AGENDA
STAYTON CITY COUNCIL
Monday, May 18, 2026

Stayton Community Center
400 W. Virginia Street
Stayton, Oregon 97383

HYBRID MEETING

The Stayton City Council will be holding a hybrid meeting utilizing Zoom video conferencing software. The meeting will be in-person but can also be live streamed on the City of Stayton's YouTube account. Please use the following option to view the meeting:

City Council Regular Session – https://youtube.com/live/qenx_PGSb-Q

Public Comment and Public Hearing Testimony: Meetings allow for in-person, virtual, or written public comment. If a community member has a barrier which prevents them from participating via one of the methods below, they should contact City staff at citygovernment@staytonoregon.gov **no less than three hours prior to the meeting start time** to make arrangements to participate.

Comments and testimony are limited to three minutes. All parties interested in providing public comment or testifying as part of a public hearing shall participate using one of the following methods:

- **In-Person Comment**: Parties interested in providing in-person verbal public comment shall fill out a "Request for Recognition" form available at the meeting. Forms must be filled out and submitted to the Assistant City Manager or designee prior to the meeting start time.
- **Video or Audio Conference Call**: Parties interested in providing virtual public comment shall contact City staff at citygovernment@staytonoregon.gov **at least three hours prior to the meeting start time** with their request. Staff will collect their contact information and provide them with information on how to access the meeting to provide comments.
- **Written Comment**: Written comment submitted to citygovernment@staytonoregon.gov **at least three hours prior to the meeting start time** will be provided to the public body in advance of the meeting and added to the City Council's webpage where agenda packets are posted.

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1. **CALL TO ORDER**

2. **FLAG SALUTE**

3. **ANNOUNCEMENTS**
   a. Additions to the agenda
   b. Declaration of Ex Parte Contacts, Conflict of Interest, Bias, etc.

4. **PUBLIC COMMENT**

5. CONSENT AGENDA

a. May 4, 2026 City Council Regular Session Minutes
b. OLCC Liquor License – New Outlet "Full On-Premises, Commercial" Application for La Yunta Tostaderia Jalisco Style

6. PRESENTATIONS

7. PUBLIC HEARING

a. Ordinance No. 26-003, Annexation and Zone Change for Property on Golf Lane
(Begins on Page 10)

1. Commencement of Public Hearing
2. Staff Introduction
3. Applicant Presentation
4. Staff Report
5. Questions from the Council
6. Public Testimony
7. Questions from the Council
8. Applicant Summary
9. Staff Summary
10. Close of Hearing
11. Council Deliberation
12. Council Decision on Ordinance No. 26-003

b. Ordinance No. 26-004, Annexation and Zone Change for Property on Shaff Road
(Begins on Page 348)

1. Commencement of Public Hearing
2. Staff Introduction
3. Applicant Presentation
4. Staff Report
5. Questions from the Council
6. Public Testimony
7. Questions from the Council
8. Applicant Summary
9. Staff Summary
10. Close of Hearing
11. Council Deliberation
12. Council Decision on Ordinance No. 26-004

8. GENERAL BUSINESS

a. Grant Authority for a Designated Signer for DEQ Loan **DECISION**
(Begins on Page 578)

1. Staff Report – James Brand
2. Public Comment
3. Council Discussion
4. Council Decision

9. COMMUNICATION FROM CITY STAFF

10. COMMUNICATION FROM MAYOR AND COUNCIL

11. ADJOURN

The meeting location is accessible to people with disabilities. A request for an interpreter for the hearing impaired or other accommodations for persons with disabilities should be made at least 48 hours prior to the meeting. If you require special accommodations, contact City Hall at (503) 769-3425.

CALENDAR OF EVENTS

MAY 2026				
Monday	May 18	City Council	6:30 p.m.	https://youtube.com/live/qenx_PGSb-Q
Wednesday	May 20	Library Board	6:00 p.m.	Stayton Public Library
Thursday	May 21	Public Arts Commission	6:00 p.m.	City of Stayton – Conference Room
Monday	May 25	**CITY OFFICES CLOSED IN OBSERVANCE OF MEMORIAL DAY HOLIDAY**		
Tuesday	May 26	Planning Commission	7:00 p.m.	Stayton Community Center
JUNE 2026				
Monday	June 1	City Council	6:30 p.m.	https://youtube.com/live/jxT3pf_oJLk
Tuesday	June 2	Parks and Recreation Board	6:00 p.m.	City of Stayton – Conference Room
Monday	June 15	City Council	6:30 p.m.	https://youtube.com/live/xjBMQ5r1cGE
Wednesday	June 17	Library Board	6:00 p.m.	Stayton Public Library
Thursday	June 18	Public Arts Commission	6:00 p.m.	City of Stayton – Conference Room
Monday	June 29	Planning Commission	7:00 p.m.	Stayton Community Center
JULY 2026				
Friday	July 3	**CITY OFFICES CLOSED IN OBSERVANCE OF INDEPENDENCE DAY HOLIDAY**		
Monday	July 6	City Council	6:30 p.m.	https://youtube.com/live/8N1ZVbno8h8
Tuesday	July 2	Parks and Recreation Board	6:00 p.m.	City of Stayton – Conference Room
Thursday	July 16	Public Arts Commission	6:00 p.m.	City of Stayton – Conference Room
Monday	July 20	City Council	6:30 p.m.	https://youtube.com/live/sMeErPfScgE
Monday	July 27	Planning Commission	7:00 p.m.	Stayton Community Center
AUGUST 2026				
Monday	August 3	City Council	6:30 p.m.	https://youtube.com/live/PdUSPI13lcU
Tuesday	August 4	Parks and Recreation Board	6:00 p.m.	City of Stayton – Conference Room
Monday	August 17	City Council	6:30 p.m.	https://youtube.com/live/gA7DHCnQPxM
Wednesday	August 19	Library Board	6:00 p.m.	Stayton Public Library
Thursday	August 20	Public Arts Commission	6:00 p.m.	City of Stayton – Conference Room
Monday	August 31	Planning Commission	7:00 p.m.	Stayton Community Center
SEPTEMBER 2026				
Tuesday	September 1	Parks and Recreation Board	6:00 p.m.	City of Stayton – Conference Room
Monday	September 7	**CITY OFFICES CLOSED IN OBSERVANCE OF LABOR DAY HOLIDAY**		
Tuesday	September 8	City Council	6:30 p.m.	https://youtube.com/live/qvN2UYyECc4
Wednesday	September 16	Library Board	6:00 p.m.	Stayton Public Library
Thursday	September 17	Public Arts Commission	6:00 p.m.	City of Stayton – Conference Room
Monday	September 21	City Council	6:30 p.m.	https://youtube.com/live/UwlOJQYUf24
Monday	September 28	Planning Commission	7:00 p.m.	Stayton Community Center

City of Stayton
City Council Minutes
May 4, 2026

LOCATION: STAYTON COMMUNITY CENTER, 400 W. VIRGINIA, STAYTON
Time Start: 6:30 P.M. Time End: 9:01 P.M.

COUNCIL MEETING ATTENDANCE LOG

COUNCIL	STAYTON STAFF
Mayor Brian Quigley	Julia Hajduk, City Manager
Councilor Ken Carey	Alissa Angelo, Assistant City Manager (excused)
Councilor Leonard Hays	Gwen Johns, Police Chief
Councilor Jordan Ohrt	Janna Moser, Library Director
Councilor David Patty	James Brand, Finance Director
Councilor Stephen Sims	Jennifer Siciliano, Community & Economic Development Director
	Barry Buchanan, Public Works Director
	Melanie Raba, Administrative Special Projects

AGENDA	ACTIONS
REGULAR MEETING	
Announcements a. Additions to the agenda b. Declaration of Ex Parte Contacts, Conflict of Interest, Bias, etc.	 Ms. Hajduk noted that page 13 of the packet had been updated. None.
Public Comment	**Noreen Chamberland, Stayton Resident** spoke regarding zoning for cottages. **Nicholas Raba, Stayton Resident** provided an update on the StaytonParksandPool.com group effort to promote the levy.
Consent Agenda a. April 20, 2026 City Council Regular Session Minutes	 Motion from Councilor Ohrt, seconded by Councilor Patty to approve the Consent Agenda, as presented. **Sims, Carey, Hays, Ohrt, Patty: Yes** **Motion passed 5:0.**
Presentations a. Marion Soil and Water Conservation District b. New Officer Introduction c. Police Radio Project d. Police Department Legal Updates	 Angela Plowhead updated council on Marion Soil and Water Control District's programs and community involvement. Chief Johns introduced new officer Christian Blicher. Officer Blicher briefly introduced himself. Chief Johns gave an update on the county radio project. Lieutenant Meeks provided an update on legal changes affecting the Police Department.

Public Hearing	None.
General Business **Resolution No. 26-010, Directing Preparation of Updated Stormwater Design Standards and Authorizing Interim Interpretation**	
a. Staff Report	Ms. Hajduk reviewed the staff report.
b. Public Comment	None.
c. Council Discussion	Council discussion regarding reduced restrictions on citizens, the inspection process in other communities, cost savings, involvement of community partners.
d. Council Decision	Motion from Councilor Ohrt, seconded by Councilor Patty to approve Resolution No. 26-010, as presented. **Sims, Carey, Hays, Ohrt, Patty: Yes** **Motion passed 5:0.**
Third Quarter Financial Update	
a. Staff Report	Mr. Brand reviewed the staff report.
b. Public Comment	None.
c. Council Discussion	Discussion regarding street fund expenditures and the completion of projects within this biennium, and financial benefit of segmenting projects. Councilor Ohrt requested that a date be established for a mid-biennium review with the Budget Committee.
DLCD/HAPO Staff Discussion of State Regulations	
a. Staff Report	Ms. Siciliano introduced Jena Hughes and Sean Edging from the Oregon Department of land Conservation and Development. Ms. Hughes and Mr. Edging presented information regarding Department rules, regulations, and assistance programs.
b. Public Comment	**Larry Chamberland, Stayton Resident** spoke regarding the State's actions limiting local authority and how the housing regulations will affect the median income.
c. Council Discussion	Council discussion regarding zoning regulations, carte blanche authority, and the implications of approving growth with the overall system cannot accommodate it. **Noreen Chamberland, Stayton Resident** spoke regarding a perceived disconnect in the system and the dilemma of complying with legal requirements when the City may not be able to afford growth.

Communications from City Staff	Ms. Hajduk provided an update on the Detroit Dam Drawdown, funds earmarked for the intertie with Sublimity, and the proposal made for police services in Sublimity.
Communications from Mayor and Council	Councilor Sims provided an update from the Planning Commission meeting. Councilor Carey spoke regarding overgrowth at the cemetery. Councilor Ohrt recognized the City and Chief Johns for their Chamber awards nominations and spoke about the awards ceremony. Mayor Quigley discussed boards and commission vacancies, the a/v system, and an upcoming forum for those interested in running for City Council.

APPROVED BY THE STAYTON CITY COUNCIL THIS 18th DAY OF MAY 2026, BY A ___ VOTE OF THE STAYTON CITY COUNCIL.

Date:_____ By:_____
Brian Quigley, Mayor

Date:_____ Attest:_____
Julia Hajduk, City Manager

CITY OF STAYTON

M E M O R A N D U M

TO: **Mayor Quigley and the Stayton City Council**

FROM: **Lieutenant Michael Meeks**

DATE: **May 18, 2026**

SUBJECT: **Liquor License – New Outlet "Full On-Premises, Commercial" Application – La Yunta Tostaderia Jalisco Style**

ISSUE

Consent Shall the Council approve an OLCC Liquor License application for La Yunta Tostaderia Jalisco Styel?

ENCLOSURE(S)

- Resolution No. 26-012

STAFF RECOMMENDATION

Forward the application to the Oregon Liquor Control Commission (OLCC) with the recommendation for approval.

BACKGROUND INFORMATION

La Yunta Tostaderia Jalisco Style, owned and operated by F & A Inc., is applying for an OLCC Liquor License for the existing business located at 151 W. Locust Street, Stayton, Oregon. The application submitted to the City of Stayton and OLCC is for a Full On-Premises, Commercial sale alcohol license. The primary contact person for the application is Francisco Velasco Ponce. Per City of Stayton zoning, the location is a Commercial General (CG) zone. Under the zoning code, the business would be allowed the sale of alcohol on the premises.

The Stayton Police Department has conducted a background investigation of the business and the person of contact for the company, Francisco Velasco Ponce. The Stayton Police Department's investigation found no information to deny the applicant's request.

FISCAL IMPACT

N/A

MOTION(S)

Consent agenda approval.

RESOLUTION NO. 26-012

APPROVING A NEW OLCC LIQUOR LICENSE FOR LA YUNTA TOSTADERIA JALISCO STYLE

WHEREAS, La Yunta Tostaderia Jalisco Style, located at 151 W. Locust Street, is owned and operated by Francisco Velasco Ponce;

WHEREAS, Mr. Velasco Ponce has applied with the City of Stayton and Oregon Liquor Control Commission (OLCC) for a Full On-Premises, Commercial application;

WHEREAS, 151 W. Locust Street is in the Commercial General (CG) zone which allows for the sale of alcohol on-premises; and

WHEREAS, the Stayton Police Department conducted an investigation of the business and person of contact for the company, Mr. Velasco Ponce and found no information to deny the request.

NOW THEREFORE, BE IT RESOLVED THAT:

1. The OLCC Liquor License application for Full On-Premises, Commercial alcohol sales is approved by the Stayton City Council.

This Resolution shall become effective upon its adoption by the Stayton City Council.

ADOPTED BY THE STAYTON CITY COUNCIL THIS 18TH DAY OF MAY 2026.

CITY OF STAYTON

Signed: _____, 2026 By: _____
Mayor Brian Quigley, Mayor

Signed: _____, 2026 ATTEST:_____
Julia Hajduk, City Manager

CITY OF STAYTON

M E M O R A N D U M

TO: **Mayor Quigley and the Stayton City Council**

FROM: **Jennifer Siciliano, Director of Community and Economic Development**

DATE: **May 18, 2026**

SUBJECT: **Ordinance No. 26-003, Annexing Real Property Located on Golf Lane and Changing the Zone from Marion County Urban Transitional (UT-20) To City of Stayton Medium Density Residential (MD)**

ISSUE

The issue before the City Council is a Public Hearing on an application for annexation of an approximately 21-acre property located on Golf Lane (Tax Lot 091W03B001500). The applicant proposes annexation into the city limits and application of the Medium Density (HD) Residential zoning district.

ENCLOSURE(S)

- Draft Ordinance *(page 14)*
- Exhibit 1 – Annexation Area *(page 16)*
- Exhibit 2 – Map of Annexation Area *(page 17)*
- Exhibit 3 – City Council Findings of Fact, Planning Commission - Signed Order of Recommendation, Annexation Application and materials, and Agency, Department, and Public Comments. *(page 18)*
- DLCD PAPA comments, DLCD Summary of virtual meeting, and DAS Oregon Housing Needs Analysis can be found it the attached documents to Ordinance No. 26-004, the Butler Annexation on Shaff Road. *(page 512)*

STAFF RECOMMENDATION

The staff recommendation is reflected in the findings and conclusions contained in the draft ordinance attached to the City Council packet.

The Stayton Planning Commission held public hearings on November 24, 2025, February 23, 2026, and April 27, 2026, and recommended that the City Council approve the annexation application as proposed. Following the November 24, 2025, hearing, it was discovered that notice had not been provided to the Oregon Department of Land Conservation and Development (DLCD) as required by ORS 197.610. A Post-Acknowledgement Plan Amendment (PAPA) notice was subsequently submitted to DLCD. DLCD provided comments on the day of the scheduled

February 23, 2026, meeting, and the hearing was continued to April 27, 2026, to allow incorporation of DLCD's comments into the findings and draft order. The Planning Commission order recommending approval is attached.

The applicant has requested that Medium Density (MD) Residential zoning be applied to the property at the time of annexation. Based on the staff analysis and findings contained in the Planning Commission order and draft ordinance, staff concurs that application of the Medium Density (MD) Residential zoning designation is appropriate and consistent with the Comprehensive Plan designation for the area. The proposed zoning also provides an appropriate transition between nearby commercially zoned property near the Highway 22 interchange and lower-density residential areas to the south.

BACKGROUND INFORMATION

The subject property consists of approximately 21 acres located on Golf Lane and identified as tax lot 091W03B001500. The property is currently located within Marion County, is zoned Urban Transition (UT-20), and lies within the Stayton Urban Growth Boundary (UGB) but outside the City limits.

The surrounding area contains a mix of residential, commercial, transportation, and institutional uses. Property to the north is zoned Commercial General (CG) and is also owned by KSD Properties, LLC. To the east, Golf Lane has already been annexed into the City. Across Golf Lane is property owned by the Oregon Department of Transportation associated with the Highway 22 interchange area. Properties to the south remain under Marion County jurisdiction and include rural residential and vacant land uses. Property to the west includes the Stayton Middle School cross-country area and wooded land.

The applicant, KSD Properties, LLC, for annexation (Land Use File #5-02/24), has requested annexation with Medium Density (MD) Residential zoning. The application also included a conceptual subdivision plan illustrating 74 single-family residential lots. While the conceptual subdivision plan was reviewed as part of the annexation analysis, no subdivision approval is being requested at this time.

The Medium Density (MD) Residential zone permits single-family detached dwellings, duplexes, triplexes, and accessory dwelling units (ADUs), with a maximum density of 12 dwelling units per acre. Although the conceptual plan illustrates 74 single-family lots, the site could theoretically accommodate a greater number of units under the full range of housing types permitted within the MD zone.

Staff analysis indicates that annexation of the property with Medium Density (MD) Residential zoning is consistent with the Residential designation in the Stayton Comprehensive Plan and supports the City's identified housing needs. The proposed zoning was also found to provide an appropriate transition between adjacent commercial property near the Highway 22 interchange area and lower-density residential development to the south.

Annexation of the property will bring the land within the City limits and subject it to City standards and regulations. Any future development will require additional land use review, including site plan review (if a multi-family development is proposed), subdivision review (if a subdivision is proposed), transportation analysis, stormwater review, and extension of public utilities and infrastructure. Future development applications will be reviewed in accordance with the Stayton Municipal Code and applicable public hearing procedures.

FISCAL IMPACT

Upon annexation, the property will be assessed as City property at the next assessment cycle and will begin contributing City property taxes. Because the property is currently vacant, the immediate increase in tax revenue will be minimal.

Future development of the property will generate additional assessed value and System Development Charges (SDCs) associated with new residential construction. Development of the property will require expansion of public infrastructure and municipal services; however, residents within the newly developed area will also contribute toward the operation and maintenance of these systems through their utility service charges and property taxes.

OPTIONS AND MOTIONS:

Staff has provided the City Council with several options, each with an appropriate motion. The Community and Economic Development Department and Planning Commission recommend the first option.

1. **Approve the application, enact Ordinance 26-004 as presented.**

   I move to approve Ordinance 26-003, approving the application of KSD Properties, LLC for annexation (Land Use File # 5-02/24) as presented by Staff.

   The City Recorder shall call the roll and the names of each Councilor present, and their vote shall be recorded in the meeting minutes. If the vote is unanimous, Ordinance No. 26-003 is enacted and will be presented to the Mayor for his approval.

   If the vote is not unanimous, Ordinance No. 26-003 will be brought before the Council for a second consideration at the June 1, 2026, meeting.

2. **Approve the application, enact Ordinance 26-003 with amendments.**

   I move to approve Ordinance 26-003 approving the application of KSD Properties, LLC for annexation (Land Use File # 5-02/24) with the following amendments.

   The City Recorder shall call the roll and the names of each Councilor present and their vote shall be recorded in the meeting minutes. If the first consideration is approved, Ordinance No. 26-003 will be brought before the Council for a second consideration at its June 1, 2026, meeting.

3. Deny the application and adopt findings and conclusions to substantiate the decision.

I move that the City Council deny the application of KSD Properties, LLC for annexation (Land Use File # 5-02/24) and direct staff to prepare an order of denial with findings and conclusions to support that decision.

4. Continue deliberation to the next meeting.

I move that the City Council continue deliberations on the application of KSD Properties, LLC for annexation (Land Use File # 5-02/24) until June 1, 2026.

ORDINANCE NO. 26-003

ANNEXING REAL PROPERTY LOCATED ON GOLF LANE AND CHANGING THE ZONE FROM MARION COUNTY URBAN TRANSITIONAL (UT-20) TO CITY OF STAYTON MEDIUM DENSITY RESIDENTIAL (MD).

WHEREAS, KSD Properties, LLC has initiated annexation of certain real property located on Golf Lane, Marion County, Oregon, identified as Map Tax Lot 091W03B001500, more particularly described in Exhibit 1 attached hereto and incorporated herein, and further illustrated on a map shown in Exhibit 2 attached hereto and incorporated herein; and

WHEREAS, the owner of the property and applicant is KSD Properties, LLC; and

WHEREAS, the annexation area consists of approximately 21 acres; and

WHEREAS, the property is currently located outside the City limits of Stayton and is zoned Marion County Urban Transition (UT-20); and

WHEREAS, the territory proposed for annexation lies within the City of Stayton Urban Growth Boundary and is designated Residential on the Stayton Comprehensive Plan Map; and

WHEREAS, upon annexation the property will be zoned Medium Density (MD) Residential, consistent with the Comprehensive Plan designation, the City's long-range residential land use policies and findings within the staff report and Planning Commission recommendation; and

WHEREAS, on November 24, 2025, February 23, 2026, and April 27, 2026, the Stayton Planning Commission held public hearings on the annexation request (File No. 5-02/24); and

WHEREAS, the Planning Commission reviewed the application materials, agency comments, and public testimony, and thereafter adopted findings of fact and conclusions determining that the application satisfies the annexation approval criteria in Stayton Municipal Code Section 17.12.210.4; and

WHEREAS, the Planning Commission recommended that the City Council approve the annexation and amend the Stayton Official Zoning Map to apply Medium Density (MD) Residential zoning to the annexed property; and

WHEREAS, the City Council held a public hearing as required by law and reviewed the Planning Commission recommendation and findings of fact, which are attached as Exhibit 3 and incorporated herein; and

WHEREAS, the City Council concludes that the annexation application satisfies the approval criteria contained in SMC 17.12.210.4.

NOW THEREFORE, THE STAYTON CITY COUNCIL ORDAINS AS FOLLOWS:

SECTION 1. Pursuant to ORS 222.125, the Stayton City Council hereby proclaims the annexation to

the City of Stayton, Oregon, of approximately 21 acres consisting of the property located on Golf Lane identified as Map Tax Lot 091W03B001500, the legal description of which is set forth in Exhibit 1, attached hereto and incorporated herein by reference.

SECTION 2. Pursuant to ORS 222.005, the Stayton City Recorder shall provide by certified mail to all public utilities, telecommunication facilities, and franchise holders operating within the City a written notice of the annexation including the site address, legal description, and map of the territory annexed, along with a copy of this Ordinance. Such notice shall be mailed within ten (10) working days following passage of this Ordinance.

SECTION 3. Pursuant to ORS 222.010, the Stayton City Recorder shall, within ten (10) days of passage of this Ordinance, file with the Marion County Clerk and Marion County Assessor a report of the annexation including the legal description and map of the territory annexed.

SECTION 4. Pursuant to ORS 308.225(2), the Stayton City Recorder shall provide to the Oregon Department of Revenue a copy of this Ordinance including the legal description and map of the annexed territory.

SECTION 5. The Stayton Official Zoning Map is hereby amended to include the annexed territory and designate the property as Medium Density (MD) Residential.

SECTION 6. Upon adoption by the Stayton City Council and signature by the Mayor, this Ordinance shall become effective thirty (30) days after the date of signing.

ADOPTED BY THE STAYTON CITY COUNCIL THIS 18 DAY OF MAY 2026.

Signed:_____, 2026 BY: _____
Brian Quigley, Mayor

Signed:_____, 2026 ATTEST: _____
Julia Hajduk, City Manager

EXHIBIT A

A unit of land situated in the northwest and southwest one-quarter of Section 3, Township 9 South, Range 1 West, of the Willamette Meridian, Marion County, Oregon, being all of that property conveyed to KSD Properties, LLC by Instrument Number 2023-29433, Marion County Records, and further described as follows:

Beginning at the northwest corner of Parcel 1 of Partition Plat 91-20, Marion County Records, being coincident with the east line of the Henry Foster Donation Land Claim and the east line of that property conveyed to the Stayton School District by Volume 638, Page 164, Marion County Records;

thence, going northerly, along the east line of said Henry Foster Donation Land Claim, approximately 780.50 feet to the south line of that property conveyed to KSD Properties, LLC by Instrument Number 2023-29472, Marion County Records;

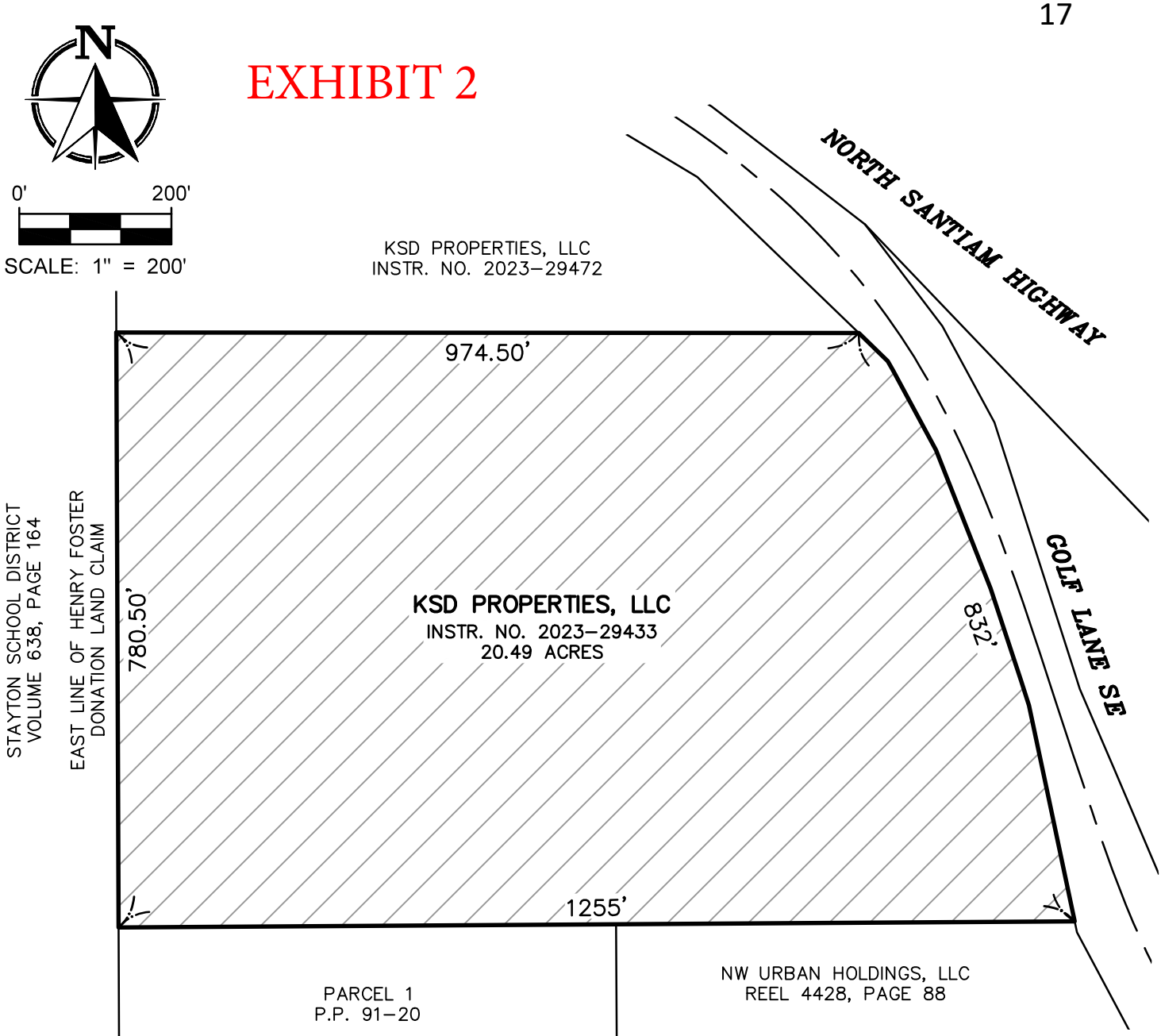
thence, going easterly, along the south line of said Instrument Number 2023-29472, approximately 974.50 feet to the west line of Golf Lane SE;

thence, going southerly, along the west line of said Golf Lane SE, approximately 832 feet to the easterly extension of the north line of Parcel 1 of said Partition Plat 91-20, being coincident with the north line of that property conveyed to NW Urban Holdings, LLC by Reel 4428, Page 88, Marion County Records;

thence, going westerly, along the easterly extension of the north line of said Parcel 1 and the north line of said NW Urban Holdings, LLC property, approximately 1255 feet to the Point of Beginning.

Containing 20.49 acres, more or less.

EXHIBIT 2



REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
SEPTEMBER 12, 2017
STEVEN LEE HOWELL
91569

RENEWS: 6-30-2025

EXHIBIT B

IN THE NW & SW 1/4 OF SECTION 3,
TOWNSHIP 9 SOUTH, RANGE 1 WEST, W.M.
MARION COUNTY, OREGON

DATE: MARCH 12, 2025

SURVEYED FOR: KSD PROPERTIES, LLC

FFN SURVEYING
7230 3rd Street SE #145, Turner, OR 97392
P: (503) 558-3330 E: info@ffnsurveying.com

JOB NO.
25-562

SHEET
1/1

EXHIBIT 3, City Council Finding of Fact

Land Use File #5-02/24

A. EXISTING CONDITIONS

1. The owner of the property and the applicant is KSD Properties, LLC.
2. The parcel can be described as: taxlot 091W03B001500.
3. The property is currently outside of the City Limits and zoned Marion County Urban Transition (UT-20).
4. The property is approximately 21acres with frontage on Golf Lane and is currently vacant.
5. The property to the north was annexed into the City in 2019, is zoned Commercial General (CG) and is also owned by KSD Properties, LLC. To the east, Golf Lane, has also been annexed into the City. Across Golf Lane is land owned by the Oregon Dept of Transportation, obtained as part of the Hwy 22 interchange development project. The properties to the south have not been annexed, remain under Marion County jurisdiction, are zoned Urban Transition (UT-20) and are vacant and developed as single unit dwelling. The property to the west is within the City limits, is part of the Stayton Middle School campus, and is zoned Public/Semi-Public (P).

B. PROPOSAL

The proposal is to annex a 21-acre parcel of land fronting Golf Lane (tax lot 091W03B001500) into the city. The applicant has proposed that Medium Density (MD) Residential zoning be applied at the time of annexation.

C. AGENCY COMMENTS

The following agencies were notified of the proposal: City of Stayton Public Works, Stayton Cooperative Telephone Company, Pacific Power, NW Natural Gas, Stayton Fire District, Marion County Public Works, Wave Broadband, Marion County Planning Division, Santiam Water Control District, Santiam Hospital, Stayton Police Department, City of Salem Development Services, and the North Santiam School District. Additionally, a Post Acknowledgement Plan Amendment (PAPA) was submitted to Oregon Department of Land Conservation and Development (DLCD) for notice file no. 001-26.

Stayton Public Works provided a memorandum dated November 13, 2025, authored by the City's consultant engineer. In addition, the City's transportation engineering consultant submitted comments in an email of the same date. These comments are incorporated into the findings below.

The City received a letter from the Oregon Department of Land Conservation and Development dated February 23, 2026, stating that, pursuant to Oregon House Bill 2001 and Oregon House Bill 2889, the City should utilize the Oregon Housing Needs Analysis allocations established for each local government. The letter indicates that, pursuant to the January 1, 2026 publication, the City of Stayton's 20-year housing need within the Urban Growth Boundary is 1,058 dwelling units, distributed across income categories as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and

300 units above 120% AMI. Additionally, a virtual meeting with DLCD was held on March 26, 2026, to further discuss and clarify their comments.

Stayton Fire District stated that they had no comment. Marion County Public Works stated that they did not have any comment at this time, but they will at time of development. No other review comments were received.

D. PUBLIC COMMENTS

The Community and Economic Development Department notified all owners of property within 300 feet of the subject property prior to each public hearing and has received two public comments on these applications. Carlos Gonzales of 12173 Golf Lane has submitted concerns about the potential development of the property. Carl Gomoll submitted comments. Both Mr. Gonzales and Mr. Gomoll provided testimony at the November public hearing. Two other individuals testified at the November public hearing. Mr. Gommel and Mr. Frichtl also spoke at the April 27, 2026, Public Hearing as well. Where the public testimony addressed approval criteria, it is summarized and included in the findings below.

E. ANALYSIS

The annexation applications satisfies approval criteria contained within Stayton Municipal Code (SMC) Title 17, Section 17.12.210.

F. REVIEW CRITERIA

Pursuant to SMC 17.12.210.4 the following criteria must be demonstrated as being satisfied by the application:

a. Need exists in the community for the land proposed to be annexed.

Finding: The 2013 Stayton Comprehensive Plan update included a Buildable Lands Inventory (BLI). The 2013 BLI provides the following information on projected growth and need for additional land in the community. At that time, there were 106 acres of vacant buildable land inside the City limits in the Low, Medium, and High Density Residential Zones. The projected population for the City in 2030 (at a medium growth rate of 1.7%) was 11,359 people, requiring an additional 1,281 dwellings. To meet that need, the City Comprehensive Plan indicates the expected need of additional 320 acres of residential to be annexed into the City. Since the time that analysis was conducted, the City has annexed 60 acres of residential land.

The need for 1,281 additional units was broken up into 889 single-family detached dwellings, 193 duplexes, 174 multi-family units, and 25 mobile homes. It is projected that the percentage of homes are needed at the following: single-family detached dwellings 65%, duplexes (or attached single-family homes) 13%, multi-family units 18%, and mobile homes 4%.

Since the BLI has been calculated, the following is a table of developments, year, type of housing unit, and number.

Project Name	Year	Type	Number
Phillips Estates, Phase 2	2014	single-family home	21
Phillips Estates, Phase 3	2025/26	single-family home	22 (concept plan)
Wildlife Meadows	2017	single-family home	42 (2 duplexes)
Hayden (Lambert Place)	2020	single-family home	51
Fern Ridge	2022	multi-family	72
Shaff Square	2023	multi-family	100

Based on these totals, Stayton's housing needs are as follows: 753 single-family homes, 191 duplex or attached single-family units, 2 multifamily units, and 25 mobile homes.

These projections are based on a higher anticipated growth rate than what has actually occurred, meaning the calculated housing needs may be somewhat overstated. From 2000 to 2024, Stayton's population increased from 6,816 to 8,176—a change of 1,360 people—reflecting an average annual growth rate of approximately 0.76%. The Marion County Coordinated Growth projection of 1.6% average annual growth rate was used in the projected needs.

The City's Comprehensive Plan Housing Goal (Chapter 6) states: "Existing and future residents will be provided a choice of housing types in safe and healthful housing." While the City currently provides a range of housing types, application of the Medium Density (MD) Residential zone to the subject property would further expand those opportunities. The MD zone permits single-family detached dwellings, duplexes, triplexes, and accessory dwelling units (ADUs), with a maximum density of 12 dwelling units per acre.

The applicant has submitted a conceptual plan proposing 74 single-family lots. However, under the full range of uses permitted in the MD zone, the site could accommodate up to 128 duplex units and 30 triplex units. Triplexes are permitted on lots of at least 10,500 square feet, and approximately 10 of the proposed lots meet this threshold. On a gross basis consistent with MD standards, the approximately 21-acre site could accommodate up to 252 dwelling units, consistent with the maximum density of 12 units per acre.

In 2023, the State adopted a new methodology for determining housing needs through the Oregon Housing Needs Analysis (OHNA). Under ORS 197A.018, "needed housing" is defined as housing by affordability level, type, characteristics, and location necessary to accommodate a city's allocated housing need over the applicable 20-year planning period. The OHNA represents a shift from a locally derived housing needs analysis to a statewide, regionally informed methodology that accounts for both future growth and existing unmet need resulting from underproduction of housing.

As described in the Department of Administrative Services (DAS) January 1, 2026, methodology, housing need now includes both projected future demand and existing unmet need, including suppressed household formation due to housing costs and limited supply. The methodology allocates a share of regional housing need to each local government. Stayton is located within the Willamette Valley region, and, consistent with state policy, urban housing needs are to be accommodated within Urban Growth Boundaries.

The DAS 2026 analysis identifies a 20-year housing need within Stayton's Urban Growth Boundary of 1,058 dwelling units, distributed across income levels as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and 300 units above 120% AMI.

Analysis: Under the State's revised methodology, housing needs include both existing unmet needs resulting from underproduction and projected future demand, which is allocated at the regional level and accommodated within Urban Growth Boundaries by local jurisdictions.

This annexation would increase the City's supply of buildable residential land and capacity, supporting its ability to provide a range of housing types and accommodate identified housing needs consistent with the City's Comprehensive Plan Housing Goal, Statewide Planning Goal 10, ORS 197.296, and the OHNA framework.

b. The site is or is capable of being serviced by adequate City public services, including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Finding: While the property is not currently connected to City utilities, the City's adopted master plans (Transportation, Water, Stormwater, and Wastewater) provide clear pathways for extending services. At the time of development, the applicant will be required to construct or extend infrastructure to meet all applicable standards, ensuring the property can be fully and adequately served.

Streets

Golf Lane, which forms the eastern boundary of the property, is designated as a future City Collector and will need to be improved to Collector standards, including curbs, sidewalks, street trees, street lighting, and adequate pavement width. Internal Local streets will also need to be constructed within the property as shown on the conceptual plan. Although the nearest City intersections are approximately 1,000 to 1,500 feet away, the Transportation System Plan identifies future projects—such as the realignment of Golf Lane and its eventual extension west—that will improve connectivity. Emergency vehicle access will need to comply with the Stayton Municipal Code, Public Works Design Standards, and Fire District requirements at the time of development.

The application included a Transportation Impact Analysis (TIA) prepared by Jenna Bogert, PE. The TIA looked at the projected impacts of a 92-lot residential subdivision, assuming

single family dwellings on each lot. The TIA assessed the impacts of development on the intersections of Cascade Highway and the Oregon 22 ramps, the Golf Lane/Park & Ride intersection, the Whitney St intersection, and the Shaff Rd/Fern Ridge Rd intersection. The TIA noted that no intersection improvements were warranted.

Written comments and testimony at the public hearing expressed concerns over traffic impacts. The annexation is not accompanied by a concurrent application for development but includes a conceptual plan for a 74-lot subdivision. Most public comments addressed the impacts of development, not the annexation of property into the city limits. Development of the subdivision will include a separate application and review process, at which time a thorough review of transportation impacts will be conducted.

There is a 2003 City–County Memorandum of Understanding for the Sublimity Interchange Area Management Plan allows Golf Lane to remain in its current location as long as vehicle queues from the Whitney Street signal do not interfere with turning movements on Golf Lane and County safety and operational standards are met. The TIA determined that the development would not trip the thresholds for realignment of Golf Lane.

The TIA was reviewed by the City's transportation planning consultant who noted that the TIA is based on the previous submission of 92 single-family homes. The consultant recommended that the TIA be updated to reflect the current conceptual plan for 74 lots determine if realignment of Golf Lane is necessary. Yet, with fewer parcels proposed, traffic demand would be expected to be lower than that analyzed in the submitted TIA. Marion County had no comments on the TIA.

Stormwater Drainage

The City's engineering consultant has stated that the site can be served by the City's storm drainage system once infrastructure is extended and required stormwater facilities are constructed. The property is not currently served by City storm drainage, with the nearest storm system approximately 1,500 feet southeast at Whitney Street and Cascade Highway SE. Existing shallow ditches along Golf Lane do not connect to an approved discharge point. At development, a complete stormwater management system—including flow control, water-quality treatment, and conveyance—will be required in accordance with the Stormwater Master Plan and Public Works Design Standards. Stormwater from this property ultimately drains to Mill Creek, and nearby existing detention and wetland features will remain protected under the Master Plan.

Water

The City's engineering consultant has stated that the water service can be provided to the site through future extensions of City water infrastructure identified in the Water Master Plan. No City water system currently exists near the property, and the nearest 12-inch water main, located approximately 1,500 feet to the southeast, is part of the Upper Pressure Zone and

cannot serve this area. The property lies within the Mill Creek Upper Pressure Service Area, where necessary infrastructure has not yet been built. The Water Master Plan includes a future Mill Creek Booster Station near the intersection of Golf Lane and Cascade Highway SE and a 12-inch distribution main to be extended through Golf Lane. At the time of development, the property will be required to extend the water system and meet all emergency water supply and fire flow requirements.

Sanitary Sewer

The City's engineering consultant has stated that the sanitary sewer service can be extended to the property as part of future development. The site is located within the Mill Creek Pump Station Basin, and the nearest sanitary sewer mains are a 12-inch main located approximately 1,800 feet southeast at Martin Drive and Cascade Highway SE, and another 12-inch main located about 2,300 feet northwest in Golf Lane. The property is not currently served by City sewer infrastructure, and connection to either main will require engineering analysis demonstrating adequate capacity for additional flows. The Wastewater Facilities Planning Study does not identify significant system deficiencies in the vicinity that would affect the ability to serve the site.

c. The proposed annexation is property contiguous to existing City jurisdictional limits.

Finding: The property is adjacent to the City limits to the north, east and to the west.

d. The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and the policies of the City of Stayton.

Finding: The property to the north is zoned Commercial General (CG) and is not yet developed. To the east, Golf Lane has been annexed into the City, and the property across the road is owned by the Oregon Department of Transportation. The property to the south contains large-lot single-family homes and remains under Marion County jurisdiction. To the west, the Stayton Middle School campus includes a forested area used for cross-country races.

The subject property is located within the Stayton Urban Growth Boundary and is designated Residential in the Comprehensive Plan. The application of Medium Density (MD) zoning upon annexation is consistent with this designation and supports the planned future character of the area. The property is adjacent to property zoned commercial – Commercial General (CG) – and in proximity to the highway interchange; as such, MD zoning provides an appropriate transition between commercial uses and lower-density residential areas.

e. The annexation request complies or can be made to comply with all applicable provisions of state and local law.

Finding: The criteria of ORS 222 apply to the adoption of an annexation ordinance which is a City Council action. The property owners have consented to the annexation. The property is contiguous to the existing city limits and is located entirely within the City of Stayton's

Urban Growth Boundary. The acknowledged Stayton Comprehensive Plan designates this area as Residential.

f. If a proposed contract annexation, the terms and conditions, including the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Finding: The proposed annexation is not a contract annexation

BEFORE THE STAYTON PLANNING COMMISSION

	)
In the matter of	) Annexation
the application of	) File # 5-02/24
KSD Properties, LLC	)

ORDER OF RECOMMENDATION

I. NATURE OF APPLICATION

The applicant has submitted an application for annexation of a 21-acre parcel of land fronting Golf Lane (tax lot 091W03B001500), proposing a zoning designation of Medium Density (MD) Residential and including a concept plan for a 74-lot subdivision into city limits.

II. PUBLIC HEARINGS

A public hearing was held on the application before the Stayton Planning Commission on November 24, 2025. At that hearing the Planning Commission reviewed Land Use File #10-08/25 application for annexation was made part of the record. Following that hearing it was discovered that notice had not been provided to the Oregon Department of Land Conservation and Development (DLCD), as required by ORS 197.610. A second public hearing was held on February 23, 2026. A comment letter from the DLCD was received on February 23, 2026. In order to incorporate the DLCD's comments into the findings and evaluate any potential impacts, the public hearing was continued to April 27, 2026.

III. FINDINGS OF FACT

A. EXISTING CONDITIONS

1. The owner of the property and the applicant is KSD Properties, LLC.
2. The parcel can be described as: taxlot 091W03B001500.
3. The property is currently outside of the City Limits and zoned Marion County Urban Transition (UT-20).
4. The property is approximately 21acres with frontage on Golf Lane and is currently vacant.
5. The property to the north was annexed into the City in 2019, is zoned Commercial General (CG) and is also owned by KSD Properties, LLC. To the east, Golf Lane, has also been annexed into the City. Across Golf Lane is land owned by the Oregon Dept of Transportation, obtained as part of the Hwy 22 interchange development project. The properties to the south have not been annexed, remain under Marion County jurisdiction, are zoned Urban Transition (UT-20) and are vacant and developed as single unit dwelling. The property to the west is within

the City limits, is part of the Stayton Middle School campus, and is zoned Public/Semi-Public (P).

B. PROPOSAL

The proposal is to annex a 21-acre parcel of land fronting Golf Lane (tax lot 091W03B001500) into the city. The applicant has proposed that Medium Density (MD) Residential zoning be applied at the time of annexation.

C. AGENCY COMMENTS

The following agencies were notified of the proposal: City of Stayton Public Works, Stayton Cooperative Telephone Company, Pacific Power, NW Natural Gas, Stayton Fire District, Marion County Public Works, Wave Broadband, Marion County Planning Division, Santiam Water Control District, Santiam Hospital, Stayton Police Department, City of Salem Development Services, and the North Santiam School District. Additionally, a Post Acknowledgement Plan Amendment (PAPA) was submitted to Oregon Department of Land Conservation and Development (DLCD) for notice file no. 001-26.

Stayton Public Works provided a memorandum dated November 13, 2025, authored by the City's consultant engineer. In addition, the City's transportation engineering consultant submitted comments in an email of the same date. These comments are incorporated into the findings below.

The City received a letter from the Oregon Department of Land Conservation and Development dated February 23, 2026, stating that, pursuant to Oregon House Bill 2001 and Oregon House Bill 2889, the City should utilize the Oregon Housing Needs Analysis allocations established for each local government. The letter indicates that, pursuant to the January 1, 2026 publication, the City of Stayton's 20-year housing need within the Urban Growth Boundary is 1,058 dwelling units, distributed across income categories as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and 300 units above 120% AMI. Additionally, a virtual meeting with DLCD was held on March 26, 2026, to further discuss and clarify their comments.

Stayton Fire District stated that they had no comment. Marion County Public Works stated that they did not have any comment at this time, but they will at time of development. No other review comments were received.

D. PUBLIC COMMENTS

The Community and Economic Development Department notified all owners of property within 300 feet of the subject property prior to each public hearing and has received two public comments on these applications. Carlos Gonzales of 12173 Golf Lane has submitted concerns about the potential development of the property. Carl Gomoll submitted comments. Both Mr. Gonzales and Mr. Gomoll provided testimony at the November public hearing. Two other individuals testified at the November public

hearing. Where the public testimony addressed approval criteria, it is summarized and included in the findings below.

E. ANALYSIS

Annexation applications are required to satisfy approval criteria contained within Stayton Municipal Code (SMC) Title 17, Section 17.12.210.

F. REVIEW CRITERIA

Pursuant to SMC 17.12.210.4 the following criteria must be demonstrated as being satisfied by the application:

a. Need exists in the community for the land proposed to be annexed.

Finding: The 2013 Stayton Comprehensive Plan update included a Buildable Lands Inventory (BLI). The 2013 BLI provides the following information on projected growth and need for additional land in the community. At that time, there were 106 acres of vacant buildable land inside the City limits in the Low, Medium, and High Density Residential Zones. The projected population for the City in 2030 (at a medium growth rate of 1.7%) was 11,359 people, requiring an additional 1,281 dwellings. To meet that need, the City Comprehensive Plan indicates the expected need of additional 320 acres of residential to be annexed into the City. Since the time that analysis was conducted, the City has annexed 60 acres of residential land.

The need for 1,281 additional units was broken up into 889 single-family detached dwellings, 193 duplexes, 174 multi-family units, and 25 mobile homes. It is projected that the percentage of homes are needed at the following: single-family detached dwellings 65%, duplexes (or attached single-family homes) 13%, multi-family units 18%, and mobile homes 4%.

Since the BLI has been calculated, the following is a table of developments, year, type of housing unit, and number.

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Hayden (Lambert Place)	2020	single-family home	51
Fern Ridge	2022	multi-family	72
East Santiam Duplexes	2023	duplexes	18 (9 duplexes)
Shaff Square	2023	multi-family	100

Based on these totals, Stayton's housing needs are as follows: 753 single-family homes, 182 duplex or attached single-family units, 2 multifamily units, and 25 mobile homes.

These projections are based on a higher anticipated growth rate than what has actually occurred, meaning the calculated housing needs may be somewhat overstated. From 2000 to 2025, Stayton's population increased from 6,816 to 8,280—a change of 1,464 people—reflecting an average annual growth rate of approximately 0.86%. The

Marion County Coordinated Growth projection of 1.6% average annual growth rate was used in the projected needs.

The City's Comprehensive Plan Housing Goal (Chapter 6) states: "Existing and future residents will be provided a choice of housing types in safe and healthful housing." While the City currently provides a range of housing types, application of the Medium Density (MD) Residential zone to the subject property would further expand those opportunities. The MD zone permits single-family detached dwellings, duplexes, triplexes, and accessory dwelling units (ADUs), with a maximum density of 12 dwelling units per acre.

The applicant has submitted a conceptual plan proposing 74 single-family lots. However, under the full range of uses permitted in the MD zone, the site could accommodate up to 128 duplex units and 30 triplex units. Triplexes are permitted on lots of at least 10,500 square feet, and approximately 10 of the proposed lots meet this threshold. On a gross basis consistent with MD standards, the approximately 21-acre site could accommodate up to 252 dwelling units, consistent with the maximum density of 12 units per acre.

In 2023, the State adopted a new methodology for determining housing needs through the Oregon Housing Needs Analysis (OHNA). Under ORS 197A.018, "needed housing" is defined as housing by affordability level, type, characteristics, and location necessary to accommodate a city's allocated housing need over the applicable 20-year planning period. The OHNA represents a shift from a locally derived housing needs analysis to a statewide, regionally informed methodology that accounts for both future growth and existing unmet need resulting from underproduction of housing.

As described in the Department of Administrative Services (DAS) January 1, 2026, methodology, housing need now includes both projected future demand and existing unmet need, including suppressed household formation due to housing costs and limited supply. The methodology allocates a share of regional housing need to each local government. Stayton is located within the Willamette Valley region, and, consistent with state policy, urban housing needs are to be accommodated within Urban Growth Boundaries.

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Analysis: Under the State's revised methodology, housing needs include both existing unmet needs resulting from underproduction and projected future demand, which is allocated at the regional level and accommodated within Urban Growth Boundaries by local jurisdictions.

This annexation would increase the City's supply of buildable residential land and capacity, supporting its ability to provide a range of housing types and accommodate identified housing needs consistent with the City's Comprehensive Plan Housing Goal, Statewide Planning Goal 10, ORS 197.296, and the OHNA framework.

b. The site is or is capable of being serviced by adequate City public services, including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Finding: While the property is not currently connected to City utilities, the City's adopted master plans (Transportation, Water, Stormwater, and Wastewater) provide clear pathways for extending services. At the time of development, the applicant will be required to construct or extend infrastructure to meet all applicable standards, ensuring the property can be fully and adequately served.

Streets
Golf Lane, which forms the eastern boundary of the property, is designated as a future City Collector and will need to be improved to Collector standards, including curbs, sidewalks, street trees, street lighting, and adequate pavement width. Internal Local streets will also need to be constructed within the property as shown on the conceptual plan. Although the nearest City intersections are approximately 1,000 to 1,500 feet away, the Transportation System Plan identifies future projects—such as the realignment of Golf Lane and its eventual extension west—that will improve connectivity. Emergency vehicle access will need to comply with the Stayton Municipal Code, Public Works Design Standards, and Fire District requirements at the time of development.

The application included a Transportation Impact Analysis (TIA) prepared by Jenna Bogert, PE. The TIA looked at the projected impacts of a 92-lot residential subdivision, assuming single family dwellings on each lot. The TIA assessed the impacts of development on the intersections of Cascade Highway and the Oregon 22 ramps, the Golf Lane/Park & Ride intersection, the Whitney St intersection, and the Shaff Rd/Fern Ridge Rd intersection. The TIA noted that no intersection improvements were warranted.

Written comments and testimony at the public hearing expressed concerns over traffic impacts. The annexation is not accompanied by a concurrent application for development but includes a conceptual plan for a 74-lot subdivision. Most public comments addressed the impacts of development, not the annexation of property into the city limits. Development of the subdivision will include a separate application and review process, at which time a thorough review of transportation impacts will be conducted.

There is a 2003 City–County Memorandum of Understanding for the Sublimity Interchange Area Management Plan allows Golf Lane to remain in its current location as long as vehicle queues from the Whitney Street signal do not interfere with turning movements on Golf Lane and County safety and operational standards are met. The

TIA determined that the development would not trip the thresholds for realignment of Golf Lane.

The TIA was reviewed by the City's transportation planning consultant who noted that the TIA is based on the previous submission of 92 single-family homes. The consultant recommended that the TIA be updated to reflect the current conceptual plan for 74 lots determine if realignment of Golf Lane is necessary. Yet, with fewer parcels proposed, traffic demand would be expected to be lower than that analyzed in the submitted TIA. Marion County had no comments on the TIA.

Stormwater Drainage

The City's engineering consultant has stated that the site can be served by the City's storm drainage system once infrastructure is extended and required stormwater facilities are constructed. The property is not currently served by City storm drainage, with the nearest storm system approximately 1,500 feet southeast at Whitney Street and Cascade Highway SE. Existing shallow ditches along Golf Lane do not connect to an approved discharge point. At development, a complete stormwater management system—including flow control, water-quality treatment, and conveyance—will be required in accordance with the Stormwater Master Plan and Public Works Design Standards. Stormwater from this property ultimately drains to Mill Creek, and nearby existing detention and wetland features will remain protected under the Master Plan.

Water

The City's engineering consultant has stated that the water service can be provided to the site through future extensions of City water infrastructure identified in the Water Master Plan. No City water system currently exists near the property, and the nearest 12-inch water main, located approximately 1,500 feet to the southeast, is part of the Upper Pressure Zone and cannot serve this area. The property lies within the Mill Creek Upper Pressure Service Area, where necessary infrastructure has not yet been built. The Water Master Plan includes a future Mill Creek Booster Station near the intersection of Golf Lane and Cascade Highway SE and a 12-inch distribution main to be extended through Golf Lane. At the time of development, the property will be required to extend the water system and meet all emergency water supply and fire flow requirements.

Sanitary Sewer

The City's engineering consultant has stated that the sanitary sewer service can be extended to the property as part of future development. The site is located within the Mill Creek Pump Station Basin, and the nearest sanitary sewer mains are a 12-inch main located approximately 1,800 feet southeast at Martin Drive and Cascade Highway SE, and another 12-inch main located about 2,300 feet northwest in Golf Lane. The property is not currently served by City sewer infrastructure, and connection to either main will require engineering analysis demonstrating adequate capacity for additional flows. The Wastewater Facilities Planning Study does not identify significant system deficiencies in the vicinity that would affect the ability to serve the site.

c. The proposed annexation is property contiguous to existing City jurisdictional limits.

Finding: The property is adjacent to the City limits to the north, east and to the west.

d. The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and the policies of the City of Stayton.

Finding: The property to the north is zoned Commercial General (CG) and is not yet developed. To the east, Golf Lane has been annexed into the City, and the property across the road is owned by the Oregon Department of Transportation. The property to the south contains large-lot single-family homes and remains under Marion County jurisdiction. To the west, the Stayton Middle School campus includes a forested area used for cross-country races.

The subject property is located within the Stayton Urban Growth Boundary and is designated Residential in the Comprehensive Plan. The application of Medium Density (MD) zoning upon annexation is consistent with this designation and supports the planned future character of the area. The property is adjacent to property zoned commercial – Commercial General (CG) – and in proximity to the highway interchange; as such, MD zoning provides an appropriate transition between commercial uses and lower-density residential areas.

e. The annexation request complies or can be made to comply with all applicable provisions of state and local law.

Finding: The criteria of ORS 222 apply to the adoption of an annexation ordinance which is a City Council action. The property owners have consented to the annexation. The property is contiguous to the existing city limits and is located entirely within the City of Stayton's Urban Growth Boundary. The acknowledged Stayton Comprehensive Plan designates this area as Residential.

f. If a proposed contract annexation, the terms and conditions, including the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Finding: The proposed annexation is not a contract annexation.

IV. CONCLUSION

Based on the facts above, the Planning Commission concludes that the application meets the requirements for Sections 17.12.210.4 Annexation Approval Criteria.

V. RECOMMENDATION

Based on the Findings and Conclusions above, the Planning Commission recommends approval of the application for annexation to the City Council and amendment of the Official Zoning Map to designate the property as Medium Density (MD) Residential.

Larry McKinley, Chairperson — Date

Jennifer Siciliano, — 4/27/2026 — Date
Community and Economic Development Director

BRAND Land Use

Incomplete Application Response

#5-02/24 | 091W03B001500

This letter shall serve as the applicant's response to an incomplete application notice received on April 25th, 2025.

July 15, 2025
Jennifer Siciliano
City of Stayton
362 N. Third Avenue
Stayton, OR 97383

RE: Response to Incomplete Application Notice – Golf Lane Annexation (File #5-02/24)

Dear Ms. Siciliano,

Thank you for your April 25, 2025, incomplete application notice regarding the proposed annexation of Marion County Assessor's Map and Tax Lot 091W03B001500 on behalf of KSD Properties, LLC. We appreciate your thorough review and write now to formally respond to the items identified.

1. Clarification of Requested Zoning Designation

Please note that the applicant has revised the requested zoning designation from High Density Residential (HD) to Medium Density Residential (MD). This change was made to better align with the anticipated development pattern, which consists primarily of detached single-family homes. The updated zoning request is reflected throughout the revised annexation narrative dated July 14, 2025, which has been resubmitted for your review.

This revision directly resolves the concern noted in your letter regarding the incompatibility between the previously proposed use (single-family development) and the permitted uses and density standards of the HD zone. The MD zoning district permits detached single-family dwellings and supports the proposed density and site layout.

2. Conceptual Plan Submittal – Paper Copies

While the original narrative stated that no formal conceptual plan was being submitted, the application materials included a preliminary layout labeled as Exhibit E. In response to your letter, we have now provided the required (3) full-size copies and (18) reduced 11x17 copies of the conceptual subdivision plan. These documents illustrate the proposed layout and are intended to satisfy the requirements of SMC 17.12.210.3.b for a conceptual plan accompanying an annexation request without concurrent subdivision approval.

3. Updated Narrative Addressing Applicable Criteria

The revised narrative submitted with this response fully replaces the prior version and reflects the updated zoning designation. The findings have been revised to demonstrate that the proposed annexation and future development are consistent with the applicable provisions of the Stayton Municipal Code, the Comprehensive Plan, and Oregon law. In particular:

The proposed Medium Density Residential zoning complies with SMC 17.16.070.1 permitted uses;

- The anticipated development of 74 single-family detached homes is consistent with the MD zone's density range;
- Applicable design standards, including those related to connectivity, open space, and building form, will be addressed in detail during future subdivision review.

We trust that these revised and supplemental materials adequately address the City's concerns. We look forward to confirmation that the application can now be deemed complete and scheduled for public hearing. Please do not hesitate to contact me directly should you require any additional information.

Sincerely,

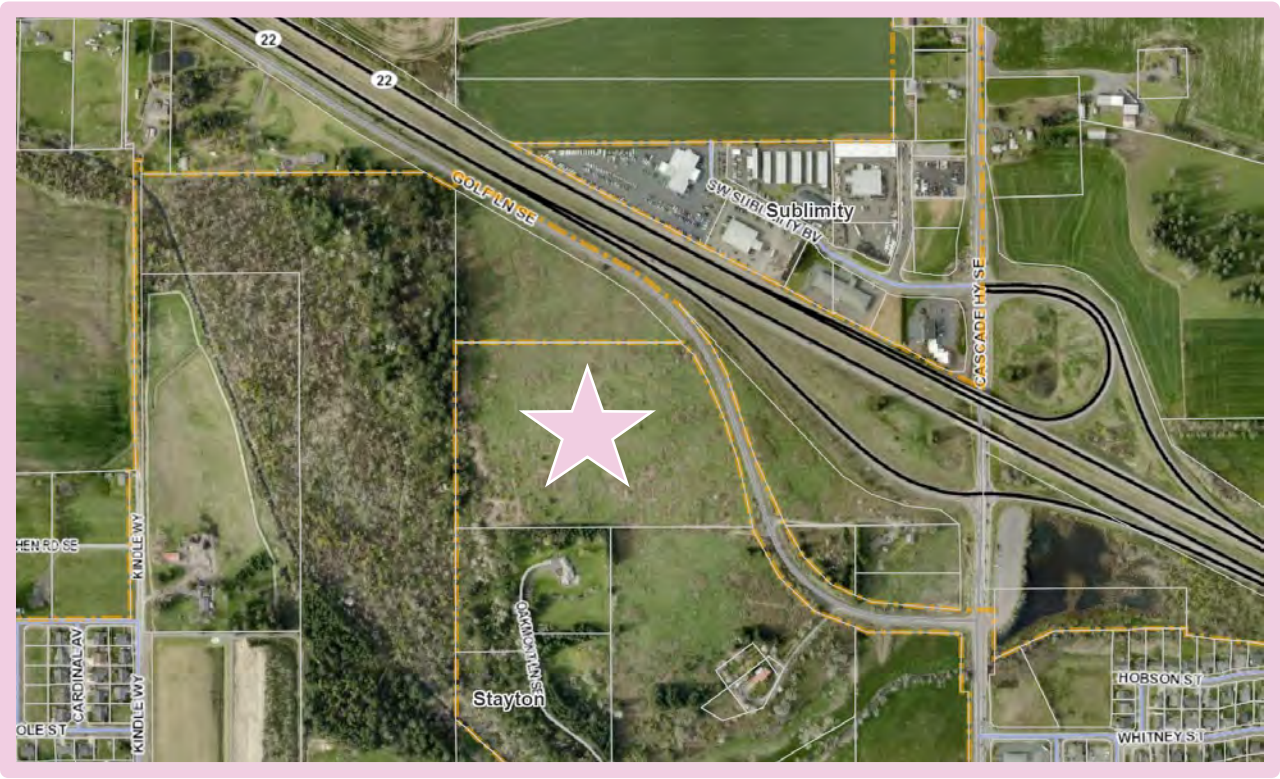
Britany Randall
BRAND Land Use, LLC
britany@brandlanduse.com

Enclosures:

1. Revised Narrative with Markups
2. Revised Conceptual Future Subdivision Plan

Table of Contents

Aerial View of Subject Property and Existing Development



Section 1: Property Background and Request

The applicant, KSD Properties, LLC, is requesting the annexation of a 21.00-acre property into the corporate city limits of the City of Stayton. The subject property, identified as Marion County Assessor's Map and Tax Lot 091W03B001500, currently holds a Residential designation in the City of Stayton Comprehensive Plan. Upon annexation, the applicant proposes to apply the corresponding ~~High Density Residential (HD)~~Medium Density Residential (MD) zoning to facilitate the future development of residential homes of varying types. The owner's team evaluated the possibility of developing the site as a ~~92-lot~~74-lot, plus a stormwater tract, single-family residential subdivision.

This annexation aligns with Stayton's 2021 Amended Comprehensive Plan, which emphasizes the need for additional residential land to accommodate the city's projected population growth. The plan seeks to maintain a mix of housing options while targeting an overall gross density of approximately ~~six units per acre~~ 3.5 dwelling units per acre. By bringing this land into the city, the proposed development will support these housing objectives while ensuring consistency with Stayton's long-term growth management policies.

A Transportation Impact Analysis (TIA) was conducted to assess the potential effects of the development on Stayton's roadway network. The analysis determined that the future subdivision would generate 69 AM peak hour trips (17 inbound, 52 outbound) and 92 PM peak hour trips (58 inbound, 34 outbound), with the majority of traffic utilizing Cascade Highway and OR 22. While most study intersections will continue to operate within acceptable standards, the Cascade Highway / Shaff Road / Fern Ridge Road intersection does not currently meet Marion County's PM peak hour operating standards. However, no mitigation measures are required as the intersection remains within Stayton's operational standards and no planned improvements are identified in the City's Transportation System Plan (TSP). The TIA also evaluated the Golf Lane / Cascade Highway intersection and concluded that a realignment is not warranted, as the intersection does not meet signal warrant criteria, nor does it present operational or safety deficiencies that would trigger a required realignment under the City-County Memorandum of Understanding (MOU).

Future development may include a new public street access via Golf Lane, which meets Stayton's access spacing requirements and has been designed to ensure safe and efficient traffic flow. Additionally, half-street frontage improvements, including bike lanes, planter strips, and sidewalks, may be constructed along the project frontage to align with city collector street standards. At the time of future development of these improvements, they will enhance pedestrian and cyclist safety while integrating the development into the city's transportation network.

By addressing both housing needs and transportation considerations, the proposed annexation and development will contribute to Stayton's vision for sustainable growth. This project will expand the city's residential land supply, support housing availability, and ensure efficient infrastructure planning while maintaining consistency with the comprehensive plan and development policies.

Section 2: Existing Conditions

The site is located within the Urban Growth Boundary of the City of Stayton. The City of Stayton Comprehensive Plan map designates the property as "Residential".

The Comprehensive Plan designations of surrounding properties include:

North: "Commercial"

South: "Residential"

East: Across Golf Lane - "Public/Semi-Public"

West: "Public/Semi-Public"

The applicant is seeking to apply the ~~High Density Residential (HD)~~Medium Density Residential zoning to the property. The surrounding properties are zoned as follows:

North: Commercial Central (CG)

South: Marion County – Outside Corporate City Limits

East: Across Golf Lane - Marion County – Outside Corporate City Limits

West: Public/Semi-Public (P)

Section 3: Findings Applicable to Administrative Procedures

Chapter 17.12 – Development Approval Procedures

Sections 17.12.030 – Application Procedure

Any application for a land use or development approval action authorized in this title shall be filed in the following manner.

(1) FORMS. The application shall be submitted on forms provided by the City Planner.
(2) FILING LOCATION. Unless stated otherwise, the application shall be filed with the City Planner at City Hall.
(3) PROPERTY OWNER AUTHORIZATION. If the property owners are not the applicants, then the application shall be accompanied by a notarized statement certifying the authority of anyone representing the owner(s) of property involved in the application. The application shall be signed by the property owner or authorized representative.
(4) SUPPLEMENTAL INFORMATION. All supplemental documentation and information specified in those sections governing the approval or action being requested shall accompany the application. The applicant shall be responsible for providing any and all information required for a complete application.
(5) COST FOR SERVICES.
    (a) Basic Application Costs. Basic application costs are intended to recover expenses incurred by the City in the receipt, review and processing of a land use application. A deposit in an amount established in the Deposit Schedule will be required at the time an application is filed.
    (b) Outside Planning Services. An applicant may, upon permission of the City, choose outside planning services at the applicant's expense, approved by the City, to process any land use application. The outside planning service will be tantamount to the function of the City Planner and will be subject to the supervision, direction and review of the City Planner. Utilizing outside planning services does not forego the City's requirement as to costs (including non-refundable deposit).

(c) In the event the application is withdrawn before City action, the applicant shall be responsible to pay for the costs incurred up to the time of its withdrawal.

(d) Waiver of Charges. The City Council may, at its discretion, waive some or all charges for the processing of applications determined by the City Council to be in the public interest

(6) DEPOSIT SCHEDULE. A deposit schedule shall be in resolution form and adopted by the City Council.

Applicant's Findings: *The applicant acknowledges and understands the procedural requirements set forth in Stayton Municipal Code Section 17.12.030 for land use and development applications. This includes submitting the annexation application using forms provided by the city planner and filing all materials at city hall, unless otherwise directed. As the legal owner of the subject property, the application has been signed by an authorized representative of the property owner, and no additional authorization is required.*

The applicant further understands that all required supplemental information must be submitted in accordance with the applicable sections of the code governing the annexation process, and that the completeness of the application is the applicant's responsibility.

Regarding application fees, the applicant acknowledges that a deposit has been submitted in accordance with the city's adopted deposit schedule and understands that the city may charge staff time and other direct costs associated with processing the application. The applicant also understands that should the application be withdrawn; they remain responsible for any costs incurred up to the point of withdrawal. Finally, the applicant recognizes that the city council has discretion to waive certain fees when an application is determined to serve the public interest.

Section 4: Findings Applicable to Annexation

Chapter 17.12 – Development Approval Procedures

Sections 17.12.210 – Annexations

(1) DEFINITION. An annexation is an expansion of the City limits through the addition of territory to the jurisdictional boundaries of the City, including "contract annexation" agreements between applicants and the City.

Applicant's Findings: *KSD Properties, LLC, is requesting annexation of a 21.00-acre parcel (Marion County Assessor's Map and Tax Lot 091W03B001500) into the City of Stayton. The property is designated Residential in the Comprehensive Plan, and the applicant proposes ~~High-Density Residential (HD)~~Medium Density Residential (MD) zoning to support a potential ~~92-lot~~74-lot single-family subdivision.*

The request aligns with the 2021 Amended Comprehensive Plan, which calls for additional residential land to meet projected growth and targets an average of ~~six units per acre~~ 3.5

dwelling units per acre. A Transportation Impact Analysis (TIA) determined that traffic from the development would not exceed the city's operational standards, and no mitigation is required. Access is proposed via Golf Lane, which meets spacing requirements, and future frontage improvements will align with collector street standards. The annexation supports Stayton's goals for managed growth, increased housing supply, and coordinated infrastructure planning.

(2) METHOD OF ADOPTION.

(b) Minor Annexations.

(1) A Minor Annexation is any annexation that meets all of the following characteristics.

(i) Consists of only one parcel, except proposed annexations that consist of contiguous parcels in the same ownership.

(ii) The area proposed for annexation is 1 acre or less. (Amended Ord. 918, March 18, 2010)

(2) Approval procedures. The following procedures shall be followed in the review and approval of an application for a Minor Annexation:

(i) An application for a Minor Annexation shall be filed with the City Planning Department.

(ii) Planning Commission Proceedings. The Planning Commission shall hold a public hearing in accordance with the requirements of Section 17.12.090. Following the public hearing the Commission shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. Based on the findings of fact and conclusions the Planning Commission shall make a recommendation to the City Council regarding the approval of the application.

(iii) City Council Proceedings. The City Council shall hold a public hearing in accordance with the requirements of Section 17.12.100. Following the public hearing, the City Council shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. If the Council finds that the criteria of Section 17.12.210.4 have been or will be met, the Council shall, by ordinance, shall set the boundaries of the area to be annexed by a legal description.

(c) Health Hazard Annexation The City may annex those areas constituting a health hazard in accordance with Oregon Revised Statutes, taking into consideration the ability of the City to provide necessary services. Annexation of areas constituting a health hazard is not subject to voter approval.

Applicant's Findings: *This application does not qualify as a Minor Annexation, as the subject property consists of 21.00 acres, exceeding the one-acre threshold defined in Section 17.12.210.2(b)(1)(ii). However, the subject property meets the approval procedures listed within Senate Bill 1573 and cannot be referred to the voters. Therefore, the proposal will follow the procedures for a minor annexation, including public hearings before both the planning commission and the city council in accordance with applicable code sections. This annexation is not being pursued on the basis of a health hazard and is therefore not subject to the provisions of Section 17.12.210.2(c).*

(3) SUBMITTAL REQUIREMENTS. In order to be accepted as complete and be processed in a timely manner by the City, requests for annexation of territory shall include the following materials and information:

(a) Completed application forms as supplied by the City Planner.

(b) Three copies of a site plan, drawn to a scale of 1 inch equals not more than 50 feet, shown as a graphic scale, of the property for which the annexation is requested. The site plan shall depict the surrounding properties, neighboring streets and roads, and existing uses of the property. If the application for annexation is not accompanied by a concurrent application for site plan, subdivision, or other land use approval, three copies of a conceptual plan of proposed uses of the property subsequent to annexation. In addition, 18 reduced copies of the plan sized as 11 inches by 17 inches shall be submitted.

(c) A plan showing the boundary lines of the properties, certified by a professional land surveyor, and the approximate area of the properties in acres or square feet.

(d) A legal description of the property, meeting the requirements of ORS 308.225.

(e) A narrative statement fully explaining the request and fully addressing the criteria for approval of an annexation.

Applicant's Findings: *This annexation application includes all materials required by Section 17.12.210.3. The applicant has submitted completed application forms provided by the city planner. A conceptual site plan drawn to scale, depicting surrounding properties, roads, and existing site conditions, has been provided in three full-size copies along with 18 reduced 11x17 copies, as required. A certified boundary and acreage plan prepared by a professional land surveyor is included, along with a legal description of the property meeting the standards of ORS 308.225. In addition, this application includes a narrative statement that fully explains the annexation request and addresses the applicable criteria for approval. These materials satisfy the city's requirements for a complete annexation submittal.*

(4) APPROVAL CRITERIA. In order to approve an application for annexation, the following affirmative findings concerning the action must be made by the decision authority:

(a) Need exists in the community for the land proposed to be annexed.

Applicant's Findings: *There is a documented and pressing need within the City of Stayton for additional residential land to accommodate current and projected population growth, as well as to support the city's goals related to housing supply, diversity, and affordability. The subject property, consisting of approximately 21.00 acres and currently designated Residential in the Stayton Comprehensive Plan, presents a valuable opportunity to address these identified needs.*

According to Chapter 2 of the 2021 Amended Comprehensive Plan, Stayton has experienced steady population growth over the last several decades. The city's population increased from 4,396 in 1980 to 7,644 in 2010, representing a 74% increase over that 30-year period. Projections adopted in the plan forecast continued growth, with the population expected to reach approximately 9,777 by 2030 under the medium-growth scenario, and potentially as high as 11,359. Even using a revised estimate accounting for updated census figures, the plan notes a likely population of over 10,700 by 2030. This sustained growth drives the need for additional land within city limits that can be developed for residential use in an efficient and well-planned manner.

Chapter 6 of the Comprehensive Plan further illustrates the housing implications of this growth. Table 6-10, "Housing Needs Projection," identifies a projected need for 894 new housing units between 2010 and 2030. To meet this need, the plan estimates that Stayton will require approximately 158 acres of additional residential land. While some of this need may be met through infill and redevelopment of underutilized parcels within the current city limits, the plan also recognizes that additional land will need to be brought into the city through annexation to maintain an adequate supply of buildable land.

Table 8-3 of the plan presents a Buildable Lands Inventory that shows a limited amount of vacant land currently available within city limits. As of February 2011, the city had only 67.9 acres of vacant land in residential zones, with a net buildable area of just 46.2 acres after accounting for constraints such as floodplains and natural resource protections. Furthermore, Table 8-4 identifies that much of the buildable land designated for residential use within the Urban Growth Boundary (UGB) lies outside the current city limits. Specifically, 154.8 acres of low-density residential land and 39.8 acres of medium-density residential land are located within the UGB but outside the city boundary. This means that without annexation, a large portion of the land identified for future residential growth is not currently available for development.

The proposed annexation directly supports the city's policy direction for managing urban growth. The comprehensive Plan states as a core land use goal (Chapter 8, Land Use Goals and Policies): "Coordinate the development of land outside the current city limits with Marion and Linn Counties" and "Provide for a land use regulation process that promotes a livable community and provides for expeditious review of development proposals." Annexing land

already designated for residential use and within the UGB allows Stayton to manage growth in a planned, coordinated manner and helps avoid leapfrog development or pressure on rural lands.

Additionally, the Comprehensive Plan emphasizes the importance of providing a variety of housing types to meet the needs of Stayton's diverse population. The housing goals outlined in Chapter 6 include:

- *"Existing and future residents will be provided a choice of housing types in safe and healthful housing."*
- *"New residential developments will be designed and built to become attractive neighborhoods."*

The proposed annexation and anticipated development of single-family homes on this property will directly contribute to the realization of these goals by expanding the range of housing options available in Stayton and supporting the development of new, well-integrated neighborhoods.

The proposed annexation is consistent with the City of Stayton Comprehensive Plan, which clearly establishes that additional residential land is needed to meet projected population and housing demands. The subject property is already designated Residential in the Comprehensive Plan and is located within the UGB, making it a logical and appropriate candidate for annexation. The proposed ~~High-Density Residential~~ Medium Density Residential (MD) zoning aligns with the city's land use goals, supports planned growth, and helps ensure that the city can meet future housing needs in a sustainable and coordinated manner.

(b) The site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Applicant's Findings: *The subject property is capable of being fully served by City of Stayton public services, including water, sanitary sewer, stormwater management, and transportation infrastructure, as documented in the city's adopted master plans. Extension of these services can be accomplished in a manner that is feasible, cost-effective, and consistent with the city's long-range public facility planning and development goals. A contract annexation agreement may be used, if necessary, to facilitate coordinated service provision and ensure that any improvements needed are implemented appropriately at the time of development.*

According to the Stayton Water Master Plan Executive Summary (2020), the city's water system has adequate capacity to meet future growth needs within the Urban Growth Boundary (UGB). The plan outlines a system-wide strategy for extending services to growing areas, including recommendations for new mains and system improvements to maintain pressure and fire flow standards. The subject property lies within the UGB and adjacent to existing city water infrastructure, allowing for logical service extension. Improvements to water mains will be

evaluated in conjunction with future subdivision design, and extension of service can be implemented in accordance with adopted master plan policies and development code requirements.

The 2021 Wastewater Facilities Planning Study identifies needed improvements to maintain system capacity and reliability as Stayton continues to grow. The study confirms that the existing wastewater treatment facility and trunk lines are adequately sized to serve new residential development within the UGB, including the area encompassing the subject property. Service to the site can be provided by extending gravity sewer lines from existing mains located to the north and west, consistent with the planned expansion of the residential sewer service area. At the time of development, project-specific engineering will confirm the alignment and sizing of sewer infrastructure and ensure compliance with the city's wastewater system standards and design criteria.

The Stayton Stormwater Master Plan (2020) provides a comprehensive framework for managing stormwater runoff and improving water quality throughout the community. The plan establishes design standards and policies for managing runoff from new development and emphasizes the use of detention, water quality treatment, and low-impact development techniques. The subject property is located in an area that can be served by storm drainage facilities consistent with the city's stormwater system goals. As part of future development, on-site stormwater facilities will be designed to meet the detention, conveyance, and treatment standards outlined in the Master Plan and Land Use and Development Code, ensuring protection of downstream infrastructure and water quality.

The 2007 Transportation System Plan (TSP) identifies planned improvements and future street connectivity objectives that support development within the UGB. The subject property has direct frontage along Golf Lane and will include public street improvements and connections as part of future subdivision development. These improvements will be designed in accordance with the city's collector street standards, which include provisions for sidewalks, bike lanes, planter strips, and appropriate access spacing. As noted in the Transportation Impact Analysis submitted with this application, the development is anticipated to generate 69 AM peak hour trips and 92 PM peak hour trips. The study determined that traffic impacts can be managed within the City's existing network and no mitigation is currently required under adopted standards.

The subject property is fully capable of being served by adequate public facilities, as documented in the city's adopted infrastructure master plans. Water, sewer, stormwater, and transportation services can be extended to the site in a manner consistent with Stayton's system capacities and design standards. The city's comprehensive planning framework anticipates urban development in this area, and the extension of public services to this site supports orderly, efficient growth in line with the goals of the Comprehensive Plan. If necessary, a contract

annexation agreement between the applicant and the city may formalize the timing, responsibility, and cost-sharing for public service extensions to ensure coordinated and timely delivery of infrastructure to the site.

(c) The proposed annexation is property contiguous to the existing City limits.

Applicant's Findings: *The subject property, identified as Marion County Assessor's Map and Tax Lot 091W03B001500, is contiguous to the existing City of Stayton corporate limits along its northern and western boundaries. The property shares an uninterrupted boundary line with land that is already located within the city limits, thereby meeting the statutory and code-based requirement for physical contiguity. This configuration allows for a logical and orderly extension of the city boundary, consistent with Stayton's Comprehensive Plan policies and the intent of Oregon's land use planning framework to promote efficient urban growth within established urban growth boundaries.*

(d) The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and policies of the City of Stayton.

Applicant's Findings: *The proposed annexation is compatible with the character of the surrounding area and is consistent with the City of Stayton's adopted urban growth policies. The subject property is located within the Stayton Urban Growth Boundary (UGB) and is designated Residential in the Stayton Comprehensive Plan. Upon annexation, the applicant is proposing to apply the ~~High-Density Residential (HD)~~Medium Density Residential (MD) zoning district, which corresponds directly to the existing Comprehensive Plan designation.*

This demonstrates compatibility with the planned character of the area, as defined by the city's long-range planning documents. The Residential designation reflects the city's intent for this area to transition into urban residential use, consistent with surrounding properties that share the same designation within the UGB. Bringing the property into the city under its existing designation ensures alignment with the broader land use pattern envisioned in the Comprehensive Plan and avoids inconsistencies in development intensity or use.

The annexation also supports Stayton's urban growth program by facilitating orderly and contiguous expansion of the city limits in an area identified for future urban development. The annexation will allow for future development to occur in a manner consistent with adopted policies related to land use, housing, infrastructure, and community form. This includes goals and policies in the Comprehensive Plan that promote efficient growth within the UGB, the extension of public services in a coordinated manner, and the development of complete and livable neighborhoods.

Accordingly, the annexation complies with the city's urban growth program and land use policies, and the application of the HD zoning district ensures compatibility with the planned character of the area.

(e) The annexation request complies, or can be made to comply, with all applicable provisions of state and local law.

Applicant's Findings: *This annexation request complies, or can be made to comply, with all applicable provisions of state and local law. The application has been submitted in accordance with the procedural requirements of Stayton Municipal Code Section 17.12.210, which outlines the process and criteria for annexation. The applicant has provided all required submittal materials, including a completed application form, certified legal description, property boundary map, narrative addressing the applicable approval criteria, and a conceptual development plan.*

The proposal also complies with Oregon state law, including provisions of ORS Chapter 222, which governs annexation procedures for cities. The property is contiguous to the existing city limits and is located entirely within the City of Stayton Urban Growth Boundary (UGB), as acknowledged by the Department of Land Conservation and Development (DLCD). No territory subject to this annexation is considered to be "island" or noncontiguous land, and no conflicts arise with respect to boundaries or jurisdiction. In accordance with state law, consent of the property owner has been provided, and the proposed annexation does not require an election or petition from surrounding property owners or electors.

In addition, the proposed annexation is consistent with the city's adopted Comprehensive Plan, which designates the subject property as Residential and includes it within the area identified for future urban development. This demonstrates compatibility with the city's coordinated population, housing, and infrastructure planning efforts, as required by Oregon's Statewide Planning Goals—particularly Goal 14: Urbanization, which encourages orderly and efficient transition of land from rural to urban use.

To the extent that any additional procedural steps are required prior to final approval (e.g., recording of the annexation ordinance, updating of service agreements, or adoption of a zoning ordinance applying the ~~HD district~~ MD zoning district), such steps can and will be completed in accordance with both state and local law.

(f) If a proposed contract annexation, within the terms and conditions of the contract the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Applicant's Findings: *This is not a contract annexation. Therefore, the provisions of Section 17.12.210.4(f) regarding cost calculations by the Public Works Director are not applicable to this request.*

(5) ZONING OF ANNEXED TERRITORY. All lands that are annexed to the City shall be zoned in accordance with the designation of the property in the Comprehensive Plan. The specific zone assigned to the land being annexed shall be determined by the City Council in accordance with the proposed uses of the land and the needs identified by the buildable lands analysis in the Comprehensive Plan. This requirement does not prohibit an application to amend the Comprehensive Plan Map concurrent with the application for annexation.

Applicant's Findings: *The subject property is designated Residential in the City of Stayton Comprehensive Plan, and the applicant is requesting the application of the corresponding ~~High-Density Residential (HD)~~Medium Density Residential (MD) zoning district upon annexation. This request is consistent with the Comprehensive Plan designation and no amendment to the Plan Map is proposed.*

The ~~HD zoning~~MD zoning district implements the Residential designation by allowing for primarily single-family detached homes at a density that supports the city's long-term housing and land use goals. The applicant anticipates future residential subdivision development on the property in a manner consistent with the allowed uses and development standards of the ~~HD zone~~MD zone.

This zoning assignment is also supported by the City's Buildable Lands Inventory and Housing Needs Analysis as outlined in Chapter 6 and Chapter 8 of the Comprehensive Plan. These analyses project the need for approximately 894 new housing units between 2010 and 2030 and identify a corresponding need for over 150 acres of additional residential land within the Urban Growth Boundary. Table 8-4 of the Comprehensive Plan shows that while there is some vacant land within the UGB, much of it is located outside the city limits—requiring annexation to make it available for development. The requested zoning supports the city's strategy to meet projected housing demand while maintaining an overall target gross density of ~~six units~~3.5 dwelling units per acre.

Accordingly, the proposed zoning is consistent with the adopted Comprehensive Plan designation, the intended use of the land, and the city's identified need for residential land within the Urban Growth Boundary.

(6) CONFORMANCE WITH CONCEPTUAL PLAN. Development of the property after annexation shall be in substantial conformance with any conceptual plan submitted with the application for annexation. For the purposes of this section, development is in substantial conformance with a conceptual plan if:

(a) The development is generally consistent with the character and intent of the conceptual plan;

(b) The number and types of housing units are generally consistent with those presented in the conceptual plan;

(c) The impacts from the development, including but not limited to, noise, vibration, dust, odor, or fumes, detectable at the property line will not exceed the maximums typical for the categories of uses proposed in the conceptual plan;
(d) The number and types of vehicular trips to and from the site will not exceed the maximums typical for the categories of uses proposed in the conceptual plan; and
(e) The amount and types of outside storage, loading, and parking will not exceed the maximums typical for the categories of uses proposed in the conceptual plan.

Applicant's Findings: *No formal ~~conceptual~~ development plan is submitted with this annexation application, only a highly conceptual plan depicting how a development could possibly be presented in the future. However, the applicant anticipates that the property will be developed in the future as a traditional residential subdivision consistent with the ~~High-Density Residential (HD)~~Medium Density Residential (MD) zoning designation proposed in conjunction with annexation.*

While a specific layout has not been prepared at this time, the anticipated future use—single-family residential development—is fully consistent with the Residential Comprehensive Plan designation that currently applies to the property. The property is being brought into the city under a zoning designation that supports traditional neighborhood development patterns, with detached homes, internal public streets, and appropriate pedestrian and infrastructure improvements.

As future development plans are brought forward, they will be subject to separate land use applications (e.g., subdivision review or site development approval) and will be required to demonstrate compliance with applicable standards for use, density, access, traffic generation, and environmental impacts. All development will be required to stay within the scope of impacts typical for ~~high-density~~medium density residential neighborhoods, including limits on noise, traffic, parking, and other externalities as outlined in the development code.

In the absence of a ~~conceptual~~ formal plan and given the applicant's stated intent to pursue residential subdivision development consistent with the ~~HD zoning~~MD zoning, future development will be aligned with the expectations and parameters described in this section.

(7) NOTICE TO COUNTY AND STATE.
(a) Within 10 working days after enactment of the ordinance approving the annexation, the City Recorder shall provide by certified mail to all public utilities, electric cooperatives and telecommunications carriers operating within the City each site address to be annexed as recorded on county assessment and tax rolls, a legal description and map of the proposed boundary change, and a copy of the ordinance approving the annexation.

(b) Within 10 days from the effective date the ordinance approving the annexation, the City Recorder shall provide to the Marion County Clerk and County Assessor a report containing a detailed legal description of the new boundaries established by the City.

(c) Within 14 days of enactment of the ordinance approving the annexation, the City Recorder shall transmit to the Oregon Secretary of State:

(1) A copy of the ordinance proclaiming the annexation, including a legal description of the territory to be annexed.

(2) An abstract of the vote, if a major annexation. The abstract of the vote shall show the whole number of electors voting on the annexation, the number of votes cast for annexation, and the number of votes cast against annexation.

(3) A copy of the statement of consent by electors or landowners in the territory annexed.

(d) Within 30 days of enactment of an ordinance annexing territory into the City, the City Recorder shall transmit to the Marion County Assessor and the Oregon Department of Revenue the legal description of the boundary change or proposed change and an accurate map conforming to the requirements of ORS 308.225(2).

Applicant's Findings: *The applicant understands that, following city council approval of the annexation ordinance, the city recorder is responsible for providing notice and documentation of the annexation to all applicable county and state agencies in accordance with Stayton Municipal Code Section 17.12.210.7 and ORS 308.225. This includes providing legal descriptions, maps, and copies of the ordinance to Marion County departments, the Oregon Secretary of State, the Oregon Department of Revenue, and utility service providers within the required timelines. The applicant acknowledges these post-approval steps are part of the formal annexation process and will ensure full cooperation with city staff as needed to complete these requirements.*

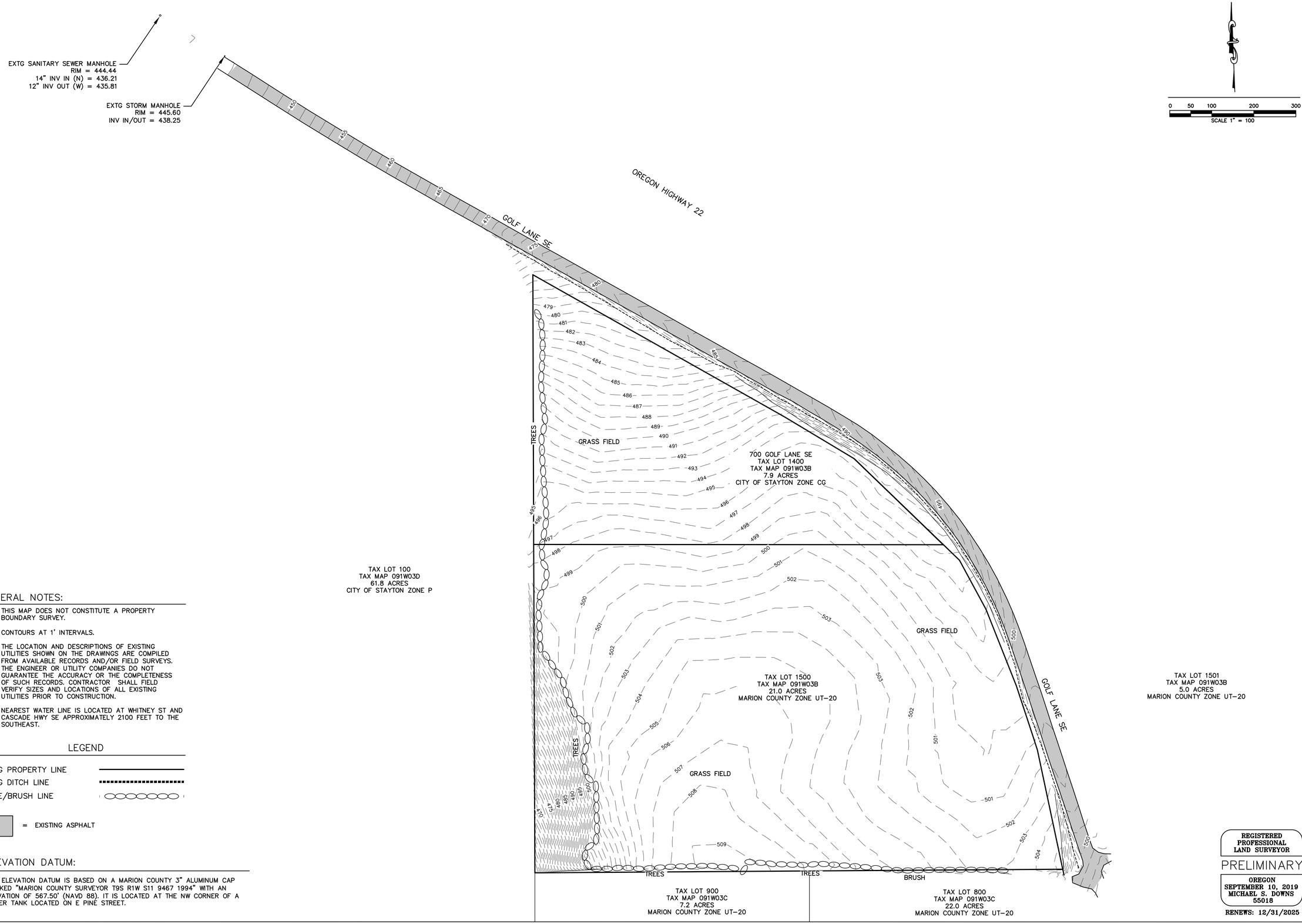
Section 5: Conclusion

The proposed annexation of the 21.00-acre property identified as Marion County Assessor's Map and Tax Lot 091W03B001500 is consistent with the applicable provisions of the Stayton Municipal Code, the city's Comprehensive Plan, and state law. The property is located within the city's Urban Growth Boundary and is designated Residential in the Comprehensive Plan, indicating its suitability for future urban development. The applicant is requesting ~~High-Density Residential (HD)~~Medium Density Residential (MD) zoning upon annexation, which aligns with the city's long-range planning goals and supports the anticipated development of a traditional single-family residential neighborhood. The annexation will help meet Stayton's projected housing needs by expanding the supply of buildable residential land within the city limits. Public

services and infrastructure can be extended to the property in an efficient and coordinated manner, consistent with the city's adopted utility master plans. The property is contiguous to the existing city limits and can be integrated seamlessly into the city's urban fabric.

Through this application, the applicant has provided all required materials and demonstrated compliance with the applicable criteria for annexation. The request supports the city's goals for managed growth, housing availability, and infrastructure planning, and represents a logical and beneficial expansion of the Stayton city limits. The applicant respectfully requests approval of the annexation and application of the Low-Density Residential zoning designation.

Section 6: Exhibits



GENERAL NOTES:

1. THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
2. CONTOURS AT 1' INTERVALS.
3. THE LOCATION AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE ENGINEER OR UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. CONTRACTOR SHALL FIELD VERIFY SIZES AND LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. NEAREST WATER LINE IS LOCATED AT WHITNEY ST AND CASCADE HWY SE APPROXIMATELY 2100 FEET TO THE SOUTHEAST.

LEGEND

EXTG PROPERTY LINE

EXTG DITCH LINE

TREE/BRUSH LINE

= EXISTING ASPHALT

ELEVATION DATUM:

THE ELEVATION DATUM IS BASED ON A MARION COUNTY 3" ALUMINUM CAP MARKED "MARION COUNTY SURVEYOR T9S R1W S11 9467 1994" WITH AN ELEVATION OF 567.50' (NAVD 88). IT IS LOCATED AT THE NW CORNER OF A WATER TANK LOCATED ON E PINE STREET.

NORTH SANTIAM PAVING COMPANY
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(503) 769-3436
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CONSTRUCTION • ENGINEERING • SURVEYING

GOLF LANE DEVELOPMENT
700 GOLF LANE SE
CITY OF STAYTON MARION COUNTY, OREGON
NW 1/4 SEC 3 T9S R1W WM TAX MAP 091W03B TAX LOT 1400

EXISTING CONDITIONS

PLOT DATE: 3/1/2024
REVISIONS:
DRAWN BY: LDW
CHECKED BY: LDW
JOB No: 23110
SCALE: 1" = 100'

SHEET
C1

REGISTERED PROFESSIONAL LAND SURVEYOR
PRELIMINARY
OREGON
SEPTEMBER 10, 2019
MICHAEL S. DOWNS
55018
RENEWS: 12/31/2025

PRELIMINARY LAND USE

GROSS PLANNING AREA:

GROSS AREA	914,760 SF = 21.0 ACRES
TRACT A	34,445 SF = – 0.79 ACRES
	880,315 SF = 20.21 ACRES

PLANNING TO BE DEVELOPED:

TOTAL	880,315 SF = 20.21 ACRES
PLAT ROADS	242,248 SF = –5.56 ACRES
NET PLANNING AREA	638,067 SF = 14.65 ACRES

NET PLANNING AREA:

74 LOTS / 14.65 ACRES = 5.05 LOTS PER ACRE

638,067 SF / 74 LOTS = 8,622 SF AVERAGE LOT SIZE

SMALLEST LOT SIZE: 7,000 SF
LARGEST LOT SIZE: 30,662 SF

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CONSTRUCTION • ENGINEERING • SURVEYING

GOLF LANE DEVELOPMENT

CITY OF STAYTON MARION COUNTY, OREGON
NW 1/4 SEC 3 T9S R1W WM TAX MAP 091W03B TAX LOT 1500

PRELIMINARY LAYOUT

REGISTERED PROFESSIONAL ENGINEER
88956PE
OREGON
JANUARY 21, 2021
LEVI D. WARRINER
EXPIRES: 6–30–2026

PLOT DATE:	6/11/2025
REVISIONS:	
DRAWN BY:	LDW
CHECKED BY:	LDW
JOB No:	23110
SCALE:	1" = 50'

SHEET
C2

0 100 200 400 600
SCALE 1" = 200'

NORTH SANTIAM PAVING COMPANY
41203 KINGSTON–LYONS DRIVE, P.O. BOX 516
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CONSTRUCTION • ENGINEERING • SURVEYING

GOLF LANE DEVELOPMENT

CITY OF STAYTON MARION COUNTY, OREGON
NW 1/4 SEC 3 T9S R1W WM TAX MAP 091W03B TAX LOT 1500

FUTURE UTILITIES

REGISTERED PROFESSIONAL ENGINEER
88956PE
LAURA D. WARRINER
JANUARY 21, 2021
RENEWAL: 6-30-2026

PLOT DATE: 6/11/2025
REVISIONS:
DRAWN BY: LDW
CHECKED BY: LDW
JOB No: 23110
SCALE: 1" = 50'

SHEET
C3

Stayton Annexation

Submittal Date:	March 26th, 2025
Submitted To:	City of Stayton Planning Division
Project Location:	Marion County Tax Lot No: 091W03B001500
Applicant(s):	KSD Properties, LLC Owner
Applicant's Land Use Representative:	Britany Randall of BRAND Land Use Britany@brandlanduse.com

BRAND

FEASABILITY | PLANNING | LAND USE

BRANDLANDUSE.COM

503.370.8704

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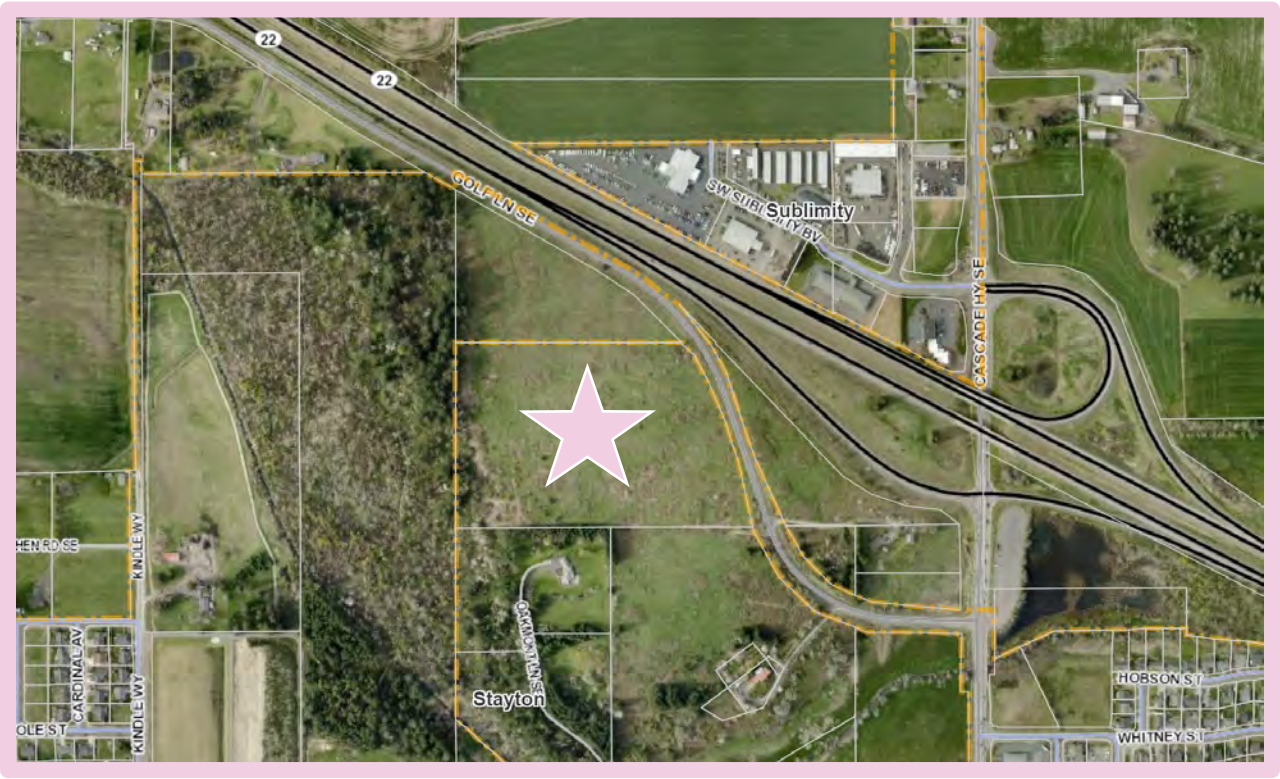
Aerial View of Subject Property and Existing Development



Section 1: Property Background and Request

The applicant, KSD Properties, LLC, is requesting the annexation of a 21.00-acre property into the corporate city limits of the City of Stayton. The subject property, identified as Marion County Assessor's Map and Tax Lot 091W03B001500, currently holds a Residential designation in the City of Stayton Comprehensive Plan. Upon annexation, the applicant proposes to apply the corresponding High Density Residential (HD) zoning to facilitate the future development of residential homes of varying types. The owner's team evaluated the possibility of developing the site as a 92-lot single-family residential subdivision.

This annexation aligns with Stayton's 2021 Amended Comprehensive Plan, which emphasizes the need for additional residential land to accommodate the city's projected population growth. The plan seeks to maintain a mix of housing options while targeting an overall gross density of approximately six units per acre. By bringing this land into the city, the proposed development will support these housing objectives while ensuring consistency with Stayton's long-term growth management policies.

A Transportation Impact Analysis (TIA) was conducted to assess the potential effects of the development on Stayton's roadway network. The analysis determined that the future

subdivision would generate 69 AM peak hour trips (17 inbound, 52 outbound) and 92 PM peak hour trips (58 inbound, 34 outbound), with the majority of traffic utilizing Cascade Highway and OR 22. While most study intersections will continue to operate within acceptable standards, the Cascade Highway / Shaff Road / Fern Ridge Road intersection does not currently meet Marion County's PM peak hour operating standards. However, no mitigation measures are required as the intersection remains within Stayton's operational standards and no planned improvements are identified in the City's Transportation System Plan (TSP). The TIA also evaluated the Golf Lane / Cascade Highway intersection and concluded that a realignment is not warranted, as the intersection does not meet signal warrant criteria, nor does it present operational or safety deficiencies that would trigger a required realignment under the City-County Memorandum of Understanding (MOU).

Future development may include a new public street access via Golf Lane, which meets Stayton's access spacing requirements and has been designed to ensure safe and efficient traffic flow. Additionally, half-street frontage improvements, including bike lanes, planter strips, and sidewalks, may be constructed along the project frontage to align with city collector street standards. At the time of future development of these improvements, they will enhance pedestrian and cyclist safety while integrating the development into the city's transportation network.

By addressing both housing needs and transportation considerations, the proposed annexation and development will contribute to Stayton's vision for sustainable growth. This project will expand the city's residential land supply, support housing availability, and ensure efficient infrastructure planning while maintaining consistency with the comprehensive plan and development policies.

Section 2: Existing Conditions

The site is located within the Urban Growth Boundary of the City of Stayton. The City of Stayton Comprehensive Plan map designates the property as "Residential".

The Comprehensive Plan designations of surrounding properties include:

North: "Commercial"

South: "Residential"

East: Across Golf Lane - "Public/Semi-Public"

West: "Public/Semi-Public"

The applicant is seeking to apply the High Density Residential (HD) zoning to the property. The surrounding properties are zoned as follows:

North: Commercial Central (CG)

South: Marion County – Outside Corporate City Limits

East: Across Golf Lane - Marion County – Outside Corporate City Limits

West: Public/Semi-Public (P)

Section 3: Findings Applicable to Administrative Procedures

Chapter 17.12 – Development Approval Procedures

Sections 17.12.030 – Application Procedure

Any application for a land use or development approval action authorized in this title shall be filed in the following manner.

(1) FORMS. The application shall be submitted on forms provided by the City Planner.
(2) FILING LOCATION. Unless stated otherwise, the application shall be filed with the City Planner at City Hall.
(3) PROPERTY OWNER AUTHORIZATION. If the property owners are not the applicants, then the application shall be accompanied by a notarized statement certifying the authority of anyone representing the owner(s) of property involved in the application. The application shall be signed by the property owner or authorized representative.
(4) SUPPLEMENTAL INFORMATION. All supplemental documentation and information specified in those sections governing the approval or action being requested shall accompany the application. The applicant shall be responsible for providing any and all information required for a complete application.
(5) COST FOR SERVICES.
    (a) Basic Application Costs. Basic application costs are intended to recover expenses incurred by the City in the receipt, review and processing of a land use application. A deposit in an amount established in the Deposit Schedule will be required at the time an application is filed.
    (b) Outside Planning Services. An applicant may, upon permission of the City, choose outside planning services at the applicant's expense, approved by the City, to process any land use application. The outside planning service will be tantamount to the function of the City Planner and will be subject to the supervision, direction and review of the City Planner. Utilizing outside planning services does not forego the City's requirement as to costs (including non-refundable deposit).
    (c) In the event the application is withdrawn before City action, the applicant shall be responsible to pay for the costs incurred up to the time of its withdrawal.

(d) Waiver of Charges. The City Council may, at its discretion, waive some or all charges for the processing of applications determined by the City Council to be in the public interest

(6) DEPOSIT SCHEDULE. A deposit schedule shall be in resolution form and adopted by the City Council.

Applicant's Findings: *The applicant acknowledges and understands the procedural requirements set forth in Stayton Municipal Code Section 17.12.030 for land use and development applications. This includes submitting the annexation application using forms provided by the city planner and filing all materials at city hall, unless otherwise directed. As the legal owner of the subject property, the application has been signed by an authorized representative of the property owner, and no additional authorization is required.*

The applicant further understands that all required supplemental information must be submitted in accordance with the applicable sections of the code governing the annexation process, and that the completeness of the application is the applicant's responsibility.

Regarding application fees, the applicant acknowledges that a deposit has been submitted in accordance with the city's adopted deposit schedule and understands that the city may charge staff time and other direct costs associated with processing the application. The applicant also understands that should the application be withdrawn; they remain responsible for any costs incurred up to the point of withdrawal. Finally, the applicant recognizes that the city council has discretion to waive certain fees when an application is determined to serve the public interest.

Section 4: Findings Applicable to Annexation

Chapter 17.12 – Development Approval Procedures

Sections 17.12.210 – Annexations

(1) DEFINITION. An annexation is an expansion of the City limits through the addition of territory to the jurisdictional boundaries of the City, including "contract annexation" agreements between applicants and the City.

Applicant's Findings: *KSD Properties, LLC, is requesting annexation of a 21.00-acre parcel (Marion County Assessor's Map and Tax Lot 091W03B001500) into the City of Stayton. The property is designated Residential in the Comprehensive Plan, and the applicant proposes High-Density Residential (HD) zoning to support a potential 92-lot single-family subdivision.*

The request aligns with the 2021 Amended Comprehensive Plan, which calls for additional residential land to meet projected growth and targets an average of six units per acre. A Transportation Impact Analysis (TIA) determined that traffic from the development would not exceed the city's operational standards, and no mitigation is required. Access is proposed via Golf Lane, which meets spacing requirements, and future frontage improvements will align with

collector street standards. The annexation supports Stayton's goals for managed growth, increased housing supply, and coordinated infrastructure planning.

(2) METHOD OF ADOPTION.

(b) Minor Annexations.

(1) A Minor Annexation is any annexation that meets all of the following characteristics.

(i) Consists of only one parcel, except proposed annexations that consist of contiguous parcels in the same ownership.

(ii) The area proposed for annexation is 1 acre or less. (Amended Ord. 918, March 18, 2010)

(2) Approval procedures. The following procedures shall be followed in the review and approval of an application for a Minor Annexation:

(i) An application for a Minor Annexation shall be filed with the City Planning Department.

(ii) Planning Commission Proceedings. The Planning Commission shall hold a public hearing in accordance with the requirements of Section 17.12.090. Following the public hearing the Commission shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. Based on the findings of fact and conclusions the Planning Commission shall make a recommendation to the City Council regarding the approval of the application.

(iii) City Council Proceedings. The City Council shall hold a public hearing in accordance with the requirements of Section 17.12.100. Following the public hearing, the City Council shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. If the Council finds that the criteria of Section 17.12.210.4 have been or will be met, the Council shall, by ordinance, shall set the boundaries of the area to be annexed by a legal description.

(c) Health Hazard Annexation The City may annex those areas constituting a health hazard in accordance with Oregon Revised Statutes, taking into consideration the ability of the City to provide necessary services. Annexation of areas constituting a health hazard is not subject to voter approval.

Applicant's Findings: *This application does not qualify as a Minor Annexation, as the subject property consists of 21.00 acres, exceeding the one-acre threshold defined in Section 17.12.210.2(b)(1)(ii). However, the subject property meets the approval procedures listed within Senate Bill 1573 and cannot be referred to the voters. Therefore, the proposal will follow the*

procedures for a minor annexation, including public hearings before both the planning commission and the city council in accordance with applicable code sections. This annexation is not being pursued on the basis of a health hazard and is therefore not subject to the provisions of Section 17.12.210.2(c).

(3) SUBMITTAL REQUIREMENTS. In order to be accepted as complete and be processed in a timely manner by the City, requests for annexation of territory shall include the following materials and information:
   (a) Completed application forms as supplied by the City Planner.
   (b) Three copies of a site plan, drawn to a scale of 1 inch equals not more than 50 feet, shown as a graphic scale, of the property for which the annexation is requested. The site plan shall depict the surrounding properties, neighboring streets and roads, and existing uses of the property. If the application for annexation is not accompanied by a concurrent application for site plan, subdivision, or other land use approval, three copies of a conceptual plan of proposed uses of the property subsequent to annexation. In addition, 18 reduced copies of the plan sized as 11 inches by 17 inches shall be submitted.
   (c) A plan showing the boundary lines of the properties, certified by a professional land surveyor, and the approximate area of the properties in acres or square feet.
   (d) A legal description of the property, meeting the requirements of ORS 308.225.
   (e) A narrative statement fully explaining the request and fully addressing the criteria for approval of an annexation.

Applicant's Findings: *This annexation application includes all materials required by Section 17.12.210.3. The applicant has submitted completed application forms provided by the city planner. A site plan drawn to scale, depicting surrounding properties, roads, and existing site conditions, has been provided in three full-size copies along with 18 reduced 11x17 copies, as required. A certified boundary and acreage plan prepared by a professional land surveyor is included, along with a legal description of the property meeting the standards of ORS 308.225. In addition, this application includes a narrative statement that fully explains the annexation request and addresses the applicable criteria for approval. These materials satisfy the city's requirements for a complete annexation submittal.*

(4) APPROVAL CRITERIA. In order to approve an application for annexation, the following affirmative findings concerning the action must be made by the decision authority:
   (a) Need exists in the community for the land proposed to be annexed.

Applicant's Findings: *There is a documented and pressing need within the City of Stayton for additional residential land to accommodate current and projected population growth, as well as to support the city's goals related to housing supply, diversity, and affordability. The subject*

property, consisting of approximately 21.00 acres and currently designated Residential in the Stayton Comprehensive Plan, presents a valuable opportunity to address these identified needs.

According to Chapter 2 of the 2021 Amended Comprehensive Plan, Stayton has experienced steady population growth over the last several decades. The city's population increased from 4,396 in 1980 to 7,644 in 2010, representing a 74% increase over that 30-year period. Projections adopted in the plan forecast continued growth, with the population expected to reach approximately 9,777 by 2030 under the medium-growth scenario, and potentially as high as 11,359. Even using a revised estimate accounting for updated census figures, the plan notes a likely population of over 10,700 by 2030. This sustained growth drives the need for additional land within city limits that can be developed for residential use in an efficient and well-planned manner.

Chapter 6 of the Comprehensive Plan further illustrates the housing implications of this growth. Table 6-10, "Housing Needs Projection," identifies a projected need for 894 new housing units between 2010 and 2030. To meet this need, the plan estimates that Stayton will require approximately 158 acres of additional residential land. While some of this need may be met through infill and redevelopment of underutilized parcels within the current city limits, the plan also recognizes that additional land will need to be brought into the city through annexation to maintain an adequate supply of buildable land.

Table 8-3 of the plan presents a Buildable Lands Inventory that shows a limited amount of vacant land currently available within city limits. As of February 2011, the city had only 67.9 acres of vacant land in residential zones, with a net buildable area of just 46.2 acres after accounting for constraints such as floodplains and natural resource protections. Furthermore, Table 8-4 identifies that much of the buildable land designated for residential use within the Urban Growth Boundary (UGB) lies outside the current city limits. Specifically, 154.8 acres of low-density residential land and 39.8 acres of medium-density residential land are located within the UGB but outside the city boundary. This means that without annexation, a large portion of the land identified for future residential growth is not currently available for development.

The proposed annexation directly supports the city's policy direction for managing urban growth. The comprehensive Plan states as a core land use goal (Chapter 8, Land Use Goals and Policies): "Coordinate the development of land outside the current city limits with Marion and Linn Counties" and "Provide for a land use regulation process that promotes a livable community and provides for expeditious review of development proposals." Annexing land already designated for residential use and within the UGB allows Stayton to manage growth in a planned, coordinated manner and helps avoid leapfrog development or pressure on rural lands.

Additionally, the Comprehensive Plan emphasizes the importance of providing a variety of housing types to meet the needs of Stayton's diverse population. The housing goals outlined in Chapter 6 include:

- *"Existing and future residents will be provided a choice of housing types in safe and healthful housing."*
- *"New residential developments will be designed and built to become attractive neighborhoods."*

The proposed annexation and anticipated development of single-family homes on this property will directly contribute to the realization of these goals by expanding the range of housing options available in Stayton and supporting the development of new, well-integrated neighborhoods.

The proposed annexation is consistent with the City of Stayton Comprehensive Plan, which clearly establishes that additional residential land is needed to meet projected population and housing demands. The subject property is already designated Residential in the Comprehensive Plan and is located within the UGB, making it a logical and appropriate candidate for annexation. The proposed Low-Density Residential zoning aligns with the city's land use goals, supports planned growth, and helps ensure that the city can meet future housing needs in a sustainable and coordinated manner.

(b) The site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Applicant's Findings: *The subject property is capable of being fully served by City of Stayton public services, including water, sanitary sewer, stormwater management, and transportation infrastructure, as documented in the city's adopted master plans. Extension of these services can be accomplished in a manner that is feasible, cost-effective, and consistent with the city's long-range public facility planning and development goals. A contract annexation agreement may be used, if necessary, to facilitate coordinated service provision and ensure that any improvements needed are implemented appropriately at the time of development.*

According to the Stayton Water Master Plan Executive Summary (2020), the city's water system has adequate capacity to meet future growth needs within the Urban Growth Boundary (UGB). The plan outlines a system-wide strategy for extending services to growing areas, including recommendations for new mains and system improvements to maintain pressure and fire flow standards. The subject property lies within the UGB and adjacent to existing city water infrastructure, allowing for logical service extension. Improvements to water mains will be evaluated in conjunction with future subdivision design, and extension of service can be

implemented in accordance with adopted master plan policies and development code requirements.

The 2021 Wastewater Facilities Planning Study identifies needed improvements to maintain system capacity and reliability as Stayton continues to grow. The study confirms that the existing wastewater treatment facility and trunk lines are adequately sized to serve new residential development within the UGB, including the area encompassing the subject property. Service to the site can be provided by extending gravity sewer lines from existing mains located to the north and west, consistent with the planned expansion of the residential sewer service area. At the time of development, project-specific engineering will confirm the alignment and sizing of sewer infrastructure and ensure compliance with the city's wastewater system standards and design criteria.

The Stayton Stormwater Master Plan (2020) provides a comprehensive framework for managing stormwater runoff and improving water quality throughout the community. The plan establishes design standards and policies for managing runoff from new development and emphasizes the use of detention, water quality treatment, and low-impact development techniques. The subject property is located in an area that can be served by storm drainage facilities consistent with the city's stormwater system goals. As part of future development, on-site stormwater facilities will be designed to meet the detention, conveyance, and treatment standards outlined in the Master Plan and Land Use and Development Code, ensuring protection of downstream infrastructure and water quality.

The 2007 Transportation System Plan (TSP) identifies planned improvements and future street connectivity objectives that support development within the UGB. The subject property has direct frontage along Golf Lane and will include public street improvements and connections as part of future subdivision development. These improvements will be designed in accordance with the city's collector street standards, which include provisions for sidewalks, bike lanes, planter strips, and appropriate access spacing. As noted in the Transportation Impact Analysis submitted with this application, the development is anticipated to generate 69 AM peak hour trips and 92 PM peak hour trips. The study determined that traffic impacts can be managed within the City's existing network and no mitigation is currently required under adopted standards.

The subject property is fully capable of being served by adequate public facilities, as documented in the city's adopted infrastructure master plans. Water, sewer, stormwater, and transportation services can be extended to the site in a manner consistent with Stayton's system capacities and design standards. The city's comprehensive planning framework anticipates urban development in this area, and the extension of public services to this site supports orderly, efficient growth in line with the goals of the Comprehensive Plan. If necessary, a contract annexation agreement between the applicant and the city may formalize the timing,

responsibility, and cost-sharing for public service extensions to ensure coordinated and timely delivery of infrastructure to the site.

(c) The proposed annexation is property contiguous to the existing City limits.

Applicant's Findings: *The subject property, identified as Marion County Assessor's Map and Tax Lot 091W03B001500, is contiguous to the existing City of Stayton corporate limits along its northern and western boundaries. The property shares an uninterrupted boundary line with land that is already located within the city limits, thereby meeting the statutory and code-based requirement for physical contiguity. This configuration allows for a logical and orderly extension of the city boundary, consistent with Stayton's Comprehensive Plan policies and the intent of Oregon's land use planning framework to promote efficient urban growth within established urban growth boundaries.*

(d) The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and policies of the City of Stayton.

Applicant's Findings: *The proposed annexation is compatible with the character of the surrounding area and is consistent with the City of Stayton's adopted urban growth policies. The subject property is located within the Stayton Urban Growth Boundary (UGB) and is designated Residential in the Stayton Comprehensive Plan. Upon annexation, the applicant is proposing to apply the High-Density Residential (HD) zoning district, which corresponds directly to the existing Comprehensive Plan designation.*

This demonstrates compatibility with the planned character of the area, as defined by the city's long-range planning documents. The Residential designation reflects the city's intent for this area to transition into urban residential use, consistent with surrounding properties that share the same designation within the UGB. Bringing the property into the city under its existing designation ensures alignment with the broader land use pattern envisioned in the Comprehensive Plan and avoids inconsistencies in development intensity or use.

The annexation also supports Stayton's urban growth program by facilitating orderly and contiguous expansion of the city limits in an area identified for future urban development. The annexation will allow for future development to occur in a manner consistent with adopted policies related to land use, housing, infrastructure, and community form. This includes goals and policies in the Comprehensive Plan that promote efficient growth within the UGB, the extension of public services in a coordinated manner, and the development of complete and livable neighborhoods.

Accordingly, the annexation complies with the city's urban growth program and land use policies, and the application of the HD zoning district ensures compatibility with the planned character of the area.

(e) The annexation request complies, or can be made to comply, with all applicable provisions of state and local law.

Applicant's Findings: *This annexation request complies, or can be made to comply, with all applicable provisions of state and local law. The application has been submitted in accordance with the procedural requirements of Stayton Municipal Code Section 17.12.210, which outlines the process and criteria for annexation. The applicant has provided all required submittal materials, including a completed application form, certified legal description, property boundary map, narrative addressing the applicable approval criteria, and a conceptual development plan.*

The proposal also complies with Oregon state law, including provisions of ORS Chapter 222, which governs annexation procedures for cities. The property is contiguous to the existing city limits and is located entirely within the City of Stayton Urban Growth Boundary (UGB), as acknowledged by the Department of Land Conservation and Development (DLCD). No territory subject to this annexation is considered to be "island" or noncontiguous land, and no conflicts arise with respect to boundaries or jurisdiction. In accordance with state law, consent of the property owner has been provided, and the proposed annexation does not require an election or petition from surrounding property owners or electors.

In addition, the proposed annexation is consistent with the city's adopted Comprehensive Plan, which designates the subject property as Residential and includes it within the area identified for future urban development. This demonstrates compatibility with the city's coordinated population, housing, and infrastructure planning efforts, as required by Oregon's Statewide Planning Goals—particularly Goal 14: Urbanization, which encourages orderly and efficient transition of land from rural to urban use.

To the extent that any additional procedural steps are required prior to final approval (e.g., recording of the annexation ordinance, updating of service agreements, or adoption of a zoning ordinance applying the HD district), such steps can and will be completed in accordance with both state and local law.

(f) If a proposed contract annexation, within the terms and conditions of the contract the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Applicant's Findings: *This is not a contract annexation. Therefore, the provisions of Section 17.12.210.4(f) regarding cost calculations by the Public Works Director are not applicable to this request.*

(5) ZONING OF ANNEXED TERRITORY. All lands that are annexed to the City shall be zoned in accordance with the designation of the property in the Comprehensive Plan. The specific zone assigned to the land being annexed shall be determined by the City Council in accordance with the proposed uses of the land and the needs identified by the

buildable lands analysis in the Comprehensive Plan. This requirement does not prohibit an application to amend the Comprehensive Plan Map concurrent with the application for annexation.

Applicant's Findings: *The subject property is designated Residential in the City of Stayton Comprehensive Plan, and the applicant is requesting the application of the corresponding High-Density Residential (HD) zoning district upon annexation. This request is consistent with the Comprehensive Plan designation and no amendment to the Plan Map is proposed.*

The HD zoning district implements the Residential designation by allowing for primarily single-family detached homes at a density that supports the city's long-term housing and land use goals. The applicant anticipates future residential subdivision development on the property in a manner consistent with the allowed uses and development standards of the HD zone.

This zoning assignment is also supported by the City's Buildable Lands Inventory and Housing Needs Analysis as outlined in Chapter 6 and Chapter 8 of the Comprehensive Plan. These analyses project the need for approximately 894 new housing units between 2010 and 2030 and identify a corresponding need for over 150 acres of additional residential land within the Urban Growth Boundary. Table 8-4 of the Comprehensive Plan shows that while there is some vacant land within the UGB, much of it is located outside the city limits—requiring annexation to make it available for development. The requested zoning supports the city's strategy to meet projected housing demand while maintaining an overall target gross density of six units per acre.

Accordingly, the proposed zoning is consistent with the adopted Comprehensive Plan designation, the intended use of the land, and the city's identified need for residential land within the Urban Growth Boundary.

(6) CONFORMANCE WITH CONCEPTUAL PLAN. Development of the property after annexation shall be in substantial conformance with any conceptual plan submitted with the application for annexation. For the purposes of this section, development is in substantial conformance with a conceptual plan if:

(a) The development is generally consistent with the character and intent of the conceptual plan;

(b) The number and types of housing units are generally consistent with those presented in the conceptual plan;

(c) The impacts from the development, including but not limited to, noise, vibration, dust, odor, or fumes, detectable at the property line will not exceed the maximums typical for the categories of uses proposed in the conceptual plan;

(d) The number and types of vehicular trips to and from the site will not exceed the maximums typical for the categories of uses proposed in the conceptual plan; and

(e) The amount and types of outside storage, loading, and parking will not exceed the maximums typical for the categories of uses proposed in the conceptual plan.

Applicant's Findings: *No formal conceptual development plan is submitted with this annexation application. However, the applicant anticipates that the property will be developed in the future as a traditional residential subdivision consistent with the High-Density Residential (HD) zoning designation proposed in conjunction with annexation.*

While a specific layout has not been prepared at this time, the anticipated future use—single-family residential development—is fully consistent with the Residential Comprehensive Plan designation that currently applies to the property. The property is being brought into the city under a zoning designation that supports traditional neighborhood development patterns, with detached homes, internal public streets, and appropriate pedestrian and infrastructure improvements.

As future development plans are brought forward, they will be subject to separate land use applications (e.g., subdivision review or site development approval) and will be required to demonstrate compliance with applicable standards for use, density, access, traffic generation, and environmental impacts. All development will be required to stay within the scope of impacts typical for low-density residential neighborhoods, including limits on noise, traffic, parking, and other externalities as outlined in the development code.

In the absence of a conceptual plan and given the applicant's stated intent to pursue residential subdivision development consistent with the HD zoning, future development will be aligned with the expectations and parameters described in this section.

(7) NOTICE TO COUNTY AND STATE.

(a) Within 10 working days after enactment of the ordinance approving the annexation, the City Recorder shall provide by certified mail to all public utilities, electric cooperatives and telecommunications carriers operating within the City each site address to be annexed as recorded on county assessment and tax rolls, a legal description and map of the proposed boundary change, and a copy of the ordinance approving the annexation.

(b) Within 10 days from the effective date the ordinance approving the annexation, the City Recorder shall provide to the Marion County Clerk and County Assessor a report containing a detailed legal description of the new boundaries established by the City.

(c) Within 14 days of enactment of the ordinance approving the annexation, the City Recorder shall transmit to the Oregon Secretary of State:

(1) A copy of the ordinance proclaiming the annexation, including a legal description of the territory to be annexed.

(2) An abstract of the vote, if a major annexation. The abstract of the vote shall show the whole number of electors voting on the annexation, the number of votes cast for annexation, and the number of votes cast against annexation.

(3) A copy of the statement of consent by electors or landowners in the territory annexed.

(d) Within 30 days of enactment of an ordinance annexing territory into the City, the City Recorder shall transmit to the Marion County Assessor and the Oregon Department of Revenue the legal description of the boundary change or proposed change and an accurate map conforming to the requirements of ORS 308.225(2).

Applicant's Findings: *The applicant understands that, following city council approval of the annexation ordinance, the city recorder is responsible for providing notice and documentation of the annexation to all applicable county and state agencies in accordance with Stayton Municipal Code Section 17.12.210.7 and ORS 308.225. This includes providing legal descriptions, maps, and copies of the ordinance to Marion County departments, the Oregon Secretary of State, the Oregon Department of Revenue, and utility service providers within the required timelines. The applicant acknowledges these post-approval steps are part of the formal annexation process and will ensure full cooperation with city staff as needed to complete these requirements.*

Section 5: Conclusion

The proposed annexation of the 21.00-acre property identified as Marion County Assessor's Map and Tax Lot 091W03B001500 is consistent with the applicable provisions of the Stayton Municipal Code, the city's Comprehensive Plan, and state law. The property is located within the city's Urban Growth Boundary and is designated Residential in the Comprehensive Plan, indicating its suitability for future urban development. The applicant is requesting High-Density Residential (HD) zoning upon annexation, which aligns with the city's long-range planning goals and supports the anticipated development of a traditional single-family residential neighborhood. The annexation will help meet Stayton's projected housing needs by expanding the supply of buildable residential land within the city limits. Public services and infrastructure can be extended to the property in an efficient and coordinated manner, consistent with the city's adopted utility master plans. The property is contiguous to the existing city limits and can be integrated seamlessly into the city's urban fabric.

Through this application, the applicant has provided all required materials and demonstrated compliance with the applicable criteria for annexation. The request supports the city's goals for managed growth, housing availability, and infrastructure planning, and represents a logical and beneficial expansion of the Stayton city limits. The applicant respectfully requests approval of the annexation and application of the Low-Density Residential zoning designation.

Section 6: Exhibits

Exhibit A – Marion County Tax Map

09 1W 03B

09 1W 03B SUBLIMITY

MARION COUNTY, OREGON

NW1/4 SEC3 T9S R1W W.M.

SCALE 1" = 200'

LEGEND

LINE TYPES

- Taxlot Boundary
- Historical Boundary
- Road Right-of-Way
- Easement
- Railroad Right-of-Way
- Railroad Centerline
- Private Road ROW
- Taxcode Line
- Subdivision/Plat Bndry
- Map Boundary
- Waterline - Taxlot Bndry
- Waterline - Non Bndry

CORNER TYPES

- 1/16TH Section Cor.
- 1/4 Section Cor.
- DLC Corner
- Section Corner (16 15 / 21 22)

NUMBERS

Tax Code Number

00 00 0

Acreage *0.25 AC*

All acres listed are Net Acres, excluding any portions of the taxlot within public ROWs

NOTES

Tick Marks: A tick mark in the road indicates that the labeled dimension extends into the public ROW

200.00
175.00

CANCELLED NUMBERS

201
501
701
1100
1201
1401

DISCLAIMER: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY

Marion County OREGON — Assessors Office Cartography Dept

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT www.co.marion.or.us

PLOT DATE: 3/28/2022

SUBLIMITY 09 1W 03B

SEE MAP 081W33D

SEE MAP 081W34CC

SEE MAP 081W34CD

SEE MAP 081W34DC

SEE MAP 091W04A

SEE MAP 091W04D

SEE MAP 091W03A

SEE MAP 091W03C

SEE MAP 091W03DB

W 8TH STREET

9TH STREET

EAST 7TH STREET

CASCADE MEADOW DRIVE

ALPINE COURT

WILLOW CT

MISTMAIDEN COURT

LUPINE COURT

LARKSPUR COURT

CLAY STREET

FOXHILL AVENUE

EMERALD PL

DALMATIAN AVENUE

CENTER

03BB

03BA

29 18 0

29 58 0

29 04 0

29 23 0

29 54 0

RE-ENT COR G BROWN DLC 47

SLY SW COR G BROWN DLC 47

SE COR G BROWN DLC 47

ELY NE COR H FOSTER DLC 45

NW COR H HOBSON LAND CLAIM

1/4 COR

100 PARCEL 2 *34.01 AC*

PART. PLAT 1995-81

NOTE - REMAINDER OF THIS PARCEL ON MAP 09 1W 03BA

200 *10.89 AC* GOV'T LOT 1

300 PARCEL 1 *4.39 AC*

400 *3.15 AC*

500 *0.34 AC*

600 *2.19 AC*

700 *0.88 AC*

800 *0.70 AC*

900 *0.84 AC*

1000 *0.82 AC*

301 PARCEL 2 *2.00 AC*

92 - 117

301 A1

302 PARCEL 3 *0.88 AC*

1300 *0.94 AC* MCSR 38148

1200 *2.28 AC*

1400 *8.00 AC*

1500 *21.00 AC* GOV'T LOT 2

1501 *4.98 AC*

MCSR 39500

P.P.

GOLF LANE

NORTH SANTIAM GOLF LANE

SUBLIMITY BLVD.

SE CR 9004 HIGHWAY NO. 22

SE MR 30 HIGHWAY

CASCADE HIGHWAY

CASCADE VIEW AVE

CTR SEC

50' ACCESS EASEMENT

S89 30W 2206.13

'FRS' 2129.22

N89 36E 24.30 CH 1942.13

N89 36E 33.61 CH 2218.26

N89 36E 33.65 CH 2220.90

S0 46W 16.79 CH 1108.14

S0 46W 11.90 CH 785.40

09 1W 03B

Exhibit B – Deeds

Marion County Parcel Information

TICOR TITLE™

Parcel Information

Parcel #:	**533917**
Tax Lot:	**091W03B001500**
Site Address:	
	Sublimity OR 97385
Owner:	Ksd Properties LLC
Owner2:	
Owner Address:	500 SW Sublimity Blvd
	Sublimity OR 97385 - 9629
Twn/Range/Section:	09S / 01W / 03 / NW
Parcel Size:	21.00 Acres (914,760 SqFt)
Plat/Subdivision:	
Lot:	
Block:	
Census Tract/Block:	010701 / 5027
Waterfront:	

Tax Information

Levy Code Area:	29540
Levy Rate:	12.1555
Tax Year:	2023
Annual Tax:	$2,777.28
Exempt Desc:	N/A

Legal

01-02: 21.0 ACRES DISQ FARM USE, PAT LIAB $4,884.71

Assessment Information

Market Value Land:	$781,200.00
Market Value Impr:	$0.00
Market Value Total:	$781,200.00
Assessed Value:	$228,480.00

Land

Zoning:	County-UT-20 - Urban Transition - 20 Acres Lot Min.	**Cnty Bldg Use:**	Residential
Cnty Land Use:	490 - Tract land only, over 1 acre, inside city or urban growth boundary	**Neighborhood:**	
Std Land Use:	VMSC - Vacant Misc	**Recreation:**	
School District:	29J - North Santiam	**Primary School:**	Stayton Elementary School
Middle School:	Stayton Middle School	**High School:**	Stayton High School

Improvement

Year Built:		**Stories:**		**Finished Area:**	
Bedrooms:		**Bathrooms:**		**Garage:**	
Basement Fin:					

Transfer Information

Rec. Date:	09/28/2023	**Sale Price:**	$650,000.00	**Doc Num:**	2023-29433	**Doc Type:**	Deed
Owner:	Ksd Properties LLC			**Grantor:**	MCCLAIN LIVING TRUST		
Orig. Loan Amt:				**Title Co:**	AMERITITLE		
Finance Type:		**Loan Type:**		**Lender:**			

AmeriTitle

MARION COUNTY RECORDS **2023-29433**
D-DEED 09/28/2023 10:30 AM
$10.00 $11.00 $10.00 $60.00 $91.00

I, Bill Burgess, County Clerk for Marion County, Oregon, certify that the instrument identified herein was recorded in the Official Records.

Pgs=2 JCK

After recording return to:
KSD Properties LLC, an Oregon limited liability company
500 SW Sublimity Blvd
Sublimity, OR 97385

Until a change is requested all tax statements shall be sent to the following address:
KSD Properties LLC, an Oregon limited liability company
500 SW Sublimity Blvd
Sublimity, OR 97385
File No. 605382AM

AMERITITLE 605382AM

STATUTORY WARRANTY DEED

William L. McClain and Pamela K. McClain, Trustees, or their successors in interest of the McClain Living Trust, dated June 6, 2003,

Grantor(s), hereby convey and warrant to

KSD Properties LLC, an Oregon limited liability company,

Grantee(s), the following described real property in the County of Marion and State of Oregon free of encumbrances except as specifically set forth herein:

Beginning at a point on the legal subdivision line dividing Section 3 into East and West halves and being 33.35 chains North 15' East from the one fourth section line on the North boundary of said Section 3 in Township 9 South, Range 1 West of the Willamette Meridian in Marion County, Oregon; thence South 89°30' West 33.61 chains to the Eastline of the Donation Land Claim of Henry Foster; thence South 45' West 11.90 chains along the line of the Henry Foster Donation Land Claim; thence North 89°36' East 33.65 chains to the East line of the West one half of said Section 3; thence North 15' West 11.90 chains along the East line of the West one half of said Section 3 to the place of beginning.

SAVE AND EXCEPT that portion conveyed to the State of Oregon by and through its State Highway Commission recorded in Book 483, Page 669, Deed Records for Marion County, Oregon.

ALSO SAVE AND EXCEPT therefrom that ceratin real property conveyed to the Sublimity Fire Insurance Co. in Book 638, Page 091, Deed Records for Marion County.

FURTHER SAVE AND EXCEPT therefrom that certain property described in Final Judgment filed August 11, 1997 in Marion County Court Case 95C11158, recorded August 29, 1997 in Reel 1422, Page 23, Deed Records for Marion County.

FOR INFORMATION PURPOSES ONLY, THE MAP/TAX ACCT #(S) ARE REFERENCED HERE:

091W03B001500

The true and actual consideration for this conveyance is $650,000.00.

Page 2 Statutory Warranty Deed
Escrow No. 605382AM
The above-described property is free of encumbrances except all those items of record, if any, as of the date of this deed and those shown below, if any:

2023-2024 Real Property Taxes, a lien not yet due and payable

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

Dated this 27 day of September 2023

The McClain Living Trust, dated June 6, 2003

X _____
William L. McClain, Trustee

X _____
Pamela K. McClain, Trustee

State of Oregon} ss.
County of Marion}

On this 27 day of September, 2023 ___, before me, Stephanie Catlett Goad a Notary Public in and for said state, personally appeared William L. McClain and Pamela K. McClain known or identified to me to be the person whose name is subscribed to the foregoing instrument as trustee of the McClain Living Trust, and acknowledged to me that he/she/they executed the same as Trustee.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

_____
Notary Public for the State of Oregon
Residing at: Salem OR
Commission Expires: 12-13-2025

OFFICIAL STAMP
STEPHANIE MARIE CATLETT-GOAD
NOTARY PUBLIC - OREGON
COMMISSION NO. 1019866
MY COMMISSION EXPIRES DECEMBER 13, 2025

Marion County
Document Separator Page

Instrument # 2023-29433

September 28, 2023 10:30 AM

State of Oregon
County of Marion

I hereby certify that the attached instrument was received and duly recorded by me in Marion County records:

Fee: $91.00

Bill Burgess
Marion County Clerk

This is not an invoice.

Exhibit C – Articles of Organization

AMENDED ANNUAL REPORT

Corporation Division
sos.oregon.gov/business

E-FILED
Jan 03, 2024
OREGON SECRETARY OF STATE

REGISTRY NUMBER

13117791

REGISTRATION DATE

02/18/2003

BUSINESS NAME

KSD PROPERTIES, LLC

BUSINESS ACTIVITY

REAL ESTATE INVESTMENT

MAILING ADDRESS

500 SW SUBLIMITY BLVD
SUBLIMITY OR 97385 USA

TYPE

DOMESTIC LIMITED LIABILITY COMPANY

PRIMARY PLACE OF BUSINESS

500 SW SUBLIMITY BLVD
SUBLIMITY OR 97385 USA

JURISDICTION

OREGON

REGISTERED AGENT

JEFF KOEHNKE

500 SW SUBLIMITY BLVD
SUBLIMITY OR 97385 USA

If the Registered Agent has changed, the new agent has consented to the appointment.

MANAGER

JEFF KOEHNKE

500 W SUBLIMITY BLVD
SUBLIMITY OR 97385 USA

I declare, under penalty of perjury, that this document does not fraudulently conceal, fraudulently obscure, fraudulently alter or otherwise misrepresent the identity of the person or any officers, managers, members or agents of the limited liability company on behalf of which the person signs. This filing has been examined by me and is, to the best of my knowledge and belief, true, correct, and complete. Making false statements in this document is against the law and may be penalized by fines, imprisonment, or both.

By typing my name in the electronic signature field, I am agreeing to conduct business electronically with the State of Oregon. I understand that transactions and/or signatures in records may not be denied legal effect solely because they are conducted, executed, or prepared in electronic form and that if a law requires a record or signature to be in writing, an electronic record or signature satisfies that requirement.

