**CITY OF COBURG CITY COUNCIL**
**PO BOX 8316 Coburg, OR 97408**

# STAFF REPORT
# Annexation & Rezone
# ANX 01-20 & ZC 01-20

Report Date: December 7,2021
Public Hearing Date: December 14, 2021

## I. BASIC DATA

Property Owners: Ravin Ventures & Hardly Hackit, LLC
3555 Gateway Street, Suite 200
Springfield, OR 97477

Applicant Consultant /Engineer: Mr. Anthony Favreau
The Favreau Group
Eugene, OR 97405

Assessors' Map Lot#: 16-03-34-00-00202

Comprehensive Plan Designation: Light Industrial

Current Zoning: Exclusive Farm Use (EFU-40 Acre Minimum)

Noticing: Mailed notice: November 23, 2021
Notice posted: November 30, 2021, at City Hall, Coburg Post Office, Norma Pfeiffer Park shelter and Pavilion Park.
Notice posted at subject property: December 1, 2021
Notice published in *Register Guard*: November 27, 28, December 4, and December 11, 2021.

Staff Report Prepared by: Henry Hearley, Lane Council of Governments, Contract Coburg Planner

## II. REQUEST

The applicant has requested annexation and rezone of a 107.43-acre unit of land located on Map and Tax Lot 16-03-34-00-00202. The requested annexation and rezone are being processed concurrently, at the request of the applicant. The

applicant and the City have mutually agreed to enter into an annexation agreement. The annexation agreement is included in the report as **Attachment A**. See Figure 1 below for a vicinity map of the subject property.

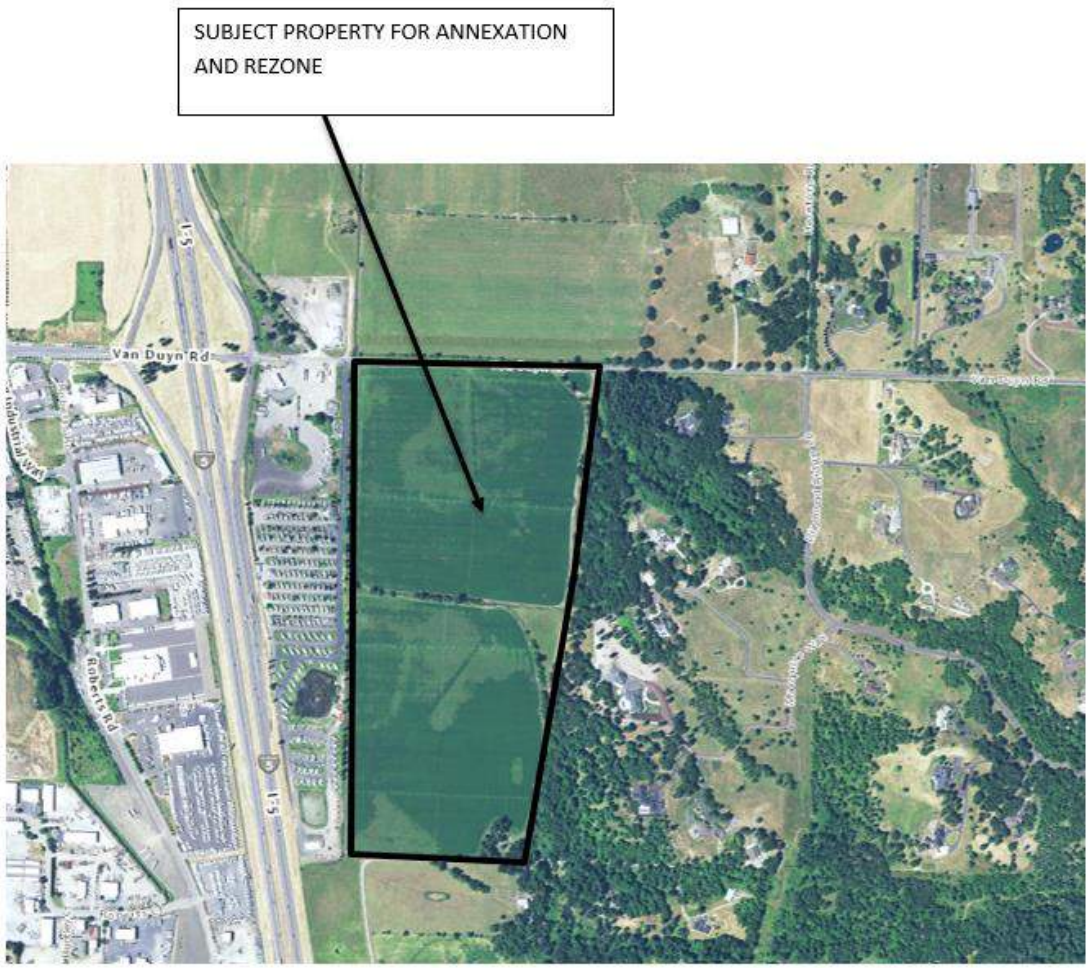



*Figure 1: Subject Property*

## III. Summary of Planning Commission Public Hearing, November 14, 2021

This section is intended to give City Council an overview of the issues and comments that were discussed and raised in front of the Planning Commission on November 14, during the public hearing.

**Summary of Commission Deliberations**.

Commission deliberations and questions were largely centered around traffic impacts the annexation and rezone will the have on East Van Duyn Road. Staff largely referred those questions to the applicant's qualified traffic engineer that was in attendance. The applicant's traffic engineer gave a brief overview of the findings from the Traffic Impact Analysis (TIA) and of how trip caps generally work.

There was a discussion around past historical City Council actions with respect to the subject property when it was included within the UGB and the fact that City Council applied a Comprehensive Plan Map designation of Light Industrial to the property and not Campus Industrial. There seemed to be consensus amongst the Commissioners that the Development Code itself provided city decision makers with the tools and information necessary to aid in determining the zoning to be applied to annexed properties, specifically subsection I of Article IV. However, a Commissioner did ask staff if the City was legally obligated to capture up 30 percent of the estimated regional demand for large light industrial sites; staff responded that they are not aware of any such state law to that effect.

One comment was asked about staff's response to Industrial Policy 7 of Goal 9 of Comprehensive Plan. Industrial Policy 7 reads "*a buffer, subject to conditions of the Zoning Code, shall be required along the boundary of all industrial areas that abut a residential district or shall be used to act as a buffer between the two districts or conflicting uses. Setback requirements of the Zoning Code shall also reflect buffering needs*." The Commissioner's comment suggested that a buffer should also be considered for the western property line of the subject property to separate the uses of the Premier RV property from the future industrial uses to locate on the subject property. It was mentioned during the public testimony portion of the hearing, that some patrons of the Primer RV property consider that their primary residence and should be afforded similar buffering considerations as those being proposed for the eastern property line. Industrial Policy 7 does state a buffer can be used between two districts or conflicting uses. The Commissioner suggested that the uses occurring on the Premier RV property, and the future uses to locate on the subject property should be considered to be conflicting and thus a buffer to separate those conflicting uses should be implemented. Prior to the Planning Commission hearing staff had not fully evaluated Industrial Policy 7 and do find credence in the Commissioner's question and offer this opportunity to further address Industrial Policy 7. The proposed finding for Industrial Policy 7 has been revised accordingly and staff offer City Council to consider a similar buffer be placed between the Premier RV property and the subject property. Staff believe the buffer between the Premier RV property and the subject property can be dealt with during the master plan process that the applicant will undergo following annexation. As such, staff will include a discussion of this buffer requirement into the annexation agreement to ensure that it is addressed.

Refer to the Planning Commission meeting minutes for a full accounting of the Planning Commission meeting. At the time of writing this report, the meeting minutes were not available

**Planning Commission's Recommendation**.

Planning Commission closed the record and the hearing. Planning Commission entered into deliberations and a motion was made and seconded to recommend approval of the rezone and annexation onto City Council. Additionally, Planning Commission made a motion to recommend to City Council that the zoning designation of Light Industrial be applied to the subject property.

## IV. BACKGROUND

The subject property is currently within the Coburg Urban Growth Boundary (UGB) and is zoned EFU (a Lane County designation). The subject property is currently vacant and consists of grasses and farmlands and wetland features. The subject property abuts Van Duyn road along the northerly boundary. This portion of Van Duyn is outside of the UGB. The subject property was first identified as possible inclusion into the City's UGB as a result of an Urbanization Study that was first conducted in 2010 and later updated in 2014 (the 2014 updated version, written by Eric Hovee, is included as **Attachment E**). In the Urbanization Study, the City found that the City's entire need for employment land cannot be satisfied through "efficiency measures," and that the UGB must therefore be expanded to include additional land for employment needs to the east of the Interstate 5 corridor. At the same time as the UGB was expanded to include the subject property, the City's Comprehensive Plan was also amended to add Policy 28 to Goal 9: Economy of the City, which reads "*In order to meet a regional industrial need, properties with Light Industrial designation located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20 acres*."

Ordinance A-199-G (**Attachment F**), approved by City Council, expanded the UGB to include the subject property and designated the subject property as Light Industrial on the Comprehensive Plan Map. Figure 2 below shows the subject property designated Light Industrial on the Comprehensive Plan Map and shows the property within the UGB.

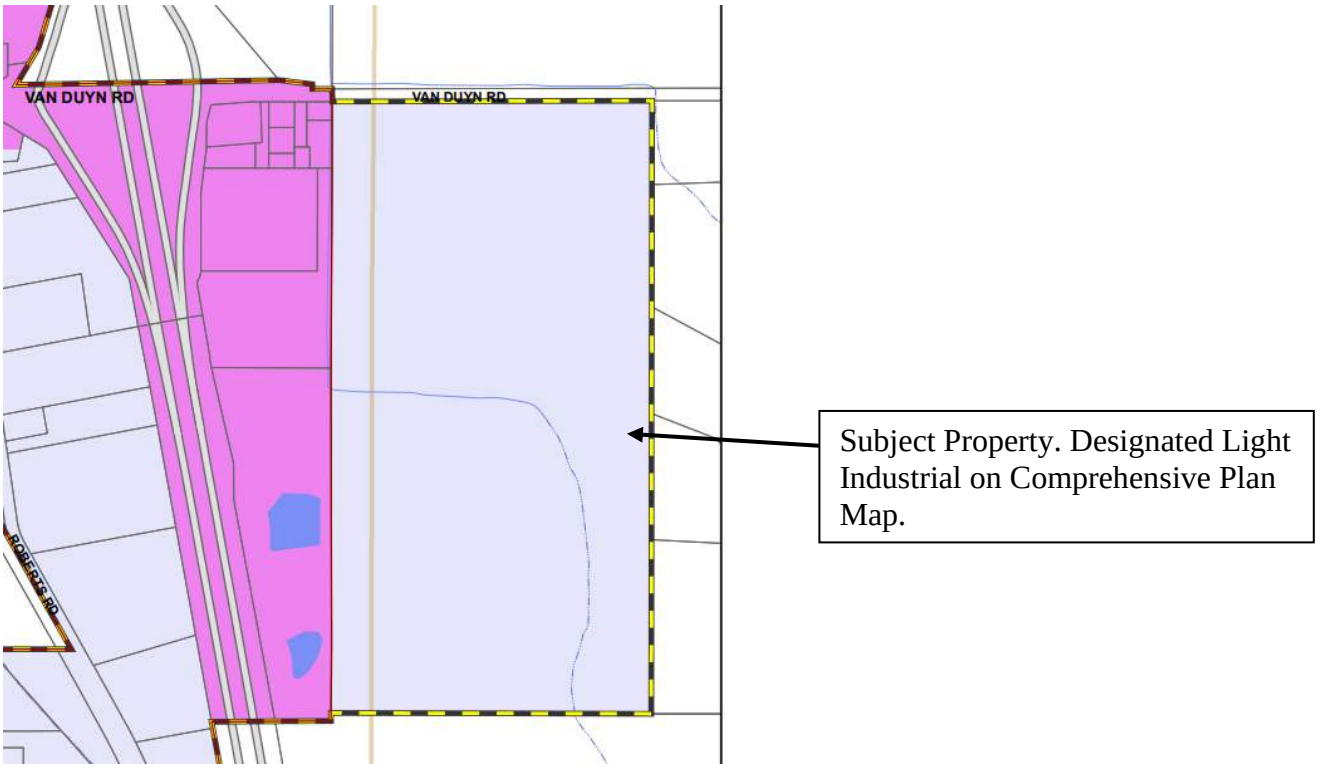



*Figure 1: Coburg Comprehensive Plan Map of Subject Property*

The subject property (identified as Study Area 8) was chosen to be included into the UGB to provide regional employment lands because of the proximity to Interstate 5, most of the property being viewed as potentially developable; its ability to capture a high percentage of the regional demand – not just a City demand; the subject property's ability to accommodate large industrial users; and due to its majority of soils being Classes IV and VI, which are among the least capable agricultural soils.

As seen in Table A.17 of the *Coburg Urbanization Study Addendum, June 2014*, Scenario B of the Regional Economic Analysis (REA) includes three sub-scenarios as to what extent of the regional large industrial site Coburg has the ability to capture. The REA assumed, at most and fairly aggressively, that Coburg could capture up to 30 percent of the regional large site industrial need.

**Table A.17 Coburg Industrial Scenarios with Regional Large Site Industrial Capture**

| | Coburg Large Site Industrial Capture % | | | |
|---|---|---|---|---|
| **Comparative Scenario / Option** | **A** | **B1** | **B2** | **B3** |
| **Added Regional Market Capture Rate** | **0%** | **10%** | **20%** | **30%** |
| Regional Large Site Acreage Demand | 463 | 463 | 463 | 463 |
| Net Coburg Regional Acreage Demand | - | 46.3 | 92.5 | 138.8 |
| Coburg Share Adjusted for 10% Vacancy | - | 51.4 | 102.8 | 154.2 |
| *Plus* Local Industrial Need (Forecast A) | 68.7 | 68.7 | 68.7 | 68.7 |
| Total Coburg Industrial Demand | 68.7 | 120.1 | 171.5 | 222.9 |
| *Less* Estimated Coburg Industrial Lands | (28.4) | (28.4) | (28.4) | (28.4) |
| ***Equals* Net Added Acreage Need** | **40.3** | **91.7** | **143.1** | **194.5** |

*Source: E. D. Hovee & Company, LLC using methodology of 2010 Urbanization Study together with 2012 OED Region 5 (Lane County) employment forecast. See Appendix B for added detail.*

*Figure 2. Table A.17 of the Coburg Urbanization Study Addendum, June 2014.*

City staff have held three work sessions with City Council and Planning Commission on the topic of annexations and on this application. On October 27, 2020, City staff briefed City Council and Planning Commission at joint work session on the annexation process. On February 23, 2021, staff held another work session on the subject application, and on October 12, 2021, staff held the third and final work session on the annexation agreement that is accompanying this request.

Lastly, City staff and the applicant have held several meetings with affected property owners located to the east of the subject property. Staff has sent them an introductory letter that gave them preemptive notice of the application and in-general have made themselves available to answer neighbor's questions and/or concerns that have arisen with respect to the application. The preemptive meetings organized by the City with affected nearby property owners was above and beyond of what was required by the Coburg Development Code. The applicant has also attended a meeting with the Park and Tree Committee to discuss the open space plan. The proposal under consideration is the culmination of several years of work on behalf of citizen's involvement committees, stakeholder groups, City staff, and previous Planning Commissioners and City Councilors.

## V. Article IV. Rules for Interpretation of District Boundaries.

***I. If land is annexed into the City and the intent of the City and applicant is to zone the annexed land the same as the existing Comprehensive Plan zoning designation, it automatically is zoned as such.***

**Staff Response:** The Coburg Development Code contains a provision in Article IV that may aid City decision makers in determining the appropriate zoning designation to be applied to the subject property. As seen in subsection I, the provision states that if land is annexed into the City and the intent of the City and applicant is to zone the annexed land the same as the existing Comprehensive Plan zoning designation, it automatically

is zoned as such. The applicant has requested the zoning to be applied to the subject property be Light Industrial, as such, the applicant has indicated their intent for a zoning of Light Industrial. Next, the intent of the City has to be discussed. Staff points out that the intent of the City can be found in Ordinance A-199-G when City Council specifically amended the Comprehensive Plan Map to designate the subject property as Light Industrial and not Campus Industrial in Section 2(b) of the ordinance.

**Section 2.** Coburg Comprehensive Plan. The Coburg Comprehensive Plan is amended as follows:

(a) The Coburg Comprehensive Plan text is hereby amended to add Policy 28 to Goal 9: Economy of the City, which reads:

"Policy 28: In order to meet a regional industrial need, properties with a Light Industrial designation located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20 acres."

(b) The Coburg Comprehensive Plan Diagram is hereby amended to add approximately 106 acres of property (Tax Lot 202, Assessor's Map 16-03-34-00) designated as Light Industrial. The revised Comprehensive Plan Diagram is attached hereto by reference as Exhibit D, and is hereby adopted.

*Figure 3: Section 2 of Ordinance A-199-G that applied a Plan designation of Light Industrial to the subject property.*

After public notice and reading pursuant to the Coburg City Charter and after Council deliberations followed by councilor motion and second, this ordinance was put to a vote, the results of which were:

**ADOPTED** by the **City Council** of the **City of Coburg** this 9th day of January, 2018, by a vote of 5 for and 0 against.

**APPROVED** by the Mayor of the City of Coburg this 9th day of January, 2018.

Ray Smith, Mayor

ATTEST:

Mandy Balcom, Assistant City Recorder

*Figure 4: City Council's action adopting Ordinance A-199-6 with a vote of 5 for and zero against which applied a Plan designation of Light Industrial to the subject property.*

The designation of Campus Industrial was an available Plan designation, but City Council did not choose to designate the subject property as Campus Industrial, instead, City Council chose Light Industrial. Because of this, staff finds that it's reasonable to conclude that the City made its intent as to which future zoning designation they wanted to see on the subject property; and it was Light Industrial not Campus Industrial.

Subsection I of Article IV is perhaps the strongest argument that the subject property should be zoned as Light Industrial when it is brought into city limits. City decision makers will have to discuss and deliberate on this matter and staff do not attempt to completey explain the intent of City Council's action with respect to a historical decision; City Council/Planning Commission can make their intent known. However, as will be discussed later on in this report, staff do believe it is reasonable for City decision makers to apply a zoning designation of Campus Industrial to the subject property. Staff note there are differences between the Light Industrial and Campus Industrial zones. Staff will highlight some of those differences throughout this report. The open space requirements in the annexation agreement are written in a manner that is consistent with a zoning of Light Industrial applied to the subject property, only in the sense of the landscape buffer along the western property boundary.

**VI. Light Industrial and Campus Industrial Zoning Designations.**

**Staff Response:** In this section, staff will briefly outline some similarities and differences between the Light Industrial and Campus Industrial zones.

In both the Light Industrial and Campus Industrial zones the minimum parcel size for properties located east of Interstate 5 is 20-acres. The maximum lot coverage of the Light Industrial zone is 80 percent, whereas the maximum lot coverage in the Campus Industrial zone is 60 percent. The minimum landscaping requirement for parcels zoned Light Industrial is 15 percent, whereas in the Campus Industrial the landscaping percentage is 40 percent. Perhaps one of the biggest differences between the two zones are the side yard setbacks and the requirement for a landscape buffer for when an industrial use abuts a residential district. In the Light Industrial zone, where an industrial use abuts a residential district, a 25-foot setback is the minimum area that shall be between any development and adjacent residential district. The 25-foot setback is in the form of a landscaped horizontal buffer. This same requirement for a 25-foot landscaped buffer is not a requirement of the Campus Industrial zone, however a buffer, similar to the buffer required in the LI zone, could likely be achieved by citing Industrial Policy 7, which requires for a buffer between conflicting uses, the conflicting uses in the case would be the industrial uses conflicting with the adjacent residential uses. Included in the annexation agreement, as part of the required open space, is a landscape buffer running the entire length of the western property boundary, providing the separation of uses that is required in the Light Industrial zone. If a Campus Industrial zone is applied to the subject property, the applicant is not required, per the Coburg Development Code, to provide the landscape buffer. It should be noted however, that regardless of the zoning to be applied, the 20 percent open space requirement still applies, pursuant to the master planned requirements of Article XIV of the Coburg Development Code.

Staff do not attempt to describe at length the permitted uses, conditional uses and prohibited uses of each zone, as that information is readily available in the Coburg Development Code. What staff will note of the two zones is that in the Light Industrial zone, wholesaling, warehousing, and storage on properties located east of Interstate 5

are prohibited. In the Campus Industrial zone, distribution centers, warehouses, and automobile dependent uses are prohibited. Further, both zones allow manufacturing and assembly uses, but the Campus Industrial zone has a qualifier for those uses; the manufacturing and assembly use is permitted so long as the use does not require a permit from an air quality public agency. This qualifier is not included in the list of permitted uses in the Light Industrial zone.

Any development that is to occur on the subject property, outside of the frontage improvements listed in the annexation agreement, will first have to go through the master planned process and will be subject to review and approval of the Planning Commission.

## IV. ARTICLE XX. BOUNDARY CHANGES (ANNEXATION) (code sections appear in bolded *italics* throughout this staff report)

### *A. Annexation and Withdrawal Procedures and Criteria*

***1. Annexation Initiation and Review. An annexation application may be initiated by City Council resolution, or by written consents from electors and/or property owners as provided for in ARTICLE X.X.C.18. Annexation applications are reviewed under Type II procedures per ARTICLE X.C. The City Council shall approve proposed annexations by Ordinance. Other annexation proposals permitted by ORS 222 shall be processed as provided in ORS 222.***

**Staff Response:** The proposed annexation and concurrent rezone have been initiated by written consent of the property owners of the property located on Map and Tax Lot 16-03-34-00-00202. The applicant has submitted Form 1 Petition Signature Sheet for Annexation and a Verification of Property Owners form; both forms have been signed by Lane County Department of Assessment and Taxation. Pursuant to ORS 222.125, no election is required because the annexation was initiated with consent of all of the owners of land and a majority of electors. See **Attachment B** for the applicant's application materials. Criterion met.

***2. Application Requirements. In addition to the provisions specified in other articles of this Code, an annexation application shall include the following:***

***a. A list of all owners, including partial holders of owner interest, within the affected territory, indicating for each owner:***

***(1) The affected tax lots, including the township, section and range numbers;***

***(2) The street or site addresses within the affected territory as shown in the Lane County Regional Land Information Database system (RLID);***

***(3) A list of all eligible electors registered at an address within the affected territory; and***

***(4) Signed petitions, as may be required.***

**Staff Response:** The applicant submitted the necessary application materials for staff to review and analysis of the requested land use actions. Criterion met.

***b. Written consents on City-approved petition forms that are:***

***(1) Completed and signed, in accordance with ORS 222.125, by:***

***(i) All of the owners within the affected territory; and***

***(ii) Not less than 50 percent of the eligible electors, if any, registered within the affected territory; or***

***(2) Completed and signed, in accordance with ORS 222.170, by:***

***(i) More than half the owners of land in the territory, who also own more than half the land in the contiguous territory and of real property therein representing more than half the assessed value of all real property in the contiguous territory; or***

***(ii) A majority of the electors registered in the territory proposed to be annexed and a majority of the owners of more than half the land. (iii) Publicly owned rights-of-way can be added to annexations initiated by these two methods without any consents.***

**Staff Response:** The applicant has submitted completed and signed consent forms. The consent form is signed by all of the property owners of record for the subject property. The subject property contains no eligible electors. Criterion met.

***h. A waiver form signed by each owner within the affected territory as allowed by ORS 222.173.***

**Staff Response:** The applicant has submitted a waiver signed by each owner within the affected territory as allowed by ORS 222.173. See **Attachment B** for the applicant's application materials. Criterion met.

***(i) A legal description of the affected territory proposed for annexation consistent with ORS 308.225 that will include contiguous or adjacent right-of-way to ensure contiguity as required by ORS 222.111.***

**Staff Response:** The applicant submitted a legal description of the property to be annexed. Adjacent rights-of-way are not included in the requested annexation.

***(n) A signed Annexation Agreement to resolve fiscal impacts upon the City caused by the proposed annexation. The Annexation Agreement shall address, at a minimum, connection to and extension of public facilities and services. Connection to public facilities and services shall be at the discretion of the City, unless otherwise required by ORS. Where public facilities and services are available and can be extended, the applicant shall be required to do so.***

**Staff Response:** The applicant and the City have mutually drafted an annexation agreement that addresses connection to and extension of public facilities and services. Further, the Agreement also outlines the applicant's obligation to construct frontage improvements along Van Duyn for the portion that abuts the subject property. The frontage improvements to be constructed by the applicant on Van Duyn include:

- Dedication of approximately 20-feet of right-of-way;
- Construction of a 56-foot wide roadway;
- Construction of sidewalk, curb, gutter, public utilities;
- Construction of two east-bound vehicle travel lanes from the property's west boundary to the access road;
- Construction of an internal access road providing access in accordance with the adopted Interchange Access Management Plan (IAMP).

All construction plans are subject to review and approval by the City Engineer. The annexation agreement will be signed and executed between the applicant and the City following annexation.

***3. Notice. In addition to the requirements of ARTICLE X, the following notice requirements are also required for annexations:***

***a. Mailed Notice. Notice of the annexation application shall be mailed to:***

***(1) The applicant, property owner and active electors in the affected territory;***

***(2) Owners and occupants of properties located within 300 feet of the perimeter of the affected territory;***

***(3) Affected special districts and all other public utility providers; and***

***(4) Lane County Land Management Division, Lane County Elections, and the Lane County Board of Commissioners.***

***b. Posted Notice. Notice of the public hearing at which an annexation application will be considered shall be posted in four public places in the City for two successive weeks prior to the hearing date.***

**Staff Response:** Mailed notice was sent to properties located within 300-feet of the subject property on October 8, 2021. Posted notice was placed by the applicant on November 2, 2021. City staff e-mailed agency referral notice to affected governmental agencies on October 7, 2021. See **Attachment C** for notice materials and **Attachment D, D.1 and D2** for the applicant's TIA and accompanying comments.

***4. Criteria. An annexation application may be approved only if the City Council finds that the proposal conforms to the following criteria:***

***a. The affected territory proposed to be annexed is within the City's urban growth boundary, and is;***

***(1) Contiguous to the City limits; or***

**Staff Response:** As seen in Figure 6 below, the subject property is contigious with the existing city limits along the entirety of the western property line.

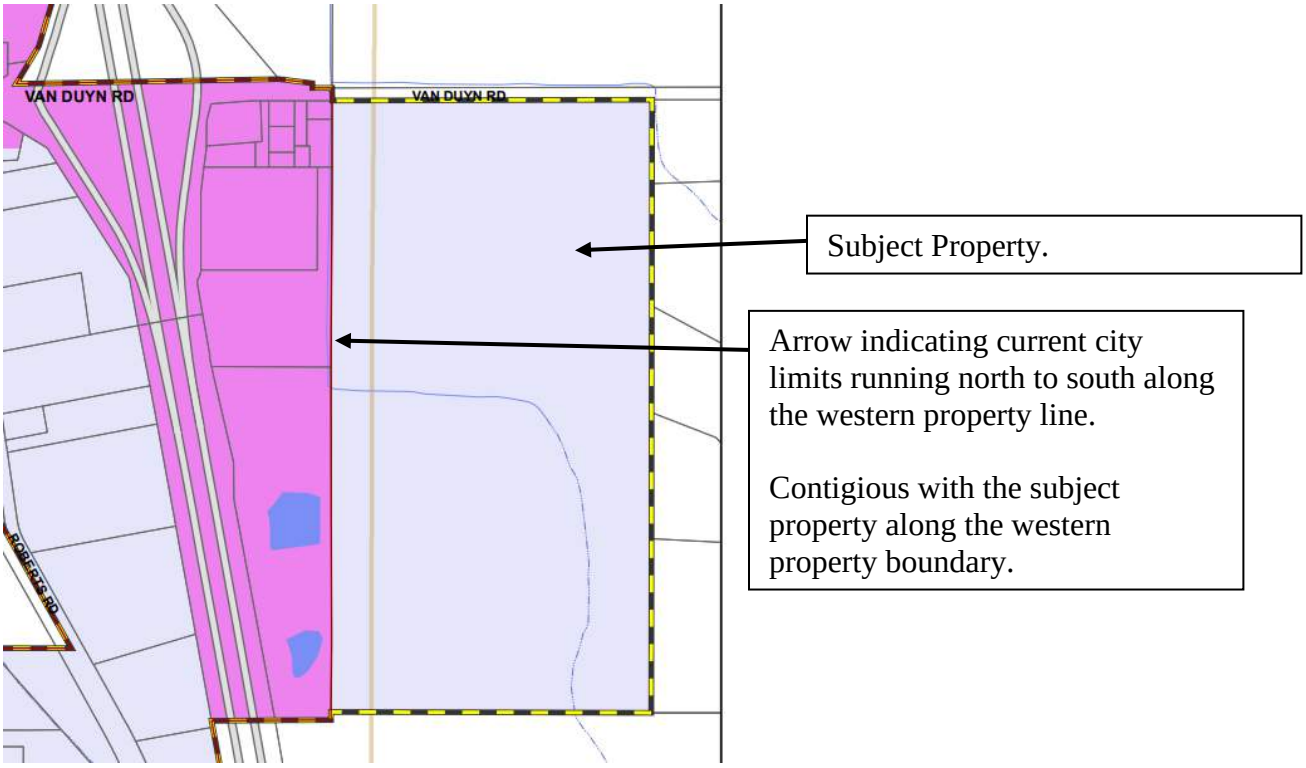



*Figure 6: Contiguity of the subject property with existing city limits*

***b. The proposed annexation is consistent with applicable policies in the Coburg Comprehensive Plan and in any applicable refinement plans;***

**Staff Response:** Staff now turn to a discussion about the application's consistency with the applicable policies of the Comprehensive Plan and any refinement plans. The first policy staff want to bring to City decision maker's attention is Policy 28 of Goal 9. This policy was added to the Comprehensive Plan as a result of the UGB expansion that brought the subject property into the UGB. Policy 28 specifically identifies those properties with a Light Industrial plan and located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20-acres. This is because of the regional industrial need for parcels at least 20-acres in size.

**Policy 28 of Goal 9:** ***"In order to meet a regional industrial need, properties with a Light Industrial designation located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20 acres."***

**Goal 1: Citizen Involvement, Coburg Objective:** ***"The Citizen Involvement Committee will help develop, maintain, and refine programs and procedures that promote and enhance citizen involvement in the land use planning to assure compliance with Goal 1."***

**Staff Response:** Goal 1 of the Comprehensive Plan is much aligned with Goal 1 of the Oregon Statewide Planning Goal, which is also citizen involvement. Commonly, in most cities, the citizen involvement committee is effectively the Planning Commission. Coburg maintains an effective, active and well-informed Planning Commission that reviews land use applications in a public forum which revolves heavily around citizen involvement. In the case of the proposed annexation and rezone, Planning Commission held a public hearing on November 17, 2021, and accepted testimony from those in favor of the proposal and those in opposition to the proposal. Both of the public hearings were duly noticed in accordance with the Coburg Development Code and ORS 222.120(3), which dictates that notice of the hearing shall be published once each week for two successive weeks prior to the day of the hearing, in a newspaper of generally circulation. Notice for the City Council hearing was published on November 27, 27 and December 4 and 11. At the close of the public hearing in front of Planning Commission on November 17, 2021, Planning Commission passed a motion to recommend approval of the annexation and rezone onto City Council for final action. City Council will hold a second hearing on both requests. Additionally, Planning Commission passed a motion to recommend that the zoning to be applied to the property be Light Industrial. Criterion met.

**Goal 2: Land Use. Refinement Plans, Policy 3**: ***"The City may use Refinement Plans to refine the Comprehensive Plan and/or the zoning ordinance in order to further implement the Comprehensive Plan policies. A Refinement Plan designates specific land use, transportation, and other elements through broad local participation. Refinement Plans may be developed in a single linear process, including neighborhood workshops, Planning Commission hearing(s), and the City Council adoption hearing(s)."***

**Staff Response:** This policy authorizes the City to use Refinement Plans to refine the Comprehensive Plan and or Zoning Ordinance to further implement the Comprehensive Plan Policies. The Coburg Urbanization Study that was first conducted in 2010 and updated in 2014 is a form of a Refinement Plan that was specifically undertaken to address a specific issue and develop policies and recommendations to address the issue of employment lands. The results of the Urbanization Study drove the need for the City to expand the UGB to address deficiencies in land availability for residential and industrial uses. Ultimately, the expansion of the UGB to include additional residential lands was abandoned, but the UGB was expanded to specifically include the subject property to address a specific deficiency in land availability for industrial uses and further address a regional need for large parcels of 20-acres or more. As a result, the Comprehensive Plan and Map were amended to add Policy 28 of Goal 9 and to include the subject property in the UGB with a Light Industrial Plan designation.

**Goal 2: Land Use. Interpretation of Comprehensive Plan Map, Policy 7:** ***"Plan designations for land use categories are intended to guide zoning."***

**Staff Response:** This policy states the Plan designations for land use categories are intended to guide zoning. What this means, is that zoning of parcels should be consistent with the designation as seen on the Comprehensive Plan Map. Applying this Policy to the present proposal would mean it would be reasonable for City decision makers to apply a zoning designation of Light Industrial because that's what the subject property is designated on the Comprehensive Plan Map. Conversely, staff also believe it reasonable to find that a Plan designation of Light Industrial can be implemented through the Campus Industrial zoning designation.

As seen in **Policy 13 of Comprehensive Plan Designations**, the intent of the Light Industrial Plan designation is ***"intended to provide areas for manufacturing, assembly, packaging, wholesaling, related activities, and limited commercial uses that support local industry and are compatible with the surrounding commercial and residential districts. The LI designation is intended to promote a high quality of life through a diverse economy and strong tax base, transition between higher and lower intensity uses, and appropriately scaled nonpolluting industrial uses that fit the small town, historic character of the community."***

Relatedly, the Campus Industrial, as seen in **Policy 14 of Comprehensive Plan** Designations is ***"to provide areas for research and development, manufacturing, assembly, packaging, wholesaling, related activities, and limited industrial-supportive commercial uses in an attractive, campus setting. The CI designation is intended to promote a high quality of life through a diverse economy and strong tax base, and appropriately scaled, nonpolluting industrial uses that fit the small town, historic character of the community."***

Both Plan designations provide for manufacturing and assembly, although in the Campus Industrial zone, manufacturing and assembly, including associated sales are permitted when the use does not require a permit from an air quality public agency. That same qualifier does not appear in the Light Industrial zone. The Light Industrial zone does allow for a wider range of light industrial permitted uses, which staff feel would advance the City's effort in capturing up to 30% of the regional demand for light industrial uses. Staff do not feel a zoning designation of Campus Industrial could capture the regional need as much as the light industrial zone.

The zoning to be applied will have to be discussed amongst and decided by City decision makers.

**Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources. Natural Resources, Policy 19:** ***The Cities Wetland Map identifies areas of inventoried as wetlands. This map should be used to identify properties that may need a wetland permit from the Oregon Division of State Lands and the U.S. Army Corps of Engineers prior to development. The City shall consider additional code authority to enforce protection of wetlands.***

**Staff Response:** This policy relates to the City's inventory of wetlands. The City's Local Wetland Inventory (LWI) Map shall be used to identify properties that may need a

wetland permit from Oregon Department State of Lands (DSL) and the US Army Corps of Engineers (USACE), prior to development on the site. The subject property is known to contain wetlands. However, the City's present LWI Map does not extend east of Interstate 5, so the subject property is not depicted on the LWI Map. As such, staff turn the Lane County GIS layer for a discussion on the wetlands present on the subject property. Based on the National Wetlands Inventory map and Lane County GIS data, the subject property contains a 0.75-acre and 0.99-acre freshwater emergent wetland classified as PEM1Cx. The two Freshwater emergent wetlands generally run through the center of the subject property north to south. Also, running through the middle center and down the southern portion of the east property line is a 2.96-acre freshwater forested/shrub wetland (PFOC). See Figure 7 below. This discussion about wetlands is added to make City decision makers aware that subsequent development to occur on the subject property will be subject to the regulatory requirements of DSL and USACE, prior to development activities commencing.

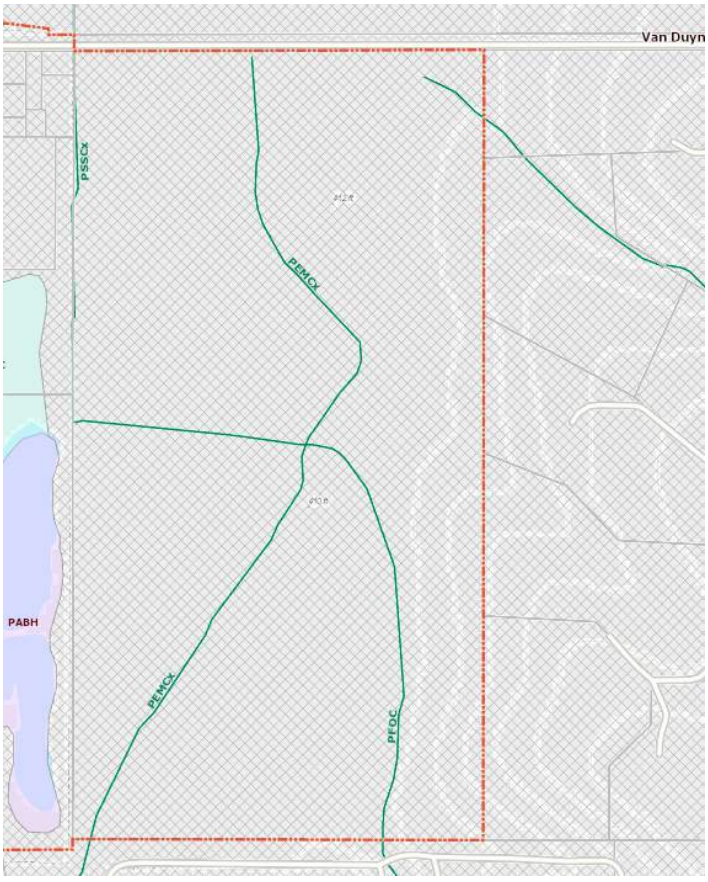



*Figure 7: Known wetland features on the subject property.*

**Goal 6: Air, Water and Land Resource Quality:**

**Policy 1**: ***All future development shall be in accordance with the Department of Environmental Quality (DEQ) air quality maintenance plan and applicable primary and secondary standards of the Lane Regional Air Pollution Authority.***

**Policy 2:** ***The City shall coordinate all major land use decisions with DEQ and LRAPA. The City shall consult with LRAPA prior to the approval of an industry that might affect the airshed of the Eugene-Springfield metropolitan Area.***

**Staff Response**: Policy 1 and 2 of Goal 6 are discussed because of the proposed zoning designation to be applied to the subject property will likely contain industrial type uses. All future development to occur on the subject property shall be in accordance with DEQ air quality maintenance and applicable and secondary standards of the Lane Regional Air Pollution Authority (LRAPA). Even before agency referral notice is sent to DEQ and LARAPA, the City should strongly consider including a local DEQ and LARAPA representative in any pre-application conference that occurs prior to the submittal of a land use application for development on the subject property. This ensures the coordination mentioned in Policy 2 begins in earnest for any development on the subject property.

**Goal 9: Economy of the City.**

**General Policy 2:** ***Lands for the expansion within the City, of business (commercial and industrial activities), will be provided to the extent necessary to meet local employment needs, to accommodate the identified regional needs, to provide an adequate tax base, and to support future population growth.***

**Staff Response:** Policy 2 does not so much apply to the present proposal as it may have once applied to the past UGB expansion that included the subject property in the UGB. The City expanded the UGB to meet an identified employment lands need and to address a specific regional need – that need being industrial sites of 20-acres in size or more.

**Industrial Policy 7:** ***A buffer, subject to conditions of the Zoning Code, shall be required along the boundary of all industrial areas that abut a residential district or shall be used to act as a buffer between the two districts or conflicting uses. Setback requirements of the Zoning Code shall also reflect buffering needs.***

**Staff Response:** A landscape buffer is proposed as seen in the Open Space exhibit to separate the subject property from the adjacent residential district to the east. As was brought up during the Planning Commission hearing, Industrial Policy 7 is intended to provide for a buffer between conflicting uses. As was discussed by the Planning Commission during the first evidentiary hearing, the Premier RV property (zoned Highway Commercial) located immediately to the west and abutting the subject property contains different uses than will be sited on the subject property, as such, Planning Commission found these two districts to contain conflicting uses and thus a buffer

should be placed in between the two districts. The Primer RV property is a RV campground that is used for short and long-term stays and acts as a form of residence for some patrons. As such, Planning Commission found the uses sited on the Primer RV property would conflict with the future industrial uses to locate on the subject property, thus as allowed for in Industrial Policy 7, a buffer should be implemented. Staff believe this buffer can be thoroughly implemented and addressed by the applicant during the master plan process. Accordingly, staff have included a discussion of Industrial Policy 7 and the need for a buffer in between Premier RV and the subject property, into the annexation agreement. Policy sufficiently addressed.

**Industrial Policy 8:** ***Industrial uses shall be grouped together within well-designated industrial parks or subdivisions so as to promote:***

- ***A pollution free environment;***
- ***The highest aesthetic standards possible;***
- ***Minimum impact on adjacent lands;***
- ***Development within the constraints of the natural environment; and***
- ***Compliance with LCDC Goals and Guidelines.***

**Staff Response:** Staff would argue this Policy is one of the reasons why lands east of Interstate 5 are required to be Master Planned. A Master Planned development looks precisely at how to implement the policies of the Comp Plan, make efficient use of land, encourage energy conservation and improved air and water quality, and encourage developments that recognize the relationships between buildings and their use, open space and other site amenities. As required by the Coburg Development Code, lands east of Interstate 5 will be required to go through the Master Planned Development process of Article XIV.

**Industrial Policy 9:** ***Public facilities, including water, streets and fire and police protection, already exist which are capable of meeting the needs of expanded commercial and industrial development within the Urban Growth Boundary.***

**Staff Response:** As addressed in the annexation agreement, there is an existing 6-inch sanitary sewer line that crosses the freeway under the Van Duyn overpass. Currently, the pipe is serving approximately 45 Equivalent Dwelling Units (EDUs), leaving approximately 1,055 EDUs of capacity for future area properties. An EDU is used for purposes of capacity planning. Any additional capacity needed beyond the available capacity will be the responsibility of future developers.

The City's water system, east of Interstate 5, is under construction and includes an extension line that runs underneath Interstate 5. When completed, there will be a 12-inch watermain to connect to within approximately 300-feet of the southwest corner of the property. There is a 20-foot Public Utility Easement (PUE) located along the southerly and westerly edges of the property to accommodate public water. With

subsequent development of the subject property, water will need to be extended and connected throughout the site.

With respect to streets, the property has approximately 1,540 feet of frontage on Van Duyn Road and is about 3,100 feet deep. The property owner will be responsible for complying with street improvements imposed by the City and County through all applicable land development review processes at the time development is proposed. Additionally, to address some more immediate street issues, the applicant will be providing frontage improvements along the frontage of Van Duyn following annexation. The specific improvements are included in the annexation agreement and include:

- Dedication of approximately 20-feet of right-of-way along the frontage of Van Duyn;
- Construction of a 56-foot wide roadway;
- Sidewalk, curb, gutter, public utilities, and two eastbound vehicle travel lanes from the property's west boundary to the access road; and
- Internal roadway providing access in accordance with the adopted IAMP.

Exact details of the frontage and roadway improvements are subject to final engineering design and review approval process.

Fire and police services are available to the subject property once annexed into city limits.

**Jobs and the Economy Policy 17:** ***The City shall diversify employment base by the following:***

***a. Provide developable land necessary to accommodate economic growth***

***b. Research and develop policies that discourage big-box retail and strip commercial uses***

**Staff Response:** As already addressed in this report, the impetuous of the UGB expansion that brought the subject property into the UGB was an identified regional need for employments lands of 20-acres or greater that Coburg could supply. The zoning to be applied to the subject property would effectively be the limiting factor on what types of uses could locate on the subject property. Anecdotally when the property was brought into the UGB there was a desire on behalf of the City to not allow the "big-box retail" types to uses to occur on the subject property. In the Light Industrial zone, retails and service commercial uses are limited up to 5,000 feet in gross floor area. In the Light Industrial zone, wholesaling, warehousing, and storage are prohibited uses on properties located on the east side of Interstate 5. Staff want to make clear, that the act of annexation and rezone will not permit any development to commence on the property (except for the Van Duyn frontage improvements), without first going through the land

review process, i.e., the master planned development, land division process and site review.

**Other Policy 25:** ***The City shall utilize design standards for commercial and industrial development uses.***

**Staff Response:** Policy 25 is directly implemented in the Coburg Development Code by the requirement that properties located east of Interstate 5 be master planned, pursuant to Article XIV(B)(2).

**Goal 11: Public Facilities and Services.**

**Policy 1:** ***The initial stages of all new development will include the installation at the developer's expense, of water lines and sanitary facilities in compliance with the adopted Coburg Sewerage Facilities Plan, full streets, street trees, sidewalks and bicycle lanes or paths where required, street lights, and underground power and telephone lines.***

**Staff Response*:*** Policy 1 above is addressed in sections G, H, I, J, M, and 1.7 of the annexation agreement.

**Policy 2:** ***All city facilities including, but not limited to, extension and connection of water lines, and extension and dedication of streets must be completed and approved by the City prior to occupancy of the new development.***

**Staff Response:** The applicant is well aware of their responsibility to extend and connect water lines, sewer lines and street improvements that are required once site development starts. These items will be a part of the master planned development process once development on the subject property is proposed. These elements are also included and discussed in the annexation agreement.

**Goal 12: Transportation**

**Policy 2:** ***Take a long-range view in approving street patterns for new development.***

***2.1 All development proposals, plan amendments, or zone changes shall conform to the adopted Transportation System Plan.***

***2.2 Protect the function of existing and planned transportation systems as identified in the Transportation System Plan through application of appropriate land use regulations. When making a land use decision, the City shall consider the impact on the existing and planned transportation facilities.***

***2.3 Consider the potential to establish or maintain accessways, paths, or trails prior to the vacation of any public easement or right-of-way.***

***2.4 At the time of land development or land division, require the dedication of additional street right-of-way in order to obtain adequate street widths in accordance with all street plans adopted by the City.***

**Staff Response:** Policy 2 calls for the City to take a long-range view in approving street patterns for new development. The long-range view of street patterns that would serve the development is established by the IAMP which was adopted by the City, County, and ODOT. The IAMP calls for access control and improvement of East Van Duyn Road which would require a new frontage road through the development to serve as access and upgrading East Van Duyn Road to include bike lanes, sidewalks, and any needed turning lanes to serve the operational needs of the development while ensuring safe and efficient travel of the public.

With regard to conformance with the adopted TSP, the City and County co-adopted an update to Coburg's TSP in 2015 which included a reclassification of Van Duyn Road from a local to a collector. Since the City TSP is in the process of resolving an appeal remand, Lane County will be amending the Lane County TSP in early 2022 to include classification corrections consistent with the roadway functions; this will include correcting the classification Van Duyn Road to a collector, consistent with its operational function and consistency with the IAMP.

The applicant will be constructing the road improvements as specifically identified in the annexation agreement and as consistent with the IAMP and TIA. These improvements are intended to see through the future bridge/overpass replacement headed up by ODOT. Although Lane County is the road authority for the abutting portion of East Van Duyn, access and design standards of Lane Code are superseded by the IAMP which was adopted by Lane County. Lane County Transportation has reviewed the proposed frontage improvements for East Van Duyn and agrees with the proposed improvements. The improvements have been designed in a manner that takes into account the future bridge/overpass replacement and the reclassification of Van Duyn from a local road to a major collector. The road improvements and the status of Van Duyn will be further discussed in this report under a discussion of compliance with the Oregon Statewide Planning Goals. See Figure 8 below.

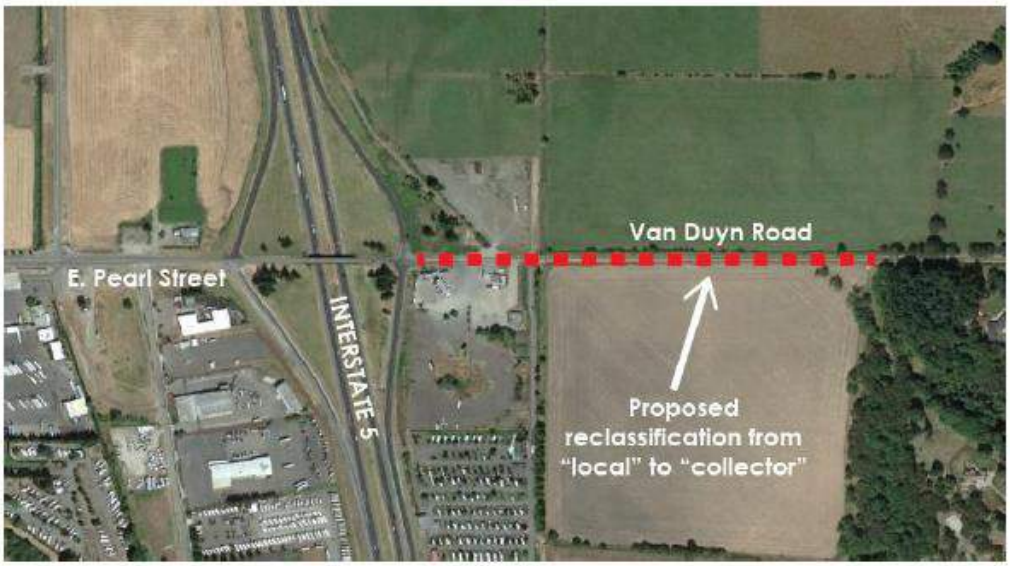



*Figure 8: East Van Duyn Road*

**Policy 40:** ***The exception area immediately east of Interstate 5, when included within the urban growth boundary and city limits, shall have a process for transportation review criteria placed on the property to assure that any new development or redevelopment on the property that increases trip generation from the site is required to go through a plan amendment application with the city and will be required to address the requirements of Section 0060 of the TPR regarding impacts to state, county, and city transportation facilities. The property owner or applicant may be required to complete a traffic impact analysis, road dedications, and road improvements for affected County Roads, consistent with the Lane County Transportation System Plan goals and policies and with County requirements for roads in Lane Code 15.***

**Policy 41:** ***The exception area immediately east of the Interstate 5 interchange shall have an established trip generation baseline upon annexation of the property. The trip generation baseline shall be for average daily trips (ADT), weekday AM peak and weekday PM peak trips, based on ITE Trip Generation Manual and inventory of uses is as shown in Exhibit 2 and is incorporated as policy by reference.***

**Policy 42:** ***All new development proposals and/or redevelopment proposals in the exception area immediately east of Interstate 5 that exceed the baseline trip generation established upon annexation shall be required to apply for a city plan amendment application and meet Statewide Goal 12, Transportation Planning Rule, in particular Section 0060, and develop a transportation analysis to determine the impact on the interchange and on County Roads. The County may require a traffic impact analysis and road improvements consistent with the Lane County Transportation System Plan goals and policies and with County***

***requirements for roads in Lane Code 15. The new site development or redevelopment shall be required to measure the following trip impacts for all three of the following:***

- ***Weekday PM peak hour trips between 4:00 pm and 6:00 pm***
- ***Weekday AM peak hour trips between 6:00 am and 9:00 am***
- ***Average Daily grips for the entire area in question.***

**Staff Response:** The subject property is NOT an exception zone; it is zoned EFU. Nonetheless, the intent of Policy 40 and 41 are relevant to the proposed annexation and rezone due to the Transportation Planning Rule (TPR) of Oregon Statewide Planning Goal 12 (ORS 660-012-0060). For this reason, staff include a discussion of Policy 40 and 41. The TPR requires local governments to demonstrate that amendments (of which an annexation and rezone are) to adopted plans and regulations will not significantly affect existing or planned transportation facilities. The generally accepted method for establishing whether there is a significant effect, the extent of the impact, and the appropriate mitigation measures, is to prepare a Traffic Impact Analysis (TIA). In some cases, a full TIA may not be required, if an applicant can demonstrate the impact will not be significant. In cases such as this, a Significant Effects Analysis (SEA) will be prepared. This was not the case with the present proposal, so a full TIA was prepared by the applicant's traffic engineer. The TIA prepared by the applicant's traffic engineer was scoped in coordination with ODOT, Lane County Transportation and the City Engineer. The completed TIA underwent three rounds of review and comment before being accepted by all parties. The TIA found there would be impacts to roadway facilities and mitigation measures would need to be incorporated. Specifically, the TIA found that:

- The Pearl Street at Interstate 5 Southbound Ramp will have a substantial number of trips added to the westbound left-turn movement. The subject property can be developed up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. As a result, a trip cap of 613 PM Peak Hour trips is imposed on the subject property which was proposed by the applicant and accepted by the relevant road authorities as being sufficient for the zone change to meet the TRP requirements of OAR 660-012-0060; however, future development will trigger a development-specific TIA that would involve a more detailed review of operational needs, such as intersection performance and turning lanes.
- The Pearl Street/Interstate 5 northbound ramp intersection will not need to be signalized. The IAMP improvements identified in the IAMP include the addition of the lanes to/through this intersection. The intersection with the IAMP improvements can handle all 720PM Peak Hour trips from the zone change. Therefore, there is no mitigation required for this development.

The trip cap will apply in perpetuity or until another Transportation Planning Rule Analysis (TPRA) is submitted on changes facilities, uses, etc. The trip cap will be written

into the subsequent deeds of the parcels of land that are created through the land division process. The trip cap has been added to the annexation agreement. The discussion around transportation and Goal 12 will again be addressed under Goal 12 of the Oregon Statewide Planning Goals.

**Goals 14: Urbanization**

**Policy 6:** ***The City shall not annex lands outside its adopted Urban Growth Boundary without first expanding its Urban Growth Boundary to include the proposed annexation.***

**Staff Response:** The subject property is presently within the City's adopted UGB and has been designated as Light Industrial on the Comprehensive Plan Map. The City is not annexing land outside of its adopted UGB.

As discussed in the aforementioned applicable goals and policies of the Coburg Comprehensive Plan, the proposed annexation and rezone are consistent with the Coburg Comprehensive Plan. Criterion sufficiently addressed.

***c. The proposed annexation will result in a boundary in which key services can be provided.***

**Staff Response:** As included in the annexation agreement and discussed in this report, the proposed annexation will result in a boundary in which key services can be provided. Criteria met.

***d. Where applicable, fiscal impacts to the City have been mitigated through an Annexation Agreement or other mechanism approved by the City Council.***

**Staff Response:** The City and the applicant will enter into and execute an annexation agreement following approval of the annexation. The annexation agreement outlines the obligations of the applicant with respect to the costs associated with the extension of city services and frontage improvements on East Van Duyn. The annexation agreement is included in this report at **Attachment A**. Criterion met.

***5. Application of Zoning Districts***

***a. Upon approval of the annexation by the City Council, the underlying Comprehensive Plan designation and current zoning consistent with the Comprehensive Plan designation shall apply.***

**Staff Response:** When the subject property was brought into the UGB, City Council applied the plan designation of Light Industrial to the property. Presently, the Comprehensive Plan map designates the property as Light Industrial which generally means a City fully intends and plans for those uses to eventually located on the property. An application of a Light Industrial zoning designation to the subject property

would be a straight-forward one-to-one implementation of the Light Industrial Plan designation because the zoning and Plan designation are exactly the same. However as mentioned throughout this report, staff believe it reasonable to find a zoning designation of Campus Industrial also implements the Plan designation of Light Industrial. This is something City decision makers will have to consider and make a decision on.

***b. An applicant may submit for a zoning map and Comprehensive Plan map amendment. The Commission will not deem an application complete for a zoning map amendment until the annexation has been approved by the City Council and becomes effective, as that term is described in ARTICLE X.X.A.5, and ARTICLE X.X.A.6 that follows.***

**Staff Response:** The applicant has submitted an application for annexation and concurrent rezone, consistent with the application requirements of the Coburg Development Code. The annexation and rezone will not become effective until final action is taken by City Council, as outlined in the ordinance adopting the annexation and zone change, and as set forth in ORS Chapter 222. Criterion met.

## V. ARTICLE XXI. ZONE CHANGES.

***2. District Amendment Criteria Any zoning or special purpose district amendment proposal considered under a Type II procedure must be demonstrated to be in conformance with each of the following criteria:***

***a. The proposed amendment conforms to the Comprehensive Plan or substantial changes have occurred which render the Comprehensive Plan inapplicable to the requested change and the Plan should be amended as proposed by the proponent of the change (in which case the Plan must be amended prior to final action on the District Amendment).***

**Staff Response:** As discussed in this report, there are two possible zoning designations that could be applied to the subject property: Campus Industrial or Light Industrial. Both of these zoning designations would implement the Plan designation of Light Industrial. Both plan designations provide for manufacturing, assembly, packaging, wholesaling and related activities, although the Campus Industrial zone does not allow uses that require an air quality permit. Both designations are intended to promote a high quality of life through a diverse economy and strong tax base, and appropriately scaled, nonpolluting industrial uses that fit the small-town character of Coburg. Both zones prohibit some uses: the Campus Industrial zone prohibits distribution centers, warehouses, automobile dependent uses and the Light Industrial zone prohibits wholesaling, warehousing, and storage on properties located east of Interstate 5. One notable difference between the permitted uses is that the Light Industrial zone permits distribution centers, whereas the Campus Industrial prohibits them. As seen in the Urbanization Study, under Scenario B, in which Coburg has the ability to capture the greatest percentage of regional industrial needs, distribution related firms are identified

as a use for which Coburg could remain competitive ~~for~~. With a zoning of Campus Industrial, distribution centers would be prohibited and the full realization of Coburg being able to capture up to 30 percent of the regional industrial demand may be diminished. As mentioned earlier, the Campus Industrial zone does not require a 25-foot landscaped buffer between industrial uses and residential districts. As seen in the annexation agreement, the applicant is proposing to provide a landscape buffer along the entire westerly property boundary, creating the separation of uses that is required in the Light Industrial zone.

***b. The proposed amendment fulfills a demonstrated public need for a particular activity or use of land within the area in question.***

**Staff Response:** The driving force behind the City's past UGB expansion that brought the subject property into the UGB was a demonstrated public need for employment lands in the region and Coburg was found to be able to meet that need most readily compared to other cities in Lane County. As discussed earlier in this report, the resultant recommendation of the Urbanization Study was to expand the City's UGB to capture Study Area 8, which is the subject property. Once Study Area 8 was incorporated into the City's UGB the next logical step towards addressing the regional need for employment lands is to annex the property into city limits so development can be realized towards meeting the identified regional need. The proposed amendment to the City's zoning map to bring the subject property into the city limits fulfills a demonstrated public need. Criterion met.

***c. If residential zoning is involved, the proposed residential zone or zones best satisfies the objectives of the Comprehensive Plan and does not exclude opportunities for adequate provision of low and moderate housing within the subject neighborhood area.***

**Staff Response:** Residential zoning is not proposed as part of the proposal. Criterion not applicable.

***d. When an application is received to change the zone of property which includes all or part of a mobile home park, written notice by first class mail shall be sent to each existing mailing address for tenants of the mobile home park at least 20 days but not more than 40 days before the date of the first hearing on the application.***

**Staff Response:** The proposal does not involve the rezone of a property which includes all or part of a mobile home park. Criterion not applicable.

***3. Land Use Applications that fall within the IAMP.***

***a. The City and County shall coordinate with ODOT in the review of land use applications for areas within the IAMP boundary. Land use actions within the IAMP that may affect the performance of an interchange, such as zone changes will be***

***consistent with the adopted IAMP. The City Planner shall include ODOT as an agency referral partner. Actions not consistent with the IAMP may only be approved by also amending the IAMP and related transportation system plans consistent with OAR 660-012-0050 and 0055. Lands bounded by IAMP can be found in ARTICLE X.***

**Staff Response:** City, Lane County and ODOT staff have been working cooperatively with the applicant since the applicant submitted the application. ODOT and Lane County were both sent a request for agency referral comment. Because the subject property falls within the IAMP area, a TIA was required of the applicant and because the zone change triggered the TPR. Both ODOT and Lane County have provided extensive comment on the applicant's TIA and after several rounds of review and comment, the TIA was accepted by all parties. The TIA was found to be consistent with the IAMP.

## VI. CONSISTNECY WITH OREGON STATEWIDE PLANNING GOALS.

### Goal 1: Citizen Involvement.

**Staff Response:** Goal 1 of the Comprehensive Plan is much aligned with Goal 1 of the Oregon Statewide Planning Goal, which is also citizen involvement. Commonly, in most cities, the citizen involvement committee is effectively the Planning Commission. Coburg maintains an effective, active and well-informed Planning Commission that reviews land use applications in a public forum which revolves heavily around citizen involvement. In the case of the proposed annexation and rezone, Planning Commission held a public hearing on November 17, 2021, and accepted testimony from those in favor of the proposal and those in opposition to the proposal. Both of the public hearings were duly noticed in accordance with the Coburg Development Code and ORS 222.120(3), which dictates that notice of the hearing shall be published once each week for two successive weeks prior to the day of the hearing, in a newspaper of generally circulation. Notice for the City Council hearing was published on November 27, 27 and December 4 and 11. At the close of the public hearing in front of Planning Commission on November 17, 2021, Planning Commission passed a motion to recommend approval of the annexation and rezone onto City Council for final action. City Council will hold a second hearing on both requests. Additionally, Planning Commission passed a motion to recommend that the zoning to be applied to the property be Light Industrial. Criterion met.

### Goal 2: Land Use Planning.

**Staff Response:** Goal 2 outlines the basic procedures for Oregon's statewide planning program, stating that land use decisions must be made in accordance with comprehensive plans and the effective implementation ordinances must be adopted. The City's past UGB expansion, which brought the subject property into the City's UGB, was implemented by Ordinance A-199-G, which specifically amended the Comprehensive Plan and map to state that the subject property shall not be partitioned into parcels of less than 20-acres and the plan designation of the subject property shall

be Light Industrial. As discussed in this report, the plan designation of Light Industrial can be effectively implemented by a zoning designation of Light Industrial or Campus Industrial. The proposed annexation and rezone are consistent with the City's adopted Comprehensive Plan and Map.

**Goal 3: Agriculture Lands.**

**Goal 4: Forest Lands.**

**Staff Response:** The subject property is presently zoned Exclusive Farm Use (EFU) by Lane County. Previously, the subject property was designed as agriculture by the Rural Comprehensive Plan. When the UGB was expanded to bring in the subject property, City Council designated the property as Light Industrial on the Comprehensive Plan Map. This action was driven by the Urbanization Study that identified a deficiency in employment lands regionally and the Coburg is in an excellent position to meet that regional need. The action of bringing the subject property into the UGB and designating it Light Industrial meant the City fully expects this land be become developed in the future, consistent with the Comprehensive Plan. Because Van Duyn is not within the UGB and is proposed to be improved, a discussion about road improvements with respect to OAR 660-012-0065 which permits transportation facilities on rural lands consistent with Goals 3,4,11 and 14 without a goal exception will be discussed under Goal 14 Urbanization. Goals 3 and 4 satisfactorily addressed.

Staff would also like to address the soils found on the subject property, as it was a criterion for selection for inclusion into the UGB. Study Area 8, as identified in the Urbanization Study, is the subject property. Study Area 8 is comprised of two percent Class III soils, 51 percent Class IV soils and 48 percent of Class VI soils. Class I soils have the highest agricultural capability and Class VI the lowest.

**Goal 5: Natural Resources, Scenic and Historic Areas and Open Spaces.**

**Staff Response:** Goal 5 requires local governments to adopt programs that will protect natural resources; Goal 5 includes wetlands as natural resources. As discussed earlier in this report, the subject property contains two freshwater emergent wetlands (PEM1Cx) and one freshwater/shrub wetland (PFOC). When development is proposed on the subject property, the City will send referral notice to DSL and USACE for review and comment with respect to development within known wetland features. As noted earlier, the applicant will be responsible for adhering to all regulatory requirements of DSL and USACE, prior to development activities. Goal 5 satisfactorily addressed.

**Goal 6: Air, Water and Land Resources Quality.**

**Staff Response:** Goal 6 states that all waste and processes discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality

statutes, rules and standards. Similar to the finding for Goal 5, above, upon site specific development, the developer will be required to comply with state and federal water air quality standards through the Department of Environmental Quality (DEQ) and LRAPA.DEQ and LARAPA will be included on the agency referral comment list when site specific development is proposed. The local representative for DEQ has reviewed the annexation and rezone request with respect to air and water quality permitting. Goal 6 satisfactorily addressed.

**Goal 7: Natural Hazards.**

**Staff Response:** Goal 7 requires local governments to inventory natural hazards. There are no known inventoried natural hazards on the subject property. Not applicable.

**Goal 8: Recreational Needs.**

**Staff Response:** Goal 8 requires local governments for meeting recreational needs for now and in the future. The open space provided for by the subject property will be for private use by the employees of the businesses to locate on the property. (The requirement for open space is a function of the zoning designation and requirement of the Coburg Development Code). The open space as described in the annexation agreement, running north-to-south along the eastern boundary of the property will be placed in a conservation easement. To the extent that Goal 8 is applicable, it is sufficiently addressed.

**Goal 9: Economic Development.**

**Staff Response:** Goal 9 is perhaps the most relevant Oregon Statewide Planning Goal to the proposal. Goal 9 requires local governments to contribute to a stable and healthy economy in all regions of the State. The impetus of the UGB expansion that brought the subject property into the UGB was driven a by a regional demonstrated need for employment lands in the form of large-scale, light industrial lands. The proposed annexation and rezone are the next steps towards the City and region realizing those past UGB expansion efforts. The annexation will formally bring the subject property within Coburg's city limits and give it its initial city zoning designation, thus effectively making the property ready for development and able to contribute to the local and regional economy of the State. Goal 9 satisfactorily addressed.

**Goal 10: Housing.**

**Staff Response:** The proposed annexation and rezone does not pertain to residential lands; it is for employment/industrial lands. The City Council designated the subject property as Light Industrial when it was brought into the UGB. Not applicable.

**Goal 11: Public Facilities.**

**Staff Response:** Goal 11 requires local governments 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. Goal 11 states the local governments shall not allow the establishment or extension of sewer systems outside urban growth boundaries or unincorporated community boundaries. The proposed water line to serve the subject property will be located near the southwest corner of the property, which is within the UGB. The proposed sewer line to serve the subject property is near the northwest corner, which is also within the UGB; Neither utility line (water or sewer) will serve any properties outside of the UGB. Goal 11 satisfactorily addressed.

**Goal 12: Transportation.**

**Staff Response:** As discussed at length earlier in this report, the proposal is consistent with Goal 12 and the requirements of TPR as seen in OAR 660-012-0660. The TPR requires local governments to demonstrate that amendments (of which an annexation and rezone are) to adopted plans and regulations will not significantly affect existing or planned transportation facilities. Based on traffic generation assumptions of the uses that would be allowed by the new zoning, there was the potential for the proposal to have a significant effect. The applicant's traffic engineer prepared a TIA to evaluate TPR compliance.

The TPR TIA underwent three rounds of review and comment before being accepted b by all parties and entered into the official record for this application. The TIA found there would be impacts to roadway facilities and mitigation measures would need to be incorporated. Although the applicant's TIA included some operational assumptions and recommendations (i.e. queue lengths and turning movements), the road authorities stated that the future development-specific TIA would more appropriately evaluate and mitigate the development impacts on the transportation system (e.g. a signal warrant analysis and turn lanes). To limit traffic generation below the threshold of trips that would necessitate physical mitigation measures, the applicant proposed, and the road authorities accepted the trip cap as detailed above.

The trip cap will be set at 613 PM Peak Hour trips. The trip cap will apply in perpetuity or until another Transportation Planning Rule Analysis (TPRA) is submitted on changes facilities, uses, etc. The trip cap will be written into the subsequent deeds of the parcels of land that are created through the land division process. The trip cap has been added to the annexation agreement.

Because Van Duyn is located outside of the UGB, staff would like to address OAR 660-012-0065. This rule identifies transportation facilities, services and improvements which may be permitted on rural lands consistent with Goals 3,4, 11 and 14 without pursuing a goal exception process.

One of the listed exceptions to improvement on rural roads is found under subsection (3)(o) of OAR 660-012-0065, "*transportation facilities, services and improvements other than those listed in this rule that serve local travel needs. The travel capacity and performance standards of facilities and improvements serving local travel needs shall be limited to that necessary to support local land uses identified in the acknowledged comprehensive plan or to provide adequate emergency access*." The proposed frontage improvements along Van Duyn are required to support local travel needs and are identified in the IAMP (a refinement plan of the Comprehensive Plan). Further as outlined in subsection (3)(c) and (d) channelization and realignment of roads is an allowed transportation improvement on rural roads that is consistent with Goal 3, 4, 11 and 14. Both channelization and realignment of Van Duyn will occur as a result of the frontage improvements.

**Goal 13: Energy Conservation.**

**Staff Response:** Goal 13 directs local governments to manage lands so as to maximize the conservation of all forms of energy, based on upon sound economic principles.

The proposal is consistent with Goal 13 because it maintains the City's compact urban growth form by locating industrial uses adjacent to existing industrial uses and by locating those uses along the Interstate 5 corridor, which is a principle of planning guideline 4 of Goal 13. Goal 13 satisfactorily addressed.

**Goal 14: Urbanization.**

**Staff Response:** Goal 14 directs local governments to provide for an orderly and efficient transition from rural to urban land uses, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

The proposal is consistent with Goal 14 because the proposed annexation and rezone brings land within the city limits that are ready for urbanization and development in order to meet an identified regional employment need that Coburg can satisfy. The discussion of Van Duyn being improved with specific frontage improvements outside of the UGB has been found to be consistent with Goal 14 as discussed under Goal 12 and pursuant to OAR 660-012-0065. Goal 14 satisfactorily addressed.

## VII. Informational items.

- Engineering plans for the Van Duyn frontage improvements are subject to review and approval by the City Engineer before construction of the improvements commence. This requirement is also outlined in the annexation agreement.
- A trip cap of 613 PM Peak Hour trips shall be set on the subject property. The trip cap shall be placed as deed restrictions on the subsequent parcels that are created as a result of the land division process. This requirement is also outlined in the annexation agreement. Staff note the trip cap should also be addressed and added as a condition of approval during the land division process that will occur following annexation.

## VIII. Conclusion.

Staff recommend the City Council accept Planning Commission's recommendation that the annexation and rezone request be approved and for the subject property to contain a zoning designation of Light Industrial, once annexed into city limits. As outlined in this report, the proposed annexation and rezone meet the applicable approval criteria. Staff do recommend a zoning of Light Industrial be applied to the subject property because of Article IV(I), which are the rules for interpreting district boundaries. As pointed out in Figures 4 and 5, staff believe the City Council made its intent as to what the zoning of the property would be once annexed; a Plan designation of Campus Industrial was available for City Council to apply to the property, but they selected a Plan designation of Light Industrial to be applied to the subject property. Further, the Light Industrial zone allows for a greater range of Light Industrial uses than does the Campus Industrial, including distribution centers. Staff believe a zoning of Light Industrial addresses the regional demand for large-site industrial uses more so than does the Campus Industrial zone.

## IX. City Council Options.

City Council may:

- Continue the public hearing to date certain; or
- Close the public hearing and record and enter into deliberations for:
    - Approval of the annexation and rezone request; or
    - Denial of the annexation and rezone request.
    - City Council should also make clear in a motion the zoning designation to be applied to the subject property.

Staff have prepared an ordinance and findings for City Council's consideration for adoption of the annexation and rezone request and application of a city zoning designation. The annexation and rezone must be adopted via an ordinance and in accordance with the Coburg City Charter.

## X. Attachments.

Attachment A - Draft Annexation Agreement
Attachment B – Applicant's Application Materials
Attachment C – Notice Materials
Attachment D – Applicant's Final Accepted TIA (for brevity only the final accepted version of the TIA is included)
Attachment D.1 – Applicant's Final TIA Comments to City
Attachment D.2 – Applicant's Final TIA Comments to ODOT
Attachment E – Urbanization Study update by Eric Hovee, 2014
Attachment F – City Council Findings in Support of Ordinance A-199-G
Attachment G - Planning Commission Public Comments
Attachment H - Agency Comments
Attachment I – City Council Public Comments
Attachment J – Proposed (Draft) Findings of Fact for Council Consideration
Attachment K – New Draft Zoning Map
Attachment L - Ordinance A-200-J

**After Recording, Return to:**
**City of Coburg**
**PO BOX 8316**
**Coburg, OR 97408**

**Send all Notices to:**
**Ramon Fisher & Ravin Ventures, LLC.**
**37801 Upper Camp Creek Rd**
**Springfield, OR 97478**

# ANNEXATION AGREEMENT

This Annexation Agreement ("Agreement") is made between the City of Coburg, an Oregon municipal corporation ("CITY") and Ravin Ventures, LLC and Hardly Hackit, LLC, Tenants in Common ("RAVIN/HARDLY").

## RECITALS

A. RAVIN/HARDLY owns the parcel of land legally described in Exhibit A and shown on the map attached as Exhibit B. The property is contiguous to the jurisdictional limits of CITY on its eastern boundary.

B. RAVIN/HARDLY has submitted to CITY an Annexation Application (ANX 01–20), to annex approximately 107.43 acres of tax lot 202. Assessor's Map 16–03–34-00 ("PROPERTY").

C. RAVIN/HARDLY wishes to annex the PROPERTY to the CITY and seeks approval from the CITY for the annexation and for a concurrent zone change (ZC 01–20). It is understood that RAVIN/HARDLY intends to develop the PROPERTY, or sell one or more portions of the PROPERTY to purchaser(s) who will develop the PROPERTY, for light industrial or campus industrial purposes.

D. The PROPERTY is currently designated in the Coburg Comprehensive Land Use Plan as Light Industrial and is zoned by Lane County as E–40 (Exclusive Farm Use–40 Acre Minimum). Per Section B.2.b. of Article XIV of the Coburg Development Code, development on Light Industrial–zoned property east of Interstate 5 and/or property within the Coburg/Interstate 5 Interchange Area Management Plan (IAMP) must have a Master Planned Development overlay designation prior to development. In addition, Section I.1.a. of Article X of the Coburg Development Code requires that a Traffic Impact Study be conducted when a land use application involves a change in zoning.

E. Annexation of the Property requires a showing under Article XX, Section A.4. of the Coburg Development Code that:

   a. The affected territory proposed to be annexed is within the CITY's urban growth boundary, and is;

      (1) Contiguous to the CITY limits; or

(2) Separated from the CITY only by a public right-of-way or a stream, lake or other body of water.

b. The proposed annexation is consistent with applicable policies in the Coburg Comprehensive Plan and in any applicable refinement plans;

c. The proposed annexation will result in a boundary within which key services can be provided.

d. Where applicable, fiscal impacts to the CITY have been mitigated through an Annexation Agreement or other mechanism approved by the City Council.

F. The purpose of this Agreement is to memorialize RAVIN/HARDLY'S and CITY's commitment and agreement to the allocation of financial responsibility for public facilities and services for the PROPERTY and other users of the facilities, sufficient to meet the CITY's requirements for the provision of key urban services necessary for an affirmative CITY recommendation for the annexation request.

G. **SANITARY SEWER:** There is a 6" sanitary sewer line that crosses the freeway under the Van Duyn overpass. Currently, the pipe is serving approximately **45 EDUs**, leaving approximately **1,055 EDUs** of capacity for future area properties. Any additional capacity needed beyond the available capacity will be the responsibility of the developer.

Sanitary sewers shall be installed to serve each new development and to connect developments to existing mains in accordance with the CITY's Sanitary Sewer Master Plan as adopted or hereafter amended and updated, and the applicable construction specifications. Development permits for sewer shall not be issued until the City Engineer has approved all sanitary sewer plans in conformance with CITY standards, and approval has been granted by applicable state agencies. A 20-foot –Public Utility Easement is located along the southerly and westerly edges of the property to accommodate public sewer.

H. **WATER:** The City's water system is under construction and includes an extension under Interstate 5. The connection to the City's system is anticipated to be completed in summer of 2021. When completed, there will be a 12–inch watermain to connect to within approximately 300–feet of the southwest corner of the property. A 20–foot Public Utility Easement is located along the southerly and westerly edges of the property to accommodate public water. With development of the site, water will need to be connected and extended to and through the site along the west property line north to Van Duyn.

Water mains shall be installed to serve each new development and to connect developments to existing mains in accordance with the Water System Master Plan as adopted or hereafter amended and updated, and the applicable construction specifications. Development permits for sewer and water improvements shall not be issued until the City Engineer has approved all water plans in conformance with CITY standards, and approval has been granted by applicable state agencies.

I. **STORMWATER:**A detailed drainage plan will be submitted as part of application for any development of the property. The plan will demonstrate compliance with the

requirements of the Coburg Development Code and the applicable Master Planned Development plan.

J. **STREETS:** The property has approximately 1540 feet of frontage on Van Duyn Road and is about 3,100 feet deep. The property owner will be responsible for complying with street improvement requirements imposed by the CITY and County through all applicable land development review processes at the time development is proposed. Newly created public streets will be constructed to the required standards. All street improvements will comply with Section E of Article VIII of the Coburg Development Code.

K. **PARKS:** The CITY has adopted a system development charge (SDC) for parks. When a building permit is requested for construction, the owner of the property being improved shall pay a park SDC fee commensurate with the type of building proposed based upon the City's Parks SDC Methodology Study.

L. CITY staff has determined that the minimum level of key urban services is currently available to the subject property with regard to water, sewer, electricity, schools and fire and emergency services (with the exception that additional signage, street width, lift station and hydrants may be required as part of development improvements).

M. In order to facilitate orderly development of the PROPERTY and ensure the full provision of key urban services that are satisfactory to the CITY and meet the CITY's conditions for an affirmative recommendation for annexation, and in exchange for the obligations of CITY set forth below, RAVIN/HARDLY shall comply with all requirements imposed on the CITY in this Agreement.

N. The subject property will be required to be Master Planned, consistent with Article XIV of the Coburg Development Code. Per Section F.4, of Article XIV, master plans shall contain a minimum of 20 percent open space. The subject property is 107.43 acres (4,679,771 square feet); 20 percent of the total area of the subject property is 935,954 square feet (21.48 acres). As seen on **Exhibit D**, RAVIN/HARDLY will provide an initial open space allotment of 458,338 square feet (10.52 acres). The 10.52-acre open space also acts as a natural landscape buffer between the future uses on the property and the residential areas located immediately to the east. The City finds the initial allotment of 10.52 acres as an open space and landscape buffer acceptable and will count towards the total required 20 percent of open space. Each subsequent parcel partitioned from the parent parcel (tax lot 202) will be required to contain 20% open space. The initial allotment of 10.52 acres of open space shall be improved by RAVIN/HARDLY with recreational walking paths and benches for employee working at the respective businesses to be located on the subject property. The recreational walking path and related open space improvements for the initial allotment of open space shall be put in place at the same time as the rights-of-way are constructed. The purpose of the open space requirement is to provide employee respite and recreation. The remainder of the 20 percent require open space shall be fulfilled by subsequent developments that occur on the subject property.

O. In order to equitably distribute the 10.52 acres among the entire development, the following portions of the open space area shall be allocated and credited as open space to each lot as follows:

Lot 1 = 119,578 square feet (2.745 acres)
Lot 2 = 250,760 square feet (5.757 acres)
Lot 3 = 78,000 square feet (1.790 acres)
Lot 4 = 10,000 square feet (0.230 acres)

The above area designated for each lot will be subtracted from the required 20 percent open space requirement for that lot. The 20 percent requirement is calculated by taking the gross area of the lot and multiplying it by 0.20.

P. The subject property is located adjacent to a residential district. As such, the CITY and RAVIN/HARDLY agree the setback along the eastern property boundary that abuts the residential district shall be no less than 25-feet wide and run the entire length of the property boundary.

Q. Per Article VII.E.4.b(3) of the Coburg Development Code, a minimum of 15 percent of the total area of the site shall be landscaped in accordance with ARTICLE VIII, Supplementary District Regulations. Water quality treatment areas may be incorporated into required landscape area. Additionally, the required landscaping percentage may be counted towards the required open space percentage requirements.

R. The open space as seen in **Exhibit D**, shall be placed in a conversation easement. RAVIN/HARDLY will be responsible for the conversation easement until the property sells or conservation easement is transferred to another party. RAVIN/HARDLY shall prepare the legal description and record the conservation easement described in **Exhibit C**, in accordance with ORS 92.

S. As seen on pages 1, 22-23 and 26 of the Traffic Impact Study, dated October 12, 2021, and completed by Sandow Engineering on behalf of RAVIN/HARDLY, the PROPERTY can be developed to add up to 613 PM Peak Hour trips before the Pearl Street at Interstate 5 Southbound ramps intersections do not meet mobility standards. At 614-720 PM Peak Hour trips, the intersection will require mitigation. As such, the CITY imposes a trip cap of 613 for the entire PROPERTY. The trip cap shall remain in perpetuity, or until another Transportation Planning Rule Analysis (TPRA) is submitted based on changes of facilities, uses, etc. The trip cap shall be recorded on all subsequent deeds for properties that are created from the PROPERTY, in the form a deed restriction. RAVIN/HARDLY shall notify all potential purchasers of the PROEPRTY that a trip cap of 613 PM Peak Hour trips exists on the PROPERTY and the trip cap will be placed on the deed as a deed restriction. The aforementioned pages of the Traffic Impact Study are incorporated into this agreement as **Exhibit F**.

T. Through the public hearings process for the requested annexation and rezone, Planning Commission and City Council found that Industrial Policy 7 of the Coburg Comprehensive Plan directly applies to the annexation request. Specifically, the annexation and subsequent industrial development will create conflicting uses with the

adjacent properties located at Map and Tax Lot 16-03-33-40-00100 and 16-03-33-40-00200. The aforementioned property is Premier RV, which contains short-term and long-term RV lodging, which Planning Commission and City Council interpreted to be a residential-type use in nature. Industrial Policy 7 reads "*a buffer, subject to conditions of the Zoning Code, shall be required along the boundary of all industrial areas that abut a residential district or shall be used to act as a buffer between the two districts or conflicting uses. Setback requirements of the Zoning Code shall also reflect buffering needs."* Planning Commission and City Council found the annexation and subsequent industrial development to occur on the property would create conflicting uses with the adjacent property immediately to the west. As such, a landscape buffer of 25-feet in minimum width and 6-feet in height shall be placed between the subject property to annexed and the two Premier RV properties. The buffer may be placed within the required setbacks. The buffer shall be implemented and shown on the tentative Master Plan for the property following annexation. The 6-foot-high requirement may be met by planting and maintaining a row of hedges, trees, or other landscape vegetative features that achieve a 6-foot minimum height and adequate screening.

Now, therefore, based on the foregoing Recitals, which are specifically made a part of this Agreement, the parties agree as follows:

## AGREEMENT

1. Obligations of RAVIN/HARDLY. Consistent with the above recitals and subject to the issuance of development and public improvement plan approvals, RAVIN/HARDLY agrees to perform the obligations set forth in this section.

1.1 RAVIN/HARDLY will commence "development activities" (as that term is defined below in this paragraph) within five (5) years of the execution of this Agreement. CITY will extend this five (5) year deadline for such reasonable period of time as may be requested in writing by RAVIN/HARDLY if the written extension request identifies one or more factors that adversely impacted the ability of RAVIN/HARDLY to commence development activities prior to the ability of RAVIN/HARDLY to meet that deadline (including but not limited to changes in the economy or in the commercial/industrial real estate market) and demonstrates the ongoing commitment of RAVIN/HARDLY to develop the property within a commercially reasonable period of time. For purposes of this Agreement, "development activities" means one or more activities consistent with the development of property in the Light Industrial Zone described in Sections E.1 and 2of Article VII of the Coburg Development Code and may include activities such as sitework or infrastructure development activities, or marketing of the PROPERTY for sale or lease for Light Industrial or Campus Industrial purposes.

1.2 RAVIN/HARDLY shall notify potential purchasers of the PROPERTY that on–site public sanitary sewer and water conveyance systems shall be the responsibility of the developer of the Property and that those systems shall be designed to adequately serve any future development and to comply with the

public sewer connection requirements of Section F.5. of Article VIII of the Coburg Development Code.

1.3 In conjunction with any future development, any existing wells shall be abandoned per applicable standards of the State of Oregon Administrative Rules, Chapter 690, Division 220, Rules 5 through 140 (OAR 690-220-0005 through 690-220-0140). Develop on–site and off–site water system as may be necessary to adequately serve any future development and that complies with applicable City and County requirements, including but not limited to the City's Master Water Plan and Section F.6. of Article VIII of the Coburg Development Code. All water service will be provided to the annexed area consistent with and in accordance with applicable City and County requirements, including but not limited to Section F.6. of Article VIII of the Coburg Development Code.

1.4 RAVIN/HARDLY shall notify potential purchasers of the PROPERTY that the developer of the PROPERTY shall develop on–site and off–site stormwater management facilities and dedicate drainage easements as may be necessary to adequately manage and treat stormwater runoff from the development site and develop the site in accordance with stormwater quality measures that comply with applicable City and County storm drainage requirements, including but not limited to those set forth in the Coburg Development Code, including those above.

1.4 RAVIN/HARDLY shall notify potential purchasers of the PROPERTY that dedication of right–of–ways as may be determined necessary during development review and approval processes and improvements to full CITY standards must be made to all new or impacted street right–of–ways at a level as needed to support the approved development.

1.5 RAVIN/HARDLY shall notify potential purchasers of the PROPERTY that the developer of the PROPERTY shall be required to pay a park SDC fee commensurate with the type of building proposed based on the City's Parks SDC Methodology Study.

1.6 RAVIN/HARDLY shall notify potential purchasers of the PROPERTY that prior to development of the PROPERTY, the developer shall present the CITY with an application for a Master Planned Development plan for the PROPERTY. Within one year of the approval of the application, the developer shall present the CITY with a Master Planned Development plan for the PROPERTY.

1.7 RAVIN/HARDLY shall, at the time of development of the first parcel, dedicate approximately 20-feet of right-of-way along the frontage of Van Duyn of Map and Tax Lot 16-03-34-00-00202 and construct a total of a 56-foot (including the existing roadway width) wide roadway, as generally illustrated in the attached conceptual drawing (**Exhibit E**). At a minimum, frontage improvements shall include: sidewalk, curb and gutter, public utilities, two eastbound vehicle travel lanes from the property's west boundary to the access road, and an internal roadway providing access in accordance with the adopted IMAP. Exact details of

the roadway and improvements are subject to final engineering design and review approval process.

2. Obligations of City. Consistent with the above Recitals, City agrees to:

2.1 Recommend and support annexation of the PROPERTY to the City of Coburg. If development activities (as defined above in Section 1.1) have not been commenced at the PROPERTY by the deadline described above in Section 1.1 (as such deadline may be extended pursuant to Section 1.1 above) the City may consider withdrawal of the PROPERTY under the procedures of ORS 222.460.

2.2 Use good faith in the timely review and decision making of the applications to the amendments to the Comprehensive Plan Diagram and Zoning Map, and to the timely review and decision making of the Master Planned Developments Plan for the PROPERTY. CITY will support any appeal of a decision by the CITY on these applications, but will not assume financial responsibility to provide legal counsel on appeal.

2.3 The CITY will provide sewer and water service to the subject property. Sewer and water lines may extend outside the Coburg Urban Growth Boundary within the subsurface right–of–way of Van Duyn Road but, consistent with OAR 660–011–060(3) and –065(2), these lines shall not be used to serve any property outside of the corporate limits of Coburg.

3. Covenants Running With the Land. It is the intention of the parties that the covenants herein are necessary for the development of light industrial use on Property and as such shall run with the Property and shall be binding upon the heirs, executors, assigns, administrators, and successors of the parties hereto, and shall be construed to be a benefit and burden upon the Property. This Agreement shall be recorded upon its execution in the Land County Deeds and Records. In connection with the sale of all or a portion of the PROPERTY, this Agreement may be assigned by RAVIN/HARDLY to the purchaser and shall benefit any assigns or successors in interest to RAVIN/HARDLY. Without limiting the generality of the foregoing, if either or both of Ravin Ventures, LLC and/or Hardly Hackit, LLC (or any of their respective successors in interest) transfers an ownership interest in the PROPERTY (whether voluntarily or by operation of law), the transferee will automatically be bound by the obligations of RAVIN/HARDLY under this Agreement and the transferor will have no further obligation under this Agreement. Execution of this Agreement is a precondition to the support of the City of Coburg for annexation of the property described in Exhibit A for the City of Coburg. Accordingly, the CITY retains all rights for enforcement of this Agreement.

4. Mutual Cooperation. City and RAVIN/HARDLY shall endeavor to mutually cooperate with each other in implementing the various matters contained herein. For so long as Ravin Ventures, LLC and Hardly Hackit, LLC both own interests in the PROPERTY, they shall each be jointly and severally bound by the obligations of RAVIN/HARDLY under this Agreement; as provided above in Section 3, if either or both of Ravin Ventures, LLC and/or Hardly Hackit, LLC (or any of their respective successors in interest) transfers an ownership interest in the PROPERTY (whether voluntarily or by operation of law), the transferee will automatically be bound by the obligations of RAVIN/HARDLY under this Agreement (jointly and severally with all other

owners of the PROPERTY, if there is more than one owner) and the transferor will have no further obligation under this Agreement.

5. Waiver of Right of Remonstrance. RAVIN/HARDLY agrees to sign any and all waivers, petitions, consents and all other documents necessary to obtain the public facilities and services described herein as benefiting the Property, under any Local Improvement Act or proceeding of the State of Oregon, Lane County or the City of Coburg and to waive all rights to remonstrate against these improvements. RAVIN/HARDLY does not waive the right to protest the amount or manner of spreading the assessment thereof, if the assessment appears to RAVIN/HARDLY to be inequitable or operate unfairly upon the Property, or its right to comment upon any proposed local improvement district, or any related matters orally or in writing.

7. Modification of Agreement. This Agreement may only be modified by writing signed by both parties (or, if RAVIN/HARDLY has transferred an ownership interest in the PROPERTY, by the then-current owners of the PROPERTY).

8. Land Use. Nothing in this Agreement shall be construed as waiving any requirements of the Coburg Development Code or Coburg Municipal Code which may be applicable to the use and development of this Property. Nothing herein shall be construed as CITY providing or agreeing to provide approval of any building, land use, or other development application submitted by RAVIN/HARDLY.

9. Invalidity. If any provision of this Agreement shall be deemed unenforceable or invalid, such enforceability or invalidity shall not affect the enforceability or validity of any other provision of this Agreement. The validity, meaning, enforceability, and effect of the Agreement and the rights and liabilities of the parties hereto shall be determined in accordance with the laws of the State of Oregon.

DATED this _____ day of _____, 2021.

IN WITNESS WHEREOF, Raven Ventures, LLC, Hardly Hacket, LLC RAVIN/HARDLY and City have executed this Agreement as of the date first herein above written.

**City of Coburg**

By:_____
Ray Smith, Mayor

**Ravin Ventures, LLC**

By: _____ Title: _____

**Hardly Hackit, LLC**

By: _____ Title: _____

STATE OF OREGON
County of Lane

This record was acknowledged before me on _____, 2021, by

**Ray Smith** as **Mayor of City of Coburg**.

_____
Notary Public for Oregon
Commission Expires _____

STATE OF OREGON
County of Lane

This record was acknowledged before me on _____, 2021, by

_____as _____of Ravin Ventures LLC.

_____
Notary Public for Oregon
Commission Expires _____

STATE OF OREGON
County of Lane

This record was acknowledged before me on _____, 2021, by

_____ as _____ of Hardly Hackit, LLC.

_____
Notary Public for Oregon
Commission Expires _____

# EXHIBIT A
# LEGAL DESCRIPTION

BEGINNING AT A POINT ON THE NORTH LINE OF THE I. S. SWEARINGER DONATION LAND CLAIM NO. (D.L.C.) NO. 37, IN SECTION 34, TOWNSHIP 16 SOUTH, RANGE 3 WEST OF THE WILLAMETTE MERIDIAN, SAID POINT BEING WEST 1051.00 FEET AND 30.00 FEET SOUTH FROM THE NORTHEAST CORNER OF SAID DONATION LAND CLAIM NO. 37;

THENCE RUNNING PARALLEL WITH THE EAST LINE OF SAID DONATION LAND CLAIM NO. 37, SOUTH 3106.29 FEET(Course 1), MORE OR LESS, TO A POINT ON THE SOUTH LINE OF TRACT 4 AS DESCRIBED IN A DEED RECORDED AUGUST 2, 1939 IN BOOK 198, PAGE 572 OF THE LANE COUNTY OREGON DEED RECORDS;

THENCE ALONG SAID SOUTH LINE, WEST 1540.16 FEET (Course 2), MORE OR LESS, TO A POINT ON THE WEST LINE OF SAID DONATION LAND CLAIM NO. 37;

THENCE LEAVING SAID SOUTH LINE AND RUNNING ALONG SAID WEST LINE, NORTH 3106.29 FEET (Course 3), MORE OR LESS, TO THE NORTHWEST CORNER OF SAID DONATION LAND CLAIM NO. 37;

THENCE ALONG THE NORTH LINE OF SAID DONATION LAND CLAIM NO. 37, EAST 1540.16 FEET (Course 4), MORE OR LESS, TO THE POINT OF BEGINNING, ALL IN LANE COUNTY, OREGON.

