LA PINE
OREGON

CITY of LA PINE PLANNING COMMISSION AGENDA
Wednesday, June 19, 2019
5:30 p.m.
La Pine City Hall
16345 Sixth Street, La Pine, Oregon 97739

1. Call to Order

2. Establish Quorum

3. Pledge of Allegiance

4. Public Hearing -Proposed Comprehensive Plan Amendment 01CA-19
   Comprehensive Plan Amendment to change the designation of 5.0 acres of land from Industrial (I) to Traditional Commercial (C)

   1. Staff Report
   2. Applicant Testimony
   3. Open Public Testimony
   4. Applicant Rebuttal
   5. Close Hearing

5. Public Hearing Zone Change File No. 01ZC-19
   Zone Change to change the zone from Industrial (I) to Traditional Commercial (C) on the Zoning Map.

   1. Staff Report
   2. Applicant Testimony
   3. Open Public Testimony
   4. Applicant Rebuttal
   5. Close Hearing

6. Staff and Committee Comments

7. Adjourn

Pursuant to ORS 192.640, this notice includes a list of the principal subjects anticipated to be considered or discussed at the above-referenced meeting. This notice does not limit the ability of the City Council to consider or discuss additional subjects. This meeting is subject to cancellation without notice. The regular meeting is open to the public and interested citizens are invited to attend. The public will not be permitted to attend the executive session; provided, however, representatives of the news media and designated staff will be allowed to attend the executive session. Representatives of the news media are specifically directed not to report on any of the deliberations during the executive session, except to state the general subject of the executive session as previously announced. No decision will be made in the executive session. The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours before the meeting to Patti Morgan (541-536-1432). For deaf, hearing impaired, or speech disabled dial 541-536-1432 for TTY

CITY OF LA PINE

16345 Sixth Street — PO Box 2460
La Pine, Oregon 97739
TEL (541) 536-1432
www.lapineoregon.gov

CITY OF LA PINE PLANNING DIVISION

FILE NO. 01ZC-19 and 01CA-19

Staff Report to Planning Commission

APPLICANTS: Richard and Sandra Priday
8611 NE Ochoco Highway
Prineville, OR 97754

OWNER: Richard and Sandra Priday Trust

LOCATION: The property address is 16527 Reed Road; it is identified as Tax lot 600 on the Deschutes County Tax Assessor's Map 22-10-14BA. The property is located east of Highway 97, south of Reed Road.

REQUEST: Comprehensive Plan Amendment to change the designation of 5.0 acres of land from Industrial (I) to Traditional Commercial (C) and Zone Change to change the zone from Industrial (I) to Traditional Commercial (C) on the Zoning Map.

I. APPLICABLE STANDARDS, PROCEDURES, AND CRITERIA:

City of La Pine Comprehensive Plan
- Chapters 1-12

La Pine Development Code
- Chapter 15.334 - Text and Map Amendments

Oregon Revised Statutes

- ORS 197.610, Local Government Notice of Amendment or New Regulation
- ORS 197.250, Compliance with Goals Required
- ORS 197.763, Conduct of Local Quasi-Judicial Land Use Hearings; Notice Requirements

Oregon Administrative Rules (OAR)

- 660-012 Transportation Planning Rule
- 660-015 Oregon Statewide Planning Rule

II. FINDINGS OF FACT:

LOCATION: The property is located east of Highway 97, south of Reed Road. The property address is 16527 Reed Road; it is identified as Tax lot 600 on the Deschutes County Tax Assessor's Map 22-10-14BA.

ZONING: The current Zone and Comprehensive Plan designation of the subject property is Industrial (I).

SITE DESCRIPTION & SURROUNDING USES: The subject property of this proposed comprehensive plan amendment and zone change is located east of Highway 97 along the western edge of the City's industrial area. The property is currently vacant. Properties to the west are commercial properties and properties to the east and south are industrial properties. To the north across Reed Road, properties are zoned Mixed Use Commercial. Adjacent uses to the west include McDonalds, Subway, gas station, and a hotel. To the east, uses include a pet feed store and a storage facility. The subject property is not within a FEMA-mapped 100-year floodplain.

PUBLIC NOTICE AND COMMENTS: Public Notice was sent on May 17, 2019 to property owners within 500' of the proposed location. Notice was also sent on May 17, 2019 to the City's agency notice list, including: ODOT Region 4 Planning, La Pine Fire Department, Deschutes County, Office of the State Fire Marshal, and Wilderness Garbage. No comments were received from the public or from any agencies.

III. APPLICATION OF THE CRITERIA:

CONFORMANCE WITH THE LA PINE DEVELOPMENT CODE

Chapter 15.202 - Summary of Application Procedures

15.202.010 Purpose and Applicability

3. **Type III Procedure (Quasi-Judicial Review – Public Hearing). Type III decisions are made by the Planning Commission after a public hearing, with an opportunity for appeal to the City Council except for decisions on all quasi-judicial Comprehensive Plan amendments and Zone changes which must be adopted by the City Council before becoming effective. Quasi-Judicial decisions involve discretion but implement established policy. They involve the application of existing law or policy to a specific factual situation.**

FINDING: This application is for a comprehensive plan map amendment and zone change for an individual property. As such, it is the review is Quasi-Judicial, but must be adopted by City Council before becoming effective.

…

15.202.050 Neighborhood Contact

1. **Purpose and Applicability. Unless waived by the City Planning Official, applicants for master plans, subdivisions with more than 10 lots, major variances and property owner-initiated for zone changes are required to contact neighboring property owners and offer to a hold meeting with them prior to submitting an application. This is to ensure that affected property owners are given an opportunity to preview a proposal and offer input to the applicant before a plan is formally submitted to the City, thereby raising any concerns about the project and the project's compatibility with surrounding uses early in the design process when changes can be made relatively inexpensively.**

FINDING: The neighborhood contact was waived for this application for two reasons - a) early notice of the hearing was provide to property owners within 500 feet and b) the neighborhood contact meeting is newly adopted code and was not in place at the time the initial conversations and initial planning that occurred with the Applicant.