ELECTRONIC SIGNATURE

NAME

JEFF KOEHNKE

TITLE

MANAGING MEMBER

DATE

01-03-2024

Exhibit D – Stayton Annexation Application Form

Submit Via Email

CITY OF STAYTON
APPLICATION FOR ANNEXATION

PROPERTY OWNER: KSD Properties, LLC
Address: 500 SW Sublimity Blvd
City/State/Zip: Sublimity, OR 97385
Phone: See Representative Email: See Representative

APPLICANT: Same as property owner.
Address:
City/State/Zip:
Phone: Email:

APPLICANT'S REPRESENTATIVE: BRAND Land Use, LLC | Britany Randall
Address: 1720 Liberty Street SE
City/State/Zip: Salem, OR 97302
Phone: 503-370-8704 Email: britany@brandlanduse.com

CONSULTANTS: Please list below planning and engineering consultants.

PLANNING	ENGINEERING
Name: BRAND Land Use, LLC	Name:
Address: 1720 Liberty Street SE	Address:
City/State/Zip: Salem, OR 97302	City/State/Zip:
Phone: 503-370-8704	Phone:
Email: britany@brandlandus.com	Email:

Select one of the above as the principal contact to whom correspondence from the Planning Department should be addressed:

☐ owner ☐ applicant ■ applicant's representative ■ planning consultant ☐ engineer

LOCATION:

StreetAddress:

Assessor's Tax Lot Number and Tax Map Number:
091W03B001500

Closest Intersecting Streets: Golf Lane SE and Cascade Highway SE

CURRENT COMPREHENSIVE PLAN DESIGNATION: Residential

ZONE MAP DESIGNATION PROPOSED WITH ANNEXATION: High Density Residential (HD)

SIGNATURE OF APPLICANT: Jeff Koehnke

DO NOT WRITE BELOW THIS LINE

Application received by: Date: Fee Paid: $ Receipt No.

Land Use File#

Please See Detailed Narrative Included with Submittal

QUESTIONS TO BE ADDRESSED IN NARRATIVE STATEMENT

The Stayton Planning Commission, with assistance from the Planning Department and the Public Works Department will use the information provided by the applicant to analyze the merits of this application. A decision to approve or deny the application is made based on how well the applicant presents information to show the application meets the standards and criteria set forth in the Stayton Land Use and Development Code 17.12.210.5. Please provide the following information in full and attach a narrative statement to this application.

1. NEED: What is the demonstrated need for this property to be annexed into the City?
2. ADEQUATE UTILITIES: How will the proposed annexation obtain or maintain adequate utility systems (including water, sewer, surface water drainage, power, and communications), and connections, including easements, to properly serve the subject property in accordance with accepted City standards?

   All public improvements must meet City of Stayton standard specifications. All design plans must be approved by the City prior to construction. The City will inspect all construction.

   a. List public services currently available to the site:

   Water Supply: _____ - inch line available in _____ Street.
   Sanitary Sewer: _____ - inch line available in _____ Street.
   Storm Sewer: _____ - inch line available in _____ Street.
   Natural Gas: _____ - inch line available in _____ Street.
   Telephone: ☐ is (or) ☐ is not available in _____ Street.
   Cable TV: ☐ is (or) ☐ is not available in _____ Street.
   Electrical: ☐ is (or) ☐ is not available in _____ Street.

   b. Will existing City public services need to be replaced or upgraded to accommodate the demands created by the annexation? ☐ yes ☐ no
3. Is the subject property contiguous to the city limits? ☐ yes ☐ no
4. Is the proposed annexation compatible with the character of the surrounding area and does it comply with the urban growth program and policies of the City?
5. How does the proposed annexation comply, or will be made to comply with all applicable provisions of state and local law?
6. If the proposed annexation is a contract annexation, does the proposal include the cost of City facility and service extensions as calculated by the Public Works Director?

Exhibit E – Conceptual Subdivision Site Plan

Exhibit F – Professional Land Surveyor Property Boundary Line Exhibit

TAX LOT 1400
8.0 ACRES
CITY LIMITS

TRACT A
RAIN GARDEN

21 6000 SF | 20 6000 SF | 19 7160 SF | 18 7220 SF | 17 6000 SF | 16 6000 SF | 15 6000 SF | 14 6000 SF | 13 6000 SF | 12 6000 SF | 11 7370 SF | 10 7330 SF | 9 7150 SF | 8 6000 SF | 7 6000 SF | 6 9320 SF | 5 6000 SF | 4 8490 SF | 3 7050 SF | 2 7000 SF | 1 9180 SF

22 6000 SF | 23 6000 SF | 24 6000 SF | 25 6000 SF | 26 6000 SF | 27 6000 SF | 28 7570 SF | 29 8170 SF | 30 7000 SF | 31 6000 SF | 32 6000 SF | 33 6000 SF | 34 6000 SF | 35 6000 SF | 36 6000 SF | 37 6000 SF | 38 6000 SF | 39 6000 SF | 40 6000 SF | 41 6000 SF | 42 6000 SF | 43 6000 SF | 44 6000 SF | 45 7260 SF | 46 10770 SF | 47 13950 SF | 48 11240 SF | 49 7260 SF | 50 8530 SF

86 8230 SF | 85 8230 SF | 87 6000 SF | 84 6000 SF | 88 6000 SF | 83 6000 SF | 89 6000 SF | 82 6000 SF | 90 6000 SF | 81 6000 SF | 91 6000 SF | 80 6000 SF | 92 8120 SF | 79 8120 SF

72 8230 SF | 71 8230 SF | 73 6000 SF | 70 6000 SF | 74 6000 SF | 69 6000 SF | 75 6000 SF | 68 6000 SF | 76 6000 SF | 67 6000 SF | 77 6000 SF | 66 6000 SF | 78 8120 SF | 65 8120 SF

58 8230 SF | 57 8230 SF | 59 6000 SF | 56 6000 SF | 60 6000 SF | 55 6000 SF | 61 6000 SF | 54 6000 SF | 62 6000 SF | 53 6000 SF | 63 6000 SF | 52 6000 SF | 64 8120 SF | 51 8120 SF

TAX LOT 1500
21.0 ACRES
TO BE ANNEXED

TAX LOT 100
CITY LIMITS

TAX LOT 1501
COUNTY LIMITS

TAX LOT 900
COUNTY LIMITS

TAX LOT 800
COUNTY LIMITS

GOLF LANE ROAD

0 25 50 100 150
SCALE 1" = 50'

LAND USE

GROSS PLANNING AREA:

GROSS AREA	914,760 SF = 21.0 ACRES
TRACT A	33,600 SF = – 0.77 ACRES
	881,160 SF = 20.23 ACRES

PLANNING TO BE DEVELOPED:

TOTAL	881,160 SF = 20.23 ACRES
PLAT ROADS	248,400 SF = –5.70 ACRES
NET PLANNING AREA	632,760 SF = 14.53 ACRES

NET PLANNING AREA:

92 LOTS / 14.53 ACRES = 6.33 LOTS PER ACRE

632,760 SF / 92 LOTS = 6,880 SF AVERAGE LOT SIZE

SMALLEST LOT SIZE: 6,000 SF
LARGEST LOT SIZE: 13,950 SF

NS NORTH SANTIAM PAVING COMPANY
41203 KINGSTON–LYONS DRIVE, P.O. BOX 516
STAYTON, OREGON 97383
(503) 769–3436
LEVI@NSPOR.COM
CONSTRUCTION • ENGINEERING • SURVEYING

GOLF LANE ROAD SUBDIVISION

CITY OF STAYTON MARION COUNTY, OREGON
NW 1/4 SEC 3 T9S R1W WM TAX MAP 091W03B TAX LOT 1500

PRELIMINARY LAYOUT OPTION 3

REGISTERED PROFESSIONAL ENGINEER
88956PE
OREGON
JANUARY 21, 2021
LEVI D. WARRINER
EXPIRES: 6–30–2024

PLOT DATE: 2/7/2024
REVISIONS:
DRAWN BY: LDW
CHECKED BY: LDW
JOB No: 23110
SCALE: 1" = 50'

SHEET
C1

Exhibit G – Legal Description of Property

EXHIBIT A

A unit of land situated in the northwest and southwest one-quarter of Section 3, Township 9 South, Range 1 West, of the Willamette Meridian, Marion County, Oregon, being all of that property conveyed to KSD Properties, LLC by Instrument Number 2023-29433, Marion County Records, and further described as follows:

Beginning at the northwest corner of Parcel 1 of Partition Plat 91-20, Marion County Records, being coincident with the east line of the Henry Foster Donation Land Claim and the east line of that property conveyed to the Stayton School District by Volume 638, Page 164, Marion County Records;

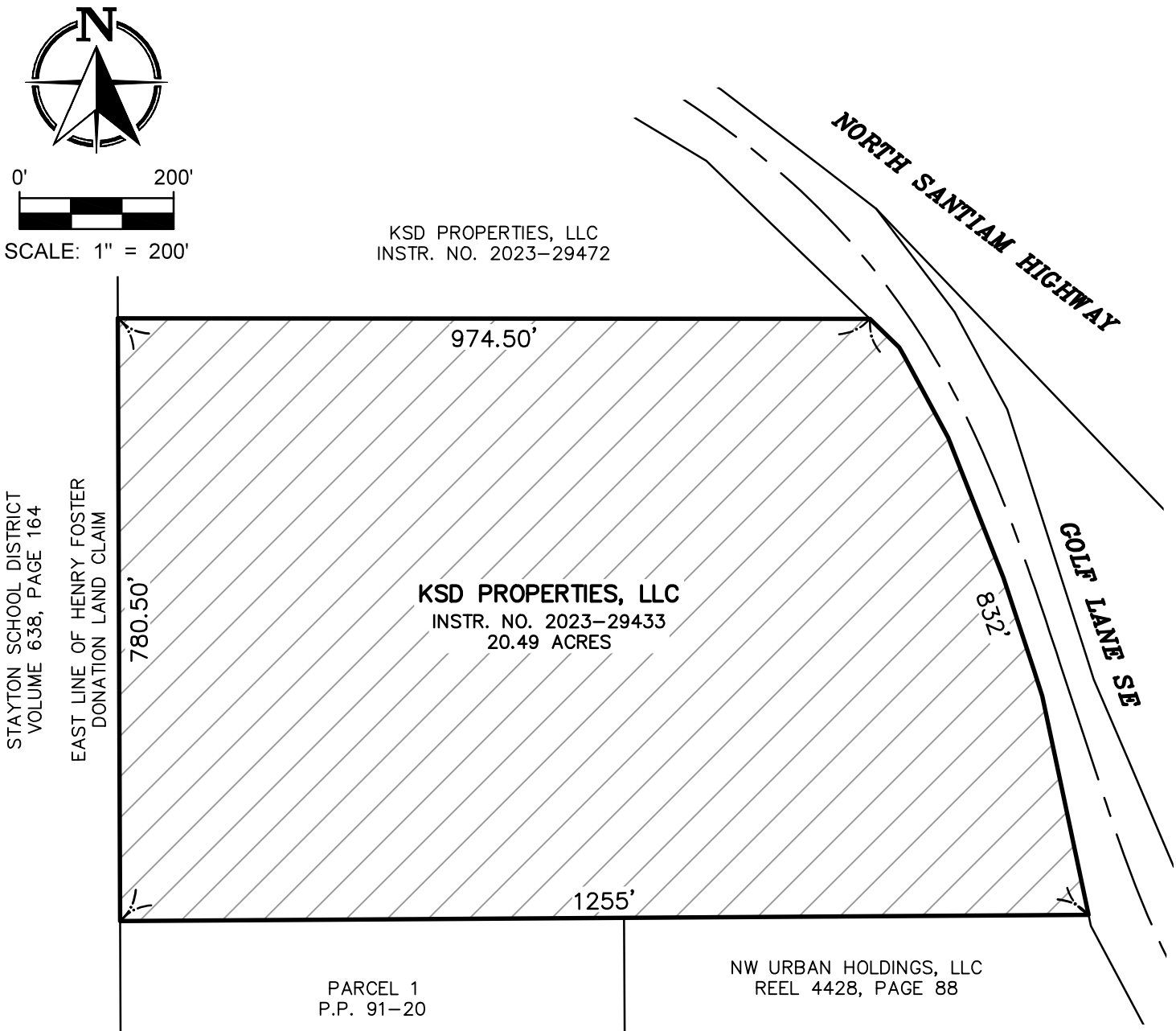
thence, going northerly, along the east line of said Henry Foster Donation Land Claim, approximately 780.50 feet to the south line of that property conveyed to KSD Properties, LLC by Instrument Number 2023-29472, Marion County Records;

thence, going easterly, along the south line of said Instrument Number 2023-29472, approximately 974.50 feet to the west line of Golf Lane SE;

thence, going southerly, along the west line of said Golf Lane SE, approximately 832 feet to the easterly extension of the north line of Parcel 1 of said Partition Plat 91-20, being coincident with the north line of that property conveyed to NW Urban Holdings, LLC by Reel 4428, Page 88, Marion County Records;

thence, going westerly, along the easterly extension of the north line of said Parcel 1 and the north line of said NW Urban Holdings, LLC property, approximately 1255 feet to the Point of Beginning.

Containing 20.49 acres, more or less.



REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
SEPTEMBER 12, 2017
STEVEN LEE HOWELL
91569

RENEWS: 6–30–2025

EXHIBIT B

IN THE NW & SW 1/4 OF SECTION 3,
TOWNSHIP 9 SOUTH, RANGE 1 WEST, W.M.
MARION COUNTY, OREGON

DATE: MARCH 12, 2025

SURVEYED FOR: KSD PROPERTIES, LLC

FFN SURVEYING
7230 3rd Street SE #145, Turner, OR 97392
P: (503) 558-3330 E: info@ffnsurveying.com

JOB NO.
25–562

SHEET
1/1

Exhibit H – Transportation Impact Analysis

STAYTON GOLF LANE SUBDIVISION

TRANSPORTATION IMPACT ANALYSIS

AUGUST 2024

PREPARED FOR KSD PROPERTIES

Jeff Koehnke

Brad Koehnke

Bryan Koehnke

PREPARED BY DKS ASSOCIATES

Jenna Bogert, P.E.

Harrison Steiger

REGISTERED PROFESSIONAL ENGINEER 97,731 OREGON MAY 11, 2021 JENNA C. BOGERT EXPIRES: DEC. 31, 2025

Jenna C Bogert

Digitally signed by Jenna C Bogert
Date: 2024.08.16 14:02:07 -07'00'

TABLE OF CONTENTS

INTRODUCTION

This study evaluates the transportation impacts associated with the proposed 92-lot subdivision development in Stayton, Oregon. The property is located west of the Golf Lane and Cascade Highway intersection, south of Highway 22.

The purpose of this transportation impact analysis is to identify potential mitigation measures needed to offset transportation impacts that the proposed development may have on the nearby transportation network. The impact analysis is focused on the study intersections, which are listed below and shown in Figure 1.

1. Cascade Hwy / OR 22 Westbound Ramps
2. Cascade Hwy / OR 22 Eastbound Ramps
3. Cascade Hwy / Golf Lane / Parking Lot
4. Cascade Hwy / Whitney St
5. Cascade Hwy Shaff Rd / Fern Ridge Rd
6. Golf Ln / New Public Street (Site Access)

FIGURE 1: STUDY AREA

EXISTING CONDITIONS

This chapter provides documentation of existing study area conditions, including the study area roadway network, pedestrian and bicycle facilities, and existing traffic volumes and operations.

STUDY AREA ROADWAY NETWORK

The project site is located in north Stayton, Oregon. The key roadways in the study area are summarized in Table 1 along with their existing roadway characteristics.

TABLE 1: STUDY AREA ROADWAY CHARACTERISTICS

ROADWAY	JURISDICTION	FUNCTIONAL CLASSIFICATION	LANES	POSTED SPEED	SIDEWALK	BIKE FACILITIES
OR 22	ODOT	Statewide Highway	4	55 mph	No	No
CASCADE HWY	Marion County	Major Arterial	3	45 mph	Partial[1]	Yes
GOLF LN	Marion County	Collector	2	N/A	No	No
WHITNEY ST	City of Stayton	Residential Local	2	N/A	Partial[2]	No
SHAFF RD	Marion County	Minor Arterial	2	35 mph	Partial [3]	Yes
FERN RIDGE RD	City of Stayton	Collector	3	35 mph	Yes	Yes

CRASH ANALYSIS

Crash data was obtained for the five most recent years of available data (2018-2022) in Stayton, Oregon. A total of 58 intersection crashes were reported at the five study intersections and are summarized below. No fatal crashes were reported and none of the crashes involved bicyclists or pedestrians. There were no reported crashes at the Cascade Highway / Golf Lane intersection during the time period analyzed. There are no ODOT SPIS sites (2019 – 2021 data) within the study area.

[1] Sidewalk present on east side of road and west side of road north of Mill Creek

[2] Sidewalk present on south side of road only

[3] Sidewalk present of south side of road only

There was one Serious Injury (A) crash that occurred at the OR22 Westbound Ramp / Cascade Highway intersection. On a clear morning, a motorcycle failed to stop while exiting OR22 and struck a vehicle travelling north on Cascade Highway.

The intersection of Cascade Highway/OR 22 westbound ramps exceeds the comparison 90th percentile crash rate as calculated by ODOT. This intersection has a high proportion of angle and turning crashes. The planned improvement at this intersection is a traffic signal as identified in the ODOT Interchange Area Management Plan.

TABLE 2: CRITICAL CRASH EVALUATION

INTERSECTION	CRASHES						CALCULATED CRASH RATE	PUBLISHED ODOT COMPARISON CRASH RATE
	FATAL	SERIOUS INJURY	MINOR INJURY	POSSIBLE INJURY	PDO	TOTAL		
CASCADE HWY / OR22 WB RAMPS	0	1	4	2	5	12	**0.479**	0.408
CASCADE HWY / OR22 EB RAMPS	0	0	5	3	15	23	0.740	0.860
CASCADE HWY / GOLF LN	0	0	0	0	0	0	0.000	0.408
CASCADE HWY / WHITNEY ST	0	0	0	2	5	7	0.230	0.509
CASCADE HWY / SHAFF RD / FERN RIDGE RD	0	0	1	6	10	16	0.441	0.860

EXISTING TRAFFIC VOLUMES

Weekday AM and PM peak hour turning movement counts (7:00-9:00 a.m. and 4:00-6:00 p.m.) were collected at the five study intersections on Thursday, May 30th, 2024. A seasonal adjustment factor of 1.08 was applied to the existing volumes to represent the 30th Highest Hourly Volumes (30HV). ATR Station #24-005 was used and is located on OR22 approximately 3.5 miles west of our study intersections. The resulting 2024 Existing traffic volumes are shown in Figure 2.

INTERSECTION PERFORMANCE MEASURES

Level of service (LOS) ratings and volume-to-capacity (v/c) ratios are two commonly used performance measures that provide a good picture of intersection operations.

- **Level of Service (LOS):** A "report card" rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity.
- **Volume-to-capacity (v/c) ratio:** A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the

hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases, and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

The intersections in this analysis are predominately under either State or Marion County jurisdiction. Below are the standards for the agencies:

For intersections under ODOT jurisdiction, the Oregon Highway Plan identifies the operational standards for State Highways. OR 22 is a freight route on a state highway and will need to meet the v/c ratio standards in Table 6 of the Oregon Highway Plan. The standard for the WB ramps is a v/c ratio of 0.70 or better and for the EB ramps, the standard is 0.80 or better.

Marion County standards state that all signalized intersections shall operate at a LOS D or better (LOS E or better for all individual movements) and v/c ratio of 0.85 better. Two-way stop controlled intersections shall operate at Level Of Service E or better. For intersections that are within the UGB of a city, the City' standard shall also apply.

The City of Stayton's Land Use and Development Code states the minimum acceptable LOS for signalized intersections is LOS "D". The minimum acceptable level of service for unsignalized two-way stop-controlled intersections is LOS "E" or LOS "F" with a v/c ratio of 0.95 or less for the critical movement.

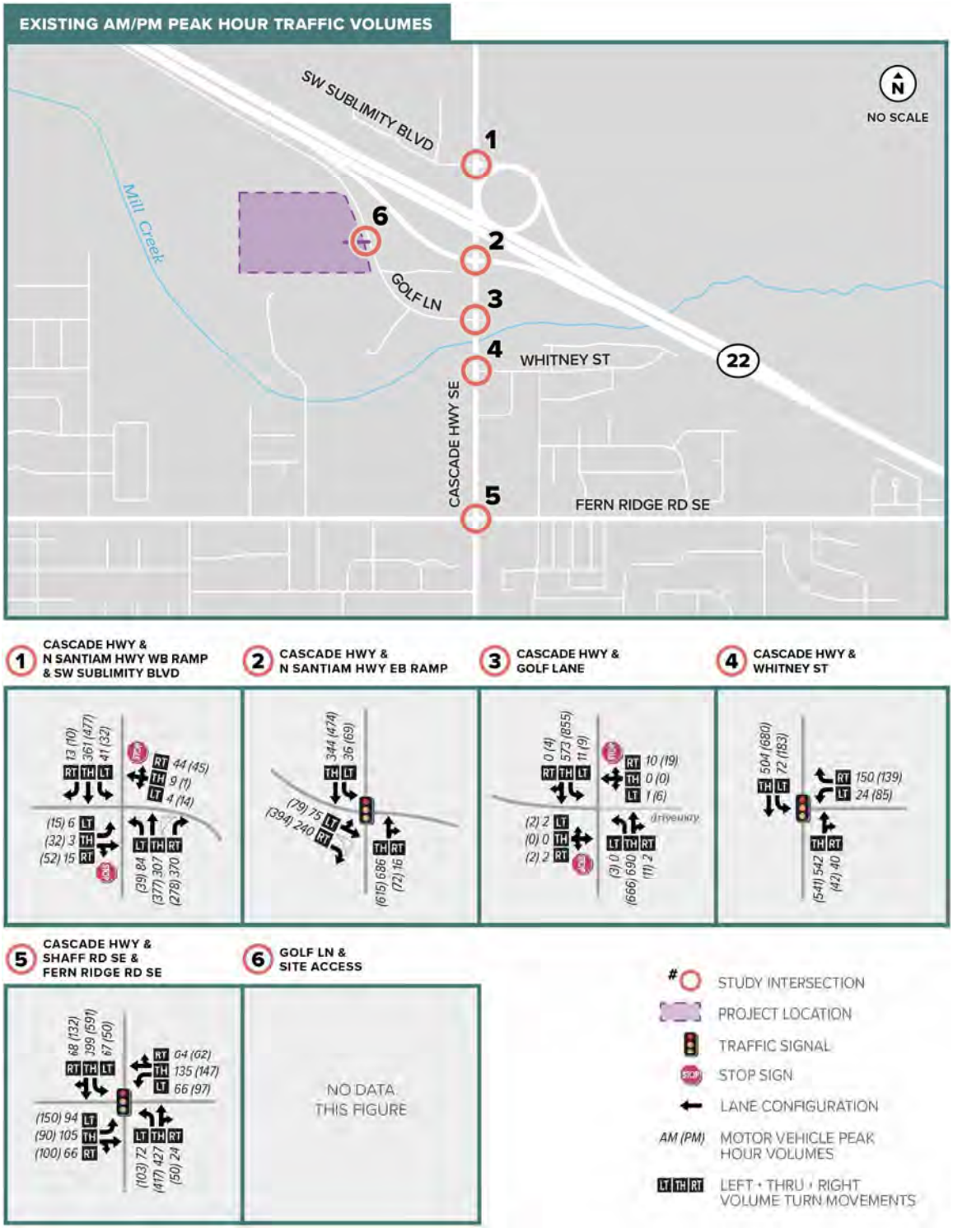


FIGURE 2: EXISTING 2023 AM AND PM PEAK HOUR VOLUMES

EXISTING OPERATING CONDITIONS

Existing traffic operations at the study intersections were determined for the AM and PM peak hours based on the Highway Capacity Manual (HCM) 6th Edition methodology for signalized and unsignalized intersections.[4] The results were then compared with the Marion County and ODOT operating standards. Table 3 lists the estimated v/c ratio and delay at each study intersection.

As shown below, there is one study intersection that does not meet the operating standards for the 2024 Existing PM peak hour and that is the Cascade Highway/Shaff Road/Fern Ridge Road intersection, which is under the County's jurisdiction.

TABLE 3: EXISTING INTERSECTION OPERATIONS (2024)

INTERSECTION	JURISDICTIONAL OWNER	OPERATING STANDARD	AM PEAK HOUR			PM PEAK HOUR		
			V/C RATIO	DELAY (SECS)	LOS	V/C RATIO	DELAY (SECS)	LOS
CASCADE HWY / OR22 WB RAMPS	ODOT	v/c ≤ 0.70 (v/c ≤ 0.90) [a]	0.06	33.9	D	0.13	36.7	E
CASCADE HWY / OR22 EB RAMPS	ODOT	v/c ≤ 0.80 (v/c ≤ 0.90) [a]	0.80	34.9	C	0.81	23.9	C
CASCADE HWY / GOLF LN [b]	County	LOS E; v/c ≤ 0.95	0.05	18.2	C	0.15	27.2	D
CASCADE HWY / WHITNEY ST	County	LOS D; v/c ≤ 0.85	0.67	15.2	B	0.69	17.8	B
CASCADE HWY / SHAFF RD / FERN RIDGE RD	County	LOS D; v/c ≤ 0.85	0.73	34.2	C	**0.88**	37.2	D

STOP CONTROLLED INTERSECTION:
Delay = Critical Movement Approach Delay (secs)
v/c = Associated Movement Volume-to-Capacity Ratio
LOS = Level of Service (Major/Minor Road)

SIGNALIZED INTERSECTION
Delay = Average Intersection Delay (secs)
v/c = Total Volume-to-Capacity Ratio
LOS = Total Level of Service

[a] This v/c ratio may be increased to 0.90 if it can be determined that vehicles queues will not extend onto the mainline or into the portion of the ramp needed to safely accommodate deceleration; and if an adopted Interchange Area Management Plan (IAMP) is present or can be developed.
Queuing analysis showed that eastbound off-ramp vehicle queues do not extend onto the mainline of OR 22 during the peak hours. The queues are approximately 175 feet during the PM peak hour, while the off-ramp is approximately 1,800 feet in length.

At the intersection of Cascade Highway and Golf Lane, there is currently a two-way left turn lane (TWLTL) this is striped along Cascade Highway. This TWLTL serves as a left turn lane for vehicles turning off Cascade Highway onto Golf Lane and into the Cherriots Park and Ride lot. It also provides an opportunity for vehicles turning out of Golf Lane or the Park and Ride onto Cascade

[4] Highway Capacity Manual, 6th Edition, Transportation Research Board, 2016.

Highway to make a left turn in two stages. During field observations, vehicles were observed to perform this two-stage maneuver during the peak hour. As shown in Figure 2, during the peak hours the number of vehicles turning into the Park and Ride lot is low (<10 vehicles) as well as the number of vehicles turning left out of Golf Lane (<5 vehicles), resulting in minimal conflicts within the TWLTL. This two-stage left turn was maintained in the analysis models for future conditions.

The intersection of Cascade Highway/Shaff Road/Fern Ridge Road currently exceeds the County/City operating standards during the PM peak hour. This is primarily due to the high volume (>1,200 vehicles per hour) of north-south traffic through the intersection. Traffic volumes on Cascade Highway at the intersection currently exceed the City's projected 2040 traffic volume estimates in their TSP. There is no improvement project identified in the City's Transportation System Plan.

PROJECT IMPACTS

This section reviews the impacts that the proposed residential development may have on the transportation system within the study area. This analysis includes the trip generation, trip distribution, and future year traffic volumes and operating conditions for the study intersections for both the No-Build and Build scenarios.

PROPOSED DEVELOPMENT

The development is a 92-lot subdivision to be used for single-family residential living. All lots will be accessed via Golf Lane. The project completion is estimated to be in 2028.

ANALYSIS SCENARIOS

Future operating conditions were analyzed at the study intersections for the following future traffic scenarios. The comparison of the following scenarios enables the assessment of project impacts:

- 2028 No-Build – This scenario represents the expected future traffic conditions of the study area without the project trips from the proposed development. There is currently one in-process development (Fern Ridge Apartments) near the study area and the associated project trips were included in the No-Build scenario.
- 2028 Build – This scenario represents the expected traffic conditions of the study area including the project trips for the proposed development, assuming it is built and fully occupied by 2028

TRIP GENERATION

Trip generation is the method used to estimate the number of vehicles added to site roadways and the adjacent roadway network by a development during a specified period (i.e., such as the PM

peak hour). ITE 11th Edition trip generation data was used to determine the trip generation of the new residential housing development.[5]

Single-Family Detached Housing (ITE code 210) was used to estimate the trip generation from the site. Neither Internal nor Pass-By trip reductions were applied to the values as they do not apply for this land use. Table 4 provides the trip generation for the proposed development. As shown, the development is expected to generate a total of 69 (17 in, 52 out) AM peak hour trips and 92 (58 in, 34 out) PM peak hour trips.

TABLE 4: TRIP GENERATION

LAND USE (ITE CODE)	SIZE	AM PEAK TRIPS			PM PEAK TRIPS			DAILY TRIPS
		TOTAL	IN	OUT	TOTAL	IN	OUT	
SINGLE-FAMILY DETACHED HOUSING (210)	92 units	69	17	52	92	58	34	935

TRIP DISTRIBUTION

Trip distribution provides an estimate of where project-related trips would be coming from and going to. It is given as percentages at key gateways to the study area and is used to route project rips through the study intersections. Figure 3 shows the expected trip distribution and project trip routing for the trips generated by the proposed development. The distribution was coordinated with City of Stayton's consultant traffic engineer.

- 35% to/from N First Avenue south of the project site
- 35% to/from OR22 west of the project site
- 10% to/from Shaff Road southwest of the project site
- 10% to/from Fern Ridge Road southeast of the project site
- 5% to/from S Center Street north of the project site
- 5% to/from OR22 east of the project site

FUTURE TRAFFIC VOLUMES

The AM and PM peak hour traffic volumes for the two future analysis scenarios are shown in Figure 4 and Figure 5. The Future 2028 No-Build scenario volumes were estimated by applying a linear growth rate of 1% per year to the Existing 2024 volumes over four years to 2028 (assumed year of project completion). The 1% linear growth rate was supported by the City's consultant traffic engineer and captures typical vehicle growth associated with regional and local growth. Additionally, the vehicle trips generated by the Fern Ridge Apartments were added to the 2028 No Build scenario volumes. The Future 2028 Build scenario volumes were estimated by adding the project generation trips to the Future 2028 No-Build scenario volumes.

[5] Trip Generation Manual, 11th Edition, Institute of Transportation Engineers, 2021.

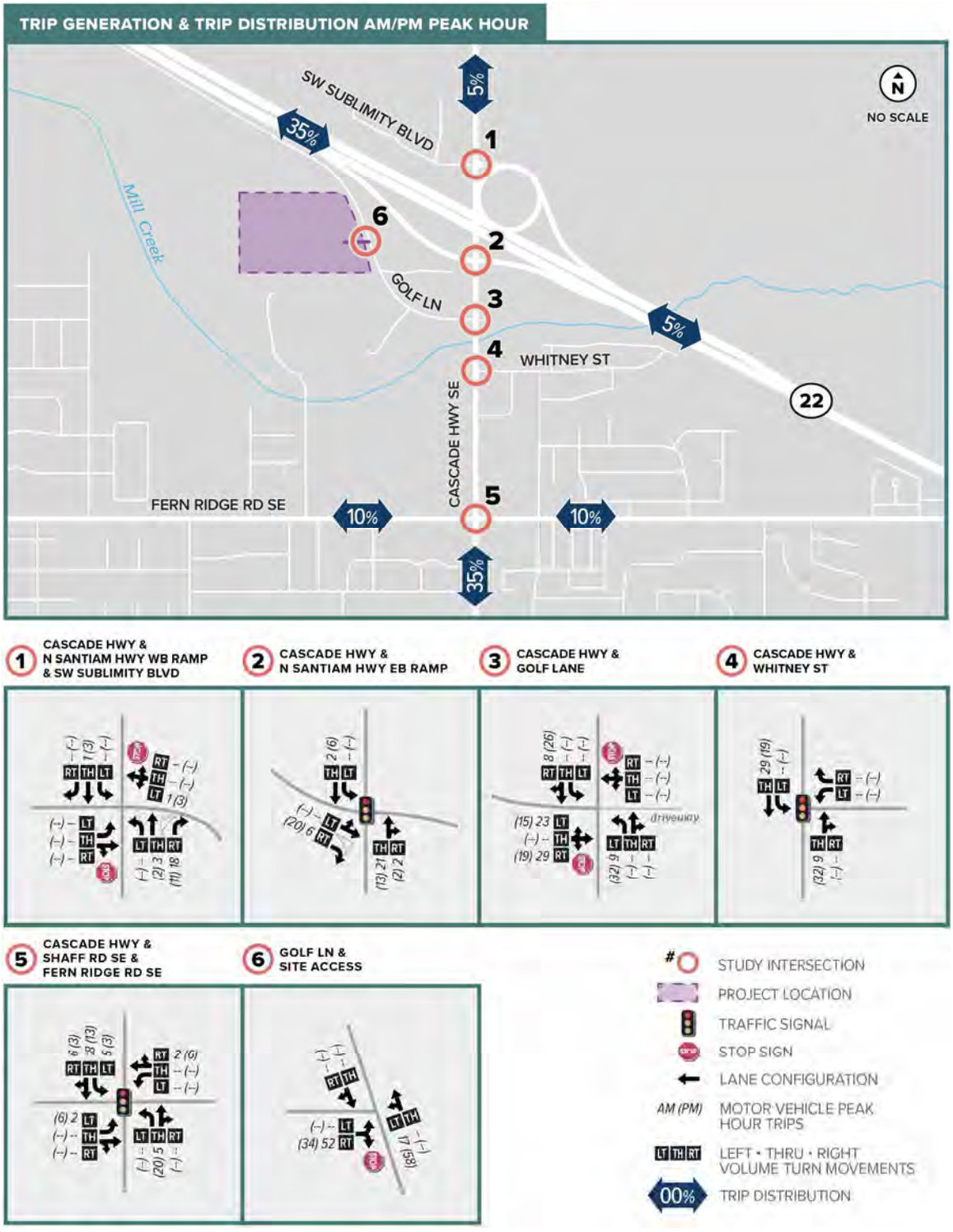


FIGURE 3: TRIP GENERATION & TRIP DISTRIBUTION

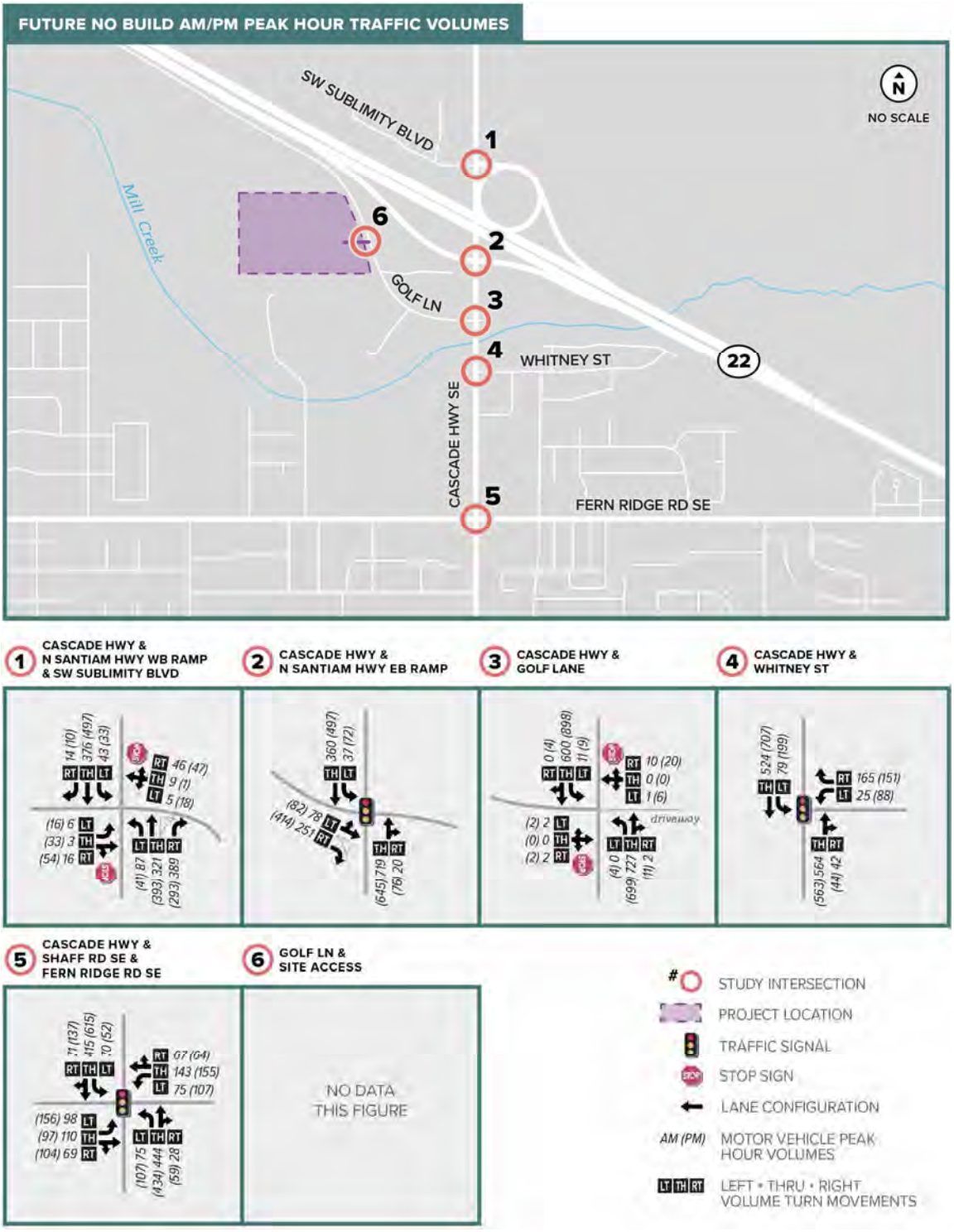


FIGURE 4: FUTURE 2028 NO-BUILD AM AND PM PEAK HOUR VOLUMES

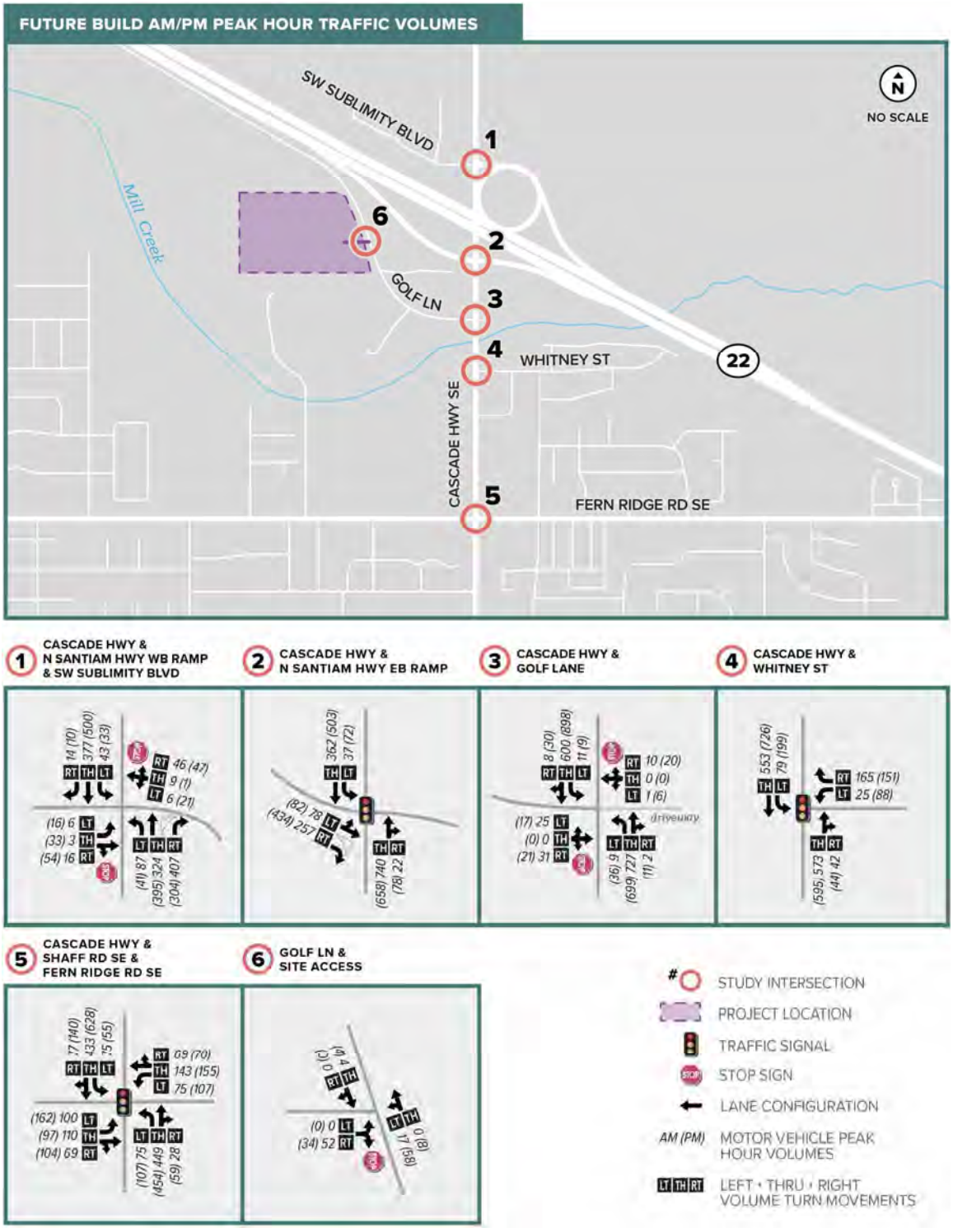


FIGURE 5: FUTURE 2028 BUILD AM AND PM PEAK HOUR VOLUMES

FUTURE INTERSECTION OPERATIONS

Future traffic operations at the study intersections were determined for the AM and PM peak hour based on the Highway Capacity Manual (HCM) 6th Edition methodology for unsignalized intersections. Table 5 and Table 6 list the estimated v/c ratio, delay, and LOS at each study intersection for the AM and PM peak hours for the No Build and Build scenarios, respectively. The reports are provided in the appendix.

As shown, the Cascade Highway/Shaff Road/Fern Ridge Road intersection continues to fail to meet the County's operating standard in the PM peak hour.

TABLE 5: FUTURE (2028) NO-BUILD INTERSECTION OPERATIONS – AM & PM PEAK

INTERSECTION	JURISDICTIONAL OWNER	OPERATING STANDARD	AM PEAK HOUR			PM PEAK HOUR		
			V/C RATIO	DELAY (SECS)	LOS	V/C RATIO	DELAY (SECS)	LOS
CASCADE HWY / OR22 WB RAMPS	ODOT	v/c ≤ 0.70 (v/c ≤ 0.90) [a]	0.06	37.3	E	0.18	42.8	E
CASCADE HWY / OR22 EB RAMPS	ODOT	v/c ≤ 0.80 (v/c ≤ 0.90) [a]	0.85	45.1	D	0.87	32.0	C
CASCADE HWY / GOLF LN	County	LOS E; v/c ≤ 0.95	0.05	19.4	C	0.17	29.9	D
CASCADE HWY / WHITNEY ST	County	LOS D; v/c ≤ 0.85	0.71	16.7	B	0.73	19.6	B
CASCADE HWY / SHAFF RD / FERN RIDGE RD	County	LOS D; v/c ≤ 0.85	0.76	37.4	D	**0.88**	39.1	D

STOP CONTROLLED INTERSECTION:
Delay = Critical Movement Approach Delay (secs)
v/c = Associated Movement Volume-to-Capacity Ratio
LOS = Level of Service of Associated Movement

SIGNALIZED INTERSECTION
Delay = Average Intersection Delay (secs)
v/c = Total Volume-to-Capacity Ratio
LOS = Total Level of Service

[a] This v/c ratio may be increased to 0.90 if it can be determined that vehicles queues will not extend onto the mainline or into the portion of the ramp needed to safely accommodate deceleration; and if an adopted Interchange Area Management Plan (IAMP) is present or can be developed.
Queuing analysis shows that eastbound off-ramp vehicle queues do not extend onto the mainline of OR 22 during the peak hours. The AM and PM peak hour queues are approximately 75 feet and 150 feet, respectively, while the off-ramp is approximately 1,800 feet in length.

As shown, the Cascade Highway/Shaff Road/Fern Ridge Road intersection continues to fail to meet the County's operating standard in the AM peak hour and PM peak hour.

TABLE 6: FUTURE (2028) BUILD INTERSECTION OPERATIONS – AM & PM PEAK

INTERSECTION	JURISDI-CTIONAL OWNER	OPERATING STANDARD	AM PEAK HOUR			PM PEAK HOUR		
			V/C RATIO	DELAY (SECS)	LOS	V/C RATIO	DELAY (SECS)	LOS
CASCADE HWY / OR22 WB RAMPS	ODOT	v/c ≤ 0.70 (v/c ≤ 0.90) [a]	0.06	37.6	E	0.21	45.0	E
CASCADE HWY / OR22 EB RAMPS	ODOT	v/c ≤ 0.80 (v/c ≤ 0.90) [a]	0.87	52.2	D	0.90	34.9	C
CASCADE HWY / GOLF LN	County	LOS E; v/c ≤ 0.95	0.25	22.7	C	0.21	37.0	E
CASCADE HWY / WHITNEY ST	County	LOS D; v/c ≤ 0.85	0.72	17.0	B	0.75	20.6	C
CASCADE HWY / SHAFF RD / FERN RIDGE RD	County	LOS D; v/c ≤ 0.85	0.78	38.7	D	**0.91**	41.6	D
GOLF LN / PROPOSED ACCESS	County	LOS E; v/c ≤ 0.95	0.06	8.5	A	0.04	8.5	A

STOP CONTROLLED INTERSECTION:
Delay = Critical Movement Approach Delay (secs)
v/c = Associated Movement Volume-to-Capacity Ratio
LOS = Level of Service (Major/Minor Road)

SIGNALIZED INTERSECTION
Delay = Average Intersection Delay (secs)
v/c = Total Volume-to-Capacity Ratio
LOS = Total Level of Service

[a] This v/c ratio may be increased to 0.90 if it can be determined that vehicles queues will not extend onto the mainline or into the portion of the ramp needed to safely accommodate deceleration; and if an adopted Interchange Area Management Plan (IAMP) is present or can be developed.
Queuing analysis shows that eastbound off-ramp vehicle queues do not extend onto the mainline of OR 22 during the peak hours. The AM and PM peak hour queues are approximately 100 feet and 225 feet, respectively, while the off-ramp is approximately 1,800 feet in length.

CASCADE HIGHWAY/SHAFF ROAD/FERN RIDGE ROAD INTERSECTION

As demonstrated throughout the operations analysis, the intersection of Cascade Highway/Shaff Road/Fern Ridge Road does not meet the County's volume-to-capacity operating standard now and under future conditions with or without the project. However, it does meet the City's operating standard of LOS D. Currently, there is no identified improvement in the City of Stayton Transportation System Plan[6] at this intersection.

[6] City of Stayton Transportation System Plan, Adopted June 2019.

The City TSP does not include any capacity improvements at this intersection as it projected a lower volume of traffic on Cascade Highway in 2040 than the current 2024 traffic volumes. This observation was verified when compared to traffic data of similar magnitude that was collected in 2021 for a different nearby development. This data was provided by the City's traffic engineer. The high volume of traffic on Cascade Highway is likely a result of unanticipated growth and development in the City at the time of the TSP adoption.

Because this intersection is under the County's jurisdiction and the development will be approved through the City's land use process, then no mitigation at this intersection is identified or recommended.

QUEUING ANALYSIS

Vehicle queuing analysis was performed at all intersections for the AM & PM Peak hours under the 2028 Build scenario to determine the 95th percentile queues. The 95th percentile queue is the queue length for a given intersection movement that has only a five percent chance of being exceeded during the peak traffic hour. The queue lengths were estimated using SimTraffic. As shown in the table below, none of the 95th percentile queues at the study intersections exceed the available storage.

TABLE 7: 2028 BUILD SCENARIO QUEUING

INTERSECTION	MOVEMENT	STORAGE LENGTH (FT)	AM PEAK		PM PEAK	
			AVERAGE QUEUE (FT)	95TH PERCENTILE QUEUE (FT)	AVERAGE QUEUE (FT)	95TH PERCENTILE QUEUE (FT)
CASCADE HWY / OR22 WB RAMPS	EBL	350	0	25	0	25
	EBTR	350	0	25	25	50
	WBLT	1800	25	50	25	50
	WBR	1800	25	50	25	50
	NBL	750	25	50	25	50
	NBR	750	0	50	0	25
	SBL	500+	0	25	25	50
	SBR	500+	0	0	0	0
CASCADE HWY / OR22 EB RAMPS	EBLT	1800	50	100	50	100
	EBR	1800	25	75	100	225
	NBTR	475	200	400	175	325
	SBL	750	25	50	25	50
	SBT	750	50	100	75	150
CASCADE HWY / GOLF LN	EBLTR	500+	25	100	25	50
	WBLTR	100+	0	25	25	50
	NBL	425	0	25	25	50
	NBTR	425	0	100	0	0
	SBL	475	0	25	0	25

INTERSECTION	MOVEMENT	STORAGE LENGTH (FT)	AM PEAK		PM PEAK	
			AVERAGE QUEUE (FT)	95TH PERCENTILE QUEUE (FT)	AVERAGE QUEUE (FT)	95TH PERCENTILE QUEUE (FT)
	SBTR	475	0	0	0	0
CASCADE HWY / WHITNEY ST	WBL	525	25	50	50	75
	WBR	525	75	125	75	125
	NBTR	1000+	175	325	200	325
	SBL	425	50	100	100	175
	SBT	425	100	175	125	225
CASCADE HWY / SHAFF RD / FERN RIDGE RD	EBL	900	50	100	125	225
	EBTR	900	75	150	125	250
	WBL	500	50	100	100	175
	WBTR	500	125	225	175	300
	NBL	575	50	125	75	150
	NBTR	575	175	300	175	300
	SBL	1200	50	125	75	275
	SBTR	1200	200	350	350	600

GOLF LANE REALIGNMENT EVALUATION

Based on the Memo of Understanding (MOU)[7] between the City of Stayton and Marion County, the City has agreed to realign Golf Lane when one of two criteria are met. The realignment would be consistent with what is shown in the City's Transportation System (TSP) and would result in Golf Lane intersecting with Cascade Highway at Whitney Lane (relocated from opposite the Cherriots Park and Ride lot). The two criteria for the Golf Lane realignment are described below as well as whether the proposed project is anticipated to trigger either criteria.

SIGNAL WARRANT EVALUATION

Criterion: The Golf Lane Realignment would be triggered at the time when traffic signal warrants are met at the current Cascade Highway/Golf Lane intersection. The MUTCD signal warrants (Warrants 1 and 2) were evaluated at Cascade Highway/Golf Lane intersection under future 2028 Build conditions.[8]

Findings: Neither Warrant 1 nor Warrant 2 met the volume thresholds identified in the MUTCD[9]. Warrant 1 only met 5 of the required 8 hours and Warrant 2 only met 2 of the 4 required hours. The results of the signal warrant evaluation are provided in the appendix.

[7] Memorandum of Understanding: City of Stayton and Marion County (Regarding Golf Lane Realignment), May 19, 2003.

[8] Signal Warrants 3 – 8 are not applicable to the proposed development or study area.

[9] Section 4C.02 and Section 4C.03, Manual on Uniform Traffic Control Devices, 11th Edition.

OPERATIONS ANALYSIS

Criterion: The Golf Lane Realignment would be triggered at the time when Golf Lane fails to meet County standards for safety and/or operations.

Findings: Based on the findings in the Crash Analysis section, there are no crash trends or history of collisions at this intersection that would warrant any safety concerns. Based on the operations results in Table 5 and Table 6, the proposed project will not cause Golf Lane at Cascade Highway to fail to meet the County's operating standard.

MOU FINDINGS

The Golf Lane Realignment is not triggered by the proposed project as a traffic signal is not warranted nor do the safety or vehicle operations fail to meet Marion County standards under the proposed Build scenario.

SITE PLAN EVALUATION

This section reviews the proposed access point and project frontage for the proposed development based on the provided site plan and the City of Stayton's Development Code. This site will have access to the public street network via Golf Lane.

ACCESS SPACING

One access point is proposed via Golf Lane. The City of Stayton's access spacing standards for collectors[10] states that the minimum spacing between driveways and/or streets is 150 feet. Currently, there is an existing driveway approximately 350 feet to the south of the proposed access point. Therefore, the site meets the City's standards and there are no safety or operational concerns with the proposed access on Golf Lane.

FRONTAGE IMPROVEMENTS

The City of Stayton's TSP has street cross-sections standards for City collectors[11]. The development is required to construct half-street frontage improvements consistent with the cross-section standards identified in the TSP on Golf Lane. The City's Collector standard requires a right-of-way width of 60-80 feet, and includes bike lanes, planter strips, and sidewalks.

[10] City of Stayton Transportation System Plan, Adopted June 2019 - Table 7

[11] City of Stayton Transportation System Plan, Adopted June 2019 – Exhibit 4. Collector

PROJECT SUMMARY

The proposed single-family subdivision development in Stayton, Oregon consists of 92 total lots. All lots will be accessed via Golf Lane. The estimated year of completion is 2028. A summary of the development and its anticipated impacts are as follows:

TRIP GENERATION

- The development is expected to generate a total of 69 (17 in, 52 out) AM peak hour trips and 92 (58 in, 34 out) PM peak hour trips.

INTERSECTION OPERATIONS & VEHICLE QUEUING

- The Cascade Highway / Shaff Road / Fern Ridge Road intersection does not meet the County's operating standard during the PM Peak Hour under all analysis scenarios. No planned improvement is identified in the City of Stayton Transportation System Plan.
- The traffic volumes on Cascade Highway currently exceed the City's 2040 traffic volume projections. This is likely due to a high rate of development and growth in this area of Stayton than anticipated at the time of the TSP adoption.
- Because this intersection is under Marion County's jurisdiction and the development will be approved through the City of Stayton land use process, then no mitigation at this intersection is identified or recommended.
- None of the 95th percentile vehicle queues at the study intersections exceed the available storage under the AM or PM Build scenarios.

GOLF LANE REALIGNMENT

- The intersection of Cascade Highway & Golf Lane does not meet the criteria for realignment (signal warrants or safety/operational deficiency).

SITE EVALUATION

- The access point via Golf Lane meets the City of Stayton standard for access spacing. There are no safety or operational concerns with the proposed access on Golf Lane.
- Preliminary sight distance was measured at the proposed access on Golf Lane and found to meet AASHTO requirements. Prior to occupancy, sight distance at any new or modified access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon
- Half-street improvements are to be constructed along the project frontage consistent with City Collector standards, which require 60-80 feet of right-of-way, bike lanes, planter strips, and sidewalks.

APPENDIX

DKS

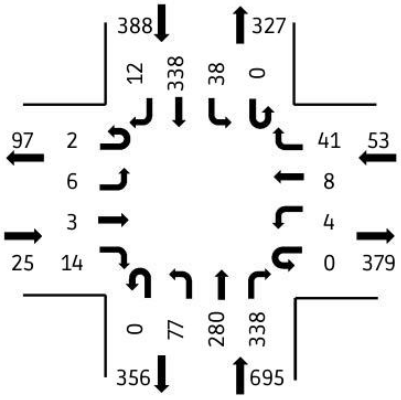
117 COMMERCIAL STREET NE, SUITE 310, SALEM, OR 97301 • 503.391.8773 • DKSASSOCIATES.COM

APPENDIX A: TRAFFIC DATA

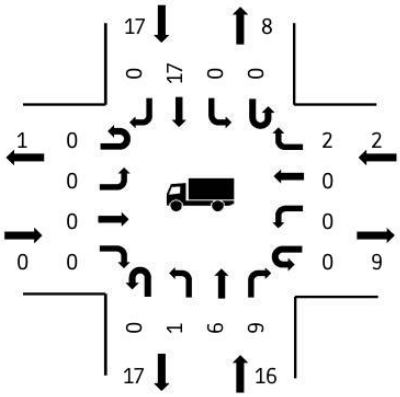
RallyTraffic

Location: Cascade Hwy & 22 WB ramps
Date: 5/23/2024
Peak Hour Start: 07:20 AM
Peak 15 Minute Start: 07:50 AM
Peak Hour Factor: 0.8

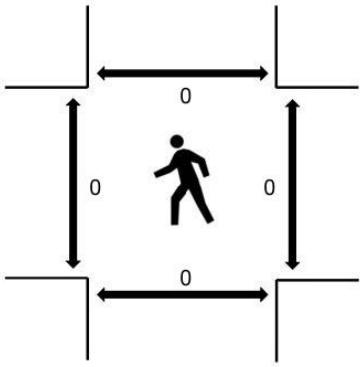
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	2	7	19	0	0	4	9	1	0	0	0	0	0	0	0	0	0	3	0	0		
07:05:00 AM	5	12	21	0	0	5	15	2	0	0	0	0	0	0	0	1	0	1	0	0		
07:10:00 AM	2	17	24	0	0	2	20	1	0	0	0	0	0	0	0	2	0	4	0	0	179	
07:15:00 AM	3	20	21	0	0	5	14	1	0	0	0	0	0	0	0	0	0	3	0	0	201	
07:20:00 AM	2	13	25	0	0	4	20	2	0	0	1	1	0	0	0	1	0	6	0	0	214	
07:25:00 AM	4	17	30	0	0	6	17	0	0	0	0	0	1	0	0	0	1	2	0	0	220	
07:30:00 AM	7	18	34	0	0	3	22	0	0	0	0	0	0	0	0	1	1	2	0	0	241	
07:35:00 AM	4	26	32	0	0	2	26	0	0	0	1	0	0	1	0	1	2	4	0	0	265	
07:40:00 AM	3	29	31	0	0	4	38	0	0	0	0	1	1	1	0	0	0	2	0	0	297	
07:45:00 AM	8	23	16	0	0	2	38	1	0	0	0	0	0	0	0	0	1	2	0	0	300	
07:50:00 AM	15	32	23	0	0	4	39	1	0	0	0	0	2	0	0	1	0	4	0	0	322	
07:55:00 AM	13	27	32	0	0	1	38	1	0	0	1	1	0	0	0	0	3	3	0	0	332	1028
08:00:00 AM	10	32	41	0	0	2	29	3	0	0	0	0	1	0	0	0	0	2	0	0	361	1103
08:05:00 AM	4	26	36	0	0	5	26	0	0	0	1	0	5	0	0	0	0	6	0	0	349	1150
08:10:00 AM	4	20	14	0	0	2	21	4	0	0	1	0	2	0	0	0	0	3	0	0	300	1149
08:15:00 AM	3	17	24	0	0	3	24	0	0	0	1	0	2	0	0	0	0	5	0	0	259	1161
08:20:00 AM	6	21	19	0	0	3	19	0	0	0	1	0	1	0	0	2	1	1	0	0	224	1160
08:25:00 AM	3	16	16	0	0	2	19	0	0	0	0	0	3	0	0	0	0	2	0	0	214	1143
08:30:00 AM	5	16	28	0	0	4	19	1	0	0	1	1	3	0	0	0	2	3	0	0	218	1138
08:35:00 AM	11	17	15	0	0	0	20	2	0	0	1	0	2	0	0	0	0	1	0	0	213	1108
08:40:00 AM	4	15	14	0	0	5	27	1	0	0	1	2	1	0	0	0	0	3	0	0	225	1071
08:45:00 AM	1	12	20	0	0	1	12	1	0	0	0	0	0	0	0	1	0	6	0	0	196	1034
08:50:00 AM	1	4	7	0	0	1	10	2	0	0	1	0	2	0	0	0	0	1	0	0	156	942
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	822

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	2	7	19	0	0	4	8	1	0	0	0	0	0	0	0	0	0	3	0	0		
07:05:00 AM	5	10	21	0	0	5	13	2	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	2	14	23	0	0	2	19	1	0	0	0	0	0	0	0	2	0	4	0	0	167	
07:15:00 AM	3	18	19	0	0	5	14	1	0	0	0	0	0	0	0	0	0	3	0	0	186	
07:20:00 AM	2	12	24	0	0	4	18	2	0	0	1	1	0	0	0	1	0	6	0	0	201	
07:25:00 AM	4	17	30	0	0	6	14	0	0	0	0	0	1	0	0	0	1	2	0	0	209	
07:30:00 AM	7	18	34	0	0	3	22	0	0	0	0	0	0	0	0	1	1	2	0	0	234	
07:35:00 AM	4	26	32	0	0	2	24	0	0	0	1	0	0	1	0	1	2	3	0	0	259	
07:40:00 AM	3	28	30	0	0	4	37	0	0	0	0	1	1	1	0	0	0	1	0	0	290	
07:45:00 AM	8	22	16	0	0	2	37	1	0	0	0	0	0	0	0	0	1	2	0	0	291	
07:50:00 AM	15	31	21	0	0	4	39	1	0	0	0	0	2	0	0	1	0	4	0	0	313	
07:55:00 AM	13	27	31	0	0	1	37	1	0	0	1	1	0	0	0	0	3	3	0	0	325	991
08:00:00 AM	10	32	41	0	0	2	27	3	0	0	0	0	1	0	0	0	0	2	0	0	354	1065
08:05:00 AM	4	24	35	0	0	5	26	0	0	0	1	0	5	0	0	0	0	6	0	0	342	1115
08:10:00 AM	4	20	13	0	0	2	18	4	0	0	1	0	2	0	0	0	0	3	0	0	291	1115
08:15:00 AM	3	17	22	0	0	3	22	0	0	0	1	0	2	0	0	0	0	5	0	0	248	1127
08:20:00 AM	6	19	19	0	0	3	18	0	0	0	1	0	1	0	0	2	1	1	0	0	213	1127
08:25:00 AM	3	15	16	0	0	2	18	0	0	0	0	0	3	0	0	0	0	2	0	0	205	1111
08:30:00 AM	5	16	28	0	0	4	18	1	0	0	1	1	3	0	0	0	2	3	0	0	212	1105
08:35:00 AM	11	16	15	0	0	0	20	2	0	0	1	0	2	0	0	0	0	1	0	0	209	1077
08:40:00 AM	4	14	14	0	0	4	25	1	0	0	1	2	1	0	0	0	0	2	0	0	218	1039
08:45:00 AM	1	11	20	0	0	1	12	1	0	0	0	0	0	0	0	1	0	6	0	0	189	1003
08:50:00 AM	1	4	7	0	0	1	8	2	0	0	1	0	2	0	0	0	0	1	0	0	148	912
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80	794

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	1	0	0		
07:10:00 AM	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:15:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	
07:20:00 AM	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
07:25:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
07:35:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	6	
07:40:00 AM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	7	
07:45:00 AM	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
07:50:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
07:55:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	38
08:00:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	39
08:05:00 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	36
08:10:00 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	35
08:15:00 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	35
08:20:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	34
08:25:00 AM	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	34
08:30:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	35
08:35:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	33
08:40:00 AM	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	7	34
08:45:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	32
08:50:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	31
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	29

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

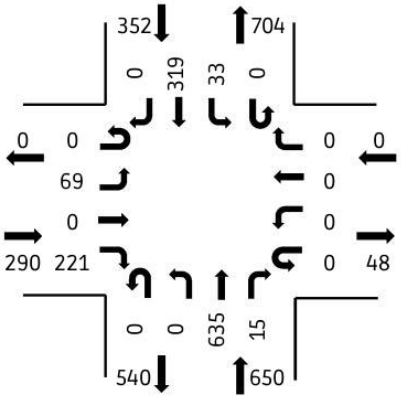
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	0	0	0		
07:05:00 AM	0	0	0	0		
07:10:00 AM	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0

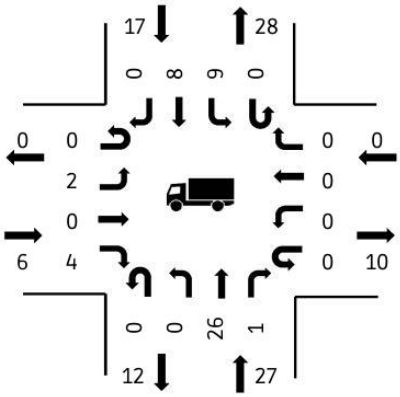
RallyTraffic

Location: Cascade Hwy & 22 EB ramps
Date: 5/23/2024
Peak Hour Start: 07:25 AM
Peak 15 Minute Start: 07:45 AM
Peak Hour Factor: 0.83

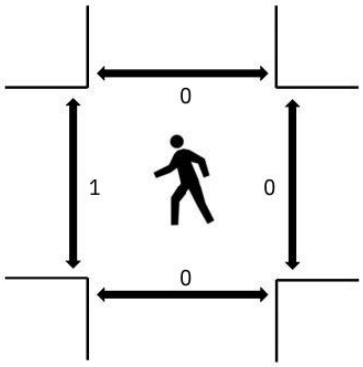
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	32	0	0	0	2	9	0	0	0	2	0	11	0	0	0	0	0	0	0		
07:05:00 AM	0	39	2	0	0	4	13	0	0	0	3	0	10	0	0	0	0	0	0	0		
07:10:00 AM	0	37	1	0	0	2	20	0	0	0	5	0	12	0	0	0	0	0	0	0	204	
07:15:00 AM	0	40	2	0	0	2	13	0	0	0	3	0	12	0	0	0	0	0	0	0	220	
07:20:00 AM	0	43	0	0	0	3	17	0	0	0	1	0	20	0	0	0	0	0	0	0	233	
07:25:00 AM	0	48	0	0	0	3	14	0	0	0	6	0	23	0	0	0	0	0	0	0	250	
07:30:00 AM	0	47	2	0	0	2	21	0	0	0	4	0	16	0	0	0	0	0	0	0	270	
07:35:00 AM	0	65	0	0	0	2	25	0	0	0	4	0	23	0	0	0	0	0	0	0	305	
07:40:00 AM	0	53	0	0	0	2	37	0	0	0	5	0	22	0	0	0	0	0	0	0	330	
07:45:00 AM	0	53	2	0	0	1	35	0	0	0	7	0	33	0	0	0	0	0	0	0	369	
07:50:00 AM	0	48	5	0	0	4	40	0	0	0	10	0	17	0	0	0	0	0	0	0	374	
07:55:00 AM	0	70	0	0	0	3	36	0	0	0	10	0	17	0	0	0	0	0	0	0	391	1175
08:00:00 AM	0	74	2	0	0	3	26	0	0	0	6	0	8	0	0	0	0	0	0	0	379	1238
08:05:00 AM	0	61	1	0	0	3	28	0	0	0	4	0	19	0	0	0	0	0	0	0	371	1283
08:10:00 AM	0	33	1	0	0	4	19	0	0	0	6	0	9	0	0	0	0	0	0	0	307	1278
08:15:00 AM	0	36	1	0	0	4	21	0	0	0	1	0	7	0	0	0	0	0	0	0	258	1276
08:20:00 AM	0	47	1	0	0	2	17	0	0	0	6	0	27	0	0	0	0	0	0	0	242	1292
08:25:00 AM	0	29	3	0	0	5	21	0	0	0	6	0	26	0	0	0	0	0	0	0	260	1288
08:30:00 AM	0	43	2	0	0	2	19	0	0	0	2	0	9	0	0	0	0	0	0	0	267	1273
08:35:00 AM	0	40	1	0	0	8	15	0	0	0	9	0	17	0	0	0	0	0	0	0	257	1244
08:40:00 AM	0	25	1	0	0	4	24	0	0	0	4	0	14	0	0	0	0	0	0	0	239	1197
08:45:00 AM	0	30	0	0	0	2	11	0	0	0	2	0	6	0	0	0	0	0	0	0	213	1117
08:50:00 AM	0	28	3	0	0	2	16	0	0	0	5	0	20	0	0	0	0	0	0	0	197	1067
08:55:00 AM	0	34	3	0	0	0	23	0	0	0	5	0	12	0	0	0	0	0	0	0	202	1008

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	32	0	0	0	2	9	0	0	0	2	0	10	0	0	0	0	0	0	0		
07:05:00 AM	0	37	2	0	0	3	11	0	0	0	2	0	10	0	0	0	0	0	0	0		
07:10:00 AM	0	34	1	0	0	2	19	0	0	0	5	0	11	0	0	0	0	0	0	0	192	
07:15:00 AM	0	34	0	0	0	2	13	0	0	0	3	0	11	0	0	0	0	0	0	0	200	
07:20:00 AM	0	41	0	0	0	2	16	0	0	0	1	0	20	0	0	0	0	0	0	0	215	
07:25:00 AM	0	47	0	0	0	0	14	0	0	0	6	0	20	0	0	0	0	0	0	0	230	
07:30:00 AM	0	45	2	0	0	2	21	0	0	0	4	0	16	0	0	0	0	0	0	0	257	
07:35:00 AM	0	64	0	0	0	2	23	0	0	0	4	0	23	0	0	0	0	0	0	0	293	
07:40:00 AM	0	51	0	0	0	2	36	0	0	0	5	0	22	0	0	0	0	0	0	0	322	
07:45:00 AM	0	49	2	0	0	1	34	0	0	0	6	0	33	0	0	0	0	0	0	0	357	
07:50:00 AM	0	46	5	0	0	4	40	0	0	0	10	0	17	0	0	0	0	0	0	0	363	
07:55:00 AM	0	67	0	0	0	3	35	0	0	0	10	0	17	0	0	0	0	0	0	0	379	1123
08:00:00 AM	0	73	2	0	0	2	25	0	0	0	6	0	8	0	0	0	0	0	0	0	370	1184
08:05:00 AM	0	58	1	0	0	3	28	0	0	0	3	0	19	0	0	0	0	0	0	0	360	1231
08:10:00 AM	0	31	1	0	0	0	19	0	0	0	6	0	8	0	0	0	0	0	0	0	293	1224
08:15:00 AM	0	34	0	0	0	3	20	0	0	0	1	0	7	0	0	0	0	0	0	0	242	1226
08:20:00 AM	0	44	1	0	0	2	16	0	0	0	6	0	27	0	0	0	0	0	0	0	226	1242
08:25:00 AM	0	26	3	0	0	4	20	0	0	0	5	0	23	0	0	0	0	0	0	0	242	1236
08:30:00 AM	0	43	2	0	0	1	19	0	0	0	2	0	7	0	0	0	0	0	0	0	251	1220
08:35:00 AM	0	39	0	0	0	8	15	0	0	0	9	0	16	0	0	0	0	0	0	0	242	1191
08:40:00 AM	0	24	1	0	0	3	23	0	0	0	4	0	13	0	0	0	0	0	0	0	229	1143
08:45:00 AM	0	30	0	0	0	2	11	0	0	0	1	0	5	0	0	0	0	0	0	0	204	1067
08:50:00 AM	0	27	2	0	0	1	15	0	0	0	5	0	19	0	0	0	0	0	0	0	186	1014
08:55:00 AM	0	32	3	0	0	0	23	0	0	0	5	0	11	0	0	0	0	0	0	0	192	956

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
07:05:00 AM	0	2	0	0	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	12	
07:15:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	20	
07:20:00 AM	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	
07:25:00 AM	0	1	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	20	
07:30:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
07:35:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:40:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
07:45:00 AM	0	4	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	12	
07:50:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
07:55:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12	52
08:00:00 AM	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	54
08:05:00 AM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	11	52
08:10:00 AM	0	2	0	0	0	4	0	0	0	0	0	0	1	0	0	0	0	0	0	0	14	54
08:15:00 AM	0	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	50
08:20:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	50
08:25:00 AM	0	3	0	0	0	1	1	0	0	0	1	0	3	0	0	0	0	0	0	0	18	52
08:30:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	16	53
08:35:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	15	53
08:40:00 AM	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	10	54
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	9	50
08:50:00 AM	0	1	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	11	53
08:55:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10	52

Bike Volumes

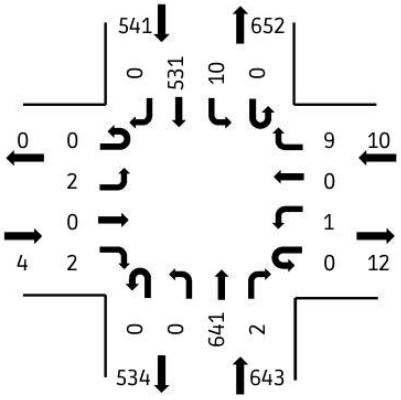
Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Volumes

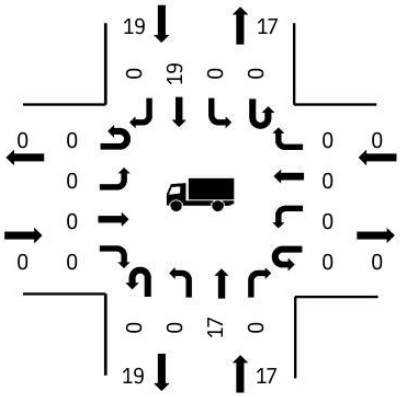
Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	0	0	0		
07:05:00 AM	0	0	0	0		
07:10:00 AM	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	
07:35:00 AM	0	0	1	0	1	
07:40:00 AM	0	0	0	0	1	
07:45:00 AM	0	0	0	0	1	
07:50:00 AM	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	1
08:00:00 AM	0	0	0	0	0	1
08:05:00 AM	0	0	0	0	0	1
08:10:00 AM	0	0	0	0	0	1
08:15:00 AM	0	0	0	0	0	1
08:20:00 AM	0	0	0	0	0	1
08:25:00 AM	0	0	0	0	0	1
08:30:00 AM	0	0	0	0	0	1
08:35:00 AM	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0
08:55:00 AM	0	0	1	0	1	1

Location: Cascade Hwy & Golf Ln
Date: 5/23/2024
Peak Hour Start: 07:25 AM
Peak 15 Minute Start: 07:45 AM
Peak Hour Factor: 0.82

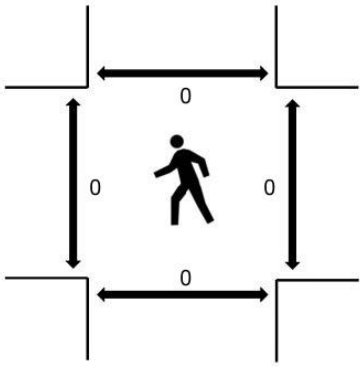
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	32	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	39	0	0	0	1	23	0	0	0	0	0	0	0	0	0	0	2	0	0		
07:10:00 AM	0	39	0	0	0	1	30	0	0	0	0	0	0	0	0	0	0	0	0	0	187	
07:15:00 AM	0	40	1	0	0	0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	202	
07:20:00 AM	1	41	2	0	0	0	35	0	0	0	0	0	0	0	0	1	0	0	0	0	217	
07:25:00 AM	0	55	1	0	0	2	36	0	0	0	1	0	1	0	0	1	0	2	0	0	246	
07:30:00 AM	0	41	0	0	0	1	36	0	0	0	0	0	0	0	0	0	0	1	0	0	258	
07:35:00 AM	0	63	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	289	
07:40:00 AM	0	55	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	1	0	0	306	
07:45:00 AM	0	62	0	0	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	356	
07:50:00 AM	0	56	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	358	
07:55:00 AM	0	66	1	0	0	0	54	0	0	0	0	0	1	0	0	0	0	1	0	0	365	1104
08:00:00 AM	0	80	0	0	0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	0	349	1165
08:05:00 AM	0	47	0	0	0	1	46	0	0	0	0	0	0	0	0	0	0	1	0	0	331	1195
08:10:00 AM	0	37	0	0	0	1	27	0	0	0	1	0	0	0	0	0	0	1	0	0	275	1192
08:15:00 AM	0	32	0	0	0	2	25	0	0	0	0	0	0	0	0	0	0	1	0	0	222	1185
08:20:00 AM	0	47	0	0	0	3	42	0	0	0	0	0	0	0	0	0	0	1	0	0	220	1198
08:25:00 AM	0	31	0	0	0	1	45	1	0	0	0	0	1	0	0	0	0	1	0	0	233	1179
08:30:00 AM	0	45	0	0	0	2	26	0	0	0	1	0	0	0	0	1	0	2	0	0	250	1177
08:35:00 AM	0	34	0	0	0	0	33	0	0	0	2	0	0	0	0	0	0	0	0	0	226	1135
08:40:00 AM	0	26	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	0	0	0	208	1081
08:45:00 AM	0	29	0	0	0	2	17	0	0	0	0	0	0	0	0	0	0	1	0	0	180	1001
08:50:00 AM	0	34	1	0	0	0	35	0	0	0	0	0	0	0	0	1	0	1	0	0	183	960
08:55:00 AM	0	34	0	0	0	1	34	0	0	0	0	0	0	0	0	0	0	0	0	0	190	906

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	32	0	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	37	0	0	0	1	20	0	0	0	0	0	0	0	0	0	0	2	0	0		
07:10:00 AM	0	36	0	0	0	1	27	0	0	0	0	0	0	0	0	0	0	0	0	0	175	
07:15:00 AM	0	35	1	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	185	
07:20:00 AM	1	39	2	0	0	0	33	0	0	0	0	0	0	0	0	1	0	0	0	0	201	
07:25:00 AM	0	55	1	0	0	2	33	0	0	0	1	0	1	0	0	1	0	2	0	0	233	
07:30:00 AM	0	41	0	0	0	1	35	0	0	0	0	0	0	0	0	0	0	1	0	0	250	
07:35:00 AM	0	63	0	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0	0	282	
07:40:00 AM	0	53	0	0	0	0	59	0	0	0	0	0	0	0	0	0	0	1	0	0	299	
07:45:00 AM	0	59	0	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	345	
07:50:00 AM	0	55	0	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	347	
07:55:00 AM	0	65	1	0	0	0	53	0	0	0	0	0	1	0	0	0	0	1	0	0	355	1062
08:00:00 AM	0	79	0	0	0	0	31	0	0	0	0	0	0	0	0	0	0	0	0	0	341	1121
08:05:00 AM	0	44	0	0	0	1	46	0	0	0	0	0	0	0	0	0	0	1	0	0	323	1153
08:10:00 AM	0	35	0	0	0	1	26	0	0	0	1	0	0	0	0	0	0	1	0	0	266	1153
08:15:00 AM	0	30	0	0	0	2	24	0	0	0	0	0	0	0	0	0	0	1	0	0	213	1149
08:20:00 AM	0	45	0	0	0	3	40	0	0	0	0	0	0	0	0	0	0	1	0	0	210	1162
08:25:00 AM	0	30	0	0	0	1	40	1	0	0	0	0	1	0	0	0	0	1	0	0	220	1140
08:30:00 AM	0	45	0	0	0	2	24	0	0	0	1	0	0	0	0	1	0	2	0	0	238	1137
08:35:00 AM	0	32	0	0	0	0	32	0	0	0	2	0	0	0	0	0	0	0	0	0	215	1095
08:40:00 AM	0	26	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	0	0	201	1042
08:45:00 AM	0	29	0	0	0	2	16	0	0	0	0	0	0	0	0	0	0	1	0	0	174	966
08:50:00 AM	0	33	1	0	0	0	33	0	0	0	0	0	0	0	0	1	0	1	0	0	177	925
08:55:00 AM	0	32	0	0	0	1	33	0	0	0	0	0	0	0	0	0	0	0	0	0	183	870

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:15:00 AM	0	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
07:20:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
07:25:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
07:30:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
07:35:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
07:40:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
07:45:00 AM	0	3	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
07:50:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
07:55:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	42
08:00:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	44
08:05:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	42
08:10:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	39
08:15:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	36
08:20:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	36
08:25:00 AM	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	13	39
08:30:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	40
08:35:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	40
08:40:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	39
08:45:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	35
08:50:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	35
08:55:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	36

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

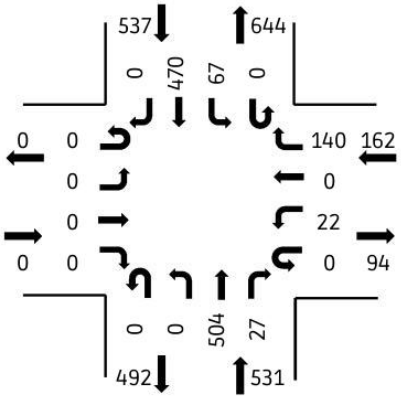
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	0	0	0		
07:05:00 AM	0	0	0	0		
07:10:00 AM	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0

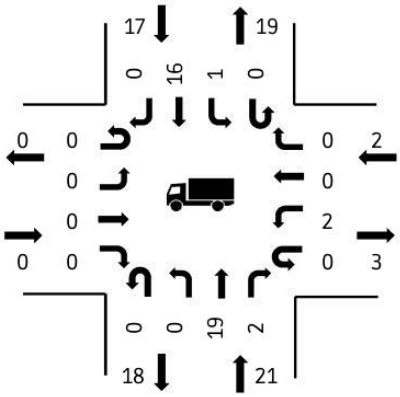
RallyTraffic

Location: Cascade Hwy & Whitney St
Date: 5/23/2024
Peak Hour Start: 07:25 AM
Peak 15 Minute Start: 07:45 AM
Peak Hour Factor: 0.8

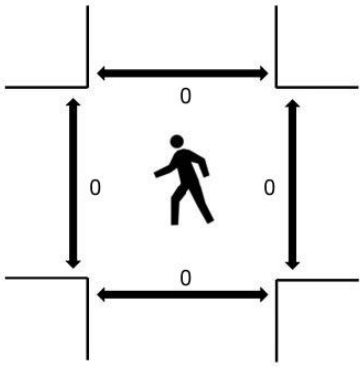
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	24	1	0	0	1	19	0	0	0	0	0	0	0	0	2	0	5	0	0		
07:05:00 AM	0	35	1	0	0	0	20	0	0	0	0	0	0	0	0	0	0	7	0	0		
07:10:00 AM	0	29	0	0	0	1	28	0	0	0	0	0	0	0	0	3	0	8	0	0	184	
07:15:00 AM	0	40	2	0	0	2	25	0	0	0	0	0	0	0	0	1	0	1	0	0	203	
07:20:00 AM	0	34	1	0	0	6	28	0	0	0	0	0	0	0	0	1	0	11	0	0	221	
07:25:00 AM	0	43	3	0	0	5	36	0	0	0	0	0	0	0	0	3	0	10	0	0	252	
07:30:00 AM	0	33	1	0	0	2	32	0	0	0	0	0	0	0	0	2	0	9	0	0	260	
07:35:00 AM	0	45	0	0	0	6	39	0	0	0	0	0	0	0	0	1	0	19	0	0	289	
07:40:00 AM	0	44	2	0	0	6	56	0	0	0	0	0	0	0	0	0	0	10	0	0	307	
07:45:00 AM	0	49	3	0	0	9	53	0	0	0	0	0	0	0	0	4	0	13	0	0	359	
07:50:00 AM	0	56	1	0	0	3	58	0	0	0	0	0	0	0	0	2	0	12	0	0	381	
07:55:00 AM	0	44	1	0	0	6	50	0	0	0	0	0	0	0	0	3	0	19	0	0	386	1129
08:00:00 AM	0	56	5	0	0	3	34	0	0	0	0	0	0	0	0	1	0	18	0	0	372	1194
08:05:00 AM	0	38	4	0	0	8	34	0	0	0	0	0	0	0	0	3	0	10	0	0	337	1228
08:10:00 AM	0	27	2	0	0	5	21	0	0	0	0	0	0	0	0	0	0	6	0	0	275	1220
08:15:00 AM	0	27	3	0	0	3	26	0	0	0	0	0	0	0	0	2	0	9	0	0	228	1219
08:20:00 AM	0	42	2	0	0	11	31	0	0	0	0	0	0	0	0	1	0	5	0	0	223	1230
08:25:00 AM	0	18	0	0	0	7	40	0	0	0	0	0	0	0	0	2	0	11	0	0	240	1208
08:30:00 AM	0	40	3	0	0	1	25	0	0	0	0	0	0	0	0	2	0	7	0	0	248	1207
08:35:00 AM	0	25	1	0	0	7	24	0	0	0	0	0	0	0	0	0	0	9	0	0	222	1163
08:40:00 AM	0	22	0	0	0	6	31	0	0	0	0	0	0	0	0	4	0	3	0	0	210	1111
08:45:00 AM	0	25	0	0	0	2	13	0	0	0	0	0	0	0	0	1	0	4	0	0	177	1025
08:50:00 AM	0	32	3	0	0	5	35	0	0	0	0	0	0	0	0	1	0	2	0	0	189	971
08:55:00 AM	0	28	1	0	0	3	26	0	0	0	0	0	0	0	0	4	0	7	0	0	192	917

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	24	1	0	0	1	18	0	0	0	0	0	0	0	0	2	0	5	0	0		
07:05:00 AM	0	33	1	0	0	0	17	0	0	0	0	0	0	0	0	0	0	7	0	0		
07:10:00 AM	0	26	0	0	0	1	27	0	0	0	0	0	0	0	0	3	0	8	0	0	174	
07:15:00 AM	0	35	1	0	0	2	23	0	0	0	0	0	0	0	0	1	0	1	0	0	186	
07:20:00 AM	0	32	1	0	0	6	26	0	0	0	0	0	0	0	0	1	0	11	0	0	205	
07:25:00 AM	0	41	3	0	0	5	33	0	0	0	0	0	0	0	0	1	0	10	0	0	233	
07:30:00 AM	0	33	1	0	0	2	32	0	0	0	0	0	0	0	0	2	0	9	0	0	249	
07:35:00 AM	0	45	0	0	0	6	36	0	0	0	0	0	0	0	0	1	0	19	0	0	279	
07:40:00 AM	0	42	1	0	0	6	54	0	0	0	0	0	0	0	0	0	0	10	0	0	299	
07:45:00 AM	0	46	3	0	0	9	52	0	0	0	0	0	0	0	0	4	0	13	0	0	347	
07:50:00 AM	0	54	1	0	0	3	56	0	0	0	0	0	0	0	0	2	0	12	0	0	368	
07:55:00 AM	0	43	1	0	0	5	50	0	0	0	0	0	0	0	0	3	0	19	0	0	376	1082
08:00:00 AM	0	56	5	0	0	3	32	0	0	0	0	0	0	0	0	1	0	18	0	0	364	1146
08:05:00 AM	0	35	4	0	0	8	34	0	0	0	0	0	0	0	0	3	0	10	0	0	330	1182
08:10:00 AM	0	25	1	0	0	5	20	0	0	0	0	0	0	0	0	0	0	6	0	0	266	1174
08:15:00 AM	0	25	3	0	0	3	25	0	0	0	0	0	0	0	0	2	0	9	0	0	218	1178
08:20:00 AM	0	40	2	0	0	11	30	0	0	0	0	0	0	0	0	1	0	5	0	0	213	1190
08:25:00 AM	0	15	0	0	0	4	37	0	0	0	0	0	0	0	0	2	0	11	0	0	225	1166
08:30:00 AM	0	40	3	0	0	1	23	0	0	0	0	0	0	0	0	2	0	7	0	0	234	1163
08:35:00 AM	0	23	1	0	0	7	23	0	0	0	0	0	0	0	0	0	0	9	0	0	208	1119
08:40:00 AM	0	22	0	0	0	6	29	0	0	0	0	0	0	0	0	3	0	3	0	0	202	1069
08:45:00 AM	0	25	0	0	0	2	12	0	0	0	0	0	0	0	0	1	0	4	0	0	170	986
08:50:00 AM	0	31	3	0	0	5	33	0	0	0	0	0	0	0	0	1	0	2	0	0	182	933
08:55:00 AM	0	26	1	0	0	3	25	0	0	0	0	0	0	0	0	4	0	7	0	0	185	878

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
07:15:00 AM	0	5	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
07:20:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16	
07:25:00 AM	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	19	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
07:35:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
07:40:00 AM	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
07:45:00 AM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:50:00 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
07:55:00 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	47
08:00:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8	48
08:05:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	46
08:10:00 AM	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	46
08:15:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	41
08:20:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	40
08:25:00 AM	0	3	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	15	42
08:30:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	14	44
08:35:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	14	44
08:40:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	8	42
08:45:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	39
08:50:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	38
08:55:00 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	39

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

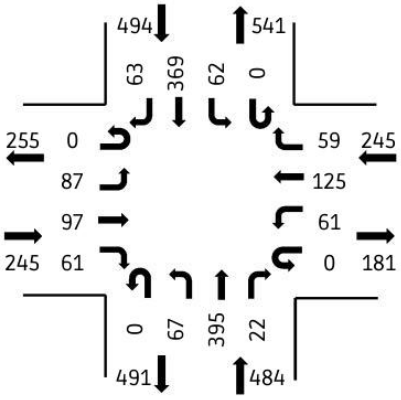
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	0	0	0		
07:05:00 AM	0	0	0	0		
07:10:00 AM	0	0	0	1	1	
07:15:00 AM	0	0	0	0	1	
07:20:00 AM	0	0	0	0	1	
07:25:00 AM	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	1
08:00:00 AM	0	0	0	0	0	1
08:05:00 AM	0	0	0	0	0	1
08:10:00 AM	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0

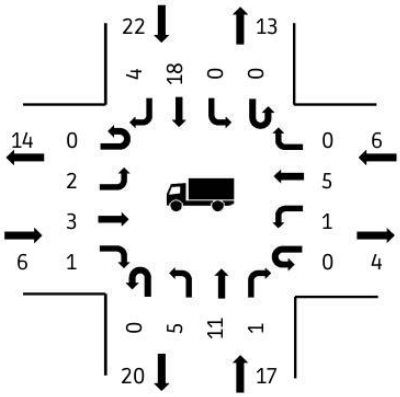
RallyTraffic

Location: Cascade Hwy & Fern Ridge Rd
Date: 6/11/2024
Peak Hour Start: 07:25 AM
Peak 15 Minute Start: 07:40 AM
Peak Hour Factor: 0.77

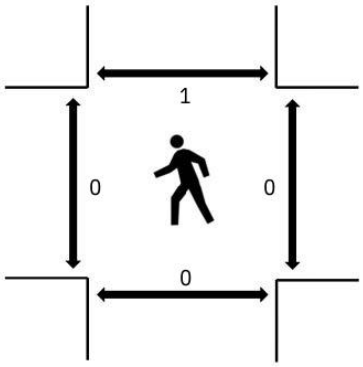
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	2	18	3	0	0	2	15	2	0	0	2	7	4	0	0	1	5	6	0	0		
07:05:00 AM	3	23	0	0	0	2	14	3	0	0	3	1	1	0	0	3	0	9	0	0		
07:10:00 AM	1	32	0	0	0	0	20	3	0	0	4	3	3	0	0	3	4	4	0	0	206	
07:15:00 AM	5	21	3	0	0	3	10	5	0	0	4	4	1	0	0	2	11	10	0	0	218	
07:20:00 AM	3	32	1	0	0	1	17	2	0	0	3	2	5	0	0	9	10	7	0	0	248	
07:25:00 AM	2	30	1	0	0	2	33	7	0	0	7	4	4	0	0	5	9	6	0	0	281	
07:30:00 AM	7	23	1	0	0	2	22	6	0	0	1	8	4	0	0	1	10	5	0	0	292	
07:35:00 AM	6	32	1	0	0	5	30	5	0	0	9	7	3	0	0	9	19	7	0	0	333	
07:40:00 AM	7	37	3	0	0	5	41	7	0	0	2	11	3	0	0	9	20	0	0	0	368	
07:45:00 AM	10	32	1	0	0	2	43	3	0	0	9	16	10	0	0	5	10	8	0	0	427	
07:50:00 AM	8	45	4	0	0	15	49	9	0	0	14	9	4	0	0	8	10	6	0	0	475	
07:55:00 AM	5	40	4	0	0	7	40	5	0	0	9	3	6	0	0	5	12	6	0	0	472	1327
08:00:00 AM	9	33	1	0	0	7	23	4	0	0	12	15	7	0	0	8	9	5	0	0	456	1393
08:05:00 AM	3	35	3	0	0	4	27	4	0	0	6	7	4	0	0	4	5	5	0	0	382	1438
08:10:00 AM	3	29	1	0	0	6	18	3	0	0	9	8	4	0	0	5	10	4	0	0	340	1461
08:15:00 AM	5	28	1	0	0	4	17	4	0	0	4	6	9	0	0	0	4	3	0	0	292	1467
08:20:00 AM	2	31	1	0	0	3	26	6	0	0	5	3	3	0	0	2	7	4	0	0	278	1468
08:25:00 AM	2	30	4	0	0	0	19	3	0	0	3	5	8	0	0	3	8	6	0	0	269	1449
08:30:00 AM	4	19	0	0	0	6	10	2	0	0	3	7	3	0	0	2	4	5	0	0	249	1424
08:35:00 AM	5	21	0	0	0	5	21	1	0	0	1	4	8	0	0	4	8	2	0	0	236	1371
08:40:00 AM	6	22	1	0	0	5	16	3	0	0	4	6	3	0	0	3	7	1	0	0	222	1303
08:45:00 AM	6	27	3	0	0	3	24	1	0	0	6	1	0	0	0	4	5	0	0	0	237	1234
08:50:00 AM	5	27	4	0	0	7	35	4	0	0	5	9	9	0	0	6	8	1	0	0	277	1173
08:55:00 AM	5	20	4	0	0	6	28	2	0	0	8	4	5	0	0	4	4	3	0	0	293	1124

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	2	17	2	0	0	2	15	2	0	0	2	7	4	0	0	1	5	6	0	0		
07:05:00 AM	3	22	0	0	0	2	13	3	0	0	3	1	1	0	0	3	0	8	0	0		
07:10:00 AM	1	31	0	0	0	0	19	2	0	0	4	3	3	0	0	3	3	4	0	0	197	
07:15:00 AM	5	19	3	0	0	3	9	4	0	0	4	4	1	0	0	2	11	10	0	0	207	
07:20:00 AM	3	32	1	0	0	1	16	2	0	0	3	2	5	0	0	9	9	7	0	0	238	
07:25:00 AM	2	30	0	0	0	2	31	7	0	0	6	4	4	0	0	5	9	6	0	0	271	
07:30:00 AM	7	23	1	0	0	2	21	4	0	0	1	8	4	0	0	1	10	5	0	0	283	
07:35:00 AM	6	30	1	0	0	5	29	5	0	0	9	7	3	0	0	8	19	7	0	0	322	
07:40:00 AM	7	35	3	0	0	5	41	6	0	0	2	11	3	0	0	9	17	0	0	0	355	
07:45:00 AM	10	31	1	0	0	2	41	3	0	0	8	15	10	0	0	5	9	8	0	0	411	
07:50:00 AM	8	45	4	0	0	15	48	9	0	0	14	9	4	0	0	8	10	6	0	0	462	
07:55:00 AM	5	39	4	0	0	7	40	5	0	0	9	3	6	0	0	5	12	6	0	0	464	1287
08:00:00 AM	9	32	1	0	0	7	20	4	0	0	12	14	7	0	0	8	9	5	0	0	449	1350
08:05:00 AM	3	34	3	0	0	4	25	3	0	0	6	6	4	0	0	4	5	5	0	0	371	1393
08:10:00 AM	3	28	1	0	0	6	16	3	0	0	9	8	3	0	0	5	9	4	0	0	325	1415
08:15:00 AM	5	27	1	0	0	4	15	4	0	0	4	6	9	0	0	0	4	3	0	0	279	1422
08:20:00 AM	2	30	1	0	0	3	24	6	0	0	5	3	3	0	0	2	7	4	0	0	267	1422
08:25:00 AM	2	30	4	0	0	0	17	2	0	0	3	5	8	0	0	3	8	6	0	0	260	1404
08:30:00 AM	4	16	0	0	0	6	10	2	0	0	2	7	3	0	0	2	4	5	0	0	239	1378
08:35:00 AM	5	21	0	0	0	5	20	1	0	0	1	4	8	0	0	4	8	2	0	0	228	1328
08:40:00 AM	6	21	1	0	0	5	15	3	0	0	4	6	3	0	0	3	7	1	0	0	215	1264
08:45:00 AM	6	27	3	0	0	3	22	1	0	0	6	1	0	0	0	4	5	0	0	0	232	1199
08:50:00 AM	5	27	4	0	0	7	35	4	0	0	4	9	9	0	0	6	8	1	0	0	272	1138
08:55:00 AM	5	19	4	0	0	6	28	2	0	0	8	4	5	0	0	4	4	3	0	0	289	1089

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0		
07:10:00 AM	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	11	
07:15:00 AM	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	
07:20:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	11	
07:25:00 AM	0	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	10	
07:30:00 AM	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	10	
07:35:00 AM	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	13	
07:40:00 AM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	15	
07:45:00 AM	0	1	0	0	0	0	2	0	0	0	1	1	0	0	0	0	1	0	0	0	17	
07:50:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
07:55:00 AM	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	46
08:00:00 AM	0	1	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	9	48
08:05:00 AM	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	13	50
08:10:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	15	50
08:15:00 AM	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	14	50
08:20:00 AM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	51
08:25:00 AM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10	50
08:30:00 AM	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	10	50
08:35:00 AM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	47
08:40:00 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	43
08:45:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	39
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	39
08:55:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	37

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
07:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
07:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:20:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:25:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

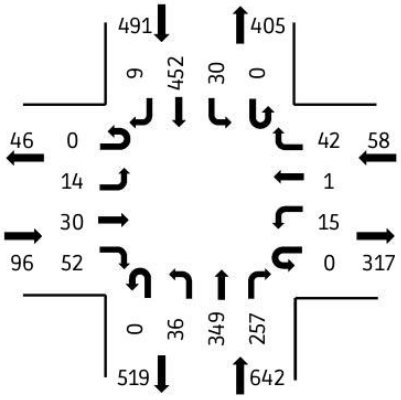
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
07:00:00 AM	0	0	0	0		
07:05:00 AM	0	0	0	0		
07:10:00 AM	1	1	0	0	2	
07:15:00 AM	0	0	0	0	2	
07:20:00 AM	0	0	0	0	2	
07:25:00 AM	0	0	0	0	0	
07:30:00 AM	0	1	0	0	1	
07:35:00 AM	0	0	0	0	1	
07:40:00 AM	0	0	0	0	1	
07:45:00 AM	0	0	0	0	0	
07:50:00 AM	0	0	0	0	0	
07:55:00 AM	0	0	0	0	0	3
08:00:00 AM	0	0	0	0	0	3
08:05:00 AM	0	0	0	0	0	3
08:10:00 AM	0	0	0	0	0	1
08:15:00 AM	0	0	0	0	0	1
08:20:00 AM	0	0	0	0	0	1
08:25:00 AM	0	0	0	0	0	1
08:30:00 AM	0	0	0	0	0	0
08:35:00 AM	0	0	0	0	0	0
08:40:00 AM	0	0	0	0	0	0
08:45:00 AM	0	0	0	0	0	0
08:50:00 AM	0	0	0	0	0	0
08:55:00 AM	0	0	0	0	0	0

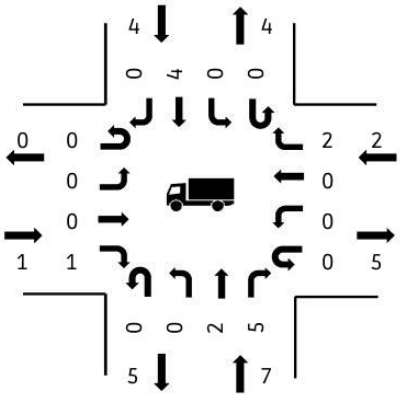
RallyTraffic

Location: Cascade Hwy & 22 WB ramps
Date: 5/30/2024
Peak Hour Start: 04:45 PM
Peak 15 Minute Start: 05:10 PM
Peak Hour Factor: 0.9

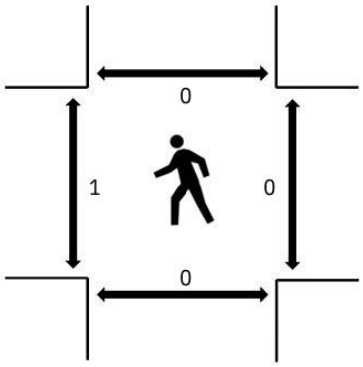
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	5	41	17	0	0	2	32	2	0	0	0	3	4	0	0	1	0	4	0	0		
04:05:00 PM	1	36	26	0	0	4	22	0	0	0	1	5	4	0	0	2	0	4	0	0		
04:10:00 PM	1	25	31	0	0	2	40	0	0	0	0	2	2	0	0	1	0	5	0	0	325	
04:15:00 PM	1	27	12	0	0	3	33	1	0	0	0	3	2	0	0	0	0	5	0	0	301	
04:20:00 PM	2	39	20	0	0	1	26	4	0	0	0	0	2	0	0	0	0	7	0	0	297	
04:25:00 PM	4	43	25	0	0	0	38	5	0	0	1	0	2	1	0	0	0	2	0	0	309	
04:30:00 PM	7	23	23	0	0	1	22	0	0	0	1	2	10	0	0	1	3	2	0	0	317	
04:35:00 PM	3	32	17	0	0	3	30	1	0	0	2	1	7	0	0	0	0	9	0	0	321	
04:40:00 PM	1	32	17	0	0	1	27	2	0	0	3	0	6	0	0	1	1	5	0	0	296	
04:45:00 PM	5	26	15	0	0	3	30	0	0	0	1	0	9	0	0	3	0	4	0	0	297	
04:50:00 PM	4	33	17	0	0	3	28	0	0	0	0	2	5	0	0	1	0	4	0	0	289	
04:55:00 PM	1	26	25	0	0	2	31	1	0	0	1	0	4	0	0	1	0	8	0	0	293	1223
05:00:00 PM	4	25	17	0	0	2	26	1	0	0	0	4	4	0	0	4	0	2	0	0	286	1201
05:05:00 PM	3	25	31	0	0	3	37	1	0	0	4	2	4	0	0	0	0	3	0	0	302	1209
05:10:00 PM	4	38	20	0	0	5	36	0	0	0	4	7	3	0	0	0	0	1	0	0	320	1218
05:15:00 PM	3	25	28	0	0	0	33	1	0	0	2	3	6	0	0	1	0	3	0	0	336	1236
05:20:00 PM	2	42	32	0	0	2	42	0	0	0	2	0	5	0	0	2	0	4	0	0	356	1268
05:25:00 PM	2	23	22	0	0	0	51	1	0	0	0	2	2	0	0	1	0	2	0	0	344	1253
05:30:00 PM	2	28	16	0	0	1	49	2	0	0	0	3	6	0	0	0	0	1	0	0	347	1266
05:35:00 PM	2	36	21	0	0	6	39	1	0	0	0	4	3	0	0	1	1	5	0	0	333	1280
05:40:00 PM	4	22	13	0	0	3	50	1	0	0	0	3	1	0	0	1	0	5	0	0	330	1287
05:45:00 PM	1	21	21	0	0	1	33	0	0	0	0	1	3	0	0	0	0	11	0	0	314	1283
05:50:00 PM	2	14	17	0	0	1	36	0	0	0	3	0	3	0	0	1	0	3	0	0	275	1266
05:55:00 PM	2	28	19	0	0	1	37	0	0	0	0	3	4	0	0	0	0	2	0	0	268	1262

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	5	41	17	0	0	2	32	2	0	0	0	2	4	0	0	1	0	4	0	0		
04:05:00 PM	1	35	26	0	0	3	22	0	0	0	1	5	3	0	0	2	0	4	0	0		
04:10:00 PM	1	24	30	0	0	2	39	0	0	0	0	2	2	0	0	1	0	5	0	0	318	
04:15:00 PM	1	27	11	0	0	3	32	1	0	0	0	2	1	0	0	0	0	5	0	0	291	
04:20:00 PM	2	39	20	0	0	1	25	4	0	0	0	0	2	0	0	0	0	7	0	0	289	
04:25:00 PM	4	41	25	0	0	0	38	5	0	0	1	0	2	1	0	0	0	2	0	0	302	
04:30:00 PM	7	23	22	0	0	1	22	0	0	0	1	2	10	0	0	1	3	2	0	0	313	
04:35:00 PM	3	31	17	0	0	3	29	1	0	0	2	1	7	0	0	0	0	9	0	0	316	
04:40:00 PM	1	32	17	0	0	1	27	2	0	0	3	0	6	0	0	1	1	5	0	0	293	
04:45:00 PM	5	26	14	0	0	3	30	0	0	0	1	0	8	0	0	3	0	4	0	0	293	
04:50:00 PM	4	33	17	0	0	3	28	0	0	0	0	2	5	0	0	1	0	3	0	0	286	
04:55:00 PM	1	26	25	0	0	2	31	1	0	0	1	0	4	0	0	1	0	8	0	0	290	1203
05:00:00 PM	4	25	17	0	0	2	26	1	0	0	0	4	4	0	0	4	0	2	0	0	285	1182
05:05:00 PM	3	25	30	0	0	3	37	1	0	0	4	2	4	0	0	0	0	3	0	0	301	1192
05:10:00 PM	4	37	19	0	0	5	34	0	0	0	4	7	3	0	0	0	0	1	0	0	315	1200
05:15:00 PM	3	24	27	0	0	0	32	1	0	0	2	3	6	0	0	1	0	3	0	0	328	1219
05:20:00 PM	2	42	32	0	0	2	42	0	0	0	2	0	5	0	0	2	0	4	0	0	349	1252
05:25:00 PM	2	23	21	0	0	0	50	1	0	0	0	2	2	0	0	1	0	2	0	0	339	1237
05:30:00 PM	2	28	16	0	0	1	49	2	0	0	0	3	6	0	0	0	0	1	0	0	345	1251
05:35:00 PM	2	36	21	0	0	6	39	1	0	0	0	4	3	0	0	1	1	5	0	0	331	1267
05:40:00 PM	4	22	13	0	0	3	50	1	0	0	0	3	1	0	0	1	0	4	0	0	329	1273
05:45:00 PM	1	21	21	0	0	1	33	0	0	0	0	1	3	0	0	0	0	11	0	0	313	1271
05:50:00 PM	2	14	17	0	0	1	36	0	0	0	3	0	3	0	0	1	0	3	0	0	274	1255
05:55:00 PM	2	28	19	0	0	1	36	0	0	0	0	3	4	0	0	0	0	2	0	0	267	1250

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
04:05:00 PM	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0		
04:10:00 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
04:15:00 PM	1	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	12	
04:20:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
04:25:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
04:30:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:35:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
04:45:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	21
05:05:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	18
05:10:00 PM	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	19
05:15:00 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	17
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	16
05:25:00 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	16
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	15
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	13
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	14
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
05:55:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12

Bike Volumes

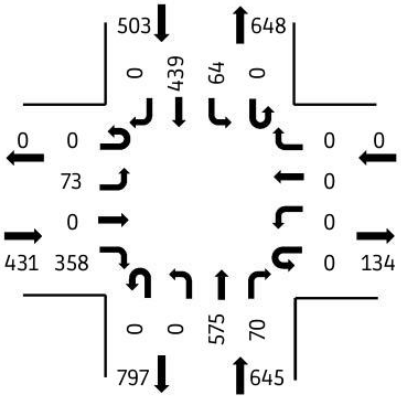
Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 WB ramps)					WB (22 WB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:25:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Pedestrian Volumes

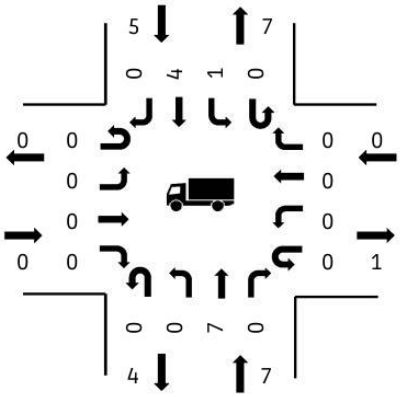
Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	
04:40:00 PM	0	0	1	0	1	
04:45:00 PM	0	0	1	0	2	
04:50:00 PM	0	0	0	0	2	
04:55:00 PM	0	0	0	0	1	2
05:00:00 PM	0	0	0	0	0	2
05:05:00 PM	0	0	0	0	0	2
05:10:00 PM	0	0	0	0	0	2
05:15:00 PM	0	0	0	0	0	2
05:20:00 PM	0	0	0	0	0	2
05:25:00 PM	0	0	0	0	0	2
05:30:00 PM	0	0	0	0	0	2
05:35:00 PM	0	0	0	0	0	2
05:40:00 PM	0	0	0	0	0	1
05:45:00 PM	0	0	0	0	0	0
05:50:00 PM	0	0	0	0	0	0
05:55:00 PM	0	0	2	0	2	2

Location: Cascade Hwy & 22 EB ramps
Date: 5/30/2024
Peak Hour Start: 04:40 PM
Peak 15 Minute Start: 05:15 PM
Peak Hour Factor: 0.9

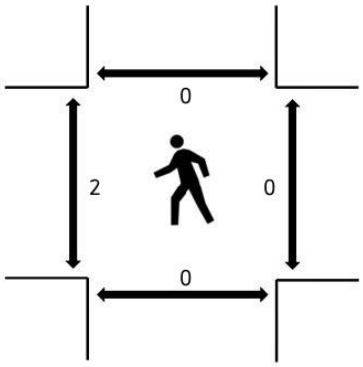
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	50	6	0	0	6	30	0	0	0	11	0	28	0	0	0	0	0	0	0		
04:05:00 PM	0	61	1	0	0	8	22	0	0	0	6	0	27	0	0	0	0	0	0	0		
04:10:00 PM	0	54	4	0	0	4	38	0	0	0	3	0	18	0	0	0	0	0	0	0	377	
04:15:00 PM	0	41	6	0	0	3	32	0	0	0	3	0	24	0	0	0	0	0	0	0	355	
04:20:00 PM	0	55	7	0	0	3	24	0	0	0	9	0	29	0	0	0	0	0	0	0	357	
04:25:00 PM	0	59	5	0	0	3	36	0	0	0	7	0	33	0	0	0	0	0	0	0	379	
04:30:00 PM	0	43	7	0	0	3	30	0	0	0	8	0	27	0	0	0	0	0	0	0	388	
04:35:00 PM	0	51	4	0	0	3	31	0	0	0	6	0	34	0	0	0	0	0	0	0	390	
04:40:00 PM	0	43	7	0	0	4	34	0	0	0	6	0	35	0	0	0	0	0	0	0	376	
04:45:00 PM	0	43	8	0	0	6	35	0	0	0	6	0	23	0	0	0	0	0	0	0	379	
04:50:00 PM	0	44	9	0	0	4	30	0	0	0	11	0	28	0	0	0	0	0	0	0	376	
04:55:00 PM	0	38	9	0	0	6	31	0	0	0	6	0	26	0	0	0	0	0	0	0	363	1495
05:00:00 PM	0	39	4	0	0	2	32	0	0	0	6	0	35	0	0	0	0	0	0	0	360	1482
05:05:00 PM	0	54	4	0	0	4	37	0	0	0	6	0	27	0	0	0	0	0	0	0	366	1489
05:10:00 PM	0	56	4	0	0	3	35	0	0	0	7	0	20	0	0	0	0	0	0	0	375	1493
05:15:00 PM	0	58	7	0	0	5	33	0	0	0	3	0	35	0	0	0	0	0	0	0	398	1525
05:20:00 PM	0	67	8	0	0	4	47	0	0	0	6	0	25	0	0	0	0	0	0	0	423	1555
05:25:00 PM	0	42	7	0	0	11	42	0	0	0	3	0	35	0	0	0	0	0	0	0	438	1552
05:30:00 PM	0	38	1	0	0	12	43	0	0	0	9	0	30	0	0	0	0	0	0	0	430	1567
05:35:00 PM	0	53	2	0	0	3	40	0	0	0	4	0	39	0	0	0	0	0	0	0	414	1579
05:40:00 PM	0	35	8	0	0	3	50	0	0	0	3	0	25	0	0	0	0	0	0	0	398	1574
05:45:00 PM	0	36	6	0	0	4	31	0	0	0	6	0	27	0	0	0	0	0	0	0	375	1563
05:50:00 PM	0	30	5	0	0	4	37	0	0	0	5	0	20	0	0	0	0	0	0	0	335	1538
05:55:00 PM	0	40	5	0	0	4	34	0	0	0	5	0	34	0	0	0	0	0	0	0	333	1544

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	50	6	0	0	6	30	0	0	0	11	0	28	0	0	0	0	0	0	0		
04:05:00 PM	0	59	1	0	0	8	21	0	0	0	6	0	27	0	0	0	0	0	0	0		
04:10:00 PM	0	51	4	0	0	3	38	0	0	0	3	0	17	0	0	0	0	0	0	0	369	
04:15:00 PM	0	40	6	0	0	2	31	0	0	0	3	0	24	0	0	0	0	0	0	0	344	
04:20:00 PM	0	54	7	0	0	3	23	0	0	0	9	0	29	0	0	0	0	0	0	0	347	
04:25:00 PM	0	58	5	0	0	3	36	0	0	0	6	0	33	0	0	0	0	0	0	0	372	
04:30:00 PM	0	43	7	0	0	3	30	0	0	0	8	0	27	0	0	0	0	0	0	0	384	
04:35:00 PM	0	50	4	0	0	3	30	0	0	0	6	0	34	0	0	0	0	0	0	0	386	
04:40:00 PM	0	43	7	0	0	4	34	0	0	0	6	0	35	0	0	0	0	0	0	0	374	
04:45:00 PM	0	42	8	0	0	6	34	0	0	0	6	0	23	0	0	0	0	0	0	0	375	
04:50:00 PM	0	44	9	0	0	4	30	0	0	0	11	0	28	0	0	0	0	0	0	0	374	
04:55:00 PM	0	38	9	0	0	6	31	0	0	0	6	0	26	0	0	0	0	0	0	0	361	1476
05:00:00 PM	0	39	4	0	0	2	32	0	0	0	6	0	35	0	0	0	0	0	0	0	360	1463
05:05:00 PM	0	53	4	0	0	4	37	0	0	0	6	0	27	0	0	0	0	0	0	0	365	1472
05:10:00 PM	0	54	4	0	0	3	33	0	0	0	7	0	20	0	0	0	0	0	0	0	370	1477
05:15:00 PM	0	56	7	0	0	5	32	0	0	0	3	0	35	0	0	0	0	0	0	0	390	1509
05:20:00 PM	0	67	8	0	0	4	47	0	0	0	6	0	25	0	0	0	0	0	0	0	416	1541
05:25:00 PM	0	41	7	0	0	10	42	0	0	0	3	0	35	0	0	0	0	0	0	0	433	1538
05:30:00 PM	0	38	1	0	0	12	43	0	0	0	9	0	30	0	0	0	0	0	0	0	428	1553
05:35:00 PM	0	53	2	0	0	3	40	0	0	0	4	0	39	0	0	0	0	0	0	0	412	1567
05:40:00 PM	0	35	8	0	0	3	50	0	0	0	3	0	25	0	0	0	0	0	0	0	398	1562
05:45:00 PM	0	36	6	0	0	4	31	0	0	0	6	0	26	0	0	0	0	0	0	0	374	1552
05:50:00 PM	0	30	5	0	0	4	37	0	0	0	5	0	20	0	0	0	0	0	0	0	334	1527
05:55:00 PM	0	40	5	0	0	4	33	0	0	0	5	0	34	0	0	0	0	0	0	0	331	1532

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	3	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8	
04:15:00 PM	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
04:20:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
04:25:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	7	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:35:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:45:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	19
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
05:05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	17
05:10:00 PM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	16
05:15:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	16
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	14
05:25:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	14
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	14
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	12
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	11
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
05:55:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	12

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (22 EB ramps)					WB (22 EB ramps)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:20:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

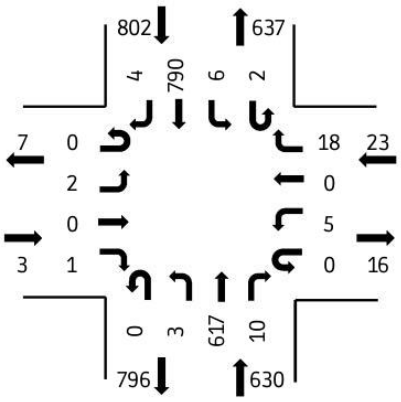
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	
04:40:00 PM	0	0	1	0	1	
04:45:00 PM	0	0	1	0	2	
04:50:00 PM	0	0	0	0	2	
04:55:00 PM	0	0	0	0	1	2
05:00:00 PM	0	0	0	0	0	2
05:05:00 PM	0	0	0	0	0	2
05:10:00 PM	0	0	0	0	0	2
05:15:00 PM	0	0	0	0	0	2
05:20:00 PM	0	0	0	0	0	2
05:25:00 PM	0	0	0	0	0	2
05:30:00 PM	0	0	0	0	0	2
05:35:00 PM	0	0	0	0	0	2
05:40:00 PM	0	0	0	0	0	1
05:45:00 PM	0	0	0	0	0	0
05:50:00 PM	0	0	0	0	0	0
05:55:00 PM	2	0	2	0	4	4

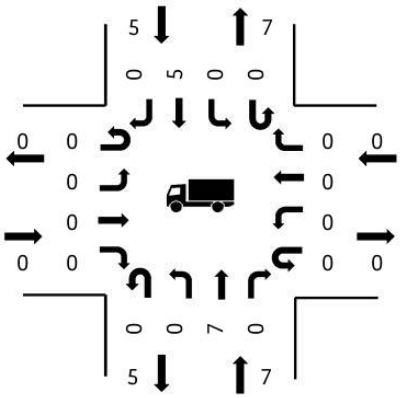
RallyTraffic

Location: Cascade Hwy & Golf Ln
Date: 5/30/2024
Peak Hour Start: 04:45 PM
Peak 15 Minute Start: 05:15 PM
Peak Hour Factor: 0.9

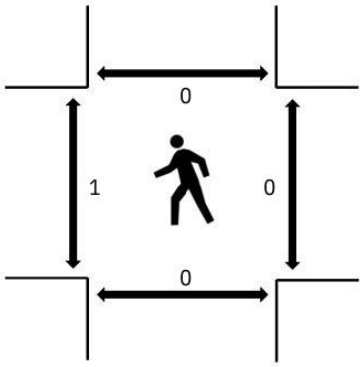
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	52	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	62	0	0	0	0	49	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	51	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	324	
04:15:00 PM	0	52	2	0	0	0	55	1	0	0	0	0	0	0	0	0	0	0	0	0	329	
04:20:00 PM	0	62	1	0	0	0	52	1	0	0	0	0	0	0	0	2	0	0	0	0	336	
04:25:00 PM	0	56	1	0	0	0	70	0	0	0	1	0	0	0	0	1	0	2	0	0	359	
04:30:00 PM	1	44	0	0	0	0	64	0	3	0	0	0	0	0	0	1	0	1	0	0	363	
04:35:00 PM	0	55	0	0	0	0	64	0	1	0	1	0	0	0	0	0	0	1	0	0	367	
04:40:00 PM	0	48	0	0	0	4	65	0	0	0	0	0	0	0	0	0	0	0	0	0	353	
04:45:00 PM	0	55	0	0	0	0	57	1	0	0	0	0	0	0	0	1	0	1	0	0	354	
04:50:00 PM	0	50	1	0	0	1	57	0	0	0	0	0	0	0	0	0	0	0	0	0	341	
04:55:00 PM	0	41	1	0	0	0	56	1	0	0	0	0	0	0	0	0	0	3	0	0	326	1362
05:00:00 PM	1	45	0	0	0	1	67	0	0	0	0	0	1	0	0	0	0	1	0	0	327	1373
05:05:00 PM	1	63	1	0	0	0	63	0	0	0	0	0	0	0	0	1	0	0	0	0	347	1391
05:10:00 PM	0	54	1	0	0	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	355	1393
05:15:00 PM	1	60	0	0	0	3	63	0	0	0	0	0	0	0	0	1	0	4	0	0	371	1415
05:20:00 PM	0	68	1	0	0	0	71	1	1	0	0	0	0	0	0	0	0	3	0	0	387	1442
05:25:00 PM	0	49	1	0	0	1	77	0	0	0	1	0	0	0	0	0	0	0	0	0	406	1440
05:30:00 PM	0	41	1	0	0	0	73	0	0	0	0	0	0	0	0	1	0	2	0	0	392	1444
05:35:00 PM	0	46	2	0	0	0	76	0	1	0	1	0	0	0	0	1	0	1	0	0	375	1450
05:40:00 PM	0	45	1	0	0	0	75	1	0	0	0	0	0	0	0	0	0	3	0	0	371	1458
05:45:00 PM	1	39	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	1	0	0	352	1442
05:50:00 PM	0	33	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	315	1424
05:55:00 PM	0	53	0	0	0	0	66	0	0	0	0	0	0	0	0	0	0	0	0	0	309	1441

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	52	0	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	60	0	0	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	48	0	0	0	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	317	
04:15:00 PM	0	51	2	0	0	0	54	1	0	0	0	0	0	0	0	0	0	0	0	0	320	
04:20:00 PM	0	61	1	0	0	0	51	1	0	0	0	0	0	0	0	2	0	0	0	0	328	
04:25:00 PM	0	56	0	0	0	0	70	0	0	0	1	0	0	0	0	1	0	1	0	0	353	
04:30:00 PM	1	44	0	0	0	0	64	0	3	0	0	0	0	0	0	1	0	1	0	0	359	
04:35:00 PM	0	54	0	0	0	0	63	0	1	0	1	0	0	0	0	0	0	1	0	0	363	
04:40:00 PM	0	48	0	0	0	4	65	0	0	0	0	0	0	0	0	0	0	0	0	0	351	
04:45:00 PM	0	54	0	0	0	0	56	1	0	0	0	0	0	0	0	1	0	1	0	0	350	
04:50:00 PM	0	50	1	0	0	1	57	0	0	0	0	0	0	0	0	0	0	0	0	0	339	
04:55:00 PM	0	41	1	0	0	0	56	1	0	0	0	0	0	0	0	0	0	3	0	0	324	1345
05:00:00 PM	1	45	0	0	0	1	67	0	0	0	0	0	1	0	0	0	0	1	0	0	327	1356
05:05:00 PM	1	61	1	0	0	0	63	0	0	0	0	0	0	0	0	1	0	0	0	0	345	1375
05:10:00 PM	0	53	1	0	0	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	350	1378
05:15:00 PM	1	58	0	0	0	3	62	0	0	0	0	0	0	0	0	1	0	4	0	0	363	1399
05:20:00 PM	0	68	1	0	0	0	71	1	1	0	0	0	0	0	0	0	0	3	0	0	381	1428
05:25:00 PM	0	48	1	0	0	1	77	0	0	0	1	0	0	0	0	0	0	0	0	0	402	1427
05:30:00 PM	0	41	1	0	0	0	73	0	0	0	0	0	0	0	0	1	0	2	0	0	391	1431
05:35:00 PM	0	46	2	0	0	0	76	0	1	0	1	0	0	0	0	1	0	1	0	0	374	1439
05:40:00 PM	0	45	1	0	0	0	74	1	0	0	0	0	0	0	0	0	0	3	0	0	370	1446
05:45:00 PM	1	39	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	1	0	0	350	1431
05:50:00 PM	0	33	0	0	0	0	58	0	0	0	0	0	0	0	0	0	0	0	0	0	313	1413
05:55:00 PM	0	53	0	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	307	1429

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
04:15:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
04:20:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
04:25:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:35:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:45:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	17
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
05:05:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	16
05:10:00 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15
05:15:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	16
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	14
05:25:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
05:40:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	12
05:45:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	11
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	11
05:55:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	12

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Golf Ln)					WB (Golf Ln)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:20:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

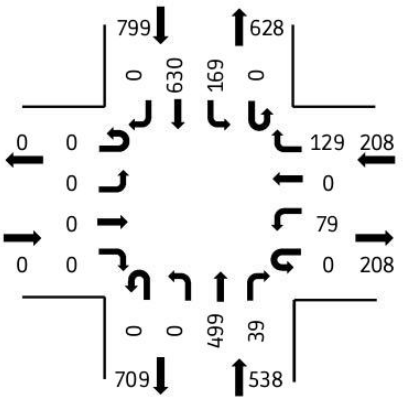
Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	
04:40:00 PM	0	0	1	0	1	
04:45:00 PM	0	0	1	0	2	
04:50:00 PM	0	0	0	0	2	
04:55:00 PM	0	0	0	0	1	2
05:00:00 PM	0	0	0	0	0	2
05:05:00 PM	0	0	0	0	0	2
05:10:00 PM	0	0	0	0	0	2
05:15:00 PM	0	0	0	0	0	2
05:20:00 PM	0	0	0	0	0	2
05:25:00 PM	0	0	0	0	0	2
05:30:00 PM	0	0	0	0	0	2
05:35:00 PM	0	0	0	0	0	2
05:40:00 PM	0	0	0	0	0	1
05:45:00 PM	0	0	0	0	0	0
05:50:00 PM	0	0	0	2	2	2
05:55:00 PM	0	0	0	0	2	2

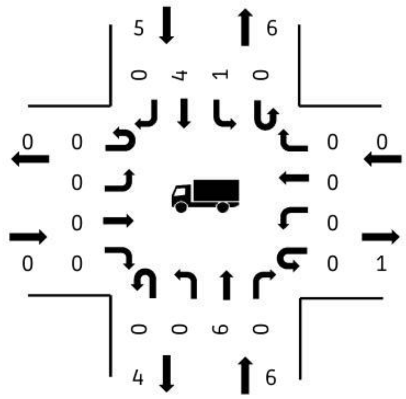
RallyTraffic

Location: Cascade Hwy & Whitney St
Date: 5/30/2024
Peak Hour Start: 04:45 PM
Peak 15 Minute Start: 05:15 PM
Peak Hour Factor: 0.93

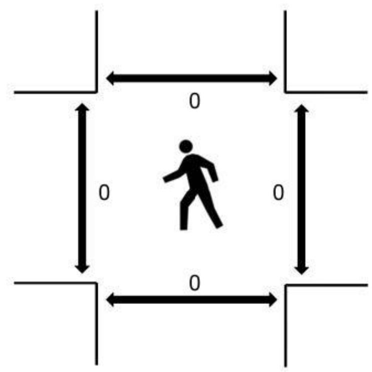
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	35	8	0	0	10	50	0	0	0	0	0	0	0	0	9	0	13	0	0		
04:05:00 PM	0	50	2	0	0	11	32	0	0	0	0	0	0	0	0	10	0	12	0	0		
04:10:00 PM	0	36	1	0	0	17	48	0	0	0	0	0	0	0	0	8	0	17	0	0	369	
04:15:00 PM	0	40	4	0	0	11	39	0	0	0	0	0	0	0	0	4	0	10	0	0	352	
04:20:00 PM	0	47	7	0	0	16	41	0	0	0	0	0	0	0	0	7	0	18	0	0	371	
04:25:00 PM	0	43	2	0	0	10	60	0	0	0	0	0	0	0	0	6	0	14	0	0	379	
04:30:00 PM	0	36	3	0	0	14	37	0	0	0	0	0	0	0	0	5	0	12	0	0	378	
04:35:00 PM	0	46	2	0	0	15	47	0	0	0	0	0	0	0	0	8	0	8	0	0	368	
04:40:00 PM	0	44	4	0	0	18	56	0	0	0	0	0	0	0	0	7	0	4	0	0	366	
04:45:00 PM	0	43	4	0	0	9	41	0	0	0	0	0	0	0	0	2	0	12	0	0	370	
04:50:00 PM	0	42	1	0	0	12	54	0	0	0	0	0	0	0	0	10	0	11	0	0	374	
04:55:00 PM	0	33	2	0	0	12	43	0	0	0	0	0	0	0	0	6	0	9	0	0	346	1460
05:00:00 PM	0	36	1	0	0	13	53	0	0	0	0	0	0	0	0	6	0	10	0	0	354	1454
05:05:00 PM	0	49	9	0	0	13	50	0	0	0	0	0	0	0	0	3	0	14	0	0	362	1475
05:10:00 PM	0	45	4	0	0	17	38	0	0	0	0	0	0	0	0	8	0	13	0	0	382	1473
05:15:00 PM	0	46	5	0	0	15	49	0	0	0	0	0	0	0	0	10	0	11	0	0	399	1501
05:20:00 PM	0	56	4	0	0	11	60	0	0	0	0	0	0	0	0	2	0	13	0	0	407	1511
05:25:00 PM	0	38	1	0	0	19	60	0	0	0	0	0	0	0	0	7	0	10	0	0	417	1511
05:30:00 PM	0	31	2	0	0	18	54	0	0	0	0	0	0	0	0	9	0	10	0	0	405	1528
05:35:00 PM	0	44	0	0	0	18	66	0	0	0	0	0	0	0	0	7	0	7	0	0	401	1544
05:40:00 PM	0	36	6	0	0	12	62	0	0	0	0	0	0	0	0	9	0	9	0	0	400	1545
05:45:00 PM	0	32	3	0	0	14	41	0	0	0	0	0	0	0	0	10	0	7	0	0	383	1541
05:50:00 PM	0	27	4	0	0	13	48	0	0	0	0	0	0	0	0	5	0	6	0	0	344	1514
05:55:00 PM	0	17	1	0	0	2	16	0	0	0	0	0	0	0	0	0	0	7	0	0	253	1452

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	35	8	0	0	10	50	0	0	0	0	0	0	0	0	9	0	13	0	0		
04:05:00 PM	0	48	2	0	0	10	32	0	0	0	0	0	0	0	0	10	0	12	0	0		
04:10:00 PM	0	35	1	0	0	17	47	0	0	0	0	0	0	0	0	7	0	16	0	0	362	
04:15:00 PM	0	39	4	0	0	10	39	0	0	0	0	0	0	0	0	4	0	10	0	0	343	
04:20:00 PM	0	46	7	0	0	16	40	0	0	0	0	0	0	0	0	7	0	18	0	0	363	
04:25:00 PM	0	42	2	0	0	10	60	0	0	0	0	0	0	0	0	6	0	14	0	0	374	
04:30:00 PM	0	36	3	0	0	14	37	0	0	0	0	0	0	0	0	5	0	12	0	0	375	
04:35:00 PM	0	45	2	0	0	15	46	0	0	0	0	0	0	0	0	8	0	8	0	0	365	
04:40:00 PM	0	44	4	0	0	18	56	0	0	0	0	0	0	0	0	7	0	4	0	0	364	
04:45:00 PM	0	42	4	0	0	9	40	0	0	0	0	0	0	0	0	2	0	12	0	0	366	
04:50:00 PM	0	42	1	0	0	12	54	0	0	0	0	0	0	0	0	10	0	11	0	0	372	
04:55:00 PM	0	33	2	0	0	12	43	0	0	0	0	0	0	0	0	6	0	9	0	0	344	1444
05:00:00 PM	0	36	1	0	0	13	53	0	0	0	0	0	0	0	0	6	0	10	0	0	354	1438
05:05:00 PM	0	47	9	0	0	13	50	0	0	0	0	0	0	0	0	3	0	14	0	0	360	1460
05:10:00 PM	0	44	4	0	0	17	36	0	0	0	0	0	0	0	0	8	0	13	0	0	377	1459
05:15:00 PM	0	44	5	0	0	15	48	0	0	0	0	0	0	0	0	10	0	11	0	0	391	1486
05:20:00 PM	0	56	4	0	0	11	60	0	0	0	0	0	0	0	0	2	0	13	0	0	401	1498
05:25:00 PM	0	38	1	0	0	19	60	0	0	0	0	0	0	0	0	7	0	10	0	0	414	1499
05:30:00 PM	0	31	2	0	0	18	54	0	0	0	0	0	0	0	0	9	0	10	0	0	405	1516
05:35:00 PM	0	44	0	0	0	17	66	0	0	0	0	0	0	0	0	7	0	7	0	0	400	1533
05:40:00 PM	0	36	6	0	0	12	62	0	0	0	0	0	0	0	0	9	0	9	0	0	399	1534
05:45:00 PM	0	32	3	0	0	14	40	0	0	0	0	0	0	0	0	8	0	7	0	0	379	1529
05:50:00 PM	0	27	4	0	0	13	48	0	0	0	0	0	0	0	0	5	0	6	0	0	341	1502
05:55:00 PM	0	17	1	0	0	2	16	0	0	0	0	0	0	0	0	0	0	7	0	0	250	1440

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	7	
04:15:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
04:20:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
04:25:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
04:35:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:45:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	16
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
05:05:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	15
05:10:00 PM	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	14
05:15:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	15
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	13
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
05:35:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
05:45:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	4	12
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	12

Bike Volumes

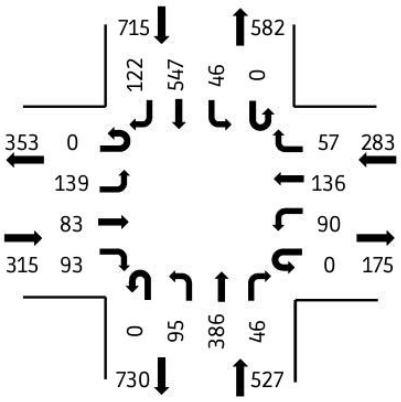
Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Whitney St)					WB (Whitney St)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

Pedestrian Volumes

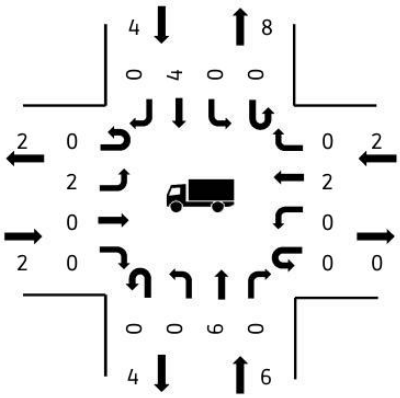
Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	
04:35:00 PM	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0
05:00:00 PM	0	0	0	0	0	0
05:05:00 PM	0	0	0	0	0	0
05:10:00 PM	0	0	0	0	0	0
05:15:00 PM	0	0	0	0	0	0
05:20:00 PM	0	0	0	0	0	0
05:25:00 PM	0	0	0	0	0	0
05:30:00 PM	0	0	0	0	0	0
05:35:00 PM	0	0	0	0	0	0
05:40:00 PM	0	0	0	0	0	0
05:45:00 PM	0	0	0	0	0	0
05:50:00 PM	0	0	0	0	0	0
05:55:00 PM	0	0	0	0	0	0

Location: Cascade Hwy & Fern Ridge Rd
Date: 5/30/2024
Peak Hour Start: 04:55 PM
Peak 15 Minute Start: 05:15 PM
Peak Hour Factor: 0.9

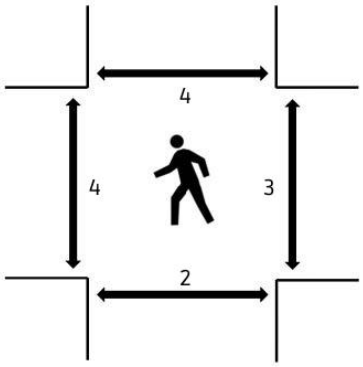
Motorized Vehicles



Heavy Vehicles



Pedestrians



(peak hour)

All Vehicle Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	8	28	7	0	0	12	30	8	0	0	16	11	12	0	0	6	8	8	0	0		
04:05:00 PM	12	33	6	0	0	3	47	8	0	0	8	14	10	0	0	9	7	4	0	0		
04:10:00 PM	14	44	5	0	0	1	39	13	0	0	7	4	5	0	0	3	8	6	0	0	464	
04:15:00 PM	10	32	7	0	0	1	36	13	0	0	4	7	14	0	0	9	8	6	0	0	457	
04:20:00 PM	7	25	7	0	0	0	28	10	0	0	11	9	9	0	0	11	22	16	0	0	451	
04:25:00 PM	4	43	4	0	0	3	45	7	0	0	12	9	9	0	0	11	11	6	0	0	466	
04:30:00 PM	8	31	2	0	0	2	34	11	0	0	7	13	7	0	0	5	9	11	0	0	459	
04:35:00 PM	10	33	3	0	0	3	46	9	0	0	7	7	8	0	0	4	11	8	0	0	453	
04:40:00 PM	8	36	5	0	0	6	43	9	0	0	8	8	9	0	0	5	14	7	0	0	447	
04:45:00 PM	5	30	3	0	0	4	42	8	0	0	6	8	13	0	0	3	16	6	0	0	451	
04:50:00 PM	10	36	4	0	0	5	41	7	0	0	11	8	4	0	0	5	6	4	0	0	443	
04:55:00 PM	5	32	2	0	0	4	44	10	0	0	8	9	5	0	0	7	11	3	0	0	425	1802
05:00:00 PM	7	20	6	0	0	8	32	10	0	0	11	6	16	0	0	6	12	9	0	0	424	1791
05:05:00 PM	6	35	3	0	0	4	43	12	0	0	7	3	5	0	0	4	8	2	0	0	415	1762
05:10:00 PM	10	25	5	0	0	1	25	6	0	0	17	6	4	0	0	6	12	9	0	0	401	1739
05:15:00 PM	12	42	5	0	0	5	52	5	0	0	13	8	6	0	0	5	11	7	0	0	429	1763
05:20:00 PM	3	48	5	0	0	0	53	10	0	0	13	13	9	0	0	10	11	1	0	0	473	1784
05:25:00 PM	15	38	1	0	0	4	39	11	0	0	18	6	9	0	0	9	10	5	0	0	512	1785
05:30:00 PM	5	32	3	0	0	4	47	11	0	0	13	13	10	0	0	17	11	5	0	0	512	1816
05:35:00 PM	3	24	2	0	0	3	50	10	0	0	15	6	6	0	0	11	11	2	0	0	479	1810
05:40:00 PM	10	36	6	0	0	3	54	15	0	0	7	4	7	0	0	4	12	3	0	0	475	1813
05:45:00 PM	8	29	5	0	0	4	59	9	0	0	8	6	8	0	0	4	12	5	0	0	461	1826
05:50:00 PM	11	25	3	0	0	6	49	13	0	0	9	3	8	0	0	7	15	6	0	0	473	1840
05:55:00 PM	9	19	8	0	0	3	36	2	0	0	9	10	7	0	0	7	11	3	0	0	436	1824