**EXHIBIT B**
**Tax Lot 202, Assessor's Map 16–03–34–00**

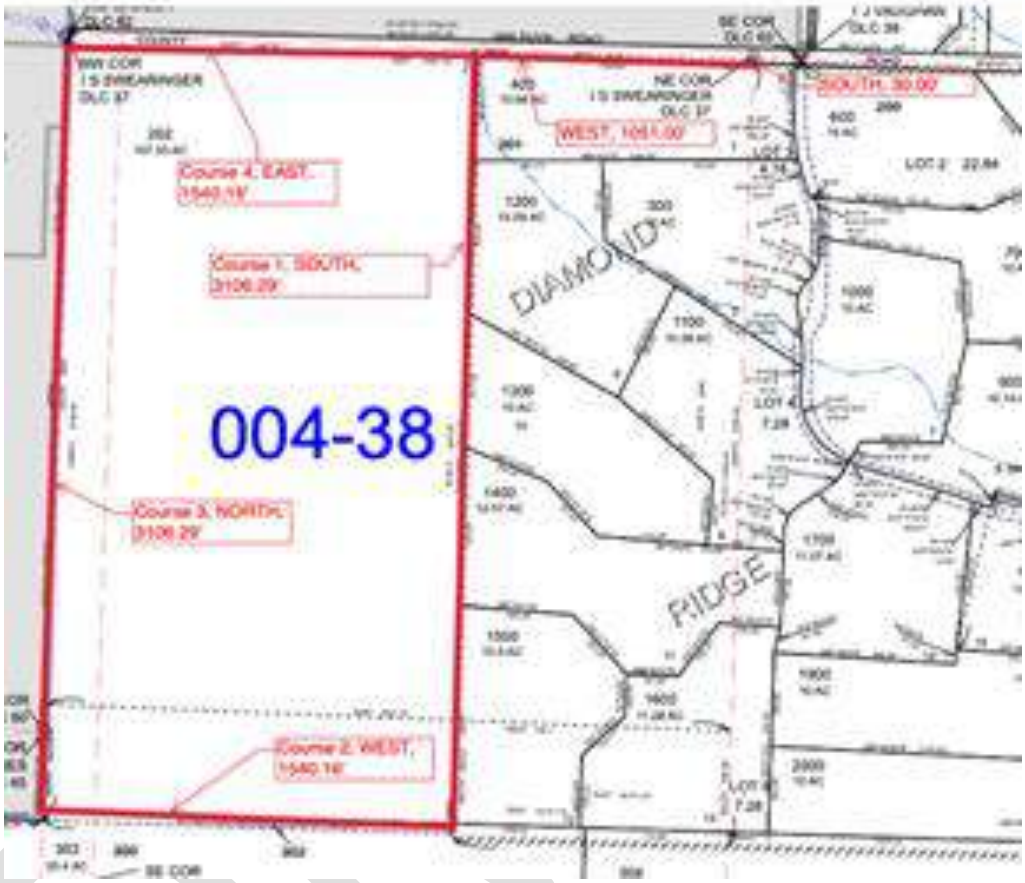
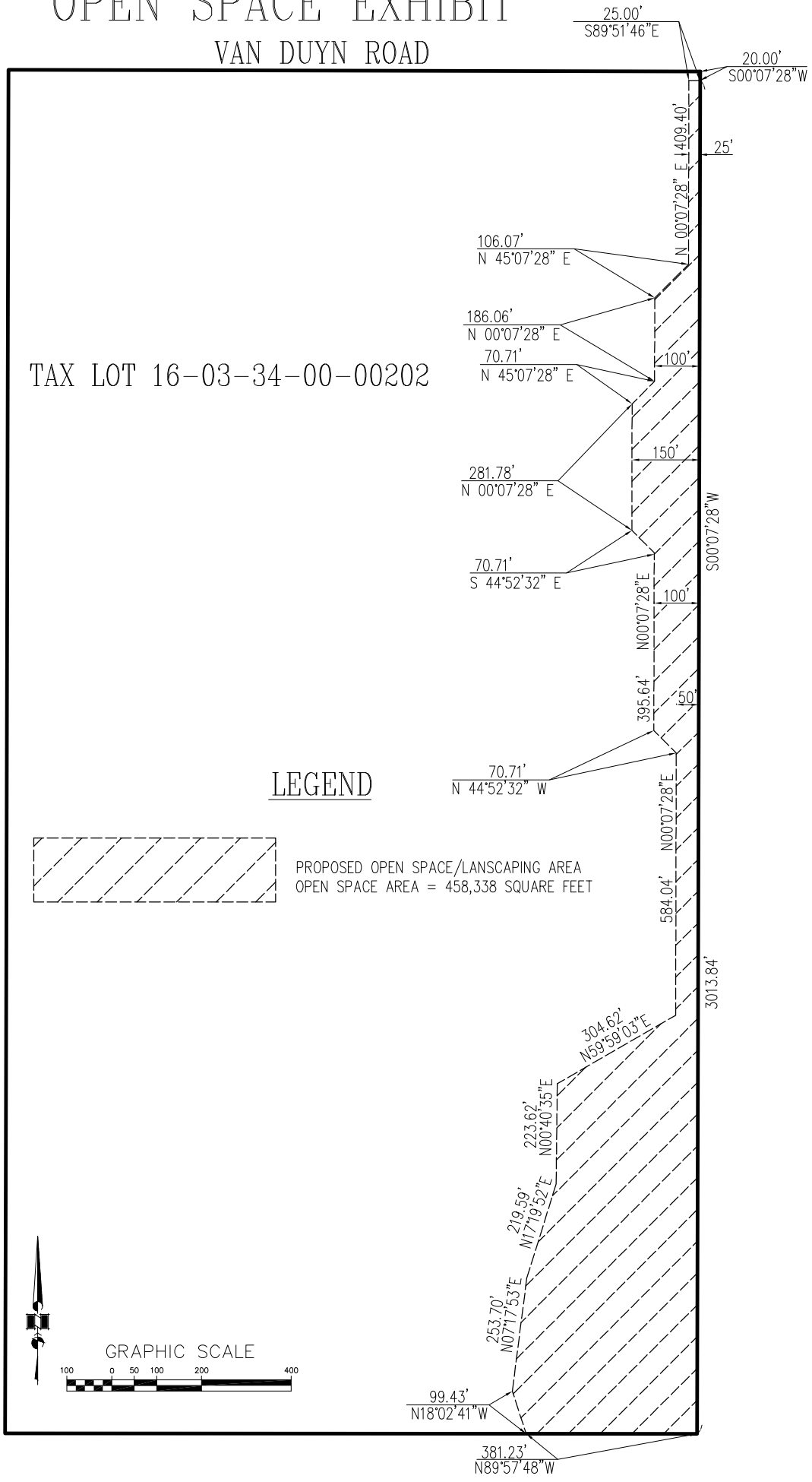


EXHIBIT D

# OPEN SPACE EXHIBIT



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SURVEYING
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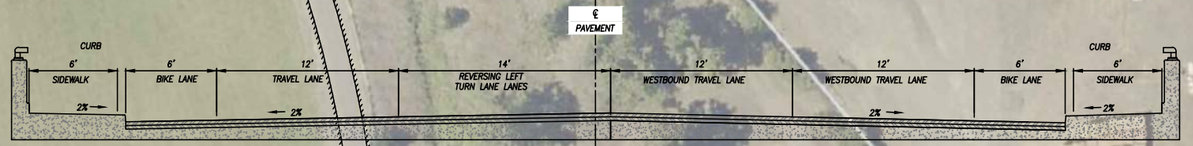
Springfield, OR 97477
p: 541.746.0637
www.BranchEngineering.com

EXHIBIT E

E. PEARL ST

MATCHLINE SEE BELOW LEFT




**TYPICAL SECTION – BRIDGE/OVERPASS FUTURE CONDITIONS**
(NOT TO SCALE)

MATCHLINE SEE ABOVE RIGHT

VAN DUYN RD (PROPOSED CITY COLLECTOR)

80' RIGHT-OF-WAY
WITH 20' ADDITIONAL AT SOUTH

EX. RIGHT-OF-WAY

℄ EX. ROW

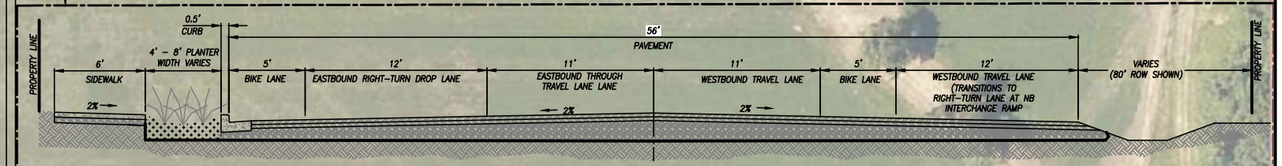
30'

30'

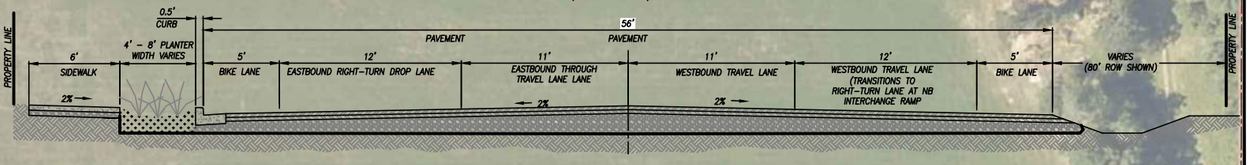
50'

N

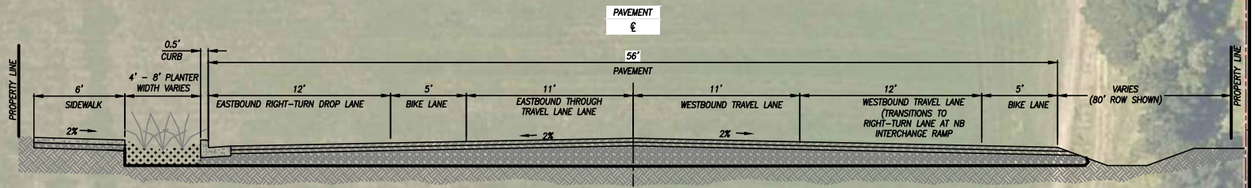
CONCEPTUAL
FOR REFERENCE ONLY
NOT TO SCALE




**VAN DUYN RD AS CITY COLLECTOR – WEST END NEAR INTERCHANGE**
(NOT TO SCALE)




**VAN DUYN RD AS CITY COLLECTOR – TYPICAL SECTION**
(NOT TO SCALE)




**VAN DUYN RD AS CITY COLLECTOR – EAST END AT NEW STREET CONNECTION**
(NOT TO SCALE)

# CITY OF COBURG
# CONCEPTUAL VAN DUYN RD IMPROVEMENT PLAN
COBURG, OREGON

revisions:

date: JUNE 30, 2021
drawn by: DNH
designer: DNH
project no: 20-004G

TYPICAL STREET SECTIONS

sheet: 1 OF 1



Z:\2020\20-004g Industrial UGB Annexation\E. Van Duyn Rd\21-004 Van Duyn Rd Street Sec.dwg 6/29/2021 8:00 PM DANH

## EXECUTIVE SUMMARY

This report provides the Traffic Impact Analysis and findings prepared for the proposed Annexation and Zone Change for Tax lot 202 in Coburg, Oregon. The subject site is located south of Van Duyn Road east of Interstate-5 on Assessor's Map 16-03-34-00 tax lot 202. The 107-acre parcel is currently vacant and is zoned E40. The applicant is proposing to annex the site and rezone the property to Light Industrial.

The analysis evaluates the transportation impacts as per the Oregon Administrative Ruling, OAR 660-012-060, Transportation Planning Rule (TPR) evaluating conditions as per the City of Coburg, ODOT, and Lane County criteria. The analysis evaluates adjacent roadway and intersection operations with the proposed zone change for the end of the applicable planning horizon.

The analysis is required to evaluate conditions consistent with the City of Coburg Transportation System Plan. The evaluation is prepared for the PM Peak Hour for the reasonable worst-case development scenario. The reasonable worst-case development scenario has the potential to generate 720 PM Peak Hour trips.

The following report recommendations are based on the information and analysis documented in this report.

## FINDINGS

- **Pearl St at I-5 SB Ramps:** This intersection is stop-controlled with the stop approach for the southbound ramp. The proposed zone change will add a substantial number of trips to the westbound left-turn movement. The site can be developed to add up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. At 614-720 PM Peak Hour trips, the intersection will require mitigation. The mitigation at this development level is a traffic signal with protective-permissive phasing for the westbound left turn. With the trip cap at 613 trips, the intersection will operate at a v/c 0.82. With the traffic signal, the intersection will operate at LOS B and v/c 0.65, meeting the standard.
- The addition of development traffic does not substantially increase queuing conditions.
- The right turn lane at the site access on Van Duyne Rd meets the ODOT APM right turn lane criteria.
- The TPR requirements of OAR 660-012-0060 have been demonstrated to be met with the proposed zone change.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NB | T | 100 | n/a | n/a | n/a | n/a | 0 | 0 |
| **N Willamette St @ Coburg Rd** | EB | LTR | 250 | 25 | 50 | 25 | 50 | 25 | 50 |
| | WB | LTR | 250 | 25 | 25 | 25 | 50 | 25 | 50 |
| | NB | LTR | 110 | 25 | 25 | 0 | 0 | 0 | 25 |
| | SB | LTR | 350 | 0 | 0 | 25 | 25 | 0 | 0 |
| **Coburg Bottom Loop Rd @ Coburg Rd** | EB | LTR | 500 | 25 | 25 | 25 | 25 | 25 | 25 |
| | WB | LTR | 650 | 25 | 50 | 25 | 50 | 25 | 50 |
| | NB | LTR | 500 | 25 | 50 | 25 | 50 | 25 | 50 |
| | SB | LTR | 500 | 50 | 75 | 50 | 75 | 50 | 100 |

As demonstrated in Table 7, the addition of development traffic increases the queuing at the I-5 NB ramps and I-5 SB Ramps.

## 8.0 MITIGATION

As shown in Table 5, the I-5 NB and SB ramps will not meet the standards with the reasonable worst-case development scenario with the proposed zone change. The following provides the recommended mitigation measures for the intersections.

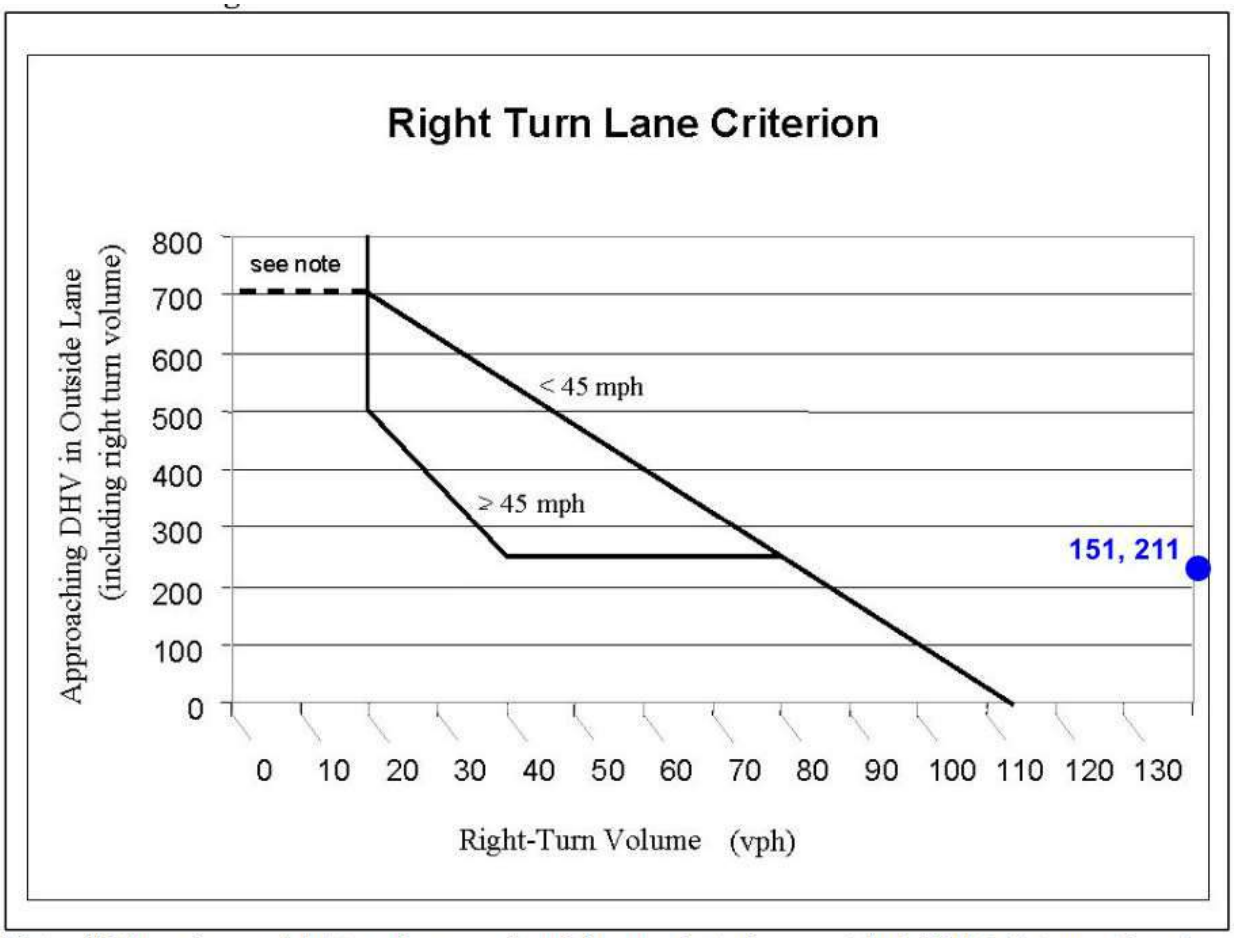
**Pearl St at I-5 SB Ramps:** This intersection is stop-controlled with the stop approach for the southbound ramp. The proposed zone change will add a substantial number of trips to the westbound left-turn movement. The site can be developed to add up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. At 614-720 PM Peak Hour trips, the intersection will require mitigation. The mitigation at this development level is a traffic signal with protective-permissive phasing for the westbound left turn. With the trip cap at 613 trips, the intersection will operate at a v/c 0.82. With the traffic signal, the intersection will operate at LOS B and v/c 0.65, meeting the standard. Appendix G contains the HCM outputs.

The ODOT Preliminary Traffic Signal Warrant analysis was performed for this intersection. The warrant considers traffic volumes based on the MUTCD Warrant 1. The warrant analysis was performed for the year 2036 with full build out and considers the 70% warrant criteria based on the current population of Coburg. The preliminary warrant is provided in Appendix G. The traffic volumes are not met for Case A or Case B when the discount for the right turns for the SB approach is considered. However, the traffic volumes for Case B are just under the threshold. It is recommended that a new warrant analysis be prepared when the development

exceeds the trip cap threshold of 613 trips. At this time traffic volumes may have changes enough in the area to meet the volume threshold.

## 9.0 RIGHT TURN LANE WARRANT

A right turn lane warrant was prepared for the site access to Van Duyne Rd. ODOT Analysis Procedures Manual, APM, has three criteria for determining when a separate right-turn pocket should be installed. Criterion 1 is the comparison of right-turn traffic volumes to approaching traffic volumes. As per Figure 7, during the year 2036 PM peak hour, there are 151 right turns, 211 approaching volumes, and the speed of Van Duyne Rd is 45 mph. The illustration below shows the right turn lane criterion.




Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

development trips or signalization. With the trip cap or signalization, the intersection meets standards. This standard is met.

*(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan." OAR 660-12-0060(1)*

All intersections will meet the mobility standards prior to the development. This standard is not applicable.

## 12.0 CONCLUSION

This report provides the Transportation Planning Rule Analysis and findings prepared for the proposed Annexation and Zone Change for Tax lot 202 in Coburg, Oregon. The subject site is located south of Van Duyn Road east of Interstate-5 on Assessor's Map 16-03-34-00 tax lot 202. The 107-acre parcel is currently vacant and is zoned E40. The applicant is proposing to annex the site and rezone the property to Light Industrial.

### FINDINGS

- **Pearl St at I-5 SB Ramps:** This intersection is stop-controlled with the stop approach for the southbound ramp. The proposed zone change will add a substantial number of trips to the westbound left-turn movement. The site can be developed to add up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. At 614-720 PM Peak Hour trips, the intersection will require mitigation. The mitigation at this development level is a traffic signal with protective-permissive phasing for the westbound left turn. With the trip cap at 613 trips, the intersection will operate at a v/c 0.82. With the traffic signal, the intersection will operate at LOS B and v/c 0.65, meeting the standard.
- The addition of development traffic does not substantially increase queuing conditions.
- The right turn lane at the site access on Van Duyne Rd meets the ODOT APM right turn lane criteria.
- The TPR requirements of OAR 660-012-0060 have been demonstrated to be met with the proposed zone change.

# RAVIN VENTURES, LLC
# HARDLY HACKIT, LLC

## Annexation Application

**Lane County Tax Lot – 16-03-34-00-00202**

**107.35 Acres**

**Coburg, Oregon**

# TABLE OF CONTENTS

# Planning Department
# TYPE IV
# Land Use – Legislative

Date Received _____

*(For official use only)*
Application Number _____ Date Paid & Receipt # _____

**Application Type** *(CHECK ALL THAT APPLY)*

- ☒ Annexation
- ☐ Code Amendment
- ☐ Comprehensive Plan Amendment Map
- ☐ Comprehensive Plan Amendment Text
- ☐ Master Planning
- ☐ Vacation
- ☐ Zoning Code Amendment Map & Text
- ☐ Other Legislative:

Note: All legislative applications require supplemental material and pre-application meetings with the Planning Department

***PRINT*** *CLEARLY AND COMPLETE ALL SPACES*

**Applicant Information**

Name Ramon Fisher Daytime Phone 541-914-8868
Mailing Address 3555 Gateway St. Suite 200 Email ramon@Oakridgesand.com
Contact Person Springfield, OR 97477 Contact Daytime Phone 541-914-8868
Ramon Fisher

**Site Information**

Street Address _____ COBURG, OR 97408
Map & Tax Lot # 16-03-34-00-00202 Total Area **(sq. ft./ acres)** 107.35
If more than one lot:
Map and Tax Lot # _____ Total Area _____
Present Use(s) of Property Farmland
Proposed Use(s) of Property Light Industrial

**Property Owner Information**

Name Ramon Ventures to Herdly Hackit, LLC Daytime Phone 541-914-8868
Mailing Address 3555 Gateway St. Suite 200 Email ramon@oakridgesand.com
Contact Person Springfield, OR 97477 Contact Daytime Phone 541-914-8868
Ramon Fisher

Is there more than one applicant or site associated with this application? If so, check here. ☐ *ATACH A SEPARATE SHEET WITH ADDITIONAL APPLICANT AND SITE INFORMATION)*



**CITY OF COBURG** | P.O. BOX 8316 | 91136 NORTH WILLAMETTE STREET | COBURG, OREGON 97408
541-682-7850| coburgoregon.org

*ATTACH THE FOLLOWING DOCUMENTAION WITH YOUR APPLICATION:* *OFFICIAL COMPLETENESS CHECK*

Written legal description of the property(ies) ☑ _____

Copy of Assessor's Map, highlight property(ies) *(8.5" x11" or 11" x 17" SIZE)* ☑ _____

* Written statement addressing **all** applicable Code Criteria ☒ _____

Site Plan and/or Engineered Drawings (see sign site plan checklist) ☒ _____

Preliminary Title Report and supporting documentation ☒ _____

15 copies of application materials ☒ _____

Copy of Coburg Business License ☐ N/A

Is the property in the flood plain? YES ☐ NO ☑

** Written Statements must be in the form of factual statements or findings of fact and supported by evidence. List the findings criteria in the Coburg Zoning Code (Ord. A-200-H) and develop evidence that supports it.*

**I hereby certify** that the statements and information contained in this application, including the attached drawings and the required findings of fact, are in all respects true and correct. I understand that all property pins must be shown on the drawings and visible upon site inspection. In the event that the pins are not shown or their location found to be incorrect, the owner assumes full responsibility.

I further understand that if this request is subsequently contested, the burden will be on me to establish that I produced sufficient factual evidence at the hearing to support this request, that the evidence adequately justifies the granting of the request, that the findings of fact furnished by me are adequate, and further that all structures or improvements are properly located on the ground. Failure in this regard will result most likely in not only the request being set aside, but also possibly in any structures being built in reliance thereon being required to be removed at my expense. If I have any doubts, I am advised to seek competent professional advice and assistance.

_____ Date: 4/30/2020

**Applicant Signature**

As owner of the property involved in this request, I have read and understood the complete application and its consequences to me as a property owner.

_____ Date: 9/6/2020

**Property Owner Signature #1**

Ramon Fisla - Member Raven Ventures, LLC

**Print Name**

_____ Date: _____

**Property Owner Signature #2**

_____

**Print Name**



CITY OF COBURG | P O BOX 8316 | 91136 NORTH WILLAMETTE STREET | COBURG OREGON 97408
541-682-7850 | coburgoregon.org

## EXHIBIT "A"

**Beginning at a point on the North line of the I. S. Swearinger Donation Land Claim No. (D.L.C.) No. 37, in Section 34, Township 16 South, Range 3 West of the Willamette Meridian, said point being West 1051.00 feet from the Northeast corner of said D.L.C. No. 37; thence leaving said North line and running parallel with the East line of said D.L.C. No. 37, South 3106.29 feet, more or less, to a point on the South line of Tract 4 as described in a deed recorded August 2, 1939 in Book 198, Page 572 of the Lane County Oregon Deed Records; thence along said South line, West 1540.16 feet, more or less, to a point on the West line of said D.L.C. No. 37; thence leaving said South line and running along said West line, North 3106.29 feet, more or less, to the Northwest corner of said D.L.C. No. 37; thence along the North line of said D.L.C. No. 37, East 1540.16 feet, more or less, to the point of beginning, all in Lane County, Oregon.**

**EXCEPTING THEREFROM any portion of the above tract contained within any public roadways.**

FOR ASSESSMENT AND TAXATION ONLY

Lane County

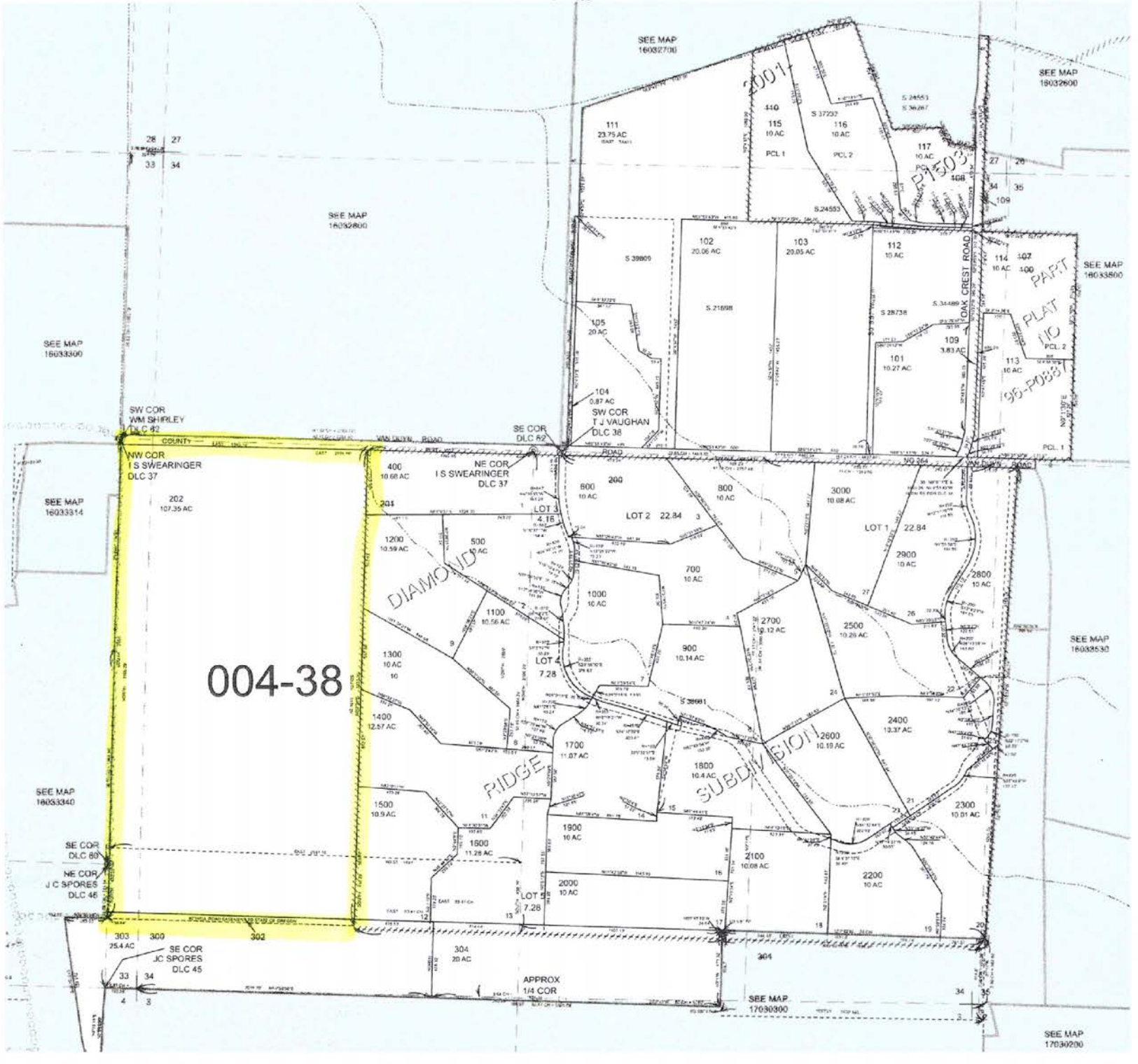
1" = 400'

16033400

LCATBHH - 2016-06-24 09:08

CANCELLED
100
107
108
110
200
201
300
302
301

57




16033400

Ravin Ventures, Hardly Hackit LLC, Tenants in Common
Annexation Application
Tax Lot – 16-03-34-00-00202
107.35 Acres
Light Industrial Zoning

Code Criteria – Article XX.A.4 of the City of Coburg Development Code

(a) The subject property is in the City's urban growth boundary

- The subject property is contiguous to the City Limits

(b) The proposed annexation is consistent with applicable policies in the Coburg Comprehensive Plan and in any applicable refinement plans.
(c) The subject property will result in a boundary in which key services can be provided.
(d) The owners of the subject property will complete an Annexation Agreement to mitigate fiscal impacts to the City

Code Criteria – Article VII.E

The subject property shall conform to the Light Industrial zoning requirements as detailed in Article VII.E of the City of Coburg Development Code

THE FAVREAU GROUP
CIVIL ENGINEERING

3730 NORWICH AVE.
EUGENE, OR 97408 (541) 683-7048

| DATE | BY | DESCRIPTION | APP. |
|---|---|---|---|
| | | REVISIONS | |

DESIGNED | DRAWN
CHECKED | DATE 04-29-20

# CONCEPTUAL SITE PLAN FOR FISHER INDISTRIAL PARK

LANE COUNTY

SHEET 1 OF 1

After Recording, Return to:

City of Coburg
Anne Heath, City Administrator
91136 N. Willamette St
Coburg, OR 97408

Unless requested otherwise, send all tax statements to:

Ramon Fisher
Ravin Ventures, LLC. & Hardly Hackit, LLC.
Tenants in Common
37801 Upper Camp Creek Rd
Springfield, OR 97478

# ANNEXATION AGREEMENT

This Annexation Agreement ("Agreement") is made between the City of Coburg, an Oregon municipal corporation ("City") and Ravin Ventures, LLC. and Hardly Hackit, LLC. Tenants in Common ("RAVIN/HARDLY").

## RECITALS

A. RAVIN/HARDLY owns the parcel of land legally described in Exhibit A and shown on the map attached as Exhibit B. The property is contiguous to the jurisdictional limits of the City on its eastern boundary, and is subject to annexation by the Lane County Local Government Boundary Commission ("Boundary Commission") following minor boundary change procedures.

B. RAVIN/HARDLY has submitted to the City an Annexation Application dated June 24, 2020 to annex approximately 107 acres located at Assessor's Map No. 16-03-34-00, Lot 00202 (portion) ("Property").

C. RAVIN/HARDLY wishes to annex the Property to the City and seeks support from the City for the annexation before the Boundary Commission.

D. The Property is currently designated in the Coburg Urban Growth Boundary for Light Industrial Use and is zoned by Lane County as E40 (Exclusive Farm Use). RAVIN/HARDLY plans to subdivide the property for large lot light industrial as zoned by City of Coburg.

E. Annexation of the Property requires a showing under Article XX Boundary Changes (Annexation) of the City of Coburg Development Code that:

a. The affected territory proposed to be annexed is within the City's urban growth boundary, and is;

(1) Contiguous to the City limits; or
(2) Separated from the City only by a public right-of-way or a stream, lake or other body of water.

b. The proposed annexation is consistent with applicable policies in the Coburg Comprehensive Plan and in any applicable refinement plans;

c. The proposed annexation will result in a boundary in which key services can be provided.
d. Where applicable, fiscal impacts to the City have been mitigated through an Annexation Agreement or other mechanism approved by the City Council.

F. The purpose of this Agreement is to memorialize RAVIN/HARDLY's and City's commitment and agreement to the allocation of financial responsibility for public facilities and services for the property and other users of the facilities, sufficient to meet the City's requirements for the provision of key urban services necessary for an affirmative City recommendation for the annexation request.

G. Water, Stormwater and Sewer Service: Water, Stormwater and Sewer Service shall meet the criteria as listed in Article XX Boundary Changes (Annexation) B. Extraterritorial Extension of Water, Storm water and Sewer Service as follows:

Criteria. The City Council shall review the application for extraterritorial extension of water, stormwater, or sewer service based on the approval criteria specified in (a) – (g) that follows:

a. The property proposed for water or sewer service is located within the city's urban growth boundary, or the property proposed for stormwater service is located within or outside the city's urban growth boundary;

b. Annexation of the property proposed to be served is currently not possible due to the inability to meet the criteria for annexation in ARTICLE XX.A;

c. The property proposed for service is not vacant;

d. The provision of service will not prolong uses that are nonconforming uses as specified in ARTICLE VI;

e. In the case of an application for extension of water service, the property to be served is connected with an approved means of sewage disposal;

f. The proposed extension is consistent with adopted resolutions, policies, plans, and ordinances concerning extraterritorial extensions; and

g. Even if a proposed extension is inconsistent with the criteria above, the City may approve an extraterritorial extension of water, stormwater, or sewer service:

(1) Where a communicable disease hazard exists and the extension is the only practical remedy as specified in ORS 222.840 - 222.915; or

(2) To property within a dissolved water district within which the City is providing service to some properties.

h. Even if a proposed extension is inconsistent with the criteria above, where the City currently provides water outside the urban growth boundary, the City shall consider new service connection requests only when an applicant can demonstrate that a health condition exists that will negatively impact the City of Coburg.

"Sanitary Sewers. All new development must be served by the Public Sanitary Sewer System of the City of Coburg. All proposed sanitary sewer plans must be approved by the City engineer as part of the preliminary plat review process."

H. STREETS: Transportation facilities are currently provided to Property via Van Duyn Road. Both sections of roads adjacent to property are included in the Annexation Request. RAVIN/HARDLY shall set aside an easement and work with Oregon Department of Transportation (ODOT) to construct access to properties west of subject property required as per updating Van Duyn Road to current ODOT standards and the IAMP (I-5 Area Management Plan)

I. City staff has determined that the minimum level of key urban services is currently available to Property with regard to electricity, schools and fire and emergency services (with the exception that additional signage, street width and hydrants may be required as part of development improvements).

J. In order to facilitate orderly development of property and ensure the full provision of key urban services that are satisfactory to the City and meet the City's conditions for an affirmative recommendation for annexation to the Boundary Commission, and in exchange for the obligations of City set forth below, RAVIN/HARDLY shall comply with all requirements imposed on RAVIN/HARDLY in this Agreement.

Now, therefore, based on the foregoing Recitals, which are specifically made a part of this Agreement, the parties agree as follows:

## AGREEMENT

1. Obligations of RAVIN/HARDLY. Consistent with the above recitals and subject to the issuance of subdivision and public improvement plan approvals, RAVIN/HARDLY agrees to perform the obligations set forth in this section.

1.1 1.1.1. Develop on-site public sanitary sewer conveyance systems as may be necessary to adequately serve the development and which comply with the requirements of Article XX Boundary Changes (Annexation) of the City of Coburg Development Code, set forth above.

1.2 Develop on-site public water conveyance system as may be necessary to adequately serve the development and which complies with Article XX Boundary Changes (Annexation) of the City of Coburg Development Code.

1.3 Develop on-site and off-site stormwater management facilities and dedicate drainage easements as may be necessary to adequately manage and treat stormwater runoff from the development site and develop the site in accordance with stormwater quality measures which comply with City storm drainage requirements as set forth in the City of Coburg Development Code, including those above. RAVIN/HARDLY shall either provide information establishing that existing culverts can accommodate additional storm drainage, or shall provide improvements required to meet applicable City and County standards.

1.4 Dedicate rights-of-way as may be determined necessary during the Subdivision Tentative Plat review and approval and improve to full City standards all new street rights-of-way at a level as needed to support the approved subdivision.

1.5 RAVIN/HARDLY knows and understands its rights under Dolan v. City of Tigard, 512 U.S. 374 (1994), and by entering into this Annexation Agreement hereby waives any requirement that the City demonstrate that the dedications of right-of-way, public utility easements, and other public improvements required herein are roughly proportional to the impacts of the subdivision. RAVIN/HARDLY further waives any cause of action it may have pursuant to Dolan v. City of Tigard , *supra,* and its progeny arising out of the actions described herein.

1.6 Provide and be financially responsible for the provision of the following key urban service on Property:

1.6.1 Sanitary sewer (City cost participation, Zone of Benefit, or Local Improvement District formation shall be available for sanitary sewer oversizing or providing service to land not owned by RAVIN/HARDLY).

1.6.2 Drainage (City cost participation, Zone of Benefit, or Local Improvement District formation shall be available for drainage system oversizing or providing service to land not owned by RAVIN/HARDLY).

1.6.3 Internal roads and transportation facilities identified in the Subdivision Tentative Plat (City cost participation, Zone of Benefit, or Local Improvement District formation shall be available for providing excess capacity on these City transportation system improvements if required by the City to provide capacity beyond that needed to serve the subdivision development).

2. Obligations of City. Consistent with the above Recitals, City agrees to:

2.1 Recommend and support annexation of the Property to the City of Coburg before the Boundary Commission and support RAVIN/HARDLY'S defense of a Boundary Commission decision annexing the Property to the City, but will not assume financial responsibility to provide legal counsel on any such appeal;

2.2 Use good faith in the timely review and decision making of the Subdivision Tentative Plat, Final Plat, and Public Improvement Plan applications for the Property. City will support any appeal of a decision by the City on these applications, but will not assume financial responsibility to provide legal counsel on appeal.

2.3 Review in a timely manner the application for the formation of a Zone of Benefit or Local Improvement District to provide public improvement services to the Property in the event a valid Petition for such a District is presented to the City by RAVIN/HARDLY or by other property owners interested in forming such a District.

3. Covenants Running With the Land. It is the intention of the parties that the covenants herein are necessary for the development of a residential subdivision on Property and as such shall run with the Property and shall be binding upon the heirs, executors, assigns, administrators, and successors of the parties hereto, and shall be construed to be a benefit and burden upon the Property. This Agreement shall be recorded upon its execution in the Land County Deeds and Records. This Agreement may be assigned by RAVIN/HARDLY and shall benefit any assigns or successors in interest to RAVIN/HARDLY. Execution of this Agreement is a precondition to the support of the City of Coburg for annexation of the property described in Exhibit A for the City of Coburg. Accordingly, the City retains all rights for enforcement of this Agreement.

4. Limitations on the Development. No part of Property shall be further developed prior to obtaining appropriate City development approval of a Subdivision Tentative Plat.

5. Mutual Cooperation. City and RAVIN/HARDLY shall endeavor to mutually cooperate with each other in implementing the various matters contained herein.

6. Waiver of Right of Remonstrance. RAVIN/HARDLY agrees to sign any and all waivers, petitions, consents and all other documents necessary to obtain the public facilities and services described herein as benefiting the Property, under any Local Improvement Act or proceeding of the State of Oregon, Lane County or the City of Coburg and to waive all rights to remonstrate against these improvements. RAVIN/HARDLY does not waive the right to protest the amount or manner of spreading the assessment thereof, if the assessment appears to RAVIN/HARDLY to be inequitable or operate unfairly upon the Property. RAVIN/HARDLY waives any right to file a written remonstrance against these improvements. RAVIN/HARDLY does not waive its right to comment upon any proposed local improvement district or any related matters orally or in writing.

7. Modification of Agreement. This Agreement may only be modified by writing signed by both parties.

8. Land Use. Nothing in this Agreement shall be construed as waiving any requirements of the Coburg Development Code or Coburg Municipal Code which may be applicable to the use and

development of this Property. Nothing herein shall be construed as City providing or agreeing to provide approval of any building, land use, or other development application submitted by the RAVIN/HARDLY.

9. Invalidity. If any provision of this Agreement shall be deemed unenforceable or invalid, such enforceability or invalidity shall not affect the enforceability or validity of any other provision of this Agreement. The validity, meaning, enforceability, and effect of the Agreement and the rights and liabilities of the parties hereto shall be determined in accordance with the laws of the State of Oregon.

DATED this _____ day of _____, 2020.

IN WITNESS WHEREOF, the Applicant and City have executed this Agreement as of the date first herein above written.

CITY OF COBURG

By:_____
Mayor

RAVIN VENTURES & HARDLY HACKIT, LLC.

_____
RAMON FISHER as manager of RAVIN VENTURES, LLC.

_____
MICHAEL STEVENSON as manager of HARDLY HACKIT, LLC.

STATE OF OREGON )
: ss.
County of Lane )

Personally appeared the above named RAMON FISHER and MICHAEL STEVENSON who acknowledged the foregoing instrument to by their voluntary act. Before me on this ____ day of _____, 2020.

_____
Notary Public for Oregon
My Commission Expires _____

STATE OF OREGON )
: ss.

County of Lane )

Personally appeared the above named _____ who acknowledged the foregoing instrument to by their voluntary act. Before me on this ____ day of _____, 2020.

_____
Notary Public for Oregon
My Commission Expires _____

# Planning Department
## TYPE IV
## Land Use – Legislative

Date Received _____

*(For official use only)*
Application Number _____ Date Paid & Receipt # _____

**Application Type** *(CHECK ALL THAT APPLY)*

- ☒ Annexation
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*PRINT CLEARLY AND COMPLETE ALL SPACES*

**Applicant Information**

Name Ramon Fisher Daytime Phone 541-914-8868
Mailing Address 3555 Gateway St. Suite 200 Email ramon@Oakridgesand.com
Contact Person Springfield, OR 97477 Contact Daytime Phone 541-914-8868
Ramon Fisher

**Site Information**

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If more than one lot:
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Proposed Use(s) of Property Light Industrial

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Name Ravin Ventures & Herdly Hackit, LLC Daytime Phone 541-914-8868
Mailing Address 3555 Gateway St. Suite 200 Email ramon@oakridgesand.com
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Ramon Fisher

Is there more than one applicant or site associated with this application? If so, check here. ☐ *ATACH A SEPARATE SHEET WITH ADDITIONAL APPLICANT AND SITE INFORMATION)*

ATTACH THE FOLLOWING DOCUMENTATION WITH YOUR APPLICATION — OFFICIAL COMPLETENESS CHECK

| | |
|---|---|
| Written legal description of the property(ies) | ☒ |
| Copy of Assessor's Map, highlight property(ies) (8 5" x11" or 11" x 17" SIZE) | ☑ |
| * Written statement addressing all applicable Code Criteria | ☒ |
| Site Plan and/or Engineered Drawings (see sign site plan checklist) | ☒ |
| Preliminary Title Report and supporting documentation | ☒ |
| 15 copies of application materials | ☒ |
| Copy of Coburg Business License | ☐ N/A |
| Is the property in the flood plain? | YES ☐ NO ☒ |

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Applicant Signature — Date 4/30/2020

As owner of the property involved in this request, I have read and understood the complete application and its consequences to me as a property owner.

Property Owner Signature #1 — Date 9/6/2020

Ramon Fisla - Member Ravin Ventures, LLC
Print Name

Property Owner Signature #2 — Date 11/12/2020

Mike Stevenson
Print Name

# Planning Department
## TYPE III
## Land Use – Quasi-Judicial

Date Received _____

*(For official use only)*
Application Number _____ Date Paid & Receipt # _____

**Application Type** *(CHECK ALL THAT APPLY)*

- ❑ Appeal to City Council
- ❑ Appeal to Planning Commission
- ❑ Conditional Use Permit
- ❑ Final Subdivision 1-5 lots
- ❑ Final Subdivision 6+ lots
- ❑ Home Occupation
- ❑ Master Planning – Major Modification
- ❑ Partition
- ❑ Replat
- ❑ Tentative Subdivision (all)
- ❑ Variance
- ☒ Zone Change
- ❑ Zone Map Change

**IMPORTANT: Any application determined to need Planning Commission, must be submitted 45 days prior to the next Planning Commission meeting to meet notice requirements.**

***PRINT*** *CLEARLY AND COMPLETE ALL SPACES*

**Applicant Information**

Name Ramon Fisher Daytime Phone 541-914-8868
Mailing Address 2295 Coburg Rd, Eugene, OR 97401 Email ramon@oakridgesand.com
Contact Person Ramon Fisher Contact Daytime Phone 541-914-8868

**Site Information**

Street Address _____ COBURG, OR 97408
Map & Tax Lot # 16-03-34-00-00202 Total Area **(sq. ft./ acres)** 107.35 acres
If more than one lot:
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Proposed Use(s) of Property Light Industrial

**Property Owner Information**

Name Ravin Ventures, LLC & Hardt, Hacket, LLC Daytime Phone 541-914-8868
Mailing Address 2295 Coburg Rd, Eugene OR 97401 email ramon@oakridgesand.com
Contact Person Ramon Fisher Contact Daytime Phone 541-914-8868



CITY OF COBURG | P.O. BOX 8316 | 91136 NORTH WILLAMETTE STREET | COBURG, OREGON 97408
541-682-7850| coburgoregon.org

Is there more than one applicant or site associated with this application? If so, check here. ❑ *ATTACH A SEPARATE SHEET WITH ADDITIONAL APPLICANT AND SITE INFORMATION)*

*ATTACH THE FOLLOWING DOCUMENTAION WITH YOUR APPLICATION:* *OFFICIAL COMPLETENESS CHECK*

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Copy of Coburg Business License ❑ _____

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** Written Statements must be in the form of factual statements or findings of fact and supported by evidence. List the findings criteria in the Coburg Zoning Code (Ord. A-200-H) and develop evidence that supports it.*

**I hereby certify** that the statements and information contained in this application, including the attached drawings and the required findings of fact, are in all respects true and correct. I understand that all property pins must be shown on the drawings and visible upon site inspection. In the event that the pins are not shown or their location found to be incorrect, the owner assumes full responsibility.

I further understand that if this request is subsequently contested, the burden will be on me to establish: that I produced sufficient factual evidence at the hearing to support this request; that the evidence adequately justifies the granting of the request; that the findings of fact furnished by me are adequate, and further that all structures or improvements are properly located on the ground. Failure in this regard will result most likely in not only the request being set aside, but also possibly in any structures being built in reliance thereon being required to be removed at my expense. If I have any doubts, I am advised to seek competent professional advice and assistance.

_____ Date: 11/5/2020

**Applicant Signature**

As owner of the property involved in this request, I have read and understood the complete application and its consequences to me as a property owner.

_____ Date: 11/5/2020

**Property Owner Signature #1**

Ramon Fisher

**Print Name**

_____ Date: 11/5/2020

**Property Owner Signature #2** (if applicable)

Mike Stevenson

**Print Name**

December 18, 2020

City of Coburg
91136 N. Willamette Street
Coburg OR 97408

Re: Annexation and Zone Change Process

To Whom It May Concern:

In regards to the property located at 16-03-34-00202, owned as a tenancy in common by Ravin Ventures, LLC. and Hardly Hackit, LLC., that is currently going through the annexation process, we request that the annexation and zone change process run concurrently.

If you have any questions regarding this request, please feel free to contact me.

Sincerely,

Ramon Fisher
Applicant
Managing Member, Ravin Ventures, LLC.

# Planning Department
# TYPE IV
# Land Use – Legislative

Date Received _____

*(For official use only)*
Application Number _____ Date Paid & Receipt # _____

**Application Type** *(CHECK ALL THAT APPLY)*

- ☒ Annexation
- ☐ Code Amendment
- ☐ Comprehensive Plan Amendment Map
- ☐ Comprehensive Plan Amendment Text
- ☐ Master Planning
- ☐ Vacation
- ☐ Zoning Code Amendment Map & Text
- ☐ Other Legislative:

Note: All legislative applications require supplemental material and pre-application meetings with the Planning Department

***PRINT*** *CLEARLY AND COMPLETE ALL SPACES*

**Applicant Information**

Name Ramon Fisher Daytime Phone 541-914-8868
Mailing Address 3555 Gateway St. Suite 200 Email ramon@Oakridgesand.com
Contact Person Springfield, OR 97477 Contact Daytime Phone 541-914-8868
Ramon Fisher

**Site Information**

Street Address _____ COBURG, OR 97408
Map & Tax Lot # 16-03-34-00-00202 Total Area **(sq. ft./ acres)** 107.35
If more than one lot:
Map and Tax Lot # _____ Total Area _____
Present Use(s) of Property Farmland
Proposed Use(s) of Property Light Industrial

**Property Owner Information**

Name Ramon Ventures to Herdly Hackit, LLC Daytime Phone 541-914-8868
Mailing Address 3555 Gateway St. Suite 200 Email ramon@oakridgesand.com
Contact Person Springfield, OR 97477 Contact Daytime Phone 541-914-8868
Ramon Fisher

Is there more than one applicant or site associated with this application? If so, check here. ☐ *ATACH A SEPARATE SHEET WITH ADDITIONAL APPLICANT AND SITE INFORMATION)*



**CITY OF COBURG** | P.O. BOX 8316 | 91136 NORTH WILLAMETTE STREET | COBURG, OREGON 97408
541-682-7850| coburgoregon.org

*ATTACH THE FOLLOWING DOCUMENTAION WITH YOUR APPLICATION* *OFFICIAL COMPLETENESS CHECK*

Written legal description of the property(ies) ☑ _____

Copy of Assessor's Map, highlight property(ies) *(8.5" x11" or 11" x 17" SIZE)* ☑ _____

* Written statement addressing **all** applicable Code Criteria ☒ _____

Site Plan and/or Engineered Drawings (see sign site plan checklist) ☒ _____

Preliminary Title Report and supporting documentation ☒ _____

15 copies of application materials ☒ _____

Copy of Coburg Business License ☐ N/A

Is the property in the flood plain? YES ☐ NO ☑

** Written Statements must be in the form of factual statements or findings of fact and supported by evidence. List the findings criteria in the Coburg Zoning Code (Ord. A-200-H) and develop evidence that supports it.*

**I hereby certify** that the statements and information contained in this application, including the attached drawings and the required findings of fact, are in all respects true and correct. I understand that all property pins must be shown on the drawings and visible upon site inspection. In the event that the pins are not shown or their location found to be incorrect, the owner assumes full responsibility.

I further understand that if this request is subsequently contested, the burden will be on me to establish that I produced sufficient factual evidence at the hearing to support this request, that the evidence adequately justifies the granting of the request, that the findings of fact furnished by me are adequate, and further that all structures or improvements are properly located on the ground. Failure in this regard will result most likely in not only the request being set aside, but also possibly in any structures being built in reliance thereon being required to be removed at my expense. If I have any doubts, I am advised to seek competent professional advice and assistance.

_____ Date: 4/30/2020

**Applicant Signature**

As owner of the property involved in this request, I have read and understood the complete application and its consequences to me as a property owner.

_____ Date: 9/6/2020

**Property Owner Signature #1**

Ramon Fisla - Member Raven Ventures, LLC

**Print Name**

_____ Date: _____

**Property Owner Signature #2**

_____

**Print Name**

LEGAL DESCRIPTION:

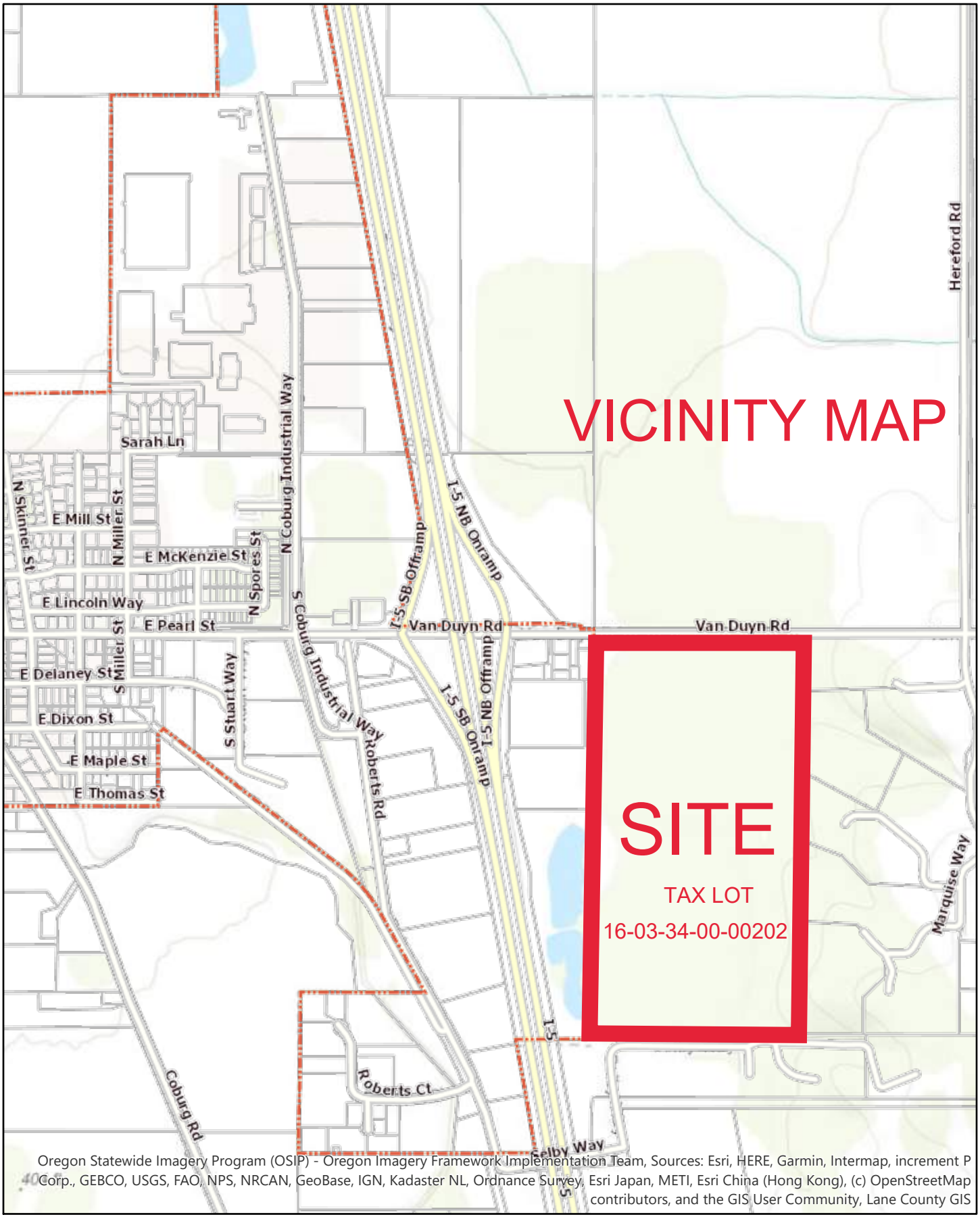
BEGINNING AT A POINT ON THE NORTH LINE OF THE I. S. SWEARINGER DONATION LAND CLAIM NO. (D.L.C.) NO. 37, IN SECTION 34, TOWNSHIP 16 SOUTH, RANGE 3 WEST OF THE WILLAMETTE MERIDIAN, SAID POINT BEING WEST 1051.00 FEET AND 30.00 FEET SOUTH FROM THE NORTHEAST CORNER OF SAID DONATION LAND CLAIM NO. 37;

THENCE RUNNING PARALLEL WITH THE EAST LINE OF SAID DONATION LAND CLAIM NO. 37, **SOUTH 3106.29 FEET( Course 1)**, MORE OR LESS, TO A POINT ON THE SOUTH LINE OF TRACT 4 AS DESCRIBED IN A DEED RECORDED AUGUST 2, 1939 IN BOOK 198, PAGE 572 OF THE LANE COUNTY OREGON DEED RECORDS;

THENCE ALONG SAID SOUTH LINE, **WEST 1540.16 FEET (Course 2)**, MORE OR LESS, TO A POINT ON THE WEST LINE OF SAID DONATION LAND CLAIM NO. 37;

THENCE LEAVING SAID SOUTH LINE AND RUNNING ALONG SAID WEST LINE, **NORTH 3106.29 FEET (Course 3)**, MORE OR LESS, TO THE NORTHWEST CORNER OF SAID DONATION LAND CLAIM NO. 37;

THENCE ALONG THE NORTH LINE OF SAID DONATION LAND CLAIM NO. 37, **EAST 1540.16 FEET (Course 4)**, MORE OR LESS, TO THE POINT OF BEGINNING, ALL IN LANE COUNTY, OREGON.




Oregon Statewide Imagery Program (OSIP) - Oregon Imagery Framework Implementation Team, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Lane County GIS



N

0 335 670 1,340 Feet

ArcGIS Web Map

Lane County, Oregon

**PETITION**
**for**
**ANNEXATION TO CITY OF COBURG**

**TO: City of Coburg**

We, the undersigned, constitute at least the owners of one-half of the land area of the following described property:

See attached legal description(s) (Exhibit A)

AND Tax lot 16, Township 03 S, Range 34 E/W, Section 00, Map 00202
Tax lot _____, Township _____ S, Range _____ E/W, Section _____, Map _____

We desire to be annexed to the City of Coburg under ORS Chapter 222. (_____) *fill in the blank with the appropriate ORS.*

A map is attached, marked Exhibit B, showing the affected territory and its relationship to the present city boundaries.

The annexation constitutes a boundary change under ORS 222, and after study, and public hearing an Ordinance will be entered by the City of Coburg.

Date 10/28/2020

By: _____
Title: Member
By: _____
Title: Member

**NOTE**: With the above signature, I am verifying that I have the authority to consent to annexation on my own behalf or on behalf of my firm or agency.

## VERIFICATION OF PROPERTY OWNERS

(Coburg Development Code Article XX.A.2.e)

I have caused a search to be made of the assessment and taxation records, Lane County Department of Assessment and Taxation (A&T), on 14-03-34-00-00202. Those records reflect that the 2 individuals listed on the attached petition are the owners of record of the property identified by the tax lots described on the attached sheet. A&T is not responsible for subsequent deed activity which may not yet be reflected on the A&T computerized tax roll.

Lane County Department of Assessment and Taxation

11/3/20

Date

# FORM 1

## PETITION/PETITION SIGNATURE SHEET
Annexation by Individuals
[SDC 5.7-125(2)(b)(i)/ORS 222.170(1)]

We, the following property owners of the following territory, consent to the annexation to the City of Coburg

| | Signature | Date Signed m/d/y | Print Name | Residence Address (street, city, zip code) | Map and Tax Lot Number (example: 17-04-03-00-00100) | ✓ Land Owner | Acres (qty) |
|---|---|---|---|---|---|---|---|
| 1. | | 10/28/20 | Ramon Fisher | 37801 Upper Camp Creek Rd | 16-03-34-00-00102 | ✓ | 107 |
| 2. | member — | | Hardly Hackit LLC | Spfd, OR 97478 | | | 107.35 |
| 3. | | 10/29/20 | Michael Stevenson | 33401 Vantage Rd. Eugene 97405 | 16-03-34-00-00202 | ✓ | 107 |
| 4. | member — | | Bastin Ventures LLC | | | | 107.35 |
| 5 | | | | | | | |

Note: With the above signature(s), I am attesting that I have the authority to consent to annexation on my own behalf or on behalf of my firm or agency. *(Attach evidence of such authorization when applicable.)*

I, Frances Allen *(printed name of circulator)*, hereby certify that every person who signed this sheet did so in my presence.

x Frances Allen *(signature of circulator)*

**CERTIFICATION OF OWNERSHIP**

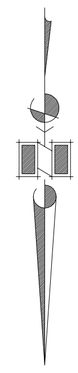
The total landowners in the proposed annexation are 2 *(qty)*. This petition reflects that 2 *(qty)* landowners *(or legal representatives)* listed on this petition represent a total of 100 *(%)* of the landowners and 100 *(%)* of the acres as determined by the map and tax lots attached to the petition. *A&T is not responsible for subsequent deed activity that may not yet be reflected on the A&T computerized tax roll.*

Hallyn Allen

**Lane County Department of Assessment and Taxation**

11/3/20

Date Signed and Certified



GRAPHIC SCALE

( IN FEET )

1 inch = 100 ft.

100 0 50 100 200 400

N90°00'00"W 1540.16'

3021.29'

S00°00'00"E

2776.29'

N00°00'00"E

PARCEL 2
102.24 ACRES

PARCEL 1
3.14 ACRES

60.00'
60.00'
740.08'
60'
740.08'
305.00'
60'
185.00'
185.00'
740.08'
740.08'
N90°00'00"E 1540.16'
45'

VAN DUYN ROAD

SHEET 1 OF 1

EXPIRES DEC. 31, 2021

REGISTERED PROFESSIONAL ENGINEER
OREGON
DEC. 31, 1995
ANTHONY J. FAVREAU
(8240) PE

PLANS PREPARED BY:

THE FAVREAU GROUP
CIVIL ENGINEERING

3750 NORWICH AVE.
EUGENE, OR 97408 (541) 683-7048

| DATE | BY | DESCRIPTION | APP. |
|---|---|---|---|
| | | | |

REVISIONS

APPROVED:

DATE

| DESIGNED | DRAWN |
|---|---|
| CHECKED | DATE 04-29-20 |

# CONCEPTUAL SITE PLAN FOR FISHER INDISTRIAL PARK

LANE COUNTY

FOR ASSESSMENT AND TAXATION ONLY

# SECTION 34 T.16S. R.3W. W.M.
## Lane County
1" = 400'

REVISIONS
02/11/2008 - LCAT155 - CONVERT MAP TO GIS
06/24/2016 - LCAT142 - CANC 301 TO 1703030000101

16033400

LCATBHH - 2016-06-24 09:08

CANCELLED
100
107
108
110
200
201
300
302
301

004-38

SEE MAP 16032700
SEE MAP 16032600
SEE MAP 16032800
SEE MAP 16033300
SEE MAP 16033500
SEE MAP 16033314
SEE MAP 16033340
SEE MAP 16033530
SEE MAP 17030300
SEE MAP 17030200

SW COR WM SHIRLEY DLC 62
SE COR DLC 62
SW COR T J VAUGHAN DLC 38
NW COR I S SWEARINGER DLC 37
NE COR I S SWEARINGER DLC 37
SE COR DLC 60
NE COR J C SPORES DLC 45
SE COR JC SPORES DLC 45
APPROX 1/4 COR

Course 1, SOUTH, 3106.29'
Course 2, WEST, 1540.16'
Course 3, NORTH, 3106.29'
Course 4, EAST, 1540.16'

SOUTH, 30.00'
WEST, 1051.00'

VAN DUYN ROAD
OAK CREST ROAD
DIAMOND RIDGE SUBDIVISION
PART PLAT NO 96-P0887
PCL 1
PCL 2
PCL 3
TAX LOTTED ON MAP 16033400
PRIVATE ROAD
COUNTY ROAD NO 254
40' HAUL ROAD EASEMENT TO STATE OF OREGON

111 23.75 AC (EAST 5340')
102 20.06 AC
103 20.05 AC
112 10 AC
114 10 AC
113 10 AC
101 10.27 AC
109 3.83 AC
104 0.87 AC
105 20 AC
400 10.68 AC
202 107.35 AC
303 25.4 AC
304 20 AC
301
1200 10.59 AC
500 10 AC
600 10 AC
800 10 AC
3000 10.08 AC
1000 10 AC
700 10 AC
2700 10.12 AC
2500 10.26 AC
1100 10.56 AC
1300 10 AC
900 10.14 AC
1400 12.57 AC
2600 10.19 AC
2400 10.37 AC
1700 11.07 AC
1800 10.4 AC
1500 10.9 AC
1900 10 AC
2100 10.08 AC
2300 10.01 AC
1600 11.28 AC
2000 10 AC
2200 10 AC
2900 10 AC
2800 10 AC
LOT 1 22.84
LOT 2 22.84
LOT 3 4.16
LOT 4 7.28
LOT 5 7.28

S 24553
S 36287
S 37232
S.24553
S 39809
S.21698
S 28738
S.34489
S 38681

16033400

## FORM 4

WAIVER OF ONE YEAR TIME LIMIT
FOR ANNEXATION PURSUANT TO ORS 222.173

This waiver of the time limit is for the following described property:

16-03-34-00-00202
Map and Tax Lot Number assigned)

Street Address of Property (if address has been

ONE WAIVER OF TIME LIMIT FOR EACH PARCEL, PLEASE

We, the owner(s) of the property described above understand the annexation process can take more than one year but desire to annex to have City services. Therefore, we agree to waive the one-year time limitation on this petition to annex established by Oregon Revised Statutes 222.173, and further agree that this contract shall be effective [X] indefinitely or [ ] until _____.
Date

Signatures of Legal Owners

| Please print or type name | Signature | Date Signed |
|---|---|---|
| Ramon Fisher | | 10/28/2020 |
| Michael Stevenson | | 10/29/2020 |
| | | |
| | | |
| | | |

ZONE CHANGE NARRATIVE:

Date: November 3, 2020

Assessor's Map: 16-03-34-00-00202

Applicant: Ramon Fisher
Ravin Ventures, LLC & Hardly Hackit, LLC
Tenants in Common
37801 Upper Camp Creek Rd.
Springfield, OR 97478

Applicant's Representative: The Favreau Group
3750 Norwich Ave.
Eugene, OR 97408
541-683-7048
Attn: Tony Favreau

**District Amendment Criteria**

a. Any zoning or special purpose district amendment proposal considered under a Type II procedure must be demonstrated to be in conformance with each of the following criteria:

b. The proposed amendment conforms to the Comprehensive Plan or substantial changes have occurred which render the Comprehensive Plan inapplicable to the requested change and the Plan should be amended as proposed by the proponent of the change (in which case the Plan must be amended prior to final action on the District Amendment).

**Response: The site currently has a county zoning of E40. The site is zoned for light industrial in the Comprehensive Plan. The zone change will rezone the site to come into conformity with the Comprehensive Plan. The zone change will also allow for development of the land pursuant to the Coburg Development Code. All future development of the site will be reviewed by the Coburg City staff for consistency to the Coburg Development Code. There are no refinement plans for this site.**

c. The proposed amendment fulfills a demonstrated public need for a particular activity or use of land within the area in question.

**Response: The site was rezoned in the Comprehensive Plan due to the fact that the City of Coburg lacks light industrial property. This rezoning will fill the need for property zoned light industrial in the City of Coburg.**

d. If residential zoning is involved, the proposed residential zone or zones best satisfies the objectives of the Comprehensive Plan and does not exclude opportunities for adequate provision of low and moderate housing within the subject neighborhood area.

**Response: Residential zoning is not involved, so this does not apply.**

e. When an application is received to change the zone of property which includes all or part of a mobile home park, written notice by first class mail shall be sent to each existing mailing address for tenants of the mobile home park at least 20 days but not more than 40 days before the date of the first hearing on the application.

**Response: A mobile home park is not involved, so this does not apply.**

**Land Use Applications that fall within the IAMP.**

a. The City and County shall coordinate with ODOT in the review of land use applications for areas within the IAMP boundary. Land use actions within the IAMP that may affect the performance of an interchange, such as zone changes will be consistent with the adopted IAMP. The City Planner shall include ODOT as an agency referral partner. Actions not consistent with the IAMP may only be approved by also amending the IAMP and related transportation system plans consistent with OAR 660-012-0050 and 0055. Lands bounded by IAMP can be found in ARTICLE X.

**Response: Van Duyn Road is improved to county standards. The applicant will be working with the City of Coburg, Lane Count and ODOT to ensure the a safe, convenient and economical transportation system. ODOT has reviewed the application and their comments will be incorporated into any future development. The Coburg/Interstate 5 Interchange Area Management Plan (IAMP) was develop to address access and safety to I5. IAMP has recommended that access to this property as well as the properties between this property and the I5 freeway be restricted to be a distance of 1,320 feet or more from the north bound ramp. Also, that a Traffic Impact analysis be performed. These items are can be achieved during the future design process, since at this time there are no current developments plans.**

**ODOT Comments:**

1. It's not entirely clear from the information provided (either the referral notice or draft annexation agreement) whether the property is being rezoned concurrently with annexation or if it will be rezoned later.

**Response: The property is being rezoned concurrently with annexation.**

2. Annexation by itself is not a land use action. If the property is only being annexed, Transportation Planning Rule (TPR) findings are not required. If the property is being rezoned concurrently, TPR findings are required. DLCD can verify this.

**Response: The City of Coburg is updating their TSP which will satisfy the TPR requirements.**

3. The City of Coburg is currently updating their TSP, with assistance from the Lane Council of Governments. The update should account for urban development in this area. If so, this should satisfy the TPR requirements.

**Response: The City of Coburg is updating their TSP which will satisfy the TPR requirements.**

4. Tax lot 202 is not adjacent to any ODOT owned highway but this area of Coburg and this section of Van Duyn Road are included within the Coburg/Interstate 5 Interchange Area Management Plan. The plan calls for a frontage road to serve properties to the west of lot 202. The easement shown on the plan included in the land use notice appears
to conform to the location of the frontage road identified in the IAMP. ODOT recommends the easement be configured to accommodate the horizontal alignment of the future frontage road, consistent with local road standards.

**Response: During the future design process, the easement will be configured to accommodate the horizontal alignment of the future frontage road and be consistent with local road standards.**

CITY OF COBURG • P.O. BOX 8316 • COBURG OREGON 97408 • 541-682-7850 FAX 541-485-0655

*Dear Property Owner: As a property owner within 300-feet of site described below, the City is required to notify you of this pending Type IV legislative land use action and invite you to provide written testimony on this matter.*

*Notice to mortgagee, lien holder, vendor, or seller: The City of Coburg Development Code requires that if you receive this notice it shall be promptly forwarded to the purchaser.*

# NOTICE OF LAND USE REQUEST – ANNEXATION AND ZONE CHANGE

| | |
|---|---|
| **APPLICATION NUMBER:** | **ANX 01-20 & ZC 01-20** |
| **APPLICANT:** | Ravin Ventures, LLC & Hardly Hackit, LLC |
| **REQUEST:** | Annexation of 105.73 acres parcel into Coburg City Limits and application of City Zoning designation. |
| **PROPERTY LOCATION:** | Assessor's Map 16-03-34-00, Tax Lot 00202 |
| **ZONING:** | Lane County Exclusive Farm Use (EFU 40 acre minimum) |
| **PLAN DESIGNATION:** | Light Industrial |
| **APPLICABLE CRITERIA:** | Article XX Boundary Changes. Article XXI Zone Changes. Article XIV Master Planned Developments. |
| **MAILING DATE:** | November 23, 2021 |

The proposal is annexation of a 105.73-acre parcel of land within the Urban Growth Boundary of the City of Coburg. If annexed, the property will be within the City Limits of Coburg. The property will also have its initial City Zoning designation applied as it currently has a Lane County zoning designation. The zoning designation will be determined by City Council as part of the application process. The uses that

can occur on the subject property will be based on the zoning designation that is applied. No immediate development will occur as a result of annexation.

The Coburg City Council will hold a public hearing **Tuesday, December 14, 2021, at 7:00 p.m**. at, Coburg City Hall, 91069 N Willamette St., Coburg, Oregon, to consider Planning Commission's recommendation for an annexation and rezone. The City Council will review the application and related materials, the staff report, and written comments. They will accept oral testimony for and against the proposal and provide an opportunity to rebut testimony. City Council will take final action on this proposed annexation and rezone.

The meeting will be live streamed on the City's website at https://www.coburgoregon.org/. To present oral testimony, you must sign up with the City Recorder by **December 14, 2021, at 3PM**. To sign up contact Sammy Egbert at 541-682-7852, Sammy.egbert@ci.coburg.or.us. Registered participants will be emailed information and directions on how to participate on the day of the hearing. Written testimony is being accepted and must be received by **3PM on December 14, 2021.**

To submit written testimony, you may send a letter to City Hall at 91136 N Willamette Street, PO BOX 8316, Coburg, OR 97408, or submit via email to Sammy.egbert@ci.coburg.or.us.

Copies of the application and pertinent Coburg ordinances are available Review. A copy of the City's staff report and recommendation to the hearings body will be available for review at no cost seven days before the hearing. If you have questions, contact Henry Hearley at 541-682-3089, hhearley@lcog.org or Sammy Egbert at 541-682-7852, Sammy.egbert@ci.coburg.or.us.

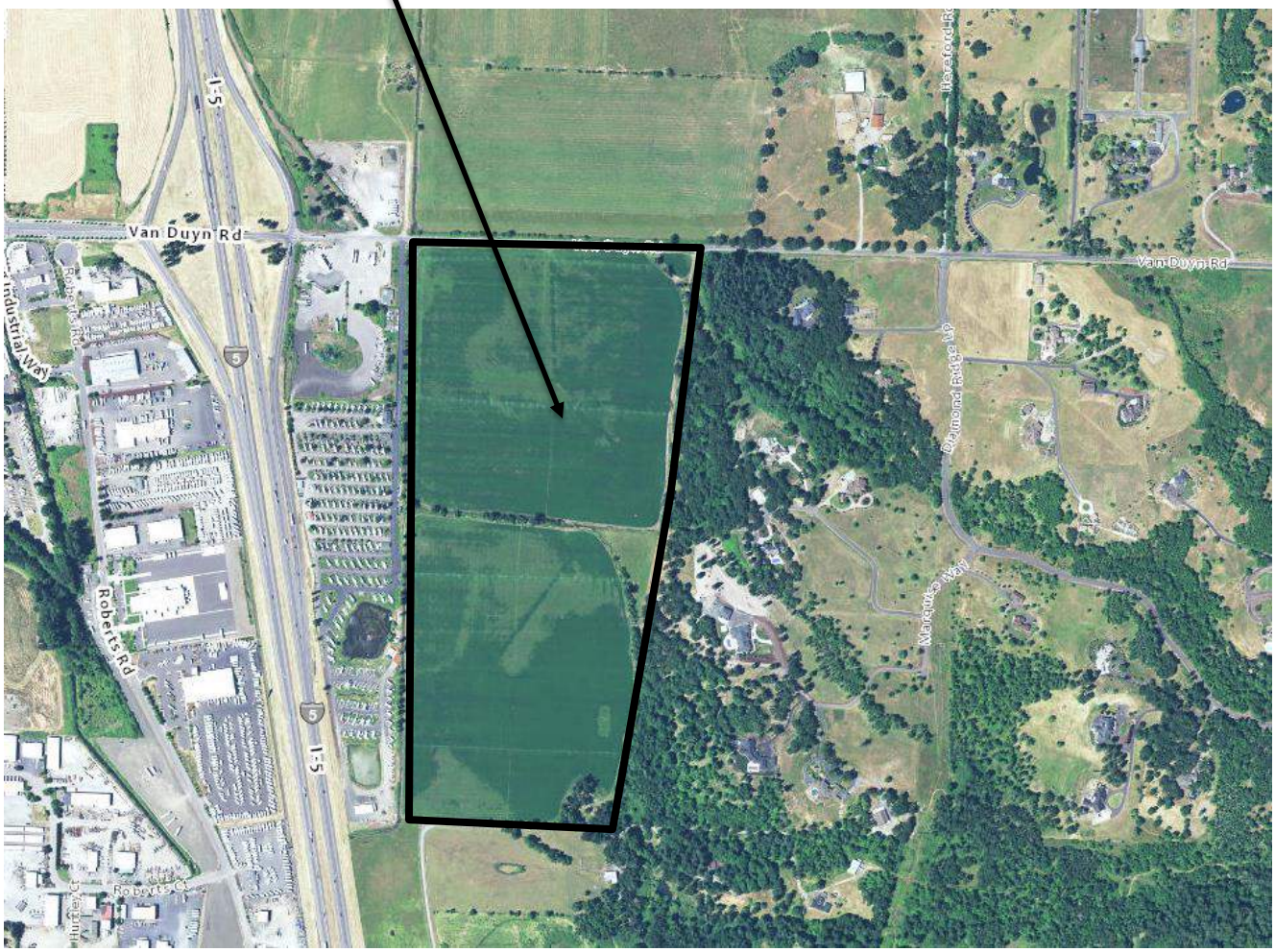
**The staff report will be available on December 7, 2021, at 5:00p.m**. Copies of all materials are available at reasonable cost.

Failure to raise an issue in person, or by letter at the hearing, or failure to provide statements or evidence sufficient to afford the decision-maker an opportunity to respond to the issue, means that an appeal based on that issue cannot be filed with the State Land Use Board of Appeals.

The subject property does not have an assigned address. An easily understood geographic reference to the subject property can be described as the property lying east of Interstate 5 and just east of Eugene Premier RV Resort and abutting Van Duyn Road. See the attached vicinity map.

For more information, please contact Henry or Sammy at the contact information provided above.

SUBJECT PROPERTY FOR ANNEXATION AND REZONE



2021 Annexation

| Name | Email | | Physical Address | Mailing Address | | | | |
|---|---|---|---|---|---|---|---|---|
| Bishow Consulting LLC | teresa@bishowconsulting.com | 541-514-1029 | | PO Box 50721 | Eugene | Oregon | 97405 | Emailed him back 1/8/21 requesting mailing address |
| William B Sproul | wmbsproul@hotmail.com | | | | | | | |
| Marilyn Hays | amhays9@gmail.com | 541-338-7679 | 90576 Diamond Ridge | Same | Eugene | Oregon | 97408 | |
| Ryan McKillop | ryan@hillsideequitygroup.com | 541-514-4389 | 91150 Triple Oaks Dr | | Eugene | Oregon | 97408 | |
| Lisa Hadley | lhadley@premierrvresorts.com | 503-313-5492 | | | | | | Emiled requesting |
| Debbi Bohle | dbohle831@icloud.com | | | 5749 Ridge Crest Drive | Springfield | OR | 97478 | |
| Kevin Dwyer | oldmanwalking54@gmail.com | 415-577-2208 | | 90541 Diamond Ridge Loop | Eugene | OR | 97408 | |

# AFFIDAVIT OF POSTING

I, Ramon Fisher, Managing Member of Ravin Ventures, owner of property located at Assessor's Map 16-03-34-00-00202 depose and state that I posted on said property, On **DECEMBER 1, 2021,** a notice of proposed annexation and zone change **(ANX 01-20 & ZC 01-20)**in the City of Coburg

Signature

Ramon Fisher

Print Name

# AFFIDAVIT OF POSTING

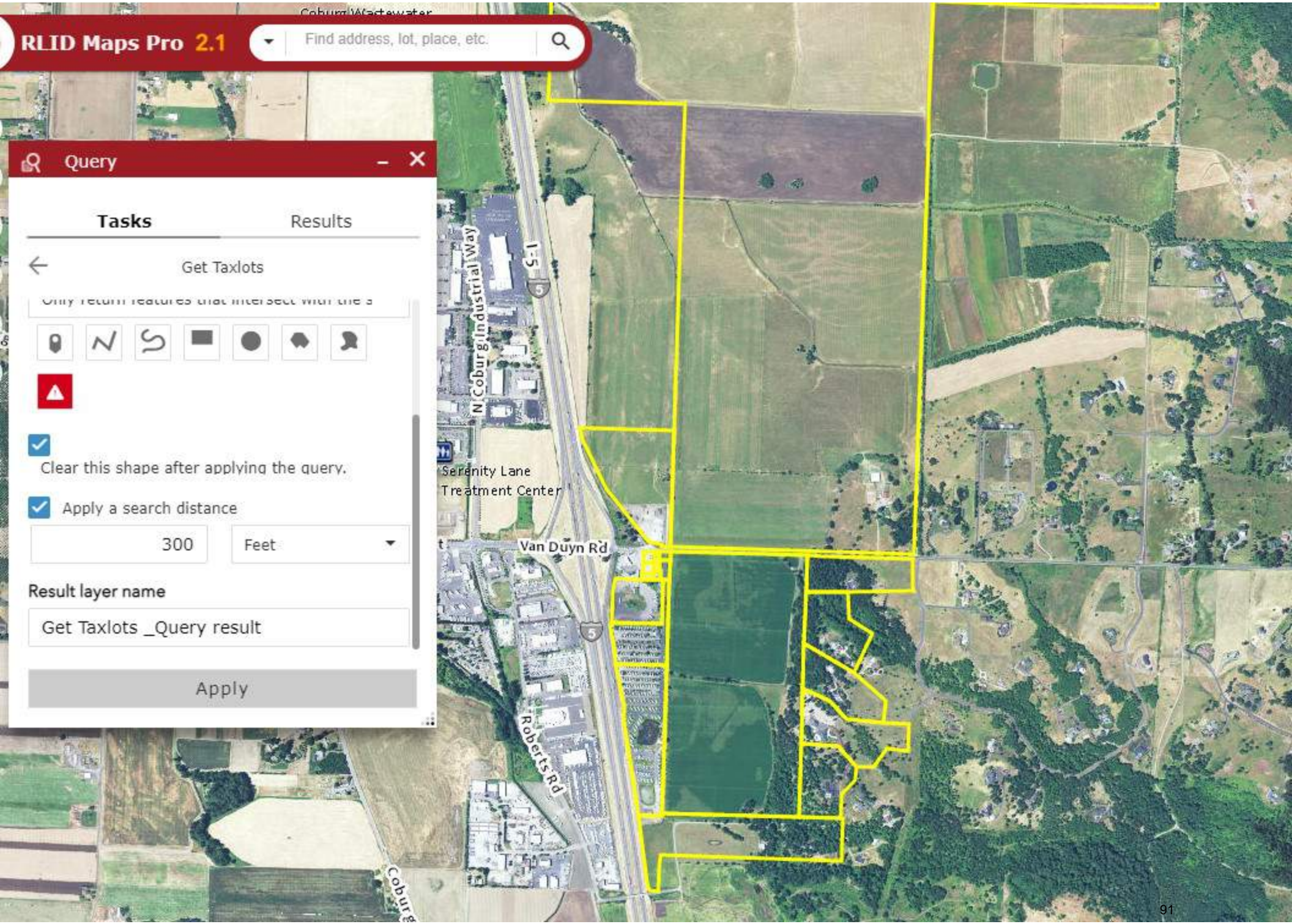
CITY OF COBURG
91136 N Willamette Street
PO Box 8316
Coburg, Oregon 97408

I, Megan E. Winner, Planner, depose and state that I posted on **November 30, 2021,** a notice for a public hearing for an ANNEXATION and ZONE CHANGE (ANX 01-20 and ZC 01-20) at Map and Tax Lot 16-03-34-00-00202 in the City of Coburg at four locations including Coburg City Hall, Coburg Post Office, Norma Pfeiffer Park shelter and Pavilion Park information kiosk.

Signature

Megan E Winner

Print Name


RLID Maps Pro 2.1
Find address, lot, place, etc.
Query
Tasks
Results
Get Taxlots
Clear this shape after applying the query.
Apply a search distance
300
Feet
Result layer name
Get Taxlots _Query result
Apply
N Coburg Industrial Way
I-5
Serenity Lane
Treatment Center
Van Duyn Rd
Roberts Rd

| NAME | ADDR1 | ADDR2 |
|---|---|---|
| KNEE DEEP CATTLE COMPANY | 33401 VAN DUYN RD | EUGENE OR 97401 |
| EUGENE PREMIER RV RESORT LLC | 16926 SW RICHEN PARK CIR | SHERWOOD OR 97140 |
| COW CREEK BAND OF UMPQUA TRIBE OF INDIANS | 2371 NE STEPHENS ST STE 100 | ROSEBURG OR 97470 |
| HARDLY HACKIT LLC | 2295 COBURG RD STE 105 | EUGENE OR 97401 |
| BURRELL PAUL M & SARA L | PO BOX 8278 | COBURG OR 97408 |
| HELFRICH MARK & KELLY MEGAN | 90531 DIAMOND RIDGE LOOP | EUGENE OR 97408 |
| GASS JEDIDIAH R & PAMELA L | 90865 MARQUISE WAY | EUGENE OR 97408 |
| EAGEN PATRICK & SALLY | 90855 MARQUISE WAY | EUGENE OR 97408 |
| ROMERO KENNETH | 90825 MARQUISE WAY | EUGENE OR 97408 |
| PAPE RYAN C & JENNIFER C | 90797 MARQUISE WAY | EUGENE OR 97408 |

ATTACHMENT D

TRAFFIC IMPACT ANALYSIS

# TAX LOT 202 ANNEXATION AND ZONE CHANGE

Coburg, Oregon

October 12, 2021

160 Madison Street, Suite A
Eugene, Oregon 97402
541.513.3376

SANDOW ENGINEERING

## EXECUTIVE SUMMARY

This report provides the Traffic Impact Analysis and findings prepared for the proposed Annexation and Zone Change for Tax lot 202 in Coburg, Oregon. The subject site is located south of Van Duyn Road east of Interstate-5 on Assessor's Map 16-03-34-00 tax lot 202. The 107-acre parcel is currently vacant and is zoned E40. The applicant is proposing to annex the site and rezone the property to Light Industrial.

The analysis evaluates the transportation impacts as per the Oregon Administrative Ruling, OAR 660-012-060, Transportation Planning Rule (TPR) evaluating conditions as per the City of Coburg, ODOT, and Lane County criteria. The analysis evaluates adjacent roadway and intersection operations with the proposed zone change for the end of the applicable planning horizon.

The analysis is required to evaluate conditions consistent with the City of Coburg Transportation System Plan. The evaluation is prepared for the PM Peak Hour for the reasonable worst-case development scenario. The reasonable worst-case development scenario has the potential to generate 720 PM Peak Hour trips.

The following report recommendations are based on the information and analysis documented in this report.

## FINDINGS

- **Pearl St at I-5 SB Ramps:** This intersection is stop-controlled with the stop approach for the southbound ramp. The proposed zone change will add a substantial number of trips to the westbound left-turn movement. The site can be developed to add up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. At 614-720 PM Peak Hour trips, the intersection will require mitigation. The mitigation at this development level is a traffic signal with protective-permissive phasing for the westbound left turn. With the trip cap at 613 trips, the intersection will operate at a v/c 0.82. With the traffic signal, the intersection will operate at LOS B and v/c 0.65, meeting the standard.
- The addition of development traffic does not substantially increase queuing conditions.
- The right turn lane at the site access on Van Duyne Rd meets the ODOT APM right turn lane criteria.
- The TPR requirements of OAR 660-012-0060 have been demonstrated to be met with the proposed zone change.

# CONTENTS

## LIST OF APPENDICES

# 1.0 BACKGROUND

## 1.1 SITE INFORMATION

This report provides the Traffic Impact Analysis and findings prepared for the proposed Annexation and Zone Change for Tax lot 202 in Coburg, Oregon. The subject site is located south of Van Duyn Road east of Interstate-5 on Assessor's Map 16-03-34-00 tax lot 202. The 107-acre parcel is currently vacant and is zoned E40. The applicant is proposing to annex the site and rezone the property to Light Industrial.

The site's only access will be direct access onto Van Duyn Road. As this is an annexation and zone change request, a site plan has not been developed, nor is it required. Therefore, there is no specificity on the number and location of access connections. The conceptual IAMP improvements illustrate one access connection along the street frontage. The evaluation considers the conceptual access provided as part of the IAMP improvements.

## 1.2 ANALYSIS SCOPE

The traffic impacts from the proposed zone change are required to be evaluated to show consistency with the Oregon Administrative Ruling, OAR 660-012-0060, Transportation Planning Rule (TPR). The TPR requires Comprehensive Plan amendments to evaluate the reasonable worst-case development potential of the site through the end of the planning horizon for the City's Transportation System Plan (TSP). The City of Coburg's locally adopted Transportation System Plan has a planning horizon date of 2030.

Lane County has a TSP planning horizon date of 2036. Additionally, ODOT requires an evaluation of ODOT facilities to include a minimum of 15 years in the future for the zone changes. To be conservative, this zone change was evaluated for the year 2036, consistent with Lane County and ODOT requirements.

The intersection evaluation is performed in accordance with the analysis criteria consistent with the City of Coburg, Lane County, and ODOT standards. The analysis evaluates the surrounding infrastructure for Transportation Planning Rule consistency. The Scope of Works coordinated by Sandow Engineering and the City of Coburg, ODOT, and Lane County are included in Appendix A, which establishes evaluation criteria for off-site impacts. Traffic analysis is performed for the weekday 4:00 PM to 6:00 PM peak period at the following locations:

- Van Duyn Rd at I-5 SB Ramps
- Pearl Street/Van Duyn Rd at I-5 NB Ramps
- Pearl Street at Coburg Industrial Way
- Pearl Street at Willamette Street

- Willamette Street at E Van Duyn St/Coburg Rd
- Coburg Rd at Coburg Bottom Loop Rd/Coburg Rd N

The operational analysis is performed at the studied intersections during the PM peak hour of the system for the existing year (year 2021) and for the 15-year planning horizon (year 2036) with and without the zone change.

# 2.0 EXISTING ROADWAY CONDITIONS

## 2.1 STREET NETWORK

Streets included within the study are Van Duyn Rd, Pearl Street, and Willamette Street. The roadway characteristics within the study area are included in Table 1. Figure 1 provides a map of the site location and study area. Figure 2 illustrates the study area intersection geometry and access control.

TABLE 1: ROADWAY CHARACTERISTICS WITHIN STUDY AREA

| Characteristic | Van Duyn Road | Pearl Street | Willamette Street | Coburg Road (north of Willamette St) |
|---|---|---|---|---|
| **Jurisdiction** | Lane County/ODOT | Lane County | Lane County | Lane County |
| **Functional Classification** | Rural Local | Urban Minor Arterial | Urban Minor Arterial | Urban Minor Arterial/ Rural Major Collector |
| **Lanes per Direction** | 1 | 1-2 | 1 | 1 |
| **Center Left Turn Lane** | None | Left Turn Pockets | None | None |
| **Restrictions in the Median** | None | Yes | None | None |
| **Bikes Lanes Present** | None | Yes | Yes | Yes |
| **Sidewalks Present** | No | Yes | Yes | Yes |
| **Transit Route** | No | West of Coburg Industrial Way | South of Pearl St | No |
| **On-Street Parking** | No | No | Yes | No |
| **Vertical or Horizontal Sight Limitations** | None | None | None | None |

## 2.2 CRASH ANALYSIS

A crash estimation was performed for the study area intersections. The analysis investigates crash data available for the most recent 5 years, 1/1/2015-12/31/2019, to determine a crash rate in crashes per million entering vehicles and the type of crashes that occurred. The crash analysis follows the Critical Crash Rate methodology outlined in ODOT's Analysis Procedures Manual. The calculated intersection crash rates are compared to the critical crash rate for the City of Coburg intersections and the Statewide 90th percentile crash rate for the ODOT intersections. If the calculated crash rate exceeds the critical crash rate, the location is investigated for further mitigation measures. Crash data was provided by ODOT for the study area and is included in Appendix B. The results of the crash analysis are provided in Table 2.

TABLE 2: INTERSECTION CRASH DATA- MEDFORD INTERSECTIONS

| Location | Intersection Type | Number of Crashes | ADT | MEV | Crash Rate | Critical Crash Rate | |
|---|---|---|---|---|---|---|---|
| **Pearl St at Willamette St** | Signal | 3 | 9380 | 17.12 | 0.18 | 0.56 | under |
| **Pearl St at Coburg Industrial Way** | Signal | 6 | 10,150 | 18.52 | 0.32 | 0.55 | under |
| **Pearl St at I-5 SB Ramps** | Stop | 6 | 6060 | 11.06 | 0.54 | 0.59<br>1.080* | under |
| **Pearl St at I-5 NB Ramps** | Signal | 5 | 533 | 9.73 | 0.51 | 0.65<br>0.579* | under |
| **Willamette at Coburg/Van Duyn** | Stop | 2 | 6590 | 12.03 | 0.17 | 0.58 | under |
| **Coburg at Coburg Bottom Loop** | Stop | 2 | 6720 | 12.26 | 0.16 | 0.57 | under |

*ODOT 90th percentile crash rate

As illustrated within Table 2, the crash rate for the study area intersections does not exceed the critical crash rate or the 90th percentile crash rate. Therefore, there is no mitigation required.