15.204.030 Type III Procedure (Quasi-Judicial Review – Public Hearing)
Type III decisions are made by the Planning Commission after a public hearing, with an opportunity for appeal to the City Council. Except that prior to becoming effective, all quasi-judicial Comprehensive Plan amendments and Zone changes shall be adopted by the City Council. In considering all quasi-judicial Comprehensive Plan amendments and Zone changes on which the Planning Commission has authority to make a decision, the City Council shall, in the absence of an appeal or review initiated by the Council, adopt the Planning Commission decision. No argument or further testimony will be taken by the Council.

FINDING: A Quasi-Judicial Review process is being followed for this application. Staff recommends that Council initiate review of the applications and hold a hearing prior to adoption.

B. Mailed and Posted Notice of a Public Hearing.

1**. The City shall mail public notice of a public hearing on a Quasi-Judicial application at least 20 days before the hearing date to the individuals and organizations listed below. The City Planning Official shall prepare an affidavit of notice, which shall be made a part of the file. The affidavit shall state the date that the notice was mailed. However, the failure of a property owner to receive mailed notice shall not invalidate any land use approval if the Planning Official can show by affidavit that such notice was given. Notice shall be mailed to:**

a. **The applicant;**
b. **Owners of record of property as shown on the most recent property tax assessment roll of property located within 100 feet of the property that is the subject of the notice where any part of the subject property is within an urban growth boundary;**
c. **The owner of a public use airport if the airport is located within 10,000 feet of the subject property;**
d. **The tenants of a mobile home park when the application is for the rezoning of any part or all of a mobile home park;**
e. **The Planning Commission;**
f. **Any neighborhood or community organization formally recognized by the City Council, whose boundaries include the site;**

g. **Any person who submits a written request to receive a notice; and**
h. **Any governmental agency that is entitled to notice under an intergovernmental agreement entered into with the City and any other affected agencies. At a minimum, the City Planning Official shall notify the road authority if different than the City of La Pine. The failure of another agency to respond with written comments on a pending application shall not invalidate an action or permit approval made by the City under this Code.**

2. In general circulation in the County at least 10 days prior to the hearing addition to notice by mail and posting, notice of an initial hearing shall be published in a newspaper of general circulation in the County at least 10 days prior to the hearing.

3. **At least 14 days before the first hearing, the City shall post notice of the hearing on the project site in clear view from a public right-of-way.**

4. **Notice of a Quasi-Judicial hearing to be mailed and published per subsection 1 above shall contain all of the following information:**
   a. **A summary of the proposal and the relevant approval criteria, in sufficient detail to help the public identify and locate applicable code requirements;**
   b. **The date, time, and location of the scheduled hearing;**
   c. **The street address or other clear reference to the location of the proposed use or development;**
   d. **A disclosure statement that if any person fails to address the relevant approval criteria with enough detail, he or she may not be able to appeal to the City Council, Land Use Board of Appeals, or Circuit Court, as applicable, on that issue, and that only comments on the relevant approval criteria are considered relevant evidence;**
   e. **A statement that a copy of the application, all documents and evidence submitted by or for the applicant, and the applicable criteria and standards shall be available for review at the office of the City Planning Official, and that copies shall be provided at a reasonable cost;**
   f. **A statement that a copy of the City's staff report and recommendation to the hearings body shall be available for review at no cost at least seven days before the hearing, and that a copy shall be provided on request at a reasonable cost;**
   g. **A general explanation of the requirements to submit testimony, and the procedure for conducting public hearings; and**
   h. **A statement that after the public hearing closes, the City will issue its decision, and the decision shall be mailed to the applicant and to anyone else who submitted written comments or who is otherwise legally entitled to notice.**

FINDING: Type III procedures are being followed. The radius of mailing was expanded to include all property owners within 500' and was mailed on May 17, 2019.

Chapter 15.334 - Text and Map Amendments

15.334.020 Applicability

A. **Legislative amendments generally involve broad public policy decisions that apply to other than an individual property owner. These include, without limitation, amendments to the text of the comprehensive plans, development code, or changes in zoning maps not directed at a small number of property owners. The following amendments are considered generally considered legislative.**

1. All text amendments to Development Code or Comprehensive Plan (except for corrections).
2. Amendments to the Comprehensive Plan Map and/or Zoning Map that affect more than a limited group of property owners.

B. Amendments to the Comprehensive Plan and/or Zoning Map (Zone Change) that do not meet the criteria under subsection A may be processed as Quasi-Judicial amendments. However, the distinction between legislative and quasi-judicial changes must ultimately be made on a case-by-case basis with reference to case law on the subject.

C. Requests for Text and Map amendments may be initiated by an applicant, the Planning Commission, or the City Council. The City Planning Official may request the Planning Commission to initiate an amendment. Initiations by a review body are made without prejudice towards the outcome.

FINDING: This proposed Comprehensive Plan Map amendment and Zone Change apply to a single property owner. The property owner initiated the proposed amendments. As the proposed amendments do not generally involve broad public policy and the amendments do not apply to more than the subject property, the proposals are being processed as Quasi-judicial amendments.

15.334.030 Procedure Type

B. Quasi-judicial amendments are subject to Type III review in accordance with the procedures in Article 7 except that quasi-judicial Comprehensive Plan amendments and Zone changes which must be adopted by the City Council before becoming effective.

FINDING: This application is being processed as a Quasi-judicial amendment, through a Type III review process in accordance with the procedures in Article 7. As the application is for both a Comprehensive Plan Map amendment and a Zone change, if recommended for approval by the Planning Commission, both applications will be considered by the City Council for adoption before becoming effective.