Car Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	8	25	7	0	0	12	29	8	0	0	16	11	12	0	0	6	8	8	0	0		
04:05:00 PM	12	33	6	0	0	3	47	8	0	0	8	14	10	0	0	8	7	4	0	0		
04:10:00 PM	14	43	5	0	0	1	39	13	0	0	7	4	5	0	0	3	8	5	0	0	457	
04:15:00 PM	10	30	7	0	0	1	35	12	0	0	4	7	14	0	0	9	8	6	0	0	450	
04:20:00 PM	7	24	7	0	0	0	28	10	0	0	11	9	9	0	0	11	22	16	0	0	444	
04:25:00 PM	4	43	4	0	0	3	44	7	0	0	12	9	9	0	0	11	11	6	0	0	460	
04:30:00 PM	8	30	2	0	0	2	34	11	0	0	5	13	7	0	0	5	9	11	0	0	454	
04:35:00 PM	10	33	3	0	0	3	46	9	0	0	7	7	8	0	0	4	10	8	0	0	448	
04:40:00 PM	8	35	5	0	0	6	43	9	0	0	8	8	9	0	0	5	14	7	0	0	442	
04:45:00 PM	5	30	3	0	0	4	41	8	0	0	6	7	13	0	0	3	16	6	0	0	447	
04:50:00 PM	10	36	4	0	0	5	40	7	0	0	11	8	4	0	0	5	6	4	0	0	439	
04:55:00 PM	5	32	2	0	0	4	44	10	0	0	8	9	5	0	0	7	11	3	0	0	422	1781
05:00:00 PM	7	20	6	0	0	8	32	10	0	0	11	6	16	0	0	6	11	9	0	0	422	1773
05:05:00 PM	6	35	3	0	0	4	43	12	0	0	7	3	5	0	0	4	8	2	0	0	414	1745
05:10:00 PM	10	23	5	0	0	1	25	6	0	0	17	6	4	0	0	6	12	9	0	0	398	1722
05:15:00 PM	12	40	5	0	0	5	51	5	0	0	13	8	6	0	0	5	11	7	0	0	424	1747
05:20:00 PM	3	47	5	0	0	0	51	10	0	0	12	13	9	0	0	10	11	1	0	0	464	1765
05:25:00 PM	15	38	1	0	0	4	38	11	0	0	18	6	9	0	0	9	10	5	0	0	504	1766
05:30:00 PM	5	31	3	0	0	4	47	11	0	0	12	13	10	0	0	17	11	5	0	0	505	1798
05:35:00 PM	3	24	2	0	0	3	50	10	0	0	15	6	6	0	0	11	10	2	0	0	475	1792
05:40:00 PM	10	36	6	0	0	3	54	15	0	0	7	4	7	0	0	4	12	3	0	0	472	1796
05:45:00 PM	8	29	5	0	0	4	59	9	0	0	8	6	8	0	0	4	12	5	0	0	460	1811
05:50:00 PM	11	25	3	0	0	6	49	13	0	0	9	3	8	0	0	7	15	6	0	0	473	1826
05:55:00 PM	9	19	8	0	0	3	36	2	0	0	9	10	7	0	0	7	10	3	0	0	435	1809

Truck Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0		
04:10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8	
04:15:00 PM	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8	
04:20:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
04:25:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
04:30:00 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	5	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	
04:40:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
04:45:00 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	4	
04:50:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	22
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	19
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	17
05:10:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17
05:15:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	16
05:20:00 PM	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	9	19
05:25:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	19
05:30:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	7	18
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	18
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	17
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	15
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	15

Bike Volumes

Time	NB (Cascade Hwy)					SB (Cascade Hwy)					EB (Fern Ridge Rd)					WB (Fern Ridge Rd)					Totals	
Time	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	Left	Thru	Right	U-turn	RTOR	15min	1hr
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pedestrian Volumes

Time	Pedestrians				Totals	
Time	NB	SB	EB	WB	15min	1hr
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	1	0	0	0	1	
04:35:00 PM	0	0	0	0	1	
04:40:00 PM	0	0	0	0	1	
04:45:00 PM	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	1
05:00:00 PM	0	0	0	0	0	1
05:05:00 PM	0	0	0	0	0	1
05:10:00 PM	0	0	0	0	0	1
05:15:00 PM	0	0	0	0	0	1
05:20:00 PM	0	0	0	0	0	1
05:25:00 PM	0	0	0	0	0	1
05:30:00 PM	0	0	0	0	0	0
05:35:00 PM	0	1	0	0	1	1
05:40:00 PM	0	2	2	0	5	5
05:45:00 PM	0	1	0	0	6	6
05:50:00 PM	2	0	2	3	12	13
05:55:00 PM	0	0	0	0	8	13

APPENDIX B: HCM REPORTS - EXISTING

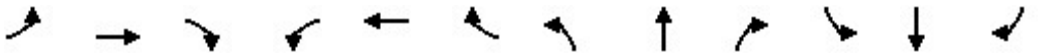
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	15	4	9	44	84	307	370	41	361	13
Future Vol, veh/h	6	3	15	4	9	44	84	307	370	41	361	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	200	-	-	-	-	25	250	-	300	250	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	5	1	2	3	0	5	0
Mvmt Flow	8	4	19	5	11	55	105	384	463	51	451	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1180	1147	451	1167	1163	384	467	0	0	384	0	0
Stage 1	553	553	-	594	594	-	-	-	-	-	-	-
Stage 2	627	594	-	573	569	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.25	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.345	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	169	201	613	172	196	657	1100	-	-	1186	-	-
Stage 1	521	518	-	495	496	-	-	-	-	-	-	-
Stage 2	475	496	-	508	509	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	132	174	613	147	170	657	1100	-	-	1186	-	-
Mov Cap-2 Maneuver	132	174	-	147	170	-	-	-	-	-	-	-
Stage 1	472	496	-	448	449	-	-	-	-	-	-	-
Stage 2	384	449	-	468	487	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.8	15.3	1	0.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1100	-	-	132	432	162	657	1186	-	-
HCM Lane V/C Ratio	0.095	-	-	0.057	0.052	0.1	0.084	0.043	-	-
HCM Control Delay (s)	8.6	-	-	33.9	13.8	29.7	11	8.2	-	-
HCM Lane LOS	A	-	-	D	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.2	0.3	0.3	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	0	240	0	0	0	0	686	16	36	344	0
Future Volume (vph)	75	0	240	0	0	0	0	686	16	36	344	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5					5.7		4.5	5.7	
Lane Util. Factor		1.00	1.00					1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					1.00		1.00	1.00	
Flt Protected		0.95	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		1614	1458					1676		1309	1699	
Flt Permitted		0.95	1.00					1.00		0.12	1.00	
Satd. Flow (perm)		1614	1458					1676		161	1699	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	90	0	289	0	0	0	0	827	19	43	414	0
RTOR Reduction (vph)	0	0	241	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	90	48	0	0	0	0	845	0	43	414	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	0%	4%	7%	27%	3%	0%
Turn Type	Perm	NA	Perm					NA		pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8							2		
Actuated Green, G (s)		10.1	10.1					29.8		40.8	40.8	
Effective Green, g (s)		10.1	10.1					29.8		40.8	40.8	
Actuated g/C Ratio		0.17	0.17					0.49		0.67	0.67	
Clearance Time (s)		4.5	4.5					5.7		4.5	5.7	
Vehicle Extension (s)		2.5	2.5					4.8		2.5	4.8	
Lane Grp Cap (vph)		266	241					817		229	1134	
v/s Ratio Prot								c0.50		0.02	c0.24	
v/s Ratio Perm		0.06	0.03							0.11		
v/c Ratio		0.34	0.20					1.03		0.19	0.37	
Uniform Delay, d1		22.5	22.0					15.7		9.6	4.5	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.6	0.3					40.8		0.3	0.4	
Delay (s)		23.1	22.3					56.5		9.9	4.8	
Level of Service		C	C					E		A	A	
Approach Delay (s)		22.5			0.0			56.5			5.3	
Approach LOS		C			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	61.1	Sum of lost time (s)	14.7
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	1	0	10	0	690	2	11	573	0
Future Vol, veh/h	2	0	2	1	0	10	0	690	2	11	573	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	2	0	2	1	0	12	0	841	2	13	699	0

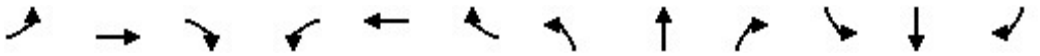
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1573	1568	699	1568	1567	842	699	0	0	843	0	0
Stage 1	725	725	-	842	842	-	-	-	-	-	-	-
Stage 2	848	843	-	726	725	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	90	112	443	91	112	367	907	-	-	802	-	-
Stage 1	420	433	-	362	383	-	-	-	-	-	-	-
Stage 2	359	382	-	419	433	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	86	110	443	89	110	367	907	-	-	802	-	-
Mov Cap-2 Maneuver	208	230	-	89	110	-	-	-	-	-	-	-
Stage 1	420	426	-	362	383	-	-	-	-	-	-	-
Stage 2	347	382	-	410	426	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.9	18.2	0	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	907	-	-	283	286	802	-	-
HCM Lane V/C Ratio	-	-	-	0.017	0.047	0.017	-	-
HCM Control Delay (s)	0	-	-	17.9	18.2	9.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	24	150	542	40	72	504
Future Volume (vph)	24	150	542	40	72	504
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.7		4.5	5.7
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1525	1488	1664		1630	1699
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1525	1488	1664		1630	1699
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	30	188	678	50	90	630
RTOR Reduction (vph)	0	163	2	0	0	0
Lane Group Flow (vph)	30	25	726	0	90	630
Heavy Vehicles (%)	9%	0%	4%	7%	2%	3%
Turn Type	Prot	Prot	NA		Prot	NA
Protected Phases	4	4	6		5	2
Permitted Phases						
Actuated Green, G (s)	9.0	9.0	37.6		7.1	49.2
Effective Green, g (s)	9.0	9.0	37.6		7.1	49.2
Actuated g/C Ratio	0.13	0.13	0.55		0.10	0.71
Clearance Time (s)	5.0	5.0	5.7		4.5	5.7
Vehicle Extension (s)	2.5	2.5	4.8		2.5	4.8
Lane Grp Cap (vph)	199	194	908		167	1213
v/s Ratio Prot	c0.02	0.02	c0.44		0.06	c0.37
v/s Ratio Perm						
v/c Ratio	0.15	0.13	0.80		0.54	0.52
Uniform Delay, d1	26.6	26.5	12.6		29.3	4.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.2	5.6		2.6	0.7
Delay (s)	26.8	26.7	18.3		31.9	5.2
Level of Service	C	C	B		C	A
Approach Delay (s)	26.7		18.3			8.5
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	15.2
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	105	66	66	135	64	72	427	24	67	399	68
Future Volume (vph)	94	105	66	66	135	64	72	427	24	67	399	68
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.95		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1630	1593		1629	1622		1539	1684		1662	1628	
Flt Permitted	0.31	1.00		0.52	1.00		0.20	1.00		0.25	1.00	
Satd. Flow (perm)	539	1593		888	1622		318	1684		430	1628	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	122	136	86	86	175	83	94	555	31	87	518	88
RTOR Reduction (vph)	0	16	0	0	0	0	0	2	0	0	4	0
Lane Group Flow (vph)	122	206	0	86	258	0	94	584	0	87	602	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	2%	3%	2%	2%	4%	0%	8%	3%	5%	0%	5%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	37.2	26.5		31.2	23.5		58.7	50.4		55.1	48.6	
Effective Green, g (s)	37.2	26.5		31.2	23.5		58.7	50.4		55.1	48.6	
Actuated g/C Ratio	0.34	0.24		0.28	0.21		0.53	0.45		0.50	0.44	
Clearance Time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	286	380		301	344		259	766		286	714	
v/s Ratio Prot	c0.04	0.13		0.02	c0.16		c0.03	0.35		0.02	c0.37	
v/s Ratio Perm	0.10			0.06			0.16			0.13		
v/c Ratio	0.43	0.54		0.29	0.75		0.36	0.76		0.30	0.84	
Uniform Delay, d1	27.2	36.8		30.3	40.9		17.0	25.2		17.2	27.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	1.2		0.4	8.5		0.6	4.8		0.4	9.3	
Delay (s)	28.0	38.1		30.6	49.4		17.7	30.0		17.6	36.9	
Level of Service	C	D		C	D		B	C		B	D	
Approach Delay (s)		34.5			44.7			28.3			34.5	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	34.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	110.8	Sum of lost time (s)	19.7
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

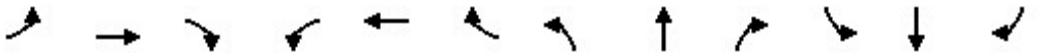
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	32	52	14	1	45	39	377	278	32	477	10
Future Vol, veh/h	15	32	52	14	1	45	39	377	278	32	477	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	200	-	-	-	-	25	250	-	300	250	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	2	0	0	5	0	1	2	0	1	0
Mvmt Flow	17	36	58	16	1	50	43	419	309	36	530	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1133	1108	530	1161	1119	420	541	0	0	420	0	0
Stage 1	602	602	-	506	506	-	-	-	-	-	-	-
Stage 2	531	506	-	655	613	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.1	6.5	6.25	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.5	4	3.345	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	182	212	549	174	209	627	1038	-	-	1150	-	-
Stage 1	490	492	-	552	543	-	-	-	-	-	-	-
Stage 2	536	543	-	458	486	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	158	197	549	127	194	626	1038	-	-	1149	-	-
Mov Cap-2 Maneuver	158	197	-	127	194	-	-	-	-	-	-	-
Stage 1	470	477	-	529	520	-	-	-	-	-	-	-
Stage 2	472	520	-	367	471	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.8	17.6	0.5	0.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1038	-	-	158	327	130	626	1149	-	-
HCM Lane V/C Ratio	0.042	-	-	0.105	0.285	0.128	0.08	0.031	-	-
HCM Control Delay (s)	8.6	-	-	30.5	20.3	36.7	11.2	8.2	-	-
HCM Lane LOS	A	-	-	D	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	1.2	0.4	0.3	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	0	394	0	0	0	0	615	72	69	474	0
Future Volume (vph)	79	0	394	0	0	0	0	615	72	69	474	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5					5.7		4.5	5.7	
Lane Util. Factor		1.00	1.00					1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.99		1.00	1.00	
Flt Protected		0.95	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		1662	1488					1705		1630	1733	
Flt Permitted		0.95	1.00					1.00		0.12	1.00	
Satd. Flow (perm)		1662	1488					1705		203	1733	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	88	0	438	0	0	0	0	683	80	77	527	0
RTOR Reduction (vph)	0	0	273	0	0	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	88	165	0	0	0	0	759	0	77	527	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%
Turn Type	Perm	NA	Perm					NA		pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8							2		
Actuated Green, G (s)		11.8	11.8					29.7		41.2	41.2	
Effective Green, g (s)		11.8	11.8					29.7		41.2	41.2	
Actuated g/C Ratio		0.19	0.19					0.47		0.65	0.65	
Clearance Time (s)		4.5	4.5					5.7		4.5	5.7	
Vehicle Extension (s)		2.5	2.5					4.8		2.5	4.8	
Lane Grp Cap (vph)		310	277					801		290	1129	
v/s Ratio Prot								c0.44		0.03	c0.30	
v/s Ratio Perm		0.05	c0.11							0.14		
v/c Ratio		0.28	0.59					0.95		0.27	0.47	
Uniform Delay, d1		22.1	23.5					16.0		9.0	5.5	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.4	2.9					20.3		0.4	0.6	
Delay (s)		22.4	26.4					36.3		9.3	6.1	
Level of Service		C	C					D		A	A	
Approach Delay (s)		25.7			0.0			36.3			6.5	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	14.7
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	6	0	19	3	666	11	9	855	4
Future Vol, veh/h	2	0	2	6	0	19	3	666	11	9	855	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	2	0	2	7	0	21	3	740	12	10	950	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1735	1731	952	1726	1727	747	954	0	0	753	0	0
Stage 1	972	972	-	753	753	-	-	-	-	-	-	-
Stage 2	763	759	-	973	974	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	70	89	317	71	90	416	729	-	-	866	-	-
Stage 1	306	333	-	405	420	-	-	-	-	-	-	-
Stage 2	400	418	-	306	333	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	66	87	317	70	88	416	729	-	-	865	-	-
Mov Cap-2 Maneuver	182	205	-	70	88	-	-	-	-	-	-	-
Stage 1	305	329	-	403	418	-	-	-	-	-	-	-
Stage 2	378	416	-	300	329	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.9	27.2	0	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	729	-	-	231	190	865	-	-
HCM Lane V/C Ratio	0.005	-	-	0.019	0.146	0.012	-	-
HCM Control Delay (s)	10	-	-	20.9	27.2	9.2	-	-
HCM Lane LOS	A	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	85	139	541	42	183	680
Future Volume (vph)	85	139	541	42	183	680
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.7		4.5	5.7
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1662	1488	1717		1646	1733
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1662	1488	1717		1646	1733
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	91	149	582	45	197	731
RTOR Reduction (vph)	0	126	3	0	0	0
Lane Group Flow (vph)	91	23	624	0	197	731
Confl. Bikes (#/hr)		2				
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%
Turn Type	Prot	Prot	NA		Prot	NA
Protected Phases	4	4	6		5	2
Permitted Phases						
Actuated Green, G (s)	10.3	10.3	31.7		10.6	46.8
Effective Green, g (s)	10.3	10.3	31.7		10.6	46.8
Actuated g/C Ratio	0.15	0.15	0.47		0.16	0.69
Clearance Time (s)	5.0	5.0	5.7		4.5	5.7
Vehicle Extension (s)	2.5	2.5	4.8		2.5	4.8
Lane Grp Cap (vph)	252	226	802		257	1196
v/s Ratio Prot	c0.05	0.02	c0.36		c0.12	0.42
v/s Ratio Perm						
v/c Ratio	0.36	0.10	0.78		0.77	0.61
Uniform Delay, d1	25.8	24.8	15.1		27.4	5.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.6	0.1	5.5		12.3	1.3
Delay (s)	26.4	24.9	20.6		39.7	6.9
Level of Service	C	C	C		D	A
Approach Delay (s)	25.5		20.6			13.9
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	67.8	Sum of lost time (s)	15.2
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	90	100	97	147	62	103	417	50	50	591	132
Future Volume (vph)	150	90	100	97	147	62	103	417	50	50	591	132
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1645	1587		1658	1637		1662	1686		1660	1680	
Flt Permitted	0.29	1.00		0.47	1.00		0.12	1.00		0.38	1.00	
Satd. Flow (perm)	497	1587		824	1637		204	1686		669	1680	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	167	100	111	108	163	69	114	463	56	56	657	147
RTOR Reduction (vph)	0	30	0	0	0	0	0	3	0	0	6	0
Lane Group Flow (vph)	167	181	0	108	232	0	114	516	0	56	798	0
Confl. Peds. (#/hr)	2		4	4		2	3		4	4		3
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	2%	0%	0%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	33.8	23.7		28.2	20.9		74.7	67.2		66.1	62.9	
Effective Green, g (s)	33.8	23.7		28.2	20.9		74.7	67.2		66.1	62.9	
Actuated g/C Ratio	0.28	0.20		0.23	0.17		0.62	0.55		0.55	0.52	
Clearance Time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	234	310		242	282		216	935		391	872	
v/s Ratio Prot	c0.06	0.11		0.03	c0.14		c0.03	0.31		0.00	c0.47	
v/s Ratio Perm	0.14			0.08			0.29			0.07		
v/c Ratio	0.71	0.58		0.45	0.82		0.53	0.55		0.14	0.91	
Uniform Delay, d1	35.8	44.2		38.2	48.3		20.0	17.3		13.5	26.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.2	2.3		1.0	17.0		1.8	0.9		0.1	14.2	
Delay (s)	45.0	46.6		39.2	65.3		21.8	18.2		13.7	40.8	
Level of Service	D	D		D	E		C	B		B	D	
Approach Delay (s)		45.9			57.0			18.8			39.0	
Approach LOS		D			E			B			D	

Intersection Summary			
HCM 2000 Control Delay	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	121.1	Sum of lost time (s)	19.7
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX C: HCM REPORTS – FUTURE NO-BUILD

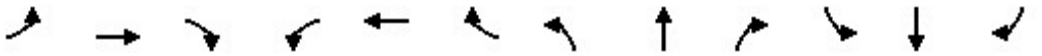
Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	16	5	9	46	87	321	389	43	376	14
Future Vol, veh/h	6	3	16	5	9	46	87	321	389	43	376	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	200	-	-	-	-	25	250	-	300	250	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	5	1	2	3	0	5	0
Mvmt Flow	8	4	20	6	11	58	109	401	486	54	470	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1232	1197	470	1218	1215	401	488	0	0	401	0	0
Stage 1	578	578	-	619	619	-	-	-	-	-	-	-
Stage 2	654	619	-	599	596	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.25	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.345	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	155	187	598	159	183	643	1080	-	-	1169	-	-
Stage 1	505	504	-	480	483	-	-	-	-	-	-	-
Stage 2	459	483	-	492	495	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	119	160	598	135	157	643	1080	-	-	1169	-	-
Mov Cap-2 Maneuver	119	160	-	135	157	-	-	-	-	-	-	-
Stage 1	454	481	-	432	434	-	-	-	-	-	-	-
Stage 2	366	434	-	450	472	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.7	16.1	1	0.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1080	-	-	119	418	148	643	1169	-	-
HCM Lane V/C Ratio	0.101	-	-	0.063	0.057	0.118	0.089	0.046	-	-
HCM Control Delay (s)	8.7	-	-	37.3	14.1	32.6	11.1	8.2	-	-
HCM Lane LOS	A	-	-	E	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.2	0.4	0.3	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	0	251	0	0	0	0	719	20	37	360	0
Future Volume (vph)	78	0	251	0	0	0	0	719	20	37	360	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5					5.7		4.5	5.7	
Lane Util. Factor		1.00	1.00					1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					1.00		1.00	1.00	
Flt Protected		0.95	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		1614	1458					1674		1309	1699	
Flt Permitted		0.95	1.00					1.00		0.12	1.00	
Satd. Flow (perm)		1614	1458					1674		161	1699	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	94	0	302	0	0	0	0	866	24	45	434	0
RTOR Reduction (vph)	0	0	252	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	94	50	0	0	0	0	889	0	45	434	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	0%	4%	7%	27%	3%	0%
Turn Type	Perm	NA	Perm					NA		pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8							2		
Actuated Green, G (s)		10.2	10.2					29.7		40.8	40.8	
Effective Green, g (s)		10.2	10.2					29.7		40.8	40.8	
Actuated g/C Ratio		0.17	0.17					0.49		0.67	0.67	
Clearance Time (s)		4.5	4.5					5.7		4.5	5.7	
Vehicle Extension (s)		2.5	2.5					4.8		2.5	4.8	
Lane Grp Cap (vph)		269	243					812		231	1132	
v/s Ratio Prot								c0.53		0.02	c0.26	
v/s Ratio Perm		0.06	0.03							0.11		
v/c Ratio		0.35	0.21					1.09		0.19	0.38	
Uniform Delay, d1		22.6	22.0					15.8		11.0	4.6	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.6	0.3					60.7		0.3	0.4	
Delay (s)		23.1	22.3					76.4		11.3	5.0	
Level of Service		C	C					E		B	A	
Approach Delay (s)		22.5			0.0			76.4			5.6	
Approach LOS		C			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	45.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	14.7
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	1	0	10	0	727	2	11	600	0
Future Vol, veh/h	2	0	2	1	0	10	0	727	2	11	600	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	2	0	2	1	0	12	0	887	2	13	732	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1652	1647	732	1647	1646	888	732	0	0	889	0	0
Stage 1	758	758	-	888	888	-	-	-	-	-	-	-
Stage 2	894	889	-	759	758	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	79	100	424	80	100	345	882	-	-	771	-	-
Stage 1	402	418	-	341	365	-	-	-	-	-	-	-
Stage 2	338	364	-	402	418	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	75	98	424	78	98	345	882	-	-	771	-	-
Mov Cap-2 Maneuver	194	217	-	78	98	-	-	-	-	-	-	-
Stage 1	402	411	-	341	365	-	-	-	-	-	-	-
Stage 2	326	364	-	393	411	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.8	19.4	0	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	882	-	-	266	263	771	-	-
HCM Lane V/C Ratio	-	-	-	0.018	0.051	0.017	-	-
HCM Control Delay (s)	0	-	-	18.8	19.4	9.8	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	165	564	42	79	524
Future Volume (vph)	25	165	564	42	79	524
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.7		4.5	5.7
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1525	1488	1663		1630	1699
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1525	1488	1663		1630	1699
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	31	206	705	52	99	655
RTOR Reduction (vph)	0	179	2	0	0	0
Lane Group Flow (vph)	31	27	756	0	99	655
Heavy Vehicles (%)	9%	0%	4%	7%	2%	3%
Turn Type	Prot	Prot	NA		Prot	NA
Protected Phases	4	4	6		5	2
Permitted Phases						
Actuated Green, G (s)	9.0	9.0	36.8		7.2	48.5
Effective Green, g (s)	9.0	9.0	36.8		7.2	48.5
Actuated g/C Ratio	0.13	0.13	0.54		0.11	0.71
Clearance Time (s)	5.0	5.0	5.7		4.5	5.7
Vehicle Extension (s)	2.5	2.5	4.8		2.5	4.8
Lane Grp Cap (vph)	201	196	897		172	1208
v/s Ratio Prot	c0.02	0.02	c0.45		0.06	c0.39
v/s Ratio Perm						
v/c Ratio	0.15	0.14	0.84		0.58	0.54
Uniform Delay, d1	26.2	26.2	13.3		29.0	4.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.2	7.9		3.8	0.8
Delay (s)	26.5	26.4	21.2		32.8	5.5
Level of Service	C	C	C		C	A
Approach Delay (s)	26.4		21.2			9.1
Approach LOS	C		C			A

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	68.2	Sum of lost time (s)	15.2
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	110	69	75	143	67	75	444	28	70	415	71
Future Volume (vph)	98	110	69	75	143	67	75	444	28	70	415	71
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.95		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1630	1593		1629	1622		1539	1682		1662	1628	
Flt Permitted	0.29	1.00		0.43	1.00		0.19	1.00		0.21	1.00	
Satd. Flow (perm)	503	1593		733	1622		309	1682		367	1628	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	127	143	90	97	186	87	97	577	36	91	539	92
RTOR Reduction (vph)	0	16	0	0	0	0	0	2	0	0	4	0
Lane Group Flow (vph)	127	217	0	97	273	0	97	611	0	91	627	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	2%	3%	2%	2%	4%	0%	8%	3%	5%	0%	5%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	35.7	24.5		33.3	23.3		59.7	51.3		59.3	51.1	
Effective Green, g (s)	35.7	24.5		33.3	23.3		59.7	51.3		59.3	51.1	
Actuated g/C Ratio	0.31	0.22		0.29	0.20		0.53	0.45		0.52	0.45	
Clearance Time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	268	343		293	332		253	758		284	731	
v/s Ratio Prot	c0.05	0.14		0.03	c0.17		c0.03	0.36		0.02	c0.38	
v/s Ratio Perm	0.10			0.07			0.17			0.14		
v/c Ratio	0.47	0.63		0.33	0.82		0.38	0.81		0.32	0.86	
Uniform Delay, d1	29.8	40.5		30.5	43.2		17.8	26.9		17.2	28.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	3.3		0.5	14.7		0.7	6.6		0.5	10.1	
Delay (s)	30.7	43.8		31.0	58.0		18.5	33.5		17.7	38.1	
Level of Service	C	D		C	E		B	C		B	D	
Approach Delay (s)		39.2			50.9			31.5			35.5	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	113.7	Sum of lost time (s)	19.7
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

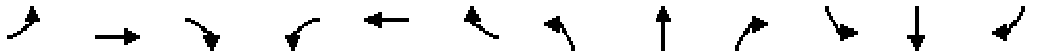
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	33	54	18	1	47	41	393	293	33	497	10
Future Vol, veh/h	16	33	54	18	1	47	41	393	293	33	497	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	200	-	-	-	-	25	250	-	300	250	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	2	0	0	5	0	1	2	0	1	0
Mvmt Flow	18	37	60	20	1	52	46	437	326	37	552	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1182	1156	552	1210	1167	438	563	0	0	438	0	0
Stage 1	626	626	-	530	530	-	-	-	-	-	-	-
Stage 2	556	530	-	680	637	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.1	6.5	6.25	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.5	4	3.345	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	168	198	533	161	195	612	1019	-	-	1133	-	-
Stage 1	475	480	-	536	530	-	-	-	-	-	-	-
Stage 2	519	530	-	444	475	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	183	533	114	180	611	1019	-	-	1132	-	-
Mov Cap-2 Maneuver	144	183	-	114	180	-	-	-	-	-	-	-
Stage 1	454	464	-	511	506	-	-	-	-	-	-	-
Stage 2	452	506	-	351	459	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.7	20.4	0.5	0.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1019	-	-	144	309	116	611	1132	-	-
HCM Lane V/C Ratio	0.045	-	-	0.123	0.313	0.182	0.085	0.032	-	-
HCM Control Delay (s)	8.7	-	-	33.5	21.9	42.8	11.4	8.3	-	-
HCM Lane LOS	A	-	-	D	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.3	0.6	0.3	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	0	414	0	0	0	0	645	76	72	497	0
Future Volume (vph)	82	0	414	0	0	0	0	645	76	72	497	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5					5.7		4.5	5.7	
Lane Util. Factor		1.00	1.00					1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.99		1.00	1.00	
Flt Protected		0.95	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		1662	1488					1705		1630	1733	
Flt Permitted		0.95	1.00					1.00		0.12	1.00	
Satd. Flow (perm)		1662	1488					1705		199	1733	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	91	0	460	0	0	0	0	717	84	80	552	0
RTOR Reduction (vph)	0	0	251	0	0	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	91	209	0	0	0	0	797	0	80	552	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%
Turn Type	Perm	NA	Perm					NA		pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8							2		
Actuated Green, G (s)		13.5	13.5					29.9		41.4	41.4	
Effective Green, g (s)		13.5	13.5					29.9		41.4	41.4	
Actuated g/C Ratio		0.21	0.21					0.46		0.64	0.64	
Clearance Time (s)		4.5	4.5					5.7		4.5	5.7	
Vehicle Extension (s)		2.5	2.5					4.8		2.5	4.8	
Lane Grp Cap (vph)		344	308					783		280	1102	
v/s Ratio Prot								c0.47		0.03	c0.32	
v/s Ratio Perm		0.05	c0.14							0.15		
v/c Ratio		0.26	0.68					1.02		0.29	0.50	
Uniform Delay, d1		21.6	23.8					17.6		10.7	6.3	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.3	5.3					36.6		0.4	0.7	
Delay (s)		21.9	29.1					54.2		11.1	7.0	
Level of Service		C	C					D		B	A	
Approach Delay (s)		27.9			0.0			54.2			7.5	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	65.1	Sum of lost time (s)	14.7
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	2	6	0	20	4	699	11	9	898	4
Future Vol, veh/h	2	0	2	6	0	20	4	699	11	9	898	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	2	0	2	7	0	22	4	777	12	10	998	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1822	1818	1000	1813	1814	784	1002	0	0	790	0	0
Stage 1	1020	1020	-	792	792	-	-	-	-	-	-	-
Stage 2	802	798	-	1021	1022	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	60	79	298	61	79	396	699	-	-	839	-	-
Stage 1	288	317	-	385	404	-	-	-	-	-	-	-
Stage 2	381	401	-	288	316	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	56	77	298	60	77	396	699	-	-	838	-	-
Mov Cap-2 Maneuver	169	193	-	60	77	-	-	-	-	-	-	-
Stage 1	286	313	-	382	401	-	-	-	-	-	-	-
Stage 2	358	398	-	282	312	-	-	-	-	-	-	-

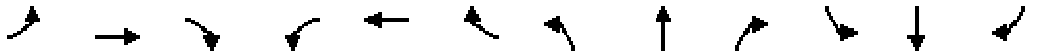
Approach	EB	WB	NB	SB
HCM Control Delay, s	22	29.9	0.1	0.1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	699	-	-	216	173	838	-	-
HCM Lane V/C Ratio	0.006	-	-	0.021	0.167	0.012	-	-
HCM Control Delay (s)	10.2	-	-	22	29.9	9.3	-	-
HCM Lane LOS	B	-	-	C	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	88	151	563	44	199	707
Future Volume (vph)	88	151	563	44	199	707
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.7		4.5	5.7
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1662	1488	1717		1646	1733
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1662	1488	1717		1646	1733
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	95	162	605	47	214	760
RTOR Reduction (vph)	0	137	3	0	0	0
Lane Group Flow (vph)	95	25	649	0	214	760
Confl. Bikes (#/hr)		2				
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%
Turn Type	Prot	Prot	NA		Prot	NA
Protected Phases	4	4	6		5	2
Permitted Phases						
Actuated Green, G (s)	10.4	10.4	32.5		10.6	47.6
Effective Green, g (s)	10.4	10.4	32.5		10.6	47.6
Actuated g/C Ratio	0.15	0.15	0.47		0.15	0.69
Clearance Time (s)	5.0	5.0	5.7		4.5	5.7
Vehicle Extension (s)	2.5	2.5	4.8		2.5	4.8
Lane Grp Cap (vph)	251	225	812		253	1200
v/s Ratio Prot	c0.06	0.02	c0.38		c0.13	0.44
v/s Ratio Perm						
v/c Ratio	0.38	0.11	0.80		0.85	0.63
Uniform Delay, d1	26.2	25.2	15.3		28.3	5.8
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.7	0.2	6.3		21.8	1.5
Delay (s)	26.9	25.3	21.6		50.0	7.2
Level of Service	C	C	C		D	A
Approach Delay (s)	25.9		21.6			16.6
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	68.7	Sum of lost time (s)	15.2
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	97	104	107	155	64	107	434	59	52	615	137
Future Volume (vph)	156	97	104	107	155	64	107	434	59	52	615	137
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.96		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1645	1589		1658	1638		1662	1682		1661	1680	
Flt Permitted	0.26	1.00		0.45	1.00		0.11	1.00		0.36	1.00	
Satd. Flow (perm)	456	1589		783	1638		195	1682		622	1680	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	173	108	116	119	172	71	119	482	66	58	683	152
RTOR Reduction (vph)	0	29	0	0	0	0	0	4	0	0	6	0
Lane Group Flow (vph)	173	195	0	119	243	0	119	544	0	58	829	0
Confl. Peds. (#/hr)	2		4	4		2	3		4	4		3
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	2%	0%	0%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	34.4	24.7		28.2	21.6		75.7	69.2		69.3	66.0	
Effective Green, g (s)	34.4	24.7		28.2	21.6		75.7	69.2		69.3	66.0	
Actuated g/C Ratio	0.28	0.20		0.23	0.17		0.61	0.56		0.56	0.53	
Clearance Time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	220	317		225	286		196	942		376	897	
v/s Ratio Prot	c0.06	0.12		0.03	0.15		c0.03	0.32		0.00	c0.49	
v/s Ratio Perm	c0.16			0.09			0.34			0.08		
v/c Ratio	0.79	0.62		0.53	0.85		0.61	0.58		0.15	0.92	
Uniform Delay, d1	37.8	45.1		40.3	49.4		21.2	17.7		13.3	26.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	16.2	3.0		1.7	20.1		4.4	1.0		0.1	15.1	
Delay (s)	54.0	48.1		42.0	69.5		25.6	18.7		13.4	41.5	
Level of Service	D	D		D	E		C	B		B	D	
Approach Delay (s)		50.6			60.4			19.9			39.7	
Approach LOS		D			E			B			D	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	123.5	Sum of lost time (s)	19.7
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	34	58	8	4	0
Future Vol, veh/h	0	34	58	8	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	48	82	11	6	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	181	6	6	0	-	0
Stage 1	6	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	813	1083	1628	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	860	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	772	1083	1628	-	-	-
Mov Cap-2 Maneuver	772	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	860	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	6.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1628	-	1083	-	-
HCM Lane V/C Ratio	0.05	-	0.044	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

APPENDIX D: HCM REPORTS – FUTURE BUILD

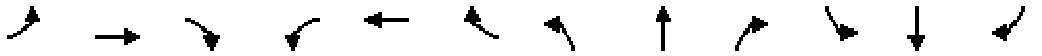
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	16	6	9	46	87	324	407	43	377	14
Future Vol, veh/h	6	3	16	6	9	46	87	324	407	43	377	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	200	-	-	-	-	25	250	-	300	250	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	0	0	5	1	2	3	0	5	0
Mvmt Flow	8	4	20	8	11	58	109	405	509	54	471	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1237	1202	471	1223	1220	405	489	0	0	405	0	0
Stage 1	579	579	-	623	623	-	-	-	-	-	-	-
Stage 2	658	623	-	600	597	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.25	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.345	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	154	186	597	158	182	639	1079	-	-	1165	-	-
Stage 1	504	504	-	477	481	-	-	-	-	-	-	-
Stage 2	457	481	-	491	495	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	118	160	597	134	156	639	1079	-	-	1165	-	-
Mov Cap-2 Maneuver	118	160	-	134	156	-	-	-	-	-	-	-
Stage 1	453	481	-	429	432	-	-	-	-	-	-	-
Stage 2	364	432	-	449	472	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.8	16.6	0.9	0.8
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1079	-	-	118	417	146	639	1165	-	-
HCM Lane V/C Ratio	0.101	-	-	0.064	0.057	0.128	0.09	0.046	-	-
HCM Control Delay (s)	8.7	-	-	37.6	14.2	33.3	11.2	8.2	-	-
HCM Lane LOS	A	-	-	E	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.2	0.2	0.4	0.3	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	0	257	0	0	0	0	740	22	37	362	0
Future Volume (vph)	78	0	257	0	0	0	0	740	22	37	362	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5					5.7		4.5	5.7	
Lane Util. Factor		1.00	1.00					1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					1.00		1.00	1.00	
Flt Protected		0.95	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		1614	1458					1674		1309	1699	
Flt Permitted		0.95	1.00					1.00		0.12	1.00	
Satd. Flow (perm)		1614	1458					1674		161	1699	
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	94	0	310	0	0	0	0	892	27	45	436	0
RTOR Reduction (vph)	0	0	258	0	0	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	94	52	0	0	0	0	918	0	45	436	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	0%	2%	0%	0%	0%	0%	4%	7%	27%	3%	0%
Turn Type	Perm	NA	Perm					NA		pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8							2		
Actuated Green, G (s)		10.2	10.2					29.7		40.8	40.8	
Effective Green, g (s)		10.2	10.2					29.7		40.8	40.8	
Actuated g/C Ratio		0.17	0.17					0.49		0.67	0.67	
Clearance Time (s)		4.5	4.5					5.7		4.5	5.7	
Vehicle Extension (s)		2.5	2.5					4.8		2.5	4.8	
Lane Grp Cap (vph)		269	243					812		231	1132	
v/s Ratio Prot								c0.55		0.02	c0.26	
v/s Ratio Perm		0.06	0.04							0.11		
v/c Ratio		0.35	0.21					1.13		0.19	0.39	
Uniform Delay, d1		22.6	22.0					15.8		11.2	4.6	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.6	0.3					74.0		0.3	0.4	
Delay (s)		23.1	22.4					89.7		11.5	5.0	
Level of Service		C	C					F		B	A	
Approach Delay (s)		22.5			0.0			89.7			5.6	
Approach LOS		C			A			F			A	

Intersection Summary			
HCM 2000 Control Delay	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	14.7
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑		↰	↑	
Traffic Vol, veh/h	25	0	31	1	0	10	9	727	2	11	600	8
Future Vol, veh/h	25	0	31	1	0	10	9	727	2	11	600	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	0	0	0	0	0	0	3	0	0	4	0
Mvmt Flow	30	0	38	1	0	12	11	887	2	13	732	10

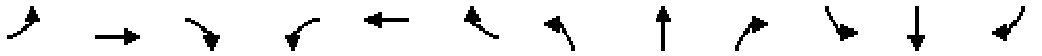
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1679	1674	737	1692	1678	888	742	0	0	889	0	0
Stage 1	763	763	-	910	910	-	-	-	-	-	-	-
Stage 2	916	911	-	782	768	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	76	97	422	75	96	345	874	-	-	771	-	-
Stage 1	400	416	-	332	356	-	-	-	-	-	-	-
Stage 2	329	356	-	390	414	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	72	94	422	67	93	345	874	-	-	771	-	-
Mov Cap-2 Maneuver	188	211	-	67	93	-	-	-	-	-	-	-
Stage 1	395	409	-	328	351	-	-	-	-	-	-	-
Stage 2	313	351	-	349	407	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.7	20.2	0.1	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	874	-	-	271	251	771	-	-
HCM Lane V/C Ratio	0.013	-	-	0.252	0.053	0.017	-	-
HCM Control Delay (s)	9.2	-	-	22.7	20.2	9.8	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.2	0.1	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	165	573	42	79	553
Future Volume (vph)	25	165	573	42	79	553
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.7		4.5	5.7
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1525	1488	1664		1630	1699
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1525	1488	1664		1630	1699
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	31	206	716	52	99	691
RTOR Reduction (vph)	0	179	2	0	0	0
Lane Group Flow (vph)	31	27	767	0	99	691
Heavy Vehicles (%)	9%	0%	4%	7%	2%	3%
Turn Type	Prot	Prot	NA		Prot	NA
Protected Phases	4	4	6		5	2
Permitted Phases						
Actuated Green, G (s)	9.0	9.0	36.8		7.2	48.5
Effective Green, g (s)	9.0	9.0	36.8		7.2	48.5
Actuated g/C Ratio	0.13	0.13	0.54		0.11	0.71
Clearance Time (s)	5.0	5.0	5.7		4.5	5.7
Vehicle Extension (s)	2.5	2.5	4.8		2.5	4.8
Lane Grp Cap (vph)	201	196	897		172	1208
v/s Ratio Prot	c0.02	0.02	c0.46		0.06	c0.41
v/s Ratio Perm						
v/c Ratio	0.15	0.14	0.85		0.58	0.57
Uniform Delay, d1	26.2	26.2	13.4		29.0	4.8
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.3	0.2	8.7		3.8	1.0
Delay (s)	26.5	26.4	22.1		32.8	5.8
Level of Service	C	C	C		C	A
Approach Delay (s)	26.4		22.1			9.2
Approach LOS	C		C			A

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	68.2	Sum of lost time (s)	15.2
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	110	69	75	143	69	75	449	28	75	433	77
Future Volume (vph)	100	110	69	75	143	69	75	449	28	75	433	77
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.94		1.00	0.95		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1630	1593		1629	1621		1539	1682		1662	1627	
Flt Permitted	0.27	1.00		0.42	1.00		0.18	1.00		0.22	1.00	
Satd. Flow (perm)	455	1593		724	1621		292	1682		385	1627	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	130	143	90	97	186	90	97	583	36	97	562	100
RTOR Reduction (vph)	0	17	0	0	0	0	0	2	0	0	4	0
Lane Group Flow (vph)	130	216	0	97	276	0	97	617	0	97	658	0
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	2%	3%	2%	2%	4%	0%	8%	3%	5%	0%	5%	6%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	36.9	25.3		33.7	23.7		64.6	56.0		64.0	55.7	
Effective Green, g (s)	36.9	25.3		33.7	23.7		64.6	56.0		64.0	55.7	
Actuated g/C Ratio	0.31	0.21		0.28	0.20		0.54	0.47		0.54	0.47	
Clearance Time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	254	337		280	322		248	789		295	759	
v/s Ratio Prot	c0.05	0.14		0.03	c0.17		c0.03	0.37		0.02	c0.40	
v/s Ratio Perm	0.11			0.07			0.18			0.15		
v/c Ratio	0.51	0.64		0.35	0.86		0.39	0.78		0.33	0.87	
Uniform Delay, d1	31.9	42.9		32.9	46.2		18.3	26.5		17.2	28.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	3.7		0.5	19.3		0.7	5.4		0.5	10.5	
Delay (s)	33.2	46.5		33.4	65.5		19.0	31.9		17.6	39.0	
Level of Service	C	D		C	E		B	C		B	D	
Approach Delay (s)		41.8			57.2			30.2			36.3	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	119.3	Sum of lost time (s)	19.7
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	52	17	0	4	0
Future Vol, veh/h	0	52	17	0	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	63	20	0	5	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	45	5	5	0	-	0
Stage 1	5	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	970	1084	1630	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	988	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	958	1084	1630	-	-	-
Mov Cap-2 Maneuver	958	-	-	-	-	-
Stage 1	1011	-	-	-	-	-
Stage 2	988	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	7.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1630	-	1084	-	-
HCM Lane V/C Ratio	0.013	-	0.058	-	-
HCM Control Delay (s)	7.2	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

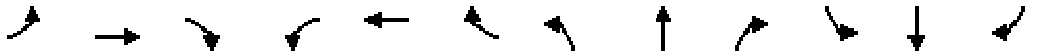
Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	33	54	21	1	47	41	395	304	33	500	10
Future Vol, veh/h	16	33	54	21	1	47	41	395	304	33	500	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	200	-	-	-	-	25	250	-	300	250	-	350
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	2	0	0	5	0	1	2	0	1	0
Mvmt Flow	18	37	60	23	1	52	46	439	338	37	556	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1188	1162	556	1216	1173	440	567	0	0	440	0	0
Stage 1	630	630	-	532	532	-	-	-	-	-	-	-
Stage 2	558	532	-	684	641	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.22	7.1	6.5	6.25	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.318	3.5	4	3.345	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	167	197	531	159	194	611	1015	-	-	1131	-	-
Stage 1	473	478	-	535	529	-	-	-	-	-	-	-
Stage 2	518	529	-	442	473	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	143	182	531	112	179	610	1015	-	-	1130	-	-
Mov Cap-2 Maneuver	143	182	-	112	179	-	-	-	-	-	-	-
Stage 1	452	462	-	510	505	-	-	-	-	-	-	-
Stage 2	451	505	-	349	457	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.8	22.2	0.5	0.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1015	-	-	143	307	114	610	1130	-	-
HCM Lane V/C Ratio	0.045	-	-	0.124	0.315	0.214	0.086	0.032	-	-
HCM Control Delay (s)	8.7	-	-	33.7	22	45	11.5	8.3	-	-
HCM Lane LOS	A	-	-	D	C	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	1.3	0.8	0.3	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	0	434	0	0	0	0	658	78	72	503	0
Future Volume (vph)	82	0	434	0	0	0	0	658	78	72	503	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5					5.7		4.5	5.7	
Lane Util. Factor		1.00	1.00					1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.99		1.00	1.00	
Flt Protected		0.95	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		1662	1488					1705		1630	1733	
Flt Permitted		0.95	1.00					1.00		0.11	1.00	
Satd. Flow (perm)		1662	1488					1705		194	1733	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	91	0	482	0	0	0	0	731	87	80	559	0
RTOR Reduction (vph)	0	0	253	0	0	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	91	229	0	0	0	0	814	0	80	559	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	1%	0%	2%	1%	0%
Turn Type	Perm	NA	Perm					NA		pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8							2		
Actuated Green, G (s)		14.0	14.0					30.8		42.4	42.4	
Effective Green, g (s)		14.0	14.0					30.8		42.4	42.4	
Actuated g/C Ratio		0.21	0.21					0.46		0.64	0.64	
Clearance Time (s)		4.5	4.5					5.7		4.5	5.7	
Vehicle Extension (s)		2.5	2.5					4.8		2.5	4.8	
Lane Grp Cap (vph)		349	312					788		276	1103	
v/s Ratio Prot								c0.48		0.03	c0.32	
v/s Ratio Perm		0.05	c0.15							0.15		
v/c Ratio		0.26	0.73					1.03		0.29	0.51	
Uniform Delay, d1		22.0	24.6					17.9		11.3	6.5	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.3	8.2					40.7		0.4	0.7	
Delay (s)		22.3	32.8					58.6		11.7	7.2	
Level of Service		C	C					E		B	A	
Approach Delay (s)		31.1			0.0			58.6			7.8	
Approach LOS		C			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	66.6	Sum of lost time (s)	14.7
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	0	21	6	0	20	36	699	11	9	898	30
Future Vol, veh/h	17	0	21	6	0	20	36	699	11	9	898	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	75	-	-	75	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	19	0	23	7	0	22	40	777	12	10	998	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1909	1905	1015	1910	1915	784	1031	0	0	790	0	0
Stage 1	1035	1035	-	864	864	-	-	-	-	-	-	-
Stage 2	874	870	-	1046	1051	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	52	69	292	52	68	396	682	-	-	839	-	-
Stage 1	282	312	-	352	374	-	-	-	-	-	-	-
Stage 2	347	372	-	278	306	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	46	64	292	45	63	396	682	-	-	838	-	-
Mov Cap-2 Maneuver	149	177	-	45	63	-	-	-	-	-	-	-
Stage 1	265	308	-	331	352	-	-	-	-	-	-	-
Stage 2	308	350	-	253	302	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.2	37	0.5	0.1
HCM LOS	D	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	682	-	-	204	141	838	-	-
HCM Lane V/C Ratio	0.059	-	-	0.207	0.205	0.012	-	-
HCM Control Delay (s)	10.6	-	-	27.2	37	9.3	-	-
HCM Lane LOS	B	-	-	D	E	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.7	0	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	88	151	595	44	199	726
Future Volume (vph)	88	151	595	44	199	726
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.7		4.5	5.7
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1662	1488	1718		1646	1733
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1662	1488	1718		1646	1733
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	95	162	640	47	214	781
RTOR Reduction (vph)	0	138	3	0	0	0
Lane Group Flow (vph)	95	24	684	0	214	781
Confl. Bikes (#/hr)		2				
Heavy Vehicles (%)	0%	0%	1%	0%	1%	1%
Turn Type	Prot	Prot	NA		Prot	NA
Protected Phases	4	4	6		5	2
Permitted Phases						
Actuated Green, G (s)	10.5	10.5	34.6		10.6	49.7
Effective Green, g (s)	10.5	10.5	34.6		10.6	49.7
Actuated g/C Ratio	0.15	0.15	0.49		0.15	0.70
Clearance Time (s)	5.0	5.0	5.7		4.5	5.7
Vehicle Extension (s)	2.5	2.5	4.8		2.5	4.8
Lane Grp Cap (vph)	246	220	838		246	1214
v/s Ratio Prot	c0.06	0.02	c0.40		c0.13	0.45
v/s Ratio Perm						
v/c Ratio	0.39	0.11	0.82		0.87	0.64
Uniform Delay, d1	27.3	26.1	15.5		29.5	5.8
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.7	0.2	6.9		26.0	1.5
Delay (s)	28.0	26.3	22.4		55.5	7.3
Level of Service	C	C	C		E	A
Approach Delay (s)	26.9		22.4			17.7
Approach LOS	C		C			B

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	70.9	Sum of lost time (s)	15.2
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	97	104	107	155	70	107	454	59	55	628	140
Future Volume (vph)	162	97	104	107	155	70	107	454	59	55	628	140
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.95		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1645	1589		1658	1633		1662	1684		1661	1680	
Flt Permitted	0.25	1.00		0.44	1.00		0.10	1.00		0.34	1.00	
Satd. Flow (perm)	436	1589		773	1633		180	1684		595	1680	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	180	108	116	119	172	78	119	504	66	61	698	156
RTOR Reduction (vph)	0	29	0	0	0	0	0	3	0	0	6	0
Lane Group Flow (vph)	180	195	0	119	250	0	119	567	0	61	848	0
Confl. Peds. (#/hr)	2		4	4		2	3		4	4		3
Heavy Vehicles (%)	1%	0%	0%	0%	2%	0%	0%	2%	0%	0%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	34.9	25.3		28.9	22.3		77.8	71.2		71.4	68.0	
Effective Green, g (s)	34.9	25.3		28.9	22.3		77.8	71.2		71.4	68.0	
Actuated g/C Ratio	0.28	0.20		0.23	0.18		0.62	0.56		0.57	0.54	
Clearance Time (s)	4.5	5.0		4.5	5.0		4.5	5.7		4.5	5.7	
Vehicle Extension (s)	2.5	2.5		2.5	2.5		2.5	4.0		2.5	4.0	
Lane Grp Cap (vph)	212	318		223	288		188	950		365	905	
v/s Ratio Prot	c0.06	0.12		0.03	0.15		c0.03	0.34		0.00	c0.50	
v/s Ratio Perm	c0.17			0.09			0.36			0.09		
v/c Ratio	0.85	0.61		0.53	0.87		0.63	0.60		0.17	0.94	
Uniform Delay, d1	40.0	46.0		41.3	50.5		22.3	18.1		13.5	27.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	25.4	3.0		1.9	22.8		6.0	1.2		0.2	16.8	
Delay (s)	65.5	49.0		43.2	73.3		28.3	19.2		13.7	43.9	
Level of Service	E	D		D	E		C	B		B	D	
Approach Delay (s)		56.3			63.6			20.8			41.9	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	126.2	Sum of lost time (s)	19.7
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	34	58	8	4	0
Future Vol, veh/h	0	34	58	8	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	48	82	11	6	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	181	6	6	0	-	0
Stage 1	6	-	-	-	-	-
Stage 2	175	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	813	1083	1628	-	-	-
Stage 1	1022	-	-	-	-	-
Stage 2	860	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	772	1083	1628	-	-	-
Mov Cap-2 Maneuver	772	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	860	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	6.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1628	-	1083	-	-
HCM Lane V/C Ratio	0.05	-	0.044	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	-	-

APPENDIX E: QUEUING REPORTS

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	7:10	7:10	7:10	7:10	7:10	7:10
Total Time (min)	13	13	13	13	13	13
Time Recorded (min)	10	10	10	10	10	10
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	467	444	412	414	400	427
Vehs Exited	434	413	410	403	422	417
Starting Vehs	92	82	83	90	98	89
Ending Vehs	125	113	85	101	76	100
Travel Distance (mi)	335	318	303	308	305	314
Travel Time (hr)	19.8	16.2	15.3	15.2	15.4	16.4
Total Delay (hr)	8.0	5.0	4.6	4.4	4.7	5.3
Total Stops	677	552	522	485	535	553
Fuel Used (gal)	12.7	11.8	10.8	11.1	11.1	11.5

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:10
Total Time (min)	10

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	467	444	412	414	400	427
Vehs Exited	434	413	410	403	422	417
Starting Vehs	92	82	83	90	98	89
Ending Vehs	125	113	85	101	76	100
Travel Distance (mi)	335	318	303	308	305	314
Travel Time (hr)	19.8	16.2	15.3	15.2	15.4	16.4
Total Delay (hr)	8.0	5.0	4.6	4.4	4.7	5.3
Total Stops	677	552	522	485	535	553
Fuel Used (gal)	12.7	11.8	10.8	11.1	11.1	11.5

Intersection: 1: Cascade Hwy & Sublimity Blvd/Santiam Hwy Westbound Ramp

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	LT	R	L	L
Maximum Queue (ft)	19	42	30	46	30	21
Average Queue (ft)	10	26	14	32	14	7
95th Queue (ft)	29	50	38	59	39	27
Link Distance (ft)		640	1184			
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200			25	250	250
Storage Blk Time (%)			4	7		
Queuing Penalty (veh)			2	1		

Intersection: 2: Santiam Hwy Eastbound Ramp & Cascade Hwy

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	TR	L	T
Maximum Queue (ft)	68	129	252	58	108
Average Queue (ft)	44	69	171	28	62
95th Queue (ft)	76	182	274	66	119
Link Distance (ft)	918		470		815
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		550		275	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Cascade Hwy & Golf Ln

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	10	31	6	18
Average Queue (ft)	4	15	1	6
95th Queue (ft)	17	40	11	25
Link Distance (ft)		263		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			75	75
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Cascade Hwy & Whitney St

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	78	103	221	128	137
Average Queue (ft)	53	68	160	87	101
95th Queue (ft)	91	113	248	135	163
Link Distance (ft)		674	1290		429
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150			200	
Storage Blk Time (%)					0
Queuing Penalty (veh)					0

Intersection: 5: Shaff Rd/Fern Ridge Rd & Cascade Hwy

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	112	159	107	178	90	218	108	430
Average Queue (ft)	73	95	53	99	59	140	35	331
95th Queue (ft)	127	174	121	191	99	235	153	647
Link Distance (ft)		806		960		1174		1290
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		200		250		350	
Storage Blk Time (%)		0		2		1		11
Queuing Penalty (veh)		1		2		1		5

Zone Summary

Zone wide Queuing Penalty: 11

SimTraffic Simulation Summary

07/26/2024

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	7:20	7:20	7:20	7:20	7:20	7:20
End Time	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2
Vehs Entered	2205	2270	2227	2200	2260	2232
Vehs Exited	2223	2268	2227	2208	2236	2232
Starting Vehs	84	74	78	67	64	70
Ending Vehs	66	76	78	59	88	70
Travel Distance (mi)	1669	1701	1647	1641	1704	1672
Travel Time (hr)	84.1	88.3	82.9	82.7	86.3	84.9
Total Delay (hr)	25.4	28.4	24.8	25.2	26.3	26.0
Total Stops	2879	2921	2773	2742	2781	2819
Fuel Used (gal)	60.7	62.7	60.3	59.8	62.0	61.1

Interval #0 Information Seeding

Start Time	7:20
End Time	7:30
Total Time (min)	10

Volumes adjusted by Growth Factors, Anti PHF.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	727	734	722	738	703	727
Vehs Exited	694	685	688	676	648	679
Starting Vehs	84	74	78	67	64	70
Ending Vehs	117	123	112	129	119	120
Travel Distance (mi)	520	525	501	503	501	510
Travel Time (hr)	29.4	30.3	27.6	27.9	27.5	28.5
Total Delay (hr)	11.1	11.8	9.9	10.2	9.8	10.6
Total Stops	1137	1053	971	952	905	1003
Fuel Used (gal)	19.7	20.0	18.8	19.0	18.7	19.2

Interval #2 Information Recording

Start Time	7:45
End Time	8:30
Total Time (min)	45

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1478	1536	1505	1462	1557	1509
Vehs Exited	1529	1583	1539	1532	1588	1553
Starting Vehs	117	123	112	129	119	120
Ending Vehs	66	76	78	59	88	70
Travel Distance (mi)	1148	1176	1146	1137	1204	1162
Travel Time (hr)	54.8	58.0	55.3	54.8	58.9	56.4
Total Delay (hr)	14.3	16.6	14.9	14.9	16.5	15.5
Total Stops	1742	1868	1802	1790	1876	1812
Fuel Used (gal)	41.0	42.7	41.5	40.8	43.4	41.9

Intersection: 1: Cascade Hwy & Sublimity Blvd/Santiam Hwy Westbound Ramp

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	LT	R	L	R	L	R
Maximum Queue (ft)	28	37	54	55	66	33	49	3
Average Queue (ft)	5	11	15	31	21	1	10	0
95th Queue (ft)	20	30	46	58	52	24	35	0
Link Distance (ft)		640	1184					
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200			25	250	300	250	350
Storage Blk Time (%)			3	6				
Queuing Penalty (veh)			2	1				

Intersection: 2: Santiam Hwy Eastbound Ramp & Cascade Hwy

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	TR	L	T
Maximum Queue (ft)	115	93	392	70	130
Average Queue (ft)	43	23	190	21	44
95th Queue (ft)	85	76	341	56	105
Link Distance (ft)	918		470		815
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			1		
Storage Bay Dist (ft)		550		275	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Cascade Hwy & Golf Ln

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	TR	L
Maximum Queue (ft)	27	40	38	29
Average Queue (ft)	3	13	2	4
95th Queue (ft)	18	37	28	21
Link Distance (ft)		263	429	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				75
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 4: Cascade Hwy & Whitney St

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	98	166	444	108	231
Average Queue (ft)	21	81	174	45	90
95th Queue (ft)	61	140	342	83	174
Link Distance (ft)		674	1290		429
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150			200	
Storage Blk Time (%)		0			0
Queuing Penalty (veh)		0			0

Intersection: 5: Shaff Rd/Fern Ridge Rd & Cascade Hwy

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	133	241	147	292	243	360	208	536
Average Queue (ft)	56	81	46	116	54	160	48	195
95th Queue (ft)	112	159	99	219	140	296	157	412
Link Distance (ft)		806		960		1174		1290
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		200		250		350	
Storage Blk Time (%)	0	0		3	0	3		3
Queuing Penalty (veh)	0	1		2	0	3		2

Zone Summary

Zone wide Queuing Penalty: 13

SimTraffic Simulation Summary

07/26/2024

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:57	6:57	6:57	6:57	6:57	6:57
End Time	7:10	7:10	7:10	7:10	7:10	7:10
Total Time (min)	13	13	13	13	13	13
Time Recorded (min)	10	10	10	10	10	10
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	473	525	474	480	457	480
Vehs Exited	468	495	454	477	431	465
Starting Vehs	103	90	93	103	86	96
Ending Vehs	108	120	113	106	112	111
Travel Distance (mi)	351	373	340	347	324	347
Travel Time (hr)	19.0	20.6	18.1	18.2	17.0	18.6
Total Delay (hr)	6.7	7.5	6.0	6.0	5.5	6.3
Total Stops	657	713	591	618	559	627
Fuel Used (gal)	13.3	14.1	12.4	12.7	11.7	12.8

Interval #0 Information Seeding

Start Time	6:57
End Time	7:00
Total Time (min)	3

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	7:10
Total Time (min)	10

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	473	525	474	480	457	480
Vehs Exited	468	495	454	477	431	465
Starting Vehs	103	90	93	103	86	96
Ending Vehs	108	120	113	106	112	111
Travel Distance (mi)	351	373	340	347	324	347
Travel Time (hr)	19.0	20.6	18.1	18.2	17.0	18.6
Total Delay (hr)	6.7	7.5	6.0	6.0	5.5	6.3
Total Stops	657	713	591	618	559	627
Fuel Used (gal)	13.3	14.1	12.4	12.7	11.7	12.8

Intersection: 1: Cascade Hwy & Sublimity Blvd/Santiam Hwy Westbound Ramp

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	LT	R	L	L
Maximum Queue (ft)	32	67	30	61	28	27
Average Queue (ft)	14	31	11	29	12	8
95th Queue (ft)	40	71	34	68	39	28
Link Distance (ft)		640	1184			
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200			25	250	250
Storage Blk Time (%)			4	6		
Queuing Penalty (veh)			2	1		

Intersection: 2: Santiam Hwy Eastbound Ramp & Cascade Hwy

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	TR	L	T
Maximum Queue (ft)	78	133	307	46	140
Average Queue (ft)	50	86	187	27	72
95th Queue (ft)	89	152	357	57	166
Link Distance (ft)	918		470		815
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			2		
Storage Bay Dist (ft)		550		275	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Cascade Hwy & Golf Ln

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	L
Maximum Queue (ft)	16	31	11	11	17
Average Queue (ft)	5	17	2	2	6
95th Queue (ft)	21	40	15	20	24
Link Distance (ft)	969	263		429	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			75		75
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: Cascade Hwy & Whitney St

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	78	97	253	149	188
Average Queue (ft)	54	75	201	106	114
95th Queue (ft)	93	115	313	169	204
Link Distance (ft)		674	1290		429
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150			200	
Storage Blk Time (%)		0		1	1
Queuing Penalty (veh)		0		6	1

Intersection: 5: Shaff Rd/Fern Ridge Rd & Cascade Hwy

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	136	155	146	206	118	260	117	420
Average Queue (ft)	83	101	90	148	63	174	46	329
95th Queue (ft)	151	176	167	219	143	291	159	491
Link Distance (ft)		806		960		1174		1290
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		200		250		350	
Storage Blk Time (%)		0		3		2		7
Queuing Penalty (veh)		1		4		2		4

Zone Summary

Zone wide Queuing Penalty: 22

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	7:20	7:20	7:20	7:20	7:20	7:20
End Time	8:30	8:30	8:30	8:30	8:30	8:30
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2
Vehs Entered	2368	2249	2205	2242	2334	2275
Vehs Exited	2360	2249	2208	2266	2316	2278
Starting Vehs	90	76	73	95	67	74
Ending Vehs	98	76	70	71	85	75
Travel Distance (mi)	1779	1701	1661	1698	1745	1717
Travel Time (hr)	95.0	88.6	82.9	85.6	88.6	88.1
Total Delay (hr)	32.2	28.5	24.3	25.7	26.7	27.5
Total Stops	3470	3094	2720	2879	2994	3032
Fuel Used (gal)	65.8	62.7	60.5	61.8	63.6	62.9

Interval #0 Information Seeding

Start Time	7:20
End Time	7:30
Total Time (min)	10

Volumes adjusted by Growth Factors, Anti PHF.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:30
End Time	7:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	745	728	713	685	710	713
Vehs Exited	704	683	678	681	669	685
Starting Vehs	90	76	73	95	67	74
Ending Vehs	131	121	108	99	108	110
Travel Distance (mi)	539	528	511	487	499	513
Travel Time (hr)	31.9	31.7	27.0	26.2	26.8	28.7
Total Delay (hr)	12.9	13.0	9.0	8.9	9.1	10.6
Total Stops	1260	1183	901	890	879	1022
Fuel Used (gal)	20.8	20.5	19.0	18.3	18.5	19.4

Interval #2 Information Recording

Start Time	7:45
End Time	8:30
Total Time (min)	45

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	1623	1521	1492	1557	1624	1563
Vehs Exited	1656	1566	1530	1585	1647	1598
Starting Vehs	131	121	108	99	108	110
Ending Vehs	98	76	70	71	85	75
Travel Distance (mi)	1240	1172	1150	1211	1246	1204
Travel Time (hr)	63.1	56.9	55.9	59.4	61.8	59.4
Total Delay (hr)	19.3	15.5	15.4	16.7	17.7	16.9
Total Stops	2210	1911	1819	1989	2115	2005
Fuel Used (gal)	45.0	42.2	41.5	43.6	45.2	43.5

Intersection: 1: Cascade Hwy & Sublimity Blvd/Santiam Hwy Westbound Ramp

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	LT	R	L	R	L
Maximum Queue (ft)	28	28	58	56	58	79	48
Average Queue (ft)	5	9	16	30	20	3	9
95th Queue (ft)	21	25	49	60	50	41	32
Link Distance (ft)		640	1184				
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200			25	250	300	250
Storage Blk Time (%)			4	5			
Queuing Penalty (veh)			2	1			

Intersection: 2: Santiam Hwy Eastbound Ramp & Cascade Hwy

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	TR	L	T
Maximum Queue (ft)	115	109	429	83	134
Average Queue (ft)	47	23	209	21	46
95th Queue (ft)	91	78	406	59	106
Link Distance (ft)	918		470		815
Upstream Blk Time (%)			1		
Queuing Penalty (veh)			6		
Storage Bay Dist (ft)		550		275	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Cascade Hwy & Golf Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	123	39	33	97	32	4
Average Queue (ft)	36	11	5	11	6	0
95th Queue (ft)	91	35	24	92	24	3
Link Distance (ft)	969	263		429		470
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75		75	
Storage Blk Time (%)				1		
Queuing Penalty (veh)				0		

Intersection: 4: Cascade Hwy & Whitney St

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	85	152	406	131	194
Average Queue (ft)	18	79	165	50	94
95th Queue (ft)	55	132	321	96	164
Link Distance (ft)		674	1290		429
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150			200	
Storage Blk Time (%)		0			0
Queuing Penalty (veh)		0			0

Intersection: 5: Shaff Rd/Fern Ridge Rd & Cascade Hwy

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	147	183	139	256	207	387	208	394
Average Queue (ft)	55	87	45	119	52	164	47	199
95th Queue (ft)	112	156	107	214	120	304	118	338
Link Distance (ft)		806		960		1174		1290
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		200		250		350	
Storage Blk Time (%)	0	0		2		2		1
Queuing Penalty (veh)	1	0		1		2		1

Zone Summary

Zone wide Queuing Penalty: 14

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	4:20	4:20	4:20	4:20	4:20	4:20
End Time	5:30	5:30	5:30	5:30	5:30	5:30
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	3	3	3	3	3	3
# of Recorded Intervals	2	2	2	2	2	2
Vehs Entered	2944	2841	2835	2835	2906	2873
Vehs Exited	2971	2848	2829	2834	2875	2868
Starting Vehs	122	93	107	107	111	102
Ending Vehs	95	86	113	108	142	104
Travel Distance (mi)	2145	2092	2066	2079	2116	2100
Travel Time (hr)	127.7	114.9	111.5	115.0	116.8	117.2
Total Delay (hr)	51.6	40.8	38.3	41.3	41.6	42.7
Total Stops	4227	3807	3687	3859	3891	3897
Fuel Used (gal)	82.5	78.6	76.7	78.8	79.1	79.1

Interval #0 Information Seeding

Start Time	4:20
End Time	4:30
Total Time (min)	10

Volumes adjusted by Growth Factors, Anti PHF.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:30
End Time	4:45
Total Time (min)	15

Volumes adjusted by PHF, Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	872	804	801	799	780	809
Vehs Exited	831	767	777	755	751	775
Starting Vehs	122	93	107	107	111	102
Ending Vehs	163	130	131	151	140	142
Travel Distance (mi)	613	558	567	562	537	567
Travel Time (hr)	39.6	32.3	32.0	32.8	29.5	33.2
Total Delay (hr)	17.9	12.5	11.9	12.8	10.4	13.1
Total Stops	1295	1118	1028	1098	946	1095
Fuel Used (gal)	24.1	21.5	21.2	21.6	19.9	21.6

Interval #2 Information Recording

Start Time	4:45
End Time	5:30
Total Time (min)	45

Volumes adjusted by Growth Factors, Anti PHF.

Run Number	1	2	3	4	5	Avg
Vehs Entered	2072	2037	2034	2036	2126	2060
Vehs Exited	2140	2081	2052	2079	2124	2097
Starting Vehs	163	130	131	151	140	142
Ending Vehs	95	86	113	108	142	104
Travel Distance (mi)	1532	1533	1499	1517	1579	1532
Travel Time (hr)	88.1	82.6	79.5	82.3	87.3	84.0
Total Delay (hr)	33.7	28.3	26.4	28.5	31.2	29.6
Total Stops	2932	2689	2659	2761	2945	2796
Fuel Used (gal)	58.4	57.1	55.5	57.2	59.2	57.5

Intersection: 1: Cascade Hwy & Sublimity Blvd/Santiam Hwy Westbound Ramp

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	L	TR	LT	R	L	R	L
Maximum Queue (ft)	40	63	57	60	45	32	45
Average Queue (ft)	10	26	20	32	15	1	13
95th Queue (ft)	30	50	52	60	41	23	38
Link Distance (ft)		640	1184				
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	200			25	250	300	250
Storage Blk Time (%)			7	6			
Queuing Penalty (veh)			3	1			

Intersection: 2: Santiam Hwy Eastbound Ramp & Cascade Hwy

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	TR	L	T
Maximum Queue (ft)	100	276	377	75	180
Average Queue (ft)	49	104	175	30	66
95th Queue (ft)	88	219	317	58	144
Link Distance (ft)	918		470		815
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		550		275	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Cascade Hwy & Golf Ln

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	70	61	48	6	33	10
Average Queue (ft)	24	21	18	0	4	1
95th Queue (ft)	56	49	44	4	21	6
Link Distance (ft)	969	263		429		470
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			75		75	
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 4: Cascade Hwy & Whitney St

Movement	WB	WB	NB	SB	SB
Directions Served	L	R	TR	L	T
Maximum Queue (ft)	103	155	391	185	247
Average Queue (ft)	46	77	199	101	124
95th Queue (ft)	87	131	334	166	213
Link Distance (ft)		674	1290		429
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	150			200	
Storage Blk Time (%)		0		0	1
Queuing Penalty (veh)		0		2	2

Intersection: 5: Shaff Rd/Fern Ridge Rd & Cascade Hwy

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)	219	321	225	360	212	377	374	639
Average Queue (ft)	120	131	90	170	77	182	81	346
95th Queue (ft)	214	254	187	302	162	307	277	594
Link Distance (ft)		806		960		1174		1290
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	200		200		250		350	
Storage Blk Time (%)	5	2	0	9		2		9
Queuing Penalty (veh)	10	3	0	9		3		5

Zone Summary

Zone wide Queuing Penalty: 40

APPENDIX F: CRASH DATA

013 Lat	014 Long	117 Severity	000 Crash Id	002 Year	005 Region	007 County1	008 Jurisdiction	015 Street Name
44.81870004	-122.7943326	Minor Injury (B)	1847246	2019	2	Marion	Sublimity	NORTH SANTIAM
44.81869722	-122.7943278	PDO	1805699	2018	2	Marion	Sublimity	NORTH SANTIAM
44.81869548	-122.7943359	PDO	1863335	2019	2	Marion	Sublimity	NORTH SANTIAM
44.81869254	-122.7943342	PDO	1873569	2019	2	Marion	Sublimity	NORTH SANTIAM
44.81869603	-122.7943253	Minor Injury (B)	1843689	2019	2	Marion	Sublimity	NORTH SANTIAM
44.81869722	-122.7943278	Possible Injury (C)	1782099	2018	2	Marion	Sublimity	NORTH SANTIAM
44.81871891	-122.7939208	Possible Injury (C)	1845291	2019	2	Marion		NORTH SANTIAM
44.81869962	-122.7943375	PDO	1895810	2020	2	Marion	Sublimity	NORTH SANTIAM
44.81869472	-122.7943337	PDO	1897397	2020	2	Marion	Sublimity	NORTH SANTIAM
44.81869722	-122.7943278	Serious Injury (A)	1787368	2018	2	Marion	Sublimity	NORTH SANTIAM
44.81869646	-122.7943285	Minor Injury (B)	2002835	2022	2	Marion	Sublimity	NORTH SANTIAM
44.81869646	-122.7943285	Minor Injury (B)	1982223	2022	2	Marion	Sublimity	NORTH SANTIAM
44.81633889	-122.7942528	PDO	1806637	2018	2	Marion		NORTH SANTIAM
44.81633333	-122.7942444	PDO	1806880	2018	2	Marion		NORTH SANTIAM
44.81633381	-122.7942489	PDO	1862793	2019	2	Marion		NORTH SANTIAM
44.81633378	-122.7942452	PDO	1864930	2019	2	Marion		NORTH SANTIAM
44.81633623	-122.7942582	PDO	1865825	2019	2	Marion		NORTH SANTIAM
44.81633325	-122.7942445	PDO	2003074	2022	2	Marion		NORTH SANTIAM
44.81633325	-122.7942445	Minor Injury (B)	1976366	2022	2	Marion		NORTH SANTIAM
44.81633333	-122.7942444	PDO	1818009	2018	2	Marion		NORTH SANTIAM
44.81633531	-122.7942459	Minor Injury (B)	1965202	2022	2	Marion		NORTH SANTIAM
44.81633325	-122.7942445	Possible Injury (C)	1827976	2019	2	Marion		NORTH SANTIAM
44.81632866	-122.7942461	Possible Injury (C)	1882113	2020	2	Marion		NORTH SANTIAM
44.81633637	-122.7942502	Minor Injury (B)	1924721	2021	2	Marion		CASCADE HWY SE
44.81633325	-122.7942445	Minor Injury (B)	1985258	2022	2	Marion		CASCADE HWY SE
44.81632637	-122.7942471	PDO	1898989	2020	2	Marion		NORTH SANTIAM
44.81633465	-122.794249	PDO	1897371	2020	2	Marion		NORTH SANTIAM
44.81633581	-122.7942434	PDO	1895802	2020	2	Marion		NORTH SANTIAM
44.816336	-122.7942462	PDO	1954561	2021	2	Marion		NORTH SANTIAM
44.81633515	-122.7942403	Minor Injury (B)	1929956	2021	2	Marion		NORTH SANTIAM
44.81633435	-122.7942436	Possible Injury (C)	1923539	2021	2	Marion		NORTH SANTIAM
44.81633325	-122.7942445	PDO	2003594	2022	2	Marion		NORTH SANTIAM
44.81633325	-122.7942445	PDO	1994693	2022	2	Marion		NORTH SANTIAM
44.81633333	-122.7942472	PDO	1811907	2018	2	Marion		NORTH SANTIAM
44.81632973	-122.7946608	PDO	1980364	2022	2	Marion		NORTH SANTIAM
44.81356919	-122.7942973	Possible Injury (C)	1917270	2021	2	Marion	Stayton	CASCADE HWY
44.81356944	-122.7943	PDO	1804536	2018	2	Marion	Stayton	CASCADE HWY
44.813573	-122.7943	PDO	1902144	2020	2	Marion	Stayton	CASCADE HWY
44.8135706	-122.7942997	PDO	1946450	2021	2	Marion	Stayton	CASCADE HWY
44.8135711	-122.7943053	Possible Injury (C)	1892107	2020	2	Marion	Stayton	CASCADE HWY
44.81356389	-122.7938556	PDO	1805411	2018	2	Marion	Stayton	WHITNEY ST
44.81310111	-122.7943027	PDO	1952144	2021	2	Marion	Stayton	CASCADE HWY
44.80978611	-122.7942667	PDO	1809311	2018	2	Marion	Stayton	SHAFF RD
44.80978601	-122.7942654	Possible Injury (C)	1839109	2019	2	Marion	Stayton	CASCADE HWY
44.80979034	-122.7942628	PDO	1871161	2019	2	Marion	Stayton	CASCADE HWY
44.80978805	-122.7942669	PDO	1865120	2019	2	Marion	Stayton	CASCADE HWY
44.80978674	-122.7942697	PDO	1943129	2021	2	Marion	Stayton	FERN RIDGE RD
44.80979001	-122.7942684	PDO	1903451	2020	2	Marion	Stayton	FERN RIDGE RD
44.80942482	-122.7942681	Possible Injury (C)	1971372	2022	2	Marion	Stayton	1ST AVE
44.81013056	-122.794275	Possible Injury (C)	1776412	2018	2	Marion	Stayton	CASCADE HWY
44.80978611	-122.7942639	Minor Injury (B)	1792539	2018	2	Marion	Stayton	CASCADE HWY
44.80978847	-122.7942679	PDO	1902097	2020	2	Marion	Stayton	CASCADE HWY
44.80978789	-122.7942631	PDO	1953644	2021	2	Marion	Stayton	FERN RIDGE RD
44.80978611	-122.7942639	PDO	1803040	2018	2	Marion	Stayton	FERN RIDGE RD
44.80944444	-122.7942694	PDO	1804626	2018	2	Marion	Stayton	1ST AVE
44.80978724	-122.7942652	Possible Injury (C)	1888738	2020	2	Marion	Stayton	FERN RIDGE RD
44.80942222	-122.7942694	Possible Injury (C)	1792514	2018	2	Marion	Stayton	1ST AVE
44.80932883	-122.7942691	Possible Injury (C)	1831554	2019	2	Marion	Stayton	1ST AVE

021 Road Characteristics	022 Off Roadway Flag	036 Crash Cause 1	114 Road Departure Flag	118 Intersection Flag
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	IMP-TURN	No	Yes
STRGHT	FALSE	F AVOID	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	VIEW OBS	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	PAS-STOP	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	TRUE	OTHER	No	Yes
INTER	FALSE	DIS SIG	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	TOO-FAST	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	CARELESS	No	Yes
STRGHT	FALSE	F AVOID	No	Yes
INTER	FALSE	INATTENT	No	Yes
INTER	FALSE	DIS SIG	No	Yes
INTER	FALSE	DIS SIG	No	Yes
INTER	TRUE	IMP-TURN	No	Yes
INTER	FALSE	F AVOID	No	Yes
STRGHT	FALSE	IMP LN C	No	Yes
STRGHT	FALSE	F AVOID	No	Yes
INTER	FALSE	TOO-FAST	No	Yes
INTER	FALSE	INATTENT	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
INTER	FALSE	DIS SIG	No	Yes
INTER	FALSE	F AVOID	No	Yes
STRGHT	FALSE	F AVOID	No	Yes
STRGHT	FALSE	TOO-CLOS	No	Yes
INTER	FALSE	F AVOID	No	Yes
INTER	FALSE	DIS SIG	No	Yes
INTER	FALSE	DIS SIG	No	Yes
INTER	FALSE	NO-YIELD	No	Yes
STRGHT	FALSE	MECH-DEF	No	Yes
INTER	FALSE	DIS SIG	No	Yes
STRGHT	FALSE	INATTENT	No	Yes
STRGHT	FALSE	CARELESS	No	Yes

119 State Highway Flag1	126 Bike / Ped Related	127 Driveway Flag	128 Jurisdiction Complete	011 Hwy No	001 CRASH Date
Yes	Neither	No	Sublimity	162	11/12/2019
Yes	Neither	No	Sublimity	162	4/30/2018
Yes	Neither	No	Sublimity	162	6/14/2019
Yes	Neither	No	Sublimity	162	12/14/2019
Yes	Neither	No	Sublimity	162	9/21/2019
Yes	Neither	No	Sublimity	162	4/22/2018
Yes	Neither	No	Marion County	162	10/15/2019
Yes	Neither	No	Sublimity	162	1/8/2020
Yes	Neither	No	Sublimity	162	2/10/2020
Yes	Neither	No	Sublimity	162	7/2/2018
Yes	Neither	No	Sublimity	162	12/27/2022
Yes	Neither	No	Sublimity	162	10/18/2022
Yes	Neither	No	Marion County	162	5/17/2018
Yes	Neither	No	Marion County	162	6/11/2018
Yes	Neither	No	Marion County	162	5/31/2019
Yes	Neither	No	Marion County	162	7/12/2019
Yes	Neither	No	Marion County	162	7/25/2019
Yes	Neither	No	Marion County	162	12/23/2022
Yes	Neither	No	Marion County	162	9/8/2022
Yes	Neither	No	Marion County	162	10/16/2018
Yes	Neither	No	Marion County	162	4/18/2022
Yes	Neither	No	Marion County	162	1/17/2019
Yes	Neither	No	Marion County	162	4/23/2020
No	Neither	No	Marion County		7/21/2021
No	Neither	No	Marion County		6/10/2022
Yes	Neither	No	Marion County	162	3/17/2020
Yes	Neither	No	Marion County	162	2/9/2020
Yes	Neither	No	Marion County	162	1/8/2020
Yes	Neither	No	Marion County	162	10/22/2021
Yes	Neither	No	Marion County	162	10/22/2021
Yes	Neither	No	Marion County	162	6/17/2021
Yes	Neither	No	Marion County	162	11/17/2022
Yes	Neither	No	Marion County	162	10/17/2022
Yes	Neither	No	Marion County	162	9/21/2018
Yes	Neither	No	Marion County	162	3/16/2022
No	Neither	No	Stayton		4/1/2021
No	Neither	No	Stayton		3/2/2018
No	Neither	No	Stayton		7/12/2020
No	Neither	No	Stayton		5/21/2021
No	Neither	No	Stayton		11/23/2020
No	Neither	No	Stayton		4/16/2018
No	Neither	No	Stayton		8/25/2021
No	Neither	No	Stayton		8/22/2018
No	Neither	No	Stayton		7/19/2019
No	Neither	No	Stayton		10/30/2019
No	Neither	No	Stayton		7/17/2019
No	Neither	No	Stayton		3/10/2021
No	Neither	No	Stayton		8/3/2020
No	Neither	No	Stayton		6/29/2022
No	Neither	No	Stayton		1/19/2018
No	Neither	No	Stayton		9/14/2018
No	Neither	No	Stayton		7/4/2020
No	Neither	No	Stayton		9/3/2021
No	Neither	No	Stayton		1/1/2018
No	Neither	No	Stayton		3/7/2018
No	Neither	No	Stayton		9/11/2020
No	Neither	No	Stayton		9/13/2018
No	Neither	No	Stayton		3/19/2019

APPENDIX G: SEASONAL ADJUSTMENT FACTOR SPREADSHEET

213

Seasonal Adjustment Using ATR #24-005

		Month	2022	2021	2020	2019	2018	2017		
Weekday	**Peak**	July or August	25487	25871	*	26620	26440	25341		
Traffic	**Counts**	May	23652	24841	*	24215	23985	23351		
Percent	**Peak**	July or August	117	116	*	116	116	116	116	Seasonal Adjustment
ADT	**Counts**	May	108	111	*	106	105	107	107	1.08

APPENDIX H: SIGNAL WARRANT CALCULATIONS

Traffic Signal Warrant Analysis

Analysis Volumes

Hour	Major (N/S) Casacde Hwy	Minor (EB) Golf Ln		Major Ped Crossing
12 am - 1 am	41	0		0
1 am - 2 am	43	0		0
2 am - 3 am	34	0		0
3 am - 4 am	83	8		0
4 am - 5 am	172	8		0
5 am - 6 am	389	16		0
6 am - 7 am	647	8		0
7 am - 8 am	1023	31		0
8 am - 9 am	1047	47		0
9 am - 10 am	989	47		0
10 am - 11 am	1092	31		0
11 am - 12 pm	1143	62		0
12 pm - 1 pm	1220	62		0
1 pm - 2 pm	1229	54		0
2 pm - 3 pm	1444	31		0
3 pm - 4 pm	1452	16		0
4 pm - 5 pm	1515	8		0
5 pm - 6 pm	1520	31		0
6 pm - 7 pm	929	23		0
7 pm - 8 pm	728	0		0
8 pm - 9 pm	614	31		0
9 pm - 10 pm	384	0		0
10 pm - 11 pm	161	0		0
11 pm - 12 am	103	23		0

Roadway Characteristics

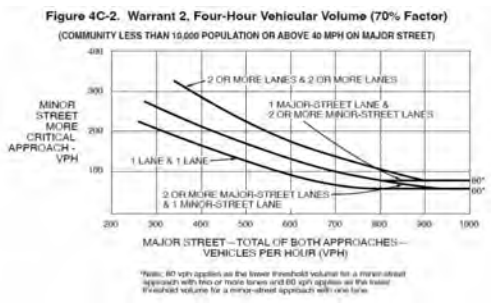
		Lanes	
Major:	N/S	1	
Minor:	E/W	1	
Use APM Reduction?		No	
EB RT Lane Capacity			vph
Reduction:		0	
WB RT Lane Capacity			vph
Reduction:		0	
Above 40 mph on Major Street?		No	
Isolated community with population less than 10,000?		Yes	
Use 70% Factor			

WARRANT #1

	Volume Criteria Major	Minor	# of Hours	8 Hours Met?
Condition A (70%)	350	105	0	FALSE
Condition B (70%)	525	53	3	FALSE
Condition A (56%)	280	84	0	FALSE
Condition B (56%)	420	42	5	

No

WARRANT #2 No 2 of 4 hours met



APPENDIX I: SITE PLAN

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LAND USE

GROSS PLANNING AREA:

GROSS AREA	914,760 SF = 21.0 ACRES
TRACT A	33,600 SF = – 0.77 ACRES
	881,160 SF = 20.23 ACRES

PLANNING TO BE DEVELOPED:

TOTAL	881,160 SF = 20.23 ACRES
PLAT ROADS	248,400 SF = –5.70 ACRES
NET PLANNING AREA	632,760 SF = 14.53 ACRES

NET PLANNING AREA:

92 LOTS / 14.53 ACRES = 6.33 LOTS PER ACRE

632,760 SF / 92 LOTS = 6,880 SF AVERAGE LOT SIZE

SMALLEST LOT SIZE: 6,000 SF
LARGEST LOT SIZE: 13,950 SF

NORTH SANTIAM PAVING COMPANY
41203 KINGSTON–LYONS DRIVE, P.O. BOX 516
STAYTON, OREGON 97383
(503) 769–3436
LEWIS@NSPOR.COM
CONSTRUCTION • ENGINEERING • SURVEYING

GOLF LANE ROAD SUBDIVISION

CITY OF STAYTON MARION COUNTY, OREGON
NW 1/4 SEC. 3 T9S R1W WM TAX MAP 091W03B TAX LOT 1500

PRELIMINARY LAYOUT OPTION 3

REGISTERED PROFESSIONAL ENGINEER
88054PE
OREGON
JANUARY 31, 2012
LEWIS D. WARNER
EXPIRES: 6-30-2024

PLOT DATE: 2/7/2024
REVISIONS:
DRAWN BY: LDW
CHECKED BY: LDW
JOB No: 23110
SCALE: 1" = 50'

SHEET
C1

Exhibit I – Pre-Application Conference Notes

City of Stayton
Preapplication Meeting
April 4, 2024
2:00 p.m.

KDS Golf Lane SE Annexation

Applicant: KSD Properties, LLC, 500 SW Sublimity BLVD, Sublimity, OR 97385

Staff: Jennifer Siciliano, Community and Economic Development Director, Public Works Director, City Engineer, and Fire Department

Project Description: Annex a 21-acre property, taxlot 091W03B001500, for residential use.

Comprehensive Plan Map Designation: Residential
Zoning District: Low or Medium Density Residential

The following comments are intended for discussion purposes only and may not include all applicable code requirements.

Applicable Stayton Land Use and Development Code (code) provisions:

17.12.210 ANNEXATIONS
2. METHOD OF ADOPTION
a. Major Annexations.

1) A Major Annexation is an annexation that meets one or more of the following characteristics.

i. Consists of two or more parcels, except proposed annexations that consist of contiguous parcels in the same ownership.
ii. The area proposed for annexation exceeds 1 acre, except a health hazard annexation.

2) describes the approval procedure which has not been amended since Senate Bill 1573 passed. The bill states:

" ... the legislative body of the city shall annex the territory without submitting the proposal to the electors of the city if:
(a) The territory is included within an urban growth boundary adopted by the city or Metro, as defined in ORS 197.015;
(b) The territory is, or upon annexation of the territory into the city will be, subject to the acknowledged comprehensive plan of the city;
(c) At least one lot or parcel within the territory is contiguous to the city limits or is separated from the city limits only by a public right of way or a body of water; and

(d) The proposal conforms to all other requirements of the city's ordinances. ..."

A general timetable is the following:

- *An application for annexation is submitted to the City Planner.*
- *The City Planner has 30 days to deem the application complete or incomplete.*
- *Once the application is deemed complete, it can be scheduled for a Planning Commission Public Hearing. Abutters need to be notified 20 days in advance of this hearing. The Planning Commission only meets on the last Monday of the month.*
- *The Planning Commission submits its recommendations to the City Council to schedule another Public Hearing in front of the Council. This hearing needs to be advertised at least two weeks before the hearing. The City Council meets the first and third Mondays of the month.*
- *A Notice of Decision is sent out to the abutters within 3 days of the decision.*
- *From the Notice of Decision there is a 14-day appeal period.*

3. SUBMITTAL REQUIREMENTS. In order to be accepted as complete and be processed in a timely manner by the City, requests for annexation of territory shall include the following materials and information:

a. Completed application forms as supplied by the City Planner.
b. Three copies of a site plan, drawn to a scale of 1 inch equals not more than 50 feet, shown as a graphic scale, of the property for which the annexation is requested. The site plan shall depict the surrounding properties, neighboring streets and roads, and existing uses of the property. If the application for annexation is not accompanied by a concurrent application for site plan, subdivision, or other land use approval, three copies of a conceptual plan of proposed uses of the property subsequent to annexation. In addition, 18 reduced copies of the plan sized as 11 inches by 17 inches shall be submitted.
c. A plan showing the boundary lines of the properties, certified by a professional land surveyor, and the approximate area of the properties in acres or square feet.
d. A legal description of the property, meeting the requirements of ORS 308.225.
e. A narrative statement fully explaining the request and fully addressing the criteria for
approval of an annexation.

See the application checklist for guidance.

4. APPROVAL CRITERIA. In order to approve an application for annexation, the following affirmative findings concerning the action must be made by the decision authority:
a. Need exists in the community for the land proposed to be annexed.

b. The site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.
c. The proposed annexation is property contiguous to the existing City limits.
d. The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and policies of the City of Stayton.
e. The annexation request complies, or can be made to comply, with all applicable provisions of state and local law.
f. If a proposed contract annexation, within the terms and conditions of the contract the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

5. ZONING OF ANNEXED TERRITORY. All lands that are annexed to the City shall be zoned in accordance with the designation of the property in the Comprehensive Plan. The specific zone assigned to the land being annexed shall be determined by the City Council in accordance with the proposed uses of the land and the needs identified by the buildable lands analysis in the Comprehensive Plan. This requirement does not prohibit an application to amend the Comprehensive Plan Map concurrent with the application for annexation.

According to the Comprehensive Plan, this parcel is considered residential. It could be approved for Low or Medium Density Residential Zone.

Table 17.16.070.2 Minimum Dimensional Requirements for Lots

Low Residential Density Zone	
Lot Area (square feet)	8,000
Lot Width (feet)	80 (40 feet for lots with frontage on a cul-de-sac)
Average Width (feet)	80

Medium Residential Density Zone	
Lot Area (square feet)	7,000 (A Triplex requires a minimum lot area of 10,500 square feet.)
Lot Width (feet)	70 (40 feet for lots with frontage on a cul-de-sac)
Average Width (feet)	70

Table 17.16.070.3 Dimensional Requirements for Structures

Low Residential Density Zone	
Front Yard Setback (feet)	20[2]
Side Yard Setback (feet)	5
Rear Yard Setback (feet)	20
Building Height (feet)	35[6]

[2] 25 feet to a garage entrance, except a garage on a back lot or flag lot.
[6] Or 2 ½ stories

Medium Residential Density Zone

Front Yard Setback (feet)	20[2]
Side Yard Setback (feet)	5
Rear Yard Setback (feet)	15
Building Height (feet)	35[6]

[2] 25 feet to a garage entrance, except a garage on a back lot or flag lot.
[6] Or 2 ½ stories

4. ADDITIONAL REGULATIONS FOR SINGLE FAMILY DETACHED DWELLINGS AND MANUFACTURED HOMES ON INDIVIDUAL LOTS.

Within the Low Density and Medium Density Residential Districts, all new single-family detached dwellings, including manufactured homes not in a mobile home park, are subject to the following development and design standards:

1) Floor Area. A dwelling shall have a minimum floor area of 1,000 square feet. The dwelling must have a minimum horizontal dimension of at least 24 feet.

2) Repealed.

3) Design Features. All new dwellings shall contain the following design feature requirements:

a) The site must include an attached or detached garage with exterior materials that are the same exterior materials as the primary home.
b) The building shall be provided with gutters and downspouts.
c) The dwelling must have a composition asphalt, fiberglass, shake, or tile roof with a minimum pitch of 3 feet in height for each 12 feet in length.
d) The dwelling must have horizontally applied wood siding, horizontally applied fiber-cement siding, brick or stone masonry siding, or textured plywood siding with vertical grooves.
e) The base of the new dwelling must be enclosed continuously at the perimeter with either concrete, concrete block, brick, stone, or combination thereof. Unless the home is placed on a basement, the home shall sit so that no more than 12 inches of the enclosing material is exposed above grade. Where the building site has a grade with a slope of more than 10%, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home.
f) If a manufactured home, the transportation mechanisms, including wheels, axles, and hitch, shall be removed.

4) In addition, to provide architectural relief, new dwellings shall contain at least 3 of the following design elements on the side(s) of the home which fronts on a street:
a) Dormers or gables.
b) Cupolas.
c) Bay or bow windows.
d) Exterior shutters.
e) Recessed entries.

f) Front porch of at least 100 square feet, which may extend into the required front yard.
g) Covered porch entries.
h) Pillars or posts in the front entry area.
i) (Repealed, Ord 1060, May 17, 2023.)
j) Front-side exterior brickwork or masonry.

17.20.190 MULTI-FAMILY RESIDENTIAL DESIGN STANDARDS
1. These standards shall apply to any new attached residential structure.
2. SITE DESIGN.
a. Maximum Lot Coverage. Lot coverage shall not exceed the percentages shown in Table 17.20.190.2.a:

Table 17.20.190.2.a Maximum Lot Coverage for Multi-family Uses

Multi-Family Use	Maximum Coverage
Single Family Attached, Duplex or Triplex	50%
Multi-family dwellings	60%

Lot coverage is calculated as the percentage of a lot or parcel covered by buildings or structures (as defined by the foundation plan area) and other structures with surfaces greater
than 36 inches above the finished grade. It does not include paved surface-level development such as driveways, parking pads, and patios.

b. Height Step Down. To provide compatible scale and relationships between new multi-story attached residential structures and adjacent single-family dwellings, the multi-story building(s) shall “step down” to create a building height transition to adjacent single-family building(s).

The transition standard is met when the height of any portion of the taller structure does not exceed 1 foot of height for every foot of separation between the adjacent single-family building and that portion of the taller structure.

c. Building Orientation Standards. All new attached residential structures shall have buildings that are oriented to the street. The following standards will apply:
1) All buildings shall comply with the setback standards of the zoning district where the development is located.

2) Except as provided in subsections 3 and 4, below, all attached residential structures shall have at least 1 primary building entrance (i.e. dwelling entrance, a tenant space entrance, a lobby entrance, or breezeway/courtyard entrance serving a cluster of units)

facing an adjoining street, or if on a side elevation, not more than 20 feet from a front lot line.

3) Any duplex located on a corner lot shall be oriented so that the architectural front of each unit faces a separate street.

4) Repealed.

5) Off street parking, driveways, and other vehicle areas shall not be placed between buildings and the street(s) to which they are oriented, except that townhouses with garages that face a street may have 1 driveway access located between the street and primary building entrance for every 2 dwelling units following vehicle areas when the decision authority finds they will not adversely affect pedestrian safety and convenience.

6) Parking and maneuvering areas, driveways, active recreation areas, loading areas, and dumpsters shall not be located between attached residential structures and adjacent single family homes.

7) When there is insufficient street frontage for building orientation in a development with multiple buildings to face the street, a primary entrance may be oriented to a common green, plaza or courtyard. When oriented this way, the primary entrance(s) and common green, plaza or courtyard shall be connected to the street by a pedestrian walkway meeting the standards of Section 17.26.020.5.

8) Outdoor Service Areas. Trash receptacles shall be oriented away from building entrances and set back at least 10 feet from any public right-of-way and adjacent residences. Outdoor service areas shall be screened with an evergreen hedge or solid fence of materials similar to the primary building of not less than 6 feet in height. If the outdoor service area includes trash receptacles, the receptacle must be accessible to trash pick-up trucks.

3. ARCHITECTURAL STANDARDS.
a. Building Length. The continuous horizontal distance as measured from end wall to end wall of individual buildings shall not exceed 100 feet.
b. Articulation. All attached residential structures shall incorporate design features to break up large expanses of uninterrupted walls or roof planes. Along the vertical face of all building stories, such elements shall occur at a minimum interval of 30 feet and each floor shall contain at least 2 of the following elements.

1) Recess (e.g. deck, patio, courtyard, entrance or similar feature) that has a minimum depth of 4 feet.
2) Extension (e.g. deck, patio, entrance, overhang, or similar feature) that projects a minimum of 2 feet and runs horizontally for a minimum length of 4 feet.

3) Dormers with peaked roofs and windows or offsets or breaks in roof elevation of 2 feet or greater in height.

c. Street-side facades. All building elevations visible from a street right-of-way shall provide prominent defined entrances and a combination of architectural features as specified in Section 17.20.190.3.e below.

d. Exterior Stairways. Stairways shall be incorporated into the building design. External stairways, when necessary, shall be recessed into the building, sided using the same siding materials as the building, or otherwise incorporated into the building architecture. Access balconies and/or outdoor corridors longer than 16 feet shall not be used. No more than 4 units shall access from a single balcony.

e. Design Features. The minimum number of required design features for an attached residential structure is determined by the number of dwelling units in each building as shown in Table 17.20.190.3.e.

Table 17.20.190.3.e Minimum Number of Design Features

Number of Units	Minimum Number of Features
2 - 6	5
7 - 20	8
21 or more	10

The following design features may be used to meet the requirements of this subsection. Features not included on the list may be used if approved by decision authority.

1) Dormers
2) Gables
3) Entries recessed a minimum of 30 inches
4) Covered porch entries or porticos
5) Cupolas or towers
6) Pillars or posts
7) Eaves; a minimum 18 inches of projection
8) Off-sets in building face or roof; a minimum 16 inches
9) Window trim; minimum of 3 inches wide
10) Bay windows
11) Balconies
12) Decorative patterns on exterior finish such as: shingles, wainscoting, ornamentation or similar features.
13) Decorative cornice or pediments (for flat roofs)

f. Building Materials. Plain concrete, corrugated metal, plywood, sheet press board, or textured plywood siding with vertical grooves shall not be used as exterior finish material.

4. OPEN SPACE.

a. Common Open Space. Of the landscaping required by Section 17.20.090, a minimum of 10% of the site area shall be designated and permanently reserved as common open space in all multi-family developments with more than 10 units, in accordance with the following criteria:

1) The site area is defined as the lot or parcel on which the development is to be located, after subtracting any required dedication of street right-of-way.
2) Streets, driveways, and parking areas, including areas required to satisfy parking area landscape standards, shall not be applied towards the minimum useable open space requirement.
3) In meeting the common open space standard, the multi-family development shall contain one or more of the following: outdoor recreation area, protection of sensitive lands, play fields, outdoor playgrounds, outdoor sports courts, swimming pools, walking paths, or similar open space amenities for residents.
4) The common open space shall have a minimum average width of 15 feet and a minimum average length of 15 feet.

b. Private Open Space. Private open space areas shall be required for dwelling units based on all of the following criteria:

1) All ground-floor housing units shall have front or rear patios or decks measuring at least 40 square feet.
2) All upper-floor housing units shall have balconies or porches measuring at least 30 square feet.

5. LIGHTING. All attached residential structures shall meet the standards of Section 17.20.170.

Pre-application questions:

Land Use Requirements

1. It is anticipated the following applications are required, please confirm this is accurate: annexation application. *Yes*
2. Please confirm the property will be annexed into the City of Stayton as Residential, which aligns with the comprehensive plan. *If the City Council approves the annexation, it will be for residential use since that aligns with the Comprehensive Plan.*
3. Please confirm the setbacks for each property line that will be applicable at the time of development following a successful annexation. *See Table 17.16.070.3 in zoning.*
4. Please confirm if Golf Lane SE is subject to a special setback along the subject property frontage. *Golf Lane does not have special setbacks.*
5. Are any open spaces or parks required for future development? *There are requirements for open space for multi-family structures including duplexes. There are also open space requirements for master plan developments – see 17.24.100.d.*
6. Please confirm there are no previous land use actions on this property which would impact or disallow the proposal. *None.*
7. Please confirm application corresponding fees for land use approval. *$2,000 deposit*
8. Please discuss the typical processing timeline for annexations under the City's process for which do not request a comprehensive plan amendment. The applicant understands

annexation applications are not held to any jurisdictional deadlines*. See general timetable described above.*

9. Please discuss how the applicant may expedite the review process for this application, if applicable. *There is no expedited process.*

10. Please provide a list of information which is required to be submitted with the land use application for the proposed annexation. *See checklist in the annexation application.*

11. Please confirm what supplemental studies or reports are required to be submitted with this application. *Transportation Impact Analysis may be required.*

12. Please confirm if the proposal will trigger any local, state, or federal notifications. *The city usually notifies Marion County. After an annexation is approved, there are notification requirements – see 17.12.210.7.*

City of Stayton

Department of Public Works

362 N. Third Avenue • Stayton, OR 97383

Phone: (503) 769-2919 • Fax (503) 767-2134

Date: 11/13/2025
To: Jennifer Siciliano, AICP – Community and Economic Development Director
Through: Barry Buchanan, PE – Interim Public Works Director
Michael Schmidt – Engineering Associate
From: Lyle J. Misbach, PE, CFM
Project Name: 1000 Block of Golf Lane Annexation, Land Use File #5-02/24
AKS Job No.: 12093-02-1001
Project Site: 1000 Block of Golf Lane, Stayton

Subject: **Public Works Recommendations – Developer-Proposed Annexation**

PROPOSAL

The submitted application is for annexation of a parcel 20.5 acres in size, located on the west side of Golf Lane (Tax Lot 091W03B001500), to be incorporated into the City as Medium Density (MD) Residential zoning. The parcel (the "Subject Property") is currently shown as Residential in the City's Comprehensive Plan. The Annexation approval is being requested by KSD Properties, LLC, as Applicant. We have received and reviewed the BRAND Land Use Annexation Narrative Package, dated March 26, 2025, and accompanying Incomplete Application Response, dated July 15, 2025, as well as the criteria listed in Stayton Municipal Code (SMC) 17.12.210.4, particularly the criterion listed in 4.b.

PURPOSE

The purpose of this memorandum is to identify the potential availability and current deficiencies of City public works infrastructure (streets, storm drainage, water, and sanitary sewer) necessary to be resolved to provide City services for the proposed property Annexation. The following comments are based on our review of for the proposed Annexation application as it relates to City infrastructure and in general conformance with applicable public works portions of the City of *Stayton Municipal Code* (SMC), City of Stayton *Land Use Development Code* (LUDC), City of Stayton utility Master Plans and Transportation System Plan (TSP), Public Works Design Standards (PWDS), and Public Works Standard Construction Specifications (SCS).

PUBLIC WORKS INFRASTRUCTURE

No public infrastructure improvements are required for annexation of property. The following information explains the condition of existing public infrastructure in the vicinity of the Subject Property as well as potential future development requirements. At the time of development of the Subject Property, improvements to public infrastructure to adequately serve the proposed development will be required.

Streets

At the time of development, right-of-way dedication and/or construction of street improvements will be required. The proposed development may also be responsible for contributing a proportional share toward Transportation System Plan capital improvements that benefit the Subject Property.

1. Golf Lane - Golf Lane is designated as a future City Collector in the TSP. The standard for this street classification is a 46-foot-wide improvement, including curbs and sidewalks, street trees and street lighting, in an 80-foot-wide right-of-way.
    a. Existing Conditions:
        i. This street has an approximate 32-foot-wide turnpike improvement within a varied right-of-way along the Subject Property frontage and between the Subject Property and the City street system.
        ii. The nearest City intersection, at Cascade Highway SE, is located approximately 1,000 feet south and east of the Subject Property.
        iii. The next nearest City intersection is the intersection of Cascade Highway SE and Whitney Street and is located nearly 1,500 feet south and east of the Subject Property.
    b. Current Deficiencies:
        i. Golf Lane is a boundary street for the property and will need to be improved to Collector street standards along the Subject Property frontage at time of development.
        ii. This street will also serve as linking street from Cascade Highway SE to the Subject Property and will need to be improved to provide two-way vehicle traffic along the roadway, accommodate safe pedestrian movement to and from the Subject Property, and meet the emergency vehicle access requirements.
        iii. Per SMC 17.24.040, *development of one- and two-family dwellings where the number of dwelling units exceeds 30 … shall be provided with not less than two approved means of access.* Golf Lane is currently a dead-end street without secondary access or connectivity to any streets beside Cascade Highway SE. Development of the Subject Property will need to provide adequate emergency vehicle access and water supply in conformance with the SMC and with PWDS and Stayton Fire Department requirements.
    c. Transportation System Plan. Two projects for Golf Lane are listed in the current TSP, and may affect some of the requirements for future development of the Subject Property:
        i. Project M3 as listed is a proposed realignment of Golf Lane to Whitney Street at Cascade Highway, southeast of the Subject Property.
        ii. Project M7 as listed is an extension of Golf Lane west to and intersection with Golf Club Road, west of the Subject Property.
2. Internal Streets –The conceptual site plan submitted with the Application indicates that all of the proposed streets within the Subject Property will be Local streets within a 60-foot-wide right-of-way.
    a. Existing Conditions:
        i. None of the proposed streets currently exist.

ii. The nearest City intersection of Golf Lane and Cascade Highway SE is located approximately 1,000 feet south and east of the Subject Property.

iii. The next nearest City intersection is the intersection of Cascade Highway SE and Whitney Street and is located nearly 1,500 feet south and east of the Subject Property.

b. Transportation System Plan:

i. None of the streets shown in the conceptual site plan are listed in the current TSP.

Storm Drainage

Construction of a storm drainage system, including flow control, stormwater quality treatment, and extension of existing City storm infrastructure to serve the property, will be required at the time of development of the Subject Property. The proposed development may also be responsible for contributing a proportional share toward *Stormwater Master Pla*n capital improvements that benefit the Subject Property.

3. Existing Conditions:

a. The nearest available City storm system infrastructure is an unknown size and material City storm drain located in the intersection of Whitney Street and Cascade Highway SE, approximately 1,500 feet southeast of the Subject Property.

b. Mill Creek, a waterway within the City limits and also a ”water of the state” of Oregon, is located approximately 900 feet southeast of the Subject Property.

4. Current Deficiencies:

a. The Subject Property is not currently served by any City storm drainage infrastructure.

b. Some shallow localized drainage ditches exist along Golf Lane, but these do not connect to the City system or an approved discharge point as defined in the PWDS.

5. Stormwater Master Plan:

a. Per the *Stormwater Master Plan*, stormwater runoff from this property and any nearby storm drainage system drains to Mill Creek.

c. The current *Stormwater Master Plan* indicates an existing detention/retention basin located north and east of the Golf Lane SE/Cascade Highway SE intersection.

d. The *Stormwater Master Plan* also indicates that the existing wetland between Mill Creek, Cascade Highway SE, and Shaff Road SE shall be preserved as part of the Master Plan.

Water

At the time of development, construction of water system infrastructure, including extension of existing City water mains to serve the property, will be required. The proposed development may also be responsible for contributing a proportional share toward *Water Master Plan* capital improvements that benefit the Subject Property.

1. Existing Conditions:

a. No City water system infrastructure exists near the Subject Property.

2. Current Deficiencies:

a. The Subject Property is not currently served by any City water system infrastructure.

b. The Subject Property is located in the "Mill Creek Upper Pressure Service Area" as defined in the *Water Master Plan*. City water infrastructure to serve this Service Area does not exist at this time.

c. The nearest existing water system infrastructure is a 12-inch ductile iron City water main located in Whitney Street, approximately 120 feet from the Cascade Highway SE intersection, and approximately 1,500 feet southeast of the Subject Property. However, this water main provides service to the "Upper Pressure Zone" as defined in the *Water Master Plan* and is not available to serve the Subject Property.

d. Development of the Subject Property will need to provide adequate emergency water supply in conformance with SMC, PWDS and Stayton Fire Department requirements.

3. Water Master Plan:

a. The current *Water Master Plan* indicates a new "Mill Creek Booster Station" near the future intersection of Golf Lane and Cascade Highway, along with a 12-inch distribution main within Golf Lane from this Booster Station, ultimately extended to Kindle Way and Golf Club Road, are required to provide sufficient pressure and flows to this Service Area.

Sanitary Sewer

At the time of development, construction of sanitary sewer system infrastructure, including extension of existing City sewer mains to serve the property, will be required. The proposed development may also be responsible for contributing a proportional share toward *Wastewater Facilities Planning Study* capital improvements that benefit the Subject Property.

1. Existing Conditions

a. The Subject Property is located in the "Mill Creek Pump Station Basin" as defined in the *Wastewater Facilities Planning Study.*

a. The nearest available sanitary sewer system infrastructure is a 12-inch PVC City sewer main located in the intersection of Martin Drive and Cascade Highway SE, approximately 1,800 feet southeast of the Subject Property.

b. The next nearest available sanitary sewer system infrastructure is a 12-inch PVC City sewer main located in Golf Lane, approximately 2,300 feet northwest of the Subject Property.

2. Current Deficiencies:

a. The Subject Property is not currently served by any City sanitary sewer system infrastructure.

b. Proposed connection to any of the existing mains will require engineering calculations to demonstrate that the receiving main has capacity for all additional sanitary sewer flows.

3. Sewer Master Plan:

b. The current *Wastewater Facilities Planning Study* does not indicate any significant sanitary sewer system deficiencies in the nearby vicinity that will be impacted or could be improved by development of the Subject Property.

cc: Richard Walker, PE – City Engineer

From: Caleb Cox
To: Jennifer Siciliano
Cc: Susan Wright; Max Heller
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24
Date: Thursday, November 13, 2025 12:11:23 PM
Attachments: image001.png

Hi Jennifer,

As we started preparing the summary we noticed that I had misread queueing table in the Traffic Study... We had thought the 600' queue was for the Cascade Hwy/Whitney St intersection, but it is actually at the Cascade Hwy/Fern Ridge intersection. This changes the trajectory of our review, and means the development is likely fine to proceed without triggering the Golf Lane realignment. I'm very sorry for the confusion on this.

That being said, this Golf Lane realignment issue doesn't go away, this finding just kicks the can down the road to some future developer. I would still recommend a conversation with Marion County to talk through a long-term plan for how development will proceed once the thresholds for a signal are met. We're happy to participate in that conversation it you'd like.

Back to the KSD annexation, here are our revised comments on the traffic study:

1. We understand the application was revised to include only 74 homes rather than the originally proposed 94. It appears the TIA assumed the original 94. We'd like to request an updated analysis for the 74-home proposal. While the reduction in impact is likely small, it's important in this case to account for the trips as accurately as possible because of the restrictions placed on the Cascade Hwy/Golf Lane intersection. We want to make sure the City can reference this TIA when considering options for future development on Golf Lane.
2. We do not see an updated site plan for the 74-home proposal. If the site access will be changing, we would like to see an updated site plan to verify appropriate access and sight distance.
3. On Page 15, the TIA notes that the Cascade Hwy/Shaff Rd/Fern Ridge Rd intersection does not meet v/c standards but no mitigation is recommended because the intersection is under County jurisdiction and the development is being approved through the city's land use process. This assumption should be confirmed with Marion Conty before proceeding.

Thank you,

Caleb Cox, PE
Senior Engineer

Kittelson & Associates, Inc.
Transportation Engineering & Planning
503.228.5230
503.535.7453 (direct)

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Thursday, November 13, 2025 11:14 AM
To: Caleb Cox <ccox@kittelson.com>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: RE: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Sounds good. - Jennifer

From: Caleb Cox <ccox@kittelson.com>
Sent: Thursday, November 13, 2025 10:51 AM
To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Hi Jennifer,

We're happy to do that. We'll aim to have a written summary over to you by mid-next week.

Thanks!

Caleb Cox, PE
Senior Engineer

Kittelson & Associates, Inc.
Transportation Engineering & Planning
503.228.5230
503.535.7453 (direct)

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Thursday, November 13, 2025 8:58 AM
To: Caleb Cox <ccox@kittelson.com>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: RE: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Hello All,

We spoke about this application on October 23, 2025. Would you be able to write up a short summary comments to be shared at a Planning Commission meeting? Doesn't have to be a full memo; it can just be an email. The Public Hearing is being heard on November 24, 2025.

I have attached an AI summary and transcript if that will assist you.

Thank you,

Jennifer

From: Caleb Cox <ccox@kittelson.com>
Sent: Monday, October 20, 2025 7:24 PM
To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Hi Jennifer,

We've reviewed the TIA for the KSD Annexation on Golf Lane and our draft comments are listed below. **Before sending to the applicant, there are a couple items we'd like to discuss with you noted in red text.** Are you available this week to talk?

1. We understand the application was revised to include only 74 homes rather than the originally proposed 94. It appears the TIA assumed the original 94. We'd like to request an updated analysis for the 74-home proposal. While the reduction in impact is likely small, it's important in this case to account for the trips as accurately as possible because of the restrictions placed on the Cascade Hwy/Golf Lane intersection. We want to make sure the City can reference this TIA when considering options for future development on Golf Lane.

2. We do not see an updated site plan for the 74-home proposal. If the site access will be changing, we would like to see an updated site plan to verify appropriate access and sight distance.

3. The MOU between the City and County (see screen clip below) states, "Golf Lane may remain in its existing location at the time a signal is installed at Whitney Street provided that vehicle queues from the signal do not interfere with turning movements at Golf Lane and Golf Lane meets County standards for safety and operations." The queuing analysis shows the PM peak 95th percentile SBT queue is 600 feet. This extends well past the Golf lane intersection, presumably "interfering with turning movements" at Golf Lane. **Jennifer, This is a potential issue for the applicant, and something the City and County may need to weigh in on. Depending on how the MOU is interpreted, this could trigger the need for the Golf Lane realignment and therefore pause all development in the area until the realignment is complete.**

4. On Page 15, the TIA notes that the Cascade Hwy/Shaff Rd/Fern Ridge Rd intersection does not meet v/c standards but no mitigation is recommended because the intersection is under County jurisdiction and the development is being approved through the city's land use process. **Jennifer, can you please confirm whether this is correct? Does Marion County have authority to weigh in when a development potentially impacts one of their intersections?**

Screen clip from the MOU:

The CITY will cause the realignment of the east end of Golf Lane as designed in Kittelson & Associates recommended lane configuration and traffic control map (attachment "A" Figure 10, dated August 2001), to intersect Cascade Highway at such time Golf Lane warrants signalization or Golf Lane fails to meet COUNTY standards for safety and/or operations and as funds become available. Golf Lane may remain in its existing location at the time a signal is installed at Whitney Street provided that vehicle queues from the signal do not interfere with turning movements at Golf Lane and Golf Lane meets COUNTY standards for safety and operations. If one or more of the above conditions requiring realignment of Golf Lane are met, and funding for the realignment is not available, then the CITY will prohibit any further development on Golf Lane until the east end realignment is funded and completed.

Caleb Cox, PE
Senior Engineer

Kittelson & Associates, Inc.

Transportation Engineering & Planning

503.228.5230
503.535.7453 (direct)

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Monday, September 29, 2025 4:18 PM
To: Paul Hartmann <phartmann@santiamhospital.org>; Adam Kohler <Adam.Kohler@PacifiCorp.com>; breich@co.marion.or.us <breich@co.marion.or.us>; Brent Stevenson <BrentS@santiamwater.gov>; brian.kelley@nwnatural.com <brian.kelley@nwnatural.com>; Caleb Cox <ccox@kittelson.com>; Christopher Clark <Christopher.clark@pacificorp.com>; dfreitag@santiamhospital.org <dfreitag@santiamhospital.org>; Doug Kintz <doug.kintz@staytonfire.org>; Erik Hoefer <erik@sctcweb.com>; Gwen Johns <gjohns@staytonoregon.gov>; Janelle Shanahan <jshanahan@co.marion.or.us>; Jay Alley <jay.alley@staytonfire.org>; John Eckis <johneckis@sctcweb.com>; John Rasmussen <jrasmussen@co.marion.or.us>; Kendall Smith <ksmith@staytonoregon.gov>; kinman@co.marion.or.us <kinman@co.marion.or.us>; Lee Loving <lee.loving@nsantiam.k12.or.us>; Max Heller <mheller@kittelson.com>; Max Hepburn <mhepburn@co.marion.or.us>; MCPW Engineering <mcldep@co.marion.or.us>; Michael Schmidt <mschmidt@staytonoregon.gov>; Nicole Willis <nicole.willis@pacificorp.com>; oregonconstruction@wavebroadband.com <oregonconstruction@wavebroadband.com>; planning@co.marion.or.us <planning@co.marion.or.us>; Richard Walker (richardw@aks-eng.com) <richardw@aks-eng.com>; rlee@waveboardband.com <rlee@waveboardband.com>; Salem Development Services <developmentservices@cityofsalem.net>; Susan Wright <swright@kittelson.com>; Troy Wheeler <twheeler@co.marion.or.us>; Wayne.clevenger@pacificorp.com <Wayne.clevenger@pacificorp.com>
Cc: Susan Bender <sbender@staytonoregon.gov>
Subject: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

[External Sender]

The City of Stayton has received an application for a proposal to annex a parcel approximately 20.5 acres, located on the west side of Golf Lane (Tax Lot 091W03B001500), to be incorporated into the city as Medium Density (MD) Residential zoning.

The application and narrative package can be accessed at: https://www.staytonoregon.gov/upload/page/0080/KSD%20Stayton%20Annexation%20Narrative%20Package.pdf A revised narrative package is available at: https://www.staytonoregon.gov/upload/page/0080/BRAND%20Response%20to%20Incomplete%20Letter_.pdf The original application proposed annexation as High Density (HD) Residential with the potential for 92 single-family units. Because single-family units are not permitted in the HD Residential zone, the applicant was advised to revise their proposal. The updated application now requests Medium Density (MD) Residential zoning, with the potential for 74 single-family units.

I have attached our usual request for comments form.

Please send responses by **October 20, 2025**.

Thank you for your assistance.

Jennifer Siciliano, AICP

Community and Economic Development Director

311 N. 3rd Ave

Stayton, OR 97383

Phone 503-769-2998

From: John Rasmussen
To: Jennifer Siciliano
Subject: Golf Ln Annexation
Date: Tuesday, October 21, 2025 2:35:26 PM
Attachments: image001.png

Hi Jennifer,

I consulted with our Transportation Planner Janelle Shanahan who reviewed the TIA, and we have no specific comment for the case. However, we will likely have comment during a future SPR step. Thanks for copying us.

Marion County
OREGON

John Rasmussen, PE | Civil Engineer Associate 3
Land Development Engineering & Permits
Engineering Division, Marion County Public Works
jrasmussen@co.marion.or.us
☎ (503) 584-7706 (office)

From: Jay Alley
To: Jennifer Siciliano
Subject: RE: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24
Date: Tuesday, September 30, 2025 3:26:52 PM

Hi Jennifer;

Is this from the same group that came with the original proposal a while back? I read this application is just for annexation, correct? If so the fire district has no comment at this time.

Jay Alley
Fire Chief
Stayton Fire District
Office 503-769-2601
Cell 503-932-7805
Jay.alley@staytonfire.org

"TO PROVIDE OUTSTANDING SERVICE WITH COMMITMENT TO SAVING LIVES AND PROPERTY"

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Monday, September 29, 2025 4:18 PM
To: Paul Hartmann <phartmann@santiamhospital.org>; Adam Kohler <Adam.Kohler@PacifiCorp.com>; breich@co.marion.or.us; Brent Stevenson <BrentS@santiamwater.gov>; brian.kelley@nwnatural.com; Caleb Cox <ccox@kittelson.com>; Christopher Clark <Christopher.clark@pacificorp.com>; dfreitag@santiamhospital.org; Doug Kintz <Doug.Kintz@staytonfire.org>; Erik Hoefer <erik@sctcweb.com>; Gwen Johns <gjohns@staytonoregon.gov>; Janelle Shanahan <jshanahan@co.marion.or.us>; Jay Alley <Jay.Alley@staytonfire.org>; John Eckis <johneckis@sctcweb.com>; John Rasmussen <jrasmussen@co.marion.or.us>; Kendall Smith <ksmith@staytonoregon.gov>; kinman@co.marion.or.us; Lee Loving <lee.loving@nsantiam.k12.or.us>; Max Heller <mheller@kittelson.com>; Max Hepburn <mhepburn@co.marion.or.us>; MCPW Engineering <mcldep@co.marion.or.us>; Michael Schmidt <mschmidt@staytonoregon.gov>; Nicole Willis <nicole.willis@pacificorp.com>; oregonconstruction@wavebroadband.com; planning@co.marion.or.us; Richard Walker (richardw@aks-eng.com) <richardw@aks-eng.com>; rlee@waveboardband.com; Salem Development Services <developmentservices@cityofsalem.net>; Susan Wright <swright@kittelson.com>; Troy Wheeler <twheeler@co.marion.or.us>; Wayne.clevenger@pacificorp.com
Cc: Susan Bender <sbender@staytonoregon.gov>
Subject: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

The City of Stayton has received an application for a proposal to annex a parcel approximately 20.5 acres, located on the west side of Golf Lane (Tax Lot 091W03B001500), to be incorporated into the city as Medium Density (MD) Residential zoning.

The application and narrative package can be accessed at: https://www.staytonoregon.gov/upload/page/0080/KSD%20Stayton%20Annexation%20Narrative%20Package.pdf A revised narrative package is available at: https://www.staytonoregon.gov/upload/page/0080/BRAND%20Response%20to%20Incomplete%20Letter_.pdf The original application proposed annexation as High Density (HD) Residential with the potential for 92 single-family units. Because single-family units are not permitted in the HD Residential zone, the applicant was advised to revise their proposal. The updated application now requests Medium Density (MD) Residential zoning, with the potential for 74 single-family units.

I have attached our usual request for comments form.

Please send responses by **October 20, 2025**.

Thank you for your assistance.

Jennifer Siciliano, AICP
Community and Economic Development Director

311 N. 3rd Ave
Stayton, OR 97383
Phone 503-769-2998

From: gomolls@wvi.com
To: Jennifer Siciliano
Cc: cargon55@gmail.com; aaronfrichel@gmail.com; rjbmitch@gmail.com
Subject: Re: Land Use File #5-02/24
Date: Monday, November 17, 2025 5:14:56 PM
Attachments: Technical Comment Letter.pdf

Hello Ms Siciliano, I have attached a document that I would like to be included in the packet that goes to the city Commissioners for their review prior to the November 24 meeting. I would also appreciate the opportunity to speak to the Commissioners concerning this annexation.

Thank you,

Carl Gomoll
12174 Golf Lane SE
Sublimity, OR 97385
503.930.5173

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Thursday, November 13, 2025 4:26 PM
To: gomolls@wvi.com <gomolls@wvi.com>
Subject: RE: Land Use File #5-02/24

Hello Carl,

You may find the relevant documents for the annexation on the Planning Commission's webpage under "Public Hearings" and under the November 24, 2025, meeting. Here are direct links to Revised Narrative Package (incomplete application response) dated July 15, 2025 (https://www.staytonoregon.gov/page/open/5842/0/BRAND_Response_to_Incomplete_Letter_.pdf.pdf) , and the previous submittal dated March 26, 2025 (https://www.staytonoregon.gov/page/open/5842/0/KSD_Stayton_Annexation_Narrative_Package.pdf).

Staff documents are usually available on Monday (11/17/2025) evening and will be posted on the same webpage under "Public Hearings" under the Land Use File #5-02/24.

Sincerely,

Jennifer Siciliano, AICP
Community and Economic Development Director

311 N. 3rd Ave
Stayton, OR 97383
Phone 503-769-2998

From: gomolls@wvi.com <gomolls@wvi.com>
Sent: Thursday, November 13, 2025 1:25 PM
To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Subject: Land Use File #5-02/24

Dear J Siciliano,

Date: November 17, 2025
To: City of Stayton Planning Commission & City Council
Subject: Technical Comment Letter – Proposed Annexation & Subdivision of Tax Lot 091W03B001500 (KSD Properties, LLC Development)
From: Golf Lane SE Residents' Coalition

1 Summary

We respectfully oppose—or, in the alternative, ask that you heavily condition—the proposed annexation and 74-lot subdivision because it conflicts with the Transportation System Plan (TSP), Storm-Water Master Plan (SWMP), Comprehensive Plan (Comp Plan), and Economic Development Strategy (EDS). The project would shift long-term costs and risks onto existing residents while yielding few citywide benefits.

2 Transportation Findings

- **New peak-hour traffic.** KSD Properties, LLC's Transportation Impact Analysis (TIA) forecasts 69 a.m. and 92 p.m. peak-hour trips for the subdivision. We are not sure if this considers the current 15 households on Golf Lane.

- **Current loads are already high.** The City's Transportation System Plan (TSP) counts show 1,000-1,800 vehicles each peak hour at the four Cascade Hwy intersections that "book-end" Golf Lane. The above increase would amount to approximately 6% more volume.

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- **System at capacity.** The SWMP states that "high runoff volumes tax the existing system beyond capacity; flooding and ponding are common" (SWMP p. 4-12). Ultimately 45% of Stayton Storm Water Sheds drain to Mill Creek, Lucas Ditch and Mill Creek basin (SWMP p. 2.7). The subdivision's 21 acres of runoff will fill another ditch to the northwest which was never intended for this use that will add more runoff to Mill Creek. Mill Creek floods twice or more a year currently within the Mill Creek Basin. The additional runoff could cause more flooding and failures to current septic's and wells. The application does not site detentions or swales.

- **Mill Creek Basin.** Basins 11, 15C, 15B and 19 do not have enough cover above the water table to reasonably collect runoff from other upstream basins, therefore local detention is the best option for this basin. The city currently has a policy of requiring onsite detention for redevelopment that would affect this basin.

- **Missing downstream model.** City design standards require hydraulic analysis through the 100-year event; no such study accompanies the proposal.

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- **Water extension cost.** The nearest 12-inch main is 2,100 ft south of Golf Ln at Cascade Hwy & Whitney St; an extension plus booster station is unbudgeted

- **Future assessments.** If Golf Lane is later annexed, owners may be required to abandon wells and septic's and pay system-development charges.

5 Housing, Residential Saturation & Socio-Economic Considerations

- **Zoning & Density.** The proposed subdivision adds 74 new urban lots with streetlights, sidewalks, and curb-and-gutter infrastructure, which will alter the semi-rural character of the surrounding properties.

- **Rapid housing build-out.** Stayton has added 74 apartments (2023) and 100 apartments (2024), with 74 more single-family lots now proposed—a net gain of 248 dwellings in two years (Building Permit Log 2023-24).

- **Job stagnation.** The TSP employment analysis shows total jobs declined from 2005 to 2020 and remain below 2005 levels. The City's Economic Development Strategy cites *"lack of job growth"* and *"lack of new commercial investment"* as top weaknesses.

- **Commuter pressure.** More homes without parallel job creation will drive up-valley commuting, aggravating peak-hour congestion at Cascade Hwy and on the future Golf Lane collector.

- **Economic mismatch.** Additional units risk a higher proportion of lower-income households without a corresponding rise in family-wage employment or commercial tax base.

- **Public-service burden.** Residential growth that outpaces employment growth leaves the City reliant on existing homeowners to fund major projects—e.g., the $8.2 million collector upgrade and regional storm-water pipes.

6 Consistency Matrix

Adopted Policy / Goal	Citation	Consistency Issue
Natural Resources	Comp Plan Goal NR-2 – Minimize flood damage	No downstream flood study; ditch discharge may raise twice-annual floods.
Economic Development	EDS Goal 1 – Increase family-wage jobs	Housing growth outpaces stagnant job base; no mitigation.

Adopted Policy / Goal	Citation	Consistency Issue
Transportation	TSP – Safe multimodal network	$8.2 M collector & $3.3 M realignment unfunded; safety degraded.

7 Requested Conditions (or Grounds for Denial)

1. **Transportation** – Developer must dedicate right-of-way and fund a proportionate share of the $8.2 M collector upgrade and the $3.3M Cascade Hwy intersection improvements before final plat.

    - **Post-occupancy checks at Golf Lane/Cascade Hwy**
    -
    - **.** Within 6–12 months of full occupancy and again at 24 months, require turning-movement counts and an HCM two-way-stop update that shows the north–south Cascade Hwy volumes used, the side-street delay/LOS, and v/c (AM/PM, no-build vs. build). If PM delay exceeds LOS E/F on two consecutive counts or MUTCD signal warrants are met, initiate the realignment scoping and assign proportionate share.

    - **Document the corridor realities in the record.** Add a short memo confirming RTOR permissions at Whitney/Cascade and OR-22 EB/Cascade and the posted 45-mph segment, and to explain how these factors reduce usable gaps for Golf Lane (with the HCM inputs noted above).

    - **Pilot "gap-creation" operations (with ODOT/County).** Prepare a ready-to-use pilot for peak-hour "No Turn on Red" at one or both signals and minor coordination retuning to deliver short gap windows downstream. Measure before/after gaps at Golf Lane, side-street delay, and queues at the signals to confirm no adverse effects. (The interchange plan already calls for signal coordination on Cascade Hwy due to close spacing.)

    - **Speed/arrival review.** Coordinate a speed-zone/arrival check between Whitney and Golf Lane; consider speed-feedback or minor progression tweaks that slightly lengthen headways without degrading corridor progression.

    - **Frontage & access.** With subdivision build-out, complete standard frontage along Golf Lane (bike lanes/planter strips/sidewalks) and a Construction Traffic Management Plan to avoid peak-hour adds at Golf Lane/Cascade.

- **Trip-distribution transparency.** Place the study's trip generation and distribution in the record and compare observed routing in monitoring reports; if more site traffic uses Golf Lane than assumed, update the HCM results and mitigation accordingly.

2. **Storm-Water** – Provide a Mill Creek-based hydraulic model; construct on-site detention for the post-development 100-year storm with recorded maintenance covenants.

3. **Utilities** – Record a covenant barring forced utility hookups, assessments, or annexation of existing Golf Lane properties without written consent from land owners.

4. **Phasing** – Limit building permits to 20 until off-site infrastructure—collector improvements, water main, and regional storm facilities—is fully operational and accepted by the City.

8 Conclusion

Because the application conflicts with multiple adopted plans—and would shift long-term traffic, flooding, and fiscal burdens onto existing homeowners—we request denial of File #5-02/24 or, at minimum, the imposition of the protective conditions above.

9 References

1. **TIA** – Brand Transportation Impact Analysis (KSD Properties, Jul 2025).
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3. **SWMP** – Stayton Storm-Water Master Plan (Adopted 2021).
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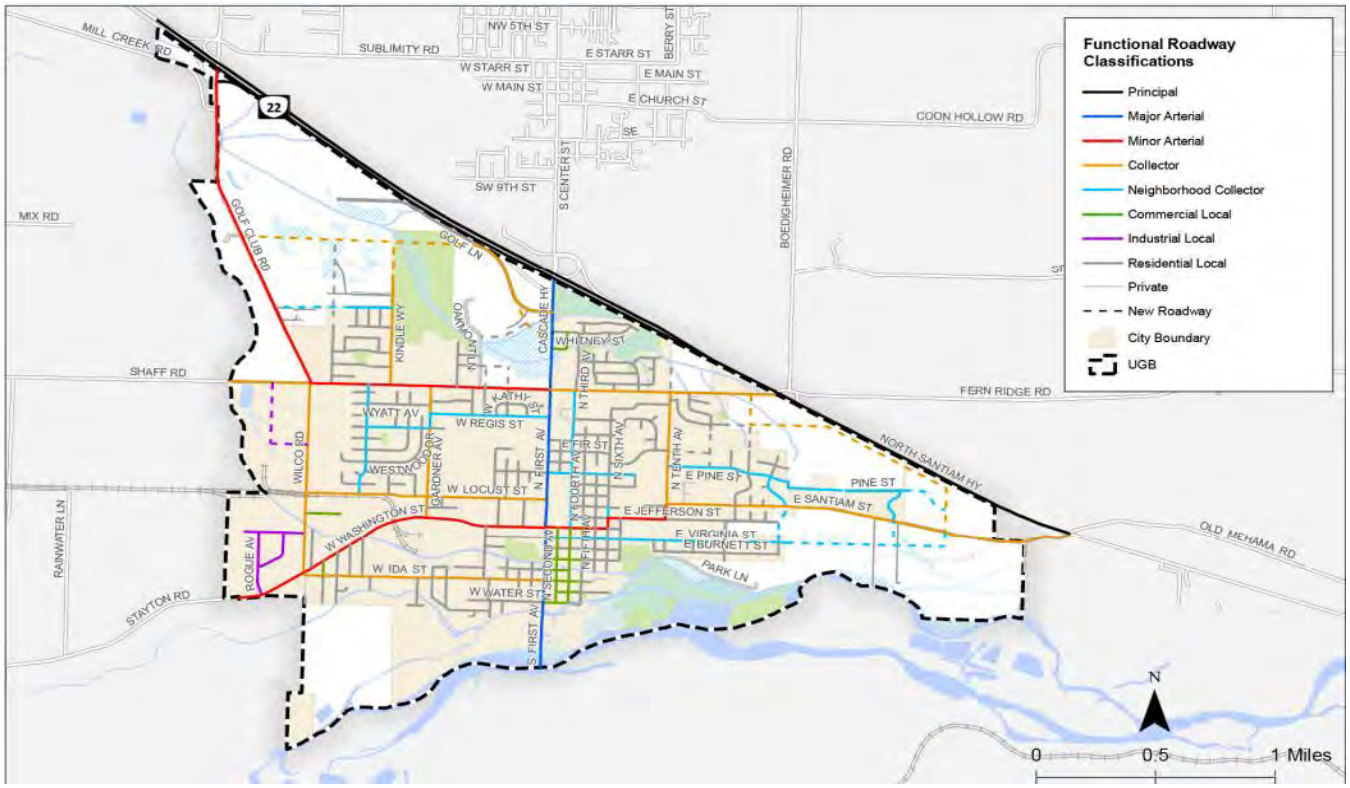
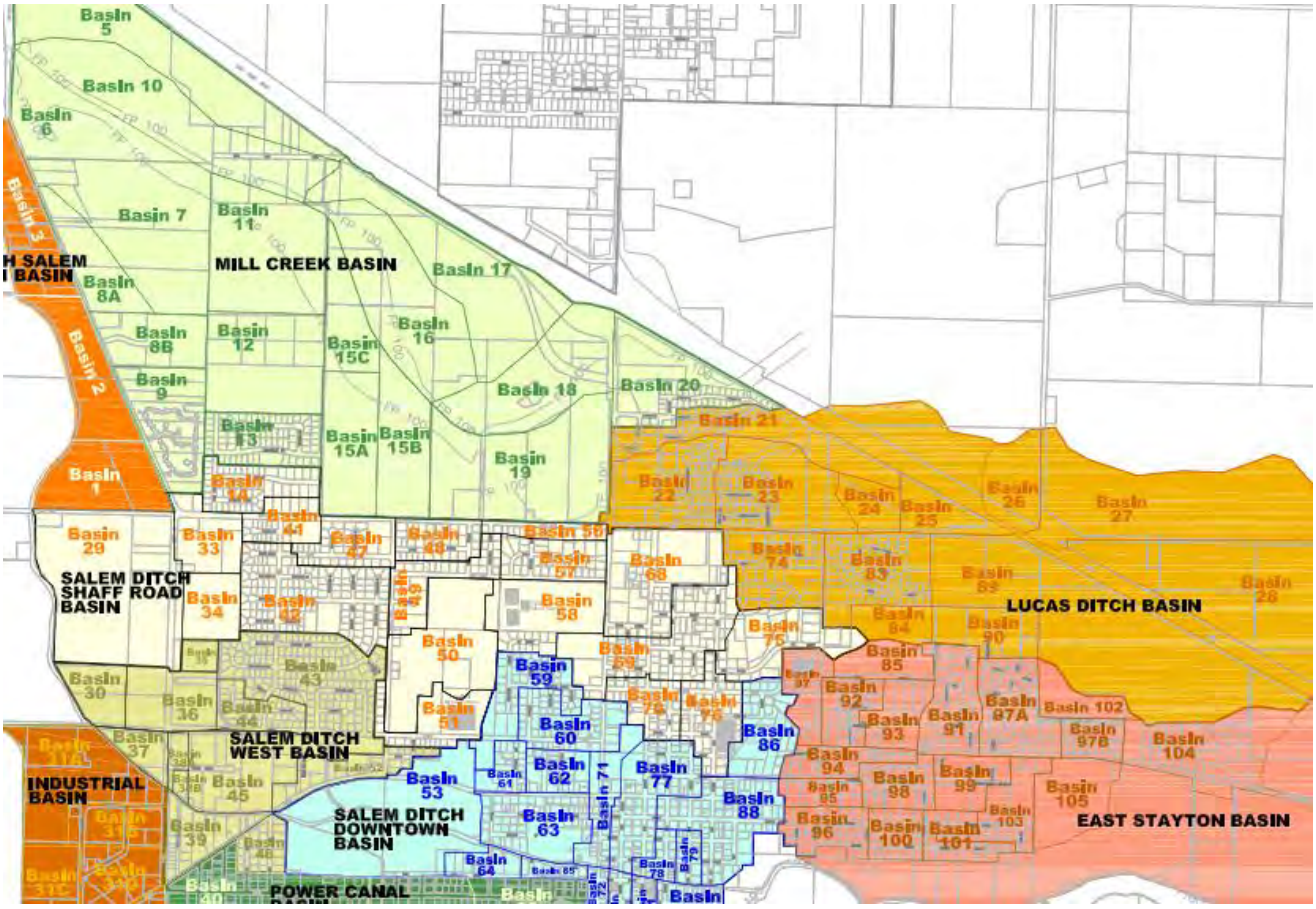
10. **Building Permit Log** (2023-2024)

Prepared for submission by the Golf Lane SE Residents' Coalition.