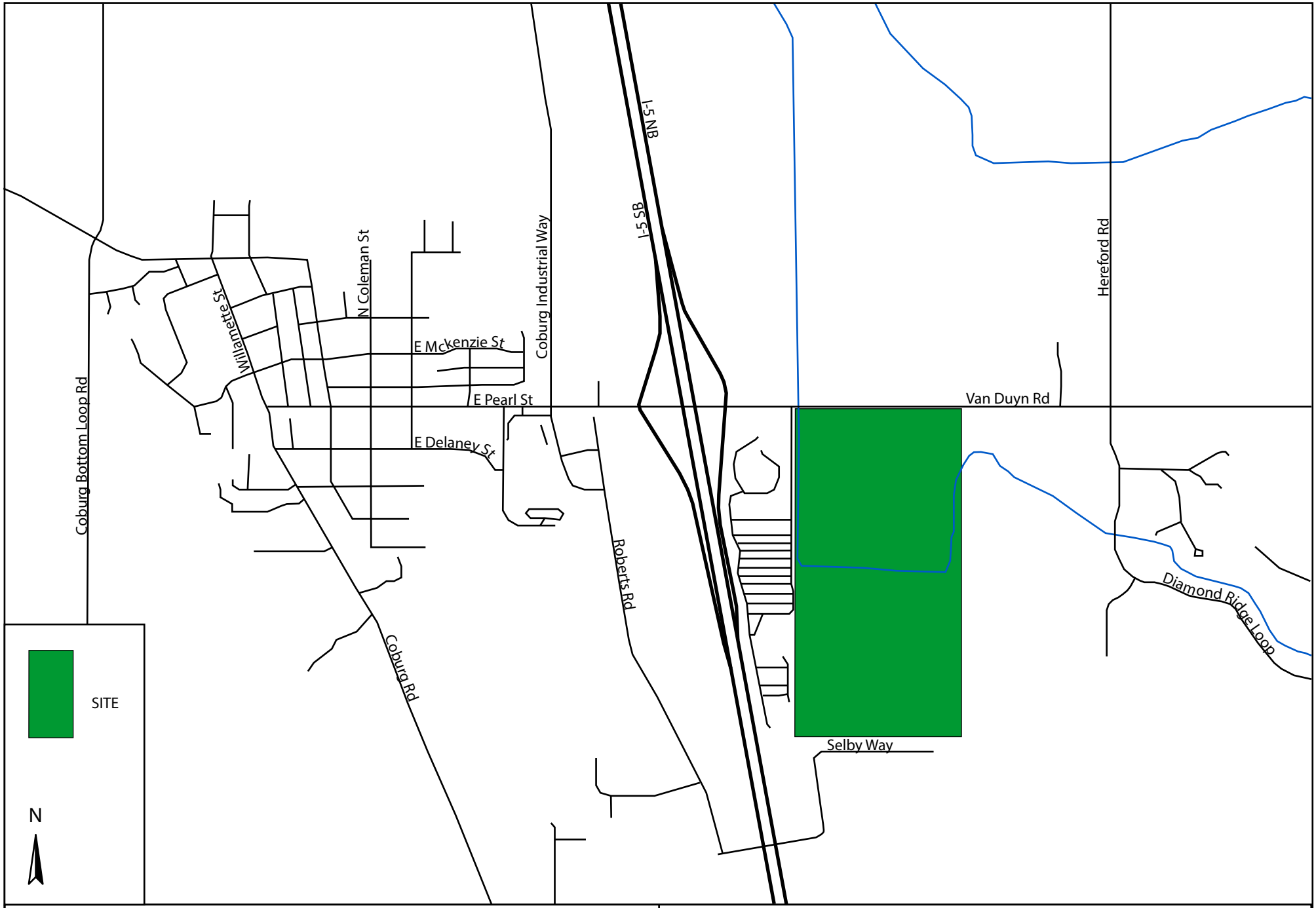



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Figure 1: Site Location and Vicinity Map

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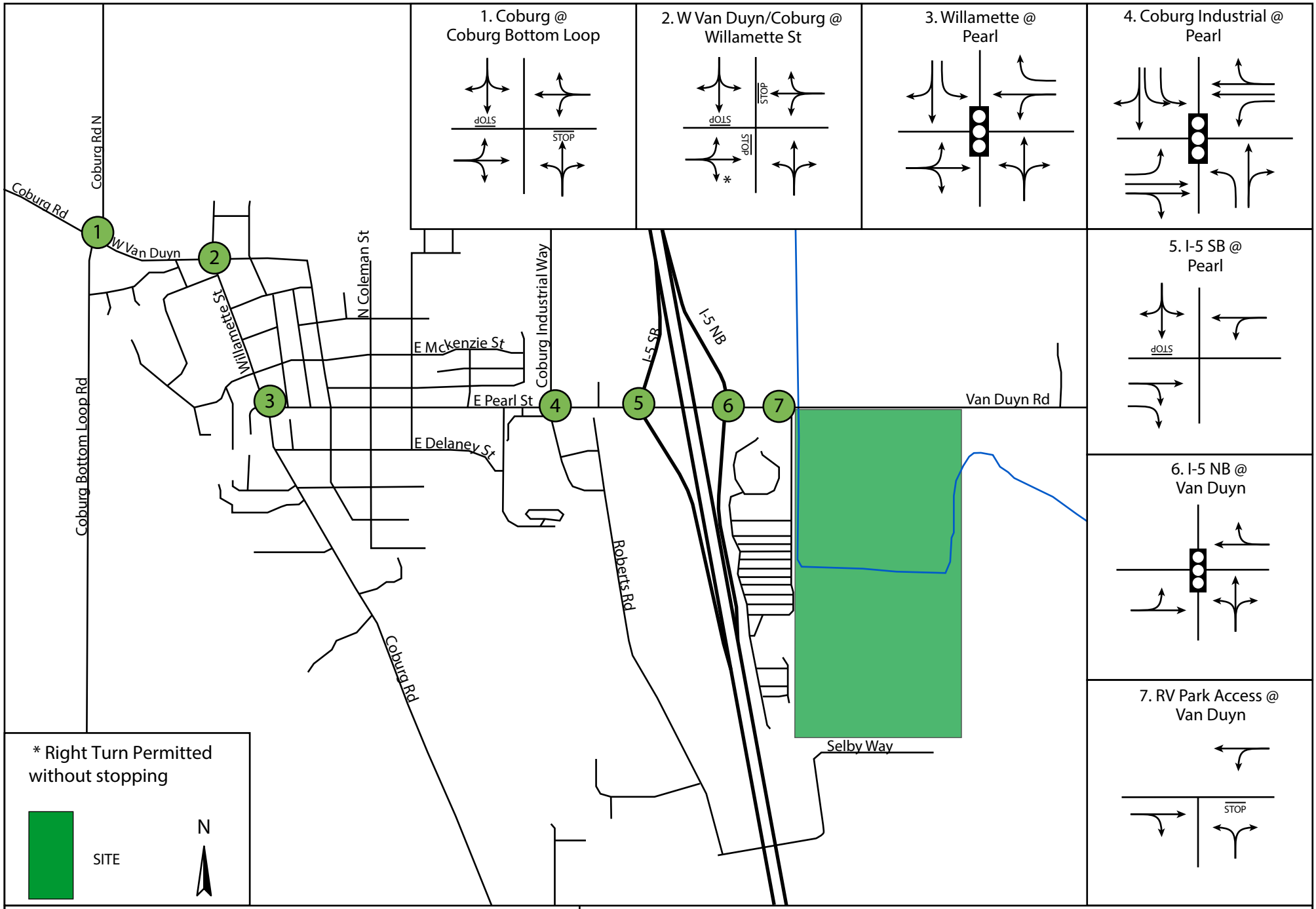


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Figure 2: Existing Intersection Control and Lane Configuration

# 3.0 DEVELOPMENT TRIP GENERATION AND DISTRIBUTION

The Transportation Planning Rule requires an evaluation when zone changes increase vehicle trips on the adjacent roadway when compared to the existing zoning. The analysis is required to evaluate the reasonable worst case development scenario. The following provides the trip generation estimate for the existing and proposed zoning.

**Existing Zoning**

The existing zoning of Tax Lot 202 is EFR-40. The reasonable worst case development scenario for the 107 acres under the EFR-40 zoning is 2 homes. The property is anticipated to generate 2 PM peak hour trips with the existing zoning.

**Proposed zoning**

The proposed zoning is Light Industrial. As per the City of Coburg development code, the following are assumptions made for possible development on site:

- Maximum lot coverage of 80%
- Landscaping at 15%
- Assume parking ratio of 1 stall per 750 sf building
- Need large areas for truck drive aisles and parking

Based on this data, it is estimated that the maximum building floor area is 1,800,000 sf.

The trips for the building square footage are estimated using ITE Code 130-Industrial Park. This land use is the most reasonable as this land use is a mix of manufacturing, service, and warehouse facilities with a mix of small businesses and large businesses. The trip generation is estimated using the estimated building square footage; there is no trip generation rate for acreage. Table 3 illustrates the trip generation estimate.

TABLE 3: TRIP GENERATION

| ITE Land Use | Size | Trip Generation | | | | | |
|---|---|---|---|---|---|---|---|
| | | Rate | Trips | %IN | %OUT | IN | OUT |
| **PM Peak Hour** | | | | | | | |
| **130-Industrial Park** | 1,800 ksf | 0.40 | 720 | 21% | 79% | 151 | 569 |
| **ADT** | | | | | | | |
| **130-Industrial Park** | 1,800 ksf | EQN | 1,220 | 50% | 50% | 2110 | 2110 |

EQN: ln(T)=0.52ln(x)+4.45

The existing travel patterns from the traffic counts are used to estimate how the development trips will use the surrounding transportation system to access the site. The trips are distributed through the study area based on those existing travel patterns as described below:

| | | out | in |
|---|---|---|---|
| To Coburg | | 20% | 20% |
| I-5 | NB | 12% | 60% |
| | SB | 68% | 20% |

Between Willamette St and Coburg Industrial Way there are several City streets that serve a majority of the residential neighborhoods. It is estimated that 5% of development trips will be to/from these neighborhoods.

The traffic volumes were distributed within the study area according to the percentages above and are illustrated in Figure 3.

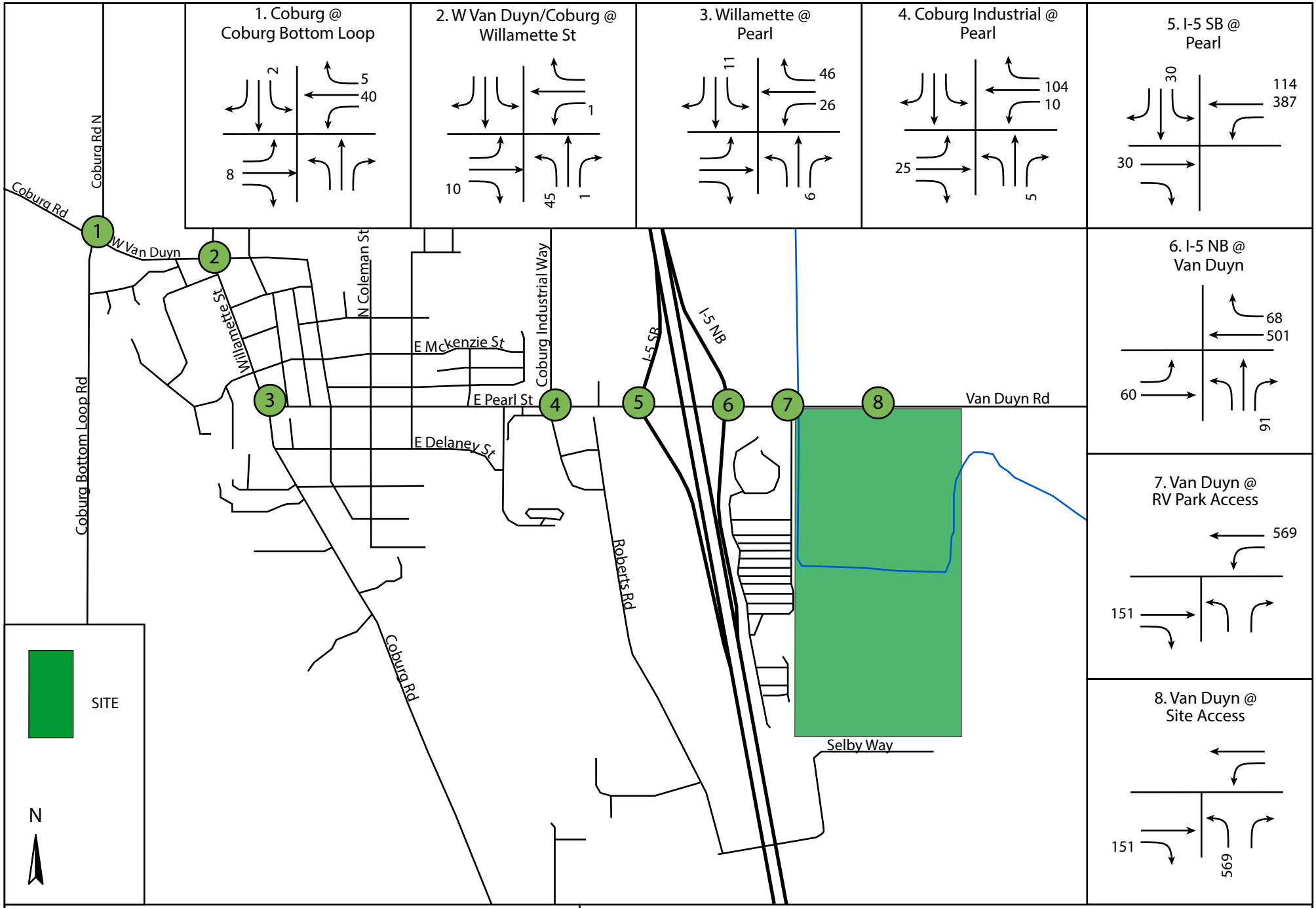


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Figure 3: Development Trip Distribution

# 4.0 BACKGROUND TRAFFIC VOLUMES

## 4.1 INTERSECTION COUNTS

As part of the analysis, peak hour turning movement counts were collected at the study area intersections during for the weekday peak period of 4:00 PM to 6:00 PM. The turning movement counts illustrate that the peak of the count periods occurred between 4:30 PM and 5:30 PM. Table 4 provides the dates for the traffic counts.

The traffic volumes are included in Appendix C.

TABLE 4: TURNING MOVEMENT COUNT DATES

| Location | Count Date |
|---|---|
| **Pearl St at Willamette St** | April 13, 2021 |
| **Pearl St at Coburg Industrial Way** | January 28, 2021 |
| **Pearl St at I-5 SB Ramps** | April 15, 2021 |
| **Pearl St at I-5 NB Ramps** | April 20, 2021 |
| **Willamette at Coburg/Van Duyn** | July 13, 2021 |
| **Coburg at Coburg Bottom Loop** | July 15, 2021 |
| **Van Duyn at RV Access** | July 14, 2021 |

## 4.2 VOLUME ADJUSTMENT

**Covid Adjustment**

Traffic volumes for the study area intersection were collected January, April, and July in 2021. Since March 2020, traffic volumes have been generally affected by Covid-19 shutdowns. Therefore, the traffic volumes are adjusted to represent traffic levels during pre-Covid-19 times. ODOT has been collecting traffic volumes on state highways during the Covid-19 shutdowns and comparing the traffic volumes to pre Covid-19 data.

One count was taken on 1/28/21 (previous study). As per the Feb 1, 2021, ODOT report counts at this time show a statewide overall reduction in trips of 13% when compared to 2019 volumes. The analysis has been updated to include a 1.13 factor for this intersection.

Three counts were taken in April. The ODOT report dated May 7, 2021, shows that during this time the I-5 corridor south of Portland within the Willamette Valley the volumes are 3% lower during this time frame than the 2019 volumes. In general traffic volumes fluctuate throughout the years and a 3% fluctuation would not be considered significant enough to warrant a traffic volume adjustment. Daily fluctuations in traffic could be as much as 10%. The 3% is within the typical margin of daily fluctuation. As requested, the traffic volumes taken in April were revised to include a 1.03 factor.

Three counts were taken in July. Updated data for this time period has not been provided by ODOT. The July 9, 2021, report shows that the July data is 8-13% higher than traffic volumes at this time in 2019 on I-5 south of Portland in the Willamette Valley. Therefore, there is not further adjustment needed for these counts.

**Seasonal Adjustment Factor (SAF):**

The City of Coburg experiences a seasonal fluctuation associated with commuter trends. This is reasonable as most residents work outside of Coburg and there are no recreational or other tourist destinations that influence vehicle travel patterns. In general, any counts taken during typical business days (outside of holidays) will reflect the commuter trend as normal business operations do not fluctuate seasonally. To be conservative, the evaluation has been prepared using the ODOT Seasonal Adjustment Trend data for commute trends. Using the ODOT Seasonal Trend Table, the SAF for the city intersections are:

- January= 1.19
- April= 1.04
- July= 1.02

The I-5 ramps at the Coburg Interchange are also heavily influenced by commuter trips, as the area adjacent to the interchange is heavily developed with industrial and commercial development, a majority of the Coburg residents work outside of the city, and the area is not a recreational destination or serves as a route to recreational areas from I-5. Therefore, as stated above, any count taken during the typical commuter travel should be representative of the typical volumes and seasonal adjustment would not be necessary. However, to be conservative, a SAF is applied to the I-5 ramp intersections.

Following ODOT Analysis Procedures Manual for SAF:

1. There are no ATRs within the study area.

2. Using the ATR characteristic table, the only ATR that is applicable is ATR 24-001. ATR 24-001 has an ADT of 13,000. The ramps have an estimated ADT of 11,000. ATR 24-001 is within 10% of our site ADT. The closest ATR is ATR 22-016. This ATR is on I-5 and, therefore more heavily influenced by seasonal fluctuations that are seen outside of the City of Coburg. Additionally, the ADT at this ATR is 42,500, exceeding the 10% volume difference threshold for using ATR data. Therefore, this ATR should not be used. Using ATR 24-001, the SAF for the I-5 ramp counts (April count) is 1.13.

3. ODOT Seasonal Trend Table: The most appropriate trends for this area are the commuter and summer trends. The SAF for the April counts for the ramps are:

    - Commuter: 1.04
    - Summer: 1.22

The appropriate methodology is to average the two SAF's. The average SAF is 1.13.

As sated previously, counts taken during the typical commute times represent the typical traffic volumes and should not need to be seasonally adjusted. As a conservative analysis, the SAF 1.13 will be applied to the ODOT ramps.

## 4.3 FUTURE YEAR BACKGROUND VOLUMES

Consistent with the traffic impact analysis criteria, the intersections were evaluated for the existing conditions (year 2021) and the 15-year planning horizon, the year 2036. To account for naturally occurring traffic increased between the count year and the future analysis year, an annual growth rate was applied. The City of Coburg's Transportation Demand Model, provided by LCOG is used to estimate growth within the study area. The LCOG TDM models are provided for the PM Peak Hour for the base year 2011 and the future year 2035. The traffic volume data were extrapolated to determine the growth rate on each roadway. The growth rate data is shown in Appendix C. The growth rates are applied to the year 2021 traffic volumes to estimate the year 2036 volumes.

## 4.4 FINAL TRAFFIC VOLUMES

The existing traffic volumes were adjusted according to the methodology described above. Appendix C provides the traffic volume calculations. The development trips are added to the background traffic to volume to represent the build conditions. Figure 4 illustrates the year 2021 background traffic volumes. Figure 5 illustrates the year 2036 PM Peak hour background traffic volumes. Figure 6 illustrates the year 2036 PM peak hour traffic volumes with the proposed zone change.

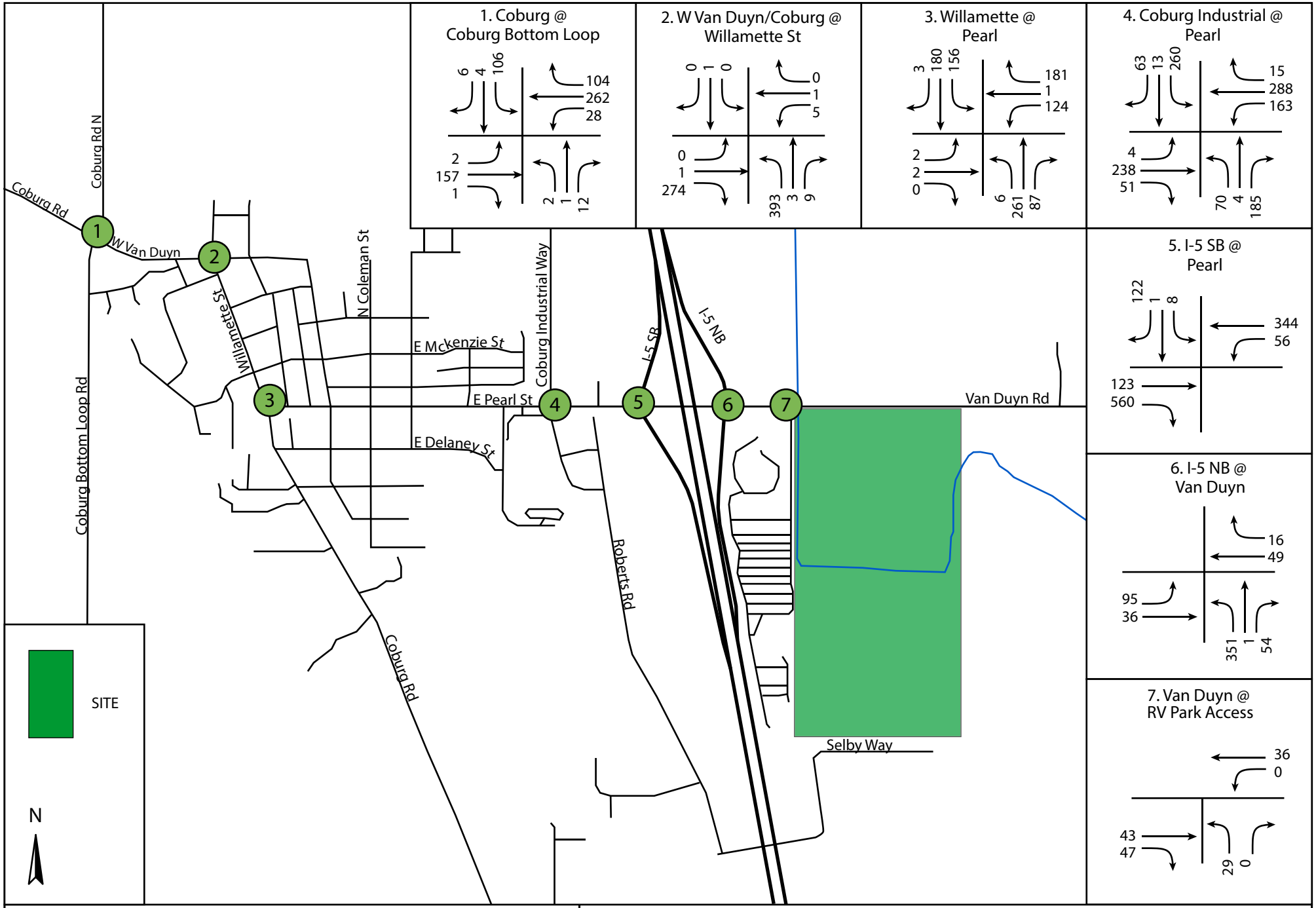


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Figure 4: Year 2021 Background Peak Hour Traffic Volumes

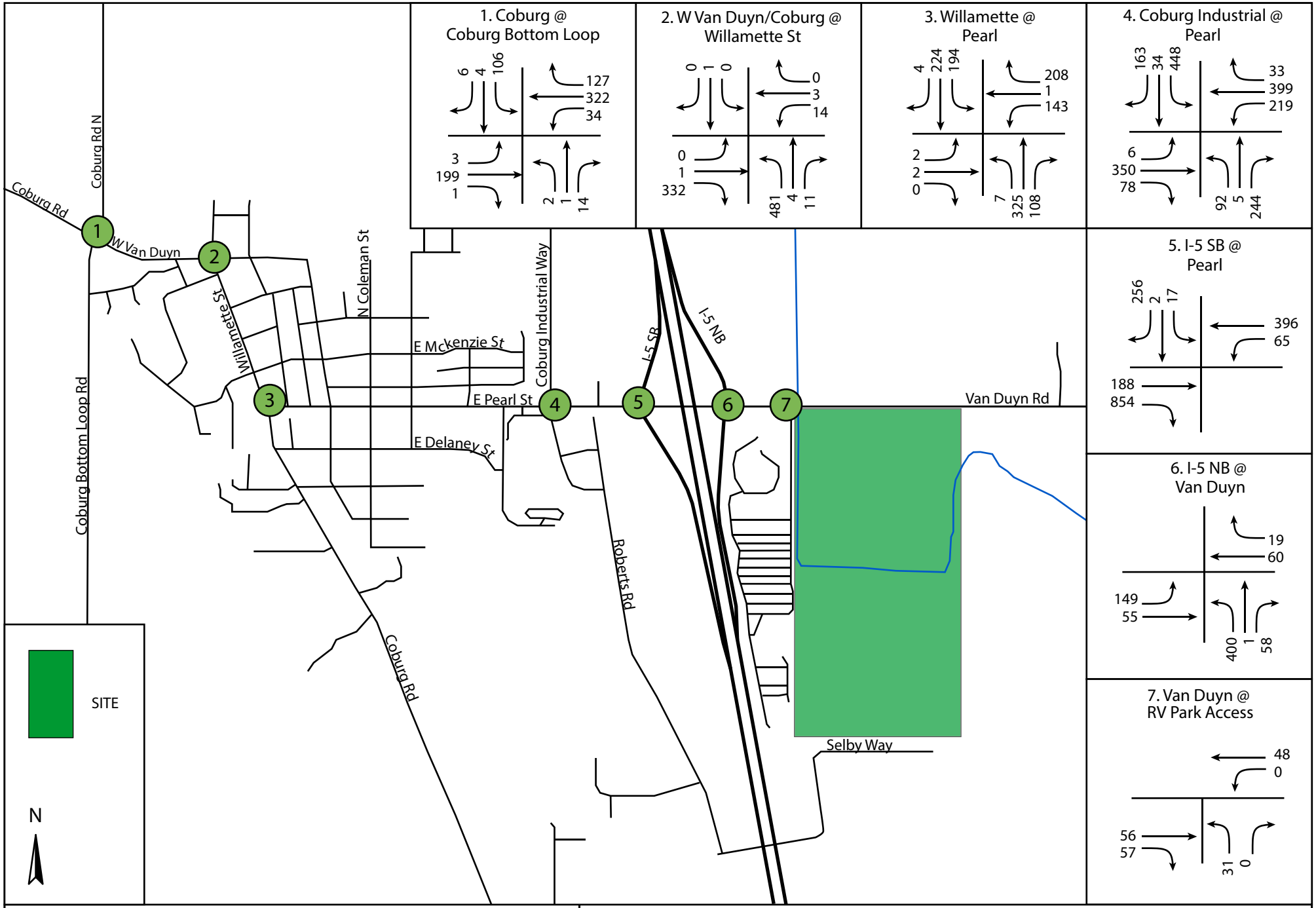


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Figure 5: Year 2036 Background Peak Hour Traffic Volumes

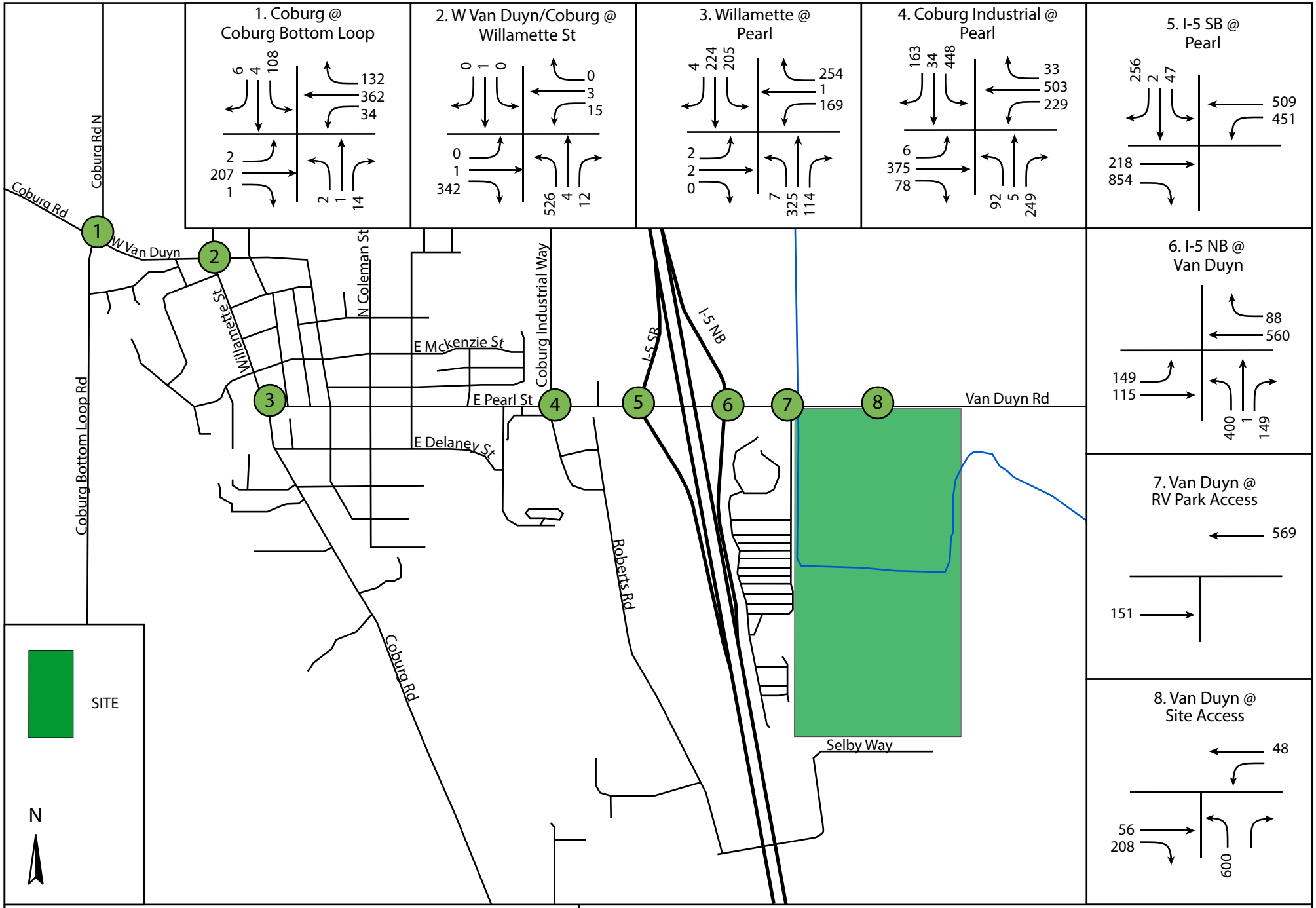


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Figure 6: Year 2036 With Development

# 5.0 ROADWAY IMPROVEMENTS

The Coburg Interchange Aria Management Plan, IAMP, dated January 2010, has identified improvements to facilitate growth in the area. Branch Engineering has provided an updated design for the IAMP improvements. The conceptual design layout is provided in Appendix D. In summary, the improvements are:

- I-5 SB Ramp: Addition of second westbound through lane. Addition of separate westbound left-turn lane.
- I-5 NB Ramp: Add eastbound left-turn lane, add northbound left-turn lane, add westbound right turn lane, add second eastbound through lane, and second westbound through lane.
- Van Duyn at site entrance: Add two eastbound travel lanes and two westbound travel lanes west of the entrance. Relocate the RV park access to shared access with the site. Add eastbound left-turn pocket and separate northbound left and right turn pockets.

The interchange improvements do not have a completion date, and the project is not included in the current STIP 2021-2024 does not show these improvements. As per OAR-660-012-0060(4)(C)(B) if there is an adopted IAMP, the improvements from the IAMP can reasonably be assumed to be completed with the planning horizon. The planning horizon for the IAMP is the year 2031. Therefore, the improvements can reasonably be assumed to be completed by the year 2036. The interchange improvements were added to the year 2036 background and with zone change conditions.

The IAMP includes the relocation of the RV Park entrance to a shared entrance with the subject site. A PM Peak hour traffic count was taken at the RV park entrance. The traffic volumes entering and exiting the RV Park were relocated to the site access for the year 2036 conditions. The traffic volumes are provided in Appendix C.

# 6.0 INTERSECTION ANALYSIS

## 6.1 PERFORMANCE MEASURES

The intersections are evaluated using the Highway Capacity Manual (HCM) defined level of service (LOS) and the volume-to-capacity ratio (v/c).

LOS is a concept developed to quantify the degree of comfort (including such elements as travel time, number of stops, total amount of stopped delay, and impediments caused by other vehicles) afforded to drivers as they travel through an intersection or along a roadway segment. It was developed to quantify the quality of service of transportation facilities.

LOS is based on average delay, defined as the average total elapsed time from when a vehicle stops at the end of a queue until the vehicle departs from the stop line. The average delay is measured in seconds per vehicle per hour and then translated into a grade or "level of service" for each intersection. LOS ranges from A to F, with A indicating the most desirable condition and F indicating the most unsatisfactory condition.

The LOS criteria, as defined by the Highway Capacity Manual, for signalized intersections, are provided in Table 5.

TABLE 5: HCM LEVEL OF SERVICE FOR INTERSECTIONS

| | **Stopped Delay Per Vehicle (Seconds per Vehicle)** | |
|---|---|---|
| | **Unsignalized Intersections** | **Signalized Intersections** |
| **A** | ≤ 10.0 | ≤ 10 |
| **B** | > 10.0 and ≤ 15.0 | > 10 and ≤ 20 |
| **C** | > 15.0 and ≤ 25.0 | > 20 and ≤ 35 |
| **D** | > 25.0 and ≤ 35.0 | > 35 and ≤ 55 |
| **E** | > 35.0 and ≤ 50.0 | > 55 and ≤ 80 |
| **F** | > 50.0 | > 80 |

The volume-to-capacity ratio describes the capability of an intersection to meet volume demand based upon the maximum number of vehicles that could be served in an hour.

The City of Coburg has a mobility standard of LOS D for intersections within their jurisdiction.

Pearl Street and Coburg Rd are Lane County's jurisdiction. Intersections along Pearl Street need to comply with Lane County standards. Lane County has a LOS standard of E and a v/c Standard of 0.85 for intersections.

V/C is the threshold for which ODOT evaluates the operation of intersections, as defined by the *1999 Oregon Highway Plan*. V/C thresholds are defined based on roadway classification and speed. As per the Oregon Highway Plan, the signalized intersections at ramp terminals have a v/c ratio of 0.85. As per the Analysis Procedures Manual, the v/c ratio for ODOT intersections uses the HCM 6 Methodology.

### 6.2 INTERSECTION ANALYSIS RESULTS

A performance analysis was conducted for the studied intersections for the Year 2021 and 2036 conditions for the PM peak hour. The intersection evaluation was performed using Synchro 10. The results are shown in Table 6. The SYNCHRO outputs are provided in Appendix E.

TABLE 6: INTERSECTION PERFORMANCE: WEEKDAY PM PEAK HOUR

| Intersection | Mobility Standard LOS, v/c | 2021 Background | 2036 Background | 2036 Build |
|---|---|---|---|---|
| **Van Duyn at I-5 NB Ramps** | 0.85 | B, 0.42 | B, 0.49 | C, 0.62 |
| **Van Duyn/Pearl St at I-5 SB Ramp** | 0.85 | B, 0.22 | C, 0.38 | F, 1.23 |
| **Coburg Industrial Way at Pearl St** | E, 0.85 | D, 0.63 | D, 0.80 | D, 0.81 |
| **Pearl Street at Willamette Street** | E, 0.85 | B, 0.58 | B, 0.68 | B, 0.77 |
| **Coburg Rd at Coburg Bottom Loop** | E, 0.85 | C, 0.29 | C, 0.36 | C, 0.39 |
| **Willamette St at Van Duyne** | E, 0.85 | C, 0.25 | D, 0.31 | D, 0.34 |
| **Van Duyn at Site Access** | E, 0.85 | N/A | N/A | C, 0.71 |

As illustrated in Table 6, the intersection of Pearl St at I-5 SB Ramp; does not meet the ODOT v/c standard with the full potential build-out of the site. All other intersections will meet the standard.

## 7.0 QUEUE ANALYSIS

A queuing analysis was conducted for the studied intersections. The analysis was performed using SimTraffic 10, a microsimulation software tool that uses the HCM defined criteria to estimate the queuing of vehicles within the study area. The average and 95$^{th}$ percentile queuing results are illustrated in Table 7 for the PM peak hour. All results are rounded to 25 feet to represent the total number of vehicles in the queue, as one vehicle typically occupies 25 feet of space. The SimTraffic outputs are provided in Appendix F.

TABLE 7: INTERSECTION QUEUING: WEEKDAY PM PEAK HOUR

| Intersection | | | Available Storage (Feet) | 2021 Background (Feet) | | 2036 Background (Feet) | | 2036 Build (Feet) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Average | 95th | Average | 95th | Average | 95th |
| **N Willamette St @ E Pearl St** | EB | LTR | 100 | 25 | 25 | 25 | 25 | 25 | 25 |
| | WB | LT | 110 | 75 | 125 | 100 | 225 | 100 | 225 |
| | | R | 110 | 75 | 125 | 75 | 150 | 100 | 150 |
| | NB | LTR | 330 | 100 | 175 | 125 | 225 | 150 | 275 |
| | SB | L | 150 | 50 | 100 | 75 | 125 | 100 | 150 |
| | | TR | 260 | 50 | 100 | 50 | 100 | 75 | 150 |
| **Coburg Industrial Way @ E Pearl St** | EB | L | 110 | 25 | 50 | 25 | 50 | 25 | 50 |
| | | T | 300 | 100 | 150 | 150 | 225 | 150 | 250 |
| | | TR | 300 | 100 | 150 | 150 | 225 | 150 | 225 |
| | WB | L | 320 | 125 | 225 | 175 | 300 | 200 | 325 |
| | | T | 710 | 100 | 175 | 175 | 325 | 200 | 400 |
| | | TR | 710 | 50 | 125 | 125 | 300 | 150 | 325 |
| | NB | L | 220 | 50 | 100 | 75 | 150 | 75 | 125 |
| | | TR | 380 | 75 | 125 | 100 | 250 | 100 | 150 |
| | SB | L | 240 | 75 | 150 | 175 | 250 | 175 | 250 |
| | | L | 240 | 125 | 200 | 200 | 300 | 200 | 275 |
| | | TR | 970 | 25 | 75 | 100 | 200 | 100 | 200 |
| **I-5 SB Exit @ E Pearl St** | EB | TR | 700 | 25 | 25 | 50 | 125 | 125 | 250 |
| | | R | 700 | 0 | 0 | 25 | 75 | 50 | 200 |
| | WB | L | 670 | n/a | n/a | 25 | 50 | 125 | 200 |
| | | T | 670 | 25 | 75 | 25 | 25 | 25 | 25 |
| | SB | L | 25 | 25 | 50 | 25 | 75 | 50 | 100 |
| | | TR | 1000+ | 75 | 100 | 100 | 200 | 250 | 600 |
| **I-5 NB Exit @ Van Duyn Rd** | EB | LT | 670 | 100 | 175 | n/a | n/a | n/a | n/a |
| | | L | 270 | n/a | n/a | 100 | 200 | 125 | 200 |
| | | T | 670 | n/a | n/a | 50 | 100 | 50 | 100 |
| | WB | TR | 150 | 50 | 100 | n/a | n/a | n/a | n/a |
| | | T | 520 | n/a | n/a | 50 | 100 | 175 | 250 |
| | | R | 520 | n/a | n/a | 25 | 50 | 50 | 75 |
| | NB | L | 1000+ | n/a | n/a | 100 | 175 | 175 | 275 |
| | | LTR | 1000+ | 75 | 150 | 50 | 125 | 125 | 225 |
| **Site Access @ Van Duyn Rd** | EB | T | 730 | n/a | n/a | n/a | n/a | 0 | 0 |
| | | R | 200 | n/a | n/a | n/a | n/a | 0 | 0 |
| | WB | LT | 1000+ | n/a | n/a | n/a | n/a | n/a | n/a |
| | | L | 100 | n/a | n/a | n/a | n/a | 100 | 200 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | NB | T | 100 | n/a | n/a | n/a | n/a | 0 | 0 |
| **N Willamette St @ Coburg Rd** | EB | LTR | 250 | 25 | 50 | 25 | 50 | 25 | 50 |
| | WB | LTR | 250 | 25 | 25 | 25 | 50 | 25 | 50 |
| | NB | LTR | 110 | 25 | 25 | 0 | 0 | 0 | 25 |
| | SB | LTR | 350 | 0 | 0 | 25 | 25 | 0 | 0 |
| **Coburg Bottom Loop Rd @ Coburg Rd** | EB | LTR | 500 | 25 | 25 | 25 | 25 | 25 | 25 |
| | WB | LTR | 650 | 25 | 50 | 25 | 50 | 25 | 50 |
| | NB | LTR | 500 | 25 | 50 | 25 | 50 | 25 | 50 |
| | SB | LTR | 500 | 50 | 75 | 50 | 75 | 50 | 100 |

As demonstrated in Table 7, the addition of development traffic increases the queuing at the I-5 NB ramps and I-5 SB Ramps.

## 8.0 MITIGATION

As shown in Table 5, the I-5 NB and SB ramps will not meet the standards with the reasonable worst-case development scenario with the proposed zone change. The following provides the recommended mitigation measures for the intersections.

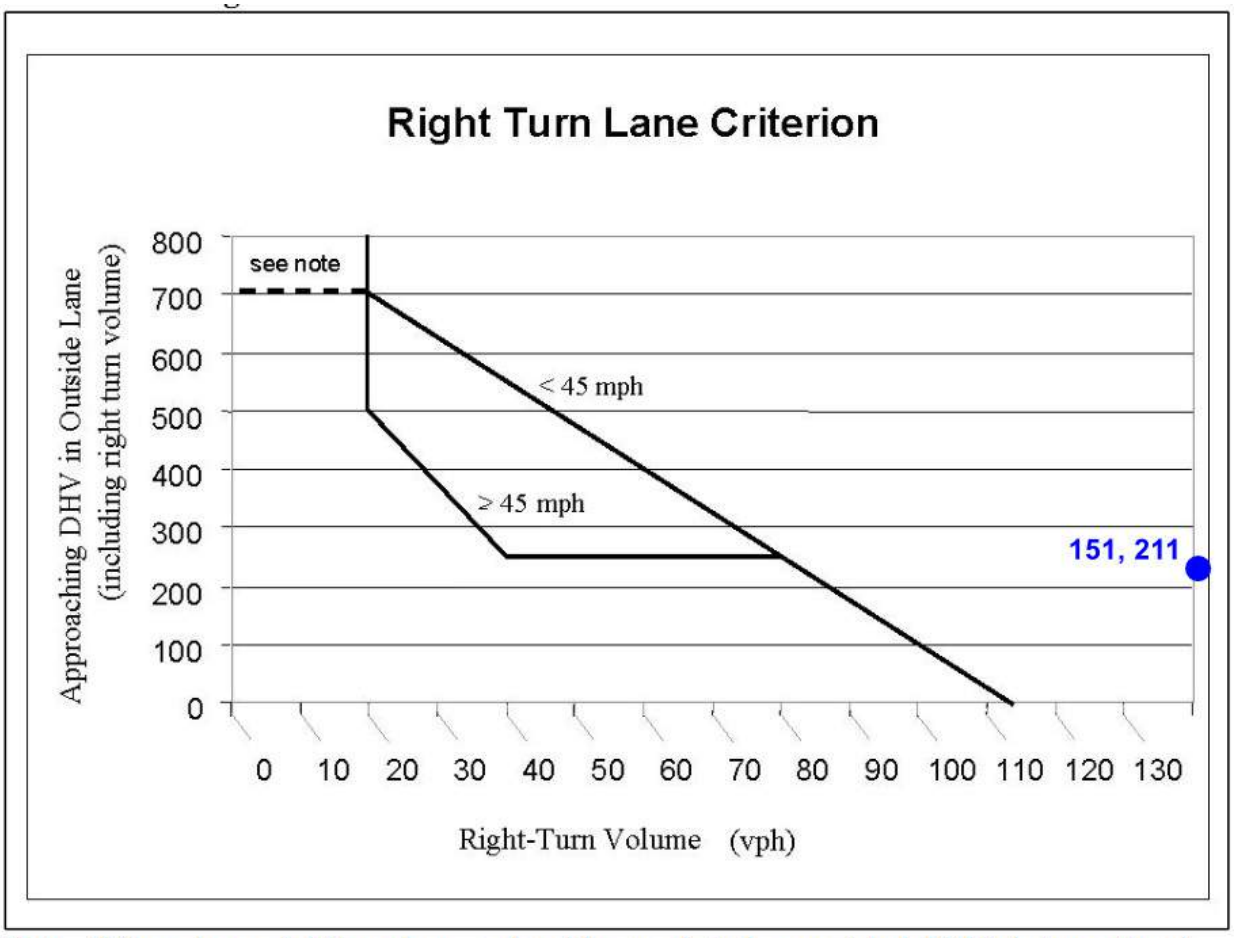
**Pearl St at I-5 SB Ramps:** This intersection is stop-controlled with the stop approach for the southbound ramp. The proposed zone change will add a substantial number of trips to the westbound left-turn movement. The site can be developed to add up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. At 614-720 PM Peak Hour trips, the intersection will require mitigation. The mitigation at this development level is a traffic signal with protective-permissive phasing for the westbound left turn. With the trip cap at 613 trips, the intersection will operate at a v/c 0.82. With the traffic signal, the intersection will operate at LOS B and v/c 0.65, meeting the standard. Appendix G contains the HCM outputs.

The ODOT Preliminary Traffic Signal Warrant analysis was performed for this intersection. The warrant considers traffic volumes based on the MUTCD Warrant 1. The warrant analysis was performed for the year 2036 with full build out and considers the 70% warrant criteria based on the current population of Coburg. The preliminary warrant is provided in Appendix G. The traffic volumes are not met for Case A or Case B when the discount for the right turns for the SB approach is considered. However, the traffic volumes for Case B are just under the threshold. It is recommended that a new warrant analysis be prepared when the development

exceeds the trip cap threshold of 613 trips. At this time traffic volumes may have changes enough in the area to meet the volume threshold.

## 9.0 RIGHT TURN LANE WARRANT

A right turn lane warrant was prepared for the site access to Van Duyne Rd. ODOT Analysis Procedures Manual, APM, has three criteria for determining when a separate right-turn pocket should be installed. Criterion 1 is the comparison of right-turn traffic volumes to approaching traffic volumes. As per Figure 7, during the year 2036 PM peak hour, there are 151 right turns, 211 approaching volumes, and the speed of Van Duyne Rd is 45 mph. The illustration below shows the right turn lane criterion.




Note: If there is no right turn lane, a shoulder needs to be provided. If this intersection is in a rural area and is a connection to a public street, a right turn lane is needed.

As shown in the illustration, a right turn lane is warranted for the eastbound right-turn movement at the site access for the PM peak hour. While not required for the analysis, the right turn into the site during the AM peak hour is anticipated to be over 500 trips. Therefore, the right turn will be warranted for the AM peak hour.

## 10.0 PEDESTRIAN AND BICYCLE CONNECTIVITY

Currently, there are no separated bicycle and pedestrian facilities between the site and the I-5 SB ramp intersection. The IAMP improvement will provide sidewalks and separated bike lanes between the site access and I-5 SB Ramps. The applicant will provide the applicable pedestrian and bicycle facilities internal to the site and will provide the site frontage improvements as required by the City.

The frontage improvements and IAMP improvements to the bike and pedestrian facilities are adequate for safe and efficient travel between this site and the nearest existing pedestrian facilities.

## 11.0 TRANSPORTATION PLANNING RULE

Consistent with the Transportations Rule (TPR), the following elaborates on how this development meets the TPR requirements.

*Goal 12, (OAR) 660-12-0060 (1) requires that a local government ensures that an amendment to a functional plan, an acknowledged comprehensive plan, or a land-use regulation (including a zoning map) does not significantly affect an existing or planned transportation facility. A plan or land use amendment significantly affects a transportation facility if it would:*

> *"(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan).*

The development area will be adding traffic volumes to the following streets:

- Van Duyn Rd-Local Street
- E Pearl St- Minor Arterial
- Willamette Street-Minor Arterial
- W Van Duyn St-Minor Arterial

Van Duyn Rd is currently classified as a local street. the City of Coburg's TSP recommended a reclassification of Collector level street. The proposed improvements to Van Duyn will be sufficient to handle the level of traffic proposed. A change of functional classification is not needed to support the development trips.

The street classification of Pearl St, Willamette St, and W Van Dun St are Minor Arterials. The street cross section and is sufficient to hand the level of traffic from the proposed development. A change in street classification is not necessary to support the development trips. This standard is met.

*(b) Change standards implementing a functional classification system; or*

The standards are based on ADT, street connectivity, spacing of streets, mix and amounts of travel modes, and mobility. The proposed zone change does not need to modify the standards for the street functional classification system. This standard is met

*(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.*

*(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;*

Development on the property with the proposed zone change will mostly consist of passenger vehicles and freight with use from pedestrians, and bicycles. This type of use is consistent with the types of uses expected on urban streets, especially arterial streets.

The LOS and queuing analysis conclude that there are no additional lanes or other capacity improvements required to facilitate the levels of proposed traffic, beyond the IAMP improvement, that is inconsistent with what is typically found on these streets.

The proposed zone change will not cause traffic levels, patterns, or access that are inconsistent with the functional classification of and existing or planned transportation facility. This standard is met.

*(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or*

The intersection of I-5 SB Ramps at Peal Street is projected to not meet the mobility standards with the addition of development trips. The mitigation for this intersection is a trip cap at 650

development trips or signalization. With the trip cap or signalization, the intersection meets standards. This standard is met.

*(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan." OAR 660-12-0060(1)*

All intersections will meet the mobility standards prior to the development. This standard is not applicable.

## 12.0 CONCLUSION

This report provides the Transportation Planning Rule Analysis and findings prepared for the proposed Annexation and Zone Change for Tax lot 202 in Coburg, Oregon. The subject site is located south of Van Duyn Road east of Interstate-5 on Assessor's Map 16-03-34-00 tax lot 202. The 107-acre parcel is currently vacant and is zoned E40. The applicant is proposing to annex the site and rezone the property to Light Industrial.

### FINDINGS

- **Pearl St at I-5 SB Ramps:** This intersection is stop-controlled with the stop approach for the southbound ramp. The proposed zone change will add a substantial number of trips to the westbound left-turn movement. The site can be developed to add up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. At 614-720 PM Peak Hour trips, the intersection will require mitigation. The mitigation at this development level is a traffic signal with protective-permissive phasing for the westbound left turn. With the trip cap at 613 trips, the intersection will operate at a v/c 0.82. With the traffic signal, the intersection will operate at LOS B and v/c 0.65, meeting the standard.
- The addition of development traffic does not substantially increase queuing conditions.
- The right turn lane at the site access on Van Duyne Rd meets the ODOT APM right turn lane criteria.
- The TPR requirements of OAR 660-012-0060 have been demonstrated to be met with the proposed zone change.

TAX LOT 202 TPR

## kellysandow@sandowengineering.com

**From:** Damien Gilbert <damieng@branchengineering.com>
**Sent:** Friday, July 9, 2021 9:28 AM
**To:** Kelly Sandow
**Cc:** ANTHONY J FAVREAU; favreaueng@gmail.com; Ramon Fisher; Dan Haga
**Subject:** RE: Sandow, TIA Scope (Fisher Industrial Park), Van Duyn Rd.pdf
**Attachments:** 21-004 Van Duyn Rd SECT 6.29.21.pdf

Kelly,

Below is a brief scope to add to the ODOT/Lane County scope. I have also attached a schematic showing the anticipated future roadway at buildout. It matches up with the future bridge widening and meets the City's future functional classification of Van Duyn (Major Collector). I would recommend phasing in the frontage improvements based on anticipated buildout. If you would like to discuss any of this, please don't hesitate to reach out. If any of this conflicts with the other agency scope, such as analysis years or other assumptions, please let me know and we will do our best to keep things consistent.

- Forecast and analyze design hour conditions for the current year (calibration), the anticipated year of opening and a planning horizon year consistent with the year of opening + 15 years (assumed to be consistent with ODOT's and Lane County's scope) for the following intersections:
    - Site Approach on E. Van Duyn Street
    - I-5 NB and SB ramp intersections,
    - E. Pearl Street at Coburg Industrial Way;
    - E. Pearl at Willamette Street;
    - N. Willamette Street at Van Duyn, and:
    - Coburg Rd at Coburg Bottom Loop Rd/N. Coburg Rd.
- The last two intersections are not included in the other agency scope; however, based on the trip distribution showing 46 trips outbound from the site and 11 trips inbound toward the site at the north leg of the intersection of Willamette Street at E. Pearl Street, these should be included.
- We have and can share the most recent EMME/2 model runs (2011 Base Year and 2035 plan horizon year) that LCOG's consultant shared with us for the most recent TSP update endeavor that did not include the northeast quadrant UGB expansion nor the previously proposed east-west collector roadway connecting Coburg Rd with Industrial North.
- To satisfy the TPR analysis criteria, the intersection performance should be analyzed for PM peak/design hour conditions. The analysis should consider deceleration and acceleration lanes for a cross section that would roughly match that of E. Pearl Street to the west of Interstate 5 to be included with the proposed development at the site's frontage. It is anticipated that a functional classification change from local to collector will be implemented at some point in the future for E. Van Duyn Rd and should be discussed in the forthcoming traffic analysis. Also, ODOT is planning an upgrade to the overpass, as indicated in the Coburg IAMP.
- If the intent is to provide a traffic impact analysis to be reviewed concurrently with the TPR, the analysis should also include the AM peak hour, since other nearby similar industrial uses are likely to have similar AM peak hour trip generation characteristics to the proposed industrial use at the subject site, since industrial uses sometimes have equal or higher AM peak hour traffic when compared to PM conditions.

Again, please don't hesitate to get in touch with any questions, or if there is anything we can help with for your assumptions and analysis.

Thank you,

# Lane County Public Works Department

**Engineering & Construction Services Division**

June 23, 2021

**TO**: Kelly Sandow, Sandow Engineering

**FROM**: Shashi Bajracharya, Lane County, Traffic Operations
Danielle Stanka, Lane County, Transportation Planning

**RE:** Scope for Fisher Industrial Park (Van Duyn Rd)

Thank you for the email correspondence requesting a scope of work for a traffic impact analysis (TIA) for the Fisher Industrial Park proposal on a vacant parcel identified on the tax map as 16-03-34-00-00202 within the Urban Growth Boundary (UGB) of the City of Coburg. The property is served by Van Duyn Rd, which is a County Road functionally classified as a Rural Local Road in the County's Transportation System Plan. The subject property is proposed for a zone change from existing E-40 to Light Industrial zone in the City of Coburg Zoning. TIA requirements for County Roads are available in Lane Code Chapter 15 and Lane Manual Chapter 15.

For the zone change proposal, the following are the relevant code requirements.
*LC 15.697: Traffic Impact Analysis Requirements*

1) *A traffic impact analysis (TIA) may be required as part of a land use application or other development when the proposal is expected to involve one or more of the following:*
   a) *A development proposal that if approved, will result in an increase of peak hour traffic flow of 50 or more automobile trips outside an urban growth boundary, or 100 or more automobile trips inside an urban growth boundary. The increase in number of trips will be calculated based upon the methodology in the Institute of Traffic Engineers' Trip Generation manual for the year of publication specified in LM Chapter 15.450 and associated handbook and user's guide;*
   b) *A Development proposals that will affect county roads where congestion or safety problems have been identified by previous traffic engineering analysis;*
   c) *A plan amendment or zone change proposal, unless waived by the County Engineer as specified below;*
   d) *A proposed development that will generate or receive traffic by single or combination vehicles with gross weights greater than 26,000 pounds as part of the development's daily operations. "Daily operations" includes delivery to or from the site of materials or products manufactured, processed, or sold by the business on the site. "Daily operations" does not include routine services provided to the site by others, such as mail delivery, solid waste pickup, or bus service;*
   e) *An existing or proposed access driveway, the location of which does not meet minimum spacing or sight distance requirements, and where vehicles are expected to queue or hesitate at an approach or access connection, thereby creating a safety hazard;*
   f) *Any potential impacts to pedestrian and bicycle routes, including, but not limited to school routes and multimodal roadway improvements identified in the TSP;*
   g) *A project development that would increase intersection or driveway volumes by 25 peak hour vehicle trips or greater.*
   h) *A development for which a TIA is required by ODOT pursuant with OAR 734-051*

For this proposal, the majority of the above TIA requirements apply including an evaluation of the existing pavement condition. TP requests a TIA report that includes the following information and relevant elements.

Area conditions

- Area of influence
- Area of significant traffic impact
- Study area land use
- Existing zoning
- Anticipated future development
- Area roadway system by jurisdictions
- Traffic volumes and conditions
- Existing transportation system management programs

Projected Traffic

(a) Site Traffic

The trip generation estimate will be based on the ITE Trip Generation Manual 10th Edition. We concur Industrial Park Code 130 is the closest land use code applicable for this analysis. The trip generation estimate will be based on the Acres or Square Foot parameter whichever results the conservative trip estimate.

The trip distribution should be based on a LCOG trip based model or other approved assumptions. The following Lane County intersections must be included in the study.

- Pearl Street and Coburg Industrial Way
- Pearl Street and Willamette Street
- Property accesses on Van Duyn Rd

The modal split will be as per the regional trip model. The study will analyze multimodal connectivity of the site on Van Duyn Road with the County transportation network system including bike and pedestrian connectivity.

The trip assignment will be as per reasonable development trip origin-destination assumptions. Pavement structural analysis will be required for County roads where site generated heavy traffic are assigned. A scope of pavement analysis may be requested from the Lane County Materials lab when the trip assignments are finalized.

(b) Background Non-site Traffic

Background trip estimate will be based on a regional trip model output.

The modal split will be as per the regional trip model.

The study will forecast transportation impacts for a 20-year planning horizon. A growth rate adopted by the regional trip model or a rate acceptable to reviewing agencies will be used.

Traffic Analysis

The traffic analysis will include the following elements:

- Site access
- Capacity and v/c
- Crash analysis of last three years

- Traffic signals

The performance standards are specified in LC 15.696(1). For the County facilities, the performance will need to be evaluated during the 20-year planning horizon from the date the analysis was completed. The Lane County signalized intersections inside urban growth boundary will be maintained a LOS "E" or better and a volume to capacity ratio not higher than 0.85.

Improvement Analysis

If the performance standards in LC 15.696(1) cannot be achieved or maintained, the analysis must include an improvement analysis with the following information:

- Road dedications and improvements for capacity increases for site traffic
- Alternative improvements- such as implement demand management strategies
- Status of improvements already funded, programmed, or planned that will improve impacted facilities
- Improvement strategies can be found in LC 15.697(6) and (7)

Summary Findings

Please include a summary of findings about

- Site accessibility
- Traffic Impacts
- Improvement Needs
- Compliance with local codes and plans

Recommendations

Include recommendations proportional to traffic impacts on County facilities.

Oregon
Kate Brown, Governor

**Department of Transportation**
**Region 2 Tech Center**
455 Airport Road SE, Building A
Salem, Oregon 97301-5397
Telephone (503) 986-2990
Fax (503) 986-2839

**DATE:** July 6, 2021

**TO:** Bill Johnston, Transportation Planner
Doug Baumgartner, Development Review Coordinator

**FROM:** Arielle Ferber, PE
Traffic Analysis Engineer

**SUBJECT:** Coburg Aggregate (Coburg) – Transportation Planning Rule
TIA Scoping Comments

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ODOT Region 2 Traffic has reviewed the provided information (email from Sandow Engineering dated June 21, 2021) related to scoping a traffic impact analysis to address traffic impacts due to development southeast of the I-5 NB Ramps at Van Duyn Road intersection in the City of Coburg, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in October 2020. The current version is published online at: http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx. As a result, we submit the following comments and recommendations:

1. Traffic volumes shown on Figure 1: Development Trip Distribution do not match the provided trip generation. Figure 1 should be updated appropriately.
2. ODOT recommends the applicant submit a methodology and assumptions memorandum documenting methodology and assumptions to be used for existing conditions (i.e. seasonal factors), future conditions (i.e. volume development/post-processing methodology), and alternative analysis (i.e. peak hour factors, analysis parameters, calibration, etc) to Region 2 Traffic in accordance with Section 2.5.1 of the *APM*. By participating in this practice, applicant can proactively reduce or eliminate any need for rework. The methodology and assumptions memorandum should include at least the following proposed analysis parameters:
    - Analysis study area/intersection(s)
    - Count date, type, and duration
    - Seasonal adjustment
    - Analysis years
    - Annual growth rate
    - Trip generation and distribution
    - Mobility targets

- Existing and future peak hour factors (PHFs) and heavy vehicle percentages
- Unadjusted (idea) saturation flow rate

3. ODOT recommends analysis of the following study area intersections:
   - I-5 NB Ramps at Van Duyn Road
   - I-5 SB Ramps at Van Duyn Road/Pearl Street
   - Pearl Street at Coburg Industrial Way
   - Pearl Street at Willamette Street/Coburg Road
   - Van Duyn Road at Site Access (if multiple access points all should be analyzed)
4. Traffic volumes and travel patterns have been disrupted due to COVID-9. Therefore, traffic volumes may be obtained as follows:
   - Historical counts may be obtained and grown to the current existing year by applying historical growth factors. It is recommended that historical counts collected more than five years previously not be used.
   - New counts may be collected with application of a COVID-19 adjustment factor to obtain pre-COVID existing year traffic volumes. The COVID-19 adjustment factor can be calculated by comparing 2019 and existing year traffic volumes from a nearby or representative ATR(s) and/or traffic count.
5. ODOT recommends use of the 30$^{th}$ highest hour volumes (30 HV) to represent existing and future volumes in analyses. The peak hour from a manual count is converted to the 30 HV by applying a seasonal factor. ODOT's *APM* Section 5.2 includes further information for determining an appropriate seasonal factor. For the study area it would be appropriate for the consultant to utilize an average of ATR #22-016 (Lake Creek) and ATR #24-001 (Woodburn) to calculate the appropriate seasonal factor.
6. Due to the nature of the development (Industrial Park) consideration should be taken regarding the heavy vehicle percentage of site generated trips and if it will affect the existing heavy vehicle percentages at study area intersection turn movements.
7. ODOT recommends unsignalized study intersections and private approach roads without existing right- or left-turn lanes be analyzed to determine if they meet the criteria outlined in Section 12.2 of the APM and locations that meet such criteria shall be noted. Installation of a turn lane may be recommended as mitigation for development traffic impacts. However, meeting any criteria does not mean a turn lane will be approved for installation. Engineering judgement shall be used to determine if such installation would be impractical or introduce safety concerns, particularly considering bicycle and pedestrian traffic.
8. ODOT recommends a crash analysis be conducted for the study area intersections by comparing an intersection's crash rate to that of the corresponding 90$^{th}$ percentile crash rate per Section 4.1 and Exhibit 4-1 of ODOT's *APM*. The crash analysis should also include a review of the three most recent Safety Priority Index System (SPIS) lists to identify top 5% or 10% locations within the study area.
9. In addition to analyzing existing year conditions the TIA should also analyze future year conditions. As the development includes an annexation ODOT recommends a 20 year planning horizon in addition to analysis of the opening year. Analyses shall be made for all study area intersections, under both *Future Year* "*background traffic*" and "*total traffic*" scenarios. The *Future Year* "*background traffic*" scenario shall include all in-process traffic (traffic generated by approved and pending development), if any such exist. If none exist, include a statement verifying all jurisdictions were contacted for information on in-process development traffic and that none existed. The "*total traffic*" scenario is

considered *Future Year* "*background traffic*" volumes plus the peak hour trips generated by the proposed development.

10. Intersection operational analyses shall include the effects of queueing and blocking. Average and 95$^{th}$ percentile queue lengths shall be reported for all study area intersections. The 95$^{th}$ percentile queuing is used for design purposes and shall be reported to the next highest 25-foot increment. For signalized intersections, *SimTraffic* is an acceptable queuing analysis software package, while *SimTraffic* or the AASHTO *2-Minute Rule* are examples of acceptable queuing analysis methodologies for unsignalized intersections. *HCM2000* or *Traffix* queuing analysis results will NOT be accepted. Roundabout queuing analyses shall follow the procedures listed in Section 12.3.4 of the *APM*. Simulation should be used if v/c ratios exceed 0.70 and simulation shall be used if v/c ratios are equal to or exceed 0.90. Simulations shall be calibrated in accordance with Chapter 15 of the *APM*.
11. The I-5 Coburg Interchange Design Project (an ODOT shelf project) was recently updated in May 2021 and provides a conceptual design/draft design acceptance package which advanced recommendations made in the I-5 Coburg Interchange Area Management Plan (IAMP).The analysis should ensure that any proposed mitigation aligns with recommendations made within the I-5 Coburg Interchange Design Project.

If there are any questions regarding these comments, please contact me at (503) 986-2857 or Arielle.Ferber@ODOT.state.or.us

TAX LOT 202 TPR

| | | | # Crashes | ADT | MEV | Crash Rate | Critical Crash Rate | |
|---|---|---|---|---|---|---|---|---|
| 1 | E Pearl St @ Willamette St | Signal | 3 | 9380 | 17.12 | 0.18 | 0.56 | under |
| 2 | E Pearl St @ Coburg Industrial Way | Signal | 6 | 10150 | 18.52 | 0.32 | 0.55 | under |
| 3 | E Pearl @ I-5 SB | Stop | 6 | 6060 | 11.06 | 0.54 | 0.59 | under |
| 4 | E Pearl @ I-5 NB | Signal | 5 | 5330 | 9.73 | 0.51 | 0.65 | under |
| 5 | Willamette at Van Duyn | Stop | 2 | 6590 | 12.03 | 0.17 | 0.58 | under |
| 6 | Coburg and Coburg BTM | Stop | 2 | 6720 | 12.26 | 0.16 | 0.57 | under |

| | | | |
|---|---|---|---|
| Weighted Average | | | |
| Signalized | 14 | 45 | 0.30857735 |
| Stop | 10 | 35 | 0.28288343 |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**VAN DUYN ST at COBURG BOTTOM LP, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2019** | | | | | | | | | | | | | | |
| REAR-END | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2019 TOTAL** | **0** | **1** | **0** | **1** | **0** | **2** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2018** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **1** | **0** | **1** | **0** | **4** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** |
| **FINAL TOTAL** | **0** | **2** | **0** | **2** | **0** | **6** | **0** | **1** | **1** | **2** | **0** | **2** | **0** | **0** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**VAN DUYN ST at WILLAMETTE ST, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2017** | | | | | | | | | | | | | | |
| REAR-END | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2017 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2015** | | | | | | | | | | | | | | |
| ANGLE | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2015 TOTAL** | **0** | **1** | **0** | **1** | **0** | **2** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **FINAL TOTAL** | **0** | **2** | **0** | **2** | **0** | **3** | **0** | **1** | **1** | **2** | **0** | **2** | **0** | **0** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**PEARL ST at COBURG INDUSTRIAL W, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2018** | | | | | | | | | | | | | | |
| REAR-END | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **1** | **1** | **2** | **0** | **2** | **1** | **2** | **0** | **2** | **0** | **2** | **0** | **0** |
| **YEAR: 2016** | | | | | | | | | | | | | | |
| BACKING | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| REAR-END | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 0 |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2016 TOTAL** | **0** | **2** | **2** | **4** | **0** | **2** | **1** | **4** | **0** | **4** | **0** | **4** | **0** | **0** |
| **FINAL TOTAL** | **0** | **3** | **3** | **6** | **0** | **4** | **2** | **6** | **0** | **6** | **0** | **6** | **0** | **0** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**VAN DUYN RD at NB ENFR PEARL C3, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2016** | | | | | | | | | | | | | | |
| BACKING | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 |
| **YEAR 2016 TOTAL** | **0** | **1** | **1** | **2** | **0** | **3** | **1** | **0** | **1** | **1** | **1** | **2** | **0** | **0** |
| **FINAL TOTAL** | **0** | **1** | **1** | **2** | **0** | **3** | **1** | **0** | **1** | **1** | **1** | **2** | **0** | **0** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**VAN DUYN RD at NB EXTO PEARL C1, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2018** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2017** | | | | | | | | | | | | | | |
| REAR-END | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2017 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2015** | | | | | | | | | | | | | | |
| REAR-END | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2015 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **1** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **FINAL TOTAL** | **0** | **2** | **1** | **3** | **0** | **2** | **1** | **2** | **1** | **3** | **0** | **3** | **0** | **0** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**PEARL ST at SB ENFR PEARL C5, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2019** | | | | | | | | | | | | | | |
| NON-COLLISION | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2019 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2018** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **1** | **0** | **1** | **0** | **3** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2017** | | | | | | | | | | | | | | |
| REAR-END | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2017 TOTAL** | **0** | **1** | **0** | **1** | **0** | **2** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** |
| **FINAL TOTAL** | **0** | **2** | **1** | **3** | **0** | **5** | **1** | **1** | **2** | **3** | **0** | **3** | **0** | **0** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**PEARL ST at SB EXTO PEARL C4, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2019** | | | | | | | | | | | | | | |
| TURNING MOVEMENTS | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 |
| **YEAR 2019 TOTAL** | **0** | **1** | **0** | **1** | **0** | **2** | **0** | **1** | **0** | **0** | **1** | **1** | **0** | **0** |
| **YEAR: 2018** | | | | | | | | | | | | | | |
| ANGLE | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** | **1** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2015** | | | | | | | | | | | | | | |
| FIXED / OTHER OBJECT | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| **YEAR 2015 TOTAL** | **0** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** |
| **FINAL TOTAL** | **0** | **2** | **1** | **3** | **0** | **3** | **0** | **2** | **1** | **2** | **1** | **3** | **0** | **1** |

CRASH SUMMARIES BY YEAR BY COLLISION TYPE

**PEARL ST at WILLAMETTE ST, City of Coburg, Lane County, 01/01/2015 to 12/31/2019**

| COLLISION TYPE | FATAL CRASHES | NON-FATAL CRASHES | PROPERTY DAMAGE ONLY | TOTAL CRASHES | PEOPLE KILLED | PEOPLE INJURED | TRUCKS | DRY SURF | WET SURF | DAY | DARK | INTER-SECTION | INTER-SECTION RELATED | OFF-ROAD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **YEAR: 2018** | | | | | | | | | | | | | | |
| PEDESTRIAN | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2018 TOTAL** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** |
| **YEAR: 2016** | | | | | | | | | | | | | | |
| FIXED / OTHER OBJECT | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 |
| REAR-END | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 |
| **YEAR 2016 TOTAL** | **0** | **1** | **1** | **2** | **0** | **1** | **0** | **0** | **2** | **2** | **0** | **2** | **0** | **1** |
| **FINAL TOTAL** | **0** | **2** | **1** | **3** | **0** | **2** | **0** | **1** | **2** | **3** | **0** | **3** | **0** | **1** |

TAX LOT 202 TPR

1

**Intersection:** 1: N Willamette St @ E Pearl St **City:** Coburg, OR

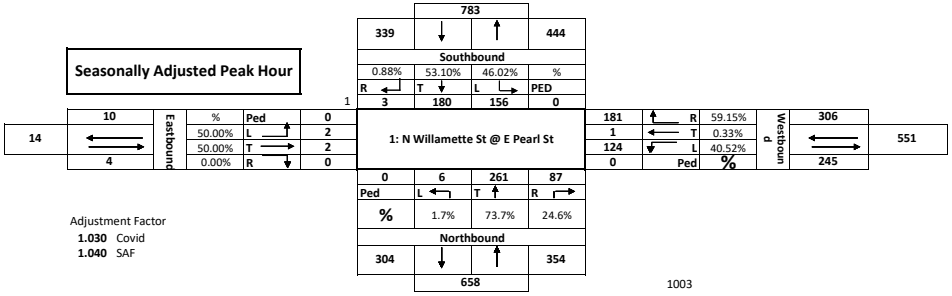
**Counter:** Sandow Engineering **Date:** Tuesday, April 13, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 0 | 43 | 33 | 76 | 60 | 0 | 34 | 94 | 22 | 41 | 0 | 63 | 1 | 0 | 0 | 1 | 234 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 40 | 28 | 68 | 52 | 0 | 26 | 78 | 16 | 64 | 0 | 80 | 0 | 0 | 0 | 0 | 226 | | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 1 | 52 | 38 | 91 | 33 | 1 | 37 | 71 | 19 | 59 | 1 | 79 | 0 | 1 | 1 | 2 | 243 | | 1 | 0 | 0 | 0 |
| 16:45 | 17:00 | 2 | 42 | 32 | 76 | 43 | 0 | 24 | 67 | 27 | 53 | 1 | 81 | 0 | 0 | 1 | 1 | 225 | 928 | 0 | 0 | 1 | 0 |
| 17:00 | 17:15 | 0 | 36 | 42 | 78 | 39 | 0 | 36 | 75 | 17 | 55 | 1 | 73 | 0 | 0 | 0 | 0 | 226 | 920 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 38 | 34 | 72 | 54 | 0 | 19 | 73 | 18 | 77 | 3 | 98 | 0 | 1 | 0 | 1 | 244 | 938 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 37 | 21 | 58 | 33 | 0 | 21 | 54 | 14 | 64 | 0 | 78 | 0 | 0 | 1 | 1 | 191 | 886 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 1 | 37 | 32 | 70 | 43 | 0 | 11 | 54 | 20 | 51 | 1 | 72 | 1 | 0 | 0 | 1 | 197 | 858 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:30 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:45 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **4** | **325** | **260** | | **357** | **1** | **208** | | **153** | **464** | **7** | | **2** | **2** | **3** | | **1786** | | **1** | **0** | **1** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **3** | **168** | **146** | **317** | **169** | **1** | **116** | **286** | **81** | **244** | **6** | **331** | **0** | **2** | **2** | **4** | **938** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.38 | 0.81 | 0.87 | 0.87 | 0.78 | 0.25 | 0.78 | 0.95 | 0.75 | 0.79 | 0.50 | 0.84 | 0.00 | 0.50 | 0.50 | 0.50 | 0.96 | | | | | |
| **Trucks** | 0 | 3 | 12 | | 8 | 0 | 2 | | 4 | 9 | 0 | | 0 | 0 | 0 | | | | | | | |
| **% Trucks** | 0% | 2% | 8% | | 5% | 0% | 2% | | 5% | 4% | 0% | | 0% | 0% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
783
339
444
Southbound
0.88%
53.10%
46.02%
%
R
T
L
PED
1
3
180
156
0
10
Eastbound
%
Ped
0
14
50.00%
L
2
50.00%
T
2
4
0.00%
R
0
1: N Willamette St @ E Pearl St
181
R
59.15%
1
T
0.33%
124
L
40.52%
0
Ped
%
Westboun
d
306
551
245
0
6
261
87
Ped
L
T
R
%
1.7%
73.7%
24.6%
Northbound
304
354
658
1003
Adjustment Factor
1.030 Covid
1.040 SAF

**1: N Willamette St @ E Pearl St**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | | | 42 | 30 | | | 58 | | 33 | | | 21 | 40 | | | | 1 | | | | 225 | |
| 4:15 PM | | | 40 | 27 | | | 49 | | 25 | | | 15 | 61 | | | | | | | | 217 | |
| 4:30 PM | | 1 | 51 | 35 | | | 28 | 1 | 37 | | | 17 | 57 | 1 | | | | 1 | 1 | | 230 | |
| 4:45 PM | | 2 | 41 | 31 | | | 42 | | 22 | | | 27 | 53 | 1 | | | | | 1 | | 220 | 892 |
| 5:00 PM | | | 35 | 37 | | | 38 | | 36 | | | 16 | 53 | 1 | | | | | | | 216 | 883 |
| 5:15 PM | | | 38 | 31 | | | 53 | | 19 | | | 17 | 72 | 3 | | | | 1 | | | 234 | 900 |
| 5:30 PM | | | 37 | 19 | | | 33 | | 21 | | | 14 | 61 | | | | | | 1 | | 186 | 856 |
| 5:45 PM | | 1 | 36 | 32 | | | 41 | | 11 | | | 20 | 49 | 1 | | | 1 | | | | 192 | 828 |
| 6:00 PM | | | | | | | | | | | | | | | | | | | | | 0 | 612 |
| 6:15 PM | | | | | | | | | | | | | | | | | | | | | 0 | 378 |
| 6:30 PM | | | | | | | | | | | | | | | | | | | | | 0 | 192 |
| 6:45 PM | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 4 | 320 | 242 | | 0 | 342 | 1 | 204 | | 0 | 147 | 446 | 7 | | 0 | 2 | 2 | 3 | | | |
| **Peak Hour** | **0** | **3** | **165** | **134** | **0** | **0** | **161** | **1** | **114** | **0** | **0** | **77** | **235** | **6** | **0** | **0** | **0** | **2** | **2** | **0** | **900** | **2675** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | | 1 | 3 | | 2 | | 1 | | 1 | 1 | | | | | | | 9 | |
| 4:15 PM | | 0 | 1 | | 3 | | 1 | | 1 | 3 | | | | | | | 9 | |
| 4:30 PM | | 1 | 3 | | 5 | | 0 | | 2 | 2 | | | | | | | 13 | |
| 4:45 PM | | 1 | 1 | | 1 | | 2 | | 0 | 0 | | | | | | | 5 | 36 |
| 5:00 PM | | 1 | 5 | | 1 | | | | 1 | 2 | | | | | | | 10 | 37 |
| 5:15 PM | | 0 | 3 | | 1 | | | | 1 | 5 | | | | | | | 10 | 38 |
| 5:30 PM | | 0 | 2 | | 0 | | | | | 3 | | | | | | | 5 | 30 |
| 5:45 PM | | 1 | 0 | | 2 | | | | | 2 | | | | | | | 5 | 30 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 20 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 10 |
| 6:30 PM | | | | | | | | | | | | | | | | | 0 | 5 |
| 6:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 5 | 18 | | 15 | 0 | 4 | | 6 | 18 | 0 | | 0 | 0 | 0 | | | |
| **Peak Hour** | **0** | **3** | **12** | **0** | **8** | **0** | **2** | **0** | **4** | **9** | **0** | **0** | **0** | **0** | **0** | **0** | **38** | **111** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | 1 | | | | | | | | | | | | | | 1 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | 1 | | | | | | 0 | 0 | 1 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 1 | 0 | | 0 | 0 | 0 | | 0 | 1 | 0 | | 0 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **1** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | 1 | 1 | 2 | | 1 | | 1 | | | | 0 | 2 | 1 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | 2 | 2 | | | 1 | 1 | | | | 0 | | | 1 | 1 | 1 | 2 | 1 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 2 | 2 | | 1 | 2 | 3 | | 1 | 0 | 1 | | 0 | 1 | 1 | 3 | 3 | 1 | 0 |
| **Peak Hour** | **0** | **2** | **2** | **0** | **1** | **2** | **3** | **0** | **1** | **0** | **1** | **0** | **0** | **1** | **1** | **3** | **3** | **1** | **0** |

**Intersection:** 2: Coburg Industrial @ E Pearl St **City:** Coburg, OR

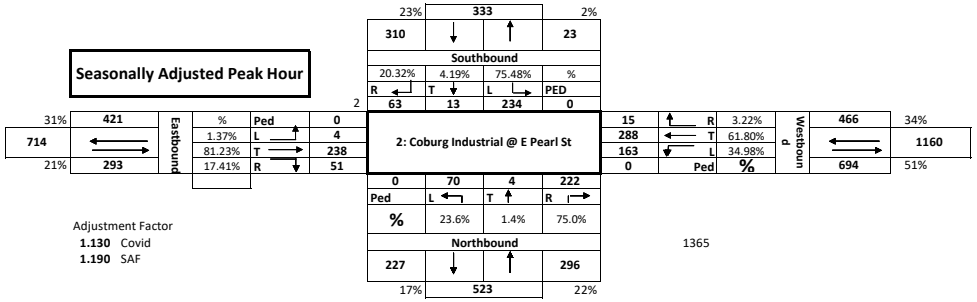
**Counter:** Sandow Engineering **Date:** Thursday, January 28, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 11 | 8 | 31 | 50 | 7 | 35 | 32 | 74 | 41 | 1 | 13 | 55 | 13 | 61 | 1 | 75 | 254 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 5 | 3 | 31 | 39 | 7 | 48 | 29 | 84 | 37 | 2 | 10 | 49 | 10 | 67 | 2 | 79 | 251 | | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 22 | 2 | 82 | 106 | 4 | 51 | 35 | 90 | 36 | 0 | 15 | 51 | 8 | 48 | 0 | 56 | 303 | | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 2 | 1 | 27 | 30 | 5 | 58 | 30 | 93 | 44 | 0 | 9 | 53 | 5 | 42 | 2 | 49 | 225 | 1033 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 13 | 6 | 46 | 65 | 0 | 47 | 31 | 78 | 57 | 1 | 20 | 78 | 13 | 47 | 1 | 61 | 282 | 1061 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 10 | 1 | 19 | 30 | 2 | 58 | 25 | 85 | 28 | 2 | 8 | 38 | 12 | 40 | 0 | 52 | 205 | 1015 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 2 | 3 | 8 | 13 | 4 | 57 | 14 | 75 | 17 | 2 | 15 | 34 | 8 | 52 | 1 | 61 | 183 | 895 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 1 | 1 | 9 | 11 | 2 | 46 | 27 | 75 | 23 | 1 | 11 | 35 | 5 | 38 | 1 | 44 | 165 | 835 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:30 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:45 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **66** | **25** | **253** | | **31** | **400** | **223** | | **283** | **9** | **101** | | **74** | **395** | **8** | | **1868** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **47** | **10** | **174** | **231** | **11** | **214** | **121** | **346** | **165** | **3** | **52** | **220** | **38** | **177** | **3** | **218** | **1015** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.53 | 0.42 | 0.53 | 0.54 | 0.55 | 0.92 | 0.86 | 0.93 | 0.72 | 0.38 | 0.65 | 0.71 | 0.73 | 0.92 | 0.38 | 0.89 | 0.84 | | | | | |
| **Trucks** | 0 | 0 | 4 | | 2 | 17 | 44 | | 8 | 0 | 0 | | 6 | 25 | 1 | | | | | | | |
| **% Trucks** | 0% | 0% | 2% | | 18% | 8% | 36% | | 5% | 0% | 0% | | 16% | 14% | 33% | | | | | | | |


Seasonally Adjusted Peak Hour
Southbound
Eastbound
Westbound
Northbound
2: Coburg Industrial @ E Pearl St
Adjustment Factor
1.130 Covid
1.190 SAF
1365

**2: Coburg Industrial @ E Pearl St**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | | 10 | 4 | 30 | | | 6 | 32 | 24 | | | 40 | 1 | 13 | | | 13 | 57 | 1 | | 231 | |
| 4:15 PM | | 5 | 3 | 31 | | | 6 | 45 | 24 | | | 37 | 2 | 10 | | | 9 | 58 | 1 | | 231 | |
| 4:30 PM | | 22 | 2 | 82 | | | 2 | 41 | 20 | | | 34 | 0 | 15 | | | 6 | 41 | 0 | | 265 | |
| 4:45 PM | | 2 | 1 | 26 | | | 5 | 52 | 22 | | | 40 | 0 | 9 | | | 4 | 38 | 1 | | 200 | 927 |
| 5:00 PM | | 13 | 6 | 44 | | | 0 | 47 | 21 | | | 56 | 1 | 20 | | | 11 | 39 | 1 | | 259 | 955 |
| 5:15 PM | | 10 | 1 | 18 | | | 2 | 57 | 14 | | | 27 | 2 | 8 | | | 11 | 34 | 0 | | 184 | 908 |
| 5:30 PM | | 2 | 2 | 8 | | | 3 | 54 | 6 | | | 16 | 2 | 14 | | | 6 | 42 | 0 | | 155 | 798 |
| 5:45 PM | | 1 | 1 | 8 | | | 2 | 45 | 21 | | | 18 | 1 | 11 | | | 4 | 32 | 1 | | 145 | 743 |
| 6:00 PM | | | | | | | | | | | | | | | | | | | | | 0 | 484 |
| 6:15 PM | | | | | | | | | | | | | | | | | | | | | 0 | 300 |
| 6:30 PM | | | | | | | | | | | | | | | | | | | | | 0 | 145 |
| 6:45 PM | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 65 | 20 | 247 | | 0 | 26 | 373 | 152 | | 0 | 268 | 9 | 100 | | 0 | 64 | 341 | 5 | | | |
| **Peak Hour** | **0** | **47** | **10** | **170** | **0** | **0** | **9** | **197** | **77** | **0** | **0** | **157** | **3** | **52** | **0** | **0** | **32** | **152** | **2** | **0** | **908** | **2790** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | 1 | 4 | 1 | | 1 | 3 | 8 | | 1 | | | | 0 | 4 | 0 | | 23 | |
| 4:15 PM | | | | | 1 | 3 | 5 | | 0 | | | | 1 | 9 | 1 | | 20 | |
| 4:30 PM | | | | | 2 | 10 | 15 | | 2 | | | | 2 | 7 | 0 | | 38 | |
| 4:45 PM | | | 1 | | | 6 | 8 | | 4 | | | | 1 | 4 | 1 | | 25 | 106 |
| 5:00 PM | | | 2 | | | 0 | 10 | | 1 | | | | 2 | 8 | 0 | | 23 | 106 |
| 5:15 PM | | | 1 | | | 1 | 11 | | 1 | | | | 1 | 6 | 0 | | 21 | 107 |
| 5:30 PM | | 1 | | | 1 | 3 | 8 | | 1 | | 1 | | 2 | 10 | 1 | | 28 | 97 |
| 5:45 PM | | | 1 | | | 1 | 6 | | 5 | | | | 1 | 6 | | | 20 | 92 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 69 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 48 |
| 6:30 PM | | | | | | | | | | | | | | | | | 0 | 20 |
| 6:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 1 | 5 | 6 | | 5 | 27 | 71 | | 15 | 0 | 1 | | 10 | 54 | 3 | | | |
| **Peak Hour** | **0** | **0** | **4** | **0** | **2** | **17** | **44** | **0** | **8** | **0** | **0** | **0** | **6** | **25** | **1** | **0** | **107** | **319** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 3: I-5 SB ramps @ E Pearl St **City:** Coburg, OR

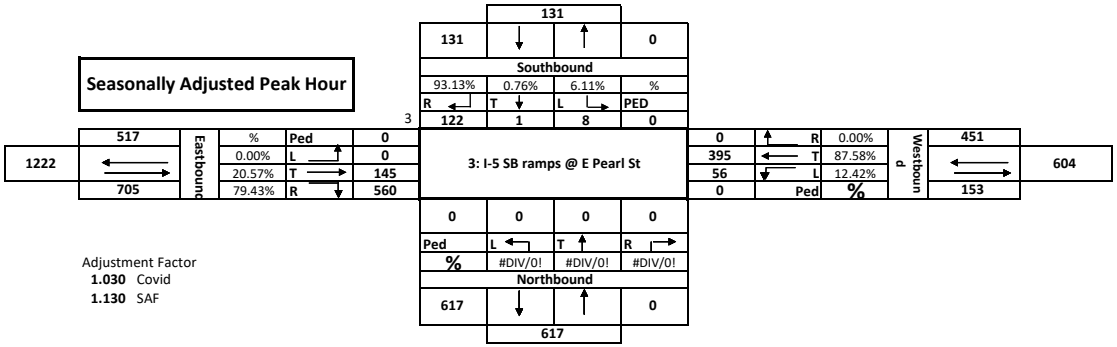
**Counter:** Sandow Engineering **Date:** Thursday, April 15, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 16 | 1 | 1 | 18 | 0 | 70 | 13 | 83 | 0 | 0 | 0 | 0 | 103 | 28 | 0 | 131 | 232 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 16 | 0 | 2 | 18 | 0 | 84 | 12 | 96 | 0 | 0 | 0 | 0 | 85 | 23 | 0 | 108 | 222 | | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 20 | 1 | 3 | 24 | 0 | 87 | 10 | 97 | 0 | 0 | 0 | 0 | 144 | 32 | 0 | 176 | 297 | | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 27 | 0 | 4 | 31 | 0 | 77 | 13 | 90 | 0 | 0 | 0 | 0 | 107 | 32 | 0 | 139 | 260 | 1011 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 29 | 0 | 6 | 35 | 0 | 71 | 9 | 80 | 0 | 0 | 0 | 0 | 124 | 31 | 0 | 155 | 270 | 1049 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 29 | 0 | 2 | 31 | 0 | 104 | 16 | 120 | 0 | 0 | 0 | 0 | 106 | 30 | 0 | 136 | 287 | 1114 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 33 | 0 | 0 | 33 | 0 | 82 | 10 | 92 | 0 | 0 | 0 | 0 | 76 | 30 | 0 | 106 | 231 | 1048 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 16 | 2 | 1 | 19 | 0 | 82 | 6 | 88 | 0 | 0 | 0 | 0 | 65 | 29 | 0 | 94 | 201 | 989 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 719 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 432 | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **186** | **4** | **19** | | **0** | **657** | **89** | | **0** | **0** | **0** | | **810** | **235** | **0** | | **2000** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **105** | **1** | **15** | **121** | **0** | **339** | **48** | **387** | **0** | **0** | **0** | **0** | **481** | **125** | **0** | **606** | **1114** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.91 | 0.25 | 0.63 | 0.86 | 0.00 | 0.81 | 0.75 | 0.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.84 | 0.98 | 0.00 | 0.86 | 0.94 | | | | | |
| **Trucks** | 38 | 0 | 7 | | 0 | 62 | 3 | | 0 | 0 | 0 | | 25 | 33 | 0 | | | | | | | |
| **% Trucks** | 36% | 0% | 47% | | 0% | 18% | 6% | | 0% | 0% | 0% | | 5% | 26% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
3
3: I-5 SB ramps @ E Pearl St
Southbound
Northbound
Eastbound
Westbound
Ped
R
T
L
PED
%
93.13%
0.76%
6.11%
131
0
122
1
8
617
705
517
1222
145
560
0.00%
20.57%
79.43%
451
604
153
395
56
87.58%
12.42%
#DIV/0!
Adjustment Factor
1.030 Covid
1.130 SAF

**3: I-5 SB ramps @ E Pearl St**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | | 15 | 1 | 1 | | | | 58 | 13 | | | | | | | | 95 | 25 | | | 208 | |
| 4:15 PM | | 9 | 0 | 0 | | | | 73 | 12 | | | | | | | | 78 | 21 | | | 193 | |
| 4:30 PM | | 16 | 1 | 1 | | | | 69 | 10 | | | | | | | | 141 | 21 | | | 259 | |
| 4:45 PM | | 16 | | 4 | | | | 61 | 11 | | | | | | | | 102 | 24 | | | 218 | 878 |
| 5:00 PM | | 18 | | 3 | | | | 57 | 9 | | | | | | | | 114 | 23 | | | 224 | 894 |
| 5:15 PM | | 17 | | 0 | | | | 90 | 15 | | | | | | | | 99 | 24 | | | 245 | 946 |
| 5:30 PM | | 18 | | 0 | | | | 64 | 10 | | | | | | | | 70 | 26 | | | 188 | 875 |
| 5:45 PM | | 10 | 1 | 1 | | | | 68 | 6 | | | | | | | | 58 | 19 | | | 163 | 820 |
| 6:00 PM | | | | | | | | | | | | | | | | | | | | | 0 | 596 |
| 6:15 PM | | | | | | | | | | | | | | | | | | | | | 0 | 351 |
| **Total** | 0 | 119 | 3 | 10 | | 0 | 0 | 540 | 86 | | 0 | 0 | 0 | 0 | | 0 | 757 | 183 | 0 | | | |
| **Peak Hour** | **0** | **67** | **1** | **8** | **0** | **0** | **0** | **277** | **45** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **456** | **92** | **0** | **0** | **946** | **2718** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | 1 | | 0 | | | 12 | | | | | | | 8 | 3 | | | 24 | |
| 4:15 PM | 7 | | 2 | | | 11 | | | | | | | 7 | 2 | | | 29 | |
| 4:30 PM | 4 | | 2 | | | 18 | | | | | | | 3 | 11 | | | 38 | |
| 4:45 PM | 11 | | 0 | | | 16 | 2 | | | | | | 5 | 8 | | | 42 | 133 |
| 5:00 PM | 11 | | 3 | | | 14 | 0 | | | | | | 10 | 8 | | | 46 | 155 |
| 5:15 PM | 12 | | 2 | | | 14 | 1 | | | | | | 7 | 6 | | | 42 | 168 |
| 5:30 PM | 15 | | 0 | | | 18 | | | | | | | 6 | 4 | | | 43 | 173 |
| 5:45 PM | 6 | 1 | 0 | | | 14 | | | | | | | 7 | 10 | | | 38 | 169 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 123 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 81 |
| **Total** | 67 | 1 | 9 | | 0 | 117 | 3 | | 0 | 0 | 0 | | 53 | 52 | 0 | | | |
| **Peak Hour** | **38** | **0** | **7** | **0** | **0** | **62** | **3** | **0** | **0** | **0** | **0** | **0** | **25** | **33** | **0** | **0** | **168** | **456** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Intersection:** 4: I-5 NB ramps @ E Pearl St **City:** Coburg, OR