15.334.040 Approval Criteria
Planning Commission review and recommendation, and City Council approval, of an ordinance amending the Zoning Map, Development Code, or Comprehensive Plan shall be based on all of the following criteria:

A. The proposal must be consistent with the Comprehensive Plan (the Comprehensive Plan may be amended concurrently with proposed changes in zoning). If the proposal involves an amendment to the Comprehensive Plan, the amendment must be consistent with the Statewide Planning Goals and relevant Oregon Administrative Rules; and

FINDING: The Applicant is proposing a Comprehensive Plan Map amendment, concurrently with the proposed Zone Change. Compliance with the Statewide Planning Goals and relevant Oregon Administrative rules is demonstrated below.

B. The proposal must be found to:
1. Be in the public interest with regard to community conditions; or
2 Respond to changes in the community, or
3. Correct a mistake or inconsistency in the subject plan or code; and

FINDING: The Applicant notes that it is their intent to develop the property as a hotel. Although the intended use of the subject property is not guaranteed through this proposed Comp Plan Map amendment and zone change, staff agrees with the Applicant's assertion that the proposed amendment and zone change could facilitate the development of the subject property for a commercial use encouraged by the Comprehensive Plan. Further, the Applicant notes that the property has been vacant for 40 years, noting that it is bordered to the west and north by commercial uses and that a commercial use may be more desirable for this large property size abutting other commercial uses. Staff finds this criterion to be met.

C. The amendment must conform to Section 15.344.050, Transportation Planning Rule Compliance; and

FINDING: Transportation Planning Rule compliance is demonstrated below.

D. For a Quasi-Judicial Zone Change the applicant must also provide evidence substantiating that the following criteria are met:

1. **Approval of the request is consistent with applicable Statewide Planning Goals;**

FINDING: The Applicant notes, and staff agrees, that the applicable Statewide Planning Goals are Goals 9, 11, and 12. Compliance with Goal 12 is addressed below, as required by 15.334.050 and the Transportation Planning Rule OAR 660-012-0060. Compliance with Goal 11 is assured by compliance with the City Comprehensive Plan policies that implement Goal 11, discussed below. Compliance with Goal 9 is assured by compliance with OAR 660, Division 9, Economic Development. The Applicant notes, and staff agrees, that the relevant part of the division is found in OAR 660-009-0010 (4):

> **(4) For a post-acknowledgement plan amendment under OAR Chapter 660, Division 18, that changes the plan designation of land in excess of two acres within an existing urban growth boundary from an industrial use designation to a non-industrial use designation, or another employment use designation to any other use designation, a city or county must address all applicable planning requirements; and:**
>
> **(a) Demonstrate that the proposed amendment is consistent with its most recent economic opportunities analysis and the parts of its acknowledged comprehensive plan which address the requirements of this division; or**
>
> **(b) Amend its comprehensive plan to incorporate the proposed amendment, consistent with the requirements of this division; or**

FINDING: The City's most recent economic opportunities analysis is contained in the City's acknowledged comprehensive plan. The proposed amendment is consistent with this acknowledged comprehensive plan, as detailed below.

2. **Approval of the request is consistent with the relevant policies of the Comprehensive Plan;**

FINDING: The subject property is designated Industrial land by the City's Comprehensive Plan. This application proposes to change this designation to Commercial, on a property that adjoins commercial and industrial lands. As such, plan policies related to agriculture (Goal 3), forest (Goal 4), recreational (Goal 8) and residential (Goal 10) lands do not apply. In addition, the policies of Chapter 5 (Natural Resources and Environment) also do not apply as the subject property does not contain any plan-identified Goal 5 resources. Goal 6 is not

applicable because the proposed Comprehensive Plan Map Amendment and Zone Change only amends a map; it does not include development and will not have any impacts on air, water or land resources. Through future development applications, the Applicant will be required to demonstrate that sewage treatment, water service, and stormwater management will be supplied in accordance with the adopted design standards, thus maintaining water and land resource quality on and around the property. Additionally, there are no streams or other water resources in the vicinity that would be adversely affected future development.

Policies of Chapter 7, 8, and 9 are addressed below:

Chapter 7, Public Facilities and Services

This chapter is intended to carry out Statewide Planning Goal 11. Given the current population of 1,687 (PSU 2015 Population Estimate), Goal 11 does apply to the City of La Pine. Nonetheless, the Comprehensive Plan includes a comprehensive review of service providers, development reviewing entities, health providers, recreation providers, street details, water and sewer elements, school, library, solid waste, storm water, power, gas, communication and broadcasting providers. This Chapter includes goals and policies directed at coordination, provider details, expansion needs, development restrictions, along with conservation practices. Some of the policies of this chapter are directed at development and are implemented through the Zoning Ordinance standards.

City Goal #1
Policies

- **Plans providing for public facilities and services should be coordinated with plans for designation of urban boundaries, land use zoning designation, surrounding urbanizable land and rural uses, and for the transition of rural land to urban uses.**

FINDING: The City's comprehensive plan has developed a plan for providing public facilities and services. Public facilities are provided to the subject area of the property and are addressed below:

> Water/Sewer: Both City water and sewer services are available to the property and will be evaluated at the time of site plan review. Applicant shall submit water and sewer needs and capacity analyses at the time of site plan application, prior to any development
>
> Transportation: Reed Road serves the subject property for access. The Applicant submitted a traffic memo, which outlined the impacts of the proposed comp plan amendment/zone change. The traffic memo noted that the zone change from industrial to commercial, for a "worst case scenario" could increase the PM peak hour trips by 95 trips.
>
> The traffic memo notes: *"The analysis shows that the signalized intersection of US 97/1st Street – Reed Road operates well today and provides nearly 50 percent reserve capacity. Even during the peak summer months the intersection is forecast to operate with 40 percent reserve capacity today. In the future, the 2034 analysis shows that the system is reaching the ODOT mobility standard, with limited reserve capacity during the peak fifteen minutes of the peak summer months. The additional trips from the rezone will reach the mobility standard but shows that the intersection would continue to operate within its carrying capacity even during the peak fifteen minutes of the peak summer month. The site access is shown to operate acceptably long-term with a single shared northbound lane and stop-sign control."* Based on this traffic analysis, staff finds

that there is adequate transportation capacity to accommodate the proposed comprehensive plan map amendment and zone change. However, Reed Road is not constructed to the standards of the Transportation System Plan (TSP), so full frontage improvements shall be required at the time of site plan application, prior to development. Additionally, the potential increase in traffic may result in increased stacking distance on Reed Road westbound at the light with Highway 97. At the time of site plan, the Applicant shall provide a public access easement for secondary access for abutting properties, as approved by the City Engineer.