Figure 8. Roadway Functional Classification Map

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POWER CANAL

Date: November 17, 2025
To: City of Stayton Planning Commission & City Council
Subject: Technical Comment Letter – Proposed Annexation & Subdivision of Tax Lot 091W03B001500 (KSD Properties, LLC Development)
From: Golf Lane SE Residents' Coalition

1 Summary

We respectfully oppose—or, in the alternative, ask that you heavily condition—the proposed annexation and 74-lot subdivision because it conflicts with the Transportation System Plan (TSP), Storm-Water Master Plan (SWMP), Comprehensive Plan (Comp Plan), and Economic Development Strategy (EDS). The project would shift long-term costs and risks onto existing residents while yielding few citywide benefits.

2 Transportation Findings

- **New peak-hour traffic.** KSD Properties, LLC's Transportation Impact Analysis (TIA) forecasts 69 a.m. and 92 p.m. peak-hour trips for the subdivision. We are not sure if this considers the current 15 households on Golf Lane.

- **Current loads are already high.** The City's Transportation System Plan (TSP) counts show 1,000-1,800 vehicles each peak hour at the four Cascade Hwy intersections that "book-end" Golf Lane. The above increase would amount to approximately 6% more volume.

- **Applicant's Transportation Impact Analysis (TIA)**. This evaluates 2028 operations with and without the project. At Golf Lane/Cascade Hwy (two-way stop control on Golf Lane), the PM peak goes from a delay of 29.9 seconds (LOS D) and v/c ≈ 0.17 (No-Build Project) to a delay of 37.0 seconds (LOS E) and v/c ≈ 0.21 (Build Project). In plain terms: longer average waits for Golf Lane drivers, even though the movement's v/c remains low on Golf Lane. The applicant's narrative reiterates that signal warrants are not met at Golf Lane and that realignment is not yet warranted under current forecasts.

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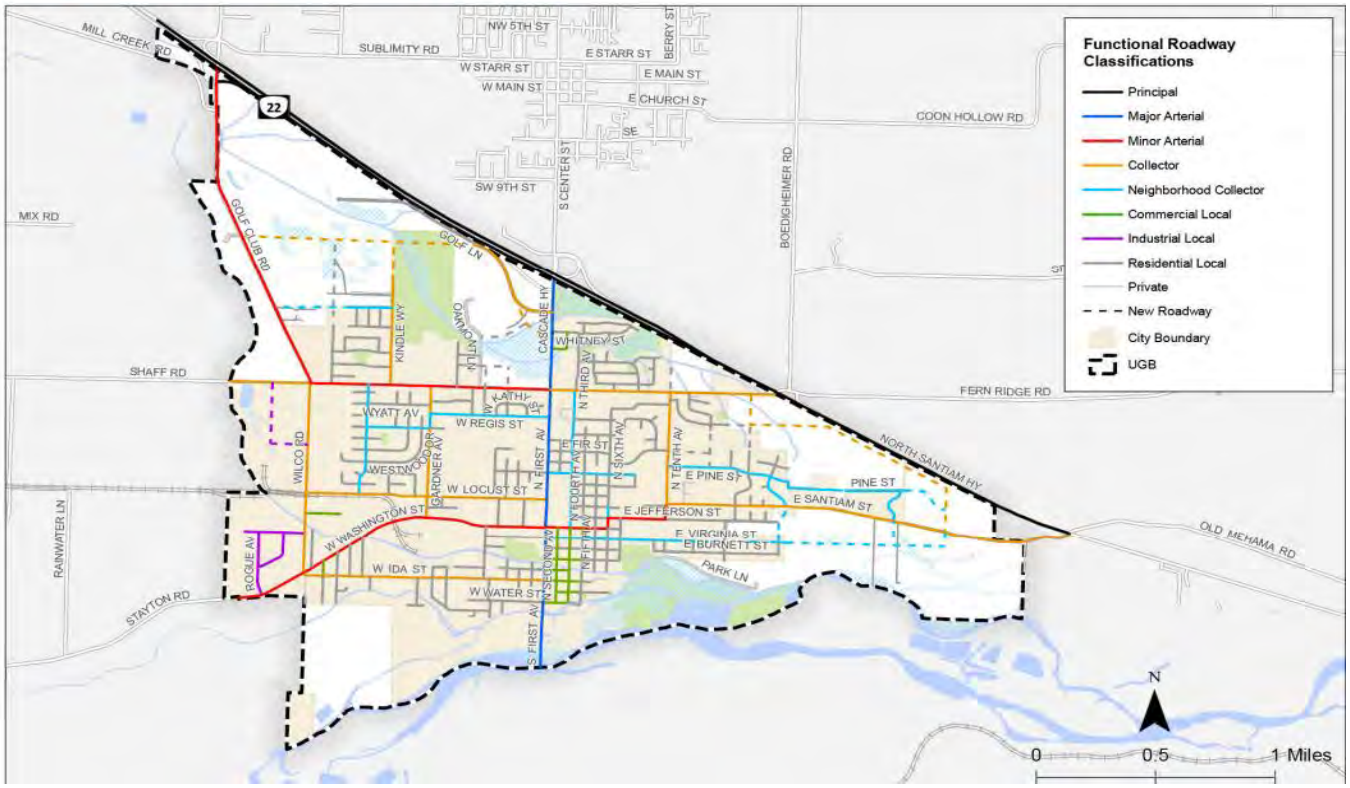

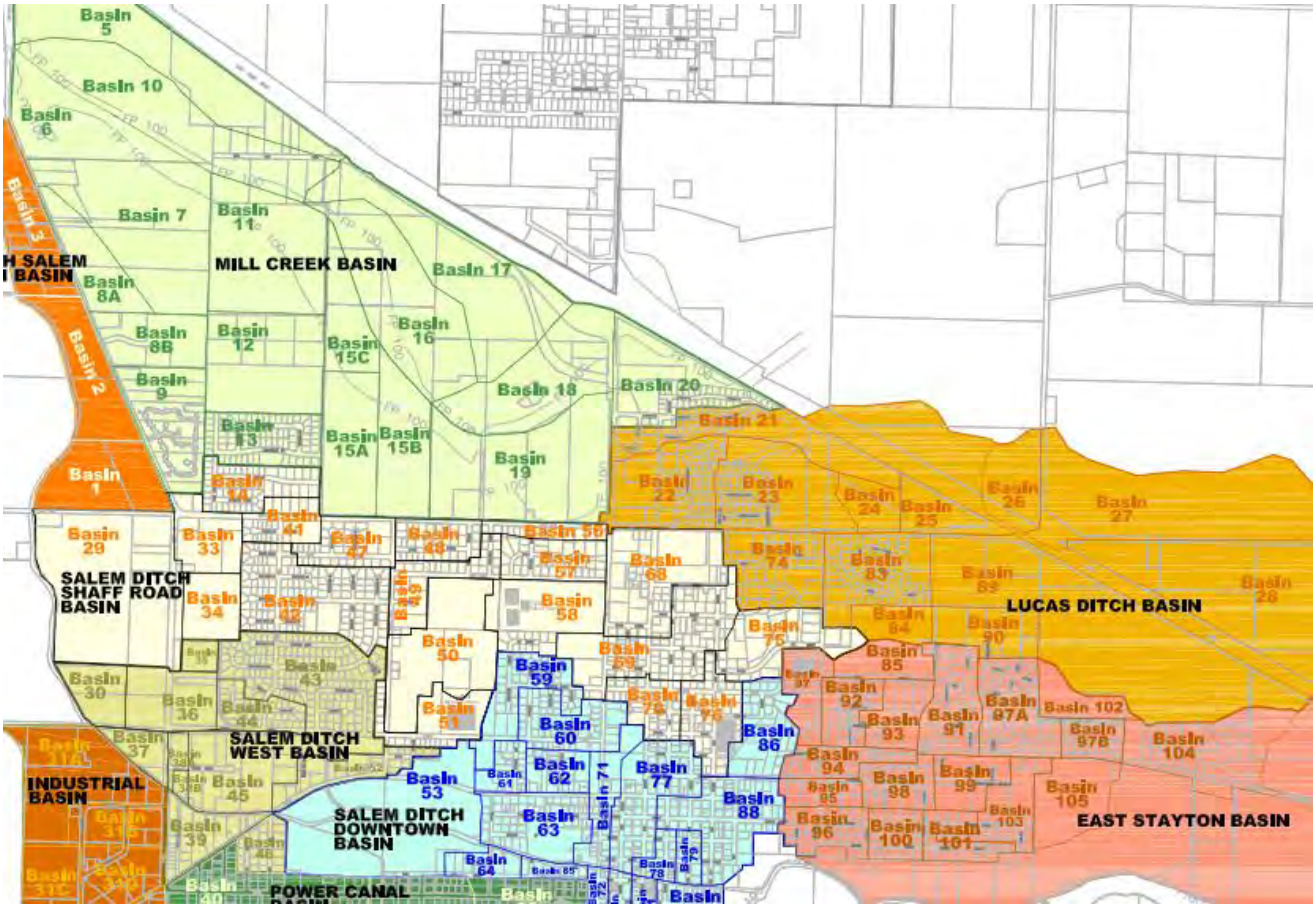
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SALEM DITCH WEST BASIN
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Basin 86
Basin 104
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Basin 45
Basin 62
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SALEM DITCH DOWNTOWN BASIN
Basin 63
Basin 96
Basin 100
Basin 101
Basin 103
EAST STAYTON BASIN
Basin 64
Basin 78
POWER CANAL

From: Carlos Gonzales
To: Jennifer Siciliano
Subject: Re: Land use file # 5-02/24
Date: Wednesday, November 12, 2025 6:54:08 PM

My name is Carlos Gonzales. My wife and I have lived at 12173 Golf Lane for 20 years
I may not be unable to attend the meeting on 11/24 but would like to express my concerns. There are several properties beyond the area that is looking to be developed .
Here are some of my concerns.
1. How is the additional traffic from the new homes going to be addressed? At times getting onto Cascade Highway at Golf lane can take several minutes especially if turning left.
2. With the addition of 74 homes what is the expectation of water runoff into the creek and the potential for increased flooding.
Has a flood impact study been completed or will one be conducted ?
3. What is the expected increase in traffic to the end of Golf Lane? The last 1/2 mile or so is a private unimproved road that is maintained by its property owners.
4. Where will the utilities (water, sewer, electricity etc.) of the newly developed property come from? Will it come from a newly developed road connecting Golf Lane to Whitney Rd or somewhere else?
If I have any additional concerns I will be sure to let you know.

Carlos

> On Nov 10, 2025, at 4:36 PM, Jennifer Siciliano <jsiciliano@staytonoregon.gov> wrote:
>
> This property is within the Urban Growth Boundary for Stayton, but not in the City limits. The current zone is UT-20. - Jennifer
>
> -----Original Message-----
> From: Carlos Gonzales <ccgonzales@hotmail.com>
> Sent: Monday, November 10, 2025 3:52 PM
> To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
> Subject: Land use file # 5-02/24
>
> CAUTION: This email originated from Outside Your Organization. Exercise caution when opening attachments or on clicking links from unknown senders. Please contact Information Technology for assistance.
>
>
>
>
>
> Is this property currently within Stayton city limits or its growth boundary? Also, what is its current zoning designation ?
> Carlos

From: Caleb Cox
To: Jennifer Siciliano
Cc: Susan Wright; Max Heller
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24
Date: Thursday, November 13, 2025 12:11:23 PM
Attachments: image001.png

Hi Jennifer,

As we started preparing the summary we noticed that I had misread queueing table in the Traffic Study... We had thought the 600' queue was for the Cascade Hwy/Whitney St intersection, but it is actually at the Cascade Hwy/Fern Ridge intersection. This changes the trajectory of our review, and means the development is likely fine to proceed without triggering the Golf Lane realignment. I'm very sorry for the confusion on this.

That being said, this Golf Lane realignment issue doesn't go away, this finding just kicks the can down the road to some future developer. I would still recommend a conversation with Marion County to talk through a long-term plan for how development will proceed once the thresholds for a signal are met. We're happy to participate in that conversation it you'd like.

Back to the KSD annexation, here are our revised comments on the traffic study:

1. We understand the application was revised to include only 74 homes rather than the originally proposed 94. It appears the TIA assumed the original 94. We'd like to request an updated analysis for the 74-home proposal. While the reduction in impact is likely small, it's important in this case to account for the trips as accurately as possible because of the restrictions placed on the Cascade Hwy/Golf Lane intersection. We want to make sure the City can reference this TIA when considering options for future development on Golf Lane.
2. We do not see an updated site plan for the 74-home proposal. If the site access will be changing, we would like to see an updated site plan to verify appropriate access and sight distance.
3. On Page 15, the TIA notes that the Cascade Hwy/Shaff Rd/Fern Ridge Rd intersection does not meet v/c standards but no mitigation is recommended because the intersection is under County jurisdiction and the development is being approved through the city's land use process. This assumption should be confirmed with Marion Conty before proceeding.

Thank you,

Caleb Cox, PE
Senior Engineer

Kittelson & Associates, Inc.
Transportation Engineering & Planning
503.228.5230
503.535.7453 (direct)

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Thursday, November 13, 2025 11:14 AM
To: Caleb Cox <ccox@kittelson.com>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: RE: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Sounds good. - Jennifer

From: Caleb Cox <ccox@kittelson.com>
Sent: Thursday, November 13, 2025 10:51 AM
To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Hi Jennifer,

We're happy to do that. We'll aim to have a written summary over to you by mid-next week.

Thanks!

Caleb Cox, PE
Senior Engineer

Kittelson & Associates, Inc.
Transportation Engineering & Planning
503.228.5230
503.535.7453 (direct)

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Thursday, November 13, 2025 8:58 AM
To: Caleb Cox <ccox@kittelson.com>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: RE: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Hello All,

We spoke about this application on October 23, 2025. Would you be able to write up a short summary comments to be shared at a Planning Commission meeting? Doesn't have to be a full memo; it can just be an email. The Public Hearing is being heard on November 24, 2025.

I have attached an AI summary and transcript if that will assist you.

Thank you,

Jennifer

From: Caleb Cox <ccox@kittelson.com>
Sent: Monday, October 20, 2025 7:24 PM
To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Cc: Susan Wright <swright@kittelson.com>; Max Heller <mheller@kittelson.com>
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

Hi Jennifer,

We've reviewed the TIA for the KSD Annexation on Golf Lane and our draft comments are listed below. **Before sending to the applicant, there are a couple items we'd like to discuss with you noted in red text.** Are you available this week to talk?

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Senior Engineer

Kittelson & Associates, Inc.

Transportation Engineering & Planning

503.228.5230
503.535.7453 (direct)

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Sent: Monday, September 29, 2025 4:18 PM
To: Paul Hartmann <phartmann@santiamhospital.org>; Adam Kohler <Adam.Kohler@PacifiCorp.com>; breich@co.marion.or.us <breich@co.marion.or.us>; Brent Stevenson <BrentS@santiamwater.gov>; brian.kelley@nwnatural.com <brian.kelley@nwnatural.com>; Caleb Cox <ccox@kittelson.com>; Christopher Clark <Christopher.clark@pacificorp.com>; dfreitag@santiamhospital.org <dfreitag@santiamhospital.org>; Doug Kintz <doug.kintz@staytonfire.org>; Erik Hoefer <erik@sctcweb.com>; Gwen Johns <gjohns@staytonoregon.gov>; Janelle Shanahan <jshanahan@co.marion.or.us>; Jay Alley <jay.alley@staytonfire.org>; John Eckis <johneckis@sctcweb.com>; John Rasmussen <jrasmussen@co.marion.or.us>; Kendall Smith <ksmith@staytonoregon.gov>; kinman@co.marion.or.us <kinman@co.marion.or.us>; Lee Loving <lee.loving@nsantiam.k12.or.us>; Max Heller <mheller@kittelson.com>; Max Hepburn <mhepburn@co.marion.or.us>; MCPW Engineering <mcldep@co.marion.or.us>; Michael Schmidt <mschmidt@staytonoregon.gov>; Nicole Willis <nicole.willis@pacificorp.com>; oregonconstruction@wavebroadband.com <oregonconstruction@wavebroadband.com>; planning@co.marion.or.us <planning@co.marion.or.us>; Richard Walker (richardw@aks-eng.com) <richardw@aks-eng.com>; rlee@waveboardband.com <rlee@waveboardband.com>; Salem Development Services <developmentservices@cityofsalem.net>; Susan Wright <swright@kittelson.com>; Troy Wheeler <twheeler@co.marion.or.us>; Wayne.clevenger@pacificorp.com <Wayne.clevenger@pacificorp.com>
Cc: Susan Bender <sbender@staytonoregon.gov>
Subject: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

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I have attached our usual request for comments form.

Please send responses by **October 20, 2025**.

Thank you for your assistance.

Jennifer Siciliano, AICP

Community and Economic Development Director

311 N. 3rd Ave

Stayton, OR 97383

Phone 503-769-2998

From: Susan Wright
To: Jennifer Siciliano; Caleb Cox
Cc: Max Heller
Subject: RE: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24
Date: Thursday, December 4, 2025 8:39:55 PM
Attachments: image001.png

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To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
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Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

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Cc: Max Heller
Subject: Re: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24
Date: Thursday, December 4, 2025 9:30:00 PM
Attachments: image001.png
TM3 - Existing and Future Conditions.pdf
Appendix E - Population and Employment Forecast.pdf

Jennifer,

Here is the tech memo and relevant appendix that Susie mentioned. The section describing the future growth assumptions begins on page 34.

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From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Monday, September 29, 2025 4:18 PM
To: Paul Hartmann <phartmann@santiamhospital.org>; Adam Kohler <Adam.Kohler@PacifiCorp.com>; breich@co.marion.or.us <breich@co.marion.or.us>; Brent Stevenson <BrentS@santiamwater.gov>; brian.kelley@nwnatural.com <brian.kelley@nwnatural.com>; Caleb Cox <ccox@kittelson.com>; Christopher Clark <Christopher.clark@pacificorp.com>; dfreitag@santiamhospital.org <dfreitag@santiamhospital.org>; Doug Kintz <doug.kintz@staytonfire.org>; Erik Hoefer <erik@sctcweb.com>; Gwen Johns <gjohns@staytonoregon.gov>; Janelle Shanahan <jshanahan@co.marion.or.us>; Jay Alley <jay.alley@staytonfire.org>; John Eckis <johneckis@sctcweb.com>; John Rasmussen <jrasmussen@co.marion.or.us>; Kendall Smith <ksmith@staytonoregon.gov>; kinman@co.marion.or.us <kinman@co.marion.or.us>; Lee Loving <lee.loving@nsantiam.k12.or.us>; Max Heller <mheller@kittelson.com>; Max Hepburn <mhepburn@co.marion.or.us>; MCPW Engineering <mcldep@co.marion.or.us>; Michael Schmidt <mschmidt@staytonoregon.gov>; Nicole Willis <nicole.willis@pacificorp.com>; oregonconstruction@wavebroadband.com <oregonconstruction@wavebroadband.com>; planning@co.marion.or.us <planning@co.marion.or.us>; Richard Walker (richardw@aks-eng.com) <richardw@aks-eng.com>; rlee@waveboardband.com <rlee@waveboardband.com>; Salem Development Services <developmentservices@cityofsalem.net>; Susan Wright <swright@kittelson.com>; Troy Wheeler <twheeler@co.marion.or.us>; Wayne.clevenger@pacificorp.com <Wayne.clevenger@pacificorp.com>
Cc: Susan Bender <sbender@staytonoregon.gov>
Subject: Request for Comments on Annexation 20.5 acres off Golf Lane - LU # 5-02/24

[External Sender]

The City of Stayton has received an application for a proposal to annex a parcel approximately 20.5 acres, located on the west side of Golf Lane (Tax Lot 091W03B001500), to be incorporated into the city as Medium Density (MD) Residential zoning.

The application and narrative package can be accessed at:

https://www.staytonoregon.gov/upload/page/0080/KSD%20Stayton%20Annexation%20Narrative%20Package.pdf A revised narrative package is available at: https://www.staytonoregon.gov/upload/page/0080/BRAND%20Response%20to%20Incomplete%20Letter_.pdf The original application proposed annexation as High Density (HD) Residential with the potential for 92 single-family units. Because single-family units are not permitted in the HD Residential zone, the applicant was advised to revise their proposal. The updated application now requests Medium Density (MD) Residential zoning, with the potential for 74 single-family units.

I have attached our usual request for comments form.

Please send responses by **October 20, 2025**.

Thank you for your assistance.

Jennifer Siciliano, AICP

Community and Economic Development Director

311 N. 3rd Ave

Stayton, OR 97383

Phone 503-769-2998

TECHNICAL MEMORANDUM #3

Date: October 9, 2018 Project #: 22352

To: Lance Ludwick and Dan Fleishman (City of Stayton)

From: Susan Wright, PE (Kittelson & Associates, Inc.)
Darci Rudzinski (Angelo Planning Group)

Subject: Existing and Future Conditions Memo

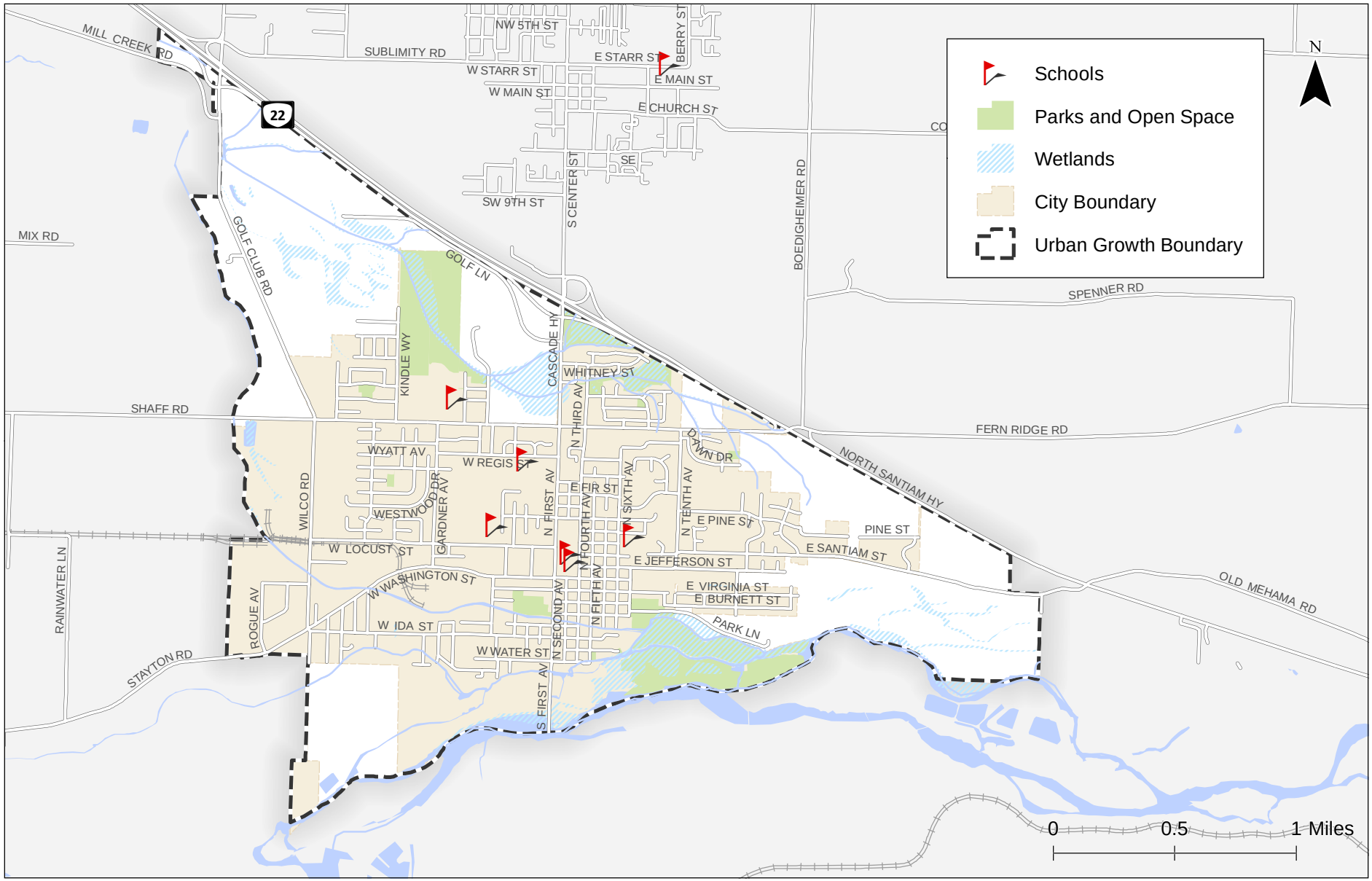
TABLE OF CONTENTS

PURPOSE AND INTRODUCTION

This memorandum assesses existing and future conditions and planned improvements for all transportation systems and services within the City of Stayton. Figure 1 illustrates the study area, including the city boundary and urban growth boundary (UGB). The information presented in this memorandum will serve as a baseline for evaluating transportation system needs and identifying

IN THIS MEMO

- Existing Operations and Safety
- Future Growth and Operations
- Funding Overview



Study Area
Stayton, Oregon

Figure
1

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KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl

potential solutions for the Transportation System Plan (TSP) update. The information is based on an inventory of existing transportation facilities and services and discussions with City staff. The information has also been updated based on input from the project advisory committee (PAC) and technical advisory committee (TAC), and will be updated based on input received from a public workshop.

This memorandum includes information on the existing motor vehicle, pedestrian, bicycle, and public transit modes within the city. This memorandum also includes information on existing operations and safety conditions within the city and an environmental justice analysis of city demographics. Lastly, it includes an operations analysis of the future forecast and a funding sources review.

EXISTING TRANSPORTATION SYSTEM

The transportation system of Stayton includes motor vehicle, pedestrian, bicycle, public transportation, and other transportation systems. Together, these systems allow for Stayton residents to travel the city and reach other cities and towns in the surrounding area. Different parts of the City of Stayton's transportation system are owned, operated, and maintained by various entities, including the Oregon Department of Transportation (ODOT), Marion County, and the City of Stayton.

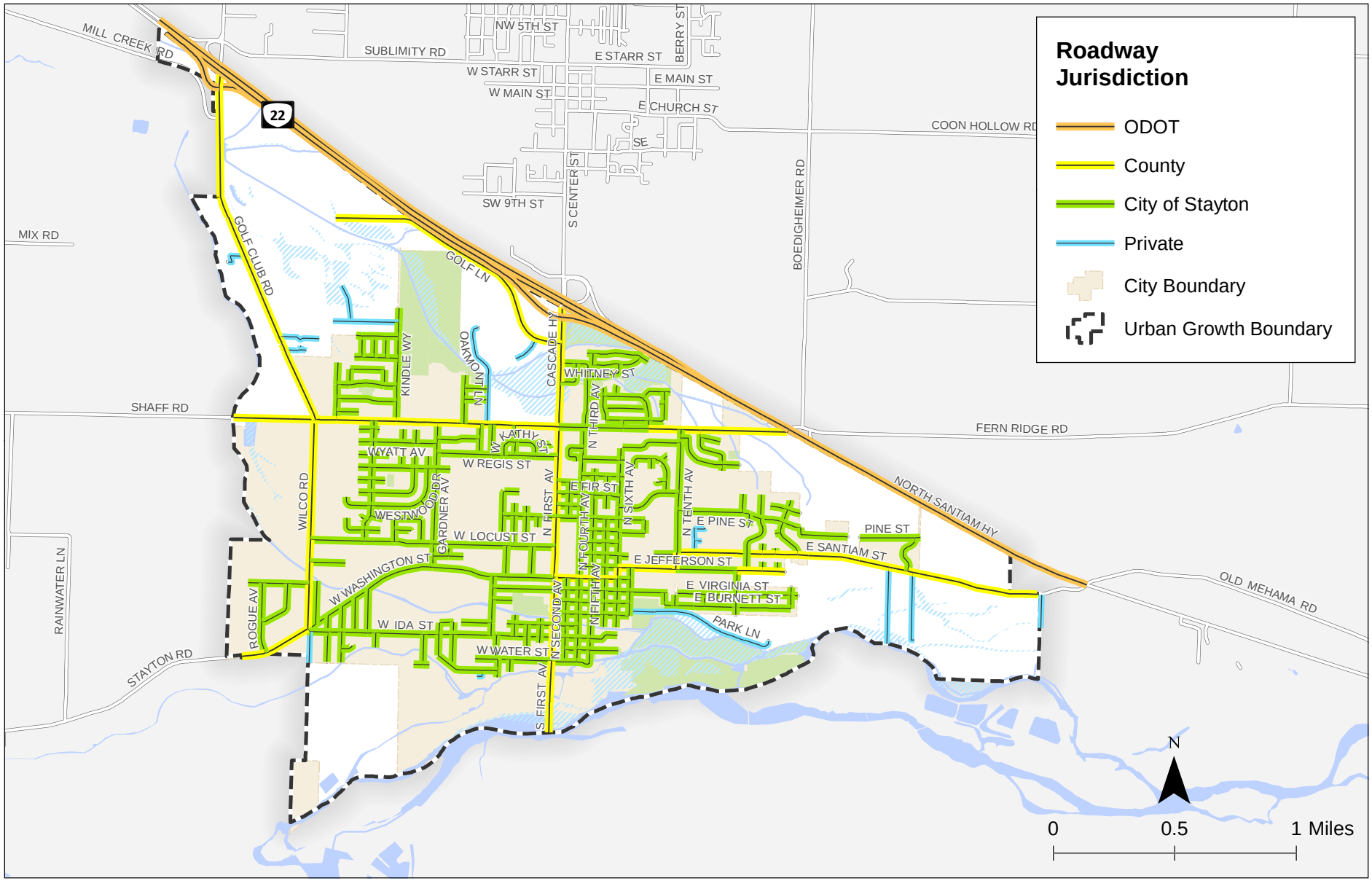
MOTOR VEHICLE SYSTEM

The motor vehicle system within Stayton includes private streets, city streets, county roads, and state highways. These facilities provide residents with the ability to access retail, commercial, recreational, and other land uses within Stayton and neighboring cities by vehicle. This section describes how the system has been developed to date and provides a review of how it is used and operated.

JURISDICTION

The streets within Stayton are owned and operated by the City of Stayton, Marion County, and the Oregon Department of Transportation (ODOT). Each jurisdiction is responsible for determining the functional classification of the streets, defining major design and multimodal features, and approving construction and access permits. Coordination is required among the jurisdictions to ensure that the streets are planned, operated, maintained, and improved to safely meet public needs. Figure 2 illustrates the jurisdiction (ownership and maintenance responsibilities) of streets within Stayton.

ODOT owns OR 22, the highest-volume roadway in Stayton. Marion County owns many of the major roads within the city, including Golf Club Road, N First Avenue, Wilco Road, and Shaff Road. The City of Stayton owns the remaining public roadways within the urban area. Some of the roadways in the city are classified as private.



Roadway Jurisdiction
Stayton, Oregon

Figure **2**

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FUNCTIONAL CLASSIFICATION

A street's functional classification defines its role in the overall transportation system and defines the operational and design characteristics of the roadway, such as right-of-way requirements, pavement widths, pedestrian and bicycle features, and driveway spacing standards. The functional classifications of the streets within Stayton are shown in Figure 3. Descriptions of each type of functional classification can be found below.

Note that these classifications represent an update from the five classifications shown in the 2004 TSP: Principal arterial, minor arterial, major collector, minor collector, and local. The classifications shown below represent a way to further classify local streets and better prioritize maintenance of city-maintained streets.

Arterials

Arterials are roadways that are designed to facilitate traffic entering and leaving the urban area. The main function of arterials is to efficiently move traffic, although they may provide access to adjacent land uses. Arterials typically focus on longer distance trips than other roadways, with the goal of moving high volumes of traffic through as efficiently as possible. Principal Arterials typically have limited access and higher traffic speeds than other facilities except when traveling through a downtown area. Principal Arterials are usually served by other Arterials.

Collectors

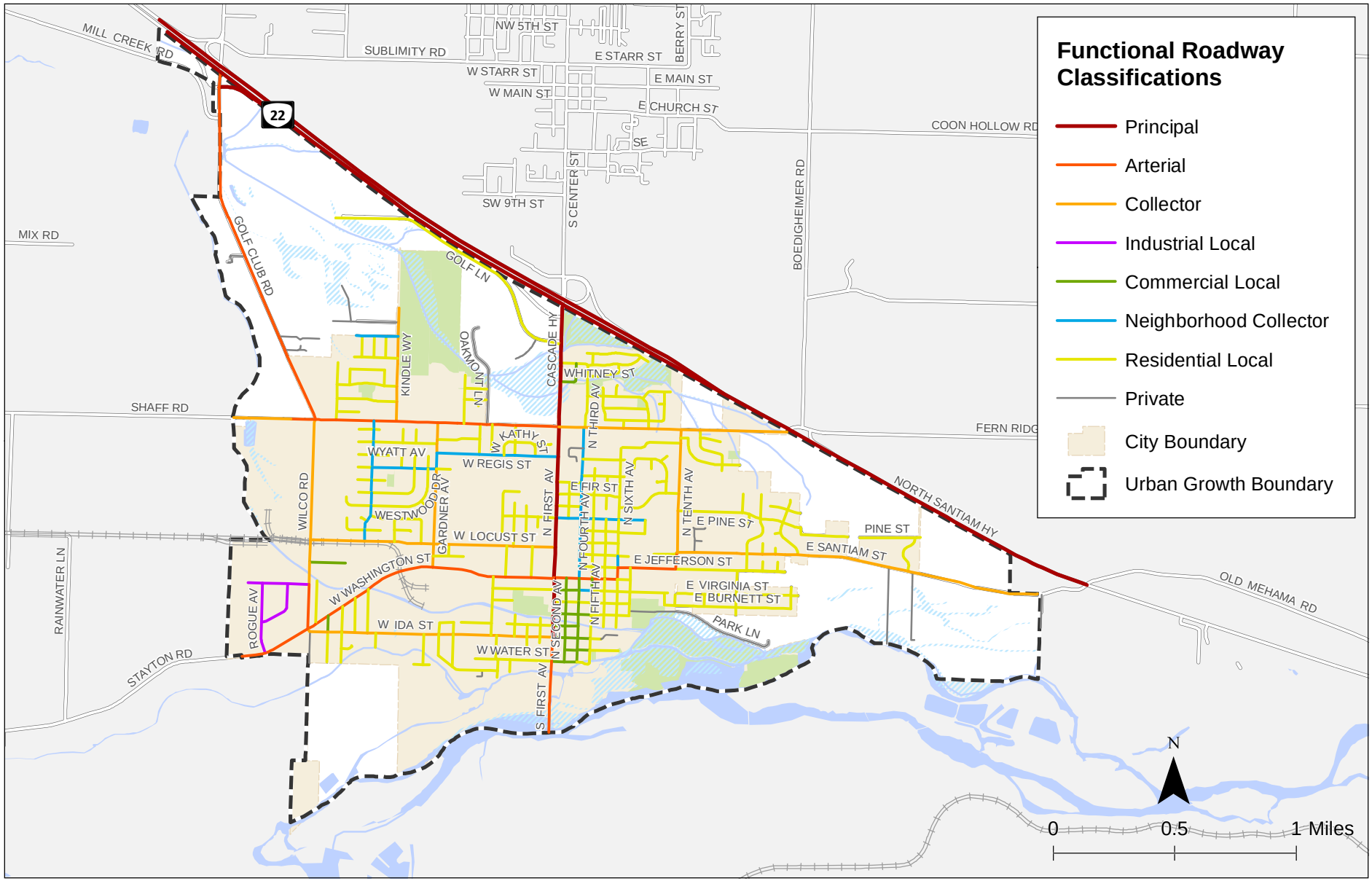
Collector roadways facilitate the movement of city traffic within the urban area. Collectors provide some degree of access to adjacent properties, while maintaining circulation and mobility for all users. Collectors can be two or three-lane facilities and are used to connect the various roadways of an urban area, although they are designed to carry lower traffic volumes at lower speeds than arterials.

Neighborhood Collectors

The function of Neighborhood Collectors is to connect neighborhoods with collectors and arterials, facilitate the movement of local traffic and provide access to abutting land uses. Speed on these facilities should remain low to ensure community livability and safety for pedestrians and bicyclists of all ages. On-street parking is more prevalent and pedestrian amenities are typically provided. Striped bike lanes are unnecessary for most neighborhood streets because the traffic volumes and speeds should allow cyclists to share the road with the motorists.

Local Streets

The goal of Local Streets is to provide access to adjacent land uses. These streets offer the lowest level of mobility and consequently tend to be short, low-speed facilities. As such, local streets should primarily serve passenger cars, pedestrians, and bicyclists; heavy truck traffic should be discouraged. On-street parking is common and sidewalks are typically present. The Local Streets within Stayton can be split into three categories: Industrial, Commercial, and Residential Local roadways, with all three categories providing access to their respective land uses. Table 1 summarizes the functional



Functional Roadway Classification
Stayton, Oregon

Figure **3**

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KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl

classification of the principal arterial, arterial, and collector streets within Stayton and the overlapping jurisdictional relationships that exist.

Table 1. Functional Classification of Collector and Higher Streets by Jurisdiction

Roadway	Roadway Extents	Jurisdiction	Functional Classification
OR 22	Western UGB limits to eastern UGB limits	ODOT	Principal Arterial OHP Statewide Highway NHS State Highway
Golf Club Road	OR 22 to Shaff Road	County	Arterial
Wilco Road	Shaff Road to Deschutes Drive	County	Collector
	Deschutes Drive to W Washington Street	County	Arterial
Cascade Highway	OR 22 to Shaff Road	County	Principal Arterial
N First Avenue	Shaff Road to W Ida Street	County	Principal Arterial
	W Ida Street to W Water Street	County	Arterial
S First Avenue	W Water Street to southern UGB limits	County	Arterial
N Sixth Avenue	E Jefferson Street to E Washington Street	County	Arterial
N Tenth Avenue	E Santiam Street to E Jefferson Street	County	Arterial
Shaff Road	Western UGB limits to Golf Club Road	County	Collector
	Golf Club Road to Cascade Highway	County	Arterial
Fern Ridge Road	N Tenth Avenue to OR 22	County	Collector
E Washington Street	N First Avenue to N Sixth Avenue	County	Arterial
E Jefferson Street	N Sixth Avenue to N Tenth Avenue	County	Arterial
E Santiam Street	N Scenic View Drive to OR 22	County	Collector
Stayton Road	Western UGB limits to Rogue Avenue	County	Arterial
E Santiam Street	N Tenth Avenue to N Scenic View Drive	County	Collector
Kindle Way	Northern terminus to Shaff Road	City	Collector
Gardner Avenue	Shaff Road to W Washington Street	City	Collector
N Tenth Avenue	Fern Ridge Road to E Santiam Street	City	Collector
Eagle Street	Quail Run Avenue to Kindle Way	City	Collector
Fern Ridge Road	Cascade Highway to N Tenth Avenue	City	Collector
W Locust Street	Wilco Road to N First Avenue	City	Collector
W Ida Street	Wilco Road to N First Avenue	City	Collector

ROADWAY CHARACTERISTICS

The characteristics of Principal Arterial, Arterial, and Collector Streets are summarized in Table 2. The data includes posted speed limits, street widths, number of lanes, lane widths, on-street bike lanes, and on-street parking. These characteristics define roadway capacity and operating speeds through the street system, which affects travel path choices for drivers in Stayton.

Table 2: Roadway Characteristics by Functional Classification

Corridor	Posted Speed (mph)	Number of Lanes	Lane Width (ft)	On-Street Bike Lanes	On-Street Parking
OR 22	55	2-4	12	No	No
Cascade Highway	45	2-3	11	Yes	No
First Avenue	30	2-3	12	No	No
Golf Club Road	45	2	12	No	No
Wilco Road	45	2	11	No	No
N First Avenue	30	2	13	No	No
S First Avenue	30	2	12	No	No
N Sixth Avenue	25	2	12	No	No
N Tenth Avenue	25	2	10	No	No
Shaff Road	35[1]	2	11	No	No
E Washington Street	25[1]	2	11	No	No
E Jefferson Street	25	2	10	No	No
Stayton Road	45	2	12	No	No
Wilco Road	45	2	12	No	No
Shaff Road	35	2	10	No	No

Corridor	Posted Speed (mph)	Number of Lanes	Lane Width (ft)	On-Street Bike Lanes	On-Street Parking
Fern Ridge Road	35	2	13	Yes	No
E Santiam Street	55	2	10	No	No
E Santiam Street	40	2	11	No	No
Kindle Way	25	2	10	No	No
Gardner Avenue	25[1]	2	13	Yes	No
N Tenth Avenue	25	2	10	Yes	No
W Locust Street	25[1]	2	10	No	Yes
W Ida Street	30	1	13	No	Yes

[1] A 20 mph school zone exists on part of this roadway

PEDESTRIAN SYSTEM

The pedestrian system of Stayton consists of sidewalks, enhanced sidewalks, off-street trails, and pedestrian crossings, which are both marked and unmarked; signalized and unsignalized. These facilities provide residents with the ability to access local retail/commercial centers, recreational areas, schools, and other land uses by foot. A safe, convenient, and continuous network of pedestrian facilities is essential to establishing a vibrant and healthy community while supporting the local economy within Stayton. The existing pedestrian facilities are shown in Figure 4.

Sidewalks

Sidewalks are provided along at least one side of most of the roadways categorized as collector or higher within the city of Stayton. However, there a few notable "sidewalk gaps", or segments along roadways where there is no sidewalk. These sidewalk gaps are also shown in Figure 4. Notable sidewalk gaps occur on segments of W Washington Street, Shaff Road, N Third Avenue, N Tenth Avenue, Kindle Way, and Locust Street.

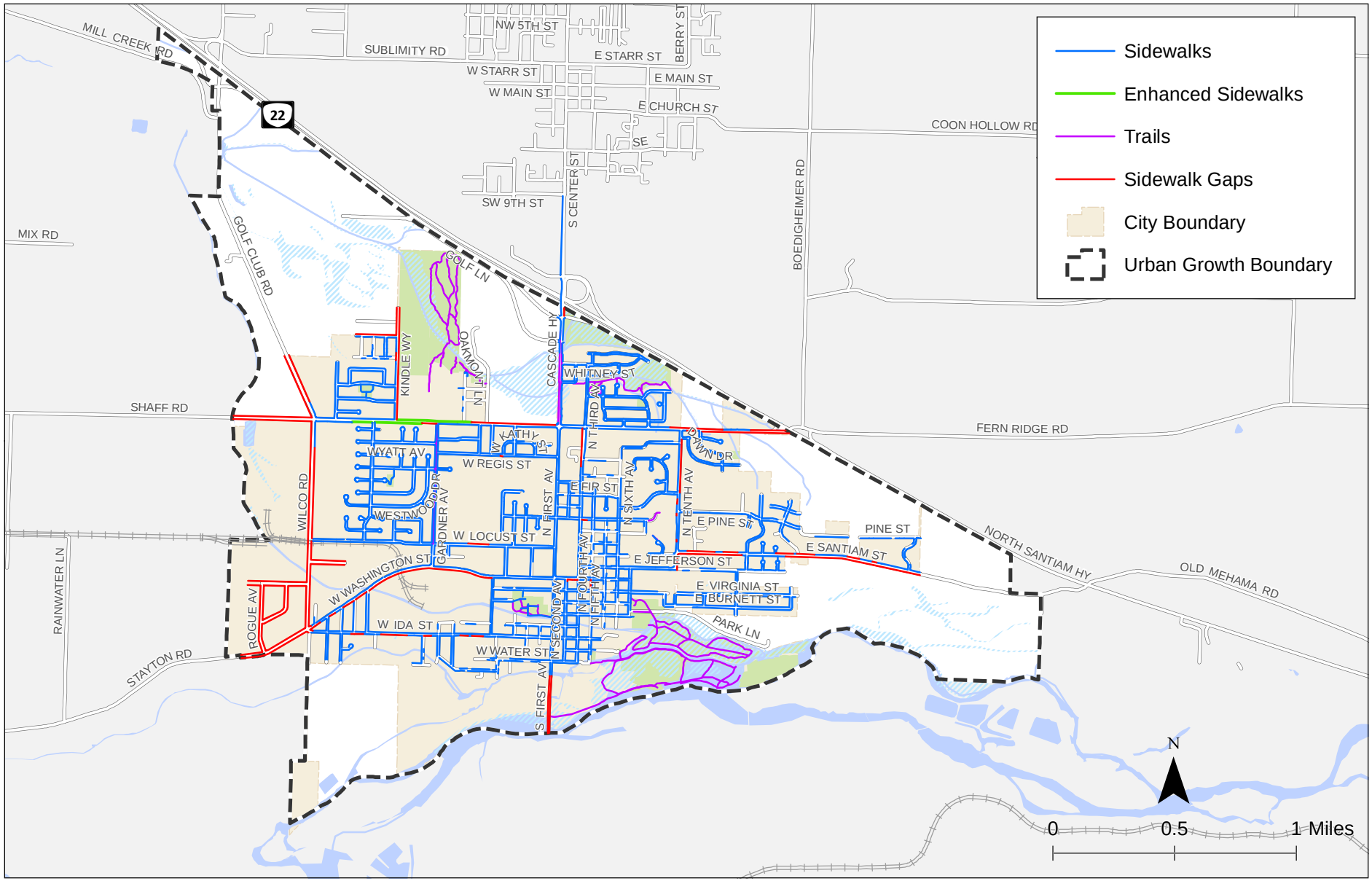
Off-Road Trails

Off-road trails are also present in Stayton. These trails range from multi-use paved paths to gravel trails. The following off-road trails exist within Stayton:

- The trails throughout Wilderness Park, which are a mix between paved and gravel.
- The trails on the Stayton Middle School Campus, which are mostly gravel.
- The path in and around Santiam Park, which is paved.
- The paths within Community Center Park, which are paved.
- The path near the Santiam Memorial Hospital, which is paved.

PEDESTRIAN QUALITATIVE LEVEL OF SERVICE (QLOS)

A Pedestrian Qualitative Level of Service (QLOS) analysis examines and scores the characteristics of sidewalk segments. The possible scores for a sidewalk segment are Good, Fair, and Poor. The QLOS judges a sidewalk segment on the presence of a sidewalk/path, lighting, and buffers, as well as the widths of the sidewalk and of the outside travel lane. The QLOS analysis for sidewalk segments along roadways of classification collector or higher within Stayton is shown in Table 3.



Existing Pedestrian Facilities
Stayton, Oregon

Figure
4

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Table 3: Qualitative LOS for Sidewalks Along Roadways of Classification Collector or Higher

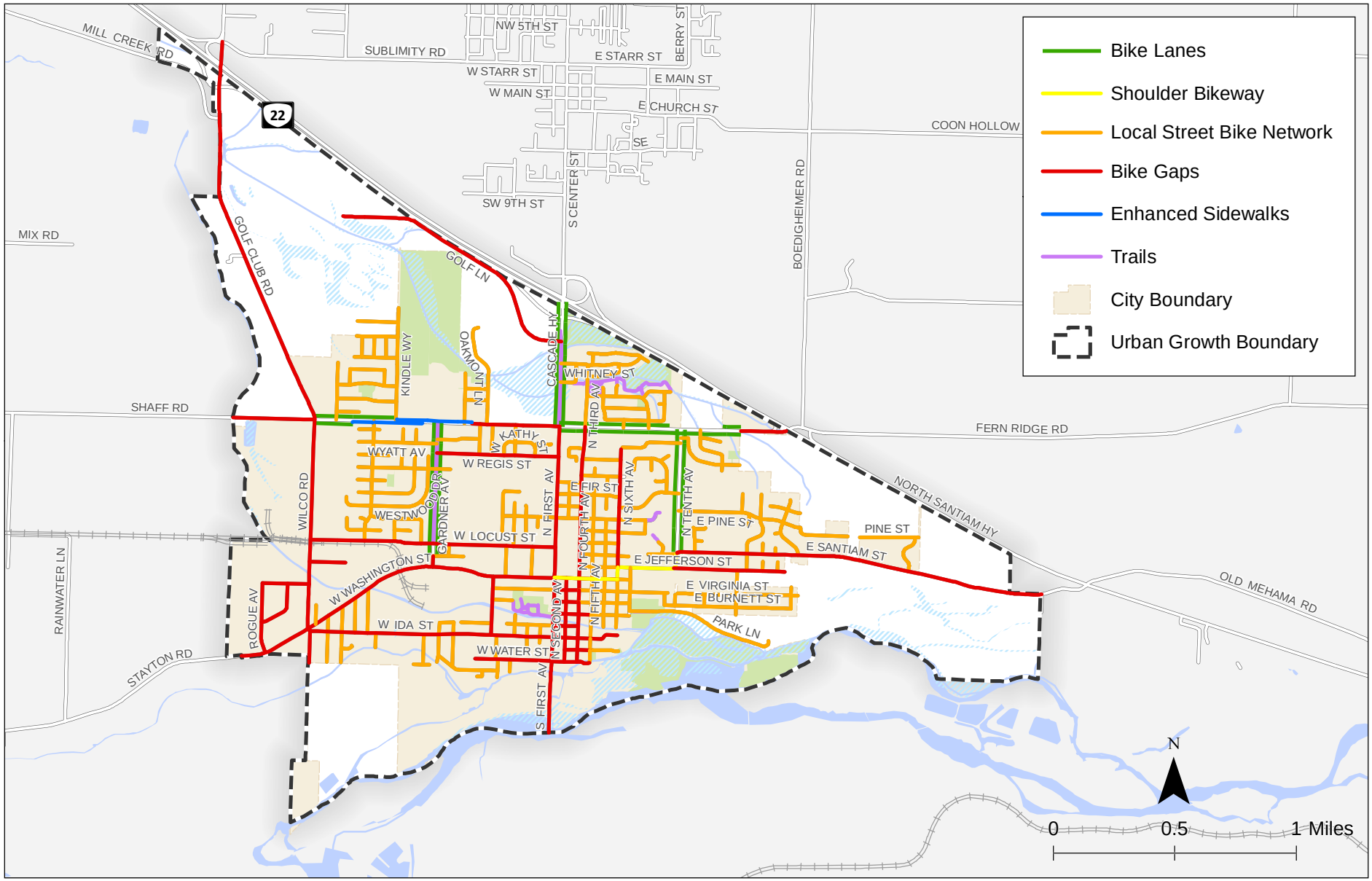
Roadway	Roadway Extents	Qualitative Level of Service
Golf Club Road	OR 22 to Shaff Road	Poor
Wilco Road	Shaff Road to W Washington Street	Poor
Cascade Highway	OR 22 to Shaff Road	Good
N First Avenue	Shaff Road to W Ida Street	Fair
S First Avenue	W Ida Street to southern UGB limits	Poor
N Sixth Avenue	E Jefferson Street to E Washington Street	Good
N Tenth Avenue	E Santiam Street to E Jefferson Street	Good
Shaff Road	Golf Club Road to Cascade Highway	Fair
Fern Ridge Road	Cascade Highway to N Tenth Avenue	Fair
	N Tenth Avenue to OR 22	Poor
E Washington Street	N First Avenue to N Sixth Avenue	Fair
E Jefferson Street	N Sixth Avenue to N Tenth Avenue	Fair
E Santiam Street	N Scenic View Drive to OR 22	Poor
Stayton Road	Western UGB limits to Rogue Avenue	Poor
E Santiam Street	N Tenth Avenue to N Scenic View Drive	Poor-Fair
Kindle Way	northern terminus to Shaff Road	Fair
Gardner Avenue	Shaff Road to W Washington Street	Fair
W Locust Street	Wilco Road to N First Avenue	Fair
W Ida Street	Wilco Road to N First Avenue	Fair

BICYCLE SYSTEM

The bicycle system within Stayton consists of on-street bike lanes, off street trails, enhanced sidewalks, other off-street bicycle facilities, and bicycle parking. These facilities provide residents with the ability to access local retail/commercial centers, recreational areas, and other land uses within Stayton by bicycle. A safe, convenient, and continuous network of bicycle facilities is essential to establishing a vibrant and healthy community while supporting the local economy within the City. Stayton currently does not have any bikeways listed on the Oregon State Parks Scenic Bikeways list, the Mid-Valley Bike Transportation map, or the Willamette Valley Scenic Bikeway list.

BICYCLE FACILITIES

To assess the adequacy of bicycle facilities in Stayton, GIS data of existing bicycle facilities was obtained from the City. Figure 5 shows the existing bicycle facilities within Stayton. The following provides a summary of the facilities, including existing gaps and deficiencies.



Existing Bicycle Facilities
Stayton, Oregon

Figure
5

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Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl

Bicycle Lanes

On-street bike lanes are provided along five roadway segments in Stayton. Bike lanes are present along Gardner Avenue from Shaff Road to W Darby Street, Cascade Highway from OR 22 to Shaff Road, N Tenth Avenue from Fern Ridge Road to E Santiam Street, Shaff Road from Golf Club Road to Kindle Way, and Fern Ridge Road from Cascade Highway to the eastern city limits.

Enhanced Sidewalks

Enhanced sidewalks are wide, separated facilities that can be used for walking or bicycling. Enhanced sidewalks are present along both sides of Shaff Road intermittently between Wilco Road and Oakmont Lane.

Shared Roadways

Some of the roadways within Stayton have shoulders, which, when wide enough, can act as a bicycle lane. The shoulders allow bicyclist to ride in a lane separated from traffic, which allows motor vehicles to pass safely. Shoulder bikeways aren't always ideal, however, as there are sometimes motor vehicles parked in the shoulder and there is oftentimes debris within the shoulder.

Off-Street Trails

Many of the trails available for pedestrians are also available to cyclists. Exceptions include Pioneer Park, Wilderness Park, Riverfront Park, and trails near the Mill Creek River. Trails available to cyclists are typically multi-use paved paths.

BICYCLE QUALITATIVE LEVEL OF SERVICE (QLOS)

A Bicycle Qualitative Level of Service (QLOS) analysis examines the characteristics of bicycle facilities and gives them a score. The possible scores for a bicycle facility are Good, Fair, or Poor. The QLOS judges a bicycle facility on the presence of a bicycle lane or "sharrow" markings, width of the bicycle lane (if applicable), volume of roadway, and obstructions present. The QLOS analysis for bicycle facilities along roadways of classification collector or higher within Stayton is shown in Table 4.

Table 4: Qualitative LOS for Bicycle Facilities Along Roadways of Classification Collector or Higher

Roadway	Roadway Extents	Type of Facility	Qualitative Level of Service
Golf Club Road	OR 22 to Shaff Road	No Facility	Poor
Wilco Road	Shaff Road to W Washington Street	No Facility	Poor
Cascade Highway	OR 22 to Shaff Road	Bicycle Lane	Good
N First Avenue	Shaff Road to W Ida Street	No Facility	Poor
S First Avenue	Shaff Road to southern city limits	Shoulder Bikeway	Poor
N Sixth Avenue	E Jefferson Road to E Washington Street	Shoulder Bikeway	Fair
N Tenth Avenue	E Santiam Street to E Jefferson Street	Bicycle Lane	Good
Shaff Road	Golf Club Road to Oakmont Lane	Bicycle Lane/ Enhanced Sidewalk	
Shaff Road	Oakmont Lane to Cascade Highway	No Facility	Poor
Fern Ridge Road	Cascade Highway to OR 22	Bicycle Lane	Good

Roadway	Roadway Extents	Type of Facility	Qualitative Level of Service
E Washington Street	N First Avenue to N Sixth Avenue	Shoulder Bikeway	Fair[1]
E Jefferson Street	N Sixth Avenue to N Tenth Avenue	Shoulder Bikeway	Fair[1]
E Santiam Street	N Scenic View Drive to OR 22	No Facility	Poor
Stayton Road	Western UGB limits to Rogue Avenue	No Facility	Poor
E Santiam Street	N Tenth Avenue to N Scenic View Drive	No Facility	Poor
Kindle Way	Northern terminus to Shaff Road	Low-Stress Facility	Fair
Gardner Avenue	Shaff Road to W Washington Street	Bicycle Lane	Good
W Locust Street	Wilco Road to N First Avenue	No Facility	Poor-Fair
W Ida Street	Wilco Road to N First Avenue	No Facility	Poor-Fair

[1]The public advisory committee noted that on-street parking makes bicycling more difficult on the shoulder bikeways on these roads

PUBLIC TRANSPORTATION SYSTEM

Public transportation service in Stayton is provided by Cherriots and the North Santiam School District. Transit provides residents the ability to access grocery, retail, and social opportunities within Stayton as well as to access Sublimity, Salem, and other surrounding towns. It also provides schoolchildren access to school.

TRANSIT SERVICES

Transit services within Stayton consist of fixed-route and school bus services.

Fixed Route Service

Cherriots Route 30X is a fixed route bus service that runs from Salem to Gates. The bus makes three stops within the city boundary of Stayton and two stops just north of the urban area. Cherriots Route 30X services each of these bus stops four times per day in both directions. The bus does not operate on weekends or holidays. The bus route and stop locations are shown in Figure 6.

School Bus Services

The North Santiam School District 29J, which includes Stayton Elementary, Middle, and High Schools, is serviced by the Mid-Columbia Bus Company (MIDCO). MIDCO has an office within Stayton and offers 19 different bus routes for the school district.

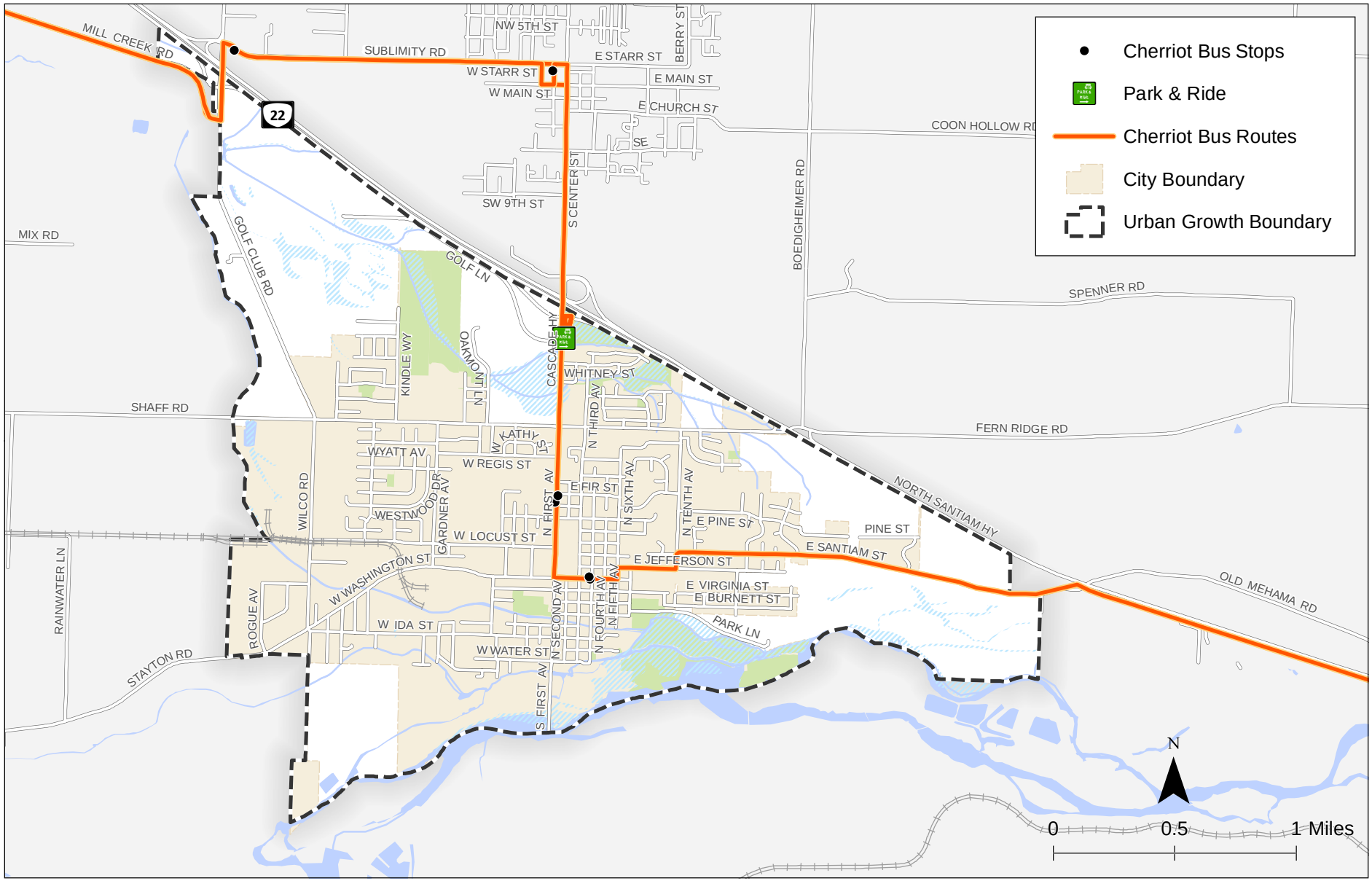
TRANSIT INFRASTRUCTURE

Park-and-Ride

There is one park-and-ride location within Stayton, located on Cascade Highway at the intersection of Golf Lane, shown in Figure 6. This park-and-ride is serviced by Cherriots Route 30X and has vehicle parking capacity for 94 vehicles and covered bicycle parking capacity for 5 bicycles.

Transit Stops

There are three transit stops within the Stayton city boundary and two stops just north of the urban area. Stop locations are:



Cherriots Route 30X from Salem to Gates runs four times per weekday in both directions on the route shown. Buses do not operate on holidays or weekends.

Existing Transit Facilities
Stayton, Oregon

Figure
6

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- E Washington Street/N Fourth Avenue in downtown Stayton
- Stayton Safeway near the intersection of N First Avenue/E Fir Street
- Stayton park-and-ride near the intersection of Cascade Highway SE/Golf Lane.
- NW Starr Street/NW Johnson Street in Sublimity
- Stayton DMV near the intersection of Sublimity Road SE/Golf Club Road SE.

Each of these transit stops are serviced by Cherriots Route 30X and are shown in Figure 6.

Transit Ridership

Daily average ridership for Cherriots Route 30X for April and the first three weeks of May of 2018 is shown in Table 5. This data shows bidirectional boardings and alightings and was collected by Cherriots transit drivers.

Table 5: Cherriots Route 30X Average Daily Ridership

Transit Stop	Boardings	Alightings	Total
Washington Street and Fourth Avenue	6	11	17
Stayton Safeway	25	26	51
Stayton Park-and-Ride	2	4	6
Johnson Street and Starr Road	1	2	3
Stayton DMV	0	0	0

EXISTING GAPS AND DEFICIENCIES

Stayton's current public transportation system does not offer specialized services for seniors or people with disabilities. The discontinued dial-a-ride service provided by CARTS offered a simple transit service for people who found it difficult to use the fixed Cherriots Route 30X. This curb-to-curb service deviated up to 0.75 miles from the fixed route for anyone who made a request with the call center at least 24 hours in advance. While Cherriots currently offers an origin-to-destination transportation service for people whose disabilities prevent them from using the Cherriots buses, this service only operates within the Salem-Keizer urban area. With a senior living center and hospital located in Stayton, this service would supplement the existing transit system for seniors and people with disabilities.

Currently, Cherriots Route 30X only services each transit stop four times per day. Increasing the frequency of buses along this route would encourage more transit ridership, as riders would have more options for the timing of their trips.

While transit schedule information is available online, schedules are not provided at stops and real-time arrival and departure information is not available online or at transit stops in Stayton. Providing real-time data online via a phone app or using digital screens or announcements would help inform riders about bus arrivals and service delays and improve customer satisfaction. Since the Cherriots Route 30X only services each stop four times a day, missing a bus currently delays a rider's trip substantially. Thus, knowing real-time information about bus arrival times would assist riders in

planning their trips. Additionally, posting schedules at stops would make bus arrival time knowledge more readily available for those without access to smartphones.

FREIGHT SYSTEM

OR 22 is designated as a statewide National Highway System freight route by the 1999 Oregon Highway Plan (OHP).

OTHER TRANSPORTATION MODES

The following describes the other modes of transportation within Stayton including air, water, and natural gas pipeline facilities.

PRIVATE TRANSPORTATION PROVIDERS

Uber and Lyft both operate in the City of Stayton. They provide on-demand taxi services through a mobile phone application.

AIR TRANSPORTATION

The City of Stayton does not have an airport. The nearest commercial airport is the Portland International Airport, located 75 miles to the north of Stayton. There are several other small airstrips within 20 miles of Stayton. There is also a helistop located at the Santiam Memorial Hospital.

RAIL TRANSPORTATION

An unused rail spur runs from the west side of the city along W Locust Street to the NORPAC facility. The last rail activity on this line was over five years ago, and NORPAC has not used the line in over twenty years.

WATER TRANSPORTATION

Although the City of Stayton is situated along the North Santiam River, the river has not been used as a method of transportation, mainly due to the shallowness of the river. There are several boat ramps along the river; however, these are mostly used for small watercraft. The river is mainly used for recreation but is also a source of drinking water.

PIPELINE FACILITIES

The primary pipeline facilities in Stayton are associated with the city storm sewer, sanitary sewer, and water lines. Potable water is transported from the North Santiam River to Salem via two transmission mains that run through Stayton. There are no natural gas lines that are large enough to be classified as pipelines in the Stayton area.

EXISTING CONDITIONS ANALYSIS

TRAFFIC OPERATIONS

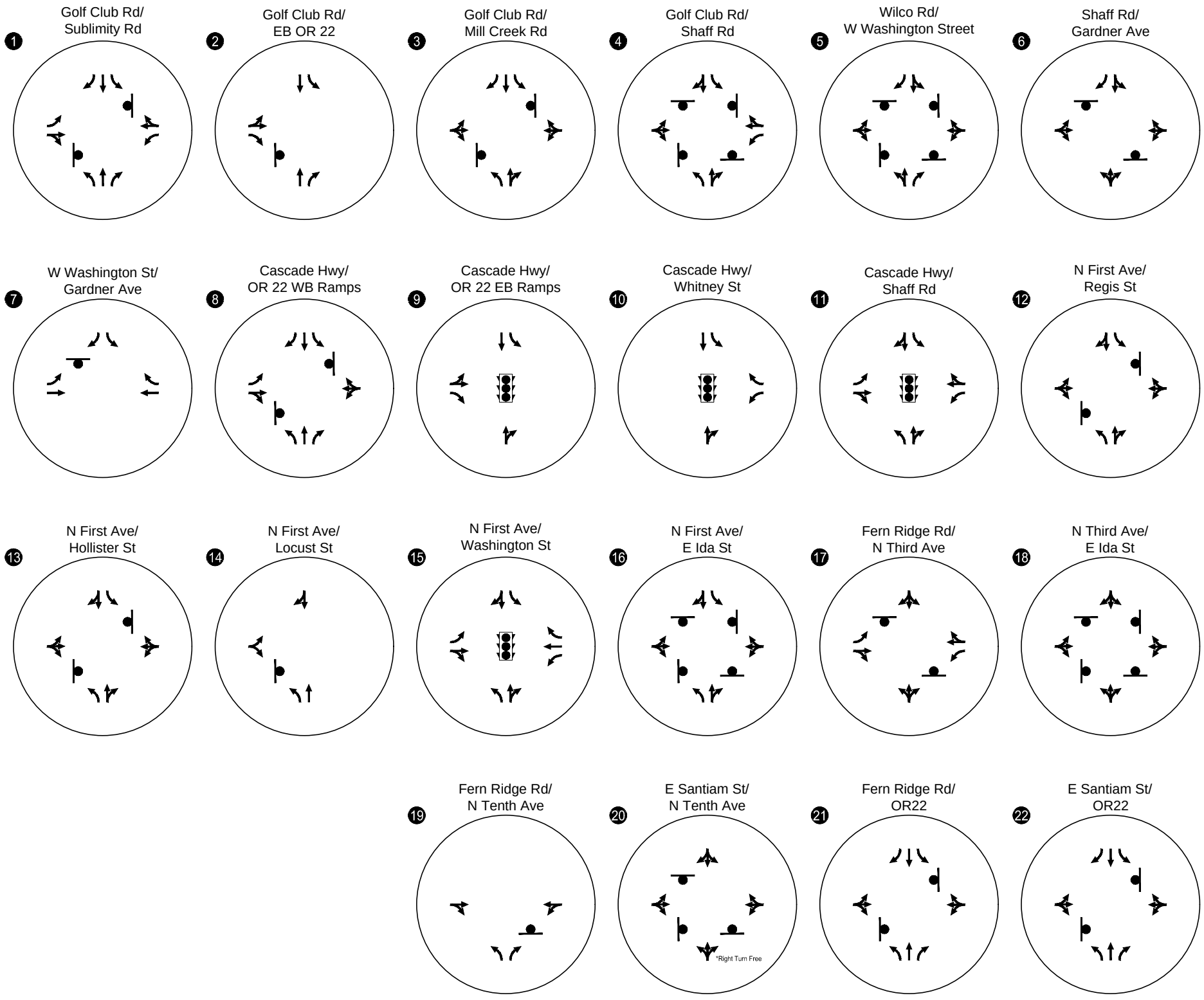
Traffic operations were evaluated at 22 study intersections in accordance with the Analysis Methodology and Assumptions Memorandum (Reference 1). Figure 7 shows the study intersections and summarizes the existing lane configurations and traffic control devices.

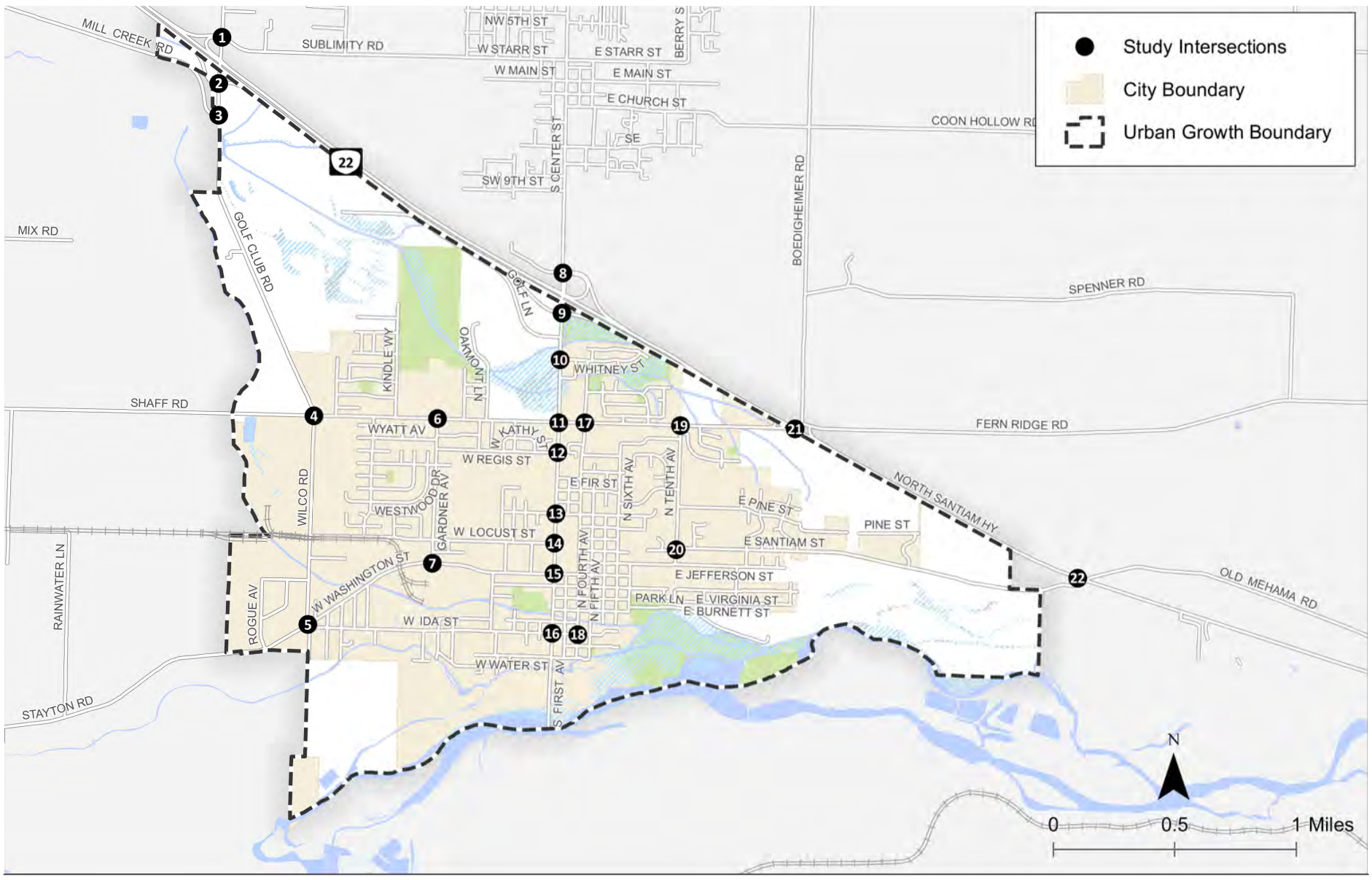
TRAFFIC VOLUMES

Manual turning movement counts were conducted at the study intersections in April 2018. The counts were conducted on a typical midweek day during the evening (4:00 to 6:00 pm) peak period while Stayton schools were in session. The system-wide peak hour for the study intersections was identified as 4:40 to 5:40 pm. Appendix A contains the turning movement counts.

PEAK HOUR OPERATIONS

Figure 8 summarizes the PM peak hour turning movement counts and operations at the study intersections under existing traffic conditions. The through movements of the turning movement counts along OR 22 were seasonally adjusted to 30th highest hour volumes (30HV) in accordance with the Seasonal Trend Table methodology identified in the Analysis Methodology and Assumptions Memorandum. Table 6 summarizes the results of the traffic operations analysis at the study intersection under existing traffic conditions. Appendix B contains the year 2018 existing traffic conditions worksheets.





- STOP SIGN
- TRAFFIC SIGNAL

Existing Lane Configuration and Traffic Control Devices
Stayton, Oregon

Figure
7

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KITTELSON & ASSOCIATES

1 Golf Club Rd/ Sublimity Rd
CM=WB
LOS=C
Del=15.4
V/C=0.14

2 Golf Club Rd/ EB OR 22
CM=EB
LOS=B
Del=13.0
V/C=0.27

3 Golf Club Rd/ Mill Creek Rd
CM=EB
LOS=D
Del=30.6
V/C=0.19

4 Golf Club Rd/ Shaff Rd
LOS=C
Del=20.9

5 Wilco Rd/ W Washington Street
LOS=B
Del=12.0

6 Shaff Rd/ Gardner Ave
CM=NB
LOS=C
Del=18.8
V/C=0.31

7 W Washington St/ Gardner Ave
CM=SB
LOS=B
Del=12.2
V/C=0.11

8 Cascade Hwy/ OR 22 WB Ramps
CM=WB
LOS=C
Del=20.6
V/C=0.08

9 Cascade Hwy/ OR 22 EB Ramps
LOS=A
Del=8.1

10 Cascade Hwy/ Whitney St
LOS=B
Del=10.9

11 Cascade Hwy/ Shaff Rd
LOS=C
Del=26.1

12 N First Ave/ Regis St
CM=WB
LOS=E
Del=47.6
V/C=0.07

13 N First Ave/ Hollister St
CM=WB
LOS=C
Del=22.9
V/C=0.16

14 N First Ave/ Locust St
CM=EB
LOS=C
Del=18.0
V/C=0.27

15 N First Ave/ Washington St
LOS=B
Del=19.5

16 N First Ave/ E Ida St
LOS=C
Del=15.9

17 Fern Ridge Rd/ N Third Ave
CM=SB
LOS=B
Del=14.3
V/C=0.19

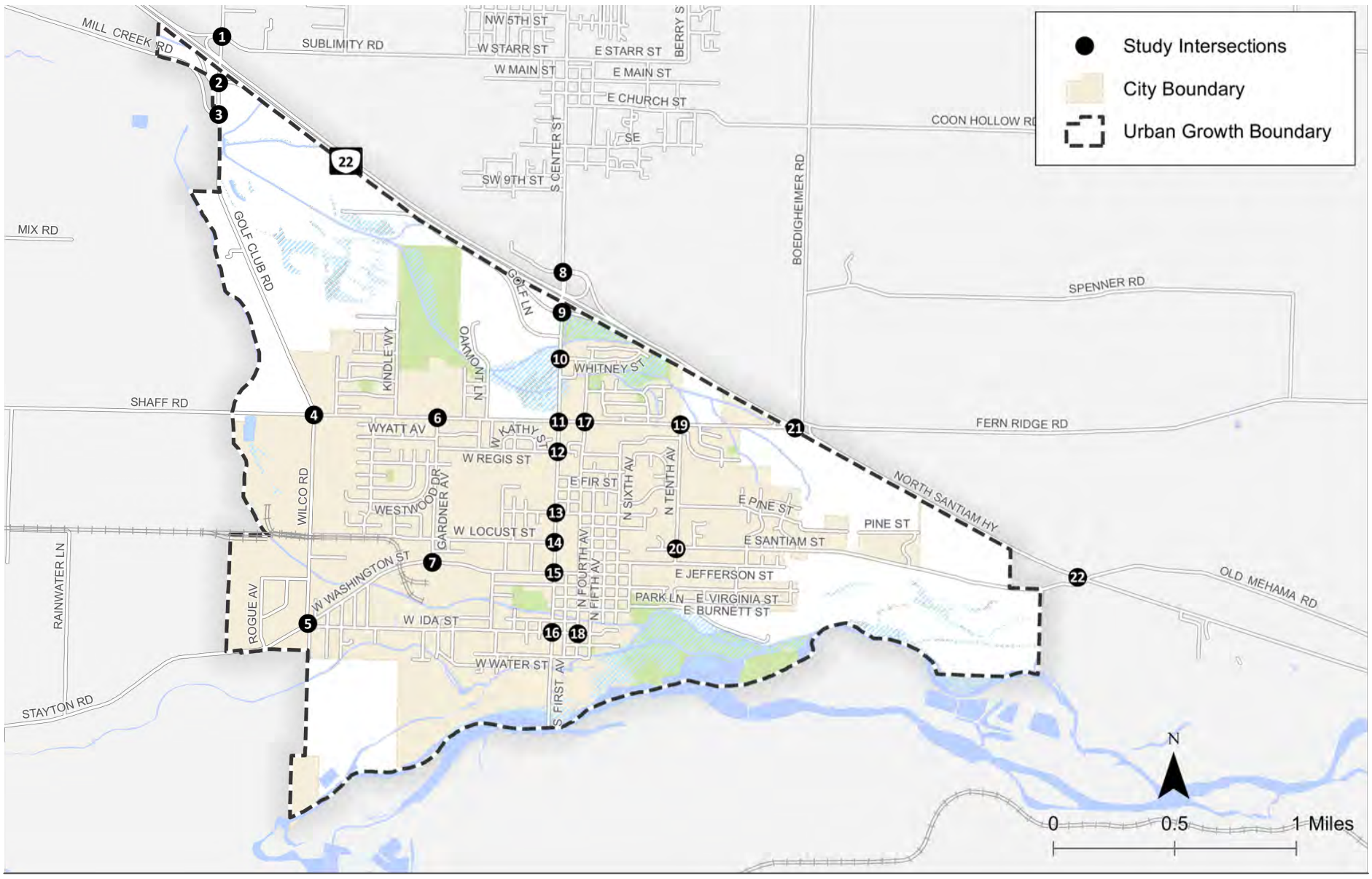
18 N Third Ave/ E Ida St
LOS=A
Del=7.4

19 Fern Ridge Rd/ N Tenth Ave
CM=NB
LOS=B
Del=13.3
V/C=0.18

20 E Santiam St/ N Tenth Ave
CM=SB
LOS=A
Del=6.5

21 Fern Ridge Rd/ OR22
CM=WB
LOS=C
Del=21.0
V/C=0.17

22 E Santiam St/ OR22
CM=EB
LOS=C
Del=17.2
V/C=0.24



CM = CRITICAL MOVEMENT (TWSC)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED/AWSC) / CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED/AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO
TWSC = TWO-WAY STOP CONTROL
AWSC = ALL-WAY STOP CONTROL

Existing Traffic Conditions
Weekday PM Peak Hour
Stayton, Oregon

Figure
8

KITTELSON & ASSOCIATES

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Table 6. Existing Weekday PM Peak Hour Intersection Operations

#	Intersection	Level of Service (LOS)	Delay (Sec)	Volume/Capacity (v/c)	Measure of Effectiveness (MOE)		MOE Met?
					Agency	Maximum	
1	Golf Club Road at Sublimity Road/WB OR 22	C	15.4	0.14	ODOT	V/C 0.70[1]	Yes
2	Golf Club Road at EB OR 22	B	13.0	0.27	ODOT	V/C 0.80[1]	Yes
3	Golf Club Road at Mill Creek Road	D	30.6	0.19	County	LOS E[2]	Yes
4	Golf Club Road/Wilco Road at Shaff Road	D	20.9	-	County	LOS E[2]	Yes
5	Wilco Road at W Washington Street/Ida Street	B	12.0	-	County	LOS E[2]	Yes
6	Shaff Road at Gardner Road/Stayton Middle School	C	18.8	0.31	County	LOS E[2]	Yes
7	W Washington Street at Gardner Road	B	12.2	0.11	City	LOS E[3]	Yes
8	Cascade Highway at Sublimity Boulevard/WB OR 22	C	20.6	0.08	ODOT	V/C 0.70[1]	Yes
9	Cascade Highway at EB OR 22	A	8.1	-	ODOT	V/C 0.80[1]	Yes
10	Cascade Highway at Whitney Street	B	10.9	-	County	LOS E[2]	Yes
11	Cascade Highway/N First Avenue at Shaff Road/Fern Ridge Road	C	26.1	-	County	LOS E[2]	Yes
12	N First Avenue at Regis Street	E	47.6	0.07	City	LOS E[3]	Yes
13	N First Avenue at Hollister Street	C	22.9	0.16	City	LOS E[3]	Yes
14	N First Avenue at Locust Street	C	18.0	0.27	City	LOS E[3]	Yes
15	N First Avenue at Washington Street	B	19.5	-	County	LOS E[2]	Yes
16	N First Avenue at Ida Street	C	15.9	-	City	LOS E[3]	Yes
17	Fern Ridge Road at N Third Avenue	B	14.3	0.19	County	LOS E[2]	Yes
18	N Third Avenue at E Ida Street	A	7.4	-	City	LOS E[3]	Yes
19	Fern Ridge Road at N Tenth Avenue	B	13.3	0.18	County	LOS E[2]	Yes
20	N Tenth Avenue at E Santiam Street	A	6.5	-	County	LOS E[2]	Yes
21	Fern Ridge Road at OR 22	C	21.0	0.17	ODOT	V/C 0.80	Yes
22	E Santiam Street at OR 22	C	17.2	0.24	ODOT	V/C 0.70	Yes

[1] *This v/c ratio may be increased to 0.90 if it can be determined that vehicles queues will not extend onto the mainline or into the portion of the ramp needed to safely accommodate deceleration; and if an adopted Interchange Area Management Plan (IAMP) is present or can be developed.*
[2] *LOS F may be allowed depending on volume*
[3] *or LOS F with a v/c ratio of 0.95 or better*

Target measures of effectiveness for each agency are described in the Analysis Methodology and Assumptions Memorandum (Reference 1) and summarized in Table 6. As shown, all study intersections operate acceptably within their respective measures of effectiveness in the PM peak hour.

QUEUEING

A queueing analysis was conducted at the signalized study intersections. Table 7 summarizes the 95th percentile queues during the weekday PM peak hours under year 2018 existing traffic conditions. The storage lengths reflect the striped storage for each movement at the intersections. Appendix C contains the queueing reports for these study intersections.

Table 7. Existing Weekday PM Peak Hour Queueing

Intersection	Movement	95th Percentile Queue (feet)	Storage Length (feet)	Adequate?
Cascade Highway SE/ OR 22 EB Ramps	SBL	25	150	Yes
	EBR	75	575	Yes
Cascade Highway SE/Whitney Street	SBL	50	100	Yes
	WBL	100	150	Yes
Shaff Road/N First Avenue	NBL	125	175	Yes
	SBL	75	100	Yes
	EBL	100	125	Yes
	WBL	75	100	Yes
N First Avenue/E Washington Street	NBL	50	100	Yes
	SBL	100	150	Yes
	EBL	50	75	Yes
	WBL	50	75	Yes
	WBR	25	50	Yes

As shown in Table 7, 95th percentile queues do not exceed the striped storage for any turning movement at any study intersection.

PUBLIC OPERATIONS COMMENTS

At their August meeting, the Stayton TSP Public Advisory Committee described locations throughout Stayton that may be experiencing congestion not described in the analysis above. The committee noted the following:

- The intersection of OR 22 and Fern Ridge Road seems to be operating worse than described
- Though the intersection of N Tenth Avenue and E Santiam is operating acceptably now, its operations will degrade with growth.
- The intersection of Cascade Highway/Shaff Road experiences congestion in the AM peak hour
- The intersection of N First avenue/Washington Street operated better with a protected left turn.

TRAFFIC SAFETY

The crash histories of the study intersections and selected segments were reviewed in an effort to identify potential safety issues within the study area. Additionally, all fatal crashes and all pedestrian and bicycle crashes were reviewed to identify safety trends and the ODOT Statewide Priority Index System was reviewed to identify high crash locations within the study area.

INTERSECTION CRASH RATES

ODOT provided crash records for the five-year period from January 1, 2011 through December 31, 2015 for the 22 study intersections. Table 8 summarizes the data provided by ODOT for the study intersection by crash type and severity. Figure 9 illustrates city-wide data obtained from ODOT by crash type and severity. Appendix D contains the crash data provided by ODOT.

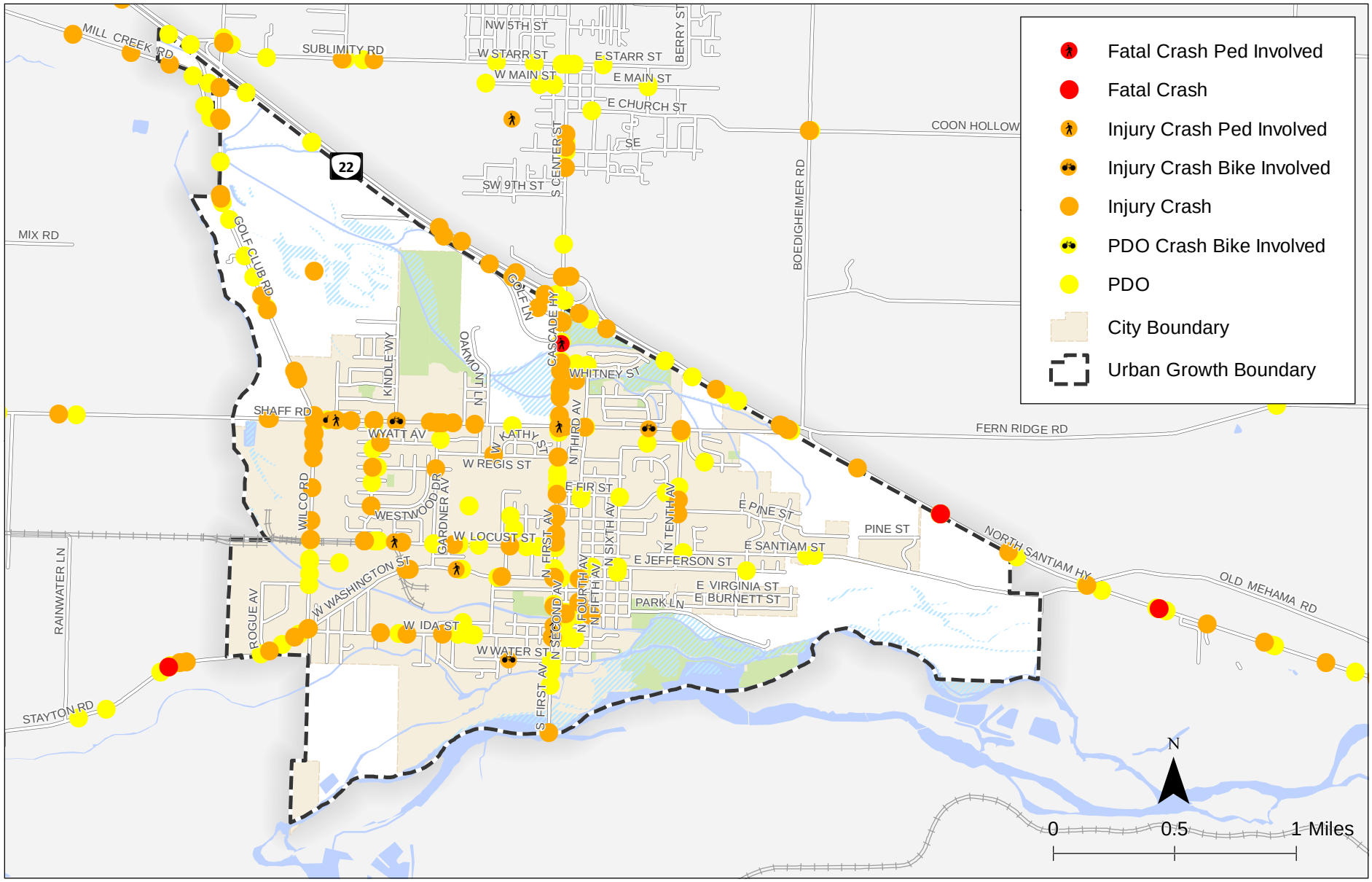
The crash rates shown in Table 8 were compared to the 90th percentile rates for similar facilities shown in Table 4-1 of the ODOT Analysis Procedures Manual (APM, Reference

Table 8. Intersection Crash Summary (January 1, 2011 to December 31, 2015)

#	Location	Crash Type							Severity			Total	PM Peak Hour Total Entering Vehicles	Intersection Class[2]	Critical Crash Rate	Crash Rate
		Rear End	Turning	Angle	Head On	Sideswipe	Pedestrian	Fixed Object	PDO[1]	Injury	Fatal					
1	Golf Club Road SE/Sublimity Rd SE	0	2	6	1	1	0	0	6	4	0	10	612	4 ST	0.41	**0.90**
2	Golf Club Road SE/OR 22 EB Ramps	1	0	0	0	0	0	1	0	2	0	2	933	4 ST	0.41	0.12
3	Golf Club Road SE/Mill Creek Rd SE	2	2	0	0	0	0	0	2	2	0	4	1094	4 ST	0.41	0.20
4	Wilco Rd/Shaff Rd SE	1	0	0	0	0	0	0	0	1	0	1	1292	4 ST	0.41	0.04
5	W Ida St&Jetters Way-Wilco Road/Stayton Rd SE-W Washington St	0	0	3	0	0	0	0	1	2	0	3	831	4 ST	0.41	0.20
6	N Gardner Ave/Shaff Rd SE	3	1	0	0	0	0	1	3	2	0	5	801	4 ST	0.41	0.34
7	N Gardner Ave/W Washington St	0	0	0	0	0	0	0	0	0	0	0	455	3 ST	0.29	0.00
8	Cascade Hwy SE/OR 22 WB Ramps	0	6	3	0	0	0	0	5	4	0	9	1085	4 ST	0.41	**0.45**
9	Cascade Hwy SE/OR 22 EB Ramps	23	1	0	0	0	0	0	15	9	0	24	1413	4 SG	0.86	**0.93**
10	Cascade Hwy SE/Whitney St	0	2	0	0	0	0	0	1	1	0	2	1432	3 SG	0.51	0.08
11	N First Ave/Shaff Rd SE	5	1	7	0	0	1	0	7	7	0	14	1769	4 SG	0.86	0.43
12	N First Ave/W Regis St	2	0	0	0	0	0	0	0	2	0	2	1361	4 ST	0.41	0.08
13	N First Ave/E Hollister St	0	0	1	0	0	0	0	0	1	0	1	1206	4 ST	0.41	0.05
14	N First Ave/W Locust St	2	2	0	0	0	0	0	4	0	0	4	1172	3 ST	0.29	0.19
15	N First Ave/E Washington St	1	8	1	0	0	0	0	4	6	0	10	1328	4 SG	0.86	0.41
16	N First Ave/E Ida St	1	3	2	0	0	1	0	2	5	0	7	1015	4 ST	0.41	0.38
17	N Third Ave/Fern Ridge Rd SE	0	0	4	0	0	0	0	3	1	0	4	611	4 ST	0.41	0.36
18	N Third Ave/E Ida St	0	0	0	0	0	0	0	0	0	0	0	180	4 ST	0.41	0.00
19	N Tenth Ave/Fern Ridge Rd SE	0	1	0	0	0	0	0	0	1	0	1	490	3 ST	0.29	0.11
20	N Tenth Ave/Stayton Rd SE	0	0	0	0	0	0	0	0	0	0	0	346	4 ST	0.41	0.00
21	OR 22/Fern Ridge Rd SE	1	3	8	0	0	0	1	6	7	0	13	1021	4 ST	0.41	**0.70**
22	OR 22/E Santiam St	0	1	1	0	0	0	0	1	1	0	2	1003	4 ST	0.41	0.11

1. Property Damage Only

2. All Contexts Urban



Reported Crashes from 2011 - 2015
Stayton, Oregon

Figure
9

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KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl

2). Per the APM, any intersection that has a crash rate equal to or greater than the corresponding 90th percentile rate is considered a high-risk intersection and is recommended for further review. Based on these criteria, four intersections are recommended for further review as described below.

Golf Club Road SE/Sublimity Road SE (Intersection #1)

The intersection of Golf Club Road SE/Sublimity Road SE is a westbound on and off ramp to OR 22 on the northwest side of the Stayton study area. The crash data summarized in Table 8 shows a high proportion of angle and turning crashes at this intersection. The intersection is stop controlled on the minor approaches, and eight of the ten crashes resulted from a failure to properly yield the right of way by vehicles at a stop sign. Four of the crashes resulted in injuries and none resulted in a fatality.

Cascade Highway SE/OR 22 WB Ramps (Intersection #8)

The intersection of Cascade Highway SE/OR 22 WB Ramps is a westbound on and off ramp to OR 22 on the north side of the Stayton study area. The crash data summarized in Table 8 shows that all crashes at this intersection in the study period were angle or turning crashes. All the crashes resulted from a failure to properly yield the right of way by vehicles at a stop-controlled approach or failure to stop at a stop sign. Four of the crashes at this intersection resulted in injuries and none resulted in a fatality.

Cascade Highway SE/OR 22 EB Ramps (Intersection #9)

The intersection of Cascade Highway SE/OR 22 EB Ramps is an eastbound on and off ramp to OR 22 on the north side of the Stayton study area. The crash data summarized in Table 8 shows that 23 of the 24 crashes were rear end crashes. All these crashes involved eastbound vehicles that had just exited OR 22 and 17 of the 23 crashes involved vehicles using the yield-controlled channelized right turn. These 17 rear end crashes likely occurred when the first eastbound vehicle to approach the intersection was required to yield to a southbound vehicle and the second eastbound vehicle to approach the intersection did not anticipate a need to stop. Nine of the crashes at this intersection resulted in injuries and none resulted in a fatality.

OR 22/Fern Ridge Road SE (Intersection #21)

The intersection of OR 22/Fern Ridge Road SE is an at-grade, minor approach stop-controlled intersection between a state facility and a county road. The crash data summarized in Table 8 shows that 11 of the 13 crashes involved angle or turning movements. Each of these 11 crashes resulted from a failure to properly yield the right of way by vehicles at a stop-controlled approach. Seven of the crashes at this intersection resulted in injuries and none resulted in a fatality.

SEGMENT CRASH RATES

The crash history of selected segments was reviewed to identify potential safety issues within the study area. City-wide crash data by crash type and severity obtained from ODOT is illustrated in Figure 9. Table 9 summarizes the data provided by ODOT for the study segments by crash type and severity.

Table 9. Segment Crash Summary (January 1, 2011 to December 31, 2015)

#	Roadway	Roadway Extents	Crash Type						Severity			Total	Functional Classification	Average Rate	Crash Rate
			Rear End	Turning	Angle	Head On	Pedestrian	Fixed Object	PDO[1]	Injury	Fatal				
1	Golf Club Road	OR 22 to Shaff Road	5	0	0	1	0	8	6	8	0	14	Arterial	1.30	0.46
2	Wilco Road	Shaff Road to Deschutes Drive	8	0	0	0	0	1	2	7	0	9	Collector	1.53	0.92
3		Deschutes Drive to W Washington Street	0	0	0	0	0	0	0	0	0	0	Arterial	1.30	0.00
4	Cascade Highway	OR 22 to Shaff Road	6	0	0	0	1	2	3	5	1	8	Principal Arterial	1.45	0.69
5	N First Avenue	Shaff Road to W Ida Street	3	3	1	0	0	1	5	3	0	8	Principal Arterial	1.45	0.41
6		W Ida Street to W Water Street	0	0	0	0	0	0	0	0	0	0	Principal Arterial	1.45	0.00
7	S First Avenue	W Water Street to southern UGB limits	0	0	0	0	0	4	4	0	0	4	Arterial	1.30	0.94

The crash rates shown in Table 9 were compared to the average rates for similar segments shown in ODOT Crash Rate Table II (Reference 3). Per the APM, any segment that has a crash rate equal to or greater than the corresponding average rate is considered a high-risk segment and is recommended for further review. Based on these criteria, no segments have a crash rate equal to or greater than the corresponding average rate and thus no segments are recommended for further review.

SAFETY PRIORITY INDEX SYSTEM

The ODOT Statewide Priority Index System (SPIS) identifies sites along both state highways and non-state facilities where safety issues warrant further investigation. The SPIS is a method developed by ODOT for identifying hazardous locations on state highways through consideration of crash frequency, crash rate, and crash severity. Sites identified within the top 5 percent are investigated by ODOT staff and reported to the Federal Highway Administration (FHWA). Per the most recent SPIS list, published in 2016, a segment immediately north of Cascade Highway SE/Whitney Street is identified by ODOT as within the top 10% of statewide SPIS sites over the last five-year period. Note that the ODOT SPIS shows that a fatal pedestrian crash occurred just north of the Cascade Highway SE/Whitney Street intersection and was not intersection-related.

PEDESTRIAN AND BICYCLE CRASH REVIEW

Seven pedestrian crashes and six bicycle crashes occurred within the study area from 2011 to 2015:

Pedestrian Crashes:

Shaff Road/Quail Run Avenue

At 10:00 AM on November 21, 2015, a passenger vehicle exiting a commercial driveway from the south onto Shaff Road SE struck a pedestrian in the intersection. The driver of the vehicle failed to yield the right of way to the pedestrian. The pedestrian sustained a minor injury (not visible but leading to a complaint of pain) from the crash.

Fern Ridge Road/N First Avenue

At 7:00 AM on January 20, 2012, a passenger vehicle traveling west on Fern Ridge Road and attempting to turn south onto N First Avenue struck a pedestrian in the intersection. The driver of the vehicle failed to yield the right of way to the pedestrian. The pedestrian sustained a minor injury (not visible but leading to a complaint of pain) from the crash.

W Locust Street/Heritage Loop

At 6:00 AM on December 19, 2015, a passenger vehicle traveling east on W Locust Road and attempting to turn north onto Heritage Loop struck a pedestrian 50 feet north of the intersection. The driver failed to see or yield to the pedestrian, who was wearing dark clothing. The pedestrian sustained an incapacitating injury from the crash.

W Washington Street East of N Gardner Avenue

At 2:00 PM on June 15, 2012, a passenger vehicle traveling west on W Locust Road struck two pedestrians off the roadway. The driver was driving inattentively and lost control of the vehicle, causing it to run off the roadway and hit the pedestrians. One pedestrian sustained an incapacitating injury from the crash and the other sustained a minor injury (not visible but leading to a complaint of pain) from the crash.

Cascade Highway SE, South of Golf Lane SE Intersection

At 5:00 PM on December 10, 2014, a southbound passenger vehicle struck and killed a pedestrian on Cascade Highway SE. Conditions at the time of the crash were dark with heavy rain and the pedestrian attempted to cross at a location without a crosswalk.

N First Avenue/W High Street

At 2:00 PM on December 10, 2015, a passenger vehicle traveling south on N First Avenue struck a pedestrian in the intersection. The driver failed to yield the right of way to the pedestrian. The pedestrian sustained a minor injury (not visible but leading to a complaint of pain) injury from the crash.

N First Avenue/W Ida Street

At 7:00 PM on March 11, 2014, a passenger vehicle traveling north on N First Avenue and attempting to turn west onto Ida Street struck a pedestrian in the intersection. The driver failed to yield the right of way to the pedestrian. The pedestrian sustained a non-incapacitating injury from the crash.

Bicycle Crashes:

Shaff Road East of Golf Club Road

At 4:00 PM on March 1, 2011, a passenger vehicle exiting a commercial driveway from the south onto Shaff Road SE struck a bicyclist in the bicycle lane or sidewalk. The driver of the vehicle failed to yield the right of way to the bicyclist. The bicyclist sustained a non-incapacitating injury from the crash.

Shaff Road/Quail Run Avenue

At 7:00 AM on August 8, 2015, a passenger vehicle attempting to make an eastbound left turn at the intersection of Shaff Road SE/Quail Run Avenue failed to yield the right of way and struck a westbound bicyclist. The bicyclist sustained a non-incapacitating injury from the crash.

Shaff Road/Kindle Way

At 7:00 AM on May 1, 2015, a passenger vehicle attempting to make a southbound left turn at the intersection of Shaff Road SE/Kindle Way SE failed to yield the right of way to a westbound bicyclist. As a result, the bicyclist struck the vehicle and sustained a minor injury (not visible but leading to a complaint of pain) injury.

W Water Street East of S Douglas Avenue

At 7:00 PM on June 1, 2012, a passenger vehicle proceeding from west to east failed to yield the right of way and struck a bicyclist. Conditions were rainy and wet and the bicyclist sustained a non-incapacitating injury.

N First Avenue/E Fir Street

At 2:00 PM on August 21, 2014, a passenger vehicle proceeding from north to south failed to yield the right of way and struck a bicyclist. The driver's view was obscured by her vehicle. The bicyclist did not sustain an injury.

Fern Ridge Road/Wildflower Drive

At 3:00 PM on February 20, 2013, a southbound passenger vehicle at the intersection of Fern Ridge Road/Wildflower Drive failed to yield the right of way to a westbound bicyclist. The bicyclist sustained a non-incapacitating injury.

FATAL CRASH REVIEW

Two fatal crashes occurred within the study area from 2011 to 2015.

OR 22, West of E Santiam Street Intersection

At 1:00 PM on November 11, 2011, a westbound passenger vehicle on OR 22 crossed over the center line and into the oncoming traffic line, hitting an eastbound passenger vehicle head on. The driver of the former vehicle was killed in the crash. Per police, the driver may have suffered a medical emergency before the crash occurred, causing the illegal maneuver.

Cascade Highway SE, South of Golf Lane SE Intersection

At 5:00 PM on December 10, 2014, a southbound passenger vehicle struck and killed a pedestrian on Cascade Highway SE. Conditions at the time of the crash were dark with heavy rain and the pedestrian attempted to cross at a location without a crosswalk. This crash was also described in the pedestrian and bicycle crash review.

Cascade Highway SE at Whitney Street

ODOT has verified all crashes occurring through 2015; however, more recent crash data is available in preliminary form. Crash data from 2017 shows that a fatal crash occurred at the intersection of Cascade Highway SE and Whitney Street at 9:00 AM on September 7, 2017. In this crash, a westbound left-turning vehicle and a northbound through-moving vehicle collided, resulting in one fatality, one incapacitating injury, and one minor (not visible but leading to a complaint of pain) injury. This crash was the result of the northbound driver disregarding the traffic signal.

PUBLIC TRAFFIC SAFETY COMMENTS

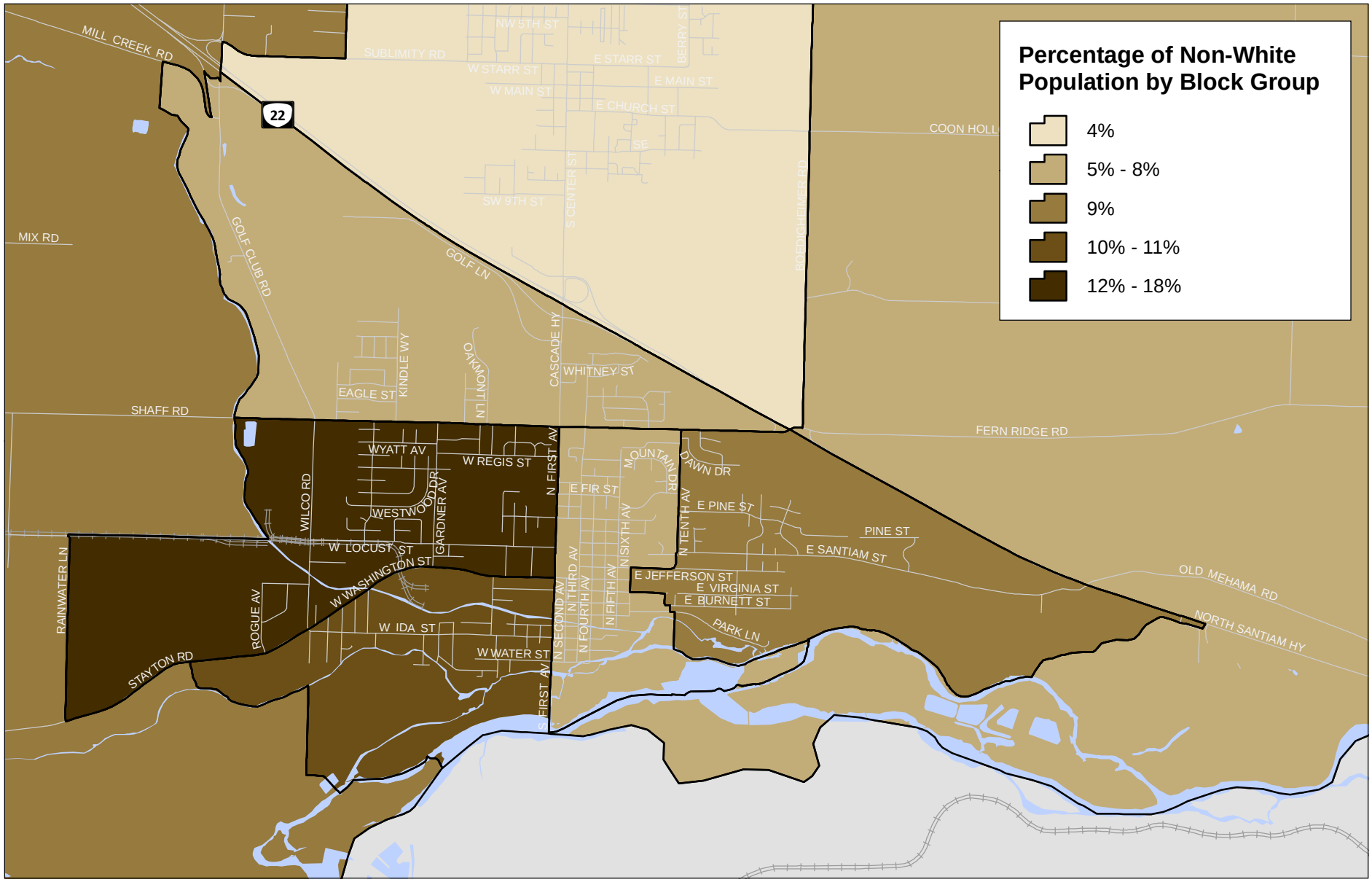
At their August meeting, the Stayton TSP Public Advisory Committee described locations throughout Stayton that have experienced close calls or that have the potential to be improved from a safety perspective. These locations were:

- School crosswalks across N First Avenue
- N First Avenue/Washington Street intersection
- N Tenth Avenue/E Santiam Street intersection
- N Third Avenue/Fern Ridge Road intersection

ENVIRONMENTAL JUSTICE ANALYSIS

The socio-economically sensitive populations within the City of Stayton consist of minorities, elderly people (people 65 years of age or older), youth (people 17 years of age or younger), people who do not speak English, disabled people, and people who live below the poverty line. 2010 census data was collected at the census block group level to show the concentrations of these populations as a percentage of the overall population. The data was combined with a general understanding of local conditions to ensure that the existing transportation system meets the needs of these individuals. Figures 10 through 16 illustrate the locations of these populations within Stayton.

- Minorities – As shown in Figure 10, the south and west sides of the city contain the highest concentration of minorities. The block group southwest of W Washington Street has a 10-11% concentration of non-white population while the block group on the west side between Shaff Road and W Washington Street has a 12-18% concentration of non-white population. The remaining portions of the city all have a less than 10% concentration of non-white population.
- Elderly People – As shown in Figure 11, the part of the city north of Shaff Road/Fern Ridge Road and the central part of the city have the highest concentration of people age 65 and older at 17%. Other parts of the city have an elderly population mostly under 12%.
- Youth – As shown in Figure 12, the west side of the city has the highest youth population at 28-29% of the population. The east side of the city has a similarly high youth population at 26-27% of the population. The northern and central parts of the city have lower youth populations at under 25% of the population.
- Non-English Speaking – As shown in Figure 13, the west side of the city has the highest population of people who do not speak English at 17-26% of the population. The east side of the city has a similarly high population of people who do not speak English at 16%. In the northern part of the city, 6-15% of the population does not speak English and less than 4% of people do not speak English in the central and southern part of the city. In total, about 15% of Stayton residents do not speak English.
- People with Disabilities – As shown in Figure 14, the north side of the city has the highest population of people with disabilities with 29%-32% of the population. The east and west sides of the city have a low population of people with disabilities at less than 18% while the central part of the city has 26-27% of the population with disabilities.



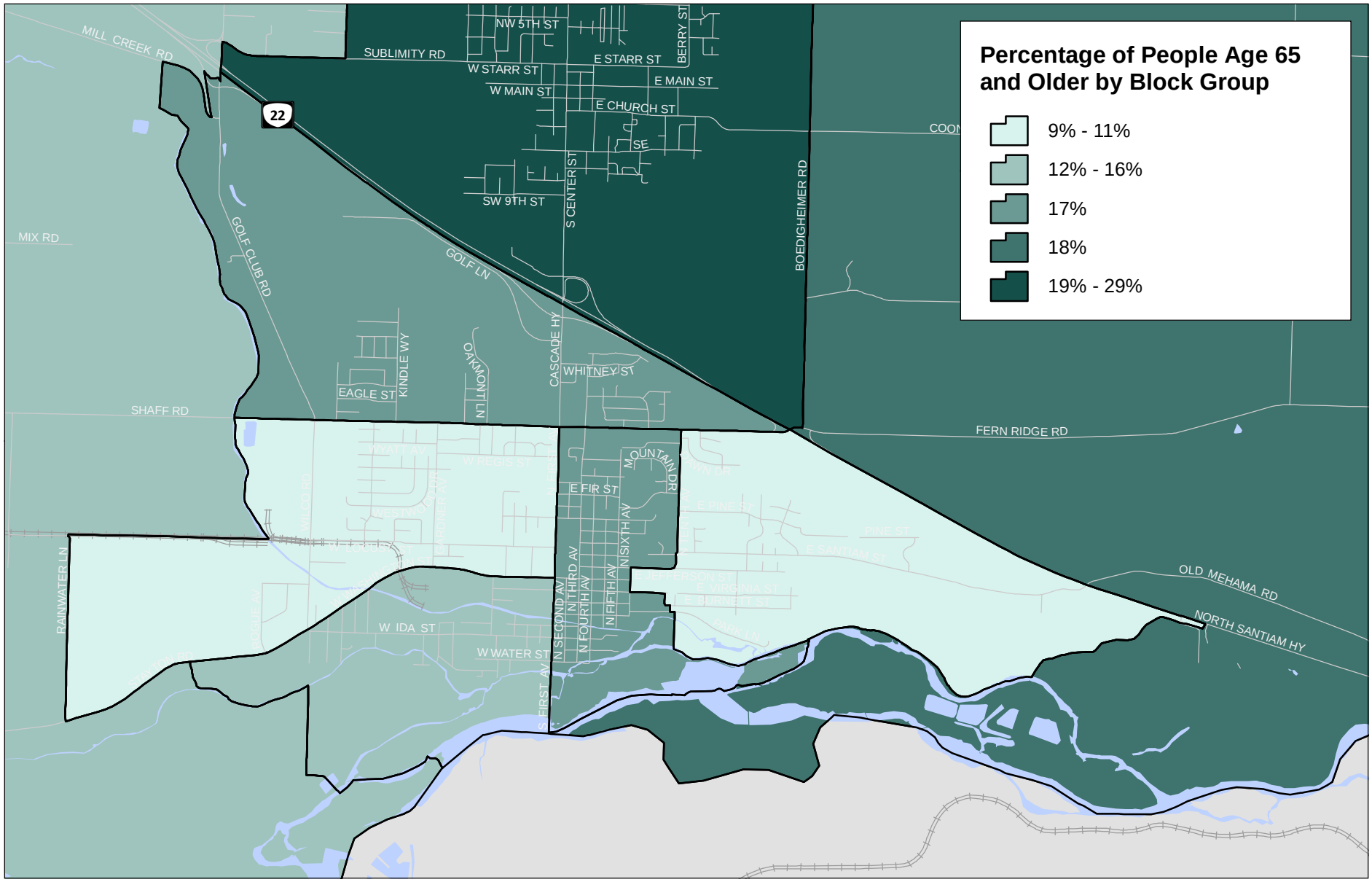
Minority Population
Stayton, Oregon

Figure
10

H:\2212352 - Stayton Transportation System Plan\gis\10 Minority Population.mxd - jsommerville - 10:29 AM 9/5/2018

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2010 Census Redistricting Data (Public Law 94-171) Summary File



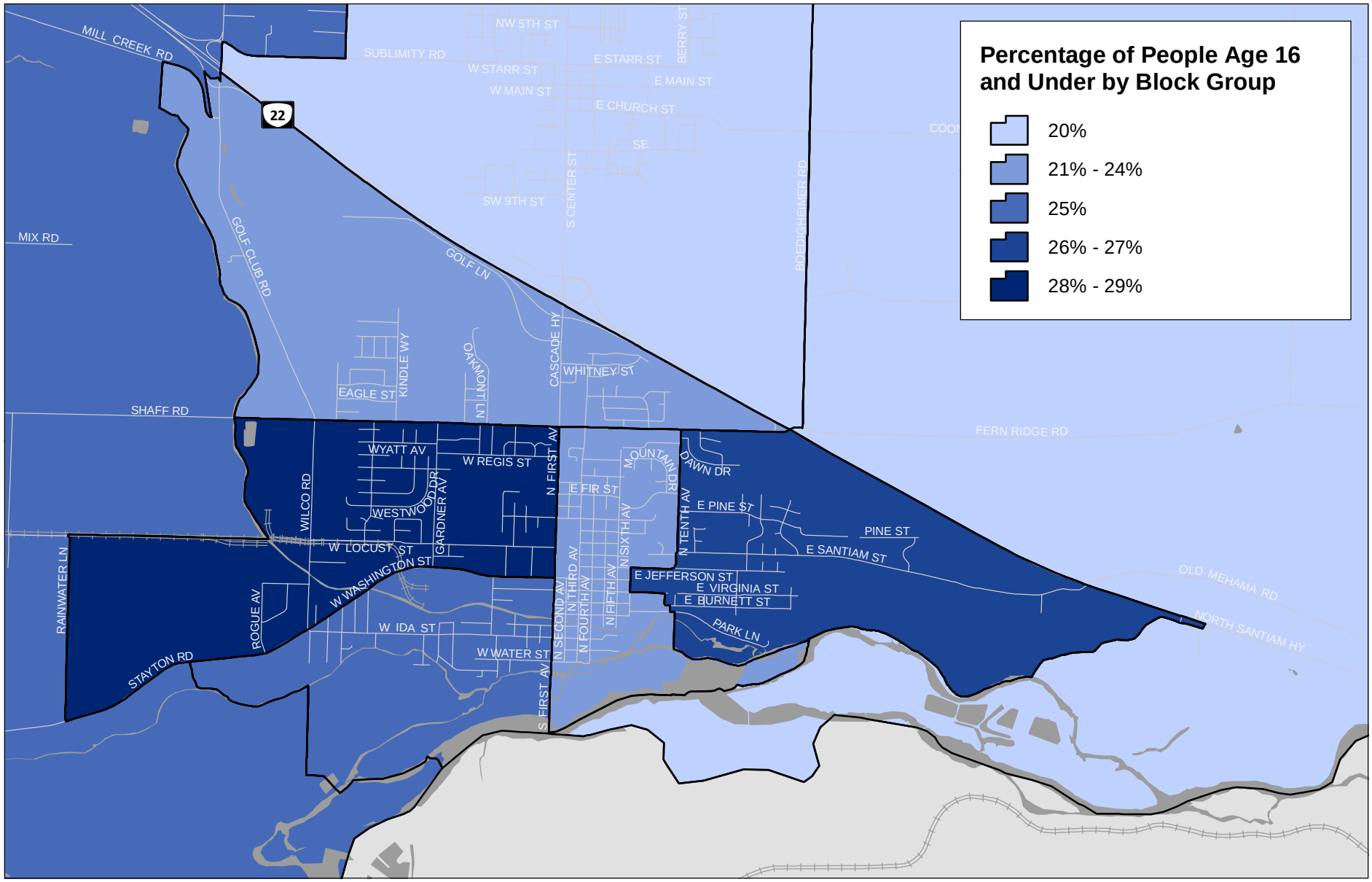
Elderly Population
Stayton, Oregon

Figure
11

H:\22122352 - Stayton Transportation System Plan\gis\11 Elderly Population.mxd - jsommerville - 10:29 AM 9/5/2018

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2010 Census Table DEC_10_SF1_P12



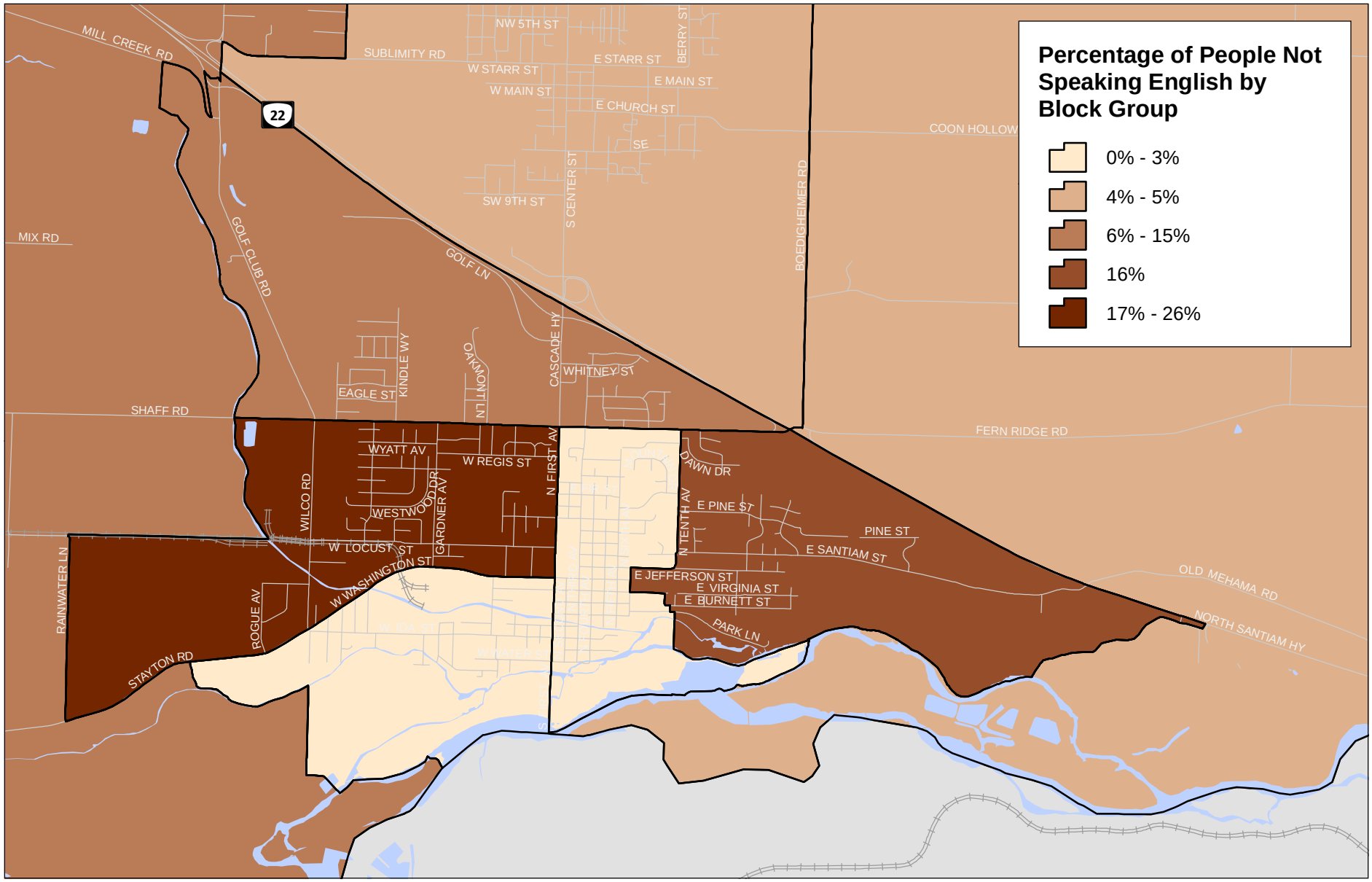
Youth Population
Stayton, Oregon

Figure
12

H:\22122352 - Stayton Transportation System Plan\gis\12 Youth Population.mxd - jsommerville - 10:29 AM 9/5/2018

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2010 Census Table DEC_10_SF1_P14



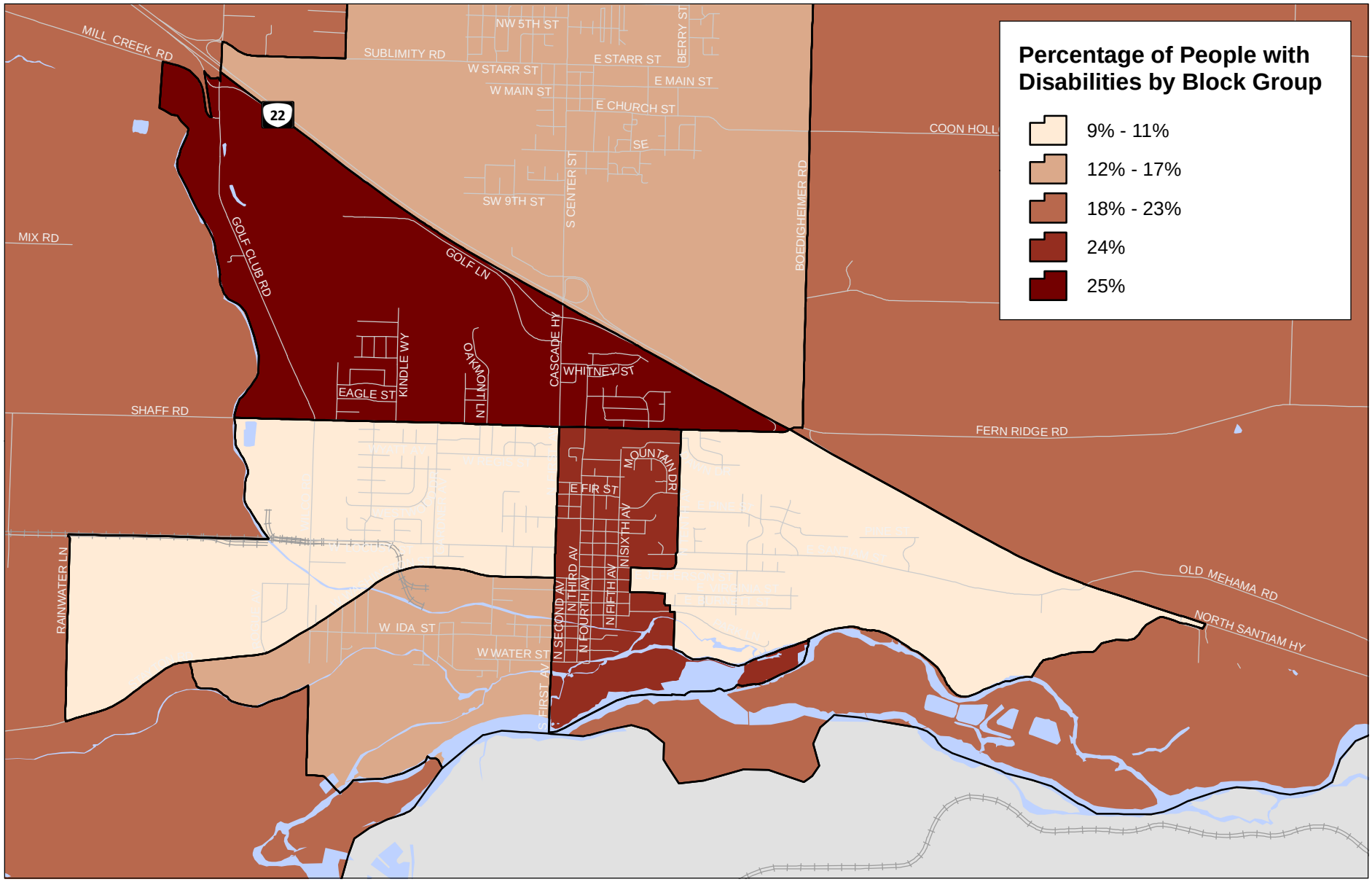
Non-English Speaking Population
Stayton, Oregon

Figure **13**

H:\2212\2352 - Stayton Transportation System Plan\gis\13 Non-English Speaking Population.mxd - jsommerville - 10:29 AM 9/5/2018

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2016 ACS Table ACS_16_5YR_B99163



Disabled Population
Stayton, Oregon

Figure
14

H:\2212352 - Stayton Transportation System Plan\gis\14 Disabled Population.mxd - jsommerville - 10:29 AM 9/5/2018

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2016 ACS Table ACS_16_5YR_C21007

- Households without Access to a Personal Vehicle – As shown in Figure 15, the north and west sides of the city have the highest portion of households without access to a personal vehicle, at 14-17%. Overall, 9% of the households in Stayton do not have access to a personal vehicle. These households are more likely to rely on walking, bicycling, and public transportation for their transportation needs.

- People with Low income – As shown in Figure 16, the southwest corner of the city has the highest percentage of people earning less than twice the federal poverty level at 50-88% of the population. The west side of the city has 37-49% of people in this category, while the north and east side of the city has 28-36% of people in this category.

The socioeconomic conditions within the city will be considered in the development of the TSP update to ensure that the future transportation system meets the needs of the entire population while not creating adverse conditions for select segments of the population.

FUTURE GROWTH ASSUMPTIONS

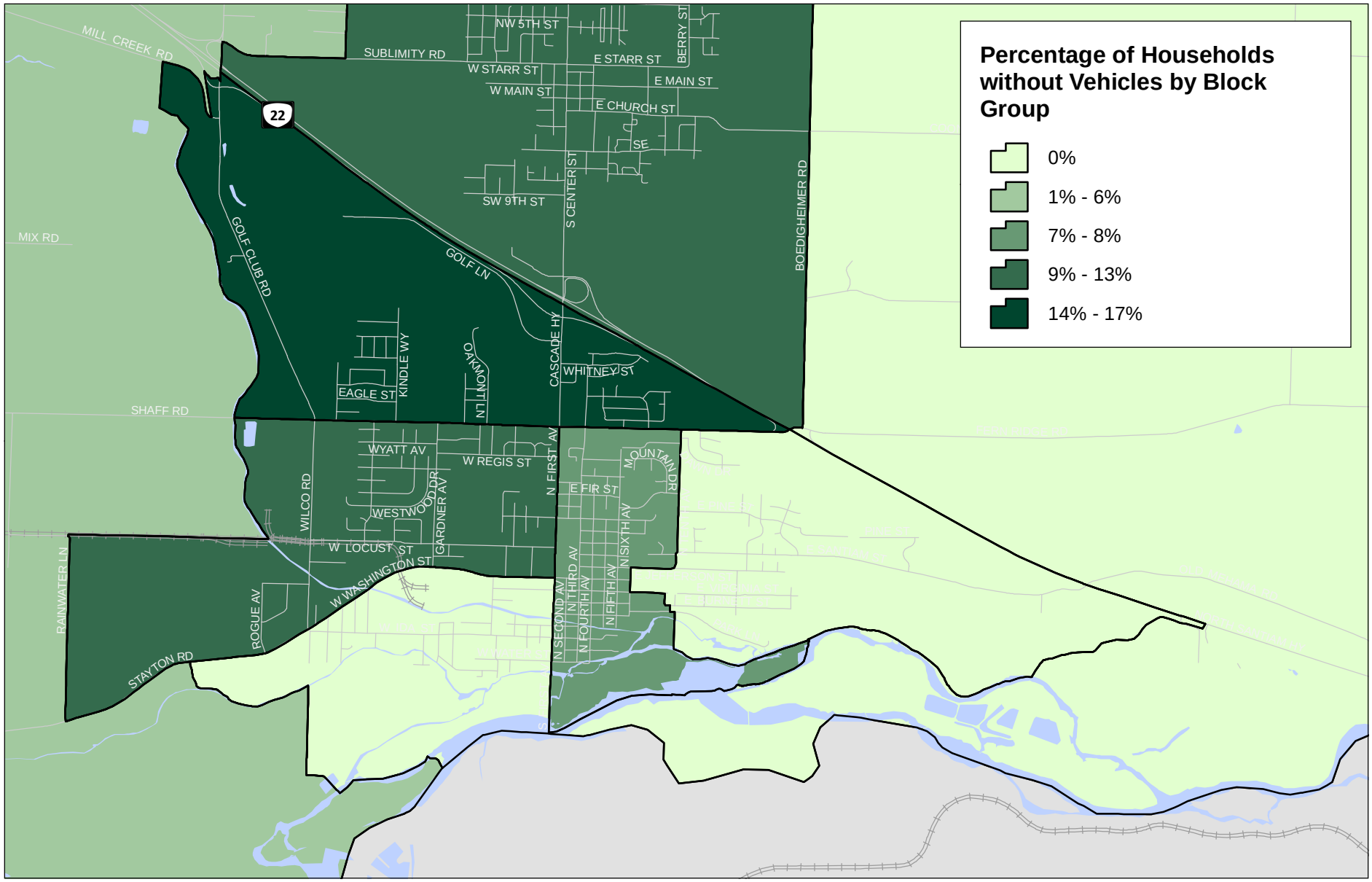
Analysis below shows projected 2040 operations at the 22 study intersections. To determine 2040 traffic conditions, traffic growth between present day and 2040 was projected through an understanding of expected household and employment growth in the area and accompanying trip generation.

PROJECTED LAND USES

Land use plays an important role in developing a comprehensive transportation system. The amount of land that is planned to be developed, the type of land uses, and how the land uses are mixed together all have a direct impact on how the transportation system will operate in the future. Understanding land use is critical to taking actions to maintain or enhance the transportation system. Population and employment growth play a significant role in determining future land use. The following provides a summary of the population and employment projections prepared for the Stayton TSP update. Appendix E contains a more detailed discussion on the projections.

POPULATION AND HOUSEHOLD FORECAST

Population data for Stayton was obtained from Portland State University's Population Research Center (PRC). The PRC's Coordinated Population Forecast for Marion County and Larger Sub Areas includes base year 2017 and forecast year 2035 and 2067 population estimates for Stayton as well as estimates of persons per household. Based on the data, the population is currently 8,138 persons and is projected to be 9,767 persons in the year 2040; this reflects an Average Annual Growth Rate (AAGR) of approximately 0.80 percent per year between 2017 and 2035 and an AAGR of approximately 0.70 percent per year between 2035 and 2040. The persons per household is currently 2.6 and is



Households Without Vehicles
Stayton, Oregon

Figure
15

H:\22122352 - Stayton Transportation System Plan\gis\15 Households with Vehicles.mxd - jsommerville - 10:29 AM 9/5/2018

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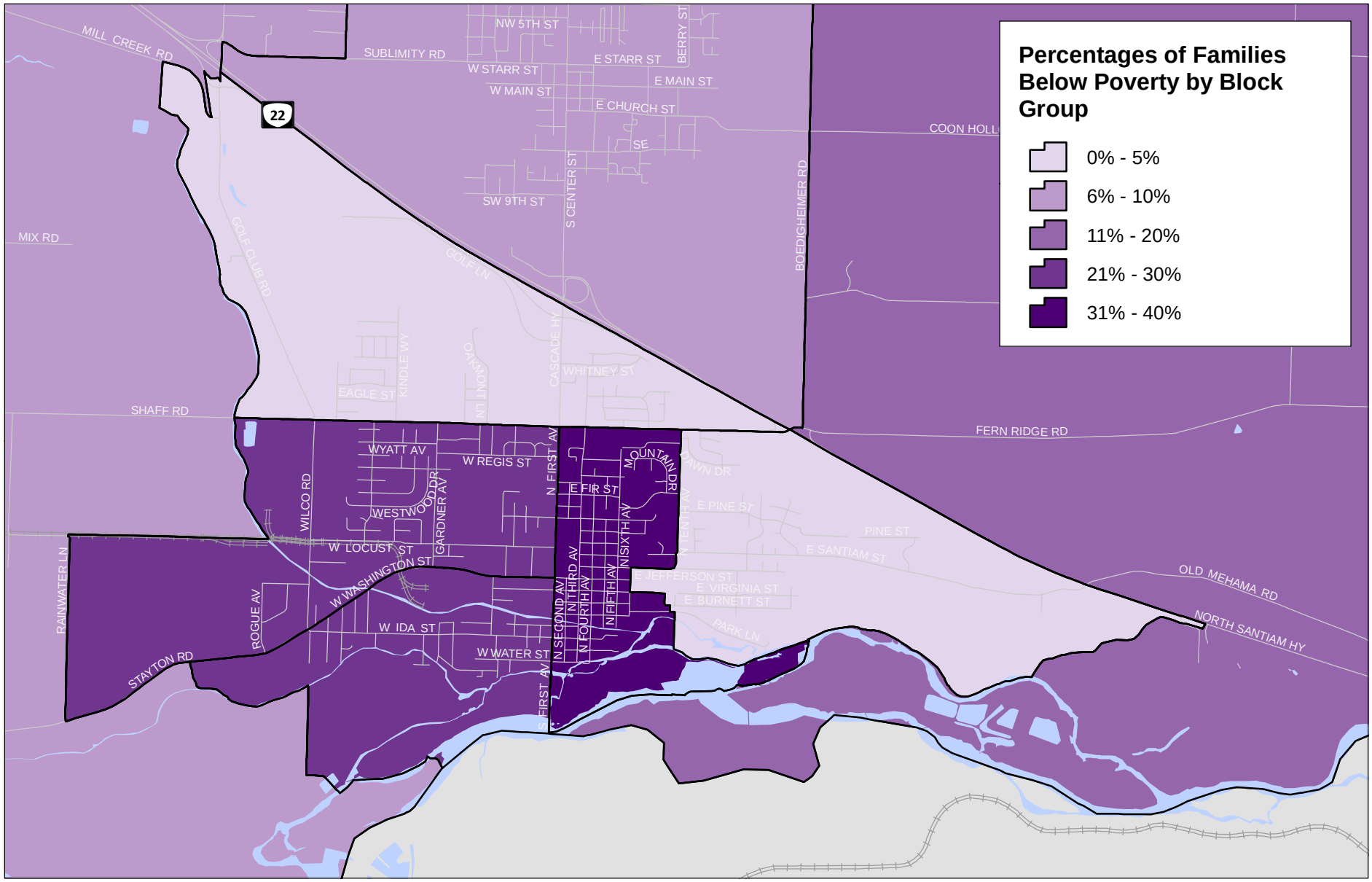
Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2016 ACS 5-Year Estimates Table B25044



Low Income Population
Stayton, Oregon

Figure
16

H:\22\22352 - Stayton Transportation System Plan\gis\16 Low Income Population.mxd - jsomnerville - 10:29 AM 9/5/2018

KITTELSON & ASSOCIATES

Coordinate System: NAD 1983 HARN StatePlane Oregon North FIPS 3601 Feet Intl
2016 ACS Table ACS_16_5YR_B17010

projected to be 2.6 in 2040. Therefore, there is a need for approximately 627 new homes in 2040. However, if the occupancy rate remains at 95 percent, there may be a need for 31 additional homes, or 658 new homes.

EMPLOYMENT FORECAST

Employment data for Stayton was obtained through the US Census Bureau's Center for Economic Studies "On the Map" tool and the State of Oregon's Mid-Valley Industry Employment Projections for the Linn, Marion, Polk, and Yamhill County. While the "On the Map" data shows a steady decline in jobs within the City since 2005, the State projects a 12 percent growth rate within the County, or an average annual growth rate of 1.2 percent. The State's projected growth rates vary considerably between job sectors, with the greatest growth occurring in manufacturing and health care jobs. Based on the data, there are currently 3,060 jobs within Stayton and there are projected to be 4,135 jobs in 2040, or an increase of 1,075 jobs. The job data was further divided into North American Industry Classification System (NAICS) sectors and converted to square-feet. Based on the data there is currently 282,410 square-feet of commercial and 622,159 square-feet of industrial space within the City and there is projected to be 380,802 square-feet of commercial and 829,986 square-feet of industrial space in the future

Table 10 summarizes the population and employment data for year 2017 and forecast year 2040 conditions. As shown, employment is expected to grow at a slightly higher rate than the population over the 23-year period.

Note that this growth estimate is more conservative than the growth estimate shown in the 2004 TSP. The 2004 TSP anticipated rapid growth that did not occur; the growth estimate shown below anticipates more conservative growth that will lead to lower projected volumes than shown in the 2004 TSP.

Table 10: Stayton Population and Employment Growth Summary

Land Use	2017	2040	Change	Annual Percent Change
Population	8,138	9,767	1,629	0.80%/0.70%
Households	3,130	3,757	627	0.80%/0.70%
Employment	3,060	4,135	1,075	1.2%
Square-feet (Com/Ind)	282K/622K	381K/830K	98K/207K	1.2%

The population and employment data shown in Table 10 was distributed throughout the Stayton based on information provided by the City on planned developments, information provided by the US Census, and information provided in the City's comprehensive plan and zoning designation map. The population and employment data was distributed based on Transportation Analysis Zones (TAZs) developed for the TSP update based on the current zoning designations and the location of major roadways and intersections throughout the City. The TAZs provide a convenient way of evaluating and summarizing the population and employment data for the City as well as a way to establish origin and destinations for new trips. Trip generation based on expected growth and origin-destination tables showing the distribution of this trip generation to and from the TAZs is

shown in Appendix F. Figure 17 shows the distribution of this trip generation onto the transportation network.