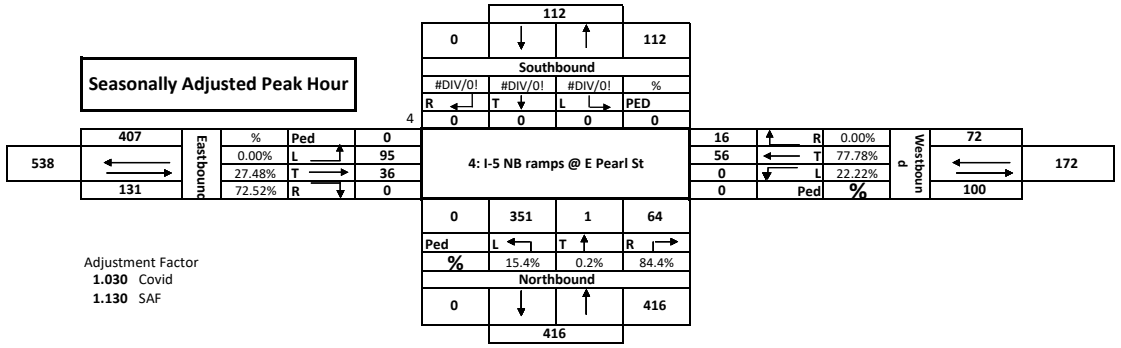
**Counter:** Sandow Engineering **Date:** Tuesday, April 20, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 0 | 0 | 0 | 0 | 7 | 20 | 0 | 27 | 15 | 0 | 86 | 101 | 0 | 11 | 16 | 27 | 155 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 0 | 0 | 0 | 3 | 15 | 0 | 18 | 16 | 0 | 78 | 94 | 0 | 14 | 18 | 32 | 144 | | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 2 | 12 | 0 | 14 | 12 | 1 | 79 | 92 | 0 | 8 | 16 | 24 | 130 | | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 3 | 9 | 0 | 12 | 17 | 0 | 69 | 86 | 0 | 6 | 23 | 29 | 127 | 556 | 0 | 0 | 0 | 1 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 3 | 15 | 0 | 18 | 7 | 0 | 83 | 90 | 0 | 5 | 25 | 30 | 138 | 539 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 6 | 12 | 0 | 18 | 19 | 0 | 71 | 90 | 0 | 12 | 18 | 30 | 138 | 533 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 8 | 12 | 0 | 20 | 23 | 0 | 67 | 90 | 0 | 12 | 27 | 39 | 149 | 552 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 5 | 14 | 0 | 19 | 19 | 0 | 47 | 66 | 0 | 6 | 18 | 24 | 109 | 534 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 396 | 0 | 0 | 0 | 1 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 1 |
| **Count Period Total** | | **0** | **0** | **0** | | **37** | **109** | **0** | | **128** | **1** | **580** | | **0** | **74** | **161** | | **1090** | | **0** | **0** | **0** | **3** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **0** | **0** | **0** | **14** | **48** | **0** | **62** | **55** | **1** | **302** | **358** | **0** | **31** | **82** | **113** | **533** | | **0** | **0** | **0** | **1** |
| **PHF** | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 | 0.80 | 0.00 | 0.86 | 0.72 | 0.25 | 0.91 | 0.97 | 0.00 | 0.65 | 0.82 | 0.94 | 0.97 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 6 | 3 | 0 | | 13 | 0 | 61 | | 0 | 3 | 22 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 43% | 6% | 0% | | 24% | 0% | 20% | | 0% | 10% | 27% | | | | | | | |


Seasonally Adjusted Peak Hour
112
0
112
Southbound
#DIV/0!
#DIV/0!
#DIV/0!
%
R
T
L
PED
4
0
0
0
0
407
Eastbound
%
Ped
0
538
0.00%
L
95
27.48%
T
36
131
72.52%
R
0
4: I-5 NB ramps @ E Pearl St
16
R
0.00%
56
T
77.78%
0
L
22.22%
0
Ped
%
Westboun
d
72
172
100
0
351
1
64
Ped
L
T
R
%
15.4%
0.2%
84.4%
Northbound
0
416
416
Adjustment Factor
1.030 Covid
1.130 SAF

**4: I-5 NB ramps @ E Pearl St**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | 0 | | | | | 0 | 4 | 19 | | | 0 | 12 | | 64 | | 0 | | 11 | 13 | | 123 | |
| 4:15 PM | 0 | | | | | 0 | 1 | 14 | | | 0 | 16 | | 60 | | 0 | | 12 | 15 | | 118 | |
| 4:30 PM | 0 | | | | | 0 | 1 | 12 | | | 0 | 10 | 1 | 59 | | 0 | | 7 | 13 | | 103 | |
| 4:45 PM | 0 | | | | | 0 | 2 | 8 | | | 0 | 12 | | 58 | | 1 | | 6 | 15 | | 101 | 445 |
| 5:00 PM | 0 | | | | | 0 | 2 | 13 | | | 0 | 5 | | 65 | | 0 | | 4 | 18 | | 107 | 429 |
| 5:15 PM | 0 | | | | | 0 | 3 | 12 | | | 0 | 15 | | 59 | | 0 | | 11 | 14 | | 114 | 425 |
| 5:30 PM | 0 | | | | | 0 | 5 | 12 | | | 0 | 19 | | 60 | | 0 | | 9 | 14 | | 119 | 441 |
| 5:45 PM | 0 | | | | | 0 | 2 | 12 | | | 0 | 18 | | 39 | | 0 | | 3 | 13 | | 87 | 427 |
| 6:00 PM | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | 320 |
| 6:15 PM | 0 | | | | | 0 | | | | | 0 | | | | | 0 | | | | | 0 | 206 |
| **Total** | 0 | 0 | 0 | 0 | | 0 | 20 | 102 | 0 | | 0 | 107 | 1 | 464 | | 1 | 0 | 63 | 115 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **8** | **45** | **0** | **0** | **0** | **42** | **1** | **241** | **0** | **1** | **0** | **28** | **60** | **0** | **425** | **1299** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | | | | | 3 | 1 | | | 3 | | 22 | | | 0 | 3 | | 32 | |
| 4:15 PM | | | | | 2 | 1 | | | 0 | | 18 | | | 2 | 3 | | 26 | |
| 4:30 PM | | | | | 1 | 0 | | | 2 | | 20 | | | 1 | 3 | | 27 | |
| 4:45 PM | | | | | 1 | 1 | | | 5 | | 11 | | | 0 | 8 | | 26 | 111 |
| 5:00 PM | | | | | 1 | 2 | | | 2 | | 18 | | | 1 | 7 | | 31 | 110 |
| 5:15 PM | | | | | 3 | 0 | | | 4 | | 12 | | | 1 | 4 | | 24 | 108 |
| 5:30 PM | | | | | 3 | 0 | | | 4 | | 7 | | | 3 | 13 | | 30 | 111 |
| 5:45 PM | | | | | 3 | 2 | | | 1 | | 8 | | | 3 | 5 | | 22 | 107 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 76 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 52 |
| **Total** | 0 | 0 | 0 | | 17 | 7 | 0 | | 21 | 0 | 116 | | 0 | 11 | 46 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **6** | **3** | **0** | **0** | **13** | **0** | **61** | **0** | **0** | **3** | **22** | **0** | **108** | **329** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | 1 | | 1 | 0 | 0 | 0 | 1 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 1 | 0 | 1 | 0 | 0 | 0 | 1 |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **0** | **0** | **1** |

5 **Intersection:** 5: Coburg Bottom Loop Rd @ Coburg Rd **City:** Coburg, OR

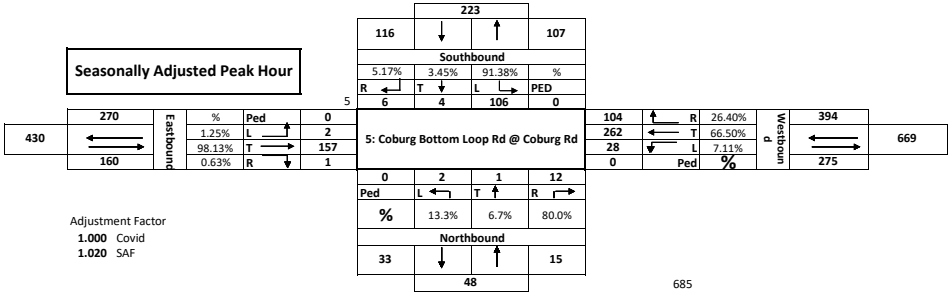
**Counter:** Sandow Engineering **Date:** Thursday, July 15, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 1 | 0 | 26 | 27 | 19 | 52 | 7 | 78 | 7 | 0 | 0 | 7 | 2 | 43 | 0 | 45 | 157 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 0 | 27 | 27 | 26 | 61 | 7 | 94 | 3 | 0 | 0 | 3 | 1 | 46 | 2 | 49 | 173 | | 1 | 2 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 32 | 32 | 24 | 64 | 5 | 93 | 2 | 0 | 0 | 2 | 0 | 39 | 0 | 39 | 166 | | 0 | 0 | 0 | 3 |
| 16:45 | 17:00 | 2 | 0 | 33 | 35 | 27 | 61 | 9 | 97 | 7 | 0 | 1 | 8 | 0 | 39 | 0 | 39 | 179 | 675 | 0 | 1 | 0 | 0 |
| 17:00 | 17:15 | 0 | 1 | 16 | 17 | 30 | 67 | 8 | 105 | 2 | 1 | 0 | 3 | 0 | 36 | 1 | 37 | 162 | 680 | 1 | 1 | 0 | 0 |
| 17:15 | 17:30 | 4 | 3 | 23 | 30 | 21 | 65 | 5 | 91 | 1 | 0 | 1 | 2 | 1 | 40 | 1 | 42 | 165 | 672 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 18 | 18 | 30 | 61 | 15 | 106 | 4 | 1 | 1 | 6 | 0 | 49 | 0 | 49 | 179 | 685 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 1 | 16 | 17 | 21 | 46 | 9 | 76 | 4 | 1 | 1 | 6 | 0 | 28 | 0 | 28 | 127 | 633 | 0 | 0 | 0 | 1 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:30 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:45 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **7** | **5** | **191** | | **198** | **477** | **65** | | **30** | **3** | **4** | | **4** | **320** | **4** | | **1308** | | **2** | **4** | **0** | **4** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **6** | **4** | **104** | **114** | **102** | **257** | **27** | **386** | **12** | **1** | **2** | **15** | **1** | **154** | **2** | **157** | **672** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.38 | 0.33 | 0.79 | 0.81 | 0.85 | 0.96 | 0.75 | 0.92 | 0.43 | 0.25 | 0.50 | 0.47 | 0.25 | 0.96 | 0.50 | 0.93 | 0.94 | | | | | |
| **Trucks** | 0 | 0 | 5 | | 17 | 6 | 1 | | 0 | 1 | 0 | | 0 | 7 | 1 | | | | | | | |
| **% Trucks** | 0% | 0% | 5% | | 17% | 2% | 4% | | 0% | 100% | 0% | | 0% | 5% | 50% | | | | | | | |


Seasonally Adjusted Peak Hour
223
116
107
Southbound
5.17%
3.45%
91.38%
%
R
T
L
PED
5
6
4
106
0
270
Eastbound
%
Ped
0
430
1.25%
L
2
98.13%
T
157
160
0.63%
R
1
5: Coburg Bottom Loop Rd @ Coburg Rd
104
R
26.40%
262
T
66.50%
28
L
7.11%
0
Ped
%
Westboun
d
394
669
275
0
2
1
12
Ped
L
T
R
%
13.3%
6.7%
80.0%
Northbound
33
15
48
685
Adjustment Factor
1.000 Covid
1.020 SAF

**5: Coburg Bottom Loop Rd @ Coburg Rd**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | | 1 | | 24 | | | 18 | 49 | 7 | | | 7 | | | | | 2 | 40 | | | 148 | |
| 4:15 PM | | | | 22 | | | 24 | 61 | 7 | | | 3 | | | | | 1 | 43 | 2 | | 163 | |
| 4:30 PM | | | | 30 | | | 21 | 62 | 5 | | | 2 | | | | | | 36 | | | 156 | |
| 4:45 PM | | 2 | | 33 | | | 23 | 59 | 9 | | | 7 | | 1 | | | | 38 | | | 172 | 639 |
| 5:00 PM | | | 1 | 15 | | | 24 | 66 | 7 | | | 2 | | | | | | 33 | | | 148 | 639 |
| 5:15 PM | | 4 | 3 | 21 | | | 17 | 64 | 5 | | | 1 | | 1 | | | 1 | 40 | 1 | | 158 | 634 |
| 5:30 PM | | | | 18 | | | 28 | 57 | 15 | | | 4 | 1 | 1 | | | | 46 | | | 170 | 648 |
| 5:45 PM | | | | 16 | | | 18 | 45 | 9 | | | 4 | 1 | 1 | | | | 28 | | | 122 | 598 |
| 6:00 PM | | | | | | | | | | | | | | | | | | | | | 0 | 450 |
| 6:15 PM | | | | | | | | | | | | | | | | | | | | | 0 | 292 |
| 6:30 PM | | | | | | | | | | | | | | | | | | | | | 0 | 122 |
| 6:45 PM | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 7 | 4 | 179 | | 0 | 173 | 463 | 64 | | 0 | 30 | 2 | 4 | | 0 | 4 | 304 | 3 | | | |
| **Peak Hour** | **0** | **6** | **4** | **99** | **0** | **0** | **85** | **251** | **26** | **0** | **0** | **12** | **0** | **2** | **0** | **0** | **1** | **147** | **1** | **0** | **634** | **1912** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | | | 2 | | 1 | 3 | | | | | | | | 3 | | | 9 | |
| 4:15 PM | | | 5 | | 2 | 0 | | | | | | | | 3 | | | 10 | |
| 4:30 PM | | | 2 | | 3 | 2 | | | | | | | | 3 | | | 10 | |
| 4:45 PM | | | | | 4 | 2 | | | | | | | | 1 | | | 7 | 36 |
| 5:00 PM | | | 1 | | 6 | 1 | 1 | | | 1 | | | | 3 | 1 | | 14 | 41 |
| 5:15 PM | | | 2 | | 4 | 1 | | | | | | | | | | | 7 | 38 |
| 5:30 PM | | | | | 2 | 4 | | | | | | | | 3 | | | 9 | 37 |
| 5:45 PM | | 1 | | | 3 | 1 | | | | | | | | | | | 5 | 35 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 21 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 14 |
| 6:30 PM | | | | | | | | | | | | | | | | | 0 | 5 |
| 6:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 1 | 12 | | 25 | 14 | 1 | | 0 | 1 | 0 | | 0 | 16 | 1 | | | |
| **Peak Hour** | **0** | **0** | **5** | **0** | **17** | **6** | **1** | **0** | **0** | **1** | **0** | **0** | **0** | **7** | **1** | **0** | **38** | **115** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 1 | | 1 | | 1 | | | | | | | | | 1 | 2 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | 3 | | 0 | 0 | 0 | 3 |
| 4:45 PM | | | | | | | 1 | | | | | | | | | 0 | 1 | 0 | 0 |
| 5:00 PM | | | 1 | | 1 | | | | | | | | | | | 1 | 1 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | 1 | | 0 | 0 | 0 | 1 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 2 | | 2 | 0 | 2 | | 0 | 0 | 0 | | 0 | 4 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **1** | **0** | **1** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **0** | **3** | **0** | **1** | **2** | **0** | **3** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | 1 | 1 | | | 1 | 1 | 0 | 0 | 1 | 1 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 1 | 1 | | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

6 **Intersection:** 6: N Willamette St @ W Van Duyn St **City:** Coburg, OR

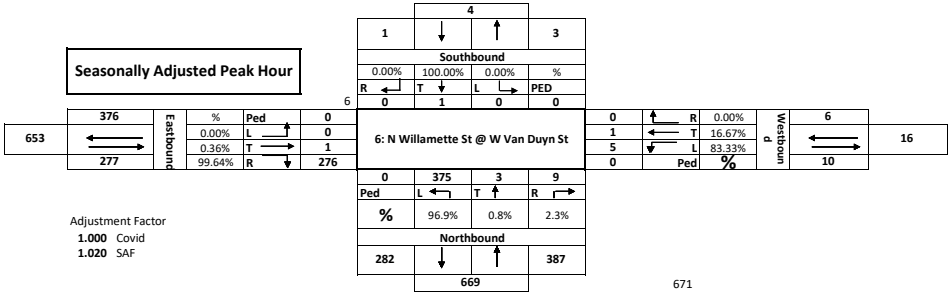
**Counter:** Sandow Engineering **Date:** Tuesday, July 13, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 83 | 83 | 64 | 0 | 0 | 64 | 148 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 91 | 53 | 0 | 0 | 53 | 144 | | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 0 | 86 | 89 | 62 | 0 | 0 | 62 | 153 | | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 85 | 87 | 83 | 1 | 0 | 84 | 172 | 617 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 1 | 99 | 103 | 57 | 0 | 0 | 57 | 162 | 631 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 3 | 0 | 98 | 101 | 69 | 0 | 0 | 69 | 172 | 659 | 0 | 0 | 1 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 100 | 66 | 2 | 0 | 68 | 168 | 674 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 77 | 78 | 51 | 0 | 0 | 51 | 130 | 632 | 0 | 0 | 0 | 2 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:30 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:45 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **1** | **0** | | **0** | **1** | **7** | | **10** | **3** | **719** | | **505** | **3** | **0** | | **1249** | | **0** | **0** | **1** | **2** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **1** | **0** | **1** | **0** | **1** | **5** | **6** | **9** | **3** | **368** | **380** | **271** | **1** | **0** | **272** | **659** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.25 | 0.00 | 0.25 | 0.00 | 0.25 | 0.63 | 0.75 | 0.75 | 0.38 | 0.93 | 0.92 | 0.82 | 0.25 | 0.00 | 0.81 | 0.96 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 0 | 0 | 1 | | 0 | 0 | 15 | | 11 | 0 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 0% | 0% | 20% | | 0% | 0% | 4% | | 4% | 0% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
4
1
3
Southbound
0.00%
100.00%
0.00%
%
R
T
L
PED
6
0
1
0
0
376
Eastbound
%
Ped
0
653
0.00%
L
0
0.36%
T
1
277
99.64%
R
276
6: N Willamette St @ W Van Duyn St
0
R
0.00%
1
T
16.67%
5
L
83.33%
0
Ped
%
Westboun
d
6
16
10
0
375
3
9
Ped
L
T
R
%
96.9%
0.8%
2.3%
Northbound
282
387
669
671
Adjustment Factor
1.000 Covid
1.020 SAF

**6: N Willamette St @ W Van Duyn St**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | | | | | | | | | 1 | | | | | 80 | | | 59 | | | | 140 | |
| 4:15 PM | | | | | | | | | | | | | | 82 | | | 52 | | | | 134 | |
| 4:30 PM | | | | | | | | | 1 | | | 3 | | 83 | | | 59 | | | | 146 | |
| 4:45 PM | | | | | | | | 1 | | | | | 2 | 80 | | | 78 | 1 | | | 162 | 582 |
| 5:00 PM | | | | | | | | | 2 | | | 3 | 1 | 93 | | | 56 | | | | 155 | 597 |
| 5:15 PM | | | 1 | | | | | | 1 | | | 3 | | 97 | | | 67 | | | | 169 | 632 |
| 5:30 PM | | | | | | | | | | | | | | 97 | | | 64 | 2 | | | 163 | 649 |
| 5:45 PM | | | | | | | | | 1 | | | | | 71 | | | 49 | | | | 121 | 608 |
| 6:00 PM | | | | | | | | | | | | | | | | | | | | | 0 | 453 |
| 6:15 PM | | | | | | | | | | | | | | | | | | | | | 0 | 284 |
| 6:30 PM | | | | | | | | | | | | | | | | | | | | | 0 | 121 |
| 6:45 PM | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 0 | 1 | 0 | | 0 | 0 | 1 | 6 | | 0 | 9 | 3 | 683 | | 0 | 484 | 3 | 0 | | | |
| **Peak Hour** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **1** | **4** | **0** | **0** | **9** | **3** | **353** | **0** | **0** | **260** | **1** | **0** | **0** | **632** | **1811** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | | | | | | | | | | | 3 | | 5 | | | | 8 | |
| 4:15 PM | | | | | | | | | | | 9 | | 1 | | | | 10 | |
| 4:30 PM | | | | | | | 1 | | | | 3 | | 3 | | | | 7 | |
| 4:45 PM | | | | | | | | | | | 5 | | 5 | | | | 10 | 35 |
| 5:00 PM | | | | | | | | | | | 6 | | 1 | | | | 7 | 34 |
| 5:15 PM | | | | | | | | | | | 1 | | 2 | | | | 3 | 27 |
| 5:30 PM | | | | | | | | | | | 3 | | 2 | | | | 5 | 25 |
| 5:45 PM | | | | | | | | | 1 | | 6 | | 2 | | | | 9 | 24 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 17 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 14 |
| 6:30 PM | | | | | | | | | | | | | | | | | 0 | 9 |
| 6:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 1 | | 1 | 0 | 36 | | 21 | 0 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **15** | **0** | **11** | **0** | **0** | **0** | **27** | **96** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | 1 | | | | | 0 | 0 | 1 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | 2 | | | 0 | 0 | 0 | 2 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 1 | | 2 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** |

**Pedestrians**

| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

7 **Intersection:** 7: Van Duyn Rd @ RV Park Access **City:** Coburg, OR

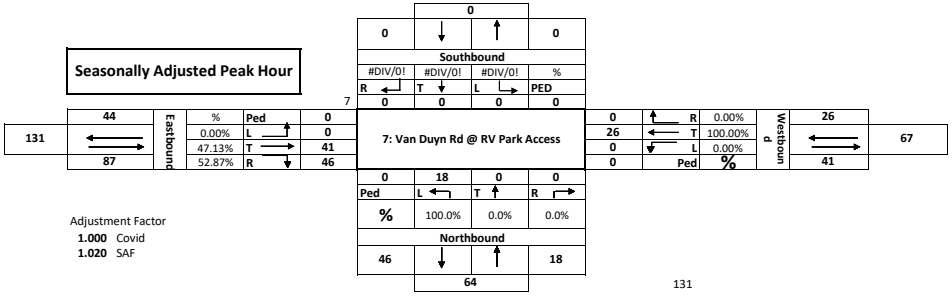
**Counter:** Sandow Engineering **Date:** Wednesday, July 14, 2021

## Total of All Vehicles

| Time Period | | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | Right | Thru | Left | Approach Total | | | SB | WB | NB | EB |
| 16:00 | 16:15 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 12 | 0 | 0 | 6 | 6 | 7 | 5 | 0 | 12 | 30 | | 0 | 0 | 0 | 0 |
| 16:15 | 16:30 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 2 | 2 | 13 | 7 | 0 | 20 | 28 | | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 4 | 4 | 8 | 9 | 0 | 17 | 26 | | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 1 | 1 | 10 | 12 | 0 | 22 | 30 | 114 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 7 | 7 | 10 | 8 | 0 | 18 | 32 | 116 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 6 | 6 | 17 | 11 | 0 | 28 | 40 | 128 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 7 | 7 | 6 | 13 | 0 | 19 | 33 | 135 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 4 | 4 | 12 | 7 | 0 | 19 | 29 | 134 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:30 | 18:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| 18:45 | 19:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 |
| **Count Period Total** | | **0** | **0** | **0** | | **0** | **56** | **0** | | **0** | **0** | **37** | | **83** | **72** | **0** | | **248** | | **0** | **0** | **0** | **0** |

**PM Peak Hour Count Summary**

| | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | | | Pedestrians | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | Right | Thru | Left | Approach | | | SB | WB | NB | EB |
| **Peak Volumes** | **0** | **0** | **0** | **0** | **0** | **25** | **0** | **25** | **0** | **0** | **18** | **18** | **45** | **40** | **0** | **85** | **128** | | **0** | **0** | **0** | **0** |
| **PHF** | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.89 | 0.00 | 0.89 | 0.00 | 0.00 | 0.64 | 0.64 | 0.66 | 0.83 | 0.00 | 0.76 | 0.80 | | | | | |
| **Trucks** | 0 | 0 | 0 | | 0 | 1 | 0 | | 0 | 0 | 1 | | 1 | 0 | 0 | | | | | | | |
| **% Trucks** | 0% | 0% | 0% | | 0% | 4% | 0% | | 0% | 0% | 6% | | 2% | 0% | 0% | | | | | | | |


Seasonally Adjusted Peak Hour
Eastbound
Westbound
Southbound
Northbound
7: Van Duyn Rd @ RV Park Access
Ped
Adjustment Factor
1.000 Covid
1.020 SAF

131

**7: Van Duyn Rd @ RV Park Access**

**Pedestrians and Cars**

| Time Period | Southbound | | | | | Westbound | | | | | Northbound | | | | | Eastbound | | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | Peds | Right | Thru | Left | | | |
| 4:00 PM | | | | | | | | 12 | | | | | | 6 | | | 7 | 5 | | | 30 | |
| 4:15 PM | | | | | | | | 5 | | | | | | 2 | | | 12 | 6 | | | 25 | |
| 4:30 PM | | | | | | | | 5 | | | | | | 4 | | | 8 | 9 | | | 26 | |
| 4:45 PM | | | | | | | | 7 | | | | | | 0 | | | 10 | 12 | | | 29 | 110 |
| 5:00 PM | | | | | | | | 6 | | | | | | 7 | | | 10 | 8 | | | 31 | 111 |
| 5:15 PM | | | | | | | | 6 | | | | | | 6 | | | 16 | 11 | | | 39 | 125 |
| 5:30 PM | | | | | | | | 7 | | | | | | 7 | | | 6 | 13 | | | 33 | 132 |
| 5:45 PM | | | | | | | | 6 | | | | | | 4 | | | 12 | 7 | | | 29 | 132 |
| 6:00 PM | | | | | | | | | | | | | | | | | | | | | 0 | 101 |
| 6:15 PM | | | | | | | | | | | | | | | | | | | | | 0 | 62 |
| 6:30 PM | | | | | | | | | | | | | | | | | | | | | 0 | 29 |
| 6:45 PM | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 0 | 0 | 0 | | 0 | 0 | 54 | 0 | | 0 | 0 | 0 | 36 | | 0 | 81 | 71 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **24** | **0** | **0** | **0** | **0** | **0** | **17** | **0** | **0** | **44** | **40** | **0** | **0** | **125** | **346** |

**Trucks**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | | 15 Minute Volume | Hourly Volume |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | |
| 4:00 PM | | | | | | | | | | | | | | | | | 0 | |
| 4:15 PM | | | | | | 1 | | | | | | | 1 | 1 | | | 3 | |
| 4:30 PM | | | | | | | | | | | | | | | | | 0 | |
| 4:45 PM | | | | | | | | | | | 1 | | | | | | 1 | 4 |
| 5:00 PM | | | | | | 1 | | | | | | | | | | | 1 | 5 |
| 5:15 PM | | | | | | | | | | | | | 1 | | | | 1 | 3 |
| 5:30 PM | | | | | | | | | | | | | | | | | 0 | 3 |
| 5:45 PM | | | | | | | | | | | | | | | | | 0 | 2 |
| 6:00 PM | | | | | | | | | | | | | | | | | 0 | 1 |
| 6:15 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 2 | 0 | | 0 | 0 | 1 | | 2 | 1 | 0 | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **0** | **0** | **0** | **1** | **0** | **1** | **0** | **0** | **0** | **3** | **12** |

**Bikes**

| Time Period | Southbound | | | | Westbound | | | | Northbound | | | | Eastbound | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | Right | Thru | Left | | | | |
| 4:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 4:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 5:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:00 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:15 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:30 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| 6:45 PM | | | | | | | | | | | | | | | | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | | | |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

**Pedestrians**

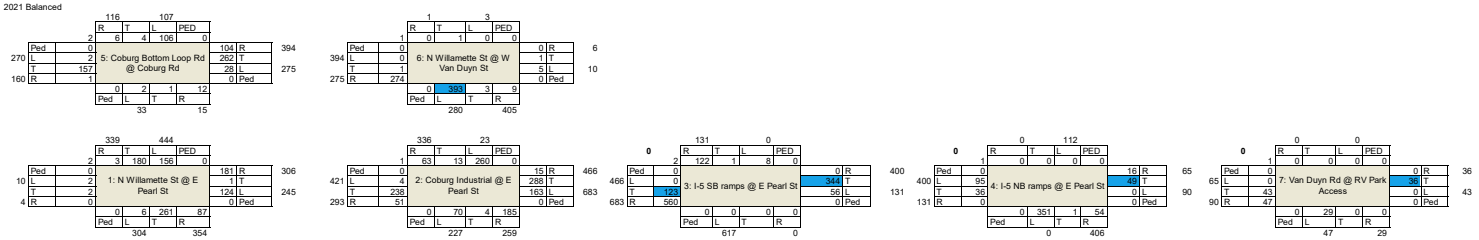
| Time Period | NE | | | | NW | | | | SW | | | | SE | | | SB | WB | NB | EB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | Left | Right | Total | | | | |
| 4:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 4:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 5:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:00 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:15 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:30 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| 6:45 PM | | | 0 | | | | 0 | | | | 0 | | | | 0 | 0 | 0 | 0 | 0 |
| **Total** | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Peak Hour** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

## Global Peak Hour

| Intersections | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 1: N Willamette St @ E Pearl St | 2: Coburg Industrial @ E Pearl St | 3: I-5 SB ramps @ E Pearl St | 4: I-5 NB ramps @ E Pearl St | 6: N Willamette St @ W Van Duyn St | 5: Coburg Bottom Loop Rd @ Coburg Rd | 0 |
| Time Period | | Volume | Volume | Volume | Volume | Volume | Volume | Total |
| 4:00 PM | 5:00 PM | 928 | 1,033 | 1,011 | 556 | 617 | 675 | **3528** |
| 4:15 PM | 5:15 PM | 920 | 1,061 | 1,049 | 539 | 631 | 680 | **3569** |
| 4:30 PM | 5:30 PM | 938 | 1,015 | 1,114 | 533 | 659 | 672 | **3600** |
| 4:45 PM | 5:45 PM | 886 | 895 | 1,048 | 552 | 674 | 685 | **3381** |
| 5:00 PM | 6:00 PM | 858 | 835 | 989 | 534 | 632 | 633 | **3216** |
| | | 938 | 1061 | 1114 | 556 | 674 | 685 | 3600 |

Peak Hour 4:30 PM
4:45 PM
5:00 PM
5:15 PM

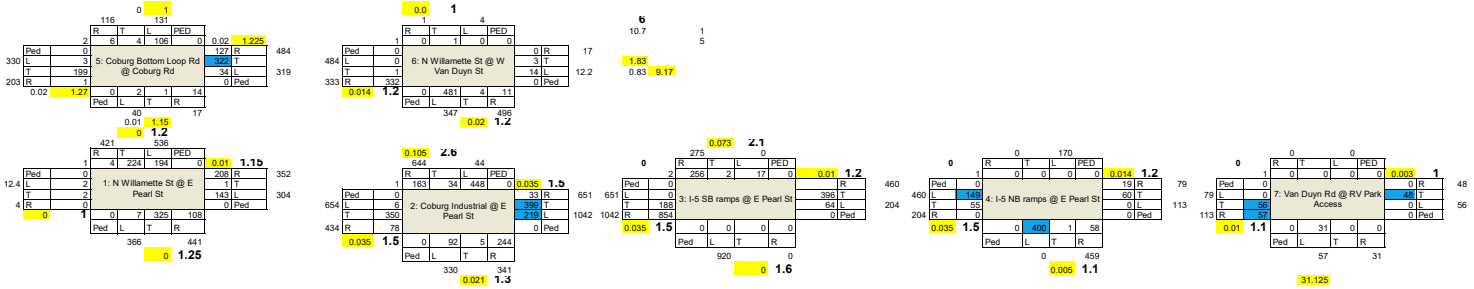
2021 Balanced



**2036 PM Volumes Background**

**EDIT Highlighted**

| | |
|---|---|
| Base Year | 2021 |
| Target Year | 2036 |
| Years of Growth | 15 |
| Growth Rate Per Year | |
| Growth Factor | |



| | | | 2011 Estimates by Direction | 2035 Estimates by Direction | Anuual Growth | Difference | Existing 2021 Volumes | 1: Future Growth Method | 2: Future Difference Method | 3: Percent Differenc e Method | Selected Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Coburg Rd @ Coburg Bottom Loop Rd** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 1 | 3 | 0.083333 | 2 | 116 | 261 | 117.25 | -0.55077 | 261 |
| | | Out | 2 | 5 | 0.0625 | 3 | 107 | 207.3125 | 108.875 | -47.4827 | 108.875 |
| | **South** | In | 56 | 56 | 0 | 0 | 15 | 15 | 15 | 0 | 15 |
| | | Out | 106 | 108 | 0.000786 | 2 | 33 | 33.38915 | 34.25 | 2.57823 | 33.38915 |
| | **East** | In | 164 | 236 | 0.018293 | 72 | 394 | 502.1098 | 439 | -12.5689 | 502.1098 |
| | | Out | 255 | 378 | 0.020098 | 123 | 275 | 357.9044 | 351.875 | -1.68464 | 357.9044 |
| | **West** | In | 358 | 486 | 0.014898 | 128 | 270 | 330.3352 | 350 | 5.952985 | 330.3352 |
| | | Out | 215 | 290 | 0.014535 | 75 | 160 | 194.8837 | 206.875 | 6.153043 | 194.8837 |
| **N Willamette St @ W Van Duyn St** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 343 | 464 | 0.014699 | 121 | 387 | 472.3262 | 462.625 | -2.05391 | 472.3262 |
| | | Out | 211 | 272 | 0.012046 | 61 | 282 | 332.9538 | 320.125 | -3.85302 | 332.9538 |
| | **South** | In | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| | | Out | 1 | 1 | 0 | 0 | 3 | 3 | 3 | 0 | 3 |
| | **East** | In | 210 | 279 | 0.01369 | 69 | 377 | 454.4196 | 420.125 | -7.54691 | 454.4196 |
| | | Out | 342 | 472 | 0.015838 | 130 | 376 | 465.3275 | 457.25 | -1.73587 | 465.3275 |
| | **West** | In | 1 | 9 | 0.333333 | 8 | 6 | 36 | 11 | -69.4444 | 11 |
| | | Out | 1 | 7 | 0.25 | 6 | 10 | 47.5 | 13.75 | -71.0526 | 13.75 |
| **N Willamette St @ E Pearl St** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 332 | 463 | 0.016441 | 131 | 338 | 421.3547 | 419.875 | -0.35117 | 421.3547 |
| | | Out | 238 | 430 | 0.033613 | 192 | 289 | 434.7143 | 409 | -5.91522 | 434.7143 |
| | **South** | In | 283 | 393 | 0.016196 | 110 | 323 | 401.4673 | 391.75 | -2.42045 | 401.4673 |
| | | Out | 411 | 590 | 0.018147 | 179 | 423 | 538.1414 | 534.875 | -0.60698 | 538.1414 |
| | **East** | In | 0 | 0 | #DIV/0! | 0 | 4 | #DIV/0! | 4 | #DIV/0! | #DIV/0! |
| | | Out | 0 | 0 | #DIV/0! | 0 | 10 | #DIV/0! | 10 | #DIV/0! | #DIV/0! |
| | **West** | In | 309 | 287 | -0.00297 | -22 | 291 | 278.051 | 277.25 | -0.28807 | 278.051 |
| | | Out | 233 | 117 | -0.02074 | -116 | 234 | 161.1888 | 161.5 | 0.19304 | 161.1888 |
| **Coburg Industrial Way @ E Pearl St** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 183 | 276 | 0.021175 | 93 | 240 | 316.2295 | 298.125 | -5.72512 | 316.2295 |
| | | Out | 91 | 123 | 0.014652 | 32 | 190 | 231.7582 | 210 | -9.38834 | 231.7582 |
| | **South** | In | 173 | 611 | 0.105491 | 438 | 252 | 650.7572 | 525.75 | -19.2095 | 525.75 |
| | | Out | 74 | 278 | 0.114865 | 204 | 36 | 98.02703 | 163.5 | 66.79074 | 163.5 |
| | **East** | In | 206 | 325 | 0.02407 | 119 | 240 | 326.6505 | 314.375 | -3.75799 | 326.6505 |
| | | Out | 253 | 444 | 0.031456 | 191 | 334 | 491.5939 | 453.375 | -7.77448 | 491.5939 |
| | **West** | In | 287 | 540 | 0.036731 | 253 | 407 | 631.24 | 565.125 | -10.4738 | 631.24 |
| | | Out | 340 | 907 | 0.069485 | 567 | 579 | 1182.48 | 933.375 | -21.0663 | 933.375 |
| **I-5 SB Exit @ E Pearl St** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 1 | 2 | 0.041667 | 1 | 0 | 0 | 0.625 | #DIV/0! | #DIV/0! |
| | | Out | 480 | 719 | 0.020747 | 239 | 530 | 694.9349 | 679.375 | -2.23904 | 694.9349 |
| | **South** | In | 57 | 157 | 0.073099 | 100 | 121 | 253.6754 | 183.5 | -27.6635 | 183.5 |
| | | Out | 0 | 0 | #DIV/0! | 0 | 0 | #DIV/0! | 0 | #DIV/0! | #DIV/0! |
| | **East** | In | 517 | 907 | 0.031431 | 390 | 579 | 851.9811 | 822.75 | -3.43096 | 851.9811 |
| | | Out | 373 | 540 | 0.018655 | 167 | 407 | 520.8891 | 511.375 | -1.82651 | 520.8891 |
| | **West** | In | 369 | 444 | 0.008469 | 75 | 350 | 394.4614 | 396.875 | 0.611877 | 394.4614 |
| | | Out | 90 | 250 | 0.074074 | 160 | 113 | 238.5556 | 213 | -10.7126 | 238.5556 |
| **I-5 NB Exit @ Van Duyn Rd** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 405 | 457 | 0.00535 | 52 | 358 | 386.7284 | 390.5 | 0.975259 | 386.7284 |
| | | Out | 0 | 0 | #DIV/0! | 0 | 0 | #DIV/0! | 0 | #DIV/0! | #DIV/0! |
| | **South** | In | 0 | 0 | #DIV/0! | 0 | 0 | #DIV/0! | 0 | #DIV/0! | #DIV/0! |
| | | Out | 73 | 217 | 0.082192 | 144 | 97 | 216.589 | 187 | -13.6614 | 216.589 |
| | **East** | In | 90 | 250 | 0.074074 | 160 | 113 | 238.5556 | 213 | -10.7126 | 238.5556 |
| | | Out | 369 | 444 | 0.008469 | 75 | 350 | 394.4614 | 396.875 | 0.611877 | 394.4614 |
| | **West** | In | 64 | 86 | 0.014323 | 22 | 62 | 75.32031 | 75.75 | 0.57048 | 75.32031 |
| | | Out | 117 | 132 | 0.005342 | 15 | 86 | 92.89103 | 95.375 | 2.674074 | 92.89103 |
| **RV Park Access @ Van Duyn Rd** | | | **Trips** | **Trips** | **%** | **Trips** | **Trips** | **Trips** | **Trips** | **%** | **Method #** |
| | **North** | In | 21 | 42 | 0.041667 | 21 | 18 | 29.25 | 31.125 | 6.410256 | 29.25 |
| | | Out | 15 | 27 | 0.033333 | 12 | 46 | 69 | 53.5 | -22.4638 | 53.5 |
| | **South** | In | 0 | 0 | #DIV/0! | 0 | 0 | #DIV/0! | 0 | #DIV/0! | #DIV/0! |
| | | Out | 0 | 0 | #DIV/0! | 0 | 0 | #DIV/0! | 0 | #DIV/0! | #DIV/0! |
| | **East** | In | 117 | 132 | 0.005342 | 15 | 87 | 93.97115 | 96.375 | 2.558068 | 93.97115 |
| | | Out | 64 | 86 | 0.014323 | 22 | 44 | 53.45313 | 57.75 | 8.038585 | 53.45313 |
| | **West** | In | 43 | 46 | 0.002907 | 3 | 26 | 27.13372 | 27.875 | 2.731948 | 27.13372 |
| | | Out | 102 | 107 | 0.002042 | 5 | 41 | 42.25613 | 44.125 | 4.422726 | 42.25613 |

| Pearl St | |
|---|---|
| 0.02407 | |
| 0.036731 | |
| 0.031431 | |
| 0.008469 | 0.034955 |
| 0.074074 | |

**Seasonal Adjustment**

| Location: | | 24-001 |
|---|---|---|
| Year | Count Month* | Peak Month* |
| | April | |
| 2019 | 102 | 117 |
| 2018 | 102 | 114 |
| 2017 | 103 | 117 |
| 2016 | 102 | 115 |
| 2015 | 103 | 113 |
| Seasonal Adj. Factor | | 1.1270 |

** Percent of ADT*
*Values in gray are high and low values not used*

**SEASONAL TREND TABLE (Updated: 7/20/2021 )[1]**

| TREND | 1-Jan | 15-Jan | 1-Feb | 15-Feb | 1-Mar | 15-Mar | 1-Apr | 15-Apr | 1-May | 15-May | 1-Jun | 15-Jun | 1-Jul | 15-Jul | 1-Aug | 15-Aug | 1-Sep | 15-Sep | 1-Oct | 15-Oct | 1-Nov | 15-Nov | 1-Dec | 15-Dec | Seasonal Trend Peak Period Factor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| INTERSTATE URBANIZED | 1.0672 | 1.0684 | 1.0922 | 1.1160 | 1.0605 | 1.0050 | 0.9923 | 0.9796 | 0.9781 | 0.9767 | 0.9615 | 0.9483 | 0.9517 | 0.9571 | 0.9551 | 0.9531 | 0.9674 | 0.9816 | 0.9850 | 0.9884 | 1.0045 | 1.0206 | 1.0322 | 1.0438 | 0.9463 |
| INTERSTATE NONURBANIZED | 1.2426 | 1.2883 | 1.3750 | 1.4616 | 1.2645 | 1.0673 | 1.0382 | 1.0092 | 0.9798 | 0.9504 | 0.9005 | 0.8506 | 0.8322 | 0.8139 | 0.8221 | 0.8302 | 0.8719 | 0.9135 | 0.9441 | 0.9747 | 1.0178 | 1.0608 | 1.1123 | 1.1638 | 0.8139 |
| COMMUTER | 1.0850 | 1.0875 | 1.1183 | 1.1492 | 1.0880 | 1.0268 | 1.0014 | 0.9759 | 0.9705 | 0.9650 | 0.9503 | 0.9355 | 0.9470 | 0.9585 | 0.9509 | 0.9433 | 0.9528 | 0.9623 | 0.9614 | 0.9604 | 0.9938 | 1.0272 | 1.0474 | 1.0676 | 0.9355 |
| COASTAL DESTINATION | 1.1885 | 1.1712 | 1.2001 | 1.2289 | 1.1242 | 1.0194 | 1.0316 | 1.0437 | 1.0080 | 0.9723 | 0.9347 | 0.8972 | 0.8612 | 0.8252 | 0.8205 | 0.8159 | 0.8686 | 0.9214 | 0.9689 | 1.0164 | 1.0660 | 1.1156 | 1.1580 | 1.2005 | 0.8159 |
| COASTAL DESTINATION ROUTE | 1.3445 | 1.3248 | 1.4108 | 1.4968 | 1.2858 | 1.0747 | 1.0911 | 1.1076 | 1.0274 | 0.9473 | 0.8941 | 0.8409 | 0.7820 | 0.7231 | 0.7218 | 0.7205 | 0.8016 | 0.8827 | 0.9669 | 1.0511 | 1.1133 | 1.1754 | 1.2480 | 1.3206 | 0.7205 |
| AGRICULTURE | 1.4583 | 1.4827 | 1.5763 | 1.6700 | 1.4596 | 1.2492 | 1.1487 | 1.0482 | 0.9747 | 0.9011 | 0.8579 | 0.8146 | 0.8058 | 0.7970 | 0.7922 | 0.7873 | 0.7772 | 0.7670 | 0.8288 | 0.8905 | 0.9947 | 1.0989 | 1.2462 | 1.3934 | 0.7670 |
| RECREATIONAL SUMMER | 1.5848 | 1.6474 | 1.7861 | 1.9247 | 1.6595 | 1.3942 | 1.2973 | 1.2004 | 1.0517 | 0.9029 | 0.8256 | 0.7484 | 0.7018 | 0.6552 | 0.6708 | 0.6864 | 0.7393 | 0.7922 | 0.8898 | 0.9874 | 1.1242 | 1.2610 | 1.3965 | 1.5320 | 0.6552 |
| RECREATIONAL SUMMER WINTER | 0.8736 | 0.8525 | 0.9330 | 1.0135 | 1.0146 | 1.0158 | 1.1492 | 1.2825 | 1.1763 | 1.0700 | 0.9760 | 0.8821 | 0.8005 | 0.7190 | 0.7305 | 0.7420 | 0.8897 | 1.0374 | 1.2010 | 1.3645 | 1.5212 | 1.6778 | 1.3812 | 1.0847 | 0.7190 |
| RECREATIONAL WINTER | 0.6997 | 0.6389 | 0.6561 | 0.6733 | 0.7219 | 0.7704 | 1.0580 | 1.3455 | 1.3746 | 1.4038 | 1.2832 | 1.1625 | 0.9985 | 0.8344 | 0.8600 | 0.8857 | 1.0560 | 1.2262 | 1.4100 | 1.5937 | 1.8758 | 2.1580 | 1.5328 | 0.9076 | 0.6389 |
| SUMMER | 1.2151 | 1.2357 | 1.3129 | 1.3901 | 1.2520 | 1.1139 | 1.0620 | 1.0100 | 0.9718 | 0.9336 | 0.8976 | 0.8615 | 0.8457 | 0.8299 | 0.8354 | 0.8410 | 0.8743 | 0.9077 | 0.9357 | 0.9638 | 1.0273 | 1.0908 | 1.1322 | 1.1737 | 0.8299 |
| SUMMER < 2500 | 1.3035 | 1.3186 | 1.3817 | 1.4448 | 1.2869 | 1.1289 | 1.0598 | 0.9906 | 0.9480 | 0.9053 | 0.8720 | 0.8387 | 0.8237 | 0.8086 | 0.8229 | 0.8373 | 0.8616 | 0.8859 | 0.9233 | 0.9607 | 1.0428 | 1.1249 | 1.2016 | 1.2783 | 0.8086 |

*** Seasonal Trend Table factors are based on previous year ATR data. The table is updated yearly.**
*** Grey shading indicates months were seasonal factor is greater than or less than 30%**
*** February 2019 snow event causing lower seasonal factors**

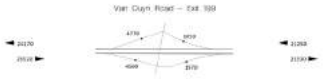
**[1]Seasonal Trend Table: The 2020 table is based on 2019 values due to the irregularity caused by the Covid epidemic shutdown during the 2020 count year.**

| | Commuter Count | Peak | SAF | | Summer Count | Peak | SAF | |
|---|---|---|---|---|---|---|---|---|
| 28-Jan | 1.1183 | 0.9355 | 1.195429 | | | | | |
| April | 0.9759 | 0.9355 | 1.043215 | | April 1.0100 | 0.8299 | 1.217042 | 1.130128 |
| July | 0.9585 | 0.9355 | 1.024575 | | | | | |

**ATR CHARACTERISTIC TABLE (Printed:7/20/2021)**

| 2020 SEASONAL TRAFFIC TREND | AREA TYPE | # OF LANES | WEEKLY TRAFFIC TREND | 2019 AADT[2] | OHP CLASSIFICATION | TR NUMBR | COUNTY | HIGHWAY ROUTE, NAME, & LOCATION | MP | STATE HWY NUMBER | $K_{30}$[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| COM | SMALL URBAN | 2 | WEEKDAY | 13000 | REGIONAL HWY | 24-001 | MARION | OR99E, PACIFIC HIGHWAY EAST, 0.11 MILES SOUTH OF NE BELLE PASSI ROAD | 34.03 | 81 | 0.1109 |

ADT Ramps 12050 10900



| Location | OR99E, MP 34.03, PACIFIC HIGHWAY EAST NO. 81, 0.11 miles south of NE Belle Passi Rd | Site Name | Woodburn (26-004) |
|---|---|---|---|
| | | Installed | January, 1937 |

**HISTORICAL ANNUAL TRAFFIC DATA**

| Year | Annual Average Daily Traffic (AADT) | Critical Values as percent of Annual Average Daily Traffic (AADT) | | | | |
|---|---|---|---|---|---|---|
| | | Max Day | Max Hour | 10th Hour | 20th Hour | 30th Hour |
| 2010 | 10228 | 133 | 13.6 | 11.6 | 11.3 | 11.1 |
| 2011 | 10147 | 126 | 14.7 | 11.9 | 11.4 | 11.2 |
| 2012 | 10050 | *** | *** | *** | *** | *** |
| 2013 | 10573 | 125 | 12.5 | 11.9 | 11.7 | 11.5 |
| 2014 | 11292 | 135 | 14.3 | 12.3 | 11.8 | 11.5 |
| 2015 | 11775 | 127 | 14.5 | 11.7 | 11.3 | 11.0 |
| 2016 | 12007 | 126 | 12.3 | 11.5 | 11.2 | 11.1 |
| 2017 | 12378 | 127 | 13.0 | 11.8 | 11.5 | 11.3 |
| 2018 | 12968 | 130 | 12.3 | 11.8 | 11.5 | 11.3 |
| 2019 | 13031 | 142 | 14.1 | 11.9 | 11.2 | 11.1 |

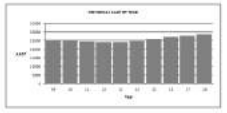
**2019 SEASONAL TRAFFIC DATA**

| Month | Weekday | | Daily | |
|---|---|---|---|---|
| | Average | % AADT | Average | % AADT |
| January | 11522 | 88 | 11067 | 85 |
| February | 11619 | 89 | 11559 | 89 |
| March | 12531 | 96 | 12165 | 93 |
| April | 13135 | 101 | 13139 | 101 |
| May | 13563 | 104 | 13386 | 103 |
| June | 13249 | 102 | 13541 | 104 |
| July | 14809 | 114 | 14495 | 111 |
| August | 14640 | 112 | 14341 | 110 |
| September | 14221 | 109 | 13924 | 107 |
| October | 14307 | 110 | 14051 | 108 |
| November | 12808 | 99 | 12256 | 94 |
| December | 12059 | 93 | 11434 | 88 |

| Location: | OR22, MP 2.82, NORTH SANTIAM HIGHWAY NO. 162, 0.91 mile east of Lancaster Drive Interchange | Site Name: | North Santiam (24-004) |
|---|---|---|---|
| | | Installed: | January, 1967 |

**HISTORICAL TRAFFIC DATA**

| Year | AADT | Percent of AADT | | | | |
|---|---|---|---|---|---|---|
| | | Max Day | Max Hour | 10TH Hour | 20TH Hour | 30TH Hour |
| 2009 | 23014 | 135 | 10.8 | 10.5 | 10.3 | 10.2 |
| 2010 | 24911 | 134 | 10.8 | 10.3 | 10.3 | 10.2 |
| 2011 | 24313 | 137 | 10.9 | 10.8 | 10.4 | 10.2 |
| 2012 | 24107 | 135 | 11.2 | 10.7 | 10.5 | 10.3 |
| 2013 | 24180 | *** | *** | *** | *** | *** |
| 2014 | 24875 | 136 | 11.4 | 10.7 | 10.4 | 10.4 |
| 2015 | 25085 | 136 | 10.9 | 10.5 | 10.1 | 9.9 |
| 2016 | 27036 | 134 | 10.8 | 10.2 | 10.1 | 10.0 |
| 2017 | 27746 | 133 | 11.2 | 10.2 | 10.0 | 9.9 |
| 2018 | 28715 | 132 | 10.6 | 10.2 | 10.0 | 9.8 |



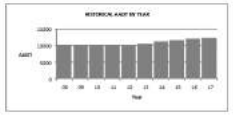
**2018 TRAFFIC DATA**

| | Average Weekday Traffic | Percent of AADT | Average Daily Traffic | Percent of AADT |
|---|---|---|---|---|
| January | 26339 | 92 | 25603 | 87 |
| February | 27217 | 95 | 26877 | 93 |
| March | 28190 | 98 | 27291 | 95 |
| April | 29277 | 102 | 28308 | 98 |
| May | 30870 | 107 | 30279 | 105 |
| June | 31927 | 111 | 31389 | 109 |
| July | 32840 | 114 | 32908 | 115 |
| August | 32849 | 114 | 32578 | 113 |
| September | 30484 | 106 | 29834 | 104 |
| October | 29543 | 103 | 28443 | 99 |
| November | 28291 | 99 | 26941 | 94 |
| December | 27068 | 94 | 25930 | 90 |

For Vehicle Classification data near your project, please go to the following web page: https://www.oregon.gov/ODOT/Data/Documents/TVT_2018.xlsx

**HISTORICAL TRAFFIC DATA**

| Year | AADT | Percent of AADT | | | | |
|---|---|---|---|---|---|---|
| | | Max Day | Max Hour | 10TH Hour | 20TH Hour | 30TH Hour |
| 2008 | 10284 | 128 | 11.9 | 11.4 | 11.2 | 11.0 |
| 2009 | 10284 | 130 | 11.9 | 11.8 | 10.6 | 10.4 |
| 2010 | 10224 | 131 | 13.4 | 11.6 | 11.3 | 11.1 |
| 2011 | 10147 | 126 | 14.7 | 11.9 | 11.4 | 11.2 |
| 2012 | 10050 | *** | *** | *** | *** | *** |
| 2013 | 10573 | 125 | 12.5 | 11.9 | 11.7 | 11.5 |
| 2014 | 11292 | 135 | 14.3 | 12.3 | 11.8 | 11.5 |
| 2015 | 11775 | 127 | 14.5 | 11.7 | 11.3 | 11.0 |
| 2016 | 12007 | 126 | 12.3 | 11.5 | 11.2 | 11.1 |
| 2017 | 12378 | 127 | 13.0 | 11.8 | 11.5 | 11.3 |



**2017 TRAFFIC DATA**

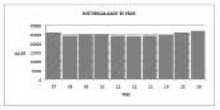
| | Average Weekday Traffic | Percent of AADT | Average Daily Traffic | Percent of AADT |
|---|---|---|---|---|
| January | 10715 | 87 | 10048 | 82 |
| February | 11734 | 95 | 11179 | 90 |
| March | 12178 | 98 | 11745 | 95 |
| April | 12790 | 103 | 12014 | 102 |
| May | 12898 | 104 | 12798 | 103 |
| June | 13466 | 109 | 13019 | 105 |
| July | 14036 | 113 | 13768 | 111 |
| August | 14424 | 117 | 13965 | 113 |
| September | 13441 | 109 | 13234 | 107 |
| October | 13164 | 107 | 13173 | 107 |
| November | 12319 | 100 | 11720 | 95 |
| December | 11492 | 93 | 11073 | 89 |

For Vehicle Classification data near your project, please go to the following web page: https://www.oregon.gov/ODOT/Data/Documents/TVT_2017.xlsx

| Location: | OR22, MP 2.82, NORTH SANTIAM HIGHWAY NO. 162, 0.91 mile east of Lancaster Drive Interchange | Site Name: | North Santiam (24-004) |
|---|---|---|---|
| | | Installed: | January, 1967 |

**HISTORICAL TRAFFIC DATA**

| Year | AADT | Percent of AADT | | | | |
|---|---|---|---|---|---|---|
| | | Max Day | Max Hour | 10TH Hour | 20TH Hour | 30TH Hour |
| 2007 | 23999 | 134 | 10.9 | 10.5 | 10.3 | 10.2 |
| 2008 | 24427 | 134 | 11.2 | 10.8 | 10.4 | 10.3 |
| 2009 | 23014 | 135 | 10.8 | 10.5 | 10.3 | 10.2 |
| 2010 | 24911 | 134 | 10.8 | 10.3 | 10.3 | 10.2 |
| 2011 | 24313 | 137 | 10.9 | 10.8 | 10.4 | 10.2 |
| 2012 | 24107 | 135 | 11.2 | 10.7 | 10.5 | 10.3 |
| 2013 | 24180 | *** | *** | *** | *** | *** |
| 2014 | 24875 | 136 | 11.4 | 10.7 | 10.4 | 10.4 |
| 2015 | 25085 | 136 | 10.9 | 10.3 | 10.1 | 9.9 |
| 2016 | 27036 | 134 | 10.8 | 10.2 | 10.1 | 10.0 |



**2016 TRAFFIC DATA**

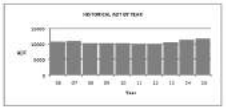
| | Average Weekday Traffic | Percent of AADT | Average Daily Traffic | Percent of AADT |
|---|---|---|---|---|
| January | 24429 | 90 | 22965 | 85 |
| February | 26010 | 96 | 24945 | 92 |
| March | 26454 | 98 | 25471 | 94 |
| April | 27038 | 100 | 27059 | 100 |
| May | 28445 | 105 | 28229 | 104 |
| June | 29870 | 110 | 29777 | 110 |
| July | 30800 | 113 | 30818 | 113 |
| August | 31079 | 115 | 31294 | 116 |
| September | 28875 | 107 | 28232 | 104 |
| October | 27510 | 101 | 26386 | 97 |
| November | 27820 | 103 | 25718 | 95 |
| December | 25118 | 93 | 23640 | 87 |

For Vehicle Classification data near your project, please go to the following web page: https://gis.odot.state.or.us/TransGIS/

| Location: | OR99E, MP 34.03, PACIFIC HIGHWAY EAST NO. 81, 0.11 miles south of NE Belle Passi Rd | Site Name: | Woodburn (26-004) |
|---|---|---|---|
| | | Installed: | January, 1937 |

**HISTORICAL TRAFFIC DATA**

| Year | ADT | Percent of ADT | | | | |
|---|---|---|---|---|---|---|
| | | Max Day | Max Hour | 10TH Hour | 20TH Hour | 30TH Hour |
| 2006 | 10748 | 128 | 13.4 | 11.2 | 10.8 | 10.7 |
| 2007 | 10914 | 126 | 13.0 | 11.8 | 11.3 | 11.1 |
| 2008 | 10254 | 128 | 11.9 | 11.4 | 11.2 | 11.0 |
| 2009 | 10266 | 130 | 11.9 | 11.0 | 10.6 | 10.4 |
| 2010 | 10224 | 131 | 13.4 | 11.6 | 11.3 | 11.1 |
| 2011 | 10147 | 126 | 14.7 | 11.9 | 11.4 | 11.2 |
| 2012 | 10050 | *** | *** | *** | *** | *** |
| 2013 | 10573 | 125 | 12.5 | 11.9 | 11.7 | 11.5 |
| 2014 | 11292 | 135 | 14.3 | 12.3 | 11.8 | 11.5 |
| 2015 | 11775 | 127 | 14.5 | 11.7 | 11.3 | 11.0 |



**2015 TRAFFIC DATA**

| | Average Weekday Traffic | Percent of ADT | Average Daily Traffic | Percent of ADT |
|---|---|---|---|---|
| January | 10843 | 92 | 10581 | 87 |
| February | 11380 | 97 | 10990 | 93 |
| March | 11931 | 101 | 11573 | 98 |
| April | 12175 | 103 | 11978 | 102 |
| May | 12420 | 106 | 12344 | 105 |
| June | 13273 | 113 | 12921 | 110 |
| July | 13250 | 113 | 12648 | 107 |
| August | 12869 | 109 | 12581 | 107 |
| September | 12362 | 105 | 12195 | 104 |
| October | 12348 | 105 | 12306 | 105 |
| November | 11550 | 98 | 10959 | 93 |
| December | 11345 | 96 | 10588 | 90 |

For Vehicle Classification data near this ATR, please go to the following web page: https://gis.odot.state.or.us/TransGIS/

TAX LOT 202 TPR

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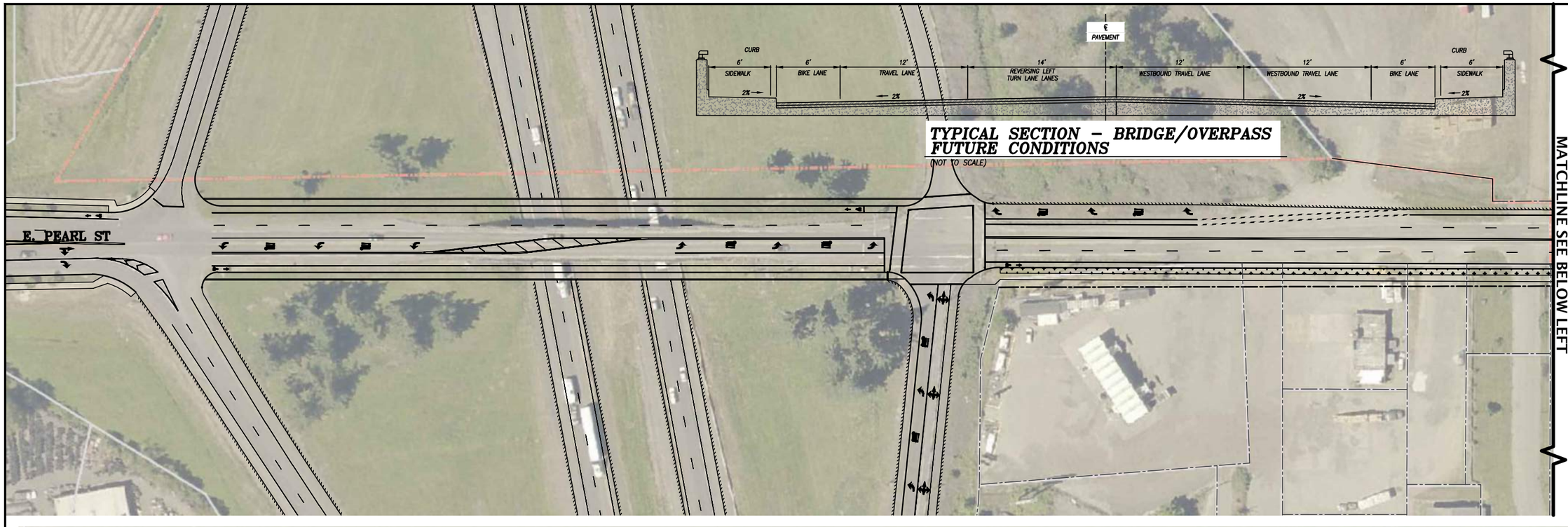
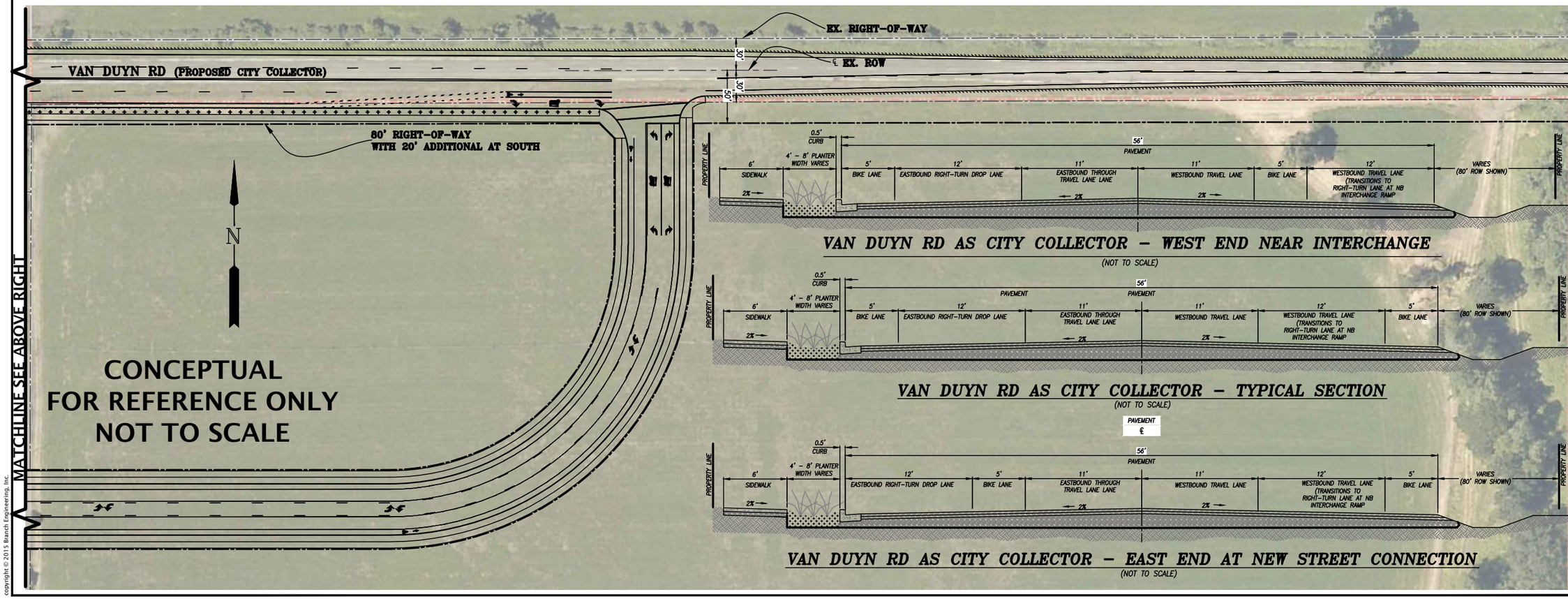
# CITY OF COBURG
# CONCEPTUAL VAN DUYN RD IMPROVEMENT PLAN
COBURG, OREGON

revisions:




**TYPICAL SECTION – BRIDGE/OVERPASS FUTURE CONDITIONS**
(NOT TO SCALE)




**VAN DUYN RD AS CITY COLLECTOR – WEST END NEAR INTERCHANGE**
(NOT TO SCALE)

**VAN DUYN RD AS CITY COLLECTOR – TYPICAL SECTION**
(NOT TO SCALE)

**VAN DUYN RD AS CITY COLLECTOR – EAST END AT NEW STREET CONNECTION**
(NOT TO SCALE)

date: JUNE 30, 2021
drawn by: DNH
designer: DNH
project no: 20-004G

TYPICAL STREET SECTIONS

sheet: 1 OF 1



Z:\2020\20-004g Industrial UGB Annexation\E. Van Duyn Rd\21-004 Van Duyn Rd Street Sec.dwg 6/29/2021 8:00 PM DANH

APPENDIX E: SYNCHRO OUTPUTS

TAX LOT 202 TPR

NB Ramp at Pearl

| 2021 Existing Conditions | | | | | | | | | B |
|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | |
| | 1 | | | | | | | | |
| | 2 NBLTR | 419 | 1640 | 0.255 | 1,2,3,4 | 0.376 | | Cycle Length | 83 |
| | 3 | | | | 1,2,7,8 | 0.297 | | Lost Time/phase | 4 |
| | 4 EBLT | 135 | 1119 | 0.121 | 5,6,3,4 | 0.121 | | # phases | 2 |
| | 5 | | | | 5,6,7,8 | 0.042 | | Total Lost Time | 8 |
| | 6 | | | | | | | | |
| | 7 | | | | Critical Pairs | 0.376 | Critical | v/c | 0.42 |
| | 8 WBTR | 67 | 1599 | 0.042 | | | | | |

| 2036 Background | | | | | | | | | B |
|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | |
| | NBL | 469 | 1640 | 0.286 | | | | | |
| | 2 NBLTR | 24 | 1640 | 0.015 | 1,2,3,4 | 0.432 | | Cycle Length | 71 |
| | | | | | 1,2,7,8 | 0.323 | | Lost Time/phase | 4 |
| | 4 EBL | 154 | 1055 | 0.146 | 5,6,3,4 | 0.181 | | # phases | 2 |
| | EBT | 57 | 1614 | 0.035 | 5,6,7,8 | 0.072 | | Total Lost Time | 8 |
| | 6 | | | | | | | | |
| | 8 WBT | 62 | 1668 | 0.037 | Critical Pairs | 0.432 | Critical | v/c | 0.49 |
| | WBR | 20 | 1437 | 0.014 | | | | | |

| 2036 Build | | | | | | | | | C |
|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | |
| | NBL | 284 | 1407 | 0.202 | | | | | |
| | 2 NBLTR | 335 | 1616 | 0.207 | 1,2,3,4 | 0.452 | | Cycle Length | 71 |
| | | | | | 1,2,7,8 | 0.548 | | Lost Time/phase | 4 |
| | 4 EBL | 154 | 616 | 0.250 | 5,6,3,4 | 0.324 | | # phases | 2 |
| | EBT | 119 | 1614 | 0.074 | 5,6,7,8 | 0.483 | | Total Lost Time | 8 |
| | 6 | | | | | | | | |
| | 8 WBT | 577 | 1668 | 0.346 | Critical Pairs | 0.548 | Critical | v/c | 0.62 |
| | WBR | 91 | 1437 | 0.063 | | | | | |

Pearl at Willamette

| 2021 Existing Conditions | | | | | | | | | | | B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | | |
| 1 | SBL | 96 | 922 | 0.104 | Prot | 1 prot, 2 | 0.332 | | | | |
| | | 66 | 641 | 0.103 | Perm | 1 perm, 2 | 0.331 | | | | |
| 2 | NBLTR | 369 | 1621 | 0.228 | | 6 | 0.111 | 0.332 | | Cycle Length | 59 |
| 3 | | | | | | 4 | 0.004 | | | Lost Time/phase | 4 |
| 4 | EBLTR | 5 | 1279 | 0.004 | | 8 | 0.133 | 0.133 | | # phases | 3 |
| 5 | | | | | | | | | | Total Lost Time | 12 |
| 6 | SBT | 191 | 1718 | 0.111 | | | | | | | |
| 7 | | | | | | Critical Pairs | 0.464 | | Critical | v/c | 0.58 |
| 8 | WBLT | 130 | 1474 | 0.088 | | | | | | | |
| | WBR | 189 | 1425 | 0.133 | | | | | | | |

| 2036 Background | | | | | | | | | | | B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | | |
| 1 | SBL | 135 | 922 | 0.146 | Prot | 1 prot, 2 | 0.429 | | | | |
| | | 67 | 641 | 0.105 | Perm | 1 perm, 2 | 0.387 | | | | |
| 2 | NBLTR | 458 | 1621 | 0.283 | | 6 | 0.138 | 0.429 | | Cycle Length | 80 |
| | | | | | | 4 | 0.011 | | | Lost Time/phase | 4 |
| 4 | EBLTR | 5 | 475 | 0.011 | | 8 | 0.152 | 0.152 | | # phases | 3 |
| 5 | | | | | | | | | | Total Lost Time | 12 |
| 6 | SBT | 237 | 1717 | 0.138 | | | | | | | |
| 7 | | | | | | Critical Pairs | 0.581 | | Critical | v/c | 0.68 |
| 8 | WBLT | 150 | 879 | 0.171 | | | | | | | |
| | WBR | 217 | 1425 | 0.152 | | | | | | | |

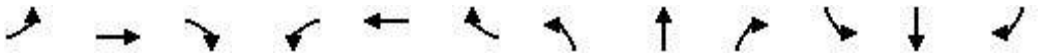
| 2036 Build | | | | | | | | | | | B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | | | |
| 1 | SBL | 129 | 922 | 0.140 | Prot | 1 prot, 2 | 0.427 | | | | |
| | | 85 | 641 | 0.133 | Perm | 1 perm, 2 | 0.420 | | | | |
| 2 | NBLTR | 465 | 1617 | 0.288 | | 6 | 0.138 | 0.427 | | Cycle Length | 60 |
| | | | | | | 4 | 0.008 | | | Lost Time/phase | 4 |
| 4 | EBLTR | 5 | 612 | 0.008 | | 8 | 0.186 | 0.186 | | # phases | 3 |
| 5 | | | | | | | | | | Total Lost Time | 12 |
| 6 | SBT | 237 | 1717 | 0.138 | | | | | | | |
| 7 | | | | | | Critical Pairs | 0.613 | | Critical | v/c | 0.77 |
| 8 | WBLT | 177 | 981 | 0.180 | | | | | | | |
| | WBR | 265 | 1425 | 0.186 | | | | | | | |

Pearl and Coburg Ind

| 2021 Existing Conditions | | | | | | | | | D |
|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | |
| 1 | SBL | 310 | 3183 | 0.097 | Prot | | | | |
| 2 | NBT | 225 | 1488 | 0.151 | | 1,2,3,4 | 0.527 | Cycle Length | 98 |
| 3 | WBL | 134 | 827 | 0.162 | Prot | 1,2,7,8 | 0.367 | Lost Time/phase | 4 |
| | | 60 | 372 | 0.161 | Perm | 5,6,3,4 | 0.387 | | |
| 4 | EBT | 283 | 2431 | 0.116 | | 5,6,7,8 | 0.227 | # phases | 4 |
| 5 | NBL | 83 | 1667 | 0.050 | Prot | | | Total Lost Time | 16 |
| 6 | SBT | 90 | 1522 | 0.059 | | | | | |
| 7 | EBL | 3 | 644 | 0.005 | Prot | Critical Pairs | 0.527 | Critical v/c | 0.63 |
| | | 2 | 594 | 0.003 | Perm | | | | |
| 8 | WBT | 343 | 3014 | 0.114 | | | | | |

| 2036 Background | | | | | | | | | D |
|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | |
| 1 | SBL | 472 | 3183 | 0.148 | Prot | | | | |
| 2 | NBT | 262 | 1487 | 0.176 | | 1,2,3,4 | 0.672 | Cycle Length | 103 |
| 3 | WBL | 161 | 827 | 0.195 | Prot | 1,2,7,8 | 0.473 | Lost Time/phase | 4 |
| | | 70 | 372 | 0.188 | Perm | 5,6,3,4 | 0.542 | | |
| 4 | EBT | 368 | 2412 | 0.153 | | 5,6,7,8 | 0.344 | # phases | 4 |
| 5 | NBL | 97 | 1667 | 0.058 | Prot | | | Total Lost Time | 16 |
| 6 | SBT | 208 | 1523 | 0.137 | | | | | |
| 7 | EBL | 3 | 644 | 0.005 | Prot | Critical Pairs | 0.672 | Critical v/c | 0.80 |
| | | 3 | 594 | 0.005 | Perm | | | | |
| 8 | WBT | 420 | 2914 | 0.144 | | | | | |

| 2036 Build | | | | | | | | | D |
|---|---|---|---|---|---|---|---|---|---|
| Phase | | | | | | | | | |
| 1 | SBL | 472 | 3183 | 0.148 | Prot | | | | |
| 2 | NBT | 267 | 1487 | 0.180 | | 1,2,3,4 | 0.690 | Cycle Length | 106 |
| 3 | WBL | 166 | 827 | 0.201 | Prot | 1,2,7,8 | 0.511 | Lost Time/phase | 4 |
| | | 75 | 372 | 0.202 | Perm | 5,6,3,4 | 0.557 | | |
| 4 | EBT | 395 | 2446 | 0.161 | | 5,6,7,8 | 0.378 | # phases | 4 |
| 5 | NBL | 97 | 1667 | 0.058 | Prot | | | Total Lost Time | 16 |
| 6 | SBT | 208 | 1523 | 0.137 | | | | | |
| 7 | EBL | 3 | 644 | 0.005 | Prot | Critical Pairs | 0.690 | Critical v/c | 0.81 |
| | | 3 | 594 | 0.005 | Perm | | | | |
| 8 | WBT | 529 | 2968 | 0.178 | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 2 | 2 | 1 | 124 | 1 | 181 | 6 | 261 | 87 | 156 | 180 | 3 |
| Future Volume (veh/h) | 2 | 2 | 1 | 124 | 1 | 181 | 6 | 261 | 87 | 156 | 180 | 3 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1750 | 1750 | 1750 | 1723 | 1750 | 1682 | 1750 | 1695 | 1682 | 1641 | 1723 | 1750 |
| Adj Flow Rate, veh/h | 2 | 2 | 1 | 129 | 1 | 189 | 6 | 272 | 91 | 162 | 188 | 3 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 4 | 5 | 8 | 2 | 0 |
| Cap, veh/h | 146 | 123 | 45 | 383 | 2 | 251 | 67 | 615 | 202 | 708 | 1126 | 18 |
| Arrive On Green | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.51 | 0.51 | 0.51 | 0.08 | 0.67 | 0.67 |
| Sat Flow, veh/h | 325 | 698 | 256 | 1460 | 14 | 1425 | 6 | 1214 | 400 | 1563 | 1691 | 27 |
| Grp Volume(v), veh/h | 5 | 0 | 0 | 130 | 0 | 189 | 369 | 0 | 0 | 162 | 0 | 191 |
| Grp Sat Flow(s),veh/h/ln | 1279 | 0 | 0 | 1474 | 0 | 1425 | 1621 | 0 | 0 | 1563 | 0 | 1718 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 2.4 |
| Cycle Q Clear(g_c), s | 4.4 | 0.0 | 0.0 | 4.4 | 0.0 | 7.2 | 8.3 | 0.0 | 0.0 | 2.5 | 0.0 | 2.4 |
| Prop In Lane | 0.40 | | 0.20 | 0.99 | | 1.00 | 0.02 | | 0.25 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 313 | 0 | 0 | 385 | 0 | 251 | 885 | 0 | 0 | 708 | 0 | 1144 |
| V/C Ratio(X) | 0.02 | 0.00 | 0.00 | 0.34 | 0.00 | 0.75 | 0.42 | 0.00 | 0.00 | 0.23 | 0.00 | 0.17 |
| Avail Cap(c_a), veh/h | 641 | 0 | 0 | 712 | 0 | 575 | 885 | 0 | 0 | 790 | 0 | 1144 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 19.4 | 0.0 | 0.0 | 21.2 | 0.0 | 22.3 | 9.0 | 0.0 | 0.0 | 4.5 | 0.0 | 3.6 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 1.7 | 1.4 | 0.0 | 0.0 | 0.2 | 0.0 | 0.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.0 | 1.5 | 0.0 | 2.3 | 2.7 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 19.5 | 0.0 | 0.0 | 21.4 | 0.0 | 24.1 | 10.4 | 0.0 | 0.0 | 4.7 | 0.0 | 3.9 |
| LnGrp LOS | B | A | A | C | A | C | B | A | A | A | A | A |
| Approach Vol, veh/h | | 5 | | | 319 | | | 369 | | | 353 | |
| Approach Delay, s/veh | | 19.5 | | | 23.0 | | | 10.4 | | | 4.3 | |
| Approach LOS | | B | | | C | | | B | | | A | |

| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 9.1 | 33.4 | | 14.5 | | 42.5 | | 14.5 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 7.6 | 25.9 | | 23.0 | | 38.0 | | 23.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 4.5 | 10.3 | | 6.4 | | 4.4 | | 9.2 | | | | |
| Green Ext Time (p_c), s | 0.3 | 3.3 | | 0.0 | | 2.0 | | 0.9 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 12.2 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 4 | 238 | 51 | 163 | 288 | 15 | 70 | 4 | 185 | 260 | 13 | 63 |
| Future Volume (veh/h) | 4 | 238 | 51 | 163 | 288 | 15 | 70 | 4 | 185 | 260 | 13 | 63 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1300 | 1559 | 1532 | 1259 | 1641 | 1504 | 1750 | 1750 | 1682 | 1723 | 1750 | 1750 |
| Adj Flow Rate, veh/h | 5 | 283 | 61 | 194 | 343 | 18 | 83 | 5 | 220 | 310 | 15 | 75 |
| Peak Hour Factor | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Percent Heavy Veh, % | 33 | 14 | 16 | 36 | 8 | 18 | 0 | 0 | 5 | 2 | 0 | 0 |
| Cap, veh/h | 215 | 404 | 86 | 299 | 931 | 49 | 105 | 12 | 531 | 390 | 108 | 538 |
| Arrive On Green | 0.01 | 0.17 | 0.17 | 0.15 | 0.31 | 0.31 | 0.06 | 0.36 | 0.36 | 0.12 | 0.42 | 0.42 |
| Sat Flow, veh/h | 1238 | 2431 | 516 | 1199 | 3014 | 158 | 1667 | 33 | 1455 | 3183 | 254 | 1268 |
| Grp Volume(v), veh/h | 5 | 171 | 173 | 194 | 177 | 184 | 83 | 0 | 225 | 310 | 0 | 90 |
| Grp Sat Flow(s),veh/h/ln | 1238 | 1481 | 1466 | 1199 | 1559 | 1612 | 1667 | 0 | 1488 | 1591 | 0 | 1522 |
| Q Serve(g_s), s | 0.3 | 9.9 | 10.2 | 11.7 | 8.1 | 8.1 | 4.5 | 0.0 | 10.3 | 8.6 | 0.0 | 3.3 |
| Cycle Q Clear(g_c), s | 0.3 | 9.9 | 10.2 | 11.7 | 8.1 | 8.1 | 4.5 | 0.0 | 10.3 | 8.6 | 0.0 | 3.3 |
| Prop In Lane | 1.00 | | 0.35 | 1.00 | | 0.10 | 1.00 | | 0.98 | 1.00 | | 0.83 |
| Lane Grp Cap(c), veh/h | 215 | 246 | 244 | 299 | 482 | 498 | 105 | 0 | 543 | 390 | 0 | 646 |
| V/C Ratio(X) | 0.02 | 0.69 | 0.71 | 0.65 | 0.37 | 0.37 | 0.79 | 0.00 | 0.41 | 0.79 | 0.00 | 0.14 |
| Avail Cap(c_a), veh/h | 275 | 611 | 605 | 311 | 806 | 833 | 235 | 0 | 543 | 575 | 0 | 646 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.4 | 35.9 | 36.0 | 25.0 | 24.6 | 24.6 | 42.2 | 0.0 | 21.7 | 38.9 | 0.0 | 16.1 |
| Incr Delay (d2), s/veh | 0.0 | 4.9 | 5.4 | 4.4 | 0.7 | 0.7 | 12.3 | 0.0 | 2.3 | 4.7 | 0.0 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 3.9 | 4.0 | 3.6 | 3.0 | 3.1 | 2.2 | 0.0 | 3.9 | 3.6 | 0.0 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.4 | 40.8 | 41.4 | 29.5 | 25.3 | 25.3 | 54.4 | 0.0 | 24.0 | 43.6 | 0.0 | 16.5 |
| LnGrp LOS | C | D | D | C | C | C | D | A | C | D | A | B |
| Approach Vol, veh/h | | 349 | | | 555 | | | 308 | | | 400 | |
| Approach Delay, s/veh | | 40.9 | | | 26.7 | | | 32.2 | | | 37.5 | |
| Approach LOS | | D | | | C | | | C | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 15.7 | 37.8 | 18.1 | 19.7 | 10.3 | 43.2 | 5.1 | 32.7 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 16.5 | 33.3 | 14.5 | 37.7 | 12.9 | 36.9 | 5.0 | 47.2 |
| Max Q Clear Time (g_c+I1), s | 10.6 | 12.3 | 13.7 | 12.2 | 6.5 | 5.3 | 2.3 | 10.1 |
| Green Ext Time (p_c), s | 0.6 | 0.9 | 0.0 | 3.0 | 0.1 | 0.3 | 0.0 | 3.4 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 33.5 |
| HCM 6th LOS | C |

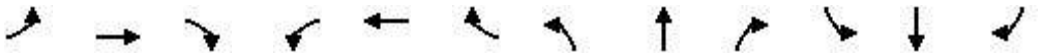
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 123 | 560 | 56 | 344 | 0 | 0 | 0 | 0 | 8 | 1 | 122 |
| Future Vol, veh/h | 0 | 123 | 560 | 56 | 344 | 0 | 0 | 0 | 0 | 8 | 1 | 122 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized | - | - | Free | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | 25 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 16974 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 0 | 26 | 5 | 6 | 18 | 0 | 0 | 0 | 0 | 47 | 0 | 36 |
| Mvmt Flow | 0 | 131 | 596 | 60 | 366 | 0 | 0 | 0 | 0 | 9 | 1 | 130 |

| Major/Minor | Major1 | | | Major2 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 131 | 0 | 0 | 617 | 617 | 366 |
| Stage 1 | - | - | - | - | - | - | 486 | 486 | - |
| Stage 2 | - | - | - | - | - | - | 131 | 131 | - |
| Critical Hdwy | - | - | - | 4.16 | - | - | 6.87 | 6.5 | 6.56 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 5.87 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 5.87 | 5.5 | - |
| Follow-up Hdwy | - | - | - | 2.254 | - | - | 3.923 | 4 | 3.624 |
| Pot Cap-1 Maneuver | 0 | - | 0 | 1430 | - | 0 | 388 | 408 | 610 |
| Stage 1 | 0 | - | 0 | - | - | 0 | 535 | 554 | - |
| Stage 2 | 0 | - | 0 | - | - | 0 | 795 | 792 | - |
| Platoon blocked, % | | - | | | - | | | | |
| Mov Cap-1 Maneuver | - | - | - | 1430 | - | - | 367 | 0 | 610 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 367 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 535 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 753 | 0 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 1.1 | 12.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBL | WBT | SBLn1 | SBLn2 |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1430 | - | 367 | 610 |
| HCM Lane V/C Ratio | - | 0.042 | - | 0.023 | 0.215 |
| HCM Control Delay (s) | - | 7.6 | 0 | 15 | 12.5 |
| HCM Lane LOS | - | A | A | C | B |
| HCM 95th %tile Q(veh) | - | 0.1 | - | 0.1 | 0.8 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 95 | 36 | 0 | 0 | 49 | 16 | 351 | 1 | 54 | 0 | 0 | 0 |
| Future Volume (veh/h) | 95 | 36 | 0 | 0 | 49 | 16 | 351 | 1 | 54 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1381 | 1614 | 0 | 0 | 1668 | 1695 | 1477 | 1750 | 1422 | | | |
| Adj Flow Rate, veh/h | 98 | 37 | 0 | 0 | 51 | 16 | 362 | 1 | 56 | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | | | |
| Percent Heavy Veh, % | 27 | 10 | 0 | 0 | 6 | 4 | 20 | 0 | 24 | | | |
| Cap, veh/h | 197 | 59 | 0 | 0 | 188 | 59 | 1026 | 3 | 159 | | | |
| Arrive On Green | 0.15 | 0.15 | 0.00 | 0.00 | 0.15 | 0.15 | 0.72 | 0.72 | 0.72 | | | |
| Sat Flow, veh/h | 735 | 384 | 0 | 0 | 1217 | 382 | 1417 | 4 | 219 | | | |
| Grp Volume(v), veh/h | 135 | 0 | 0 | 0 | 0 | 67 | 419 | 0 | 0 | | | |
| Grp Sat Flow(s),veh/h/ln | 1119 | 0 | 0 | 0 | 0 | 1599 | 1640 | 0 | 0 | | | |
| Q Serve(g_s), s | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 7.0 | 0.0 | 0.0 | | | |
| Cycle Q Clear(g_c), s | 9.1 | 0.0 | 0.0 | 0.0 | 0.0 | 2.7 | 7.0 | 0.0 | 0.0 | | | |
| Prop In Lane | 0.73 | | 0.00 | 0.00 | | 0.24 | 0.86 | | 0.13 | | | |
| Lane Grp Cap(c), veh/h | 256 | 0 | 0 | 0 | 0 | 246 | 1187 | 0 | 0 | | | |
| V/C Ratio(X) | 0.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 0.35 | 0.00 | 0.00 | | | |
| Avail Cap(c_a), veh/h | 547 | 0 | 0 | 0 | 0 | 595 | 1187 | 0 | 0 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | | | |
| Uniform Delay (d), s/veh | 30.9 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 3.8 | 0.0 | 0.0 | | | |
| Incr Delay (d2), s/veh | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 0.0 | 0.0 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.8 | 0.0 | 0.0 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 33.3 | 0.0 | 0.0 | 0.0 | 0.0 | 28.4 | 4.6 | 0.0 | 0.0 | | | |
| LnGrp LOS | C | A | A | A | A | C | A | A | A | | | |
| Approach Vol, veh/h | | 135 | | | 67 | | | 419 | | | | |
| Approach Delay, s/veh | | 33.3 | | | 28.4 | | | 4.6 | | | | |
| Approach LOS | | C | | | C | | | A | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 58.0 | | 15.9 | | | | 15.9 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 53.5 | | 27.5 | | | | 27.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 9.0 | | 11.1 | | | | 4.7 | | | | |
| Green Ext Time (p_c), s | | 2.6 | | 0.5 | | | | 0.7 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 6th Ctrl Delay | | | 13.4 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 1 | 1 | 274 | 5 | 1 | 1 | 393 | 3 | 9 | 1 | 1 | 1 |
| Future Vol, veh/h | 1 | 1 | 274 | 5 | 1 | 1 | 393 | 3 | 9 | 1 | 1 | 1 |
| 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 | - | - | Free | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 1 | 285 | 5 | 1 | 1 | 409 | 3 | 9 | 1 | 1 | 1 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 831 | 834 | - | 830 | 830 | 8 | 2 | 0 | 0 | 12 | 0 | 0 |
| Stage 1 | 4 | 4 | - | 826 | 826 | - | - | - | - | - | - | - |
| Stage 2 | 827 | 830 | - | 4 | 4 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 289 | 304 | 0 | 289 | 306 | 1074 | 1620 | - | - | 1607 | - | - |
| Stage 1 | 1018 | 892 | 0 | 366 | 387 | - | - | - | - | - | - | - |
| Stage 2 | 366 | 385 | 0 | 1018 | 892 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 231 | 226 | - | 231 | 228 | 1074 | 1620 | - | - | 1607 | - | - |
| Mov Cap-2 Maneuver | 231 | 226 | - | 231 | 228 | - | - | - | - | - | - | - |
| Stage 1 | 758 | 891 | - | 273 | 288 | - | - | - | - | - | - | - |
| Stage 2 | 271 | 287 | - | 1016 | 891 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | | 19.2 | 7.7 | 2.4 |
| HCM LOS | - | C | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1620 | - | - | - | 260 | 1607 | - | - |
| HCM Lane V/C Ratio | 0.253 | - | - | - | 0.028 | 0.001 | - | - |
| HCM Control Delay (s) | 8 | 0 | - | - | 19.2 | 7.2 | 0 | - |
| HCM Lane LOS | A | A | - | - | C | A | A | - |
| HCM 95th %tile Q(veh) | 1 | - | - | - | 0.1 | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 157 | 1 | 28 | 262 | 104 | 2 | 1 | 12 | 106 | 4 | 6 |
| Future Vol, veh/h | 2 | 157 | 1 | 28 | 262 | 104 | 2 | 1 | 12 | 106 | 4 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 167 | 1 | 30 | 279 | 111 | 2 | 1 | 13 | 113 | 4 | 6 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 390 | 0 | 0 | 168 | 0 | 0 | 572 | 622 | 168 | 574 | 567 | 335 |
| Stage 1 | - | - | - | - | - | - | 172 | 172 | - | 395 | 395 | - |
| Stage 2 | - | - | - | - | - | - | 400 | 450 | - | 179 | 172 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1169 | - | - | 1410 | - | - | 431 | 403 | 876 | 430 | 433 | 707 |
| Stage 1 | - | - | - | - | - | - | 830 | 756 | - | 630 | 605 | - |
| Stage 2 | - | - | - | - | - | - | 626 | 572 | - | 823 | 756 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1169 | - | - | 1410 | - | - | 414 | 391 | 876 | 413 | 420 | 707 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 414 | 391 | - | 413 | 420 | - |
| Stage 1 | - | - | - | - | - | - | 828 | 754 | - | 629 | 588 | - |
| Stage 2 | - | - | - | - | - | - | 599 | 556 | - | 808 | 754 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.5 | 10.2 | 17 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 711 | 1169 | - | - | 1410 | - | - | 422 |
| HCM Lane V/C Ratio | 0.022 | 0.002 | - | - | 0.021 | - | - | 0.292 |
| HCM Control Delay (s) | 10.2 | 8.1 | 0 | - | 7.6 | 0 | - | 17 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 1.2 |