Police/Fire: Police services are provided by the Deschutes County Sheriff Department and Fire Response is provided by the City's Fire Department.

Chapter 8, Transportation

This chapter is intended to carry out Statewide Planning Goal 12. This chapter provides details of the transportation elements of La Pine, including roads, bicycle ways, pedestrian routes, and public transit. Furthermore, this chapter addresses long range planning needs, air and rail, pipelines, and funding.

The majority of the policies of this section have been incorporated into the Zoning Ordinance and implementing regulations, which will be imposed upon future site development. Further, the City assures compliance with Statewide Planning Goal 12 by addressing OAR 660-012-0060, which is discussed in this staff report.

The subject property abuts Reed Road, an east-west collector street. It is near Highway 97, a north-south highway and principal arterial roadway. The current proposal includes a Comprehensive Plan Map Amendment and Zone Change only and does not include development. Full frontage improvements and compliance with the City's TSP will be required at time of site plan application, prior to development, through the applicable implementing regulations.

Chapter 9, Economy

This Chapter is intended to carry out Statewide Planning Goal 9, Economic Development. This Chapter includes an analysis of the La Pine economy, noting that "La Pine's focus on economic development is a key component of its vision to be a "complete" community…the concept of creating a complete community begins with providing enough jobs, education, services, and industry to sustain the community without heavy reliance upon other nearby cities such as Bend and Redmond. (La Pine Comprehensive Plan Page 87). Chapter 9 contains the City's Economic Opportunities Analysis/Buildable Lands Analysis. The purpose of the analysis is to "plan for and provide adequate opportunities for a variety of economic activities vital to the health, welfare, and prosperity of its citizens."

The Applicant notes and staff concurs:

"The comprehensive plan (p. 94-95) expects that the rezoning of certain economic lands parcels will be necessary to provide enough land in sizes needed to create commercial centers, rather than a continuation of additional shallow-depth strip commercial. The plan finds this type of development will provide a better balance of commercial development and reduce unnecessary trips. The subject property is a property ideally positioned to create a small commercial center with adjoining highway strip commercial properties along Highway 97. The subject property adjoins the commercial strip that runs along the east

side of Highway 97. Rezoning the property will widen the strip so that it functions as a commercial center.

The three properties in the strip commercial area south of Reed Road have no direct access to Highway 97. Instead, they are served by a private road owned by the applicants. This private road will provide a central roadway for the commercial center. The subject property may also be developed to provide a second point of access to the existing commercial strip properties. A second access will improve access to the site by emergency providers and evacuation of people in the event of an emergency.

The comprehensive plan recognizes that the recreational nature of the La Pine area will continue to create a demand for hospitality services and that retail services are needed by the community. The proposed rezoning will allow the city to provide additional hospitality services or retail service.

The comprehensive plan found that La Pine is expected to maintain an excess supply of economic lands during the planning period. According to the table on p. 110 of the plan, the City has a need for 342 acres of employment land in the 20-year planning period and a supply of 450 acres. Earlier, the plan finds that there are 234 net vacant/redeveloped acres of industrial land. This amount is sufficient to meet the city's 20-year need for 200 acres of middle-sized and larger industrial parcels. Other economic land needs identified by the plan are planned to occur in any of the economic zoning districts, including the commercial zoning district. As a result, rezoning a small five acre parcel of industrial land to commercial zoning will not prevent the city from providing land for the types of economic uses it expects to be developed in La Pine during the current planning period.

Staff finds that the application complies with the intent of Chapter 9.

Policies

- **Updates to inventories and analysis of needed industrial and commercial land types, existing land supplies, and economic development strategies for meeting the requirements of the community are essential. It is necessary to provide adequate buildable industrial and commercial land for the 20 years planning horizon.**

  FINDING: This policy recommends updating the economic land inventories as needed, with a focus on maintaining an adequate supply of buildable industrial and commercial land during the 20-year planning horizon. Based on the acreage data above for needed and available lands, staff finds this proposal to be in compliance with this policy.

- **Preservation of large industrial parcels over 30 acres in size will attract target industries and new manufacturing businesses.**

  FINDING: The subject property is not over 30 acres in size; as such, this policy does not apply.

3. Adequate public facilities, services, and transportation networks are in place or are planned to be provided concurrently with the development of the property;

FINDING: Public facilities serving the subject property include transportation, water, sewer, police and fire response.

Water/Sewer: Both City water and sewer services are available to the property and will be evaluated at the time of site plan review. Applicant shall submit water and sewer needs and capacity analyses at the time of site plan application, prior to any development

Transportation: Reed Road serves the subject property for access. The Applicant submitted a traffic memo, which outlined the impacts of the proposed comp plan amendment/zone change. The traffic memo noted that the zone change from industrial to commercial, for a "worst case scenario" could increase the PM peak hour trips by 95 trips.