FUTURE CONDITIONS ANALYSIS

TRAFFIC OPERATIONS

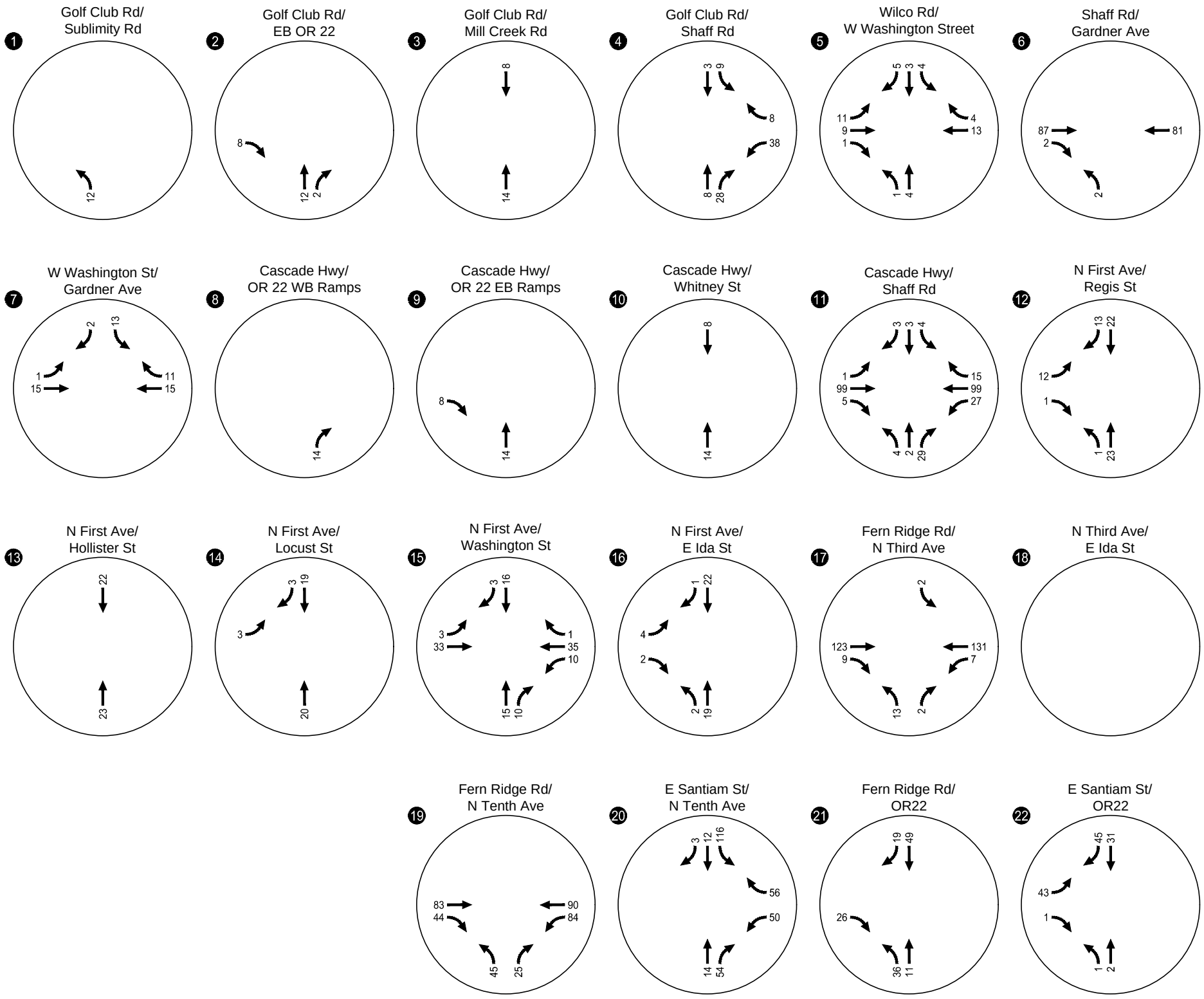
Year 2040 traffic conditions were determined by applying the future growth assumptions outlined above to the existing traffic conditions. Lane configurations and traffic control devices were assumed to be identical to existing conditions. Figure 18 summarizes the PM peak hour turning movement counts and operations at the study intersections under 2040 traffic conditions. Table 11 summarizes the results of the traffic operations analysis at the study intersection under existing traffic conditions. Appendix G contains the year 2040 traffic conditions worksheets.

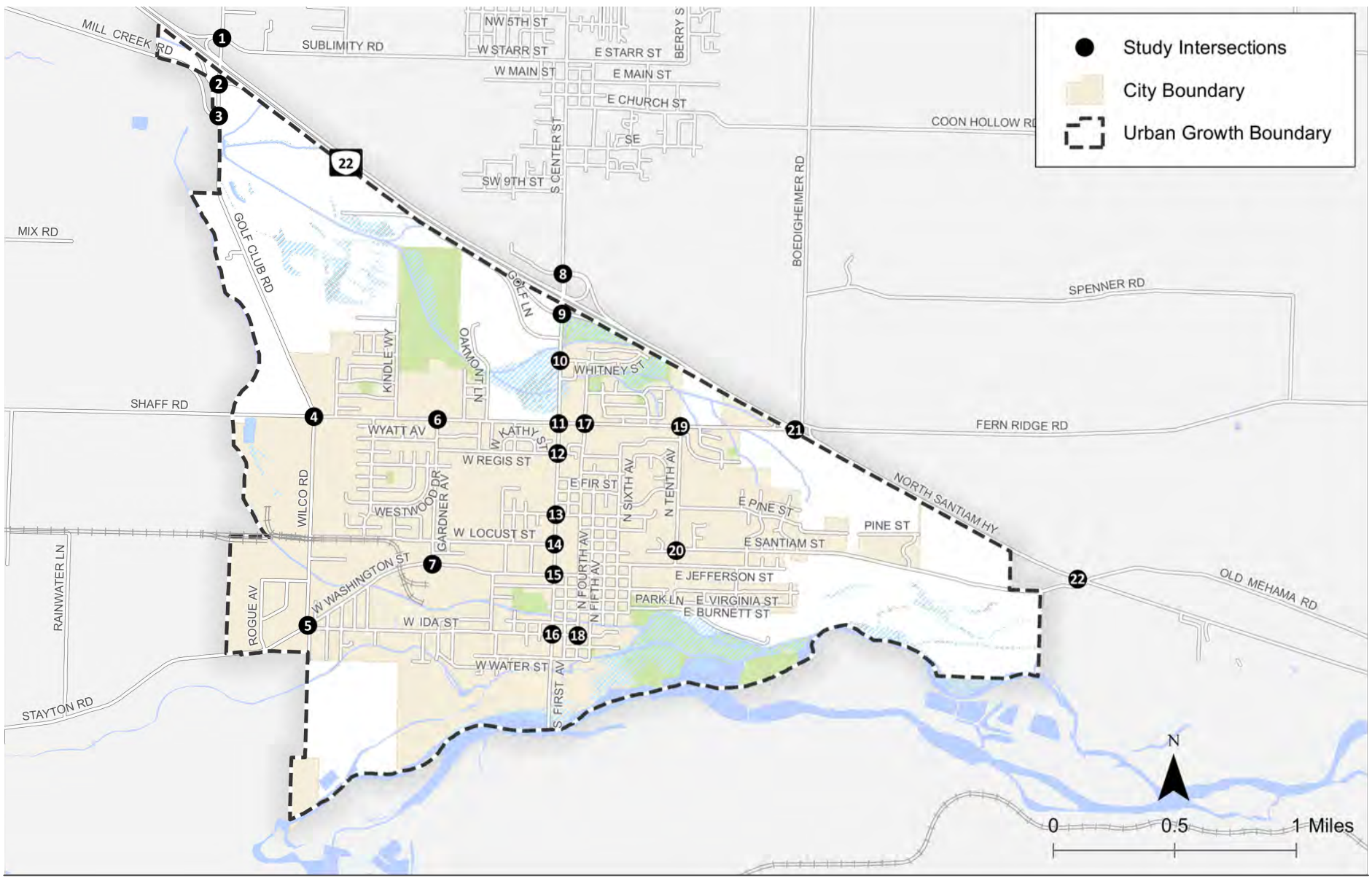
Table 11. 2040 Weekday PM Peak Hour Intersection Operations

#	Intersection	Level of Service (LOS)	Delay (Sec)	Volume/Capacity (v/c)	Measure of Effectiveness (MOE)		MOE Met?
					Agency	Maximum	
1	Golf Club Road at Sublimity Road/WB OR 22	C	16.0	0.15	ODOT	V/C 0.70[1]	Yes
2	Golf Club Road at EB OR 22	B	13.2	0.27	ODOT	V/C 0.80[1]	Yes
3	Golf Club Road at Mill Creek Road	D	31.8	0.20	County	LOS E[2]	Yes
4	Golf Club Road/Wilco Road at Shaff Road	D	25.3	-	County	LOS E[2]	Yes
5	Wilco Road at W Washington Street/Ida Street	B	13.6	-	County	LOS E[2]	Yes
6	Shaff Road at Gardner Road/Stayton Middle School	D	26.3	0.42	County	LOS E[2]	Yes
7	W Washington Street at Gardner Road	B	12.9	0.15	City	LOS E[3]	Yes
8	Cascade Highway at Sublimity Boulevard/WB OR 22	C	20.6	0.08	ODOT	V/C 0.70[1]	Yes
9	Cascade Highway at EB OR 22	A	8.2	-	ODOT	V/C 0.80[1]	Yes
10	Cascade Highway at Whitney Street	B	11.0	-	County	LOS E[2]	Yes
11	Cascade Highway/N First Avenue at Shaff Road/Fern Ridge Road	C	34.6	-	County	LOS E[2]	Yes
12	N First Avenue at Regis Street	F	52.7	0.08	City	LOS E[3]	Yes
13	N First Avenue at Hollister Street	C	24.4	0.17	City	LOS E[3]	Yes
14	N First Avenue at Locust Street	C	18.9	0.30	City	LOS E[3]	Yes
15	N First Avenue at Washington Street	C	20.1	-	County	LOS E[2]	Yes
16	N First Avenue at Ida Street	C	18.2	-	City	LOS E[3]	Yes
17	Fern Ridge Road at N Third Avenue	C	23.5	0.35	County	LOS E[2]	Yes
18	N Third Avenue at E Ida Street	A	7.4	-	City	LOS E[3]	Yes
19	Fern Ridge Road at N Tenth Avenue	D	31.9	0.52	County	LOS E[2]	Yes
20	N Tenth Avenue at E Santiam Street	A	8.9	-	County	LOS E[2]	Yes
21	Fern Ridge Road at OR 22	D	26.6	0.22	ODOT	V/C 0.80	Yes
22	E Santiam Street at OR 22	E	36.9	0.57	ODOT	V/C 0.70	Yes

[1] *This v/c ratio may be increased to 0.90 if it can be determined that vehicles queues will not extend onto the mainline or into the portion of the ramp needed to safely accommodate deceleration; and if an adopted Interchange Area Management Plan (IAMP) is present or can be developed.*
[2] *LOS F may be allowed depending on volume*
[3] *or LOS F with a v/c ratio of 0.95 or better*

Target measures of effectiveness for each agency are described in the Analysis Methodology and Assumptions Memorandum (Reference 1) and summarized in Table 11. As shown, all study intersections operate acceptably within their respective measures of effectiveness in the PM peak hour. Note that while the intersection of N First Avenue at





New Trips
Weekday PM Peak Hour
Stayton, Oregon

Figure
17

KITTELSON & ASSOCIATES

1 Golf Club Rd/ Sublimity Rd
CM=WB
LOS=C
Del=16.0
V/C=0.15
5 30 5
5 5 25
10 60 55
210 50 180

2 Golf Club Rd/ EB OR 22
CM=EB
LOS=B
Del=13.2
V/C=0.27
95 10
140 <5 385
290 35

3 Golf Club Rd/ Mill Creek Rd
CM=EB
LOS=D
Del=31.8
V/C=0.20
30 445 <5
30 <5 155
10 5 10
140 265 5

4 Golf Club Rd/ Shaff Rd
LOS=D
Del=25.3
10 330 245
10 65 35
160 45 80
45 265 95

5 Wilco Rd/ W Washington Street
LOS=B
Del=13.6
70 230 60
85 75 40
80 95 5
25 115 5

6 Shaff Rd/ Gardner Ave
CM=NB
LOS=D
Del=26.3
V/C=0.42
<5 <5 <5
10 405 70
10 335 35
50 10 45

7 W Washington St/ Gardner Ave
CM=SB
LOS=B
Del=12.9
V/C=0.15
50 65
40 145
55 160

8 Cascade Hwy/ OR 22 WB Ramps
CM=WB
LOS=C
Del=20.6
V/C=0.08
10 320 30
15 25 55
25 5 15
20 340 240

9 Cascade Hwy/ OR 22 EB Ramps
LOS=A
Del=8.2
340 50
55 <5 390
545 60

10 Cascade Hwy/ Whitney St
LOS=B
Del=11.0
580 160
125 65
490 35

11 Cascade Hwy/ Shaff Rd
CM=WB
LOS=C
Del=34.6
105 485 55
115 235 130
65 210 90
95 380 100

12 N First Ave/ Regis St
CM=WB
LOS=F
Del=52.7
V/C=0.08
35 665 <5
30 <5 75
<5 <5 5
75 545 <5

13 N First Ave/ Hollister St
CM=WB
LOS=C
Del=24.4
V/C=0.17
20 570 35
15 <5 40
20 <5 15
20 505 10

14 N First Ave/ Locust St
CM=EB
LOS=C
Del=18.9
V/C=0.30
70 555
55 45
45 450

15 N First Ave/ Washington St
LOS=C
Del=20.1
45 390 115
55 115 45
100 115 55
35 340 40

16 N First Ave/ E Ida St
LOS=C
Del=18.2
50 355 20
40 45 125
40 45 20
55 250 15

17 Fern Ridge Rd/ N Third Ave
CM=NB
LOS=C
Del=23.5
V/C=0.35
25 40 20
15 310 50
15 310 25
35 30 30

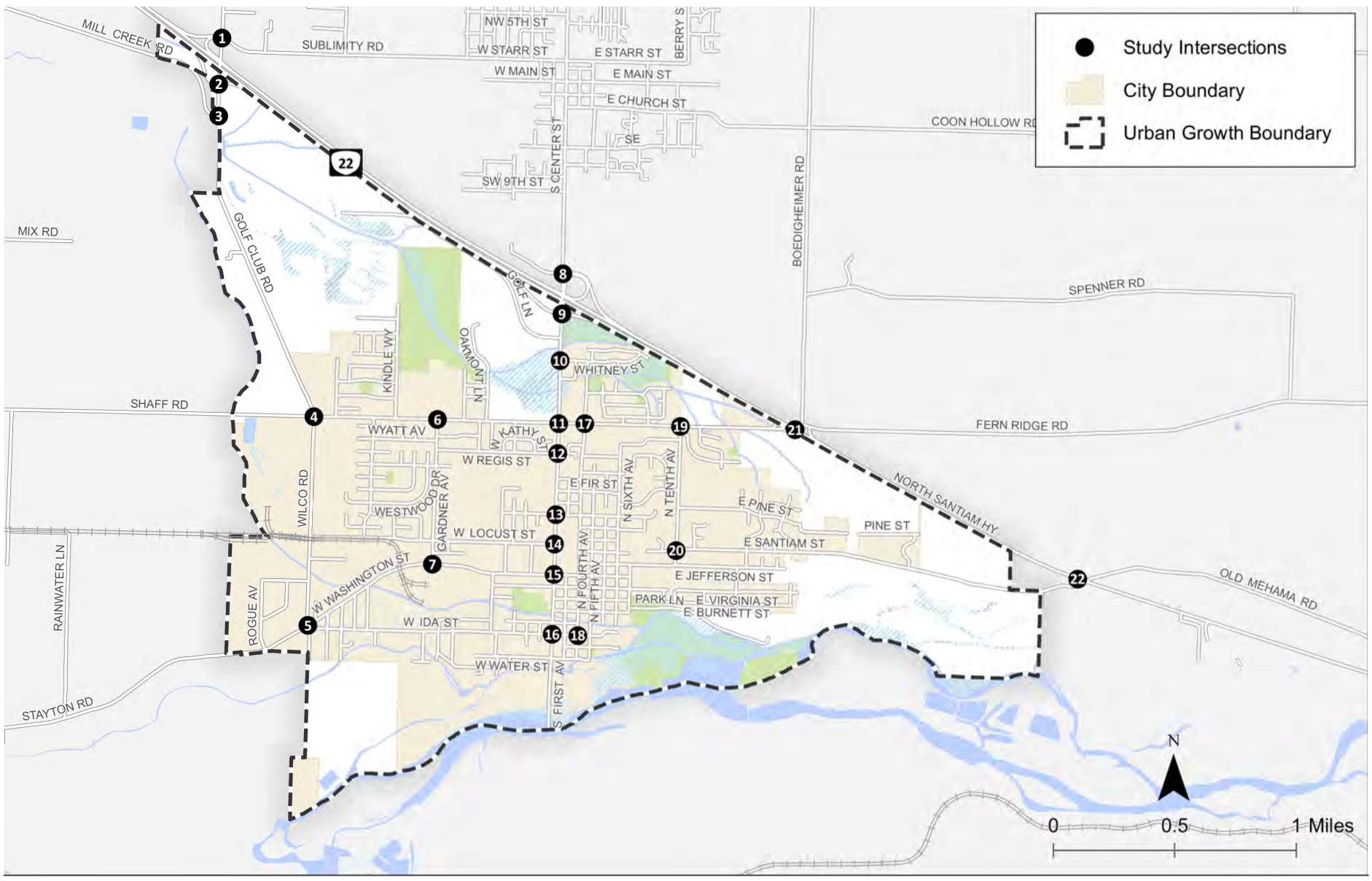
18 N Third Ave/ E Ida St
LOS=A
Del=7.4
25 210 10
25 15 20
5 25 5
10 20 <5

19 Fern Ridge Rd/ N Tenth Ave
CM=NB
LOS=D
Del=31.9
V/C=0.52
210 125
200 150
130 45

20 E Santiam St/ N Tenth Ave
CM=SB
LOS=A
Del=8.9
10 70 160
<5 <5 5
80 <5 125
40 40 155

21 Fern Ridge Rd/ OR22
CM=WB
LOS=D
Del=26.6
V/C=0.22
80 485 15
10 20 115
10 30 5
110 285 <5

22 E Santiam St/ OR22
CM=EB
LOS=E
Del=36.9
V/C=0.57
55 525 20
50 10 65
15 5 <5
50 330 <5



CM = CRITICAL MOVEMENT (TWSC)
LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED/AWSC) / CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)
Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED/AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)
V/C = CRITICAL VOLUME-TO-CAPACITY RATIO
TWSC = TWO-WAY STOP CONTROL
AWSC = ALL-WAY STOP CONTROL

Future Traffic Conditions
Weekday PM Peak Hour
Stayton, Oregon

Figure
18

KITTELSON & ASSOCIATES

H:\22\22352 - Stayton Transportation System Plan\dwg\22352_Fig01.dwg Sep 14, 2018 - 4:46pm - bgraveline Layout Tab: Future PM

Regis Street operates at LOS F, the v/c ratio of the critical movement is better than 0.95. Therefore, this intersection meets City of Stayton mobility standards.

QUEUEING

A queueing analysis was conducted at the signalized study intersections. Table 12 summarizes the 95th percentile queues during the weekday PM peak hours under year 2040 traffic conditions. The storage lengths reflect the striped storage for each movement at the intersections. Appendix H contains the queueing reports for these study intersections.

Table 12. Future Weekday PM Peak Hour Queueing

Intersection	Movement	95th Percentile Queue	Storage Length (feet)	Adequate?
Cascade Highway SE/ OR 22 EB Ramps	SBL	25	150	Yes
	EBR	75	575	Yes
Cascade Highway SE/Whitney Street	SBL	50	100	Yes
	WBL	100	150	Yes
Shaff Road/N First Avenue	NBL	125	175	Yes
	SBL	100	100	Yes
	EBL	100	125	Yes
	WBL	100	100	Yes
N First Avenue/E Washington Street	NBL	50	100	Yes
	SBL	100	150	Yes
	EBL	50	75	Yes
	WBL	50	75	Yes
	WBR	25	50	Yes

As shown in Table 12, 95th percentile queues do not exceed the striped storage for any turning movement at any study intersection.

GOLF LANE REALIGNMENT

Note that per the Whitney Street/Cascade Highway operational analysis study (Reference 4), Golf Lane should be realigned to intersect Cascade Highway directly opposite Whitney Street. See the May 19, 2003 Memorandum of Understanding between Marion County and the City of Stayton for further details regarding this area.

TRANSPORTATION FUNDING

The following provides an overview of the City of Stayton's transportation funding and provides a forecast of potential funds for implementing the TSP based on existing funding sources. Additional funding sources could provide additional funding in the future.

EXISTING REVENUE SOURCES

The primary revenue sources contributing to transportation funding for Stayton are the state gas tax, ODOTs surface transportation program (STP), and the City's street maintenance fee, System Development Charges (SDCs), and most recently, a local gas

tax. Exhibit 1 illustrates the revenues from these sources over the past six years as well as projected for Fiscal Year (FY) 2018-19.

Exhibit 1: City of Stayton Transportation Revenue Sources

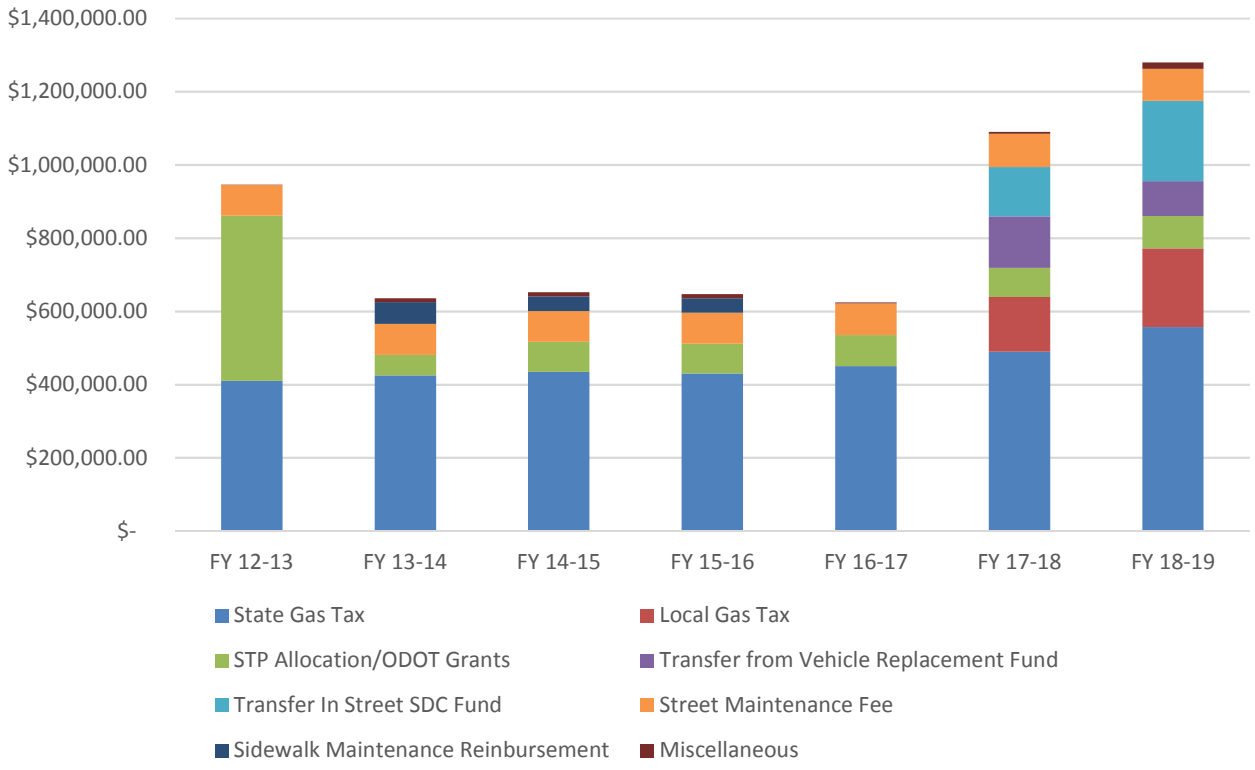


Table 13. City of Stayton Transportation Revenue

	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
State Gas Tax	$410,000	$425,000	$435,000	$430,000	$450,000	$490,000	$556,800
Local Gas Tax						$149,000	$215,000
STP Allocation/ ODOT Grants	$451,119	$56,269	$81,876	$81,876	$85,000	$80,000	$88,100
Transfer from Vehicle Replacement Fund						$140,100	$95,700
Transfer In Street SDC Fund						$135,000	$219,000
Street Maintenance Fee	$84,000	$84,000	$84,000	$84,000	$87,000	$90,300	$87,900
Sidewalk Maintenance Reimbursement		$60,000	$40,000	$40,000			
Miscellaneous	$500	$10,450	$11,150	$11,150	$1,900	$6,000	$17,500
Total	**$945,619**	**$635,719**	**$652,026**	**$647,026**	**$623,900**	**$1,090,400**	**$1,280,000**

As shown in Exhibit 1 and Table 13, transportation funding has increased in the last two fiscal years in due to the local gas tax as well as SDCs. The following describes the most significant funding sources and their projections for the future.

STATE GAS TAX

State gas taxes are comprised of proceeds from excise taxes imposed by the state and federal government to generate revenue for transportation funding. The proceeds from these taxes are distributed to Oregon counties and cities in accordance with Oregon Revised Statute (ORS) 366.764, by county registered vehicle number, and ORS 366.805, by city population. The Oregon Constitution states that revenue from the state gas tax is to be used for the construction, reconstruction, improvement, maintenance, operation and use of public highways, roads, streets, and roadside rest areas.

Based on data provided by the City, total revenue from the state gas tax has increased over the last two years due to adjustments in the population estimate used by the state to determine the amount of funding to distribute to the City. The population is expected to increase by approximately 1.0 percent per year over the next several years (see Appendix E for the population and employment assumptions), therefore revenue from the state gas tax is estimated to increase by 1% each year.

LOCAL GAS TAX

In 2017, Stayton voters passed a $0.03 per gallon gas tax for the construction, reconstruction, improvement, repair, and maintenance of streets within the city. The tax was estimated to raise approximately $162,000 per year but is projected to generate $215,000 in Fiscal Year 2018-19. This funding source is estimated to increase by 1% each year based on local growth and growth of traffic on Highway 22.

SURFACE TRANSPORTATION PROGRAM (STP) ALLOCATION

The surface transportation program (STP) provides flexible funding that may be used by States and local municipalities for projects to preserve and improve the transportation system by reconstructing any Federal-aid highway, bridge, and/or tunnel projects on public roads, pedestrian and bicycle infrastructure, and transit capital projects, including bus terminals.

ODOT distributes STP funds to municipalities based on population. The funds may be distributed on an annual basis or may be saved up and distributed all at once for larger projects. Based on data provided by the City, STP funds have averaged approximately $85,000 per year over the past several years. Stayton also received a larger grant in FY 2012-13 for the Tenth Avenue project. The projections provided below assume annual STP funds of $85,000 per year plus $500,000 every five years for special grant funded projects.

SYSTEM DEVELOPMENT CHARGES

System Development Charges (SDCs) are fees assessed on developments for impacts to public infrastructure. All revenue is dedicated to transportation capital improvement projects designed to accommodate growth. The City can offer SDC credits to developers that provide public improvements beyond the required street frontage, including those that can be constructed by the private sector at a lower cost. For example, SDC credits might be given for providing off-site improvements, such as sidewalks and bike lanes that connect the site to nearby schools or other amenities.

Based on data provided by the City, revenue from SDCs have begun again after a period of little development. Based on the growth assumptions of an additional 646 households (597 single-family and 49 multi-family homes) and 1,074 jobs (resulting in approximately an additional 100,000 s.f. of commercial space and 200,000 s.f. of industrial space), it is assumed the City may average approximately $84,000 per year in SDCs from residential development and $54,000 per year from commercial and industrial development for a total future SDC assumption of $138,000 per year.

STREET MAINTENANCE FEE

The City of Stayton Transportation Maintenance Fee began in February 2011 and included on monthly utility bills. The fee is listed as a "Street Fee" and the funds from this fee must be used for street repair and maintenance. As the number of households in Stayton is anticipated to increase 1% per year over the TSP planning horizon, it is assumed that the Street Maintenance Fee will increase by 1% per year as well.

PROJECTED REVENUES

Overall transportation funding has increased over the last five years and is assumed to continue to increase over the TSP planning horizon. Table 14 provides an estimate of potential transportation funding over the TSP horizon based on the existing revenue sources and the growth assumptions described above. As shown, approximately $28 million dollars are anticipated to be available for transportation over the next 21 years. However, only a portion is assumed to be available for street improvements and capital projects (as opposed to pavement preservation alone). The following section describes what portions of that may be available for enhancements to the transportation system.

Table 14. Projected Transportation Funding

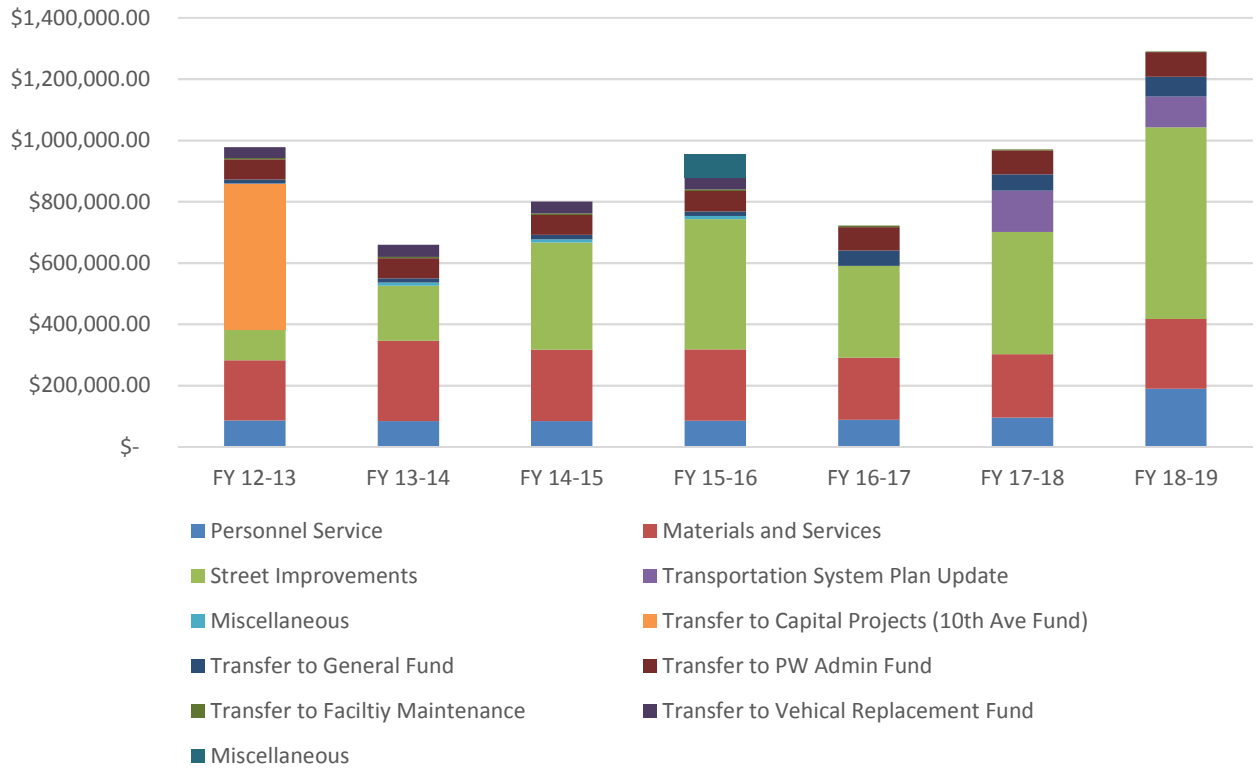
	FY 19-20	5-Year	10-Year	2040
State Gas Tax	$ 562,368	$ 2,867,520	$ 5,904,307	$ 13,080,123
Local Gas Tax	$ 217,150	$ 1,107,250	$ 2,279,860	$ 5,050,694
STP Allocation/ ODOT Grants	$ 85,000	$ 925,000	$ 1,850,000	$ 3,785,000
Transfer from Vehicle Replacement Fund	$ 33,686	$ 168,429	$ 336,857	$ 707,400

	FY 19-20	5-Year	10-Year	2040
Transfer In Street SDC Fund	$ 138,000	$ 690,000	$ 1,380,000	$ 2,898,000
Street Maintenance Fee	$ 88,779	$ 452,685	$ 932,092	$ 2,064,912
Sidewalk Maintenance Reimbursement	$ 20,000	$ 100,000	$ 200,000	$ 420,000
Miscellaneous	$ 8,379	$ 41,893	$ 83,786	$ 175,950
Total	**$ 1,153,362**	**$ 6,352,777**	**$ 12,966,902**	**$ 28,182,079**

TRANSPORTATION EXPENDITURES

The City's transportation expenditures are summarized by five main categories including personnel services, materials and services, capital improvements, fund transfers, and contingencies. Exhibit 2 illustrates the City's transportation expenditures over the past six fiscal years and projected for FY 2018-19.

Exhibit 2: City of Stayton Transportation Expenditures



As shown in Exhibit 2, transportation spending has increased steadily over the last five years with the exception of FY 2016-17. Table 15 shows the portions of the transportation expenditures that have been spent on street improvements and capital projects. Overtime these have averaged approximately 44% of the transportation budget over seven years including the projected FY 2018-19.

Table 15. City of Stayton Transportation Expenditures

	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
Personnel Service	$ 86,275	$ 84,096	$ 84,470	$ 85,460	$ 88,600	$ 95,600	$ 189,600
Materials and Services	$ 196,030	$ 262,030	$ 232,780	$ 232,780	$ 201,900	$ 206,300	$ 228,000
Street Improvements	$ 100,000	$ 180,000	$ 350,000	$ 425,000	$ 300,000	$ 399,000	$ 625,000
Transportation System Plan Update						$ 135,000	$ 100,000
Miscellaneous		$ 10,000	$ 10,000	$ 10,000			
Transfer to Capital Projects (Tenth Ave Fund)	$ 476,500						
Transfer to General Fund	$ 13,900	$ 14,180	$ 14,180	$ 14,605	$ 50,000	$ 53,500	$ 65,000
Transfer to PW Admin Fund	$ 65,000	$ 65,000	$ 65,000	$ 66,950	$ 76,400	$ 78,200	$ 80,000
Transfer to Facility Maintenance	$ 4,922	$ 4,922	$ 4,922	$ 4,922	$ 4,700	$ 2,500	$ 2,500
Transfer to Vehicle Replacement Fund	$ 34,835	$ 38,835	$ 38,835	$ 38,835			
Miscellaneous				$ 75,000			
Total Transportation Expenditures	$ 977,462	$ 659,063	$ 800,187	$ 878,552	$ 721,600	$ 970,100	$ 1,290,100
Total Spent on Street Improvements and Capital Projects	**$ 576,500**	**$ 180,000**	**$ 350,000**	**$ 425,000**	**$ 300,000**	**$ 399,000**	**$ 625,000**
% Spent on Street Improvements and Capital Projects	59%	27%	44%	48%	42%	41%	48%

PROJECTED FUNDING FOR STREET IMPROVEMENTS AND CAPITAL PROJECTS

As described above, approximately $28 million dollars are anticipated to be available for transportation over the next 21 years. However, only a portion is assumed to be available for street improvements and capital projects (as opposed to street maintenance such as pavement preservation). STP Allocation, ODOT grants, and SDC funds are assumed to be used for street improvements and capital projects in the future along with a portion of state and local gas tax based on past transportation spending which averaged approximately 42% of gas taxes supporting street improvements (as opposed to street maintenance).

Table 16 illustrates the projected revenues for street improvements and capital projects over the next 1, 5, 10 and 21-year periods. Three scenarios are provided that vary in the assumed portion of gas taxes that could go towards these projects from the historical rate of 42%, 20% and 0%. As shown, depending upon street maintenance needs, between $6.68 and $14.4 million could be available for street improvements and capital projects over the next 21 years.

Table 16. Potential Funding for Street Improvements and Capital Projects

	FY 19-20	5-Year	10-Year	2040
State Gas Tax	$ 562,368	$ 2,867,520	$ 5,904,307	$ 13,080,123
Local Gas Tax	$ 217,150	$ 1,107,250	$ 2,279,860	$ 5,050,694
STP Allocation/ ODOT Grants	$ 85,000	$ 925,000	$ 1,850,000	$ 3,785,000
Transfer In Street SDC Fund	$ 138,000	$ 690,000	$ 1,380,000	$ 2,898,000
Estimated Revenues for Street Improvements and Capital Projects (42% of gas tax)	**$ 550,398**	**$ 3,284,403**	**$ 6,667,350**	**$ 14,297,943**
Estimated Revenues for Street Improvements and Capital Projects (20% of gas tax)	**$ 378,904**	**$ 2,409,954**	**$ 4,866,833**	**$ 10,309,163**
Estimated Revenues for Street Improvements and Capital Projects (0% of gas tax)	**$ 223,000**	**$ 1,615,000**	**$ 3,230,000**	**$ 6,683,000**

REFERENCES

1. Analysis Methodology and Assumptions Memorandum. *May 2018.* Kittelson & Associates, Inc.
2. Analysis Procedures Manual Version 1. *July 2018.* Oregon Department of Transportation.
3. Five-Year Comparison of State Highway Crash Rates. *2015.* Oregon Department of Transportation.
4. Whitney Street/Cascade Highway Operational Analysis. *August 2001.* Kittelson & Associates, Inc.

APPENDICES

A. Turning Movement Counts
B. Existing PM Operations
C. Existing PM Queueing
D. Crash History
E. Population and Employment Forecast
F. Trip Generation and Origin-Destination Tables
G. 2040 PM Operations
H. 2040 PM Queueing

From: gomolls@wvi.com
To: Jennifer Siciliano
Cc: cargon55@gmail.com; aaronfrichel@gmail.com; rjbmitch@gmail.com
Subject: Re: Land Use File #5-02/24
Date: Monday, November 17, 2025 5:14:56 PM
Attachments: Technical Comment Letter.pdf

Hello Ms Siciliano, I have attached a document that I would like to be included in the packet that goes to the city Commissioners for their review prior to the November 24 meeting. I would also appreciate the opportunity to speak to the Commissioners concerning this annexation.

Thank you,

Carl Gomoll
12174 Golf Lane SE
Sublimity, OR 97385
503.930.5173

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Thursday, November 13, 2025 4:26 PM
To: gomolls@wvi.com <gomolls@wvi.com>
Subject: RE: Land Use File #5-02/24

Hello Carl,

You may find the relevant documents for the annexation on the Planning Commission's webpage under "Public Hearings" and under the November 24, 2025, meeting. Here are direct links to Revised Narrative Package (incomplete application response) dated July 15, 2025 (https://www.staytonoregon.gov/page/open/5842/0/BRAND_Response_to_Incomplete_Letter_.pdf.pdf) , and the previous submittal dated March 26, 2025 (https://www.staytonoregon.gov/page/open/5842/0/KSD_Stayton_Annexation_Narrative_Package.pdf).

Staff documents are usually available on Monday (11/17/2025) evening and will be posted on the same webpage under "Public Hearings" under the Land Use File #5-02/24.

Sincerely,

Jennifer Siciliano, AICP
Community and Economic Development Director

311 N. 3rd Ave
Stayton, OR 97383
Phone 503-769-2998

From: gomolls@wvi.com <gomolls@wvi.com>
Sent: Thursday, November 13, 2025 1:25 PM
To: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Subject: Land Use File #5-02/24

Dear J Siciliano,

Date: November 17, 2025
To: City of Stayton Planning Commission & City Council
Subject: Technical Comment Letter – Proposed Annexation & Subdivision of Tax Lot 091W03B001500 (KSD Properties, LLC Development)
From: Golf Lane SE Residents' Coalition

1 Summary

We respectfully oppose—or, in the alternative, ask that you heavily condition—the proposed annexation and 74-lot subdivision because it conflicts with the Transportation System Plan (TSP), Storm-Water Master Plan (SWMP), Comprehensive Plan (Comp Plan), and Economic Development Strategy (EDS). The project would shift long-term costs and risks onto existing residents while yielding few citywide benefits.

2 Transportation Findings

- **New peak-hour traffic.** KSD Properties, LLC's Transportation Impact Analysis (TIA) forecasts 69 a.m. and 92 p.m. peak-hour trips for the subdivision. We are not sure if this considers the current 15 households on Golf Lane.

- **Current loads are already high.** The City's Transportation System Plan (TSP) counts show 1,000-1,800 vehicles each peak hour at the four Cascade Hwy intersections that "book-end" Golf Lane. The above increase would amount to approximately 6% more volume.

- **Applicant's Transportation Impact Analysis (TIA)**. This evaluates 2028 operations with and without the project. At Golf Lane/Cascade Hwy (two-way stop control on Golf Lane), the PM peak goes from a delay of 29.9 seconds (LOS D) and v/c ≈ 0.17 (No-Build Project) to a delay of 37.0 seconds (LOS E) and v/c ≈ 0.21 (Build Project). In plain terms: longer average waits for Golf Lane drivers, even though the movement's v/c remains low on Golf Lane. The applicant's narrative reiterates that signal warrants are not met at Golf Lane and that realignment is not yet warranted under current forecasts.

- **Traffic Gaps.** Right Turn on Red (RTOR) at Whitney/Cascade intersection (NB) and at the OR-22 EB ramp/Cascade intersection (SB) keeps traffic streams moving during red phases, reducing the "quiet" windows a side street like Golf Lane depends on. With a posted 45 mph corridor, drivers often accelerate quickly as they clear the interchange, which shortens acceptable gaps and makes it harder for Golf Lane drivers to enter.

- **Percent increases look small on paper—but are concentrated.** A 6-10 % jump spread across an hour is still an extra vehicle every 30–40 seconds during the busiest minutes, all forced to merge or wait for gaps on Cascade Hwy.

- **Intersection failure.** Even with traffic light re-timing, the Cascade Hwy / Shaff-Fern Ridge intersection fails Marion County mobility standard for the p.m. peak.

- **Further Annexation/Urban Development.** The TSP notes further growth could add enough trips to trigger the M3 project to realign Golf Lane with the Whitney St signal. The signal would be justified when volume and/or safety warrants are met. The TSP lists Project M-3 - Golf Lane realignment to Whitney St at $3.3 million, unfunded high priority (TSP Project List p. 50). No contribution is offered by KSD Properties, LLC application.

- **Collector upgrade.** The TSP also designates Golf Lane SE as a future *Collector* from Cascade Hwy to Golf Club Rd at an estimated $8.2 million (Project M-7, p 50). No contribution is offered by KSD Properties, LLC application.

- **Crash history.** ODOT's 2015-2020 dataset records a fatal crash at Whitney St / Cascade Hwy in 2017, evidencing existing safety risk (ODOT Crash Stats 2015-20).

3 Storm-Water & Floodplain Findings

- **System at capacity.** The SWMP states that "high runoff volumes tax the existing system beyond capacity; flooding and ponding are common" (SWMP p. 4-12). Ultimately 45% of Stayton Storm Water Sheds drain to Mill Creek, Lucas Ditch and Mill Creek basin (SWMP p. 2.7). The subdivision's 21 acres of runoff will fill another ditch to the northwest which was never intended for this use that will add more runoff to Mill Creek. Mill Creek floods twice or more a year currently within the Mill Creek Basin. The additional runoff could cause more flooding and failures to current septic's and wells. The application does not site detentions or swales.

- **Mill Creek Basin.** Basins 11, 15C, 15B and 19 do not have enough cover above the water table to reasonably collect runoff from other upstream basins, therefore local detention is the best option for this basin. The city currently has a policy of requiring onsite detention for redevelopment that would affect this basin.

- **Missing downstream model.** City design standards require hydraulic analysis through the 100-year event; no such study accompanies the proposal.

4 Utility & Fiscal Impacts

- **Water extension cost.** The nearest 12-inch main is 2,100 ft south of Golf Ln at Cascade Hwy & Whitney St; an extension plus booster station is unbudgeted

- **Future assessments.** If Golf Lane is later annexed, owners may be required to abandon wells and septic's and pay system-development charges.

5 Housing, Residential Saturation & Socio-Economic Considerations

- **Zoning & Density.** The proposed subdivision adds 74 new urban lots with streetlights, sidewalks, and curb-and-gutter infrastructure, which will alter the semi-rural character of the surrounding properties.

- **Rapid housing build-out.** Stayton has added 74 apartments (2023) and 100 apartments (2024), with 74 more single-family lots now proposed—a net gain of 248 dwellings in two years (Building Permit Log 2023-24).

- **Job stagnation.** The TSP employment analysis shows total jobs declined from 2005 to 2020 and remain below 2005 levels. The City's Economic Development Strategy cites *"lack of job growth"* and *"lack of new commercial investment"* as top weaknesses.

- **Commuter pressure.** More homes without parallel job creation will drive up-valley commuting, aggravating peak-hour congestion at Cascade Hwy and on the future Golf Lane collector.

- **Economic mismatch.** Additional units risk a higher proportion of lower-income households without a corresponding rise in family-wage employment or commercial tax base.

- **Public-service burden.** Residential growth that outpaces employment growth leaves the City reliant on existing homeowners to fund major projects—e.g., the $8.2 million collector upgrade and regional storm-water pipes.

6 Consistency Matrix

Adopted Policy / Goal	Citation	Consistency Issue
Natural Resources	Comp Plan Goal NR-2 – Minimize flood damage	No downstream flood study; ditch discharge may raise twice-annual floods.
Economic Development	EDS Goal 1 – Increase family-wage jobs	Housing growth outpaces stagnant job base; no mitigation.

Adopted Policy / Goal	Citation	Consistency Issue
Transportation	TSP – Safe multimodal network	$8.2 M collector & $3.3 M realignment unfunded; safety degraded.

7 Requested Conditions (or Grounds for Denial)

1. **Transportation** – Developer must dedicate right-of-way and fund a proportionate share of the $8.2 M collector upgrade and the $3.3M Cascade Hwy intersection improvements before final plat.

    - **Post-occupancy checks at Golf Lane/Cascade Hwy**
    -
    - **.** Within 6–12 months of full occupancy and again at 24 months, require turning-movement counts and an HCM two-way-stop update that shows the north–south Cascade Hwy volumes used, the side-street delay/LOS, and v/c (AM/PM, no-build vs. build). If PM delay exceeds LOS E/F on two consecutive counts or MUTCD signal warrants are met, initiate the realignment scoping and assign proportionate share.

    - **Document the corridor realities in the record.** Add a short memo confirming RTOR permissions at Whitney/Cascade and OR-22 EB/Cascade and the posted 45-mph segment, and to explain how these factors reduce usable gaps for Golf Lane (with the HCM inputs noted above).

    - **Pilot "gap-creation" operations (with ODOT/County).** Prepare a ready-to-use pilot for peak-hour "No Turn on Red" at one or both signals and minor coordination retuning to deliver short gap windows downstream. Measure before/after gaps at Golf Lane, side-street delay, and queues at the signals to confirm no adverse effects. (The interchange plan already calls for signal coordination on Cascade Hwy due to close spacing.)

    - **Speed/arrival review.** Coordinate a speed-zone/arrival check between Whitney and Golf Lane; consider speed-feedback or minor progression tweaks that slightly lengthen headways without degrading corridor progression.

    - **Frontage & access.** With subdivision build-out, complete standard frontage along Golf Lane (bike lanes/planter strips/sidewalks) and a Construction Traffic Management Plan to avoid peak-hour adds at Golf Lane/Cascade.

- **Trip-distribution transparency.** Place the study's trip generation and distribution in the record and compare observed routing in monitoring reports; if more site traffic uses Golf Lane than assumed, update the HCM results and mitigation accordingly.

2. **Storm-Water** – Provide a Mill Creek-based hydraulic model; construct on-site detention for the post-development 100-year storm with recorded maintenance covenants.

3. **Utilities** – Record a covenant barring forced utility hookups, assessments, or annexation of existing Golf Lane properties without written consent from land owners.

4. **Phasing** – Limit building permits to 20 until off-site infrastructure—collector improvements, water main, and regional storm facilities—is fully operational and accepted by the City.

8 Conclusion

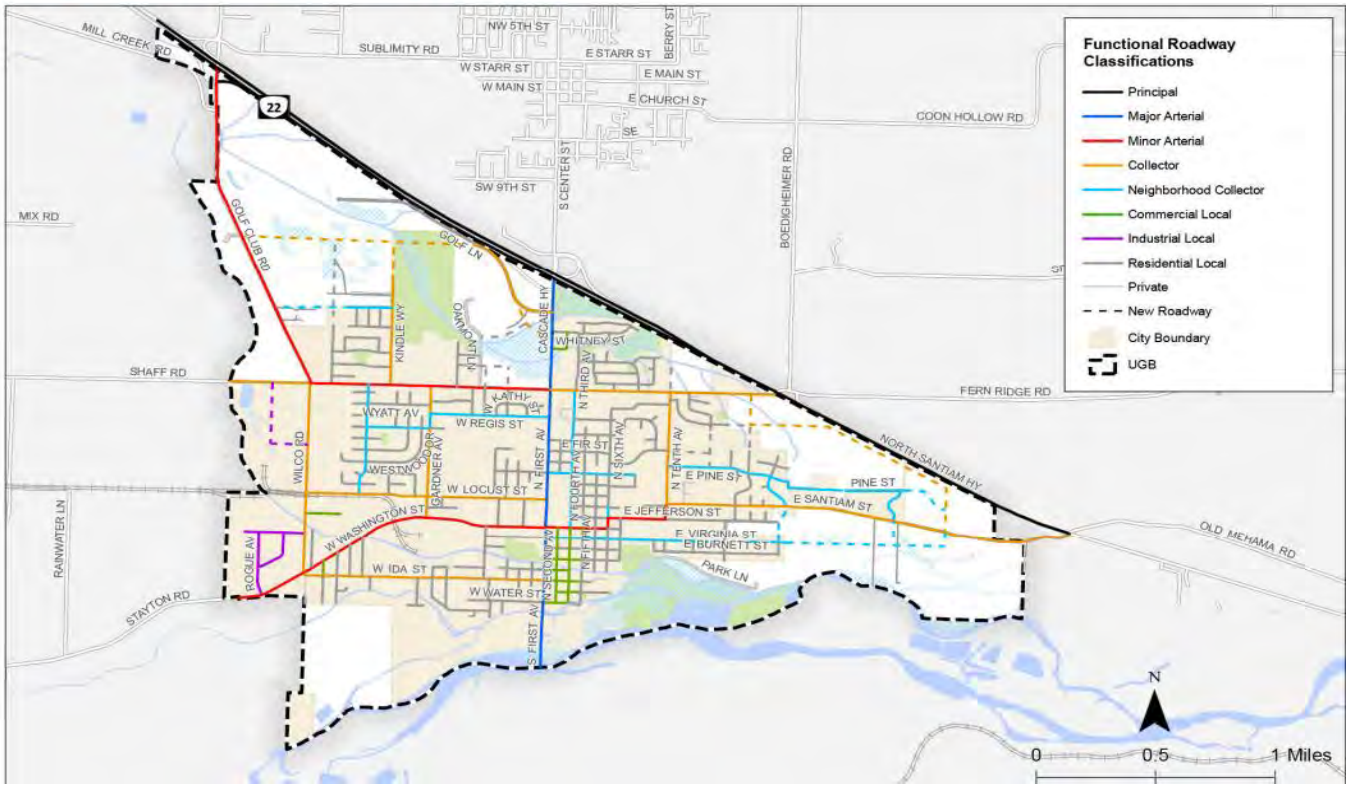
Because the application conflicts with multiple adopted plans—and would shift long-term traffic, flooding, and fiscal burdens onto existing homeowners—we request denial of File #5-02/24 or, at minimum, the imposition of the protective conditions above.

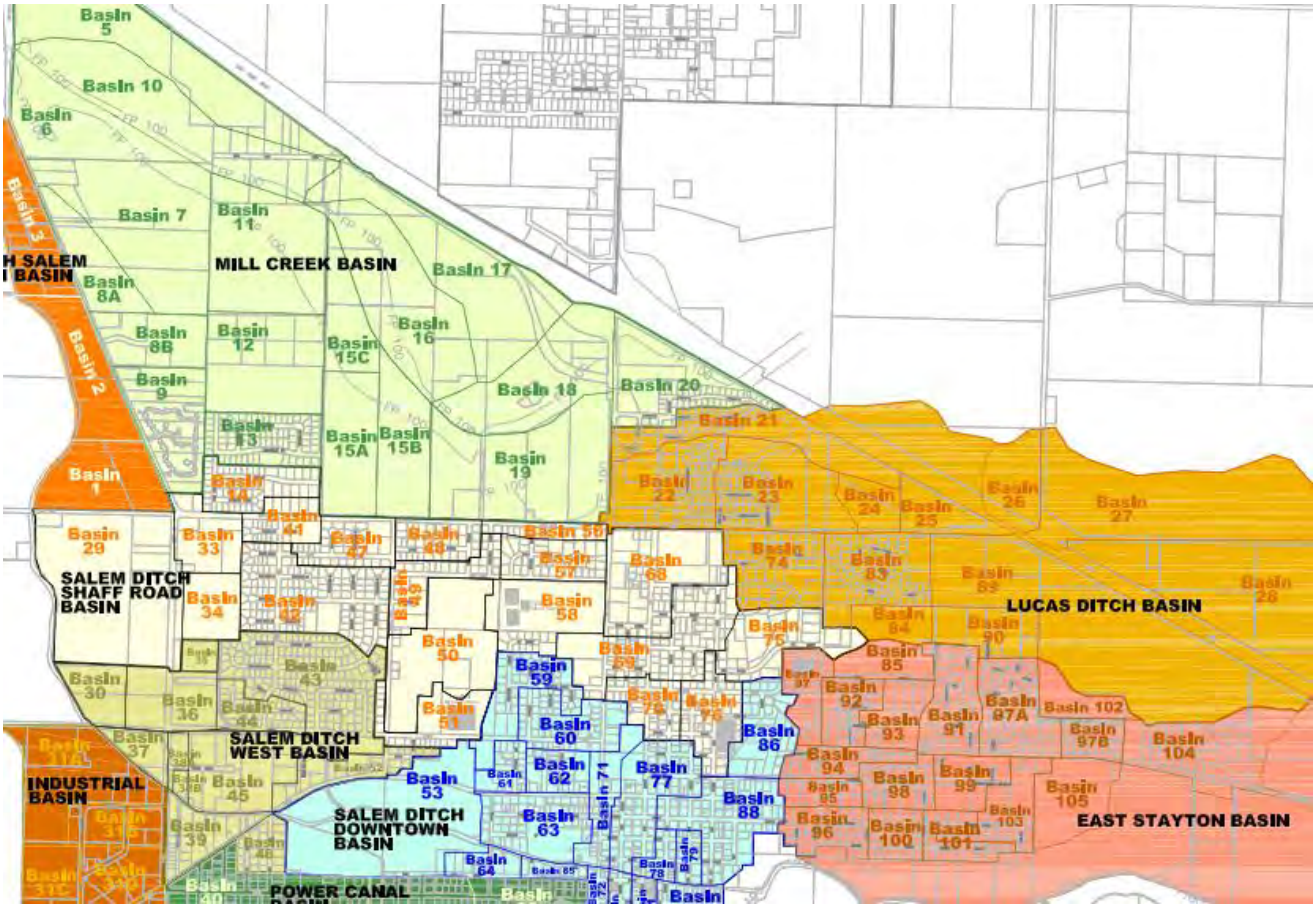
9 References

1. **TIA** – Brand Transportation Impact Analysis (KSD Properties, Jul 2025).
2. **TSP** – Stayton Transportation System Plan Update (Adopted 2022).
3. **SWMP** – Stayton Storm-Water Master Plan (Adopted 2021).
4. **Comp Plan** – Stayton Comprehensive Plan (Amended 2024).
5. **PW Design Standards** – City of Stayton Public Works Design Standards (2023).
6. **Water Master Plan** – City of Stayton Water Master Plan (2019).
7. **ODOT Crash Data** – Oregon Department of Transportation Crash Statistics, 2015-2020.
8. **Brand Prelim Plat** – Brand Development Preliminary Plat Set (Aug 2025).
9. **Stayton Economic Development Strategy** (2019-2024)
10. **Building Permit Log** (2023-2024)

Prepared for submission by the Golf Lane SE Residents' Coalition.

Figure 8. Roadway Functional Classification Map




Basin 5
Basin 10
Basin 6
Basin 7
Basin 11
MILL CREEK BASIN
Basin 17
Basin 8A
Basin 8B
Basin 12
Basin 15C
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SALEM DITCH SHAFF ROAD BASIN
Basin 34
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LUCAS DITCH BASIN
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Basin 87A
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Basin 36
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Basin 91
Basin 37
SALEM DITCH WEST BASIN
Basin 87B
Basin 104
Basin 94
Basin 98
Basin 99
INDUSTRIAL BASIN
Basin 45
Basin 53
Basin 62
Basin 77
Basin 105
Basin 39
Basin 63
Basin 88
Basin 96
Basin 100
Basin 101
Basin 103
EAST STAYTON BASIN
SALEM DITCH DOWNTOWN BASIN
Basin 64
Basin 78
POWER CANAL

From: gomolls@wvi.com
To: Jennifer Siciliano; Aaron Frichtl; rjbmitch@gmail.com; Carlos Gonzales
Cc: Susan Bender
Subject: Documents for Record
Date: Tuesday, April 14, 2026 2:16:34 PM
Attachments: Testimony.docx
Golf Ln and Golf Club Presentation.pptx

Dear Ms. Siciliano,

Please find attached my written testimony and supporting presentation regarding the proposed annexation of Golf Lane (Land Use File #5-02/24). I respectfully request that these documents be entered into the official administrative record for the public hearing scheduled on the 17th of April 2026.

I will not be presenting oral testimony at this upcoming hearing. Instead, I am relying on my written submission to establish on the record that this application fails to meet the City's required legal standards for annexation.

Specifically, the enclosed data provides substantial evidence that the proposal does not satisfy Criterion A (Need) or Criterion C (Serviceable/Adequate Public Services). It is vital that these facts, including the outlined infrastructure deficits and lack of demonstrated population demand, are formally documented for the Planning Commission and City Council's review prior to any decision.

Please confirm receipt of this email and the inclusion of these documents in the hearing record.

Thank you for your time and assistance.

Sincerely,

Carl Gomoll

Golf Lane Resident Coalition

503.930.5173

Testimony to the Stayton Planning Commission

Regarding Land Use Files #16-12/24 and #5-02/24

Date: April 14, 2026

Speaker: Carl Gomoll, Golf Lane Resident Coalition

[SLIDE 1: Title Slide – “Requirements”]

Introduction

Chairperson, Vice Chair, and members of the Commission. My name is Carl Gomoll, and I reside at 12174 Golf Lane SE. My letter is in behalf of the Golf Lane Resident Coalition. I am referring to the proposals for annexation of Golf Lane, Land Use File (LUF) #5-02/24 and Golf Club Rd, Land Use File # 16-12/24. I understand these are separate LUFs but they Impact each other.

We are not here to say "no" to all growth. We are here to say "no" to speculative growth that our infrastructure cannot support and our job market does not justify.

I will demonstrate that the applications before you fail to meet Criterion A: The Need for Land and Criteria C: Providing Services. The City's finding of "need" relies on outdated math that ignores our stagnant job market, our actual population numbers, and a massive, unfunded financial and infrastructure backlog.

I have three specific points to present:

1. Point 1 is A "Phantom Demand": Our housing growth is outpacing our actual population growth.
2. Point 2 is The "Bedroom Community" Effect: Building homes without jobs damages our existing economy.
3. Point 3 is A "Unfunded Bill": We are facing over $44 million in combined infrastructure deficits—specifically in the stormwater system and the Mill Creek Basin.

[SLIDE 2: Current Proposed Annexations]

From September of last year until March this year there is 4 proposed annexations and one that is approved for a Conceptual Plan. Totaling over 126 acres and 718 dwellings. I have also added the Golf Lane Collector to the slide as its importance will become evident.

[POINT to] There is the Golf Club Rd annexation, the Oriole Concept (Phillips Estate), Shaff Rd annexation, Golf Lane Annexation and the Park Lane annexation.

[SLIDE 3: The Disconnect: Population vs. Reality]

Point 1: The Outdated BLI vs. Real Numbers

The City's finding of "Need" relies on the 2013 Buildable Lands Inventory (BLI). That document assumes Stayton grows at 1.7% per year. Current U.S. Census shows from 2000 to 2025, Stayton's actual growth rate was only 0.8%—barely half of what was predicted.

The City of Stayton in 1998 Land and Housing Analysis used 2.7 people per household to calculate housing needs. The 2000 Census data reported 2.74 people per household in Stayton and the 2024 Census shows it has moved down to 2.54 persons per household in Stayton. I will continue to use 2.7 in my calculations.

Actual population growth is 0.8% annually, not the 1.7% assumed in the Stayton Comprehensive Planning document. The 2030 population target 11,359 is overstated. Based upon the U.S. Census Bureau the actual 2024 population is 8,520, leaving Stayton ~2,380 below the population goal for 2024. If trends mysteriously changed and we continued to use at least a 1.6% growth rate, or twice of what we are growing now, our adjusted population for 2030 would be 9,376 people with a housing need requirement of 3,472 dwellings.

As of 2024 we have 3,425 dwellings which is 269 houses over our 2024 actual needs. We will add 22 dwelling in 2025/26 with the Oriole concept plan (Phillips Estate) and that will take us to 3,447 or 25 houses short of the 2030 corrected projection. I remind you we have only been growing at half that, 0.8 percent. Based on the U.S. Census Bureau and our projected trend we do not need to add any dwellings to meet our population growth of 2030, But yet we are entertaining proposals to add 718 more dwellings.

Housing demand follows jobs. But the City's own Economic Development Strategy highlights a "History of No Growth" in the industrial sector between 2005 and 2018. While we have added 212 housing units since 2022, we have not seen a parallel surge in family-wage employment.

What happens when you build new homes in a stagnant job market?

You don't get new residents; you get a "Housing Shuffle."

- People move from older, affordable homes in Stayton to the new subdivisions.
- This leaves vacancies in our established neighborhoods, depressing property values for long-time residents and landlords
- Without new jobs bringing new money into town, we are simply cannibalizing our own tax base while adding miles of new roads to maintain.

[SLIDE 4: The Economic Reality: Job Stagnation]

Point 2, We are becoming a "Bedroom Community" or “Commuter Town” by design, not by accident.

- U.S. Census data confirms that 82% of our workforce drives out of Stayton every morning to work in a different city. That is 4 out of every 5 workers in your neighborhood leaving.
- This creates massive "peak hour" congestion on Cascade Highway and Golf Club Road as everyone tries to leave at 7:30 AM and return at 5:30 PM. Adding hundreds of new homes here just adds hundreds of cars to that specific jam.
- When people work in Salem, they buy lunch in Salem. They get gas in Salem. They shop at Costco, Walmart or Winco in Salem before they come home. That activity serves Salem's tax base, not Stayton's.
- In municipal finance, residential neighborhoods are a "net negative" on a cities budget. Property taxes rarely cover the full cost of roads, police, and parks. Cities stay solvent because Commercial and Industrial properties subsidize the residential ones.
- Stayton has had zero new industrial growth in over a decade. By annexing and adding residential land, we are adding to the "cost" side of the ledger without adding to the "revenue" side. We are digging a financial hole. Every new subdivision built without a corresponding employer is a new long-term liability for the City's general fund.
- We aren't losing jobs because we lack housing. We are losing them because of the $2.85 million Shaff/Wilco Roundabout requirement and high utility rates. Building more houses doesn't fix the roundabout; it just clogs the intersection further, making it even harder for industry to ever locate here.

- Lets Look at our neighbors. Sublimity is growing slowly at 0.2 percent and funding infrastructure with grants, not tax hikes. In July 2025, Aumsville updated their System Development Charges (SDCs) to legally ensure that 'growth pays for growth. They raised their fees to over $6,700 per home just for parks, ensuring that developers—not taxpayers—fund their new 23-acre Eastside Community Park. Stayton is doing the opposite: we are approving annexations without updating our fees, leaving existing residents to bail out the infrastructure deficit. Stayton is the only one aggressively annexing land without updating our fees or fixing our deficits. Why are we choosing the riskiest path in the canyon?

[SLIDE 5: The Infrastructure Price Tag]

Point 3: The Unfunded Infrastructure Burden

Finally, let's talk about the bill. The City's own 2009 Stormwater Master Plan documented a capital improvement backlog of $25.9 million. That deficit hasn't gone away; it has likely grown with inflation.

We have calculated the specific costs to bring utilities just to the Golf Lane tax lot. These are costs that do not currently exist in the City budget. When you add the other annexation lots the price tag increases. If I can bring your attention to the slide concerning Future Improvements it shows 9.7 million, those improvements only pertain to the knowledge the City had when they drafted the Capitol Improvement plan. It only takes into account the Oriole conceptual plan. It is the intent of the City that the developer pays for these constraints, lets just say that is doubtful.

We are facing over $44 million in Golf Ln development infrastructure "needs" and backlogs.

SLIDE 6 [StormWater Needs]

Looking at the slide we have the preserved wetlands with 4 future onsite detention basins with 1 regional detention site and only the regional detention site is projected for funded. The annexation of golf ln, 21 acres, and golf club rd, 59 acres adds a total of 80 acres of new impervious surface to the Mill Creek Basin, which is a flood-prone basin.

The need for 4 onsite detention basins and one Regional Detention Basin along mill creek needs to be built prior to any more development of land that affects the mill creek basin. The cost for the Regional detention is $600,000 that is in the budget for future improvements but the 4 detention basins are not in the budget. An item to note is the Regional Detention basin is projected to be built on top of 4 current houses so that land

would need to be purchased adding additional costs. To develop this acreage prior to fixing the $26 million backlog is negligent.

- The need for a new Booster Station for the golf lane development causes The developer not to build without it. If they don't pay the full $2.5 million, the ratepayers are on the hook.
- As it pertains to The Transportation Realignment and Collector: We already have safety issues at the intersection. We cannot wait for a fatality to prove this intersection is dangerous. Adding 74 homes to an intersection that already requires a $3.3 million safety realignment is gambling with public safety. Also, the 8.2 million Golf Lane Collector must be built to allow for a second exit for the proposed sub division at Golf Ln.

[Slide 7]

The Whitney Road, Village Creek Development in 2002 and the Phillips Estate in 2014 show piping for the stormwater drain off into Mill Creek that has caused flooding to residents north of mill creek along Golf Ln, the Santiam golf course and the Farm lands to the south of Mill Creek. This occurs once to twice a year. These are facts that the 5 detention basins along Mill Creek must be completed now and especially prior to future developments that adds more stormwater.

[Slide 8]

It is understandable that the City needs to raise money and to do this they would need to tax household or business. The more households and businesses you have the more money you can receive.

We crunched the numbers for every single one of the 718 proposed units on this list—from Golf Club Road to Park Lane. If we build all of them, they will generate about $459,000 a year for the City's general fund. Against a $44 million infrastructure deficit, that revenue is a drop in the bucket.

If you look at the math for Shaff Road vs. Golf Club Road. High Density housing brings 100 more families but generates $20,000 less revenue. We are importing more cost (traffic/police) for less money. We lose on volume.

It would take 96 years of tax revenue from these new homes just to pay off the infrastructure bill they are adding to. And that assumes we spend zero dollars on police, parks, or road repairs for these 718 families for the next century.

Since we obviously have to provide services, the actual payoff date is never. Approving these developments isn't 'growth'; it is a permanent transfer of debt onto the backs of existing Stayton residents." I would like to point out my previous statement of the housing shuffle that does not bring in population it just moves it around, thereby really never adding more revenue.

[Slide 9]

Finally, we must look at our schools. Based upon a hope population growth that may actual occurs, We calculated the impact of these 718 units on the North Santiam School District.

Conservatively, these developments will bring over 200 new students into our system. That is not just a number; that is 8 to 10 full classrooms of children. Stayton High and our elementary schools will have to find space for them immediately.

But here is the financial reality: It costs about $11,600 a year to educate one student in our district. But the property taxes from these new apartments and homes only contribute about $2,500 per student toward that bill.

That creates an annual deficit of nearly $2 million. Who fills that gap? We will either face larger class sizes, fewer teachers, or—inevitably—another school bond measure on our property tax bill to build the new classrooms these developers would not pay for.

Let’s me be clear about the capacity crisis. Right now, Stayton High School and Middle School are officially operating 'close to capacity.' They are the pinch points. They have almost no flexibility left.

While the Elementary school has a small amount of room today, these 718 new households will erase that buffer immediately.

We can't just add a classroom here or there forever. The district has projected that once we hit 2,600 students system-wide, we hit a 'cliff.' At that point, we cannot just add portables. We will need a bond measure to build an entirely new Elementary School to relieve the pressure on the whole system.

Commissioners, based on the evidence presented tonight, I ask you to find that these applications fail to meet the burden of proof required by Stayton Municipal Code Title 17.

First, the application fails Criterion A: The Need for Land. The City’s determination of "need" is based on a 2013 projection of 1.7% annual growth. We have proven that

actual growth is less than half that rate only 0.8 percent. We currently have a housing surplus of 269 units relative to our population. We are not facing a housing shortage; we are facing a population shortage relative to our aggressive zoning. Approving 119 acres of new residential land when we cannot fill the homes we already have is not planning; it is speculation.

Second, the application fails Criterion C: Adequate Public Services. A service is not "adequate" if it bankrupts the provider.

- Infrastructure: We cannot claim to have adequate services when we have a $26 million stormwater backlog and a total infrastructure deficit of $44 million.
- Business & Economy: We cannot claim to be building a balanced community when we have had zero net business growth in a decade. We are building bedrooms without jobs, forcing 82% of our workforce to commute and spend their tax dollars in surrounding communities, cementing our status as a "Bedroom Community" and a drain on the budget.
- Schools: We cannot claim to be serviceable when these developments will create a $1.9 million annual deficit for our school district and push us toward a capacity cliff that triggers an unfunded new elementary school.
- Fiscal Solvency: We cannot call this development "sustainable" when it takes 96 years of tax revenue just to pay off the infrastructure bill it creates.
- Finally, we must respect the financial reality of our citizens. In November, voters soundly **rejected the $1.10 local option levy** because they are already tapped out. Yet, the City is reportedly looking to place this tax increase back on the next ballot.
- Approving these annexations guarantees that those taxes *will* have to go up again. It forces existing residents to subsidize the infrastructure for new subdivisions that do not pay for themselves and or not needed.
- We have a documented history of stagnation because we have failed to fix our infrastructure barriers. Let’s finish the "to-do" list from our 2019 Economic Plan—fix the roundabout, fix the pipes, and attract jobs—*before* we ask the taxpayers to subsidize another subdivision.
- For the sake of Stayton’s fiscal future, I urge you to **DENY** not only the Golf Lane annexation but the Golf Club Rd, Shaff Rd and Park Lane annexations.

Thank you.

Annexation Requirements

- A: **Need**, The city is low on Buildable Lands.
- B: **Contiguity**, The land touches city limits (no islands), Consistent with Cities Comprehensive Plan.
- C: **Serviceable**, Water, Sewer, Stormwater and runoff, Transportation, Financial impact (SDCs and taxes will cover the cost of the new infrastructure)
- D: **Safety**, Public Health/Traffic
- E: **Natural Hazards**.

Annexation	Acres	Lots	Dwellings	Type
Golf Club Rd	59.63	126	534	MD
Shaff Rd	17.01	221	272	HD
Phillips P3	7.11	22	22	LD
Golf Lane	21	74	74	LD
Park Lane	21.28	273	340	HD
Total	126.03	716	1242	

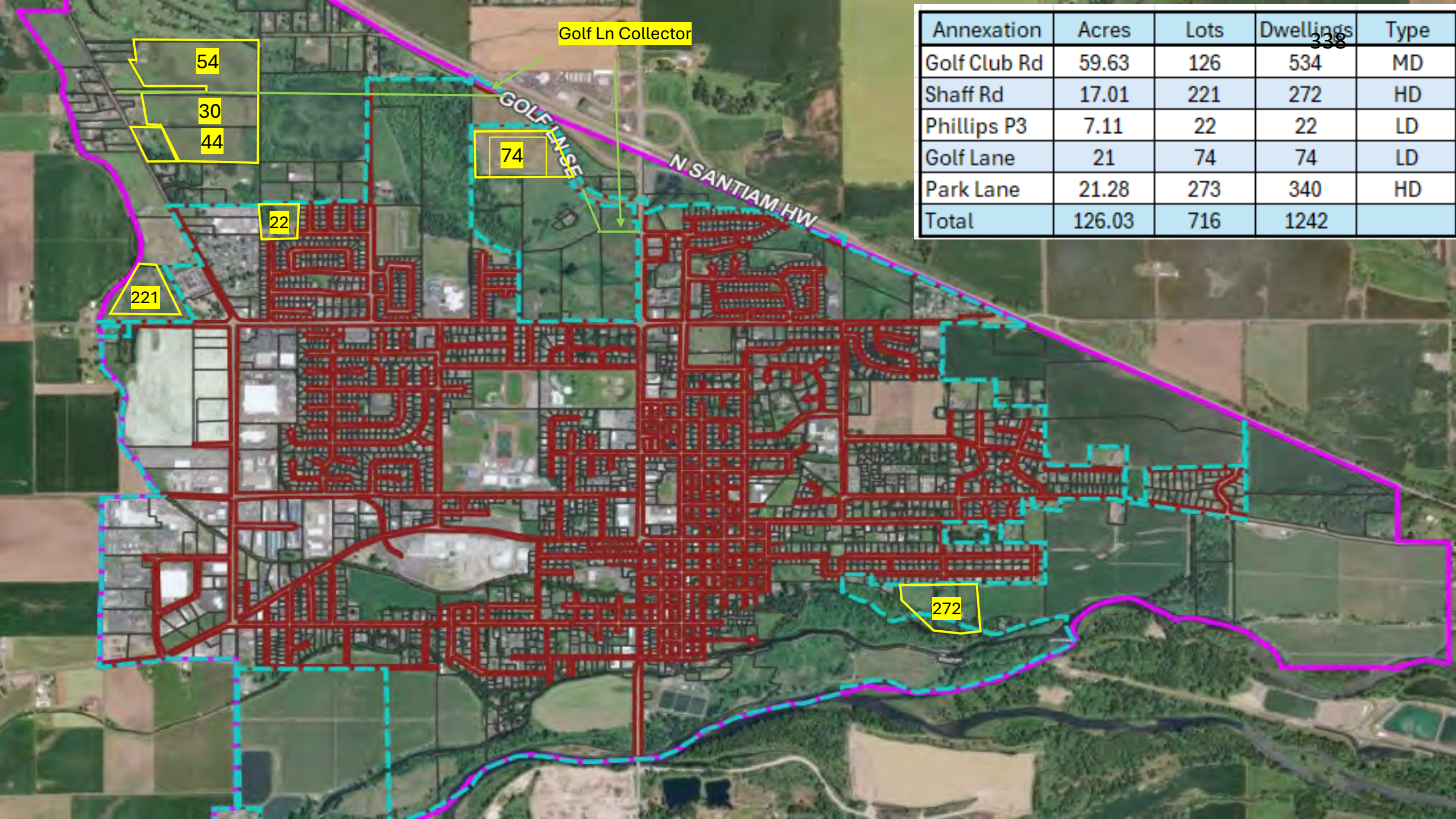


Table 2 — Housing Inventory Alignment

Year	Plan-Assumed Housing Units	Actual / Estimated Population	Population-Based Housing Need (Population ÷ 2.7)	Actual / Estimated Housing Units	Surplus / (Deficit) vs. Population Need	Remarks
~2010 (Plan baseline)	3,056	~8,244	~3,053	~3,060	+7	Baseline alignment
2020	~3,700	Actual 8,244 Estimated 9,778	~3,053	~3,350	+297	Adequate supply relative to actual population
2024	~4,050	Actual 8,520 Estimated 10,900	~3,156	~3,425	+269	Housing growth ahead of population demand
2030 (Projected)	4,337	1.6% growth 9,376 Estimated 11,359	1.6% growth 3,472 Estimated ~4,207	TBD	TBD	Requires population growth not yet observed

Key Finding:

Housing inventory has increased despite slower population growth, resulting in higher units-per-capita, not a shortage condition.

Outdated projections show 1,281 unit needed by 2030. Actual Reality we only need 465 Units

Based on the "Economic Development Strategy" (2019) and updated Census/State employment data (2023–2024), the following chart illustrates the business and commuter trends in Stayton since 2010.Stayton Business & Commuter Trends (2010–2024)

Metric	2012–2015 (Baseline from Plan)	2023–2024 (Current Data)	Net Change
Total Employer Businesses	**169** (2012 Est.)	**171** (2022 Census)	**+2** (Stagnant)
Total Jobs Located in Stayton	**3,150** (2015)	**~3,350** (Est. 2023)	**+200** (Slow Growth)
Employed Residents (Labor Force)	**3,176** (2013)	**3,823** (2023)	**+647** (Workforce Growing)
Commuter: Live & Work in Stayton	**630** (19.8% of workforce)	**~688** (18% of workforce)*	**Flat / % Decline**
Commuter: Live Here, Work OUT	**2,870** (Out-Commuters)	**3,135+** (Est.)	**Increased Out-Flow**
Commuter: Live Out, Work HERE	**2,520** (In-Commuters)	**2,662+** (Est.)	**Increased In-Flow**

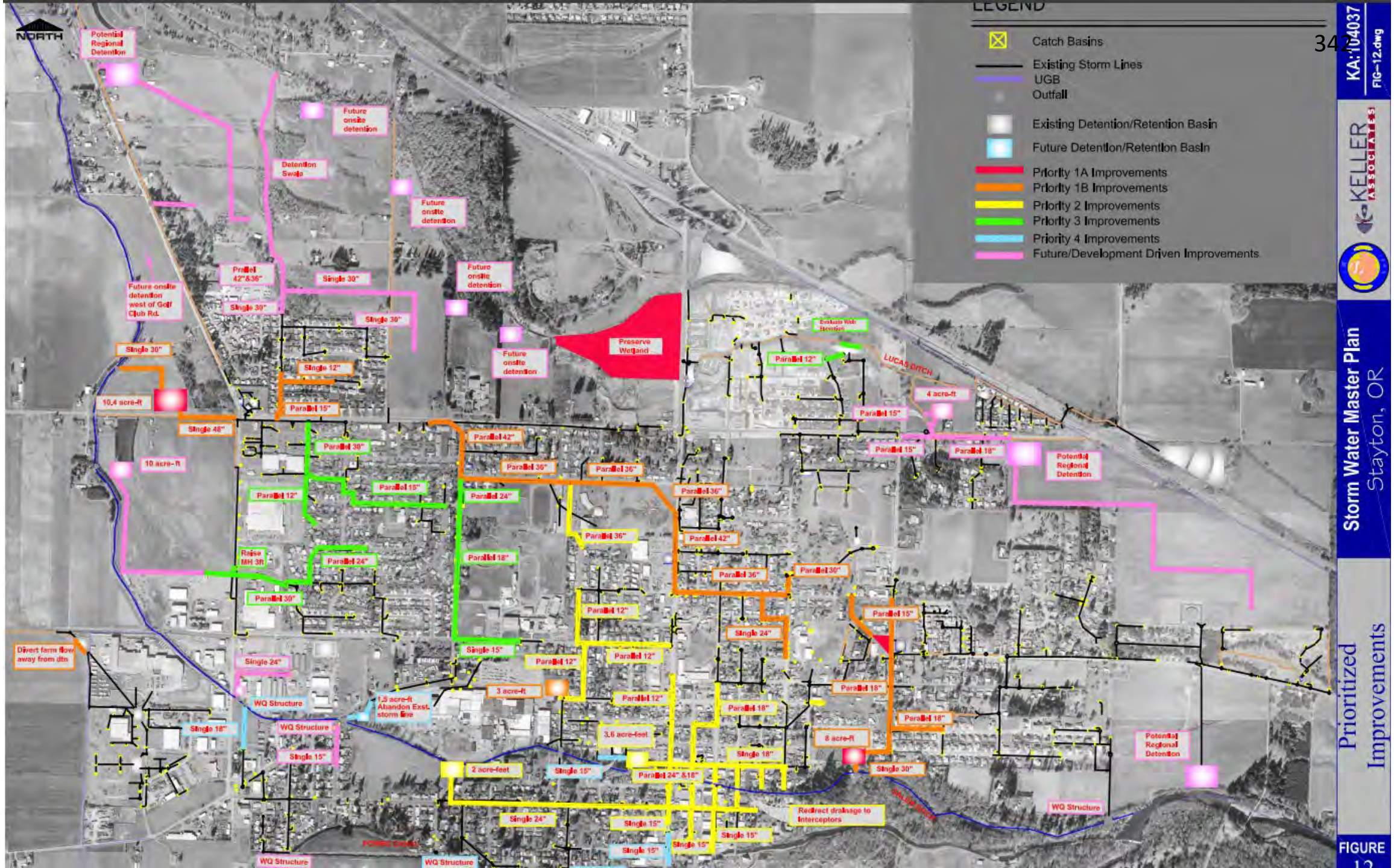
Estimated Costs to add Golf Ln/Golf Club Rd

Infrastructure Item	Details	Estimated Cost
Stormwater System Deficit	City-wide Backlog (2009 Master Plan)	$26,000,000+
Golf Ln Water Main Extension	~1,500 ft of 12" main @ $350/ft	$525,000
Golf Ln Sewer Main Extension	~2,000 ft to connect @ $400/ft	$800,000
Mill Creek Booster Station	Required for Upper Pressure Zone	$1,500,000 - $2,500,000
Golf Lane Collector Road	Future TSP Project	$8,200,000
Golf Lane Realignment	Safety requirement at Whitney St	$3,320,000
Sewer Capacity Fixes	Gardner Station Removal (Required)	$4,170,000
Golf Club Water Main Extension	~1,000 ft of 12" main @ $350/ft	$350,000
Golf Club Sewer Extension	~500 ft of 12" main @ $400/ft	$200,000
TOTAL "Backbone" Costs	Mill Creek Specific + Stormwater Backlog	~$45,050,000+

Prioritization	Conceptual Level Opinion of Probable Cost*
Priority 1A Improvements	$3.6M
Priority 1B Improvements	$5.0M
Priority 2 Improvements	$5.0M
Priority 3 Improvements	$2.2M
Priority 4 Improvements	$0.5M
Future Improvements**	$9.7M
Rounded Total	$26M

* All costs in 2007 Dollars and include engineering and contingencies.

** Timing depends on when growth occurs.



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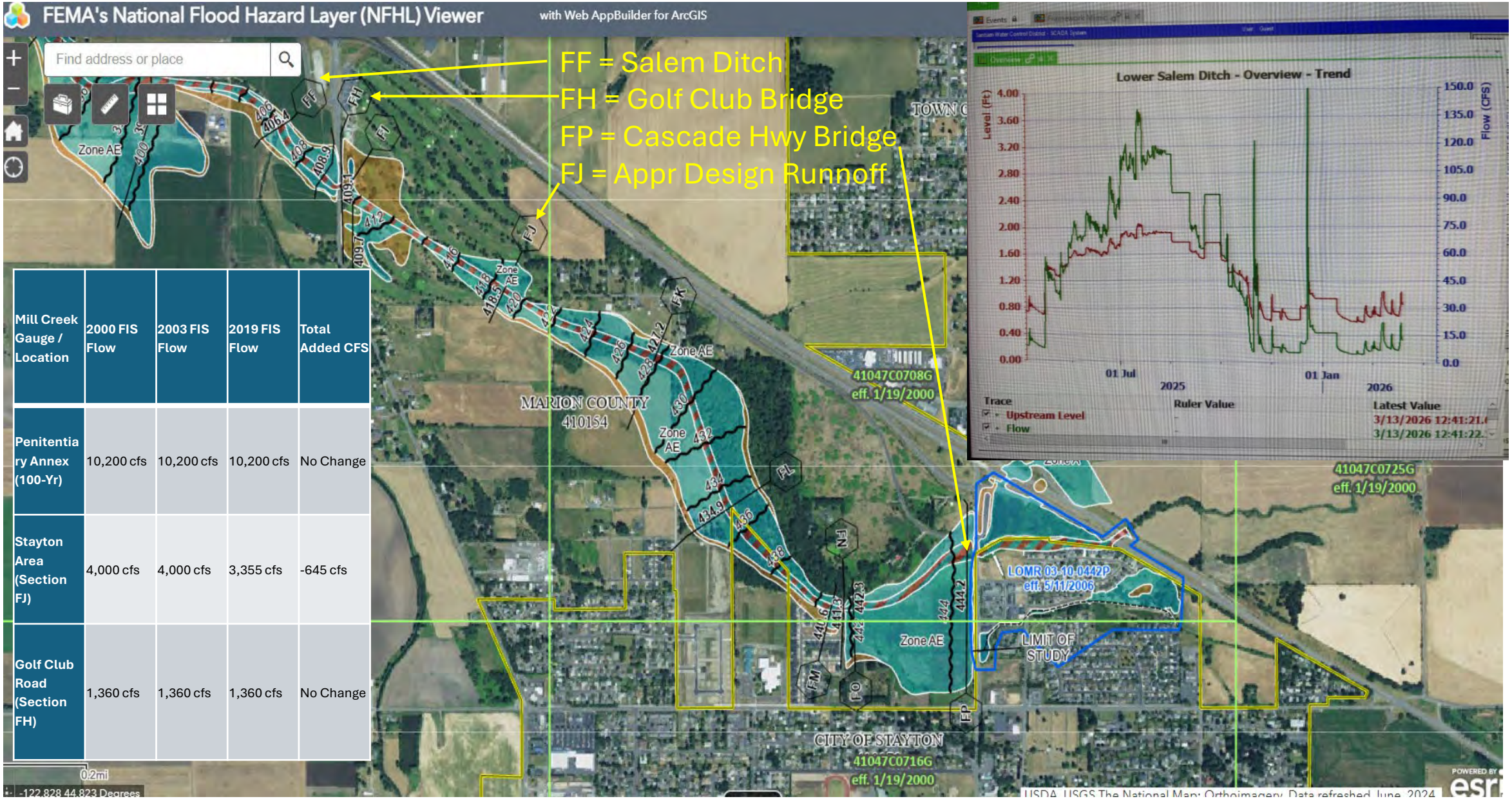
KELLER ASSOCIATES

Storm Water Master Plan
Stayton, OR

Prioritized Improvements

FIGURE

100 Year Flood Plan updated May 2006



Mill Creek Gauge / Location	2000 FIS Flow	2003 FIS Flow	2019 FIS Flow	Total Added CFS
Penitentiary Annex (100-Yr)	10,200 cfs	10,200 cfs	10,200 cfs	No Change
Stayton Area (Section FJ)	4,000 cfs	4,000 cfs	3,355 cfs	-645 cfs
Golf Club Road (Section FH)	1,360 cfs	1,360 cfs	1,360 cfs	No Change

Table 6: Pre to Post summary table without flow control

Storm Event	Allowable Runoff (cfs)	North Area Undetained Flowrate (cfs)	South Area Undetained Flowrate (cfs)	TOTAL Undetained Flowrate (cfs)
2 year	0.75	4.72	7.8	12.52
5 year	1.03	5.72	9.45	15.17
10 year	1.03	6.82	11.24	18.06
25 year	2.55	8.15	13.38	21.53
50 year	3.77	9.55	15.61	25.16
100 year	4.03	9.83	16.06	25.89

Hydrograph Results

Below are the results of the hydrograph analysis for both pond facilities.

Table 9: Pre to Post Flowrate Summary with Detention/flow control

Storm Event	*North Pond*		*South Pond*		TOTAL Design Runoff (cfs)	Allowable Runoff (cfs)	Design < Allowable?
	Release Rate (cfsf)	Water Surface Elevation	Release Rate (cfs)	Water Surface Elevation			
2 year	0.22	417.32	0.47	416.17	0.70	0.75	YES
5 year	0.31	417.77	0.66	416.72	0.96	1.03	YES
10 year	0.37	418.23	0.82	417.21	1.53	1.54	YES
25 year	0.58	418.67	0.95	417.72	1.54	1.54	YES
50 year	0.96	418.95	1.85	417.96	2.77	3.77	YES
100 year	1.03	418.98	1.99	417.99	2.97	4.03	YES

Detailed Tax Revenue Breakdown

Development	Type	Dwellings	Est. Market Value	Taxable Value (AV)*	City Tax / Yr (Per Dwelling)**	Total City Revenue / Yr
Golf Club Rd	MD	534	$533,000	~$255,840	$995	**$531,330**
Shaff Rd	HD	272	$300,000	~$123,000	$478	**$130,016**
Phillips P3	LD	22	$533,000	~$255,840	$995	**$21,890**
Golf Lane	LD	74	$533,000	~$255,840	$995	**$73,630**
Park Lane	HD	340	$300,000	~$123,000	$478	**$162,520**
TOTALS	--	**1,242**	--	--	--	**$919,386 / yr**

**Note: Taxable Assessed Value is calculated using Marion County's Changed Property Ratio (CPR) of ~0.48 for Residential and ~0.41 for Multi-Family. You do not pay taxes on full market value.*

***Note: City Tax is based on the Permanent Rate ($3.328) + Library Levy ($0.56) = $3.888 per $1,000 AV. This excludes schools/county taxes which do not go to the City budget.*

The "Unfunded Student" Gap

Based on standard student generation rates (0.45 for homes / 0.22 for apartments), these 1,242 units will add approximately **295 new students** to the district. Current Students 2,200 plus 295 is **2,495**. Cap for a mandatory new elementary school is 2,600.

School Level	New Students	Est. Classrooms Needed (25:1)
Elementary (K-5)	~140	5-6 New Classrooms
Middle (6-8)	~70	3 New Classrooms
High School (9-12)	~85	3-4 New Classrooms
TOTAL	**295 Students**	**11-12 New Classrooms**

Financial Deficit Annual

Cost to Educate: Approximately $11,634 per student (State/District Avg) Total Annual Cost: $3,432,030

School Tax Revenue Generated: Approximately $1,064,000 (Est. @$4.50/$1k AV)
Annual Deficit **negative $2,368,030**

QUESTIONS

CITY OF STAYTON

M E M O R A N D U M

TO: **Mayor Quigley and the Stayton City Council**

FROM: **Jennifer Siciliano, Director of Community and Economic Development**

DATE: **May 18, 2026**

SUBJECT: **Ordinance No. 26-004, Annexing Real Property Located on Shaff Road and Changing the Zone from Marion County Urban Transitional (UT-20) To City of Stayton High Density Residential (HD)**

ISSUE

The issue before the City Council is a Public Hearing on an application for annexation of an approximately 17-acre property located on Shaff Road Tax Lot (091W04C001901). The applicant proposes annexation into the city limits and application of the High Density (HD) Residential zoning district.

ENCLOSURE(S)

- Draft Ordinance *(page 351)*
- Exhibit 1 – Annexation Area *(page 353)*
- Exhibit 2 – Map of Annexation Area *(page 354)*
- Exhibit 3 – City Council Findings of Fact, Planning Commission - Signed Order of Recommendation, Annexation Application and materials, and Agency, Department, and Public Comments *(page 355)*

STAFF RECOMMENDATION

The staff recommendation is reflected in the findings and conclusions contained in the draft ordinance attached to the City Council packet.

The Stayton Planning Commission held public hearings on February 23, 2026, and April 27, 2026, and unanimously recommended that the City Council approve the annexation application as proposed. At the February Planning Commission public hearing, a comment letter from the Oregon Department of Land Conservation and Development (DLCD) was entered into the record. The hearing was continued to April 27, 2026, to allow staff to incorporate DLCD's comments into the findings and draft order. The Planning Commission order recommending approval is attached.

The applicant has requested that High Density (HD) Residential zoning be applied to the property at the time of annexation. Based on the staff analysis and findings contained in the Planning Commission order and draft ordinance, staff concurs that application of the High Density (HD) Residential zoning designation is appropriate and consistent with the Comprehensive Plan designation for the area. The higher density zoning is compatible with the surrounding area, including adjacent multifamily development and nearby commercially zoned property.

BACKGROUND INFORMATION

The subject property consists of approximately 17 acres located along Shaff Road and identified as tax lot 091W04C001901. The property is currently located within Marion County, is zoned Urban Transition (UT-20), and lies within the Stayton Urban Growth Boundary (UGB) but outside the City limits.

The surrounding area contains a mix of residential, commercial, agricultural, and industrial uses. Properties to the east are zoned High Density (HD) Residential and Commercial General (CG), including an existing multifamily development. Properties to the south include Light Industrial (LI) zoning and rural residential uses. Property to the north remains under Marion County jurisdiction and is used for residential and agricultural purposes, while property to the west is outside the Urban Growth Boundary.

The applicant, Kevin and Paige Butler for annexation (Land Use File # 10-08/25), has requested annexation with High Density (HD) Residential zoning. The High Density Residential zone permits single-family attached dwellings, duplexes, and multifamily residential development with a minimum density of 13 dwelling units per acre.

Staff analysis indicates that annexation of the property with High Density (HD) Residential zoning is consistent with the Residential designation in the Stayton Comprehensive Plan and supports the City's identified housing needs. The proposed zoning was also found to be compatible with the surrounding area due to the adjacent multifamily development and nearby commercially zoned property.

Annexation of the property will bring the land within the City limits and subject it to City standards and regulations. Any future development will require additional land use review, including site plan review (if a multi-family development is proposed), subdivision review (if a subdivision is proposed), transportation analysis, stormwater review, and extension of public utilities and infrastructure. Future development applications will be reviewed in accordance with the Stayton Municipal Code and applicable public hearing procedures.

FISCAL IMPACT

Upon annexation, the property will be assessed as City property at the next assessment cycle and will begin contributing City property taxes. Because the property is currently vacant, the immediate increase in tax revenue will be minimal.

Future development of the property will generate additional assessed value and System Development Charges (SDCs) associated with new residential construction. Development of the

property will require expansion of public infrastructure and municipal services; however, residents within the newly developed area will also contribute toward the operation and maintenance of these systems through their utility service charges and property taxes.

OPTIONS AND MOTIONS:
Staff has provided the City Council with several options, each with an appropriate motion. The Community and Economic Development Department and Planning Commission recommend the first option.

1. **Approve the application, enact Ordinance 26-004 as presented.**

   I move to approve Ordinance 26-004, approving the application of Kevin and Paige Butler for annexation (Land Use File # 10-08/25) as presented by Staff.

   The City Recorder shall call the roll and the names of each Councilor present, and their vote shall be recorded in the meeting minutes. If the vote is unanimous, Ordinance No. 26-004 is enacted and will be presented to the Mayor for his approval.

   If the vote is not unanimous, Ordinance No. 26-004 will be brought before the Council for a second consideration at the June 1, 2026, meeting.

2. **Approve the application, enact Ordinance 26-004 with amendments.**

   I move to approve Ordinance 26-26-004 approving the application of Kevin and Paige Butler for annexation (Land Use File # 10-08/25) with the following amendments.

   The City Recorder shall call the roll and the names of each Councilor present and their vote shall be recorded in the meeting minutes. If the first consideration is approved, Ordinance No. 26-004 will be brought before the Council for a second consideration at its June 1, 2026, meeting.

3. **Deny the application and adopt findings and conclusions to substantiate the decision.**

   I move that the City Council deny the application of Kevin and Paige Butler for annexation (Land Use File # 10-08/25) and direct staff to prepare an order of denial with findings and conclusions to support that decision.

4. **Continue deliberation to the next meeting.**

   I move that the City Council continue deliberations on the application of Kevin and Paige Butler for annexation (Land Use File # 10-08/25) until June 1, 2026.

ORDINANCE NO. 26-004

ANNEXING REAL PROPERTY LOCATED ON SHAFF ROAD AND CHANGING THE ZONE FROM MARION COUNTY URBAN TRANSITIONAL (UT-20) TO CITY OF STAYTON HIGH DENSITY RESIDENTIAL (HD).

WHEREAS, Kevin and Paige Butler have initiated annexation of certain real property located on Shaff Road, Marion County, Oregon, identified as Map Tax Lot 091W04C001901, more particularly described in Exhibit 1 attached hereto and incorporated herein, and further illustrated on a map shown in Exhibit 2 attached hereto and incorporated herein; and

WHEREAS, the owner of the property is Kevin and Paige Butler; and

WHEREAS, the annexation area consists of approximately 17 acres; and

WHEREAS, the property is currently located outside the City limits of Stayton and is zoned Marion County Urban Transition (UT-20); and

WHEREAS, the territory proposed for annexation lies within the City of Stayton Urban Growth Boundary and is designated Residential on the Stayton Comprehensive Plan Map, with a 100-foot wide Natural Resource Overlay District along the Salem Ditch; and

WHEREAS, upon annexation the property will be zoned High Density (HD) Residential, consistent with the Comprehensive Plan designation, the City's long-range residential land use policies and findings within the staff report and Planning Commission recommendation; and

WHEREAS, on February 23, 2026, and April 27, 2026, the Stayton Planning Commission held duly noticed public hearings on the annexation request (File No. 10-08/25); and

WHEREAS, the Planning Commission reviewed the application materials, agency comments, and public testimony, and thereafter adopted findings of fact and conclusions determining that the application satisfies the annexation approval criteria in Stayton Municipal Code Section 17.12.210.4; and

WHEREAS, the Planning Commission recommended that the City Council approve the annexation and amend the Stayton Official Zoning Map to apply High Density (HD) Residential zoning to the annexed property; and

WHEREAS, the City Council held a public hearing as required by law and reviewed the Planning Commission recommendation and findings of fact, which are attached as Exhibit 3 and incorporated herein; and

WHEREAS, the City Council concludes that the annexation application satisfies the approval criteria contained in SMC 17.12.210.4.

NOW THEREFORE, THE STAYTON CITY COUNCIL ORDAINS AS FOLLOWS:

SECTION 1. Pursuant to ORS 222.125, the Stayton City Council hereby proclaims the annexation to the City of Stayton, Oregon, of approximately 17 acres consisting of the property located on Shaff Road identified as Map Tax Lot 091W04C001901, the legal description of which is set forth in Exhibit 1, attached hereto and incorporated herein by reference.

SECTION 2. Pursuant to ORS 222.005, the Stayton City Recorder shall provide by certified mail to all public utilities, telecommunication facilities, and franchise holders operating within the City a written notice of the annexation including the site address, legal description, and map of the territory annexed, along with a copy of this Ordinance. Such notice shall be mailed within ten (10) working days following passage of this Ordinance.

SECTION 3. Pursuant to ORS 222.010, the Stayton City Recorder shall, within ten (10) days of passage of this Ordinance, file with the Marion County Clerk and Marion County Assessor a report of the annexation including the legal description and map of the territory annexed.

SECTION 4. Pursuant to ORS 308.225(2), the Stayton City Recorder shall provide to the Oregon Department of Revenue a copy of this Ordinance including the legal description and map of the annexed territory.

SECTION 5. The Stayton Official Zoning Map is hereby amended to include the annexed territory and designate the property as High Density (HD) Residential with a 100-foot wide Natural Resource Overlay District along the Salem Ditch.

SECTION 6. Upon adoption by the Stayton City Council and signature by the Mayor, this Ordinance shall become effective thirty (30) days after the date of signing.

ADOPTED BY THE STAYTON CITY COUNCIL THIS 18 DAY OF MAY 2026.

Signed:_____, 2026 BY: _____
Brian Quigley, Mayor

Signed:_____, 2026 ATTEST: _____
Julia Hajduk, City Manager

EXHIBIT 1

2022-16

PARTITION PLAT NO. 2022-16

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, MARION COUNTY, OREGON
DATE: OCTOBER 15, 2021
SHEET 2 OF 2

MARION COUNTY APPROVALS

ACCEPTANCE OF DEDICATION:

BY: Danielle Bethell 3/17/2022
CHAIRPERSON OR VICE-CHAIRPERSON MARION COUNTY BOARD OF COMMISSIONERS — DATE

BY: Brandon Reich 3-10-22
MARION COUNTY PLANNING COMMISSION DIRECTOR — DATE
PLANNING CASE NO.: PAR 20-015

****

APPROVED THIS 11th DAY OF March, 2022

BY:
MARION COUNTY SURVEYOR

****

APPROVED THIS 15 DAY OF March, 2022

BY: Tom Rohlfing by Kalynn
MARION COUNTY ASSESSOR

****

ALL TAXES, FEES, ASSESSMENTS, OR OTHER CHARGES AS PROVIDED BY O.R.S. 92.095 HAVE BEEN PAID THROUGH 30 June 2022
APPROVED THIS 15th DAY OF March, 2022

BY:
MARION COUNTY TAX COLLECTOR

****

STATE OF OREGON)
) SS
COUNTY OF MARION)

I DO HEREBY CERTIFY THAT THE ATTACHED PARTITION PLAT NO. 2022-16 WAS RECEIVED FOR RECORDING ON THE 17th DAY OF March, 2022, AT 4:34 O'CLOCK P.M., AND RECORDED IN THE BOOK OF PARTITION PLATS. ALSO REFERENCED IN THE MARION COUNTY DEED RECORDS IN REEL, 4605, AT PAGE 251.

BILL BURGESS, MARION COUNTY CLERK

BY: Cristian Perez Garcia
DEPUTY COUNTY CLERK

NARRATIVE

THE PURPOSE OF THIS PLAT IS TO PARTITION THAT TRACT OF LAND DESCRIBED IN DEED REEL 3996 PAGE 250, MARION COUNTY DEED RECORDS. THE BASIS OF BEARINGS WAS ESTABLISHED ALONG THE WEST LINE OF PARTITION PLAT NUMBER 2021-67, RECORDED AS REEL 4539 PAGE 171, MARION COUNTY RECORDS.

THE SOUTH LINE, BEING A PORTION OF THE SOUTH LINE OF THE SOUTHWEST ONE-QUARTER OF SECTION 4, WAS ESTABLISHED BY HOLDING THE FOUND BRASS DISKS AT THE SOUTHWEST CORNER AND THE SOUTHEAST CORNER OF SAID SOUTHWEST ONE-QUARTER.

THE NORTH RIGHT-OF-WAY LINE OF THE SHAFF ROAD SE (MARKET ROAD NO. 86), WAS ESTABLISHED BY HOLDING A LINE PARALLEL WITH AND 25.00 FEET NORTHERLY OF THE SOUTH LINE OF THE SOUTHWEST ONE-QUARTER OF SECTION 4.

THE WEST LINE, BEING THE WESTERLY LINE OF SECTION 4, WAS ESTABLISHED BY HOLDING A FOUND 2-1/2 INCH BRASS DISK AT THE SOUTHWESTERLY CORNER OF SECTION 4 AND A 3-1/4 INCH ALUMINUM CAP AT THE WEST QUARTER CORNER OF SECTION 4.

THE NORTH LINE WAS ESTABLISHED BY HOLDING FOUND IRON RODS PER MCSR 7749 AND MCSR 26345.

THE EAST LINE WAS ESTABLISHED BY HOLDING RECORD BEARING AND DISTANCE PER PARTITION PLAT NO. 2021-67 AND FOUND IRON RODS PER MCSR 23684 AND MCSR 7749 WITH THE CENTER LINE OF THE SALEM FLOURING MILLS DITCH.

SURVEYOR'S CERTIFICATE

I, ABRAHAM KAHNAMOOIAN, DO HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS, THE LANDS REPRESENTED ON THE ANNEXED MAP, SITUATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF STAYTON, MARION COUNTY, OREGON, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INITIAL POINT, BEING A FOUND 5/8-INCH IRON ROD LOCATED AT THE NORTHWEST CORNER OF MARION COUNTY PARTITION PLAT NUMBER 2021-67; THENCE ALONG THE WEST LINE OF SAID PARTITION PLAT, SOUTH 23°36'32" EAST 984.18 FEET TO THE CENTERLINE OF SHAFF ROAD SE, ALSO BEING THE SOUTH LINE OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 4; THENCE ALONG SAID SOUTH LINE, NORTH 88°42'41" WEST 2131.81 FEET TO A 2-1/2-INCH BRASS DISK AT THE SOUTHWEST CORNER OF SAID SOUTHWEST ONE-QUARTER; THENCE ALONG THE WEST LINE OF SAID SOUTHWEST ONE-QUARTER, NORTH 01°40'20" EAST 1646.22 FEET TO TO THE SOUTH LINE OF REEL 2594, PAGE 159, MARION COUNTY DEED RECORDS, FROM WHICH A 5/8-INCH IRON ROD BEARS SOUTH 88°24'59" EAST 0.20 FEET; THENCE ALONG SAID SOUTH LINE, SOUTH 88°24'59" EAST 1330.48 FEET TO AN IRON BOLT AT THE NORTHEAST CORNER OF REEL 3996, PAGE 250, MARION COUNTY DEED RECORDS; THENCE ALONG THE EAST LINE OF SAID DEED, SOUTH 01°52'50" WEST 742.47 FEET TO A POINT ON THE CENTER LINE OF SALEM WATER DITCH, ALSO BEING THE SOUTHWEST CORNER OF REEL 1220, PAGE 584, MARION COUNTY DEED RECORDS; THENCE ALONG THE SOUTH LINE OF SAID DEED, SOUTH 88°05'06" EAT 383.69 FEET TO THE INITIAL POINT.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 62.29 ACRES, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
MARCH 9, 2021
ABRAHAM KAHNAMOOIAN
95376PLS
RENEWS: 6/30/23

PLAT NOTES

1. THIS PLAT IS SUBJECT TO THE CONDITIONS OF APPROVAL SET FORTH IN MARION COUNTY PARTITION CASE FILE NO. 20-015.
2. THIS PLAT IS SUBJECT TO RIGHT OF THE PUBLIC AND OF GOVERNMENTAL BODIES IN AND TO THAT PORTION OF THE PREMISES HEREIN DESCRIBED LYING BELOW THE HIGH WATER MARK OF SALEM WATER DITCH.
3. THIS PLAT IS SUBJECT TO AN ELECTRIC TRANSMISSION, AND DISTRIBUTION LINE EASEMENT TO PACIFIC POWER AND LIGHT COMPANY RECORDED IN VOLUME 649, PAGE 163, MARION COUNTY DEED RECORDS. NO ABOVE GROUND EVIDENCE WAS FOUND OF WHERE THE EASEMENT MIGHT BE LOCATED.

DECLARATION

KNOW ALL PERSONS BY THESE PRESENTS THAT KEVIN BUTLER, IS THE OWNER OF THE LAND SHOWN ON THE ANNEXED MAP AND AS DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE, AND HAS CAUSED THE SAME TO BE SURVEYED AND PARTITIONED IN ACCORDANCE WITH THE PROVISIONS OF THE OREGON REVISED STATUTES CHAPTER 92. KEVIN BUTLER DOES HEREBY DEDICATE TO THE PUBLIC, A RIGHT-OF-WAY AS SHOWN HEREON.

KEVIN BUTLER

ACKNOWLEDGMENT

STATE OF OREGON)
) SS
COUNTY OF MARION)

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 25th DAY OF February, 2022 BY KEVIN BUTLER

NOTARY SIGNATURE

Rhonda Michelle Mackey
NOTARY PUBLIC - OREGON

COMMISSION NO. 982993A

MY COMMISSION EXPIRES January 9, 2023

CONSENT AFFIDAVIT

A PARTITION PLAT CONSENT AFFIDAVIT BY IRENE JOYCE DOZLER, TRUSTEE OF THE PAUL AND IRENE JOYCE DOZLER REVOCABLE LIVING TRUST DATED FEBRUARY 9, 1995, FOR THAT INSTRUMENT RECORDED IN REEL 3996, PAGE 251, MARION COUNTY DEED RECORDS HAS BEEN RECORDED IN REEL 4605, PAGE 250, MARION COUNTY RECORDS.

PREPARED FOR

KEVIN BUTLER
11641 SHAFF ROAD
STAYTON, OREGON 97383

JOB NAME:	11461 SHAFF RD
JOB NUMBER:	8455
DRAWN BY:	AK
CHECKED BY:	JFS
DRAWING NO.:	8455

AKS ENGINEERING & FORESTRY, LLC
3700 RIVER RD N, STE 1
KEIZER, OR 97303
503.400.6028
WWW.AKS-ENG.COM

AKS

ENGINEERING · SURVEYING · NATURAL RESOURCES
FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

EXHIBIT 2

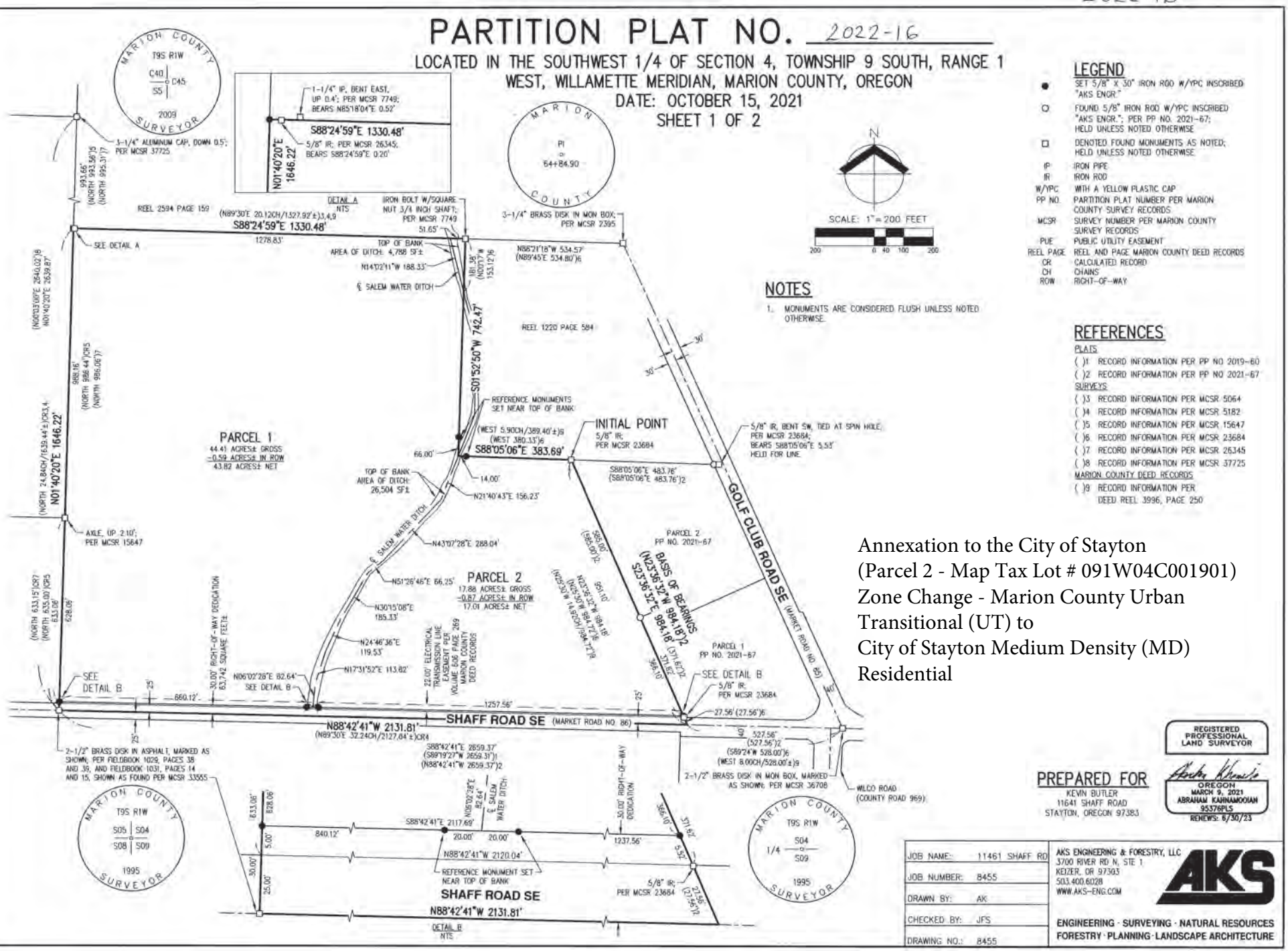
2022-16

PARTITION PLAT NO. 2022-16

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, MARION COUNTY, OREGON

DATE: OCTOBER 15, 2021

SHEET 1 OF 2



LEGEND

●	SET 5/8" X 30" IRON ROD W/YPC INSCRIBED "AKS ENGR."
○	FOUND 5/8" IRON ROD W/YPC INSCRIBED "AKS ENGR."; PER PP NO. 2021-67; HELD UNLESS NOTED OTHERWISE
□	DENOTED FOUND MONUMENTS AS NOTED; HELD UNLESS NOTED OTHERWISE
IP	IRON PIPE
IR	IRON ROD
W/YPC	WITH A YELLOW PLASTIC CAP
PP NO.	PARTITION PLAT NUMBER PER MARION COUNTY SURVEY RECORDS
MCSR	SURVEY NUMBER PER MARION COUNTY SURVEY RECORDS
PUE	PUBLIC UTILITY EASEMENT
REEL PAGE	REEL AND PAGE MARION COUNTY DEED RECORDS
CR	CALCULATED RECORD
CH	CHAINS
ROW	RIGHT-OF-WAY

SCALE: 1" = 200 FEET

200 0 40 100 200

NOTES

1. MONUMENTS ARE CONSIDERED FLUSH UNLESS NOTED OTHERWISE.

REFERENCES

PLATS

( )1 RECORD INFORMATION PER PP NO 2019-80
( )2 RECORD INFORMATION PER PP NO 2021-67

SURVEYS

( )3 RECORD INFORMATION PER MCSR 5064
( )4 RECORD INFORMATION PER MCSR 5182
( )5 RECORD INFORMATION PER MCSR 15647
( )6 RECORD INFORMATION PER MCSR 23684
( )7 RECORD INFORMATION PER MCSR 26345
( )8 RECORD INFORMATION PER MCSR 37725

MARION COUNTY DEED RECORDS

( )9 RECORD INFORMATION PER DEED REEL 3996, PAGE 250

Annexation to the City of Stayton
(Parcel 2 - Map Tax Lot # 091W04C001901)
Zone Change - Marion County Urban Transitional (UT) to
City of Stayton Medium Density (MD) Residential

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
MARCH 9, 2021
ABRAHAM KARNAMOOIAN
95376PLS
RENEWS: 6/30/23

PREPARED FOR
KEVIN BUTLER
11641 SHAFF ROAD
STAYTON, OREGON 97383

JOB NAME:	11461 SHAFF RD
JOB NUMBER:	8455
DRAWN BY:	AK
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FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

EXHIBIT 3, City Council Finding of Fact

Land Use File #10-08/25

A. EXISTING CONDITIONS

1. The owner and applicant of the property is Kevin and Paige Butler.
2. The parcel can be described as: taxlot 091W04C001901parcel proposed for annexation can be described as tax lot 091W04C001901.
3. The property is currently outside of the City Limits and zoned Marion County Urban Transition (UT-20).
4. The property is approximately 17 acres with frontage on Shaff Rd, frontage along the Salem Ditch, and is currently vacant.
5. The property is designated Residential by the Comprehensive Plan Map with a 100-foot wide Natural Resource Overlay District along the Salem Ditch.
6. The property to the north has not been annexed into the City, remains under Marion County jurisdiction, is zoned Urban Transition (UT-20), and is an 11-acre parcel used for a single-family residence and agriculture. The properties to the east were annexed into the City in 2020, are zoned HD and Commercial General and are developed with a multifamily development and vacant, respectively. One of the properties to the south, across Shaff Rd is zoned Light Industrial, is vacant except for a storage shed, and is used for agriculture. The other property across Shaff Rd is has not been annexed into the City, remains under Marion County jurisdiction, is zoned Urban Transition (UT-20), and is a 1.7-acre parcel used for a single-family residence. The property to the west is outside of the Urban Growth Boundary and is a 44-acre parcel zoned Exclusive Farm Use by Marion County.

B. PROPOSAL

The proposal is to annex a 17-acre parcel of land fronting Shaff Rd (tax lot 091W04C001901) into the city. The applicant has proposed that High Density (HD) Residential zoning be applied at the time of annexation.

C. AGENCY COMMENTS

The following agencies were notified of the proposal: City of Stayton Public Works, Stayton Cooperative Telephone Company, Pacific Power, NW Natural Gas, Stayton Fire District, Marion County Public Works, Wave Broadband, Marion County Planning Division, Santiam Water Control District, Santiam Hospital, Stayton Police Department, City of Salem Development Services, and the North Santiam School District. Additionally, a Post Acknowledgement Plan Amendment (PAPA) was submitted to Oregon Department of Land Conservation and Development (DLCD) for notice file no. 002-26.

Stayton Public Works provided a memorandum dated December 10, 2025, authored by the City's consultant engineer. In addition, the City's transportation engineering consultant submitted comments during the preapplication phase and had no further review comments during the application process. Santiam Water Control District submitted comments expressing concern

over stormwater impacts on the Salem Ditch. These comments are incorporated into the findings below.

City of Salem replied they were not impacted by the application. Stayton Fire District stated that they had no comment. Marion County Public Works stated that they did not have any comment at this time, but they will at time of development. No other review comments were received.

The Santiam Water Control District (SWCD) also submitted comments not directly related to stormwater impacts or to the approval criteria. The SWCD raised the issue of Statewide Planning Goal 6 and the obligation of the City to assure that future development complies with state and federal environmental statutes and rules. The statewide planning goals are applicable to the development of the City's comprehensive plan and land use regulations, not the individual application of the land use regulations to a specific land use or limited land use project. The Comprehensive Plan and Title 17 have been acknowledged and found consistent with the statewide planning goals.

The SWCD requested that the City's approval of this application include conditions that protect the SWCD's compliance with the Total Maximum Daily Load requirements. This application is solely for the annexation of property into the city limits and not for development approval. Bringing the property into the city limits will not impact the TMDL responsibilities of the SWCD or the City.

The SWCD raised the issue that the application did not accurately identify the property to be annexed, due to the SWCD's maintenance easement and use rights encumbering the property. The applicant provided a copy of the recorded partition plat that established the parcel to be annexed. The annexation of the property into the city limits will not have any impact on the SWCD's easement rights. The existence of easements does not need to be part of the legal description of the territory to be annexed.

The SWCD noted the responsibility of the City to coordinate its planning responsibilities with other units of government, including the SWCD. The City has complied with this requirement by including the SWCD in the drafting of the Comprehensive Plan in 2011 through 2013, the drafting of the Stormwater Master Plan, the drafting of the Public Works Design Standards, and by notifying the SWCD of this application and requesting their input.

The SWCD raised a concern over the potential loss of their water rights due to conversion of the property from agricultural use to urban development. This issue is not related to an approval criterion and is beyond the control of the City.

The SWCD, finally, raised the issue their contract with the applicant to deliver irrigation water. The SWCD requested the applicant sign a Termination of Contract as part of the annexation process. This issue is not related to an approval criterion and is beyond the control of the City.

The City received a letter from the Oregon Department of Land Conservation and Development dated February 23, 2026, stating that, pursuant to Oregon House Bill 2001 and Oregon House Bill 2889, the City should utilize the Oregon Housing Needs Analysis allocations established for each local government. The letter indicates that, pursuant to the January 1, 2026 publication, the City of Stayton's 20-year housing need within the Urban Growth Boundary is 1,058 dwelling units, distributed across income categories as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and

300 units above 120% AMI. Additionally, a virtual meeting with DLCD was held on March 26, 2026, to further discuss and clarify their comments.

D. PUBLIC COMMENTS

The Community and Economic Development Department notified all owners of property within 300 feet of the subject property and did not receive written public comment prior to the public hearing. At the April 27, 2026, Planning Commission public hearing, Mrs. Chamberland of 1624 E Burnett Street expressed concern regarding state land use requirements and the impacts of growth on City infrastructure and schools. Mr. Aaron Frichtl of 12326 Golf Lane expressed concern regarding the impacts of annexation on City infrastructure, maintenance obligations, and public services. No additional comments were received regarding this application.

E. ANALYSIS

The annexation applications satisfies approval criteria contained within Stayton Municipal Code (SMC) Title 17, Section 17.12.210.

F. REVIEW CRITERIA

Pursuant to SMC 17.12.210.4 the following criteria must be demonstrated as being satisfied by the application:

a. Need exists in the community for the land proposed to be annexed.

Finding: The 2013 Stayton Comprehensive Plan update included a Buildable Lands Inventory (BLI). The 2013 BLI provides the following information on projected growth and need for additional land in the community. At that time, there were 106 acres of vacant buildable land inside the City limits in the Low, Medium, and High Density Residential Zones. The projected population for the City in 2030 (at a medium growth rate of 1.7%) was 11,359 people, requiring an additional 1,281 dwellings. To meet that need, the City Comprehensive Plan indicates the expected need of additional 320 acres of residential to be annexed into the City. Since the time that analysis was conducted, the City has annexed 60 acres of residential land.

The need for 1,281 additional units was broken up into 889 single-family detached dwellings, 193 duplexes, 174 multi-family units, and 25 mobile homes. It is projected that the percentage of homes are needed at the following: single-family detached dwellings 65%, duplexes (or attached single-family homes) 13%, multi-family units 18%, and mobile homes 4%.

Since the BLI has been calculated, the following is a table of developments, year, type of housing unit, and number.

Project Name	Year	Type	Number
Phillips Estates, Phase 2	2014	single-family home	21
Phillips Estates, Phase 3	2025/26	single-family home	22 (concept plan)

Wildlife Meadows	2017	single-family home	42 (2 duplexes)
Hayden (Lambert Place)	2020	single-family home	51
Fern Ridge	2022	multi-family	72
Shaff Square	2023	multi-family	100

Based on these totals, Stayton's housing needs are as follows: 753 single-family homes, 191 duplex or attached single-family units, 2 multifamily units, and 25 mobile homes.

These projections are based on a higher anticipated growth rate than what has actually occurred, meaning the calculated housing needs may be somewhat overstated. From 2000 to 2024, Stayton's population increased from 6,816 to 8,176—a change of 1,360 people—reflecting an average annual growth rate of approximately 0.76%. The Marion County Coordinated Growth projection of 1.6% average annual growth rate was used in the projected needs.

The City's Comprehensive Plan Housing Goal (Chapter 6) states: "Existing and future residents will be provided a choice of housing types in safe and healthful housing." While the City currently provides a range of housing types, application of the High Density (HD) Residential zone to the subject property would further expand those opportunities. The HD zone permits single-family attached dwellings, duplexes, and multi-family dwellings (four + units per building), with a minimum density of 13 dwelling units per acre.

The applicant has not submitted a conceptual plan. On a gross basis consistent with HD standards, the approximately 17-acre site could accommodate a minimum of 221 dwelling units, consistent with the minimum density of 13 units per acre. Although the applicant did not submit a conceptual plan, the application did include an engineering analysis based on development at 24 units per acre, or a total of 408 multifamily units.

In 2023, the State adopted a new methodology for determining housing needs through the Oregon Housing Needs Analysis (OHNA). Under ORS 197A.018, "needed housing" is defined as housing by affordability level, type, characteristics, and location necessary to accommodate a city's allocated housing need over the applicable 20-year planning period. The OHNA represents a shift from a locally derived housing needs analysis to a statewide, regionally informed methodology that accounts for both future growth and existing unmet need resulting from underproduction of housing.

As described in the Department of Administrative Services (DAS) January 1, 2026, methodology, housing need now includes both projected future demand and existing unmet need, including suppressed household formation due to housing costs and limited supply. The methodology allocates a share of regional housing need to each local government. Stayton is located within the Willamette Valley region, and, consistent with state policy, urban housing needs are to be accommodated within Urban Growth Boundaries.

The DAS 2026 analysis identifies a 20-year housing need within Stayton's Urban Growth Boundary of 1,058 dwelling units, distributed across income levels as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and 300 units above 120% AMI.

Analysis: Under the State's revised methodology, housing needs include both existing unmet needs resulting from underproduction and projected future demand, which is allocated at the regional level and accommodated within Urban Growth Boundaries by local jurisdictions.

This annexation would increase the City's supply of buildable residential land and capacity, supporting its ability to provide a range of housing types and accommodate identified housing needs consistent with the City's Comprehensive Plan Housing Goal, Statewide Planning Goal 10, ORS 197.296, and the OHNA framework.

b. The site is or is capable of being serviced by adequate City public services, including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Finding: The property is not currently connected to City utilities. Three of the City's adopted master plans (Transportation, Water, and Wastewater) provide clear pathways for extending services. The adopted Stormwater master plan indicates that a stormwater detention facility is proposed for construction on this property. At the time of development, the applicant will be required to construct or extend infrastructure to meet all applicable standards, ensuring the property can be fully and adequately served.

Streets

Shaff Road, which forms the southern boundary of the property, is designated as a Major Collector and will need to be improved to Collector standards, including curbs, sidewalks, street trees, street lighting, and adequate pavement width. In addition, the preliminary design of the future roundabout at the intersection of Shaff Road and Golf Club Road identifies a potential 44-foot wide easement area outside the public right-of-way for Pacific Power transmission lines, for a large storm drainage conveyance swale, and an additional easement for a large stormwater facility located at the southeasterly corner of the parcel. Emergency vehicle access will need to comply with the Stayton Municipal Code, Public Works Design Standards, and Fire District requirements at the time of development.

Stormwater Drainage

The property is located within the North Salem Ditch Basin for purposes of the City's stormwater design and analysis. The applicant's engineering memo states that both public and private storm systems are planned to discharge into the Salem Ditch with a 30-inch outfall. The City's engineering consultant has stated that the nearest existing storm drain manhole is approximately 400 feet east of the property and on the south side of Shaff Rd. The preliminary design of the future roundabout at the Shaff Rd/Golf Club Rd intersection

identifies the need for a large storm drainage conveyance swale along the north side of Shaff Rd. The City's engineer consultant noted that Salem Ditch is not considered to have any available capacity for increased runoff or flows. The engineer consultant also pointed out that there is a wetland along the Salem Ditch as well as significant hydric soils running north to south through the middle of the property.

The Santiam Water Control District (SWCD) is the owner and operator of the Salem Ditch. In a December 10, 2025 communication the SWCD raised a number of concerns with the application. SWCD has stated that a property owner may not discharge stormwater into the Salem Ditch without SWCD approval. SWCD has stated that the Salem Ditch is at capacity and further development, without controls, will cause facility damage, flooding, and water quality degradation. The City and the SWCD entered into a Memorandum of Understanding in 2014 regarding stormwater discharges into SWCD facilities, including the Salem Ditch. Following execution of the MOU, the City amended the stormwater control sections of the City's Public Works Design Standards (Division 6) to restrict stormwater discharges from development to no more than predevelopment discharge rates, and for some design storms at less than the predevelopment discharge rate, to require downstream capacity analysis, and to prohibit new discharge points into a SWCD facility without a written approval from the SWCD.

SWCD also asserts that it holds use rights to the property and that the city must recognize and must incorporate these use rights and the corresponding appropriate setbacks into development plans. The Comprehensive Plan map provides for a 100-foot wide Natural Resources Overlay District (NROD) along the Salem Ditch, which, when implemented, would prohibit any new buildings within the NROD.

No development is proposed with this application. At development, a complete stormwater management system—including flow control, water-quality treatment, conveyance, and an acceptable point of discharge—will be required in accordance with the Municipal Code, the Stormwater Master Plan and Public Works Design Standards.

Water

The property is not currently served by the City's water system. The applicant's engineering memo states that the property can be served by water and points out improvements and extensions of the system called for in the 2006 Water Distribution Facilities Planning Study. The City's engineering consultant has stated that the nearest City water facility is a 10-inch main located in Wilco Road, approximately 400 feet east of the property. The Water Master Plan includes a future 10-inch water main along Shaff Rd and a 12-inch distribution main along Salem Ditch along the western portion of the property. At the time of development, the property will be required to extend the water system and meet all emergency water supply and fire flow requirements.

Sanitary Sewer

The property is not currently served by the City's sewer system. The applicant's engineering memo states that serving the property is feasible by connection to a sewer stub at the intersection of Golf Club Rd and Shaff Rd. The City's engineering consultant has stated that connection will require engineering analysis demonstrating adequate capacity for additional flows. The Wastewater Facilities Planning Study does not identify significant system deficiencies in the vicinity that would affect the ability to serve the site.

c. The proposed annexation is property contiguous to existing City jurisdictional limits.

Finding: The property is adjacent to the City limits to the south and east.

d. The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and the policies of the City of Stayton.

Finding: One of the properties to the east is zoned Commercial General (CG) and is not yet developed. The other property to the east was recently developed as a 100-unit multifamily development with a 20-unit density per acre. The properties to the south are vacant land zoned industrial and 2-acre single family dwelling site. To the west, property is outside of the Stayton Urban Growth Boundary and is agricultural land. To the north, is land not yet annexed into the city and is a large lot residential property also used for agriculture.

The property lies within the Stayton Urban Growth Boundary and is designated Residential in the Comprehensive Plan. Applying any residential zone upon annexation matches that designation and maintains consistency with the planned future character of the area. With the recent new construction of multi-family and duplex developments in the City, development of the property as HD would extend the high density residential area and provide a transition to the commercial area – Commercial General (CG) – directly adjacent to this parcel.

e. The annexation request complies or can be made to comply with all applicable provisions of state and local law.

Finding: The criteria of ORS 222 apply to the adoption of an annexation ordinance which is a City Council action. The property owners have consented to the annexation. The property is contiguous to the existing city limits and is located entirely within the City of Stayton's Urban Growth Boundary. The acknowledged Stayton Comprehensive Plan designates this area as Residential.

f. If a proposed contract annexation, the terms and conditions, including the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Finding: The proposed annexation is not a contract annexation

BEFORE THE STAYTON PLANNING COMMISSION

	)
In the matter of	) Annexation
the application of	) File # 10-08/25
Kevin and Paige Butler	)

ORDER OF RECOMMENDATION

I. NATURE OF APPLICATION

The applicant has submitted an application for annexation of a 17-acre parcel of land fronting Shaff Road (tax lot 091W04C001901), proposing a zoning designation of High Density (HD) Residential.

II. PUBLIC HEARING

A public hearing was held on the application before the Stayton Planning Commission on February 23, 2026. At that hearing the Planning Commission reviewed Land Use File #10-08/25 application for annexation and it was made part of the record. A comment letter from the DLCD was received on February 23, 2026. In order to incorporate the DLCD's comments into the findings and evaluate any potential impacts, the public hearing was continued to April 27, 2026.

III. FINDINGS OF FACT

A. EXISTING CONDITIONS

1. The owner of the property is Kevin Butler and the applicants are Kevin and Paige Butler.
2. The parcel can be described as: taxlot 091W04C001901.
3. The property is currently outside of the City Limits and zoned Marion County Urban Transition (UT-20).
4. The property is approximately 17 acres with frontage on Shaff Rd, frontage along the Salem Ditch, and is currently vacant.
5. The property is designated Residential by the Comprehensive Plan Map with a 100-foot wide Natural Resource Overlay District along the Salem Ditch.
6. The property to the north has not been annexed into the City, remains under Marion County jurisdiction, is zoned Urban Transition (UT-20), and is an 11-acre parcel used for a single-family residence and agriculture. The properties to the east were annexed into the City in 2020, are zoned HD and Commercial General and are developed with a multifamily development and vacant, respectively. One of the properties to the south, across Shaff Rd is zoned Light Industrial, is vacant except for a storage shed, and is used for agriculture. The other property across Shaff Rd is has not been annexed into the City, remains under Marion County

jurisdiction, is zoned Urban Transition (UT-20), and is a 1.7-acre parcel used for a single-family residence. The property to the west is outside of the Urban Growth Boundary and is a 44-acre parcel zoned Exclusive Farm Use by Marion County.

B. PROPOSAL

The proposal is to annex a 17-acre parcel of land fronting Shaff Rd (tax lot 091W04C001901) into the city. The applicant has proposed that High Density (HD) Residential zoning be applied at the time of annexation.

C. AGENCY COMMENTS

The following agencies were notified of the proposal: City of Stayton Public Works, Stayton Cooperative Telephone Company, Pacific Power, NW Natural Gas, Stayton Fire District, Marion County Public Works, Wave Broadband, Marion County Planning Division, Santiam Water Control District, Santiam Hospital, Stayton Police Department, City of Salem Development Services, and the North Santiam School District. Additionally, a Post Acknowledgement Plan Amendment (PAPA) was submitted to Oregon Department of Land Conservation and Development (DLCD) for notice file no. 002-26.

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The SWCD requested that the City's approval of this application include conditions that protect the SWCD's compliance with the Total Maximum Daily Load requirements. This application is solely for the annexation of property into the city limits and not for development approval. Bringing the property into the city limits will not impact the TMDL responsibilities of the SWCD or the City.

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property. The applicant provided a copy of the recorded partition plat that established the parcel to be annexed. The annexation of the property into the city limits will not have any impact on the SWCD's easement rights. The existence of easements does not need to be part of the legal description of the territory to be annexed.

The SWCD noted the responsibility of the City to coordinate its planning responsibilities with other units of government, including the SWCD. The City has complied with this requirement by including the SWCD in the drafting of the Comprehensive Plan in 2011 through 2013, the drafting of the Stormwater Master Plan, the drafting of the Public Works Design Standards, and by notifying the SWCD of this application and requesting their input.

The SWCD raised a concern over the potential loss of their water rights due to conversion of the property from agricultural use to urban development. This issue is not related to an approval criterion and is beyond the control of the City.

The SWCD, finally, raised the issue their contract with the applicant to deliver irrigation water. The SWCD requested the applicant sign a Termination of Contract as part of the annexation process. This issue is not related to an approval criterion and is beyond the control of the City.

The City received a letter from the Oregon Department of Land Conservation and Development dated February 23, 2026, stating that, pursuant to Oregon House Bill 2001 and Oregon House Bill 2889, the City should utilize the Oregon Housing Needs Analysis allocations established for each local government. The letter indicates that, pursuant to the January 1, 2026 publication, the City of Stayton's 20-year housing need within the Urban Growth Boundary is 1,058 dwelling units, distributed across income categories as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and 300 units above 120% AMI. Additionally, a virtual meeting with DLCD was held on March 26, 2026, to further discuss and clarify their comments.

D. PUBLIC COMMENTS

The Community and Economic Development Department notified all owners of property within 300 feet of the subject property and has received no public comment on the application prior to the public hearing.

E. ANALYSIS

Annexation applications are required to satisfy approval criteria contained within Stayton Municipal Code (SMC) Title 17, Section 17.12.210.

F. REVIEW CRITERIA

Pursuant to SMC 17.12.210.4 the following criteria must be demonstrated as being satisfied by the application:

a. Need exists in the community for the land proposed to be annexed.

Finding: The 2013 Stayton Comprehensive Plan update included a Buildable Lands Inventory (BLI). The 2013 BLI provides the following information on projected growth and need for additional land in the community. At that time, there were 106 acres of vacant buildable land inside the City limits in the Low, Medium, and High Density Residential Zones. The projected population for the City in 2030 (at a medium growth rate of 1.7%) was 11,359 people, requiring an additional 1,281 dwellings. To meet that need, the City Comprehensive Plan indicates the expected need of additional 320 acres of residential to be annexed into the City. Since the time that analysis was conducted, the City has annexed 60 acres of residential land.

The need for 1,281 additional units was broken up into 889 single-family detached dwellings, 193 duplexes, 174 multi-family units, and 25 mobile homes. It is projected that the percentage of homes are needed at the following: single-family detached dwellings 65%, duplexes (or attached single-family homes) 13%, multi-family units 18%, and mobile homes 4%.

Since the BLI has been calculated, the following is a table of developments, year, type of housing unit, and number.

Project Name	Year	Type	Number
Phillips Estates, Phase 2	2014	single-family home	21
Phillips Estates, Phase 3	2025/26	single-family home	22 (concept)
Wildlife Meadows	2017	single-family home	42 (2 duplexes)
Hayden (Lambert Place)	2020	single-family home	51
Fern Ridge	2022	multi-family	72
East Santiam Duplexes	2023	duplexes	18 (9 duplexes)
Shaff Square	2023	multi-family	100

Based on these totals, Stayton's housing needs are as follows: 753 single-family homes, 182 duplex or attached single-family units, 2 multifamily units, and 25 mobile homes.

These projections are based on a higher anticipated growth rate than what has actually occurred, meaning the calculated housing needs may be somewhat overstated. From 2000 to 2025, Stayton's population increased from 6,816 to 8,280—a change of 1464 people—reflecting an average annual growth rate of approximately 0.86%. The Marion County Coordinated Growth projection of 1.6% average annual growth rate was used in the projected needs.

The City's Comprehensive Plan Housing Goal (Chapter 6) states: "Existing and future residents will be provided a choice of housing types in safe and healthful housing." While the City currently provides a range of housing types, application of the High Density (HD) Residential zone to the subject property would further expand those opportunities. The HD zone permits single-family attached dwellings, duplexes, and multi-family dwellings (four + units per building), with a minimum density of 13 dwelling units per acre.

The applicant has not submitted a conceptual plan. On a gross basis consistent with HD standards, the approximately 17-acre site could accommodate a minimum of 221 dwelling units, consistent with the minimum density of 13 units per acre. Although the applicant did not submit a conceptual plan, the application did include an engineering analysis based on development at 24 units per acre, or a total of 408 multifamily units.

In 2023, the State adopted a new methodology for determining housing needs through the Oregon Housing Needs Analysis (OHNA). Under ORS 197A.018, "needed housing" is defined as housing by affordability level, type, characteristics, and location necessary to accommodate a city's allocated housing need over the applicable 20-year planning period. The OHNA represents a shift from a locally derived housing needs analysis to a statewide, regionally informed methodology that accounts for both future growth and existing unmet need resulting from underproduction of housing.

As described in the Department of Administrative Services (DAS) January 1, 2026, methodology, housing need now includes both projected future demand and existing unmet need, including suppressed household formation due to housing costs and limited supply. The methodology allocates a share of regional housing need to each local government. Stayton is located within the Willamette Valley region, and, consistent with state policy, urban housing needs are to be accommodated within Urban Growth Boundaries.

The DAS 2026 analysis identifies a 20-year housing need within Stayton's Urban Growth Boundary of 1,058 dwelling units, distributed across income levels as follows: 271 units at 0–30% Area Median Income (AMI); 204 units at 31–60% AMI; 113 units at 61–80% AMI; 171 units at 81–120% AMI; and 300 units above 120% AMI

Analysis: Under the State's revised methodology, housing needs include both existing unmet needs resulting from underproduction and projected future demand, which is allocated at the regional level and accommodated within Urban Growth Boundaries by local jurisdictions.