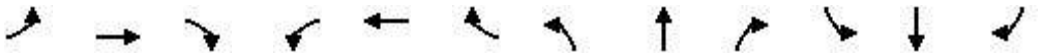
| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 43 | 47 | 1 | 36 | 29 | 1 |
| Future Vol, veh/h | 43 | 47 | 1 | 36 | 29 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 25 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 54 | 59 | 1 | 45 | 36 | 4 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 113 | 0 | 131 | 84 |
| Stage 1 | - | - | - | - | 84 | - |
| Stage 2 | - | - | - | - | 47 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1476 | - | 863 | 975 |
| Stage 1 | - | - | - | - | 939 | - |
| Stage 2 | - | - | - | - | 975 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1476 | - | 862 | 975 |
| Mov Cap-2 Maneuver | - | - | - | - | 862 | - |
| Stage 1 | - | - | - | - | 939 | - |
| Stage 2 | - | - | - | - | 974 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.2 | 9.3 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 872 | - | - | 1476 | - |
| HCM Lane V/C Ratio | 0.046 | - | - | 0.001 | - |
| HCM Control Delay (s) | 9.3 | - | - | 7.4 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 2 | 2 | 1 | 143 | 1 | 208 | 7 | 325 | 108 | 194 | 224 | 4 |
| Future Volume (veh/h) | 2 | 2 | 1 | 143 | 1 | 208 | 7 | 325 | 108 | 194 | 224 | 4 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1750 | 1750 | 1750 | 1723 | 1750 | 1682 | 1750 | 1695 | 1682 | 1641 | 1723 | 1750 |
| Adj Flow Rate, veh/h | 2 | 2 | 1 | 149 | 1 | 217 | 7 | 339 | 112 | 202 | 233 | 4 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 4 | 5 | 8 | 2 | 0 |
| Cap, veh/h | 76 | 64 | 20 | 271 | 2 | 306 | 47 | 664 | 216 | 612 | 1148 | 20 |
| Arrive On Green | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.55 | 0.55 | 0.55 | 0.08 | 0.68 | 0.68 |
| Sat Flow, veh/h | 80 | 299 | 95 | 872 | 7 | 1425 | 7 | 1217 | 396 | 1563 | 1688 | 29 |
| Grp Volume(v), veh/h | 5 | 0 | 0 | 150 | 0 | 217 | 458 | 0 | 0 | 202 | 0 | 237 |
| Grp Sat Flow(s),veh/h/ln | 475 | 0 | 0 | 879 | 0 | 1425 | 1621 | 0 | 0 | 1563 | 0 | 1717 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.0 | 0.0 | 0.0 | 0.0 | 4.4 | 0.0 | 4.4 |
| Cycle Q Clear(g_c), s | 15.8 | 0.0 | 0.0 | 15.8 | 0.0 | 12.0 | 15.2 | 0.0 | 0.0 | 4.4 | 0.0 | 4.4 |
| Prop In Lane | 0.40 | | 0.20 | 0.99 | | 1.00 | 0.02 | | 0.24 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 161 | 0 | 0 | 273 | 0 | 306 | 927 | 0 | 0 | 612 | 0 | 1167 |
| V/C Ratio(X) | 0.03 | 0.00 | 0.00 | 0.55 | 0.00 | 0.71 | 0.49 | 0.00 | 0.00 | 0.33 | 0.00 | 0.20 |
| Avail Cap(c_a), veh/h | 239 | 0 | 0 | 352 | 0 | 384 | 927 | 0 | 0 | 703 | 0 | 1167 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 27.3 | 0.0 | 0.0 | 32.5 | 0.0 | 31.0 | 12.3 | 0.0 | 0.0 | 6.0 | 0.0 | 5.1 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 2.8 | 1.9 | 0.0 | 0.0 | 0.3 | 0.0 | 0.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.0 | 3.0 | 0.0 | 4.3 | 5.5 | 0.0 | 0.0 | 1.3 | 0.0 | 1.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 27.4 | 0.0 | 0.0 | 33.1 | 0.0 | 33.8 | 14.1 | 0.0 | 0.0 | 6.3 | 0.0 | 5.5 |
| LnGrp LOS | C | A | A | C | A | C | B | A | A | A | A | A |
| Approach Vol, veh/h | | 5 | | | 367 | | | 458 | | | 439 | |
| Approach Delay, s/veh | | 27.4 | | | 33.5 | | | 14.1 | | | 5.9 | |
| Approach LOS | | C | | | C | | | B | | | A | |

| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 11.4 | 51.1 | | 22.9 | | 62.5 | | 22.9 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 11.9 | 41.6 | | 23.0 | | 58.0 | | 23.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.4 | 17.2 | | 17.8 | | 6.4 | | 17.8 | | | | |
| Green Ext Time (p_c), s | 0.6 | 5.2 | | 0.0 | | 2.7 | | 0.6 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 16.9 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 6 | 350 | 78 | 219 | 399 | 33 | 92 | 5 | 244 | 448 | 34 | 163 |
| Future Volume (veh/h) | 6 | 350 | 78 | 219 | 399 | 33 | 92 | 5 | 244 | 448 | 34 | 163 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1300 | 1559 | 1532 | 1259 | 1641 | 1504 | 1750 | 1750 | 1682 | 1723 | 1750 | 1750 |
| Adj Flow Rate, veh/h | 6 | 368 | 82 | 231 | 420 | 35 | 97 | 5 | 257 | 472 | 36 | 172 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 33 | 14 | 16 | 36 | 8 | 18 | 0 | 0 | 5 | 2 | 0 | 0 |
| Cap, veh/h | 218 | 490 | 108 | 249 | 904 | 75 | 122 | 9 | 485 | 542 | 113 | 541 |
| Arrive On Green | 0.01 | 0.20 | 0.20 | 0.11 | 0.31 | 0.31 | 0.07 | 0.33 | 0.33 | 0.17 | 0.43 | 0.43 |
| Sat Flow, veh/h | 1238 | 2412 | 532 | 1199 | 2914 | 242 | 1667 | 28 | 1459 | 3183 | 264 | 1260 |
| Grp Volume(v), veh/h | 6 | 224 | 226 | 231 | 224 | 231 | 97 | 0 | 262 | 472 | 0 | 208 |
| Grp Sat Flow(s),veh/h/ln | 1238 | 1481 | 1463 | 1199 | 1559 | 1597 | 1667 | 0 | 1487 | 1591 | 0 | 1523 |
| Q Serve(g_s), s | 0.4 | 14.3 | 14.6 | 11.5 | 11.6 | 11.7 | 5.7 | 0.0 | 14.3 | 14.5 | 0.0 | 9.0 |
| Cycle Q Clear(g_c), s | 0.4 | 14.3 | 14.6 | 11.5 | 11.6 | 11.7 | 5.7 | 0.0 | 14.3 | 14.5 | 0.0 | 9.0 |
| Prop In Lane | 1.00 | | 0.36 | 1.00 | | 0.15 | 1.00 | | 0.98 | 1.00 | | 0.83 |
| Lane Grp Cap(c), veh/h | 218 | 301 | 297 | 249 | 484 | 496 | 122 | 0 | 494 | 542 | 0 | 654 |
| V/C Ratio(X) | 0.03 | 0.75 | 0.76 | 0.93 | 0.46 | 0.47 | 0.80 | 0.00 | 0.53 | 0.87 | 0.00 | 0.32 |
| Avail Cap(c_a), veh/h | 270 | 557 | 550 | 249 | 687 | 704 | 231 | 0 | 494 | 619 | 0 | 654 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.4 | 37.5 | 37.6 | 32.9 | 27.8 | 27.9 | 45.7 | 0.0 | 27.1 | 40.5 | 0.0 | 18.9 |
| Incr Delay (d2), s/veh | 0.1 | 5.2 | 5.6 | 37.8 | 1.0 | 1.0 | 11.2 | 0.0 | 4.0 | 11.7 | 0.0 | 1.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 5.5 | 5.6 | 4.6 | 4.4 | 4.5 | 2.7 | 0.0 | 5.6 | 6.5 | 0.0 | 3.4 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.4 | 42.7 | 43.2 | 70.7 | 28.8 | 28.8 | 57.0 | 0.0 | 31.2 | 52.3 | 0.0 | 20.2 |
| LnGrp LOS | C | D | D | E | C | C | E | A | C | D | A | C |
| Approach Vol, veh/h | | 456 | | | 686 | | | 359 | | | 680 | |
| Approach Delay, s/veh | | 42.8 | | | 42.9 | | | 38.1 | | | 42.4 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 21.6 | 37.8 | 16.0 | 24.9 | 11.8 | 47.5 | 5.3 | 35.6 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 19.5 | 33.3 | 11.5 | 37.7 | 13.9 | 38.9 | 5.0 | 44.2 |
| Max Q Clear Time (g_c+I1), s | 16.6 | 16.3 | 13.5 | 16.6 | 7.7 | 11.0 | 2.4 | 13.7 |
| Green Ext Time (p_c), s | 0.6 | 1.0 | 0.0 | 3.8 | 0.1 | 0.9 | 0.0 | 4.2 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 42.0 |
| HCM 6th LOS | D |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 188 | 854 | 64 | 396 | 0 | 0 | 0 | 0 | 17 | 2 | 256 |
| Future Vol, veh/h | 0 | 188 | 854 | 64 | 396 | 0 | 0 | 0 | 0 | 17 | 2 | 256 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized | - | - | Free | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | 275 | - | - | - | - | - | 25 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 16974 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 26 | 5 | 6 | 18 | 0 | 0 | 0 | 0 | 47 | 0 | 36 |
| Mvmt Flow | 0 | 198 | 899 | 67 | 417 | 0 | 0 | 0 | 0 | 18 | 2 | 269 |

| Major/Minor | Major1 | | | Major2 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 198 | 0 | 0 | 749 | 749 | 209 |
| Stage 1 | - | - | - | - | - | - | 551 | 551 | - |
| Stage 2 | - | - | - | - | - | - | 198 | 198 | - |
| Critical Hdwy | - | - | - | 4.19 | - | - | 7.305 | 6.5 | 7.44 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.505 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.105 | 5.5 | - |
| Follow-up Hdwy | - | - | - | 2.257 | - | - | 3.9465 | 4 | 3.642 |
| Pot Cap-1 Maneuver | 0 | - | 0 | 1347 | - | 0 | 293 | 343 | 712 |
| Stage 1 | 0 | - | 0 | - | - | 0 | 449 | 519 | - |
| Stage 2 | 0 | - | 0 | - | - | 0 | 725 | 741 | - |
| Platoon blocked, % | | - | | | - | | | | |
| Mov Cap-1 Maneuver | - | - | - | 1347 | - | - | 278 | 0 | 712 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 278 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 449 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 689 | 0 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 1.1 | 13.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBT | WBL | WBT | SBLn1 | SBLn2 |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1347 | - | 278 | 712 |
| HCM Lane V/C Ratio | - | 0.05 | - | 0.064 | 0.381 |
| HCM Control Delay (s) | - | 7.8 | - | 18.8 | 13.1 |
| HCM Lane LOS | - | A | - | C | B |
| HCM 95th %tile Q(veh) | - | 0.2 | - | 0.2 | 1.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 149 | 55 | 0 | 0 | 60 | 19 | 400 | 1 | 58 | 0 | 0 | 0 |
| Future Volume (veh/h) | 149 | 55 | 0 | 0 | 60 | 19 | 400 | 1 | 58 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1381 | 1614 | 0 | 0 | 1668 | 1695 | 1477 | 1750 | 1422 | | | |
| Adj Flow Rate, veh/h | 154 | 57 | 0 | 0 | 62 | 20 | 469 | 0 | 0 | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | | | |
| Percent Heavy Veh, % | 27 | 10 | 0 | 0 | 6 | 4 | 20 | 0 | 24 | | | |
| Cap, veh/h | 307 | 351 | 0 | 0 | 363 | 313 | 1817 | 1130 | 0 | | | |
| Arrive On Green | 0.22 | 0.22 | 0.00 | 0.00 | 0.22 | 0.22 | 0.65 | 0.00 | 0.00 | | | |
| Sat Flow, veh/h | 1055 | 1614 | 0 | 0 | 1668 | 1437 | 2813 | 1750 | 0 | | | |
| Grp Volume(v), veh/h | 154 | 57 | 0 | 0 | 62 | 20 | 469 | 0 | 0 | | | |
| Grp Sat Flow(s),veh/h/ln | 1055 | 1614 | 0 | 0 | 1668 | 1437 | 1407 | 1750 | 0 | | | |
| Q Serve(g_s), s | 9.1 | 1.9 | 0.0 | 0.0 | 2.0 | 0.7 | 4.7 | 0.0 | 0.0 | | | |
| Cycle Q Clear(g_c), s | 11.1 | 1.9 | 0.0 | 0.0 | 2.0 | 0.7 | 4.7 | 0.0 | 0.0 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 0.00 | | | |
| Lane Grp Cap(c), veh/h | 307 | 351 | 0 | 0 | 363 | 313 | 1817 | 1130 | 0 | | | |
| V/C Ratio(X) | 0.50 | 0.16 | 0.00 | 0.00 | 0.17 | 0.06 | 0.26 | 0.00 | 0.00 | | | |
| Avail Cap(c_a), veh/h | 695 | 944 | 0 | 0 | 976 | 840 | 1817 | 1130 | 0 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 | | | |
| Uniform Delay (d), s/veh | 25.4 | 20.9 | 0.0 | 0.0 | 20.9 | 20.4 | 5.0 | 0.0 | 0.0 | | | |
| Incr Delay (d2), s/veh | 1.8 | 0.3 | 0.0 | 0.0 | 0.3 | 0.1 | 0.3 | 0.0 | 0.0 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 2.3 | 0.7 | 0.0 | 0.0 | 0.8 | 0.2 | 1.1 | 0.0 | 0.0 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 27.2 | 21.2 | 0.0 | 0.0 | 21.2 | 20.6 | 5.3 | 0.0 | 0.0 | | | |
| LnGrp LOS | C | C | A | A | C | C | A | A | A | | | |
| Approach Vol, veh/h | | 211 | | | 82 | | | 469 | | | | |
| Approach Delay, s/veh | | 25.6 | | | 21.1 | | | 5.3 | | | | |
| Approach LOS | | C | | | C | | | A | | | | |

| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 47.0 | | 18.8 | | | | 18.8 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 42.5 | | 38.5 | | | | 38.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 6.7 | | 13.1 | | | | 4.0 | | | | |
| Green Ext Time (p_c), s | | 1.0 | | 1.3 | | | | 0.9 | | | | |

| Intersection Summary | | |
|---|---|---|
| HCM 6th Ctrl Delay | | 12.6 |
| HCM 6th LOS | | B |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 56 | 57 | 1 | 48 | 31 | 1 |
| Future Vol, veh/h | 56 | 57 | 1 | 48 | 31 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 70 | 71 | 1 | 60 | 39 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 141 | 0 | 132 | 70 |
| Stage 1 | - | - | - | - | 70 | - |
| Stage 2 | - | - | - | - | 62 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1442 | - | 862 | 993 |
| Stage 1 | - | - | - | - | 953 | - |
| Stage 2 | - | - | - | - | 961 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1442 | - | 861 | 993 |
| Mov Cap-2 Maneuver | - | - | - | - | 861 | - |
| Stage 1 | - | - | - | - | 953 | - |
| Stage 2 | - | - | - | - | 960 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.2 | 9.4 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 861 | 993 | - | - | 1442 | - |
| HCM Lane V/C Ratio | 0.045 | 0.001 | - | - | 0.001 | - |
| HCM Control Delay (s) | 9.4 | 8.6 | - | - | 7.5 | 0 |
| HCM Lane LOS | A | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - |

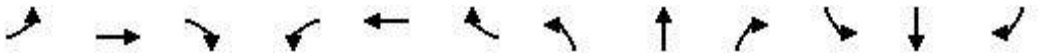
| Intersection | |
|---|---|
| Int Delay, s/veh | 3.5 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 199 | 1 | 34 | 322 | 127 | 2 | 1 | 14 | 106 | 4 | 6 |
| Future Vol, veh/h | 3 | 199 | 1 | 34 | 322 | 127 | 2 | 1 | 14 | 106 | 4 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 209 | 1 | 36 | 339 | 134 | 2 | 1 | 15 | 112 | 4 | 6 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 473 | 0 | 0 | 210 | 0 | 0 | 699 | 761 | 210 | 702 | 694 | 406 |
| Stage 1 | - | - | - | - | - | - | 216 | 216 | - | 478 | 478 | - |
| Stage 2 | - | - | - | - | - | - | 483 | 545 | - | 224 | 216 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1089 | - | - | 1361 | - | - | 354 | 335 | 830 | 353 | 366 | 645 |
| Stage 1 | - | - | - | - | - | - | 786 | 724 | - | 568 | 556 | - |
| Stage 2 | - | - | - | - | - | - | 565 | 519 | - | 779 | 724 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1089 | - | - | 1361 | - | - | 337 | 322 | 830 | 335 | 351 | 645 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 337 | 322 | - | 335 | 351 | - |
| Stage 1 | - | - | - | - | - | - | 784 | 722 | - | 566 | 535 | - |
| Stage 2 | - | - | - | - | - | - | 535 | 500 | - | 762 | 722 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.5 | 10.6 | 21.1 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 656 | 1089 | - | - | 1361 | - | - | 344 |
| HCM Lane V/C Ratio | 0.027 | 0.003 | - | - | 0.026 | - | - | 0.355 |
| HCM Control Delay (s) | 10.6 | 8.3 | 0 | - | 7.7 | 0 | - | 21.1 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 1.6 |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 2 | 2 | 1 | 169 | 1 | 254 | 7 | 325 | 114 | 205 | 224 | 4 |
| Future Volume (veh/h) | 2 | 2 | 1 | 169 | 1 | 254 | 7 | 325 | 114 | 205 | 224 | 4 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1750 | 1750 | 1750 | 1723 | 1750 | 1682 | 1750 | 1695 | 1682 | 1641 | 1723 | 1750 |
| Adj Flow Rate, veh/h | 2 | 2 | 1 | 176 | 1 | 265 | 7 | 339 | 119 | 214 | 233 | 4 |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Percent Heavy Veh, % | 0 | 0 | 0 | 2 | 0 | 5 | 0 | 4 | 5 | 8 | 2 | 0 |
| Cap, veh/h | 108 | 91 | 30 | 351 | 2 | 344 | 62 | 527 | 182 | 563 | 1035 | 18 |
| Arrive On Green | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.44 | 0.44 | 0.44 | 0.10 | 0.61 | 0.61 |
| Sat Flow, veh/h | 112 | 377 | 122 | 974 | 7 | 1425 | 7 | 1197 | 414 | 1563 | 1688 | 29 |
| Grp Volume(v), veh/h | 5 | 0 | 0 | 177 | 0 | 265 | 465 | 0 | 0 | 214 | 0 | 237 |
| Grp Sat Flow(s),veh/h/ln | 612 | 0 | 0 | 981 | 0 | 1425 | 1617 | 0 | 0 | 1563 | 0 | 1717 |
| Q Serve(g_s), s | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 10.7 | 0.0 | 0.0 | 0.0 | 4.2 | 0.0 | 3.8 |
| Cycle Q Clear(g_c), s | 12.0 | 0.0 | 0.0 | 12.0 | 0.0 | 10.7 | 13.9 | 0.0 | 0.0 | 4.2 | 0.0 | 3.8 |
| Prop In Lane | 0.40 | | 0.20 | 0.99 | | 1.00 | 0.02 | | 0.26 | 1.00 | | 0.02 |
| Lane Grp Cap(c), veh/h | 229 | 0 | 0 | 353 | 0 | 344 | 772 | 0 | 0 | 563 | 0 | 1053 |
| V/C Ratio(X) | 0.02 | 0.00 | 0.00 | 0.50 | 0.00 | 0.77 | 0.60 | 0.00 | 0.00 | 0.38 | 0.00 | 0.23 |
| Avail Cap(c_a), veh/h | 410 | 0 | 0 | 539 | 0 | 529 | 772 | 0 | 0 | 596 | 0 | 1053 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 18.5 | 0.0 | 0.0 | 22.4 | 0.0 | 21.9 | 13.6 | 0.0 | 0.0 | 6.6 | 0.0 | 5.4 |
| Incr Delay (d2), s/veh | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 1.4 | 3.5 | 0.0 | 0.0 | 0.4 | 0.0 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 0.0 | 0.0 | 2.3 | 0.0 | 3.4 | 5.1 | 0.0 | 0.0 | 1.2 | 0.0 | 1.2 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 18.5 | 0.0 | 0.0 | 22.8 | 0.0 | 23.3 | 17.1 | 0.0 | 0.0 | 7.0 | 0.0 | 5.9 |
| LnGrp LOS | B | A | A | C | A | C | B | A | A | A | A | A |
| Approach Vol, veh/h | | 5 | | | 442 | | | 465 | | | 451 | |
| Approach Delay, s/veh | | 18.5 | | | 23.1 | | | 17.1 | | | 6.4 | |
| Approach LOS | | B | | | C | | | B | | | A | |

| Timer - Assigned Phs | 1 | 2 | | 4 | | 6 | | 8 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 10.7 | 31.8 | | 19.6 | | 42.5 | | 19.6 | | | | |
| Change Period (Y+Rc), s | 4.5 | 4.5 | | 4.5 | | 4.5 | | 4.5 | | | | |
| Max Green Setting (Gmax), s | 7.5 | 26.0 | | 23.0 | | 38.0 | | 23.0 | | | | |
| Max Q Clear Time (g_c+I1), s | 6.2 | 15.9 | | 14.0 | | 5.8 | | 14.0 | | | | |
| Green Ext Time (p_c), s | 0.2 | 3.3 | | 0.0 | | 2.5 | | 1.1 | | | | |

| Intersection Summary | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HCM 6th Ctrl Delay | | | 15.5 | | | | | | | | | |
| HCM 6th LOS | | | B | | | | | | | | | |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 6 | 375 | 78 | 229 | 503 | 33 | 92 | 5 | 249 | 448 | 34 | 163 |
| Future Volume (veh/h) | 6 | 375 | 78 | 229 | 503 | 33 | 92 | 5 | 249 | 448 | 34 | 163 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | No | | | No | |
| Adj Sat Flow, veh/h/ln | 1300 | 1559 | 1532 | 1259 | 1641 | 1504 | 1750 | 1750 | 1682 | 1723 | 1750 | 1750 |
| Adj Flow Rate, veh/h | 6 | 395 | 82 | 241 | 529 | 35 | 97 | 5 | 262 | 472 | 36 | 172 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 33 | 14 | 16 | 36 | 8 | 18 | 0 | 0 | 5 | 2 | 0 | 0 |
| Cap, veh/h | 195 | 518 | 107 | 256 | 969 | 64 | 121 | 9 | 469 | 536 | 110 | 526 |
| Arrive On Green | 0.01 | 0.21 | 0.21 | 0.12 | 0.33 | 0.33 | 0.07 | 0.32 | 0.32 | 0.17 | 0.42 | 0.42 |
| Sat Flow, veh/h | 1238 | 2446 | 503 | 1199 | 2968 | 196 | 1667 | 28 | 1459 | 3183 | 264 | 1260 |
| Grp Volume(v), veh/h | 6 | 238 | 239 | 241 | 277 | 287 | 97 | 0 | 267 | 472 | 0 | 208 |
| Grp Sat Flow(s),veh/h/ln | 1238 | 1481 | 1468 | 1199 | 1559 | 1606 | 1667 | 0 | 1487 | 1591 | 0 | 1523 |
| Q Serve(g_s), s | 0.4 | 15.4 | 15.7 | 12.5 | 14.9 | 15.0 | 5.9 | 0.0 | 15.2 | 14.8 | 0.0 | 9.4 |
| Cycle Q Clear(g_c), s | 0.4 | 15.4 | 15.7 | 12.5 | 14.9 | 15.0 | 5.9 | 0.0 | 15.2 | 14.8 | 0.0 | 9.4 |
| Prop In Lane | 1.00 | | 0.34 | 1.00 | | 0.12 | 1.00 | | 0.98 | 1.00 | | 0.83 |
| Lane Grp Cap(c), veh/h | 195 | 314 | 311 | 256 | 509 | 524 | 121 | 0 | 478 | 536 | 0 | 635 |
| V/C Ratio(X) | 0.03 | 0.76 | 0.77 | 0.94 | 0.55 | 0.55 | 0.80 | 0.00 | 0.56 | 0.88 | 0.00 | 0.33 |
| Avail Cap(c_a), veh/h | 246 | 546 | 541 | 256 | 689 | 709 | 226 | 0 | 478 | 588 | 0 | 635 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 31.4 | 37.9 | 38.0 | 32.5 | 28.2 | 28.3 | 46.7 | 0.0 | 28.7 | 41.5 | 0.0 | 20.1 |
| Incr Delay (d2), s/veh | 0.1 | 5.3 | 5.6 | 40.5 | 1.3 | 1.3 | 11.3 | 0.0 | 4.6 | 13.6 | 0.0 | 1.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.1 | 6.0 | 6.1 | 4.9 | 5.7 | 5.9 | 2.8 | 0.0 | 6.0 | 6.8 | 0.0 | 3.5 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 31.4 | 43.1 | 43.6 | 73.0 | 29.5 | 29.5 | 58.0 | 0.0 | 33.3 | 55.2 | 0.0 | 21.5 |
| LnGrp LOS | C | D | D | E | C | C | E | A | C | E | A | C |
| Approach Vol, veh/h | | 483 | | | 805 | | | 364 | | | 680 | |
| Approach Delay, s/veh | | 43.2 | | | 42.5 | | | 39.9 | | | 44.9 | |
| Approach LOS | | D | | | D | | | D | | | D | |

| Timer - Assigned Phs | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | 21.7 | 37.4 | 17.0 | 26.2 | 12.0 | 47.2 | 5.3 | 37.9 |
| Change Period (Y+Rc), s | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| Max Green Setting (Gmax), s | 18.9 | 32.9 | 12.5 | 37.7 | 13.9 | 37.9 | 5.0 | 45.2 |
| Max Q Clear Time (g_c+I1), s | 16.8 | 17.2 | 14.5 | 17.7 | 7.9 | 11.4 | 2.4 | 17.0 |
| Green Ext Time (p_c), s | 0.4 | 1.0 | 0.0 | 4.0 | 0.1 | 0.9 | 0.0 | 5.3 |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 42.9 |
| HCM 6th LOS | D |

| Intersection | |
|---|---|
| Int Delay, s/veh | 17.4 |

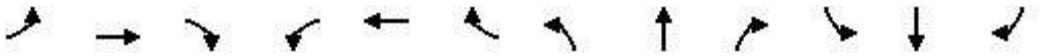
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 218 | 854 | 451 | 509 | 0 | 0 | 0 | 0 | 47 | 2 | 256 |
| Future Vol, veh/h | 0 | 218 | 854 | 451 | 509 | 0 | 0 | 0 | 0 | 47 | 2 | 256 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | Free | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | 275 | - | - | - | - | - | 25 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 16974 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 26 | 5 | 6 | 18 | 0 | 0 | 0 | 0 | 47 | 0 | 36 |
| Mvmt Flow | 0 | 229 | 899 | 475 | 536 | 0 | 0 | 0 | 0 | 49 | 2 | 269 |

| Major/Minor | Major1 | | | Major2 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 229 | 0 | 0 | 1715 | 1715 | 268 |
| Stage 1 | - | - | - | - | - | - | 1486 | 1486 | - |
| Stage 2 | - | - | - | - | - | - | 229 | 229 | - |
| Critical Hdwy | - | - | - | 4.19 | - | - | 7.305 | 6.5 | 7.44 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.505 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.105 | 5.5 | - |
| Follow-up Hdwy | - | - | - | 2.257 | - | - | 3.9465 | 4 | 3.642 |
| Pot Cap-1 Maneuver | 0 | - | 0 | 1312 | - | 0 | 62 | 91 | 649 |
| Stage 1 | 0 | - | 0 | - | - | 0 | 126 | 190 | - |
| Stage 2 | 0 | - | 0 | - | - | 0 | 700 | 718 | - |
| Platoon blocked, % | | - | | | - | | | | |
| Mov Cap-1 Maneuver | - | - | - | 1312 | - | - | ~ 40 | 0 | 649 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | ~ 40 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 126 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 447 | 0 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4.4 | 70.6 |
| HCM LOS | | | F |

| Minor Lane/Major Mvmt | EBT | WBL | WBT | SBLn1 | SBLn2 |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1312 | - | 40 | 649 |
| HCM Lane V/C Ratio | - | 0.362 | - | 1.237 | 0.418 |
| HCM Control Delay (s) | - | 9.3 | - | $ 378.4 | 14.5 |
| HCM Lane LOS | - | A | - | F | B |
| HCM 95th %tile Q(veh) | - | 1.7 | - | 4.9 | 2.1 |

| Notes | | | |
|---|---|---|---|
| ~: Volume exceeds capacity | $: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 149 | 115 | 0 | 0 | 560 | 88 | 400 | 1 | 149 | 0 | 0 | 0 |
| Future Volume (veh/h) | 149 | 115 | 0 | 0 | 560 | 88 | 400 | 1 | 149 | 0 | 0 | 0 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | | | |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Work Zone On Approach | | No | | | No | | | No | | | | |
| Adj Sat Flow, veh/h/ln | 1381 | 1614 | 0 | 0 | 1668 | 1695 | 1477 | 1750 | 1422 | | | |
| Adj Flow Rate, veh/h | 154 | 119 | 0 | 0 | 577 | 91 | 284 | 181 | 154 | | | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | | | |
| Percent Heavy Veh, % | 27 | 10 | 0 | 0 | 6 | 4 | 20 | 0 | 24 | | | |
| Cap, veh/h | 258 | 853 | 0 | 0 | 882 | 759 | 512 | 318 | 271 | | | |
| Arrive On Green | 0.53 | 0.53 | 0.00 | 0.00 | 0.53 | 0.53 | 0.36 | 0.36 | 0.36 | | | |
| Sat Flow, veh/h | 616 | 1614 | 0 | 0 | 1668 | 1437 | 1407 | 873 | 743 | | | |
| Grp Volume(v), veh/h | 154 | 119 | 0 | 0 | 577 | 91 | 284 | 0 | 335 | | | |
| Grp Sat Flow(s),veh/h/ln | 616 | 1614 | 0 | 0 | 1668 | 1437 | 1407 | 0 | 1616 | | | |
| Q Serve(g_s), s | 20.1 | 3.1 | 0.0 | 0.0 | 20.9 | 2.7 | 13.5 | 0.0 | 13.9 | | | |
| Cycle Q Clear(g_c), s | 41.0 | 3.1 | 0.0 | 0.0 | 20.9 | 2.7 | 13.5 | 0.0 | 13.9 | | | |
| Prop In Lane | 1.00 | | 0.00 | 0.00 | | 1.00 | 1.00 | | 0.46 | | | |
| Lane Grp Cap(c), veh/h | 258 | 853 | 0 | 0 | 882 | 759 | 512 | 0 | 588 | | | |
| V/C Ratio(X) | 0.60 | 0.14 | 0.00 | 0.00 | 0.65 | 0.12 | 0.55 | 0.00 | 0.57 | | | |
| Avail Cap(c_a), veh/h | 304 | 973 | 0 | 0 | 1006 | 866 | 512 | 0 | 588 | | | |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Upstream Filter(I) | 1.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | | | |
| Uniform Delay (d), s/veh | 29.0 | 10.1 | 0.0 | 0.0 | 14.2 | 9.9 | 21.2 | 0.0 | 21.4 | | | |
| Incr Delay (d2), s/veh | 3.2 | 0.1 | 0.0 | 0.0 | 1.6 | 0.1 | 4.3 | 0.0 | 4.0 | | | |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |
| %ile BackOfQ(50%),veh/ln | 3.1 | 1.1 | 0.0 | 0.0 | 7.5 | 0.8 | 4.8 | 0.0 | 5.7 | | | |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 32.2 | 10.2 | 0.0 | 0.0 | 15.8 | 10.0 | 25.5 | 0.0 | 25.3 | | | |
| LnGrp LOS | C | B | A | A | B | B | C | A | C | | | |
| Approach Vol, veh/h | | 273 | | | 668 | | | 619 | | | | |
| Approach Delay, s/veh | | 22.6 | | | 15.0 | | | 25.4 | | | | |
| Approach LOS | | C | | | B | | | C | | | | |
| Timer - Assigned Phs | | 2 | | 4 | | | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 35.0 | | 48.8 | | | | 48.8 | | | | |
| Change Period (Y+Rc), s | | 4.5 | | 4.5 | | | | 4.5 | | | | |
| Max Green Setting (Gmax), s | | 30.5 | | 50.5 | | | | 50.5 | | | | |
| Max Q Clear Time (g_c+I1), s | | 15.9 | | 43.0 | | | | 22.9 | | | | |
| Green Ext Time (p_c), s | | 2.0 | | 1.3 | | | | 10.7 | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 20.5 |
| HCM 6th LOS | C |

**Notes**

User approved volume balancing among the lanes for turning movement.

| Intersection | |
|---|---|
| Int Delay, s/veh | 8.9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ⇕ | | | ⇕ | | | ⇕ | | | ⇕ | |
| Traffic Vol, veh/h | 1 | 1 | 342 | 15 | 3 | 1 | 526 | 4 | 12 | 1 | 1 | 1 |
| Future Vol, veh/h | 1 | 1 | 342 | 15 | 3 | 1 | 526 | 4 | 12 | 1 | 1 | 1 |
| 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 | - | - | Free | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 1 | 356 | 16 | 3 | 1 | 548 | 4 | 13 | 1 | 1 | 1 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1113 | 1117 | - | 1111 | 1111 | 11 | 2 | 0 | 0 | 17 | 0 | 0 |
| Stage 1 | 4 | 4 | - | 1107 | 1107 | - | - | - | - | - | - | - |
| Stage 2 | 1109 | 1113 | - | 4 | 4 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 186 | 207 | 0 | 186 | 209 | 1070 | 1620 | - | - | 1600 | - | - |
| Stage 1 | 1018 | 892 | 0 | 255 | 286 | - | - | - | - | - | - | - |
| Stage 2 | 254 | 284 | 0 | 1018 | 892 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 134 | 136 | - | 136 | 137 | 1070 | 1620 | - | - | 1600 | - | - |
| Mov Cap-2 Maneuver | 134 | 136 | - | 136 | 137 | - | - | - | - | - | - | - |
| Stage 1 | 670 | 891 | - | 168 | 188 | - | - | - | - | - | - | - |
| Stage 2 | 164 | 187 | - | 1016 | 891 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | | 34.2 | 8.1 | 2.4 |
| HCM LOS | - | D | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1620 | - | - | - | 143 | 1600 | - | - |
| HCM Lane V/C Ratio | 0.338 | - | - | - | 0.138 | 0.001 | - | - |
| HCM Control Delay (s) | 8.4 | 0 | - | - | 34.2 | 7.3 | 0 | - |
| HCM Lane LOS | A | A | - | - | D | A | A | - |
| HCM 95th %tile Q(veh) | 1.5 | - | - | - | 0.5 | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 207 | 1 | 34 | 362 | 132 | 2 | 1 | 14 | 108 | 4 | 6 |
| Future Vol, veh/h | 3 | 207 | 1 | 34 | 362 | 132 | 2 | 1 | 14 | 108 | 4 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 218 | 1 | 36 | 381 | 139 | 2 | 1 | 15 | 114 | 4 | 6 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 520 | 0 | 0 | 219 | 0 | 0 | 753 | 817 | 219 | 756 | 748 | 451 |
| Stage 1 | - | - | - | - | - | - | 225 | 225 | - | 523 | 523 | - |
| Stage 2 | - | - | - | - | - | - | 528 | 592 | - | 233 | 225 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1046 | - | - | 1350 | - | - | 326 | 311 | 821 | 325 | 341 | 608 |
| Stage 1 | - | - | - | - | - | - | 778 | 718 | - | 537 | 530 | - |
| Stage 2 | - | - | - | - | - | - | 534 | 494 | - | 770 | 718 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1046 | - | - | 1350 | - | - | 309 | 298 | 821 | 308 | 327 | 608 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 309 | 298 | - | 308 | 327 | - |
| Stage 1 | - | - | - | - | - | - | 776 | 716 | - | 535 | 510 | - |
| Stage 2 | - | - | - | - | - | - | 504 | 475 | - | 753 | 716 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.5 | 10.9 | 23.5 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 632 | 1046 | - | - | 1350 | - | - | 317 |
| HCM Lane V/C Ratio | 0.028 | 0.003 | - | - | 0.027 | - | - | 0.392 |
| HCM Control Delay (s) | 10.9 | 8.5 | 0 | - | 7.7 | 0 | - | 23.5 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0.1 | - | - | 1.8 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 12.2 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 56 | 208 | 1 | 48 | 600 | 1 |
| Future Vol, veh/h | 56 | 208 | 1 | 48 | 600 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 59 | 219 | 1 | 51 | 632 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 278 | 0 | 112 | 59 |
| Stage 1 | - | - | - | - | 59 | - |
| Stage 2 | - | - | - | - | 53 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1285 | - | 885 | 1007 |
| Stage 1 | - | - | - | - | 964 | - |
| Stage 2 | - | - | - | - | 970 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1285 | - | 884 | 1007 |
| Mov Cap-2 Maneuver | - | - | - | - | 884 | - |
| Stage 1 | - | - | - | - | 964 | - |
| Stage 2 | - | - | - | - | 969 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.2 | 18.6 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|---|
| Capacity (veh/h) | 884 | 1007 | - | - | 1285 | - |
| HCM Lane V/C Ratio | 0.714 | 0.001 | - | - | 0.001 | - |
| HCM Control Delay (s) | 18.6 | 8.6 | - | - | 7.8 | 0 |
| HCM Lane LOS | C | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 6.3 | 0 | - | - | 0 | - |

TAX LOT 202 TPR

APPENDIX F: QUEUING OUTPUTS

## 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 | 8:07 | 8:07 | 8:07 | 8:07 | 8:07 | 8:07 |
| 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 | 1967 | 2064 | 2031 | 2070 | 2097 | 2050 |
| Vehs Exited | 1963 | 2065 | 2039 | 2061 | 2106 | 2049 |
| Starting Vehs | 57 | 67 | 77 | 64 | 76 | 65 |
| Ending Vehs | 61 | 66 | 69 | 73 | 67 | 63 |
| Travel Distance (mi) | 1270 | 1348 | 1310 | 1312 | 1371 | 1322 |
| Travel Time (hr) | 66.1 | 70.3 | 68.6 | 68.3 | 71.8 | 69.0 |
| Total Delay (hr) | 18.0 | 19.4 | 19.1 | 18.6 | 20.2 | 19.1 |
| Total Stops | 1995 | 2139 | 2137 | 2112 | 2223 | 2122 |
| Fuel Used (gal) | 49.2 | 52.9 | 51.2 | 51.5 | 54.0 | 51.8 |

## Interval #0 Information Seeding

| | |
|---|---|
| Start Time | 6:57 |
| End Time | 7:07 |
| Total Time (min) | 10 |

Volumes adjusted by Growth Factors.

No data recorded this interval.

## Interval #1 Information Recording

| | |
|---|---|
| Start Time | 7:07 |
| End Time | 7:22 |
| Total Time (min) | 15 |

Volumes adjusted by PHF, Growth Factors.

| Run Number | 1 | 2 | 3 | 4 | 5 | Avg |
|---|---|---|---|---|---|---|
| Vehs Entered | 569 | 606 | 592 | 597 | 601 | 592 |
| Vehs Exited | 565 | 591 | 594 | 578 | 608 | 586 |
| Starting Vehs | 57 | 67 | 77 | 64 | 76 | 65 |
| Ending Vehs | 61 | 82 | 75 | 83 | 69 | 72 |
| Travel Distance (mi) | 354 | 380 | 364 | 364 | 377 | 368 |
| Travel Time (hr) | 18.9 | 20.3 | 19.6 | 19.5 | 20.4 | 19.7 |
| Total Delay (hr) | 5.5 | 5.9 | 5.9 | 5.6 | 6.2 | 5.8 |
| Total Stops | 581 | 602 | 617 | 625 | 638 | 611 |
| Fuel Used (gal) | 13.6 | 15.1 | 14.6 | 14.4 | 15.1 | 14.6 |

## Interval #2 Information Recording 2

| | |
|---|---|
| Start Time | 7:22 |
| End Time | 8:07 |
| Total Time (min) | 45 |

Volumes adjusted by Growth Factors, Anti PHF.

| Run Number | 1 | 2 | 3 | 4 | 5 | Avg |
|---|---|---|---|---|---|---|
| Vehs Entered | 1398 | 1458 | 1439 | 1473 | 1496 | 1454 |
| Vehs Exited | 1398 | 1474 | 1445 | 1483 | 1498 | 1459 |
| Starting Vehs | 61 | 82 | 75 | 83 | 69 | 72 |
| Ending Vehs | 61 | 66 | 69 | 73 | 67 | 63 |
| Travel Distance (mi) | 917 | 967 | 947 | 948 | 994 | 955 |
| Travel Time (hr) | 47.3 | 50.0 | 49.0 | 48.8 | 51.4 | 49.3 |
| Total Delay (hr) | 12.5 | 13.5 | 13.2 | 13.0 | 14.0 | 13.2 |
| Total Stops | 1414 | 1537 | 1520 | 1487 | 1585 | 1509 |
| Fuel Used (gal) | 35.5 | 37.8 | 36.6 | 37.1 | 38.9 | 37.2 |

## Intersection: 3: N Willamette St & E Pearl St, Interval #1

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 9 | 122 | 112 | 187 | 90 | 74 |
| Average Queue (ft) | 2 | 60 | 65 | 105 | 51 | 32 |
| 95th Queue (ft) | 11 | 110 | 119 | 195 | 96 | 72 |
| Link Distance (ft) | 168 | 1666 | | 309 | | 1240 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 3 | 2 | | 0 | |
| Queuing Penalty (veh) | | 6 | 3 | | 1 | |

## Intersection: 3: N Willamette St & E Pearl St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 18 | 158 | 115 | 179 | 100 | 90 |
| Average Queue (ft) | 3 | 57 | 57 | 75 | 45 | 33 |
| 95th Queue (ft) | 15 | 115 | 107 | 143 | 86 | 78 |
| Link Distance (ft) | 168 | 1666 | | 309 | | 1240 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 3 | 1 | | 0 | |
| Queuing Penalty (veh) | | 5 | 1 | | 0 | |

## Intersection: 3: N Willamette St & E Pearl St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 22 | 159 | 115 | 199 | 116 | 94 |
| Average Queue (ft) | 3 | 58 | 59 | 82 | 47 | 33 |
| 95th Queue (ft) | 14 | 114 | 110 | 159 | 88 | 77 |
| Link Distance (ft) | 168 | 1666 | | 309 | | 1240 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 3 | 1 | | 0 | |
| Queuing Penalty (veh) | | 5 | 1 | | 0 | |

## Intersection: 6: Coburg Industrial Way & E Pearl St, Interval #1

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 65 | 160 | 139 | 230 | 240 | 114 | 104 | 121 | 180 | 187 | 87 |
| Average Queue (ft) | 12 | 104 | 96 | 130 | 128 | 60 | 57 | 63 | 105 | 144 | 34 |
| 95th Queue (ft) | 59 | 173 | 161 | 239 | 235 | 130 | 102 | 122 | 192 | 201 | 71 |
| Link Distance (ft) | | 609 | 609 | | 682 | 682 | | 654 | | | 953 |
| Upstream Blk Time (%) | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | 0 | 5 | | 1 | 0 | | | | | | |
| Queuing Penalty (veh) | 0 | 0 | | 1 | 0 | | | | | | |

## Intersection: 6: Coburg Industrial Way & E Pearl St, Interval #2

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 54 | 148 | 144 | 228 | 162 | 120 | 107 | 107 | 149 | 179 | 73 |
| Average Queue (ft) | 4 | 80 | 74 | 108 | 82 | 42 | 47 | 51 | 63 | 108 | 25 |
| 95th Queue (ft) | 31 | 136 | 130 | 193 | 136 | 99 | 92 | 95 | 124 | 168 | 60 |
| Link Distance (ft) | | 609 | 609 | | 682 | 682 | | 654 | | | 953 |
| Upstream Blk Time (%) | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | | 2 | | | | | | | | | |
| Queuing Penalty (veh) | | 0 | | | | | | | | | |

## Intersection: 6: Coburg Industrial Way & E Pearl St, All Intervals

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 65 | 167 | 156 | 249 | 246 | 138 | 116 | 140 | 188 | 198 | 92 |
| Average Queue (ft) | 6 | 85 | 80 | 113 | 93 | 47 | 49 | 54 | 73 | 116 | 27 |
| 95th Queue (ft) | 40 | 148 | 140 | 206 | 171 | 108 | 95 | 103 | 148 | 181 | 63 |
| Link Distance (ft) | | 609 | 609 | | 682 | 682 | | 654 | | | 953 |
| Upstream Blk Time (%) | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | 0 | 3 | | 0 | 0 | | | | | | |
| Queuing Penalty (veh) | 0 | 0 | | 0 | 0 | | | | | | |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, Interval #1

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | TR | LT | L | TR |
| Maximum Queue (ft) | 11 | 64 | 38 | 91 |
| Average Queue (ft) | 3 | 24 | 12 | 58 |
| 95th Queue (ft) | 20 | 67 | 41 | 93 |
| Link Distance (ft) | 682 | 706 | | 786 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | 25 | |
| Storage Blk Time (%) | | | 2 | 13 |
| Queuing Penalty (veh) | | | 3 | 1 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, Interval #2

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | TR | LT | L | TR |
| Maximum Queue (ft) | 26 | 102 | 53 | 107 |
| Average Queue (ft) | 1 | 14 | 9 | 59 |
| 95th Queue (ft) | 18 | 64 | 38 | 95 |
| Link Distance (ft) | 682 | 706 | | 786 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | 25 | |
| Storage Blk Time (%) | | | 1 | 11 |
| Queuing Penalty (veh) | | | 1 | 1 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, All Intervals

| Movement | EB | WB | SB | SB |
|---|---|---|---|---|
| Directions Served | TR | LT | L | TR |
| Maximum Queue (ft) | 37 | 102 | 57 | 108 |
| Average Queue (ft) | 2 | 17 | 10 | 58 |
| 95th Queue (ft) | 18 | 65 | 39 | 94 |
| Link Distance (ft) | 682 | 706 | | 786 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | 25 | |
| Storage Blk Time (%) | | | 1 | 11 |
| Queuing Penalty (veh) | | | 2 | 1 |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LT | TR | LTR |
| Maximum Queue (ft) | 150 | 81 | 176 |
| Average Queue (ft) | 81 | 42 | 75 |
| 95th Queue (ft) | 148 | 84 | 170 |
| Link Distance (ft) | 706 | 481 | 754 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LT | TR | LTR |
| Maximum Queue (ft) | 186 | 85 | 154 |
| Average Queue (ft) | 89 | 36 | 74 |
| 95th Queue (ft) | 169 | 76 | 143 |
| Link Distance (ft) | 706 | 481 | 754 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LT | TR | LTR |
| Maximum Queue (ft) | 186 | 94 | 198 |
| Average Queue (ft) | 87 | 37 | 74 |
| 95th Queue (ft) | 165 | 78 | 150 |
| Link Distance (ft) | 706 | 481 | 754 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: N Willamette St & Coburg Rd, Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 16 | 10 | 9 |
| Average Queue (ft) | 2 | 2 | 1 |
| 95th Queue (ft) | 18 | 13 | 10 |
| Link Distance (ft) | 958 | 280 | 1240 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: N Willamette St & Coburg Rd, Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 36 | 24 | 21 |
| Average Queue (ft) | 3 | 4 | 1 |
| 95th Queue (ft) | 19 | 20 | 13 |
| Link Distance (ft) | 958 | 280 | 1240 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 17: N Willamette St & Coburg Rd, All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 42 | 24 | 26 |
| Average Queue (ft) | 2 | 4 | 1 |
| 95th Queue (ft) | 18 | 18 | 12 |
| Link Distance (ft) | 958 | 280 | 1240 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 20: Coburg Bottom Loop Rd & Coburg Rd, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 6 | 32 | 34 | 78 |
| Average Queue (ft) | 1 | 5 | 10 | 44 |
| 95th Queue (ft) | 9 | 28 | 31 | 75 |
| Link Distance (ft) | 579 | 958 | 488 | 690 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 20: Coburg Bottom Loop Rd & Coburg Rd, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 16 | 40 | 30 | 76 |
| Average Queue (ft) | 1 | 4 | 12 | 40 |
| 95th Queue (ft) | 10 | 25 | 35 | 67 |
| Link Distance (ft) | 579 | 958 | 488 | 690 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 20: Coburg Bottom Loop Rd & Coburg Rd, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 16 | 54 | 34 | 88 |
| Average Queue (ft) | 1 | 4 | 11 | 41 |
| 95th Queue (ft) | 10 | 26 | 34 | 69 |
| Link Distance (ft) | 579 | 958 | 488 | 690 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 23: RV Park Access & Van Duyn Rd, Interval #1

| Movement | NB |
|---|---|
| Directions Served | LR |
| Maximum Queue (ft) | 42 |
| Average Queue (ft) | 21 |
| 95th Queue (ft) | 48 |
| Link Distance (ft) | 266 |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | |
| Storage Blk Time (%) | |
| Queuing Penalty (veh) | |

## Intersection: 23: RV Park Access & Van Duyn Rd, Interval #2

| Movement | NB |
|---|---|
| Directions Served | LR |
| Maximum Queue (ft) | 52 |
| Average Queue (ft) | 17 |
| 95th Queue (ft) | 47 |
| Link Distance (ft) | 266 |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | |
| Storage Blk Time (%) | |
| Queuing Penalty (veh) | |

## Intersection: 23: RV Park Access & Van Duyn Rd, All Intervals

| Movement | NB |
|---|---|
| Directions Served | LR |
| Maximum Queue (ft) | 64 |
| Average Queue (ft) | 18 |
| 95th Queue (ft) | 47 |
| Link Distance (ft) | 266 |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | |
| Storage Blk Time (%) | |
| Queuing Penalty (veh) | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 15
Network wide Queuing Penalty, Interval #2: 8
Network wide Queuing Penalty, All Intervals: 10

## 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 | 8:07 | 8:07 | 8:07 | 8:07 | 8:07 | 8:07 |
| 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 | 2936 | 2926 | 3011 | 2955 | 2948 | 2951 |
| Vehs Exited | 2920 | 2938 | 2997 | 2942 | 2919 | 2944 |
| Starting Vehs | 83 | 102 | 99 | 84 | 105 | 87 |
| Ending Vehs | 99 | 90 | 113 | 97 | 134 | 104 |
| Travel Distance (mi) | 1813 | 1817 | 1843 | 1828 | 1809 | 1822 |
| Travel Time (hr) | 101.1 | 102.9 | 104.9 | 102.6 | 105.5 | 103.4 |
| Total Delay (hr) | 32.7 | 34.1 | 35.2 | 33.5 | 37.1 | 34.5 |
| Total Stops | 3462 | 3531 | 3671 | 3561 | 3704 | 3583 |
| Fuel Used (gal) | 72.7 | 73.3 | 74.2 | 73.5 | 73.5 | 73.4 |

## Interval #0 Information Seeding

| | |
|---|---|
| Start Time | 6:57 |
| End Time | 7:07 |
| Total Time (min) | 10 |

Volumes adjusted by Growth Factors.

No data recorded this interval.

## Interval #1 Information Recording

| | |
|---|---|
| Start Time | 7:07 |
| End Time | 7:22 |
| Total Time (min) | 15 |

Volumes adjusted by PHF, Growth Factors.

| Run Number | 1 | 2 | 3 | 4 | 5 | Avg |
|---|---|---|---|---|---|---|
| Vehs Entered | 766 | 792 | 790 | 772 | 827 | 786 |
| Vehs Exited | 743 | 782 | 750 | 742 | 822 | 767 |
| Starting Vehs | 83 | 102 | 99 | 84 | 105 | 87 |
| Ending Vehs | 106 | 112 | 139 | 114 | 110 | 112 |
| Travel Distance (mi) | 457 | 483 | 466 | 467 | 491 | 473 |
| Travel Time (hr) | 25.8 | 28.2 | 26.1 | 26.6 | 29.6 | 27.3 |
| Total Delay (hr) | 8.5 | 10.0 | 8.5 | 8.9 | 11.0 | 9.4 |
| Total Stops | 911 | 986 | 927 | 989 | 1051 | 975 |
| Fuel Used (gal) | 18.3 | 19.7 | 18.7 | 19.0 | 20.2 | 19.2 |

## Interval #2 Information Recording 2

| | |
|---|---|
| Start Time | 7:22 |
| End Time | 8:07 |
| Total Time (min) | 45 |

Volumes adjusted by Growth Factors, Anti PHF.

| Run Number | 1 | 2 | 3 | 4 | 5 | Avg |
|---|---|---|---|---|---|---|
| Vehs Entered | 2170 | 2134 | 2221 | 2183 | 2121 | 2166 |
| Vehs Exited | 2177 | 2156 | 2247 | 2200 | 2097 | 2176 |
| Starting Vehs | 106 | 112 | 139 | 114 | 110 | 112 |
| Ending Vehs | 99 | 90 | 113 | 97 | 134 | 104 |
| Travel Distance (mi) | 1355 | 1334 | 1377 | 1361 | 1318 | 1349 |
| Travel Time (hr) | 75.3 | 74.7 | 78.8 | 76.0 | 75.9 | 76.2 |
| Total Delay (hr) | 24.1 | 24.2 | 26.7 | 24.6 | 26.0 | 25.1 |
| Total Stops | 2551 | 2545 | 2744 | 2572 | 2653 | 2615 |
| Fuel Used (gal) | 54.3 | 53.7 | 55.5 | 54.6 | 53.3 | 54.3 |

## Intersection: 3: N Willamette St & E Pearl St, Interval #1

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 13 | 195 | 115 | 204 | 111 | 71 |
| Average Queue (ft) | 2 | 114 | 81 | 111 | 65 | 32 |
| 95th Queue (ft) | 12 | 244 | 138 | 211 | 113 | 83 |
| Link Distance (ft) | 167 | 1636 | | 309 | | 1234 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 11 | 2 | | 2 | |
| Queuing Penalty (veh) | | 24 | 3 | | 4 | |

## Intersection: 3: N Willamette St & E Pearl St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 17 | 240 | 115 | 225 | 126 | 138 |
| Average Queue (ft) | 2 | 98 | 72 | 104 | 61 | 39 |
| 95th Queue (ft) | 13 | 199 | 125 | 198 | 103 | 96 |
| Link Distance (ft) | 167 | 1636 | | 309 | | 1234 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 8 | 2 | | 0 | 0 |
| Queuing Penalty (veh) | | 16 | 3 | | 1 | 1 |

## Intersection: 3: N Willamette St & E Pearl St, All Intervals

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 22 | 260 | 115 | 240 | 128 | 138 |
| Average Queue (ft) | 2 | 102 | 74 | 105 | 62 | 37 |
| 95th Queue (ft) | 13 | 211 | 129 | 201 | 106 | 93 |
| Link Distance (ft) | 167 | 1636 | | 309 | | 1234 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 9 | 2 | | 1 | 0 |
| Queuing Penalty (veh) | | 18 | 3 | | 2 | 1 |

## Intersection: 6: Coburg Industrial Way & E Pearl St, Interval #1

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 48 | 215 | 214 | 249 | 272 | 235 | 125 | 149 | 244 | 259 | 250 |
| Average Queue (ft) | 9 | 138 | 135 | 190 | 202 | 148 | 64 | 90 | 160 | 187 | 100 |
| 95th Queue (ft) | 55 | 204 | 218 | 311 | 397 | 340 | 116 | 158 | 245 | 264 | 280 |
| Link Distance (ft) | | 641 | 641 | | 672 | 672 | | 653 | | | 953 |
| Upstream Blk Time (%) | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | | 14 | | 10 | 0 | | | 0 | 0 | 2 | 0 |
| Queuing Penalty (veh) | | 1 | | 21 | 0 | | | 0 | 0 | 4 | 0 |

## Intersection: 6: Coburg Industrial Way & E Pearl St, Interval #2

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 80 | 269 | 273 | 265 | 306 | 286 | 162 | 206 | 234 | 255 | 159 |
| Average Queue (ft) | 7 | 138 | 127 | 164 | 145 | 102 | 73 | 74 | 151 | 179 | 60 |
| 95th Queue (ft) | 44 | 229 | 223 | 273 | 295 | 252 | 136 | 146 | 242 | 249 | 133 |
| Link Distance (ft) | | 641 | 641 | | 672 | 672 | | 653 | | | 953 |
| Upstream Blk Time (%) | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | | 13 | | 2 | 0 | | | 0 | 0 | 1 | |
| Queuing Penalty (veh) | | 1 | | 4 | 0 | | | 0 | 0 | 2 | |

## Intersection: 6: Coburg Industrial Way & E Pearl St, All Intervals

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 80 | 275 | 280 | 282 | 379 | 338 | 167 | 210 | 259 | 268 | 258 |
| Average Queue (ft) | 7 | 138 | 129 | 171 | 159 | 113 | 71 | 78 | 153 | 181 | 69 |
| 95th Queue (ft) | 47 | 223 | 222 | 284 | 326 | 277 | 132 | 150 | 243 | 253 | 182 |
| Link Distance (ft) | | 641 | 641 | | 672 | 672 | | 653 | | | 953 |
| Upstream Blk Time (%) | | | | | | | | | | | |
| Queuing Penalty (veh) | | | | | | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | | 13 | | 4 | 0 | | | 0 | 0 | 1 | 0 |
| Queuing Penalty (veh) | | 1 | | 8 | 0 | | | 0 | 0 | 2 | 0 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, Interval #1

| Movement | EB | EB | WB | SB | SB |
|---|---|---|---|---|---|
| Directions Served | TR | R | L | L | TR |
| Maximum Queue (ft) | 98 | 59 | 59 | 55 | 197 |
| Average Queue (ft) | 36 | 8 | 19 | 24 | 101 |
| 95th Queue (ft) | 117 | 67 | 54 | 62 | 186 |
| Link Distance (ft) | 672 | 672 | | | 780 |
| Upstream Blk Time (%) | | | | | |
| Queuing Penalty (veh) | | | | | |
| Storage Bay Dist (ft) | | | 275 | 25 | |
| Storage Blk Time (%) | | | | 5 | 31 |
| Queuing Penalty (veh) | | | | 15 | 5 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, Interval #2

| Movement | EB | EB | WB | WB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | TR | R | L | T | L | TR |
| Maximum Queue (ft) | 178 | 114 | 51 | 4 | 59 | 234 |
| Average Queue (ft) | 39 | 8 | 16 | 0 | 19 | 95 |
| 95th Queue (ft) | 121 | 62 | 47 | 3 | 56 | 178 |
| Link Distance (ft) | 672 | 672 | | 679 | | 780 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 275 | | 25 | |
| Storage Blk Time (%) | | | | | 4 | 27 |
| Queuing Penalty (veh) | | | | | 9 | 5 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, All Intervals

| Movement | EB | EB | WB | WB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | TR | R | L | T | L | TR |
| Maximum Queue (ft) | 178 | 116 | 60 | 4 | 61 | 244 |
| Average Queue (ft) | 38 | 8 | 17 | 0 | 20 | 96 |
| 95th Queue (ft) | 120 | 63 | 48 | 3 | 58 | 180 |
| Link Distance (ft) | 672 | 672 | | 679 | | 780 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | | | 275 | | 25 | |
| Storage Blk Time (%) | | | | | 4 | 28 |
| Queuing Penalty (veh) | | | | | 10 | 5 |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | L | LTR |
| Maximum Queue (ft) | 181 | 86 | 71 | 38 | 148 | 108 |
| Average Queue (ft) | 111 | 35 | 33 | 15 | 92 | 48 |
| 95th Queue (ft) | 186 | 89 | 72 | 43 | 148 | 106 |
| Link Distance (ft) | | 679 | 1252 | 1252 | 850 | 850 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 275 | | | | | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | L | LTR |
| Maximum Queue (ft) | 194 | 100 | 93 | 38 | 210 | 155 |
| Average Queue (ft) | 97 | 39 | 35 | 13 | 94 | 48 |
| 95th Queue (ft) | 175 | 86 | 78 | 38 | 168 | 107 |
| Link Distance (ft) | | 679 | 1252 | 1252 | 850 | 850 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 275 | | | | | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | L | LTR |
| Maximum Queue (ft) | 208 | 107 | 96 | 42 | 210 | 155 |
| Average Queue (ft) | 101 | 38 | 34 | 13 | 94 | 48 |
| 95th Queue (ft) | 178 | 87 | 77 | 39 | 163 | 107 |
| Link Distance (ft) | | 679 | 1252 | 1252 | 850 | 850 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 275 | | | | | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

## Intersection: 15: RV Park Access & Van Duyn Rd, Interval #1

| Movement | NB |
|---|---|
| Directions Served | L |
| Maximum Queue (ft) | 34 |
| Average Queue (ft) | 23 |
| 95th Queue (ft) | 42 |
| Link Distance (ft) | 420 |
| Upstream Blk Time (%) | |
| Queuing Penalty (veh) | |
| Storage Bay Dist (ft) | |
| Storage Blk Time (%) | |
| Queuing Penalty (veh) | |

## Intersection: 15: RV Park Access & Van Duyn Rd, Interval #2

| Movement | NB | NB |
|---|---|---|
| Directions Served | L | R |
| Maximum Queue (ft) | 44 | 22 |
| Average Queue (ft) | 16 | 2 |
| 95th Queue (ft) | 39 | 11 |
| Link Distance (ft) | 420 | 420 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 15: RV Park Access & Van Duyn Rd, All Intervals

| Movement | NB | NB |
|---|---|---|
| Directions Served | L | R |
| Maximum Queue (ft) | 51 | 22 |
| Average Queue (ft) | 17 | 1 |
| 95th Queue (ft) | 41 | 9 |
| Link Distance (ft) | 420 | 420 |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 19: N Willamette St & Coburg Rd, Interval #1

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 37 | 29 | 16 |
| Average Queue (ft) | 7 | 15 | 3 |
| 95th Queue (ft) | 40 | 37 | 17 |
| Link Distance (ft) | 952 | 256 | 335 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 19: N Willamette St & Coburg Rd, Interval #2

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 50 | 29 | 26 |
| Average Queue (ft) | 3 | 13 | 2 |
| 95th Queue (ft) | 23 | 33 | 15 |
| Link Distance (ft) | 952 | 256 | 335 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 19: N Willamette St & Coburg Rd, All Intervals

| Movement | EB | WB | SB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 60 | 29 | 27 |
| Average Queue (ft) | 4 | 13 | 3 |
| 95th Queue (ft) | 28 | 34 | 15 |
| Link Distance (ft) | 952 | 256 | 335 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 20: Coburg Bottom Loop Rd & Coburg Rd, Interval #1

| Movement | WB | NB | SB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 37 | 31 | 61 |
| Average Queue (ft) | 9 | 15 | 38 |
| 95th Queue (ft) | 36 | 39 | 65 |
| Link Distance (ft) | 952 | 342 | 382 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 20: Coburg Bottom Loop Rd & Coburg Rd, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 12 | 43 | 35 | 74 |
| Average Queue (ft) | 1 | 6 | 12 | 38 |
| 95th Queue (ft) | 9 | 29 | 37 | 65 |
| Link Distance (ft) | 396 | 952 | 342 | 382 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 20: Coburg Bottom Loop Rd & Coburg Rd, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 12 | 48 | 35 | 76 |
| Average Queue (ft) | 1 | 7 | 13 | 38 |
| 95th Queue (ft) | 8 | 31 | 37 | 65 |
| Link Distance (ft) | 396 | 952 | 342 | 382 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 77
Network wide Queuing Penalty, Interval #2: 42
Network wide Queuing Penalty, All Intervals: 51

## 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 | 8:07 | 8:07 | 8:07 | 8:07 | 8:07 | 8:07 |
| 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 | 3663 | 3736 | 3711 | 3769 | 3797 | 3733 |
| Vehs Exited | 3661 | 3745 | 3739 | 3766 | 3766 | 3736 |
| Starting Vehs | 134 | 127 | 152 | 142 | 119 | 135 |
| Ending Vehs | 136 | 118 | 124 | 145 | 150 | 133 |
| Travel Distance (mi) | 2241 | 2284 | 2291 | 2312 | 2282 | 2282 |
| Travel Time (hr) | 132.8 | 136.5 | 139.0 | 138.3 | 140.3 | 137.4 |
| Total Delay (hr) | 48.2 | 50.3 | 52.6 | 50.9 | 54.1 | 51.2 |
| Total Stops | 5022 | 5211 | 5109 | 5325 | 5332 | 5202 |
| Fuel Used (gal) | 92.8 | 95.2 | 95.6 | 96.6 | 96.3 | 95.3 |

## Interval #0 Information Seeding

| | |
|---|---|
| Start Time | 6:57 |
| End Time | 7:07 |
| Total Time (min) | 10 |

Volumes adjusted by Growth Factors.

No data recorded this interval.

## Interval #1 Information Recording

| | |
|---|---|
| Start Time | 7:07 |
| End Time | 7:22 |
| Total Time (min) | 15 |

Volumes adjusted by PHF, Growth Factors.

| Run Number | 1 | 2 | 3 | 4 | 5 | Avg |
|---|---|---|---|---|---|---|
| Vehs Entered | 943 | 1019 | 951 | 1005 | 1067 | 993 |
| Vehs Exited | 945 | 968 | 950 | 1002 | 1022 | 979 |
| Starting Vehs | 134 | 127 | 152 | 142 | 119 | 135 |
| Ending Vehs | 132 | 178 | 153 | 145 | 164 | 153 |
| Travel Distance (mi) | 569 | 602 | 582 | 626 | 621 | 600 |
| Travel Time (hr) | 35.4 | 36.6 | 37.6 | 40.0 | 41.2 | 38.1 |
| Total Delay (hr) | 14.0 | 13.9 | 15.6 | 16.4 | 17.8 | 15.5 |
| Total Stops | 1271 | 1412 | 1277 | 1482 | 1557 | 1399 |
| Fuel Used (gal) | 24.0 | 25.2 | 24.5 | 26.7 | 26.9 | 25.5 |

## Interval #2 Information Recording 2

| | |
|---|---|
| Start Time | 7:22 |
| End Time | 8:07 |
| Total Time (min) | 45 |

Volumes adjusted by Growth Factors, Anti PHF.

| Run Number | 1 | 2 | 3 | 4 | 5 | Avg |
|---|---|---|---|---|---|---|
| Vehs Entered | 2720 | 2717 | 2760 | 2764 | 2730 | 2739 |
| Vehs Exited | 2716 | 2777 | 2789 | 2764 | 2744 | 2758 |
| Starting Vehs | 132 | 178 | 153 | 145 | 164 | 153 |
| Ending Vehs | 136 | 118 | 124 | 145 | 150 | 133 |
| Travel Distance (mi) | 1671 | 1682 | 1709 | 1686 | 1660 | 1682 |
| Travel Time (hr) | 97.4 | 99.9 | 101.4 | 98.3 | 99.1 | 99.2 |
| Total Delay (hr) | 34.2 | 36.4 | 37.0 | 34.5 | 36.3 | 35.7 |
| Total Stops | 3751 | 3799 | 3832 | 3843 | 3775 | 3798 |
| Fuel Used (gal) | 68.8 | 70.0 | 71.2 | 69.9 | 69.4 | 69.9 |

## Intersection: 3: N Willamette St & E Pearl St, Interval #1

| Movement | EB | WB | WB | B15 | NB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | T | LTR | L | TR |
| Maximum Queue (ft) | 17 | 189 | 111 | 82 | 235 | 131 | 138 |
| Average Queue (ft) | 3 | 90 | 83 | 12 | 161 | 88 | 55 |
| 95th Queue (ft) | 16 | 187 | 129 | 124 | 258 | 144 | 125 |
| Link Distance (ft) | 167 | 1645 | | 643 | 309 | | 1226 |
| Upstream Blk Time (%) | | | | | | | |
| Queuing Penalty (veh) | | | | | | | |
| Storage Bay Dist (ft) | | | 90 | | | 120 | |
| Storage Blk Time (%) | | 6 | 3 | | | 4 | 0 |
| Queuing Penalty (veh) | | 16 | 6 | | | 9 | 0 |

## Intersection: 3: N Willamette St & E Pearl St, Interval #2

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | LTR | L | TR |
| Maximum Queue (ft) | 26 | 302 | 115 | 314 | 133 | 158 |
| Average Queue (ft) | 2 | 104 | 75 | 150 | 76 | 60 |
| 95th Queue (ft) | 13 | 224 | 129 | 276 | 132 | 140 |
| Link Distance (ft) | 167 | 1645 | | 309 | | 1226 |
| Upstream Blk Time (%) | | | | 1 | | |
| Queuing Penalty (veh) | | | | 0 | | |
| Storage Bay Dist (ft) | | | 90 | | 120 | |
| Storage Blk Time (%) | | 6 | 3 | | 3 | 0 |
| Queuing Penalty (veh) | | 14 | 5 | | 7 | 1 |

## Intersection: 3: N Willamette St & E Pearl St, All Intervals

| Movement | EB | WB | WB | B15 | NB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | LTR | LT | R | T | LTR | L | TR |
| Maximum Queue (ft) | 26 | 318 | 115 | 82 | 319 | 141 | 197 |
| Average Queue (ft) | 2 | 101 | 77 | 3 | 153 | 79 | 59 |
| 95th Queue (ft) | 13 | 216 | 130 | 59 | 273 | 135 | 136 |
| Link Distance (ft) | 167 | 1645 | | 643 | 309 | | 1226 |
| Upstream Blk Time (%) | | | | | 1 | | |
| Queuing Penalty (veh) | | | | | 0 | | |
| Storage Bay Dist (ft) | | | 90 | | | 120 | |
| Storage Blk Time (%) | | 6 | 3 | | | 3 | 0 |
| Queuing Penalty (veh) | | 14 | 5 | | | 8 | 1 |

## Intersection: 6: Coburg Industrial Way & E Pearl St, Interval #1

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 32 | 224 | 198 | 285 | 410 | 348 | 122 | 173 | 236 | 252 | 229 |
| Average Queue (ft) | 7 | 137 | 137 | 199 | 235 | 157 | 79 | 99 | 181 | 205 | 99 |
| 95th Queue (ft) | 32 | 220 | 221 | 337 | 533 | 406 | 141 | 167 | 280 | 282 | 257 |
| Link Distance (ft) | | 643 | 643 | | 665 | 665 | | 654 | | | 952 |
| Upstream Blk Time (%) | | | | | 1 | | | | | | |
| Queuing Penalty (veh) | | | | | 6 | | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | | 14 | | 14 | 2 | | | 0 | 0 | 3 | 0 |
| Queuing Penalty (veh) | | 1 | | 36 | 5 | | | 0 | 0 | 7 | 1 |

## Intersection: 6: Coburg Industrial Way & E Pearl St, Interval #2

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 76 | 304 | 236 | 298 | 369 | 322 | 128 | 160 | 256 | 264 | 198 |
| Average Queue (ft) | 7 | 155 | 139 | 175 | 174 | 122 | 64 | 76 | 154 | 184 | 70 |
| 95th Queue (ft) | 49 | 250 | 225 | 292 | 322 | 260 | 117 | 135 | 239 | 252 | 157 |
| Link Distance (ft) | | 643 | 643 | | 665 | 665 | | 654 | | | 952 |
| Upstream Blk Time (%) | | | | | 0 | 0 | | | | | |
| Queuing Penalty (veh) | | | | | 1 | 0 | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | 0 | 17 | | 2 | 0 | | | 0 | 0 | 1 | |
| Queuing Penalty (veh) | 0 | 1 | | 6 | 0 | | | 0 | 0 | 2 | |

## Intersection: 6: Coburg Industrial Way & E Pearl St, All Intervals

| Movement | EB | EB | EB | WB | WB | WB | NB | NB | SB | SB | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Directions Served | L | T | TR | L | T | TR | L | TR | L | L | TR |
| Maximum Queue (ft) | 81 | 304 | 236 | 304 | 450 | 378 | 133 | 190 | 257 | 267 | 265 |
| Average Queue (ft) | 7 | 151 | 138 | 181 | 189 | 130 | 67 | 82 | 161 | 189 | 77 |
| 95th Queue (ft) | 45 | 243 | 224 | 304 | 388 | 303 | 124 | 145 | 251 | 261 | 188 |
| Link Distance (ft) | | 643 | 643 | | 665 | 665 | | 654 | | | 952 |
| Upstream Blk Time (%) | | | | | 0 | 0 | | | | | |
| Queuing Penalty (veh) | | | | | 2 | 0 | | | | | |
| Storage Bay Dist (ft) | 125 | | | 280 | | | 215 | | 250 | 250 | |
| Storage Blk Time (%) | 0 | 16 | | 5 | 1 | | | 0 | 0 | 2 | 0 |
| Queuing Penalty (veh) | 0 | 1 | | 14 | 2 | | | 0 | 0 | 3 | 0 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, Interval #1

| Movement | EB | EB | WB | WB | WB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | TR | R | L | T | T | L | TR |
| Maximum Queue (ft) | 265 | 181 | 195 | 35 | 14 | 64 | 747 |
| Average Queue (ft) | 137 | 50 | 119 | 5 | 3 | 44 | 452 |
| 95th Queue (ft) | 259 | 195 | 211 | 40 | 24 | 79 | 880 |
| Link Distance (ft) | 665 | 665 | | 691 | 691 | | 780 |
| Upstream Blk Time (%) | | | | | | | 13 |
| Queuing Penalty (veh) | | | | | | | 0 |
| Storage Bay Dist (ft) | | | 275 | | | 25 | |
| Storage Blk Time (%) | | | 0 | | | 53 | 45 |
| Queuing Penalty (veh) | | | 1 | | | 143 | 22 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, Interval #2

| Movement | EB | EB | WB | WB | WB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | TR | R | L | T | T | L | TR |
| Maximum Queue (ft) | 269 | 239 | 217 | 14 | 4 | 75 | 561 |
| Average Queue (ft) | 118 | 45 | 95 | 1 | 0 | 43 | 175 |
| 95th Queue (ft) | 243 | 177 | 180 | 9 | 3 | 76 | 423 |
| Link Distance (ft) | 665 | 665 | | 691 | 691 | | 780 |
| Upstream Blk Time (%) | | | | | | | 1 |
| Queuing Penalty (veh) | | | | | | | 0 |
| Storage Bay Dist (ft) | | | 275 | | | 25 | |
| Storage Blk Time (%) | | | | | | 38 | 34 |
| Queuing Penalty (veh) | | | | | | 97 | 15 |

## Intersection: 9: E Pearl St/E Pearl St & I-5 SB Exit, All Intervals

| Movement | EB | EB | WB | WB | WB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | TR | R | L | T | T | L | TR |
| Maximum Queue (ft) | 292 | 250 | 238 | 44 | 18 | 75 | 750 |
| Average Queue (ft) | 122 | 47 | 101 | 2 | 1 | 44 | 242 |
| 95th Queue (ft) | 248 | 182 | 190 | 20 | 12 | 77 | 601 |
| Link Distance (ft) | 665 | 665 | | 691 | 691 | | 780 |
| Upstream Blk Time (%) | | | | | | | 4 |
| Queuing Penalty (veh) | | | | | | | 0 |
| Storage Bay Dist (ft) | | | 275 | | | 25 | |
| Storage Blk Time (%) | | | 0 | | | 42 | 36 |
| Queuing Penalty (veh) | | | 0 | | | 109 | 17 |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, Interval #1

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | L | LTR |
| Maximum Queue (ft) | 160 | 87 | 236 | 57 | 250 | 187 |
| Average Queue (ft) | 101 | 37 | 162 | 30 | 160 | 105 |
| 95th Queue (ft) | 167 | 84 | 237 | 62 | 235 | 206 |
| Link Distance (ft) | | 691 | 485 | 485 | 850 | 850 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 275 | | | | | |
| Storage Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, Interval #2

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | L | LTR |
| Maximum Queue (ft) | 237 | 104 | 275 | 56 | 292 | 243 |
| Average Queue (ft) | 119 | 39 | 164 | 26 | 169 | 115 |
| 95th Queue (ft) | 207 | 88 | 250 | 53 | 265 | 212 |
| Link Distance (ft) | | 691 | 485 | 485 | 850 | 850 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 275 | | | | | |
| Storage Blk Time (%) | 0 | | | | | |
| Queuing Penalty (veh) | 0 | | | | | |

## Intersection: 12: I-5 NB Exit & E Pearl St /Van Duyn Rd, All Intervals

| Movement | EB | EB | WB | WB | NB | NB |
|---|---|---|---|---|---|---|
| Directions Served | L | T | T | R | L | LTR |
| Maximum Queue (ft) | 237 | 105 | 278 | 61 | 301 | 251 |
| Average Queue (ft) | 115 | 38 | 163 | 27 | 167 | 113 |
| 95th Queue (ft) | 198 | 87 | 247 | 56 | 259 | 211 |
| Link Distance (ft) | | 691 | 485 | 485 | 850 | 850 |
| Upstream Blk Time (%) | | | | | | |
| Queuing Penalty (veh) | | | | | | |
| Storage Bay Dist (ft) | 275 | | | | | |
| Storage Blk Time (%) | 0 | | | | | |
| Queuing Penalty (veh) | 0 | | | | | |

## Intersection: 19: N Willamette St & Coburg Rd, Interval #1

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 17 | 27 | 6 |
| Average Queue (ft) | 2 | 16 | 1 |
| 95th Queue (ft) | 19 | 37 | 8 |
| Link Distance (ft) | 944 | 273 | 1226 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 19: N Willamette St & Coburg Rd, Interval #2

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 89 | 41 | 28 |
| Average Queue (ft) | 6 | 11 | 2 |
| 95th Queue (ft) | 41 | 35 | 16 |
| Link Distance (ft) | 944 | 273 | 1226 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 19: N Willamette St & Coburg Rd, All Intervals

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | LTR | LTR | LTR |
| Maximum Queue (ft) | 89 | 41 | 28 |
| Average Queue (ft) | 5 | 13 | 2 |
| 95th Queue (ft) | 37 | 36 | 14 |
| Link Distance (ft) | 944 | 273 | 1226 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 20: Coburg Bootom Loop Rd & Coburg Rd, Interval #1

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 19 | 56 | 31 | 82 |
| Average Queue (ft) | 5 | 17 | 11 | 46 |
| 95th Queue (ft) | 32 | 60 | 35 | 81 |
| Link Distance (ft) | 385 | 944 | 416 | 263 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 20: Coburg Bootom Loop Rd & Coburg Rd, Interval #2

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 10 | 43 | 31 | 98 |
| Average Queue (ft) | 1 | 6 | 13 | 46 |
| 95th Queue (ft) | 7 | 29 | 37 | 79 |
| Link Distance (ft) | 385 | 944 | 416 | 263 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 20: Coburg Bootom Loop Rd & Coburg Rd, All Intervals

| Movement | EB | WB | NB | SB |
|---|---|---|---|---|
| Directions Served | LTR | LTR | LTR | LTR |
| Maximum Queue (ft) | 24 | 59 | 31 | 106 |
| Average Queue (ft) | 2 | 8 | 12 | 46 |
| 95th Queue (ft) | 16 | 38 | 36 | 80 |
| Link Distance (ft) | 385 | 944 | 416 | 263 |
| Upstream Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |
| Storage Bay Dist (ft) | | | | |
| Storage Blk Time (%) | | | | |
| Queuing Penalty (veh) | | | | |

## Intersection: 23: Site Access & Vn Duyn Rd, Interval #1

| Movement | NB | NB |
|---|---|---|
| Directions Served | L | R |
| Maximum Queue (ft) | 230 | 4 |
| Average Queue (ft) | 120 | 1 |
| 95th Queue (ft) | 224 | 9 |
| Link Distance (ft) | 357 | 357 |
| Upstream Blk Time (%) | 0 | |
| Queuing Penalty (veh) | 0 | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Intersection: 23: Site Access & Vn Duyn Rd, Interval #2

| Movement | WB | NB | NB |
|---|---|---|---|
| Directions Served | LT | L | R |
| Maximum Queue (ft) | 6 | 189 | 17 |
| Average Queue (ft) | 0 | 91 | 1 |
| 95th Queue (ft) | 5 | 160 | 8 |
| Link Distance (ft) | 710 | 357 | 357 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Intersection: 23: Site Access & Vn Duyn Rd, All Intervals

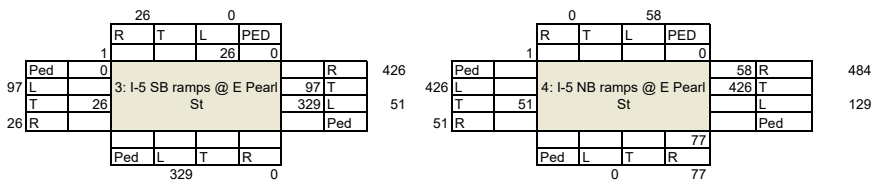
| Movement | WB | NB | NB |
|---|---|---|---|
| Directions Served | LT | L | R |
| Maximum Queue (ft) | 6 | 247 | 21 |
| Average Queue (ft) | 0 | 98 | 1 |
| 95th Queue (ft) | 4 | 179 | 8 |
| Link Distance (ft) | 710 | 357 | 357 |
| Upstream Blk Time (%) | | 0 | |
| Queuing Penalty (veh) | | 0 | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Network Summary

Network wide Queuing Penalty, Interval #1: 254
Network wide Queuing Penalty, Interval #2: 150
Network wide Queuing Penalty, All Intervals: 176

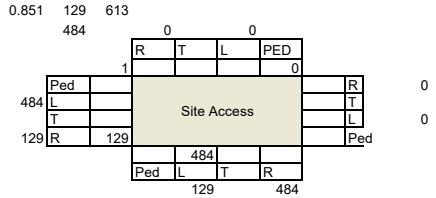
TAX LOT 202 TPR

Trip Cap- Development trips

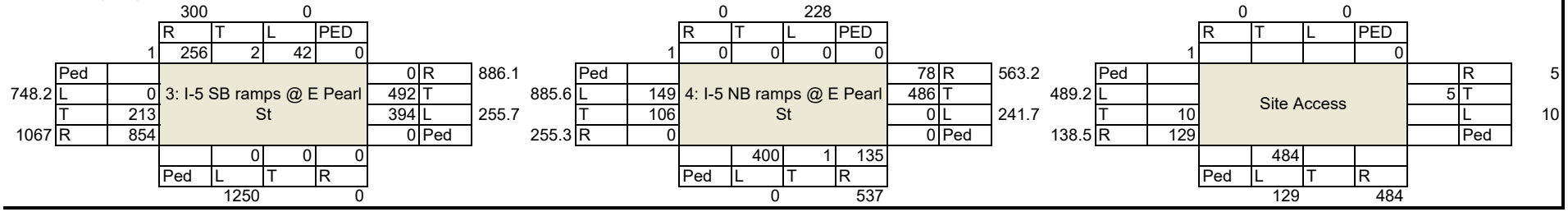








2036 with Trip Cap



| Intersection | |
|---|---|
| Int Delay, s/veh | 11 |

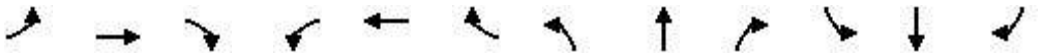
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 213 | 854 | 394 | 492 | 0 | 0 | 0 | 0 | 42 | 2 | 256 |
| Future Vol, veh/h | 0 | 213 | 854 | 394 | 492 | 0 | 0 | 0 | 0 | 42 | 2 | 256 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | Free | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | 275 | - | - | - | - | - | 25 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 16974 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 26 | 5 | 6 | 18 | 0 | 0 | 0 | 0 | 47 | 0 | 36 |
| Mvmt Flow | 0 | 224 | 899 | 415 | 518 | 0 | 0 | 0 | 0 | 44 | 2 | 269 |

| Major/Minor | Major1 | | | Major2 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 0 | - | 224 | 0 | 0 | 1572 | 1572 | 259 |
| Stage 1 | - | - | - | - | - | - | 1348 | 1348 | - |
| Stage 2 | - | - | - | - | - | - | 224 | 224 | - |
| Critical Hdwy | - | - | - | 4.19 | - | - | 7.305 | 6.5 | 7.44 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.505 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.105 | 5.5 | - |
| Follow-up Hdwy | - | - | - | 2.257 | - | - | 3.9465 | 4 | 3.642 |
| Pot Cap-1 Maneuver | 0 | - | 0 | 1317 | - | 0 | 79 | 111 | 658 |
| Stage 1 | 0 | - | 0 | - | - | 0 | 153 | 221 | - |
| Stage 2 | 0 | - | 0 | - | - | 0 | 704 | 722 | - |
| Platoon blocked, % | | - | | | - | | | | |
| Mov Cap-1 Maneuver | - | - | - | 1317 | - | - | 54 | 0 | 658 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 54 | 0 | - |
| Stage 1 | - | - | - | - | - | - | 153 | 0 | - |
| Stage 2 | - | - | - | - | - | - | 482 | 0 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 4 | 39.3 |
| HCM LOS | | | E |

| Minor Lane/Major Mvmt | EBT | WBL | WBT | SBLn1 | SBLn2 |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | 1317 | - | 54 | 658 |
| HCM Lane V/C Ratio | - | 0.315 | - | 0.819 | 0.413 |
| HCM Control Delay (s) | - | 9 | - | 192.8 | 14.3 |
| HCM Lane LOS | - | A | - | F | B |
| HCM 95th %tile Q(veh) | - | 1.4 | - | 3.5 | 2 |

| 2036 Build Phase | Mitigation | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | EBTR | 229 | 1395 | 0.164 | | 6 | 0.182 | 0.182 | | Cycle Length | 83 |
| | EBR | 0 | 1346 | | | 4 | 0.164 | | | Lost Time/phase | 4 |
| | | | | | | 8 | 0.298 | 0.462 | | # phases | 2 |
| 6 | SBL | 49 | 1056 | 0.046 | | | | | | Total Lost Time | 8 |
| | SBTR | 271 | 1485 | 0.182 | | | | | | | |
| | | | | | | Critical Pairs | 0.645 | | Critical | v/c | 0.71 |
| 8 | WBL | 379 | 1271 | 0.298 | Prot | | | | | | |
| | | 96 | 318 | 0.302 | Perm | | | | | | |
| | WBT | 536 | 2933 | 0.183 | | | | | | | |



| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (veh/h) | 0 | 218 | 854 | 451 | 509 | 0 | 0 | 0 | 0 | 47 | 2 | 256 |
| Future Volume (veh/h) | 0 | 218 | 854 | 451 | 509 | 0 | 0 | 0 | 0 | 47 | 2 | 256 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | | | | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | | No | | | No | | | | | | No | |
| Adj Sat Flow, veh/h/ln | 0 | 1395 | 1682 | 1668 | 1504 | 0 | | | | 1108 | 1750 | 1259 |
| Adj Flow Rate, veh/h | 0 | 229 | 0 | 475 | 536 | 0 | | | | 49 | 2 | 269 |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | | | | 0.95 | 0.95 | 0.95 |
| Percent Heavy Veh, % | 0 | 26 | 5 | 6 | 18 | 0 | | | | 47 | 0 | 36 |
| Cap, veh/h | 0 | 301 | | 644 | 1650 | 0 | | | | 254 | 3 | 354 |
| Arrive On Green | 0.00 | 0.22 | 0.00 | 0.27 | 0.58 | 0.00 | | | | 0.24 | 0.24 | 0.24 |
| Sat Flow, veh/h | 0 | 1395 | 1425 | 1589 | 2933 | 0 | | | | 1056 | 11 | 1474 |
| Grp Volume(v), veh/h | 0 | 229 | 0 | 475 | 536 | 0 | | | | 49 | 0 | 271 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1395 | 1425 | 1589 | 1429 | 0 | | | | 1056 | 0 | 1485 |
| Q Serve(g_s), s | 0.0 | 7.6 | 0.0 | 10.0 | 4.8 | 0.0 | | | | 1.8 | 0.0 | 8.4 |
| Cycle Q Clear(g_c), s | 0.0 | 7.6 | 0.0 | 10.0 | 4.8 | 0.0 | | | | 1.8 | 0.0 | 8.4 |
| Prop In Lane | 0.00 | | 1.00 | 1.00 | | 0.00 | | | | 1.00 | | 0.99 |
| Lane Grp Cap(c), veh/h | 0 | 301 | | 644 | 1650 | 0 | | | | 254 | 0 | 357 |
| V/C Ratio(X) | 0.00 | 0.76 | | 0.74 | 0.32 | 0.00 | | | | 0.19 | 0.00 | 0.76 |
| Avail Cap(c_a), veh/h | 0 | 663 | | 1098 | 3209 | 0 | | | | 545 | 0 | 766 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | | | | 1.00 | 0.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 18.2 | 0.0 | 9.3 | 5.4 | 0.0 | | | | 15.0 | 0.0 | 17.4 |
| Incr Delay (d2), s/veh | 0.0 | 4.0 | 0.0 | 1.7 | 0.1 | 0.0 | | | | 0.4 | 0.0 | 3.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 2.5 | 0.0 | 2.7 | 1.0 | 0.0 | | | | 0.4 | 0.0 | 2.8 |
| Unsig. Movement Delay, s/veh | | | | | | | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 22.1 | 0.0 | 11.0 | 5.5 | 0.0 | | | | 15.3 | 0.0 | 20.8 |
| LnGrp LOS | A | C | | B | A | A | | | | B | A | C |
| Approach Vol, veh/h | | 229 | A | | 1011 | | | | | | 320 | |
| Approach Delay, s/veh | | 22.1 | | | 8.1 | | | | | | 19.9 | |
| Approach LOS | | C | | | A | | | | | | B | |

| Timer - Assigned Phs | | 3 | 4 | | 6 | | 8 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Phs Duration (G+Y+Rc), s | | 17.9 | 15.2 | | 16.4 | | 33.0 | | | | | |
| Change Period (Y+Rc), s | | 4.5 | 4.5 | | 4.5 | | 4.5 | | | | | |
| Max Green Setting (Gmax), s | | 27.5 | 23.5 | | 25.5 | | 55.5 | | | | | |
| Max Q Clear Time (g_c+I1), s | | 12.0 | 9.6 | | 10.4 | | 6.8 | | | | | |
| Green Ext Time (p_c), s | | 1.4 | 1.1 | | 1.7 | | 4.3 | | | | | |

| Intersection Summary | |
|---|---|
| HCM 6th Ctrl Delay | 12.6 |
| HCM 6th LOS | B |

**Notes**

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

| | |
|---|---|
| **Major Street:** | Peal St |
| **Minor Street:** | I-5 SB Ramps |
| **Project Name:** | Van Duyn Zone Change |
| **City/County:** | Coburg |
| **Analysis Year:** | 2036 |
| **Alternative:** | with zone change |
| **Meet 70% Warrants?:** | Yes |
| | 70% |
| **Major** | |
| **Approach Lanes:** | 2 or more |
| **Minor** | |
| **Approach Lanes:** | 1 |
| **Major** | |
| **Approach Volumes (vph):** | 1179 |
| **Minor** | |
| **Approach Volume (vph):** | 305 |
| **Right Turn Volume (vph):** | 256 |
| **Capacity of Shared/Exclusive Right Turn Lane[1]:** | 649 |
| **Right Turn Discount:** | 552 |
| **Right Turn Volume included in Warrant:** | 0 |
| **Minor Approach Volume in Warrant:** | 49 |
| **Major Approach K factor:** | 5.86 |
| **Minor Approach K factor:** | 5.86 |

**[1] Capacity obtained from unsignalized intersection analysis**
**For guidance on preliminary signal warrant analysis, refer to the Analysis Procedures Manual.**

**Last Updated: January 2018**

# Oregon Department of Transportation
## Transportation Development Branch
### Transportation Planning Analysis Unit

## Preliminary Traffic Signal Warrant Analysis[1]

| | | | |
|---|---|---|---|
| **Major Street:** | Peal St | **Minor Street:** | I-5 SB Ramps |
| **Project:** | Van Duyn Zone Change | **City/County:** | Coburg |
| **Year:** | 2036 | **Alternative:** | with zone change |

## Preliminary Signal Warrant Volumes

| Number of Approach lanes | | ADT on major street approaching from both directions | | ADT on minor street, highest approaching volume | |
|---|---|---|---|---|---|
| Major Street | Minor Street | Percent of standard warrants 100 | 70 | Percent of standard warrants 100 | 70 |
| **Case A: Minimum Vehicular Traffic** | | | | | |
| 1 | 1 | 8850 | 6200 | 2650 | 1850 |
| 2 or more | 1 | 10600 | 7400 | 2650 | 1850 |
| 2 or more | 2 or more | 10600 | 7400 | 3550 | 2500 |
| 1 | 2 or more | 8850 | 6200 | 3550 | 2500 |
| **Case B: Interruption of Continuous Traffic** | | | | | |
| 1 | 1 | 13300 | 9300 | 1350 | 950 |
| 2 or more | 1 | 15900 | 11100 | 1350 | 950 |
| 2 or more | 2 or more | 15900 | 11100 | 1750 | 1250 |
| 1 | 2 or more | 13300 | 9300 | 1750 | 1250 |

| | |
|---|---|
| | 100 percent of standard warrants |
| **X** | 70 percent of standard warrants[2] |

## Preliminary Signal Warrant Calculation

| | Street | Number of Lanes | Warrant Volumes | Approach Volumes | Warrant Met |
|---|---|---|---|---|---|
| Case A | Major | 2 or more | 7400 | 20119 | N |
| | Minor | 1 | 1850 | 836 | |
| Case B | Major | 2 or more | 11100 | 20119 | N |
| | Minor | 1 | 950 | 836 | |

| | |
|---|---|
| Analyst and Date: | Reviewer and Date: |

[1] Meeting preliminary signal warrants does **not** guarantee that a signal will be installed. When preliminary signal warrants are met, project analysts need to coordinate with Region Traffic to initiate the traffic signal engineering investigation as outlined in the Traffic Manual. Before a signal can be installed, the engineering investigation must be conducted or reviewed by the Region Traffic Manager who will forward signal recommendations to headquarters. Traffic signal warrants must be met and the State Traffic Engineer's approval obtained before a traffic signal can be installed on a state highway.

[2] Used due to 85th percentile speed in excess of 40 mph or isolated community with population of less than 10,000.

Analysis Procedures Manual

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# TECH MEMO

DATE: October 12, 2021


TO: Brian Harmon
Public Works Director
City of Coburg

Damien Gilbert PE
Branch Engineering

FROM: Kelly Sandow, P.E.
Sandow Engineering

RE: Response to City Review Comments- Van Duyn Zone Change TPRA

The following provides a response to comments provided by Branch Engineering dated September 22, 2021, pertaining to the September 17, 2021, TPRA for the Van Duyn zone change.