The traffic memo notes: *"The analysis shows that the signalized intersection of US 97/1st Street – Reed Road operates well today and provides nearly 50 percent reserve capacity. Even during the peak summer months the intersection is forecast to operate with 40 percent reserve capacity today. In the future, the 2034 analysis shows that the system is reaching the ODOT mobility standard, with limited reserve capacity during the peak fifteen minutes of the peak summer months. The additional trips from the rezone will reach the mobility standard but shows that the intersection would continue to operate within its carrying capacity even during the peak fifteen minutes of the peak summer month. The site access is shown to operate acceptably long-term with a single shared northbound lane and stop-sign control."* Based on this traffic analysis, staff finds that there is adequate transportation capacity to accommodate the proposed comprehensive plan map amendment and zone change. However, Reed Road is not constructed to the standards of the Transportation System Plan (TSP), so full frontage improvements shall be required at the time of site plan application, prior to development.

Police/Fire: Police services are provided by the Deschutes County Sheriff Department and Fire Response is provided by the City's Fire Department.

4. **For nonresidential changes, the proposed zone, if it allows uses more intensive than other zones appropriate for the land use designation, will not allow uses that would destabilize the land use pattern of the area or significantly adversely affect adjacent properties.**

FINDING: The proposed zone change is a nonresidential change, from industrial to commercial. The subject property is bordered on its west and north by other commercial properties, so the zone change would be an expansion of an adjacent district and would not destabilize the land use pattern of the area or significantly adversely affect adjacent properties. The submitted traffic report noted a potential increase in traffic, however, it also noted that the intersection at Hwy 97 and 1st Street has an additional 50% capacity. Staff finds that the zone change will not destabilize the land use pattern of the area.

15.334.050 Transportation Planning Rule Compliance
Proposals to amend the Comprehensive Plan or Zoning Map shall be reviewed to determine whether they significantly affect a transportation facility pursuant to Oregon Administrative Rule (OAR) 660-012-0060 (Transportation Planning Rule - TPR). Where the City, in consultation with the applicable roadway authority, finds that a proposed amendment would have a significant effect on a transportation facility, the City shall work with the roadway authority and applicant to modify the request or mitigate the impacts in accordance with the TPR and applicable law.

FINDING: The Applicant submitted a traffic memo, completed by Transight Consulting, to address Transportation Planning Rule compliance. The submitted traffic memo notes:

"…there are eleven criteria that apply to Plan and Land Use Regulation Amendments. Of these, Criteria #1 and #4 are applicable to the proposed land use action. These criteria are provided below in italics with responses shown in standard font.

> *OAR 660-012-0060 (1) Where an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule, to assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume-to-capacity ratio, etc.) of the facility. A plan or land use regulation 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);*
>
> *(b) Change standards implementing a functional classification system; or*
>
> *(c) As measured at the end of the planning period identified in the adopted transportation system plan:*
>
> *(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;"*
>
> *(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standard identified in the TSP or comprehensive plan; or*
>
> *(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standard identified in the TSP or comprehensive plan.*

The traffic memo notes that the "proposed rezone shows an increase in the trip generation potential of the site. However, this analysis shows that this rezone does not change the types of travel or functional classification of any of the existing or planned transportation facilities within the City's adopted Transportation System Plan. The location of the site provides adequate spacing from the Highway 97 corridor to comply with the City's access policies." Further, traffic memo notes, "the change in the site trip generation potential under a reasonable worst-case development scenario shows that the existing traffic signal will remain in compliance with City of La Pine and ODOT mobility standards." Staff finds that this criterion has been met.

CONFORMANCE WITH OREGON REVISED STATUES

Oregon Revised Statutes are the laws, enacted by the Oregon Legislature (or citizen initiative), that govern the State of Oregon. As they relate to Land Use proceedings, State Statutes (Oregon Revised Statutes - ORS) are carried out through rules (Oregon Administrative Rules –OAR) which are developed by the Department of Land Conservation and Development (DLCD). Local jurisdictions (including the City of La Pine) are required to develop a land use program based upon the adopted OARs. Local land use programs include the development and maintenance of a Comprehensive Plan, along with implementing ordinances, such as zoning ordinances, procedures, and land division ordinances. DLCD and the Land Conservation and Development Commission (LCDC) reviews all Comprehensive Plans and implementing ordinances, and "acknowledges" those that are found be consistent with the OAR and Statewide Planning Goals. The City of La Pine has an "acknowledged" Comprehensive Plan, along with "acknowledged" implementing ordinances. The Comprehensive

Plan map amendment request has been reviewed for compliance with the acknowledged Comprehensive Plan and implementing ordinances, thus conformity with applicable state statutes is understood. The State Statutes that apply to this application include:

ORS 197.610, Local Government Notice of Amendment or New Regulation
ORS 197.250, Compliance with Goals Required
ORS 197.763, Conduct of Local Quasi-Judicial Land Use Hearings; Notice Requirements.

The City of La Pine Development Code was developed to comply with the State Statutes listed above, regarding both noticing and public hearings (ORS 197.610 and 197.763). Notice of the proposed amendment was provided to DLCD on May 15, 2019 and required public notice of the public hearing was mailed to neighbors within 500'.

IV. Summary and Conclusion:

The Applicant has documented that the request to amend the Comprehensive Plan Designation of the property and to amend the Zoning Map to Commercial (C) complies with the applicable approval criteria, subject to a few conditions upon site plan application:

- Applicant shall be responsible for full frontage improvements for compliance with the City's TSP.
- Applicant shall submit sewer and water capacity and needs analyses for the proposed use and shall be responsible for any required improvements to accommodate the needs.
- Due to the increase in traffic from the zone change and the resulting potential vehicle stacking distances at the Reed Road/Highway 97 intersection, Applicant shall provide a public access easement for secondary access for abutting properties, as approved by the City Engineer.

Staff recommends that, after public hearing and review, the Planning Commission approve the Comprehensive Plan Map Amendment and Zone Change as proposed, with the above conditions of approval. Staff also recommends that Council initiate review of the applications and hold a hearing prior to adoption.