This annexation would increase the City's supply of buildable residential land and capacity, supporting its ability to provide a range of housing types and accommodate identified housing needs consistent with the City's Comprehensive Plan Housing Goal, Statewide Planning Goal 10, ORS 197.296, and the OHNA framework.

b. The site is or is capable of being serviced by adequate City public services, including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Finding: The property is not currently connected to City utilities. Three of the City's adopted master plans (Transportation, Water, and Wastewater) provide clear pathways for extending services. The adopted Stormwater master plan indicates that a stormwater detention facility is proposed for construction on this property. At the time of development, the applicant will be required to construct or extend

infrastructure to meet all applicable standards, ensuring the property can be fully and adequately served.

Streets

Shaff Road, which forms the southern boundary of the property, is designated as a Major Collector and will need to be improved to Collector standards, including curbs, sidewalks, street trees, street lighting, and adequate pavement width. In addition, the preliminary design of the future roundabout at the intersection of Shaff Road and Golf Club Road identifies a potential 44-foot wide easement area outside the public right-of-way for Pacific Power transmission lines, for a large storm drainage conveyance swale, and an additional easement for a large stormwater facility located at the southeasterly corner of the parcel. Emergency vehicle access will need to comply with the Stayton Municipal Code, Public Works Design Standards, and Fire District requirements at the time of development.

Stormwater Drainage

The property is located within the North Salem Ditch Basin for purposes of the City's stormwater design and analysis. The applicant's engineering memo states that both public and private storm systems are planned to discharge into the Salem Ditch with a 30-inch outfall. The City's engineering consultant has stated that the nearest existing storm drain manhole is approximately 400 feet east of the property and on the south side of Shaff Rd. The preliminary design of the future roundabout at the Shaff Rd/Golf Club Rd intersection identifies the need for a large storm drainage conveyance swale along the north side of Shaff Rd. The City's engineer consultant noted that Salem Ditch is not considered to have any available capacity for increased runoff or flows. The engineer consultant also pointed out that there is a wetland along the Salem Ditch as well as significant hydric soils running north to south through the middle of the property.

The Santiam Water Control District (SWCD) is the owner and operator of the Salem Ditch. In a December 10, 2025 communication the SWCD raised a number of concerns with the application. SWCD has stated that a property owner may not discharge stormwater into the Salem Ditch without SWCD approval. SWCD has stated that the Salem Ditch is at capacity and further development, without controls, will cause facility damage, flooding, and water quality degradation. The City and the SWCD entered into a Memorandum of Understanding in 2014 regarding stormwater discharges into SWCD facilities, including the Salem Ditch. Following execution of the MOU, the City amended the stormwater control sections of the City's Public Works Design Standards (Division 6) to restrict stormwater discharges from development to no more than predevelopment discharge rates, and for some design storms at less than the predevelopment discharge rate, to require downstream capacity analysis, and to prohibit new discharge points into a SWCD facility without a written approval from the SWCD.

SWCD also asserts that it holds use rights to the property and that the city must recognize and must incorporate these use rights and the corresponding appropriate setbacks into development plans. The Comprehensive Plan map provides for a 100-

foot wide Natural Resources Overlay District (NROD) along the Salem Ditch, which, when implemented, would prohibit any new buildings within the NROD.

No development is proposed with this application. At development, a complete stormwater management system—including flow control, water-quality treatment, conveyance, and an acceptable point of discharge—will be required in accordance with the Municipal Code, the Stormwater Master Plan and Public Works Design Standards.

Water

The property is not currently served by the City's water system. The applicant's engineering memo states that the property can be served by water and points out improvements and extensions of the system called for in the 2006 Water Distribution Facilities Planning Study. The City's engineering consultant has stated that the nearest City water facility is a 10-inch main located in Wilco Road, approximately 400 feet east of the property. The Water Master Plan includes a future 10-inch water main along Shaff Rd and a 12-inch distribution main along Salem Ditch along the western portion of the property. At the time of development, the property will be required to extend the water system and meet all emergency water supply and fire flow requirements.

Sanitary Sewer

The property is not currently served by the City's sewer system. The applicant's engineering memo states that serving the property is feasible by connection to a sewer stub at the intersection of Golf Club Rd and Shaff Rd. The City's engineering consultant has stated that connection will require engineering analysis demonstrating adequate capacity for additional flows. The Wastewater Facilities Planning Study does not identify significant system deficiencies in the vicinity that would affect the ability to serve the site.

c. The proposed annexation is property contiguous to existing City jurisdictional limits.

Finding: The property is adjacent to the City limits to the south and east.

d. The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and the policies of the City of Stayton.

Finding: One of the properties to the east is zoned Commercial General (CG) and is not yet developed. The other property to the east was recently developed as a 100-unit multifamily development with a 20-unit density per acre. The properties to the south are vacant land zoned industrial and 2-acre single family dwelling site. To the west, property is outside of the Stayton Urban Growth Boundary and is agricultural land. To the north, is land not yet annexed into the city and is a large lot residential property also used for agriculture.

The property lies within the Stayton Urban Growth Boundary and is designated Residential in the Comprehensive Plan. Applying any residential zone upon

annexation matches that designation and maintains consistency with the planned future character of the area. With the recent new construction of multi-family and duplex developments in the City, development of the property as HD would extend the high density residential area and provide a transition to the commercial area – Commercial General (CG) – directly adjacent to this parcel.

e. The annexation request complies or can be made to comply with all applicable provisions of state and local law.

Finding: The criteria of ORS 222 apply to the adoption of an annexation ordinance which is a City Council action. The property owners have consented to the annexation. The property is contiguous to the existing city limits and is located entirely within the City of Stayton's Urban Growth Boundary. The acknowledged Stayton Comprehensive Plan designates this area as Residential.

f. If a proposed contract annexation, the terms and conditions, including the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Finding: The proposed annexation is not a contract annexation.

IV. CONCLUSION

Based on the facts above, the Planning Commission concludes that the application meets the requirements for Sections 17.12.210.4 Annexation Approval Criteria.

V. RECOMMENDATION

Based on the Findings and Conclusions above, the Planning Commission recommends approval of the application for annexation to the City Council and amendment of the Official Zoning Map to designate the property as Low Density Residential with a 100-foot wide Natural Resources Overlay District along the Salem Ditch.

Larry McKinley, Chairperson — Date

Jennifer Siciliano, Community and Economic Development Director — 4/27/2026 Date

Annexation Application

Submittal Date:	August 2025
Submitted To:	City of Stayton Community Development
Project Location:	Marion County Map and Tax Lot: 091W04C001901
Applicant(s):	Kevin and Paige Butler
Applicant's Land Use Representative:	Britany Randall of BRAND Land Use Britany@brandlanduse.com

BRAND

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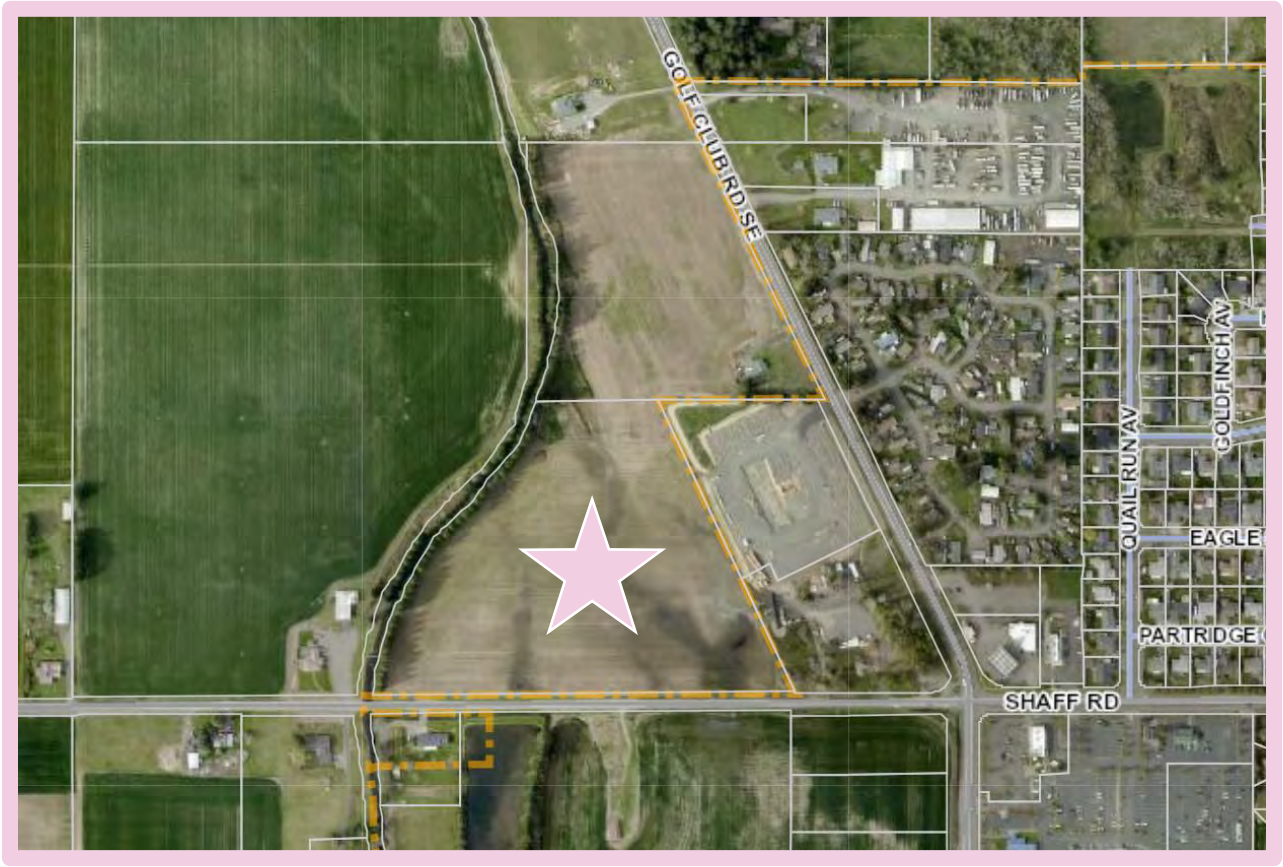
Aerial View of Subject Property and Existing Development



Section 1: Property Background and Request

The applicants, Kevin and Paige Butler, are requesting annexation of their 17.01-acre property, identified as Marion County Tax Lot 091W04C001901 (Tax Account No. 605143). The property is located immediately adjacent to the Stayton city limits on the south and east sides and is currently designated Residential on the City of Stayton's Comprehensive Plan Map. In conjunction with the annexation request, the applicants are seeking application of the High Density Residential (HDR) zoning designation. The HDR zone is consistent with the property's Comprehensive Plan designation and directly supports the city's goal of expanding housing opportunities in a manner that provides a wide range of unit types and densities to serve a growing and diverse population.

The property is strategically located adjacent to existing High Density Residential (HDR) and Commercial Retail (CR) zoned lands to the east, and Light Industrial (LI) zoned lands to the south. Applying HDR zoning will create a logical extension of existing residential patterns in the area and provide compatibility with the adjacent HDR zone to the east. The HDR designation also ensures appropriate buffering and transition to the commercial and industrial lands

nearby, while supporting the community's housing needs by allowing a broader spectrum of residential development types at higher densities. The HDR zone permits multi-family dwellings, townhomes, manufactured home parks, and other high-density residential forms, with a maximum density of 25 dwelling units per acre. This allows the property to achieve efficient land use and helps address the identified housing needs of the city, particularly for rental and multifamily options.

The annexation and application of HDR zoning will enable Stayton to continue implementing its Comprehensive Plan by accommodating growth within areas adjacent to existing urban services, thereby promoting efficient use of land, infrastructure, and public resources. The proposed HDR zoning designation aligns with city objectives for encouraging compact development, increasing housing supply, and improving housing affordability. The applicants are committed to coordinating with the city to ensure that future development of the property will be designed to integrate with surrounding land uses, provide necessary infrastructure improvements, and contribute positively to the livability and residential character of Stayton..

Section 2: Existing Conditions

The subject site is 17.01 acres in size and is described as Marion County Assessor Map and Tax Lots 091W04C001901. A Marion County Tax Map is included within the exhibits list identifying the subject property. The site is located abutting the corporate city limits of the City of Stayton. The City of Stayton Comprehensive Plan map designates the property as "Residential".

The Comprehensive Plan designations of surrounding properties include:

North: "Residential"

South: Across Shaff Road SE, "Industrial"

East: "Residential" and "Commercial"

West: Farmland Outside Stayton's Urban Growth Boundary

Section 3: Findings Applicable to Administrative Procedures

Chapter 17.12 – Development Approval Procedures

Sections 17.12.030 – Application Procedure

Any application for a land use or development approval action authorized in this title shall be filed in the following manner.

(1) FORMS. The application shall be submitted on forms provided by the City Planner.
(2) FILING LOCATION. Unless stated otherwise, the application shall be filed with the City Planner at City Hall.

(3) PROPERTY OWNER AUTHORIZATION. If the property owners are not the applicants, then the application shall be accompanied by a notarized statement certifying the authority of anyone representing the owner(s) of property involved in the application. The application shall be signed by the property owner or authorized representative.
(4) SUPPLEMENTAL INFORMATION. All supplemental documentation and information specified in those sections governing the approval or action being requested shall accompany the application. The applicant shall be responsible for providing any and all information required for a complete application.
(5) COST FOR SERVICES.
    (a) Basic Application Costs. Basic application costs are intended to recover expenses incurred by the City in the receipt, review and processing of a land use application. A deposit in an amount established in the Deposit Schedule will be required at the time an application is filed.
    (b) Outside Planning Services. An applicant may, upon permission of the City, choose outside planning services at the applicant's expense, approved by the City, to process any land use application. The outside planning service will be tantamount to the function of the City Planner and will be subject to the supervision, direction and review of the City Planner. Utilizing outside planning services does not forego the City's requirement as to costs (including non-refundable deposit).
    (c) In the event the application is withdrawn before City action, the applicant shall be responsible to pay for the costs incurred up to the time of its withdrawal.
    (d) Waiver of Charges. The City Council may, at its discretion, waive some or all charges for the processing of applications determined by the City Council to be in the public interest
(6) DEPOSIT SCHEDULE. A deposit schedule shall be in resolution form and adopted by the City Council.

Applicant's Findings: *The applicant acknowledges and understands the procedural requirements set forth in Stayton Municipal Code Section 17.12.030 for land use and development applications. This includes submitting the annexation application using forms provided by the city planner and filing all materials at city hall, unless otherwise directed. As the legal owner of the subject property, the application has been signed by an authorized representative of the property owner, and no additional authorization is required.*

The applicant further understands that all required supplemental information must be submitted in accordance with the applicable sections of the code governing the annexation process, and that the completeness of the application is the applicant's responsibility.

Regarding application fees, the applicant acknowledges that a deposit has been submitted in accordance with the city's adopted deposit schedule and understands that the city may charge

staff time and other direct costs associated with processing the application. The applicant also understands that should the application be withdrawn; they remain responsible for any costs incurred up to the point of withdrawal. Finally, the applicant recognizes that the city council has discretion to waive certain fees when an application is determined to serve the public interest.

Section 4: Findings Applicable to Annexation

Chapter 17.12 – Development Approval Procedures

Sections 17.12.210 – Annexations

(1) DEFINITION. An annexation is an expansion of the City limits through the addition of territory to the jurisdictional boundaries of the City, including "contract annexation" agreements between applicants and the City.

Applicant's Findings: *Kevin and Paige Butler seek annexation of their 17.01-acre property, identified as Marion County Tax Lot 091W04C001901, Tax Account No. 605143. The site is contiguous to the City of Stayton corporate limits on the south and east and is designated Residential on the City's Comprehensive Plan Map. The property's location within the Urban Growth Boundary and direct adjacency to existing city limits make it a logical and efficient candidate for annexation. In conjunction with annexation, the applicants request application of the High Density Residential (HDR) zoning designation. HDR is a residential zone that is consistent with the Comprehensive Plan's Residential designation and is specifically intended to provide for higher density housing in areas with access to community services and transportation facilities, with a minimum density of 13 dwelling units per acre and no maximum density, subject to other development standards. This implements Comprehensive Plan housing and land use policies that call for a full spectrum of housing choices and efficient urbanization of land within the UGB. By applying HDR zoning to the property, the city can advance several Comprehensive Plan goals, including:*

- *Goal 1 (Citizen Involvement) – Encouraging community-supported growth through transparent land use decisions;*
- *Goal 2 (Land Use Planning) – Supporting orderly and efficient urbanization of land within the UGB;*
- *Goal 10 (Housing) – Promoting a variety of housing types and densities to meet the needs of Stayton's growing population.*

The annexation and application of HDR zoning will enable development that is consistent with the city's long-range planning objectives and contribute to a more complete and connected residential neighborhood within this area of Stayton.

(2) METHOD OF ADOPTION.

(a) Major Annexations.

(1) A Major Annexation is an annexation that meets one or more of the following characteristics.

(i) Consists of two or more parcels, except proposed annexations that consist of contiguous parcels in the same ownership.

(ii) The area proposed for annexation exceeds 1 acre, except a health hazard annexation. (Amended Ord. 918, March 18, 2010)

(2) Approval procedures. The following procedures shall be followed in the review and approval of an application for a Major Annexation:

(i) Major Annexations are subject to referendum approval. The City Council may schedule a vote on an annexation proposal only in the May or November elections.

(ii) Submission Deadlines. An application for a Major Annexation shall be filed with the City Planner before 5:00 p.m. on the last working day in September for a ballot election in May and the last working day in March for a ballot election in November.

(iii) Planning Commission Proceedings. The Planning Commission shall hold a public hearing in accordance with the requirements of Section 17.12.090. Following the public hearing the Commission shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. Based on the findings of fact and conclusions, the Planning Commission shall make a recommendation to the City Council regarding the approval of the application.

(iv) City Council Proceedings. The City Council shall hold a public hearing in accordance with the requirements of Section 17.12.100. Following the public hearing, the City Council shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. If the Council finds that the criteria of Section 17.12.210.4 have been or will be met, the Council shall enact a resolution scheduling a referendum vote at the next available scheduled election. A decision by the Council approving the annexation, and referring to the voters, shall be final upon adoption for appeal purposes, but shall not be effective until all applicable appeal periods have passed with no appeal having been filed.

(v) Legal advertisement of pending election. After City Council review and approval, the City Administrator shall cause a legal advertisement describing the proposed annexation and pending election to be published in at least one newspaper of general

circulation in the City in the manner provided by state election law. The advertisement shall be placed at least 14 days prior to the election. The advertisement shall contain: a description of the location of the property, size of the property, its proposed zoning upon annexation, a general description of the potential land uses allowed, any required comprehensive plan text or map amendment or zoning ordinance text or map amendment, and where the City Council's evaluation of the proposed annexation may be found.

(vi) Election procedures. Pursuant to ORS 222.130(1), the ballot title for a proposal for annexation shall contain a general description of the boundaries of each territory proposed to be annexed. The description shall use streets and other generally recognized features. Notwithstanding ORS 250.035, the statement of chief purpose shall not exceed 150 words. The City Attorney shall prepare the ballot title wording.

(a) Pursuant to ORS 222.130(2), the notice of an annexation shall be given as provided in ORS 254.095 and 254.205, except that in addition the notice shall contain a map indicating the boundaries of each territory proposed to be annexed.

(b) Pursuant to ORS 222.111(7), two or more proposals for annexation of territory may be voted upon simultaneously; however, each proposal shall be stated separately on the ballot and voted on separately.

(vii) Setting of boundaries and proclamation of annexation. Upon approval by the voters of the proposed annexation, the City Council shall proclaim the results of the election and by ordinance set the boundaries of the area to be annexed by a legal description.

(b) Minor Annexations.

(1) A Minor Annexation is any annexation that meets all of the following characteristics.

(i) Consists of only one parcel, except proposed annexations that consist of contiguous parcels in the same ownership.

(ii) The area proposed for annexation is 1 acre or less. (Amended Ord. 918, March 18, 2010)

(2) Approval procedures. The following procedures shall be followed in the review and approval of an application for a Minor Annexation:

(i) An application for a Minor Annexation shall be filed with the City Planning Department.

(ii) Planning Commission Proceedings. The Planning Commission shall hold a public hearing in accordance with the requirements of Section 17.12.090. Following the public hearing the Commission shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. Based on the findings of fact and conclusions the Planning Commission shall make a recommendation to the City Council regarding the approval of the application.

(iii) City Council Proceedings. The City Council shall hold a public hearing in accordance with the requirements of Section 17.12.100. Following the public hearing, the City Council shall make findings of fact and conclusions as to whether the criteria of Section 17.12.210.4 below are met. If the Council finds that the criteria of Section 17.12.210.4 have been or will be met, the Council shall, by ordinance, shall set the boundaries of the area to be annexed by a legal description.

(c) Health Hazard Annexation The City may annex those areas constituting a health hazard in accordance with Oregon Revised Statutes, taking into consideration the ability of the City to provide necessary services. Annexation of areas constituting a health hazard is not subject to voter approval.

Applicant's Findings: *The subject property exceeds one acre, so under local procedure it would be treated as a major annexation for processing and public hearings. However, Oregon law requires annexation without an election when all owners petition, the territory is within the UGB, at least one parcel is contiguous to city limits, the territory is or will be subject to the City's acknowledged Comprehensive Plan, and the proposal conforms to other city ordinances. This is codified at ORS 222.127, adopted by Senate Bill 1573 in 2016, which preempts any local requirement for a voter referral on qualifying annexations. The City has processed similar annexations under its hearings procedures while not referring the measure to the voters due to this state preemption. The Butler annexation meets the ORS 222.127 criteria, so the City Council should process the application through Planning Commission and City Council hearings and act by ordinance without referral to an election.*

(3) SUBMITTAL REQUIREMENTS. In order to be accepted as complete and be processed in a timely manner by the City, requests for annexation of territory shall include the following materials and information:

(a) Completed application forms as supplied by the City Planner.

(b) Three copies of a site plan, drawn to a scale of 1 inch equals not more than 50 feet, shown as a graphic scale, of the property for which the annexation is requested. The site plan shall depict the surrounding properties, neighboring streets and roads, and existing uses of the property. If the application for annexation is not accompanied by a concurrent application for site plan, subdivision, or other land use approval, three copies of a conceptual plan of proposed uses of the property subsequent to annexation. In addition, 18 reduced copies of the plan sized as 11 inches by 17 inches shall be submitted.
(c) A plan showing the boundary lines of the properties, certified by a professional land surveyor, and the approximate area of the properties in acres or square feet.
(d) A legal description of the property, meeting the requirements of ORS 308.225.
(e) A narrative statement fully explaining the request and fully addressing the criteria for approval of an annexation.

Applicant's Findings: *Kevin and Paige Butler, the applicants, have retained a qualified consultant team to prepare and submit all materials required for a complete annexation application in accordance with Section 17.12.210.3 of the Stayton Land Use and Development Code. This application includes the completed forms supplied by the City Planner, a certified boundary map prepared by a licensed professional land surveyor identifying the property's acreage and dimensions, and a legal description of the property that meets the requirements of ORS 308.225. Because the applicants do not plan to develop the property in the near term, no conceptual development plan has been submitted. The City code allows for annexation without a concurrent development plan, and the applicants have chosen this approach because they do not yet know the precise layout of future improvements. However, to ensure the City understands how the property could be served in the future, the applicants engaged a licensed civil engineer to prepare a technical memorandum regarding transportation, water, wastewater, and stormwater service feasibility. That engineering memorandum demonstrates that public facilities can be extended to the site in full compliance with the City's adopted master plans and Public Works Design Standards, thereby meeting the annexation approval criteria. This narrative statement fully explains the annexation request and addresses the applicable criteria for approval.*

(4) APPROVAL CRITERIA. In order to approve an application for annexation, the following affirmative findings concerning the action must be made by the decision authority:
    (a) Need exists in the community for the land proposed to be annexed.

Applicant's Findings: *A demonstrated need exists in Stayton for additional residential land capable of accommodating higher-density housing. The 2021 Comprehensive Plan Housing Needs Analysis identifies a deficit of buildable residential land, particularly in categories that allow multifamily and rental housing. HDR zoning directly addresses this deficit by permitting*

densities up to 25 units per acre, thereby supporting the city's ability to meet projected growth within the UGB. The 2026–2028 City Council Goals specifically prioritize increasing affordable housing supply and ensuring land use policies support housing development across income levels. Annexation of this property with HDR zoning advances those goals by creating new opportunities for multifamily housing at a scale appropriate to its location.

(b) The site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.

Applicant's Findings: *The subject property is capable of being adequately serviced by City public facilities, as demonstrated by both adopted master plans and the detailed engineering evaluation prepared by Westech Engineering, Inc. Although the 17.01-acre property does not currently have utilities stubbed to the site, future extension of water, wastewater, stormwater, and transportation facilities is feasible and anticipated in the City's long-range planning.*

For transportation, Shaff Road is classified as a collector street in the Transportation System Plan (TSP). Existing right-of-way along the site frontage is approximately 55–60 feet, and the applicant has committed to dedicating up to 40 feet from the road centerline to achieve the ultimate 80-foot ROW standard upon development. Future site design can also accommodate the proposed roundabout at the Shaff Road/Golf Club Road intersection identified in the 2019 TSP. Internal subdivision streets can be designed to meet the 60-foot ROW requirement for local streets under the Public Works Design Standards (PWDS). Access spacing of 150 feet along Shaff Road can be maintained, and internal streets will be built to PWDS Section 312 standards, including curb and gutter, sidewalks, and lighting.

For water service, the City's Water Distribution Facilities Planning Study identifies a 10-inch main along Shaff Road and a 12-inch distribution line along Salem Ditch. The engineer's report confirmed that these improvements are feasible and sufficient to serve the property. Estimated domestic water demand for HDR-level development (assumed at 24 units per acre) is approximately 113 gallons per minute. This demand can be met by the planned system. Fire flow requirements of 1,500 gpm with sprinkled buildings can also be achieved with these mains. All water services, meters, and backflow prevention devices will be installed in accordance with PWDS and Oregon Health Authority–Drinking Water Services requirements.

For sanitary sewer, the Wastewater Facilities Planning Study does not directly address the site but identifies capacity expansion projects downstream. The engineer's analysis determined that service is feasible through a 10-inch sewer stub that drains to a 16-inch line at the Shaff/Golf Club Road intersection, flowing to the Wilco Pump Station. The system can handle approximately 540 gpm at a 0.3 percent slope, which easily accommodates the site's estimated 90 gpm demand under HDR assumptions. Development may require fill to maintain gravity flow

with adequate cover or, alternatively, construction of a pump station and pressure line. All sewer improvements will comply with PWDS and DEQ requirements.

For stormwater, the site is in the North Salem Ditch Basin and not in a flood hazard area. The City's Stormwater Master Plan calls for a 48-inch storm drain in Shaff Road and identifies a possible 10.4-acre-foot detention pond on the property. An updated stormwater plan by Keller Associates may refine that facility. At development, stormwater analysis and design will incorporate treatment and detention per the City's Revised Storm Water Standards and PWDS, with private facilities governed by Operations & Maintenance agreements. Stormwater discharge will ultimately be directed to Salem Ditch consistent with the Master Plan.

While public services are not currently constructed along the property frontage, the City's adopted facility master plans and the applicant's engineering analysis both confirm that utility extensions and transportation improvements can be provided. These improvements are consistent with adopted standards and capital planning, and the applicant will enter into a contract annexation agreement, as appropriate, to ensure they are implemented at the time of development. Therefore, the subject property is capable of being served by adequate City services upon annexation.

(c) The proposed annexation is property contiguous to the existing City limits.

Applicant's Findings: *The subject property is directly contiguous to the existing City of Stayton corporate limits on both its southern and eastern boundaries. This satisfies the definition of "contiguous" as provided in ORS 222.111 and the Stayton Land Use and Development Code. The property is located within the city's Urban Growth Boundary and forms a logical extension of the city limits in this area. The proposed annexation is not separated from the city limits by any intervening properties or barriers; the boundaries are shared along substantial lengths, ensuring that the annexation meets both the spatial and legal criteria for contiguity under local and state law. Therefore, this criterion is satisfied.*

(d) The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and policies of the City of Stayton.

Applicant's Findings: *The subject property is located within the Stayton Urban Growth Boundary and is designated Residential on the Comprehensive Plan Map. It is surrounded by a mix of existing and planned urban land uses that support and complement the proposed annexation and HDR zoning designation. To the east, property is zoned High Density Residential (HDR), where multifamily apartment construction is currently underway, establishing a denser residential character in this portion of the city. The northeast corner of Shaff Road SE and Golf Club Road SE, immediately east of the subject site, is planned for Commercial Retail (CR) uses that will provide neighborhood-serving goods and services to future residents. To the south, land*

is zoned Light Industrial (LI), while to the north, properties remain in Low Density Residential use or in rural conditions outside the city limits. Given this context, application of the HDR zone to the subject property is compatible with surrounding land uses and represents a logical extension of existing higher-density residential patterns. HDR zoning directly matches the zoning to the east, ensuring continuity of urban form and providing additional capacity for multifamily development consistent with Comprehensive Plan policies. The district permits a broad spectrum of attached and multifamily housing types at a minimum density of 13 units per acre, with no maximum density, allowing the site to accommodate Stayton's projected housing needs in an efficient manner.

The HDR designation also provides an appropriate transition between commercial and industrial lands to the east and south and lower-density residential areas to the north and west. Site planning and buffering standards in the Stayton Land Use and Development Code will ensure compatibility at development review, while the overall land use pattern advances the City's urban growth program by placing higher-density housing in a location that is adjacent to urban services, near transportation facilities, and within walking distance of planned commercial uses. The annexation and application of HDR zoning therefore align with the City's adopted Comprehensive Plan and housing policies, which emphasize efficient use of land, orderly urban expansion, and provision of a variety of housing choices to meet the needs of Stayton's growing population. For these reasons, the proposed annexation and HDR zoning are compatible with the character of the surrounding area and comply with the City's urban growth program and policies.

(e) The annexation request complies, or can be made to comply, with all applicable provisions of state and local law.

Applicant's Findings: *This annexation request has been prepared in accordance with the requirements of ORS Chapter 222, the Stayton Land Use and Development Code (LUDC), and the City of Stayton Comprehensive Plan. The subject property is located within the City's Urban Growth Boundary (UGB) and is contiguous to existing city limits, meeting the statutory requirements of ORS 222.111. Because the property is within the UGB, contiguous to city limits, and petitioned for annexation by all owners, it qualifies under ORS 222.127 (Senate Bill 1573, 2016) for annexation without an election.*

At the local level, the request satisfies all procedural requirements for annexation under SMC 17.12.210, including submission of required application materials, provision of a legal description and survey, and the preparation of findings addressing the approval criteria. The application will be processed through public hearings before the Planning Commission and City Council, in compliance with the LUDC.

Upon annexation, the applicants request application of the High Density Residential (HDR) zoning designation, which is consistent with the Residential designation of the Comprehensive

Plan. The HDR district provides for higher-density housing with a minimum of 13 units per acre and no maximum, permitting multifamily dwellings, townhouses, and manufactured home parks, subject to site plan review and development standards. All future development on the property will be subject to the applicable provisions of the Stayton LUDC, including but not limited to:

- *Section 17.16 (Zoning): Establishes dimensional standards, permitted uses, and development requirements for the HDR district, including minimum density requirements, maximum building height, setbacks, lot coverage, and open space provisions.*
- *Section 17.12 (Development Approval Procedures): Governs procedures for subdivision, site plan review, and other development approvals.*
- *Section 17.24 (Land Divisions): Sets standards for subdivision layout, lot configuration, public improvements, and phased development.*
- *Section 17.26 (Transportation): Addresses street connectivity, access spacing, right-of-way dedication, and multimodal transportation requirements consistent with the City's Transportation System Plan.*
- *Section 17.28 (Public Facilities): Requires demonstration that adequate water, wastewater, stormwater, and other public facilities are provided at the time of development, consistent with the City's Public Works Design Standards.*

In addition to compliance with local code, any necessary public facility upgrades, transportation improvements, and utility extensions will be designed and constructed in accordance with the City's adopted Public Works Design Standards (2021), the Water and Wastewater Master Plans, the Stormwater Master Plan, and the Transportation System Plan. The applicant's engineering consultant has confirmed that service is feasible and outlined options for water, sewer, and stormwater extensions and ROW dedication that will ensure compliance at the time of development review.

(f) If a proposed contract annexation, within the terms and conditions of the contract the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

Applicant's Findings: *This is not a proposed contract annexation. Therefore, the provisions of Section 17.12.210.4(f) do not apply to this application. The applicant understands that the cost of any required public facility and service extensions will be the responsibility of the developer at the time of subdivision or site development and will be determined in accordance with the City of Stayton Public Works Design Standards (PWDS) and other applicable regulations.*

(5) ZONING OF ANNEXED TERRITORY. All lands that are annexed to the City shall be zoned in accordance with the designation of the property in the Comprehensive Plan. The specific zone assigned to the land being annexed shall be determined by the City Council

in accordance with the proposed uses of the land and the needs identified by the buildable lands analysis in the Comprehensive Plan. This requirement does not prohibit an application to amend the Comprehensive Plan Map concurrent with the application for annexation.

Applicant's Findings: *The subject property is designated Residential on the City of Stayton Comprehensive Plan Map, which allows for application of Low, Medium, or High Density Residential zoning upon annexation, depending on the proposed use and consistency with Comprehensive Plan policies and the Buildable Lands Inventory (BLI). The applicants request that the property be zoned High Density Residential (HDR) upon annexation.*

HDR zoning is fully consistent with the Comprehensive Plan's Residential designation and directly supports the City's adopted housing policies, land use goals, and identified land needs. The 2021 Stayton Comprehensive Plan, particularly Goal 10: Housing, emphasizes the importance of ensuring a variety of housing types and densities are available to meet the needs of all household sizes and income levels. HDR zoning implements this goal by allowing a wide range of multifamily housing forms, including apartments, townhomes, and manufactured home parks, at a minimum density of 13 units per acre, with no maximum density, thereby creating flexibility to accommodate the diverse housing needs of the city's growing population.

The Buildable Lands Inventory, adopted as part of the Comprehensive Plan's housing needs analysis, identifies a shortfall of residential land, particularly in zoning categories that allow for higher residential densities than traditional single-family development. The BLI specifically recognizes that additional high-density land will be needed to meet projected population growth and state planning requirements under Statewide Planning Goal 10. Assigning HDR zoning to this site directly addresses this identified shortfall by expanding the supply of land suitable for multifamily development within the UGB, in close proximity to commercial services and transportation corridors.

In terms of location and compatibility, HDR zoning on this property extends the existing HDR district immediately to the east, where multifamily housing is already under construction. It also places high-density housing adjacent to the future Commercial Retail designation at the northeast corner of Shaff Road SE and Golf Club Road SE, supporting a mixed-use neighborhood pattern envisioned by the Comprehensive Plan. To the south, Light Industrial zoning provides employment opportunities, while to the north and west, lower-density residential and rural uses remain. HDR zoning in this location establishes a land use pattern that is both compatible and efficient, allowing for orderly urban growth while providing needed housing opportunities.

Importantly, this zoning request also advances the 2026–2028 Stayton City Council Goals, which prioritize addressing housing availability, affordability, and choice across the community. The Council has specifically committed to supporting policies and zoning actions that increase the supply of land for diverse residential development, reduce barriers to multifamily housing, and

ensure that growth is located where services and infrastructure can be provided efficiently. Applying HDR zoning to this annexation site responds directly to these priorities by creating significant capacity for multifamily housing in a serviced location, expanding opportunities for both market-rate and affordable housing projects, and reinforcing the Council's stated objective of meeting community housing needs over the next planning horizon. The applicants respectfully request that the City Council apply the High Density Residential zoning designation to the property upon annexation. This request is consistent with the Comprehensive Plan designation, advances the City's housing and land use goals, aligns with the Council's adopted priorities for housing affordability and supply, and addresses identified residential land needs in the Buildable Lands Inventory.

(6) CONFORMANCE WITH CONCEPTUAL PLAN. Development of the property after annexation shall be in substantial conformance with any conceptual plan submitted with the application for annexation. For the purposes of this section, development is in substantial conformance with a conceptual plan if:
   (a) The development is generally consistent with the character and intent of the conceptual plan;
   (b) The number and types of housing units are generally consistent with those presented in the conceptual plan;
   (c) The impacts from the development, including but not limited to, noise, vibration, dust, odor, or fumes, detectable at the property line will not exceed the maximums typical for the categories of uses proposed in the conceptual plan;
   (d) The number and types of vehicular trips to and from the site will not exceed the maximums typical for the categories of uses proposed in the conceptual plan; and
   (e) The amount and types of outside storage, loading, and parking will not exceed the maximums typical for the categories of uses proposed in the conceptual plan.

Applicant's Findings: *The Stayton Land Use and Development Code requires annexation applications to be reviewed for substantial conformance with a conceptual plan only if one is submitted. In this case, the applicants have chosen not to provide a conceptual development plan because they do not intend to immediately develop the property and therefore do not know how the site will ultimately be laid out. Instead, they have engaged a licensed civil engineer to evaluate the property's ability to be served by public facilities and transportation improvements. That analysis demonstrates that water, wastewater, stormwater, and transportation services can be extended to the site consistent with the City's adopted master plans and Public Works Design Standards.*

Future development of the property will occur under the standards of the High Density Residential (HDR) zone, which requires a minimum of 13 dwelling units per acre and permits

multifamily housing forms such as apartments and townhomes. At the time of land division or site development review, the applicant will be required to prepare detailed subdivision and site plans. Those plans will address building placement, density, transportation access, parking, landscaping, and buffering to ensure that impacts such as traffic, noise, and lighting are consistent with typical HDR development and in compliance with City standards. Because no conceptual plan is required and none has been submitted, this annexation request complies with Section 17.12.210.6. At the time of future development, the property will be reviewed through subdivision and site plan approval processes to ensure full compliance with the HDR zone and the City's Land Use and Development Code.

(7) NOTICE TO COUNTY AND STATE.

(a) Within 10 working days after enactment of the ordinance approving the annexation, the City Recorder shall provide by certified mail to all public utilities, electric cooperatives and telecommunications carriers operating within the City each site address to be annexed as recorded on county assessment and tax rolls, a legal description and map of the proposed boundary change, and a copy of the ordinance approving the annexation.

(b) Within 10 days from the effective date the ordinance approving the annexation, the City Recorder shall provide to the Marion County Clerk and County Assessor a report containing a detailed legal description of the new boundaries established by the City.

(c) Within 14 days of enactment of the ordinance approving the annexation, the City Recorder shall transmit to the Oregon Secretary of State:

(1) A copy of the ordinance proclaiming the annexation, including a legal description of the territory to be annexed.

(2) An abstract of the vote, if a major annexation. The abstract of the vote shall show the whole number of electors voting on the annexation, the number of votes cast for annexation, and the number of votes cast against annexation.

(3) A copy of the statement of consent by electors or landowners in the territory annexed.

(d) Within 30 days of enactment of an ordinance annexing territory into the City, the City Recorder shall transmit to the Marion County Assessor and the Oregon Department of Revenue the legal description of the boundary change or proposed change and an accurate map conforming to the requirements of ORS 308.225(2).

Applicant's Findings: *The applicant understands that, following city council approval of the annexation ordinance, the city recorder is responsible for providing notice and documentation of the annexation to all applicable county and state agencies in accordance with Stayton Municipal*

Code Section 17.12.210.7 and ORS 308.225. This includes providing legal descriptions, maps, and copies of the ordinance to Marion County departments, the Oregon Secretary of State, the Oregon Department of Revenue, and utility service providers within the required timelines. The applicant acknowledges these post-approval steps are part of the formal annexation process and will ensure full cooperation with city staff as needed to complete these requirements.

Section 5: Conclusion

Kevin and Paige Butler respectfully request approval of this annexation application for their 17.01-acre property located adjacent to the City of Stayton's corporate limits. The property is designated Residential in the City's Comprehensive Plan and represents a logical, efficient, and appropriate location for urban expansion. The annexation request is supported by the City's long-range planning goals, the Comprehensive Plan's policies, the Buildable Lands Inventory, and the 2026–2028 City Council Goals, all of which identify the need for additional land to accommodate a range of housing types and to increase housing supply and affordability.

The applicants request application of the High Density Residential (HDR) zoning designation, which is consistent with the Comprehensive Plan and provides for multifamily development at a minimum of 13 units per acre with no maximum density. HDR zoning will expand the city's supply of multifamily-capable land, directly addressing the housing shortfall identified in the Buildable Lands Inventory, while placing higher-density housing in a location that is contiguous with existing city limits, adjacent to planned commercial services, and served by transportation corridors.

The annexation request satisfies all applicable criteria outlined in SMC 17.12.210 of the Stayton Land Use and Development Code. The site is contiguous to existing city limits, is within the Urban Growth Boundary, and is capable of being served by adequate City services. To demonstrate serviceability, the applicants retained a licensed professional engineer to evaluate utility and transportation feasibility. That analysis confirmed that:

- Transportation: The site's Shaff Road frontage can be improved to collector street standards, including dedication of ROW up to 80 feet, sidewalks, and internal street connections. The future Shaff/Golf Club Road roundabout can be accommodated without adversely affecting development of the site.
- Water: Planned 10-inch and 12-inch mains along Shaff Road and Salem Ditch are capable of meeting estimated domestic water demand (113 gpm for HDR-level development) and fire flow requirements (1,500 gpm with sprinkled buildings).
- Wastewater: Service is feasible through connection to an existing 16-inch line at the Shaff/Golf Club intersection, with capacity for the estimated 90 gpm demand. Depending on site grading, gravity or pump station solutions can be provided, all compliant with PWDS and DEQ standards.

- Stormwater: The site is in the North Salem Ditch Basin and not in a flood hazard area. Stormwater improvements can be constructed in accordance with the City's Stormwater Master Plan, with detention and water quality treatment integrated into the system design.

This engineering analysis confirms that urban services can be extended to the site in a feasible and coordinated manner consistent with the City's adopted master plans and Public Works Design Standards. For these reasons, the applicants respectfully request that the Planning Commission recommend, and the City Council approve, the annexation of the property with High Density Residential zoning. This action will provide the City with needed capacity for multifamily housing, implement state and local housing goals, and support Stayton's long-term vision for responsible and sustainable growth.

Section 6: Exhibits

Exhibit A – Marion County Tax Map

09 1W 04C

09 1W 04C
STAYTON

MARION COUNTY, OREGON
SW1/4 SEC4 T9S R1W W.M.
SCALE 1" = 200'

LEGEND

LINE TYPES

- Taxlot Boundary
- Historical Boundary
- Road Right-of-Way
- Easement
- Railroad Right-of-Way
- Railroad Centerline
- Private Road ROW
- Taxcode Line
- Subdivision/Plat Bndry
- Map Boundary
- Waterline - Taxlot Bndry
- Waterline - Non Bndry

CORNER TYPES

- 1/16TH Section Cor.
- 1/4 Section Cor.
- DLC Corner
- Section Corner

NUMBERS

Tax Code Number
00 00 0

Acreage
0.25 AC

All acres listed are Net Acres, excluding any portions of the taxlot within public ROWs

NOTES

Tick Marks: A tick mark in the road indicates that the labeled dimension extends into the public ROW

200.00
175.00

CANCELLED NUMBERS

1100
1200
1300
1400

DISCLAIMER: THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY

Marion County OREGON — Assessors Office Cartography Dept

FOR ADDITIONAL MAPS VISIT OUR WEBSITE AT
www.co.marion.or.us

PLOT DATE: 4/13/2023

STAYTON
09 1W 04C

Exhibit B – Deeds

TICOR TITLE™

Parcel Information

Parcel #:	**533948**
Tax Lot:	**091W04C001900**
Site Address:	11641 Shaff Rd
	Aumsville OR 97325 - 9726
Owner:	Butler, Kevin
Owner2:	
Owner Address:	11641 Shaff Rd
	Aumsville OR 97325 - 9726
Twn/Range/Section:	09S / 01W / 04 / SW
Parcel Size:	43.82 Acres (1,908,799 SqFt)
Plat/Subdivision:	
Lot:	1
Block:	
Census Tract/Block:	010702 / 2070
Waterfront:	

Assessment Information

Market Value Land:	$440,100.00
Market Value Impr:	$432,100.00
Market Value Total:	$872,200.00
Assessed Value:	$260,226.00

Tax Information

Levy Code Area:	29545
Levy Rate:	12.1555
Tax Year:	2023
Annual Tax:	$3,163.18
Exempt Desc:	N/A

Legal

ACRES 62.50

Land

Zoning:	County-EFU - Exclusive Farm Use	**Cnty Bldg Use:**	153 - Farm Homesite 4bdss Four Bench Dry Special South - One Story With Basement
Cnty Land Use:	551 - Specially assessed farm land, improved, zoned EFU, SA, FT or UTF	**Neighborhood:**	
Std Land Use:	RSFR - Single Family Residence	**Recreation:**	
School District:	29J - North Santiam	**Primary School:**	Stayton Elementary School
Middle School:	Stayton Middle School	**High School:**	Stayton High School

Improvement

Year Built:	1953	**Stories:**	1	**Finished Area:**	1,748
Bedrooms:	3	**Bathrooms:**	1.5	**Garage:**	484 Unfinished Detached Garage
Basement Fin:					

Transfer Information

Sale Date:	03/17/2022	**Sale Price:**		**Doc Num:**	46050251	**Doc Type:**	PAPL

After recording return to:
Stephen L. Tabor, P.C.
P.O. Box 350
Sublimity, OR 97385

Until a change is requested
all tax statements shall be sent to:
Kevin Butler
9978 Stayton Road
Aumsville, Oregon 97325

REEL 3996 PAGE 250
MARION COUNTY
BILL BURGESS, COUNTY CLERK
09-25-2017 01:36 pm.
Control Number 477078 $
51.00
Instrument 2017 00049817

F.A.T. 2345-25

WARRANTY DEED

KNOW ALL BY THESE PRESENTS, That IRENE JOYCE DOZLER, TRUSTEE OF THE PAUL AND IRENE JOYCE DOZLER REVOCABLE LIVING TRUST dated February 9, 1995, hereinafter called "Grantor", does hereby convey and warrant unto KEVIN BUTLER, hereinafter called "Grantee" and Grantee's heirs, successors and assigns, that certain real property, with the tenements, hereditaments and appurtenances thereunto belonging or in any way appertaining, situated in Marion County, State of Oregon, and described as follows:

See Exhibit "A" attached hereto.

To Have and to Hold the same unto Grantee and Grantee's heirs, successors and assigns forever.

And Grantor hereby covenants to and with Grantee and Grantee's heirs, successors and assigns, that Grantor is lawfully seized in fee simple of the above granted premises, free from all encumbrances whatsoever except those as set forth on Exhibit "A" attached hereto, and that Grantor will warrant and forever defend the premises and every part and parcel thereof against the lawful claims and demands of all persons whomsoever, except those claiming under the above described encumbrances.

The true and actual consideration paid for this transfer, stated in terms of dollars is $500,000.

BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON TRANSFERRING FEE TITLE SHOULD INQUIRE ABOUT THE PERSON'S RIGHTS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010. THIS INSTRUMENT DOES NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY THAT THE UNIT OF LAND BEING TRANSFERRED IS A LAWFULLY ESTABLISHED LOT OR PARCEL, AS DEFINED IN ORS 92.010 OR 215.010, TO VERIFY THE APPROVED USES OF THE LOT OR PARCEL, TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES, AS DEFINED IN ORS 30.930, AND TO INQUIRE ABOUT THE RIGHTS OF NEIGHBORING PROPERTY OWNERS, IF ANY, UNDER ORS 195.300, 195.301 AND 195.305 TO 195.336 AND SECTIONS 5 TO 11, CHAPTER 424, OREGON LAWS 2007, SECTIONS 2 TO 9 AND 17, CHAPTER 855, OREGON LAWS 2009, AND SECTIONS 2 TO 7, CHAPTER 8, OREGON LAWS 2010.

IN WITNESS WHEREOF, the Grantor has executed this instrument this 22 day of September, 2017.

Irene Joyce Dozler
Irene Joyce Dozler, Trustee

STATE OF OREGON)
) ss.
County of Marion)

This instrument was acknowledged before me on September 22, 2017, by Irene Joyce Dozler, Trustee of the Paul and Irene Joyce Dozler Revocable Living Trust.

OFFICIAL STAMP
LISA K BYBEE
NOTARY PUBLIC - OREGON
COMMISSION NO. 960741
MY COMMISSION EXPIRES MARCH 26, 2021

Lisa K Bybee
Notary Public for Oregon

Exhibit "A"

Real property in the County of Marion, State of Oregon, described as follows:

The South half of the South West quarter of the South West quarter of Section 4 in Township 9 South of Range 1 West of the Willamette Meridian in the County of Marion, and State of Oregon; also beginning at a point in the West line of the Donation Land Claim of Henry Foster and wife, 9.92 chains North of the Southwest corner of said claim in Township 9 South, Range 1 West of the Willamette Meridian, Marion County, Oregon; thence North 14.92 chains along the West line of the Henry Foster Claim; thence North 89°30' East 20.12 chains; thence South14.92 chains to the Northeast corner of a tract of land owned by E.G. Baker; thence South 89°30' West 20.12 chains to the place of beginning, excepting the right of way for the Salem Flouring Mills Water Ditch, as long as the same is used for such purpose, all lying and being in Marion County, State of Oregon; and also, beginning at a point 8.00 chains West of the quarter section corner between Sections 4 and 9 in Township 9 South Range 1 West of the Willamette Meridian in Marion County, State of Oregon; thence running North 25°30' West 14.92 chains to a point; thence West 5.90 chains to a point; thence South 13.00 chains more or less to the Section line between Sections 4 and 9; thence North 89°30' East along the section line 12.12 chains to the place of beginning, all lying and being within Marion County, State of Oregon.

Subject to:

1. Rights of the public and of governmental bodies in and to that portion of the premises herein described lying below the high water mark of Salem Water Ditch.

2. Any adverse claim based upon the assertion that some portion of said land has been removed from or brought within the boundaries thereof by an avulsive movement of the Salem Water Ditch or has been formed by the process of accretion or reliction or has been created by artificial means or has accreted to such portion so created.

3. The rights of the public in and to that portion of the premises herein described lying within the limits of streets, roads and highways.

4. Right of Way Easement, including terms and provisions contained therein:
Recording Information: September 07, 1965 as Volume 606, Page 269, Deed Records
In Favor of: Pacific Power & Light Company, a corporation
For: Electric transmission and distribution line

5. Right of Way Easement, including terms and provisions contained therein:
Recording Information: June 13, 1968 as Volume 649, Page 163, Deed Records
In Favor of: Pacific Power & Light Company, a corporation
For: Electric transmission and distribution line

6. A Contract of Sale and the terms and conditions thereof:
Vendor/Seller: Santiam Water Control District
Vendee/Purchaser: Paul & Irene Dozler
Recorded: January 04, 1974
Recording Information: 14586

7. Operation and Maintenance Assessment for Irrigation Subdistrict of the Santiam Water Control District, including terms and provisions thereof.
Recorded: April 14, 1999 as Reel 684, Page 150, Film Records

REEL: 3996 PAGE: 250

September 25, 2017, 01:36 pm.

CONTROL #: 477078

State of Oregon
County of Marion

I hereby certify that the attached instrument was received and duly recorded by me in Marion County records:

FEE: $ 51.00

BILL BURGESS
COUNTY CLERK

THIS IS NOT AN INVOICE.

Exhibit C – Stayton Annexation Application Form

CITY OF STAYTON
APPLICATION FOR ANNEXATION

APPLICATION AND DECISION MAKING PROCEDURES

1. PRE-APPLICATION MEETING

Prior to submittal of an application, a pre-application meeting with City Staff is required. A completed pre-application form and sketch plan drawing need to be submitted at least 14 days in advance of the meeting along with the $300 pre-application meeting fee. Meetings are held every Tuesday afternoon.

2. APPLICATION FEE

Submission of a completed application form, with a plan and attachments, and payment of the application fees are required before the review process begins. The application and fees shall be submitted to the Planning Department during regular business hours. **The fee for this application is $1,800, which will include the fee for any other land use applications.** If the cost to the City does not reach the amount of the fee paid, the excess fee will be refunded to the applicant after the file is closed. If during the processing of the application, the costs to the City exceed 75% of the fee paid, the applicant will be required to pay an additional 50% of the fee amount, to assure that there are adequate funds to continue to process the application. **Applications for annexations of more than 3 acres require approval by the voters of the City. The fee is increased by $4,500 for any application which requires voter approval to cover the City's cost of conducting the election.**

3. REVIEW FOR COMPLETENESS AND SCHEDULING A HEARING

The City Planner will review the submitted application for completeness and, within 30 days from the date of submittal, determine if the applicant has provided all required information. If the application is incomplete, the City Planner will notify the applicant of the items which need to be submitted. Once the application is deemed complete, the Planner will schedule a hearing before the Stayton Planning Commission. Planning Commission meetings are regularly scheduled for the last Monday of the month. **Applications for Major Annexations must be submitted before September 30 to be scheduled for a May election and before March 31 to be scheduled for a November election.**

4. STAFF REPORT

Once a hearing date is set, the City Planner will prepare a staff report summarizing the applicant's proposal, the decision criteria, comments from other agencies or the public, and address whether the application complies with code requirements or suggest conditions to meet those requirements. A copy of the staff report will be provided to the applicant 7 days prior to the public hearing.

5. PUBLIC HEARING BEFORE THE STAYTON PLANNING COMMISSION

Prior to the public hearing, notice is required to be sent to all property owners within 300 feet of the property **20 days before the hearing**, so the hearing will be scheduled at the first regular meeting following the notice period. The hearing is to give all interested parties an opportunity to comment on the application. The hearing is conducted by the Chairperson in accordance with the Stayton Public Hearing Rules of Procedure. These rules are available at the Planning Department and on the City's web site..

At the conclusion of the hearing and deliberation, the Planning Commission will adopt an order recommending action to the City Council stating the decision criteria, findings of fact, conclusions whether the application meets the applicable standards and the Commission's decision. The Commission may decide to recommend denial, approval, or approval with conditions.

6. PUBLIC HEARING BEFORE THE STAYTON CITY COUNCIL

Annexations must be adopted by ordinance. A second public hearing will be scheduled before the Stayton City Council. A notice is required 10 days prior to the hearing which will be held at the regular Council meeting, which meets the first and third Mondays of every month. Staff reports, Planning Commission findings, and any new information will be presented to Council for consideration. The purpose of the hearing is to receive further public testimony, to review the application and consider the Planning Commission's decision and conditions. Generally, the

Council will make a decision at the conclusion of the hearing process, but may delay the decision for further information or action by the applicant. The Council will then adopt an order either approving or denying the application. Major annexations will be scheduled for approval by referendum at the May or November elections.

7. APPEALS

Council actions may be appealed to the State Land Use Board of Appeals pursuant to ORS 197.805 through 197.855.

8. FOR MORE INFORMATION

Call or write to City of Stayton Planning Dept., (mailing address) 362 N. Third Avenue, (building address) 311 N. Third Avenue, Stayton, Oregon 97383. (503) 769-2998; email: dfleishman@ci.stayton.or.us.

APPLICATION CHECKLIST FOR ANNEXATION REVIEW

This checklist has been prepared to assist applicants in submitting an application that includes all the submission requirements in Section 17.12.210. Please note that this checklist may paraphrase the requirements from the Code. It is the applicant's responsibility to read and understand the requirements of the Code. Review of an application will not begin until a complete application has been submitted. If you have questions, contact the Planning Department.

- ■ Lot and block description or a metes and bounds description, marked Exhibit A.
- ■ Property Owner Authorization: If the applicant is not the owner of the property, the application must include written indication of the applicant's right to file the application. This may be a purchase and sale agreement, an option or other document that gives the applicant some legal interest in the property. If the applicant is to be represented by another individual (planning consultant, engineer, attorney) the application must be accompanied by a notarized statement certifying that the applicant's representative has the authorization of the applicant(s) to file the application.
- ■ A site plan drawn to a scale of 1 inch equals not more than 50 feet, showing:
  - ○ A north point and graphic scale
  - ○ Tax map and tax lot numbers.
  - ○ Boundary lines of the parcel to be annexed and area of the property in acres or square feet.
  - ○ Neighboring streets and roads.
  - ○ Existing uses of the property
- ■ Vicinity Map: The vicinity map may be drawn on the same map as the site plan. All properties, streets, and natural features within 300 feet of the perimeter of the parcel shall be shown on the vicinity map.
- ■ Conceptual Plan: If the application for annexation is not accompanied by a concurrent application for site plan, subdivision, or other land use approval, a conceptual plan of proposed uses of the property.
- ■ Legal Description: A legal description of the property proposed to be annexed, meeting the requirements of ORS 308.225, must accompany the application.

BURDEN OF PROOF

This is a quasi-judicial application in which the applicant has the burden of proof. According to law, the applicant must present to the decision maker facts, evidence, analysis, and justification for each and every criteria of SMC 17.12.210.4 in order to carry out that burden of proof. It is important to remember that there is no assumption that the applicant is entitled to this approval. The burden lies with the applicant to prove how the proposal complies with the criteria, not with the City of Stayton.

Stayton Municipal Code Title 17, Land Use and Development, is available online at: www.staytonoregon.gov. Click on the Document Center tab and select Municipal Code.

400

Submit Via Email

CITY OF STAYTON
APPLICATION FOR ANNEXATION

PROPERTY OWNER: Kevin Butler
Address: 11641 Shaff Rd
City/State/Zip: Aumsville, OR 97325
Phone: See Representative Email: See Representative

APPLICANT: Kevin and Paige Butler
Address: 11641 Shaff Rd
City/State/Zip: Aumsville, OR 97325
Phone: See Representative Email: See Representative

APPLICANT'S REPRESENTATIVE: BRAND Land Use, LLC | Britany Randall
Address: 1720 Liberty Street SE
City/State/Zip: Salem, OR 97302
Phone: 503-370-8704 Email: britany@brandlanduse.com

CONSULTANTS: Please list below planning and engineering consultants.

PLANNING	ENGINEERING
Name: BRAND Land Use, LLC	Name:
Address: 1720 Liberty Street SE	Address:
City/State/Zip: Salem, OR 97302	City/State/Zip:
Phone: 503-370-8704	Phone:
Email: britany@brandlanduse.com	Email:

Select one of the above as the principal contact to whom correspondence from the Planning Department should be addressed:

☐ owner ☐ applicant ■ applicant's representative ■ planning consultant ☐ engineer

LOCATION:

StreetAddress:

Assessor's Tax Lot Number and Tax Map Number:
091W04C001901

Closest Intersecting Streets: Shaff Road SE and Golf Club Road SE

CURRENT COMPREHENSIVE PLAN DESIGNATION: Residential

ZONE MAP DESIGNATION PROPOSED WITH ANNEXATION: Medium Density Residential

SIGNATURE OF APPLICANT: Kevin Butler, Paige Butler

DO NOT WRITE BELOW THIS LINE

Application received by: _____ Date: _____ Fee Paid: $_____ Receipt No. _____

Land Use File#_____

Please See Detailed Narrative Included with Submittal

QUESTIONS TO BE ADDRESSED IN NARRATIVE STATEMENT

The Stayton Planning Commission, with assistance from the Planning Department and the Public Works Department will use the information provided by the applicant to analyze the merits of this application. A decision to approve or deny the application is made based on how well the applicant presents information to show the application meets the standards and criteria set forth in the Stayton Land Use and Development Code 17.12.210.5. Please provide the following information in full and attach a narrative statement to this application.

1. NEED: What is the demonstrated need for this property to be annexed into the City?
2. ADEQUATE UTILITIES: How will the proposed annexation obtain or maintain adequate utility systems (including water, sewer, surface water drainage, power, and communications), and connections, including easements, to properly serve the subject property in accordance with accepted City standards?

   All public improvements must meet City of Stayton standard specifications. All design plans must be approved by the City prior to construction. The City will inspect all construction.

   a. List public services currently available to the site:

   Water Supply: _____ - inch line available in _____ Street.
   Sanitary Sewer: _____ - inch line available in _____ Street.
   Storm Sewer: _____ - inch line available in _____ Street.
   Natural Gas: _____ - inch line available in _____ Street.
   Telephone: ☐ is (or) ☐ is not available in _____ Street.
   Cable TV: ☐ is (or) ☐ is not available in _____ Street.
   Electrical: ☐ is (or) ☐ is not available in _____ Street.

   b. Will existing City public services need to be replaced or upgraded to accommodate the demands created by the annexation? ☐ yes ☐ no
3. Is the subject property contiguous to the city limits? ☐ yes ☐ no
4. Is the proposed annexation compatible with the character of the surrounding area and does it comply with the urban growth program and policies of the City?
5. How does the proposed annexation comply, or will be made to comply with all applicable provisions of state and local law?
6. If the proposed annexation is a contract annexation, does the proposal include the cost of City facility and service extensions as calculated by the Public Works Director?

Exhibit D – Professional Land Surveyor Property Boundary Line Exhibit

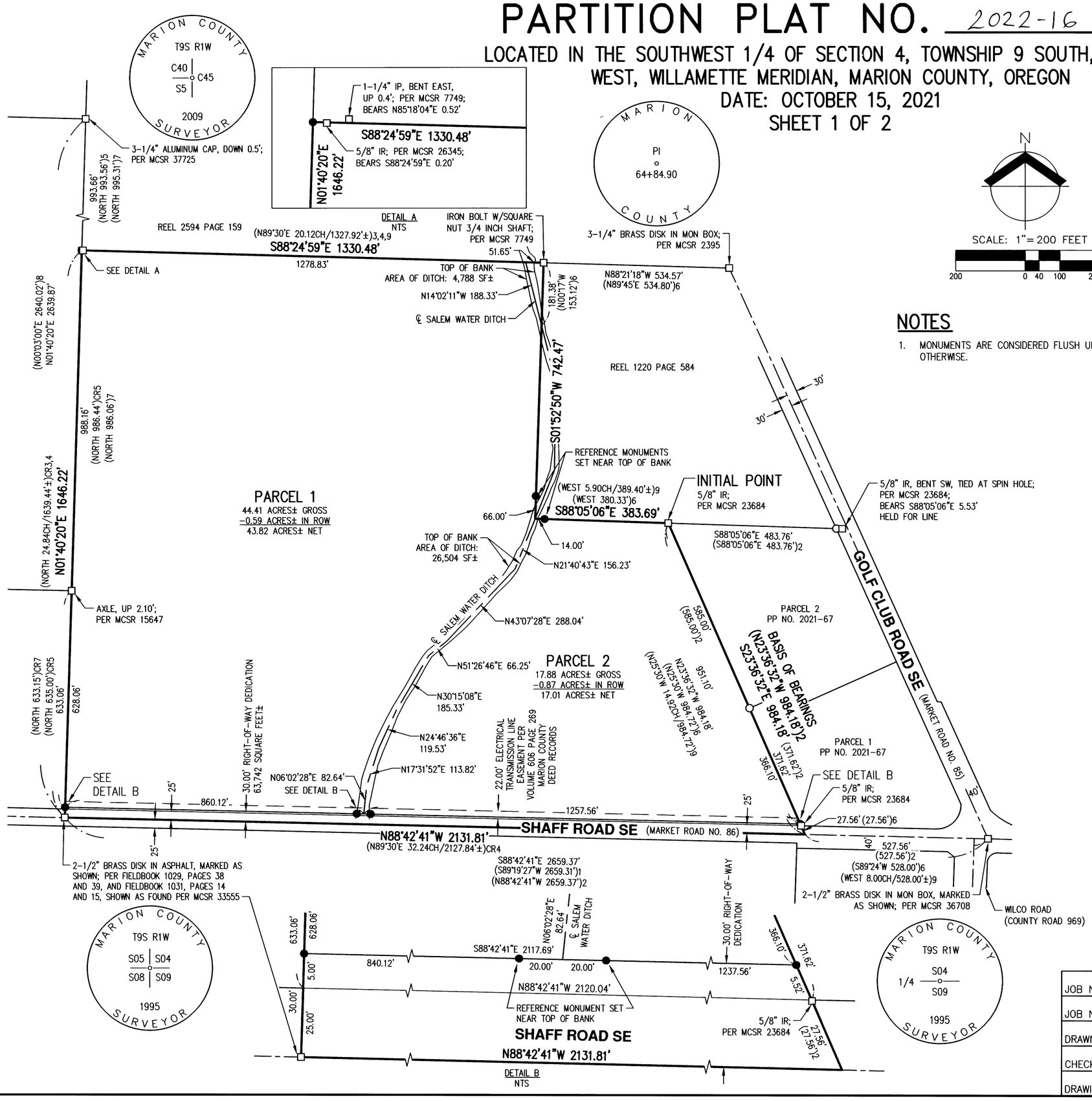
2022-16

PARTITION PLAT NO. 2022-16

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, MARION COUNTY, OREGON

DATE: OCTOBER 15, 2021

SHEET 1 OF 2



N

SCALE: 1"= 200 FEET

200 0 40 100 200

NOTES

1. MONUMENTS ARE CONSIDERED FLUSH UNLESS NOTED OTHERWISE.

LEGEND

●	SET 5/8" X 30" IRON ROD W/YPC INSCRIBED "AKS ENGR."
○	FOUND 5/8" IRON ROD W/YPC INSCRIBED "AKS ENGR."; PER PP NO. 2021-67; HELD UNLESS NOTED OTHERWISE
□	DENOTED FOUND MONUMENTS AS NOTED; HELD UNLESS NOTED OTHERWISE
IP	IRON PIPE
IR	IRON ROD
W/YPC	WITH A YELLOW PLASTIC CAP
PP NO.	PARTITION PLAT NUMBER PER MARION COUNTY SURVEY RECORDS
MCSR	SURVEY NUMBER PER MARION COUNTY SURVEY RECORDS
PUE	PUBLIC UTILITY EASEMENT
REEL PAGE	REEL AND PAGE MARION COUNTY DEED RECORDS
CR	CALCULATED RECORD
CH	CHAINS
ROW	RIGHT-OF-WAY

REFERENCES

PLATS

( )1 RECORD INFORMATION PER PP NO 2019-60

( )2 RECORD INFORMATION PER PP NO 2021-67

SURVEYS

( )3 RECORD INFORMATION PER MCSR 5064

( )4 RECORD INFORMATION PER MCSR 5182

( )5 RECORD INFORMATION PER MCSR 15647

( )6 RECORD INFORMATION PER MCSR 23684

( )7 RECORD INFORMATION PER MCSR 26345

( )8 RECORD INFORMATION PER MCSR 37725

MARION COUNTY DEED RECORDS

( )9 RECORD INFORMATION PER DEED REEL 3996, PAGE 250

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
MARCH 9, 2021
ABRAHAM KAHNAMOOIAN
95376PLS
RENEWS: 6/30/23

PREPARED FOR

KEVIN BUTLER
11641 SHAFF ROAD
STAYTON, OREGON 97383

JOB NAME:	11461 SHAFF RD
JOB NUMBER:	8455
DRAWN BY:	AK
CHECKED BY:	JFS
DRAWING NO.:	8455

AKS ENGINEERING & FORESTRY, LLC
3700 RIVER RD N, STE 1
KEIZER, OR 97303
503.400.6028
WWW.AKS-ENG.COM

AKS

ENGINEERING · SURVEYING · NATURAL RESOURCES
FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

Exhibit E – Legal Description of Property

2022-16

PARTITION PLAT NO. 2022-16

LOCATED IN THE SOUTHWEST 1/4 OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, MARION COUNTY, OREGON
DATE: OCTOBER 15, 2021
SHEET 2 OF 2

MARION COUNTY APPROVALS

ACCEPTANCE OF DEDICATION:

BY: Danielle Bethell 3/17/2022
CHAIRPERSON OR VICE-CHAIRPERSON MARION COUNTY BOARD OF COMMISSIONERS — DATE

BY: Brandon Reich 3-10-22
MARION COUNTY PLANNING COMMISSION DIRECTOR — DATE
PLANNING CASE NO.: PAR 20-015

****

APPROVED THIS 11th DAY OF March, 2022

BY:
MARION COUNTY SURVEYOR

****

APPROVED THIS 15 DAY OF March, 2022

BY: Tom Rohlfing by Kalynn
MARION COUNTY ASSESSOR

****

ALL TAXES, FEES, ASSESSMENTS, OR OTHER CHARGES AS PROVIDED BY O.R.S. 92.095 HAVE BEEN PAID THROUGH 30 June 2022
APPROVED THIS 15th DAY OF March, 2022

BY:
MARION COUNTY TAX COLLECTOR

****

STATE OF OREGON)
) SS
COUNTY OF MARION)

I DO HEREBY CERTIFY THAT THE ATTACHED PARTITION PLAT NO. 2022-16 WAS RECEIVED FOR RECORDING ON THE 17th DAY OF March, 2022, AT 4:34 O'CLOCK P.M., AND RECORDED IN THE BOOK OF PARTITION PLATS. ALSO REFERENCED IN THE MARION COUNTY DEED RECORDS IN REEL, 4605, AT PAGE 251.

BILL BURGESS, MARION COUNTY CLERK

BY: Cristian Perez Garcia
DEPUTY COUNTY CLERK

NARRATIVE

THE PURPOSE OF THIS PLAT IS TO PARTITION THAT TRACT OF LAND DESCRIBED IN DEED REEL 3996 PAGE 250, MARION COUNTY DEED RECORDS. THE BASIS OF BEARINGS WAS ESTABLISHED ALONG THE WEST LINE OF PARTITION PLAT NUMBER 2021-67, RECORDED AS REEL 4539 PAGE 171, MARION COUNTY RECORDS.

THE SOUTH LINE, BEING A PORTION OF THE SOUTH LINE OF THE SOUTHWEST ONE-QUARTER OF SECTION 4, WAS ESTABLISHED BY HOLDING THE FOUND BRASS DISKS AT THE SOUTHWEST CORNER AND THE SOUTHEAST CORNER OF SAID SOUTHWEST ONE-QUARTER.

THE NORTH RIGHT-OF-WAY LINE OF THE SHAFF ROAD SE (MARKET ROAD NO. 86), WAS ESTABLISHED BY HOLDING A LINE PARALLEL WITH AND 25.00 FEET NORTHERLY OF THE SOUTH LINE OF THE SOUTHWEST ONE-QUARTER OF SECTION 4.

THE WEST LINE, BEING THE WESTERLY LINE OF SECTION 4, WAS ESTABLISHED BY HOLDING A FOUND 2-1/2 INCH BRASS DISK AT THE SOUTHWESTERLY CORNER OF SECTION 4 AND A 3-1/4 INCH ALUMINUM CAP AT THE WEST QUARTER CORNER OF SECTION 4.

THE NORTH LINE WAS ESTABLISHED BY HOLDING FOUND IRON RODS PER MCSR 7749 AND MCSR 26345.

THE EAST LINE WAS ESTABLISHED BY HOLDING RECORD BEARING AND DISTANCE PER PARTITION PLAT NO. 2021-67 AND FOUND IRON RODS PER MCSR 23684 AND MCSR 7749 WITH THE CENTER LINE OF THE SALEM FLOURING MILLS DITCH.

SURVEYOR'S CERTIFICATE

I, ABRAHAM KAHNAMOOIAN, DO HEREBY CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH PROPER MONUMENTS, THE LANDS REPRESENTED ON THE ANNEXED MAP, SITUATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF STAYTON, MARION COUNTY, OREGON, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INITIAL POINT, BEING A FOUND 5/8-INCH IRON ROD LOCATED AT THE NORTHWEST CORNER OF MARION COUNTY PARTITION PLAT NUMBER 2021-67; THENCE ALONG THE WEST LINE OF SAID PARTITION PLAT, SOUTH 23°36'32" EAST 984.18 FEET TO THE CENTERLINE OF SHAFF ROAD SE, ALSO BEING THE SOUTH LINE OF THE SOUTHWEST ONE-QUARTER OF SAID SECTION 4; THENCE ALONG SAID SOUTH LINE, NORTH 88°42'41" WEST 2131.81 FEET TO A 2-1/2-INCH BRASS DISK AT THE SOUTHWEST CORNER OF SAID SOUTHWEST ONE-QUARTER; THENCE ALONG THE WEST LINE OF SAID SOUTHWEST ONE-QUARTER, NORTH 01°40'20" EAST 1646.22 FEET TO TO THE SOUTH LINE OF REEL 2594, PAGE 159, MARION COUNTY DEED RECORDS, FROM WHICH A 5/8-INCH IRON ROD BEARS SOUTH 88°24'59" EAST 0.20 FEET; THENCE ALONG SAID SOUTH LINE, SOUTH 88°24'59" EAST 1330.48 FEET TO AN IRON BOLT AT THE NORTHEAST CORNER OF REEL 3996, PAGE 250, MARION COUNTY DEED RECORDS; THENCE ALONG THE EAST LINE OF SAID DEED, SOUTH 01°52'50" WEST 742.47 FEET TO A POINT ON THE CENTER LINE OF SALEM WATER DITCH, ALSO BEING THE SOUTHWEST CORNER OF REEL 1220, PAGE 584, MARION COUNTY DEED RECORDS; THENCE ALONG THE SOUTH LINE OF SAID DEED, SOUTH 88°05'06" EAT 383.69 FEET TO THE INITIAL POINT.

THE ABOVE DESCRIBED TRACT OF LAND CONTAINS 62.29 ACRES, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
MARCH 9, 2021
ABRAHAM KAHNAMOOIAN
95376PLS
RENEWS: 6/30/23

PLAT NOTES

1. THIS PLAT IS SUBJECT TO THE CONDITIONS OF APPROVAL SET FORTH IN MARION COUNTY PARTITION CASE FILE NO. 20-015.
2. THIS PLAT IS SUBJECT TO RIGHT OF THE PUBLIC AND OF GOVERNMENTAL BODIES IN AND TO THAT PORTION OF THE PREMISES HEREIN DESCRIBED LYING BELOW THE HIGH WATER MARK OF SALEM WATER DITCH.
3. THIS PLAT IS SUBJECT TO AN ELECTRIC TRANSMISSION, AND DISTRIBUTION LINE EASEMENT TO PACIFIC POWER AND LIGHT COMPANY RECORDED IN VOLUME 649, PAGE 163, MARION COUNTY DEED RECORDS. NO ABOVE GROUND EVIDENCE WAS FOUND OF WHERE THE EASEMENT MIGHT BE LOCATED.

DECLARATION

KNOW ALL PERSONS BY THESE PRESENTS THAT KEVIN BUTLER, IS THE OWNER OF THE LAND SHOWN ON THE ANNEXED MAP AND AS DESCRIBED IN THE ACCOMPANYING SURVEYOR'S CERTIFICATE, AND HAS CAUSED THE SAME TO BE SURVEYED AND PARTITIONED IN ACCORDANCE WITH THE PROVISIONS OF THE OREGON REVISED STATUTES CHAPTER 92. KEVIN BUTLER DOES HEREBY DEDICATE TO THE PUBLIC, A RIGHT-OF-WAY AS SHOWN HEREON.

KEVIN BUTLER

ACKNOWLEDGMENT

STATE OF OREGON)
) SS
COUNTY OF MARION)

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THIS 25th DAY OF February, 2022 BY KEVIN BUTLER

NOTARY SIGNATURE

Rhonda Michelle Mackey
NOTARY PUBLIC - OREGON

COMMISSION NO. 982993A

MY COMMISSION EXPIRES January 9, 2023

CONSENT AFFIDAVIT

A PARTITION PLAT CONSENT AFFIDAVIT BY IRENE JOYCE DOZLER, TRUSTEE OF THE PAUL AND IRENE JOYCE DOZLER REVOCABLE LIVING TRUST DATED FEBRUARY 9, 1995, FOR THAT INSTRUMENT RECORDED IN REEL 3996, PAGE 251, MARION COUNTY DEED RECORDS HAS BEEN RECORDED IN REEL 4605, PAGE 250, MARION COUNTY RECORDS.

PREPARED FOR

KEVIN BUTLER
11641 SHAFF ROAD
STAYTON, OREGON 97383

JOB NAME:	11461 SHAFF RD
JOB NUMBER:	8455
DRAWN BY:	AK
CHECKED BY:	JFS
DRAWING NO.:	8455

AKS ENGINEERING & FORESTRY, LLC
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FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

Exhibit F – Pre-Application Conference Notes

City of Stayton
Preapplication Meeting
August 8, 2024
2:00 p.m.

11641 Shaff Road SE Annexation

Applicant: BRAND Land Use (Britany Randall), 1720 Liberty Street SE, Salem, OR 97302

S**taff:** Jennifer Siciliano, Community and Economic Development Director, Public Works Director, City Engineer, and Fire Department

Project Description: Annexation of two parcels: 11641 Shaff Road, Taxlot 091W04C001900 at 43.8 acres and Taxlot 091W04C001901 at 17 acres, for residential use.

Comprehensive Plan Map Designation: Residential
Zoning District: Low, Medium, and/or High Density Residential

The following comments are intended for discussion purposes only and may not include all applicable code requirements.

Applicable Stayton Land Use and Development Code (code) provisions:

CHAPTER 13.12 SYSTEM DEVELOPMENT CHARGES
13.12.205 DEFINITIONS
13.12.210 PURPOSE
13.12.215 SCOPE
13.12.220 SYSTEM DEVELOPMENT CHARGE ESTABLISHED
13.12.225 METHODOLOGY
13.12.230 COMPLIANCE WITH STATE LAW
13.12.235 COLLECTION OF CHARGE
13.12.240 EXEMPTIONS

13.12.245 CREDITS (*relates to 17.12.220.5.a*)
1. When development occurs that gives rise to a system development charge under Section 13.12.220, the system development charge for the existing use shall be calculated and if it is less than the system development charge for the proposed use, the difference between the system development charge for the existing use and the system development charge for the proposed use shall be the system development charge required under Section 13.12.220. If the change in use results in the system development charge for the proposed use being less than the system development charge for the existing use, no system development charge shall be required; however, no refund or credit shall be given.

2. Limitations on Credits.

a. The limitations on the use of credits contained in this Section shall not apply when credits are otherwise given under Section 13.12.250.

b. A credit against the improvement fee portion of the system development charge shall be given for the cost of a qualified public improvement associated with a development.

c. The credit provided for in this Section shall be only for the improvement fee charged for the type of improvement being constructed, and credit for qualified public improvements may be granted only for the cost of that portion of such improvement that exceeds the City's minimum standard facility size or capacity needed to serve the particular development project or property. The applicant shall have the burden of demonstrating that a particular improvement qualifies for credit.

d. The request for credit for a qualified public improvement shall be filed with the City Administrator, not later than 60 days after approval of the development by the City. The request shall include:

1. A legal description of all land within the development;
2. A legal description of any land proposed to be donated as part of the qualified public improvement;
3. A written appraisal of the fair market value of donated lands which are a part of the qualified public improvement. The appraisal shall be prepared by a certified professional appraiser and based upon comparable sales of similar property between unrelated parties;
4. A detailed written estimate of proposed construction costs for each qualified public improvement, prepared by a professional engineer. The estimate shall include separate costs for that portion of each improvement that exceeds the city's minimum standard facility size or capacity;
5. The signatures of all legal owners of the development property together with the designation of who is to receive any credits and the designated percentage for each, if more than one person or entity is designated.

e. If a qualified public improvement is located partially on and partially off the parcel of land that is the subject of the approval, the credit shall be given only for the cost of the portion of the improvement not attributable wholly to the development. The credit provided for by this Section shall be only for the public improvement charge charged for the type of improvement being constructed and shall not exceed the public improvement charge even if the cost of the capital improvement exceeds the applicable public improvement charge.

f. When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee that would otherwise be levied against the project receiving development approval, the excess credit may be applied against improvement fees that accrue in subsequent phases of the original development project in accordance with Section 13.12.245.4.

3. Applying the methodology adopted by resolution, the City Administrator shall grant a credit against the public improvement charge, the reimbursement fee, or both, for a capital improvement constructed as part of the development that reduces the development's demand upon existing capital improvements or the need for future capital improvements or that would otherwise have to be provided at City expense under then existing City Council policies.
4. In situations where the amount of credit exceeds the amount of the system development charge, the excess credit is not transferable to another development. However, the applicant and the City may enter into a written agreement for the credit to be provided to subsequent phases of the development or for the applicant to be reimbursed for portions of the credit due to the applicant from system development charges paid by other applicants for subsequent phases of the development. The terms of such an agreement shall not provide for future reimbursements more than ten (10) years after the construction of the qualified public improvement.
5. Credit shall not be transferable from one type of capital improvement to another.

13.12.250 APPEAL PROCEDURES
1. As used in this Section, "working day" means a day when the general offices of the City are open to transact business with the public.

2. A person aggrieved by a decision required or permitted to be made by the City Administrator under Sections 13.12.205 through 13.12.245 or a person challenging the propriety of an expenditure of system development charge revenues may appeal the decision or expenditure by filing a written request with the City Administrator for consideration by the City Council. Such appeal shall describe with particularity the decision or the expenditure from which the person appeals and shall comply with subsection 4 of this Section.

3. An appeal of an expenditure must be filed within two (2) years of the date of alleged improper expenditure. Appeals of any other decision must be filed within ten (10) working days of the date of the decision.

4. The appeal shall state:
   a. The name and address of the appellant;
   b. The nature of the determination being appealed;
   c. The reason the determination is incorrect; and
   d. What the correct determination should be.
   An appellant who fails to file such a statement within the time permitted waives his/her objections and his/her appeal shall be dismissed.

5. Unless the appellant and the City agree to a longer period, an appeal shall be heard within thirty (30) days of the receipt of the written appeal. At least ten (10) working days prior to the hearing, the City Recorder shall mail notice of the time and location

thereof to the appellant.

City Recorder is the City Manager.

6. The City Council shall hear and determine the appeal on the basis of the appellant's written statement and any additional evidence the appellant deems appropriate. At the hearing, the appellant may present testimony and oral argument personally or by counsel. The City may present written or oral testimony at this same hearing. The rules of evidence as used by courts of law do not apply.

7. The appellant shall carry the burden of proving that the determination being appealed is incorrect and what the correct determination should be.

8. The City Council shall render its decision within fifteen (15) days after the hearing date and the decision of the City Council shall be final. The decision shall be in writing, but written findings shall not be made or required unless the City Council in its discretion elects to make findings for precedential purposes. Any legal action contesting the City Council's decision on the appeal shall be filed within sixty (60) days of the City Council's decision.

CHAPTER 17.12 DEVELOPMENT APPROVAL PROCEDURES
17.12.210 ANNEXATIONS
2. METHOD OF ADOPTION

a. Major Annexations.

1) A Major Annexation is an annexation that meets one or more of the following characteristics.

i. Consists of two or more parcels, except proposed annexations that consist of contiguous parcels in the same ownership.
ii. The area proposed for annexation exceeds 1 acre, except a health hazard annexation.

2) describes the approval procedure which has not been amended since Senate Bill 1573 passed. The bill states:

" ... the legislative body of the city shall annex the territory without submitting the proposal to the electors of the city if:
(a) The territory is included within an urban growth boundary adopted by the city or Metro, as defined in ORS 197.015;
(b) The territory is, or upon annexation of the territory into the city will be, subject to the acknowledged comprehensive plan of the city;
(c) At least one lot or parcel within the territory is contiguous to the city limits or is separated from the city limits only by a public right of way or a body of water; and
(d) The proposal conforms to all other requirements of the city's ordinances. ..."

A general timetable is the following:

- *An application for annexation is submitted to the City Planner.*
- *The City Planner has 30 days to deem the application complete or incomplete.*
- *Once the application is deemed complete, it can be scheduled for a Planning Commission Public Hearing. Abutters need to be notified 20 days in advance of this hearing. The Planning Commission only meets on the last Monday of the month.*
- *The Planning Commission submits its recommendations to the City Council to schedule another Public Hearing in front of the Council. This hearing needs to be advertised at least two weeks before the hearing. The City Council meets the first and third Mondays of the month.*
- *A Notice of Decision is sent out to the abutters within 3 days of the decision.*
- *From the Notice of Decision there is a 14-day appeal period.*

3. SUBMITTAL REQUIREMENTS. In order to be accepted as complete and be processed in a timely manner by the City, requests for annexation of territory shall include the following materials and information:

a. Completed application forms as supplied by the City Planner.
b. Three copies of a site plan, drawn to a scale of 1 inch equals not more than 50 feet, shown as a graphic scale, of the property for which the annexation is requested. The site plan shall depict the surrounding properties, neighboring streets and roads, and existing uses of the property. If the application for annexation is not accompanied by a concurrent application for site plan, subdivision, or other land use approval, three copies of a conceptual plan of proposed uses of the property subsequent to annexation. In addition, 18 reduced copies of the plan sized as 11 inches by 17 inches shall be submitted.
c. A plan showing the boundary lines of the properties, certified by a professional land surveyor, and the approximate area of the properties in acres or square feet.
d. A legal description of the property, meeting the requirements of ORS 308.225.
e. A narrative statement fully explaining the request and fully addressing the criteria for approval of an annexation.

See the application checklist for guidance.

4. APPROVAL CRITERIA. In order to approve an application for annexation, the following affirmative findings concerning the action must be made by the decision authority:

a. Need exists in the community for the land proposed to be annexed.

b. The site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.
c. The proposed annexation is property contiguous to the existing City limits.
d. The proposed annexation is compatible with the character of the surrounding area and complies with the urban growth program and policies of the City of Stayton.
e. The annexation request complies, or can be made to comply, with all applicable provisions of state and local law.
f. If a proposed contract annexation, within the terms and conditions of the contract the cost of City facility and service extensions to the annexed area shall be calculated by the Public Works Director.

CONTRACT ANNEXATION: The addition of territory to the jurisdictional boundaries of the City that is subject to the terms and conditions of a contractual agreement between the property owner and the City relative to the nature of development to occur in the territory and the timing or sequence of annexation or annexation of portions of the property.

5. ZONING OF ANNEXED TERRITORY. All lands that are annexed to the City shall be zoned in accordance with the designation of the property in the Comprehensive Plan. The specific zone assigned to the land being annexed shall be determined by the City Council in accordance with the proposed uses of the land and the needs identified by the buildable lands analysis in the Comprehensive Plan. This requirement does not prohibit an application to amend the Comprehensive Plan Map concurrent with the application for annexation.

According to the Comprehensive Plan, this parcel is considered residential. It could be approved for Low, Medium and/or High-Density Residential Zones.

17.12.220 SITE PLAN REVIEW *(Criteria part of detailed development plan approval for Master Plan Development – see 17.24.090.8.a)*
5. APPROVAL CRITERIA.
The following criteria must be demonstrated as being satisfied by the application:

a. The existence of, or ability to obtain, adequate utility systems (including water, sewer, surface water drainage, power, and communications) and connections, including easements, to properly serve development in accordance with the City's Master Plans and Public Works Design Standards. Where an adopted Master Plan calls for facilities larger than necessary for service to the proposed use, the developer shall install the size facilities called for in the Master Plan, and shall be provided credit for the excess costs in accordance with SMC 13.12.245.
b. Provisions have been made for safe and efficient internal traffic circulation, including both pedestrian and motor vehicle traffic, and for safe access to the property for

vehicles, as well as bicycle and pedestrians, from those public streets which serve the property in accordance with the City's Transportation System Plan and Public Works Design Standards.
c. Provision has been made for all necessary improvements to local streets and roads, including the dedication of additional right-of-way to the City and/or the actual improvement of traffic facilities to accommodate the additional traffic load generated by the proposed development of the site in accordance with Chapter 17.26, the City's Transportation System Plan, and Public Works Design Standards. Improvements required as a condition of approval shall be roughly proportional to the impact of the development on transportation facilities. Approval findings shall indicate how the required improvements are directly related to and are roughly proportional to the impact of development.
d. Provision has been made for parking and loading facilities as required by Section 17.20.060.
e. Open storage areas or outdoor storage yards shall meet the standards of Section 17.20.070.
f. Site design shall minimize off site impacts of noise, odors, fumes or impacts.
g. The proposed improvements shall meet all applicable criteria of either Section 17.20.190 Multi-family Residential Design Standards, Section 17.20.200 Commercial Design Standards, Section 17.20.220 Downtown Development Design Standards, or Section 17.20.230 Industrial Design Standards.
h. (Repealed)
i. (Repealed)
j. Landscaping of the site shall prevent unnecessary destruction of major vegetation, preserve unique or unusual natural or historic features, provide for vegetative ground cover and dust control, present an attractive interface with adjacent land uses and be consistent with the requirements for landscaping and screening in Section 17.20.090.
k. The design of any visual, sound, or physical barriers around the property such as fences, walls, vegetative screening, or hedges, shall allow them to perform their intended function and comply with the requirements in Sections 17.20.050 and 17.20.090.
l. The lighting plan satisfies the requirements of Section 17.20.170.
m. The applicant has established continuing provisions for maintenance and upkeep of all improvements and facilities.
n. When any portion of an application is within 100 feet of North Santiam River or Mill Creek or within 25 feet of Salem Ditch, the proposed project will not have adverse impact on fish habitat.
o. Notwithstanding the above requirements the decision authority may approve a site plan for a property on the National Register of Historic Places that does not meet all of the development and improvement standards of Chapter 17.20 and the access spacing standards of Chapter 17.26 provided the decision authority finds that improvements proposed are in conformance with Secretary of the Interior's Standards for Treatment of Historic Properties, the site will provide safe ingress and egress to the public street system, and that adequate stormwater management will be provided.

6. IMPOSITION OF RESTRICTIONS AND CONDITIONS. (*See 17.16.090.3*)
a. The decision authority may prescribe restrictions or limitations for the proposed site plan review approval as it deems necessary to fulfill the purpose and intent of the code. Such restrictions or limitations shall be based on evidence and analysis presented to or generated by the decision authority during the course of its evaluation of the request, and shall be made a part of the approval action. Conditions may limit the time or duration of the use.
b. To ensure that required public improvements are made in a timely and acceptable manner, the applicant(s) may be required by the City to provide acceptable financial assurance to the City consistent with the requirements of Section 17.20.120.
c. A violation of any such condition(s) or limitation(s) shall constitute a violation of this Title.

CHAPTER 17.16 ZONING
Table 17.16.070.2 Minimum Dimensional Requirements for Lots
Low Residential Density Zone

Lot Area (square feet)	8,000
Lot Width (feet)	80 (40 feet for lots with frontage on a cul-de-sac)
Average Width (feet)	80

Medium Residential Density Zone

Lot Area (square feet)	7,000 (A Triplex requires a minimum lot area of 10,500 square feet.)
Lot Width (feet)	70 (40 feet for lots with frontage on a cul-de-sac)
Average Width (feet)	70

High Residential Density Zone

Lot Area (square feet)	6,000
Lot Width (feet)	60 (40 feet for lots with frontage on a cul-de-sac)
Average Width (feet)	60

Table 17.16.070.3 Dimensional Requirements for Structures
Low Residential Density Zone

Front Yard Setback (feet)	20[2]
Side Yard Setback (feet)	5
Rear Yard Setback (feet)	20
Building Height (feet)	35[6]

[2] 25 feet to a garage entrance, except a garage on a back lot or flag lot.
[6] Or 2 ½ stories

Medium Residential Density Zone

Front Yard Setback (feet)	20[2]
Side Yard Setback (feet)	5
Rear Yard Setback (feet)	15

Building Height (feet) 35[6]

High Residential Density Zone
Front Yard Setback (feet) 20[2]
Side Yard Setback (feet) 5
Rear Yard Setback (feet) 15
Building Height (feet) -- (May be established by Site Plan Review)
[2] 25 feet to a garage entrance, except a garage on a back lot or flag lot.
[6] Or 2 ½ stories

4. ADDITIONAL REGULATIONS FOR SINGLE FAMILY DETACHED DWELLINGS AND MANUFACTURED HOMES ON INDIVIDUAL LOTS.
Within the Low Density and Medium Density Residential Districts, all new single-family detached dwellings, including manufactured homes not in a mobile home park, are subject to the following development and design standards:

1) Floor Area. A dwelling shall have a minimum floor area of 1,000 square feet. The dwelling must have a minimum horizontal dimension of at least 24 feet.

2) Repealed.

3) Design Features. All new dwellings shall contain the following design feature requirements:

a) The site must include an attached or detached garage with exterior materials that are the same exterior materials as the primary home.
b) The building shall be provided with gutters and downspouts.
c) The dwelling must have a composition asphalt, fiberglass, shake, or tile roof with a minimum pitch of 3 feet in height for each 12 feet in length.
d) The dwelling must have horizontally applied wood siding, horizontally applied fiber-cement siding, brick or stone masonry siding, or textured plywood siding with vertical grooves.
e) The base of the new dwelling must be enclosed continuously at the perimeter with either concrete, concrete block, brick, stone, or combination thereof. Unless the home is placed on a basement, the home shall sit so that no more than 12 inches of the enclosing material is exposed above grade. Where the building site has a grade with a slope of more than 10%, no more than 12 inches of the enclosing material shall be exposed on the uphill side of the home.
f) If a manufactured home, the transportation mechanisms, including wheels, axles, and hitch, shall be removed.

4) In addition, to provide architectural relief, new dwellings shall contain at least 3 of the following design elements on the side(s) of the home which fronts on a street:
a) Dormers or gables.
b) Cupolas.

c) Bay or bow windows.
d) Exterior shutters.
e) Recessed entries.
f) Front porch of at least 100 square feet, which may extend into the required front yard.
g) Covered porch entries.
h) Pillars or posts in the front entry area.
i) (Repealed, Ord 1060, May 17, 2023.)
j) Front-side exterior brickwork or masonry.

17.16.090 NATURAL RESOURCE OVERLAY DISTRICT

1. BOUNDARIES OF THE NR DISTRICT. The NR Overlay district shall include lands that are:

a. 100 feet from the normal high water line of the North Santiam River, Mill Creek, Lucas Ditch, Salem Ditch north of Shaff Road, except for areas within the HD, CR, CG, CCMU, DRMU, and ID zones.

b. 50 feet from the normal high water line of the Salem Ditch and the Stayton Ditch, except for areas within the CR, CG, CCMU, and DRMU zones.

The provisions, requirements, and restrictions found herein shall be in addition to those found in the underlying primary zone. Where there are conflicts between the requirements of the NR Overlay zone and the requirements of the underlying primary zone, the more restrictive requirements shall apply.

2. PERMITTED USES. All uses are subject to site plan review.

a. Publicly owned buildings and facilities related to water supply and treatment, including parking and storage areas.
b. Recreational trails, walkways, and bikeways.
c. Public parks and river-related recreational facilities, including meeting rooms, viewing platforms, displays, signs, restrooms, and parking areas.
d. Resource enhancement projects.
e. Road and access drives.
f. Accessory uses.

3. DEVELOPMENT CRITERIA. Proposals for development will be subject to the following criteria in addition to the site plan review criteria in Section 17.12.220.6.

a. The proposal shall have as few significant detrimental environmental impacts on water as possible.
b. All identified impacts are mitigated through implementation of a mitigation plan approved by the City.
c. Existing trees and other vegetation shall be retained to the greatest extent possible pursuant to Chapter 17.20.150.

d. The proposal shall balance the impacts on the area with the potential for public enjoyment of the riparian environment and recreational use of the protected water body.

4. IMPACT EVALUATION. An impact evaluation may be required for proposals in the NR Overlay zone. The impact evaluation shall include:

a. Identification of all natural resources.

b. A storm water runoff report and plan detailing the quantity and quality of any storm water runoff from the construction or developed use of the property. The report shall detail the potential impact storm water runoff will have, if any, on the protected water bodies and shall provide a mitigation plan showing how these impacts will be averted.

c. The functional values of the identified resource are defined by their natural characteristics, quantity, and quality.

d. Erosion and sedimentation control plan adequate to keep sedimentation out of water bodies.

e. Alternative locations, design modifications, or alternative methods of development of the subject property to reduce the impacts on the water supply intakes, aquifer, and natural riparian resources are identified and evaluated.

f. If there is any resulting degradation or loss of functional values of the natural resource as a result of development, a mitigation plan is required which will compensate for the degradation or loss.

CHAPTER 17.20 DEVELOPMENT AND IMPROVEMENT STANDARDS

17.20.170 OUTDOOR LIGHTING

1. PURPOSE. The purposes of these lighting standards are: conserving energy, minimizing light pollution and glare on adjacent properties, protecting residential uses from neighboring commercial or industrial uses, and promoting traffic and pedestrian safety.

2. GENERAL STANDARDS. Lighting may be provided which serves security, safety and operational needs but which does not directly or indirectly produce deleterious effects on abutting properties or which would impair the vision of the traveling public on adjacent roadways. Lighting fixtures with more than 800 lumens of light output shall be cut-off fixtures so that the lighting elements are not exposed to normal view by motorists, pedestrians, or from adjacent dwellings. Direct or indirect illumination shall not exceed 0.5 foot candles upon abutting lots in residential use measured at the property line.

Whenever practicable, lighting installations shall include timers, dimmers, and/or sensors to reduce overall energy consumption and eliminate unneeded lighting. When

an outdoor lighting installation is being modified, extended, expanded, or added to, the entire lighting installation shall be subject to the requirements of this Section.

a. Electrical service to outdoor lighting fixtures shall be underground unless the fixtures are mounted directly on utility poles.

b. For the purposes of this Section, the mounting height of a lighting fixture shall be defined as the vertical distance from the grade elevation of the surface being illuminated to the bottom of the lighting fixture.

c. Holiday lighting during the months of November, December, and January shall be exempt from the provisions of this section, provided that such lighting does not create dangerous glare on adjacent streets or properties.

3. PROCESS. When an application for land use approval contains outdoor lighting installation or replacement, the decision authority shall review and approve the lighting installation as part of the application. Lighting installation or replacement that is not part of a land use approval application need not submit a lighting plan or obtain a permit beyond that which may be required by the Electrical Code, but shall meet the standards below

4. NON-RESIDENTIAL LIGHTING STANDARDS.

5. MULTI-FAMILY RESIDENTIAL LIGHTING STANDARDS. The following additional standards shall apply to all multi-family developments:

a. Lighting of Parking Areas. Parking lot lighting shall provide the minimum lighting necessary to ensure adequate vision and comfort in parking areas, and to not cause glare or direct illumination onto adjacent properties or streets.

1) All lighting fixtures serving parking lots shall be full cut-off fixtures.

2) Parking area lighting shall have a maximum mounting height of 15 feet, a minimum illumination level of 0.3 foot-candles, a maximum illumination level of 1.4 foot candles, a uniformity ratio of 4:1, and a minimum color rendering index of 65.

b. Lighting of Pedestrian Walkways. Pedestrian walkways in a multi-family development shall meet the following standards.

1) All lighting fixtures shall be full cut-off fixtures.

2) If pedestrian walkways are adjacent to illuminated parking areas, public rights-of-way
or common open space this standard shall be met without the need for additional
lighting if the ambient lighting meets the illumination levels, uniformity ratio and minimum color rendering index specified in subsection 5.b.3

3) Pedestrian walkways between parking areas and buildings or adjacent to dwellings and off-street multi-purpose pathways shall use bollard lights with a minimum illumination level of 0.3 foot-candles, a maximum illumination level of

1.2 foot-candles, a uniformity ratio of 4:1, and a minimum color rendering index of 65.

4) The decision authority, in consultation with the Parks and Recreation Commission and the Public Works Director, may require off-street walk and bike trails built within or adjacent to a multifamily development in accordance with the Parks and Recreation Master Plan to be illuminated in accordance with the standards of Section 17.20.170.5.b.3) above.

5) Rustic trails built within or adjacent to a multifamily development in accordance with the Parks and Recreation Master Plan shall not be illuminated.

17.20.190 MULTI-FAMILY RESIDENTIAL DESIGN STANDARDS

1. These standards shall apply to any new attached residential structure.
2. SITE DESIGN.

a. Maximum Lot Coverage. Lot coverage shall not exceed the percentages shown in Table 17.20.190.2.a:

Table 17.20.190.2.a Maximum Lot Coverage for Multi-family Uses

Multi-Family Use	Maximum Coverage
Single Family Attached, Duplex or Triplex	50%
Multi-family dwellings	60%

Lot coverage is calculated as the percentage of a lot or parcel covered by buildings or structures (as defined by the foundation plan area) and other structures with surfaces greater than 36 inches above the finished grade. It does not include paved surface-level development such as driveways, parking pads, and patios.

b. Height Step Down. To provide compatible scale and relationships between new multi-story attached residential structures and adjacent single-family dwellings, the multi-story building(s) shall “step down” to create a building height transition to adjacent single-family building(s).

The transition standard is met when the height of any portion of the taller structure does not exceed 1 foot of height for every foot of separation between the adjacent single-family building and that portion of the taller structure.

c. Building Orientation Standards. All new attached residential structures shall have buildings that are oriented to the street. The following standards will apply:

1) All buildings shall comply with the setback standards of the zoning district where the development is located.

2) Except as provided in subsections 3 and 4, below, all attached residential structures

shall have at least 1 primary building entrance (i.e. dwelling entrance, a tenant space entrance, a lobby entrance, or breezeway/courtyard entrance serving a cluster of units) facing an adjoining street, or if on a side elevation, not more than 20 feet from a front lot line.

3) Any duplex located on a corner lot shall be oriented so that the architectural front of each unit faces a separate street.

4) Repealed.

5) Off street parking, driveways, and other vehicle areas shall not be placed between buildings and the street(s) to which they are oriented, except that townhouses with garages that face a street may have 1 driveway access located between the street and primary building entrance for every 2 dwelling units following vehicle areas when the decision authority finds they will not adversely affect pedestrian safety and convenience.

6) Parking and maneuvering areas, driveways, active recreation areas, loading areas, and dumpsters shall not be located between attached residential structures and adjacent single family homes.

7) When there is insufficient street frontage for building orientation in a development with multiple buildings to face the street, a primary entrance may be oriented to a common green, plaza or courtyard. When oriented this way, the primary entrance(s) and common green, plaza or courtyard shall be connected to the street by a pedestrian walkway meeting the standards of Section 17.26.020.5.

8) Outdoor Service Areas. Trash receptacles shall be oriented away from building entrances and set back at least 10 feet from any public right-of-way and adjacent residences. Outdoor service areas shall be screened with an evergreen hedge or solid fence of materials similar to the primary building of not less than 6 feet in height. If the outdoor service area includes trash receptacles, the receptacle must be accessible to trash pick-up trucks.

3. ARCHITECTURAL STANDARDS.

a. Building Length. The continuous horizontal distance as measured from end wall to end wall of individual buildings shall not exceed 100 feet.

b. Articulation. All attached residential structures shall incorporate design features to break up large expanses of uninterrupted walls or roof planes. Along the vertical face of all building stories, such elements shall occur at a minimum interval of 30 feet and each floor shall contain at least 2 of the following elements.

1) Recess (e.g. deck, patio, courtyard, entrance or similar feature) that has a minimum depth of 4 feet.

2) Extension (e.g. deck, patio, entrance, overhang, or similar feature) that projects a minimum of 2 feet and runs horizontally for a minimum length of 4 feet.

3) Dormers with peaked roofs and windows or offsets or breaks in roof elevation of 2 feet or greater in height.

c. Street-side facades. All building elevations visible from a street right-of-way shall provide prominent defined entrances and a combination of architectural features as specified in Section 17.20.190.3.e below.

d. Exterior Stairways. Stairways shall be incorporated into the building design. External stairways, when necessary, shall be recessed into the building, sided using the same siding materials as the building, or otherwise incorporated into the building architecture. Access balconies and/or outdoor corridors longer than 16 feet shall not be used. No more than 4 units shall access from a single balcony.

e. Design Features. The minimum number of required design features for an attached residential structure is determined by the number of dwelling units in each building as shown in Table 17.20.190.3.e.

Table 17.20.190.3.e Minimum Number of Design Features

Number of Units	Minimum Number of Features
2 - 6	5
7 - 20	8
21 or more	10

The following design features may be used to meet the requirements of this subsection. Features not included on the list may be used if approved by decision authority.

1) Dormers
2) Gables
3) Entries recessed a minimum of 30 inches
4) Covered porch entries or porticos
5) Cupolas or towers
6) Pillars or posts
7) Eaves; a minimum 18 inches of projection
8) Off-sets in building face or roof; a minimum 16 inches
9) Window trim; minimum of 3 inches wide
10) Bay windows
11) Balconies
12) Decorative patterns on exterior finish such as: shingles, wainscoting, ornamentation or similar features.
13) Decorative cornice or pediments (for flat roofs)

f. Building Materials. Plain concrete, corrugated metal, plywood, sheet press board, or

textured plywood siding with vertical grooves shall not be used as exterior finish material.

4. OPEN SPACE.

a. Common Open Space. Of the landscaping required by Section 17.20.090, a minimum of 10% of the site area shall be designated and permanently reserved as common open space in all multi-family developments with more than 10 units, in accordance with the following criteria:

1) The site area is defined as the lot or parcel on which the development is to be located, after subtracting any required dedication of street right-of-way.

2) Streets, driveways, and parking areas, including areas required to satisfy parking area landscape standards, shall not be applied towards the minimum useable open space requirement.

3) In meeting the common open space standard, the multi-family development shall contain one or more of the following: outdoor recreation area, protection of sensitive lands, play fields, outdoor playgrounds, outdoor sports courts, swimming pools, walking paths, or similar open space amenities for residents.

4) The common open space shall have a minimum average width of 15 feet and a minimum average length of 15 feet.

b. Private Open Space. Private open space areas shall be required for dwelling units based on all of the following criteria:

1) All ground-floor housing units shall have front or rear patios or decks measuring at least 40 square feet.

2) All upper-floor housing units shall have balconies or porches measuring at least 30 square feet.

5. LIGHTING. All attached residential structures shall meet the standards of Section 17.20.170.

17.20.060 OFF-STREET PARKING AND LOADING

5. LOCATION. Off street parking and loading areas shall be provided on the same lot with the main building or use except that in any commercial, industrial, or public district, the parking area may be located within 500 feet of the main building.

7. REQUIREMENTS FOR AUTOMOBILE PARKING. Off-street automobile parking shall be provided in the manner required by subsection 9 of this section and approved by the City Planner in the minimum amounts described in Tables 17.20.060.7 a and b or as determined by Section 17.20.060.7.a.

a. Minimum Required Parking Spaces

Table 17.20.060.7.a Residential Parking Requirements

Residential Uses	Per Unit	Other Requirements
Single Family Dwelling or Duplex	2	
Multi-family Development	1.5	Plus 1 visitor space per 4 units

b. Calculating Spaces. When the required spaces are calculated by this subsection becomes greater than 1/3 of a space, the number shall be rounded up.

c. Determining Requirements for an Unlisted Use. When a required number of parking spaces is not specified for a particular use or facility or the Planning staff determines that the specified number of parking spaces is not appropriate, the City Planner shall prescribe a number of vehicle parking spaces or loading berths based on a determination of the traffic generation of the activity (as determined through a Traffic Impact Analysis), the amount or frequency of loading operations thereof, the time of operation of the activity, their location, and such other factors as effect the need for off street parking or loading.

8. HANDICAPPED/DISABLED PARKING.

a. Except for single family residences and duplexes, parking spaces and accessible passenger loading zones reserved exclusively for use by handicapped or disabled persons shall be provided in accordance with Table 17.20.060.8.a and shall be located on the shortest possible accessible circulation route to an entrance of the building being accessed:

Table 17.20.060.8.a Handicapped Parking Requirements

b. Handicapped/disabled parking spaces shall be designated as reserved for such use by a sign showing the international symbol of accessibility. Such a sign shall be designed so as to not be obscured by a vehicle parked in the space.

c. Parking spaces for handicapped/disabled persons shall be at least 9 feet wide and 18 feet long, and shall have an abutting access aisle of at least 6 feet in width.

d. Passenger loading zones shall provide an access aisle at least 4 feet wide and 20 feet long abutting and parallel to the vehicle pull-up space. If there are curbs between the access aisle and the vehicle pull-up space, then a curb ramp shall be provided.

9-A. BICYCLE PARKING REQUIREMENTS

1) The spaces required for bicycle parking is defined in Table 17.20.060.9-A.1. Fractional numbers of spaces shall be rounded up to the next whole space.

Table 17.20.060.9-A.1 Bicycle Parking Requirements

Land Use Category	Minimum Required Bicycle Parking Spaces
Residential	
Single-family	Exempt
Multi-family residential, general	1 space per 5 units
Multi-family residential, seniors or with physical disabilities	Exempt

a. Bicycle parking spaces shall be at least 6 feet long and 2 feet wide. If the bicycle parking space is covered, then it shall have an overhead clearance of at least 7 feet. For covered bicycle parking, the covering shall extend at least 2 feet beyond the parking area.
b. To provide for bicycle maneuvering, an aisle of 5 feet shall be provided and maintained beside or between each row of bicycle parking.

10. DEVELOPMENT REQUIREMENTS. All parking and loading areas shall be developed and maintained as follows:

a. The location of parking and loading, except for single family dwellings, duplexes, or
triplexes, which may be located within the front yard, shall meet the applicable standards of Sections 17.20.190 or 17.20.200.

b. Surfacing. All driveways, parking and loading areas shall be paved with asphalt or concrete surfacing and shall be adequately designed, graded, and drained as required by the Public Works Director. In no case shall drainage be allowed to flow across a public sidewalk. Parking areas containing more than 5 parking spaces shall be striped to identify individual parking spaces.

c. Driveways. The following standards shall apply to all driveways:

1) Residential lots with 3 or fewer dwelling units sharing a driveway shall have 16 feet of paved width with 20 feet of clear width.

2) Residential lots with 4 or more dwelling units sharing a driveway shall have 18 feet of paved width with 24 feet of clear width

d. Design of parking areas. Except where provided for by subsection 7 of this section parking area design shall comply with Title 12 and Standard Specifications.

1) Entrances and exits shall be clearly marked with pavement markings and/or signs. Entrances and exits should favor right hand turns into and out of the area where possible and should be located at least 50 feet from intersections where possible.

2) Backing into or across a street, sidewalk, or right-of-way from any parking area shall be prohibited. The perimeter shall prevent access to or from the parking area except at designated entrances and exits.

e. Screening. When any development with over 6 parking spaces or a loading area is adjacent to any residential district, that area shall be screened from all adjacent residential properties. Screening shall be done with an ornamental fence, wall, or hedge at least 4 feet high but not more than 7 feet high, except along an alley.

f. Lighting. Any light used to illuminate a parking or loading area shall meet the standards of Section 17.20.170.

11. PARKING AREA LANDSCAPING DESIGN STANDARDS.

17.20.080 SPECIAL STREET AND RIPARIAN SETBACKS

1. SPECIAL STREET SETBACKS. On the following named streets there shall be a minimum building setback of 50 feet, measured at right angles from the centerline of the street right-of way:

a. Ida Street, extending from N. Fourth Avenue to the west City limits
b. First Avenue, from south City limits to north City limits.
c. Washington Street, extending from N. Sixth Avenue to the west city limits.
d. N. Sixth Avenue from Washington Street to E. Jefferson Street.
e. E. Jefferson Street from N. Sixth Avenue to N. Tenth Avenue.
f. East Santiam Road from N. Tenth Avenue to the east City limits on Mehama Road.
g. Golf Club Road from Highway 22 to Shaff Road.
h. Wilco Road

2. RIPARIAN SETBACK AND VEGETATION MAINTENANCE REQUIREMENTS.

a. Application of Riparian Setback Standards. Setbacks for development as defined in this title shall be observed for all lands within the City adjacent to Mill Creek, Salem Ditch, Stayton Ditch, and the North Santiam River.

b. Riparian Setback Areas. The riparian setback area for all new development other than a fence, sign, or pedestrian way, except as allowed under c. of this subsection, shall be 15 feet from normal high water along the Salem Ditch, Stayton Ditch and 35 feet along Mill Creek and the North Santiam River.

c. Improvements Within Setback Areas. Along the Salem Ditch and Stayton Ditch, decks or patios attached to a dwelling which do not exceed 4 feet above ground level may extend into the setback area no more than 5 feet from normal high water.

d. Vegetation Maintenance Standards. Within the riparian setback area, the following standards for maintenance of riparian vegetation shall apply:

1) Along Mill Creek and the North Santiam River, no more of a parcel's existing riparian vegetation shall be removed from the setback area than is necessary for the placement or development, outside of the riparian zone, of use(s) permitted by the zoning district. Vegetation removed in such a manner shall, to the extent practicable, be replaced with similar or the same indigenous vegetation during the next planting season. In no case shall more than 25% by area on any given lot, of existing natural riparian vegetation shall be removed for any reason within the riparian setback area.

2) Dead or diseased vegetation or vegetation which constitutes a hazard to public safety or a threat to existing healthy indigenous vegetation.

a) Vegetation to be removed for pedestrian access (pathways) to, or along the waterway.
b) Removal of vegetation necessary for the maintenance or placement of artificial or structural shoreline stabilization, provided a showing is made that natural erosion control measures or other non-structural solutions are not feasible and only where applicable state and federal standards are met.

c) Removal of blackberry vines, scotch broom, or other introduced or invasive species, provided that such vegetation is replaced with other species that are equally suited for ground cover and erosion control.

3) Along the Salem Ditch the setback area may be used for residential landscaping adequate to maintain soil stability.

e. Variance from Riparian Vegetation Requirements. Requests for relief from the above standards shall be processed pursuant to the variance process specified in Section 17.12.190.

17.20.090 LANDSCAPING AND SCREENING GENERAL STANDARDS

1. PURPOSE.

2. BASIC PROVISIONS. Landscaping and screening standards apply to all zones except the Low Density (LD) Residential and Commercial Core Mixed Use. The minimum area of a site to be retained in landscaping shall be as follows:

Table 17.20.090.2 Minimum Landscape Percentage

Zoning District or Use	Minimum Improvement Per Lot
Medium Density (MD) Residential	20%
High Density (HD) Residential	20%

3. SUBMITTAL REQUIREMENTS FOR LANDSCAPE PLAN. The following information shall be included on a landscape plan:

a. Lot dimensions and footprint of structure(s), drawn to scale.

b. The dimensions and square footage of all landscaped areas, the total square footage of the parking lot, building square footage, and total number of parking spaces.

c. The location and size of the plant species, identified by common and botanical names, and expected size within 5 growing seasons.

d. The type and location of landscaping features other than plant materials, including, but not limited to, wetlands, creeks, ponds, sculptures, benches, and trash receptacles.

e. Adjacent land-uses. For any residence within 50 feet of the subject site, indicates the building's location and its distance from the subject property boundary.

f. Location and classification of existing trees greater than 4 inches caliper and measured at 4 feet above ground. Where the site is heavily wooded, only those trees that will be affected by the proposed development need to be sited accurately. The remaining trees may be shown on the plan in the general area of their distribution.

4. SUBMITTAL REQUIREMENTS FOR IRRIGATION PLAN. The irrigation plan shall indicate the source of water and show the materials, size and location of all components, including back flow or anti-siphon devices, valves, and irrigation heads.

a. Minimum Landscape Standards.

1) Appropriate care and maintenance of landscaping on-site and landscaping in the adjacent public right-of-way is the right and responsibility of the property owner, unless the Code specifies otherwise for general public and safety reasons. If street trees or other plant material do not survive or are removed, materials shall be replaced in kind within 1 year.

2) Significant plant and tree specimens should be preserved to the greatest extent practicable and integrated into the design of the development. Trees of 25 inches or greater in circumference measured at a height of 4 feet above grade are considered significant. Plants to be saved and methods of protection shall be indicated on the detailed planting plan submitted for approval. Existing trees may be considered preserved if no cutting, filling, or compacting of the soil takes place between the trunk of the tree and the area 5 feet outside of the tree's drip line. Trees to be retained shall be protected from damage during construction by a construction fence located 5 feet outside the drip line.

3) Planter and boundary areas used for required plantings shall have a minimum diameter of 5 feet inside dimensions. Where the curb or the edge of these areas are used as a tire stop for parking, the planter or boundary plantings shall be a minimum width of 7½ feet.

4) In no case shall shrubs, conifer trees, or other screening be permitted within the sight distance triangle or where the City Engineer otherwise deems such plantings would endanger pedestrians and vehicles.

5) Landscaped planters and other landscaped features shall be used to define, soften or screen the appearance of off street parking areas and other activity from the public street. Up to 25% of the total required landscaped area may be developed into pedestrian amenities, including, but not limited to sidewalk cafes, seating, water features, and plazas, as approved by the decision authority.

6) All areas not occupied by parking lots, paved roadways, walkways, patios, or building shall be landscaped.

7) All landscaping shall be continually maintained, including necessary watering, pruning, weeding, and replacing.

5. REQUIRED TREE PLANTINGS. Planting of trees is required along public street frontages, and along private drives more than 150 feet long. Trees shall be planted outside the street right-of-way except where there is a designated planting strip or a City-adopted street tree plan. *(There no city-adopted street tree plan.)*

a. Street trees species shall be selected from a list of approved species maintained by the Director of Public Works. Other varieties may be used only with approval by the decision authority.

b. Spacing of Street Trees. Trees with a medium canopy shall be spaced 20 feet on center. Trees with a large canopy shall be spaced 25 feet on center.

c. Trees shall be trimmed to a height that does not impede sight distance, pedestrian traffic or vehicular traffic.

6. TREE PLANTING RESTRICTIONS. Street trees shall not be planted:
a. Within 10 feet of fire hydrants and utility poles, unless approved otherwise by the City Engineer.
b. Where the decision authority determines the trees may be a hazard to the public interest or general welfare.
c. Under overhead power lines, if tree height at mature age exceeds the height of the power line.

7. IRRIGATION. Due to an increasing public demand for water and the diminishing supply, economic and efficient water use shall be required. Landscaping plans shall include provisions for irrigation. Specific means to achieve conservation of water resources shall be provided as follows:

a. Any newly planted landscaped area shall have a permanent underground or drip irrigation system with an approved back flow prevention device.
b. Wherever feasible, sprinkler heads irrigating lawns or other high-water demand landscape areas shall be separated so that they are on a separate system than those irrigating trees, shrubbery or other reduced-water requirement areas.
c. Irrigation shall not be required in wooded areas, wetlands, along natural drainage channels, or stream banks.

8. REQUIREMENTS FOR PLANT MATERIALS.
a. At least 75% of the required landscaping area shall be planted with a suitable combination of trees, shrubs, evergreens and/or ground cover. The intent of this Section is to avoid large expanses of lawn without other landscaping features and the decision authority shall determine what constitutes a suitable combination of landscape material as part of the review of each landscape plan.
b. Use of native plant materials or plants acclimated to the Pacific Northwest is encouraged to conserve water during irrigation.
c. Trees shall be species having an average mature crown spread greater than 15 feet and having trunks which can be maintained in a clear condition so there is over 5 feet without branches. Trees having a mature crown spread less than 15 feet may be substituted by grouping trees to create the equivalent of a 15 foot crown spread.
d. Deciduous trees shall be balled and burlapped or in a container, be a minimum of 7 feet in overall height or 1.5 inches in caliper measured at 4 feet above ground, immediately after planting. Bare root trees will be acceptable to plant only during their dormant season.
e. Coniferous trees shall be a minimum 5 feet in height above ground at time of planting.
f. Shrubs shall be a minimum of 2 feet in height when measured immediately after planting.

g. Hedges, where required to screen and buffer off-street parking from adjoining properties shall be planted with an evergreen species maintained so as to form a continuous, solid visual screen, planted with a minimum height of 2 feet.
h. Vines for screening purposes shall 30 inches in height immediately after planting and may be used in conjunction with fences, screens, or walls to meet physical barrier requirements as specified.
i. Turf areas shall be planted in species normally grown as permanent lawns in western Oregon. Either sod or seed are acceptable. Acceptable varieties include improved perennial ryes and fescues used within the local landscape industry.
j. Landscaped areas may include architectural features such as sculptures, benches, masonry or stone walls, fences, and rock groupings. The exposed area developed with such features shall not exceed 25% of the required landscaped area.
k. Landscaped areas may include minimal areas of non living ground covers where the applicant can demonstrate that plant ground covers are not appropriate. Artificial ground covers such as bark, mulch chips, gravel or crushed stone shall not exceed 15% of the landscaped area. This percentage shall be based on the anticipated size of landscape plants at maturity, not at planting.
l. Artificial plants are prohibited in any required landscaped area.

9. REPLANTING NATURAL LANDSCAPE AREAS
a. Areas that are not affected by the landscaping requirements where natural vegetation has been removed or damaged through construction activity shall be replanted.
b. Plant material shall be watered at intervals sufficient to assure survival and growth.
c. The use of native plant materials or plants acclimated to the Pacific Northwest is encouraged to reduce irrigation and maintenance demands.

10. LANDSCAPING IN THE PLANTER STRIP. Except for portions allowed for parking, loading, or traffic maneuvering, the planter strip shall be landscaped. The planter strip shall not count as part of the lot area percentage to be landscaped.

11. BUFFER PLANTING-PARKING, LOADING AND MANEUVERING AREAS: Buffer plantings are used to reduce building scale, provide transition between contrasting architectural styles, and generally mitigate incompatible or undesirable views. They are used to soften rather than block viewing. Where required, a variety of plants shall be used to achieve the desired buffering effect.

a. Buffering is required for any commercial, industrial, or multi-family development with more than 4 parking spaces. Buffering shall occur in the following manner:

1) Any parking area, loading area, or vehicle maneuvering area shall be landscaped along property boundaries. The landscaped area shall meet the minimums in Table 17.20.090.11.a.1

Table 17.20.090.11.a.1 Buffering Requirements in Feet

Use of Property	Adjacent Use at Property Line				Adjacent Street		
	Single Family & Duplexes	Multi Family Dwellings	Commercial	Industrial	Local	Collector	Arterial
Multifamily Dwellings	5	5	5	5	5	5	5

2) Decorative walls and fences may be used in conjunction with plantings, but may not be used by themselves to comply with buffering requirements and must meet the standards of Section 17.20.050.

b. Landscaping with buffer strips may be counted towards meeting minimum percentage landscaping requirements.

12. SCREENING (HEDGES, FENCES, WALLS, BERMS). Screening is used where unsightly views or visual conflicts must be obscured or blocked and where privacy and security are desired. Fences and walls used for screening may be constructed of wood, concrete, stone, brick, and wrought iron, or other commonly used fencing/wall materials. Acoustically designed fences and walls are also used where noise pollution requires mitigation.

a. Height and Capacity. Where landscaping is used for required screening, it shall be at least 6 feet in height and be at least 80 percent opaque, as seen from a perpendicular line of sight, within 2 years following establishment of the primary use of the site.

b. Chain Link Fencing. A chain link fence with sight obscuring slats shall qualify for screening only if a landscape buffer is also provided.

c. Height Measurement. The height of fences, hedges, walls and berms shall be measured from the lowest adjoining finished grade, except where used to comply with screening requirements for parking, loading, storage, and similar areas. In these cases, height shall be measured from the finished grade of such improvements. Screening is prohibited within the sight distance triangle.

d. Berms. Earthen berms up to 6 in height may be used to comply with screening requirements. Slope of berms may not exceed 2:1 and both faces of the slope shall be planted with ground cover, shrubs and trees. Bark mulch or other non-living materials shall not be used as the ground cover for an earthen berm.

17.20.150 TREE PRESERVATION

1. NEW DEVELOPMENT AND REDEVELOPMENT. Except for tree farms, development sites are vigorously encouraged to preserve existing trees. Site plans for new development, grade and fill plans shall disclose the details of tree removal including numbers of trees, size and species of trees to be removed.

2. STREET TREES. Unless specifically authorized in writing by the Public Works Director, or designee, no person shall intentionally damage, cut (save pruning), carve, transplant, or remove any street tree; attach any rope or wire (unless required in order to stabilize the tree), nails, advertising posters, or other contrivance; allow any substance which is harmful to such trees to come in contact with them; or set fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any tree. Private property owners are responsible for the maintenance and replacement of street trees within adjacent public rights-of-way.

3. HERITAGE TREES. Unless specifically authorized in writing by the Public Works Director, or designee, no person shall intentionally damage, cut (save pruning), carve, transplant or remove any Heritage tree; attach any rope or wire (unless required in order to stabilize the tree), nails, advertising posters, or other contrivance; allow any substance which is harmful to such trees to come in contact with them; or set fire or permit any fire to burn when such fire or the heat thereof will injure any portion of any tree. A list of community Heritage trees will be kept and maintained by the City Administrator or designee. Recognition of Heritage Trees. Stayton citizens wishing to have trees recognized by the City as Heritage trees shall submit their request in writing to the City Council. The request shall explain why the subject tree is of exceptional value to the community. A majority vote of approval of the City Council will add the tree to the Heritage Tree list. No tree shall be designated a Heritage tree unless the property owner agrees. Property owners may request the removal of the Heritage Tree designation from trees on their property.

CHAPTER 17.24 LAND DIVISIONS

17.24.090 APPLICATION AND APPROVAL REQUIREMENTS FOR MASTER PLANNED DEVELOPMENTS

1. PURPOSE STATEMENT. The purpose of a Master Planned Development is to allow flexibility in design and creative site planning for residential, commercial or industrial development consistent with the following objectives: encourage creative and efficient uses of the land, provide and ensure preservation and enhancement of open space, ensure that the project design integrates all adopted Facility Master Plans (Transportation, Water, Sewer, Parks, Facilities, etc.), Standard Specifications, and provides an attractive living and working environment.

2. APPLICABILITY. The Master Planned Development designation may be applied in any zoning district. An applicant may elect to develop a project as a Master Planned Development in compliance with the requirements of this Section. However, the City shall require that the following types of development be processed using the provisions of this Section:

a. Where a land division and associated development is to occur on a parcel or site containing wetland(s) identified in the City of Stayton Local Wetlands and Riparian Inventory or by Department of State Lands as a significant wetland.
b. Where the land division is to occur on slopes of 15% slope or greater.
c. Where Comprehensive Plan policies require any development in the area to occur as a Master Planned Development.

3. APPLICATION AND INFORMATION REQUIREMENTS FOR CONCEPTUAL APPROVAL OF A MASTER PLANNED DEVELOPMENT. The application and submission requirements for a conceptual master planned development plan shall include:

a. Three copies of the conceptual plan at a scale of 1 inch equals not more than 50 feet including the general location of: streets, open space, residential development identified by type, and any commercial development including potential uses. In addition, 10 copies of the conceptual plan reduced to fit on an 11 X 17 page shall be submitted.

b. A statement of planning objectives to be achieved by the planned development through the particular approach proposed by the applicant. This statement should include a description of the character of the proposed development such as the number of types of residential units, the range of lot sizes, and the size and scale of any non-residential uses. The statement shall also include a discussion of the rationale behind the assumptions and choices made by the applicant.
c. A development schedule indicating the approximate dates when construction of the planned development and its various phases are expected to be initiated and completed.

d. A statement of the applicant's intentions with regard to the future selling or leasing of all or portions of the planned development.

e. Existing Conditions map. At a minimum, the existing conditions map shall show the applicant's entire property and the surrounding property to a distance of 300 feet to determine the location of the development in the City, and the relationship between the proposed development site and adjacent property and development. The property boundaries, dimensions and gross area shall be identified by:

1) The location and width of all streets drives, sidewalks, pathways, rights-of-way and easements on the site and adjoining the site.
2) Potential natural hazard areas, including any areas identified as subject to a 100-year flood, areas subject to high water table, and areas mapped by the City, County, or State as having a potential for geologic hazards.

3) Resource areas, including wetland areas, streams, and wildlife habitat identified by the City or any natural resource regulatory agencies requiring protection.
4) Site features including existing structures, pavement, large rock outcroppings, areas having unique views, and drainage ways, canals and ditches.
5) Locally or federally designated historic and cultural resources on the site and adjacent parcels or lots.
6) The location, size and species of isolated trees and other vegetation having a diameter of 6 inches or greater at 4 feet above grade. The map shall also show the general location of groves of trees larger than 3,000 square feet and indicate the location of any specimen trees to be preserved in the development process in accordance with Section 17.20.150.
7) Location and impact on any facilities in the adopted Water, Sewer, Transportation, Storm Drainage, and Parks Master Plans

4. PROFESSIONAL DESIGN TEAM. A professional design team shall be required for all Master Planned Developments. The applicant must certify, in writing, that the following professionals will be involved in the preparation of the concept and detailed plan.

a. A licensed architect or professional designer.
b. A registered professional engineer
c. A landscape architect or landscape designer.

5. CONCEPT PLAN APPROVAL CRITERIA. The decision authority shall review the concept plan and make findings and conclusions as to compliance with the following criteria. The decision authority may approve the concept plan with conditions of approval necessary to assure that the proposed development meets the following standards.

a. All relevant provisions of the Comprehensive Plan are met.
b. The proposed Master Planned Development will be reasonably compatible with the surrounding neighborhood.
c. There are special physical or geographic conditions or objectives of development which warrant a departure from the standard ordinance requirements.
d. If there are proposed uses that are not allowed in the underlying zone, those uses shall be compatible with the proposed development and the surrounding neighborhoods and viable in that location.

6. TIMELINE FOR FILING A DETAILED MASTER PLAN: Within one year after the date of approval of the concept plan, the applicant shall prepare and file with the City Planner a detailed development plan in conformance with subsections 6 and 7 of this Section.

a. Extension. If deemed necessary by the decision authority, a 6-month extension to the one year period may be made by written request of the applicant, submitted to the City Planner prior to the expiration of the 1-year deadline from approval provided:

1) The applicant can show intent of applying for detailed development plan review within the 6-month extension period.
2) There have been no changes to the applicable Comprehensive Plan policies and Code provisions on which the approval was based.

7. APPLICATION AND INFORMATION REQUIREMENTS FOR DETAILED APPROVAL OF A MASTER PLANNED DEVELOPMENT.

a. The application and submission requirements for a detailed master planned development plan shall be the same as in Sections 17.24.040.2, 040.3, and 040.4. In addition, the detailed plan shall include:
b. A narrative documenting compliance with the all applicable approval criteria contained in Section 17.24.100.
c. Special studies prepared by qualified professionals (licensed engineers, architects, planners, etc.) may be required by the City Planner, Public Works Director, City Engineer, Planning Commission or City Council to determine potential geologic, noise, environmental, natural resource, and other impacts and required mitigation.
d. Detailed site plan, including:

1) Lot configuration and identification of proposed uses
2) Residential density (by phase, if a phased project) expressed in dwelling units per acre of land for each type of residential development and for the entire development.
3) Circulation plan including all rights-of-way for streets, parking areas and pedestrian and bicycle facilities and their connections to existing or proposed off-site facilities.
4) Open space plan including:
    a) Location and dimensions of all areas to be conveyed, dedicated, or reserved as common open spaces, trails, public parks, recreational areas, and similar public, semi public areas and uses.
    b) Design of trails or open space areas including proposed landscaping.
    c) Design of any structures such as playgrounds, sports facilities, and park shelters.
5) Location of all potential fences including proposed materials and transparency.
6) Lighting plan meeting the requirements of Section 17.20.170
7) Landscaping plan meeting the requirements of Section 17.20.090

8) Grading concept (for hillside or sloping properties or where extensive grading is anticipated)
9) Architectural plan including:
a) Narrative description of proposed building styles for all residential, commercial or other structures.
b) Building footprints
c) Proposed Codes, Covenants & Restrictions for all residential lots that meet the applicable requirements of Sections 17.20.190, 17.20.200 and 17.24.100.
d) Typical elevations of each type of proposed structure sufficient to describe architectural styles drawn to scale and including building dimensions.
10) Sign plan that includes size, style, and location of any proposed signs.

8. DETAILED DEVELOPMENT PLAN APPROVAL CRITERIA. The decision authority shall approve the detailed development plan upon finding that the detailed development plan conforms to the concept plan and the conditions of its approval. Minor changes to the approved concept plan may be approved with the detailed plan when the approval body finds that the modification(s) are consistent with the criteria below.

a. The detailed development plan shall meet all applicable approval criteria of Sections 17.12.220, 17.24.050, 17.24.100, and Chapter 17.26.
b. If a phased development, each phase shall be:
1) Substantially and functionally self-contained and self-sustaining with regard to access, parking, utilities, open spaces, and similar physical features; capable of substantial occupancy, operation, and maintenance upon completion of construction and development.
2) Arranged to avoid conflicts between higher and lower density development.
3) Properly related to other services of the community as a whole and to those facilities and services yet to be provided.
4) Provided with such temporary or permanent transitional features, buffers, or protective areas as may be required to prevent damage or detriment to any completed phases and to adjoining properties not in the Master Planned Development.

17.24.100 MASTER PLANNED DEVELOPMENT DESIGN STANDARDS
Master Planned Developments shall be subject to the following design criteria and objectives.
1. REGULATIONS THAT MAY BE MODIFIED. The site development standards of this Title shall apply to a Master Planned Development except the following which may be modified if the design standards of subsection 2 are met.
a. Minimum lot area, width, frontage, setbacks, and height.
b. Minimum parking requirements.
c. Use of back lots in a subdivision.

d. Block length, street layout, street width.

2. DESIGN STANDARDS. In addition to the applicable design standards of Sections 17.20.190, 17.20.200, 17.20.220, and 17.20.230, the following design standards shall be met by Master Planned Developments.

a. Design Consistency: All structures, commercial, multi-family dwellings, single family dwellings, open space facilities shall have consistency in design through the use of similar design features such as but not limited to architectural details, lighting fixtures, and exterior finishes.

1) This criterion does not require the development to conform to one specific architectural "style" such as Arts & Crafts, or Colonial, but it shall require continuity of design for all structures in the development.

2) The design chosen by the developer shall be specified in the approval documents and the Codes, Covenants & Restrictions (CCRs) of the development and/or a specific set of standards approved as part of the detailed master plan. The design standards shall be enforced by the City throughout the development and permitting process and shall be enforceable by any homeowners owners association and individual lot owners through the CCRs.

b. Design for Detached Single Family Dwellings. The detailed design plan for any portion of the master planned development that includes detached single family dwellings shall meet the following standards:

1) A minimum of fifteen percent of each lot shall be landscaped.

2) Recreational vehicle storage in the front yard shall be prohibited.

3) Graveled/paved parking areas in the front yard outside of the driveway shall be prohibited.

4) At least four of the following design features shall be included on the sides of a building facing a street, public right of way or open space.

a) Dormers or gables

b) Cupolas
c) Bay or bow windows
d) Exterior shutters
e) Recessed entries
f) Covered porch entries or porticos
g) Front porch of at least 100 square feet
h) Covered or uncovered balconies
i) Pillars or posts

j) Eaves with a minimum 18 inch projection
k) Exterior brick work or masonry on a minimum of 15% of the façade, not including
the area of doors and windows.

5) All buildings sides facing a street, public right of way or open spaces hall have a minimum of 15% in windows or doors with glazing.

6) A break in wall plane of at least 16 inches every 30 feet.

7) Offsets or breaks in roof elevation of at least 2 feet every 30 feet

c. Fences.

1) There shall be no fences in the front yard of residential structures

2) If a lot adjoins an open space, trail or water way, any fence not located in the front yard or between two structures must be 50% open and no more than 4 feet in height. Alternately, a solid fence of not more than 6 feet in height may be allowed in rear yards for privacy if an additional 10 feet of public open space is added between any trails, waterways or common open space and the fence and that area is landscaped to buffer and conceal the fence.

d. Open Space: Master Planned Developments shall contain a minimum of 25% open space, except in the downtown zones, where the open space requirement shall be 10%. Open space includes all areas not in a street right-of-way that are publicly dedicated or under common ownership.

1) If the development is adjacent to the shorelines of the North Santiam River, Mill Creek, the Stayton Ditch, or the Salem Ditch a useable portion of the shoreline and reasonable public access to it shall be part of the open space and the open space requirement shall be reduced to 20%.

2) The decision authority may waive or reduce the requirement for open space when the master planned development is adjacent to and provides access to a public park or other off-site open spaces.

3) The open space area shall be shown on the detailed plan and recorded with the final plat.

4) The open space shall be conveyed in accordance with one of the following methods:

a) At the sole discretion of the City Council, open space may be dedicated to the City as publicly owned and maintained open space. Open space proposed for dedication to the City must be acceptable to the City Planner and Public Works Director with

regard to the size, shape, location, improvement, environmental condition, and budgetary and maintenance abilities.
b) By conveying title to a nonprofit corporation, lot-owners association or other legal entity, with a conservation easement deeded to the City. The terms of such lease or other instrument of conveyance must include provisions for maintenance suitable to the decision authority, with advice from the City Planner, Public Works Director, and City Attorney.

5) Whenever any privately owned open space areas, recreation facilities, community buildings or other facilities are provided, an association of owners shall be created under state law. Owners within the development shall automatically be members and shall be assessed levies for maintenance of the facilities.

6) Areas identified as open space shall preserve important natural features such as wetlands, hillsides or historical features and integrate them into the development design. If the development abuts wetlands, the wetlands and an area around their perimeter shall be included in the open space.

7) Pedestrian trails shall provide connectivity within the development and to the adjacent area and meet the requirements of the adopted Trails Master Plan.

a) Any pedestrian paths shall be public.

b) Paths with hard surface shall be a minimum of 10 feet in width centered within a 20-foot wide right of way or easement.

c) Paths with soft surface shall be a minimum of 6 feet in width generally centered within a 16-foot wide right of way or easement.

d) Paths shall have a minimum average illumination level of 1.0 foot candles.

i. If the path is a sidewalk or adjacent to an open space with lighting such as a park or playground, this standard may be met if the surrounding lighting can meet the standard.

ii. If there is no surrounding lighting, the path shall be provided with continuous pedestrian scale lighting that meets this standard.

8) A minimum of 10% of the open space shall include amenities such as but not limited to: plazas, playgrounds, picnic areas, park shelters, indoor or outdoor recreation facilities, and community buildings.

e. Streets.
The detailed development plan may provide for streets that are narrower than those typically required in a subdivision.

1) Street right of way width may be reduced to 50 feet if:

a) All lots and buildings that front on that portion of the street are accessed by alleys, with no driveway entrances onto that portion of the street which is reduced in width.

b) On-street parking is restricted to only one side of the street.

c) The street layout pattern preserves connectivity and intersection design that meets the standards of Title 12 and intent of the Transportation Master Plan.

e) If there are one-way loops provided to serve residential developments.

2) If there are long blocks in the design, additional pedestrian connectivity will be required

3) Approval of street designs shall be required from the Public Works Director after consultation with the Fire Chief.

f. Parking.
Common parking areas shall meet the landscaping standards of Section 17.20.060. The totalnumber of required parking spaces may be reduced by up to 15% if:

1) The parking area has pedestrian facilities that are connected to city's pedestrian trail system.

2) The required number of bicycle parking spaces is increased by 25% and provided with a covered parking area.

3) Additional parking spaces can be provided in parking areas within 500 feet with pedestrian connectivity or on-street parking is available.

4) The area meets the joint use standards of Section 17.20.060.6.

g. Density.

1) When calculating the density for a Master Planned Development, the density may be averaged across the development to meet the density criteria, allowing a clustering of development and preservation of open space. If a development is located in more than one zone, the maximum number of dwelling units shall be calculated by determining the number of units permitted in those portions of the development in each zone. Dwelling units may be provided in any mix of attached or detached single family, duplex, triplex, or multifamily dwellings.