*1. The Coburg development code generally requires a traffic impact analysis (TIA) for an increase in daily trip generation of 200 or more average daily trips (ADT), or when a land use application requires a change in zoning or a plan amendment designation. Within the identified ODOT Interchange Area Management Plan (IAMP) area, a TIA is required if the use is projected to generate 600 or more ADT or 100 or more vehicle trips during any peak contiguous one-hour period. The subject site is located in the IAMP area, and as stated in the provided TPRA, would generate on average of 720 PM peak hour trips with full build-out. An average trip generation calculation for daily trips (ADT) is not provided in the TIA. There is not an applicable analysis procedure for analyzing ADT traffic, beyond its usage by the City to determine if a traffic impact analysis is required, or when a functional classification is defined with ADT volume. The zone change associated with the proposed annexation triggers the need for a TPRA based upon the codified criteria and State Land Use Law contained within Oregon Administrative Rule 660-012-0060.*

**The ADT for the site has been included in Table 3 of the updated report dated October 12, 2021.**

*2. The transportation planning rule analysis is based on potential development traffic generated by 1,800 KSF of gross floor area to be utilized as an industrial park (ITE Land Use Code 130) with the proposed Coburg Light Industrial zone, and incudes the potential traffic in a reasonable worst case development scenario if the site were to be developed with the existing*

*Lane County Zoning as Exclusive Farm Use with 40-acre minimum parcels that would support two single family residences. The TPRA analyzes the PM peak hour traffic conditions during a 15-year planning horizon, which is assumed to be the year 2036 and is consistent with ODOT analysis requirements for zone changes.*

**No response needed.**

*3. An AM period of analysis was required for the study if the study was to be prepared to address the TPR and the City's Traffic Impact Analysis requirements for actual development impacts. It is assumed that this document was prepared to address only the TPRA and that a TIA would be prepared in a separate application (if applicable), and that there would be a TIA review process needed if and when actual development moves forward.*

**The document is to address only the TPRA requirements. The future development will provide the remaining evaluation as needed. The TIA at that time will include the AM analysis.**

*4. A reference is made to "Traffic Impact Analysis" in the conclusion that should be referred to as 'transportation planning rule analysis', since the AM period is not included in the report, and other details are not provided that would typically accompany a TIA.*

**This has been updated in the revised version.**

*5. Although not required for the TPR, a vehicle queue length analysis is provided in section 7.0, with a summary of the background (no-build) and "build" vehicle queue lengths provided in Table 7. Some of the background vehicle queue lengths are reported as longer than build vehicle queue lengths, which is acceptable, given the random number seeding by SimTraffic when the result is only a few car lengths difference. However, the northbound and southbound queue lengths reported at Pearl and Industrial Way are significantly greater for no-build conditions than for the build conditions and there is no discussion on why it is appropriate as reported.*

**The no-build queuing was higher due to signal timing and allocation of the green time. The revised analysis for this update and optimizing of signal timing results in queue lengths that are similar for both no-build and build for the northbound and southbound approaches.**

*6. The report finds that a right-turn lane is warranted at the eastbound site driveway approach on Van Duyn Rd with the analyzed proposed conditions. Section 9, page 23 discusses the right-turn lane warrant for the right-turn from Van Duyn Rd into the site, but refers to it as a northbound right-turn lane. The numbers utilized in the warrant are consistent with the PM peak hour for the eastbound to southbound ingress at the approach on Van Duyn Rd.*

**The text has been updated to "eastbound right-turn".**

*7. Page 5 refers to the existing year as 2020, which should be 2021. There is also a reference to a 20-year horizon for the study there and in section 4.3 on page 14. Both should be 15 years to match the analysis year (2036). Neither reference changes the conclusions or the results that analyze the 15-year horizon.*

**The 2020 has been updated to 2021. The 20-year has been updated to 15-year.**

*8. Some of the 2021 Existing DHV turning movement volumes displayed on Figure 4 are lower than the count data, it appears to be from balancing, which is fine when it is only a few vehicles. However, the westbound left at the I-5 southbound ramps intersection on E. Pearl Street is reduced from 48 (count data) to 5 (included on figure 4 and in the SYNCHRO files). Balancing is not discussed in detail in the report, but it is unlikely that the DHV for the westbound left turn is this low during the PM peak hour, when compared to the collected count data that indicates during the count there were 48 left-turns at the location.*

**An error in the spreadsheet resulted in the balancing inadvertently being applied to the left-turn instead of the through volumes. The volumes have been corrected on all relevant analysis and figures updated.**

*9. The background year 2036 scenarios utilize a saturation flow rate of 1900 for all intersections, while all of the other scenarios utilize 1750. It is not clear if a change to a lower SAT flow for the background conditions would identify anything that would fail that is not identified as-is analyzed.*

**All saturation flow rates have been updated to 1750 for all analysis years.**

*10. The reported v/c for the intersection of the I-5 SB ramps is reported as 0.06 in Table 6 for the 2036 background conditions, which is much lower than other analyzed condition scenarios for the intersection, including the existing year (0.25). This appears to be a typo. The current HCM output requires a hand calculation of the intersection v/c at signalized intersections. The hand calculation of the v/c for SB ramps intersection is excluded from Appendix E. Other signalized intersections' v/c s are calculated and included in the appendix.*

**The I-5 SB ramp are currently unsignalized. Therefore, the v/c ratio is taken directly from the Synchro outputs. The outputs and v/c ration for the signal has been included in Appendix G. The report has the updated v/c ratio for this approach. The 2036 background is 0.38 for the southbound approach.**

*11. Section 10.0 states that the IAMP improvements will provide sidewalks and separated bike lanes between the I-5 SB intersection and the site access and concludes that the applicant will*

*provide applicable bicycle and ped facilities internal to the site. Later, it states that: "The proposed bike and pedestrian facilities are adequate for safe and efficient travel between the site and the nearest pedestrian facilities." It is not clear if "proposed" is referring to the future IAMP improvements, or unidentified improvements to accompany development of the site as frontage improvements. Actual development of the site and future conditions of approval will likely trigger frontage improvements to include a sidewalk and bike lane, as well as roadway widening, at the frontage.*

**The text has been updated to provide more clarity.**

SANDOWENGINEERING
160 MADISON STREET, SUITE A • EUGENE, OREGON 97402 • 541.513.3376

# TECH MEMO

DATE: October 12, 2021


TO: Douglas Baumgartner PE
ODOT Development Review Coordinator

Arielle Ferber, PE
ODOT Traffic Analysis Engineer

FROM: Kelly Sandow, P.E.
Sandow Engineering

RE: Response to ODOT Comments-Van Duyn Zone Change TPR Analysis

The following provides a response to comments provided by ODOT, dated October 8, 2021, pertaining to the September 17, 2021, TPRA for the Van Duyn zone change.

*1. ODOT recommends adding a statement to the memo explaining the approximately 5% attenuation of site trips between the Willamette Street and Pearl Street and Coburg Industrial Way at Pearl Street intersections.*

**This text has been added to the report.**

*2. Figure 4 has the Van Duyn Road/Pearl Street at I-5 SB Ramps intersection WBL movement at 5 vehicles, while the provided turning movement count has it at 48 vehicles. While this reduction in traffic appears to be due to balancing of traffic volumes between intersections, a reduction of approximately 90% of traffic on a particular movement is unrealistic. This may have an effect on the operational analysis results but is unlikely to have an effect on the conclusions of the study.*

**An error in the spreadsheet resulted in the balancing inadvertently being applied to the left-turn instead of the through volumes. The volumes have been corrected on all relevant analysis and figures updated.**

*3. In Table 6 the Van Duyn Road/Pearl Street at I-5 SB Ramp intersection v/c ratio for 2036 Background conditions should report the SBTR movement at 0.40 as opposed to the SBL movement at 0.06. This will not have an effect on the conclusions of the analysis*.

**This has been revised.**

Tech Memo
From: Kelly Sandow PE
RE: Van Duyn Response to ODOT Review Comments
Date: 10.12.21

*4. Synchro reports at the Van Duyn Road/Pearl Street at I-5 SB Ramps intersection for the 650 PM peak hour trip cap as well as signalization conditions should be provided in the Appendix. In addition, a preliminary traffic signal warrant analysis (see ODOT's APM, Section 12.4.1) should be conducted for the intersection in support of signalization.*

**The ODOT outputs are provided in Appendix G of the updated report. Preliminary signal warrants were added to the report and Appendix G.**

E. D. Hovee
& Company, LLC
Economic and Development Services

Appendix K

# Memorandum

| | |
|---|---|
| To: | Ed & Ramon Fisher<br>Oakridge Sand & Gravel |
| From: | Eric Hovee |
| Subject: | Regional Economic Analysis for Coburg UGB |
| Date: | January 9, 2014 |

In 2010, a draft *Coburg Urbanization Study Update* was prepared for the City of Coburg by the Lane Council of Governments (LCOG). This study included an Economic Opportunities Analysis (EOA) providing estimates of population and employment growth together with land demand over a 20-year planning horizon.

While addressing local employment growth plus the need for Urban Growth Boundary (UGB) expansion to serve regional employment opportunities for which Coburg has a competitive advantage, the Urbanization Study did not explicitly evaluate or quantify the extent of the regional need. Consequently, this regional economic analysis is prepared to more fully quantify the broader need in terms of overall Lane County industrial land demand as compared with the county-wide inventory of suitable and available industrial sites. This regional analysis is also intended to serve as resource documentation for subsequent revisions and finalization of the Coburg Urbanization Study.[1]

This regional economic analysis memorandum covers the following topics:

Summary of Findings & Recommendations
Background for Regional Economic Analysis
Demographic Trends & Forecast
Economic Trends & Forecast
Regional Industrial Lands
Coburg Employment & Industrial Scenarios
Next Steps

Two appendices are included with this report. *Appendix A* briefly profiles E. D. Hovee & Company, LLC as preparer of this analysis. *Appendix B* provides supplemental data tables.

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# SUMMARY OF FINDINGS & RECOMMENDATIONS

This regional economic analysis describes conditions that support reconsideration of the 2010 Coburg Urbanization Study and associated Economic Opportunities Analysis (EOA) – with resulting recommendations for UGB expansion to meet 20-year industrial needs. What follows is an abbreviated summary of report observations and findings.

**Background for Regional Economic Analysis.** The 2010 Urbanization Study concluded that locally-generated industrial land demand calculated using DLCD Safe Harbor provisions could be accommodated by the existing industrial supply. However, the 2010 report recognized that Coburg is also competitive for regional opportunities that could exceed Safe Harbor forecast levels and that the community has a potential need for larger industrial sites of 20+ acres not available within the existing UGB.

**Demographic Trends & Forecast.** While Coburg has been a relatively rapidly growing community, growth is now well below forecast levels due to the unexpected severity of the recession and closing of RV-equipment manufacturers. Yet improved job options are important for existing residents, especially for workers displaced and not yet fully re-employed since the recession. Family wage employment opportunities also may be pivotal as a means to encourage population growth that has lagged in recent years.

**Economic Trends & Forecast.** Rather than increasing as projected by the 2010 Urbanization Study, employment in Coburg declined as a result of industrial closures. Since 2010, the economic slowdown has spread beyond industrial to commercial uses. However, an improving economy has led to upward revisions of Oregon Employment Department (OED) forecasts for employment growth for the entire Lane County region.

**Regional Industrial Lands.** The experience of the recession and ensuing strength of recovery for industrial uses has led jurisdictions in Oregon and Lane County to revise land use and infrastructure plans to focus on added industrial lands – especially for large sites of 20+ acres. There is a particular dearth of large Lane County industrial sites located in immediate proximity to the I-5 transportation corridor.

**Coburg Employment & Industrial Scenarios.** 20-year forecast options reviewed are:

- **Scenario A** – as an update to the Urbanization Study assuming recapture of employment lost in the recession and consistency with updated OED projections.
- **Scenarios B1-3** – adding the capture of some portion of regional large site demand to the localized Scenario A projections, particularly for I-5 oriented sites.

Realization of any of these scenarios would require expansion of Coburg's UGB for industrial use. Of sites previously evaluated, Study Area 8 (located south of Van Duyn Road at 106 acres) is most highly rated in terms of suitability for industrial development.

**Next Steps.** Recommended is further discussion with the City of Coburg, LCOG and DLCD to formally update the Urbanization Study – taking into account updated regional forecasts combined with the option to better serve county-wide economic opportunities.

# BACKGROUND FOR REGIONAL ECONOMIC ANALYSIS

This background discussion includes a summary review of pertinent portions of the city's existing Urbanization Study, followed by identification of key implications for this supplemental regional economic analysis.

## *Coburg Urbanization Study*

The *2010 Coburg Urbanization Study* was conducted for five identified purposes, specifically to:

(1) Evaluate growth forecasts
(2) Inventory how much buildable land the City has
(3) Identify housing needs
(4) Identify economic development strategies
(5) Determine how much land the City will need to accommodate growth between 2010 and 2030

The City of Coburg had previously evaluated its land needs in 2003-04 as part of the Periodic Review process which included the *Coburg Crossroads* community visioning process, a Comprehensive Plan and Zoning update, and an Interchange Area Management Plan.[2] In conjunction with resolution of wastewater system constraints, the 2010 Urbanization Study was undertaken as a means "to proceed with the compulsory planning and implementation to address future growth."

The Urbanization Study was organized into eight chapters. Key provisions of these chapters of particular relevance to Coburg's Urban Growth Boundary (UGB) for employment use are summarized as follows:

**Chapter 1 – Introduction.** Described the methods and key policy decisions made as part of the study process. Of importance to industrial land determinations were methods related to Coburg's buildable lands analysis, population and employment forecasting, and land demand evaluation – as outlined below.

**Chapter 2 – Population and Employment Forecast.** The Urbanization Study resulted in a forecast 20-year population growth rate averaging 5.32% per year (covering the time period from 2010-30) Employment growth for Coburg was forecast at a much lower annual growth rate of 0.83%. With these forecast assumptions, the ratio of employment to population would drop from 3.1 to 1.2 employees per resident from 2010 to 2030.

Coburg's anticipated population growth was determined as part of a Coordinated Population Forecast for Lane County. With population increasing from what was initially estimated at 1,103 residents in 2010 to 3,363 in 2030, this forecast population level also was deemed as adequate to support the community wastewater system being constructed.

While relatively rapid compared to the rest of Lane County, the Urbanization Study notes that "Coburg's proximity to the Eugene-Springfield metropolitan area could create (yet) higher levels of population growth." If realized, population growth above forecast could also be expected to generate added job demand to better serve local residential employment needs.

By comparison, the much lower growth rates associated with the employment forecast were based on a methodology utilizing a Safe Harbor provision (or OAR 660-024). With this methodology, Coburg's employment was assumed to grow at a rate equal to that of Lane County with the then most recent (2006) job forecast as published by the Oregon Employment Department (OED).

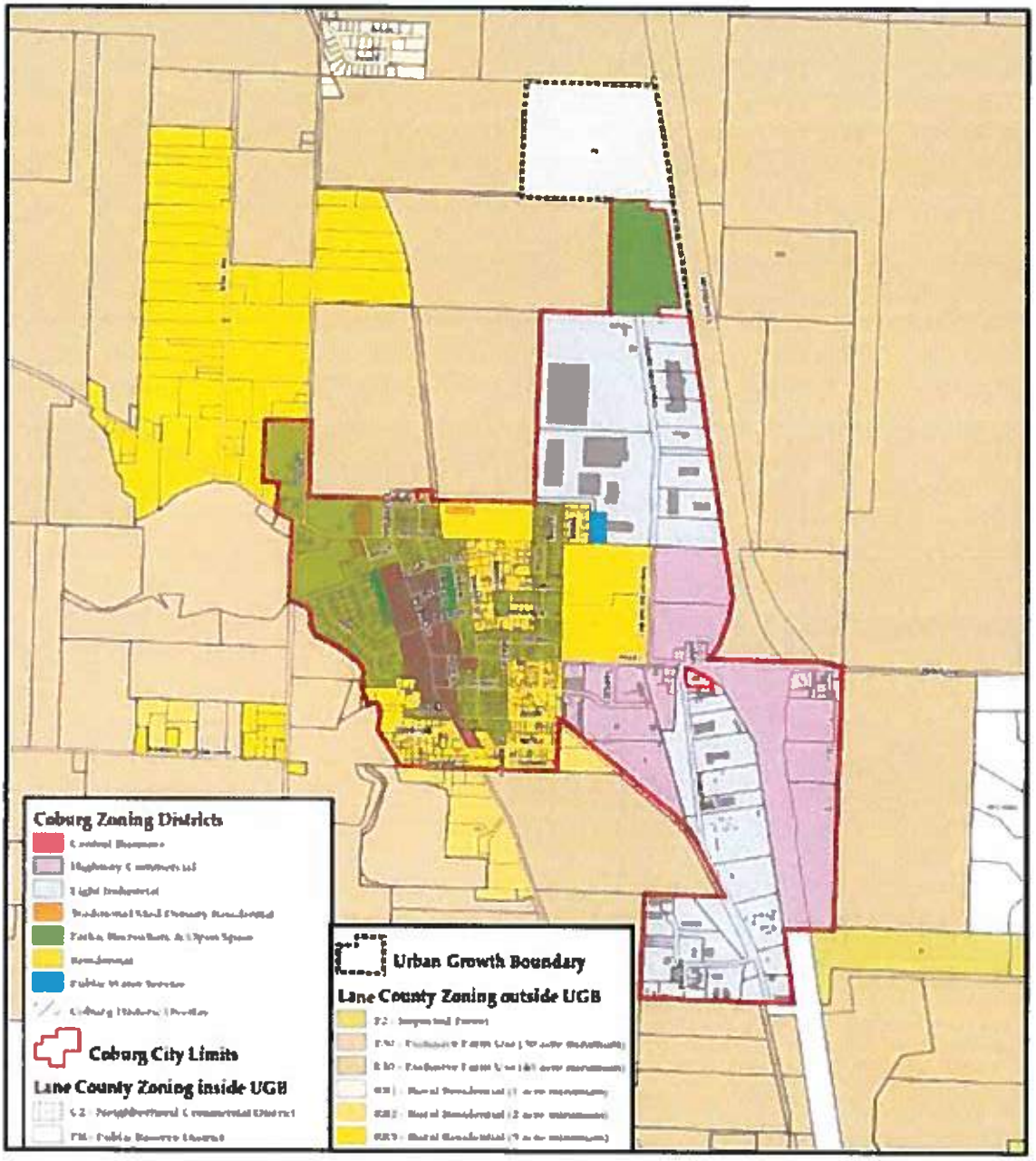
Local adjustments above the county-wide growth rate were made for the retail, professional/business service and leisure and hospitality sectors. These sectors were deemed as under-represented in Coburg but yet expected to increase in the years ahead in response to high rates of forecast growth in local residential development.

While addressing locally generated population and employment needs, the Urbanization Study report noted that the forecast "estimate does not include an adjustment to the growth rate for industries that Coburg has a competitive advantage in."[3] For Coburg, these industries of competitive advantage have been in *traded sectors* such as manufacturing and distribution-related activities.

**Chapter 3 – Buildable Lands Analysis.** As of 2010, Coburg had about 650 acres of land area within its UGB, of which 551 acres (85%) were in tax lots. Approximately 193 acres were zoned for light industrial use. Of this, 16.2 net acres were vacant with another 12.2 acres indicated as redevelopable for total buildable industrial inventory of 28.4 acres.

As illustrated by the map on the following page, industrial zoning designations currently are indicated for properties on the west side of the I-5 freeway both north and south of Coburg's freeway interchange (Exit 199). There are no sites on the east side of the freeway designated for industrial use.

## Existing Zoning within Coburg's UGB (as of 2010)




Source: Excerpted from *2010 Coburg Urbanization Study.*

**Chapter 4 – Housing Needs Analysis.** Housing needs are driven from Coburg's population forecast. Single family detached housing is anticipated to continue to account for the majority of future residential development, but with increasing proportions of demand expected for single family attached and multiple family residential uses.

The 2010 residential supply of land was estimated to be approximately 97 acres short of the acreage needed, resulting in evaluation of potential areas for UGB expansion. Also noted was the need for an added nearly 50 acres of UGB area to accommodate public infrastructure needs. These needs were not expected to directly affect the analysis of industrial land needs – as different sites were considered for residential versus employment use with prospective UGB expansion (with the Chapter 7 analysis).

**Chapter 5 – Economic Opportunities Analysis.** Coburg's EOA chapter addressed:

- **The City's economic development vision** – including a variety of site characteristics for both commercial and industrial economic opportunities including the need to provide large sites for major employers.
- **Identification of industries most likely to be attracted to Coburg** – with light industrial activities including manufacturing, wholesale/warehousing/distribution centers dependent on I-5 corridor proximity.
- **Estimation of industrial land need** – for 247 added industrial jobs over 20 years (or 40% of Coburg's total projected growth of 615 added jobs), requiring an estimated 18-21 acres (within Coburg's existing estimated buildable lands capacity with existing buildable industrial sites estimated at over 28 acres).

While industrial land demand as calculated appeared to be accommodated by the supply within the existing UGB, the 2010 Urbanization Study also articulated two key reasons as to why this supply might prove insufficient to meet 20-year project needs. First, the study recognized that Coburg offers the potential that "additional growth beyond the AAGR (average annual growth rate) applied to Lane County for these industries could be planned, provided that Coburg has sufficient land to accommodate this anticipated growth." Sectors for which Coburg has been and could be expected to remain competitive are identified as including "certain industrial and transportation sectors, including warehousing, distribution, wholesale trade, and manufacturing."

Second, the EOA acknowledges that a mathematical evaluation of land supply and demand "does not consider whether the land available is well-suited to meet the needs of new employment growth."[4] Of particular note has been the potential need for larger industrial sites of 20+ acres that are not available within the existing UGB.

**Chapter 6 – Comparison of Land Supply and Demand.** The primary question presented by the Urbanization Study and its EOA chapter was whether needs are adequately met by the existing inventory. The 2010 EOA conclusion was that: "The City will need 2-3 sites of industrial or other employment land on sites 20 acres and larger that cannot be accommodated within the existing UGB."

While not directly quantified, this EOA industrial land deficiency was expected to result from: a) industrial job growth that is above county-wide rates due to Coburg's advantages of direct I-5 proximity; and b) the anticipated need of major industrial users for sites of 20+ acres that are not available with Coburg's existing buildable lands inventory. This present regional economic analysis is aimed to more explicitly characterize and quantify these potential added land needs.

**Chapter 7 – UGB Expansion Areas Study.** To address the shortfall of both residential and employment lands, the 2010 Urbanization Study included a detailed evaluation of 11 study areas. Eight study areas were identified as presenting primary opportunity for potential residential expansion.

Three areas were considered primarily for potential employment uses. As shown by the map to the right, these were Study Areas 7, 8 and 9 – totaling 372 acres located just east of the I-5 Freeway.

Of the three study areas considered for expanded industrial use, the Final Employment Expansion Recommendation of the Urbanization Study was for the approximately 106 acre Study Area 8 site located on the south side of Van Duyn Road.[5] This area was recommended as "prime land for industrial and office employment."[6]

This Study Area consists of just one parcel with one use. A single site allows for greater flexibility of future parcelization within a potential master plan context. Also noted is that an access frontage road is planned to be constructed land south and east of the I-5 interchange. And since the Urbanization Study was completed, access to municipal wastewater facilities has been extended to in-city properties east of the I-5 freeway.[7]

**2010 UGB Expansion Study Areas**


**Employment Final Recommendation**


Source: *2010 Coburg Urbanization Study.*

Study Area 8 is directly adjacent to the only portions of Coburg's existing UGB that are east of I-5. This recommended UGB expansion area shares a significant border with the existing UGB adjoining immediately to the west.

Almost all (98%) of Study Area 8 acreage comprises Class V or VI soils, the lowest agricultural values of those typically mapped (and most favorable soil scenario for urban development of all study areas considered). There were no mapped wetlands areas per the National Wetland Inventory and no part of the site was deemed as being affected by floodplain designation. Due to the site's location south of Van Duyn Road and proximity to existing urban development, there also are fewer potential conflicts with adjoining rural/ranching uses than might be expected on the north side of Van Duyn.

**Chapter 8 – Policy Analysis.** The 2010 Coburg Urbanization Study concluded with a series of recommendations related to residential development, non-residential development, transportation, utilities, natural resources and environment, and UGB expansion. Of particular relevance to this present regional analysis was the **non-residential development** recommendation to "expand the UGB to ensure that the supply of industrial land contains sufficient diversity to meet anticipated new employment needs." Specifically referenced was the need for adding at least 40-60 acres in contiguous ownership (of 20+ acre parcels) that can be developed for larger industrial uses.

With respect to **UGB expansion**, the related recommendation of the Urbanization Study was to "add employment land to the UGB as supported by the Study and directed by the City Council." This recommendation also referenced the need for addition of 20+ acre industrial sites as supported by the Chapter 7 UGB expansion analysis.

## *Implications for Regional Economic Analysis*

Four observations from this planning review can be drawn that are of importance for the current updated and expanded regional economic analysis:

- Renewed local population growth is important to most effectively support expansion and planned utilization of Coburg's wastewater system.
- Population growth should not be expected to occur on its own but may increasingly depend both on the recovery of jobs lost during the recession and on renewed growth to serve both local and regional employment needs.
- As acknowledged by the 2010 Urbanization Study, Coburg enjoys a pivotal potential regional competitive advantage if sites of 20+ acres which are currently not available can be provided with UGB expansion.
- Of the site areas evaluated with the 2010 analysis, Study Area 8 south of Van Duyn Road has been recommended as the highest priority site for possible UGB expansion to serve large site industrial site needs.

These observations serve as a *starting point* for the updated and expanded regional economic analysis which now follows.

# DEMOGRAPHIC TRENDS & FORECAST

While not viewed as the only driver of regional economic opportunities for Coburg, local and county-wide demographics will affect an updated assessment of industrial land needs locally in two important respects:

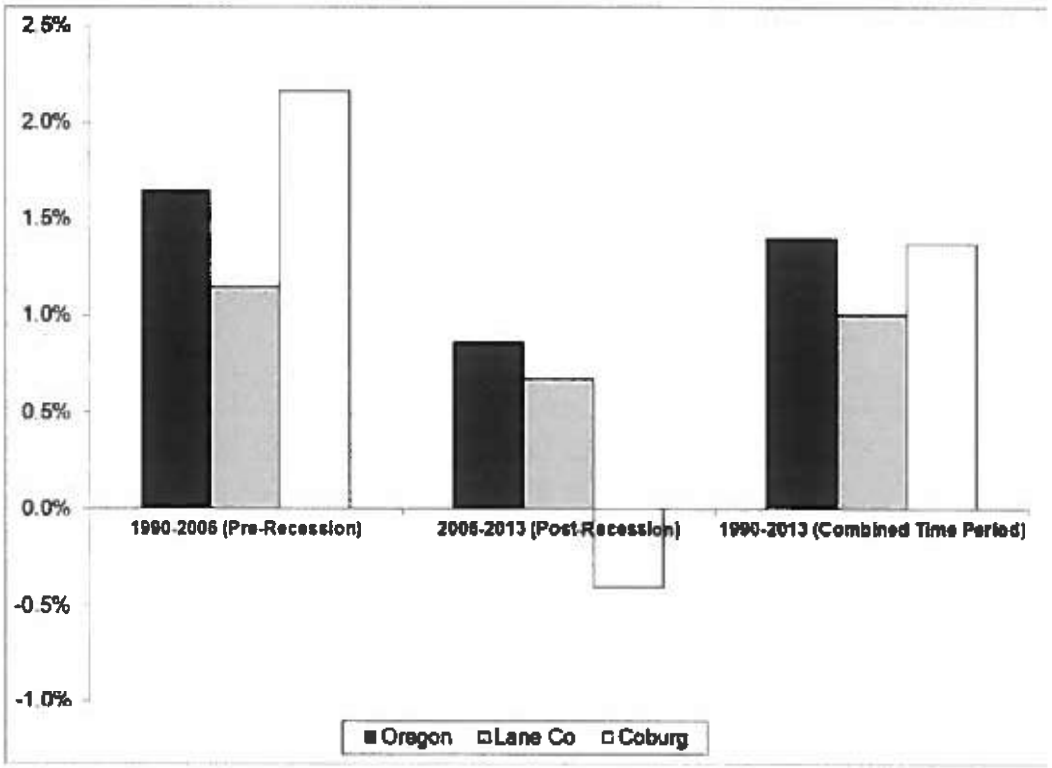
- Recent changes in county-wide demographics will affect employment needs for jobs-population balance regionally.
- Changes in Coburg-specific demographics will affect employment opportunities to serve local community needs – particularly for industrial jobs

This analysis begins with a review of population trends and forecasts. This is followed by brief discussion of other demographic trends of note – especially with respect to resulting implications for employment needs.

## *Population Trends & Forecast*

Multi-year population growth rates since 1990 or Coburg as compared with the entire state of Oregon and Lane County are illustrated by the following graph (with detailed tabular data provided by Appendix B to this report).

**Comparative Annual Population Growth Rates (1990-2013)**




Sources: U.S. Census Bureau, Population Research Center - Portland State University (PSU).

Key observations noted from this comparison are summarized as follows:

- **Pre-recession** (from 1990-2006), Coburg's population was increasing at an average rate of 2.2% per year – well above comparable growth rates for the entire state and Lane County.
- **During and since the recession** (from 2006-2013), Coburg has experienced little to no net growth. Including what appears to be a 2010 U.S. Census data adjustment, reported population has declined over this post-recession time period. While population growth state- and county-wide slowed during and after the recession, Coburg's population growth slowed even more dramatically. For each of the most recent three years of 2011-13, Coburg's population is estimated at 1,045 residents – essentially reflecting a holding pattern of no growth at present.
- **Over the full 1990-2013 time period,** Coburg's population has increased at an average rate of 1.4% per year. This is essentially the same growth rate as was experienced statewide – and above the 1.0% average annual Lane County rate of population increase experienced over this same 1990-2013 time period.

As noted, the *2010 Coburg Urbanization Study* reflected a Lane County adopted population growth rate averaging 5.32% per year over the 2008-35 time period. This resulted in a forecast in-city population of 3,363 residents by 2030, approximately three times the population estimate of 1,103 estimated for 2010. Note that this population estimate was made prior to release of 2010 Census results – indicating an adjusted 2010 population figure of 1,035 (or 6% below the prior PSU estimate).

In effect, Coburg's population has made no progress to date toward realization of the growth target identified with the Urbanization Study in 2010. If this pattern of limited to no growth were to continue, the community can expect to face greater challenges in funding wastewater system expansion and utilization as well as other public services.

With single family residential construction now again being experienced nationally and regionally, some return to growth in Coburg could reasonably be expected in the years ahead. However, to approach the 5.3% growth rate anticipated in 2010, other supporting actions may be necessary. A renewed emphasis on generating family wage employment could prove instrumental in also fulfilling the community's population growth objectives.

## *Other Demographic Trends of Note*

Other demographic trends of note relate to such items as median age of population, racial and ethnic diversity, average housing value, homeownership %, educational levles, labor force participation and unemployment rates, median income, average commute to work times. Based on data as provided by Appendix B, comparisons of demographic characteristics between Coburg, Lane County and the entire state are summarized as follows:

- As of 2010, the **median age** of Coburg residents was relatively high at 41.6 years and is increased substantially from 2000. Median age is also above that of the rest of Lane County or the entire state.
- Coburg has a below average proportions of **non-white and Latino populations** – especially when compared with the entire state – but has also become more diverse over the last decade.
- Nearly 75% of homes are **owner-occupied**, well above comparable rates county- and state-wide – but home ownership rates declined by more than elsewhere from 2000-10.
- Median **housing values** are relatively high compared to the rest of Lane County, but more affordable than housing costs statewide.
- Coburg population is relatively **well educated** – with over one-third of adult residents having a bachelor's degree or better.
- **Labor force participation** is also relatively high – and increased during the last decade (unlike the rest of Lane County and the state).
- **Unemployment rates are** below county- and statewide averages, but have increased substantially in the last decade.
- At nearly $69,000 per household, **median incomes are** well above county- and statewide figures – and increased more rapidly in Coburg than county- or statewide over the past decade.
- **Average travel time to work** is just over 18 minutes – reflecting shorter commutes than occurs throughout Lane County or statewide. Local commutes have also dropped somewhat in recent years.

Taken together, these indicators portray a community that is relatively and increasingly affluent and well-educated – compared to the rest of Lane County and the state. At the same time, Coburg's population is getting both older and more dependent on employment opportunity – trends that raise questions about the continued attractiveness and livability of the community for the next generation of residents.

Improved job options may be important for some existing residents, especially those displaced and not yet fully re-employed since the recession. Family wage employment opportunities also may become more important as a means to encourage renewed population growth that has lagged in recent years.

# ECONOMIC TRENDS & FORECAST

Economic data pertinent to this analysis begins with a review of recent employment trends for Coburg. This is followed by consideration of regional trends and forecast – with resulting implications for future job change in Coburg's UGB.

## *Coburg Employment Trends*

The most readily available employment data for Coburg is for jobs covered by unemployment insurance, as compiled by the Oregon Employment Department (OED). As indicated by the chart to the right, Coburg has lost an estimated 1,810 covered jobs in the six years from 2006-2012 – more than half of its reported 2006 employment base:

- Historically and at its peak, Coburg's employment base has been predominantly oriented to industrial job sectors (notably natural resource, construction, wholesale and transportation uses).
- Job losses experienced from 2006-10 were primarily focused on industrial activities, especially RV-manufacturing.
- However, in the most recent two-year period from 2010-12, job losses shifted to commercial sector activity. This shift reflects delayed spin-off effects of traded sector job loss to other supportive service sector activities throughout the local economy.
- Because an estimated 14% of all Coburg employment in 2006 comprised jobs not covered by unemployment insurance, these spin-off effects have also affected sole proprietors and others not counted directly by OED / QCEW data.

**Coburg Covered Employment Experience (2006-12)**

| | % of Total | | |
|---|---|---|---|
| | 2006 | 2010 | 2012 |
| Industrial Sectors | 75% | 64% | 68% |
| Commercial Sectors | 25% | 36% | 32% |
| All Sectors | 100% | 100% | 100% |
| **All Covered Jobs** | **2,848** | **1,322** | **1,038** |

Note: Covered job totals reflect OED/QCEW data as reported for Coburg by LCOG. Industrial/commercial allocations are estimated by E. D. Hovee & Company, LLC from QCEW combined with U.S. Census datasets.

Sources: OED Quarterly Census of Employment & Payroll (QCEW), LCOG, U.S. Census and E. D. Hovee.

Of added note is that, while manufacturing job losses were already underway, the 2010 Urbanization Study had forecast a modest 3% employment increase between 2006-2010. This was accompanied by a 2010 report caveat that, with the closure of Monaco Coach, 2010 forecast was not anticipated to be realized, at least in the near term. However the long-term forecast was expected to be realized including the very likely re-use of the Monaco site.[5]

With 2010 actual employment results now known, job cutbacks appear to have been even more substantial than was previously anticipated – with loss of more than 50% of Coburg's covered employment base realized in just four years from 2006-10.

A question pivotal to an updated job forecast is whether and to what degree the post-2006 job loss might be recaptured as was previously assumed with the 2010 Urbanization Study. This question is addressed in more detail later in this report with analysis of Coburg employment and industrial scenarios.

## *Economic Forecast Process*

Three methodological factors served as primary drivers of Coburg's 20-year employment forecast with the 2010 Urbanization Study:

- Establishment of a base year employment estimate (as of 2006), reflecting QCEW covered employment data adjusted for non-covered employment based on information from the U.S. Bureau of Economic Analysis (BEA). As noted, approximately 86% of employment in Coburg was estimated to consist of covered employees, with the remaining 14% as non-covered employees (as is often the case with sole proprietors of small businesses).
- Utilization of the then most current 10-year Lane County employment forecast (for 2006-16), as prepared by the Oregon Employment Department (OED).
- Application of a Safe Harbor provision, assuming that Coburg employment would increase at the same percentage rate as county-wide job growth over the 10-year OED employment forecast period.

This updated and expanded regional economic analysis considers: a) the extent to which conditions related to any of these three factors have changed since 2006; and b) whether the assumptions related to these factors remain valid or might be appropriately be adjusted to better address regional as well as local economic needs.

The 2010 Urbanization Study relies on 2006 jobs data as a starting point for its evaluation of future industrial / commercial job and associated land needs. A pivotal question for this updated Coburg UGB economic analysis is whether an updated forecast should be adjusted to start with a lower base level of employment or, alternatively, should continue to assume job replacement for what was lost in the recession followed by further job growth with full economic recovery.

## *Regional Economic Forecasts*

As noted, a key input to the Coburg employment forecast has been the use of the Lane County-wide projection as updated every two years by the Oregon Employment Department (OED). As detailed by the following chart, the 2010 Urbanization Report relied on a forecast covering the 2006-16 period (with adjustments for three Coburg-specific sectors). The most recent 2012 OED analysis covers an updated forecast time period extending from 2010-20.[9]

**Comparative Employment Forecast Growth Rates**
**(Annual Average Growth Rate – AAGR)**

| | 2010 Urbanization Study | | Update Analysis |
|---|---|---|---|
| **Employment Sector** | **Lane County (2006-16)** | **Adjusted Coburg AAGR** | **Lane County (2010-20)** |
| Natural Resources and Mining | 0.00% | | 1.01% |
| Construction | 1.41% | | 2.41% |
| Manufacturing | 0.34% | | 1.24% |
| Wholesale Trade | 0.97% | | 2.03% |
| Retail Trade | 1.16% | 2.00% | 1.37% |
| Transportation, Warehousing, Utilities | 1.15% | | 1.66% |
| Information | 1.03% | | 1.42% |
| Financial Activities | 1.14% | | 1.29% |
| Professional and Business Services | 1.72% | 2.25% | 2.48% |
| Educational and Health Services | 2.71% | | 2.56% |
| Leisure and Hospitality | 1.82% | 2.25% | 1.43% |
| Other Services | 1.12% | | 1.52% |
| Government | 1.20% | | 0.98% |
| **Total Employment** | **1.39%** | **0.83%** | **1.66%** |
| **Comments** | OED 10-year forecast for Region 5 - Lane County | Revised w/under-represented sectors, total is Coburg average | Most recent 10-year OED Region 5 forecast (as of 2012) |

Sources: Oregon Employment Department (OED) and *2010 Coburg Urbanization Study*. OED regional projections cited were based on a forecast analysis issued December, 2007.

Several observations are noted from this 2012 OED forecast update:

- The overall Lane County *job growth rate* has been increased from a 1.39% average annual growth rate (AAGR) with the 2010 Urbanization Study to a 1.66% AAGR with the most recent available OED regional projection. Extrapolation of this AAGR means that county-wide job growth which was expected to increase by 32% over 20 years would now be expected to increase by 39%.
- The most significant *ramp-up* of employment expectations is noted across the full range of industrial activities – including natural resources/mining, construction, manufacturing, wholesale trade, and transportation/warehousing/utilities. By comparison, county-wide job growth expectations are downgraded for some commercial sectors including education/health, leisure/hospitality, and governmental activities.
- Because Coburg's *mix of employment* historically has been concentrated in lower growth sectors, the 2010 Urbanization Study utilized an overall 0.83% AAGR job forecast growth factor (even after upward adjustments for three under-represented employment sectors as noted above).

- If Coburg's job growth rate were adjusted upwards to reflect the updated overall growth expectations for Lane County of a 1.66% AAGR, the employment gain within Coburg's UGB would double from the previous projection of an added 615 jobs to 1,292 net added jobs over a 20-year planning horizon.

### *Comparison with OEA Forecast*

The State of Oregon Office of Economic Analysis (OEA) provides quarterly updates of 10-year economic forecasts. While forecasts are made only for the entire state (not counties or economic subregions), the most recent December 2013 statewide forecast provides a useful point of comparison with the 2012 OED statewide projections.

**Statewide Comparison.** A detailed statistical comparison of OEA and OED forecast results for the 2010-20 time period is provided by Appendix B to this report. Key observations are noted as follows:

- Overall, OEA's recent forecast indicates that employment statewide may increase at a somewhat slower rate than has been projected by OED. However, OEA is significantly *more bullish* on prospects for industrial employment (and softer on the commercial outlook) than OED.
- OEA forecasts stronger rates of growth for the construction, manufacturing and TWU sectors than OED. Within manufacturing, forecasts recently have been revised upward for non-durable goods production – especially food processing.
- Despite "ebbs and flows," the national and regional economic recovery remains on track. While not overly robust, job growth has been strong enough to allow for gradual reductions of the state's unemployment rate.
- After a prolonged downturn, home construction is now in recovery mode – though at levels still well below the pre-recession peak. While higher interest rates may raise new challenges for housing affordability nationally and regionally, the need to "catch up" to the underbuilding of recent years means that there is still considerable *unmet demand* to address in the years ahead.
- A significant economic issue for the nation and state is what the OEA report terms as "job polarization" – resulting in fewer middle wage jobs but more jobs at both the lower and upper ends of the income spectrum.[10] Also noted is a trend toward more part-time employment.

**Willamette Valley Overview.** Although OEA does not provide sub-state job forecasts, the most recent economic report does include a brief discussion of the prospects for the two major economic regions of the state – the Portland metro area and the Willamette Valley. For purposes of OEA's analysis, the Willamette Valley region comprises Benton, Lane, Linn, Marion and Polk Counties.

OEA describes the Willamette Valley as the "bellwether region" of Oregon, with economic trends generally closely mirroring what occurs statewide. This region is more stable economically than some other areas of the state – in large part due to the stability of the region's substantial public sector – with a state capitol and two major universities.

The Willamette Valley is also characterized by several industries which have a stronger concentration in this region compared to the rest of the state. These relatively concentrated industrial sectors include:[11]

- Agriculture and forestry support
- Chemical manufacturing
- Warehousing and storage
- Textile manufacturing
- Crop production
- Wood product manufacturing
- Food manufacturing
- Apparel manufacturing

### *Implications for Coburg Industrial Lands*

This review of local and regional economic trends suggests that the 2010 Urbanization Study warrants updating to address the following changes in economic conditions:

(1) Substantial loss of RV equipment industrial employment during the recession with subsequent negative spillover to other Coburg business activities – and resulting need to replace this loss as a pre-condition to future net job growth.

(2) Overall upgrading of regional (Lane County) job forecasts from what was anticipated in 2010, with resulting long-term opportunity to offset economic losses experienced within Coburg's historic employment base.

(3) Further economic opportunity for regional capture of demand for large site industrial users requiring interstate freeway access, offering a distinctive competitive advantage for Coburg relative to alternative industrial sites elsewhere in Lane County – as described in the next section of this regional economic analysis.

## REGIONAL INDUSTRIAL LANDS

Based on research conducted for this analysis, there does not appear to be a current, comprehensive inventory of all vacant and underutilized industrial properties in Lane County – including what is on the market plus not currently available for sale or lease.

However, individual jurisdictions have conducted inventories for purposes including identification of properties now on the market together with encompassing local inventories conducted by individual cities. Several information resources are considered with this preliminary review:

- Listing of industrial sites currently being marketed, as provided by Lane County.
- Eugene-Springfield Metro Plan (now dated, extending back to 2004)

- Reference to draft EOA update for Springfield conducted in 2009 (with estimated need for 450 acres on 6 sites added as possible UGB expansion)
- Linkage to Envision Eugene 2012 recommendation for UGB expansion (as regional job center requiring 475 acres with 12 new industrial sites)
- Goshen Region Employment and Transition (GREAT) Plan (completed in 2012 for a 316+ acre industrial area within the unincorporated community of Goshen).

Each of these sources is described briefly, in turn – followed by discussion of implications for Coburg industrial property suitability and development potential.

**Marketable Industrial Properties.** A clear indication of the current dearth of large industrial properties is provided by a current listing of industrial sites available county-wide as maintained by Lane County. As of December 2013, 338 commercial and industrial sites are identified as being marketed for sale or lease in Lane County jurisdictions extending from Florence on the coast to the Eugene-Springfield metro area and neighboring communities.

Of these properties, 138 are designated for industrial or industrial/commercial use (with the other 200 sites designated for commercial use). If parcels with substantial buildings are excluded, there are a remaining 56 vacant industrial properties plus another six underimproved sites (which have buildings occupying less than 10% of site area).

As indicated by the chart to the right, there are only five identified sites of 20+ acres currently being marketed within Lane County for industrial development:

- Four of the properties are in Eugene – all four of which are located distant from the I-5 interstate transportation corridor.
- Also available for sale is the former Bald Mill veneer plant in Creswell – 10 miles south of Eugene, subject of a major 2008 fire, and with an existing 64,000 square foot building on site.

**Lane County 20+ Acre Industrial Sites**

| City | Address | Acres |
|---|---|---|
| Eugene | Awbrey Lane | 60.71 |
| Creswell | 33662 East Park Drive | 44.07 |
| Eugene | Ed Cone Blvd. Vinci | 33.40 |
| Eugene | Awbrey Lane | 22.11 |
| Eugene | Ed Cone Blvd. Lot 14 | 20.35 |
| Total | | 180.64 |

Note: Comprises sites currently being marketed for development.

Source: Lane County Community Economic Development Department, December 2012.

Coburg does not have any sites of 20+ sites indicated by Lane County as being readily suitable and actively marketed at present for industrial development. However, if such sites were to be designated for industrial use, Coburg properties could represent viable options for industrial users that require direct interstate freeway access proximate to urban area population centers.

**Eugene-Springfield Metro Plan.** A Eugene-Springfield Metropolitan Area 1990 General Plan was initially adopted in 1972. This was replaced by an updated 1980 Metro Plan adopted by the Cities of Eugene and Springfield and (with a different version) by Lane County in 1980. This regional area plan was comprehensively updated in 2004 with plan replacement pages updated as recently as 2010.

The Metro Plan addresses economic development as an applicable statewide planning goal for the Eugene-Springfield metropolitan area (south of Coburg) with an overall goal to: *Broaden, improve, and diversify the metropolitan economy while enhancing the environment.*

In addition to this goal statement, the Economic Element of the Metro Plan also included a series of findings, objectives, and policies. Objectives most relevant to this current regional economic analysis were to:

- Supply an adequate amount of land within the UGB (for manufacturing and as a regional distribution, trade and service sector)
- Reserve enough remaining large parcels for special developments requiring large lots

An accompanying policy was to: "Increase the amount of undeveloped land zoned for light industrial and commercial uses correlating the effective supply in terms of suitability and availability with the projections of demand." However, it is noted that the 2004 Metro Plan update document did not contain quantitative analysis or findings as to industrial and commercial land demand relative to supply in the Eugene-Springfield area.

Subsequently, in 2007 the Oregon Legislature passed House Bill 3337 directing Eugene and Springfield to establish separate UGBs. As a result, planning for the urbanized portion of the metro area shifted from a regional to jurisdiction-specific approach for Eugene and Springfield – leading to recent EOAs that were conducted separately for each of the two cities.

**Springfield EOA.** A draft *Commercial and Industrial Buildable Lands Inventory and Economic Opportunities Analysis* was completed for the City of Springfield in 2009. The EOA concluded that Springfield has a deficit of 450 acres for industrial land to be served with large lot development. Specifically recommended was a need for three 50 acre and three 100 acre sites.[12]

The EOA identified a need for a portion of these larger added sites to be located near an I-5 interchange. Large-scale industrial-related business activities important to the region's economy were noted as including manufacturing, recreational vehicle manufacturing and retailing, wood products and paper manufacturing, and call centers (as with Symantec).

Results of the EOA have been integrated into the *Springfield 2030 Refinement Plan* – as an update to the existing Comprehensive Plan. Proposed as of 2013 was potential

expansion of Springfield's UGB for an added 640 suitable acres of employment land. Five areas totaling up to 1,343.3 suitable (or developable) acres have been evaluated as potential candidates for UGB expansion. Two areas are in proximity to the I-5 corridor – North Gateway at 226.3 suitable acres and Seavey Loop at 151.8 acres.

Currently, it is anticipated that the Springfield City Council and Lane County Board of Commissioners will conducte a Public Hearing on the proposed 2030 Refinement Plan and UGB Amendment in early 2014.

**Eugene EOA.** In 2010, an EOA was conducted for the City of Eugene as part of a *Eugene Comprehensive Lands Assessment*. As with Springfield, the demand for commercial and industrial land was forecast over a 20-year planning period. The Eugene EOA tentatively concluded that industrial land needs might appear to potentially met by the existing buildable lands inventory, but with a significant caveat:

> The City of Eugene has not stated objectives for economic development (as required for an EOA), making it very difficult to identify the characteristics of sites needed to implement the economic development objectives. When Eugene decisionmakers develop this statement of economic development objectives, the analysis of commercial and industrial land demand may change, possibly substantially, to implement the economic development objectives and the potential for larger site needs.[13]

The Eugene EOA identified manufacturing as a *traded sector,* providing regional business activity important to Eugene and the regional economy. Specifically described by the EOA was a concern that the "characteristics of Eugene's vacant commercial and industrial sites larger than 5 acres may not be satisfactory for attracting or growing business." Issues noted were a lack of large sites, wetlands, and a lack of sites offering proximity to the I-5 freeway corridor versus an overabundance of sites along the less desirable Highway 99 corridor on the west side of Eugene.

Eugene's EOA also set the stage for further more detailed evaluation of opportunities consistent with Goal 9 that allows cities to be *aspirational* in local economic development planning. In effect, Goal 9 offers the opportunity to increase buildable lands "beyond what might be calculated to strictly match forecasted employment" to attract types of firms that historically may not have located in the community because it lacks sites suitable for these firms.

**Envision Eugene.** The 2010 Eugene EOA has been followed by a broader community planning process known as *Envision Eugene*. A critical component of this process currently underway has been to focus on land needs for industrial jobs.

This detailed analysis also identifies eight key industries viewed as pivotal to realizing the *Envision Eugene* goal of increasing the average wage in the community. Key industries identified for Eugene are clean technology/renewable energy, environmental services, waste remediation, health and wellness, specialized manufacturing, software/information technology services, biosciences, and food processing and

manufacturing. A conclusion of the *Envision Eugene* process is that "all of the key industries could utilize sites that are larger than 10 acres in size, and in some cases, larger than 50 acres, depending on the size of the business.

A 2012 draft industrial lands inventory has calculated that Eugene has a surplus of sites of less than 10 acres, but a deficiency of sites of 10+ acres in size. Of 14 identified 10+ acre sites city-wide, only two properties are located in proximity to the I-5 freeway corridor, accessed from Beltline Road. One is a vacant property and the other a redevelopment site.

Recommended *by Envision Eugene* is expansion of the city's UGB to accommodate added industrial sites in the following size classes:

- 10-20 acres (5 sites totaling 75 acres)
- 20-50 acres (1 site totaling 25 acres)
- 50-75 acres (3 sites totaling 180 acres)
- 75-100 acres (2 sites totaling 170 acres)
- ***Total added industrial need of approximately 475 suitable buildable acres***

The geographic area proposed for UGB expansion to better accommodate Eugene's industrial needs is in NW Eugene – extending to include areas between Highway 99 and the Eugene Airport north to Awbrey Lane. While these steps will be important to improve Eugene's economic opportunities, they are unlikely to prove sufficient to accommodate the full range of high-wage industries needed for regional economic vitality – notably the need for large industrial sites directly fronting on I-5 as the west coast's primary freight transportation corridor.[14]

In June 2012, *Envision Eugene, A Community Vision for 2032* was recognized by the Eugene City Council as a basis for moving forward to implement the City's long range plan. Refined recommendations for UGB expansion are currently expected to be presented to the Planning Commission and City Council in 2014. Amendments to the Comprehensive Plan, code amendments and zone changes are also anticipated to accompany plan implementation.

**Goshen Region Employment and Transition (GREAT) Plan.** In 2012, Lane County prepared a Goal 14 Exception – Findings Document aimed to enhance the economic viability of 316.51 acres of existing underutilized industrial land within the rural unincorporated area of Goshen. The GREAT Strategy and Action Plan involves seven major steps:

1) Obtain a Goal 14 urbanization exception that would facilitate redesignation from what is viewed as a "restrictive, rural land use regulation to adoption of a more flexible, urban level of industrial zoning in Goshen." This would allow for accommodation of large scale regional as well as small scale localized industrial uses – including potential creation of a community sewer system rather than placing continued reliance on individual septic systems.

2) County nomination and subsequent state designation of Goshen in 2012 as a Regionally Significant Industrial Area (RSIA) pursuant to Senate Bill 766. With this designation, a new or expanded industrial use would be eligible for expedited industrial land use permitting – for uses consistent with the County's comprehensive plan and land use regulations.
3) Potential Enterprise Zone (or Urban Renewal District) designation.
4) Infrastructure planning including priority for a sewer feasibility study and transportation improvements to Highway 99 in proximity to I-5 and Highway 58.
5) Phase 1 brownfield and wetland assessments – as a significant milestone toward establishing "shovel readiness."
6) Property visioning involving cooperative efforts with property owners and partner organizations to obtain Industrial Site Certification and Decision Ready Site statue through the Oregon Economic Development Department (Business Oregon).
7) Shovel-ready status through Business Oregon designation, coordinated with the Governor's Regional Solutions team.

If approved, the Goal 14 exception would enable Goshen to offer large sites for regional industrial uses requiring direct I-5 proximity. These are sites that currently remain unavailable elsewhere in Lane County. However, a key issue to address for Goshen competitiveness will be full utility (notably sewer) capability. A limitation that may be more difficult longer term to address is the location of Goshen at the southern end of the metro region with less access to labor force in all directions than can be found in Coburg.

As of June 2013, the Lane County Board of Commissioners has adopted the GREAT plan for Goshen's unincorporated area including:

- Legislative post-acknowledgement plan amendment (PAPA) as an exception to Goal 14 in order to allow urban levels of industrial development on existing Rural Industrial (RI) zoned lands.
- Amendments to the County's Rural Comprehensive Plan (RCP) changing the zoning from RI to General Industrial (GI) and Light Industrial (LI).
- Lane Code (LC) zoning amendments to regulate new urban scale development in Goshen.
- Zoning map amendments consistent with proposed new industrial zones.

## COBURG EMPLOYMENT & INDUSTRIAL SCENARIOS

Based on this review of economic trends / forecasts and regional industrial land needs, it is possible to now outline employment and industrial scenarios suggested for consideration with anticipated updating of the Coburg's urbanization study and associated economic opportunities analysis (EOA). Two overall scenarios are outlined and quantified in conjunction with this regional economic analysis:

- Scenario A – Job Recapture with OED Forecast Update
- Scenario B – Economic Opportunity with Regional Large Site Market Capture

**Scenario A – Job Recapture with OED Forecast Update.** This first scenario is modeled to align with the forecast methodology provided with the 2010 Urbanization Study. Assumptions integral to this updated forecast estimate are that:

- Coburg job loss experienced during the recession will be recaptured (to refill vacated space) so that forecast job growth occurs as an add-on to pre-recession peak employment conditions requiring net added industrial and commercial land – as was previously assumed with the 2010 Urbanization Study.[15]
- Lane County employment forecast projections are updated for consistency with the most current available OED regional forecast – reflecting higher county-wide job growth rates than were utilized with the 2010 Urbanization Study (as is also consistent with DLCD Safe Harbor provisions for estimating EOA land needs).[16]

As noted, forecast net job growth (after recapture of job loss) is an added nearly 1,300 jobs over 20 years. This is essentially double the job gains that were forecast with the 2010 Urbanization Study – due to more aggressive employment forecasts with the most recent available OED employment projections for Region 5 – Lane County. Note that the OED regional job forecasts are expected to be again updated in 2014.

Forecast job gains associated with commercial uses are up by 30% over what was anticipated with the 2010 Urbanization Study. Industrial job gains are more than triple what was previously assumed with the regional forecast.

**Updated Coburg Commercial & Industrial Land Needs (20 Years)**

| Land Use | Added Jobs in 20 Years | Jobs per Acre | Needed New Acres | Optimal Vacancy Rate | Adjusted New Acres Needed |
|---|---|---|---|---|---|
| Commercial (CBD & Highway) | 483 | 19.1 | 25.3 | 10% | 28.1 |
| Industrial (Light & Campus) | 809 | 13.1 | 61.8 | 10% | 68.7 |
| **Total Commercial + Industrial** | **1,292** | **14.8** | **87.1** | **10%** | **96.8** |

Source: E. D. Hovee & Company, LLC using methodology of 2010 Urbanization Study together with 2012 OED Region 5 (Lane County) employment forecast. A new regional employment forecast is anticipated to be released by OED in 2014.

Results in terms of this updated estimate are a forecast need for nearly 97 acres of commercial and industrial land. This compares with an estimated need for 38-42 acres indicated with the 2010 urbanization study. As with forecast job needs, land demand is increased most sharply for industrial uses – increasing from a previously estimated 20-year demand of just 18-21 acres for industrial development to nearly 62 acres.

**Scenario B – Economic Opportunity with Regional Large Site Market Capture.** A second scenario is predicated on the economic opportunity for Coburg to serve regional

needs for large 20+ acre sites that require I-5 freeway access *in addition to* capturing its Safe Harbor share of regionally forecast job growth:

- This enhanced economic opportunity is consistent with the findings of the 2010 Urbanization Study that Coburg has been and could remain competitive for large manufacturing and distribution-related industrial firms, particularly if 20+ acre sites were designated and made available for industrial development.
- Coburg's competitive opportunity is also reinforced by economic analyses recently prepared for other jurisdictions in Lane County – all of which confirm a demand for but relative dearth of 20+ acre sites situated in close proximity to the I-5 transportation corridor.

Envision Eugene has concluded that about one-third (33%) of its industrial site demand is anticipated to be for large 20+ acre sites. The Springfield EOA anticipates that 20+ acre sites could comprise more than 60% of the need for added industrial lands in that jurisdiction.

For purposes of this regional analysis, it is assumed that county-wide large site demand may represent about 40% of all vacant/redevelopable industrial land needs in Lane County over the next 20 years. This estimate also coincides with the composition of the large site industrial-commercial inventory with interstate freeway 5 proximity available in the Salem-Keizer urban area – as the major comparable (or competitive) mid-tier metro region on the I-5 corridor in Oregon.[17]

The following chart depicts results of alternative regional capture rates that might be considered in terms of resulting 20-acre land demand *added to* existing local industrial need as previously indicated for Forecast Alternative A. The combination of local demand combined with regional capture is then compared with the existing supply of vacant industrial sites – estimated at 28.4 acres with the 2010 Urbanization Study.

**Coburg Industrial Scenarios with Regional Large Site Industrial Capture**

| | Coburg Large Site Industrial Capture % | | | |
|---|---|---|---|---|
| **Comparative Scenario / Option** | **A** | **B1** | **B2** | **B3** |
| **Added Regional Market Capture Rate** | **0%** | **10%** | **20%** | **30%** |
| Regional Large Site Acreage Demand | 463 | 463 | 463 | 463 |
| Net Coburg Regional Acreage Demand | - | 46.3 | 92.5 | 138.8 |
| Coburg Share Adjusted for 10% Vacancy | - | 51.4 | 102.8 | 154.2 |
| *Plus* Local Industrial Need (Forecast A) | 68.7 | 68.7 | 68.7 | 68.7 |
| Total Coburg Industrial Demand | 68.7 | 120.1 | 171.5 | 222.9 |
| *Less* Estimated Coburg Industrial Lands | (28.4) | (28.4) | (28.4) | (28.4) |
| ***Equals* Net Added Acreage Need** | **40.3** | **91.7** | **143.1** | **194.5** |

Source: E. D. Hovee & Company, LLC using methodology of 2010 Urbanization Study together with 2012 OED Region 5 (Lane County) employment forecast. See Appendix B for added detail.

With this chart, two overall scenarios (plus three variations of Scenario B) are depicted as a basis for further discussion and evaluation:

- **Scenario A** depicts the results an updated OED Safe Harbor forecast (previously described), resulting in unmet demand for just over 40 acres of industrial land beyond what can be provided by vacant industrial sites within Coburg's existing UGB – as no added regional industrial capture is assumed with this scenario.
- **Scenario B1** illustrates the potential demand of associated with Coburg capturing 10% of regional large site demand in addition to the local demand associated with Scenario A – resulting in the combined need for an added 92 acres beyond what is available in the existing UGB.
- **Scenario B2** increases the regional market capture rate to 20% - yielding a potential need for an added 143 net acres of potential Coburg UGB expansion.
- **Scenario B3** shows the effects of Coburg achieving 30% capture of regional large site demand – increasing the need to 195 net acres of UGB expansion.

**Which Regional Capture Scenario Will Prove Market-Supportable?** The determination of an appropriate capture scenario involves a balancing of local community policy objectives with observed regional market experience and plans of other jurisdictions in the same county-wide market area:

- A 10-20% capture of regional market demand appears to be a reasonable minimum expectation for Coburg. This base level of market capture is supported by the previous demonstrated attractiveness of this community for large scale regional industries, better proximity to Linn as well as Lane County labor force, current and prospective lack of Eugene sites in proximity to I-5, and UGB expansion / infrastructure challenges affecting the Springfield and Goshen (as well as Eugene) alternatives.
- A 30% (or possibly better) capture rate would be possible for Coburg if I-5 oriented sites in Springfield and Goshen prove infeasible to develop or are substantially delayed in becoming market ready. A higher rate of market capture could also be achieved if I-5 locations prove to be preferred by the majority of large site industries over the Highway 99/126 corridor alternatives that may become available with potential Eugene UGB expansion.

Because of the uncertainty around proposed UGB expansions and associated feasibility of required infrastructure investments, it is not possible to readily forecast what the market share (or capture) of any particular Lane County jurisdiction will be at this time.

However, because all communities have potential added industrial lands *now in play,* this is an appropriate time to consider the relative viability of all options. Viability can be considered in terms of infrastructure requirements and associated cost to achieve site readiness together with resulting marketability to industrial users – prior to finalization of commitments for any individual jurisdiction. This regional evaluation could most appropriately occur in coordination with agencies having a multi-jurisdictional coordinating role, as with LCOG, Lane County, and DLCD.

**UGB Expansion Implications.** All of the scenarios evaluated involve some need for UGB expansion. Even with no added capture of regional industrial demand, the updated Safe Harbor forecast (Scenario A) indicates need for about 40 acres of UGB expansion.

The top rated potential industrial expansion area evaluated with the 2010 Urbanization Study was Study Area 8 totaling 106 acres – most of which is viewed as potentially developable. About 38% of the available site area for this property would be required to accommodate the Scenario A expansion need *plus* any added land that might be required for public infrastructure (as with internal streets).

Study Area 8 could also accommodate all of the anticipated demand with Scenario B1 (whereby Coburg captures 10% of regional large site demand). Industrial land need would exceed what could be accommodated by Study Area 8 alone with Scenarios B2 and B3 (with 20% or 30% regional industrial capture). In this event, added UGB expansion encompassing at least portions of Study Areas 7/9 would also be required.

Realization of the full economic opportunity possible with Coburg UGB expansion can be facilitated by planning flexibility in land use to accommodate a range of industrial, related large site and ancillary support uses. Early provision of required public-private infrastructure will also prove instrumental to achieve *shovel-ready* status at a time when full economic recovery remains of continuing significance both locally and regionally.

# NEXT STEPS

This regional economic analysis is expected to serve as a springboard for further discussion with interested parties in consideration of UGB requirements to address local and regional industrial land needs. Next steps to consider may include any or some combination of:

- Review of this preliminary analysis with LCOG and the City of Coburg – for determination of whether and in what fashion to incorporate a regional economic analysis into revisions to consider with an updated Coburg Urbanization Study and Economic Opportunities Analysis.
- Potential for further analysis refinement incorporating alternate OEA forecasts or new 10-year regional economic forecasts for Region 5 (Lane County) when issued by OED – possibly as early as the 1st quarter of 2014.
- Expanded discussion to include representatives of DLCD together with Lane County and possibly the Cities of Eugene/Springfield to address cumulative implications of proposed UGB expansions and infrastructure investments – regionally coordinated to assure that the most marketable and economic feasible UGB expansions will receive priority consideration for regional and state support.

E. D. Hovee & Company, LLC (EDH) appreciates the opportunity to submit the regional economic analysis aimed to facilitate improved economic opportunity for Coburg and for greater Lane County economic region.

# APPENDIX A. PREPARER PROFILE

Since 1984, E. D. Hovee & Company, LLC (EDH) has provided economic and development consulting services on behalf of public agency, non-profit and private clients – both in and outside the Pacific Northwest states of Oregon and Washington. Consulting services include a range of market and economic impact assessments, economic opportunity (EOA) and related Goal 9 analyses, industrial and commercial land evaluations, and business development planning.

Related project experience is summarized as follows:

- EDH has been involved in conducting EOA and related Goal 9 (Economy of the State) analyses in compliance with State Department of Land Conservation and Development (DLCD) requirements for jurisdictions including the Cities of Portland, Beaverton, Forest Grove, Gresham, Wilsonville, McMinnville, Cascade Locks, Aumsville, Medford and Ashland, and for Hood River County.
- EDH also has been involved on behalf of private clients seeking Comprehensive Plan and zoning re-designations in compliance with Goal 9 requirements in communities as diverse as Albany, Beaverton, Hood River, Junction City, Newport and Portland.
- In the 1990s, EDH worked with Rural Development Initiatives (RDI) with community assessments in Coburg and Oakridge.
- The firm provides a variety of related economic development assessments – including evaluation of economic and fiscal benefits associated with industrial development, parcelization and site planning assistance, and participating in assessing public need and benefits associated with economic development incentives including the state's Strategic Investment Program (SIP).
- EDH has also conducted assignments for agencies involved with economic development assessments in Lane County including the Cities of Eugene and Springfield, Eugene Water & Electric Board and Oregon Department of Transportation.
- Currently, the firm is also involved in evaluation of brownfield redevelopment opportunities as part of a multi-disciplinary project assignment for the City of Eugene.

This regional economic analysis for consideration of Coburg UGB expansion has been prepared by Eric Hovee – Principal and Andrea Logue – Research Coordinator.

# APPENDIX B. SUPPLEMENTAL DATA

## Comparative Population Trends (1990-2013)

| | Population | | | Annual Growth Rate | | |
|---|---|---|---|---|---|---|
| Year | Oregon | Lane Co | Coburg | Oregon | Lane Co | Coburg |
| 1990 | 2,842,337 | 282,912 | 763 | | | |
| 1991 | 2,927,800 | 288,350 | 745 | 3.0% | 1.9% | -2.4% |
| 1992 | 2,990,610 | 292,240 | 750 | 2.1% | 1.3% | 0.7% |
| 1993 | 3,059,110 | 296,930 | 755 | 2.3% | 1.6% | 0.7% |
| 1994 | 3,119,940 | 301,370 | 760 | 2.0% | 1.5% | 0.7% |
| 1995 | 3,182,690 | 306,130 | 770 | 2.0% | 1.6% | 1.3% |
| 1996 | 3,245,100 | 310,320 | 775 | 2.0% | 1.4% | 0.6% |
| 1997 | 3,302,140 | 315,790 | 785 | 1.8% | 1.8% | 1.3% |
| 1998 | 3,350,080 | 318,730 | 790 | 1.5% | 0.9% | 0.6% |
| 1999 | 3,393,410 | 320,970 | 795 | 1.3% | 0.7% | 0.6% |
| 2000 | 3,421,399 | 322,959 | 969 | 0.8% | 0.6% | 21.9% |
| 2001 | 3,471,700 | 325,900 | 970 | 1.5% | 0.9% | 0.1% |
| 2002 | 3,504,700 | 328,150 | 990 | 1.0% | 0.7% | 2.1% |
| 2003 | 3,541,500 | 329,400 | 1,050 | 1.1% | 0.4% | 6.1% |
| 2004 | 3,582,600 | 333,350 | 1,050 | 1.2% | 1.2% | 0.0% |
| 2005 | 3,631,440 | 336,085 | 1,070 | 1.4% | 0.8% | 1.9% |
| 2006 | 3,690,505 | 339,740 | 1,075 | 1.6% | 1.1% | 0.5% |
| 2007 | 3,745,455 | 343,140 | 1,070 | 1.5% | 1.0% | -0.5% |
| 2008 | 3,791,075 | 345,880 | 1,075 | 1.2% | 0.8% | 0.5% |
| 2009 | 3,823,465 | 347,690 | 1,080 | 0.9% | 0.5% | 0.5% |
| 2010 | 3,831,074 | 351,715 | 1,035 | 0.2% | 1.2% | -4.2% |
| 2011 | 3,857,625 | 353,155 | 1,045 | 0.7% | 0.4% | 1.0% |
| 2012 | 3,883,735 | 354,200 | 1,045 | 0.7% | 0.3% | 0.0% |
| 2013 | 3,919,020 | 356,125 | 1,045 | 0.9% | 0.5% | 0.0% |
| **Average Annual Growth Rates (AAGRs):** | | | | | | |
| 1990-2006 (Pre-Recession) | | | | 1.6% | 1.2% | 2.2% |
| 2006-2013 (Post-Recession) | | | | 0.9% | 0.7% | -0.4% |
| 1990-2013 (Combined Time Period) | | | | 1.4% | 1.0% | 1.4% |

Note: July 1 Certified Population Estimates and April 1 Census Counts. AAGR denotes average annual growth rate. Post-recession growth rate is affected by an adjustment to population with 2010 U.S. Census results. An even more significant adjustment occurred in 2000.

Sources: U.S. Census Bureau, Population Research Center - Portland State University (PSU).

## Comparative Demographic Indicators

| | Coburg | Lane County | Oregon |
|---|---|---|---|
| **Median Age (years)** | | | |
| 2000 | 37.9 | 36.6 | 36.3 |
| 2010 | 41.6 | 39.0 | 38.4 |
| % Chg 2000-2010 | 9.8% | 6.6% | 5.8% |
| **Population by Race - % Non-White** | | | |
| 2000 | 5.0% | 6.3% | 10.7% |
| 2010 | 5.9% | 7.7% | 12.9% |
| Change 2000-2010 (% points) | 0.9% | 1.4% | 2.2% |
| **Population by Hispanic Origin - % Latino** | | | |
| 2000 | 3.0% | 4.6% | 8.0% |
| 2010 | 7.4% | 7.4% | 11.7% |
| Change 2000-2010 (% points) | 4.4% | 2.8% | 3.7% |
| **% Owner-Occupied Housing Units** | | | |
| 2000 | 80.4% | 62.3% | 64.3% |
| 2010 | 74.6% | 59.8% | 62.2% |
| Change 2000-2010 (% points) | -5.8% | -2.5% | -2.1% |
| **Median Housing Value** | | | |
| 2000 | $152,100 | $141,000 | $165,600 |
| 2010 | $252,600 | $230,000 | $270,300 |
| % Chg 2000-2010 | 66.1% | 63.1% | 63.2% |
| **% with Bachelor's Degree or Higher** | | | |
| 2000 | 30.5% | 25.5% | 25.1% |
| 2010 | 34.5% | 27.7% | 28.6% |
| Change 2000-2010 (% points) | 4.0% | 2.2% | 3.5% |
| **Labor Force Participation Rate** | | | |
| 2000 | 68.6% | 64.3% | 65.2% |
| 2010 | 72.6% | 62.0% | 64.5% |
| Change 2000-2010 (% points) | 4.0% | -2.4% | -0.7% |
| **Civilian Unemployment Rate** | | | |
| 2000 | 0.6% | 6.4% | 6.5% |
| 2010 | 7.4% | 9.0% | 8.7% |
| Change 2000-2010 (% points) | 6.8% | 2.7% | 2.3% |
| **Median Household Income** | | | |
| 2000 | $47,500 | $36,942 | $40,916 |
| 2010 | $68,929 | $42,923 | $49,260 |
| % Chg 2000-2010 | 45.1% | 16.2% | 20.4% |
| **Average Travel Time to Work (in min)** | | | |
| 2000 | 19.9 | 19.9 | 22.2 |
| 2010 | 18.3 | 19.6 | 22.1 |
| % Chg 2000-2010 | -8.0% | -1.5% | -0.5% |

Note: 2010 data for Median Housing Value, Educational Attainment, Employment Status, Median Household Income, and Travel Time to Work is from ACS 5-yr average for all geographies.

Source: U.S. Census Bureau.

## Comparative Regional & State Employment Forecasts (2010-20)

| | OED/Worksource Oregon Forecast (2011/12) | | | | OEA Forecast (12/13) | |
|---|---|---|---|---|---|---|
| | Lane County (Region 5) | | State of Oregon | | State of Oregon | |
| Employment Sector | 2010 | 2020 | 2010 | 2020 | 2010 | 2020 |
| Natural Resources and Mining* | 1,900 | 2,100 | 50,900 | 58,900 | 8,700 | 8,300 |
| Construction | 5,200 | 6,600 | 67,600 | 86,100 | 67,600 | 88,300 |
| Manufacturing | 12,200 | 13,600 | 164,200 | 189,100 | 163,800 | 191,100 |
| Wholesale Trade | 5,400 | 6,600 | 73,600 | 87,900 | 73,300 | 85,500 |
| Retail Trade | 17,900 | 20,500 | 183,300 | 209,400 | 183,200 | 210,300 |
| Transportation, Warehousing, Utilities | 2,800 | 3,300 | 52,400 | 62,100 | 52,200 | 64,000 |
| Information | 3,300 | 3,800 | 32,200 | 36,800 | 32,100 | 37,200 |
| Financial Activities | 7,300 | 8,300 | 92,600 | 104,700 | 93,200 | 100,800 |
| Professional and Business Services | 14,400 | 18,400 | 182,300 | 231,400 | 182,300 | 249,400 |
| Educational and Health Services | 21,900 | 28,200 | 228,600 | 296,100 | 228,900 | 276,400 |
| Leisure and Hospitality | 13,800 | 15,900 | 162,300 | 193,900 | 162,300 | 196,000 |
| Other Services | 4,900 | 5,700 | 57,200 | 66,400 | 56,600 | 65,500 |
| Government | 30,200 | 33,300 | 298,900 | 321,300 | 299,700 | 312,200 |
| Total Employment* | 141,200 | 166,400 | 1,646,100 | 1,944,100 | 1,601,900 | 1,885,000 |
| Subtotal Industrial w/o Nat Resources* | 25,600 | 30,300 | 357,800 | 425,200 | 356,900 | 428,900 |

| | % Change 2010-20 | | | 2020 % of Total | | |
|---|---|---|---|---|---|---|
| Employment Sector | Lane Co | OR (OED) | OR (OEA) | Lane Co | OR (OED) | OR (OEA) |
| Natural Resources and Mining* | 1.0% | 1.5% | 2.2% | 1.3% | 3.0% | 0.4% |
| Construction | 2.4% | 2.4% | 2.7% | 4.0% | 4.4% | 4.7% |
| Manufacturing | 1.2% | 1.4% | 1.6% | 8.3% | 9.7% | 10.1% |
| Wholesale Trade | 2.0% | 1.8% | 1.6% | 4.0% | 4.5% | 4.5% |
| Retail Trade | 1.4% | 1.3% | 1.4% | 12.3% | 10.8% | 11.2% |
| Transportation, Warehousing, Utilities | 1.7% | 1.7% | 2.1% | 2.0% | 3.2% | 3.4% |
| Information | 1.4% | 1.3% | 1.5% | 2.3% | 1.9% | 2.0% |
| Financial Activities | 1.3% | 1.2% | 0.8% | 5.0% | 5.4% | 5.3% |
| Professional and Business Services | 2.5% | 2.4% | 3.2% | 11.1% | 11.9% | 13.2% |
| Educational and Health Services | 2.6% | 2.8% | 1.9% | 16.9% | 15.2% | 14.7% |
| Leisure and Hospitality | 1.4% | 1.8% | 1.9% | 9.6% | 10.0% | 10.4% |
| Other Services | 1.5% | 1.5% | 1.5% | 3.4% | 3.4% | 3.5% |
| Government | 1.0% | 0.7% | 0.4% | 20.0% | 16.5% | 16.6% |
| Total Employment* | 1.7% | 1.7% | 1.6% | 100.0% | 100.0% | 100.0% |
| Subtotal Industrial w/o Nat Resources* | 1.7% | 1.7% | 1.9% | 18.4% | 22.6% | 22.9% |

* Note: OED data includes farm employment with Natural Resources and Mining activity; OEA data excludes farm employment.

Sources: Oregon Employment Department (OED) and Oregon Office of Economic Analysis (OEA).

## Covered Employment Estimates for Coburg (2010, 2012)

| | | 2010 Estimate | | 2010 Estimate | |
|---|---|---|---|---|---|
| NAICS | Employment Sector | Firms | Jobs | Firms | Jobs |
| 23 | Construction | 11 | 89 | 10 | 118 |
| 33 & 42 | Manufacturing & Wholesale Trade | 11 | 703 | 13 | 530 |
| 44 & 45 | Retail Trade | 10 | 181 | 9 | 130 |
| 48 | Transportation and Warehousing | 4 | 20 | 5 | 27 |
| 52 & 53 | Real Estate and Rental and Leasing & Finance and Insurance | 10 | 145 | 6 | 99 |
| 54 | Professional, Scientific, and Technical Services | 5 | 23 | 6 | 25 |
| 56 & 62 | Administrative and Support and Waste Management and Remediation Services & Health Care and Social Assistance | 3 | 6 | 4 | 5 |
| 11, 61 & 92 | Educational Services, Public Administration, & Ag, Forestry, Fishing and Hunting | 5 | 62 | 4 | 53 |
| 72 | Accommodation and Food Services | 6 | 28 | 6 | 20 |
| 81 | Other Services (except Public Administration) | 9 | 65 | 6 | 31 |
| | **Total Employment** | **74** | **1,322** | **69** | **1,038** |

* Note: Employment categories have combined, as needed, by LCOG to avoid disclosure of information that could be attributed to individual firms.

Sources: Oregon Employment Department (OED) QCEW data as aggregated by Lane Council of Governments (LCOG).

## Updated Commercial & Industrial Land Needs (20 Years)

| | Lane County (Region 5) | | | 2010-20 | Job Gain (2014-34) | | Jobs on |
|---|---|---|---|---|---|---|---|
| Employment Sector | 2010 | 2014 | 2034 | %AAGR | Net New | % 20+ Ac | 20+Ac |
| Natural Resources and Mining* | 1,900 | 1,978 | 2,416 | 1.0% | 438 | 40% | 175 |
| Construction | 5,200 | 5,720 | 9,215 | 2.4% | 3,495 | 40% | 1,398 |
| Manufacturing | 12,200 | 12,816 | 16,399 | 1.2% | 3,582 | 40% | 1,433 |
| Wholesale Trade | 5,400 | 5,851 | 8,741 | 2.0% | 2,890 | 40% | 1,156 |
| Retail Trade | 17,900 | 18,898 | 24,786 | 1.4% | 5,889 | 0% | - |
| Transportation, Warehousing, Utilities | 2,600 | 2,990 | 4,153 | 1.7% | 1,163 | 40% | 465 |
| Information | 3,300 | 3,492 | 4,630 | 1.4% | 1,138 | 0% | - |
| Financial Activities | 7,300 | 7,685 | 9,934 | 1.3% | 2,250 | 0% | - |
| Professional and Business Services | 14,400 | 15,883 | 25,933 | 2.5% | 10,050 | 0% | - |
| Educational and Health Services | 21,900 | 24,231 | 40,177 | 2.6% | 15,946 | 0% | - |
| Leisure and Hospitality | 13,800 | 14,604 | 19,388 | 1.4% | 4,783 | 0% | - |
| Other Services | 4,900 | 5,206 | 7,044 | 1.5% | 1,839 | 0% | - |
| Government | 30,200 | 31,404 | 38,182 | 1.0% | 6,778 | 0% | - |
| **Total Employment*** | **141,200** | **150,758** | **210,998** | **1.7%** | **68,240** | **8%** | **4,627** |
| Assumed Job Density (Employees per Acre) | | | | | | | 10.0 |
| **Large Site Industrial Land Demand (Acres)** | | | | | | | **463** |

Source: Oregon Employment Department and E. D. Hovee & Company, LLC. OED job growth rates for 2010-20 are from the agency's most recent published forecast of early 2012. A new regional employment forecast is anticipated to be released in 2014. Industrial employment densities are consistent with assumptions used with *Envision Eugene* land forecasting.

# END NOTES

[1] Information utilized with this regional economic analysis has been obtained from sources generally deemed to be reliable. However, EDH does not guarantee the accuracy of information from third party sources. All information is subject to change without notice.

The findings and recommendations of this report are those of the authors. They should not be construed as representing the opinion of any other party prior to their express consent, whether in whole or part.

[2] Coburg's 2003-04 Comprehensive Plan process identified the need for Urban Growth Boundary (UGB) expansion to serve both residential and employment needs. However, after adding 30 acres for commercial use, further UGB expansion implementation was halted due to a multi-year delay in developing Coburg's wastewater system.

[3] Quotation is from the *2010 Coburg Urbanization Study*, page 12.

[4] *2010 Coburg Urbanization Study*, pages 11-12. The EOA portion of the study (page 139) also emphasizes the point that "the supply of buildable land is the primary constraint to significant employment growth in Coburg, and ultimately the employment capacity of existing buildable land (plus expansion and redevelopment) determines the maximum amount of employment growth Coburg can expect over the forecast period."

[5] The Urbanization Study initially identified 65 acres of Study Area 8 with what was described as Employment Expansion Alternative 3 – as the northern portion of the full 106 acre parcel. The final recommendation was to reconfigure this Study Area to include the remaining 40+ acres at the southerly portion of the parcel which otherwise would become separated with little alternative potential for continuation of the current use.

[6] *2010 Coburg Urbanization Study*, page 206.

[7] Eastside properties are on a private water system; the City has no financially constrained plan to provide municipal water at present. Electric power is provided by the Emerald People's Utility District (EPUD).

[8] Specific language accompanying Table 2.3 of the 2010 Urbanization Study states that: "Due to the closure of Monaco Coach, the 2010 adjusted (forecast) total presented in this table is not expected to be realized, the figure is maintained in the analysis because the long-term forecast is expected to be realized, and therefore the calculation of employment change requires a starting figure reflecting Coburg's existing employment capacity and the very likely reuse of the Monaco site."

[9] Because OED updates its regional job forecasts on a 2-year cycle, the next updated projection can be expected in 2014 covering a 2012-22 forecast horizon.

[10] OEA's December 2013 *Oregon Economic and Revenue Forecast* indicates that: "Since 2000, the metropolitan areas of the state – for these purposes, Corvallis, Eugene, Medford, Portland, and Salem, have become more polarized overall than the non-metro areas." Across the western states of the U.S., middle-wage jobs were lost with all net job growth occurring in either high- or low-wage jobs since 2000.

[11] Industry concentration is assessed by an economic measure known as a "location quotient." This compares the proportion of employment within a particular economic sector for a subarea of the state (such as the Willamette Valley) to the proportion of employment within that sector statewide.

[12] The Springfield EOA also identified a deficiency of about 190 acres requiring 11 additional commercial and mixed sites that could be accommodated within the existing UGB.

[13] ECONorthwest, et al, *Eugene Comprehensive Lands Assessment: Pre-Policy Analysis*, prepared for the City of Eugene Planning and Development Department, June 2010.

[14] The document *Land for Industrial Jobs*, an Envision Eugene – Technical Summary, compares Eugene's recommended buildable industrial land supply of 10+ acre sites (after UGB expansion) with Salem's existing industrial supply. An item of importance for Salem's improved industrial competitiveness has been location of much of the large site inventory on I-5, as highlighted by the Mill Creek Corporate Center, a 515-acre master planned industrial park. Marketed as the largest "Shovel Ready" Industrial Site along Interstate 5 in Oregon, Washington and Northern California, Mill Creek is located at the I-5 / Oregon Highway 22 interchange.

The 2009 Salem-Keizer EOA prepared by ECONorthwest indicates that large and medium industrial/flex sites should be located less than 5 miles from I-5. The distance from Clear Lake Road (the southernmost point of Eugene's proposed UGB expansion area) to I-5 via Beltline Route 569 is more than 7 miles which falls outside the preferred range of many industrial users.

[15] Shrinkage of Oregon's RV industry has unfolded beginning with financial collapse and subsequent economic recession of the latter part of the 2000-10 decade. Monaco layoffs included 450 jobs lost in 2011 and the subsequent marketing of the site to a new user. The French applesauce maker Materne considered reuse of the site for a facility that could employ 240 jobs but decided in December 2013 not to pursue an Oregon facility further.

One issue associated with competitiveness of the Coburg industrial property may be the need for the fifth stage of the City's new sewage collection and treatment system to be expanded, at an estimated cost of just under $2 million. This is particularly the case for food processing industries. Also noted is the need for water supply and storage capacity upgrades for a food processing user of this type. As reported by *The Register Guard*, "Applesauce maker is going elsewhere," December 19, 2013.

Whether or not a particular business decides to locate in Coburg, a continuing commitment for active public-private marketing including consideration of critical infrastructure needs and incentives will remain pivotal to facilitate re-use of the site and recovery of lost jobs.

[16] The Lane County job forecasts might be considered for further adjustment: a) once the 2014 OED employment forecasts are available; and/or b) to account for OEA's expectation of greater industrial employment than has been projected with OED forecasts to date.

[17] Per the Salem-Keizer EOA, high value vacant/redevelopable sites constitute 50% of the industrial and nearly 40% of the combined industrial-commercial vacant suitable inventory for the Salem-Keizer metro area. These sites are located directly on the I-5 freeway corridor or within 1.5 miles of the freeway.

# Findings in Support of Ordinance A-199-G

The 2010 Urbanization Study Update, as modified by the 2014 Addendum, supported the conclusion of the 2004 Urbanization Study that the City needed one or two 20+ acre parcels to meet the City's long-term employment land needs based on target industries' site specific characteristics for which the City has a competitive advantage, but for which there are no parcels or clusters of parcels within the existing urban growth boundary ("UGB") that can meet the identified need. The 2010 Urbanization Study Update further concluded that the City had sufficient vacant or redevelopable employment land to accommodate its employment needs for commercial uses and smaller site industrial uses.

The 2014 Addendum drew upon a 2014 Regional Economic Analysis (REA) to conclude that there is a further regional economic need for large, 20+ acre industrial parcels in close proximity to major transportation facilities, which the City could target due to its competitive advantages. While the 2014 addendum did not recommend a specific percentage of the regional need that the City should target, it provided the City and County decision makers the data needed to determine the percentage of regional employment growth the City could reasonably expect to capture.

The City and County concluded that the approximately 106-acre parcel identified as Study Area 8 was sufficient to accommodate the City's employment land needs in addition to a reasonable percentage of the regional large-lot industrial need the City could reasonably expect to capture. Members of the governing body expressly stated that 15% capture of the regional need, if not more, would be reasonable for the City. Using the methodology employed in the Regional Economic Analysis Supplement and below, that decision represented approximately 6% capture of the regional need for large lot industrial sites. Consequently, the two governing bodies adopted ordinances that, among other things, expanded the City's UGB to include Study Area 8 for employment land purposes and imposed conditions of approval to ensure the large-lot characteristics of the property is maintained.

Those decisions were appealed to LUBA and then to the Court of Appeals, which affirmed LUBA's decision.

LUBA remanded the City and County's initial urban growth boundary decision. Regarding the employment land determination, LUBA concluded that the REA utilized the wrong jobs base data (from 2006) instead of the "current job numbers" (from 2012) as required by OAR 660-024-0040(9). LUBA and the court denied several other challenges to the methodology employed by the City and County. Those appellate review bodies concluded that the City and County properly applied the remaining safe harbor provisions of OAR 660-024-0040(9), which does not preclude implementing other types of employment land considerations, and did not "double count" large-lot industrial jobs in the REA analysis. The double counting issue raised concerns that the REA was re-counting city population based jobs to increase the acreage needed for expansion. LUBA and the court recognized the different sources for job numbers upon which the EOA and REA are based and concluded they do not show evidence of a double counting of jobs.

After reviewing the Regional Economic Analysis Supplement prepared in response to LUBA's remand, and based upon the evidence in the record and these findings, the Coburg City Council concludes that the inclusion of the 106-acre Study Area 8 into the City's urban growth boundary is sufficient to accommodate the City's demonstrated employment land need for one to two 20+ acre parcels (40 acres), based on site specific characteristics, in addition to a reasonable percentage of the regional large-lot industrial need the City can reasonably expect to capture. Depending upon the base numbers used, the decision represents capturing approximately 11% (Forecast 2) to 15% (Forecast 3) of the demonstrated regional need.

The findings below address the relevant approval criteria.

## STATEWIDE PLANNING GOALS

> **Goal 1 - Citizen Involvement**. To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

The proposal is consistent with Statewide Planning Goal 1 because the process used to develop and adopt this amendment provided the opportunity for citizens to be involved in all phases of the planning process. The following processes were provided by the City of Coburg:

- The citizen involvement program provides for widespread citizen involvement. The citizen involvement program involves a cross-section of affected citizens in all phases of the planning process and includes the Planning Commission, the officially recognized committee for citizen involvement (CCI) that makes recommendations to the Coburg City Council.

- Effective communication between citizens and elected and appointed officials in the project is provided through open houses, work sessions, and public hearings, all open to the public, at which public input is sought and heard.

- Citizens are provided the opportunity to be involved in all phases of the planning process, including preparation of the proposed Comprehensive Plan and Code amendments.

- Technical information is explained in staff reports and PowerPoint presentations so that information necessary reach policy decisions is available in a simplified, understandable form. City staff provided assistance to interpret and effectively use technical information. A copy of all technical information is available on the City and/or project web site as well as at City Hall offices.

- Citizens receive a response from policy-makers in the form of written minutes of all public hearings and meetings which are retained and made available for public assessment and include the rationale used to reach decisions on the proposal.

- The City of Coburg provided legal notice for the Planning Commission proceedings conducted.

- On March 27, 2012. The Coburg Planning Commission held a public hearing that was continued to April 10, 2012.

- The City of Coburg provided legal notice for the City Council proceedings conducted.

- The City Council held public hearings prior to adopting Ordinance No. A-199-D on September 12, 2014.

- Lane County followed processes set forth in the findings for Lane County Ordinance No. PA 1315.

- Following remand from the Court of Appeals, the City Council opted to bifurcate the residential and employment land need components and move forward with UGB expansion only for the employment land needs.

- The City of Coburg provided legal notice for the City Council's proceedings on remand.

- On July 11, 2017, the City Council held a public hearing that was continued to September 12, 2017.

- The City Council continued a public hearing prior to adopting Ordinance No. A-199-F on September 12, 2017.

- The City Council adopted revised findings and Ordinance No. A-199-G on XXDATEXX.

The adoption of the Coburg Urbanization Study Update and changes to the Coburg Comprehensive Plan constitutes a plan amendment that is subject to the public notification and hearing processes of the Coburg Zoning Code. As described above, the public involvement requirements of the code have been met and opportunity for public involvement has been afforded at each phase of the process. The amendment is therefore consistent with statewide planning Goal 1.

> **Goal 2 - Land Use Planning:** To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The Coburg Comprehensive Plan was acknowledged by the Land Conservation and Development Commission (LCDC) as complying with the statewide planning goals. The Coburg Zoning Code Article X.XIII, also acknowledged by LCDC, specifies the means by which the Coburg Comprehensive Plan may be amended. Notice of the public hearings and pending adoption of the Coburg Urbanization Study Update and changes to the Coburg Comprehensive Plan were mailed to the Oregon Department of Land Conservation and Development (DLCD) on October 14, 2014. The adoption process follows the procedures outlined in the Coburg Zoning Code and these findings and evidence in the record provide an adequate factual basis for action. The amendment therefore conforms to the established land use planning process and framework consistent with Goal 2.

**Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources:** To conserve open space and protect natural and scenic resources.

The changes to the Coburg Comprehensive Plan are consistent with this goal because the Coburg Urbanization Study Update required a review of environmental impacts on the selected study areas, particularly if they impact Goal 5 resource sites.

**Goal 6 - Air, Water and Land Resources Quality:** To maintain and improve the quality of the air, water and land resources of the state.

The changes to the Coburg Comprehensive Plan are consistent with this goal because these resources were considered and implemented through the application of the third locational factor of Statewide Planning Goal 14 in the 2010 Urbanization Study Update. Coburg Comprehensive Plan policies also support protection of the resources identified under this goal.

**Goal 7 – Areas Subject to Natural Disasters and Hazards:** Requires plans and policies that protect the public from natural disasters such as landslides, earthquakes and related hazards, tsunamis, coastal erosion, and wildfires.

The City of Coburg is located on flat ground surrounded by agricultural lands. The only applicable potential for natural disaster comes from flooding, and this factor has been considered in the evaluation and weighing of the different study areas considered for expansion of the urban growth boundary. The study area selected for inclusion into the expanded urban growth boundary is not within any identified natural disaster or hazard areas. In addition, the City has land use regulations regarding development in the floodplain that have been acknowledged by LCDC. For these reasons, the changes to the Coburg Comprehensive Plan are consistent with this goal.

**Goal 8 - Recreational Needs:** To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

The Urbanization Study Update did not identify an additional need for recreational land and therefore the proposed expansion of the urban growth boundary does not include land for this purpose. Because no additional recreational needs were identified, the proposal is consistent with Goal 8.

**Goal 9 – Economic Development:** Requires the provision of adequate opportunities for a variety of economic activities vital to public health, welfare and prosperity.

The changes to the Coburg Comprehensive Plan are consistent with this goal because it accommodates the demonstrated local employment land need, recognizes a regional need for large–scale, light industrial land and by expanding the urban growth boundary to help satisfy a portion of this need. The adopting ordinance contains a provision that will ensure that the lot sizes in the newly included area will remain large enough to serve the identified local and regional employment land need for large-lot industrial sites of 20 acres or larger.

**Goal 10- Housing:** requires provision for the housing needs of citizens of the state.

The Urbanization Study Update identifies a need for more low-, medium- and high-density residential land. These changes to the Coburg Comprehensive Plan represent the employment land component of the City's bifurcated urban growth boundary expansion process. The residential lands component which will proceed along a separate approval track. The proposed urban growth boundary expansion is in an area identified by the Urbanization Study Update as appropriate for employment land use, thereby preserving for housing those areas identified as appropriate for residential use. These changes are consistent with the City's approach to addressing both its employment and housing needs, and is therefore consistent with this goal.