TRANSIGHT CONSULTING, LLC
Transportation Engineering and Planning Services

Date:	April 25, 2019
To:	Melissa Bethel, City of La Pine
From:	Joe Bessman, PE
Project Reference No.:	1294
Project Name:	Priday Property Commercial Rezone

This memorandum addresses Transportation Planning Rule requirements (TPR) for the proposed rezoning and Comprehensive Plan amendment of 16527 Reed Road (Priday Property) from *La Pine Industrial* (LPIND) to *La Pine Traditional Commercial* (LPTC). The property is five-acres and borders commercially-zoned property. There are no concurrent development plans for the property at this time. The location of the subject property is shown in Figure 1.

Figure 1. Location of subject property. *Source: Deschutes County DIAL.*

TRANSPORTATION PLANNING RULE

The requirements of the Transportation Planning Rule are contained within Oregon Administrative Rule (OAR) 660-12 (Transportation Planning). This Division, prepared by the Department of Land Conservation and Development, outlines the requirements for coordinated transportation and land use planning. Within this division requirements for preparation of transportation system plans is provided, coordination with State and regional plans and policies, along with measures to prevent urbanization or sprawl onto rural lands. Section -0060 (Plan and Land Use Regulation Amendments) provides the specific transportation requirements for a zone change and plan amendment. This section outlines the requirements to change the zoning of a property while ensuring that the amendment remains consistent with the goals and requirements of the Transportation System Plan.

The first step in this process is to identify whether the proposed zoning and Comprehensive Plan amendment result in additional transportation impacts. This is typically provided by reviewing reasonable development scenarios to allow a comparison of the trip generation potential of the existing and proposed zoning, as further described below.

Existing Zoning Potential

This section addresses the development potential of the 5-acre site with its *La Pine Industrial (I)* zoning designation. This zoning is described within the Chapter 15.24 of the City's Development Code. Uses that are allowed outright include the following:

- General Manufacturing and Production
- Self-Service Storage
- Light Manufacturing
- Warehousing
- Supporting (ancillary) Office

Reasonable development scenarios for this zoning that would create the highest level of trip impacts is likely to be a manufacturing facility. Typical manufacturing facilities need to balance employee parking, truck maneuvering and loading areas, setback requirements, and generally consist of single-story buildings. On a smaller parcel such as the subject site this can provide a Floor to Area Ratio as high as 0.30, or about 65,340 square-feet of building space.

Proposed Zoning Potential

The City's *Traditional Commercial* (C) zoning designation allows a broad range of uses, with outright permitted uses including the following:

- Multifamily Housing
- Residential Care Facility
- Commercial Lodging
- Eating and Drinking Establishments
- Marijuana Dispensary
- Office
- Retail Sales and Service
- Daycare Center
- Church

- Schools

Of these allowable land uses the commercial designations would provide the highest overall intensity, but would require a greater portion of the site be dedicated to on-site parking. On a five-acre parcel it is likely that future development could consist of multiple individual commercial uses, similar to the lands immediately west. The specific building sizes would vary depending on uses, with an overall Floor to Area Ratio of 0.20 to 0.25.

While there are no specific development plans for the site at this time, there are tentative plans for the site to accommodate a future hotel building. The trip generation potential of this use was also reviewed to show how the "worst-case" scenario compares to what would be anticipated. With a hotel use the site would closely mimic the adjacent development pattern to the west.

Trip Generation Comparison

A comparison of the trip generation potential of the site developing with its existing *Industrial* and proposed *Commercial* designations are provided in Table 1. This shows classification of the industrial uses applying ITE's Manufacturing land use code (ITE 140), and review of the various possible commercial uses as ITE's Shopping Center (ITE 820). Table 2 provides a summary of the more likely trip generation summary with a hotel, basing the size of this hotel on the adjacent Best Western.

Table 1. Trip Generation Comparison, ITE 10th Edition ("Worst-Case Trip Generation")

Land Use	ITE Code	Metric	Daily Trips	Weekday PM Peak Hour		
				Total	In	Out
Existing Zoning						
Manufacturing	140	65,340 *0.30 FAR*	257	44	14	30
Proposed Zoning						
Shopping Center	820	55,000 *0.25 FAR*	2,076	210	101	109
Pass-by Trips (34%)			*-706*	*-71*	*-34*	*-37*
Total Trips			1,370	138	66	72
Trip Difference						
Proposed - Existing Zoning			+1,114	+95	+53	+42

Table 2. Trip Generation Comparison, ITE 10th Edition ("Likely Development Scenario")

Land Use	ITE Code	Metric	Daily Trips	Weekday PM Peak Hour		
				Total	In	Out
Existing Zoning						
Manufacturing	140	65,340 *0.30 FAR*	257	44	14	30
Proposed Zoning						
Shopping Center	820	32,670 *0.25 FAR*	1,233	124	60	64
Pass-by Trips (34%)			*-419*	*-42*	*-20*	*-22*
Business Hotel	312	100 rms	402	32	18	14
Total Trips			1,216	114	58	56
Trip Difference						
Proposed - Existing Zoning			+959	+70	+44	+26

These trip generation estimates show that the commercial uses provide a higher trip intensity than those of the site with its industrial designation, with the potential for up to approximately 95 additional weekday p.m. peak hour trips. If the "Likely Development Scenario" occurs the trip rates will be approximately 25 percent lower than the impacts shown throughout this report. Figure 2 illustrates the assignment of the "Worst-Case" trip difference onto the surrounding transportation network to show how this trip increase impacts the nearby transportation system.