2) Residential density bonuses may be granted when one or more of the following criteria are met, up to a 50% increase in density.

a) Where the percentage of open space increases. The bonus shall permit a 5% increase in the maximum dwelling density for each percentage point increase of open space above the minimum required in Section 17.24.100.3.d.

b) When the decision authority determines that the architectural standards proposed for the development exceed the applicable design standards of Sections 17.20.190, 17.20.200 and subsection 2.b through quality, distinctive and innovative design, and use of architectural amenities, such as locating garages behind the primary building line of the house, side loaded garages, or alley-access garages, a density bonus of up to 20% may be granted.

c) Up to a 15% density increase may be granted by the decision authority if the development exceeds the standards of subsection 2.d.8.

d) Up to a 15% density increase may be granted by the decision authority if open space amenities such as those identified in subsection 2.d.8 are open to the public.

Pre-application questions:

Land Use Requirements

1. It is anticipated the following application is required, please confirm this is accurate: annexation application. Yes, an application for annexation is required.

2. Please confirm the property will be annexed into the city exempt from voter approval and will be assigned residential zoning in accordance with Stayton's Comprehensive Plan. See memo regarding exemption from voter approval due to ORS.

a. Please confirm that planning advises that it would feasible for a portion of the property to be annexed would be designated in either of the 3 below residential designations, according to the applicant's site plan proposal, which will include 2 of the 3 below designations:

i. Low Density Residential

ii. Medium Density Residential
iii. High Density Residential

Yes, the Comprehensive Plan states the area will be residential without noting the particular density for the parcel. There is a High Density Residential zoned parcel adjacent to the property.

3. Please confirm the setbacks for each property line that will be applicable for future development following a successful annexation. See memorandum.

4. Please provide your definition of "Townhome/Townhouse," and confirm the maximum amount of attached townhome units within your respective definition (before a break between units). For example, "8 attached townhome dwellings allowed, within a minimum setback of 5" between the next set of adjacent attached townhomes." Townhomes are not defined as such in 17.04.100 DEFINITIONS. There is a description of **DWELLING, SINGLE FAMILY ATTACHED: A building containing two or more dwelling units, with each dwelling unit on a separate lot, but sharing common walls.** This is what would be considered a townhome. A Townhouse is defined as: TOWNHOUSES: A multiple family dwelling of at least 2 stories in which each dwelling unit has space on the ground floor.

In 17.20.190.2.c., there is a figure: Example of Townhomes with Shared Driveways.

5. Please confirm there are no previous land use actions on this property which would impact or disallow the proposal.

Not that I know of.

6. Please confirm application corresponding fees for land use approval.

Major Annexation $4,500 deposit. Costs reflex actual time of staff, review, copies, and mailings.

7. Please discuss the timeline for this type of application. The applicant understands both the 30 and 120-day rules and that annexations are not subject to statutory deadlines, please provide approximate project timelines based on staff review times, hearing dates, and individual workloads.

See memorandum.

8. Please confirm if the applicant should anticipate any dedications to the city including property for parks, future streets, stormwater facilities, etc.

See engineering memorandum.

9. Please confirm / provide an update on the adjacent ODOT Street Round-a-Bout, including:

a. Construction Timelines

b. Street Cross Section Improvements/Details/Civil Plans

c. Any means by which the ODOT Round-a-Bout is anticipated to affect, or change the existing conditions of the subject site or property frontage along Shaff Rd.

See engineering memorandum.

10. Please provide a list of information which is required to be submitted with the land use application(s) for the proposed development, including a detailed list of plan requirements to be included on the Conceptual Site Plan.

a. Identify if a Formal Wetland Delineation by DSL is required at the time of the Annexation Decision. See memorandum.

b. Identify if a preliminary or full infiltration study, GSI report, or proposed GSI/Detention Facilities are required at or prior to the time of the Annexation Decision. See engineering memorandum.

11. Please confirm what supplemental studies or reports are required to be submitted with this application. See Annexation and Master Plan Development Detailed Form.

Public Works Requirements

12. Please confirm the classification designation of streets along the subject property frontage.
13. Please provide information on ROW dedication requirements or any realignment needs which may impact the proposed annexation territory.
14. Please provide a plan and profile view of the required street improvement if available or applicable.
15. Please confirm the location of nearby utility lines, including depths and sizes. Please provide any available as-builts for such utilities.
16. Please discuss if early site grading is permitted and if an application process is required.
17. Please confirm if annexation triggers a TIA (Traffic Impact Analysis). Or if a TIA will only be a requirement of future development.
18. Please discuss what off-site improvements might be required by this annexation, if any.
19. Please provide an SDC estimation for the proposed development.
20. Please confirm the setbacks from Salem Ditch, and how that setback is to be determined (I.E. top of bank, and what data source will quantify the Top of Bank).

a. Please verify any restoration or improvements anticipated to be conditioned along Salem Ditch, and identify what party has jurisdiction over the Salem Ditch, with contact information provided.

Fire Department Requirements

21. Please confirm that sufficient water system capacity and pressure exists for domestic and fire services.
22. Have any fire flow tests been completed within the vicinity of the project site? If so, please provide copies of such tests.

Environmental Hazards

23. Please confirm there are no known environmental hazards on the property which would require DEQ notification.
24. Please confirm if there are any landslide hazards known to the city.
25. Please confirm if there are any known wetlands, riparian areas, floodplains, etc.

ASHLEY ENGINEERING DESIGN

MEMORANDUM

Proposed Annexation and Development along Shaff Road – Pre-Application Meeting Discussion Notes (Preliminary)

City of Stayton, OR

TO: Pre-Application Meeting Discussion Notes

FROM: John Ashley, P.E./*City Engineer*

COPIES: Lance Ludwick, P.E./*Public Works Director*
Michael Schmidt/*Public Works Engineering Technician II*

PROJECT: **Proposed Annexation and Development along Shaff Road – 091W04C-TL001901**

DATE: *Pre-Application Meeting – August 8, 2024 @ 2:00pm.*
(PRELIMINARY DISCUSSION NOTES)

Background

I received a copy of the pre-application meeting notice and attachments from the City of Stayton. The pre-application meeting will be regarding possible annexation of approximately 17.01 acres and possible single family and multifamily development located along Shaff Road. The existing parcel is currently vacant land.

The following are initial thoughts and comments based on a brief cursory review of the preliminary map/sketch included with the request for a pre-application meeting, and concentrates on the public works aspects and implications of a proposed application. These preliminary discussion notes are based on a review of the applicable public works portions of the City of Stayton Municipal Code (SMC) and Public Works Design Standards (PWDS), and does not include a review of any other agency's requirements, or any building or other specialty code requirements covered under such building, plumbing, mechanical, electrical, fire, etc., or any other applicable codes and regulations that may be required for the project.

Should the applicant decide to pursue continuation of this development, the Developer will be required to obtain any and all required reviews, approvals, and permits required by the Planning Conditions of Approval, SMC, PWDS, Marion County, DEQ, OHA-DWP, Fire Code Official, Building Official, and/or any other agencies having jurisdiction over the work. As such, the Developer shall coordinate with Public Works, Fire Code Official, Building Official, and other appropriate agencies as necessary. The City of Stayton Municipal Code and Public Works Standards are available online at http://www.staytonoregon.gov, under the document center and the public works department menus.

ASHLEY ENGINEERING DESIGN

MEMORANDUM

The following preliminary discussion notes are public works initial thoughts and comments based on a brief cursory review of the preliminary map/sketch included with the request for a pre-application meeting, and are intended to be for discussion purposes only. Any SMC, PWS, SWMM, and other Site Development Permit requirements that may be applicable to the proposed development, but not specifically referenced in these preliminary discussion notes, does not in any way relieve the Developer from their responsibility to comply with the requirements of the SMC, PWS, SWMM, and applicable permits, laws, and regulations. Should the applicant decide to pursue continuation of this development, these preliminary discussion notes may be further incorporated into public works recommended conditions of approval.

Project Overview

Project Site and Access

The pre-application meeting request and City GIS mapping show the location of the proposed development to be within Township 9 South, Range 1 West, Section 04C, Tax Lot 01901. Proposed vehicular access to the parcel is from new commercial driveway approaches shown along Shaff Road SE. From the tax assessor's map, Tax Lot 01901 is shown to be approximately 17.01 acres in size.

Existing Site Topography and Utilities

Existing site topography and utilities were not provided with the pre-application meeting request. City GIS mapping indicates that there are no existing public utilities readily available along the frontage to serve the site. As such, offsite public improvements, including those identified in the City's master plans, will be necessary. Prior to annexation and future development of the site, further review and analysis of the site and of existing City public utilities by the Design Engineer(s) will be required, and supporting documentation shall be submitted to the City in accordance with SMC 17.12.210.4.a., which adequately demonstrates that the site is or is capable of being serviced by adequate City public services, including such services as may be provided subject to the terms of a contract annexation agreement between the Applicant and the City.

Construction Phasing

The pre-application meeting request did not indicate if the proposed development will be constructed in multiple construction phases. In accordance with PWDS 103.01.B, if a development that has been approved by the City to be constructed in multiple phases, the construction plans for each phase of the development shall be substantially and functionally self-contained and self-sustaining with regard to access, utilities, open spaces, and similar physical features, and shall be capable of substantial occupancy, operation, and maintenance should the subsequent phases of the development not be developed. City approval of the

construction plans and the time by which construction must begin of one construction phase, shall be independent of City approval for all other construction phases of the development.

Horizontal and Vertical Datum

The pre-application meeting request did not indicate the horizontal and vertical datum being used for the development. In accordance with PWDS 102.03, all elevations on design plans and record drawings shall be based on the NAVD88 Datum, and the horizontal datum shall be based on the Stayton local datum or Oregon State Plain Coordinate System (NAD83).

Findings

Transportation

- **TIA/TAL** – A Transportation Impact Analysis (TIA) will be required for this proposed development in accordance with PWDS 302.02 and SMC 17.26.050. Shaff Road SE is under Marion County jurisdiction, so the Developer will need to coordinate with Marion County Public Works (MCPW) to determine their TIA requirements.
- **Right of Way (R/W)** – Right-of-ways shall comply with the SMC and PWDS 312, Geometric Design Requirements by Street Functional Classification. Right-of-way dedication at intersections shall be sufficient to at minimum provide 1' clearance behind sidewalks and curb ramps in accordance with PWDS 302.05.C. The standard 10' wide public utility easement shall be provided along the frontage in accordance with PWDS 102.08, unless otherwise approved by the Public Works Director. Street connectivity and formation of blocks shall comply with PWDS 303.07.E and SMC 17.26.020 requirements.
    - ***Shaff Road SE*** – Shaff Road SE is designated in Figure 8 of the City's TSP as a Collector Street under Marion County jurisdiction. PWDS 312 requires a minimum of 80' R/W for Collector Streets designated yellow in the City's TSP. From the assessor's map, it appears that additional R/W will be needed along the frontage in order to meet the minimum half-width R/W requirement in the PWDS. Since the frontage is under Marion County jurisdiction, any additional R/W requirements will be as determined by them.
    - ***Intersection of Golf Club Road/Shaff Road/Wilco Road*** – The City's TSP recommends a roundabout be provided at this location and it is currently shown in the City's TSP as the highest priority motor vehicle project. The roundabout project is currently under design. However, since a final engineering design for the roundabout has not yet been completed, only preliminary R/W and easement needs have been established. A 44' wide easement area outside the 40' half-width R/W line is being proposed along the frontage of Shaff Road SE as part of the roundabout project for the Pacific Power transmission lines and for a large storm drainage conveyance swale. In addition, an easement for a large stormwater facility located

at the southeasterly corner of the parcel along Shaff Road SE is also being proposed as part of the roundabout project. As such, this may have an impact on the proposed site layout and proposed location of structures. Further review and coordination with the City's Traffic Engineers and with Pacific Power by the Design Engineer is recommended early in the development process to identify these areas.

- ***Interior Subdivision Streets*** – All interior subdivision streets shall comply with the minimum 60' R/W for Local Streets as required by the Public Works Standards. The standard 10' wide public utility easement shall be provided along the frontage in accordance with PWDS 102.08, unless otherwise approved by the Public Works Director.

- **Street Improvements** – Street sections shall comply with PWDS 312, Geometric Design Requirements by Street Functional Classification. In accordance with PWDS 302.01.D, it shall be the responsibility of the Developer to preserve and protect the current pavement condition index rating and the structural integrity of the existing roadways from construction traffic to the satisfaction of the Public Works Director throughout all phases of development. Failure to preserve and protect the roadways may result in the Owner/Developer being responsible for replacing and reconstructing the damaged roadways at the Owner/Developer's expense. It should also be noted that final asphalt concrete pavement and sidewalk sawcut lines for all street improvements will be established by the City Inspector with the Design Engineer and Contractor during construction in accordance with the PWDS.
  - ***Shaff Road SE*** – Shaff Road SE is currently an unimproved turnpike style street. The City's PWDS indicates that a 46' wide street section with 6' wide property line sidewalks is required for the Collector Street. All necessary street improvements shall be designed in accordance with City and MCPW standards including necessary curb and gutters, asphalt concrete pavement, storm drainage, sidewalks, street lights, and pavement tapers, unless otherwise approved by the Public Works Director. Since the frontage is under Marion County jurisdiction, any additional street improvements will be as determined by them. Unless approved otherwise by the Public Works Director at the time of development, pavement core test results will need to be provided to the City showing that the existing half-street pavement section along the frontage complies with PWDS requirements. If the existing half-street asphalt pavement section is found to be sub-standard along the frontage, the existing pavement section will need to be removed and replaced per PWDS 303.02 and PWDS 305.04. If the existing pavement base is determined to be structurally sound, an overlay of the pavement may be approved per PWDS 305.04.D.
  - ***Interior Subdivision Streets*** – All interior subdivision streets shall comply with the 34' wide typical Local Street section and other typical Local Street design standards as required by the Public Works Standards. In accordance with PWDS 303.04.A, when private streets are allowed in development, such as for condominiums and apartments, the private streets shall be built to local residential street standards and

meet all Stayton Municipal Code requirements. Private streets shall comply with the Fire Code for fire apparatus access requirements.

- **Parking Lot** –
  - Parking lot design shall minimize congestion and take into account both vehicle traffic and pedestrian traffic and shall comply with standard engineering practice, the Stayton Municipal Code, and Public Works Standards.
  - All driveway approaches and traffic circulation patterns shall be designed to accommodate emergency vehicles as necessary.
  - The proper number and type of ADA parking stalls shall be provided.
  - Parking lot lighting shall be in accordance with SMC 17.20.170.4.c. The type, spacing, and location of parking lot lighting shall be as approved by the City.
  - Finish grades shall be such that stormwater runoff will be directed towards an appropriate stormwater system. New parking lot catch basins shall be designed to support H-20 loading and at minimum shall be equipped with sediment and stormwater pollution control traps.
- **Sight Distance and Clearance Areas** – Adequate sight distance and clearance areas shall be provided in accordance with PWDS 303.06. Landscaping shall be located and designed to prevent obstruction of the sight distances and clear vision areas.
- **Driveway Spacing** – PWDS 303.11.D requires the driveway spacing to be 150' on Collector Streets from another driveway and/or from a nearby street intersection. As such, the driveway access spacing and distances will need to be reviewed by the Developer's Traffic Engineer as part of the TIA.
- **Street Lighting** – The location of existing street lights shall be reviewed and any additional street lighting shall be provided as necessary to comply with PWDS 308, unless otherwise approved by City and Marion County Public Works. Coordination with, and approval by, Pacific Power of any necessary street lighting will be required.
- **Mailbox Clusters** – The Developer shall coordinate the location of any clustered mailboxes with the USPS Postmaster, and the location of any clustered mailboxes shall comply with Public Works Standards and meet the requirements of the Building Official. Coordination with, and approval by the USPS Postmaster of any necessary mailbox clusters will be required.
- **Streetscape Appurtenances** – All public and private franchise utility items that currently exist or will be placed in the right-of-way that will impact the sidewalk and/or the landscape strip shall be coordinated and shown on the plans as necessary. Franchise utility poles and other utility structures shall be coordinated with rightful utility owners and located in accordance with PWDS requirements. Street trees shall be provided in accordance with PWDS 309.05; however, they shall be located and designed to prevent obstruction of the sight distances and clear vision areas.
- **Transportation System Plan** – Figures 3 and 5 of the City's TSP identify some bike and pedestrian improvements that are needed along the frontage of the proposed development. Figure 10 of the City's TSP indicates that a roundabout is needed at the

intersection of Golf Club Road/Shaff Road/Wilco Road (*Project M1: Golf Club Road SE/Shaff Road SE Roundabout*). Under the project description for *Project M1: Golf Club Road SE/Shaff Road SE Roundabout* shown on page 52 of the City's TSP, it states that *"The intersection of Golf Club Road SE and Shaff Road is currently all-way stop controlled. As shown in Table 10, it currently operates at an acceptable level of service. However, based on existing vehicular volumes, this intersection meets signal warrants as prescribed in the Manual for Uniform Traffic Control Devices. Additionally, during the public engagement process, this intersection was noted to need intersection control upgrade to improve traffic flow."* It should be noted that since development of the City's TSP back in 2019, there has been some recent development activity within and around this area. As such, coordination with the City and Marion County, and further review and analysis by the Developer's Traffic Engineer as part of the TIA and by the Design Engineer(s) of this intersection in accordance with the SMC, PWDS, and MCPW will be required. Depending on the findings and recommendations presented in the TIA, some improvements may need to be provided at this intersection in order to comply with SMC, PWDS, and MCPW requirements.

- **Parks Master Plan** – The development shall comply with the Parks Master Plan, including the appropriate open space, trails, and landscaping.
- **Engineered Plans** – The Developer shall submit to the City and to Marion County Public Works (as applicable) for review and approval engineered site and street improvement plans conforming to Public Works Standards.

Water

- **Public Water System** – A public water system is not readily available to serve this development, and a utility layout showing the necessary public water system needed to serve the site was not provided with the pre-application meeting request. Further analysis by the Design Engineer will be required to verify public utilities are able to adequately serve the site, and supporting documentation shall be provided to the City for review prior to annexation and future development of the site. Offsite water system improvements in accordance with the City's Water Master Plan and PWDS will be necessary to be designed and constructed per PWDS and OHA-DWS requirements.
- **Domestic Service and Backflow Prevention** – New water services, water meters, and backflow prevention devices (as appropriate) will be required to be installed in accordance with the PWDS as part of future development. All backflow prevention details will need to be reviewed and approved by the City, Building Official, and the Fire Code Official, as applicable. Only Oregon Health Authority – Drinking Water Services (OHA-DWS) approved backflow devices shall be used. All private utilities will need to be adequately sized and designed by the Design Engineer in accordance with the PWDS and applicable building/specialty codes, and reviewed and approved by the Building Official.
- **Water Quality Sampling Station(s)** – Water quality sampling station(s) will be required for the development in accordance with PWDS 410.01.A.

- **Fire Protection** – Generally, fire hydrant(s) are required to be installed within 250' of any new structure, unless otherwise approved by the Fire Code Official. As such, a fire water service connection and fire vault assembly equipped with a detector type meter assembly will be required to serve any approved private fire water lines and private fire hydrants. The Developer shall review and coordinate with the Fire Code Official to ensure compliance with applicable fire codes and regulations. Any necessary water system improvements shall comply with the Public Works Standards and be shown on the engineered plans. The Developer shall provide the necessary fire access, protection devices, and system modifications and meet all other fire protection requirements of the Fire Code Official.
- **Secondary Fire Access** – The Developer shall comply with the SMC, PWDS, and Fire Code Official regarding secondary fire access requirements necessary for the development.
- **Fire Code Official Approval** – Prior to Site Development Permit final plan approval, the Developer shall provide written documentation that the Fire Code Official has reviewed and approved all required fire access, protection devices, and system modifications, unless otherwise approved to be deferred in writing by the Fire Code Official.
- **Water Master Plan** – Figure 4 of the City's Water Master Plan shows that a 10" CLDI waterline is needed along the frontage of Shaff Road SE and a 12" CLDI north along the alignment of Salem Ditch. As such, it is recommended that the City work with the Developer for the installation of the needed waterlines and any necessary fire hydrants. The City standard minimum pipe size for a public water main is 8" CLDI. As such, the additional costs for the upsizing of the public water system will be eligible for reimbursement in accordance with SMC 13.12, as further defined in a Development Agreement.
- **Engineered Plans** – The Developer shall submit to the City for review and approval an engineered water system plan conforming to the SMC, Public Works Standards, and meeting the requirements of the Building Official and Fire Code Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public water main and/or public fire hydrant is extended outside the public right-of-way.

Sanitary Sewer

- **Public Sanitary Sewer System** – A public sanitary sewer system is not readily available to serve this development, and a utility layout showing the necessary public sanitary sewer system needed to serve the site was not provided with the pre-application meeting request. Further analysis by the Design Engineer will be required to verify public utilities are able to adequately serve the site, and supporting documentation shall be provided to the City for review prior to annexation and future development of the site. A sanitary sewer study and supporting documentation will be required in accordance with PWDS 503.01. There is an existing sanitary sewer system located at the intersection of Shaff Road and Wilco Road. Offsite sanitary sewer improvements will be necessary to be designed and constructed per PWDS and DEQ requirements to serve the

development. The City standard minimum pipe size for a public sanitary sewer main is 8" and upsizing may be required to serve future development along Shaff Road SE. If upsizing is required, then the additional costs for the upsizing of the public sanitary sewer system will be eligible for reimbursement in accordance with SMC 13.12, as further defined in a Development Agreement. All sanitary sewer system improvements shall comply with PWDS and DEQ requirements.

- **DEQ Sanitary Sewer Approval** – Prior to final plan approval, the Developer will be required to provide written documentation showing that DEQ has reviewed and approved all public sanitary sewer system improvement plans.
- **Private Sanitary Sewer Systems** – All private utilities will need to be adequately sized and designed by the Design Engineer in accordance with the PWDS and applicable building/specialty codes, and reviewed and approved by the Building Official. In accordance with PWDS 506.01.B, multi-family dwellings or commercial buildings shall have 6" sanitary sewer service laterals.
    - A sanitary sewer monitoring manhole will be required per the PWDS at the property line to monitor the discharge from the development given the shallow groundwater depths and the amount of sanitary sewer service piping that will be needed to serve the development. In addition, it is recommended that the private sanitary sewer system also be pressure tested in accordance with both PWDS and the building/specialty code requirements.
    - If grease will be introduced into the sanitary sewer system in quantities that can affect sanitary sewer flow or hinder sanitary sewer treatment, then a grease interceptor may be required in accordance with PWDS 505.04.A.
- **Wastewater Master Plan** – Figure 15 of the City's Wastewater Master Plan does not indicate the necessary sanitary sewer system improvements needed to serve development of this area. As such, further analysis by the Design Engineer for the necessary sanitary sewer system improvements will be required prior to annexation and future development of this area.
- **Engineered Plans** – The Developer shall submit to the City and Building Official for review and approval an engineered sanitary sewer plan conforming to the SMC, Public Works Standards, and meeting the requirements of the Building Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public sanitary sewer main is extended outside the public right-of-way.

Stormwater

- **Existing Natural Drainage Features** – The Developer shall comply with applicable portions of SMC 17.20.180 for wetland protection areas, applicability, and application submittal requirements, SMC 17.16.100 if located in areas of special flood hazard, and shall provide the necessary setbacks/resource overlays required by the SMC and PWDS for the existing natural drainage features located onsite. Existing natural drainage

features shall be protected at all times and shall comply with SMC, PWDS, and jurisdictional agency requirements.

- **Public Storm Drainage System** – A public storm drainage system is not readily available to serve this development, and a utility layout showing the necessary public storm drainage system needed to serve the site was not provided with the pre-application meeting request. Further analysis by the Design Engineer will be required to verify public utilities are able to adequately serve the site, and supporting documentation shall be provided to the City for review prior to annexation and future development of the site. As such, offsite stormwater improvements may be necessary to be designed and constructed per PWDS requirements and conveyed to an acceptable point of discharge.
- **Private Storm Drainage System** – Private storm drainage systems for the development shall be designed in accordance with the PWDS and design calculations shall be submitted for review. All private utilities will need to be adequately sized and designed by the Design Engineer in accordance with the PWDS and applicable building/specialty codes, and reviewed and approved by the Building Official.
- **Site Excavation and Grading** – The design, excavation, and grading of the site shall comply with SMC 15.10. A Geotechnical Engineering Report for the site excavation and grading work shall be provided in accordance with the SMC 15.10.090, and recommendations included in the Geotechnical Engineering Report shall be incorporated in the grading plans or specifications per SMC 15.10.090.4.c. Excavation and grading setbacks shall comply with SMC 15.10.140. Inspection during construction of the excavation and grading work shall be in accordance with 15.10.170. Upon completion, final asbuilts, reports, and written certification shall be provided to the City in accordance with 15.10.180.
- **Stormwater Analysis and Report** – A stormwater analysis, drainage report and supporting documentation will be required in accordance with PWDS 603.01. Existing site topography, off-site contributing areas, and the high seasonal groundwater elevation will need to be considered and included in the stormwater design. All developed open water surface areas will need to be included in the stormwater calculations and the required stormwater facility setback distances shall be included in the design and shown on the plans. The City is known to have high seasonal groundwater issues so the potential impacts to the stormwater drainage system and stormwater facilities will need to be considered in the design.
- **Stormwater Easement/Tract** –Stormwater facilities serving more than one tax lot or designed to function as multiuse/recreational facilities must be located in a separate tract (e.g., Tract A), defined easement, or designated open space. All necessary easements and tracts shall comply with the SMC, PWDS, and SWMM requirements.
- **Stormwater Quality and Quantity** – In accordance with PWDS 602.01.N, stormwater quality and quantity provisions shall be included as part of the design considerations. The City's thresholds for proposals that are subject to the stormwater quality and quantity requirements are as indicated in PWDS 602.01.N. Unless otherwise specifically

approved by the City Engineer, proposals meeting these thresholds must comply with the stormwater quality (pollution reduction) requirements specified in PWDS 607, the stormwater quantity (flow control) requirements specified in PWDS 608, and the stormwater infiltration requirements specified in PWDS 609. All projects shall comply with the City's stormwater operations and maintenance (O&M) plan and agreement requirements and source control requirements.

- In accordance with PWDS 602.01.N, stormwater shall be surface infiltrated onsite to the maximum extent feasible, before discharging any flows offsite. The City is known to have high seasonal groundwater issues, so if infiltration is proposed, the site's actual infiltration rates (to be determined during wet-weather months) and the seasonal high groundwater elevation for this area will need to be determined and the potential impacts to the stormwater drainage system and stormwater facilities (including the vertical separation requirements) will need to be considered in the design. However, given the seasonal high groundwater issues known in this area, infiltration will most likely not be appropriate. Depending on the types of stormwater facilities being proposed for the development, groundwater monitoring wells may be necessary in order to properly monitor and determine the site's high seasonal groundwater elevations. As such, it is strongly suggested that this be discussed with a Geotechnical Engineer early in the design process. Per PWDS Table 602.05.C, a 5' minimum vertical separation from the high seasonal groundwater shall be provided, unless otherwise approved. See PWDS 609 for stormwater infiltration requirements.
- Stormwater quality facilities meeting the requirements of PWDS 607 will be required. Stormwater facilities will need to properly function during periods of high groundwater and the water quality of the groundwater needs to be adequately protected. Best management practices shall be used to minimize any degradation of stormwater quality caused by the development. A stormwater quality manhole shall be provided upstream of vegetated stormwater facilities per PWDS 607.03, unless otherwise approved.
- Stormwater quantity facilities meeting the requirements of PWDS 608 will be required. If retention is proposed, then the stormwater retention facility shall be designed to retain a 100-year storm event per PWDS 602.05.C. If detention is proposed, stormwater quantity facilities will be required to detain post-developed peak runoff rates from the 2-year, 5-year, 10-year, 50-year, and 100-year 24-hour storm events to the respective pre-developed peak runoff rates, and the post-developed peak runoff rate for the 25-year storm event will be required to be detained to the 10-year pre-developed peak runoff rate per PWDS 602.05.C. A downstream capacity analysis may also be required per PWDS 603.01.B.
- Provisions for an adequate and approved emergency overflow system are required to convey the post-developed 100-year storm event flows to an acceptable point of discharge, and an emergency escape route shall be provided in accordance with

SWMM requirements. Per SWMM 2.4.2.3, emergency escape routes from stormwater facilities are not the same as a piped overflow and cannot be directly piped to public storm sewer systems. Recommended emergency escape routes include safe overland flow routes to parking lots, streets, landscaped areas, or drainage ways.

- Appropriate setbacks from the edge of the stormwater facility's maximum water surface to the building foundations and property lines shall be provided, unless an easement with adjacent property owners is provided in accordance with the SWMM requirements.
- The amount of impervious surface area that has been included in the stormwater calculations shall be shown in the stormwater drainage report narrative and noted on the stormwater plans, including what the impervious surface area calculation includes (e.g., pavements, sidewalks, driveways, driveway approaches, roofs, etc.). The maximum amount of impervious surface area shall be shown for the buildings to be constructed that has been accounted for in the stormwater facility design. The stormwater facility open water surface area will also need to be included in the calculations as an impervious open water surface area.
- Source control measures shall be implemented for the development in accordance with PWDS 602.01.N. The SWMM Source Control Manual defines the source control characteristics and uses and identifies structural source controls that must be implemented to manage the pollutants at their source.

- **Acceptable Point of Discharge** – It shall be the responsibility of the Developer to provide a suitable discharge location for stormwater from the development which will not harm or inconvenience any adjacent or downstream properties and that conforms to Public Works Standards and jurisdictional agency's requirements. An acceptable point of discharge is to be designed by the Design Engineer and approved by the City applicable jurisdictional agencies. It is recommended that the Developer work with the Santiam Water Control District (SWCD) early in the design process if stormwater is planned to be discharged to the Salem Ditch. In accordance with PWDS 605.08.A, any new outfall into Salem Ditch will require written approval from the SWCD prior to final plan approval. Offsite stormwater improvements may also be necessary to be designed and constructed per PWDS requirements in order to be conveyed to an acceptable point of discharge.
- **Stormwater Operation and Maintenance Plan and Agreement** – Operation and maintenance of any public stormwater facilities will be the obligation of the Developer within the 2-yr Stormwater Facility Warranty Bond period. Operation and maintenance of any private stormwater facilities will be the obligation of the property owner. As such, a stormwater operation and maintenance plan and agreement (as approved by the City) will be required to ensure future operation and maintenance of private stormwater facilities. See the Public Works Standard forms.

- **Stormwater Master Plan** – Figure 11 of the City's Stormwater Master Plan shows that a 48" storm drainage system is needed along the frontage within Shaff Road SE, and a future onsite detention system is needed along Shaff Road SE west of Golf Club Road. The Developer will need to review and comply with the most current recommendations of the City's Stormwater Master Plan at the time of development, unless otherwise approved by the Public Works Director. However, it is assumed that this large diameter master planned stormwater improvement would not be applicable to the proposed development, unless otherwise directed by the Public Works Director.
- **Engineered Plans** – The Developer shall submit to the City for review and approval engineered stormwater conveyance, quality, and quantity plans, stormwater analysis and report, and an O&M plan and agreement conforming to Public Works Standards, and meeting the requirements of the Building Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public storm drainage main is extended outside the public right-of-way. The Developer shall provide written documentation to the City that Marion County Public Works has reviewed and approved any proposed discharge to the existing County road system.

Erosion and Sediment Control

- **Erosion and Sediment Control Plan** – The Developer shall submit to the City for review and approval an erosion and sediment control plan conforming to Public Works Standards. Erosion and sediment control measures shall be in accordance with PWDS Division 7. A 1200-C permit will need to be obtained by the applicant from DEQ for any site disturbance of one or more acres through clearing, grading, excavating, or stockpiling of fill material.

Franchise Utilities

- **Franchise Utility Improvements** – All franchise utility improvements, including but not limited to, telephone, electrical power, gas and cable TV shall meet the current standards of the appropriate agency as well as Public Works Standards. All franchise utilities shall be located with the 10' PUE and utility plans shall be submitted to the City for review and approval.

Exhibit G – Engineering Report

WESTECH ENGINEERING, INC.
CONSULTING ENGINEERS & PLANNERS

August 11, 2025

Jennifer Siciliano
City of Stayton Planning Department
362 N. Third Avenue
Stayton, OR 97383

RE: Proposed Annexation and Development along Shaff Road located at 11641 Shaff Rd, Aumsville OR Tax lot # 091W04C1901

We respectfully submit the following information regarding the proposed annexation and development along Shaff Road with high density residential zoning. This document outlines the current conditions and planned improvements required for annexation of the site related to transportation and public utilities in compliance with the City of Stayton's standards, requirements, and review criteria. This criteria is outlined in 17.12.210.4.b of the Land Use and Development Code as follows; "*The site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City*." For basis of this report, we are going to assume 24 units per acre.

Site Description

The proposed annexation area is located at 11641 Shaff Road, Stayton OR, 97325, tax lot 091W04C001901, shown in Figure 1 below, and it currently consists of relatively flat farmland without distinct topographic features. The site is bounded by Shaff Road to the south, Salem Ditch to the west, and private properties to the north and east. At this time, no public utilities serve the area; utility connections and extensions can be addressed as part of the development process.

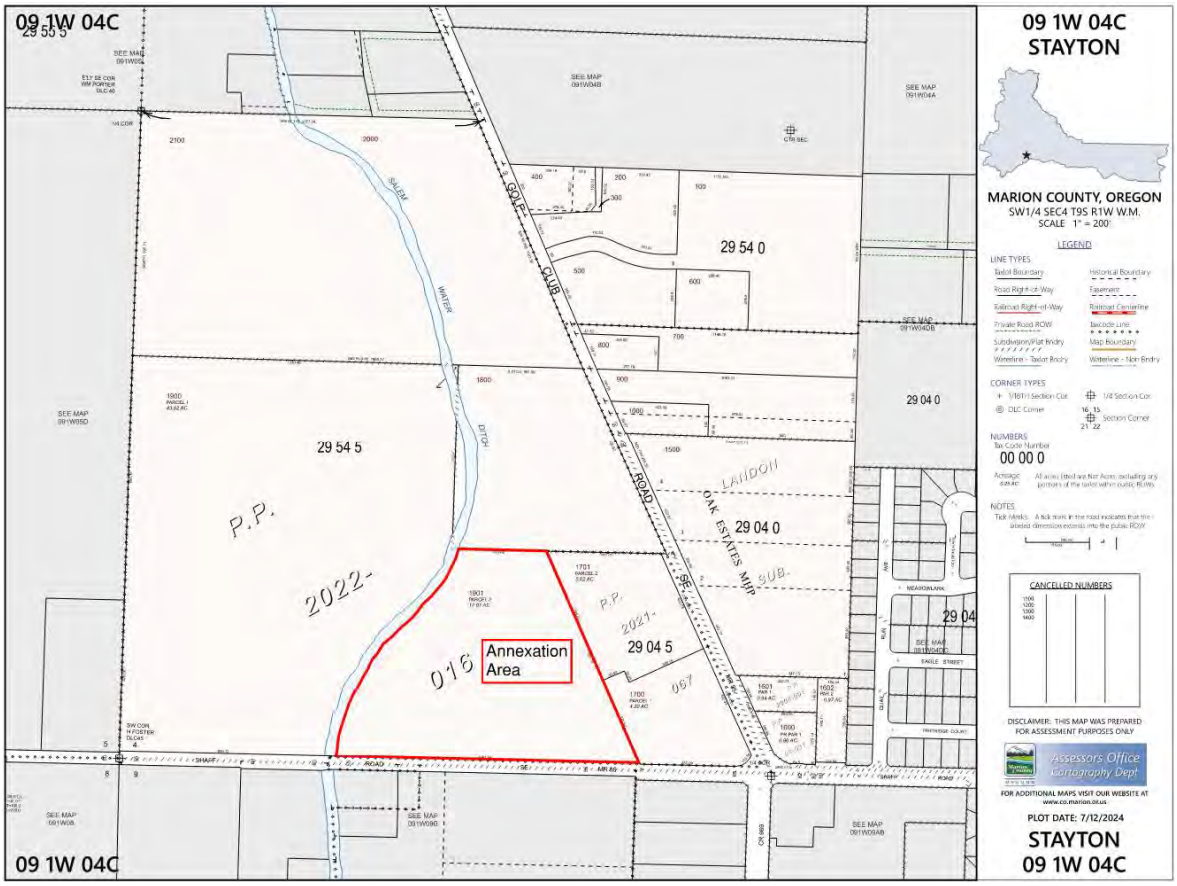

Figure 1. Tax Map of Annexation Area.

Transportation

Road Classification

Per the Stayton Transportation System Plan, Shaff Road, Wilco Road, and Golf Club Road are all county-maintained. Golf Club Road is classified as a Minor Arterial. Both Shaff Road (adjacent to the project site) and Wilco Road are classified as Collector streets.

Right-of-Way (ROW)

The Transportation System Plan classifies the section of Shaff Rd along the site as a Collector with ultimate ROW requirements of 60 to 80-feet. The Existing ROW ranges from 55 to 60-feet wide, with approximately 30-feet from the center line to edge of site. Therefore, upon development the applicant proposes dedicating 40-feet from the center of the road for a total of an 80-foot ROW. The current ROW and center line can be seen in Figure 2 below as well as the proposed ROW upon development. All internal subdivision streets can meet the minimum 60-foot ROW for Local Streets as required by the Public Works Design Standards (PWDS) and Transportation System Plan.

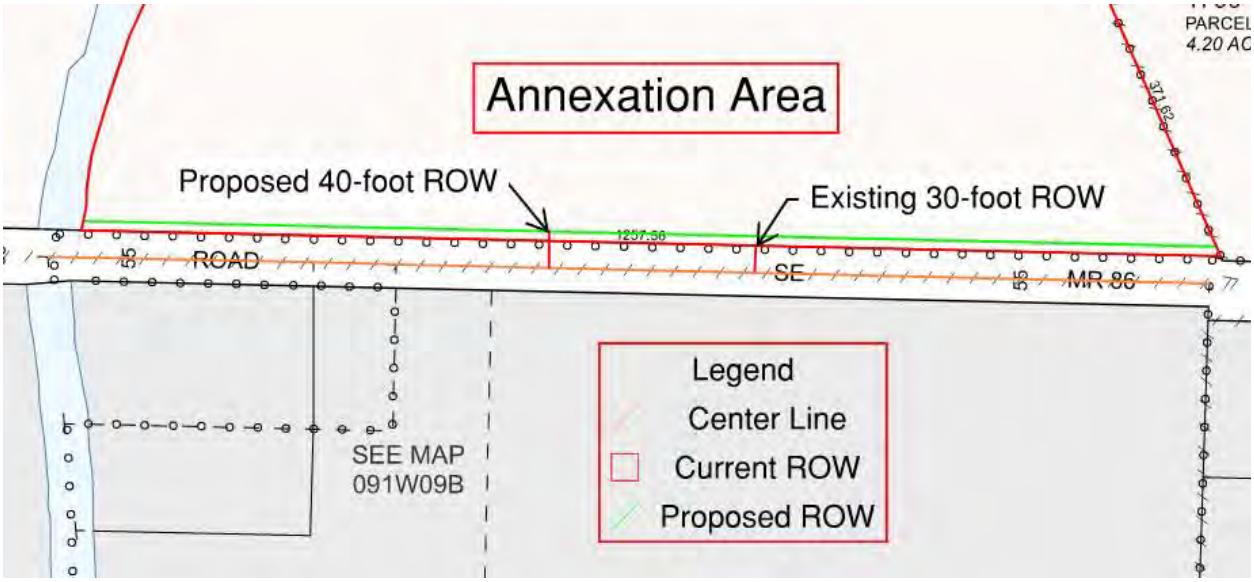

Figure 2. ROW.

The City's 2019 Transportation System Plan identifies a proposed roundabout at the Shaff and Golf Club Road intersection. Keller Associates' schematic design indicates the additional ROW needed for this roundabout may not affect the proposed development site. The location of the proposed development site and proposed roundabout can be seen in Figure 3 below. However, if the City requires additional ROW, it can be accommodated at the time of development.

Figure 3. Proposed Round About at intersection of Shaff Rd and Golf Club Rd.

Street Improvements

Upon development a minimum driveway spacing of 150-feet along Shaff Road can be maintained in accordance with its Collector classification. All new streets can comply with PWDS Section 312, which includes requirements for curb and gutter, asphalt paving, storm drainage, sidewalks, street lighting, and pavement tapers.

Upon development interior subdivision streets can follow the 34-foot Local Street section standard. Private streets can meet fire apparatus access requirements outlined in the Fire Code. Applicant can provide the standard 10-foot Public Utility Easement (PUE) along all public frontages, per PWDS 102.08, unless otherwise approved.

In accordance with PWDS 302.01.D and the TSP, upon development the applicant can preserve the existing pavement condition index and structural integrity of surrounding roadways throughout all phases of construction, to the satisfaction of the Public Works Director.

Transportation Conclusion

The proposed annexation meets the criteria for annexation by section 17.12.210.4.b of the Land Use and Development Code, because “the site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.”

Water System

Public Water System:

The 2006 Water Distribution Facilities Planning Study for Stayton OR, outlines planned improvements through the project site and along Golf Club Road. These include the installation of a 10-inch water main along Shaff Road and a 12-inch distribution line along Salem Ditch (see Figure 4). These improvements are feasible and can be constructed as part of the development. The estimated domestic water demand for the site with 24 units per acre and the conservative assumption of 100 gallons per capita per day, based on typical water usages in surrounding areas, is 113 gallons per minute for the site and can be seen below in Equation 1. Therefore, upon development the site can be served with domestic water.

$$\frac{100\ gal}{1\frac{person}{day}} * \frac{4\ people}{1\ unit} * \frac{24\ units}{1\ acre} * \frac{17\ acres}{1\ site} * \frac{1\ day}{1,440\ min} \approx 113\frac{gal}{min}$$

Equation 1. Water Demand for the Site

Figure 4. Fresh Water Conveyance System proposed in Water Master Plan.

Domestic Water Services

Upon development installation of all new water services, meters, and backflow prevention devices can be in accordance with PWDS. All devices can be Oregon Health Authority–Drinking Water Services (OHA-DWS) approved and reviewed by the City, Building Official, and Fire Code Official, as applicable.

Fire Services

High density residential requires fire flow of 1,500 gallons per minute with sprinkled buildings. The 10-inch and 12-inch water distribution lines discussed above are capable of providing sufficient flow to the site. Upon development fire hydrants can be installed in accordance with the latest PWDS's and Marion County fire code. A fire water service connection and vault assembly with a detector-type meter can serve all approved private fire lines and hydrants. Coordination with the Fire Code Official will ensure compliance with applicable codes. Upon development all required fire protection approvals, including access, devices, and system modifications can be documented and submitted.

Water System Conclusion

The proposed annexation meets the criteria for annexation by section 17.12.210.4.b of the Land Use and Development Code, because "the site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City."

Sanitary Sewer System

Public Sanitary Sewer

The Wastewater Master Plan dated January 2021 does not directly address the subject area. However, development is feasible through connection to a 10-inch sanitary sewer stub that drains to an existing 16-inch gravity sewer line flowing south from the Shaff Road and Golf Club Road intersection, and draining to the Wilco Pump Station. Given the existing sewers shallow invert elevation of approximately 419.6-feet and rim elevation of 428.7-feet at the intersection, the site may require significant fill to ensure proper slope for a gravity sewer to flow with the required 4 ft of pipe cover. The invert and rim elevations were found on the City of Stayton's GIS On-Line Mapping Project. According to Google's lidar information the elevation of the site drops from approximately 428.7 at the south east corner closest to the existing manhole to 419.7 at the far side of the site to the north west. This is an approximately 9-feet drop in elevation from the rim of the Sanitary Sewer Manhole in the intersection of Shaff Road and Golf Club Road and the far side of the project site. To maintain a minimum cover of 4-feet the site would need to be filled approximately 11-feet, this takes into account the 0.3% slope needed for a 10-inch sewer Main at approximately 2,000-feet in length to reach the far side of the project site. Alternatively, a new Sanitary Sewer Pump Station and pressure line could connect the site to the existing system if fill is deemed to be unfeasible. Upon development all improvements can meet PWDS and DEQ requirements. With the assumed density of 24 units per acre the total estimated sewer demand produced from this site is 90 gallons per minute and can be seen below in Equation 2. This uses the conservative estimate of 80 gallons per capita based on typical sewer demand in the surrounding areas. The 10-inch gravity lines discussed above are capable of handling 540 gallons per minute at a slope of 0.3% which easily handles this demand.

$$\frac{80\ gal}{1\frac{person}{day}} * \frac{4\ people}{1\ unit} * \frac{24\ units}{1\ acre} * \frac{17\ acres}{1\ site} * \frac{1\ day}{1,440\ min} \approx 90\frac{gal}{min}$$

Equation 2. Sewer Demand for the Site

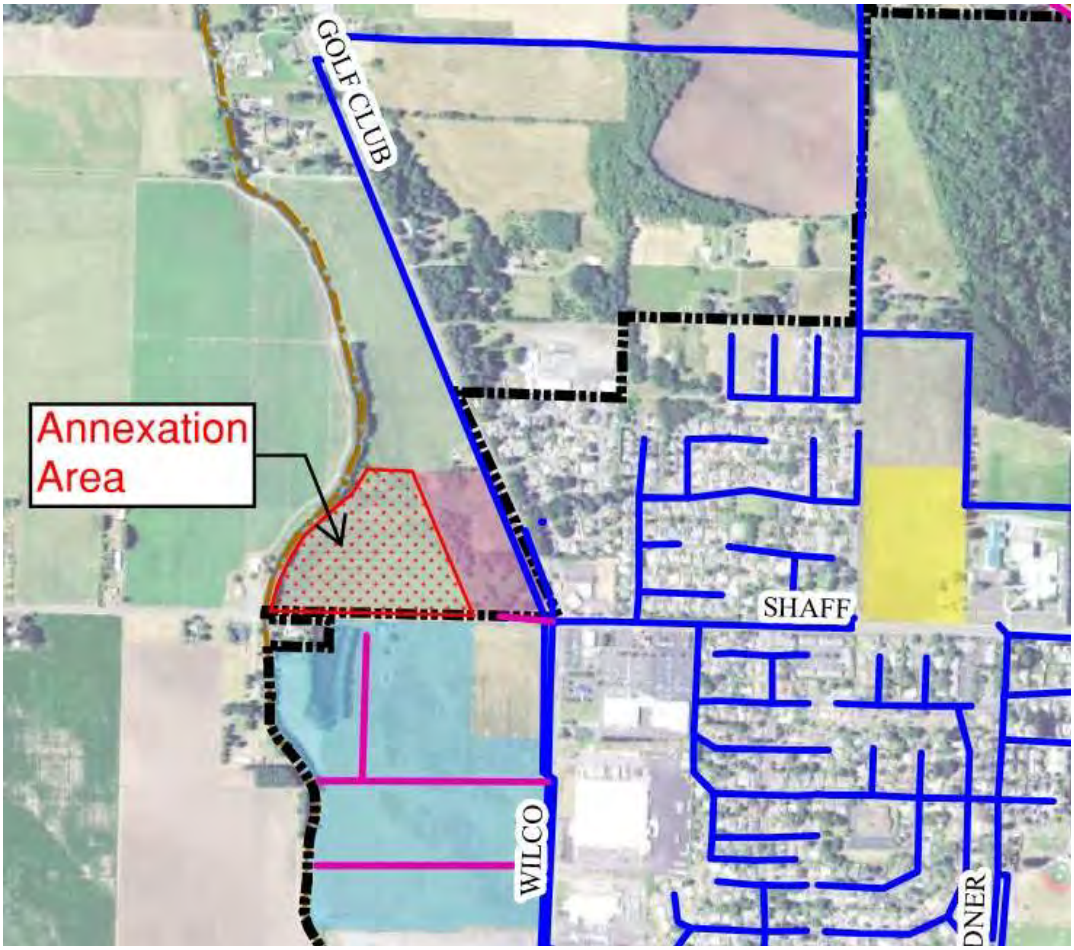

Figure 5. Existing and Planned Sanitary Sewer locations in Waste Water Master Plan.

Private Sanitary Sewer

Upon development all private utilities can be designed and sized in compliance with PWDS and relevant building/specialty codes. Multi-family or commercial buildings can include 6-inch service laterals per PWDS 506.01.B. For multifamily development a sanitary sewer monitoring manhole and/or grease interceptor can be installed per PWDS 505.04.A, if required with development.

Sanitary Sewer Conclusion

The proposed annexation meets the criteria for annexation by section 17.12.210.4.b of the Land Use and Development Code, because “the site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City.”

Stormwater Management

The site lies within the North Salem Ditch Basin (Basin 1) and is not located in a flood hazard area. The City's Stormwater Master Plan proposes a 48-inch storm drain in Shaff Road leading to a 10.4-acre-foot detention pond on the project site (see Figure 6). Upon development the applicant can include these improvements in the development if required by the City. However, an updated stormwater masterplan is being prepared by Keller Associates and may remove or relocate the detention facility mentioned above.

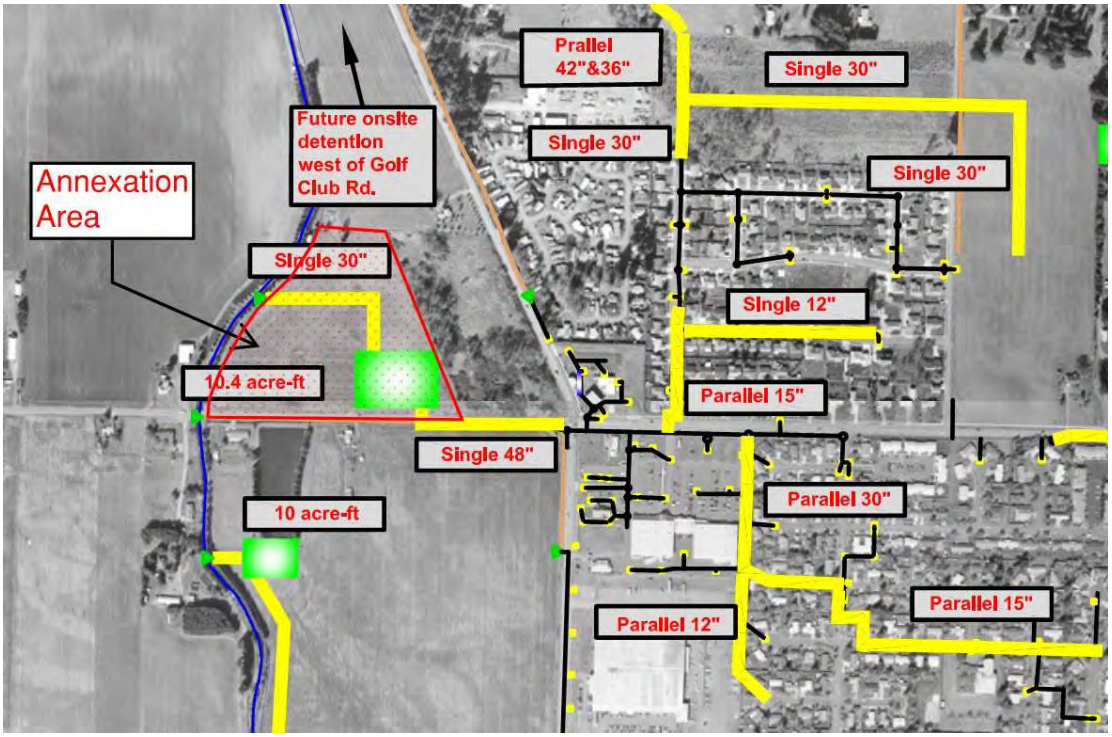

Figure 6. Proposed improvements from the Stormwater Master Plan.

The final design can incorporate a stormwater analysis and report. Both public and private storm systems are planned to discharge through a single 30-inch outfall into Salem Ditch, as shown in the Master Plan (see Figure 4). All private systems can include an Operations & Maintenance (O&M) Plan and Agreement in compliance with City standards. Therefore, the site can be served with the city's stormwater infrastructure in accordance with the Stormwater Master Plan.

Stormwater Conclusion

The proposed annexation meets the criteria for annexation by section 17.12.210.4.b of the Land Use and Development Code, because "the site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City."

Conclusion

Although the proposed annexation area currently lacks existing public utility infrastructure stubbed to the property, extending and upgrading services to meet City standards is both feasible and planned. The applicant, upon development, is committed to designing and constructing all improvements in full compliance with the City of Stayton's Public Works Design Standards and applicable codes. The proposed annexation meets the criteria for annexation by section 17.12.210.4.b of the Land Use and Development Code, because "the site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City."

We appreciate your consideration of this proposed annexation and development. Please let us know if additional information is required.

Sincerely,

WESTECH ENGINEERING, INC.

W. Josh Wells, P.E.

NS

City of Stayton

Department of Public Works

362 N. Third Avenue • Stayton, OR 97383

Phone: (503) 769-2919 • Fax (503) 767-2134

Date: 12/10/2025
To: Jennifer Siciliano, AICP – Community and Economic Development Director
Through: Barry Buchanan, PE – Interim Public Works Director
Michael Schmidt – Engineering Associate
From: Lyle J. Misbach, PE, CFM
Project Name: 11641 Shaff Road Annexation, Land Use File #10-08/25
AKS Job No.: 12093-02-1002
Project Site: 11641 Shaff Road, Stayton, Oregon

Subject: **Public Works Recommendations – Developer-Proposed Annexation**

PROPOSAL

The submitted Application is for annexation of a parcel approximately 17.01 acres in size, located on the north side of Shaff Road (Tax Lot 091W04C001901), to be incorporated into the City as High Density (HD) Residential zoning. The parcel (the "Subject Property") is currently shown as Residential in the City's Comprehensive Plan. The Annexation approval is being requested by Kevin Butler, as Applicant. We have received and reviewed the BRAND Land Use Annexation Narrative Package, dated March 26, 2025, and accompanying Incomplete Application Response, dated July 15, 2025, as well as the criteria listed in Stayton Municipal Code (SMC) 17.12.210.4, particularly the criterion listed in 4.b.

PURPOSE

The purpose of this memorandum is to identify the potential availability and current deficiencies of City public works infrastructure (streets, storm drainage, water, and sanitary sewer) necessary to be resolved to provide City services for the proposed property Annexation. The following comments are based on our review of for the proposed Annexation application as it relates to City infrastructure and in general conformance with applicable public works portions of the City of *Stayton Municipal Code* (SMC), City of Stayton *Land Use Development Code* (LUDC), City of Stayton utility Master Plans and Transportation System Plan (TSP), Public Works Design Standards (PWDS), and Public Works Standard Construction Specifications (SCS). To prepare these comments we reviewed the following application materials:

- Annexation Application and included materials, prepared by BRAND Land Use and dated August, 2025
- REVISED Annexation Application and included materials, prepared by BRAND Land Use and dated August, 2025

It should be noted that I could not discern any difference between the ORIGINAL and REVISED versions of the document.

PUBLIC WORKS INFRASTRUCTURE

No public infrastructure improvements are required for annexation of property. The following information explains the condition of existing public infrastructure in the vicinity of the Subject Property as well as potential future development requirements. At the time of development of the Subject Property, improvements to public infrastructure to adequately serve the proposed development will be required.

Streets

At the time of development, right-of-way dedication and/or construction of street improvements will be required. The proposed development may also be responsible for contributing a proportional share toward Transportation System Plan capital improvements that benefit the Subject Property.

1. Shaff Road SE

   a. City Standard - This street is designated as a Major Collector street in the TSP. The standard for this street classification is a 46-foot-wide improvement, including curbs, 6-foot-wide property-line sidewalks, and 8-foot-wide planter strips within an 80-foot-wide right-of-way, in an 80-foot-wide right-of-way. In addition, the preliminary design of the future roundabout at the intersection of Shaff Road SE and Golf Club Road SE identifies a potential 44' wide easement area outside the public right-of-way for Pacific Power transmission lines, for a large storm drainage conveyance swale, and an additional easement for a large stormwater facility located at the southeasterly corner of the parcel.

   a. County Standard - This street is designated as a Limited Collector street in the Rural TSP. The standard for this street classification is a 38-foot-wide street improvement, including curbs and sidewalks within a 64-foot-wide right-of-way.

   b. Existing Conditions:

      i. This street has an approximate 24-foot-wide turnpike improvement within a 55-foot-wide to 60-foot-wide (consistent 30-foot-wide half-street right-of-way) along the Subject Property frontage.

      ii. The nearest City intersection, at Golf Club Road SE, is located approximately 400 feet east of the Subject Property.

   c. Current Deficiencies:

      i. Shaff Road SE is a boundary street for the property and will need to be improved to Major Collector street standards along the Subject Property frontage at time of development.

      ii. This street will also serve as linking street from Golf Club Road SE to the Subject Property and will need to be improved to provide two-way vehicle traffic along the roadway, accommodate safe pedestrian movement to and from the Subject Property, and meet the emergency vehicle access requirements.

      iii. Per SMC 17.24.040, *development of one- and two-family dwellings where the number of dwelling units exceeds 30 … shall be provided with not less than two approved means of access.* Development of the Subject Property will need to provide adequate emergency

vehicle access and water supply in conformance with the SMC and with PWDS and Stayton Fire Department requirements.

d. Transportation System Plan. Two projects for Shaff Road SE are listed in the current TSP, and may affect some of the requirements for future development of the Subject Property:

i. Project M1 as listed is a proposed roundabout at the intersection of Shaff Road SE and Golf Club Road SE, east of the Subject Property.

ii. Project P46 identifies 6-foot-wide property line sidewalks are required between Golf Club Road SE and the western City limits.

iii. Figures 3 and 4 of the City's TSP identify additional bike and pedestrian improvements that are needed along the frontage of the proposed development.

2. Internal Streets

a. Existing Conditions:

i. No streets currently exist within the Subject Property.

b. Transportation System Plan:

i. No streets are proposed within the Subject Property per the current TSP.

Storm Drainage

Construction of a storm drainage system, including flow control, stormwater quality treatment, and extension of existing City storm infrastructure to serve the property, will be required at the time of development of the Subject Property. The proposed development may also be responsible for contributing a proportional share toward *Stormwater Master Pla*n capital improvements that benefit the Subject Property.

1. Existing Conditions:

a. The nearest City stormwater facility is an existing manhole approximately 400 feet east of the property on the south side of Shaff Road SE. This manhole is connected to a 24-inch storm drain along Wilco Road, with an invert elevation of approximately 426.30.

b. Salem Ditch, an irrigation facility under the authority of the Santiam Water Control District, is not considered to have any available capacity for increased runoff or flows.

c. It should also be noted that while the property currently does not include any FEMA-mapped Special Flood Hazard Areas (Map 41047C0704G), Salem Ditch has historically exceeded its banks during heavy storm events.

d. Per the Oregon Rapid Wetland Assessment Protocol (ORWAP), the Property includes a linear wetland along the Salem Ditch, as well as significant hydric soils running north to south through the middle of the property. In addition, the area is known to have a shallow groundwater table.

e. Some shallow localized drainage ditches exist along Golf Lane, but these do not connect to the City system or an approved discharge point as defined in the PWDS.

2. Current Deficiencies:

a. The Applicant does not currently indicate any location, layout, or grading for onsite storm drainage conveyance and facilities to provide required flow control and treatment within or downstream of the proposed Development.

b. The Subject Property is not currently served by any City storm drainage infrastructure.

c. The only "waterway" in the vicinity of the Subject Property is the Salem Ditch – an irrigation facility - which drains to Mill Creek. As noted above, this waterway is not considered to have any available capacity for increased runoff. The Development will need to provide water quality and flow control to retain stormwater from all storm events below the 100-year event.

3. Stormwater Master Plan (currently being updated):

a. Per the current *Stormwater Master Plan*, stormwater runoff from this property and any nearby storm drainage system drains to Salem Ditch. However, as noted above, this waterway is not considered to have any available capacity for increased runoff and no increase in flows from rain events below the 100-year storm event will be allowed to enter this waterway.

b. The current *Stormwater Master Plan* indicates a proposed regional detention basin occupying a significant portion of the Subject Property, with a proposed 48-inch main receiving flows from the Golf Club Road SE/Shaff Road SE intersection, and a proposed 30-inch main discharging to Salem Ditch.

Water

At the time of development, construction of water system infrastructure, including extension of existing City water mains to serve the property, will be required. The proposed development may also be responsible for contributing a proportional share toward *Water Master Plan* capital improvements that benefit the Subject Property.

1. Existing Conditions:

a. The Subject Property is located in the "base" water system service level.

b. The nearest City water facility is a 10-inch Asbestos Cement water line located in Wilco Road, approximately 400 feet east of the Subject Property.

2. Current Deficiencies:

a. The Subject Property is not currently served by any City water system infrastructure.

b. Development of the Subject Property will need to provide adequate domestic water and emergency water supply in conformance with SMC, PWDS, and Stayton Fire Department requirements.

3. Water Master Plan:

a. The current *Water Master Plan* indicates a new 10-inch water main along Shaff Road SE from Golf Club Road SE to the west City limits.

b. A new 12-inch water main is also indicated along the entire northwest line (Salem Ditch frontage) of the Subject Property.

Sanitary Sewer

At the time of development, construction of sanitary sewer system infrastructure, including extension of existing City sewer mains to serve the property, will be required. The proposed development may also be responsible for contributing a proportional share toward *Wastewater Facilities Planning Study* capital improvements that benefit the Subject Property.

1. Existing Conditions
    a. The Subject Property is located in the "gravity" basin of the City's system.
    c. The nearest City sanitary sewer facility is an existing manhole approximately 400 feet east of the Subject Property. This manhole is connected to an 18-inch sanitary sewer along Wilco Road, with an invert elevation of approximately 423.00.
2. Current Deficiencies:
    a. The Subject Property is not currently served by any City sanitary sewer system infrastructure.
    b. Proposed connection to any of the existing mains will require engineering calculations to demonstrate that the receiving main has capacity for all additional sanitary sewer flows from the Development.
3. Sewer Master Plan:
    a. The current *Wastewater Facilities Planning Study* does not indicate any significant sanitary sewer system deficiencies in the nearby vicinity that will be impacted or could be improved by development of the Subject Property.

cc: Richard Walker, PE – City Engineer

From: Laurel Christian
To: Jennifer Siciliano
Subject: RE: [EXTERNAL]Request for Comments on Annexation 17.01 acres off Shaff Road - LU # 10-08/25
Date: Monday, November 10, 2025 12:15:49 PM

CAUTION: This email originated from **Outside Your Organization**. Exercise caution when opening attachments or on clicking links from unknown senders. Please contact Information Technology for assistance.

Hi Jennifer,

The annexed property is not located near the City of Salem water transmission mains that that travel through Stayton. No City of Salem concerns with this request. Thank you for the opportunity to review.

Thank you,

Laurel Christian
Infrastructure Planner III
City of Salem | Community Planning and Development | Development Services
Find us at the Development Services Division Offices: 440 Church St SE, **5th Floor**
Mailing Address: P.O. Box 14300, Salem, OR 97309
lchristian@cityofsalem.net | Office: 503-584-4632
Facebook | YouTube | Linkedin | www.cityofsalem.net

From: Jennifer Siciliano <jsiciliano@staytonoregon.gov>
Sent: Monday, November 10, 2025 10:13 AM
To: Adam Kohler <Adam.Kohler@PacifiCorp.com>; Astound Construction Team <oregonconstruction@astound.com>; Barry Buchanan <bbuchanan@staytonoregon.gov>; breich@co.marion.or.us; brents@santiamwater.gov; brian.kelley@nwnatural.com; Caleb Cox <ccox@kittelson.com>; Christopher Clark <Christopher.clark@pacificorp.com>; dfreitag@santiamhospital.org; Doug Kintz <doug.kintz@staytonfire.org>; Erik Hoefer <erik@sctcweb.com>; Gwen Johns <gjohns@staytonoregon.gov>; Janelle Shanahan <jshanahan@co.marion.or.us>; Alley, Jay <Jay.Alley@staytonfire.org>; John Eckis <johneckis@sctcweb.com>; John Rasmussen <jrasmussen@co.marion.or.us>; Kendall Smith <ksmith@staytonoregon.gov>; kinman@co.marion.or.us; Lee Loving <lee.loving@nsantiam.k12.or.us>; Lyle Misbach <misbachl@aks-eng.com>; Max Heller <mheller@kittelson.com>; Max Hepburn <mhepburn@co.marion.or.us>; MCPW Engineering <mcldep@co.marion.or.us>; Michael Schmidt <mschmidt@staytonoregon.gov>; Nicole Willis <nicole.willis@pacificorp.com>; oregonconstruction@wavebroadband.com; planning@co.marion.or.us; Richard Walker (richardw@aks-eng.com) <richardw@aks-eng.com>; Development Services <developmentservices@cityofsalem.net>; Susan Wright <swright@kittelson.com>; Troy Wheeler <twheeler@co.marion.or.us>; Wayne.clevenger@pacificorp.com
Cc: Susan Bender <sbender@staytonoregon.gov>
Subject: [EXTERNAL]Request for Comments on Annexation 17.01 acres off Shaff Road - LU # 10-08/25

CAUTION! This email came from outside the City of Salem. Do not click links or open attachments unless you recognize the sender. For guidance on identifying legitimate senders/emails, please review the IT Intranet Cyber Security Page.

The City of Stayton has received an application for Annexation of an approximately 17.01-acre property on 11641 Shaff Road taxlot 091W04C001901 to be zoned High Density (HD) Residential zone.

The application and narrative package can be accessed at:
https://www.staytonoregon.gov/page/open/5937/0/Application%20and%20Narrative%20Documents The applicant has chosen to not submit a concept plan as part of their application.

I have attached our usual request for comments form.

Please send responses by **December 10, 2025**.

Thank you for your assistance.

Jennifer Siciliano, AICP
Community and Economic Development Director

311 N. 3rd Ave
Stayton, OR 97383
Phone 503-769-2998

December 10, 2025

Via Email

Jennifer Siciliano
Community and Economic Development Director
362 N. Third Avenue
Stayton, Oregon 97383
jsiciliano@staytonoregon.gov

RE: Santiam Water Control District Comments to City of Stayton
Land Use File 10-08/25

Santiam Water Control District ("SWCD") appreciates the opportunity to provide comments on the application ("Application") for the proposed annexation of the 17.01-acre property, identified as Marion County Tax Lot 091W04C001901 ("Property"). In conjunction with the annexation request, the applicants are requesting the High Density Residential ("HDR") zoning designation.

SWCD is an Oregon water control district formed under ORS Chapter 553. SWCD owns and operates water conveyance facilities. The Property borders the SWCD-owned facility "Salem Ditch" which provides irrigation water to SWCD members, including the owners of the Property. This irrigation water is certificated to SWCD and appurtenant to the Property. The Property is within SWCD district boundaries and subject to the SWCD Rules and Regulations. The Property is also burdened by SWCD water delivery contracts.

SWCD utilizes Salem Ditch to provide municipal water to City of Salem and the City of Stayton ("Stayton"). SWCD provides limited municipal stormwater services to the City of Stayton via Salem Ditch pursuant to the 2014 Memorandum of Understanding ("2014 MOU"). Under the 2014 MOU, Stayton agreed to limit additional Stayton stormwater discharges into Salem Ditch.

SWCD has three primary concerns with the Application. First, the Application proposes to discharge stormwater in Salem Ditch. Salem Ditch is an SWCD facility and the Property owner may not discharge stormwater into Salem Ditch without SWCD approval. Salem Ditch is at capacity and further Stayton-authorized development, without controls, will cause facility damage, flooding, and water quality degradation. Second, SWCD holds Property use rights. Stayton must recognize and the Application must incorporate these use rights and the corresponding appropriate setbacks into development plans. Third, SWCD is concerned with the preservation of SWCD water rights appurtenant to the Property.

I. Compliance with Legal Requirements for Annexation.

Oregon law and Stayton code contain requirements for annexation of lands. This Application does not meet several of these requirements.

A. Stayton Must Provide Stormwater Services to the Property.

To approve an annexation application, Stayton must find that the "site is or is capable of being serviced by adequate City public services including such services as may be provided subject to the terms of a contract annexation agreement between the applicant and the City."[1]

ORS 197.175 requires cities exercise their planning and zoning responsibilities in compliance with the Statewide Planning Goals. Under the Statewide Planning Goal 11, cities and counties are required to "plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development." Public facilities specifically include storm sewer systems.[2]

One way that it can be demonstrated that a property is "capable of being serviced" by the annexing municipality is through the municipality's applicable master plan. In this case, the Stayton Stormwater Master Plan projects the future Stayton stormwater system running through the Property and discharging into Salem Ditch. This does not demonstrate that the Property is capable of being serviced because Stayton does not have the authority to discharge stormwater from this Property into Salem Ditch.

The Application does not propose an alternative means of providing stormwater service. It merely states that future "stormwater discharge will ultimately be directed to Salem Ditch consistent with the Master Plan."[3] Again, the Salem Ditch is not a Stayton facility. Stayton may not use the Salem Ditch to dispose of municipal stormwater beyond the limits of the 2014 MOU. SWCD will not consent to municipal stormwater discharges from the Property into Salem Ditch without a stormwater agreement with Stayton.

1. The Salem Ditch is not a Stayton stormwater facility.

Municipal stormwater may not discharge from the Property into Salem Ditch without SWCD authorization because it is an SWCD-owned facility. Salem Ditch is an artificial irrigation ditch constructed in 1957. In 1986 Boise Cascade Corporation and City of Salem deeded the Salem Ditch to SWCD. See Exhibit A – Salem Ditch Deeds.

[1] Stayton Land Use and Development Code, Section 17.12.210(4)(b).
[2] *See* OAR 660-011-005(7)(c).
[3] *See* Application, page 11.

As an artificial ditch constructed specifically for irrigation delivery, Salem Ditch is recognized under Oregon law (ORS 540.310 and ORS 540.320) as a man-made conduit capable of ownership. SWCD jurisdiction over Salem Ditch is further supported by formal boundaries encompassing the area approved by Marion County, water delivery contracts, an ODEQ-approved TMDL plan, and recurring maintenance activities confirming its authority to operate and maintain the facility.

SWCD prohibits property owners from discharging into district facilities without an SWCD consent agreement. Any unauthorized discharge from the Property into Salem Ditch is a trespass on SWCD private property. Oregon courts recognize a "water trespass" when a defendant artificially collects surface water or groundwater, diverts it onto a plaintiff's property and the defendant knew or should have known that the water would end up on that property.[4] In the context of Salem Ditch, a future increase in impervious surface area due to the proposed development of stormwater collection system and high density residential housing will change the location of the stormwater discharge and substantially increased the acceleration and concentration of stormwater flowing onto SWCD property in violation of Oregon law. Stayton must obtain SWCD consent to discharge Property stormwater into Salem Ditch to prevent unlawful trespass and breach of the 2014 MOU.

Stayton must provide municipal services to, or otherwise ensure they are provided to, the Property in a timely manner. Therefore, to meet the legal requirements for annexation, Stayton must provide alternative stormwater drainage or enter into an agreement with SWCD for use of the Salem Ditch for this Property.

B. The Annexation Must Comply with State Law.

To approve an application for annexation, Stayton must find that the “annexation request complies, or can be made to comply, with all applicable provisions of state and local law.”[5]

1. Water Quality and Water Quantity Impacts.

ORS 197.175 requires cities exercise their planning and zoning responsibilities in compliance with the Statewide Planning Goals. Statewide Planning Goal 6 requires the cities to insure that "waste and process discharges" of future development will comply with applicable state and federal environmental statutes and rules.[6] Goal 6 requires that the city ensure that waste and process discharges from future development will not degrade, overload, or threaten the availability of air, water, or land. Without additional protections, approval of the annexation will have adverse impacts on water quality and fail to meet Goal 6 requirements.

[4] *Gibson v. Morris*, 270 Or. App. 608, 613-16 (2015).
[5] Stayton Land Use and Development Code, Section 17.12.210(4)(e)
[6] OAR 660-15-000(6)

Stormwater discharges temporarily increase the volume and flow of water in Salem Ditch. An increase in peak flows may exceed the load capacity of Salem Ditch and result in increased erosion. Increased erosion causes turbidity and related water quality issues. Increased peak flows also may cause flooding and damage to SWCD facilities and to private property.

One reason that the 2014 MOU limited Stayton stormwater discharges into Salem Ditch is that it is currently at full capacity as evidenced in the 2013 AMEC Engineering Report attached as Exhibit B-Salem Ditch Capacity Report. Stayton is aware of the Salem Ditch capacity issue as the Capacity Report was a basis for the 2014 MOU.

The Property and adjacent properties have existing stormwater drainage issues. SWCD has observed reoccurring flooding on Shaff Road on the southern property line. The drainage ditch on the south side of Shaff Road, which is a primary drainage facility from Stayton and owned by Stayton or Marion County, overflows over the road. The stormwater detention pond constructed adjacent to the northeast corner of the Property to retain stormwater from the apartment complex also appears to flood the Property.

Applicant is requesting a rezoning to High Density Residential which would allow the Property, currently farmland, to be highly developed with a significant percentage of impervious surface. The permanent increase in impervious surface on the Property created by converting farmland to high density housing will increase the annual volume and the peak flows of Property stormwater. This will exacerbate the existing drainage issue on the Property and will likely result in adverse water quality impacts.

Sediment runoff is of special concern because the Property is within the Willamette Basin which is water quality impaired for mercury. Therefore, waterways around the Property are subject to the Willamette Basin Mercury TMDL established by the U.S. Environmental Protection Agency on December 30, 2019 (“Mercury TMDL”). Mercury stored in the soil may be released by flooding and erosion as well as development activities such as excavation and grading. Mercury released by erosion and runoff would cause negative water quality impacts on Salem Ditch and receiving waters of the state. Mercury is a serious health concern because mercury in its various forms can accumulate in the body and damage the nervous system, kidneys, and brain.

Additionally, the potential for mercury runoff into Salem Ditch exposes SWCD to regulatory liability and associated costs because the Mercury TMDL designated water conveyance entities, such as SWCD, as “responsible persons” who are responsible, and can be liable for, the mercury in their conveyance facilities. Stayton land use approvals should include conditions that protect against addition of pollutants into its waterways and not negatively impact SWCD’s ability to comply with its obligations under the Mercury TMDL.

2. An Annexation Request Must Include Accurate Identification of the Property to be Annexed.

The Application does not identify SWCD's maintenance easement and use rights in the Property. The Partition Plat No 2022-16 and the Property deed both note that that the Property is subject to the right of public and governmental bodies in the portion of the Property lying below the high-water mark of Salem Ditch. However, SWCD holds a recorded easement for Salem Ditch which includes both the right of way for the canal and access for SWCD operation and maintenance of the canal (a handwritten 1856 document, typed and attached as Exhibit C - SWCD Easement).

SWCD is the Willamette Woolen Manufacturing Company ("WWMC") successor. The SWCD Easement evidences WWMC's prior right to use property within the Foster Donation Land Claim ("Foster DLC") to construct, use, and preserve a water canal. The Property is entirely within the Foster DLC. The Foster DLC is described in the Abstract of Title No 42357 detailing the water rights and assets of the WWMC and recorded May 7, 1943 ("WWMC Abstract"). See Exhibit D – Pages from WWMC Abstract.

Under Oregon law, an easement holder has the right to do what is necessary to repair and maintain its easement. Oregon law extends a right of entry to property where parties hold a valid use right in that property. Accordingly, an easement holder has the right to do what is necessary to repair and maintain the easement, including the right to enter the landowner's property for purposes of maintaining the easement, even though damage to the property may result.[7] The right to enter the landowner's property to make necessary repairs is essential to the easement; this right "passes by the grant."[8] Therefore, the SWCD Easement grants the right of entry along Salem Ditch beyond the canal right-of-way for purposes of maintaining and repairing the easement.

To maintain the Salem Ditch, SWCD requires a setback of at least 30-feet from the ditch edge for operation of ditch maintenance equipment. SWCD anticipates installing a roadbed and raised berm due to increased saturation next to Salem Ditch resulting from surrounding improvements and storm infiltration infrastructure. Stayton and the applicant must accurately identify the SWCD Easement in the Application so that future development does not interfere with SWCD use rights.

3. Coordination between Stayton and SWCD for Use of SWCD Facilities.

ORS 197.175 requires cities to exercise their planning and zoning responsibilities in compliance with the Statewide Planning Goals. Under the Statewide Planning Goal 2, cities are required to coordinate their plans with affected government agencies, including special districts such as SWCD. As detailed above, the Application proposes to use SWCD Facilities without SWCD consent in violation of SWCD Rules and Regulations. Therefore, Stayton approval of the Application without an agreement would fail to meet these Goal 2 requirements.

[7] *Motes v. Pacificorp*, 230 OrApp 701, 708 (2009); *Baumbach v. Poole*, 266 Or 154, fn. 1 (1973).
[8] *Baumbach*, 266 Or at fn. 1 (1973)(*quoting Thompson v. Uglow*, 4 Or 369, 372-373 (1873)).

II. Impacts of Annexation on SWCD.

Annexation and the future removal of the Property from agricultural use has several significant impacts on SWCD.

A. Potential Loss of SWCD Water Rights.

The Property is currently irrigated with a SWCD water right ("SWCD Water"). Urbanization of the Property will preclude the beneficial use of SWCD Water. If the SWCD Water is not removed from the Property and transferred to other SWCD lands through a permanent transfer application with Oregon Water Resources Department ("Transfer Application") within five years, the water right may be forfeit for non-use. SWCD will likely be unable to replace the forfeited water because OWRD is not issuing new surface water rights from the North Santiam River and surface water rights in the Willamette Basin are cost prohibitive when available.

OWRD approval of a Transfer Application requires landowner consent or a deed showing transfer of the appurtenant landowner's interest in the water right to SWCD. Oregon law does not offer a simple process to compel a landowner consent to the transfer or water that landowner fails to place to beneficial use. Because annexed property will no longer be a place-of-use for irrigation water certificated to SWCD, the applicant should quitclaim interest in SWCD irrigation water during the annexation process. SWCD will provide the deed template to landowner.

B. Landowner Termination of SWCD Water Delivery Contracts.

The Property is currently under contract with SWCD for the delivery of irrigation water as referenced in the Property deed. One of the contracts for the Property is attached as Exhibit E – Delivery Contract. SWCD requests that the landowners sign the SWCD Termination of Contract documents as part of the annexation process. Landowner signature will release SWCD from the obligation to deliver water to lands that will no longer be in agricultural production.

III. Conclusion.

SWCD appreciates Stayton's notice and the opportunity to comment on this Application. Notice gives SWCD the opportunity to provide input on conditions to improve this Application, to meet Stayton code criteria, and work with Property owners to protect SWCD facilities and SWCD water rights.

SWCD requests that Stayton provide SWCD notice of all future land use actions related to the Property.

Exhibit A - Salem Ditch Deeds

REEL 1671 PAGE 261 480

QUITCLAIM DEED

The CITY OF SALEM hereby releases and quitclaims to the SANTIAM WATER CONTROL DISTRICT, organized and existing under and by virtue of the laws of the State of Oregon, all its right, title, and interest, if any, in that real property situated in Marion County, State of Oregon, described as:

> The Salem Ditch from the authorized point of diversion of water as it existed prior to July 8, 1986, which is located 620 feet South and 565 feet East from the Northwest corner of the SW ¼ SE ¼ of Section 11, Township 9 South, Range 1 West. W.M. to Mill Creek.
>
> Subject to the following condition subsequent:
>
> But if the district fails, after ten (10) days written notice from City, to deliver City's 102 cfs water rights provided said water right is available for delivery, under water right priority, but not due to acts of God, actions of other government agencies or acts beyond the control of the Santiam Water Control District, the city, upon giving District thirty (30) days notice, may re-enter and take possession upon such re-entry all rights of grantee or their assigns, which were quitclaimed above and shall thereupon terminate, and title to ditch shall automatically revert to City.

Consideration for the transfer is no money but other valuable consideration.

DATED this 17th day of September, 1986.

By: Susan Harris Miller
Mayor

APPROVED AS TO FORM:

Deputy City Attorney

ATTEST:

By: Ramona Hudson
City Recorder

STATE OF OREGON)
) ss.
County of Marion)

Personally appeared before me the above-named Susan Harris Page, who, being sworn, stated that she is the Mayor of the City of Salem, and acknowledged the foregoing instrument to be her voluntary act.

Notary Public for Oregon
My Commission Expires: 5/10/89

Return To: Santiam Water Control District
284 E. Water St. Stayton OR. 97383

QUITCLAIM DEED

BOISE CASCADE CORPORATION, a Delaware corporation, hereby releases and quitclaims to the SANTIAM WATER CONTROL DISTRICT, organized and existing under and by virtue of the laws of the State of Oregon, all its right, title and interest, if any, in that real property situated in Marion County, State of Oregon, described as:

> The Salem Ditch from the authorized point of diversion of water as it existed prior to July 8, 1986, which is located 620 feet South and 565 feet East from the Northwest corner of the SW ¼ SE ¼ of Section 11, Township 9 South, Range 1 West. W.M. to Mill Creek.

DATED this 26th day of September, 1986.

BOISE CASCADE CORPORATION

By _____
Vice President

STATE OF OREGON)
) ss.
COUNTY OF MULTNOMAH)

Personally appeared before me the above-named TERRY R. LOCK, who, being sworn, stated that he is a Vice President of Boise Cascade Corporation, and acknowledged the foregoing instrument to be his voluntary act.

_____
Notary Public for Oregon
My commission expires: 3/11/88

P.O. Box 1414
1600 S.W. 4th Avenue
Portland, Oregon 97201
503/790-9400

John P. Borgwardt
Associate General Counsel

Boise Cascade Corporation

September 24, 1986

Dan Wilson
Secretary/Treasurer
Santiam Water Control District
11371 Dieckman Lane, S.E.
Elmsville, OR 97325

RE: Salem Ditch

Dear Dan:

I refer you to the unsigned memorandum prepared and distributed at our meeting of August 12, 1986 in which it was agreed that the Salem ditch and water rights would be transferred from Boise Cascade to the City of Salem. Salem would then transfer the ditch to the Santiam Water District and Boise Cascade would contribute $7,000 toward the cost of repairing and cleaning the ditch.

The conveyance has now been made by Boise Cascade to Salem. I understand Salem has conveyed the ditch to the Water District. I enclose the $7,000 payment from Boise Cascade to the Water District. I enclose also a quitclaim deed to the Water District of whatever interest Boise Cascade may have in the ditch. This in full satisfaction of Boise's obligations to the district in connection with transfer of water rights to the City of Salem and transfer of the ditch from the company to Salem and ultimately to the Water District.

Very truly yours,

John P. Borgwardt

JPB:slb
Enclosure
c: Pete Meuleveld

Exhibit B - Salem Ditch Capacity Report

June 17, 2013

Project No. 1-61M-123510

Mr. Brent Stevenson
Santiam Water Control District (SWCD)
284 E Water Street
Stayton, Oregon 97383

Subject: Analysis of the Flow Capacity of Salem Ditch
Stayton, Oregon

Dear Brent:

AMEC completed an analysis of the hydraulic capacity of Salem Ditch. AMEC found that the physical capacity of Salem Ditch was limited to 89 cubic feet per second (cfs) at a location (the "Study Site") located south of the diversion to Mix Ditch, approximately 3.3 miles downstream (northwest) of the headgate off the North Santiam River. That capacity is the flow above which the freeboard between the water surface and the bank elevations in Salem Ditch would drop below 1 foot (ft), a widely used freeboard for irrigation canals.

AMEC understands that SWCD is required to deliver 102 cfs from the North Santiam River to downstream users to satisfy its obligation to the City of Salem and those SWCD irrigation customers that can only be served by Salem Ditch. Flow in Salem Ditch also includes 30 cfs of upstream, non-consumptive use by NORPAC Foods.

There is no present capacity for additional flow in Salem Ditch. AMEC found that SWCD's 102 cfs downstream water delivery obligation probably cannot be fully satisfied without either operating the canal with less than 1 ft of freeboard, or delivering some of the water by other SWCD canals that drain to Mill Creek. However, use of other canals would not provide for the needs of irrigation users who can only be served by Salem Ditch. AMEC recommends a geotechnical study to assess bank stability and safety for operation of Salem Ditch with less than 1 ft of freeboard. AMEC recommends a maximum flow of 89 cfs in the Salem Ditch unless additional study shows that less than 1 ft of freeboard is safe, and that a higher flow can therefore be accommodated.

Although Salem Ditch might appear to have a high capacity through downtown Stayton, the flow capacity in the Salem Ditch system is limited by the threshold flow near the Mix Diversion. The ditch

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7376 SW Durham Road
Portland, Oregon
USA 97224
Tel+1 (503) 639-3400
Fax+1 (503) 620-7892
www.amec.com

might overflow near the Mix Diversion even when capacity upstream, through downtown Stayton, appears adequate.

SYSTEM OVERVIEW

SWCD operates a system of constructed and maintained irrigation and drainage facilities near the City of Stayton, Oregon. These facilities, including the Salem Ditch, convey water for irrigation of farmland west of Stayton, for industrial uses (e.g. at NORPAC), and to Mill Creek, where water uses include flow augmentation, irrigation, domestic use, fire protection, and pond and wildlife maintenance, among others. The facilities were primarily designed to efficiently supply irrigation water to users. As a secondary benefit, they also provide limited drainage capacity for the agricultural areas that they serve. Development of the SWCD waterways predates much of the urbanization that has occurred in Stayton. The general area studied is shown in Figure 1.

SWCD diverts water from the Santiam River at two locations south of Stayton. The first diversion is to the 4.1 mile long Salem Ditch, and the second diversion is to the 1.8 mile long Power Canal, from which flow is diverted into the Main Canal just downstream from the Salem Ditch.

From its headgate near the east end of Park Road, the Salem Ditch flows downstream 4.1 miles to its confluence with Mill Creek, a tributary of the Willamette River in Salem. For the first 2.3 miles it flows through downtown Stayton, and then flows over the two NORPAC diversion gates near N Holly Avenue, 1.5 miles below the headgate.

As Salem Ditch leaves the urban area, and just before crossing under the railroad trestle, the first major irrigation diversion normally sends about 10 cfs to the Butler Lateral. Downstream, the ditch slope increases (from 0.2% upstream to 0.3% downstream) as it flows northwest 1.8 miles through farmland. The second irrigation diversion, 3.4 miles below the headgate, sends less than 5 cfs to Mix Ditch. The Salem Ditch flows into Mill Creek just southwest of the intersection of Golf Club Road and Hwy 22, 19.4 miles upstream of the creek's confluence with the Willamette River in Salem.

DISCHARGES BY CITY OF STAYTON

Between the headgate on the North Santiam River and the Study Site, the Salem Ditch alignment passes through areas within the City of Stayton. The City has taken advantage of this by using SWCD's private Salem Ditch as a convenient means to dispose of the City's own stormwater discharge. Figure 2 shows a map from the City's May 2008 Storm Water Master Plan (Plan) that indicates many City storm sewer lines that outfall to SWCD canals including Salem Ditch. Any

development, increase in impervious area, or change of drainage time within areas that drain to SWCD canals – whether directly or by City storm sewers – can increase flooding in the canals.

These City discharges have increased since SWCD assumed ownership of and responsibility for the Salem Ditch, resulting in higher and more frequent flood risk along the ditch. Table 1 summarizes combined totals of peak City stormwater outflows at the Study Site on the Salem Ditch after adding flow hydrographs from each upstream City storm sewer outfall and accounting for their conveyance downstream to the Study Site. Note that this "accounting" reflects that peak flows from City outfalls are stored and attenuated in Salem Ditch. The total of the peak outflows from City outfalls is higher. This analysis used tabulations of flows at each outfall provided by the City's consultant that they had obtained from models used to develop the City's Plan.

Table 1: Discharges from City of Stayton to Salem Ditch above Study Site

Event	Peak Flow (Cfs)
2 Year	58
5 Year	81.1
10 Year	98.8
25 Year	114.7
50 Year	129.2
100 Year	132.1

Note: These flows do not include 102 cfs that SWCD must convey downstream to satisfy SWCD's obligation to the City of Salem or other irrigators. Of the physical capacity of 89 cfs, there is no available capacity for additional flows; required flows already require reduction from the 1-ft freeboard or delivery of water through other SWCD canals.

SALEM DITCH HYDRAULICS

AMEC evaluated the hydraulic capacity of Salem Ditch near the Study Site. AMEC found that flows in excess of 89 cfs would exceed the capacity of Salem Ditch at the Study Site, located just upstream (south) of the diversion to Mix Ditch and west of Golf Course Road, and 3.3 miles below (northwest of) the headgate off the North Santiam River. The Study Site was found to be the location that most limited how much flow could be conveyed without reducing freeboard below 1 ft.

This finding was based on a calibrated hydraulic model of the lower 7700 ft of Salem Ditch, from its confluence with Mill Creek upstream to above Shaff Road. The finding is further supported by

measured water surfaces when flow in Salem Ditch was 77 cfs. Figure 3 shows a photo and cross-section of the Salem Ditch at the Study Site.

LIMITATIONS

This analysis did not assess flood risk from the Santiam River flooding over or around any headgates. Infiltration to or exfiltration from groundwater was not considered. Also, this document is a study of hydrology and hydraulics and no geotechnical analysis has been conducted by AMEC of any SWCD canal or facility. The above recommendations by AMEC regarding freeboard are not intended to suggest that Salem Ditch or other SWCD canals are safe from erosion or breach with 1 ft of freeboard.

This communication was prepared exclusively for the Santiam Water Control District (SWCD) by AMEC Environment & Infrastructure, Inc. (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended to be used by SWCD subject to the terms and conditions of SWCD's contract with AMEC. Any other use of, or reliance on, this report for any other purpose or by any third party is at that party's sole risk.

Sincerely,

AMEC Environment & Infrastructure, Inc.

REGISTERED PROFESSIONAL ENGINEER 17221 OREGON JULY 19, 1994 SETH L. JELEN EXPIRES: 6/30/2013

Seth Jelen, PE, CFM, CWRE
Principal Engineer – Water Resources

Reviewed by:

Habib Matin, PE, PhD
Principal Engineer – Water Resources

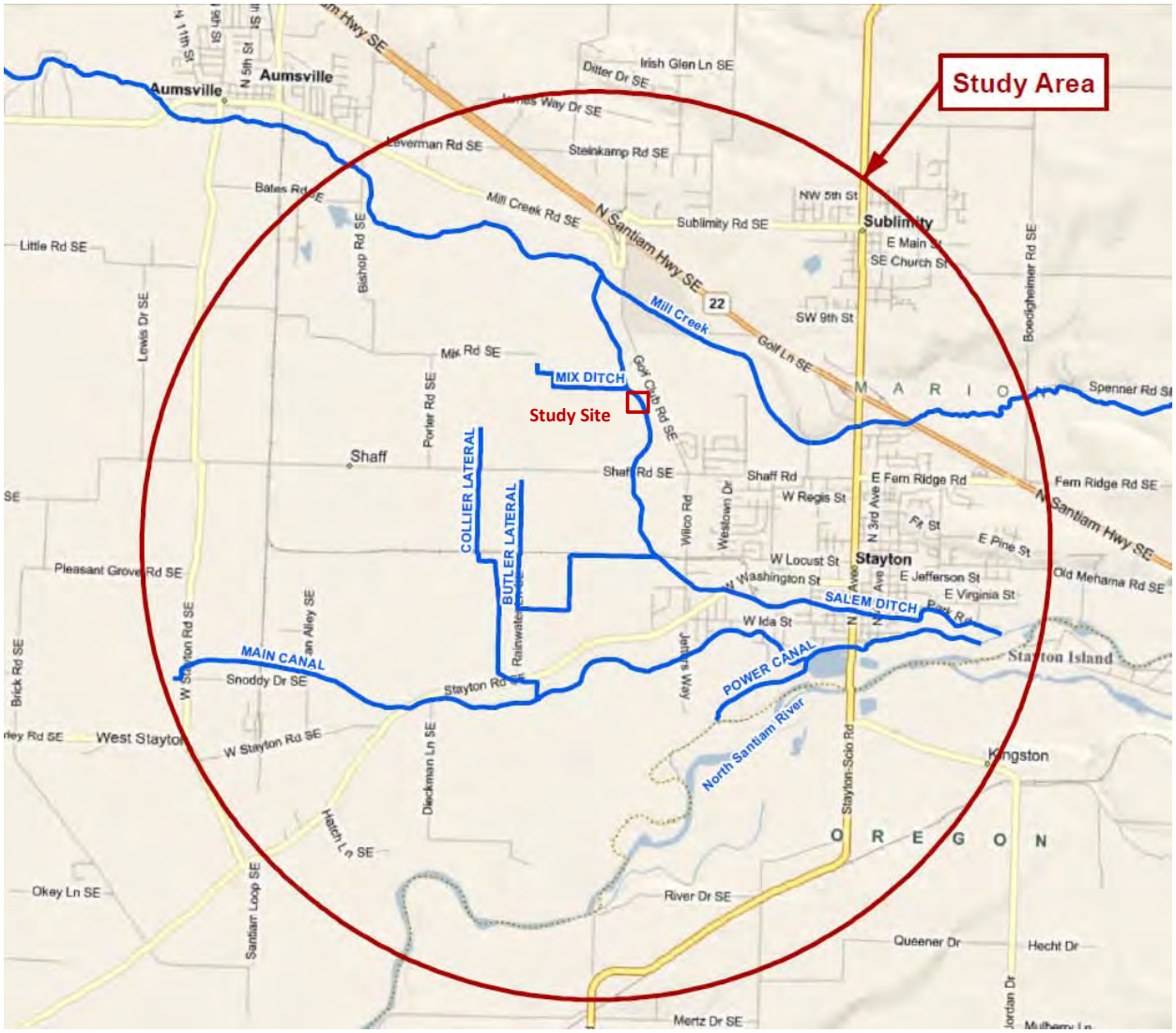

Figure 1 - Study Area Vicinity

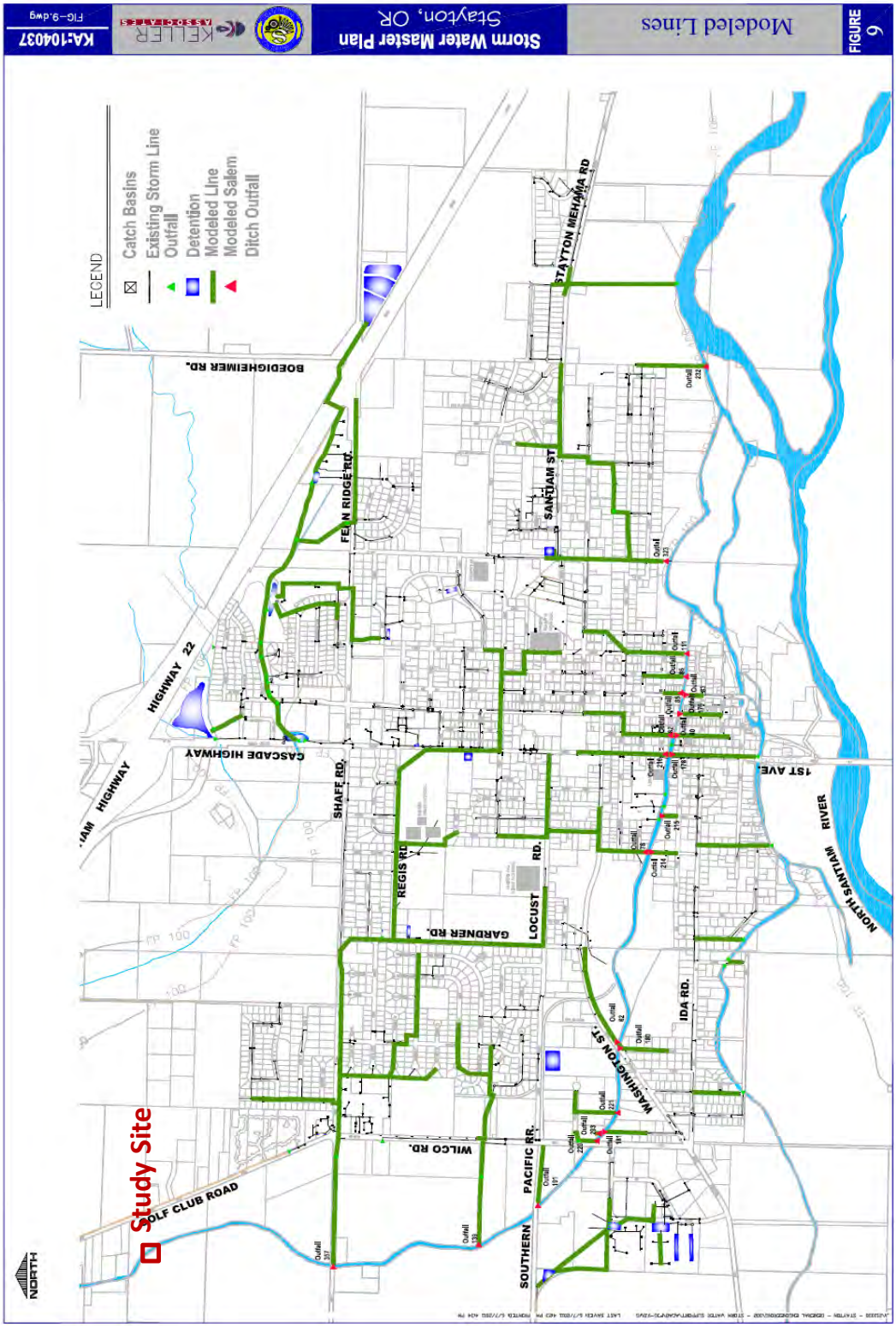

Figure 2 – City of Stayton Storm Sewers Discharging to SWCD Canals

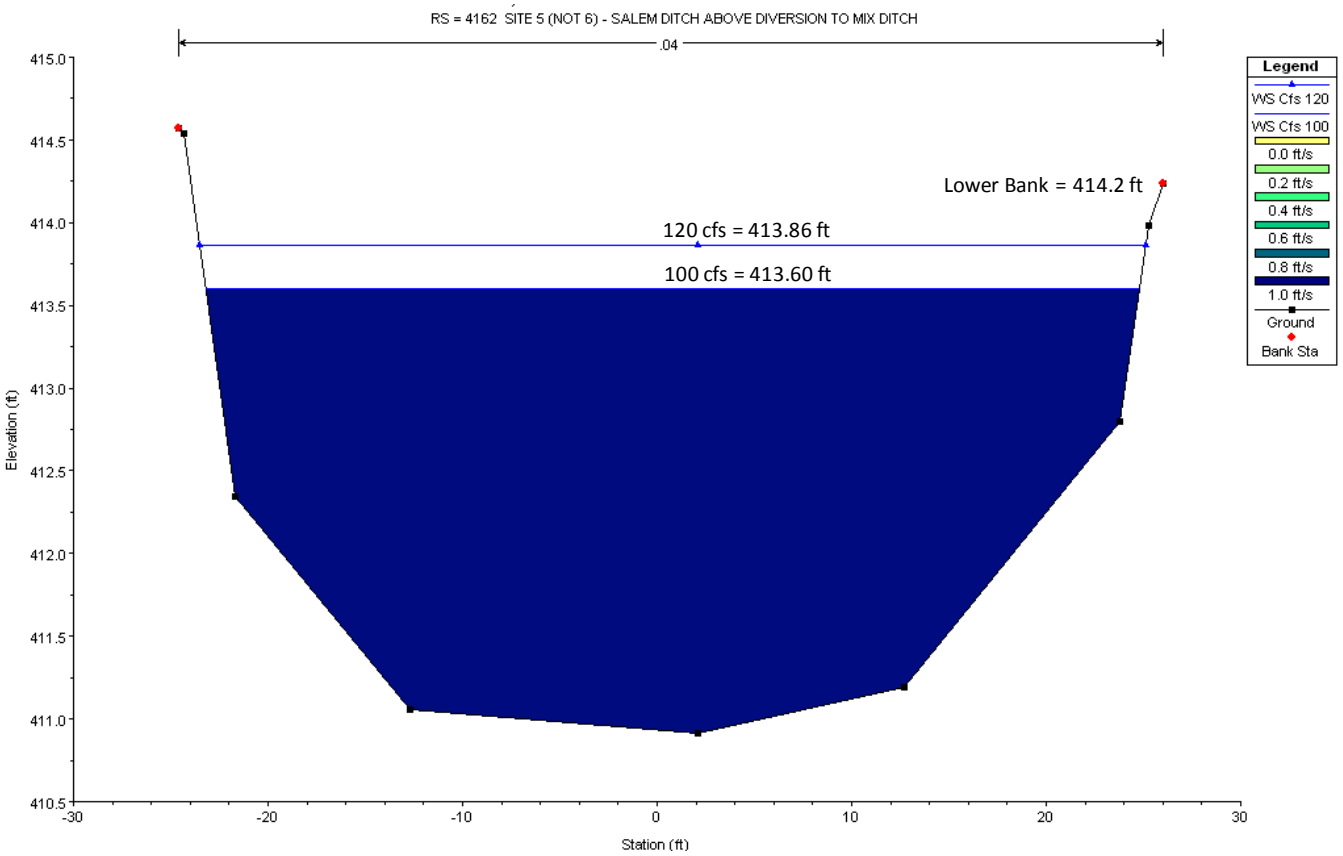

Figure 3 – Study Site Photo and Waterway Cross-Section

Exhibit C - SWCD Easement

Know all Men by these presents that we Henry Foster and Mary Foster his wife of the County of Marion, in the Territory of Oregon, in consideration of the sum of one dollar to us paid by Geo. H. Williams Joseph Watt and A. H. Reynolds do release and quit claim unto the said Geo. H. Williams, Joseph Watt and A. H. Reynolds to the use of the Willamette Woolen Manufacturing Company, the right of a canal way through all and any lands owned by us or occupide in said County of Marion, necessary to be passed through in conveying the water of the Santiam River into the channel of Mill Creek, and hereby grant, authority to said Geo. H. Williams Joseph Watt and A. H. Reynolds for the benefit of said Company to enter upon the same for the purpose of cutting a canal sufficiently large to admit the floe of any amount of water required by said Company for their purpose at Salem, and agree to allow them all the rights and privileges necessary fore the construction use and preservation of said canal

Witness our hands and seals this 10 day of April, 1856.

Two Witnesses: Henry Foster Seal

Mary Foster Seal

Acknowledged by Henry Foster and Mary Foster, before a Justice of Peace in Marion County, Oregon.

Certificate of Clerk of District court of Marion County, attached, No seal.

Recorded July 31, 1856 in Book 1, Page 317 of Deeds.

Exhibit D – Pages from WWMC Abstract

The United States of America. To All to all to whom these presents shall come, greeting. Whereas there has been deposited in the General Land Office of the United States a certificate numbered One thousand and eighty three of the Register and Receiver at Oregon City Oregon whereby it appears that under the provisions of the Act of Congress approved the 27th day of September 1850 entitled and Act to create the Office of Surveyor General of the Public Lands in Oregon and to provide for the survey and to make donations to settlers of the said public lands and the legislation supplemental thereto the claim of Henry Foster and his wife Mary Foster of Marion County, Oregon Notification No. 52 has been established to a donation of one section or six hundred and forty acres of land, and that the same has been surveyed and designated as Claim Number forty five being parts of sections three and four in Township nine South of Range one West and Claim Number sixty seven being part of section thirty three in Township Eight South of Range one West according to the Official Plat of Surveys returned to the General Land Office by the Surveyor General being bounded and described as follows to wit: Beginning at a point Six chains and fifty links South from the South West corner of Section thirty three in Township eight South of Range One West and running thence South Seventy two chains and sixty two links, thence East Eighty six chains and forty one links thence North Sixty four chains and fifty five links, thence West Fourteen chains and twenty links, thence North Eight chains, thence West Thirty two chains and thirty two links thence North Six chains and fifty links, thence North Fifty five degrees

and thirty minutes West seven chains and sixty links thence South Thirty five degrees and nine minutes West Thirteen chains and seven links and thence West Twenty six chains and seventeen links to the place of beginning in the District of lands subject to sale at Oregon City Oregon containing six hundred and twenty five acres and twenty two hundredths of an acre.

Now Know Ye, that the United States of America in consideration of the premises, and in conformity with the provisions of the Act aforesaid have given and granted and by these presents do give and grant unto the said Henry Foster and to his heirs the West half and unto his wife the said Mary Foster and to her heirs the East half of the tract of land above described. To have and to hold the said tract with the appurtenances unto the said Henry Foster and his wife Mary Foster and to their heirs and assigns forever their respective portions as aforesaid. In testimony whereof I Andrew Johnson President of the United States have caused these Letters to be made Patent and the seal of the General Land Office to be hereunto affixed Given under my hand at the City of Washington this Twentieth day of September in the year of our Lord one thousand eight hundred and sixty seven and of the Independence of the United States the ninety second.

By the President Andrew Johnson

Seal By Frank Cowan, Secretary

J. N. Granger, Recorder of the General Land Office.

Recorded July 31, 1879 in Book 24 Page 211 of Deeds

Exhibit E – Delivery Contract

SANTIAM WATER CONTROL DISTRICT
WATER DELIVERY CONTRACT

This contract, between the Santiam Water Control District, a municipal corporation formed under ORS Ch. 553, hereinafter referred to as "District", and Paul & Irene J. Dozler, their heirs and assigns, hereinafter referred to as "Owner".

WHEREAS, Owners of land within and adjacent to the District have various water rights in the forms of permits or certificates from the State of Oregon and the District may be the holder of various water rights, and the District owns a water delivery system and is authorized to deliver water for irrigation and other uses, and the Owner owns land within or served by the District with a County Tax Assessor's number and described in the following deed references or legal description:

County Tax Assessor No.	Location Sec.	Township	Range	Deed Reference Reel or Volume & Page
60408-000	4	9S	1W	

AND the Owner has a water right for the irrigation or other beneficial use of water on parcels described as follows:

Permit or Certificate No.	Priority Date	Number of Acres	Attached Map or Exhibit
68662	June 24, 1911	40.7	
68663	May 14, 1909	.4	
68664	Aug 28,1924	15.3	

and Owner wants to enter into a contract for the delivery of water for the benefit of the land,

NOW, THEREFORE, the District agrees to deliver water to the Owner via the lateral most convenient to the District, to the lands set forth above at a point of delivery described as follows:

Such water shall be used only for the purpose set forth in the Water Right Permit or Certificate mentioned above.

In return, the Owner agrees to pay the District the sum of PAID IN FULL ($_____) as an initial fee or note for this agreement, receipt of which is hereby acknowledged. Owner agrees to pay all charges levied by District for such delivery. It is agreed between the District and Owner that the operation and maintenance charges shall be payable when billed by the District and is not contingent upon Owner using water in any particular given year. It is agreed by the parties that whether Owner utilizes water or abandons their water rights through non-use, the operation and maintenance charges must continue to be paid.

If the Owner is in default for failure to pay any lawful charge or under any of the terms of this or any other agreement entered into with the District, water shall be withheld by the District and not delivered to the lands of Owner as long as such default exists, and the same shall be true even though Owner may be in default with respect to only one year's charge and not in default for other charges for other years or for other parcels of land.

Should Owner either lose their water right or a portion thereof for any reason, this shall not excuse Owner from the continued responsibility for the payment of the charges which will continue to be billed unless and until a new agreement is reached between the parties in accord with District policy.

If any party to this agreement is in default under the terms hereof and this agreement is placed in the hands of an attorney to take any steps or actions with respect to such default, the defaulting party agrees to pay the other parties reasonable attorney's fees and out of pocket expenses even though no court proceeding is filed; however, in the event either of the parties hereto institute a court proceeding to procure any remedy for any breach hereof, the party prevailing shall recover from the other such sums for attorney's fees in such suit or action in an amount the court may adjudge to be reasonable. In addition, such prevailing party shall recover from the other such sums as are incurred as the prevailing party's actual costs and disbursements in such suit or action, including but not limited to the costs of depositions, expert witness fees and other actual out of pocket expenses. Similarly, the prevailing party shall be awarded their costs, disbursements, and reasonable attorney's fees on any appeal.

The District agrees to deliver water within the terms of the water right and state law, subject to the normal losses of the delivery system to the best of the District's ability. The District shall not be responsible for delivery of water outside the water rights of Owner, or for non-delivery in the event of non-availability of water due to any reason beyond the control of the District. The District shall not be held liable for actions or inactions of employees, officers, the Board of Directors, or agents, that do not constitute gross negligence, and then only to the limits established by Oregon law.

Owner hereby grants the District right-of-way easements over and across Owner's land for existing laterals, ditches, and conduits used by the District to carry water to and from the land of Owner and other water users served by the District. Consistent with the intended purpose, the District agrees to install such laterals and conduits in a manner least likely to interfere with Owner's use of their premises and improvements thereon if reasonably possible. If any ditch is relocated for the owner's convenience, the right-of-way easement will also be transferred.

Owner further agrees to comply with the Water Control District Act, as the same may be amended in the future and with any rules, regulations or policy adopted by District and, even though the tract is located outside the District, to pay all charges imposed thereon. If the land involved lies outside the District, any unpaid charges or sums owed to the District shall be a lien on the property in the same manner as described in ORS Chapter 553 for lands within the District, and collection enforcement of the unpaid charges may be taken by the District in the same manner as though the lands were located within the District's boundaries.

The District ditches may incidentally aid in the drainage of some lands but the District shall not be responsible for providing drainage of Owner's land nor is it liable for damages which may result from the failure of any drainage system which utilizes District facilities, or damage that may result from ditch overflow beyond the control of the District.

If this contract is for delivery of water which has not yet been certificated, it is agreed that, if at the time of State Final Proof Survey and certification, the number of certifiable acres differs from that herein contracted for that if the certifiable acres are more than the contracted acres Owner agrees to pay for charges on the additional acres from the certification date onward, and to pay the District a sum representing the initial fee on these additional acres, at the rate then in effect. If the certifiable acres are less than the contracted acres, the District shall not be responsible for the refund of any past fees and charges. Owner continues to be responsible for charges on the contracted acres, unless those contracted acres not certifiable are non-irrigable.

This contract supersedes all agreements heretofore entered into between the parties or their predecessors to the extent that the lands involved and specifically described in such previous agreements coincide with the lands herein involved and described. Such previous agreements shall remain in force on any lands which do not coincide with lands herein described. In signing this contract, both parties certify that they have carefully read this contract and understand it to contain any and all details covering the purchase, sale of irrigation water or the delivery thereof. This contract is terminable only by the mutual agreement of both Owner and District.

In the event the Owner herein shall be in default in any manner whatsoever under the terms of this contract or shall fail to use the water rights mentioned herein for a period of four successive years, then the parties agree that the District may transfer such water rights to other real property or lands, with prior approval of the Board of Directors of the District and approval of Oregon Water Resources Department or upon request of the District to transfer the water rights to the District without consideration.

Dated this _____ day of _____, 199___.

DISTRICT:

By Raymond Burton
President, Board of Directors

Attest Judd Henderson
Secretary, Board of Directors

OWNER(S)

Paul Dozler

Irene J. Dozler

STATE OF OREGON)
) ss.
County of Marion.)

On this 29th day of June, 1994, before me, the undersigned, a notary public in and for said County and State, personally appeared the within named Paul + Irene J. Dozler known to me to be the identical individuals described in and who executed the within instrument and acknowledged to me that they executed the same freely and voluntarily.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the day and year last above written.

M. Kay Burton
Notary Public for Oregon

OFFICIAL SEAL
M KAY BURTON
NOTARY PUBLIC-OREGON
COMMISSION NO. 034142
MY COMMISSION EXPIRES APRIL 26, 1998

Outlook

Fw: Annexations Applications (2) for Stayton - Butler Annexation (11641 Shaff Rd)

From Caleb Cox <ccox@kittelson.com>
Date Mon 4/21/2025 10:11 AM
To Jennifer Siciliano <jsiciliano@staytonoregon.gov>

Jennifer, I tried forwarding this thread to you but got a bounce back email saying the file was too large. I'm trying again with the email thread I had attached removed.

Feel free to give me a call to discuss.

Caleb Cox, PE
Senior Engineer

Kittelson & Associates, Inc.
Transportation Engineering / Planning
503.535.7453 (direct)

From: Caleb Cox
Sent: Monday, April 14, 2025 10:31 AM
To: Jennifer Siciliano
Cc: Susan Wright; Barry Buchanan; Michael Schmidt; Max Heller
Subject: Re: Annexations Applications (2) for Stayton - Butler Annexation (11641 Shaff Rd)

Hi Jennifer,

This email is responding specifically to the Butler annexation.

We reviewed their pre-app materials back in July, 2024 (See Attached). Our response to this application for annexation is largely the same.

Can you confirm their application is for annexation only, and not development? If so, they do not need to provide any further transportation analysis at this time. When they are ready to proceed with development, a TIA will be required. We recommend that the applicant's traffic engineer reach out to us prior to starting to confirm the scope of the TIA.

I also want to make sure the applicant is still aware of the unique right-of-way needs along Shaff Road to facilitate future Shaff/Golf Club roundabout and a large utility easement for Pacific Power. Back in July, we provided our design plans for this. Will the applicant dedicate the ROW with this annexation? Or would the dedication wait until they're ready to develop?

Thanks,

Caleb Cox, PE
Senior Engineer

ASHLEY ENGINEERING DESIGN

MEMORANDUM

Proposed Annexation and Development along Shaff Road – Pre-Application Meeting Discussion Notes (Preliminary)

City of Stayton, OR

TO: Pre-Application Meeting Discussion Notes

FROM: John Ashley, P.E./*City Engineer*

COPIES: Lance Ludwick, P.E./*Public Works Director*
Michael Schmidt/*Public Works Engineering Technician II*

PROJECT: **Proposed Annexation and Development along Shaff Road – 091W04C-TL001901**

DATE: *Pre-Application Meeting – August 8, 2024 @ 2:00pm.*
(PRELIMINARY DISCUSSION NOTES)

Background

I received a copy of the pre-application meeting notice and attachments from the City of Stayton. The pre-application meeting will be regarding possible annexation of approximately 17.01 acres and possible single family and multifamily development located along Shaff Road. The existing parcel is currently vacant land.

The following are initial thoughts and comments based on a brief cursory review of the preliminary map/sketch included with the request for a pre-application meeting, and concentrates on the public works aspects and implications of a proposed application. These preliminary discussion notes are based on a review of the applicable public works portions of the City of Stayton Municipal Code (SMC) and Public Works Design Standards (PWDS), and does not include a review of any other agency's requirements, or any building or other specialty code requirements covered under such building, plumbing, mechanical, electrical, fire, etc., or any other applicable codes and regulations that may be required for the project.

Should the applicant decide to pursue continuation of this development, the Developer will be required to obtain any and all required reviews, approvals, and permits required by the Planning Conditions of Approval, SMC, PWDS, Marion County, DEQ, OHA-DWP, Fire Code Official, Building Official, and/or any other agencies having jurisdiction over the work. As such, the Developer shall coordinate with Public Works, Fire Code Official, Building Official, and other appropriate agencies as necessary. The City of Stayton Municipal Code and Public Works Standards are available online at http://www.staytonoregon.gov, under the document center and the public works department menus.

ASHLEY ENGINEERING DESIGN

MEMORANDUM

The following preliminary discussion notes are public works initial thoughts and comments based on a brief cursory review of the preliminary map/sketch included with the request for a pre-application meeting, and are intended to be for discussion purposes only. Any SMC, PWS, SWMM, and other Site Development Permit requirements that may be applicable to the proposed development, but not specifically referenced in these preliminary discussion notes, does not in any way relieve the Developer from their responsibility to comply with the requirements of the SMC, PWS, SWMM, and applicable permits, laws, and regulations. Should the applicant decide to pursue continuation of this development, these preliminary discussion notes may be further incorporated into public works recommended conditions of approval.

Project Overview

Project Site and Access

The pre-application meeting request and City GIS mapping show the location of the proposed development to be within Township 9 South, Range 1 West, Section 04C, Tax Lot 01901. Proposed vehicular access to the parcel is from new commercial driveway approaches shown along Shaff Road SE. From the tax assessor's map, Tax Lot 01901 is shown to be approximately 17.01 acres in size.

Existing Site Topography and Utilities

Existing site topography and utilities were not provided with the pre-application meeting request. City GIS mapping indicates that there are no existing public utilities readily available along the frontage to serve the site. As such, offsite public improvements, including those identified in the City's master plans, will be necessary. Prior to annexation and future development of the site, further review and analysis of the site and of existing City public utilities by the Design Engineer(s) will be required, and supporting documentation shall be submitted to the City in accordance with SMC 17.12.210.4.a., which adequately demonstrates that the site is or is capable of being serviced by adequate City public services, including such services as may be provided subject to the terms of a contract annexation agreement between the Applicant and the City.

Construction Phasing

The pre-application meeting request did not indicate if the proposed development will be constructed in multiple construction phases. In accordance with PWDS 103.01.B, if a development that has been approved by the City to be constructed in multiple phases, the construction plans for each phase of the development shall be substantially and functionally self-contained and self-sustaining with regard to access, utilities, open spaces, and similar physical features, and shall be capable of substantial occupancy, operation, and maintenance should the subsequent phases of the development not be developed. City approval of the

construction plans and the time by which construction must begin of one construction phase, shall be independent of City approval for all other construction phases of the development.

Horizontal and Vertical Datum

The pre-application meeting request did not indicate the horizontal and vertical datum being used for the development. In accordance with PWDS 102.03, all elevations on design plans and record drawings shall be based on the NAVD88 Datum, and the horizontal datum shall be based on the Stayton local datum or Oregon State Plain Coordinate System (NAD83).

Findings

Transportation

- **TIA/TAL** – A Transportation Impact Analysis (TIA) will be required for this proposed development in accordance with PWDS 302.02 and SMC 17.26.050. Shaff Road SE is under Marion County jurisdiction, so the Developer will need to coordinate with Marion County Public Works (MCPW) to determine their TIA requirements.
- **Right of Way (R/W)** – Right-of-ways shall comply with the SMC and PWDS 312, Geometric Design Requirements by Street Functional Classification. Right-of-way dedication at intersections shall be sufficient to at minimum provide 1' clearance behind sidewalks and curb ramps in accordance with PWDS 302.05.C. The standard 10' wide public utility easement shall be provided along the frontage in accordance with PWDS 102.08, unless otherwise approved by the Public Works Director. Street connectivity and formation of blocks shall comply with PWDS 303.07.E and SMC 17.26.020 requirements.
    - ***Shaff Road SE*** – Shaff Road SE is designated in Figure 8 of the City's TSP as a Collector Street under Marion County jurisdiction. PWDS 312 requires a minimum of 80' R/W for Collector Streets designated yellow in the City's TSP. From the assessor's map, it appears that additional R/W will be needed along the frontage in order to meet the minimum half-width R/W requirement in the PWDS. Since the frontage is under Marion County jurisdiction, any additional R/W requirements will be as determined by them.
    - ***Intersection of Golf Club Road/Shaff Road/Wilco Road*** – The City's TSP recommends a roundabout be provided at this location and it is currently shown in the City's TSP as the highest priority motor vehicle project. The roundabout project is currently under design. However, since a final engineering design for the roundabout has not yet been completed, only preliminary R/W and easement needs have been established. A 44' wide easement area outside the 40' half-width R/W line is being proposed along the frontage of Shaff Road SE as part of the roundabout project for the Pacific Power transmission lines and for a large storm drainage conveyance swale. In addition, an easement for a large stormwater facility located

at the southeasterly corner of the parcel along Shaff Road SE is also being proposed as part of the roundabout project. As such, this may have an impact on the proposed site layout and proposed location of structures. Further review and coordination with the City's Traffic Engineers and with Pacific Power by the Design Engineer is recommended early in the development process to identify these areas.

- ***Interior Subdivision Streets*** – All interior subdivision streets shall comply with the minimum 60' R/W for Local Streets as required by the Public Works Standards. The standard 10' wide public utility easement shall be provided along the frontage in accordance with PWDS 102.08, unless otherwise approved by the Public Works Director.

- **Street Improvements** – Street sections shall comply with PWDS 312, Geometric Design Requirements by Street Functional Classification. In accordance with PWDS 302.01.D, it shall be the responsibility of the Developer to preserve and protect the current pavement condition index rating and the structural integrity of the existing roadways from construction traffic to the satisfaction of the Public Works Director throughout all phases of development. Failure to preserve and protect the roadways may result in the Owner/Developer being responsible for replacing and reconstructing the damaged roadways at the Owner/Developer's expense. It should also be noted that final asphalt concrete pavement and sidewalk sawcut lines for all street improvements will be established by the City Inspector with the Design Engineer and Contractor during construction in accordance with the PWDS.
  - ***Shaff Road SE*** – Shaff Road SE is currently an unimproved turnpike style street. The City's PWDS indicates that a 46' wide street section with 6' wide property line sidewalks is required for the Collector Street. All necessary street improvements shall be designed in accordance with City and MCPW standards including necessary curb and gutters, asphalt concrete pavement, storm drainage, sidewalks, street lights, and pavement tapers, unless otherwise approved by the Public Works Director. Since the frontage is under Marion County jurisdiction, any additional street improvements will be as determined by them. Unless approved otherwise by the Public Works Director at the time of development, pavement core test results will need to be provided to the City showing that the existing half-street pavement section along the frontage complies with PWDS requirements. If the existing half-street asphalt pavement section is found to be sub-standard along the frontage, the existing pavement section will need to be removed and replaced per PWDS 303.02 and PWDS 305.04. If the existing pavement base is determined to be structurally sound, an overlay of the pavement may be approved per PWDS 305.04.D.
  - ***Interior Subdivision Streets*** – All interior subdivision streets shall comply with the 34' wide typical Local Street section and other typical Local Street design standards as required by the Public Works Standards. In accordance with PWDS 303.04.A, when private streets are allowed in development, such as for condominiums and apartments, the private streets shall be built to local residential street standards and

meet all Stayton Municipal Code requirements. Private streets shall comply with the Fire Code for fire apparatus access requirements.

- **Parking Lot** –
  - Parking lot design shall minimize congestion and take into account both vehicle traffic and pedestrian traffic and shall comply with standard engineering practice, the Stayton Municipal Code, and Public Works Standards.
  - All driveway approaches and traffic circulation patterns shall be designed to accommodate emergency vehicles as necessary.
  - The proper number and type of ADA parking stalls shall be provided.
  - Parking lot lighting shall be in accordance with SMC 17.20.170.4.c. The type, spacing, and location of parking lot lighting shall be as approved by the City.
  - Finish grades shall be such that stormwater runoff will be directed towards an appropriate stormwater system. New parking lot catch basins shall be designed to support H-20 loading and at minimum shall be equipped with sediment and stormwater pollution control traps.
- **Sight Distance and Clearance Areas** – Adequate sight distance and clearance areas shall be provided in accordance with PWDS 303.06. Landscaping shall be located and designed to prevent obstruction of the sight distances and clear vision areas.
- **Driveway Spacing** – PWDS 303.11.D requires the driveway spacing to be 150' on Collector Streets from another driveway and/or from a nearby street intersection. As such, the driveway access spacing and distances will need to be reviewed by the Developer's Traffic Engineer as part of the TIA.
- **Street Lighting** – The location of existing street lights shall be reviewed and any additional street lighting shall be provided as necessary to comply with PWDS 308, unless otherwise approved by City and Marion County Public Works. Coordination with, and approval by, Pacific Power of any necessary street lighting will be required.
- **Mailbox Clusters** – The Developer shall coordinate the location of any clustered mailboxes with the USPS Postmaster, and the location of any clustered mailboxes shall comply with Public Works Standards and meet the requirements of the Building Official. Coordination with, and approval by the USPS Postmaster of any necessary mailbox clusters will be required.
- **Streetscape Appurtenances** – All public and private franchise utility items that currently exist or will be placed in the right-of-way that will impact the sidewalk and/or the landscape strip shall be coordinated and shown on the plans as necessary. Franchise utility poles and other utility structures shall be coordinated with rightful utility owners and located in accordance with PWDS requirements. Street trees shall be provided in accordance with PWDS 309.05; however, they shall be located and designed to prevent obstruction of the sight distances and clear vision areas.
- **Transportation System Plan** – Figures 3 and 5 of the City's TSP identify some bike and pedestrian improvements that are needed along the frontage of the proposed development. Figure 10 of the City's TSP indicates that a roundabout is needed at the

intersection of Golf Club Road/Shaff Road/Wilco Road (*Project M1: Golf Club Road SE/Shaff Road SE Roundabout*). Under the project description for *Project M1: Golf Club Road SE/Shaff Road SE Roundabout* shown on page 52 of the City's TSP, it states that *"The intersection of Golf Club Road SE and Shaff Road is currently all-way stop controlled. As shown in Table 10, it currently operates at an acceptable level of service. However, based on existing vehicular volumes, this intersection meets signal warrants as prescribed in the Manual for Uniform Traffic Control Devices. Additionally, during the public engagement process, this intersection was noted to need intersection control upgrade to improve traffic flow."* It should be noted that since development of the City's TSP back in 2019, there has been some recent development activity within and around this area. As such, coordination with the City and Marion County, and further review and analysis by the Developer's Traffic Engineer as part of the TIA and by the Design Engineer(s) of this intersection in accordance with the SMC, PWDS, and MCPW will be required. Depending on the findings and recommendations presented in the TIA, some improvements may need to be provided at this intersection in order to comply with SMC, PWDS, and MCPW requirements.

- **Parks Master Plan** – The development shall comply with the Parks Master Plan, including the appropriate open space, trails, and landscaping.
- **Engineered Plans** – The Developer shall submit to the City and to Marion County Public Works (as applicable) for review and approval engineered site and street improvement plans conforming to Public Works Standards.

Water

- **Public Water System** – A public water system is not readily available to serve this development, and a utility layout showing the necessary public water system needed to serve the site was not provided with the pre-application meeting request. Further analysis by the Design Engineer will be required to verify public utilities are able to adequately serve the site, and supporting documentation shall be provided to the City for review prior to annexation and future development of the site. Offsite water system improvements in accordance with the City's Water Master Plan and PWDS will be necessary to be designed and constructed per PWDS and OHA-DWS requirements.
- **Domestic Service and Backflow Prevention** – New water services, water meters, and backflow prevention devices (as appropriate) will be required to be installed in accordance with the PWDS as part of future development. All backflow prevention details will need to be reviewed and approved by the City, Building Official, and the Fire Code Official, as applicable. Only Oregon Health Authority – Drinking Water Services (OHA-DWS) approved backflow devices shall be used. All private utilities will need to be adequately sized and designed by the Design Engineer in accordance with the PWDS and applicable building/specialty codes, and reviewed and approved by the Building Official.
- **Water Quality Sampling Station(s)** – Water quality sampling station(s) will be required for the development in accordance with PWDS 410.01.A.

- **Fire Protection** – Generally, fire hydrant(s) are required to be installed within 250' of any new structure, unless otherwise approved by the Fire Code Official. As such, a fire water service connection and fire vault assembly equipped with a detector type meter assembly will be required to serve any approved private fire water lines and private fire hydrants. The Developer shall review and coordinate with the Fire Code Official to ensure compliance with applicable fire codes and regulations. Any necessary water system improvements shall comply with the Public Works Standards and be shown on the engineered plans. The Developer shall provide the necessary fire access, protection devices, and system modifications and meet all other fire protection requirements of the Fire Code Official.
- **Secondary Fire Access** – The Developer shall comply with the SMC, PWDS, and Fire Code Official regarding secondary fire access requirements necessary for the development.
- **Fire Code Official Approval** – Prior to Site Development Permit final plan approval, the Developer shall provide written documentation that the Fire Code Official has reviewed and approved all required fire access, protection devices, and system modifications, unless otherwise approved to be deferred in writing by the Fire Code Official.
- **Water Master Plan** – Figure 4 of the City's Water Master Plan shows that a 10" CLDI waterline is needed along the frontage of Shaff Road SE and a 12" CLDI north along the alignment of Salem Ditch. As such, it is recommended that the City work with the Developer for the installation of the needed waterlines and any necessary fire hydrants. The City standard minimum pipe size for a public water main is 8" CLDI. As such, the additional costs for the upsizing of the public water system will be eligible for reimbursement in accordance with SMC 13.12, as further defined in a Development Agreement.
- **Engineered Plans** – The Developer shall submit to the City for review and approval an engineered water system plan conforming to the SMC, Public Works Standards, and meeting the requirements of the Building Official and Fire Code Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public water main and/or public fire hydrant is extended outside the public right-of-way.

Sanitary Sewer

- **Public Sanitary Sewer System** – A public sanitary sewer system is not readily available to serve this development, and a utility layout showing the necessary public sanitary sewer system needed to serve the site was not provided with the pre-application meeting request. Further analysis by the Design Engineer will be required to verify public utilities are able to adequately serve the site, and supporting documentation shall be provided to the City for review prior to annexation and future development of the site. A sanitary sewer study and supporting documentation will be required in accordance with PWDS 503.01. There is an existing sanitary sewer system located at the intersection of Shaff Road and Wilco Road. Offsite sanitary sewer improvements will be necessary to be designed and constructed per PWDS and DEQ requirements to serve the

development. The City standard minimum pipe size for a public sanitary sewer main is 8" and upsizing may be required to serve future development along Shaff Road SE. If upsizing is required, then the additional costs for the upsizing of the public sanitary sewer system will be eligible for reimbursement in accordance with SMC 13.12, as further defined in a Development Agreement. All sanitary sewer system improvements shall comply with PWDS and DEQ requirements.

- **DEQ Sanitary Sewer Approval** – Prior to final plan approval, the Developer will be required to provide written documentation showing that DEQ has reviewed and approved all public sanitary sewer system improvement plans.
- **Private Sanitary Sewer Systems** – All private utilities will need to be adequately sized and designed by the Design Engineer in accordance with the PWDS and applicable building/specialty codes, and reviewed and approved by the Building Official. In accordance with PWDS 506.01.B, multi-family dwellings or commercial buildings shall have 6" sanitary sewer service laterals.
    - A sanitary sewer monitoring manhole will be required per the PWDS at the property line to monitor the discharge from the development given the shallow groundwater depths and the amount of sanitary sewer service piping that will be needed to serve the development. In addition, it is recommended that the private sanitary sewer system also be pressure tested in accordance with both PWDS and the building/specialty code requirements.
    - If grease will be introduced into the sanitary sewer system in quantities that can affect sanitary sewer flow or hinder sanitary sewer treatment, then a grease interceptor may be required in accordance with PWDS 505.04.A.
- **Wastewater Master Plan** – Figure 15 of the City's Wastewater Master Plan does not indicate the necessary sanitary sewer system improvements needed to serve development of this area. As such, further analysis by the Design Engineer for the necessary sanitary sewer system improvements will be required prior to annexation and future development of this area.
- **Engineered Plans** – The Developer shall submit to the City and Building Official for review and approval an engineered sanitary sewer plan conforming to the SMC, Public Works Standards, and meeting the requirements of the Building Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public sanitary sewer main is extended outside the public right-of-way.

Stormwater

- **Existing Natural Drainage Features** – The Developer shall comply with applicable portions of SMC 17.20.180 for wetland protection areas, applicability, and application submittal requirements, SMC 17.16.100 if located in areas of special flood hazard, and shall provide the necessary setbacks/resource overlays required by the SMC and PWDS for the existing natural drainage features located onsite. Existing natural drainage

features shall be protected at all times and shall comply with SMC, PWDS, and jurisdictional agency requirements.

- **Public Storm Drainage System** – A public storm drainage system is not readily available to serve this development, and a utility layout showing the necessary public storm drainage system needed to serve the site was not provided with the pre-application meeting request. Further analysis by the Design Engineer will be required to verify public utilities are able to adequately serve the site, and supporting documentation shall be provided to the City for review prior to annexation and future development of the site. As such, offsite stormwater improvements may be necessary to be designed and constructed per PWDS requirements and conveyed to an acceptable point of discharge.
- **Private Storm Drainage System** – Private storm drainage systems for the development shall be designed in accordance with the PWDS and design calculations shall be submitted for review. All private utilities will need to be adequately sized and designed by the Design Engineer in accordance with the PWDS and applicable building/specialty codes, and reviewed and approved by the Building Official.
- **Site Excavation and Grading** – The design, excavation, and grading of the site shall comply with SMC 15.10. A Geotechnical Engineering Report for the site excavation and grading work shall be provided in accordance with the SMC 15.10.090, and recommendations included in the Geotechnical Engineering Report shall be incorporated in the grading plans or specifications per SMC 15.10.090.4.c. Excavation and grading setbacks shall comply with SMC 15.10.140. Inspection during construction of the excavation and grading work shall be in accordance with 15.10.170. Upon completion, final asbuilts, reports, and written certification shall be provided to the City in accordance with 15.10.180.
- **Stormwater Analysis and Report** – A stormwater analysis, drainage report and supporting documentation will be required in accordance with PWDS 603.01. Existing site topography, off-site contributing areas, and the high seasonal groundwater elevation will need to be considered and included in the stormwater design. All developed open water surface areas will need to be included in the stormwater calculations and the required stormwater facility setback distances shall be included in the design and shown on the plans. The City is known to have high seasonal groundwater issues so the potential impacts to the stormwater drainage system and stormwater facilities will need to be considered in the design.
- **Stormwater Easement/Tract** –Stormwater facilities serving more than one tax lot or designed to function as multiuse/recreational facilities must be located in a separate tract (e.g., Tract A), defined easement, or designated open space. All necessary easements and tracts shall comply with the SMC, PWDS, and SWMM requirements.
- **Stormwater Quality and Quantity** – In accordance with PWDS 602.01.N, stormwater quality and quantity provisions shall be included as part of the design considerations. The City's thresholds for proposals that are subject to the stormwater quality and quantity requirements are as indicated in PWDS 602.01.N. Unless otherwise specifically

approved by the City Engineer, proposals meeting these thresholds must comply with the stormwater quality (pollution reduction) requirements specified in PWDS 607, the stormwater quantity (flow control) requirements specified in PWDS 608, and the stormwater infiltration requirements specified in PWDS 609. All projects shall comply with the City's stormwater operations and maintenance (O&M) plan and agreement requirements and source control requirements.

- In accordance with PWDS 602.01.N, stormwater shall be surface infiltrated onsite to the maximum extent feasible, before discharging any flows offsite. The City is known to have high seasonal groundwater issues, so if infiltration is proposed, the site's actual infiltration rates (to be determined during wet-weather months) and the seasonal high groundwater elevation for this area will need to be determined and the potential impacts to the stormwater drainage system and stormwater facilities (including the vertical separation requirements) will need to be considered in the design. However, given the seasonal high groundwater issues known in this area, infiltration will most likely not be appropriate. Depending on the types of stormwater facilities being proposed for the development, groundwater monitoring wells may be necessary in order to properly monitor and determine the site's high seasonal groundwater elevations. As such, it is strongly suggested that this be discussed with a Geotechnical Engineer early in the design process. Per PWDS Table 602.05.C, a 5' minimum vertical separation from the high seasonal groundwater shall be provided, unless otherwise approved. See PWDS 609 for stormwater infiltration requirements.
- Stormwater quality facilities meeting the requirements of PWDS 607 will be required. Stormwater facilities will need to properly function during periods of high groundwater and the water quality of the groundwater needs to be adequately protected. Best management practices shall be used to minimize any degradation of stormwater quality caused by the development. A stormwater quality manhole shall be provided upstream of vegetated stormwater facilities per PWDS 607.03, unless otherwise approved.
- Stormwater quantity facilities meeting the requirements of PWDS 608 will be required. If retention is proposed, then the stormwater retention facility shall be designed to retain a 100-year storm event per PWDS 602.05.C. If detention is proposed, stormwater quantity facilities will be required to detain post-developed peak runoff rates from the 2-year, 5-year, 10-year, 50-year, and 100-year 24-hour storm events to the respective pre-developed peak runoff rates, and the post-developed peak runoff rate for the 25-year storm event will be required to be detained to the 10-year pre-developed peak runoff rate per PWDS 602.05.C. A downstream capacity analysis may also be required per PWDS 603.01.B.
- Provisions for an adequate and approved emergency overflow system are required to convey the post-developed 100-year storm event flows to an acceptable point of discharge, and an emergency escape route shall be provided in accordance with

SWMM requirements. Per SWMM 2.4.2.3, emergency escape routes from stormwater facilities are not the same as a piped overflow and cannot be directly piped to public storm sewer systems. Recommended emergency escape routes include safe overland flow routes to parking lots, streets, landscaped areas, or drainage ways.

- Appropriate setbacks from the edge of the stormwater facility's maximum water surface to the building foundations and property lines shall be provided, unless an easement with adjacent property owners is provided in accordance with the SWMM requirements.
- The amount of impervious surface area that has been included in the stormwater calculations shall be shown in the stormwater drainage report narrative and noted on the stormwater plans, including what the impervious surface area calculation includes (e.g., pavements, sidewalks, driveways, driveway approaches, roofs, etc.). The maximum amount of impervious surface area shall be shown for the buildings to be constructed that has been accounted for in the stormwater facility design. The stormwater facility open water surface area will also need to be included in the calculations as an impervious open water surface area.
- Source control measures shall be implemented for the development in accordance with PWDS 602.01.N. The SWMM Source Control Manual defines the source control characteristics and uses and identifies structural source controls that must be implemented to manage the pollutants at their source.

- **Acceptable Point of Discharge** – It shall be the responsibility of the Developer to provide a suitable discharge location for stormwater from the development which will not harm or inconvenience any adjacent or downstream properties and that conforms to Public Works Standards and jurisdictional agency's requirements. An acceptable point of discharge is to be designed by the Design Engineer and approved by the City applicable jurisdictional agencies. It is recommended that the Developer work with the Santiam Water Control District (SWCD) early in the design process if stormwater is planned to be discharged to the Salem Ditch. In accordance with PWDS 605.08.A, any new outfall into Salem Ditch will require written approval from the SWCD prior to final plan approval. Offsite stormwater improvements may also be necessary to be designed and constructed per PWDS requirements in order to be conveyed to an acceptable point of discharge.
- **Stormwater Operation and Maintenance Plan and Agreement** – Operation and maintenance of any public stormwater facilities will be the obligation of the Developer within the 2-yr Stormwater Facility Warranty Bond period. Operation and maintenance of any private stormwater facilities will be the obligation of the property owner. As such, a stormwater operation and maintenance plan and agreement (as approved by the City) will be required to ensure future operation and maintenance of private stormwater facilities. See the Public Works Standard forms.

- **Stormwater Master Plan** – Figure 11 of the City's Stormwater Master Plan shows that a 48" storm drainage system is needed along the frontage within Shaff Road SE, and a future onsite detention system is needed along Shaff Road SE west of Golf Club Road. The Developer will need to review and comply with the most current recommendations of the City's Stormwater Master Plan at the time of development, unless otherwise approved by the Public Works Director. However, it is assumed that this large diameter master planned stormwater improvement would not be applicable to the proposed development, unless otherwise directed by the Public Works Director.
- **Engineered Plans** – The Developer shall submit to the City for review and approval engineered stormwater conveyance, quality, and quantity plans, stormwater analysis and report, and an O&M plan and agreement conforming to Public Works Standards, and meeting the requirements of the Building Official. A utility easement in accordance with PWDS 102.08 shall be provided if a public storm drainage main is extended outside the public right-of-way. The Developer shall provide written documentation to the City that Marion County Public Works has reviewed and approved any proposed discharge to the existing County road system.