**Goal 11 - Public Facilities and Services:** 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.

The proposal is consistent with Statewide Planning Goal 11 because the Urbanization Study Update specifically considered serviceability in determining which study areas were most appropriate to bring into the current urban growth boundary. Consistent with this goal and public sentiment, the proposed expansion of the urban growth boundary helps preserve a compact urban growth form, minimizing the expensive extension of urban services.

**Goal 12 - Transportation:** To provide and encourage a safe, convenient and economic transportation system.

The changes to the Coburg Comprehensive Plan are consistent with this goal. The proposed addition of employment land is located to the east of I-5 and is therefore consistent with the Coburg-ODOT Interchange Area Management Plan (IAMP) and the city's TSP.

**Goal 13 - Energy:** To conserve energy.

The changes to the Coburg Comprehensive Plan are consistent with this goal in that the proposed expansion of the urban growth boundary maintains the city's compact urban growth form by locating adjacent to existing parts of the city east of I-5 and by providing convenient access to a major transportation corridor.

**Goal 14 - Urbanization:** To provide for an orderly and efficient transition from rural to urban land use.

The changes to the Coburg Comprehensive Plan are consistent with this goal as they implement a key component of the Coburg Urbanization study that updates the city's buildable lands inventory and applies Goal 14, OAR Chapter 660, Division 24, and ORS 197.298. A more complete Goal 14 analysis follows below.

**Conclusion**

Based upon the preceding findings, it can be concluded that the proposed amendments to the Coburg Comprehensive Plan and the Coburg Urbanization Study Update is consistent with the requirements

set forth in the applicable approval criteria. Therefore, the evidence and findings support adoption of the proposal.

## STATEWIDE PLANNING GOAL 14

**Statewide Planning Goal 14 provides that the establishment and change of urban growth boundaries shall be based on the following:**

***(1) Demonstrated need to accommodate long range urban population, consistent with a 20–year population forecast coordinated with affected local governments; and***

This requirement has been met based upon the following:

- The Coburg Urbanization Study (2010) used Lane County's Coordinated Population Forecast to estimate a twenty-year planning period.

- The Lane County Coordinated Population Forecast provided a population forecast for Coburg in five-year increments.

- The population forecast anticipated growth due to the construction of Coburg's first wastewater system. Due to the 2008 recession and a de facto growth moratorium because of a lack of a community wastewater system the City's actual population (based on the 2010 Census and PSU's estimate for 2013) fell below the Lane County Coordinated Population Forecast for the period between 2010 and 2015. (Table A.3, Urbanization Study – Revised).

- The City's wastewater system has been completed. In the final months prior to completing, and since that time, Coburg has experienced significant commercial development and residential development consistent with the growth rate forecast to occur.

- After adjusting for the lower than average growth rate that begins around the time the wastewater system was completed (now 2015 instead of 2010), the anticipated growth rate appears to be consistent with that of the coordinated population forecast except that it begins five years later. Thus, the expected population growth rate of 7.88 percent that was supposed to occur between 2015 and 2020 should now occur between 2020 and 2025, and so forth.

***(2) Demonstrated need for housing, employment opportunities, livability or uses such as public facilities, streets and roads, schools, parks or open space, or any combination of the need categories in this subsection (2).***

***Prior to expanding an urban growth boundary, local governments shall demonstrate that needs cannot reasonably be accommodated on land already inside the urban growth boundary.***

<u>Employment Opportunities</u>

- The Economic Opportunities Analysis of the 2010 Urbanization Study states that Coburg's local employment land need is for one or two parcels of at least 20 acres in size. The Regional Economic Analysis and Supplement demonstrate a regional need for 20 acre or larger sites (20 to

50 acres or "20+" acres) and concludes that the City has competitive advantages that should enable the City to capture a reasonable percentage of the demonstrated regional need for large-lot industrial sites.

- All of the exception lands within the 11 study areas are already divided into parcels significantly smaller than 20 acres in size and are therefore inadequate to accommodate the employment land need pursuant to ORS 197.298(3)(a), because specific types of identified employment land needs cannot be reasonably accommodated on the exception land parcels.

- The soils classifications on Study Areas 7, 8 and 9 are of the lowest capability, as measured by the capability classification system, of all the study areas. (See priorities discussion under ORS 197.298 for why these sites are considered first.) Study Area 8 has the lowest capability soils of the three sites. Goal 14 requires weighing four locational factors to determine which of similar study areas are more suitable for inclusion in the UGB. Table 7.6 of the 2010 Urbanization Study summarizes the analysis of these four factors. Based upon the analysis, Study Area 7 scores 11 points, Study Area 8 scores 12 points, and Study Area 9 scores only 7 points.

- Based upon the evidence in the record, the prior decision concluded that Study Area 8 should be the first area targeted to meet employment land needs, and that the entire 106 acres is sufficient to meet the City's needs and a reasonable percentage of the regional need.

- The prior analysis leading to the selection of Study Area 8 has since been validated by the expression of interest in the development of a portion of that property. This expanded employment opportunity is exactly the type of regional need opportunity that the analysis indicated that Coburg is well positioned to capture.

**Goal 14 also requires that the location of the urban growth boundary and changes to the boundary shall be determined by evaluating alternative boundary locations consistent with ORS 197.298 and with consideration of four factors.**

***ORS 197.298***

***Priority of land to be included within urban growth boundary.***

***(1) In addition to any requirements established by rule addressing urbanization, land may not be included within an urban growth boundary of Metro except under the following priorities:***

***(a) First priority is land that is designated urban reserve land under ORS 195.145, rule or metropolitan service district action plan.***

The Coburg Comprehensive Plan does not designate any lands as urban reserve.

**(b) If land under paragraph (a) of this subsection is inadequate to accommodate the amount of land needed, second priority is land adjacent to an urban growth boundary that is identified in an acknowledged comprehensive plan as an exception area or nonresource land. Second priority may include resource land**

**that is completely surrounded by exception areas unless such resource land is high-value farmland as described in ORS 215.710.**

Economic Opportunity Needs

The Economic Opportunities Analysis of the 2010 Urbanization Study found that Coburg's local employment land need is for one or two parcels of at least 20 acres in size. The Regional Economic Analysis and the REA Supplement found it reasonable for the City to attempt to capture upwards of 20% of the regional need for large-site industrial uses due to the City's competitive advantage of proximity to I-5, and upwards of 30% or more regional capture should other large jurisdictions decline to pursue regional economic opportunities in their UGB planning efforts. Both the local and regional need identify only a need for industrial sites of 20 acres or larger.

Furthermore, no properties currently within the Coburg UGB are suitable to meet the demonstrated identified need. The only parcels that come near to approaching this need are the properties north of Pearl Street that are zoned highway commercial. These properties barely meet the minimum needed size, would exclude larger target uses, and would remove a highway commercial site from the City's available inventory, which would need to be met elsewhere. Furthermore, access to these parcels is limited and development for large-site industrial purposes west of I-5 would be contrary to the Coburg-ODOT Interchange Area Management Plan (IAMP). Development of these parcels with industrial uses would also adversely affect uses on the adjacent properties, specifically including the newly developed Serenity Lane facility across Industrial Way.

Turning to the exception areas, Map 11 of the 2010 Urbanization Study shows "built upon and developed" exception areas (designated as Rural Residential) and natural resource areas (zoned either exclusive farm use or impacted forest) located adjacent to the Coburg Urban Growth Boundary. All of these exception areas are included within one of the 11 study areas, the largest block of which being located in Study Area 5, northwest of the Coburg Urban Growth Boundary, in the Stallings Lane area.

Study Area 1 to the south of the UGB includes a small 4.4 acre, triangle shaped parcel of exception land. The size and configuration of that land is inadequate to accommodate the identified need. Further, it cannot be combined with Study Area 1's resource land to the immediate south, due to its location within flood zone A (the 100-year floodplain). See Map 12: Study Areas with Exception & Constrained Lands, 2010 Urbanization Study. The exception lands within Study Area 1 are inadequate to accommodate the identified employment land need.

Study Area 2 to the south of the UGB includes 21 acres of exception land in nearly a dozen parcels, several of which are developed with residences. Most of this acreage is constrained by flood zone A that, even if the parcels could be combined efficiently for employment use, make these parcels inadequate to meet the identified employment land need.

Study Area 4 contains 17 acres of exception land. Similar to Study Area 2, the exception area consists of quite a number of small, residentially developed parcels, the majority of which lie

within flood zone A. Consequently, the exception areas from Study Area 4 are inadequate to meet the identified employment land need.

Study Area 5 consists of 56 parcels, with 172.3 acres of rural residential exception area. There are 39 residences located on the residential areas, with 43 dwelling units in total for the study area. Many of the parcels are in agricultural use, with the residence located near Stallings Lane and the remainder of the parcel intensively farmed. The need to consolidate multiple parcels to create suitable sites, which is a discouraging factor for the target employment sectors, the existing residential development and the fact that intense development at Study Area 5 would mandate transportation improvements at key intersections within the existing UGB, each make Study Area 5 inadequate to accommodate the identified employment land need.

Study Area 11 includes 18 acres of intensely developed rural residential land near the northernmost part of the City. Due to the dense parcelization, existing development, and total acreage available, the study area is inadequate to accommodate the identified employment land need.

In summary, none of the exception lands within the study areas are adequate for industrial development as all are already divided into parcels significantly smaller than 20 acres, and most have other constraints that make them inadequate to accommodate the demonstrated employment land need.

***(c) If land under paragraphs (a) and (b) of this subsection is inadequate to accommodate the amount of land needed, third priority is land designated as marginal land pursuant to ORS 197.247 (1991 Edition).***

There is no land adjacent to the Coburg Urban Growth Boundary that has been designated as marginal land.

***(d) If land under paragraphs (a) to (c) of this subsection is inadequate to accommodate the amount of land needed, fourth priority is land designated in an acknowledged comprehensive plan for agriculture or forestry, or both.***

Because the employment land need must be met by land under the fourth priority (ORS 197.298(1)(d)), and ORS 197.298(2) provides the standard by which to evaluate the suitability of these fourth priority lands, the employment lands analysis is provided in the findings immediately below.

***(2) Higher priority shall be given to land of lower capability as measured by the capability classification system or by cubic foot site class, whichever is appropriate for the current use.***

The 2010 Urbanization Study generally evaluated Study Areas 1, 6, 7, 8, 9 and 10 as having the best potential for employment land use. These areas are located immediately adjacent to existing lands designated and zoned for highway commercial and therefore represent the most logical location for expansion of employment land consistent with the current urban form.

Study Areas 1, 6, and 10 are located on the west side of I-5 and consist predominantly of Class I and II agricultural soils. Study Areas 7, 8, and 9 are located on the east side of I-5 and consist predominantly of Class IV and VI soils, with a minor percentage of either Class II or III soils on each parcel. Pursuant to ORS 197.298(2), a higher priority must be given to Study Areas 7, 8 and 9.

Map 13 of the Coburg Urbanization Study shows the soil capability classes of each of the subject areas. It is evident from that map that Study Area 8 contains the highest percentage of Class VI soils, with a fairly large percentage of Class IV soils and a very small percentage of Class III soils. Study Area 8 has the lowest soils capability of the study areas. Study Area 9 appears to be next under this standard. It contains a moderate amount of both Class VI and higher Class III soils, but predominantly consists of Class IV soils. Study Area 7 consists almost entirely of Class IV soils with a small area of Class II soils and, under this standard, ranks last on the priority scheme.

Consistent with this requirement priority should first be given to Study Area 8, then to Study Area 9, and then to Study Area 7.

***(3) Land of lower priority under subsection (1) of this section may be included in an urban growth boundary if land of higher priority is found to be inadequate to accommodate the amount of land estimated in subsection (1) of this section for one or more of the following reasons:***

- ***(a) Specific types of identified land needs cannot be reasonably accommodated on higher priority lands;***
- ***(b) Future urban services could not reasonably be provided to the higher priority lands due to topographical or other physical constraints; or***
- ***(c) Maximum efficiency of land uses within a proposed urban growth boundary requires inclusion of lower priority lands in order to include or to provide services to higher priority lands***.

As explained in the Economic Opportunities Analysis, the City of Coburg has an employment land need only for large-site industrial employment land. The City is able to accommodate its commercial and other industrial land needs within the existing UGB. However, there are no available large sites within the existing UGB and the buildable lands inventory identified no clusters of adjacent available land that could be combined to meet any of the identified need for large-lot industrial sites. As demonstrated by the high number of existing large site highway commercial and industrial uses on the west side of I-5, particularly when viewed in light of the comparatively low population base within the City itself, the City has been able to successfully capitalize on its identified competitive advantages to attract large-lot employers to locate in the City. Thus, the City's need for additional large sites is historically well established. These employment uses tend to prefer single ownership lands that can offer flexibility in site sizes, and relatively flat sites that are close to major transportation routes (preferably with proximate access to the interstate highway system).

Similarly, the Regional Economic Analysis identified large-lot industrial uses that are dependent upon a location close to major transportation corridors as the only unmet regional need. These target employers desire the same site characteristics identified above, but are even more unwilling to engage with multiple property owners to secure a site because, with a regional focus, they can simply locate in another jurisdiction in the region that has an available site under single ownership.

The above factors directly and appropriately invoke ORS 197.298(3)(a) as a basis to exclude lands of a higher priority because they cannot reasonably accommodate the site specific requirements of the target industries for which there is a demonstrated need.

EMPLOYMENT LAND ALTERNATIVES

For Coburg to adopt the preferred employment land alternative, it must make appropriate findings pursuant to ORS 197.298 that justify bringing in resource land instead of incorporating alternative exception lands into the urban growth boundary to satisfy the need for employment land.

Regarding employment lands, in addition to the analysis provided above, Coburg finds that all exception lands within the Study Areas are inadequate to accommodate the type of employment land need for the following reasons:

- The Economic Opportunities Analysis states that Coburg's employment land need is for one or two industrial parcels of at least 20 acres in size, and the Regional Economic Analysis indicates that regional-based industrial opportunities exist for parcels of 20 acres or greater in size. As discussed in more detail above, all of the exception lands within the 11 study areas are already divided into parcels significantly smaller than 20 acres in size, and are under mixed ownership. Many parcels also are encumbered with existing development and other constraints such as being located in the 100-year floodplain. Therefore, each of the existing exception land areas is inadequate to accommodate any of the large-lot employment land need pursuant to ORS 197.298(3)(a), because the specific types of identified employment land needs cannot be reasonably accommodated on the exception land parcels.

Regarding which employment lands should be further considered under the Goal 14 locational factors, in addition to the analysis provided above, Coburg finds that Study Areas 7, 8, and 9 should be considered for the following reasons:

- As discussed above, there is a fundamental difference between Study Areas 1, 6 and 10, and Study Areas 7, 8, and 9 beyond the obvious difference that each group is located on opposite sides of I-5. That difference is in the quality of the soils that make up the predominant soils types of the parcels. ORS 197.298(2) is explicit in its guidance that higher priority shall be given to land of lower capability as measured by the capability classification system. As the Coburg Urbanization Study Map 13 establishes, Study Areas 7, 8, and 9 must be considered before those other areas based solely on soils classifications. And within the three study areas, the priority based on soils capability are

Study Area 8, Study Area 9, and then Study Area 7. These three study areas contain a total of approximately 372 acres.

**FOUR LOCATIONAL FACTORS OF GOAL 14**

Once higher priority exception lands and agricultural lands with lower soil classifications are excluded, the next step in the required analysis under Goal 14 is to weigh the four locational factors within the Goal 14 text, and then determine which Study Area(s) should be included in the UGB.

Before proceeding further, it is worth discussing the amount of employment land the City needs to meet its future employment land needs. Based upon the information and analysis provided by the EOA and its log aggregation analysis, the 2010 Urbanization Study ultimately adopted findings that the City of Coburg has a surplus of land sufficient to meet all employment categories except for sites with the size and characteristics need to meet the demands for large-lot industrial uses. The 2010 Urbanization Study Update concluded that the City should add approximately one lot or tract of land consisting of 20-70 acres of land to accommodate flexibility in responding to industry employment opportunities during the planning period. This is similar to the initial 2004 assessment that one to two 20+ acre parcels are needed. For calculations purposes, the City concludes that a single lot of approximately 40 acres is sufficient to meet the need identified in the urbanization studies if combined as part of a single parcel that can accommodate a reasonable percentage of the demonstrated regional need. This conclusion that the City needs sites that can accommodate large-lot industrial uses is consistent with the OAR 660-009-0015(2) mandate to identify required site types as part of the EOA process.

The City must also consider its potential for capturing regional employment opportunities from a geographic area larger than the normal planning area. OAR 660-009-0015 strongly encourages the City to determine what percentage of regional employment growth the City can reasonably expect to capture based upon its competitive advantages and general community economic development potential. The Regional Economic Analysis and the REA Supplement provide the necessary information for this requirement.

The REA Supplement provides several forecasts, based on different OED population based numbers, with information concerning the amount of acres that would result in a 10%, 20% or 30% capture of the regional need. The REA and REA Supplement do not take into consideration any need based upon specific site characteristics assessed under OAR 660-009-0015, namely the large-lot parcel need found by the 2010 Urbanization Study Update and the 2014 Addendum to it.

The REA Supplement's Forecast 2 simply updates the original REA analysis based upon correcting the error that LUBA concludes was made in the REA. Simply put, the REA Supplement Forecast 2 calculations are based upon the 2012 jobs base for the City as opposed to the 2006 jobs base. We find that the correct calculations to use in our analysis and decision are those presented under the REA Supplement's Forecast 2. This is based upon the Court of Appeal's decision in *Zimmerman v. Land Conservation and Development Commission*, where they agreed with LCDC's conclusion that a city is not required to restart its economic

opportunities analysis each time new information becomes available and is, instead, entitled to make reasonable conclusions based on the data that was available at the time the study took place. Here, the original calculations were based on the wrong base numbers and Forecast 2 simply updates those calculations using the most recent data available at the time of the REA.

However, as a precautionary measure only, these findings also make conclusions based upon the Forecast 3 data from the REA supplement. Forecast 3 utilized the most currently available population-based job numbers (2015) for Coburg, together with the most recent 10-year updated OED regional forecast for Lane County (2014-24) available at the time the REA Supplement was prepared.

Further discussion of the Goal 14 locational factors is provided below.

**The following are the four Goal 14 factors that must be considered in modifying an existing urban growth boundary:**

***(1) Efficient accommodation of identified land needs;***

This factor is generally interpreted to equate "efficiency" with being "contiguous or adjacent" to existing development. Following the priorities analysis required by statute and Goal 14, and mirroring the process followed by the 2004 Urbanization Study, the Coburg urbanization team developed 11 study areas. The actual expansion alternatives may include portions of one or more study areas as deemed appropriate.

Coburg's Urban Growth Boundary has a perimeter of approximately 7.5 miles. The study areas constitute almost all lands adjacent to the current UGB (see Map 10). The study areas are generally numbered in a clockwise direction, beginning with Study Area 1, located along the southern portion of the current Coburg Urban Growth Boundary and continuing around its perimeter. The study areas utilized for this expansion analysis are identical, for the most part, to the study areas utilized in the 2004 Urbanization Study. The only difference is the addition of Study Areas 9, 10 and 11, and the reconfiguration of Study Area 8 to account for lands which have been added to Coburg's UGB since 2004.

The following factors were considered in developing logical study area boundaries:

- Property lines/ownership patterns, based upon Lane County Assessor Map records of the tax lot boundaries.
- Natural Features, such as wetlands, streams, and 100-year floodplains.
- Streets and roads.
- Tax lots reported by the County Assessor records as "Unimproved."
- Fundamental understanding of water and sanitary sewer service infrastructure.

Not all of the area adjacent to the existing UGB is included in the study areas. An initial review of the land surrounding the UGB identified areas adjacent to the UGB that could be excluded from consideration for expansion. State OAR 660-024-0060(5) provides local governments the authority to guide the selection of expansion alternatives through City policies specifying certain land characteristics as necessary for land to be suitable for expansion.

The identification of study areas included considerations of both ORS Priorities as well as locally specified characteristics or "local criteria" (as they are referred to throughout the 2010 Urbanization Study). Lands to the northeast of Coburg are the only lands excluded entirely from consideration within a study area. These areas were not included based on a local priority for expansion that *"provides the best opportunity for developing an efficient urban form."* The isolated nature of the lands adjacent to the northeast corner of Coburg was viewed as sufficient justification for disregarding their inclusion within a study area.

Economic Opportunity Needs

Coburg's existing highway commercial and industrial land is located adjacent to I–5, and proximity to this area and to I-5 remain the most efficient and logical areas of focus to meet future economic opportunity needs.

Study Areas 1, 6, 7, 8, 9 and 10 are located immediately adjacent or proximate to existing lands designated and zoned for highway commercial and industrial use, and to I-5. Study Areas 1, 6, and 10 are excluded from further employment land consideration because of their high value agricultural soils as mandated by ORS 197.298(2).

Of the three remaining areas, Study Area 8 represents the most "efficient" accommodation of identified land needs because of its sharing of a major property boundary with the existing urban growth boundary. Study Area 9 shares a small boundary with the existing urban growth boundary on the northwest corner of the parcel. Study Area 9 also potentially has a secondary road access to the site. Study Area 7 shares no direct boundary with the urban growth boundary, although it is located directly across I-5 from a major employment area for the City and across Van Duyn Street at the southwest corner of the study area.

***(2) Orderly and economic provision of public facilities and services;***

The major development constraint regarding properties located east of I-5, which includes all 3 Study Areas, is extending municipal services across I-5. Water, sewer, electricity, and storm drainage would all probably require boring under the interstate. A pump station might be required to move sewage from any of the areas to the treatment plant on the north end of Coburg. Transportation access to all 3 sites would come from Van Duyn Road – presently a County road. Study Area 9 also has access via Selby Way, although the condition of the bridge crossing I-5 is uncertain with respect to intensive truck traffic.

With the above in mind, Study Area 8 is adjacent to lands east of I-5 already within the UGB and for which the City has an obligation to provide service. It is also adjacent to Van Duyn Road near where a proposed wastewater sewer connection is planned to be installed. Consequently, Study Area 8 is the best site from the perspective of the orderly and economic provision of public facilities and services of the three subject sites. Study Area 7 benefits somewhat from its location directly across Van Duyn Road near the existing urban growth boundary and the proposed sewer connector. This savings is likely to be offset somewhat by the cost of providing services over the distances required to serve the entire site from its southwest corner. Study Area

9 represents the least orderly and economic provision of public facilities and services. Not only must it wait until public facilities and services are provided throughout the existing urban growth boundary area it too must extend those services throughout the length of the parcel from its northwest corner. Also, it is the parcel furthest from the planned wastewater sewer connection on Van Duyn Road.

***(3) Comparative environmental, energy, economic and social consequences; and***

**Study Area 7**

Economic consequences. Study Area 7, like each of the other study areas below, is among the most difficult to serve due to its location east of I-5. These are also among the most expensive alternatives because water, sewer, electricity, and storm drainage would all probably require boring under the Interstate. In addition, improvements to the interchange may be necessary to address development not included in the IAMP review. While proximate to Coburg's existing UGB, Study Area 7 is located across Van Duyn Road from that portion of the City's urban growth boundary east of I-5. This, in addition to the fact that public facilities and services will enter the Study Area from the southwest corner, will further increase the cost of providing services to the property.

Generally Study Area 7 is fairly well suited for the needed employment land uses. The 240-acre site, while consisting of several parcels, is all under a single ownership. It is generally flat and normal shaped. However, portions of the northern and western parts of the study area are constrained by floodplain and by wetlands. The economic consequences of removing the ranching activity that occurs on the property would likely be outweighed by the potential economic gains of utilizing the land for industrial purposes.

It should be noted that the 2004 Urbanization Study recommended that the City consider Study Areas 7 and 8 for employment growth and to take steps to preserve these areas for future employment growth.

Social consequences. Historically, there has been public resistance in the past from City citizens to the expansion of Coburg's UGB east of I-5. This has been resolved somewhat by the recent planning efforts that indicated a public desire to separate residential from industrial and large site commercial areas as the City grows, and the targeting of the latter uses to the east of I-5. From this perspective, expansion into Study Area 7 will allow for both the growth of the community, and the preservation of appropriate separation and buffers between the City's industrial and residential uses. However, additional social resistance could come from such a large area of land in agricultural use, adjacent to other lands in farm use, being converted to economic use.

Environmental consequences. Study Area 7 consists almost entirely of Class IV soils, with very small portions of Class II and Class VI soils. Both from a percentage and size perspective, Study Area 7 contains the highest quality of mapped soils of the three study areas. As discussed above, under the priority scheme set forth under ORS 197.298(2), Study Area 7 should only be brought into the urban growth boundary if the other sites are inadequate to accommodate the amount of employment land needed by the City.

Study Area 7 also has the largest areas of mapped wetlands and land within the 100-year flood plain of the three study areas. (See Coburg Urbanization Study, Map 12: Study Areas with Exception & Constrained Lands). However, given the modest size and locations of these environmental constraints along with the overall size of Study Area 7, it is likely that the majority of the Subject Area could be successfully developed without adversely impacting these resources.

Energy Consequences. Similar to the other study areas, Study Area 7 will require the full extension of all public services and facilities into the site, with the corresponding energy consequences that flows from the additional development. Access to the site will be from along Van Duyn Road, across from Study Area 8. Consequently, it has a significant energy savings in transportation access to I-5 over Study Area 9. However, unlike Study Area 8, there is no planned road to run along the length of the study area from which to access the interior of the site, so the site will have to incur the costs and energy expenditures to develop the internal transportation network on its own.

Study Area 7 also has a similar energy benefit for infrastructure development over Study Area 9 because of its proximity to the planned wastewater sewer connector and likely extension of public facilities and services along East Pearl Street/Van Duyn Road.

**Study Area 8**

Economic consequences. Like Study Area 7, Study Area 8 is among the most difficult to service due to its location east of I- 5. It shares the same sub-surface boring and IAMP concerns identified above for Study Area 7.

It should be noted that Study Area 8 is directly adjacent to the only portion of Coburg's existing UGB east of I–5. The entire site consists of one parcel with one use (a cattle ranch). The acreage belongs to the same ranch operation occupying Study Area 7. Study Area 8 is viewed by the City as having prime employment potential due to the property's substantial size, level elevation, normal shape and lack of complicating environmental factors. The economic consequences of the reduction of the ranching activities would likely be outweighed by potential economic gains of utilizing the land for industrial purposes. Additionally, the economic opportunities for this area east of I–5 has the potential to outweigh the negative economic consequence of expansion into the area such as the cost of extending services due to it being adjacent to the existing UGB.

It is also noted that the 2004 Urbanization Study recommended that the City consider Study Areas 7 and 8 for employment growth and to take steps to preserve these areas for future employment growth.

Social consequences. Because Study Area 8 is separated from the other ranch properties to the north by Van Duyn Road and to the South by Selby Way, and is surrounded by other nonresource uses, the owners are more amenable to its inclusion than Study Area 7. However, as noted, there has historically been public resistance in the past to the expansion of Coburg's UGB east of I-5, which again has been resolved somewhat recently by planning efforts. Study Area 8

is directly adjacent to a number of properties under various ownership and uses, including a few residents in the rural areas east of the interstate. Again, correspondence with property owners has suggested a willingness on their part to entertain ideas about expansion near their property. Expansion east into Study Area 8 will allow for both the growth of the community, and the preservation of appropriate separation and buffers between the City's industrial and residential uses.

Environmental consequences. The vast majority of the acreage in Study Area 8 consists of Class IV or VI soils. These soils are of the lowest values that are mapped in the study areas. Study Area 8 has the lowest value (worst quality) soils overall of any other study area. Area 8 also contains no mapped wetlands, or floodplain areas while Study Areas 7 and 9 both have mapped wetlands.

Energy consequences. Transportation access to the site would come from Van Duyn Road—a County owned extension of Pearl Street. Economic activity is undertaken more efficiently in areas nearest to transportation corridors such as I–5. In this respect expansion into this study area has positive energy consequences. This study area is generally more favorable than lands north of Van Duyn (Study Area 7) largely due to the fact that a frontage road is already planned to serve properties within the existing urban growth boundary south and east of the interchange and because it is already separated from other like uses (Area 7) to the north by Van Duyn. Areas north of Van Duyn do have the benefit of greater separation from existing residential uses east of the interstate, and freeway frontage (exposure), but in the end Study Area 8 seems better suited to the need overall.

**Study Area 9**

Economic Consequences. Study Area 9 joins Areas 7 and 8 in being the most expensive areas to extend services due to its location east of I-5. Most significant to Study Area 9's profile is that the area abuts a rare crossing and connection to areas of Coburg east of I-5. It is also noted, however, that the condition of the bridge is not immediately known. Expensive repairs may be necessary if the bridge is not in proper condition, or does not meet required specifications for industry related truck traffic. Further it seems unlikely to present a more favorable access to I-5 than from the east, and may violate the IAMP restrictions on new traffic approaching the intersection from the west.

Although Study Area 9 does not share the access advantages of Study Areas 7 and 8, it is in very close proximity to I-5 and is connected to sections of existing industrial land within Coburg via Reed Road/Selby Way. Worth noting is that Selby Way bisects the western end of the property which would lead to parcelization of the site or the need to re-route Selby Way/Reed Road.

Unlike the relatively flat Study Areas 7 and 8, the elevation of the eastern portion of Study Area 9 rises as it enters the Coburg Hills. Sloped sites are not favored by the target industrial uses. Furthermore, the site is less normal shaped than Study Areas 7 or 8, being substantially more elongated than those other sites.

Reduction of or discontinuance of activities currently on the site is not viewed as having negative economic consequences when balanced with the potential positive economic consequences of employment growth on the site.

Social Consequences. There is one owner of Study Area 9 and one existing residence. As noted with previous areas, this can reduce the complexity of the expansion process and the potential for reaching planning objectives. It also may result in significant impacts (positive and/or negative) to the individual property owner given the existing residence.

The area would be most appropriately used for employment purposes. It is noted that one advantage for consideration of Study Area 9, is the existing access to the site over I- 5 via Selby Way, which potentially affords an alternative access route for this site. Access via Selby Way would necessitate a relatively lengthy and circuitous route for commercial and industrial traffic, contributing to noise, pollution and traffic in the area.

Expansion into Study Area 9 does not as clearly meet the efficiency related policy of expansion that is "sequential development that expands in an orderly way outward from the existing city center as do Study Areas 7 or 8.

As compared to Study Areas 7 and 8, Study Area 9 appears to present greater negative social consequences overall.

Environmental consequences. Study Area 9 includes the only forest designated land within all study areas. It is not prime forest land. Study Area 9's soil profile is largely Class IV and VI, with smaller portions of Class III. The site includes several small water features; however none is located on either the National or Local Wetlands Inventory. Study Area 9 presents the only expansion alternative that encroaches onto the Urban-Wildland interface (the foothills of the Coburg Hills). It is not immediately understood what impacts such expansion might have.

Energy consequences. Study Area 9 will require the extension of all services. Transportation access to the site could come from Selby Way—a County Road, or from Van Duyn Road through the existing UGB or Study Area 8. But in either instance, access to I-5 from this site would incur greater long-term energy use than for either of the other two sites due to the greater travel distances involved. The condition of the existing bridge across I-5 is not completely understood. Development on the site may be constrained if the bridge is not in proper condition, or does not meet required specifications.

***(4) Compatibility of the proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB.***

Because of the higher class agricultural soils located on the west side of I-5, and the attendant attractive agricultural uses, expansion to meet economic opportunity needs must be focused on the east side of the freeway. Study Area 8 has the worst agricultural soils, is not intensively farmed (it is used for the grazing of cattle), and has the existing urban growth boundary and rural residential uses bordering both of its longer property boundaries. It abuts agricultural/forest uses only along its shorter northern and southern boundaries. In both instances, the existing

agricultural use is not intense and in both directions, those activities occur on the other side of an existing roadway. Therefore, industrial development of the site is unlikely to adversely impact permitted agricultural and forest activities on those or other parcels and is therefore compatible with those uses.

Study Areas 7 and 9 are similar in that they have somewhat better soil qualities than Study Area 8, but are by no means considered exceptional. Consequently, both are under less intense forms of agriculture such as grazing cattle and growing hay. While Study Area 9 is zoned for forest uses, harvesting of the existing trees is not anticipated to occur in the near future.

In general, the types of industries identified as targets for economic growth by the 2010 Urbanization Study Update and the Regional Economic Analysis are inherently compatible with existing and permitted agricultural and forest activities in the area. Consequently, the only disruption to agricultural or forest use will occur from the removal of those lands from resource use. Surrounding resource lands should not be affected by economic use of any of the Study Areas.

**ANALYSIS AND CONCLUSION**

Based upon the analysis provided above, and in large part on the statutory priority scheme established by ORS 197.298, the City concludes that it must meet its employment land needs by utilizing the land available from Study Area 8, Study Area 9 and Study Area 7 in that order.

The City must meet its identified employment land needs. At a minimum, the City must bring in a single 40-acre lot to meet the site-specific land need identified by the 2004 Urbanization Study, the 2010 Urbanization Study Update and the 2014 Addendum. The questions before the City are whether it wants to pursue capture of the demonstrated regional economic need as encouraged by OAR 660-009-0015(1) and, if so, what percentage of that employment growth can the City reasonably capture.

The City Council previously concluded that the City should seek to capture a reasonable percentage of the regional economic need for large-site industrial uses given its competitive advantages and the demonstrated ability to attract similar large-site employers to the area. The County Commissioners concurred with this conclusion. The City Council sees no reason why it should not reach the same conclusion here on remand. Consequently, the City Council concludes that the City shall bring into the urban growth boundary sufficient employment land to meet the City's demonstrated employment land needs and to capture a reasonable percentage of the regional need for large-site industrial uses.

The remaining issue is how much land is required to meet these needs and how is that requirement met by the study areas.

Examining Study Area 8 alone, its inclusion into the UGB will represent capturing a reasonable percentage of the regional need for large-site industrial sites. The 106 acres of Study Area 8 represents satisfying the City's growth based need for approximately 40 acres, with the remaining 66 acres on the site targeting capture of the identified regional need for large-lot

industrial sites or to accommodate an exceptionally large industrial use. Under the REA Supplement's Forecast 2, 66 acres represents capture of approximately 11% of that regional need based on the 2012 job base numbers. That percentage is well within the 10-20 percent range of regional capture that both the REA and REA Supplement indicate is a reasonable minimum expectation for the City, given the lack of large, I-5 oriented industrial sites in the region. The City Council notes that the REA and REA Supplement indicates that upwards of 30% regional capture could be deemed reasonable if other large I-5 oriented sites prove infeasible to develop or are substantially delayed in becoming market ready.

The City Council concludes that bringing in all of Study Area 8 into the Coburg urban growth boundary would satisfy the City's employment land needs and would also capture a reasonable percentage of the regional economic opportunities that require large-site industrial designated lands.

As a precaution against arguments that the City must conduct its analysis based upon the most current job numbers, i.e. under the REA Supplement's Forecast 3 numbers, the City Council provides the following analysis. In addition to satisfying the one to two 20+ acre parcel large-lot industrial site requirements of the City's employment land need, the remaining 66 acres of Study Area 8 would represent capturing approximately 15% of the demonstrated regional need. Again, this percentage capture of the demonstrated regional need is well within the range deemed reasonable in the REA and REA supplement.

Evidence in the record demonstrates that the City of Springfield has already adopted a new urban growth boundary, which is currently under appeal, that makes no effort to capture any of the demonstrated regional need for large industrial sites. The City of Springfield's large-site industrial need is based solely on its own population growth. Similarly, the City of Eugene has nearly completed its UGB process, and has completed its Economic Opportunities Analysis and determined its employment land needs. To date, the City of Eugene like Springfield has decided to not pursue capture of the regional economic opportunity beyond its normal growth needs despite being encouraged to do so by OAR 660-009-0015(1). It is unlikely Eugene will change its mind. Those decisions by the cities of Springfield and Eugene represent their policy choices.

What those decisions mean is that the two largest urban areas in Lane County located along I-5 have chosen to forego any effort to capture regional employment opportunities by providing sites that meet the needs of those opportunities beyond the sites needed to accommodate their normal growth. That leaves Coburg, Goshen, Cottage Grove and Creswell as the largest Lane County jurisdictions along I-5 available for regional employment opportunity capture. Given that the two largest jurisdictions in the County are not seeking to capture any of the demonstrated regional large site industrial need, and considering the other jurisdictions in the County that are similarly situated along I-5, the City Council concludes that even if it is required to apply the employment data under Forecast 3, that the maximum of 15% capture of the regional need Study Area 8 represents is a percentage of regional employment growth that Coburg can reasonably expect to capture based upon the City's demonstrated community economic development potential. The 11% capture of the regional need that Forecast 2 represents makes the inclusion of the entire Study Area 8 even more reasonable.

Even if the City must base its decision upon the calculations provided under Forecast 3 of the REA Supplement, the City Council concludes that bringing in all of Study Area 8 into the Coburg urban growth boundary would meet the City's employment land needs and also capture a reasonable percentage of the regional economic opportunities that require large-site industrial designated lands.

The City Council has also examined the possibility of including Study Area 9 in addition to Study Area 8 to meet the demonstrated City's employment land need and a reasonable percentage of regional employment land need. The combined acreage of the two study areas equals approximately 132 acres. Under Forecast 2 that represents at maximum a 16% capture of the regional need, and under Forecast 3 a capture of 21% of the regional need. However, the determination of which and how much land to bring into the urban growth boundary to meet the City's overall employment land needs does not boil down to simply what is a reasonable percentage for capture of the regional employment land needs.

The City Council rejects the inclusion of Study Area 9 in its employment lands urban growth boundary expansion decision for the several reasons. Those reasons include, among others: the lessened likelihood that Study Area 9 will attract target industries due to the topographic changes on the property; the additional infrastructure costs the study area will entail, particularly the transportation-related costs necessary to improve Selby Way and its bridge over I-5; and the overall inefficient accommodation of land needs due to the lack of orderly and compact expansion of the urban growth boundary the parcel represents. The City Council concludes that adding Study Area 9 as part of the employment land expansion would not be likely to capture much, if any, additional regional large-site industrial opportunities than Study Area 8 alone.

Because the City foregoes the inclusion of Study Area 9 into its UGB expansion to meet its employment land needs, it is inappropriate to further consider inclusion of land from Study Area 7.

The City Council ultimately concludes that inclusion of all of Study Area 8 in the City of Coburg urban growth boundary will meet the City's demonstrated employment land needs and will also capture a reasonable percentage of the regional economic opportunities that require large-site industrial designated lands.

## LOCAL EXPANSION CRITERIA

Coburg has undertaken a number of expansion-related planning processes in the last decade. These include the Coburg Crossroads visioning process of 2003, the 2004 Urbanization Study and periodic review effort, the 2005 update of the Comprehensive Plan, the 2010 update of the Urbanization Study, and the 2014 Addendum to the 2010 Urbanization Study Update, which incorporated additional employment land analysis regarding regional economic needs. The policies that were incorporated into the 2005 comprehensive plan update reflect the extensive efforts to summarize the City's ideals, including those related to the City's growth, and constitute review criteria for UGB expansion. The more recent planning efforts help to set forth how those ideals might be implemented by the City.

Economy Policies

***Policy 2: Lands for the expansion within the City of business (commercial and industrial activities), will be provided to the extent necessary to meet local employment needs, to accommodate the identified regional needs, to provide an adequate tax base, and to support future population growth.***

The Economic Opportunities Analysis provided in the 2010 Urbanization Study Update, the Regional Economic Analysis recognized by the 2014 Addendum, and the Regional Economic Analysis Supplement identified the amount of land needed for expansion to accommodate local and identified regional employment land needs. The City's demonstrated need is for one site of 20-70 acres in size, approximately 40 acres. Given the City's identified competitive advantages and planning decisions by other county jurisdictions, the capture of 11% to 15% of the regional economic need for large site industrial uses is reasonable. The economic growth that the 106-acre Study Area 8 will facilitate will support future population growth, accommodate identified regional needs and provide an adequate tax base for the City.

***Policy 6: An adequate amount of level, buildable land which has good access to arterial streets shall be provided within existing city limits to meet local and regional industrial needs.***

This policy was considered in the selection of properties identified as potential industrial sites suitable for meeting economic growth needs. Area 8 is predominantly level and is of adequate size to accommodate the City and regional needs for industrial uses that require large sites of twenty to fifty acres. Study Area 8 abuts Van Duyn Road to its north, which turns into E. Pearl Street once it crosses I-5 to the west and is a major arterial road.

***Policy 7: Industrial uses shall be grouped together within well-designated industrial parks or subdivision so as to promote:***

- ***A pollution free environment;***
- ***The highest aesthetic standards possible;***
- ***Minimum impact on adjacent lands;***
- ***Development within the constraints of the natural environment; and***
- ***Compliance with LCDC Goals and Guidelines***

The maintenance of a compact urban growth form has been one of the more significant factors in determining those properties identified as potential sites and recommended for inclusion into the urban growth boundary. Study Area 8 provides the City a single-parcel site adequate to meet its identified large-site industrial employment needs that can be readily designated as an area suited for an industrial park or industrial subdivision. Conditions imposed on the area, to include limits on parcel sizes should subdivision or partitioning occur, will insure that the site remains suited for that intended use.

Urbanization Goal Policies

***<u>Policy 1</u>: The City shall preserve urbanizable land and provide for orderly, efficient development by controlling densities through provision of the Zoning and Subdivision Ordinances, thereby preventing the need for overly extensive public services and restricting urbanization to that commensurate with the carrying capacity of the land.***

***<u>Policy 17</u>: The City shall promote the efficient use of land within the urban growth boundary and sequential development that expands in an orderly way outward from the existing city center.***

Within the context of ORS 197.298 and Statewide Planning Goal 14, the City has attempted to maintain a compact urban growth form by including areas that are contiguous to the existing urban growth boundary. Study Area 8 abuts the existing urban growth boundary along the property's entire western boundary. It will provide for orderly and efficient development of the City by expanding outward from the part of the city located east of I-5.

***<u>Policy 18</u>: The City shall provide a sufficient supply of developable land within the urban growth boundary to meet the needs of the existing and projected population for residential, commercial, industrial, and recreational uses over the next 20 – 50 years, while preserving the small town character of the community.***

The 2010 Urbanization Study Update, as modified in 2014, and the Regional Economic Analysis and REA Supplement provide the economic opportunities analysis and buildable lands inventories that identify the City's commercial and industrial land use needs for the foreseeable future. The inclusion of Study Area 8, which locates large site industrial growth on the eastern side of I-5, will help to preserve the small town character of the community by not routing industrial traffic through the City center as would have sites located to the west of the City.

***<u>Policy 19</u>: The City shall accommodate projected growth, expand the urban growth boundary in a manner that balances the need to protect high quality farm and forest resource lands with the needs of the existing and future population and with efficient public facility and service delivery.***

This policy has been addressed through the identification of suitable study areas and the 2010 Urbanization Study Update by addressing the priorities of ORS 197.298 and the factors of Statewide Planning Goal 14. The selection of Study Area 8, with the worst soil qualities of any of the study areas, protects other high quality farm and forest resource lands and meets the employment land needs of the existing and future population. This comes at a moderate, but reasonable, increase in the efficiency and cost of providing public facilities and service deliveries, which must be extended to the east side of I-5. However, that decreased efficiency is somewhat off-set by the single-parcel nature of Study Area 8 and its location adjacent to the existing urban growth boundary where the City is committed to eventually providing services.

***<u>Policy 40</u>: The City shall promote land use and development patterns that sustain and improve quality of life, are compatible with mass transit, maintain the community's identity, protect significant natural and historic resources, and meet the needs of existing and future residents for housing, employment, and parks and open spaces.***

The issues contained in this policy have been addressed in the 2010 Urbanization Study Update.

Transportation Goal Policies

***Policy 1: Develop a street network system that evenly distributes traffic throughout the community, lessening traffic impacts on residential streets, and identifying a system of arterials for moving people, goods, and services safely and efficiently.***
***Policy 46: Provide a transportation system that is safe, convenient, accessible, environmentally responsible, efficient, responsive to community needs, and considerate of neighborhood impacts, particularly in the National Historic District.***
***Policy 47: Develop and maintain a street network that is inter–connected.***

These policies are implemented through the City's Transportation System Plan. To promote efficiency and safety in the use of City streets and the I-5 interchange, the City and the Oregon Department of Transportation have entered into an Interchange Area Management Plan (IAMP). One of the relevant provisions concerns the level of use of the intersection of Industrial Way and Pearl. The plan limits uses of undeveloped properties within the designated areas of the IAMP and limits any expanded access of properties within the IAMP area. Study Area 8 is within the Southeast Quadrant of the IAMP area, within an area where traffic control measures will be required for efficient traffic flow. However, Study Area 8 is not within an area where vehicle trips are regulated. Study Area 8 has sufficient acreage in a configuration that will allow for IAMP traffic control measures (primarily an access road), as well as for development of an efficient street network on the property that meets the requirements of these policies.

Furthermore, due to its location adjacent to the existing UGB, any street network developed for Study Area 8 can interconnect with the network that serves that part of the City.

Public Facilities and Services Goal Policies

***Policy 15: The city shall expand the urban growth boundary and city limits and provide sanitary sewer service, when available, to existing exception areas and other appropriate areas when such expansion is appropriate to meet city needs.***

The preferred recommendations of the 2010 Urbanization Study Update identified areas that should be added to the existing urban growth boundary. The availability of public services was considered during the analysis of the second locational factor of Statewide Planning Goal 14 in the 2010 Urbanization Study Update. The City now has the capacity to provide sanitary sewer service to Study Area 8 when such expansion is appropriate to meet City needs.

Housing Goal Policies

***Policy 28: The City shall encourage new housing to radiate out from the city center and discourage leapfrog development in order to promote connectivity and community interaction.***

This policy does not directly relate to Study Area 8, which will help the City meet its employment land needs. Study Area 8 will promote this policy by furthering the City's vision of providing for large-site employment growth to the east of I-5, which will allow for housing to radiate out from the city center without the need to leapfrog over employment-related uses.

Natural Resources Goal Policies

***Policy 17: Significant natural areas and habitats of rare or endangered species shall be retained in open space whenever possible and to the extent the City has jurisdiction.***
***Policy 21: The City shall protect, restore, manage, and enhance important natural resources; maintain high quality air, water, land and historic resources; and provide green spaces in and around the community.***
***Policy 22: The City shall protect or mitigate, whenever possible, fish and wildlife habitats including rivers, wetlands, and forests, and significant natural areas and habitats of rare or endangered species.***

These policies were considered and implemented through the application of the third locational factor of Statewide Planning Goal 14 in the 2010 Urbanization Study Update. Study Area 8 has no rare or endangered species habitat, and is not a significant natural area due to the fact it has no mapped wetlands, rivers or forest.

Agricultural Land Goal Policies

***Policy 2: To the extent to which it has influence, the City shall promote the retention of lands outside its Urban Growth Boundary for agriculture use by encouraging Lane County to maintain current agricultural zoning within the City's area of influence as defined in the Intergovernmental Agreement with Lane County.***
***Policy 5: The City supports, and may require, measures to promote compatibility and transition between urban development at the edge of the Urban Growth Boundary and adjacent agricultural areas.***
***Policy 7: The City supports, and shall pursue, establishment of a southern greenbelt that ensures a permanent open character for the area between Coburg and the McKenzie River.***
***Policy 8: The City shall protect high quality farmland surrounding the community from premature development.***

These policies were considered and implemented though the application of ORS 197.298 and the fourth locational factor of Statewide Planning Goal 14 in the 2010 Urbanization Study Update. The selection of Study Area 8 to meet the City's and a reasonable percentage of the regional employment land needs protects high quality farmland surrounding Coburg from premature development by restricting employment land growth to a parcel with the worst soil qualities in the surrounding area.

**The 2010 Urbanization Study Update includes a list of local expansion criteria or "local criteria" from the above listed guiding policies. They are as follows:**

**Local Criteria 1:** *Expansion should be limited to areas and tax lots which promote the greatest order and efficiency.*
**Local Criteria 2:** *Expansion should be limited to areas and tax lots that are appropriate to meet city needs.*
**Local Criteria 3:** *Expansion should be limited to areas and tax lots that would promote sequential development that expands in an orderly way outward from the existing city center, and promote a street network that is interconnected in order to promote connectivity and community interaction.*
**Local Criteria 4:** *Expansion should be limited to areas and tax lots that promote livability*
**Local Criteria 5:** *Expansion should be limited to areas and tax lots that discourage premature development of agricultural lands and compatibility and transition between urban development and agricultural areas.*

These local criteria were considered and implemented in the site selection analysis in the 2010 Urbanization Study Update. Growth order and efficiency is promoted by Study Area 8 by growing the City for employment land needs along the city's eastern boundary. That location also promotes sequential and orderly expansion. As demonstrated through the REA Supplement, the size of Study Area 8 is appropriate to satisfy the City's demonstrated employment land needs as well as a reasonable percentage of the demonstrated regional large site industrial need. As discussed above, the size of Study Area 8 is also sufficient to develop a robust street network with existing roads. The location of Study Area 8 promotes community livability by locating large site industrial uses on the east side of I-5, well away from the City center and its surrounding residential neighborhoods. Last, the record shows that there are no large parcels, either individually or that can be combined, suitable for large-site industrial uses within the existing UGB. The selection of the worst quality soils for this employment land need helps discourage premature development of agricultural lands and facilitates the transition between urban development and agricultural areas by limiting the potential for agricultural – residential conflicts.

## FINAL CONCLUSION

The City Council concludes that the City of Coburg has a demonstrated need of approximately 40 acres to accommodate one to two 20+ acre parcels for large site industrial uses. The City Council further concludes that, due to its demonstrated competitive advantages, the City can expect to capture a reasonable percentage of the regional economic opportunities that require large-lot industrial designated sites. The City Council ultimately concludes that the inclusion of the entire Study Area 8 in the City of Coburg urban growth boundary will meet these demonstrated employment land needs.

Received by
City of Coburg
AUG 12 2021

Coburg Planning and Zoning Commission
91136 N Willamette Street
Coburg OR 97408

August 10, 2021

Dear Commissioners:

Over the last two decades the City of Coburg has done extensive urbanization studies, in 2004, 2010 and 2014 to review its future growth and expansion. These studies have resulted in an expansion of the urban growth boundary. Accordingly, it is a good time to take a look at the land use options for urban expansion, annexation, and zoning that would work best for the City and its adjacent neighbors.

We have reviewed portions of the original studies and have found some areas of concern regarding suitability of the proposed Light Industrial zoning in Area 8, namely that a disproportionally high part of the perimeter consists of residential land use, a potentially inappropriate adjacent use. We also have evaluated an alternative zoning for Area 8, Campus Industrial, which we feel would be more beneficial to both the City and adjacent residents. In addition, we have looked closely at some of the attributes of Area 7 and found that it is in fact very suitable for annexation as Light Industrial zoning, and would provide a substantially larger acreage of land than Area 8. These evaluations are presented in some detail in the attached document titled *Evaluation of Coburg Study Areas 7 and 8 for Suitable Zoning*.

Accordingly, we recommend that Coburg not consider annexing Area 8 unless it is rezoned for Campus Industrial use. To the extent that the City of Coburg requires additional land to designate as Light Industrial Use, Area 7 would appear to provide an appropriate area for expansion of the City's Light Industrial designation and one which would not impact surrounding residential uses.

We also recommend that the annexation and rezoning of Area 8 not be given serious consideration until ODOT provides a planned and funded replacement of the I-5 overpass consistent with its current conceptual plan. We feel it is critical to insuring the safety of all residents and future workers in case of an emergency such as the wildfires that currently threaten our state. Van Duyn is the only entrance/exit available to those of us who live and may work east of I-5.

We would be pleased to meet with the Commission and/or city staff to informally discus our findings and recommendations.

Best regards,

Kevin Dwyer and Andrew Hays on behalf of Diamond Ridge Water Association

Copy to Zack Mittge, Hutchinson Cox Attorneys

# Evaluation of Coburg Study Areas 7 and 8 for Suitable Zoning
August 10, 2021

1. Area 8 suitability for Light Industrial zoning

   a. Earlier studies. Coburg reviewed eleven areas around the perimeter of the city as part of the Coburg Urbanization Study in 2004, as shown by Map 1: Proposed Study Area(s) (Attachment 1.). Several of these areas were recommended for expansion beyond the then existing urban growth boundary, for Non-Employment and for Employment, along with areas recommended for Urban Reserve, as shown on Map 9: Urb. Study Expansion Recommendations (Attachment 2). A portion of Study Area 7, north of Van Duyn and east of I-5 was designated for Employment expansion. Subsequently the 2010 Urbanization Study reviewed all the study areas, which included a more detailed look at Study Area 7 "East I-5 North" (240 acres) and Study Area 8 "East I-5 South A" (106 acres). Final evaluation of these parcels for suitability resulted in the current selection of Study Area 8 for the current urban growth expansion, along with the pending annexation and zoning for Light Industrial.

   b. Current and proposed zoning. The current area planned for annexation and zoning is a Lane County parcel of land zoned as E40-Exclusive Farm Use (40 acre minimum). It is bordered: on the north by Van Duyn Boulevard and county land zoned E40; on the east by county land zoned as RR10-Rural Residential (10 Acre minimum); on the south by county land zoned as E-40; and on the west by the City of Coburg land zoned as Highway Commercial. Following annexation this parcel is proposed to be zoned as Light Industrial.

   c. Percent of Area 8 perimeter zoned as residential. Given the current surrounding land use, how suitable is Area 8 for Light Industrial Zoning? Map 11. Study Areas & Zoning in the Coburg Urbanization Study (Attachment 3.) presumably would provide an indication of the land use context. However, the Map does not identify the zoning for Diamond Ridge on the west, which is residential, and a closer look at the actual land use on the east of the parcel would indicate that it is mainly an RV resort, with approximately half of its occupants in more or less permanent residence. Hence people who live here full time, as either Lane County residents or as City of Coburg residents, occupy almost 60% of the perimeter of the area, a fact that Map 11 does not suggest.

   d. Preferred Residential and Light Industrial separations.

      i. What is the impact of a substantial adjacency of residential occupancy to an industrial area? Good land use planning suggests that industrial areas are best located so that they are buffered from

residential areas, typically with commercial uses, major transportation arteries, and open space, to mitigate against the less than desirable visual aspects of the industrial buildings and the attendant noise, lighting, and air pollution.

ii. Area 8 industrial and residential adjacency. An evaluation of the Light Industrial land in Coburg and similarly sized and located communities, indicates that the proposed zoning residential adjacency is well in excess of both Coburg's own residential land use (almost nil at about 1%) and other communities' residential land use (on the order of 10% to 15%). Refer to Table 1. Light Industrial and Perimeter Residential Zoning below.

iii. Impact. This substantial proximity of residential land use to light industrial land use is undesirable and may create ongoing complaints to the City.

2. Alternative zoning options for Area 8

a. Options. If Light Industrial zoning is not suitable for Coburg in this location, what are some good alternatives? One alternative would be to consider zoning Area 8 as Campus Industrial.

b. The characteristics of Campus Industrial Zoning. This land use meets the needs for commercial/industrial uses that are a good fit with low density urban development, especially in proximity to residential, and open space, such as farm land and natural areas. Some of the key characteristics include:
   i. A low ratio of building space to open space. Building heights are limited, typically to 3 stories, and more of the site is devoted to open landscaped space, pedestrian walkways, and parking. Both the building occupants and the surrounding neighbors benefit from the visual impact of the "park like" setting.
   ii. Less negative environmental impact. Obnoxious external impacts (noise, pollution, vibration, glare) are even more restricted than Light Industrial permitted uses.
   iii. Enhanced architectural design. While these occupancies typically have a large number of employees, visual design requirements work to insure that even large buildings are architecturally attractive.

c. Examples of local Campus Industrial. Northwest Springfield has a good example of a Campus Industrial zone, bordered partially by I-5 on the west, Lane County farmland to the north, the McKenzie River to the east, and

Game Farm Road to the south. The entire zone is relatively large, on the order of 300 to 350 acres. Occupants include Royal Caribbean International (visible from I-5), Peace Health Riverbend Annex (whose lobby was recently used for Covid vaccinations), and Wayfair (formerly offices for Symantec). Interestingly one of the immediately adjacent neighbors, on the south side of Game Farm Road is Patrician Mobile Park, a residential occupancy.

d. Suitability for Coburg. In many respects Coburg's Area 8 would be a perfect fit for campus industrial area use:
    i. It is large enough to accommodate any likely corporate industrial/commercial occupant or occupants.
    ii. The beautiful forested portion of the site along the southeast side of the parcel, along with the retention of the line of mature trees bisecting a portion of the parcel would provide a welcome visual amenity for corporate offices or workspaces.
    iii. With the required setbacks and environmental impact restrictions inherent in the zoning ordinance, complaints from the neighboring occupants to the west (the RV resort) and to the east (the Diamond Ridge subdivision) are likely to be greatly reduced.

3. Other areas suitability for Light Industrial zoning

a. Zoning Alternatives. Since Area 8 is unsuitable for Light Industrial, are there other areas that might be better? Going back to the original Coburg 2004 Urbanization study which identified Study Area 7, it would be useful to reevaluate this land. In many respects Area 7 is ideal for Light Industrial:
    i. It has zero residential adjacencies.
    ii. Since it is substantially larger than Area 8 it would generate more tax revenue.
    iii. It would mirror the existing Light Industrial area on the west side of I-5.

b. Evaluation of possible constraints in developing Area 7.
    i. As part of the 2010 Coburg Urbanization Study, Area 7 was identified as having some concerns with respect to flooding and protected wetlands. These findings were based on published data on hand at the time, and indicated about 5% of the land was Wetlands, based on the National Wetland Inventory, and about 5% was in a High Risk-100 Year Flood Plain. Study Area 8 had no identified Wetland or Flood Plain area and was consequently judged more suitable for development. At this point Coburg may want to look more closely at these findings.

1. Wetlands. The identified wetlands are shown on Map 12 (Attachment 4) in the study and are largely in the north-east corner of the area. However, looking at the aerial photography of the site (see Attachment 5, a Google Maps image) it appears that this farmland has been tilled over for years as grazing land, with no surface indication of plant materials or soil characteristics that would qualify currently as wetlands. It is recommended that a brief field evaluation of this location be made, and it is most likely that wetlands as a constraint to the use of Area 7 for Light Industrial does not exist.
2. Floodplain. The identified flood plain area is at the northern boundary of the study area, where small streams including Daniels Creek merge with Muddy Creek and begin to create a flood plain area extending north. The relatively minor extent (on the order of 10 or so acres) and its location along the edge of the parcel suggests that conventional site grading for surface drainage and building pads put onto engineered fill (standard practice for industrial buildings) would make the site completely usable for industrial occupancy. It would be useful to note that in Coburg's existing industrial development there is a small flood plain area near the southwest corner of the northern Industrial Way development. Map 12 (Attachment 4) and Attachment 6., a Google Maps image, shows that the building for Pacific Headwear and Promotions Inc. is actually built on a designated floodplain. An on-site evaluation indicates that the building is at a floor elevation above the high level of the 100-year flood. Accordingly, it is likely that the floodplain situation in Area 7 is similarly not a constraint for development.

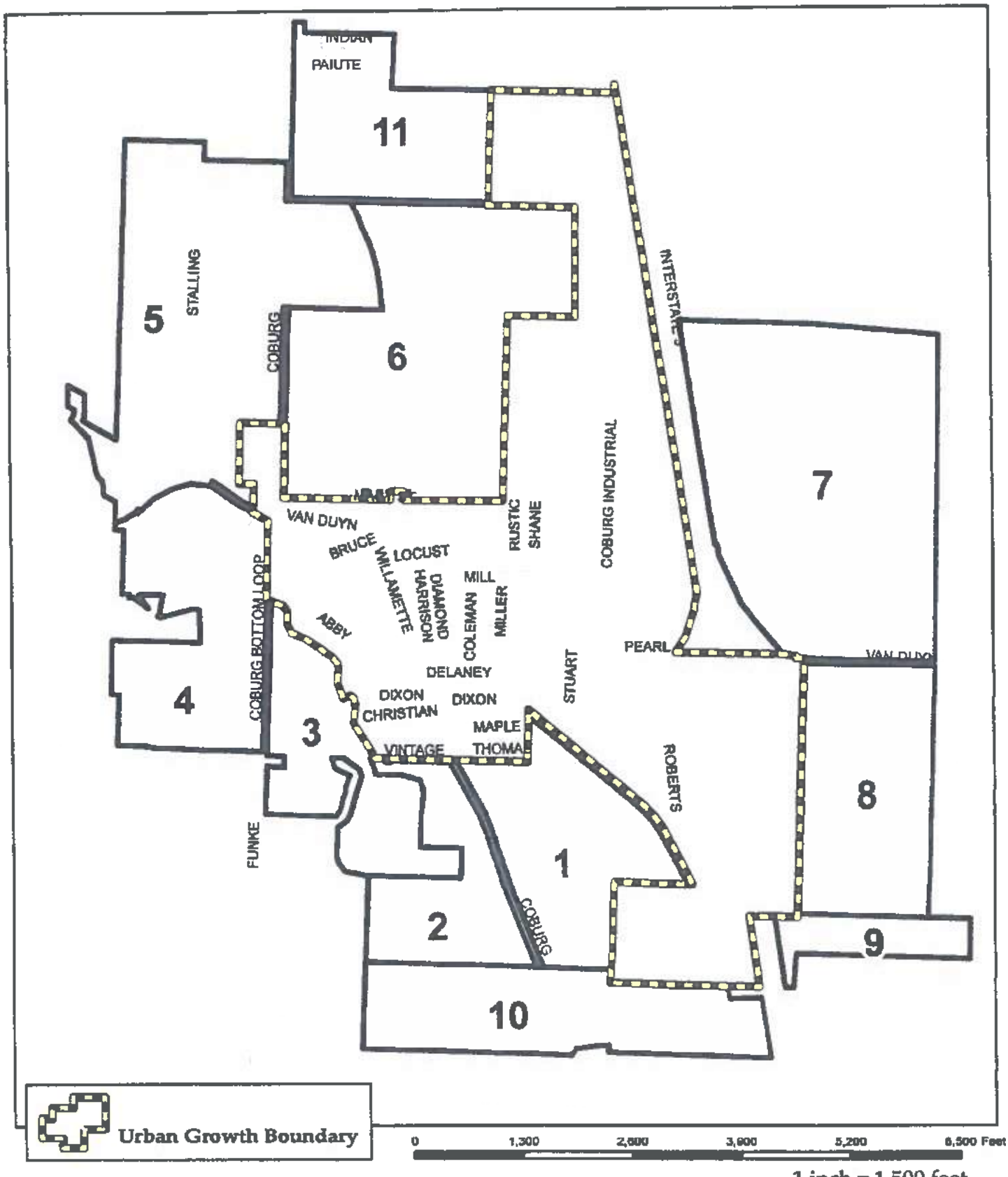
4. Other development constraints. The suitability of development of Areas 7 and 8 will be constrained by other factors, principally traffic related, since industrial land usage will generate substantially more traffic than the current farmland, and the I-5 overpass needs to be replaced. In addition, the residents of the Coburg hills to the east will have concerns about emergency exiting in the event of fires, regrettably a more likely hazard now and in the future.

Table 1. Light Industrial and Perimeter Residential Zoning

| Location | Approximate size light industrial zoning in acres | Approximate Percent of perimeter in residential land use | Notes |
|---|---|---|---|
| | | | |
| Coburg existing light industrial | 220 | 1% | |
| | | | |
| Coburg study area 7 | 240 | 0% | |
| | | | |
| Coburg study area 8 | 106 | 57% | Perimeter residential % includes Diamond Ridge and Premier Resorts, which is a Highway Commercial zone. |
| | | | |
| Creswell | 320 | 15% | Zoning identified as industrial. |
| | | | |
| Junction City | 330 | 9% | |
| | | | |
| Veneta | 60 | 8% | Zoning is identified as Industrial Commercial. An additional 17% of the perimeter zoned General Residential is separated by Highway126 and Luther Street extension "Green Corridor" |

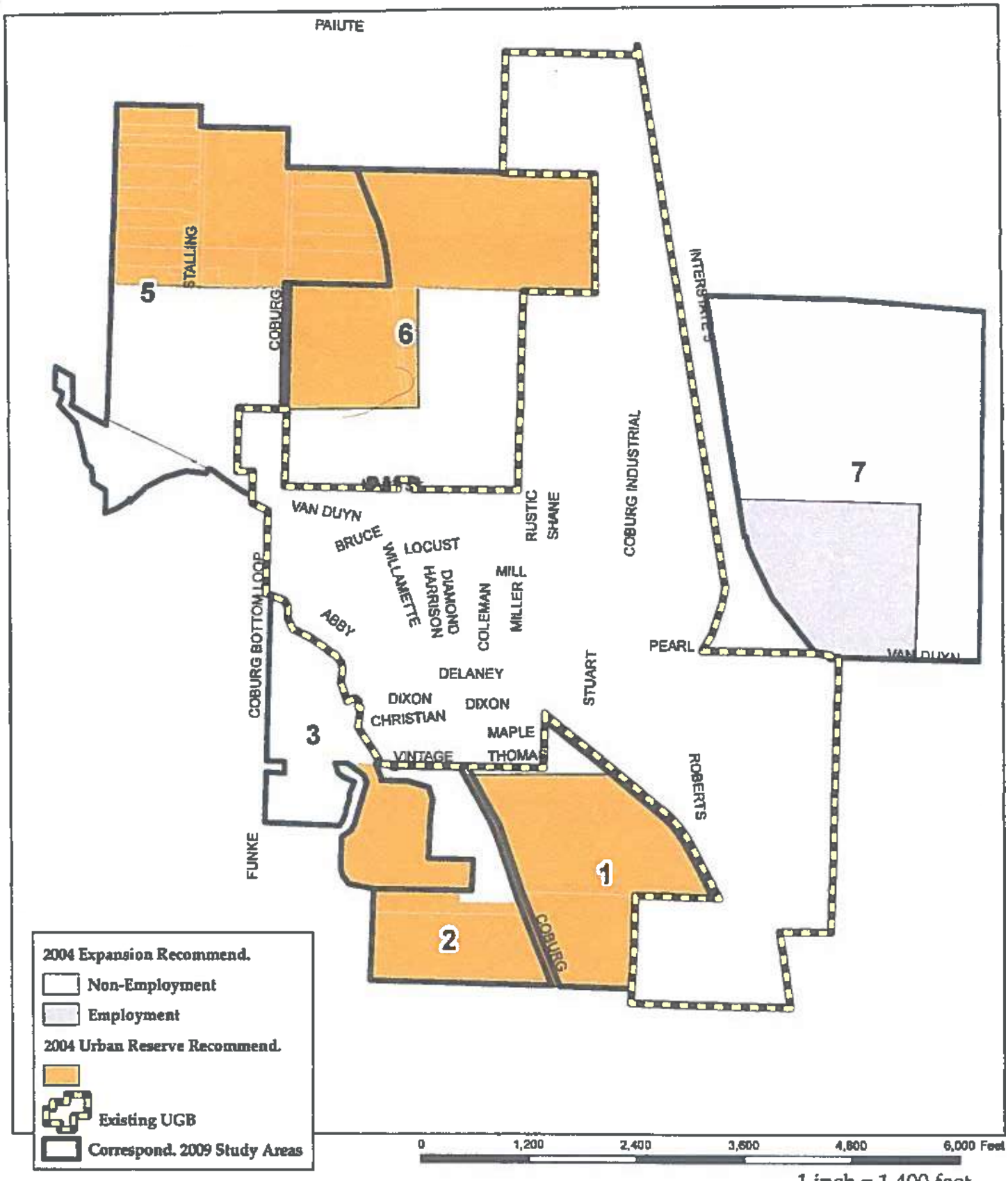
**Note:** The approximate extent of industrial development in the currently designated industrial zones in 100% in Coburg, 50% in Veneta and 20-25% in Junction City and Creswell, based on review of current aerial photographs.

Attachment 1




# Map 1:
# Proposed Study Area(s)
## Coburg Urbanization Study

COBURG LCOG

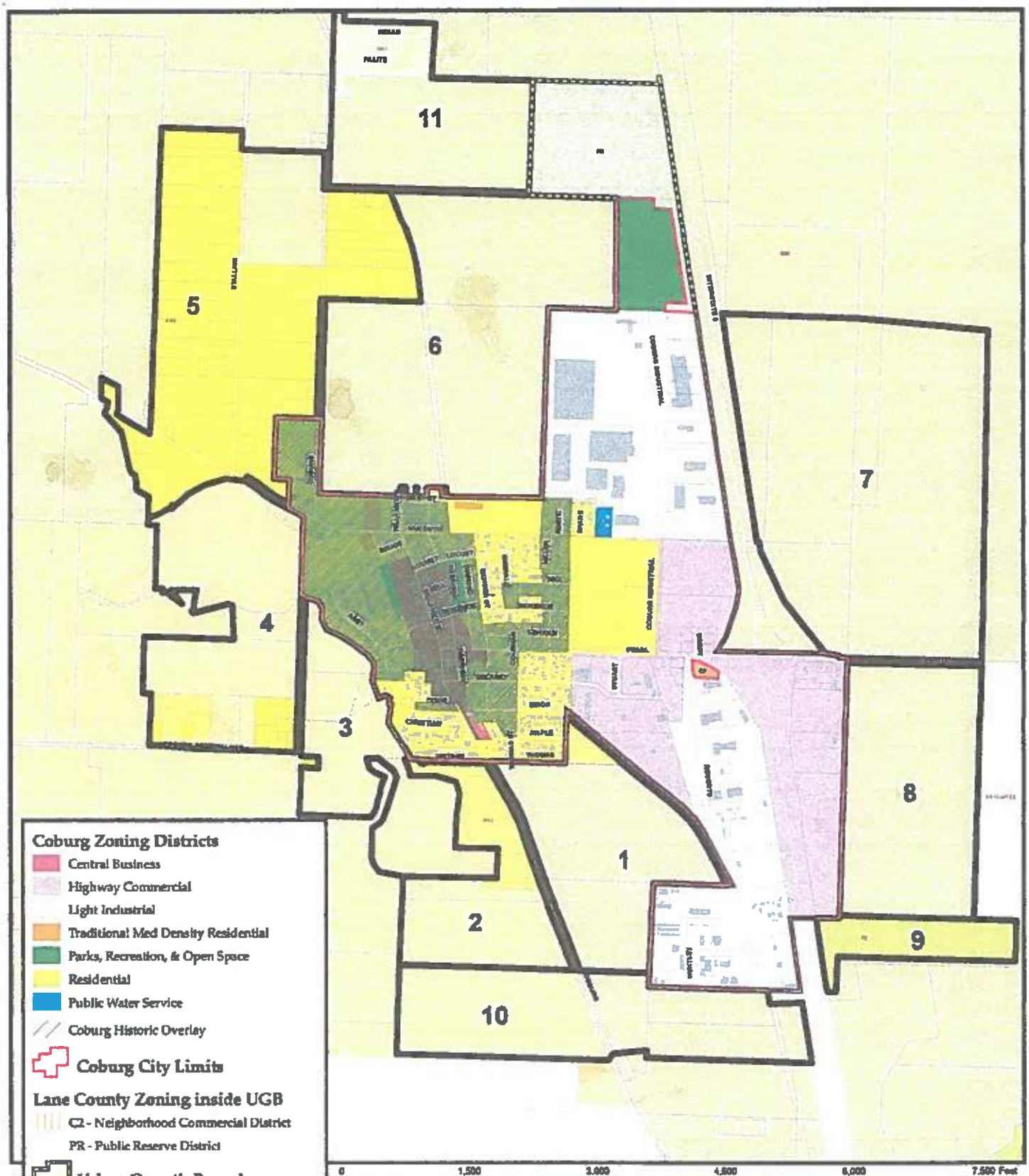



# Map 9: 2004 Urb. Study Expansion Recommendations

## Coburg Urbanization Study

COBURG LCOG

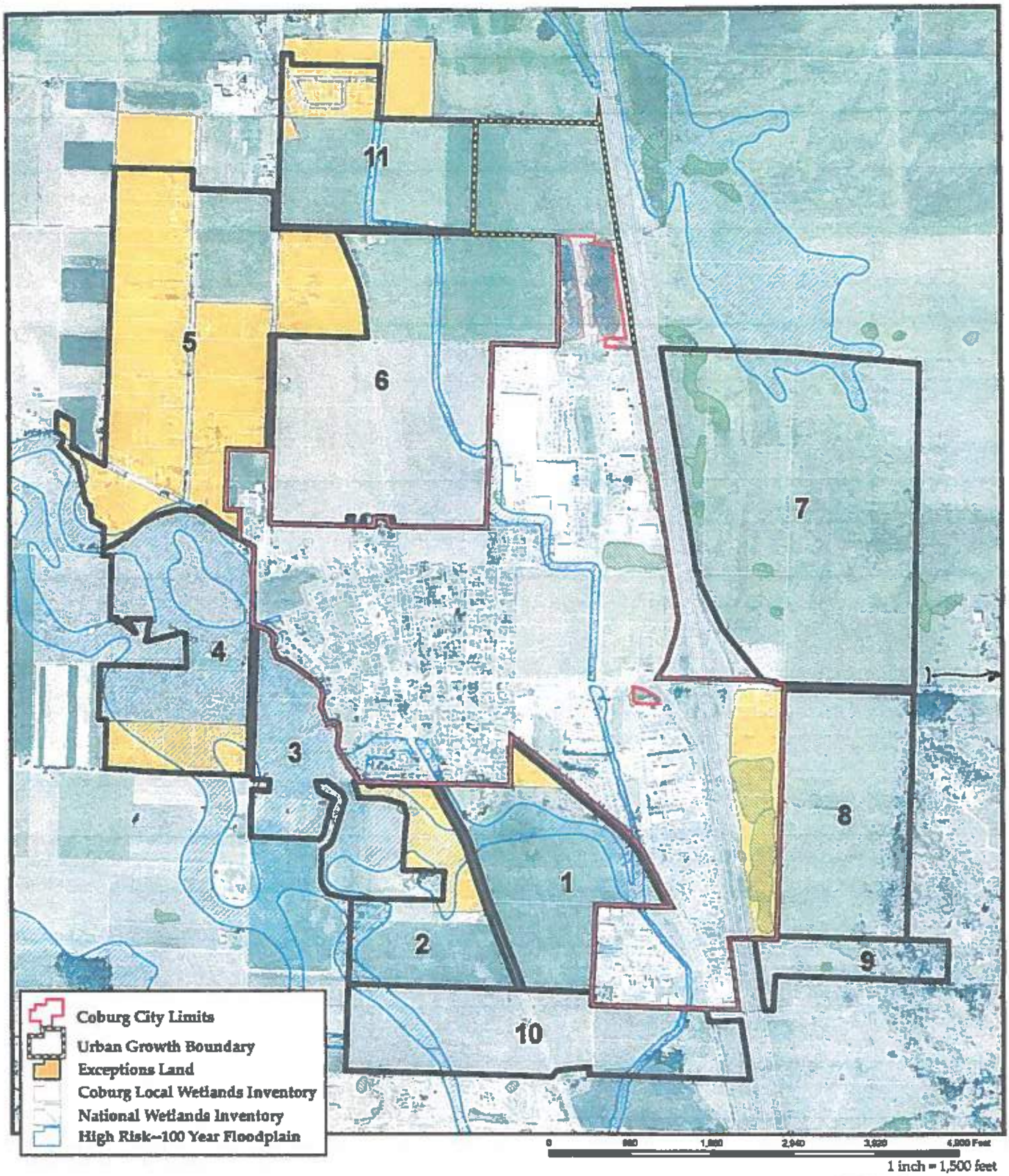
# Attachment 3




# Map 11:
# Study Areas & Zoning
## Coburg Urbanization Study

COBURG

LCOG




# Map 12: Study Areas with Exception & Constrained Lands

## Coburg Urbanization Study

COBURG LCOG

N

Google Maps

# Attachment 5


Imagery ©2021 Google, Imagery ©2021 Maxar Technologies, State of Oregon, Map data ©2021 200 ft

Google Maps

# Attachment 6


Imagery ©2021 Google, Imagery ©2021 Maxar Technologies, State of Oregon, Map data ©2021 200 ft

2.

August 11, 2021

The undersigned acknowledges receipt of three hard copies of a Letter to the Commissioners and a document entitled "Evaluation of Coburg Study Areas 7 and 8 for Suitable Zoning, prepared by the Diamond Ridge Water Association.

Name: Tammy L. Egbert

Signature: Tammy L. Egbert, City Recorder

Date: 8/12/2021

Title: City of Recorder, City of Coburg.

cc: Diamond Ridge Water Association
Zack Mittge, Hutchinson Cox Attorneys

Received by
City of Coburg
AUG 12 2021

Anne Heath
City Manager
Coburg, Oregon

August 19, 2021

Ms. Heath,

Thank you for the opportunity to comment of the proposed preliminary plans for the buffer zone. We'll share this information with our members and ask them to share their comments concerning the proposal. From our perspective, preservation of the existing treed buffer is critical between the proposed industrial use and the adjoining residential uses, as is an appropriate setback around the existing wetlands on the property.

We're concerned that the existing buffer does not appear to encompass the existing treed area.

The figure also raises some addition questions, as even the portions of the buffer denoted with cross-hatching are identified in the legend as "improved open space" and "landscaping area," but does the plan itself does not identify just what landscaping or improvements are proposed. We would be very reluctant to support the removal of trees or shrubs that would provide a buffer between the residences and an industrial use. In addition, no buffer is provided for development around the existing wetlands or the existing drainage on the property.

We would support a proposal that provide a 25-foot setback around the existing treed buffer, and a 50-foot setback from the wetlands and streams.

We look forward to addressing the applicant's proposal in full during the public hearing process before the City of Coburg. Please include me on the list of parties receiving all future notices associated with the proposed annexation and zone change.

Regards,

Kevin Dwyer on behalf of the Diamond Ridge Water Association

Copy to Zack Mittge, Hutchinson Cox Attorneys

## HEARLEY Henry O

**From:** Damien G <damieng@branchengineering.com>
**Sent:** September 21, 2020 10:56 AM
**To:** HEARLEY Henry O
**Cc:** HEATH ANNE (LCOG List); HARMON Brian
**Subject:** RE: Agency Referral Comment for Annexation of Property at 16-03-34-00-00202



Henry,

Here are some items (conditions?) that should be included in the agreement for annexation:

- Dedication of a 20-foot Public Utility Easement along entire southerly boundary.
- Dedication of a 20-foot Public Utility Easement along entire westerly boundary.
- Installation of planned public utilities to and through the property prior to, or concurrent with, development of the property.
- Concurrence that the city is in the process of improving urban services to that property, and they might not be available for some permitted uses immediately upon annexation.

Let me know if there is anything in particular I need to look at.

Thanks,
Damien

**DAMIEN GILBERT, P.E.** Principal
**BRANCH ENGINEERING, INC.**
541.746.0637

**From:** HEARLEY Henry O <HHEARLEY@Lcog.org>
**Sent:** Friday, September 18, 2020 10:16 AM
**To:** ODOTR2PLANMGR@odot.state.or.us; BAUMGARTNER Douglas G <Douglas.G.BAUMGARTNER@odot.state.or.us>; Damien G <damieng@branchengineering.com>; HARMON Brian <brian.harmon@ci.coburg.or.us>; STANKA Danielle E <danielle.stanka@lanecountyor.gov>; BAJRACHARYA Shashi <shashi.bajracharya@lanecountyor.gov>; VARTANIAN Sasha <Sasha.VARTANIAN@co.lane.or.us>; Jason Bush <buildingofficial@cottagegrove.org>; BLACKSMITH Bekke (SMTP) <permit@cottagegrove.org>
**Cc:** CALLISTER Jacob (LCOG) <jcallister@lcog.org>; HEATH ANNE (LCOG List) <anne.heath@ci.coburg.or.us>; patrick.wingard@state.or.us
**Subject:** Agency Referral Comment for Annexation of Property at 16-03-34-00-00202
**Importance:** High

All:

Please see the attached referral and application for annexation of a property to the City of Coburg. Please let me know if you have any questions or concerns.

Respectfully,

Henry

Henry O. Hearley
Associate Planner
Lane Council of Governments
hhearley@locg.org
541-682-3089

**PUBLIC WORKS DEPARTMENT | TRANSPORTATION PLANNING**
**3040 N DELTA HIGHWAY | EUGENE, OR 97408**
**P: 541.682.6996 | F: 541.682.8554**

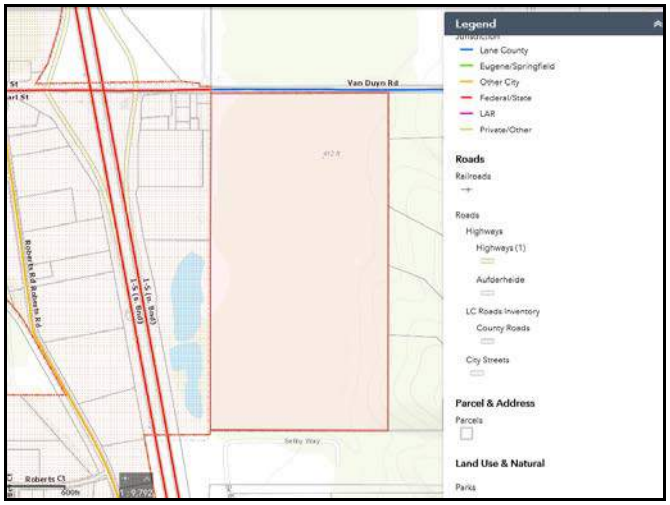
October 7, 2020

| | |
|---|---|
| **OWNER:** | Ravin Ventures, LLC & Hardly Hackit, LLC |
| **APPLICANT:** | Ramon Fisher |
| **MAP & TAX LOTS:** | 16-03-34-00-00202 |
| **PROPOSAL:** | **ANNEXATION OF 107.35 ACRES** |

Thank you for the opportunity to review and comment on this proposal. Please accept the following comments from Lane County Transportation Planning:

## COMMENTS FROM LANE COUNTY TRANSPORTATION PLANNING

The subject property ("property") is located within the City of Coburg's Urban Growth Boundary. The property fronts Van Duyn Road along its northern property line, as shown in the figure below. Van Duyn Road is a Lane County road functionally classified as a Rural Local road.




Unless and until the jurisdictional transfer of Van Duyn Road occurs, its current status as a Rural Local road requires that any redevelopment of new development of the property demonstrate compliance with Lane County's requirements for roads as applicable. Such requirements are at Lane Code (LC) Chapter 15 and include: **LC 15.070:** Building Setback Requirements for Local Access Roads, Public Roads, County Roads, and State Roads or Highways; **LC 15.105:** Dedication and Improvement Requirements **LC 15.135**: General Access Requirements; **LC 15.137:** Access Management Requirements; and **LC 15.704:** Urban Local Street Standards. A full copy of LC Chapter 15 is available for review at:

https://www.lanecounty.org/cms/one.aspx?portalId=3585881&pageId=4119453

### Improvement Requirements

At the time of development, Lane County may require half-street improvements pursuant to LC 15.105 (1).

**Stormwater**

Stormwater runoff from private property must not be directed to the Lane County road right-of-way or into any Lane County drainage facility, including roadside ditches. Ditches adjacent to County roads are designed solely to accommodate stormwater runoff generated by the roadways themselves (Lane Manual Chapter 15.515).

# Lane County Public Works Department

**Engineering & Construction Services Division**

October 19, 2021

TO: Megan Winner, City of Coburg
FROM: Becky Taylor, Senior Transportation Planner, Lane County
RE: **Annexation and Zone Change Request for Tax Lot 202 of Assessor's Map 16-03-34-00**

Thank you for providing Lane County the opportunity to review and comment. The following comments supersede those provided by me on 8/27/21, based on updated information from the applicant (i.e. Sandow email dated 10/12/21). Further, Lane County supports the City's proposed Annexation Agreement with the applicant.

**TPR Analysis**
In the updated analysis, the applicant has amended the trip generation assumptions. The revised mitigation is a trip cap of 613 PM peak trips. The applicant no longer proposes a traffic signal at Pearl/I-5 Ramp, based the finding that the intersection will function within operating standards with the proposed trip cap. Lane County accepts the trip cap to mitigate the significant effect of the zone change.

**Annexation**
Lane County identified several development-related concerns, such as frontage improvements of Van Duyn Road and stormwater runoff from development not being directed to the Lane County right-of-way. The City's proposed Annexation Agreement satisfies Lane County's concerns by clarifying the following:

- The property has approximately 1540 feet of frontage on Van Duyn Road. The property owner will be responsible for complying with street improvement requirements imposed by the City and County through all applicable land development review processes at the time development is proposed.

- The developer shall develop on–site and off–site stormwater management facilities and dedicate drainage easements as may be necessary to adequately manage and treat stormwater runoff from the development site and develop the site in accordance with stormwater quality measures that comply with applicable City and County storm drainage requirements.

**Conclusion**
Based on the above findings, Lane County recommends approval of the zone change with the proposed trip cap and of the annexation with the proposed agreement.

# Boundary Change Preliminary Review

**DOR 20-P63-2021**

Cadastral Information Systems Unit
PO Box 14380
Salem, OR 97309-5075
fax 503-945-8737
boundary.changes@dor.oregon.gov

City of Coburg
PO Box 8316
Coburg OR 97401

---

October 14, 2021

Documents received: 10/7/2021
From: Megan Winner

This letter is to inform you that the Description and Map for your planned Annexationn to the City of Coburg (Anx-01-20
Map 16-03-34-00-00202) in Lane County have been reviewed per your request. They MEET the requirements of ORS 308.225 for use with an Order, Ordinance, or Resolution which must be submitted to the Lane County Assessor and the Department of Revenue in final approved form before March 31 of the year in which the change will become effective.



If you have any questions please contact Robert Ayers, 503-983-3032

Oregon
Kate Brown, Governor

Department of Transportation
Delivery & Operations Division
Region 2 Headquarters, Bldg. B
455 Airport Rd SE
Salem, OR 97301-5352
Phone: (503) 986-2600

October 25, 2021

Anne Heath
City Administrator
City of Coburg
91136 N Willamette St
PO Box 8316
Coburg, OR 97408

Re. Status of Coburg Interchange Project (K21139)

Ms. Heath,

The Coburg Interchange design project is a $1.4M design-only project completed in 2021. The design was completed to the Design Acceptance (DAP) checkpoint standard. Additional design work will be necessary as part of a funded construction project.

In 2010 ODOT, the City of Coburg, and Lane County created the Coburg/I-5 Area Management Plan (IAMP). The IAMP found that the interchange will not be able to meet the travel demands that are forecasted for the future and recommends a four-lane bridge over I-5, improvements to all the ramps, and signals at the southbound ramp.

The IAMP accounted for future east side development but the 2015 Coburg TSP did not. The property owner requesting the annexation has prepared a traffic study that demonstrates the additional traffic can be accommodated if a trip cap is imposed on the property, to which the property owner has agreed.

If the uses allowed in the Campus Industrial zone would generate less traffic than the uses allowed in the Light Industrial zone, then the current traffic study and mitigation measures would adequately account for the traffic impacts. If the zone change could generate additional traffic, the traffic study and trip cap may need to be modified.

The completed interchange follows the IAMP recommendations. It includes a new four lane bridge to better accommodate vehicle, bicycles, and pedestrian traffic, improved vertical clearance over I-5, a flatter crown to better accommodate freight transit over the bridge, and an updates for the existing east side signals. The trip cap the to which the applicant has agreed will preclude the necessity of adding west-side signals.

East Van Duyn Road will be also be widened east of the interchange to accommodate a new access road and dedicated turn lane to the industrial lands, east side businesses, and RV park. The new access road will be 1/4 mile east of the interchange with new culvert crossings and retaining walls. The estimated cost to finish the design and construct the interchange is $32,250,000. Construction funding has not been identified.

Sincerely,

Frannie Brindle

Frannie Brindle
Area 5 Manager
Oregon Department of Transportation

Links of interest:
https://www.oregon.gov/odot/projects/pages/project-details.aspx?project=21139
https://www.oregon.gov/odot/STIP/Documents/2018-2021-Final-STIP-Historical.pdf

## HEARLEY Henry O

**From:** JOHNSTON Bill <Bill.W.JOHNSTON@odot.state.or.us>
**Sent:** February 8, 2021 3:26 PM
**To:** HEARLEY Henry O; HEATH ANNE (LCOG List)
**Cc:** BAUMGARTNER Douglas G; VARTANIAN Sasha; WINGARD Patrick
**Subject:** Coburg annexation agreement (Ravin-Hardly) - ODOT comments
**Attachments:** ODOT_COMMENTS.pdf; Coburg Annexation Agreement_Jan27.docx



Hello Henry – Thank you for the opportunity to review your revised draft annexation agreement with Ravin-Hardly (tenants in common). Your original Feb 5 email to me is included at the bottom (beginning) of this email discussion.

I see the revised draft clarifies the property will be rezoned (to Light Industrial) at the same time (Recital C). This was my primary question when I reviewed and commented on the this proposal previously (Oct 7, 2020).

Below are my revised comments, based on the new agreement. Please let me know if you have any questions or concerns.

**Bill Johnston**, AICP, Transportation Planner
**Oregon Department of Transportation** | Region 2 Area 5 | 2080 Laura St; Springfield OR 97477 | 541.747.1354 | bill.johnston@odot.state.or.us

I'm teleworking from home until further notice. Hours: M-F, 8-5. I can be reached by email (preferred) or cell phone: 503.910.5058

**Comments**

1. Before the City approves the rezone it will need to provide findings demonstrating compliance with OAR 660-012-0060 (Transportation Planning Rule). Specifically, you will need to show the plan amendment or rezone will not significantly affect existing or planned transportation facilities. What constitutes a significant effect is defined in OAR 660-012-660(1)(a-c).
2. The City may be exempt from this requirement if (a) the zone change is consistent with the underlying comprehensive plan designation, and (2) the City's adopted (and approved by DLCD) Transportation System Plan (TSP) already accounts for development at the intensity allowed under the proposed zoning, in terms of trip generation and traffic impact.
3. Both of these conditions may already be satisfied. Recital D in the revised draft annexation agreement indicates the property is currently designated in the Coburg Comprehensive Land Use Plan as Light Industrial. I also assume the City's TSP accounted for urban development in this area. You will need to document this in your findings.
4. In addition to the rezone (to Light Industrial) that will be processed concurrently with the annexation, I see (in Recital D and Agreement Item 1.6) the City will also require the property owner to subsequently (prior to development) request another zoning amendment to apply the City's Master Planned Development overlay, and that a more refined Traffic Impact Study will be required at that time.
5. Please notify ODOT when an application is submitted for the subsequent rezone (referred to in the previous comment). We would like an opportunity to comment on the development proposal's consistency with the Interchange Area Management Plan (IAMP), traffic impacts, and any other ODOT requirements that may apply.

**From:** HEARLEY Henry O <HHEARLEY@Lcog.org>
**Sent:** Friday, February 5, 2021 2:12 PM
**To:** JOHNSTON Bill <Bill.W.JOHNSTON@odot.state.or.us>
**Subject:** Draft Annexation Agreement Coburg
**Importance:** High

Hi Bill,

In your referral comments you mention the annexation agreement. The City has completed the draft agreement and has given the applicant an opportunity to review it.

Henry

Henry O. Hearley
Associate Planner
Lane Council of Governments
hhearley@lcog.org
541-682-3089

## HEARLEY Henry O

**From:** JOHNSTON Bill <Bill.W.JOHNSTON@odot.state.or.us>
**Sent:** October 7, 2020 9:16 AM
**To:** HEARLEY Henry O
**Cc:** BAUMGARTNER Douglas G; HEATH ANNE (LCOG List); VARTANIAN Sasha; WINGARD Patrick
**Subject:** Proposed annexation of property at 16-03-34-00-00202 (Coburg) - ODOT comments



Hello Henry – Below are ODOT's comments on this proposed annexation. Please let me know if you have any questions or concerns.

**Bill Johnston**, AICP, Transportation Planner
**Oregon Department of Transportation** | Region 2 Area 5 | 2080 Laura St; Springfield OR 97477 | 541.747.1354 | bill.johnston@odot.state.or.us

I'm teleworking from home until further notice. Hours: M-F, 8-5. I can be reached by email (preferred) or cell phone: 503.910.5058

Comments

1. It's not entirely clear from the information provided (either the referral notice or draft annexation agreement) whether the property is being rezoned concurrently with annexation or if it will be rezoned later.
2. Annexation by itself is not a land use action. If the property is only being annexed, Transportation Planning Rule (TPR) findings are not required. If the property is being rezoned concurrently, TPR findings are required. DLCD can verify this.
3. The City of Coburg is currently updating their TSP, with assistance from the Lane Council of Governments. The update should account for urban development in this area. If so, this should satisfy the TPR requirements.
4. Tax lot 202 is not adjacent to any ODOT owned highway but this area of Coburg and this section of Van Duyn Road are included within the Coburg/Interstate 5 Interchange Area Management Plan. The plan calls for a frontage road to serve properties to the west of lot 202. The easement shown on the plan included in the land use notice appears to conform to the location of the frontage road identified in the IAMP. ODOT recommends the easement be configured to accommodate the horizontal alignment of the future frontage road, consistent with local road standards.