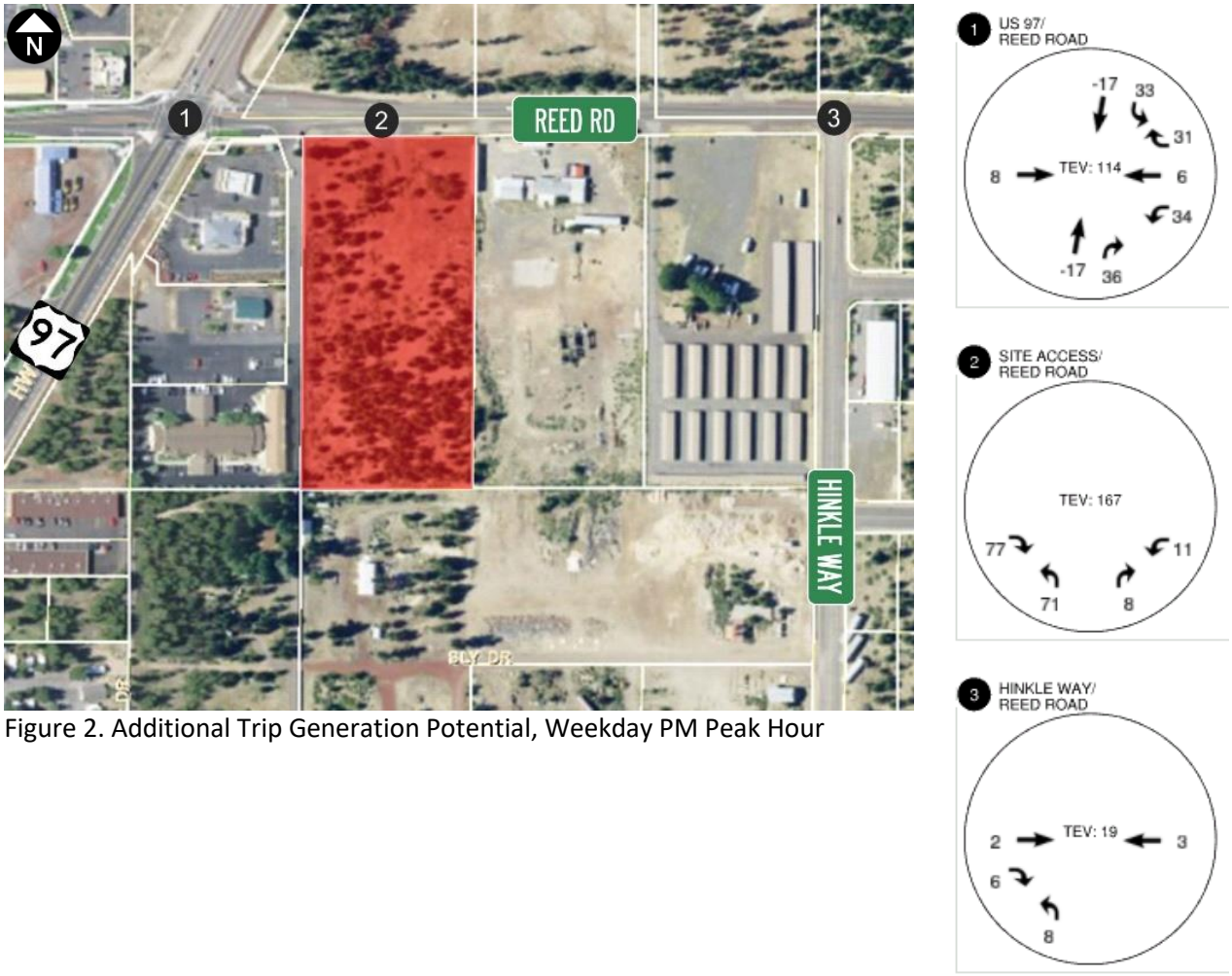


Figure 2. Additional Trip Generation Potential, Weekday PM Peak Hour

Figure 2 shows that City of La Pine and ODOT significance thresholds would be met at the nearby intersection of US 97/Reed Road – 1st Street. Only minor impacts would occur at Hinkle Way that would not change the facility needs. However, the impacts to the highway will require a long-term analysis to identify whether sufficient reserve capacity was provided at the intersection to support the additional travel demands, as further documented herein.

ADOPTED TRANSPORTATION PLANS

The long-range analysis that is conducted as part of a zone change is intended to identify whether changes need to occur within the agency's adopted Transportation System Plan so that transportation facilities continue to support their intended role and function. For ODOT facilities the Oregon Transportation Plan serves as this document, with the 1999 Oregon Highway Plan (as amended) supplementing as the highway element of the State's TSP. The City's Transportation System Plan was adopted in 2013.

The City's Transportation System Plan assessed conditions through 2032, and the Oregon Highway Plan identifies a rolling 15-year minimum horizon period:

> *"The greater of 15 years or the planning horizon of the applicable local and regional transportation system plans for amendments to transportation plans, comprehensive plans, or land use regulations."*

For consistency with these adopted plans, conditions in this analysis assesses conditions in 2034 operations, which meets ODOT's horizon period and extends two years beyond any specific plans adopted in La Pine that encompass the US 97/Reed Road - 1st Street intersection.

The needs analysis for the highway that was incorporated into the City's Transportation System Plan was originally conducted as part of the US 97/La Pine Corridor Plan in 2011, shortly after the City's incorporation. This plan identified the current configuration of the signalized US 97/1st Street intersection, along with other streetscape elements that were subsequently completed. Figure 1 shows the recommended long-term treatment at the US 97/1st Street intersection. In addition, the construction of the intersection also integrated several of the identified near-term safety treatments that were also recommended within the plan. The improvements that were constructed were developed directly from this corridor plan, and fully integrate the long-term treatments that were identified in the corridor study and adopted in the 2012 Transportation System Plan that followed.

Signal activation occurred on October 28, 2015; ODOT crash records show that only a single crash was reported at the intersection in 2016, and three intersection-related crashes in 2017. This reflects a substantial decline in the crash experience with the prior stop-control, as shown in Figure 2.