Erosion and Sediment Control

- **Erosion and Sediment Control Plan** – The Developer shall submit to the City for review and approval an erosion and sediment control plan conforming to Public Works Standards. Erosion and sediment control measures shall be in accordance with PWDS Division 7. A 1200-C permit will need to be obtained by the applicant from DEQ for any site disturbance of one or more acres through clearing, grading, excavating, or stockpiling of fill material.

Franchise Utilities

- **Franchise Utility Improvements** – All franchise utility improvements, including but not limited to, telephone, electrical power, gas and cable TV shall meet the current standards of the appropriate agency as well as Public Works Standards. All franchise utilities shall be located with the 10' PUE and utility plans shall be submitted to the City for review and approval.

Oregon
Tina Kotek, Governor

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February 23rd, 2026

Jennifer Siciliano, City Planner
City of Stayton
362 N. Third Avenue, Stayton, Oregon 97383
(503) 769-2998
jsiciliano@staytonoregon.gov

Subject: Comments on:

(1) PAPA DLCD File No. 001-25 Annexation of three (3) parcels 1) 9164 Golf Club Rd SE, Aumsville, OR, 2) 9384 Golf Club Rd SE, Aumsville, OR (part of parcel to be partitioned), 3) 9474 Golf Club Rd SE, Aumsville, OR (part of parcel to be partitioned) and change zoning from Urban Transitional (UT) to Medium Density (MD) Residential zone - change is consistent with the Comprehensive Plan.

(2) PAPA DLCD File No. 001-26 Annexation with zoning change to Medium Density (MD) Residential from Marion Co. Urban Transitional (UT) consistent with Comprehensive Plan for one parcel Map Tax Lot 091W03B001500; and

(3) PAPA DLCD File No. 002-26 for a Zoning change from Marion Co. Urban Transitional (UT) to City of Stayton High Density (HD) Residential consistent with Comprehensive Plan for one parcel Map Tax Lot 091W04C001901;

Dear Ms. Siciliano,

Thank you for the opportunity to comment on the above-referenced applications. We have reviewed the materials submitted and would like to submit the following comments for the record:

The above-referenced Post-acknowledgment Plan Amendments (PAPAs) all concern the application of urban zoning to properties that will be zoned for residential development. As such, we have consolidated our general comments that are applicable to all three PAPAs that are similar in nature. Specifically, none of the above-referenced PAPAs have staff reports uploaded to the record; however, for PAPA No. 001-26, Department of Land Conservation and Development (DLCD) staff were able to find a Planning Commission staff recommendation on the city's website dated November 13, 2025, that contained the following findings and condition:

> *"**Analysis:** The City has a limited number of residential units needed based on the Buildable Lands Inventory (BLI), which assumes a growth rate higher than what has actually occurred. Under these projections, the number of multifamily units allowed in the MD zone would exceed the number needed in the City. If the property were*

> *annexed with a Low Density (LD) Residential zoning designation, it would be less likely to exceed the projected need for single-family homes identified in the BLI.* ***Condition:*** *The annexation application should be approved with a Low Density (LD) Residential zoning designation to better meet the housing needs of the community."*

We want to highlight a few concerns regarding the staff recommendation to reduce the residential density zoning designation for the urbanizing lands associated with these PAPAs.

In the 2023 legislative session, House Bills 2001 and 2889 codified the Oregon Housing Needs Analysis (OHNA), a statewide methodology for allocating housing need to each local government in the state. Pursuant to Oregon Revised Statute (ORS) 184.453, Oregon's Department of Administrative Services (DAS) updates the methodology publishes the allocation of housing need for each local government annually. According to DAS' January 1, 2026 publication (the most current), the city of Stayton received the following allocation of housing need (refer to page 67):

Willamette Valley UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Stayton UGB	1 year	68	22	14	7	10	15
	20 year	1,070	278	208	115	174	295

With the codification of the OHNA into state housing law, the Oregon Legislature updated the definition of "Needed Housing" under ORS 197A.018. The amended statute includes clear requirement for local governments to utilize the state allocation of housing need from the OHNA rather than using local population estimates. ORS 197A.018 states:

> *(1)(a) "Needed housing" means housing by affordability level, as described in ORS 184.453 (4), type, characteristics and location that is necessary to accommodate the city's allocated housing need over the 20-year planning period in effect when the city's housing capacity is determined.*

In the Department's understanding, the city is relying on a population projection that was adopted for the 2010-2030 planning horizon in developing findings related to the proposal. The department encourages the city to recognize and incorporate the most up to date information available about the city's housing needs published by DAS in their recommendation on the proposal. This not only provides a more accurate description of the city's housing needs but also better aligns with the expressed housing planning policies of the state.

Additionally, the department notes that the findings included in the staff recommendation also appear to contradict the city's comprehensive plan, particularly as it relates to the city's housing goal within Chapter 6 and the residential purpose within the Land Use Chapter 8:

> Chapter 6: *"EXISTING AND FUTURE RESIDENTS WILL BE PROVIDED A CHOICE OF HOUSING TYPES IN SAFE AND HEALTHFUL HOUSING"*

> Chapter 8: *"To provide areas for residential development. The Residential area may be further divided into zones that provide for single family residences only, allow mix of single family, duplex and triplex development, and provide adequate opportunities for higher density multifamily development. The overall goal for residential development shall be to provide a mix of housing opportunities in the City and provide an overall gross density of residential development of approximately 6 units per acre."*

Despite this language, and the city having received an application that would allow medium and high-density residential development (which would provide a needed mix of housing as specified in the Stayton comprehensive plan), the city's recommendation appears to propose low density residential zoning. The acknowledged comprehensive plan housing goals outlined in Chapter 6 require existing and future residents be provided a choice of housing types in safe and healthful housing. The comprehensive plan language also includes a definition of the residential land use designation to "provide for single family residences only, allow mix of single family, duplex and triplex development, and provide adequate opportunities for higher density multifamily development".

For each of these PAPAs we recommend that the city address the zone change's consistency with applicable sections of the Comprehensive Plan that call for a mix of housing types and opportunities for higher density housing, as well as consider the application of needed housing as required by ORS 197.018.

Please feel free to contact me at 503-930-9739 or melissa.ahrens@dlcd.oregon.gov if you have any questions.

Sincerely,

Melissa Ahrens
Regional Representative
DLCD

cc: Gordon Howard
Ethan Stuckmayer

CITY OF STAYTON

M E M O R A N D U M

TO: **Planning Commission**

FROM: **Jennifer Siciliano, Community and Economic Development**

DATE: **April 16, 2026**

SUBJECT: **Virtual Meeting with DLCD March 26, 2026**

Summary of Virtual Meeting with DLCD – March 26, 206

I participated in a virtual meeting with staff from the Oregon Department of Land Conservation and Development, including Sean Edging, Jena Hughes, Ethan Stuckmayer, Josh LeBombard, and Melissa Ahrens to discuss how the City should approach housing need and zoning decisions in light of multiple pending annexation applications. The primary focus was the relationship between the City's Comprehensive Plan and the State's Housing Needs Analysis. DLCD confirmed the City may rely on its Comprehensive Plan as the legal basis for decisions, but emphasized that the State's housing needs allocations (based on income levels/AMI) reflect current law and should be incorporated into findings to strengthen the record. They noted that all residential zoning designations (LD, MD, and HD) are generally consistent with the Comprehensive Plan when the plan states Residential as a zone, and that the greatest legal risk is reducing density without clear, well-supported justification, particularly when relying on outdated data.

We also discussed the challenge of aligning housing types with affordability. DLCD acknowledged that zoning alone does not ensure affordability, but emphasized that allowing a broader mix of housing types, including higher-density and middle housing, supports overall housing availability and aligns with state policy. Staff raised concerns about the cumulative scale of proposed development and whether there is a point at which the City may limit growth. DLCD clarified that cities may not impose a cap on housing production and are expected to plan for at least the identified need, as housing development is considered a shared responsibility between the State, local governments, and the private market. With respect to infrastructure, DLCD indicated that if adopted master plans demonstrate the ability to serve growth, this generally supports approval, even if upgrades are required.

The discussion also included the role of the Housing Accountability and Production Office (HAPO), which was established under recent state legislation to support housing production and ensure compliance with state housing laws.

DAS
DEPARTMENT OF ADMINISTRATIVE SERVICES

Oregon Housing Needs Analysis 2026 Production Targets and Adopted Methodology

December 2025

This report is produced by the Office of Economic Analysis within the Department of Administrative Services. The Oregon Department of Housing and Community Services (OHCS) and the Oregon Department of Land Conservation and Development (DLCD) provided key contributions. Specific staff include:

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Report Overview

This report contains the 2026 statewide and local housing production targets along with a description of the OHNA Methodology. Due to the federal government shutdown in October and November of 2025, many of the foundational data sources used in the methodology were delayed from their typical release schedule. Additionally, some of the sources (primarily used in the local allocation methodology) have infrequent and unannounced release dates, making it not always possible to update the data sources from the last annual report. These data limitations will be documented in detail. Other than data update limitations, the only planned update to the methodology involved a change from a two year to a three year moving average of the annual need to create the 2026 20-year total need and the annual production target.

Figure 1. OHNA Statewide Annual Targets by Component

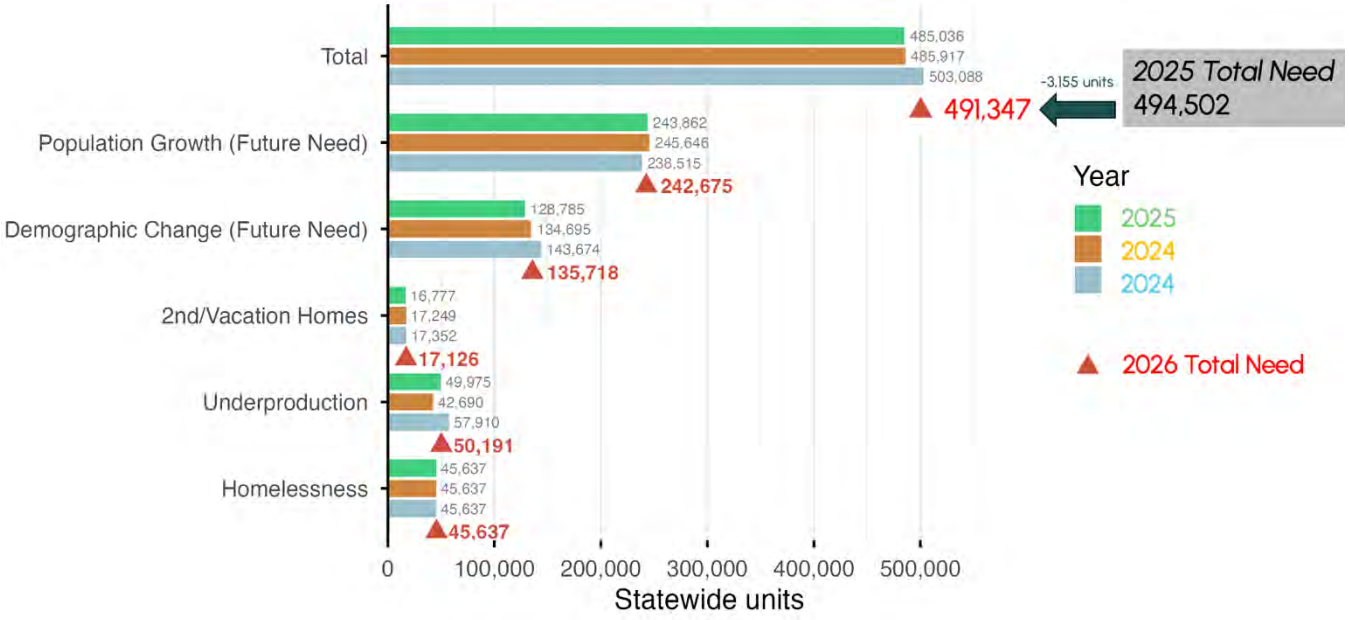
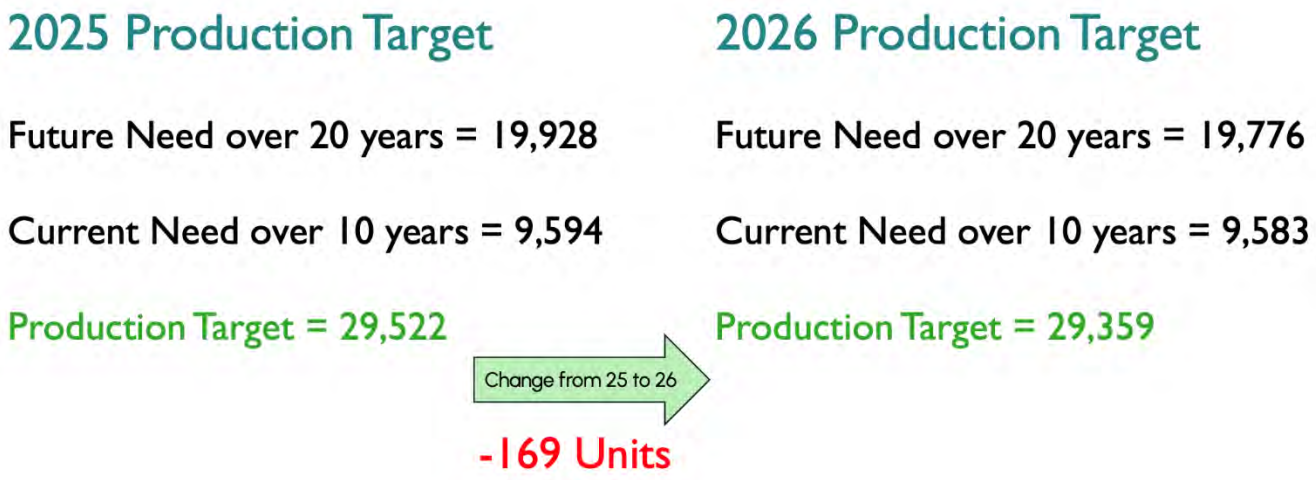


Figure 2. OHNA Statewide 2025 vs 2026 Production Target



Oregon Housing Needs Analysis Methodology

The OHNA Methodology focuses on the affordability and geographic distribution of newly produced housing, not the characteristics of the existing housing stock across the state. This is a methodological choice that has implications for policymaking and tracking the overall affordability of the entire housing stock. The Final Methodology incorporates multiple considerations to reflect different types of demand on current and future housing need. The OHNA Methodology has six steps:

1. Determine Regions
2. Determine Income Categories
3. Determine Components of Housing Need
4. Allocate Needed Housing to Income Categories
5. Allocate Needed Housing to Cities and UGBs
6. Set Housing Production Targets

Step 1: Determine Regions

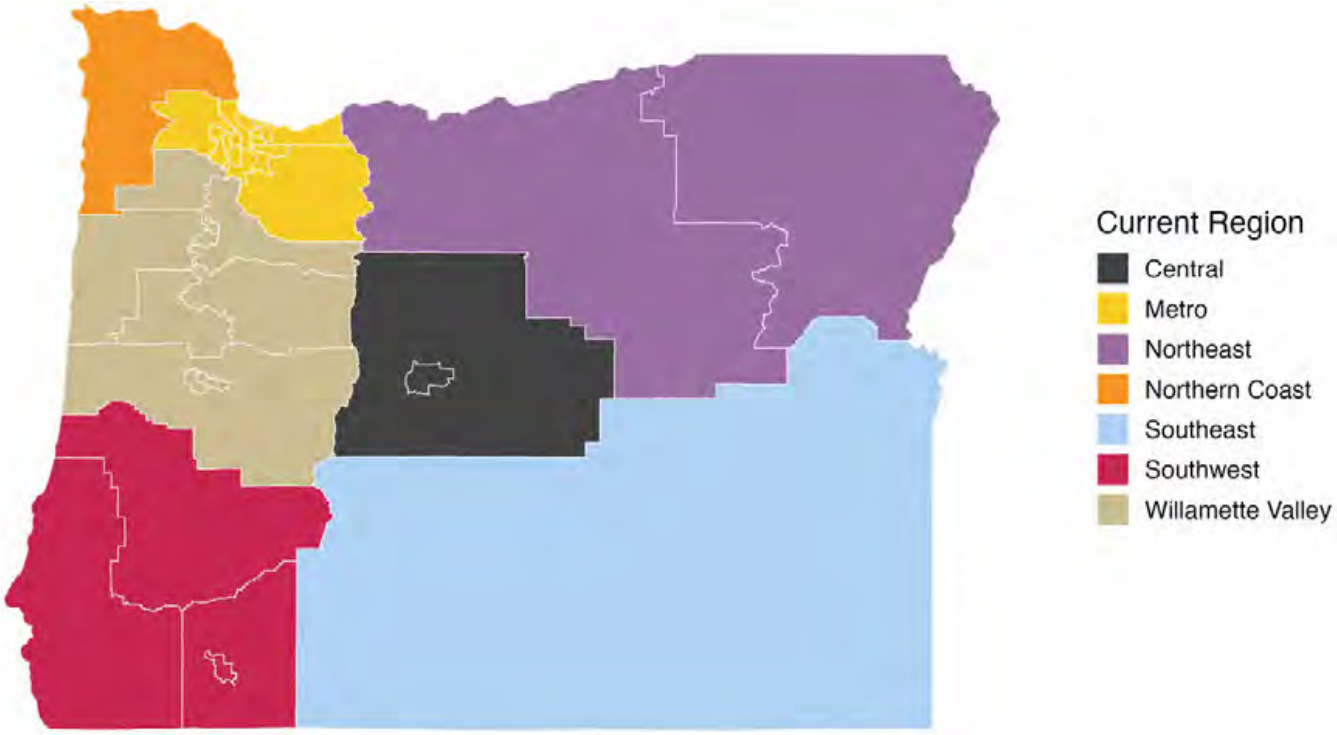
The first step in completing the OHNA is to define the regions for the analysis. The regions affect the entire analysis, from the ability to develop the analysis based on available data to the interpretation of the findings about regional housing needs for individual cities. Since each possible dataset that could be used to define regions has its own level of geographic specificity, choices about regions are integrally tied to choices about data.

Defining regions for this analysis required identifying the source of data that would be used throughout the analysis. The source of data needs to be consistently available statewide, available at an appropriate geographic level, updated annually, have acceptable margins of error for the variables of interest for the methodology, and be flexible enough to allow for comparisons necessary to deliver the analysis required by the statute. While the methodology is structured to account for limitations in available data, future iterations of the methodology could benefit from improvements in state access to data sources, such as a statewide parcel database of standardized assessor's data or a statewide rental registry that included information on costs and accessibility.

Regions

Figure 1 shows the regions in the OHNA Final Methodology. The OHNA regions are built from Census Public Use Microdata Areas (PUMA) regions using data from the 2022 vintage of data. PUMA regions shown in white outline, are aggregated up to the OHNA regions, shown in color. The U.S. Census Bureau updates PUMAs every 10 years following the Decennial Census; future changes to PUMA boundaries may affect the OHNA regions in the future.

Figure 3. OHNA Regions (PUMA boundaries denoted in white)



Step 2: Determine Income Categories

The second step is to define the income categories that are used to distribute needed housing across the income spectrum. The OHNA Methodology uses Area Median Income (AMI) limits that were stated in ORS 184.453(4):

(a) Less than 30%
(b) 30% or more and less than 60%
(c) 60% or more and less than 80%
(d) 80% or more and less than 120%
(e) 120% or more

These income categories align with common funding sources, including OHCS's programs, for subsidized affordable housing. It's important to note that the distribution of households in each income category is not equal.

The methodology uses regional incomes to allocate housing need to individual jurisdictions. This is an important change from prior Goal 10 planning requirements in which jurisdictions used their own city-level incomes to estimate housing need by income level. The effect of this change is that local governments will be required to plan for a share of the region's estimated housing needs by income, rather than locally estimating and planning for housing needs by income only within the boundaries of the local government.

Income categories translate into housing affordability. Income categories are expressed as a percent of AMI, which is determined by the U.S. Department of Housing and Urban Development (HUD) and takes into account household size and the number of bedrooms. A housing unit is determined to be affordable to a household if it accounts for less than 30% of that household's gross income.

Across the Final Methodology, all income categories are adjusted to account for household size. HUD provides regional AMIs based on a four-person household and provides guidance to allow practitioners to adjust for household size and number of bedrooms in a unit,[1] which is as follows:

Household Size Income Adjustment

- 1-person household: 70% of AMI
- 2-person household: 80% of AMI
- 3-person household: 90% of AMI
- 4-person household: 100% of AMI
- 5-person household: 108% of AMI

Apartment Unit Size Income Adjustment

- Studio unit: 70% of AMI
- 1-bedroom unit: 75% of AMI
- 2-bedroom unit: 90% of AMI
- 3-bedroom unit: 104% of AMI

Step 3: Determine Components of Need

The third step of the OHNA is to determine the different components of housing need. The OHNA is an estimate of total housing needed statewide over a 20-year horizon and includes housing units that are needed now to house the existing population (Current Need) as well as units needed in the future to accommodate household growth (Future Need).

- **Current Need** includes housing underproduction and housing units for people experiencing homelessness.
- **Future Need** includes units for expected population growth, expected housing units that will be lost to second and vacation homes, and units to accommodate expected demographic change.

By including an estimate of current housing need in planning requirements, the OHNA departs from historic Goal 10 planning requirements which only required jurisdictions to look forward at the 20-year population forecast. The Final Methodology recognizes that Oregon has been underbuilding housing for several decades and that a narrow focus solely on future population

[1] Portland Housing Bureau Median Income Percentages 2024. https://www.portland.gov/phb/documents/2024-income-and-rent-limits-phb/download

growth will not help communities relieve the pressures created in housing markets by low vacancy rates and high prices.

Current Need

The OHNA is an estimate of total housing needed statewide over a 20-year planning horizon, including an estimate of how many units the state, regions, and cities need currently to adequately house their existing populations. Current need takes into account housing underproduction and units needed for people experiencing homelessness.

Housing Underproduction

The Final Methodology adopts with some minor modifications of an approach used by Up for Growth, a housing policy research nonprofit in Washington, D.C., that has been vetted by housing industry experts.[2] This approach calculates the target number of housing units a region's market should have (demand) and compares that against the actual number of units that market has available for year-round occupancy (supply). These steps are broken down below. Regions where the demand exceeds supply are experiencing housing underproduction.

Figure 4. Up for Growth Housing Underproduction Methodology

Target Number of Housing Units

The estimate of the target number of housing units starts with the Census Bureau's estimate of total households and then estimates the number of "missing households" that have not formed in a market compared to historical formation rates in 2000.

Household formation is influenced by the housing stock available—when a market does not build sufficient housing, prices rise and vacancy falls, affecting the likelihood of households to form (e.g., roommates splitting up, children moving out, etc.). This measure estimates the number of households that are expected to form in less constrained housing market conditions, and as such are a component of current demand.

The Final Methodology calculates "missing households" based on changes in the headship rate (the percentage of people who are heads of households, or householders) for different

[2]Up for Growth, Housing Underproduction in the U.S. 2024. https://upforgrowth.org/apply-the-vision/housing-underproduction-reports/

age cohorts between 18 and 64. The lack of housing availability and affordability is not the only reason that explains reduced household formation rates, therefore including all age cohorts would be an overcount of household formation primarily caused by housing market constraints. Age cohorts are therefore limited to head of households between 18 and 64 as the most likely ages where this occurs—effectively excluding head of households over 65 is one way to limit the impact of the overcount. Limiting the age cohorts helps compensate for the nature of the overcount–essentially that housing isn't the only factor contributing to decreased household formation rates. The standard UFG approach limits age cohorts over the age of 44, the expansion of head of households to the age of 64 acknowledges circumstances unique to Oregon's housing market, and the fact that working households of all ages are experiencing the impacts of a constrained, underproduced housing market.

The OHNA Methodology uses a baseline headship rate in the year 2000 for all cohorts. This year was chosen because 2000 Decennial Census data offers the most recent statistically reliable estimate of a housing market that was more in balance. Headship rates were also generally stable between 1980 and 2000, so going back further would not have a large impact on the baseline headship rate. The Final Methodology compares the most recent headship rate (based on 2024 PUMS data) against the 2000 baseline for each age cohort. If a cohort has a lower headship rate in the most recent year compared to the baseline, it indicates that fewer households formed. The total estimate of "missing households" is the sum of reduced household formation from cohorts aged 64 years and younger. Should there be negative missing households (more households formed compared to the baseline rate) in any age cohort, they are netted out to zero because they are not contributing to excess demand beyond what is already captured in the households formed data observation.

The estimate of missing households is added to the current total number of households to approximate the total number of households that would be seeking housing in unconstrained market conditions. The model then applies a 5% target vacancy rate to estimate the total number of housing units a region should have to accommodate current need and have a healthy level of vacancy. Five percent vacancy is the 75th percentile of the national vacancy rate between 1980 and 2000 and is meant to represent unconstrained market conditions. It is backed by industry stakeholder outreach and research and is used in other methodologies of estimating housing need and underproduction.

Actual Units Available for Year-Round Occupancy

The estimate of the actual number of units available for year-round occupancy starts with the Census Bureau's estimate of total housing units and removes uninhabitable units and second and vacation homes that are not available for year-round occupancy from the stock. Uninhabitable units are identified in the Census PUMS data as those that lack indoor plumbing and complete kitchens, and that have been vacant for at least a year. Second and vacation homes are identified in the Census Bureau as those that are vacant and used for "seasonal or recreational purposes."

By removing uninhabitable units and second and vacation homes from the estimate of the current housing stock, the Final Methodology attempts to calculate each region's total housing

stock available for year-round occupancy as a more accurate reflection of housing supply. When compared to the total number of households each region would have in unconstrained market conditions, the Final Methodology can capture current housing underproduction and incorporate current housing need into future planning purposes. This change pushes Oregon's statewide housing planning system toward one that more accurately measures total housing need; planning for future housing need without accounting for current need will continue to yield insufficient housing production relative to demand across the state.

Housing Units Needed for People Experiencing Homelessness

DAS and OHCS engaged the Portland State University (PSU) Homeless Research and Action Collaborative (HRAC) to develop the methodology to estimate housing units needed for people experiencing homelessness. The HRAC methodology uses an annualized point in time count of unsheltered households, the number of households served in shelter over a year, and households doubled-up based on K-12 student data and U.S. Census data.

Determining the number of units a region needs to house people experiencing homelessness requires careful attention, because available datasets have many known limitations including undercounting populations. Populations experiencing homelessness are generally not captured in foundational datasets derived from the Census, so they are not included in the projections of current (or future) need. This methodological choice was made under the assumption that if jurisdictions can plan for current need as the sum of underproduction and housing for people experiencing homelessness, while planning for enough housing units to meet future need, then homelessness would become "functionally zero," and would be rare and brief.[3]

The Final Methodology relies heavily on the limited research available on this topic, as well as discussion and feedback from stakeholders with expertise in research and service provision for those experiencing homelessness in Oregon. The state continues to explore new research and better data to continually improve this portion of the OHNA methodology.[4]

The HRAC methodology combines portions of four data sets to better estimate the number of people experiencing homelessness in an OHNA region. The approach uses Continuum of Care (CoC) Point-In-Time Count (PITC) data and McKinney-Vento Student Data (MVSD) for children enrolled in K-12 public schools. It also utilizes CoC Homeless Management Information System (HMIS) data, By-Name Lists (BNL), and American Community Survey (ACS) data.

To calculate the number of households who need housing, the HRAC methodology combines:

- **Unsheltered data:** PITC unsheltered data that is annualized and converted to household numbers; or the household count from BNL across one year;

[3] Functional Zero Homelessness occurs "when the number of people experiencing homelessness at any time does not exceed the community's proven record of housing at least that many people in a month." https://community.solutions/built-for-zero/functional-zero

[4] Recommendations for improving data are included in Chapter 7 of the OHCS RHNA Technical Report and Appendix B describes the key analytical issues in estimating the amount of housing need to accommodate the population of people experiencing homelessness in Oregon

- **Sheltered data:** Households served in shelter over one calendar year, as recorded in HMIS; and,
- **Doubled-up data:** MVSD for doubled-up student households plus ACS doubled-up households without children enrolled in K-12 schools.

All data are converted to households (HH), and annualized when the data set is not an annual count. Each household is assumed to occupy one housing unit, thereby producing the estimate of the number of housing units needed. See Appendix C for a copy of the complete memo detailing the HRAC methodology.

Future Need

The OHNA is an estimate of total housing needed statewide over a 20-year planning horizon. Future need takes into account the housing units needed for population growth, housing units lost to second and vacation home demand, and housing units needed to accommodate demographic change.

Housing Units for Population Growth

To estimate 20-year future housing needs, forecasted population growth must be translated into future households and then translated into future needed housing units.

PSU's Population Research Center (PRC) produces the official population estimates for the State of Oregon with the exception of the Portland Metro Region.[5] The Final Methodology converts the PRC population forecast to households using the most recent regional average household size estimated with the most recent PUMS data.

As with past Goal 10 housing planning requirements, the OHNA Methodology excludes the estimate of people living in group quarters because they are not considered part of the household population, and their needs are planned for separately. Each region's base-year population estimates are reduced by the 2023 PUMS-derived share of population in group quarters, before converting population to households. For the horizon year forecasts, the model uses 2024 PUMS to calculate a group quarters rate by age cohort and apply it to regions' 2045 age cohort forecasts to arrive at an overall regional group quarters rate. Since most regions' forecast a greater share of older cohorts in 2045, the OHNA currently models slight increases in overall group quarter rates for all regions in the horizon year.

The loss of units to second and vacation homes in the future is calculated as a separate component of need (see next section), therefore the Final Methodology assumes that each future household will occupy one housing unit, while also planning for the target vacancy rate. Once total future needed housing units are determined, the Final Methodology applies the

[5] Metro is responsible for issuing population forecasts within the Metro urban growth boundary, which serve as the basis for comprehensive and land use plans (see ORS 195.036). The Metro allocation methodology, outlined later in this document, is based on housing needs estimates for the Metro UGB in Metro's Urban Growth Report.

same 5% vacancy factor to estimate the future housing stock that cities and regions should plan for (see page 6).

Housing Units Lost to Second and Vacation Home Demand

Estimating second and vacation homes as its own component allows cities to better account for demand for these housing units in the future and improves the State's understanding of the role that second and vacation homes play in each region's housing market. In many outdoor recreation- and tourist-heavy communities, particularly along the coast, in the Gorge, and in central Oregon, the presence of second and vacation homes removes units of the existing housing stock from year-round occupants at a different rate than in other parts of the state. This contributes to underproduction of needed housing by reducing the number of units available to full-time renters and owners, thereby decreasing vacancy rates and putting upward pressure on housing costs. As the stock of second and vacation homes grows in the future, it effectively takes away from housing production, as fewer units are available for year-round occupancy.

Summary of Process to Identify Second and Vacation Homes

1. Calculate change in the number of second and vacation homes per region
2. Determine how much housing is needed to offset this expected future loss in units
3. Apply the ratio to forecasted housing unit growth

The current share of second and vacation homes varies by region, as does the pace at which these shares are changing over time. First, the model calculates the change in the number of second and vacation homes for each region between the years 2000 and 2020. The growth in second and vacation homes is then contextualized by the number of all housing units added for each region between 2000 and 2020. The ratio of second and vacation homes added compared to the total housing production is calculated for each region. This ratio is effectively an approximation of how much additional production would be required to offset the loss in units to second and vacation home demand over the 20-year planning period. In practice, a jurisdiction could implement policies to reduce the growth of second and vacation homes or target the production of additional units to offset the loss of units available for year-round occupancy.

Example Calculation for Second and Vacation Home Demand

If a city produced 1,000 housing units between 2000 and 2020 but saw the number of second and vacation homes in the same time period grow from 100 to 200 units (either through new construction or conversion of an existing home), then it would have a ratio of 0.1 ((200-100)/1000). If this city was expected to grow by 2,500 households over twenty years, the additional production to account for units lost to second and vacation home need would be 0.1 * 2,500 or 250 units.

The Final Methodology only calculates second and vacation homes as part of determining future housing need. These units are no longer available for year-round occupancy, and as units are purpose-built or converted into second and vacation homes, the progress toward the desired number of units per household or target vacancy rate is lessened. Units identified as being currently occupied as second and vacation homes are captured as part of the underproduction calculation (current need).

Housing Units for Demographic Change

The number of housing units needed to account for demographic change helps to account for changing household demographic composition as the population of Oregon changes.

Like many states, Oregon is aging, and seniors typically have smaller household sizes; according to Census data, the average household size (persons per household, PPH) headed by a person aged 60 to 69 is only 1.9 people, compared to 2.9 people for households headed by a person aged 30-39. As population forecasts expect a larger share of the population to be 65 and older, and as the fertility rate continues to remain below replacement rate, more housing units will be needed to house Oregon's older total future population. An example below depicts how demographic change is handled in the model.

First, the Final Methodology uses PUMS data to calculate the current PPH for each major age cohort by region. It then joins the age cohort-based PPH figures to the 2025 and 2045 population forecasts by age cohort and then calculates a total PPH for each region for 2025 and 2045. Average household sizes for each region are forecast to be smaller due to changing demographics.

The PRC-forecasted populations in each region in 2025 and 2045 are then converted into households by dividing by the average household size in each region. This differs from the population change component, where the PPH is held constant between the baseline and horizon years (using 2025 PPH).

The final step in the process is to convert the added number of households in each region into needed housing units. Following the methodology for the other components, the Final Methodology also applies the target 5% vacancy factor to the estimated number of needed housing units in the future (see page 6).

Example Regional Demographic Change

1. $(Population_{2045} \div PPH_{2025}) - (Population_{2025} \div PPH_{2025})$ = Households added by Population Change
2. $(Population_{2045} \div PPH_{2045}) - (Population_{2025} \div PPH_{2025})$ – Households added by Population Change = Households added by Demographic Change

3. Households added by Demographic Change x 1.05 = Housing Units Needed to Account for Demographic Change

The demographic change component is effectively capturing the change in household size for existing households (starting in 2025) as well as the marginal new households added between 2025 and 2045. This is a deviation from other components in that it considers housing need for existing and future households. It is included in the future need category because it captures future demand for housing from existing households (rather than underproduction and homelessness, which are current demand).

Step 4: Allocate Needed Housing to Income Categories

Once total housing units needed are estimated for each component and each region, the next step is to distribute housing need to income categories. Allocation processes differ by component.

Current Need: Housing Underproduction

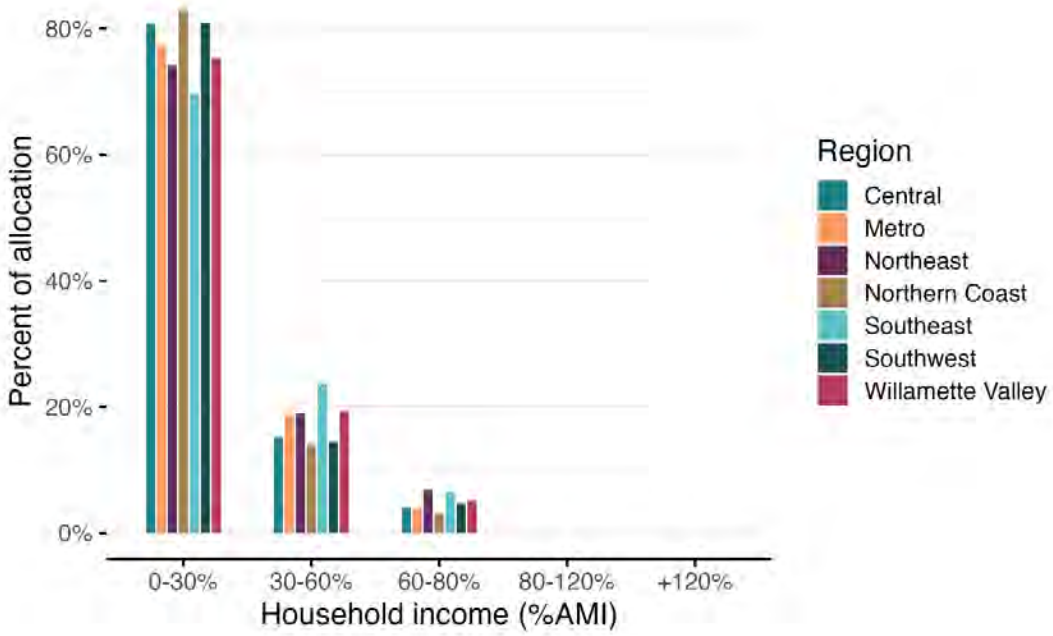
Underproduced units are allocated to income categories based on the rate of cost burdened renter households in each region. Cost burdening is a good proxy to estimate the income levels where current housing is in most need. Underproduction in a market leads to increased cost burdening by limiting choice and reducing overall affordability, and these impacts are most acutely experienced by lower-income renter households who have the highest rates of cost burdening. Underproduced units are therefore distributed proportionate to rates of regional cost burdening to approximate the income levels with the most acute need. For example, if 50% of all renter households who are cost burdened earn 0-30% of AMI, then 50% of the underproduction units should be targeted for households earning 0-30% of AMI. The model uses 2024 PUMS to first isolate cost-burdened renter households in each region, and from there, calculate the proportion of these cost-burdened households in each AMI household income bracket.

Current Need: Housing Units Needed for People Experiencing Homelessness

> Housing units needed for people experiencing homelessness are distributed by income based on information provided from OHCS. There is no existing, high-quality dataset with information about the incomes of people who are experiencing homelessness, but many households that are experiencing homelessness have incomes and still cannot find a home that is affordable to them.

The Final Methodology uses data on the incomes of people experiencing homelessness from HMIS information managed by Continuums of Care. The data are from 2024 and are regional. Statewide, of households whose incomes are captured in the data, a large portion (77%) are in the lowest income category of 0-30% AMI. The regional distributions by income are shown in Figure 5.

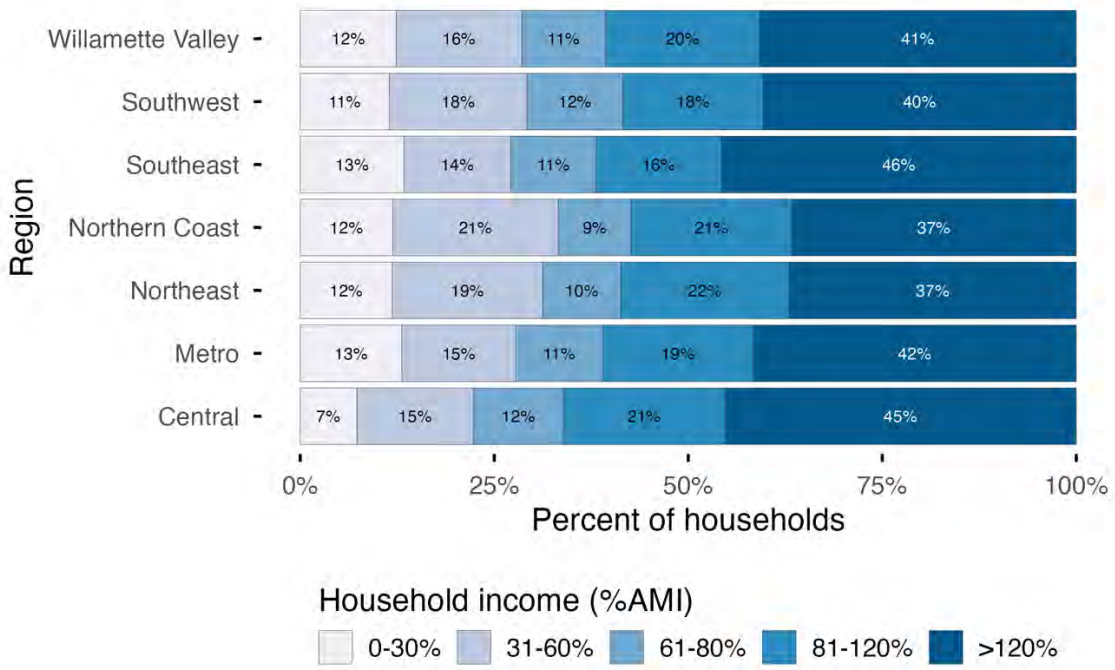
Figure 5. Income Distributions for Each OHNA Region for People Experiencing Homelessness, 2025 (unchanged from 2024)



Future Need: Housing Units for Population Growth

Units needed to accommodate population growth are allocated based on each region's current income distribution. The state's income distribution and that of each region are shown in Figure 6 below.

Figure 6. Income Distributions for Oregon and Each OHNA Region, 2025



Future Need: Housing Units Lost to Second and Vacation Home Demand

PUMS data does not provide rent or valuation data for units identified as second and vacation homes, but data on the year built are available and are used as a proxy for valuation with the assumption that newer units are more expensive and should be allocated to the highest income categories. The OHNA methodology allocates units identified as second and vacation homes that were built prior to 1990 to the 80-120% AMI income category while those built after 1990 are allocated to the 120%+ AMI income category. This distribution was determined based on a PUMS analysis of regional patterns of affordability of occupied homes by year built.

Future Need: Housing Units Needed for Demographic Change

Given the similarities between units needed for population growth and units needed for demographic change, units needed for demographic changes are also allocated to income categories based on each region's income distribution.

Step 5: Allocate Needed Housing to Cities and UGBs

After the total housing units needed over 20 years is calculated, the fifth step in the methodology is to determine what needed housing should be allocated to areas inside or outside of Urban Growth Boundaries. The Portland Metro region has a different allocation methodology (see page 20). While the Salem-Keizer area has two cities within one UGB, PRC provides city-level population projections for both Salem and Keizer, preventing the need to create a separate allocation process for this UGB.

Step A. Determine Regional Need Inside vs. Outside UGBs

First, the 20-year future population growth outside of UGBs is determined for each region. This is based on PRC forecasts which report outside-UGB subtotals for every county. This step recognizes that not all Oregonians live inside UGBs, and not all Oregonians will live inside UGBs in the future. Lands outside a UGB receive a future housing estimate to reflect projected demand, but do not receive any current need allocations. Current need is a symptom of a lack of enough housing units within the planned areas of growth. Areas outside of UGBs are rural and resource lands and generally do not plan for housing growth under the statewide land use system; therefore, the responsibility for providing additional housing units to meet current need is accommodated inside of UGBs.

Second, units that accommodate population growth, demographic change, and demand for second and vacation homes outside UGBs are removed from the regional total. The remaining units are then allocated to UGBs inside the region.

Step B. Allocating Regional Need to Urban Growth Boundaries

Next, each component of need is allocated from the adjusted regional total (excluding areas outside of UGBs) to each of the UGBs in the region using a set of policy variables and weights in the following combinations. ORS 184.453 requires the methodology to allocate housing need to each city in consideration of forecasted population growth, regional job distribution, and an equitable statewide distribution of housing. The allocation weights below operationalize this direction to align with the policy priorities set forth by the legislature, balancing where people currently live, where the PSU population forecasts expect people to live, and where the region's jobs are located. Second and vacation home allocations focus those housing units where the housing markets are most directly impacted today. Including an area's share of jobs as a weight in the allocation is a policy choice driven by Oregon's desire to create compact livable communities with access to jobs and amenities. Locating housing closer to jobs also helps support Oregon's climate and emissions reductions goals.

- **Housing Underproduction**
  - 50% from UGB's share of its region's current population
  - 50% from UGB's share of its region's current employment (derived from current Census Longitudinal Employer-Household Dynamics (LEHD) block-level counts of jobs within all geographies)
- **Housing Units for People Experiencing Homelessness**
  - 50% from UGB's share of its region's current population
  - 50% from UGB's share of its region's current employment
- **Housing Units for Population Growth**
  - 50% from UGB's share of its region's population growth
  - 50% from UGB's share of its region's current employment
- **Housing Units for Demographic Change**
  - 50% from UGB's share of its region's current population
  - 50% from UGB's share of its region's current employment
- **Housing Units Lost to Second and Vacation Home Demand**

- 100% from UGB's share of its regions current second and vacation home stock (as determined by 2020 Decennial Census block-level counts of second and vacation homes spatially joined to UGB boundaries)

Step C. Distribute from Urban Growth Boundaries to Cities

This is only applicable in the Portland Metro UGB, which contains multiple jurisdictions (see page 20).

Step 6: Set Housing Production Targets

Once the total housing need is determined, the final (sixth) step of the methodology is to set targets for housing production. In early 2023, Governor Tina Kotek issued Executive Order 23-04 to establish an annual statewide housing production goal. Based on this policy objective and using the same formula as the Governor's housing production goal, the OHNA Final Methodology prioritizes and front-loads the current need over 10 years and spreads the future need over the 20-year OHNA planning horizon to calculate the annual production target. An example calculation of an annual production target is shown below using statewide total housing need. The same calculations apply for calculating the production targets for each city and each income level.

Example Annual Housing Production Target Calculation Using Statewide Results

See page 24 more detail on the statewide results by component.

Total Need: 491,347 units
Current Need: 95,828 units
Future Need: 395,519 units

Annual Production Target:
[Current Need / 10 years] + [Future Need / 20 years]
[95,828 units / 10 years] + [395,519 units / 20 years]
= 9,583 units + 19,776 units
= 29,359units per year

In order to produce annual targets for each jurisdiction that are more stable from year to year, DAS runs the OHNA Methodology each year and averages the current year's results with the prior two year's results. In the 2025 production targets, this wasn't possible due to the lack of 3 years of annual targets, therefore the 2026 annual production target is the first vintage where the 3 year moving average has been implemented. The intention with smoothing the data is to prevent OHNA targets from jumping around significantly from year to year due to data volatility, allowing local jurisdictions to have more consistent information for planning purposes. In this case the 2026 production target is the average of 2023, 2024, and 2025

annual targets. The smoothing process will be challenging when PUMA boundaries change again in 2032, and a technical update may be required at that point in time.

Peer Cities

OHCS must produce a Housing Production Dashboard, which must include, for each city with a population of 10,000 or greater, "a comparative analysis of progress in comparison to the region and other local governments with similar market types" which are referred to as "peer cities."[6] DLCD must base referral decisions to the Housing Acceleration Program on a city's relative progress and performance towards housing production targets.[7] The following housing market attributes that indicate market similarity were used to group cities into peers:

1. Current population size (static)
2. Share of households with incomes >$200,000 (static)
3. Share of housing used as second and vacation homes (static)
4. Share of housing that is single unit detached (static)
5. Share of housing that is owner-occupied (static)
6. Population growth between 2010 and 2020 (percent change)

The methodology uses a statistical analysis called a K-Nearest Neighbor (KNN) to group each city with seven other peers based on their shared conditions across the seven variables listed above (see Figure 7 for the list of peers). The KNN algorithm uses place-level ACS and Decennial Census population estimates data as inputs, and each input is equally weighted. This approach allows for each city to be compared to its seven "closest" peers. This approach offers several advantages including a consistent number of peer cities, and for each city to be grouped with its best fitting peers.

KNN calculates a matrix of Euclidean distances between each pair of cities (the square root of the sum of squared differences for every variable). Some city pairs are socioeconomically and demographically "closer," or more similar to each other than others. As Euclidean distance increases, the potential fit as a peer decreases. A common rule of thumb for KNN is to limit neighbor groupings to the square root of the total number of samples in the set. In this case, the KNN model contains 58 cities (and Tillamook County) that have a population over 10,000 in Oregon, indicating that 7 nearest neighbors is the optimal number for the OHNA application.

Not every local government defined as a "city with a population of 10,000 or greater" can be readily paired with market peers utilizing this methodology. This includes:

- Urban unincorporated lands within Metro counties: The peer methodology omits these local governments because they are non-standard and not reflected in any Census

[6]"City" is used as shorthand for the jurisdictions that will receive peers. See ORS 456.601(3)b: https://www.oregonlegislature.gov/bills_laws/ors/ors456.html
[7] See ORS 197A.130: https://www.oregonlegislature.gov/bills_laws/ors/ors197A.html

geographic unit. The closes approximation would be to use aggregation of census tracts, but these cross into other incorporated cities.

- Cities and specified unincorporated communities within the Tillamook County: While SB 406 (2023) defines these communities as "cities with a population of 10,000 or greater" for the purpose of housing planning, they are not large enough to have suitable Census data to be included in the peer methodology and are therefore grouped together.

Figure 7. Peer Cities List

City	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 6	Peer 7
Albany	Keizer	McMinnville	Medford	Grants Pass	Hermiston	Forest Grove	Woodburn
Ashland	Astoria	Pendleton	Klamath Falls	Newberg	North Bend	Newport	Tualatin
Astoria	Ashland	Pendleton	Klamath Falls	Roseburg	North Bend	The Dalles	Newport
Baker City	Sweet Home	North Bend	Central Point	Pendleton	Milwaukie	St. Helens	The Dalles
Beaverton	Hillsboro	Gresham	Eugene	Corvallis	Tualatin	Salem	Tigard
Bend	Oregon City	Newberg	Tigard	Redmond	Medford	Grants Pass	Forest Grove
Canby	Dallas	Oregon City	Gladstone	Central Point	Silverton	Newberg	Woodburn
Central Point	Dallas	Silverton	St. Helens	Woodburn	Oregon City	Keizer	Cornelius
Coos Bay	Pendleton	La Grande	Ontario	Springfield	Newport	McMinnville	Klamath Falls
Cornelius	Central Point	Troutdale	St. Helens	Dallas	Gladstone	Canby	Sandy
Corvallis	Beaverton	Eugene	Hillsboro	Monmouth	Gresham	Fairview	Tualatin
Cottage Grove	St. Helens	Woodburn	Prineville	Hermiston	Sweet Home	Dallas	Independence
Dallas	Woodburn	Central Point	Canby	St. Helens	Hermiston	Silverton	Oregon City
Eugene	Salem	Gresham	Hillsboro	Beaverton	Corvallis	Medford	Springfield
Fairview	Wilsonville	Lebanon	Independence	Tualatin	Monmouth	Hermiston	Corvallis
Forest Grove	Newberg	Molalla	The Dalles	Albany	Silverton	Hermiston	Keizer
Gladstone	Troutdale	Canby	Milwaukie	Central Point	Cornelius	Silverton	Oregon City
Grants Pass	Roseburg	The Dalles	Medford	Albany	Keizer	Silverton	McMinnville
Gresham	Salem	Eugene	Beaverton	Medford	Hillsboro	Springfield	Albany
Happy Valley	Sandy	Sherwood	West Linn	Oregon City	Lake Oswego	Canby	Bend
Hermiston	Independence	Lebanon	Woodburn	Albany	Dallas	Prineville	Forest Grove
Hillsboro	Beaverton	Eugene	Gresham	Salem	Tualatin	Corvallis	Tigard
Independence	Hermiston	Lebanon	Dallas	Silverton	Woodburn	Forest Grove	Prineville
Keizer	McMinnville	Albany	Woodburn	Newberg	Central Point	Milwaukie	Grants Pass

City	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 6	Peer 7
Klamath Falls	Pendleton	Astoria	Roseburg	Grants Pass	Ashland	Monmouth	Springfield
La Grande	Coos Bay	Pendleton	Ontario	Klamath Falls	Springfield	Milwaukie	Newport
Lake Oswego	Tigard	Sherwood	Newberg	Oregon City	Tualatin	West Linn	Canby
Lebanon	Independence	Hermiston	Albany	Roseburg	Forest Grove	Prineville	Fairview
Lincoln City	Tillamook County	Astoria	Molalla	The Dalles	Newport	Ashland	North Bend
McMinnville	Keizer	Albany	Milwaukie	Newberg	Woodburn	Silverton	Grants Pass
Medford	Albany	Grants Pass	Salem	Gresham	Keizer	McMinnville	Springfield
Milwaukie	North Bend	McMinnville	Keizer	Silverton	Pendleton	Gladstone	Central Point
Molalla	The Dalles	Prineville	Forest Grove	Silverton	Redmond	Newberg	Roseburg
Monmouth	Klamath Falls	Astoria	Lebanon	Corvallis	Ashland	Roseburg	Fairview
Newberg	Forest Grove	Silverton	The Dalles	Keizer	Oregon City	McMinnville	Central Point
Newport	Astoria	Ashland	Pendleton	Coos Bay	McMinnville	North Bend	Newberg
North Bend	Milwaukie	Silverton	Newberg	The Dalles	Central Point	Pendleton	Grants Pass
Ontario	Springfield	Independence	Lebanon	Pendleton	McMinnville	Hermiston	Klamath Falls
Oregon City	Canby	Central Point	Newberg	Silverton	Dallas	Keizer	Forest Grove
Pendleton	Klamath Falls	Astoria	Roseburg	Milwaukie	McMinnville	Ashland	North Bend
Portland	Eugene	Salem	Gresham	Hillsboro	Beaverton	Medford	Bend
Prineville	The Dalles	Roseburg	Molalla	Sweet Home	Silverton	Cottage Grove	Hermiston
Redmond	The Dalles	Molalla	Grants Pass	Central Point	Prineville	Oregon City	Silverton
Roseburg	Grants Pass	Prineville	The Dalles	Pendleton	Albany	McMinnville	Klamath Falls
St. Helens	Woodburn	Cottage Grove	Dallas	Central Point	Troutdale	Silverton	Keizer
Salem	Eugene	Gresham	Medford	Hillsboro	Albany	Beaverton	Springfield
Sandy	Cornelius	Dallas	Oregon City	Central Point	Canby	Sherwood	Redmond
Sherwood	West Linn	Oregon City	Lake Oswego	Cornelius	Central Point	Canby	Sandy
Silverton	The Dalles	Newberg	North Bend	Central Point	Molalla	Milwaukie	Keizer
Springfield	McMinnville	Albany	Medford	Roseburg	Gresham	Pendleton	Keizer
Sweet Home	Prineville	Cottage Grove	Roseburg	The Dalles	Baker City	St. Helens	Redmond
The Dalles	Molalla	Silverton	Prineville	Grants Pass	Newberg	Roseburg	Forest Grove
Tigard	Tualatin	Newberg	Oregon City	Canby	Forest Grove	Lake Oswego	Keizer

City	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5	Peer 6	Peer 7
Troutdale	Gladstone	St. Helens	Woodburn	Cornelius	Central Point	Milwaukie	Keizer
Tualatin	Tigard	Beaverton	Hillsboro	Ashland	Gresham	Newberg	Fairview
West Linn	Sherwood	Lake Oswego	Cornelius	Happy Valley	Oregon City	Sandy	Central Point
Wilsonville	Fairview	Hillsboro	Tualatin	Beaverton	Corvallis	Forest Grove	Monmouth
Woodburn	St. Helens	Dallas	Keizer	Central Point	Hermiston	McMinnville	Cottage Grove
Tillamook County	Lincoln City	Baker City	Newport	North Bend	Redmond	Sweet Home	Astoria

Updating the Methodology

Since producing the first official needs estimates and production targets in 2025, DAS plans to revisit the methodology at least every five years. The law also allows OHCS and DLCD to recommend changes to the OHNA Methodology, provided that the agencies provide an opportunity for written and oral testimony on proposed recommendations.

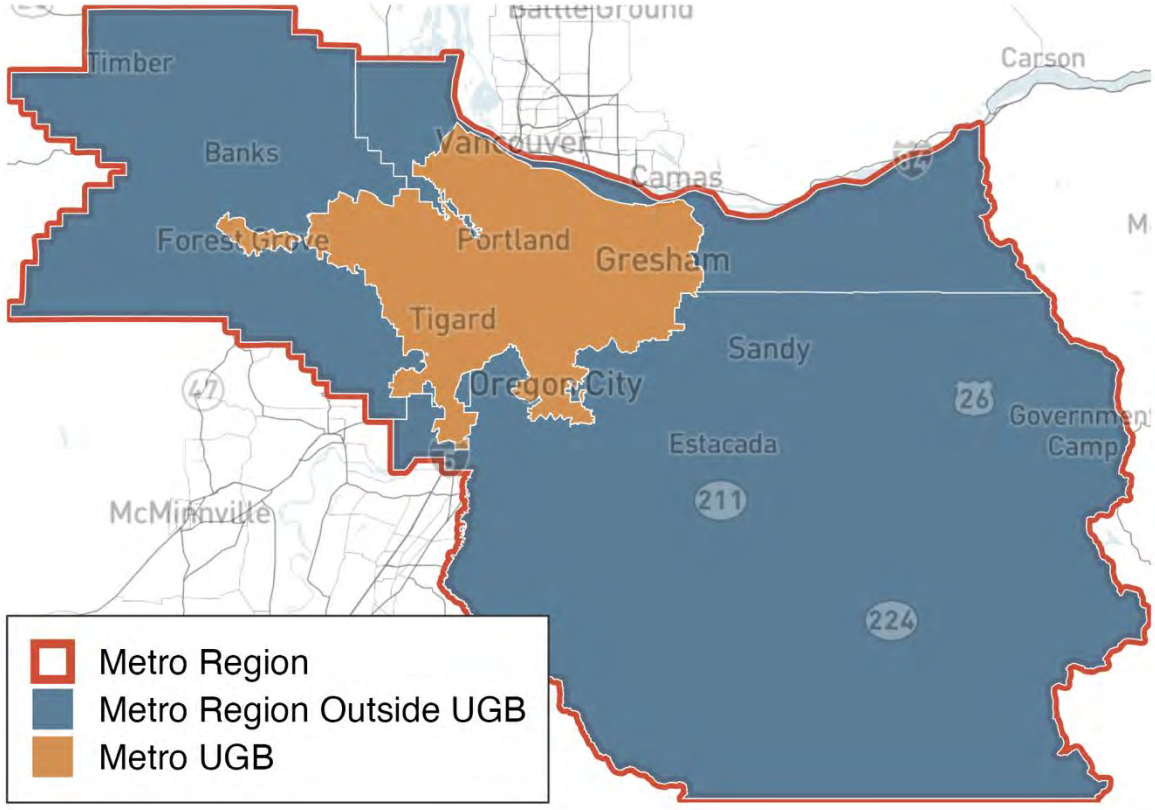
Portland Metro Region

The law codifying the OHNA into the statewide land use planning system treats the Portland Metro UGB differently from the rest of the state. Under HB2889 (2023) Metro maintains its statutory responsibility to estimate the region's housing need within the Metro UGB, while DAS is made responsible for allocating that need to Metro cities and urban, unincorporated lands (UULs).[8]

OHNA Metro UGB Suballocation Methodology Steps

In the OHNA methodology, every region, except for the Portland Metro Region uses a top-down estimation of need, followed by a local jurisdiction allocation process for all UGB's and non-UGB areas within the region. The Portland Metro Region is composed of Multnomah, Washington, and Clackamas counties. The Metro UGB is the growth boundary sitting inside the three counties, determined by Metro to separate urban and urbanizable land from rural land.

Figure 8. Map of OHNA Metro Region (Three Counties), Metro Region Outside UGB, and Metro UGB Areas



The OHNA methodology estimates the Portland Metro Region's total housing need (areas in red outline in Figure 8) in the same manner as all other regions in the state, but then swaps in

[8]See ORS 184.453(3)(e) which requires DAS to consider Metro's projected housing needs and ORS 197A.348(2) which requires Metro to project housing need for the components of need that are included in the OHNA.

Metro's own estimate of current and future housing need from its Urban Growth Report (UGR)[9] for the units needed inside the Metro UGB (areas in orange in Figure 8). The estimates of housing units needed in the Metro Region Outside UGB area (the blue remainder in Figure 8) are held constant so any changes related to a control total inside the Metro UGB do not impact the need in the rest of the region.

Step A: Determining Need for Metro UGB

The OHNA uses Metro's estimate of current and future housing need from its 2024 adopted UGR for the units needed inside the Metro UGB.

Planning for housing need inside the Metro UGB is determined separately from the rest of the OHNA Metro Region. The OHNA Metro Region's current and future need is calculated in the same manner as all other regions. However, within the OHNA Metro Region future and current need is allocated to UGBs using an amended methodology different from all other regions.

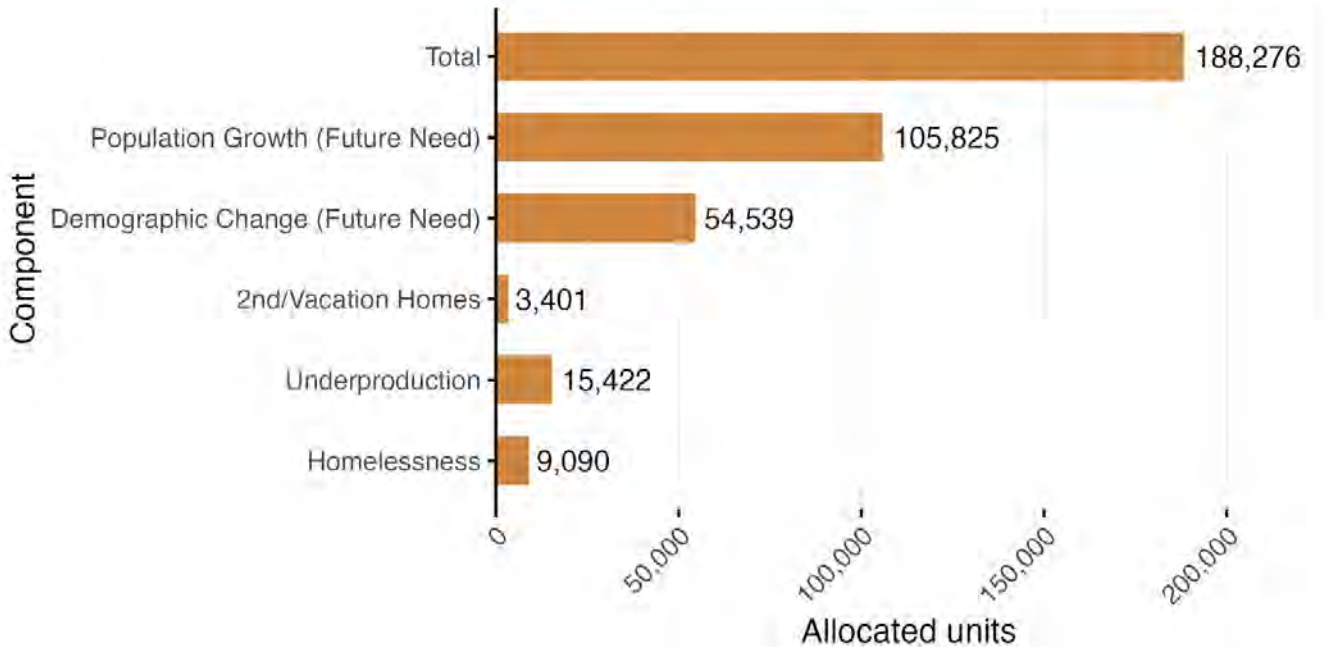
Current and future need is first determined for the Metro Region Outside UGB Areas (including the cities of Sandy, Estacada, Canby, Molalla, Barlow, Gaston, Banks, and North Plains), and the county areas outside of all UGBs separately. Then the estimate of current and future need within the Metro UGB is determined using Metro's adopted UGR, which includes an estimate of total future need from "household growth" (population growth and demographic change combined) along with estimates of need for underproduction, second and vacation homes, and units to address homelessness.

To align the Metro UGB need with the rest of OHNA, the UGR-calculated "household growth" need is split into population growth and demographic change components, and across household income brackets using the pre-existing distributions from the rest of the OHNA Metro Region. The rest of the Metro UGR-calculated components are swapped into the model for the Metro UGB as-is and allocated along the same regional income distributions.

Oregon statute requires that Metro must coordinate its regional forecasts with governments within the UGB. These growth forecast distributions are used to update land use and transportation plans, regulations and related policies. Metro typically completes its distributed forecast within one to two years after adopting the regional forecast in the UGR. Once available, the distributed forecast will be substituted in place of housing capacity when determining subsequent housing need allocations within the Metro UGB.

[9] See Metro's Urban Growth Report here: https://www.oregonmetro.gov/public-projects/2024-growth-management-decision/

Figure 9. Distribution by Component of Need for OHNA Metro Region, 2025



Step B: Allocation of Need from UGBs to Cities and Urban Unincorporated Lands (UULs)

As noted on page 20, House Bill 2889 (2023) maintains Metro's statutory responsibility to estimate the region's housing need within the Metro UGB, while giving DAS the responsibility to allocate that need to Metro cities and urban, unincorporated lands (UULs).

The allocation of future and current housing need to the cities and UULs within the OHNA Metro Region but outside the Metro UGB (the blue areas in Figure 8 on page 20) mirrors the methodology used in all other OHNA regions of the state.

The allocation of future and current housing need to cities and UULs within the Metro UGB uses a different allocation methodology that is unique to the Metro UGB. This approach reflects the fact that the area inside the Metro UGB functions as a single housing market with many different jurisdictions; the Metro UGB also has access to more robust data that allows for more nuanced indicators. Unique elements of the allocation methodology for the Metro UGB include a more refined approach to capturing access to jobs, and an approach that takes existing housing affordability and recent housing production into consideration when allocating existing, unmet housing needs. Each component of the methodology is allocated using the following indicators and weights:

Units Needed for Underproduction and for People Experiencing Homelessness:

- **Production:** 50% from the city's rate of housing unit production relative to the UGB-wide average as calculated from the Regional Land Information System (RLIS) parcel-based housing layer, which provides unit counts and year built for parcels. Units built within the last five years of the model "run-year" (the year corresponding to the model's PUMS

data inputs) are calculated as a share of total units within each jurisdiction and UUL (**Inverse weight** – see comments on Inverse Weighting on page 27).

- **Affordability:** 50% from the percentage of a city's housing units that are rental 0-50% AMI units, relative to the UGB-wide average, using the most recent vintage of the CHAS 5-year data (**Inverse weight**). Urban unincorporated lands within the UGB have their affordability level calculated using tract-level CHAS data for tracts with at least 30% of their area in the UUL. CHAS is more out-of-date compared to the ACS/PUMS products, so the model corrects for this by applying the affordability rate from CHAS to the more recent unit counts calculated with RLIS's Housing Layer.

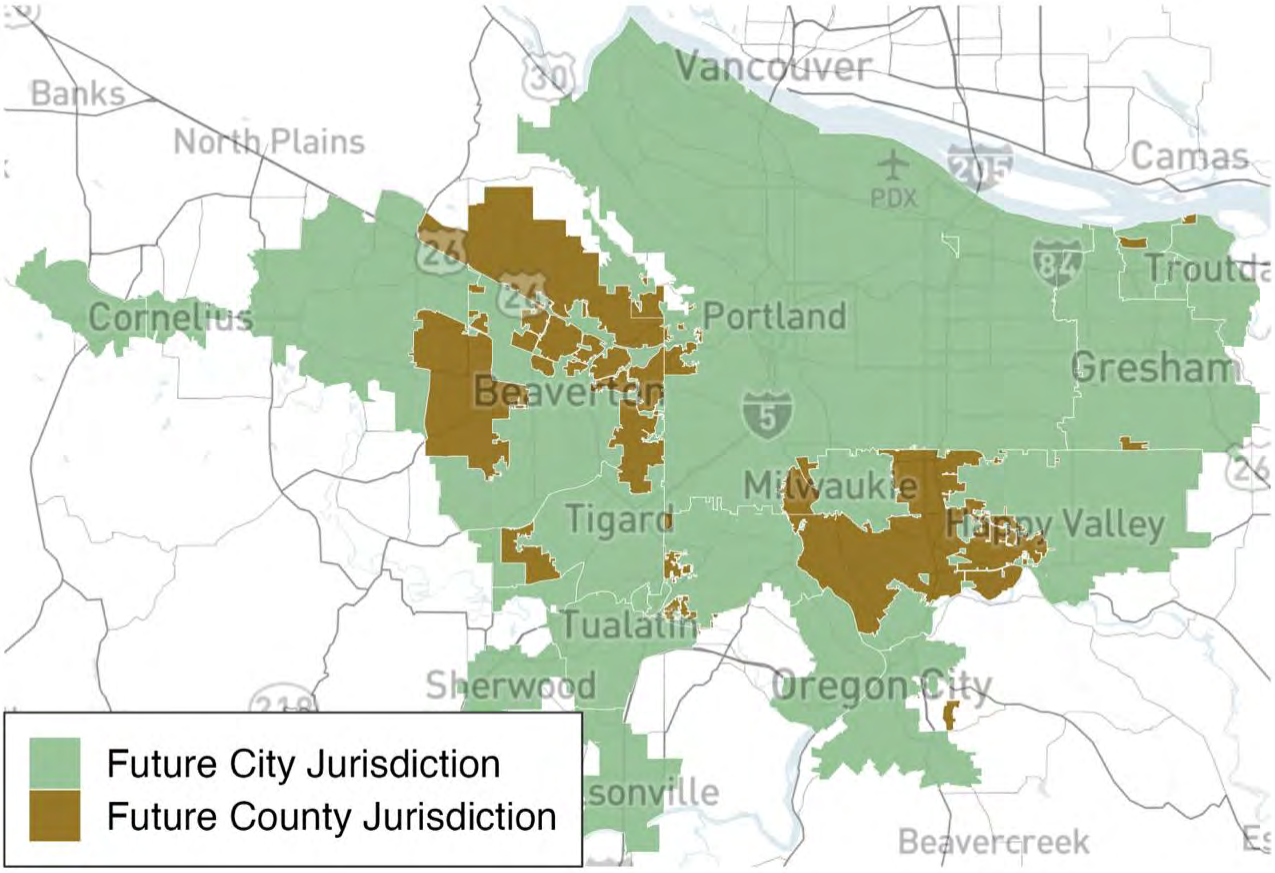
Future need is allocated to cities (including the unincorporated urbanizable areas for which they have planning authority based on intergovernmental agreements) and UULs using the following indicators and weights:

Units Needed to Accommodate Population Growth:

- **Residential capacity**: 33% from the city's share of jurisdictional residential capacity, as calculated with Metro's UGR process, wherein capacity in Metro's unincorporated urbanizable areas has been assigned to their future responsible jurisdictions as shown in Figure 10.[10]
- **Jobs access:** 33% from the city's share of UGB employed residents who live within areas with adequate transit or walking access to jobs, as calculated with TriMet and SMART's most recent transit schedule data and OpenStreetMap street grid data (see comments on Measuring Jobs Access on page 25)
- **Forecasted job growth:** 33% from the city's share of all forecasted jobs to be added between 2020 and 2050, based on Metro's UGR modeling. This metric uses Metro's TAZ-level job forecasts, which are then assigned to cities using a Metro-provided map of expected future jurisdictional responsibilities (see Figure 11 on page 26).

[10] The allocation is required to incorporate population forecasts under ORS 195.033 and 195.036. Under these statutes, only Metro is authorized to create population projections for cities within the Metro UGB for use in comprehensive planning. Because Metro's distributed forecast won't be published until 2025 and given the relatively close statistical relationship between modeled residential capacity and expected population growth, residential capacity is used as a proxy for the forecast in the initial run of the methodology. In the future, once Metro's distributed forecast is adopted, it will be substituted in as the source for this component of the allocation.

Figure 10. Future Metro UGB Jurisdictional Responsibility



Units needed to accommodate demographic change:

- **Current population:** 33% from the city's share of current (baseline) population, as calculated with 2020 block-level Decennial Census data. The choice to use Decennial Census is driven by the need to allocate population to the complex UUL boundaries as well as cities, which can only be done with granular geographies like census blocks
- **Jobs access:** 33% from the city's share of UGB employed residents who live within areas with adequate transit or walking access to jobs, as calculated with TriMet and SMART's most recent transit schedule data and OpenStreetMap street grid data (see below).
- **Residential capacity:** 33% from the city's share of jurisdictional residential capacity, as calculated with Metro's UGR process, wherein capacity in Metro's unincorporated urbanizable areas has been assigned to their future responsible jurisdictions.

Units lost to second and vacation homes:

- **Second and vacation homes:** 100% from the city's share of all current UGB second and vacation homes as calculated with 2020 Decennial Census place-level counts

Measuring Jobs Access

One of the weights used to allocate units for population growth to Metro cities is a measurement of transit access to jobs. The approach uses current TriMet and SMART's schedule data, OpenStreetMap street grid data, and open-source trip-routing software to plot transit and walking trips from every Transit Analysis Zone (TAZ) in the Metro UGB to every other TAZ in the Metro UGB.

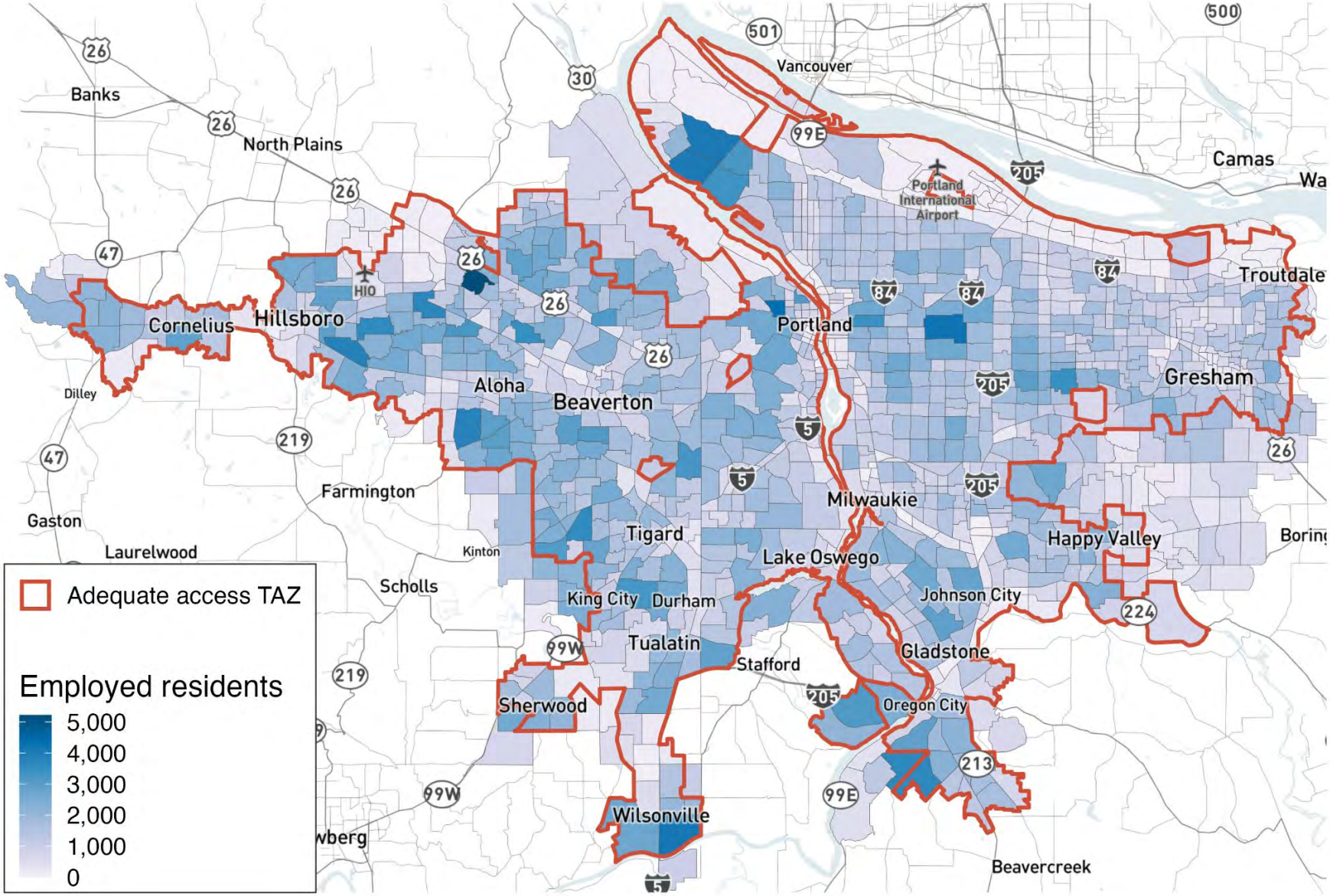
Walk and transit access was chosen specifically to be most applicable to all households, regardless of income and access to private vehicles as a mode of transportation. Joining this with Longitudinal Employer-Household Dynamics (LEHD) job location data spatially allocated to the TAZs, the model calculates the number of jobs reachable by transit within a 60-minute journey, mid-week, at 8:00 AM. The UGBs' TAZs are rank ordered by job access, and a threshold is set at the 10^{th} percentile to denote "transit access" zones. Each TAZ is assigned to a city based on Metro's TAZ planning jurisdiction shapefile, and where this information is missing, it is assigned based on which city has the largest overlap with any given TAZ. The number of employed residents living in these "transit access TAZs" is calculated for each jurisdiction, and the jurisdiction's share of the UGB's total is used as the final weight.

In the interest of maintaining accurate assessments of transit access, future iterations of the OHNA model will incorporate the most up-to-date TAZ-level jobs totals, transit schedules, and OpenStreetMap data.

Measuring Job Growth

Similar to the transit allocation component, the methodology incorporates forecasted job growth to operationalize the statutory direction to incorporate access/proximity to jobs as part of the allocation. This component has the effect of allocating more housing where future job growth is projected to occur. This data set is provided by Metro from their housing and transportation modeling processes, based on TAZ geographies, with job total forecasts for 2020 and 2050 included in separate columns for each TAZ. TAZs are joined spatially to jurisdictional boundaries (including planning agreements), based on spatial data provided by Metro and the change in jobs between 2020 and 2050 is totaled for all Metro jurisdictions. The weight is calculated as a jurisdiction's share of all UGB added jobs.

Figure 11. TAZ Transit Access Zones Used to Calculate the Jobs Access Weights



Inverse Weighting

Several weights used in the Metro UGB Suballocation Methodology are termed “inverse weights.” The selected inverse weights operationalize statutory direction for the allocation to incorporate an "equitable distribution of housing" under ORS 184.453 (3)(c), ensuring cities that have historically underproduced market-rate or affordable housing are responsible for a greater proportionate share of housing underproduction. The selected inverse weights have the effect of allocating more housing, particularly housing affordable at lower incomes, to cities that have historically produced less market-rate and affordable housing units. The inverse weighting system works in the following manner, using the “Production” weight as an example:

- Each city’s rate of housing unit production is calculated by taking the previous five years of total permits from RLIS housing unit data and converting them to a percentage of current total units.
- The UGB average is calculated from among all cities.
- The “delta,” or nominal units needed for each city to match the UGB’s average rate, is calculated. Cities above the UGB average receive a weight of 0.
- All the nominal deltas are converted to percent of the total delta. This percentage becomes half the weight used to allocate underproduction and units needed to accommodate homelessness.

Example Delta Calculation for Inverse Weights
UGB average rate of housing unit production: 7% of current units (average of all cities)

City X	City Y
City X’s current units: 12,000 City X’s actual production: 600 City X’s production rate: 5% of current units To match the UGB rate of housing production, City X should have built 840 units (7% * 12,000) Its delta is 240 units (840 – 600) If the sum of all cities’ deltas was 500, City X would have 240/500 or 48%. Because recent production is only half of the weight for the current need allocation, this 48% would be averaged with the weight calculated for affordability to arrive at a blended weight.	City Y’s current units: 15,000 City Y’s actual production: 1,500 City Y’s production rate: 10% of current units To match the UGB rate of housing production, City Y only needed to build 1,050 units (7% * 15,000) Since it produced more than the average, it has no delta, and its weight would be zero.

Statewide and Regional Results

This section provides statewide and regional results of the total 20-year housing need by income and need component along with the annual 2026 production target. Local city-level results are provided by income level in Appendix A. The federal government shutdown in October and November delayed the release of many of the foundational data sources used in the methodology. Ultimately all of the sources of federal data that have regular annual data updates were released in time for use in this year's update.

The delay of the data release did however impact some components of the estimate of housing need. The homelessness methodology and source data used in the methodology are produced by Portland State University's Homelessness Research and Action Collaborative (HRAC). Data sources used by HRAC were not available in time to allow for an annual update to the homelessness data. Therefore there is not an update for this component of need, and the 2025 vintage was used for the 2026 production targets and 20-year estimate of need. Other data used in the methodology are updated infrequently and are therefore either lagged until a more recent vintage is available, or operate with predictable and known data update cycles.

The population forecasts used in the methodology to inform the population growth and demographic change components are produced by Portland State University's Population Research Center (PRC). PRC produces an annual update to their statewide population forecast, but the update only covers a portion of the state. PRC divides the state into four regions, and then annually produces an update for only one of the four regions (note that PRC regions do not align with the OHNA regions). Each of the PRC regions is then updated on a four-year cycle, in 2024 the Metro region was updated, and in 2025 the Willamette Valley was updated.

The Metro region was only partially updated in this year's methodology, as the Metro UGB calculation of need is statutorily conducted by Metro. Metro currently updates their growth estimates every 6 years as part of the Urban Growth Report process. That process was most recently completed in 2024 and used as part of the 2025 calculation of 20 years of need and annual production target. All other parts of the Metro region were updated except for the Metro UGB which is unchanged in the calculation of the total units of need. Local allocation is updated for the entirety of the state on an annual basis. See the following section of the report for a more complete description of all of the data sources and their update schedules.

The 2026 20-year calculation of total need is the average of the 2023, 2024, and 2025 annual calculations of need, which rely primarily on census data that are lagged by a year. For example, the 2025 annual calculation of need uses 2024 census data as the basis for its calculation. The annual production target is the combination of a 20-year time horizon for future need, and a 10-year time horizon for current need. The following charts and tables show the state components of need for each of the 3 years used to create the 2026 20-year total need, along with the statewide and regional annual regional targets by income level.

The 2026 statewide calculation of 20-years of need is 491,347 units, down from 494,502 units in 2025. This translates to a 2026 statewide annual production target of 29,359 units, down from 29,522 units in 2025.

Figure 12. Statewide components of 20 years of total need for 2026

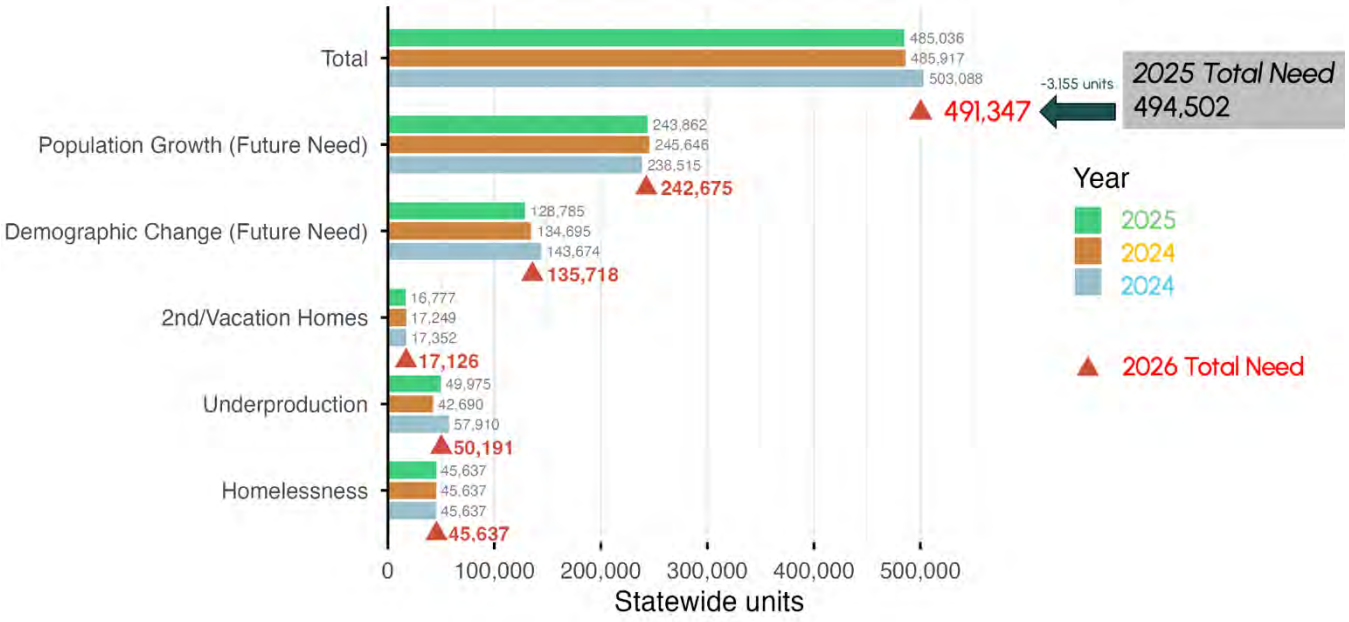


Figure 13. Statewide 2025 vs. 2026 Annual Production Target

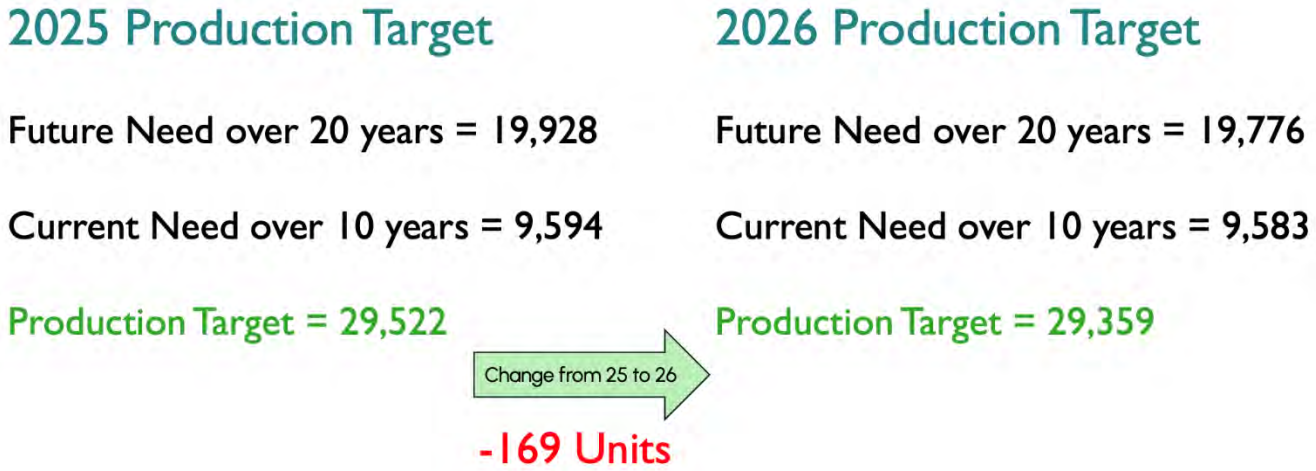


Figure 14. Statewide and Regional 20-Year Total Housing Need by Income Level

Region	Income Level					Total Need
	0-30%	31-60%	61-80%	81-120%	>120%	
Central	7,807	8,977	6,900	12,809	22,455	58,949
Metro	31,606	31,422	20,714	36,180	68,241	188,164
Northeast	3,527	3,354	1,962	4,527	6,406	19,775
Northern Coast	4,441	3,328	1,252	3,366	3,550	15,938
Southeast	2,816	2,031	1,183	2,001	3,678	11,708

Southwest	13,239	11,055	6,630	10,682	20,713	62,319
Willamette Valley	32,923	25,151	13,966	23,958	38,496	134,494
Oregon	**96,359**	**85,319**	**52,607**	**93,523**	**163,540**	**491,347**

Figure 15. Statewide 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	14,770	35,287	-	16,774	29,529	96,359
31-60%	16,515	8,223	-	21,967	38,613	85,319
61-80%	7,921	2,127	-	15,226	27,333	52,607
81-120%	7,406	-	11,250	26,724	48,142	93,523
>120%	3,579	-	5,876	55,027	99,058	163,540
Total	**50,191**	**45,637**	**17,126**	**135,718**	**242,675**	**491,347**

Regional Results

Figure 16. OHNA Regions (from page 3)

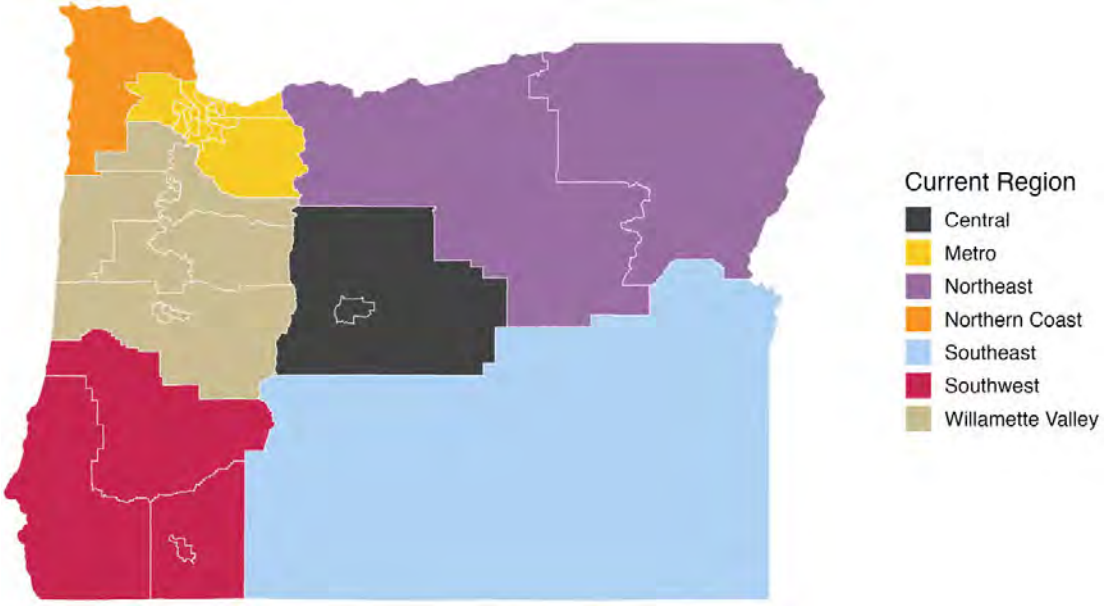


Figure 17. Central Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	1,535	2,113	-	997	3,163	7,807
31-60%	1,991	398	-	1,579	5,010	8,977
61-80%	1,374	105	-	1,298	4,123	6,900
81-120%	1,347	-	1,809	2,314	7,339	12,809
>120%	696	-	1,688	4,815	15,256	22,455
Total	**6,943**	**2,616**	**3,497**	**11,003**	**34,890**	**58,949**

Figure 18. Northern Coast Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	1,030	2,374	-	537	500	4,441
31-60%	1,244	410	-	870	805	3,328
61-80%	392	76	-	406	378	1,252
81-120%	446	-	1,260	865	796	3,366
>120%	175	-	624	1,433	1,319	3,550

Total	**3,286**	**2,859**	**1,883**	**4,111**	**3,798**	**15,938**

Figure 19. Southwest Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	1,554	6,613	-	2,200	2,870	13,239
31-60%	2,004	1,191	-	3,418	4,443	11,055
61-80%	963	366	-	2,302	2,998	6,630
81-120%	830	-	1,578	3,592	4,682	10,682
>120%	556	-	615	8,498	11,045	20,713
Total	**5,907**	**8,170**	**2,193**	**20,010**	**26,038**	**62,319**

Figure 20. Willamette Valley Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	4,959	14,794	-	4,721	8,450	32,923
31-60%	5,211	3,819	-	5,772	10,348	25,151
61-80%	2,181	992	-	3,858	6,935	13,966
81-120%	2,083	-	2,718	6,850	12,308	23,958
>120%	1,020	-	932	13,016	23,529	38,496
Total	**15,453**	**19,605**	**3,650**	**34,216**	**61,570**	**134,494**

Figure 21. Northeast Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	709	1,128	-	858	831	3,527
31-60%	637	288	-	1,229	1,200	3,354
61-80%	264	106	-	809	783	1,962
81-120%	263	-	1,302	1,507	1,454	4,527
>120%	134	-	729	2,820	2,723	6,406
Total	**2,007**	**1,522**	**2,031**	**7,224**	**6,991**	**19,775**

Figure 22. Southeast Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	410	1,238	-	774	393	2,816
31-60%	334	423	-	843	430	2,031
61-80%	148	114	-	610	311	1,183
81-120%	188	-	290	1,009	514	2,001
>120%	100	-	183	2,237	1,158	3,678
Total	**1,180**	**1,775**	**473**	**5,474**	**2,807**	**11,708**

Figure 23. Metro Region 20-Year Total Housing Need by Income Level and Component

	Current Need		Future Need			
Income Level	**Underproduction**	**Units for Homelessness**	**Second & Vacation Homes**	**Demographic Change**	**Pop. Growth**	**Total Needs**
0-30%	4,572	7,026	-	6,686	13,322	31,606
31-60%	5,095	1,703	-	8,255	16,376	31,422
61-80%	2,599	368	-	5,942	11,804	20,714
81-120%	2,250	-	2,294	10,586	21,050	36,180
>120%	898	-	1,105	22,210	44,028	68,241
Total	**15,415**	**9,090**	**3,400**	**53,679**	**106,580**	**188,164**

Appendix A. Local Results

Each figure contains the UGBs in an OHNA Region and displays the UGB's 1-year annual housing production target in total and by income level, as well as the 20-year housing need allocation in total and by income level. See page 15 for the calculation of annual housing production targets.

Figure 24. Central Region Results

Central UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Bend UGB	1-year	2,010	348	336	245	418	663
	20-year	34,116	4,640	5,192	3,962	7,509	12,814
Culver UGB	1-year	15	3	3	2	3	5
	20-year	244	37	39	29	52	87
La Pine UGB	1-year	58	9	9	7	13	20
	20-year	1,016	127	148	114	232	394
Madras UGB	1-year	135	26	24	17	26	42
	20-year	2,236	334	365	277	450	811
Metolius UGB	1-year	10	2	2	1	2	3
	20-year	159	24	26	20	31	57
Prineville UGB	1-year	188	36	34	24	36	58
	20-year	3,091	469	503	380	630	1,109
Redmond UGB	1-year	606	109	106	78	117	197
	20-year	10,251	1,463	1,652	1,264	2,067	3,804
Sisters UGB	1-year	101	14	15	11	23	37
	20-year	1,802	205	247	193	437	720

*On January 12, 2026, OEA revised this table to correct spreadsheet error

Figure 25. Metro Region Results

Metro UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Banks UGB	1 year	9	2	2	1	2	3
	20 year	162	31	28	18	29	56
Barlow UGB	1 year	0	0	0	0	0	0
	20 year	6	1	1	1	1	2
Beaverton	1 year	766	147	136	86	138	259
	20 year	13,810	2,230	2,301	1,538	2,611	5,130
Canby UGB	1 year	125	28	22	14	21	39
	20 year	2,173	394	365	237	401	774
Clackamas UA	1 year	625	165	127	72	99	163
	20 year	9,994	2,107	1,838	1,125	1,748	3,175
Cornelius	1 year	63	8	10	7	12	26
	20 year	1,250	159	193	138	246	513
Durham	1 year	14	5	3	2	2	2
	20 year	188	58	41	22	28	40
Estacada UGB	1 year	41	9	7	4	7	14
	20 year	732	125	121	80	137	269
Fairview	1 year	45	8	8	5	8	16
	20 year	821	130	134	91	158	309
Forest Grove	1 year	158	20	24	17	32	65
	20 year	3,169	394	485	349	633	1,308
Gaston UGB	1 year	4	1	1	0	1	1
	20 year	64	16	12	7	10	19
Gladstone	1 year	78	27	18	9	10	13
	20 year	1,048	307	222	120	159	240
Gresham	1 year	497	79	83	55	94	186
	20 year	9,428	1,339	1,506	1,043	1,841	3,700
Happy Valley	1 year	459	85	80	51	83	160
	20 year	8,382	1,316	1,381	933	1,588	3,164
Hillsboro	1 year	741	140	131	83	134	253
	20 year	13,425	2,149	2,222	1,491	2,550	5,013
Johnson City	1 year	5	2	1	1	0	0
	20 year	49	21	13	6	5	4
King City	1 year	128	31	25	15	21	36
	20 year	2,122	416	377	237	384	708
Lake Oswego	1 year	322	95	68	36	51	73
	20 year	4,850	1,139	913	535	873	1,391
Maywood Park	1 year	8	3	2	1	1	2
	20 year	122	31	24	14	20	34

Metro UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Milwaukie	1 year	108	14	17	12	22	44
	20 year	2,157	270	329	236	437	885
Molalla UGB	1 year	64	14	11	7	11	21
	20 year	1,145	200	191	126	211	417
Multnomah UA	1 year	55	11	10	6	10	18
	20 year	983	158	162	108	192	363
North Plains UGB	1 year	39	7	6	4	7	14
	20 year	721	110	116	80	137	278
Oregon City	1 year	275	40	44	30	53	108
	20 year	5,355	719	837	592	1,052	2,155
Portland	1 year	2,856	350	424	304	614	1,163
	20 year	56,913	6,907	8,434	6,062	12,259	23,252
Rivergrove	1 year	3	1	1	0	1	0
	20 year	44	13	8	4	10	9
Sandy UGB	1 year	85	18	15	9	15	28
	20 year	1,513	262	251	166	281	552
Sherwood	1 year	200	46	38	23	33	60
	20 year	3,402	639	593	383	614	1,173
Tigard	1 year	461	86	81	52	83	159
	20 year	8,376	1,330	1,383	931	1,591	3,142
Troutdale	1 year	75	14	13	8	14	26
	20 year	1,371	213	224	151	268	515
Tualatin	1 year	222	76	51	26	30	39
	20 year	3,051	861	638	350	465	736
Washington UA	1 year	1,467	476	329	171	205	287
	20 year	20,887	5,522	4,233	2,385	3,313	5,434
West Linn	1 year	238	83	55	28	32	40
	20 year	3,205	932	675	364	501	733
Wilsonville	1 year	195	46	37	22	33	56
	20 year	3,262	621	568	360	609	1,105
Wood Village	1 year	19	2	3	2	4	8
	20 year	389	48	59	42	79	160

*On January 12, 2026, OEA revised this table to correct spreadsheet error

Figure 26. Northeast Region Results

Northeast UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Adams UGB	1 year	2	0	0	0	0	0
	20 year	25	5	5	3	5	8
Antelope UGB	1 year	0	0	0	0	0	0
	20 year	8	0	0	0	4	3
Arlington UGB	1 year	4	1	1	0	1	1
	20 year	63	12	11	6	14	20
Athena UGB	1 year	6	2	1	1	1	2
	20 year	10	21	19	11	19	32
Baker City UGB	1 year	68	18	13	7	13	17
	20 year	1,103	225	198	112	232	337
Boardman UGB	1 year	44	11	9	5	7	12
	20 year	728	145	136	79	136	232
Canyon City UGB	1 year	4	1	1	0	1	1
	20 year	62	13	11	6	14	18
Cascade Locks UGB	1 year	11	2	2	1	2	3
	20 year	198	31	33	20	46	67
Condon UGB	1 year	5	1	1	0	2	1
	20 year	86	11	9	5	33	28
Cove UGB	1 year	2	1	0	0	0	1
	20 year	33	8	6	4	6	10
Dayville UGB	1 year	1	0	0	0	0	0
	20 year	12	1	1	1	6	4
Dufur UGB	1 year	4	1	1	0	1	1
	20 year	59	12	11	6	12	18
Echo UGB	1 year	3	1	1	0	1	1
	20 year	56	11	10	6	12	18
Elgin UGB	1 year	9	2	2	1	2	2
	20 year	138	30	25	14	28	40
Enterprise UGB	1 year	22	6	4	2	4	6
	20 year	358	70	63	36	79	111
Fossil UGB	1 year	3	1	0	0	1	1
	20 year	49	8	7	4	16	15
Granite UGB	1 year	3	0	0	0	2	1
	20 year	58	0	0	0	36	21
Grass Valley UGB	1 year	1	0	0	0	0	0
	20 year	13	3	3	1	2	4

Northeast UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Haines UGB	1 year	2	0	0	0	0	0
	20 year	27	5	4	2	8	8
Halfway UGB	1 year	4	1	0	0	1	1
	20 year	62	7	6	4	24	20
Helix UGB	1 year	1	0	0	0	0	0
	20 year	17	4	3	2	3	5
Heppner UGB	1 year	10	2	2	1	2	2
	20 year	156	29	25	14	40	48
Hermiston UGB	1 year	166	40	33	18	29	47
	20 year	2,805	535	519	306	535	911
Hood River UGB	1 year	110	24	19	10	26	31
	20 year	1,876	311	289	168	501	606
Huntington UGB	1 year	3	0	0	0	1	1
	20 year	48	6	5	3	20	15
Imbler UGB	1 year	2	0	0	0	0	0
	20 year	30	6	5	3	8	9
Ione UGB	1 year	2	0	0	0	0	0
	20 year	28	5	4	3	7	9
Irrigon UGB	1 year	9	2	2	1	1	2
	20 year	148	31	28	16	27	45
Island City UGB	1 year	9	2	2	1	2	2
	20 year	155	31	29	17	29	49
John Day UGB	1 year	15	4	3	2	3	4
	20 year	244	50	43	24	52	74
Joseph UGB	1 year	9	2	1	1	3	2
	20 year	150	21	19	11	50	48
La Grande UGB	1 year	95	26	19	10	16	24
	20 year	1,528	323	288	165	285	467
Lexington UGB	1 year	1	0	0	0	0	0
	20 year	17	3	3	2	4	5
Lonerock UGB	1 year	1	0	0	0	0	0
	20 year	20	2	2	1	8	7
Long Creek UGB	1 year	3	1	0	0	0	0
	20 year	49	8	7	4	14	16
Lostine UGB	1 year	2	0	0	0	1	1
	20 year	36	4	3	2	15	12
Maupin UGB	1 year	6	1	1	0	3	2
	20 year	119	9	9	5	54	41

Northeast UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Milton-Freewater UGB	1 year	34	9	7	4	6	8
	20 year	536	117	101	57	100	160
Mitchell UGB	1 year	1	0	0	0	0	0
	20 year	22	2	2	1	9	7
Monument UGB	1 year	1	0	0	0	0	0
	20 year	9	2	2	1	1	3
Moro UGB	1 year	4	1	1	0	1	1
	20 year	61	12	12	7	11	19
Mosier UGB	1 year	5	1	1	0	2	2
	20 year	101	9	9	5	43	35
Mt. Vernon UGB	1 year	2	1	0	0	0	0
	20 year	28	7	5	3	5	8
North Powder UGB	1 year	2	1	1	0	0	1
	20 year	41	8	8	5	7	13
Pendleton UGB	1 year	120	32	24	13	21	31
	20 year	1,949	403	360	206	381	599
Pilot Rock UGB	1 year	5	1	1	0	1	1
	20 year	86	17	13	7	23	25
Prairie City UGB	1 year	4	1	1	0	1	1
	20 year	59	10	8	5	18	18
Richland UGB	1 year	2	0	0	0	1	1
	20 year	39	3	3	2	18	13
Rufus UGB	1 year	2	0	0	0	0	0
	20 year	30	5	4	3	9	10
Seneca UGB	1 year	2	0	0	0	1	1
	20 year	40	3	2	1	21	14
Shaniko UGB	1 year	0	0	0	0	0	0
	20 year	6	0	0	0	3	2
Spray UGB	1 year	1	0	0	0	1	0
	20 year	26	2	2	1	12	9
Stanfield UGB	1 year	16	3	3	2	3	5
	20 year	288	49	53	32	55	99
Summerville UGB	1 year	0	0	0	0	0	0
	20 year	8	2	1	1	2	2
Sumpter UGB	1 year	13	0	0	0	8	5
	20 year	257	4	4	2	156	92
The Dalles UGB	1 year	111	30	22	12	19	28
	20 year	1,785	378	334	190	342	542

Northeast UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Ukiah UGB	1 year	2	0	0	0	1	1
	20 year	30	2	2	1	16	10
Umatilla UGB	1 year	49	13	10	5	8	13
	20 year	812	164	150	87	156	92
Union UGB	1 year	9	2	2	1	2	2
	20 year	148	28	25	15	34	46
Unity UGB	1 year	1	0	0	0	0	0
	20 year	11	0	0	0	6	4
Wallowa UGB	1 year	4	1	1	0	1	1
	20 year	68	12	10	5	20	20
Wasco UGB	1 year	1	0	0	0	0	0
	20 year	23	4	3	2	7	7
Weston UGB	1 year	8	2	2	1	1	2
	20 year	137	25	25	15	27	45

*On January 12, 2026, OEA revised this table to correct spreadsheet error

Figure 27. Northern Coast Region Results

Northern Coast UGB	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Astoria UGB	1 year	140	60	35	11	17	17
	20 year	1,802	654	431	152	259	307
Bay City UGB	1 year	14	6	4	1	2	2
	20 year	183	68	43	15	29	29
Cannon Beach UGB	1 year	44	14	8	3	11	8
	20 year	645	150	100	36	211	148
Clatskanie UGB	1 year	23	10	6	2	3	3
	20 year	294	107	71	25	41	50
Columbia City UGB	1 year	13	6	3	1	1	1
	20 year	161	62	40	14	21	25
Garibaldi UGB	1 year	12	5	3	1	2	2
	20 year	158	50	34	12	31	30
Gearhart UGB	1 year	25	7	4	1	7	5
	20 year	373	81	54	19	131	88
Manzanita UGB	1 year	22	4	3	1	8	5
	20 year	364	50	36	13	164	100
Nehalem UGB	1 year	15	5	3	1	3	3
	20 year	222	61	45	17	50	49
Prescott UGB	1 year	1	0	0	0	0	0
	20 year	7	2	2	1	1	1
Rainier UGB	1 year	28	12	7	2	3	3
	20 year	352	130	86	30	48	59
Rockaway Beach UGB	1 year	32	7	4	1	12	8
	20 year	538	78	57	21	235	147
Scappoose UGB	1 year	93	37	23	8	11	13
	20 year	1,268	417	302	112	186	252
Seaside UGB	1 year	112	42	25	8	20	17
	20 year	1,570	457	316	114	356	326
St. Helens UGB	1 year	170	71	43	14	20	22
	20 year	2,241	782	539	195	315	410
Tillamook Outside UGB Area	1 year	60	6	10	5	18	21
	20 year	1,194	127	204	96	356	412
Tillamook UGB	1 year	95	41	24	8	11	11
	20 year	1,226	447	298	106	166	210
Vernonia UGB	1 year	20	9	5	2	2	2
	20 year	264	96	63	22	37	45

Northern Coast UGB	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Warrenton UGB	1 year	93	38	23	8	12	13
	20 year	1,252	417	295	108	190	241
Wheeler UGB	1 year	5	2	1	0	1	1
	20 year	60	19	12	4	14	11

*On January 12, 2026, OEA revised this table to correct spreadsheet error

Figure 28. Southeast Region Results

Southeast UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Adrian UGB	1 year	2	1	0	0	0	1
	20 year	34	8	5	3	8	11
Bonanza UGB	1 year	3	1	0	0	1	1
	20 year	47	10	7	4	12	15
Burns UGB	1 year	23	8	5	2	3	5
	20 year	349	96	63	34	58	98
Chiloquin UGB	1 year	6	2	1	1	1	1
	20 year	90	22	14	8	19	26
Hines UGB	1 year	13	4	3	1	2	3
	20 year	211	51	35	20	40	64
Jordan Valley UGB	1 year	3	0	0	0	1	1
	20 year	51	4	3	1	25	18
Klamath Falls UGB	1 year	347	119	70	34	46	78
	20 year	5,240	1,429	960	530	814	1,507
Lakeview UGB	1 year	31	10	6	3	5	8
	20 year	482	118	82	46	90	146
Malin UGB	1 year	5	2	1	0	1	1
	20 year	69	19	12	6	13	19
Merrill UGB	1 year	6	2	1	1	1	1
	20 year	88	23	16	9	15	26
Nyssa UGB	1 year	23	7	4	2	3	6
	20 year	356	91	63	35	61	107
Ontario UGB	1 year	146	47	29	15	20	36
	20 year	2,284	583	411	235	359	697
Paisley UGB	1 year	2	1	0	0	1	1
	20 year	37	7	5	3	11	12
Vale UGB	1 year	22	7	4	2	3	6
	20 year	349	86	62	36	57	109

Figure 29. Southwest Region Results

Southwest UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Ashland UGB	1 year	221	65	40	22	37	57
	20 year	3,525	779	604	354	678	1,109
Bandon UGB	1 year	50	12	8	4	13	14
	20 year	853	142	117	70	252	272
Brookings UGB	1 year	118	32	20	11	25	31
	20 year	1,915	381	296	174	467	597
Butte Falls UGB	1 year	3	1	0	0	0	1
	20 year	41	10	7	4	8	12
Canyonville UGB	1 year	19	6	4	2	3	5
	20 year	297	74	55	32	46	91
Cave Junction UGB	1 year	22	7	4	2	3	6
	20 year	354	82	64	38	57	113
Central Point UGB	1 year	164	50	32	17	21	43
	20 year	2,595	608	481	284	385	836
Coos Bay UGB	1 year	178	56	34	18	26	44
	20 year	2,775	663	498	289	468	857
Coquille UGB	1 year	37	12	7	4	5	9
	20 year	563	141	102	58	94	169
Drain UGB	1 year	9	3	2	1	1	2
	20 year	129	34	24	14	20	38
Eagle Point UGB	1 year	70	21	13	7	10	19
	20 year	1,131	254	207	123	175	372
Elkton UGB	1 year	2	1	0	0	1	1
	20 year	37	7	5	3	12	11
Glendale UGB	1 year	5	2	1	0	1	1
	20 year	66	19	13	7	9	19
Gold Beach UGB	1 year	37	9	5	3	10	10
	20 year	614	105	80	47	197	186
Gold Hill UGB	1 year	9	3	2	1	1	2
	20 year	140	35	25	14	24	42
Grants Pass UGB	1 year	551	153	104	59	77	157
	20 year	9,031	1,917	1,638	989	1,430	3,057
Jacksonville UGB	1 year	26	8	5	2	4	6
	20 year	406	91	68	40	82	125
Lakeside UGB	1 year	16	3	2	1	5	4
	20 year	266	39	29	16	104	78

Southwest UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Medford UGB	1 year	1,267	347	240	136	178	366
	20 year	20,910	4,372	3,795	2,300	3,297	7,147
Myrtle Creek UGB	1 year	40	14	8	4	5	9
	20 year	595	161	110	62	92	170
Myrtle Point UGB	1 year	18	7	4	2	2	4
	20 year	270	75	50	28	40	76
North Bend UGB	1 year	91	29	18	9	12	23
	20 year	1,412	345	258	150	223	436
Oakland UGB	1 year	6	2	1	1	1	1
	20 year	96	26	18	10	14	28
Phoenix UGB	1 year	42	13	8	4	6	11
	20 year	660	159	122	71	100	208
Port Orford UGB	1 year	16	4	2	1	5	4
	20 year	258	40	28	16	101	73
Powers UGB	1 year	4	1	1	0	1	1
	20 year	54	13	9	5	12	15
Reedsport UGB	1 year	32	10	6	3	6	7
	20 year	496	116	81	46	110	144
Riddle UGB	1 year	8	3	2	1	1	2
	20 year	125	32	24	14	18	38
Rogue River UGB	1 year	27	8	5	3	4	7
	20 year	426	97	77	45	71	137
Roseburg UGB	1 year	373	114	72	39	50	98
	20 year	5,907	1,372	1,083	640	913	1,899
Shady Cove UGB	1 year	21	6	4	2	5	5
	20 year	341	69	52	30	85	104
Sutherlin UGB	1 year	63	20	12	7	8	15
	20 year	964	241	178	103	146	295
Talent UGB	1 year	46	14	9	5	6	12
	20 year	73	166	133	79	119	237
Winston UGB	1 year	58	17	11	6	8	16
	20 year	933	206	171	102	143	311
Yoncalla UGB	1 year	5	2	1	0	1	1
	20 year	74	20	13	7	13	20

*On January 12, 2026, OEA revised this table to correct spreadsheet error

Figure 30. Willamette Valley Region Results

Willamette Valley UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Adair Village UGB	1 year	8	2	2	1	1	2
	20 year	122	29	23	13	21	36
Albany UGB	1 year	488	154	100	50	70	114
	20 year	7,708	1,925	1,474	820	1,271	2,218
Amity UGB	1 year	11	4	2	1	2	3
	20 year	183	45	35	20	30	53
Aumsville UGB	1 year	36	9	7	4	6	10
	20 year	617	127	112	67	110	200
Aurora UGB	1 year	12	3	2	1	2	3
	20 year	208	44	38	23	37	67
Brownsville UGB	1 year	9	3	2	1	1	2
	20 year	137	38	27	14	22	37
Carlton UGB	1 year	17	5	3	2	3	4
	20 year	274	61	50	29	50	83
Coburg UGB	1 year	27	8	5	3	4	7
	20 year	438	101	82	47	75	133
Corvallis UGB	1 year	515	173	108	52	72	111
	20 year	7,895	2,102	1,530	826	1,287	2,150
Cottage Grove UGB	1 year	61	23	13	6	8	11
	20 year	882	267	178	91	131	215
Creswell UGB	1 year	33	11	7	3	4	7
	20 year	488	136	96	51	77	128
Dallas UGB	1 year	155	44	31	16	24	40
	20 year	2,565	580	477	275	445	787
Dayton UGB	1 year	13	5	3	1	2	3
	20 year	198	5	39	21	30	52
Depoe Bay UGB	1 year	15	3	2	1	6	4
	20 year	268	35	27	15	117	74
Detroit UGB	1 year	8	0	0	0	5	2
	20 year	158	4	3	2	108	41
Donald UGB	1 year	9	3	2	1	1	2
	20 year	144	39	28	15	22	39
Dundee UGB	1 year	18	6	4	2	3	4
	20 year	283	74	54	29	49	77
Dunes City UGB	1 year	7	2	1	0	3	1
	20 year	118	19	12	6	55	28

Willamette Valley UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Eugene UGB	1 year	1,676	552	348	171	235	371
	20 year	25,944	6,764	5,003	2,729	4,251	7,196
Falls City UGB	1 year	5	2	1	1	1	1
	20 year	87	21	17	9	15	25
Florence UGB	1 year	86	25	15	7	22	18
	20 year	1,350	292	198	103	418	339
Gates UGB	1 year	3	1	1	0	0	1
	20 year	44	10	8	4	9	13
Gervais UGB	1 year	16	5	3	2	2	4
	20 year	246	63	47	26	40	70
Halsey UGB	1 year	6	2	1	1	1	1
	20 year	85	23	17	9	13	23
Harrisburg UGB	1 year	20	7	4	2	3	4
	20 year	296	82	58	31	46	78
Hubbard UGB	1 year	29	9	6	3	4	7
	20 year	461	115	88	49	77	132
Idanha UGB	1 year	1	0	0	0	0	0
	20 year	17	3	2	1	6	5
Independence UGB	1 year	78	23	16	8	12	20
	20 year	1,282	297	240	137	221	387
Jefferson UGB	1 year	18	6	4	2	2	4
	20 year	276	7	54	29	44	77
Junction City UGB	1 year	64	19	13	7	10	16
	20 year	1,039	248	196	111	177	308
Keizer UGB	1 year	251	79	51	26	36	59
	20 year	3,963	990	758	422	653	1,140
Lafayette UGB	1 year	28	8	6	3	4	8
	20 year	475	104	88	51	83	149
Lebanon UGB	1 year	140	49	30	14	19	28
	20 year	2,092	585	412	218	331	547
Lincoln City UGB	1 year	145	29	18	9	55	34
	20 year	2,511	352	261	143	1,083	672
Lowell UGB	1 year	6	2	1	1	1	1
	20 year	97	25	18	9	19	25
Lyons UGB	1 year	10	3	2	1	2	2
	20 year	164	38	30	17	32	48
McMinnville UGB	1 year	295	95	61	30	42	67
	20 year	4,603	1,177	882	484	766	1,294

Willamette Valley UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Mill City UGB	1 year	13	5	3	1	2	3
	20 year	202	55	39	20	35	52
Millersburg UGB	1 year	73	16	14	8	13	23
	20 year	1,330	240	236	147	247	460
Monmouth UGB	1 year	96	27	19	10	15	26
	20 year	1,609	355	298	174	280	502
Monroe UGB	1 year	4	2	1	0	1	1
	20 year	59	18	12	6	9	14
Mt. Angel UGB	1 year	27	9	6	3	4	6
	20 year	412	107	80	44	66	116
Newberg UGB	1 year	256	73	51	27	39	66
	20 year	4,207	960	785	451	727	1,285
Newport UGB	1 year	115	34	21	10	26	24
	20 year	1,812	407	285	150	500	469
Oakridge UGB	1 year	17	6	3	2	3	3
	20 year	251	67	47	25	47	65
Philomath UGB	1 year	48	14	10	5	7	12
	20 year	783	182	146	83	136	236
Salem UGB	1 year	2,002	650	415	205	280	453
	20 year	31,236	8,030	6,023	3,311	5,075	8,798
Scio UGB	1 year	10	3	2	1	1	2
	20 year	158	36	30	17	27	49
Scotts Mills UGB	1 year	2	1	0	0	0	1
	20 year	39	9	7	4	7	11
Sheridan UGB	1 year	30	10	6	3	4	6
	20 year	451	123	88	47	71	121
Siletz UGB	1 year	7	3	2	1	1	2
	20 year	111	30	22	12	18	29
Silverton UGB	1 year	84	26	17	9	12	20
	20 year	1,330	329	253	141	224	384
Sodaville UGB	1 year	3	1	1	0	0	1
	20 year	40	10	8	4	7	12
Springfield UGB	1 year	466	170	100	47	59	90
	20 year	6,832	1,993	1,365	710	1,041	1,724
St. Paul UGB	1 year	3	1	1	0	0	1
	20 year	44	11	9	5	7	13
Stayton UGB	1 year	68	22	14	7	9	15
	20 year	1,058	271	204	113	171	300

Willamette Valley UGBs	Results	Total	0-30% AMI	31-60% AMI	61-80% AMI	81-120% AMI	>120% AMI
Sublimity UGB	1 year	14	5	3	1	2	3
	20 year	204	59	41	21	31	52
Sweet Home UGB	1 year	60	19	12	6	9	14
	20 year	935	237	178	98	159	264
Tangent UGB	1 year	16	5	3	2	2	4
	20 year	251	64	48	27	41	71
Toledo UGB	1 year	23	8	5	2	3	4
	20 year	336	94	65	34	59	85
Turner UGB	1 year	23	6	4	2	4	6
	20 year	383	83	70	41	68	120
Veneta UGB	1 year	26	9	5	3	4	6
	20 year	397	106	77	41	66	108
Waldport UGB	1 year	18	4	3	1	5	4
	20 year	300	55	41	23	99	82
Waterloo UGB	1 year	1	0	0	0	0	0
	20 year	9	3	2	1	1	2
Westfir UGB	1 year	1	0	0	0	0	0
	20 year	15	4	3	1	3	4
Willamina UGB	1 year	14	4	3	1	2	3
	20 year	222	53	42	24	37	66
Woodburn UGB	1 year	211	70	44	22	29	46
	20 year	3,253	856	630	343	526	898
Yachats UGB	1 year	18	3	2	1	8	5
	20 year	328	35	28	16	159	90
Yamhill UGB	1 year	7	2	1	1	1	2
	20 year	107	28	21	11	17	29

*On January 12, 2026, OEA revised this table to correct spreadsheet error

Appendix B. Alternative Counterfactual Metro Region Modeling

Alternative Scenario of Metro UGB Housing Needs with Counterfactual Standard OHNA methodology applied to the Metro Region

As noted on page 20, House Bill 2889 (2023) retains Metro's statutory responsibility to estimate housing need within the Metro UGB. Metro has discretion on the data sources and specific methods used in the UGR to estimate housing need, but the policy intent is for the UGR methodology to align with OHNA methodology.

Metro updates its UGR every 6-years, with 2024 being the most recent update year. Metro began the update process in early 2024 and adopted the UGR on December 5, 2024. Due to timeline discontinuity between the OHNA methodology development process and Metro's process, the underlying methods and data sources used to estimate housing need within the Metro UGB differ from OHNA. This discontinuity primarily affects the estimate of regional housing need but also has some feedback loops into local allocation process. This discontinuity could be reconciled if Metro were to update its UGR methodology to align with the OHNA and/or produce an updated calculation of need on or before the 6-year update schedule.

Differences Between Standard Methodology and Counterfactual applied to Metro region

A comparison is shown below demonstrating the difference in the estimate of total OHNA Metro Region housing need had Metro's UGR incorporated the OHNA methodology and sources is provided below for reference use only. The standard OHNA approach is not part of the statutory methodology, and included only to provide some guidance to assist in future planning. A summary discussion of the major differences between methods is also included below.

Had Metro's UGR estimate of regional housing need incorporated the OHNA Methodology for the calculation of total need, the estimate for the Metro UGB (a subset of the Metro Region) would have been 198,300 compared to the statutory estimate of 178,100, a difference of 20,200 units.

The two largest differences between the OHNA Methodology and the Metro UGR methodology are in how to estimate *Underproduction*, and how to estimate *Units Needed for People Experiencing Homelessness*. Given the income distributions of these two components, the majority of the difference between the two methods is contained within the 0-80% AMI household income range.

Figure 31. Comparison of official Metro UGB allocation vs. non-binding OHNA standard approach by component

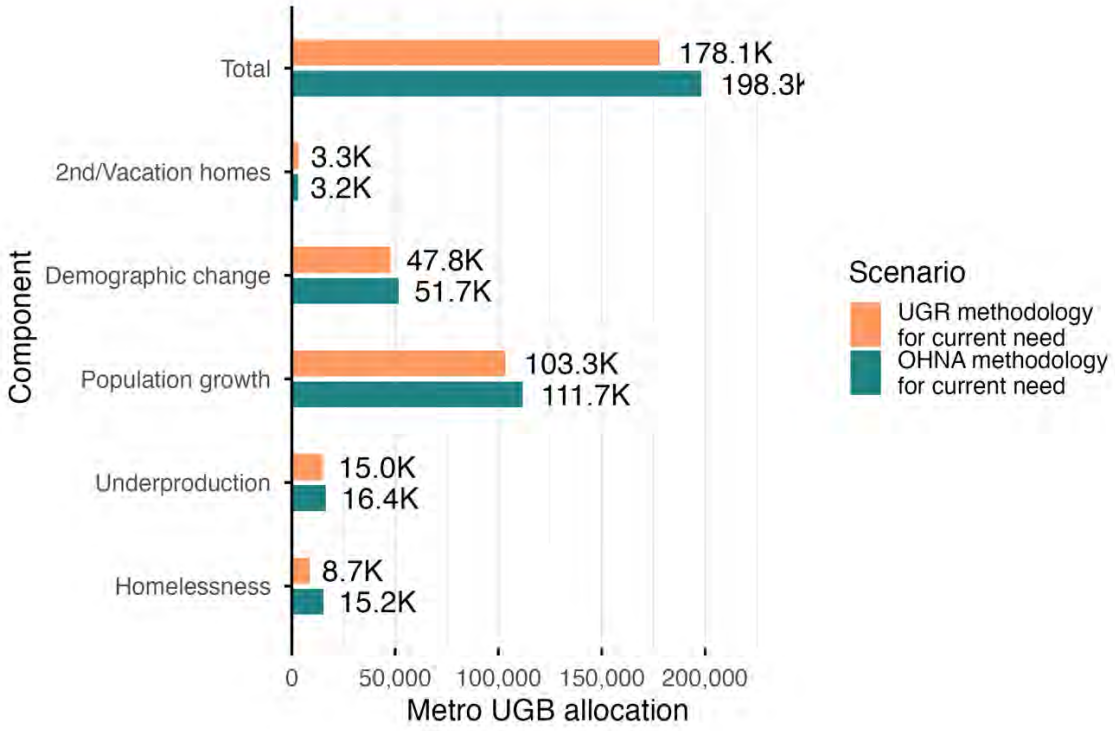
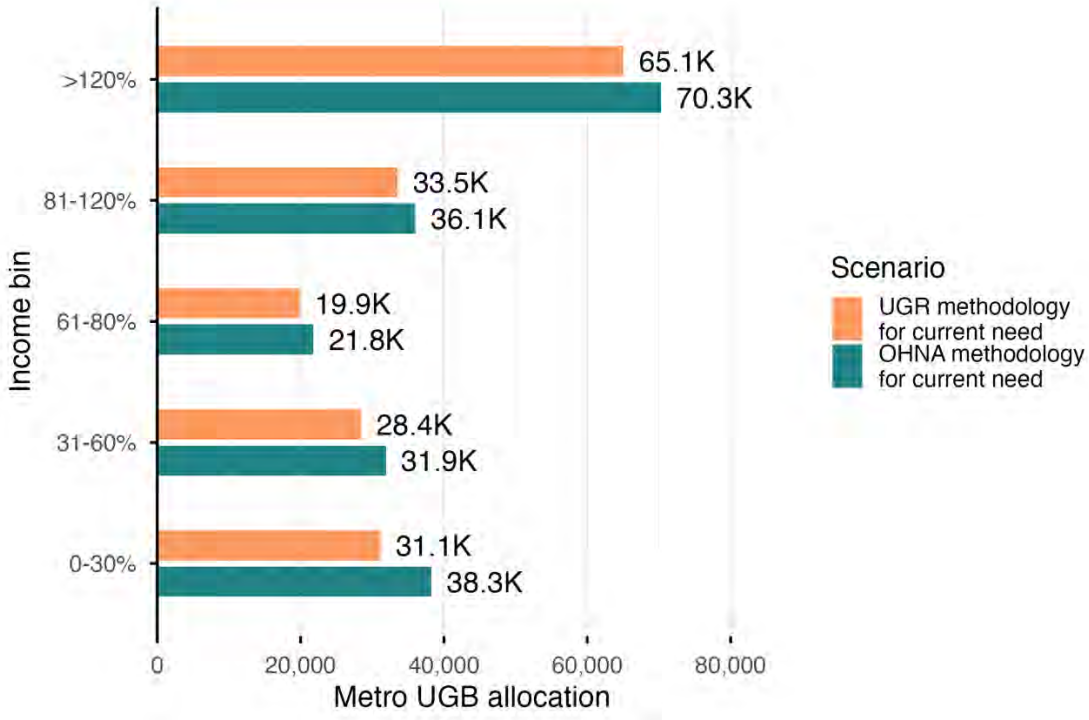


Figure 32. Comparison of official Metro UGB allocation vs. non-binding OHNA standard approach by income level



Appendix C. Common Terms & Acronyms

AMI: Area Median Income: Every year the U.S. Department of Housing and Urban Development (HUD) produces a median family income calculation/assessment to determine affordability thresholds for a given area (some geographies are HUD-specific). Affordable housing projects' income limits, rent limits, and other characteristics will be based on this income limit. This term is synonymous with Median Family Income or MFI.[11]

City: This report uses the terms "City" and "city with a population of 10,000 or greater" as DLCD does, which includes, regardless of size: (a) Any city within Tillamook County and the communities of Barview/Twin Rocks/Watseco, Cloverdale, Hebo, Neahkahnie, Neskowin, Netarts, Oceanside and Pacific City/Woods; and (b) A county with respect to its jurisdiction over Metro urban unincorporated lands.

Cost Burdening / Severe Cost Burdening: The term "cost burdening" refers to households who pay more than 30% of their income on housing costs. The term "severe cost burdening" is used for households paying more than 50% of their income on housing. These terms come from HUD, and include mortgage payments and interest, or rent, utilities, and insurance.

DAS: Department of Administrative Services

DLCD: Department of Land Conservation and Development

Goal 10 (Housing): One of Oregon's 19 statewide land use planning requirements relating to planning for housing need. All local governments are required to plan for housing needs within an urban growth boundary (see term below) under Goal 10. Cities with populations larger than 10,000 people (as well as all cities and certain urban, unincorporated communities in Tillamook County, and counties with urban unincorporated lands in the Metro area) must regularly update local planning documents to comply with Goal 10.

Goal 14 (Urbanization): One of Oregon's 19 statewide land use planning requirements relating to planning for the orderly and efficient urbanization of land within an urban growth boundary (UGB - see term below). All cities and Metro are required to establish and amend urban growth boundaries to accommodate identified land needs in compliance with Goal 14.

[11] A note on AMI vs MFI from HUD: "HUD estimates Median Family Income (MFI) annually for each metropolitan area and non-metropolitan county. The metropolitan area definitions are the same ones HUD uses for Fair Market Rents (except where statute requires a different configuration). HUD calculates Income Limits as a function of the area's Median Family Income (MFI). The basis for HUD's median family incomes is data from the American Community Survey, table B19113 - MEDIAN FAMILY INCOME IN THE PAST 12 MONTHS. The term Area Median Income is the term used more generally in the industry. If the term Area Median Income (AMI) is used in an unqualified manor, this reference is synonymous with HUD's MFI. However, if the term AMI is qualified in some way - generally percentages of AMI, or AMI adjusted for family size, then this is a reference to HUD's income limits, which are calculated as percentages of median incomes and include adjustments for families of different sizes." Source: HUD. 2018. "FY 2018 Income Limits Frequently Asked Questions." https://www.huduser.gov/portal/datasets/il/il18/FAQs-18r.pdf

HB: House Bill (year)

Housing Affordability: Housing is considered "affordable" to a household if it spends less than 30% of its gross (pre-tax) income on housing costs (see Cost Burdening).

HSC: Housing Stability Council: The advisory body overseeing Oregon Housing and Community Services.

HUD: U.S. Department of Housing and Urban Development

LCDC: Land Conservation and Development Commission: The governing body with policy and administrative oversight of the state land-use planning program. LCDC is supported by the Oregon Department of Land Conservation and Development.

Metro UGB: Metro Urban Growth Boundary: The Portland metropolitan area's urban growth boundary (UGB), managed by Metro. Within the Metro UGB, cities and counties do not have individual UGBs. Since 1997, Oregon law also requires Metro to maintain a 20-year supply of land for future residential development inside the Metro UGB. See also: UGB.

OEA: Oregon Office of Economic Analysis

OHNA: Oregon Housing Needs Analysis

OHCS: Oregon Housing and Community Services

PRC: Population Research Center

PUMA: Public Use Microdata Area: A geographic area defined by the U.S. Census Bureau to have roughly 100,000 people and to (typically) align with County boundaries. PUMA sizes vary depending on the population density. Oregon has 31 PUMAs, with most PUMAs located in the more densely populated western part of the state.

PUMS: Public Use Microdata Sample: Data files produced by the U.S. Census Bureau that allow users to create custom analyses that are not available through pre-tabulated data tables. These data are produced for PUMA geographies.

Regulated Affordable Housing: Housing that is rent- or income-restricted to be affordable to households earning certain incomes. These units typically have public support (funding) in exchange for affordability requirements. Housing is considered "affordable" to a household if it spends less than 30% of its gross (pre-tax) income on housing costs (see Cost Burdening above). Regulations are set according to the types of funding used to develop the housing, such as the Low-Income Housing Tax Credit, or U.S. Housing and Urban Development (HUD) funding. Most regulated affordable housing is affordable for households earning under 60% AMI, but restrictions vary.

SB: Senate Bill (year)

UUL: Urban Unincorporated Lands: follows the definition in HB4063 (2024), which are lands within the Metro urban growth boundary that are identified by the county as: (a) Not within a city; (b) Zoned for urban development; (c) Within the boundaries of a sanitary district or sanitary authority or a district formed for the purposes of sewage works; (d) Within the service boundaries of a water provider with a water system; and (e) Not zoned with a designation that maintains the land's potential for future urbanization.

UGB: Urban Growth Boundary: A boundary delineating urban and urbanizable land from rural land. This boundary contains urban development, is used to plan for orderly growth, and can be amended to accommodate an identified land need. Cities in Oregon are surrounded by urban growth boundaries (UGBs) which designate where they expect to grow over a 20-year period. The Portland metropolitan region has a single regional UGB, established and maintained by Metro. See also: Metro UGB.

Appendix D. Data Sources and Updates

The OHNA Final Methodology relies on publicly available data, which are updated and released throughout the calendar year. Figure 33 below lists the variables used throughout the OHNA Final Methodology, their sources, and when they are typically updated.

Figure 33. Publicly Available Data Sources and Release Schedules

Category	Component	Data Input	Source	Area	Annual Release Schedule
Many	Regional Income Limits as a Percent of Area Median	AMI levels to allocate units to incomes	HUD	Region	April
Current Need	Underproduction	Total households	Census PUMS for American Community Service (ACS) 1-year estimates	Region	October
		Missing households			
		Total housing units			
		Second and vacation homes			
		Uninhabitable units			
		Rate of cost burdening (to allocate units to income levels)			
	Units Needed for Homelessness	Point-In-Time count	Continuums of Care	Continuums of Care	Varies (annual)
		Homelessness Management Information Systems			
		McKinney-Vento student data	Oregon Dept. of Education	Region	Varies (annual)
		Doubled-up population	Census PUMS	Region	October

Category	Component	Data Input	Source	Area	Annual Release Schedule
Future Need	Units Needed for Population Growth	Population forecasts	PSU	Region	Rotating 4-year cycle for a set of counties and their UGBs
		Number of people living in group quarters	Census PUMS	Region	October
		Average household size			
		Regional income distribution (to allocate units to income levels)			
	Units Lost to Second and Vacation Home Demand	Total housing units	Census PUMS	Region	October
		Units identified as used for “seasonal or recreational purposes”			
		Year built for units identified as used for “seasonal or recreational purposes” (to allocate units to income levels)			
	Units Needed for Demographic Change	Population forecasts by age cohort, by region	PSU	Region	Rotating 4-year cycle for a set of counties and their UGBs

Category	Component	Data Input	Source	Area	Annual Release Schedule
		Number of people living in group quarters	Census PUMS	Region	October
		Average household size			
		Regional income distribution (to allocate units to income levels)			
Allocating Needed Housing	Local Allocation Factor	UGB's current share of regional population	PSU	UGB	Rotating 4-year cycle for a set of counties and their UGBs
		UGB's current share of regional jobs	Census LEHD-LODES	UGB	December
		UGB's current share of regional units identified as used for "seasonal or recreational purposes"	2020 Census	UGB	December
Metro	Metro UGB	Metro's UGR Current and Future Need Totals	Metro UGR	UGB	At least every six years
	Local allocation factor	City's share of UGB's jobs and residents in transit accessible areas	Census LEHD-LODES	City (Metro only)	Variable
	Local allocation factor	City's share of UGB's jobs and residents in transit accessible areas	TriMet GTFS	City (Metro only)	Quarterly

Category	Component	Data Input	Source	Area	Annual Release Schedule
	Local allocation factor	City's share of UGB's affordable units	HUD CHAS	City (Metro only)	September
	Local allocation factor	City's share of UGB's recent housing production	Metro RLIS	City (Metro only)	Monthly
	Local allocation factor	City's share of residential capacity	Metro UGR	City (Metro only)	At least every six years
	Local allocation factor	City's share of forecast added jobs	Metro Distributed Forecast	City (Metro only)	At least every six years
	Local allocation factor	City's share of current population	ACS	City (Metro only)	Annual
	Local allocation factor	City's share of 2020 vacation units	Census	City	Decennial

Notes: All references to Census PUMS are for 1-year ACS data.
PSU forecasts come from the Population Research Center: *https://www.pdx.edu/population-research/population-forecasts*
LEHD-LODES is the Longitudinal Employer Household Data Origin-Destination Employment Statistics: *https://lehd.ces.census.gov/data/*
TriMet GTFS is the General Transit Feed Specification: *https://developer.trimet.org/GTFS.shtml*
HUD CHAS is the Comprehensive Housing Affordability Survey: *https://www.huduser.gov/portal/datasets/cp.html*
HUD SOCDS is the State of the Cities Data Systems which is calculated from Census Data: *https://www.huduser.gov/portal/datasets/socds.ht*

CITY OF STAYTON

M E M O R A N D U M

TO: **Mayor Brian Quigley and the Stayton City Council**

FROM: **James Brand, Finance Director**

DATE: **May 18, 2026**

SUBJECT: **Resolution No. 26-011, Designate Signer for DEQ Loan**

ISSUE

Shall the Council designate City Manager Julia Hajduk to be the authorized signer for Department of Environmental Quality (DEQ) Clean Water State Revolving Fund (CWSRF)?

STAFF RECOMMENDATION

Staff recommends approval of Resolution No. 26-011 as presented.

BACKGROUND INFORMATION

Sanitary sewer upgrades are needed in order to allow further growth to occur in the City and to improve existing functions. These projects are included in the City's master plans. In 2023, the City began discussions with Business Oregon (in a OneStop meeting) to search out funding options. Several projects identified received funding through state and federal grant programs, however there remained projects that are necessary that are not currently funded. The best option available was offered by the Department of Environmental Quality (DEQ) Clean Water State Revolving Fund (CWSRF).

Loans are available at low interest rates (to be set at loan signing). The DEQ also offers principal forgiveness of up to 50% of the loan amount up to $2,000,000 per project per fiscal year. This funding incentive is available this fiscal year and may not be available in future years. Staff and DEQ intend to package the funding of the projects to achieve the maximum available forgiveness.

This resolution will designate a City representative to have the authority to sign the loan documents.

FISCAL IMPACT

This resolution has no direct fiscal impact. However, it is a necessary step that will allow the City to obtain funds needed for sanitary sewer collection system upgrades. The total project will likely

be funded by a combination of low interest rate loans and grants (principal forgiveness). The City believes this funding opportunity is a wise use of City funds.

OPTIONS

1. Adopt the Resolution as presented.

2. Amend and adopt a resolution designating a different authorized signer.

3. Do not adopt the resolution.

MOTION

Offer a motion to approve Resolution No. 26-011, to designate a signer for the DEQ loan *(either as presented or as further specifically amended).*

RESOLUTION NO. 26-011
DESIGNATE SIGNER FOR DEQ LOAN

WHEREAS, the City of Stayton has submitted a loan application to the Oregon Department of Environmental Quality to fund a sanitary sewer collection system upgrade; and,

WHEREAS, the estimated cost of this project to be funded by DEQ is $5,200,000; and

WHEREAS, DEQ is willing to issue a loan to the City of Stayton in that amount for the project; and

WHEREAS, it is anticipated that up to 50% of the loan may be forgiven upon successful completion of the project; and

WHEREAS, authority for signing the loan documents is to be set in Resolution form by the Stayton City Council;

NOW THEREFORE, THE CITY OF STAYTON RESOLVES:

SECTION 1. The City of Stayton is authorized to undertake the loan and that the City Manager, Julia Hajduk, is authorized and directed to negotiate the final amount, terms, and conditions of the loan documents; to execute and deliver the final loan documents and to do any other acts necessary or appropriate in order to obtain the loan.

This Resolution shall become effective upon its adoption by the Stayton City Council.

ADOPTED BY THE STAYTON CITY COUNCIL THIS 18TH DAY OF MAY 2026.

CITY OF STAYTON

Signed:_____, 2026 BY: _____
Brian Quigley, Mayor

Signed:_____, 2026 ATTEST: _____
Julia Hajduk, City Manager