---

**From:** HEARLEY Henry O <HHEARLEY@Lcog.org>
**Sent:** Friday, September 18, 2020 10:16 AM
**To:** ODOT Reg 2 Planning Manager <ODOTR2PLANMGR@odot.state.or.us>; BAUMGARTNER Douglas G <Douglas.G.BAUMGARTNER@odot.state.or.us>; Damien G <damieng@branchengineering.com>; HARMON Brian <brian.harmon@ci.coburg.or.us>; STANKA Danielle E <danielle.stanka@lanecountyor.gov>; BAJRACHARYA Shashi <shashi.bajracharya@lanecountyor.gov>; VARTANIAN Sasha <Sasha.VARTANIAN@co.lane.or.us>; Jason Bush <buildingofficial@cottagegrove.org>; BLACKSMITH Bekke (SMTP) <permit@cottagegrove.org>
**Cc:** CALLISTER Jacob (LCOG) <jcallister@lcog.org>; HEATH ANNE (LCOG List) <anne.heath@ci.coburg.or.us>; WINGARD Patrick <patrick.wingard@state.or.us>

**Subject:** Agency Referral Comment for Annexation of Property at 16-03-34-00-00202
**Importance:** High



All:

Please see the attached referral and application for annexation of a property to the City of Coburg. Please let me know if you have any questions or concerns.

Respectfully,

Henry

Henry O. Hearley
Associate Planner
Lane Council of Governments
hhearley@locg.org
541-682-3089

Oregon
Kate Brown, Governor

**Department of Transportation**
**Region 2 Tech Center**
455 Airport Road SE, Building A
Salem, Oregon 97301-5397
Telephone (503) 986-2990
Fax (503) 986-2839

**DATE:** July 6, 2021

**TO:** Bill Johnston, Transportation Planner
Doug Baumgartner, Development Review Coordinator

**FROM:** Arielle Ferber, PE
Traffic Analysis Engineer

**SUBJECT:** Coburg Aggregate (Coburg) – Transportation Planning Rule
TIA Scoping Comments

---

ODOT Region 2 Traffic has reviewed the provided information (email from Sandow Engineering dated June 21, 2021) related to scoping a traffic impact analysis to address traffic impacts due to development southeast of the I-5 NB Ramps at Van Duyn Road intersection in the City of Coburg, with respect to consistency and compliance with ODOT's Analysis Procedures Manual, Version 2 (APM). The APM was most recently updated in October 2020. The current version is published online at: http://www.oregon.gov/ODOT/TD/TP/Pages/APM.aspx. As a result, we submit the following comments and recommendations:

1. Traffic volumes shown on Figure 1: Development Trip Distribution do not match the provided trip generation. Figure 1 should be updated appropriately.
2. ODOT recommends the applicant submit a methodology and assumptions memorandum documenting methodology and assumptions to be used for existing conditions (i.e. seasonal factors), future conditions (i.e. volume development/post-processing methodology), and alternative analysis (i.e. peak hour factors, analysis parameters, calibration, etc) to Region 2 Traffic in accordance with Section 2.5.1 of the *APM*. By participating in this practice, applicant can proactively reduce or eliminate any need for rework. The methodology and assumptions memorandum should include at least the following proposed analysis parameters:
    - Analysis study area/intersection(s)
    - Count date, type, and duration
    - Seasonal adjustment
    - Analysis years
    - Annual growth rate
    - Trip generation and distribution
    - Mobility targets

- Existing and future peak hour factors (PHFs) and heavy vehicle percentages
- Unadjusted (idea) saturation flow rate

3. ODOT recommends analysis of the following study area intersections:
   - I-5 NB Ramps at Van Duyn Road
   - I-5 SB Ramps at Van Duyn Road/Pearl Street
   - Pearl Street at Coburg Industrial Way
   - Pearl Street at Willamette Street/Coburg Road
   - Van Duyn Road at Site Access (if multiple access points all should be analyzed)
4. Traffic volumes and travel patterns have been disrupted due to COVID-9. Therefore, traffic volumes may be obtained as follows:
   - Historical counts may be obtained and grown to the current existing year by applying historical growth factors. It is recommended that historical counts collected more than five years previously not be used.
   - New counts may be collected with application of a COVID-19 adjustment factor to obtain pre-COVID existing year traffic volumes. The COVID-19 adjustment factor can be calculated by comparing 2019 and existing year traffic volumes from a nearby or representative ATR(s) and/or traffic count.
5. ODOT recommends use of the 30$^{th}$ highest hour volumes (30 HV) to represent existing and future volumes in analyses. The peak hour from a manual count is converted to the 30 HV by applying a seasonal factor. ODOT's *APM* Section 5.2 includes further information for determining an appropriate seasonal factor. For the study area it would be appropriate for the consultant to utilize an average of ATR #22-016 (Lake Creek) and ATR #24-001 (Woodburn) to calculate the appropriate seasonal factor.
6. Due to the nature of the development (Industrial Park) consideration should be taken regarding the heavy vehicle percentage of site generated trips and if it will affect the existing heavy vehicle percentages at study area intersection turn movements.
7. ODOT recommends unsignalized study intersections and private approach roads without existing right- or left-turn lanes be analyzed to determine if they meet the criteria outlined in Section 12.2 of the APM and locations that meet such criteria shall be noted. Installation of a turn lane may be recommended as mitigation for development traffic impacts. However, meeting any criteria does not mean a turn lane will be approved for installation. Engineering judgement shall be used to determine if such installation would be impractical or introduce safety concerns, particularly considering bicycle and pedestrian traffic.
8. ODOT recommends a crash analysis be conducted for the study area intersections by comparing an intersection's crash rate to that of the corresponding 90$^{th}$ percentile crash rate per Section 4.1 and Exhibit 4-1 of ODOT's *APM*. The crash analysis should also include a review of the three most recent Safety Priority Index System (SPIS) lists to identify top 5% or 10% locations within the study area.
9. In addition to analyzing existing year conditions the TIA should also analyze future year conditions. As the development includes an annexation ODOT recommends a 20 year planning horizon in addition to analysis of the opening year. Analyses shall be made for all study area intersections, under both *Future Year* "*background traffic*" and "*total traffic*" scenarios. The *Future Year* "*background traffic*" scenario shall include all in-process traffic (traffic generated by approved and pending development), if any such exist. If none exist, include a statement verifying all jurisdictions were contacted for information on in-process development traffic and that none existed. The "*total traffic*" scenario is

considered *Future Year* "*background traffic*" volumes plus the peak hour trips generated by the proposed development.

10. Intersection operational analyses shall include the effects of queueing and blocking. Average and 95$^{th}$ percentile queue lengths shall be reported for all study area intersections. The 95$^{th}$ percentile queuing is used for design purposes and shall be reported to the next highest 25-foot increment. For signalized intersections, *SimTraffic* is an acceptable queuing analysis software package, while *SimTraffic* or the AASHTO *2-Minute Rule* are examples of acceptable queuing analysis methodologies for unsignalized intersections. *HCM2000* or *Traffix* queuing analysis results will NOT be accepted. Roundabout queuing analyses shall follow the procedures listed in Section 12.3.4 of the *APM*. Simulation should be used if v/c ratios exceed 0.70 and simulation shall be used if v/c ratios are equal to or exceed 0.90. Simulations shall be calibrated in accordance with Chapter 15 of the *APM*.
11. The I-5 Coburg Interchange Design Project (an ODOT shelf project) was recently updated in May 2021 and provides a conceptual design/draft design acceptance package which advanced recommendations made in the I-5 Coburg Interchange Area Management Plan (IAMP).The analysis should ensure that any proposed mitigation aligns with recommendations made within the I-5 Coburg Interchange Design Project.

If there are any questions regarding these comments, please contact me at (503) 986-2857 or Arielle.Ferber@ODOT.state.or.us

# Paul & Sara Burrell

CONTACT

33268 Selby Way
Eugene, OR 97408

PHONE
541-912-4406

EMAIL
paul@ohdeugene.com

Received by
City of Coburg
NOV 30 2021

11/29/2021

Coburg City Council

City Of Coburg
PO Box 8316 Coburg, OR 97408

Dear City Council,

I am the property owner to the direct south that shares the property line. I want to share my concern and disapproval for this expansion of Farm Land into Light Industrial Zoning.

There are still multiple lots on Roberts Rd that have never been developed and are already zoned light industrial use. I see no reason to impede on more farm land especially directly next to Van Duyn housing development and my Farm.

The amount of noise and disturbance is also a huge concern. The wildlife displacement of many species that use our farm, my neighbors to the south and this proposed development include: Elk, Deer & Turkey populations.

Muddy Creek flows directly behind this property boundary also. The risk for damaging the ecosystem and pollutants is high with a commercial development.

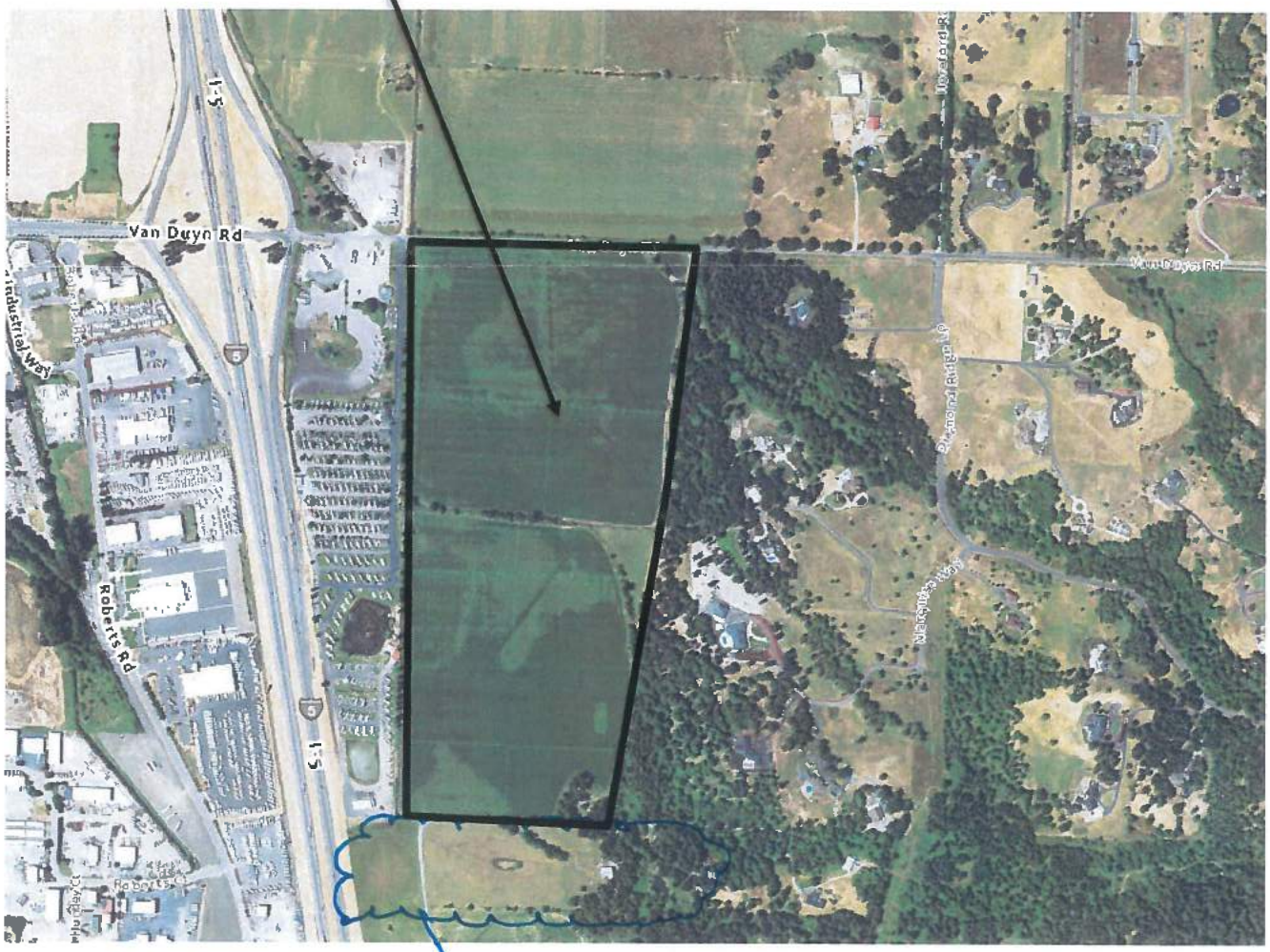
If you owned my beautiful property, the last thing you would want is a commercial development jammed in right next to you as you drive down your driveway. If this does proceed, I would expect and demand a buffer between property lines as well as a natural Cypress border. There is a huge clump of very old Oak Trees and other mature timber in the SE Corner. I would potentially even purchase a strip of land with a lot line adjustment to incorporate these trees and a buffer zone.

As a property owner and small business farm owner (Coburg Cattle Co) I do hope you take my suggestions and thoughts to heart as this will affect a lot of people surrounding this land and WHY people love the small town of Coburg and farming tradition.

Sincerely,

Paul M Burrell

SUBJECT PROPERTY FOR ANNEXATION AND REZONE




My Land

**CITY OF COBURG CITY COUNCIL**
**PO BOX 8316 Coburg, OR 97408**

**FINAL ORDER & FINDINGS OF FACT**
**Annexation & Rezone**
**ANX 01-20 & ZC 01-20**

Findings Adopted Date: _____
City Council Public Hearing Date: December 14, 2021

## I. BASIC DATA

Property Owners: Ravin Ventures & Hardly Hackit, LLC
3555 Gateway Street, Suite 200
Springfield, OR 97477

Applicant Consultant /Engineer: Mr. Anthony Favreau
The Favreau Group
Eugene, OR 97405

Assessors' Map Lot#: 16-03-34-00-00202

Comprehensive Plan Designation: Light Industrial

Current Zoning: Exclusive Farm Use (EFU-40 Acre Minimum)

Noticing: Mailed notice: November 23, 2021
Notice posted: November 30, 2021, at City Hall, Coburg Post Office, Norma Pfeiffer Park shelter and Pavilion Park.
Notice posted at subject property: December 1, 2021
Notice published in *Register Guard*: November 27, 28, December 4, and December 11, 2021.

Staff Report Prepared by: Henry Hearley, Lane Council of Governments, Contract Coburg Planner

## II. REQUEST

The applicant has requested annexation and rezone of a 107.43-acre unit of land located on Map and Tax Lot 16-03-34-00-00202. The requested annexation and rezone are being processed concurrently, at the request of the applicant. The

applicant and the City have mutually agreed to enter into an annexation agreement. The annexation agreement is included in the report as **Attachment A**. See Figure 1 below for a vicinity map of the subject property.

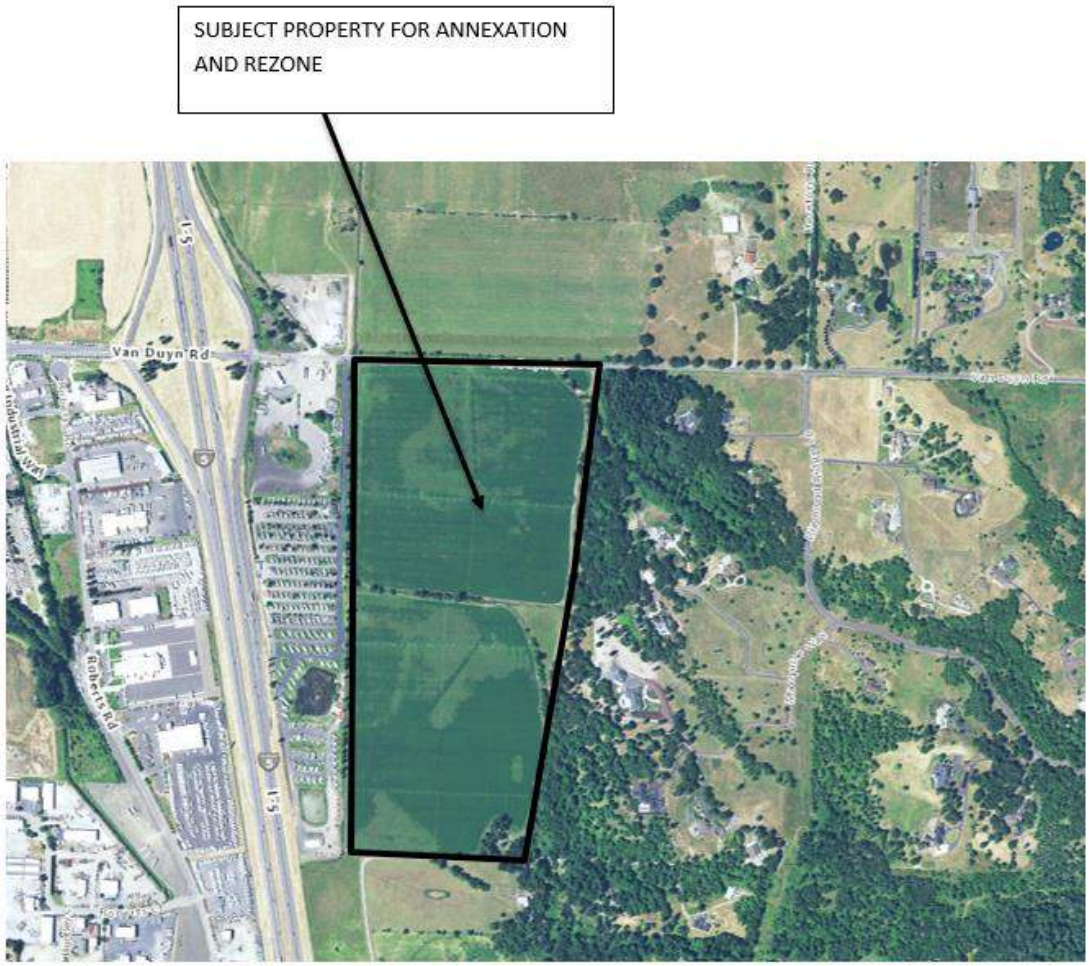



*Figure 1: Subject Property*

## III. Summary of Planning Commission Public Hearing, November 14, 2021

This section is intended to give City Council an overview of the issues and comments that were discussed and raised in front of the Planning Commission on November 14, during the public hearing.

**Summary of Commission Deliberations**.

Commission deliberations and questions were largely centered around traffic impacts the annexation and rezone will have on East Van Duyn Road. Staff largely referred those questions to the applicant's qualified traffic engineer that was in

attendance. The applicant's traffic engineer gave a brief overview of the findings from the Traffic Impact Analysis (TIA) and of how trip caps generally work.

There was a discussion around past historical City Council actions with respect to the subject property when it was included within the UGB and the fact that City Council applied a Comprehensive Plan Map designation of Light Industrial to the property and not Campus Industrial. There seemed to be consensus amongst the Commissioners that the Development Code itself provided city decision makers with the tools and information necessary to aid in determining the zoning to be applied to annexed properties, specifically subsection I of Article IV. However, a Commissioner did ask staff if the City was legally obligated to capture up 30 percent of the estimated regional demand for large light industrial sites; staff responded that they are not aware of any such state law to that effect.

One comment was asked about staff's response to Industrial Policy 7 of Goal 9 of Comprehensive Plan. Industrial Policy 7 reads "*a buffer, subject to conditions of the Zoning Code, shall be required along the boundary of all industrial areas that abut a residential district or shall be used to act as a buffer between the two districts or conflicting uses. Setback requirements of the Zoning Code shall also reflect buffering needs*." The Commissioner's comment suggested that a buffer should also be considered for the western property line of the subject property to separate the uses of the Premier RV property from the future industrial uses to locate on the subject property. It was mentioned during the public testimony portion of the hearing, that some patrons of the Primer RV property consider that their primary residence and should be afforded similar buffering considerations as those being proposed for the eastern property line. Industrial Policy 7 does state a buffer can be used between two districts or conflicting uses. The Commissioner suggested that the uses occurring on the Premier RV property, and the future uses to locate on the subject property should be considered to be conflicting and thus a buffer to separate those conflicting uses should be implemented. Prior to the Planning Commission hearing staff had not fully evaluated Industrial Policy 7 and do find credence in the Commissioner's question and offer this opportunity to further address Industrial Policy 7. The proposed finding for Industrial Policy 7 has been revised accordingly and staff offer City Council to consider a similar buffer be placed between the Premier RV property and the subject property. Staff believe the buffer between the Premier RV property and the subject property can be dealt with during the master plan process that the applicant will undergo following annexation. As such, staff will include a discussion of this buffer requirement into the annexation agreement to ensure that it is addressed.

**Planning Commission's Recommendation**.

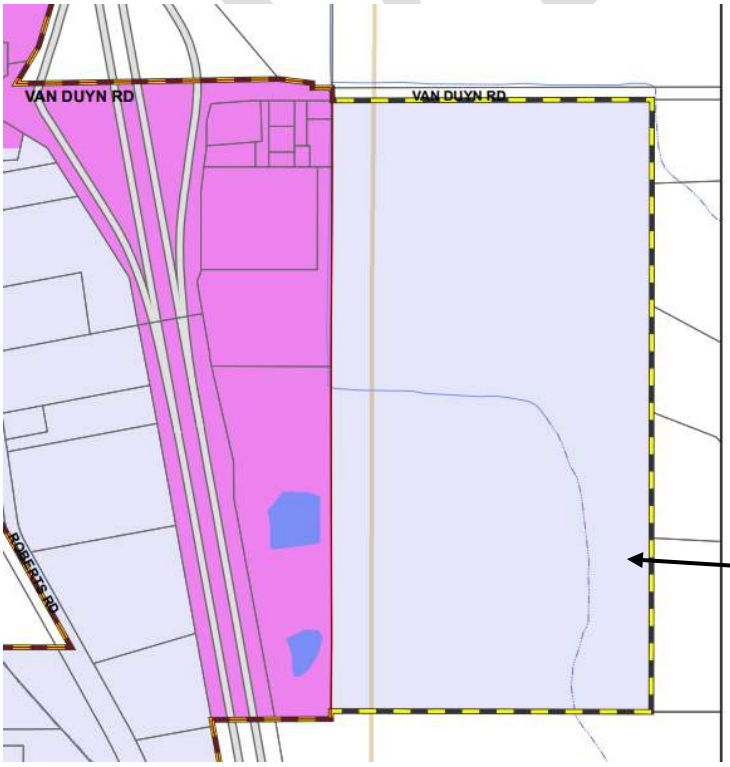
Planning Commission closed the record and the hearing. Planning Commission entered into deliberations and a motion was made and seconded to recommend approval of the rezone and annexation onto City Council. Additionally, Planning

Commission made a motion to recommend to City Council that the zoning designation of Light Industrial be applied to the subject property.

## IV. BACKGROUND

The subject property is currently within the Coburg Urban Growth Boundary (UGB) and is zoned EFU (a Lane County designation). The subject property is currently vacant and consists of grasses and farmlands and wetland features. The subject property abuts Van Duyn road along the northerly boundary. This portion of Van Duyn is outside of the UGB. The subject property was first identified as possible inclusion into the City's UGB as a result of an Urbanization Study that was first conducted in 2010 and later updated in 2014 (the 2014 updated version, written by Eric Hovee, is included as **Attachment E**). In the Urbanization Study, the City found that the City's entire need for employment land cannot be satisfied through "efficiency measures," and that the UGB must therefore be expanded to include additional land for employment needs to the east of the Interstate 5 corridor. At the same time as the UGB was expanded to include the subject property, the City's Comprehensive Plan was also amended to add Policy 28 to Goal 9: Economy of the City, which reads "*In order to meet a regional industrial need, properties with Light Industrial designation located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20 acres*."

Ordinance A-199-G (**Attachment F**), approved by City Council, expanded the UGB to include the subject property and designated the subject property as Light




Subject Property. Designated Light Industrial on Comprehensive Plan Map.

Industrial on the Comprehensive Plan Map. Figure 2 below shows the subject property designated Light Industrial on the Comprehensive Plan Map and shows the property within the UGB.

*Figure 1: Coburg Comprehensive Plan Map of Subject Property*

The subject property (identified as Study Area 8) was chosen to be included into the UGB to provide regional employment lands because of the proximity to Interstate 5, most of the property being viewed as potentially developable; its ability to capture a high percentage of the regional demand – not just a City demand; the subject property's ability to accommodate large industrial users; and due to its majority of soils being Classes IV and VI, which are among the least capable agricultural soils.

As seen in Table A.17 of the *Coburg Urbanization Study Addendum, June 2014*, Scenario B of the Regional Economic Analysis (REA) includes three sub-scenarios as to what extent of the regional large industrial site Coburg has the ability to capture. The REA assumed, at most and fairly aggressively, that Coburg could capture up to 30 percent of the regional large site industrial need.

**Table A.17 Coburg Industrial Scenarios with Regional Large Site Industrial Capture**

| | Coburg Large Site Industrial Capture % | | | |
|---|---|---|---|---|
| **Comparative Scenario / Option** | **A** | **B1** | **B2** | **B3** |
| **Added Regional Market Capture Rate** | **0%** | **10%** | **20%** | **30%** |
| Regional Large Site Acreage Demand | 463 | 463 | 463 | 463 |
| Net Coburg Regional Acreage Demand | - | 46.3 | 92.5 | 138.8 |
| Coburg Share Adjusted for 10% Vacancy | - | 51.4 | 102.8 | 154.2 |
| *Plus* Local Industrial Need (Forecast A) | 68.7 | 68.7 | 68.7 | 68.7 |
| Total Coburg Industrial Demand | 68.7 | 120.1 | 171.5 | 222.9 |
| *Less* Estimated Coburg Industrial Lands | (28.4) | (28.4) | (28.4) | (28.4) |
| ***Equals* Net Added Acreage Need** | **40.3** | **91.7** | **143.1** | **194.5** |

*Source: E. D. Hovee & Company, LLC using methodology of 2010 Urbanization Study together with 2012 OED Region 5 (Lane County) employment forecast. See Appendix B for added detail.*

*Figure 2. Table A.17 of the Coburg Urbanization Study Addendum, June 2014.*

City staff have held three work sessions with City Council and Planning Commission on the topic of annexations and on this application. On October 27, 2020, City staff briefed City Council and Planning Commission at joint work session on the annexation process. On February 23, 2021, staff held another work session on the subject application, and on October 12, 2021, staff held the third and final work session on the annexation agreement that is accompanying this request.

Lastly, City staff and the applicant have held several meetings with affected property owners located to the east of the subject property. Staff has sent them an introductory letter that gave them preemptive notice of the application and in-general have made themselves available to answer neighbor's questions and/or concerns

that have arisen with respect to the application. The preemptive meetings organized by the City with affected nearby property owners was above and beyond of what was required by the Coburg Development Code. The applicant has also attended a meeting with the Park and Tree Committee to discuss the open space plan. The proposal under consideration is the culmination of several years of work on behalf of citizen's involvement committees, stakeholder groups, City staff, and previous Planning Commissioners and City Councilors.

## V. Article IV. Rules for Interpretation of District Boundaries.

***I. If land is annexed into the City and the intent of the City and applicant is to zone the annexed land the same as the existing Comprehensive Plan zoning designation, it automatically is zoned as such.***

**FINDING:** The Coburg Development Code contains a provision in Article IV that may aid City decision makers in determining the appropriate zoning designation to be applied to the subject property. As seen in subsection I, the provision states that if land is annexed into the City and the intent of the City and applicant is to zone the annexed land the same as the existing Comprehensive Plan zoning designation, it automatically is zoned as such. The applicant has requested the zoning to be applied to the subject property be Light Industrial, as such, the applicant has indicated their intent for a zoning of Light Industrial. Next, the intent of the City has to be discussed. Staff points out that the intent of the City can be found in Ordinance A-199-G when City Council specifically amended the Comprehensive Plan Map to designate the subject property as Light Industrial and not Campus Industrial in Section 2(b) of the ordinance.

**Section 2.** Coburg Comprehensive Plan. The Coburg Comprehensive Plan is amended as follows:

(a) The Coburg Comprehensive Plan text is hereby amended to add Policy 28 to Goal 9: Economy of the City, which reads:

"Policy 28: In order to meet a regional industrial need, properties with a Light Industrial designation located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20 acres."

(b) The Coburg Comprehensive Plan Diagram is hereby amended to add approximately 106 acres of property (Tax Lot 202, Assessor's Map 16-03-34-00) designated as Light Industrial. The revised Comprehensive Plan Diagram is attached hereto by reference as Exhibit D, and is hereby adopted.

*Figure 3: Section 2 of Ordinance A-199-G that applied a Plan designation of Light Industrial to the subject property.*

After public notice and reading pursuant to the Coburg City Charter and after Council deliberations followed by councilor motion and second, this ordinance was put to a vote, the results of which were:

**ADOPTED** by the **City Council** of the **City of Coburg** this 9th day of January, 2018, by a vote of 5 for and 0 against.

**APPROVED** by the Mayor of the City of Coburg this 9th day of January, 2018.

Ray Smith, Mayor

ATTEST:

Mandy Balcom, Assistant City Recorder

*Figure 4: City Council's action adopting Ordinance A-199-6 with a vote of 5 for and zero against which applied a Plan designation of Light Industrial to the subject property.*

The designation of Campus Industrial was an available Plan designation, but City Council did not choose to designate the subject property as Campus Industrial, instead, City Council chose Light Industrial. Because of this, staff finds that it's reasonable to conclude that the City made its intent as to which future zoning designation they wanted to see on the subject property; and it was Light Industrial not Campus Industrial. Subsection I of Article IV is perhaps the strongest argument that the subject property should be zoned as Light Industrial when it is brought into city limits. Planning Commission and City Council pointed to the adoption of A-199-6 and subsection I of Article IV as one of the findings to support their decision to approve the proposal and apply a zoning designation of Light Industrial to the property.

## VI. Light Industrial and Campus Industrial Zoning Designations.

**FINDING:** This section briefly outlines some similarities and differences between the Light Industrial and Campus Industrial zones.

In both the Light Industrial and Campus Industrial zones the minimum parcel size for properties located east of Interstate 5 is 20-acres. The maximum lot coverage of the Light Industrial zone is 80 percent, whereas the maximum lot coverage in the Campus Industrial zone is 60 percent. The minimum landscaping requirement for parcels zoned Light Industrial is 15 percent, whereas in the Campus Industrial the landscaping percentage is 40 percent. Perhaps one of the biggest differences between the two zones are the side yard setbacks and the requirement for a landscape buffer for when an industrial use abuts a residential district. In the Light Industrial zone, where an industrial use abuts a residential district, a 25-foot setback is the minimum area that

shall be between any development and adjacent residential district. The 25-foot setback is in the form of a landscaped horizontal buffer. This same requirement for a 25-foot landscaped buffer is not a requirement of the Campus Industrial zone, however a buffer, similar to the buffer required in the LI zone, could likely be achieved by citing Industrial Policy 7, which requires for a buffer between conflicting uses, the conflicting uses in the case would be the industrial uses conflicting with the adjacent residential uses. Included in the annexation agreement, as part of the required open space, is a landscape buffer running the entire length of the western property boundary, providing the separation of uses that is required in the Light Industrial zone.

Staff do not attempt to describe at length the permitted uses, conditional uses and prohibited uses of each zone, as that information is readily available in the Coburg Development Code. What staff will note of the two zones is that in the Light Industrial zone, wholesaling, warehousing, and storage on properties located east of Interstate 5 are prohibited. In the Campus Industrial zone, distribution centers, warehouses, and automobile dependent uses are prohibited. Further, both zones allow manufacturing and assembly uses, but the Campus Industrial zone has a qualifier for those uses; the manufacturing and assembly use is permitted so long as the use does not require a permit from an air quality public agency. This qualifier is not included in the list of permitted uses in the Light Industrial zone.

Any development that is to occur on the subject property, outside of the frontage improvements listed in the annexation agreement, will first have to go through the master planned process and will be subject to review and approval of the appropriate City approval body, consistent with the standards set forth in the Coburg Development Code.

**IV. ARTICLE XX. BOUNDARY CHANGES (ANNEXATION) (code sections appear in bolded *italics* throughout this staff report)**

***A. Annexation and Withdrawal Procedures and Criteria***

> ***1. Annexation Initiation and Review. An annexation application may be initiated by City Council resolution, or by written consents from electors and/or property owners as provided for in ARTICLE X.X.C.18. Annexation applications are reviewed under Type II procedures per ARTICLE X.C. The City Council shall approve proposed annexations by Ordinance. Other annexation proposals permitted by ORS 222 shall be processed as provided in ORS 222.***

**FINDING:** The proposed annexation and concurrent rezone have been initiated by written consent of the property owners of the property located on Map and Tax Lot 16-03-34-00-00202. The applicant has submitted Form 1 Petition Signature Sheet for Annexation and a Verification of Property Owners form; both forms have been signed by Lane County Department of Assessment and Taxation. Pursuant to ORS 222.125, no election is required because the annexation was initiated with consent of all of the

owners of land and a majority of electors. See **Attachment B** for the applicant's application materials. Criterion met.

***2. Application Requirements. In addition to the provisions specified in other articles of this Code, an annexation application shall include the following:***

***a. A list of all owners, including partial holders of owner interest, within the affected territory, indicating for each owner:***

***(1) The affected tax lots, including the township, section and range numbers;***

***(2) The street or site addresses within the affected territory as shown in the Lane County Regional Land Information Database system (RLID);***

***(3) A list of all eligible electors registered at an address within the affected territory; and***

***(4) Signed petitions, as may be required.***

**FINDING:** The applicant submitted the necessary application materials for staff to review and analysis of the requested land use actions. Criterion met.

***b. Written consents on City-approved petition forms that are:***

***(1) Completed and signed, in accordance with ORS 222.125, by:***

***(i) All of the owners within the affected territory; and***

***(ii) Not less than 50 percent of the eligible electors, if any, registered within the affected territory; or***

***(2) Completed and signed, in accordance with ORS 222.170, by:***

***(i) More than half the owners of land in the territory, who also own more than half the land in the contiguous territory and of real property therein representing more than half the assessed value of all real property in the contiguous territory; or***

***(ii) A majority of the electors registered in the territory proposed to be annexed and a majority of the owners of more than half the land. (iii) Publicly owned rights-of-way can be added to annexations initiated by these two methods without any consents.***

**FINDING:** The applicant has submitted completed and signed consent forms. The consent form is signed by all of the property owners of record for the subject property. The subject property contains no eligible electors. Criterion met.

***h. A waiver form signed by each owner within the affected territory as allowed by ORS 222.173.***

**FINDING:** The applicant has submitted a waiver signed by each owner within the affected territory as allowed by ORS 222.173. See **Attachment B** for the applicant's application materials. Criterion met.

***(i) A legal description of the affected territory proposed for annexation consistent with ORS 308.225 that will include contiguous or adjacent right-of-way to ensure contiguity as required by ORS 222.111.***

**FINDING:** The applicant submitted a legal description of the property to be annexed. Adjacent rights-of-way are not included in the requested annexation. Criterion met.

***(n) A signed Annexation Agreement to resolve fiscal impacts upon the City caused by the proposed annexation. The Annexation Agreement shall address, at a minimum, connection to and extension of public facilities and services. Connection to public facilities and services shall be at the discretion of the City, unless otherwise required by ORS. Where public facilities and services are available and can be extended, the applicant shall be required to do so.***

**FINDING:** The applicant and the City have mutually drafted an annexation agreement that addresses connection to and extension of public facilities and services. Further, the Agreement also outlines the applicant's obligation to construct frontage improvements along Van Duyn for the portion that abuts the subject property. The frontage improvements to be constructed by the applicant on Van Duyn include:

- Dedication of approximately 20-feet of right-of-way;
- Construction of a 56-foot wide roadway;
- Construction of sidewalk, curb, gutter, public utilities;
- Construction of two east-bound vehicle travel lanes from the property's west boundary to the access road;
- Construction of an internal access road providing access in accordance with the adopted Interchange Access Management Plan (IAMP).

All construction plans are subject to review and approval by the City Engineer. The annexation agreement will be signed and executed between the applicant and the City following annexation. Criterion met.

***3. Notice. In addition to the requirements of ARTICLE X, the following notice requirements are also required for annexations:***

***a. Mailed Notice. Notice of the annexation application shall be mailed to:***

***(1) The applicant, property owner and active electors in the affected territory;***

***(2) Owners and occupants of properties located within 300 feet of the perimeter of the affected territory;***

***(3) Affected special districts and all other public utility providers; and***

***(4) Lane County Land Management Division, Lane County Elections, and the Lane County Board of Commissioners.***

***b. Posted Notice. Notice of the public hearing at which an annexation application will be considered shall be posted in four public places in the City for two successive weeks prior to the hearing date.***

**FINDING:** For the Planning Commission hearing, mailed notice was sent to properties located within 300-feet of the subject property on October 8, 2021. Posted notice was placed by the applicant on November 2, 2021. City staff e-mailed agency referral notice to affected governmental agencies on October 7, 2021. Notice for the Planning Commission hearing was published in the *Register Guard* on November 2 and 3, 2021. Notice for the City Council hearing was published in the *Register Guard* on November 27, 28 and December 4 and 11, 2021. Notice of the City Council public hearing was mailed to property owners within 300-feet of the subject property on November 23, 2021. See **Attachment C** for notice materials.

***4. Criteria. An annexation application may be approved only if the City Council finds that the proposal conforms to the following criteria:***

***a. The affected territory proposed to be annexed is within the City's urban growth boundary, and is;***

***(1) Contiguous to the City limits; or***

**FINDING:** As seen in Figure 6 below, the subject property is contigious with the existing city limits along the entirety of the western property line. Criterion met.

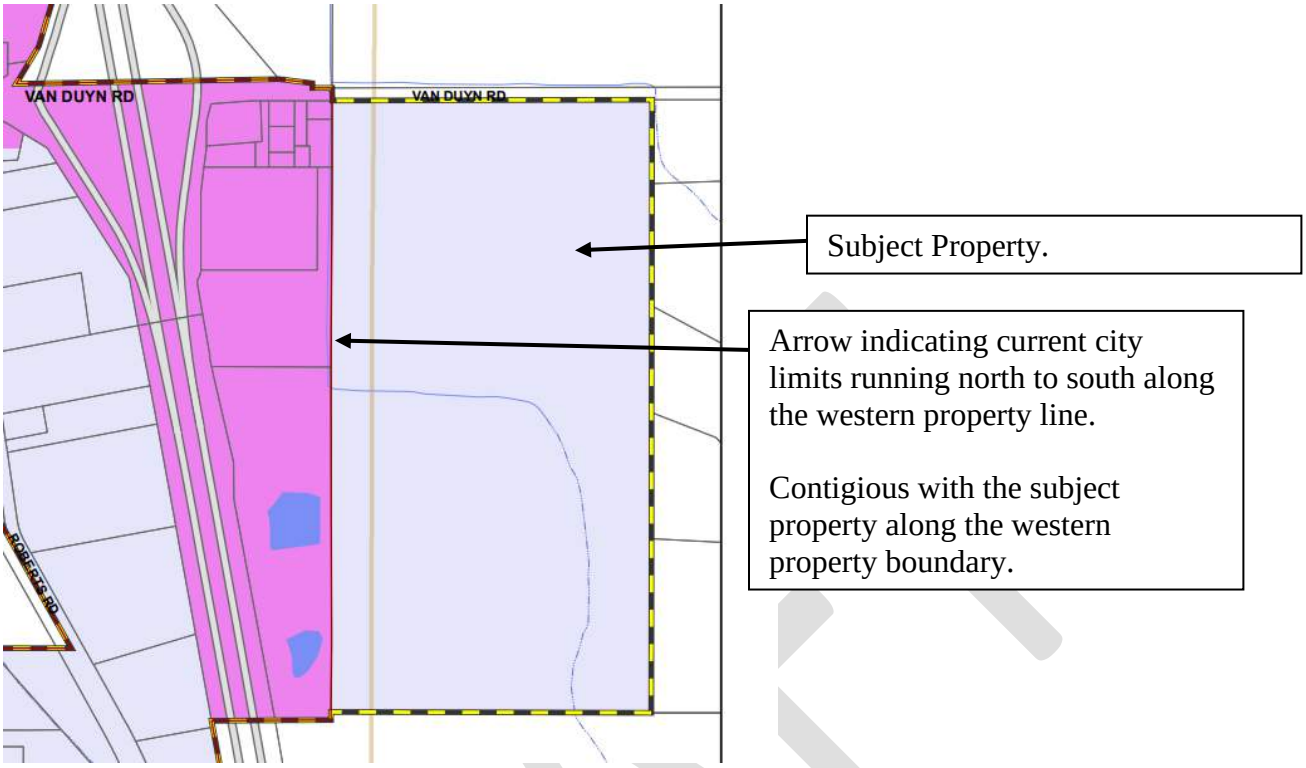



*Figure 6: Contiguity of the subject property with existing city limits*

***b. The proposed annexation is consistent with applicable policies in the Coburg Comprehensive Plan and in any applicable refinement plans;***

**FINDING:** Staff now turn to a discussion about the application's consistency with the applicable policies of the Comprehensive Plan and any refinement plans. The first policy staff want to bring to City decision maker's attention is Policy 28 of Goal 9. This policy was added to the Comprehensive Plan as a result of the UGB expansion that brought the subject property into the UGB. Policy 28 specifically identifies those properties with a Light Industrial plan and located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20-acres. This is because of the regional industrial need for parcels at least 20-acres in size. Criterion met.

**Policy 28 of Goal 9:** ***"In order to meet a regional industrial need, properties with a Light Industrial designation located on the east side of Interstate 5 shall not be partitioned into parcels smaller than 20 acres."***

**Goal 1: Citizen Involvement, Coburg Objective:** ***"The Citizen Involvement Committee will help develop, maintain, and refine programs and procedures that promote and enhance citizen involvement in the land use planning to assure compliance with Goal 1."***

**FINDING:** Goal 1 of the Comprehensive Plan is much aligned with Goal 1 of the Oregon Statewide Planning Goal, which is also citizen involvement. Commonly, in most cities, the citizen involvement committee is effectively the Planning Commission. Coburg maintains an effective, active and well-informed Planning Commission that reviews land use applications in a public forum which revolves heavily around citizen involvement. In the case of the proposed annexation and rezone, Planning Commission held a public hearing on November 17, 2021, and accepted testimony from those in favor of the proposal and those in opposition to the proposal. Both of the public hearings were duly noticed in accordance with the Coburg Development Code and ORS 222.120(3), which dictates that notice of the hearing shall be published once each week for two successive weeks prior to the day of the hearing, in a newspaper of generally circulation. Notice for the City Council hearing was published on November 27, 28 and December 4 and 11, 2021. At the close of the public hearing in front of Planning Commission on November 17, 2021, Planning Commission passed a motion to recommend approval of the annexation and rezone onto City Council for final action. City Council will hold a second hearing on both requests. Additionally, Planning Commission passed a motion to recommend that the zoning to be applied to the property be Light Industrial. Criterion met.

**Goal 2: Land Use. Refinement Plans, Policy 3**: ***"The City may use Refinement Plans to refine the Comprehensive Plan and/or the zoning ordinance in order to further implement the Comprehensive Plan policies. A Refinement Plan designates specific land use, transportation, and other elements through broad local participation. Refinement Plans may be developed in a single linear process, including neighborhood workshops, Planning Commission hearing(s), and the City Council adoption hearing(s)."***

**FINDING:** This policy authorizes the City to use Refinement Plans to refine the Comprehensive Plan and or Zoning Ordinance to further implement the Comprehensive Plan Policies. The Coburg Urbanization Study that was first conducted in 2010 and updated in 2014 is a form of a Refinement Plan that was specifically undertaken to address a specific issue and develop policies and recommendations to address the issue of employment lands. The results of the Urbanization Study drove the need for the City to expand the UGB to address deficiencies in land availability for residential and industrial uses. Ultimately, the expansion of the UGB to include additional residential lands was abandoned, but the UGB was expanded to specifically include the subject property to address a specific deficiency in land availability for industrial uses and further address a regional need for large parcels of 20-acres or more. As a result, the Comprehensive Plan and Map were amended to add Policy 28 of Goal 9 and to include the subject property in the UGB with a Light Industrial Plan designation. Criterion met.

**Goal 2: Land Use. Interpretation of Comprehensive Plan Map, Policy 7:** ***"Plan designations for land use categories are intended to guide zoning."***

**FINDING:** This policy states the Plan designations for land use categories are intended to guide zoning. What this means, is that zoning of parcels should be consistent with the designation as seen on the Comprehensive Plan Map. Applying this Policy to the present proposal would mean it would be reasonable for City decision makers to apply a zoning designation of Light Industrial because that's what the subject property is designated on the Comprehensive Plan Map. Conversely, staff also believe it reasonable to find that a Plan designation of Light Industrial can be implemented through the Campus Industrial zoning designation.

As seen in **Policy 13 of Comprehensive Plan Designations**, the intent of the Light Industrial Plan designation is ***"intended to provide areas for manufacturing, assembly, packaging, wholesaling, related activities, and limited commercial uses that support local industry and are compatible with the surrounding commercial and residential districts. The LI designation is intended to promote a high quality of life through a diverse economy and strong tax base, transition between higher and lower intensity uses, and appropriately scaled nonpolluting industrial uses that fit the small town, historic character of the community."***

Relatedly, the Campus Industrial, as seen in **Policy 14 of Comprehensive Plan** Designations is ***"to provide areas for research and development, manufacturing, assembly, packaging, wholesaling, related activities, and limited industrial-supportive commercial uses in an attractive, campus setting. The CI designation is intended to promote a high quality of life through a diverse economy and strong tax base, and appropriately scaled, nonpolluting industrial uses that fit the small town, historic character of the community."***

Both Plan designations provide for manufacturing and assembly, although in the Campus Industrial zone, manufacturing and assembly, including associated sales are permitted when the use does not require a permit from an air quality public agency. That same qualifier does not appear in the Light Industrial zone. The Light Industrial zone does allow for a wider range of light industrial permitted uses, which staff feel would advance the City's effort in capturing up to 30% of the regional demand for light industrial uses. Staff do not feel a zoning designation of Campus Industrial could capture the regional need as much as the light industrial zone. Criterion met.

**Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources. Natural Resources, Policy 19:** ***The Cities Wetland Map identifies areas of inventoried as wetlands. This map should be used to identify properties that may need a wetland permit from the Oregon Division of State Lands and the U.S. Army Corps of Engineers prior to development. The City shall consider additional code authority to enforce protection of wetlands.***

**FINDING:** This policy relates to the City's inventory of wetlands. The City's Local Wetland Inventory (LWI) Map shall be used to identify properties that may need a wetland permit from Oregon Department State of Lands (DSL) and the US Army Corps

of Engineers (USACE), prior to development on the site. The subject property is known to contain wetlands. However, the City's present LWI Map does not extend east of Interstate 5, so the subject property is not depicted on the LWI Map. As such, staff turn the Lane County GIS layer for a discussion on the wetlands present on the subject property. Based on the National Wetlands Inventory map and Lane County GIS data, the subject property contains a 0.75-acre and 0.99-acre freshwater emergent wetland classified as PEM1Cx. The two Freshwater emergent wetlands generally run through the center of the subject property north to south. Also, running through the middle center and down the southern portion of the east property line is a 2.96-acre freshwater forested/shrub wetland (PFOC). See Figure 7 below. This discussion about wetlands is added to make City decision makers aware that subsequent development to occur on the subject property will be subject to the regulatory requirements of DSL and USACE, prior to development activities commencing. Criterion met.

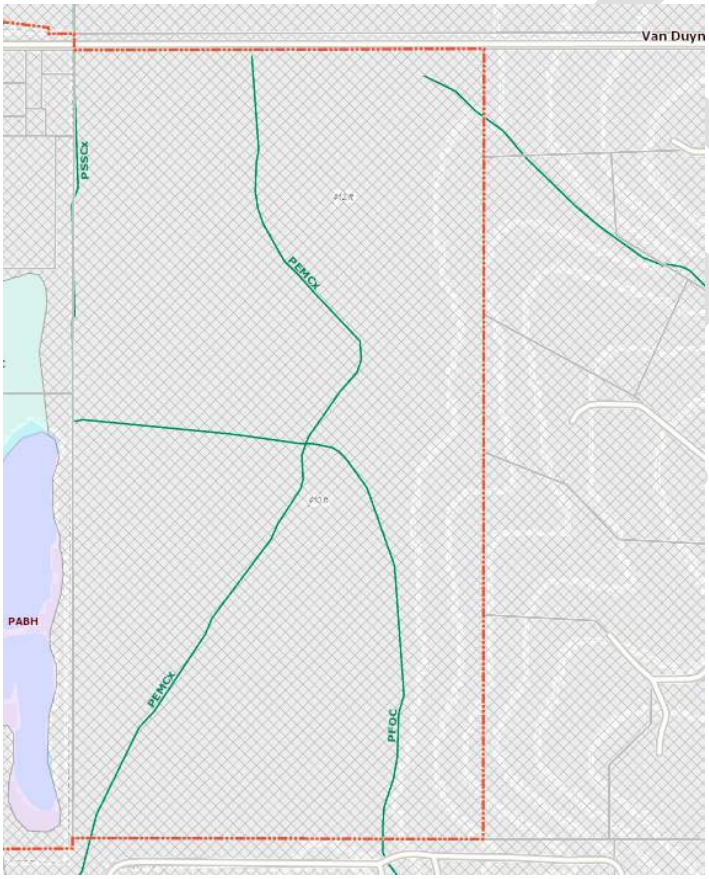



*Figure 7: Known wetland features on the subject property.*

**Goal 6: Air, Water and Land Resource Quality:**

**Policy 1**: ***All future development shall be in accordance with the Department of Environmental Quality (DEQ) air quality maintenance plan and applicable primary and secondary standards of the Lane Regional Air Pollution Authority.***

**Policy 2:** ***The City shall coordinate all major land use decisions with DEQ and LRAPA. The City shall consult with LRAPA prior to the approval of an industry that might affect the airshed of the Eugene-Springfield metropolitan Area.***

**FINDING**: Policy 1 and 2 of Goal 6 are discussed because of the proposed zoning designation to be applied to the subject property will likely contain industrial type uses. All future development to occur on the subject property shall be in accordance with DEQ air quality maintenance and applicable and secondary standards of the Lane Regional Air Pollution Authority (LRAPA). Even before agency referral notice is sent to DEQ and LARAPA, the City should strongly consider including a local DEQ and LARAPA representative in any pre-application conference that occurs prior to the submittal of a land use application for development on the subject property. This ensures the coordination mentioned in Policy 2 begins in earnest for any development on the subject property. Criterion met.

**Goal 9: Economy of the City.**

**General Policy 2:** ***Lands for the expansion within the City, of business (commercial and industrial activities), will be provided to the extent necessary to meet local employment needs, to accommodate the identified regional needs, to provide an adequate tax base, and to support future population growth.***

**FINDING:** Policy 2 does not so much apply to the present proposal as it may have once applied to the past UGB expansion that included the subject property in the UGB. The City expanded the UGB to meet an identified employment lands need and to address a specific regional need – that need being industrial sites of 20-acres in size or more. Criterion met.

**Industrial Policy 7:** ***A buffer, subject to conditions of the Zoning Code, shall be required along the boundary of all industrial areas that abut a residential district or shall be used to act as a buffer between the two districts or conflicting uses. Setback requirements of the Zoning Code shall also reflect buffering needs.***

**FINDING:** A landscape buffer is proposed as seen in the Open Space exhibit to separate the subject property from the adjacent residential district to the east. As was brought up during the Planning Commission hearing, Industrial Policy 7 is intended to provide for a buffer between conflicting uses. As was discussed by the Planning Commission during the first evidentiary hearing, the Premier RV property (zoned Highway Commercial) located immediately to the west and abutting the subject property

contains different uses than will be sited on the subject property, as such, Planning Commission found these two districts to contain conflicting uses and thus a buffer should be placed in between the two districts. The Primer RV property is a RV campground that is used for short and long-term stays and acts as a form of residence for some patrons. As such, Planning Commission found the uses sited on the Primer RV property would conflict with the future industrial uses to locate on the subject property, thus as allowed for in Industrial Policy 7, a buffer should be implemented. Staff believe this buffer can be thoroughly implemented and addressed by the applicant during the master plan process. Accordingly, staff have included a discussion of Industrial Policy 7 and the need for a buffer in between Premier RV and the subject property, into the annexation agreement. Policy sufficiently addressed. Criterion met.

**Industrial Policy 8:** ***Industrial uses shall be grouped together within well-designated industrial parks or subdivisions so as to promote:***

- ***A pollution free environment;***
- ***The highest aesthetic standards possible;***
- ***Minimum impact on adjacent lands;***
- ***Development within the constraints of the natural environment; and***
- ***Compliance with LCDC Goals and Guidelines.***

**FINDING:** Staff would argue this Policy is one of the reasons why lands east of Interstate 5 are required to be Master Planned. A Master Planned development looks precisely at how to implement the policies of the Comp Plan, make efficient use of land, encourage energy conservation and improved air and water quality, and encourage developments that recognize the relationships between buildings and their use, open space and other site amenities. As required by the Coburg Development Code, lands east of Interstate 5 will be required to go through the Master Planned Development process of Article XIV. Criterion met.

**Industrial Policy 9:** ***Public facilities, including water, streets and fire and police protection, already exist which are capable of meeting the needs of expanded commercial and industrial development within the Urban Growth Boundary.***

**FINDING:** As addressed in the annexation agreement, there is an existing 6-inch sanitary sewer line that crosses the freeway under the Van Duyn overpass. Currently, the pipe is serving approximately 45 Equivalent Dwelling Units (EDUs), leaving approximately 1,055 EDUs of capacity for future area properties. An EDU is used for purposes of capacity planning. Any additional capacity needed beyond the available capacity will be the responsibility of future developers.

The City's water system, east of Interstate 5, is under construction and includes an extension line that runs underneath Interstate 5. When completed, there will be a 12-inch watermain to connect to within approximately 300-feet of the southwest corner of the property. There is a 20-foot Public Utility Easement (PUE) located along the

southerly and westerly edges of the property to accommodate public water. With subsequent development of the subject property, water will need to be extended and connected throughout the site.

With respect to streets, the property has approximately 1,540 feet of frontage on Van Duyn Road and is about 3,100 feet deep. The property owner will be responsible for complying with street improvements imposed by the City and County through all applicable land development review processes at the time development is proposed. Additionally, to address some more immediate street issues, the applicant will be providing frontage improvements along the frontage of Van Duyn following annexation. The specific improvements are included in the annexation agreement and include:

- Dedication of approximately 20-feet of right-of-way along the frontage of Van Duyn;
- Construction of a 56-foot wide roadway;
- Sidewalk, curb, gutter, public utilities, and two eastbound vehicle travel lanes from the property's west boundary to the access road; and
- Internal roadway providing access in accordance with the adopted IAMP.

Exact details of the frontage and roadway improvements are subject to final engineering design and review approval process.

Fire and police services are available to the subject property once annexed into city limits.

Criterion met.

**Jobs and the Economy Policy 17:** ***The City shall diversify employment base by the following:***

***a. Provide developable land necessary to accommodate economic growth***

***b. Research and develop policies that discourage big-box retail and strip commercial uses***

**FINDING:** As already addressed in this report, the impetuous of the UGB expansion that brought the subject property into the UGB was an identified regional need for employments lands of 20-acres or greater that Coburg could supply. The zoning to be applied to the subject property would effectively be the limiting factor on what types of uses could locate on the subject property. Anecdotally when the property was brought into the UGB there was a desire on behalf of the City to not allow the "big-box retail" types to uses to occur on the subject property. In the Light Industrial zone, retails and service commercial uses are limited up to 5,000 feet in gross floor area. In the Light Industrial zone, wholesaling, warehousing, and storage are prohibited uses on properties located on the east side of Interstate 5. Staff want to make clear, that the act

of annexation and rezone will not permit any development to commence on the property (except for the Van Duyn frontage improvements), without first going through the land review process, i.e., the master planned development, land division process and site review. Criterion met.

**Other Policy 25:** ***The City shall utilize design standards for commercial and industrial development uses.***

**FINDING:** Policy 25 is directly implemented in the Coburg Development Code by the requirement that properties located east of Interstate 5 be master planned, pursuant to Article XIV(B)(2). Criterion met.

**Goal 11: Public Facilities and Services.**

**Policy 1:** ***The initial stages of all new development will include the installation at the developer's expense, of water lines and sanitary facilities in compliance with the adopted Coburg Sewerage Facilities Plan, full streets, street trees, sidewalks and bicycle lanes or paths where required, street lights, and underground power and telephone lines.***

**FINDING*:*** Policy 1 above is addressed in sections G, H, I, J, M, and 1.7 of the annexation agreement. Criterion met.

**Policy 2:** ***All city facilities including, but not limited to, extension and connection of water lines, and extension and dedication of streets must be completed and approved by the City prior to occupancy of the new development.***

**FINDING:** The applicant is well aware of their responsibility to extend and connect water lines, sewer lines and street improvements that are required once site development starts. These items will be a part of the master planned development process once development on the subject property is proposed. These elements are also included and discussed in the annexation agreement. Criterion met.

**Goal 12: Transportation**

**Policy 2:** ***Take a long-range view in approving street patterns for new development.***

***2.1 All development proposals, plan amendments, or zone changes shall conform to the adopted Transportation System Plan.***

***2.2 Protect the function of existing and planned transportation systems as identified in the Transportation System Plan through application of appropriate land use regulations. When making a land use decision, the City shall consider the impact on the existing and planned transportation facilities.***

***2.3 Consider the potential to establish or maintain accessways, paths, or trails prior to the vacation of any public easement or right-of-way.***

***2.4 At the time of land development or land division, require the dedication of additional street right-of-way in order to obtain adequate street widths in accordance with all street plans adopted by the City.***

**FINDING:** Policy 2 calls for the City to take a long-range view in approving street patterns for new development. The long-range view of street patterns that would serve the development is established by the IAMP which was adopted by the City, County, and ODOT. The IAMP calls for access control and improvement of East Van Duyn Road which would require a new frontage road through the development to serve as access and upgrading East Van Duyn Road to include bike lanes, sidewalks, and any needed turning lanes to serve the operational needs of the development while ensuring safe and efficient travel of the public.

With regard to conformance with the adopted TSP, the City and County co-adopted an update to Coburg's TSP in 2015 which included a reclassification of Van Duyn Road from a local to a collector. Since the City TSP is in the process of resolving an appeal remand, Lane County will be amending the Lane County TSP in early 2022 to include classification corrections consistent with the roadway functions; this will include correcting the classification Van Duyn Road to a collector, consistent with its operational function and consistency with the IAMP.

The applicant will be constructing the road improvements as specifically identified in the annexation agreement and as consistent with the IAMP and TIA. These improvements are intended to see through the future bridge/overpass replacement headed up by ODOT. Although Lane County is the road authority for the abutting portion of East Van Duyn, access and design standards of Lane Code are superseded by the IAMP which was adopted by Lane County. Lane County Transportation has reviewed the proposed frontage improvements for East Van Duyn and agrees with the proposed improvements. The improvements have been designed in a manner that takes into account the future bridge/overpass replacement and the reclassification of Van Duyn from a local road to a major collector. The road improvements and the status of Van Duyn will be further discussed in this report under a discussion of compliance with the Oregon Statewide Planning Goals. See Figure 8 below. Criterion met.

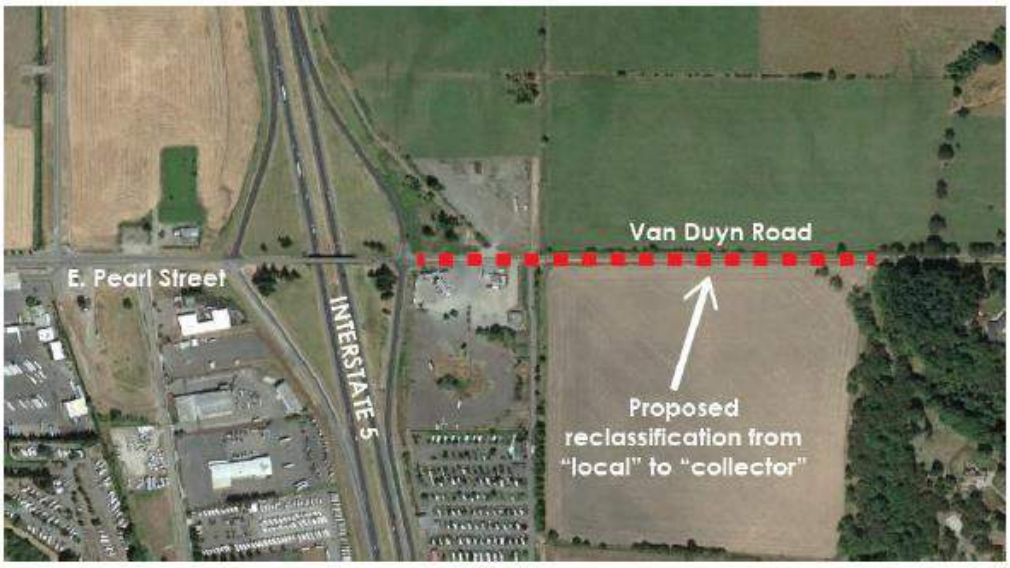



*Figure 8: East Van Duyn Road*

**Policy 40:** ***The exception area immediately east of Interstate 5, when included within the urban growth boundary and city limits, shall have a process for transportation review criteria placed on the property to assure that any new development or redevelopment on the property that increases trip generation from the site is required to go through a plan amendment application with the city and will be required to address the requirements of Section 0060 of the TPR regarding impacts to state, county, and city transportation facilities. The property owner or applicant may be required to complete a traffic impact analysis, road dedications, and road improvements for affected County Roads, consistent with the Lane County Transportation System Plan goals and policies and with County requirements for roads in Lane Code 15.***

**Policy 41:** ***The exception area immediately east of the Interstate 5 interchange shall have an established trip generation baseline upon annexation of the property. The trip generation baseline shall be for average daily trips (ADT), weekday AM peak and weekday PM peak trips, based on ITE Trip Generation Manual and inventory of uses is as shown in Exhibit 2 and is incorporated as policy by reference.***

**Policy 42:** ***All new development proposals and/or redevelopment proposals in the exception area immediately east of Interstate 5 that exceed the baseline trip generation established upon annexation shall be required to apply for a city plan amendment application and meet Statewide Goal 12, Transportation Planning Rule, in particular Section 0060, and develop a transportation analysis to determine the impact on the interchange and on County Roads. The County may require a traffic impact analysis and road improvements consistent with the Lane County Transportation System Plan goals and policies and with County***

***requirements for roads in Lane Code 15. The new site development or redevelopment shall be required to measure the following trip impacts for all three of the following:***

- ***Weekday PM peak hour trips between 4:00 pm and 6:00 pm***
- ***Weekday AM peak hour trips between 6:00 am and 9:00 am***
- ***Average Daily grips for the entire area in question.***

**FINDING:** The subject property is NOT an exception zone; it is zoned EFU. Nonetheless, the intent of Policy 40 and 41 are relevant to the proposed annexation and rezone due to the Transportation Planning Rule (TPR) of Oregon Statewide Planning Goal 12 (ORS 660-012-0060). For this reason, staff include a discussion of Policy 40 and 41. The TPR requires local governments to demonstrate that amendments (of which an annexation and rezone are) to adopted plans and regulations will not significantly affect existing or planned transportation facilities. The generally accepted method for establishing whether there is a significant effect, the extent of the impact, and the appropriate mitigation measures, is to prepare a Traffic Impact Analysis (TIA). In some cases, a full TIA may not be required, if an applicant can demonstrate the impact will not be significant. In cases such as this, a Significant Effects Analysis (SEA) will be prepared. This was not the case with the present proposal, so a full TIA was prepared by the applicant's traffic engineer. The TIA prepared by the applicant's traffic engineer was scoped in coordination with ODOT, Lane County Transportation and the City Engineer. The completed TIA underwent three rounds of review and comment before being accepted by all parties. The TIA found there would be impacts to roadway facilities and mitigation measures would need to be incorporated. Specifically, the TIA found that:

- The Pearl Street at Interstate 5 Southbound Ramp will have a substantial number of trips added to the westbound left-turn movement. The subject property can be developed up to 613 PM Peak Hour trips before the intersection does not meet the mobility standard. As a result, a trip cap of 613 PM Peak Hour trips is imposed on the subject property which was proposed by the applicant and accepted by the relevant road authorities as being sufficient for the zone change to meet the TRP requirements of OAR 660-012-0060; however, future development will trigger a development-specific TIA that would involve a more detailed review of operational needs, such as intersection performance and turning lanes.
- The Pearl Street/Interstate 5 northbound ramp intersection will not need to be signalized. The IAMP improvements identified in the IAMP include the addition of the lanes to/through this intersection. The intersection with the IAMP improvements can handle all 720PM Peak Hour trips from the zone change. Therefore, there is no mitigation required for this development.

The trip cap will apply in perpetuity or until another Transportation Planning Rule Analysis (TPRA) is submitted on changes facilities, uses, etc. The trip cap will be written

into the subsequent deeds of the parcels of land that are created through the land division process. The trip cap has been added to the annexation agreement. The discussion around transportation and Goal 12 will again be addressed under Goal 12 of the Oregon Statewide Planning Goals. Criterion met.

**Goals 14: Urbanization**

**Policy 6:** ***The City shall not annex lands outside its adopted Urban Growth Boundary without first expanding its Urban Growth Boundary to include the proposed annexation.***

**FINDING:** The subject property is presently within the City's adopted UGB and has been designated as Light Industrial on the Comprehensive Plan Map. The City is not annexing land outside of its adopted UGB.

As discussed in the aforementioned applicable goals and policies of the Coburg Comprehensive Plan, the proposed annexation and rezone are consistent with the Coburg Comprehensive Plan. Criterion met.

> ***c. The proposed annexation will result in a boundary in which key services can be provided.***

**FINDING:** As included in the annexation agreement and discussed in this report, the proposed annexation will result in a boundary in which key services can be provided. Criterion met.

> ***d. Where applicable, fiscal impacts to the City have been mitigated through an Annexation Agreement or other mechanism approved by the City Council.***

**FINDING:** The City and the applicant will enter into and execute an annexation agreement following approval of the annexation. The annexation agreement outlines the obligations of the applicant with respect to the costs associated with the extension of city services and frontage improvements on East Van Duyn. The annexation agreement is included in this report at **Attachment A**. Criterion met.

***5. Application of Zoning Districts***

> ***a. Upon approval of the annexation by the City Council, the underlying Comprehensive Plan designation and current zoning consistent with the Comprehensive Plan designation shall apply.***

**FINDING:** When the subject property was brought into the UGB, City Council applied the plan designation of Light Industrial to the property. Presently, the Comprehensive Plan map designates the property as Light Industrial which generally means a City fully intends and plans for those uses to eventually located on the property. An application of

a Light Industrial zoning designation to the subject property would be a straight-forward one-to-one implementation of the Light Industrial Plan designation because the zoning and Plan designation are exactly the same. Planning Commission recommended to City Council the zoning to be applied to the subject property be Light Industrial. Planning Commission cited subsection I of Article IV and Article XX (A)(5)(a) of the Coburg Development Code, and Policy 5 of Goal 2 of the Comprehensive Plan, as the basis for their decision. The aforementioned sections of the Development Code and Comprehensive Plan, offer city decision makers guidance and direction when deciding the zoning to be applied when lands are annexed. Specifically, subsection I of Article IV states "*if land is annexed into the City and the intent of the City and the applicant is to zone the annexed land the same as the existing Comprehensive Plan zoning designation, it automatically is zoned as such*." In the staff report and public hearings, staff set forth a discussion that the intent of the City was made when it specifically designated the subject property as Light Industrial when the UGB was expanded, thus making their intent known. Under the guise of subsection, I of Article IV, Planning Commission and City Council found that the zoning to be applied shall be Light Industrial. Further, Policy 7 of Goal 2 under Interpretation of Comprehensive Plan Map, the policy reads "Plan *designations for land use categories are intended to guide zoning*." Utilizing Policy 7, Planning Commission and City Council, found the Comprehensive Plan designation applied to the subject property was intended to guide the future zoning of the property when it comes into city limits. As such, Planning Commission and City Council relied on this Policy when it decided to apply a zoning designation of Light Industrial to the subject property. Criterion met.

***b. An applicant may submit for a zoning map and Comprehensive Plan map amendment. The Commission will not deem an application complete for a zoning map amendment until the annexation has been approved by the City Council and becomes effective, as that term is described in ARTICLE X.X.A.5, and ARTICLE X.X.A.6 that follows.***

**FINDING:** The applicant has submitted an application for annexation and concurrent rezone, consistent with the application requirements of the Coburg Development Code. The annexation and rezone will not become effective until final action is taken by City Council, as outlined in the ordinance adopting the annexation and zone change, and as set forth in ORS Chapter 222. Criterion met.

## V. ARTICLE XXI. ZONE CHANGES.

***2. District Amendment Criteria Any zoning or special purpose district amendment proposal considered under a Type II procedure must be demonstrated to be in conformance with each of the following criteria:***

***a. The proposed amendment conforms to the Comprehensive Plan or substantial changes have occurred which render the Comprehensive Plan inapplicable to the requested change and the Plan should be amended as proposed by the proponent of the***

***change (in which case the Plan must be amended prior to final action on the District Amendment).***

**FINDING:** As discussed in this report, there are two possible zoning designations that could be applied to the subject property: Campus Industrial or Light Industrial. Both of these zoning designations would implement the Plan designation of Light Industrial. Both plan designations provide for manufacturing, assembly, packaging, wholesaling and related activities, although the Campus Industrial zone does not allow uses that require an air quality permit. Both designations are intended to promote a high quality of life through a diverse economy and strong tax base, and appropriately scaled, nonpolluting industrial uses that fit the small-town character of Coburg. Both zones prohibit some uses: the Campus Industrial zone prohibits distribution centers, warehouses, automobile dependent uses and the Light Industrial zone prohibits wholesaling, warehousing, and storage on properties located east of Interstate 5. One notable difference between the permitted uses is that the Light Industrial zone permits distribution centers, whereas the Campus Industrial prohibits them. As seen in the Urbanization Study, under Scenario B, in which Coburg has the ability to capture the greatest percentage of regional industrial needs, distribution related firms are identified as a use for which Coburg could remain competitive. With a zoning of Campus Industrial, distribution centers would be prohibited and the full realization of Coburg being able to capture up to 30 percent of the regional industrial demand may be diminished. As mentioned earlier, the Campus Industrial zone does not require a 25-foot landscaped buffer between industrial uses and residential districts, but a buffer could be applied by invoking Industrial Policy 7 of the Comprehensive Plan. As seen in the annexation agreement, the applicant is proposing to provide a landscape buffer along the entire westerly property boundary, creating the separation of uses that is required in the Light Industrial zone. As discussed in the public hearings, and found by Planning Commission and City Council, for the reasons found in these findings, the zoning designation to be applied to the subject property shall be Light Industrial. Criterion met.

***b. The proposed amendment fulfills a demonstrated public need for a particular activity or use of land within the area in question.***

**FINDING:** The driving force behind the City's past UGB expansion that brought the subject property into the UGB was a demonstrated public need for employment lands in the region and Coburg was found to be able to meet that need most readily compared to other cities in Lane County. As discussed earlier in this report, the resultant recommendation of the Urbanization Study was to expand the City's UGB to capture Study Area 8, which is the subject property. Once Study Area 8 was incorporated into the City's UGB the next logical step towards addressing the regional need for employment lands is to annex the property into city limits so development can be realized towards meeting the identified regional need. The proposed amendment to the City's zoning map to bring the subject property into the city limits fulfills a demonstrated public need. Criterion met.

***c. If residential zoning is involved, the proposed residential zone or zones best satisfies the objectives of the Comprehensive Plan and does not exclude opportunities for adequate provision of low and moderate housing within the subject neighborhood area.***

**FINDING:** Residential zoning is not proposed as part of the proposal. Criterion not applicable.

***d. When an application is received to change the zone of property which includes all or part of a mobile home park, written notice by first class mail shall be sent to each existing mailing address for tenants of the mobile home park at least 20 days but not more than 40 days before the date of the first hearing on the application.***

**FINDING:** The proposal does not involve the rezone of a property which includes all or part of a mobile home park. Criterion not applicable.

***3. Land Use Applications that fall within the IAMP.***

***a. The City and County shall coordinate with ODOT in the review of land use applications for areas within the IAMP boundary. Land use actions within the IAMP that may affect the performance of an interchange, such as zone changes will be consistent with the adopted IAMP. The City Planner shall include ODOT as an agency referral partner. Actions not consistent with the IAMP may only be approved by also amending the IAMP and related transportation system plans consistent with OAR 660-012-0050 and 0055. Lands bounded by IAMP can be found in ARTICLE X.***

**FINDING:** City, Lane County and ODOT staff have been working cooperatively with the applicant since the applicant submitted the application. ODOT and Lane County were both sent a request for agency referral comment. Because the subject property falls within the IAMP area, a TIA was required of the applicant and because the zone change triggered the TPR. Both ODOT and Lane County have provided extensive comment on the applicant's TIA and after several rounds of review and comment, the TIA was accepted by all parties. The TIA was found to be consistent with the IAMP. Criterion met.

## VI. CONSISTNECY WITH OREGON STATEWIDE PLANNING GOALS.

### Goal 1: Citizen Involvement.

**FINDING:** Goal 1 of the Comprehensive Plan is much aligned with Goal 1 of the Oregon Statewide Planning Goal, which is also citizen involvement. Commonly, in most cities, the citizen involvement committee is effectively the Planning Commission. Coburg maintains an effective, active and well-informed Planning Commission that reviews land use applications in a public forum which revolves heavily around citizen involvement. In the case of the proposed annexation and rezone, Planning Commission held a public hearing on November 17, 2021, and accepted testimony from those in favor of the

proposal and those in opposition to the proposal. Both of the public hearings were duly noticed in accordance with the Coburg Development Code and ORS 222.120(3), which dictates that notice of the hearing shall be published once each week for two successive weeks prior to the day of the hearing, in a newspaper of generally circulation. Notice for the City Council hearing was published on November 27, 27 and December 4 and 11. At the close of the public hearing in front of Planning Commission on November 17, 2021, Planning Commission passed a motion to recommend approval of the annexation and rezone onto City Council for final action. On December 14, 2021, City Council held a second hearing on both requests and again accepted oral and written testimony of those in favor and opposed to the proposal. Following the public hearing, City Council accepted Planning Commission's recommendation for approval of both requests and applied a zoning of Light Industrial to the property. Criterion met.

**Goal 2: Land Use Planning.**

**FINDING:** Goal 2 outlines the basic procedures for Oregon's statewide planning program, stating that land use decisions must be made in accordance with comprehensive plans and the effective implementation ordinances must be adopted. The City's past UGB expansion, which brought the subject property into the City's UGB, was implemented by Ordinance A-199-G, which specifically amended the Comprehensive Plan and map to state that the subject property shall not be partitioned into parcels of less than 20-acres and the plan designation of the subject property shall be Light Industrial. As discussed during the public hearings and found in these findings, Planning Commission recommended onto City Council the annexation and rezone be approved and the Light Industrial zoning designation be applied to the property. The proposed annexation and rezone are consistent with the City's adopted Comprehensive Plan and Map. Criterion met.

**Goal 3: Agriculture Lands.**

**Goal 4: Forest Lands.**

**FINDING:** The subject property is presently zoned Exclusive Farm Use (EFU) by Lane County. Previously, the subject property was designed as agriculture by the Rural Comprehensive Plan. When the UGB was expanded to bring in the subject property, City Council designated the property as Light Industrial on the Comprehensive Plan Map. This action was driven by the Urbanization Study that identified a deficiency in employment lands regionally and the Coburg is in an excellent position to meet that regional need. The action of bringing the subject property into the UGB and designating it Light Industrial meant the City fully expects this land be become developed in the future, consistent with the Comprehensive Plan. Because Van Duyn is not within the UGB and is proposed to be improved, a discussion about road improvements with respect to OAR 660-012-0065 which permits transportation facilities on rural lands consistent with Goals 3,4,11 and 14 without a goal exception will be discussed under Goal 14 Urbanization. Goals 3 and 4 satisfactorily addressed.

Staff would also like to address the soils found on the subject property, as it was a criterion for selection for inclusion into the UGB. Study Area 8, as identified in the Urbanization Study, is the subject property. Study Area 8 is comprised of two percent Class III soils, 51 percent Class IV soils and 48 percent of Class VI soils. Class I soils have the highest agricultural capability and Class VI the lowest. Criterion met.

**Goal 5: Natural Resources, Scenic and Historic Areas and Open Spaces.**

**FINDING:** Goal 5 requires local governments to adopt programs that will protect natural resources; Goal 5 includes wetlands as natural resources. As discussed earlier in this report, the subject property contains two freshwater emergent wetlands (PEM1Cx) and one freshwater/shrub wetland (PFOC). When development is proposed on the subject property, the City will send referral notice to DSL and USACE for review and comment with respect to development within known wetland features. As noted earlier, the applicant will be responsible for adhering to all regulatory requirements of DSL and USACE, prior to development activities. Goal 5 satisfactorily addressed.

**Goal 6: Air, Water and Land Resources Quality.**

**FINDING:** Goal 6 states that all waste and processes discharges from future development, when combined with such discharges from existing developments shall not threaten to violate, or violate applicable state or federal environmental quality statutes, rules and standards. Similar to the finding for Goal 5, above, upon site specific development, the developer will be required to comply with state and federal water air quality standards through the Department of Environmental Quality (DEQ) and LRAPA.DEQ and LARAPA will be included on the agency referral comment list when site specific development is proposed. The local representative for DEQ has reviewed the annexation and rezone request with respect to air and water quality permitting. Goal 6 satisfactorily addressed.

**Goal 7: Natural Hazards.**

**FINDING:** Goal 7 requires local governments to inventory natural hazards. There are no known inventoried natural hazards on the subject property. Not applicable.

**Goal 8: Recreational Needs.**

**FINDING:** Goal 8 requires local governments for meeting recreational needs for now and in the future. The open space provided for by the subject property will be for private use by the employees of the businesses to locate on the property. (The requirement for open space is a function of the zoning designation and requirement of the Coburg Development Code). The open space as described in the annexation agreement, running north-to-south along the eastern boundary of the property will be placed in a

conservation easement. To the extent that Goal 8 is applicable, it is sufficiently addressed.

**Goal 9: Economic Development.**

**FINDING:** Goal 9 is perhaps the most relevant Oregon Statewide Planning Goal to the proposal. Goal 9 requires local governments to contribute to a stable and healthy economy in all regions of the State. The impetus of the UGB expansion that brought the subject property into the UGB was driven a by a regional demonstrated need for employment lands in the form of large-scale, light industrial lands. The proposed annexation and rezone are the next steps towards the City and region realizing those past UGB expansion efforts. The annexation will formally bring the subject property within Coburg's city limits and give it its initial city zoning designation, thus effectively making the property ready for development and able to contribute to the local and regional economy of the State. Goal 9 satisfactorily addressed.

**Goal 10: Housing.**

**FINDING:** The proposed annexation and rezone does not pertain to residential lands; it is for employment/industrial lands. The City Council designated the subject property as Light Industrial when it was brought into the UGB. Not applicable.

**Goal 11: Public Facilities.**

**FINDING:** Goal 11 requires local governments 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. Goal 11 states the local governments shall not allow the establishment or extension of sewer systems outside urban growth boundaries or unincorporated community boundaries. The proposed water line to serve the subject property will be located near the southwest corner of the property, which is within the UGB. The proposed sewer line to serve the subject property is near the northwest corner, which is also within the UGB; Neither utility line (water or sewer) will serve any properties outside of the UGB. Goal 11 satisfactorily addressed.

**Goal 12: Transportation.**

**FINDING:** As discussed at length earlier in these findings, the proposal is consistent with Goal 12 and the requirements of TPR as seen in OAR 660-012-0660. The TPR requires local governments to demonstrate that amendments (of which an annexation and rezone are) to adopted plans and regulations will not significantly affect existing or planned transportation facilities. Based on traffic generation assumptions of the uses that would be allowed by the new zoning, there was the potential for the proposal to have a significant effect. The applicant's traffic engineer prepared a TIA to evaluate TPR compliance.

The TPR TIA underwent three rounds of review and comment before being accepted b by all parties and entered into the official record for this application. The TIA found there would be impacts to roadway facilities and mitigation measures would need to be incorporated. Although the applicant's TIA included some operational assumptions and recommendations (i.e., queue lengths and turning movements), the road authorities stated that the future development-specific TIA would more appropriately evaluate and mitigate the development impacts on the transportation system (e.g. a signal warrant analysis and turn lanes). To limit traffic generation below the threshold of trips that would necessitate physical mitigation measures, the applicant proposed, and the road authorities accepted the trip cap as detailed above.

The trip cap will be set at 613 PM Peak Hour trips. The trip cap will apply in perpetuity or until another Transportation Planning Rule Analysis (TPRA) is submitted on changes facilities, uses, etc. The trip cap will be written into the subsequent deeds of the parcels of land that are created through the land division process. The trip cap has been added to the annexation agreement.

Because Van Duyn is located outside of the UGB, staff would like to address OAR 660-012-0065. This rule identifies transportation facilities, services and improvements which may be permitted on rural lands consistent with Goals 3,4, 11 and 14 without pursuing a goal exception process.

One of the listed exceptions to improvement on rural roads is found under subsection (3)(o) of OAR 660-012-0065, "*transportation facilities, services and improvements other than those listed in this rule that serve local travel needs. The travel capacity and performance standards of facilities and improvements serving local travel needs shall be limited to that necessary to support local land uses identified in the acknowledged comprehensive plan or to provide adequate emergency access*." The proposed frontage improvements along Van Duyn are required to support local travel needs and are identified in the IAMP (a refinement plan of the Comprehensive Plan). Further as outlined in subsection (3)(c) and (d) channelization and realignment of roads is an allowed transportation improvement on rural roads that is consistent with Goal 3, 4, 11 and 14. Both channelization and realignment of Van Duyn will occur as a result of the frontage improvements.

**Goal 13: Energy Conservation.**

**FINDING:** Goal 13 directs local governments to manage lands so as to maximize the conservation of all forms of energy, based on upon sound economic principles.

The proposal is consistent with Goal 13 because it maintains the City's compact urban growth form by locating industrial uses adjacent to existing industrial uses and by locating those uses along the Interstate 5 corridor, which is a principle of planning guideline 4 of Goal 13. Goal 13 satisfactorily addressed.

**Goal 14: Urbanization.**

**FINDING:** Goal 14 directs local governments to provide for an orderly and efficient transition from rural to urban land uses, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

The proposal is consistent with Goal 14 because the proposed annexation and rezone brings land within the city limits that are ready for urbanization and development in order to meet an identified regional employment need that Coburg can satisfy. The discussion of Van Duyn being improved with specific frontage improvements outside of the UGB has been found to be consistent with Goal 14 as discussed under Goal 12 and pursuant to OAR 660-012-0065. Goal 14 satisfactorily addressed.

## VII. Informational items.

- Engineering plans for the Van Duyn frontage improvements are subject to review and approval by the City Engineer before construction of the improvements commence. This requirement is also outlined in the annexation agreement.
- A trip cap of 613 PM Peak Hour trips shall be set on the subject property. The trip cap shall be placed as deed restrictions on the subsequent parcels that are created as a result of the land division process. This requirement is also outlined in the annexation agreement. The trip cap should also be addressed and added as a condition of approval during the land division process that will occur following annexation.

## VIII. Conclusion.

City Council accepted Planning Commission's recommendation that the annexation and rezone request be approved and for the subject property to contain a zoning designation of Light Industrial, once annexed into city limits. As outlined in these findings, the proposed annexation and rezone meet the applicable approval criteria. In making its decision, City Council, in part, relied on subsection I of Article IV, Article XX(A)(5)(a) and Policy 7 of Goal 2 of the Comprehensive Plan to make its decision. The intent for the zoning to be applied to the property, was made when City Council designated the property as Light Industrial when it was brought into the UGB; this action guided City Council's decision to zone the property Light Industrial.

Additionally, the Light Industrial zone allows for a greater range of Light Industrial uses than does the Campus Industrial, including distribution centers. City Council finds a zoning of Light Industrial addresses the regional demand for large-site industrial uses more so than does the Campus Industrial zone. With a zoning of Light Industrial, Coburg has the ability to capture a larger portion of the regional need for industrially zoned property.

## IX. Attachments.

Attachment A - Draft Annexation Agreement
Attachment B – Applicant's Application Materials
Attachment C – Notice Materials
Attachment D – Applicant's Final Accepted TIA (for brevity only the final accepted version of the TIA is included)
Attachment D.1 – Applicant's Final TIA Comments to City
Attachment D.2 – Applicant's Final TIA Comments to ODOT
Attachment E – Urbanization Study update by Eric Hovee, 2014
Attachment F – City Council Findings in Support of Ordinance A-199-G
Attachment G - Planning Commission Public Comments
Attachment H - Agency Comments
Attachment I - City Council Public Comments
Attachment J – Proposed (Draft) Findings of Fact for Council Consideration
Attachment K – New Draft Zoning Map
Attachment L – Ordinance A-200-J

These Findings of Fact accepted by City Council as a basis for approval of ANX 01-20 & ZC 01-20 on this date: _____

_____
Mr. Ray Smith, Mayor of Coburg

# Coburg Zoning Districts

DRAFT

INDIAN DR
PAIUTE LN
MUDDY CREEK
N COBURG RD
COBURG RD
Coburg Fire Station
W VAN DUYN ST
N HARRISON ST
SARAH LN
SHANE CT
Serenity Lane Treatment Center
N COBURG INDUSTRIAL WAY
HATFIELD ST
BRUCE WAY
E LOCUST ST
N COLEMAN ST
E MILL ST
Coburg City Hall
AUSTIN ST
N WILLAMETTE ST
N DIAMOND ST
N SKINNER ST
E MCKENZIE ST
N SPORES ST
MILL SLOUGH
ABBY RD
E LINCOLN WAY
N MILLER ST
FINNLEY ST
E PEARL ST
VAN DUYN RD
VAN DUYN RD
COBURG BOTTOM LOOP RD
S MILLER ST
E DELANEY ST
S STUART WAY
S COBURG INDUSTRIAL WAY
W DIXON ST
S SKINNER ST
E DIXON ST
CHRISTIAN WAY
S WILLAMETTE ST
S COLEMAN ST
E MAPLE ST
E THOMAS ST
VINTAGE WAY
ROBERTS RD
ROBERTS CT
COBURG RD

## Legend

### Zoning Districts

- Traditional Residential
- Traditional Medium Density Residential
- Central Business
- Highway Commercial
- Light Industrial
- Parks, Recreation, & Open Space
- Public Water Service
- Historic District
- Site Review/ACA Overlay District (ACA = Architecturally Controlled Area)

**Parcel Boundaries**

**City Limits**

**Urban Growth Boundary**

**Section Lines**

N

0 400 800

Feet

NAD 1983 HARN StatePlane Oregon South FIPS 3602

LCOG

Printing Date: December 05, 2021

# ORDINANCE NO. A–200J

## AN ORDINANCE ANNEXING TERRITORY TO THE CITY OF COBURG IDENTIFIED AS TAX LOT 00202 OF ASSSESSORS MAP 16–03–34–00 AND CONSISTING OF 107.43 ACRES, AND AMENDING ORDINANCE A–200G TO CHANGE THE COBURG ZONING MAP TO REZONE SAID TERRITORY FROM LANE COUNTY ZONING DISTRICT EXCLUSIVE FARM USE (E–40) TO COBURG ZONING DISTRICT LIGHT INDUSTRIAL.

**THE CITY COUNCIL OF THE CITY OF COBURG FINDS THAT:**

**WHEREAS**, a request to annex certain territory was submitted on September 20, 2020, said territory being described as follows:

> Tax lot 202, 16–03–34–00, as generally depicted and more particularly described in and on file as ANX–01–20; and Ord. A–220–I, adopted 11/2019

**WHEREAS**, the City Council is authorized by Articles XX and XXI of the Coburg Development Code, as amended by Ordinance A–220–I; and ORS Chapter 222, to accept, process, and act on annexations to the City; and

**WHEREAS**, consistent with Section A.1 and A.2.a. of Article XX and Section A of Article XXI of the Coburg Development Code, and ORS 222.111(2), the annexation was initiated by Ravin Ventures, LLC and Hardly Hackit, LLC; and

**WHEREAS**, the applicants for the annexation of the property to be rezoned have requested that a Light Industrial zoning district be applied to the property and the property has been designated by the Coburg Comprehensive Plan as Light Industrial; and

**WHEREAS**, pursuant to ORS 222.125, no election is required because the annexation was initiated with consent of all of the owners of land and a majority of electors; and

**WHEREAS**, consistent with Section A.4 of Article XX of the Coburg Development Code, the territory proposed to be annexed is within the City of Coburg Comprehensive Plan urban growth boundary, is contiguous to the City limits, and is designated by the Comprehensive Plan as Light Industrial; and

**WHEREAS**, the annexation is consistent with the applicable policies in the Coburg Comprehensive Plan supporting annexation to the City and determined by the Final Order including the Findings of Fact herein **Exhibit B**; and

**WHEREAS**, consistent with Section A.4.c of Article XX of the Coburg Development Code, the annexation will result in a boundary in which key services can be provided; and

**WHEREAS**, consistent with Section A.4.d of Article XX of the Coburg Development Code, fiscal impacts to the City have been mitigated through an Annexation Agreement, attached to this Ordinance as **Exhibit C**, between the City and the property owners; and

**WHEREAS**, the annexation area is currently within the Coburg Rural Fire Protection District and will remain in the district after annexation to the City, as the City is a part of and receives services from the District; and

**WHEREAS**, on November 15, 2021, the Coburg Planning Commission held a public hearing on the annexation and voted to recommend to the Coburg City Council that the annexation be approved and that the annexed property be rezoned to Light Industrial; and

**WHEREAS**, a Staff Report and Final Order was presented to the City Council on December 14, 2021 with the recommendation to approve the annexation request as submitted and to rezone the annexed property to Light Industrial; and

**WHEREAS**, on December 14, 2021, a First Reading and a public hearing on this Ordinance was conducted by the City Council; and

**WHEREAS**, consistent with the requirements of ORS 222.120(3), notice of the December 14, 2021 public hearing was placed in the Register Guard on December 4, 2021 and on December 11, 2021 and in four public places for two weeks prior to the hearing; and

**WHEREAS**, on January ___, 2022 the City Council conducted a Second Reading of this Ordinance and is now ready to take action on this application based on the recommendation and findings in support of approving the annexation request as set forth in the aforementioned Staff Report and Final Order to the Council, incorporated herein by reference, and the evidence and testimony presented at this public hearing held in the matter of adopting this Ordinance.

**NOW THEREFORE,** THE CITY OF COBURG ORDAINS AS FOLLOWS:

**SECTION 1:** The City Council of the City of Coburg does hereby approve the annexation request, said territory being described as follows:

> Tax lot 202, 16–03–34, as generally depicted and more particularly described in and on file as ANX–01–20; and as more particularly described in **Exhibit A** of this Ordinance.

**SECTION 2:** Consistent with Section A.5.a of Article XX of the Coburg Development Code, the City Council of the City of Coburg does hereby rezone the property described in **Exhibit A** of this Ordinance from Exclusive Farm Use to Light Industrial.

**SECTION 3:** Findings of fact in support of the annexation and rezoning request are found in **Exhibit B** to this Ordinance, which are adopted by reference in support of this Ordinance.

**SECTION 4:** The City Administrator shall file this Ordinance in accordance with the requirements of Section A.6.b of Article XX of the Coburg Development Code.

**ADOPTED** by the **City Council** of the **City of Coburg** this _____ day of January, 2022, by a vote of ____ for and _____ against.

APPROVED by the Mayor of the City of Coburg this ____ day of January, 2022.

_____
Ray Smith, Mayor

ATTEST:

_____
Sammy L. Egbert, City Recorder

# EXHIBIT A
## ORDINANCE NO. A–200-J

LEGAL DESCRIPTION:

BEGINNING AT A POINT ON THE NORTH LINE OF THE I. S. SWEARINGER DONATION LAND CLAIM NO. (D.L.C.) NO. 37, IN SECTION 34, TOWNSHIP 16 SOUTH, RANGE 3 WEST OF THE WILLAMETTE MERIDIAN, SAID POINT BEING WEST 1051.00 FEET AND 30.00 FEET SOUTH FROM THE NORTHEAST CORNER OF SAID DONATION LAND CLAIM NO. 37;

THENCE RUNNING PARALLEL WITH THE EAST LINE OF SAID DONATION LAND CLAIM NO. 37, **SOUTH 3106.29 FEET( Course 1)**, MORE OR LESS, TO A POINT ON THE SOUTH LINE OF TRACT 4 AS DESCRIBED IN A DEED RECORDED AUGUST 2, 1939 IN BOOK 198, PAGE 572 OF THE LANE COUNTY OREGON DEED RECORDS;

THENCE ALONG SAID SOUTH LINE, **WEST 1540.16 FEET (Course 2)**, MORE OR LESS, TO A POINT ON THE WEST LINE OF SAID DONATION LAND CLAIM NO. 37;

THENCE LEAVING SAID SOUTH LINE AND RUNNING ALONG SAID WEST LINE, **NORTH 3106.29 FEET (Course 3)**, MORE OR LESS, TO THE NORTHWEST CORNER OF SAID DONATION LAND CLAIM NO. 37;

THENCE ALONG THE NORTH LINE OF SAID DONATION LAND CLAIM NO. 37, **EAST 1540.16 FEET (Course 4)**, MORE OR LESS, TO THE POINT OF BEGINNING, ALL IN LANE COUNTY, OREGON.