There are no remaining intersection improvement projects at this intersection that were identified as necessary to support the City's 2032 planning horizon.

Figure 2. US 97/1st Street Signalized Concept.
Source: US 97/La Pine Corridor Plan, 2011.

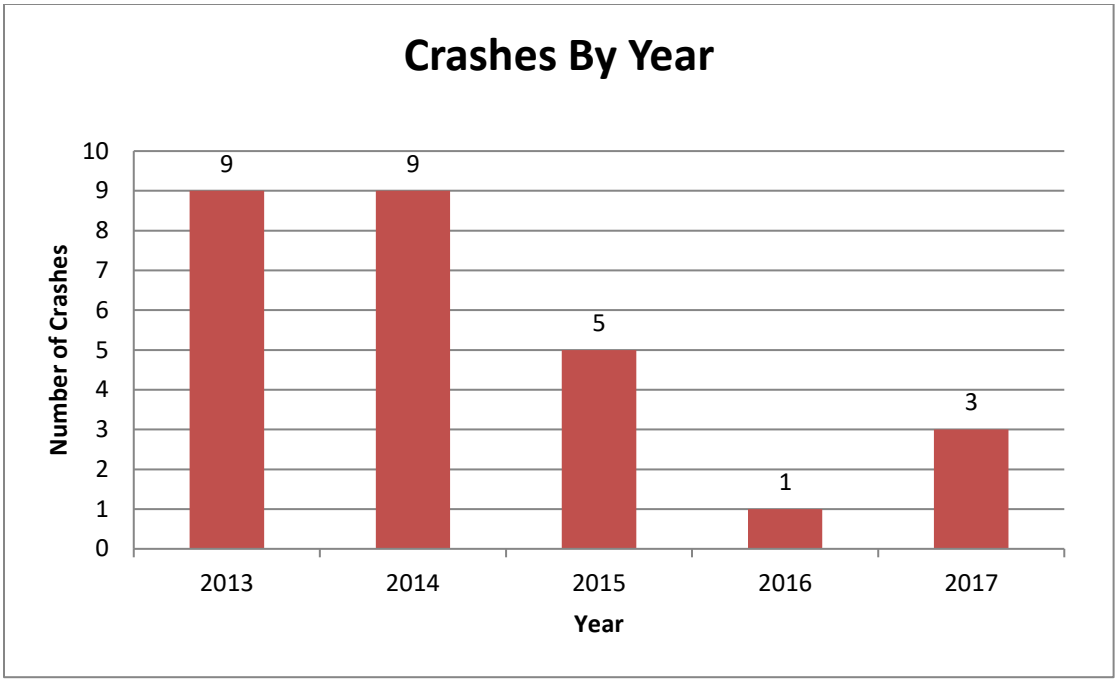


Figure 2. Annual Reported Crash Experience at the US 97/Reed Road Intersection.

Intersection performance standards at the US 97/Reed Road - 1st Street intersection are identified in the Oregon Highway Plan. Intersection performance standards for the US 97 corridor consider the intersecting facility types, location within its surrounding environment, the posted speed, and traffic control. For a Statewide Highway within the City's Urban Growth Boundary and with a posted speed of 35 miles per hour the mobility target is a volume-to-capacity ratio of 0.85 or less.

City of La Pine standards are identified within the Transportation System Plan. This identify a volume-to-capacity ratio of 0.90 or better and Level of Service "D" for signalized and all-way stop-controlled intersections, and a volume-to-capacity ratio of 0.90 and Level of Service "E" for the critical movement at unsignalized intersections.

TRAFFIC COUNTS

Transportation analysis to support a rezoning effort only assesses conditions in the horizon year of the adopted Transportation System Plan. Manual turning movement counts are used as the basis for the area projections, and similar to forecasts prepared in the Transportation System Plan require seasonal adjustments to reflect peak summer conditions. As the City of La Pine is outside the boundaries of any of ODOT's travel demand models, the forecasts were prepared by applying linear growth rates similar to the efforts identified in the adopted Transportation System Plan. The City's TSP included both low (1 percent annual) and high (2.7 percent annual) growth scenarios to determine the sensitivity and viability of long-term improvement needs.

Review of ODOT's Automatic Traffic Recorder (ATR) data was also conducted to identify travel patterns throughout this section of US 97. The nearest permanent count stations are located at the south end of Bend (Station 09-003) and south of the OR 58 Junction (Station 18-006), and so are more likely reflective of regional tourism rather than City patterns. Trends at the southern Bend ATR show about 40 percent less traffic in March compared to peak summer conditions. However, neither ATR would be considered reflective of conditions in La Pine due to the significant difference in travel volumes and facility

characteristics. Accordingly, conduct of ODOT's on-site ATR seasonal adjustment methodology was not considered appropriate per the guidelines within ODOT's *Analysis Procedures Manual*.

An alternative seasonal adjustment methodology is to apply data from highways across the State with similar characteristics to the subject area using ODOT's *Characteristics Table.* Review of this table did not identify any other similar highway segments that would serve as an appropriate surrogate with similar volumes to US 97 in La Pine. Accordingly, seasonal adjustment factors were obtained from ODOT's *Seasonal Trend Method*. Similar to the nearby ATR in southern Bend, this data also showed a 38-percent adjustment factor for March conditions.

FUTURE TRAFFIC FORECASTS

ODOT does not maintain a specific travel demand model for La Pine. The City is located in the southern boundary of the Deschutes County model, providing less accurate results. Similar to the analysis provided within the City's Transportation System Plan, an annual growth factor was applied throughout the City to assess projected future needs.

Review of Automatic Traffic Recorder data for the past ten years at the south edge of Bend shows that growth in US 97 travel has averaged 2.3-percent (see Figure 3). This growth rate is slightly higher than was assumed in the adopted Transportation System Plan (the TSP assumed 2 percent annual growth), but reflects much of the post-recession travel increases in the system.

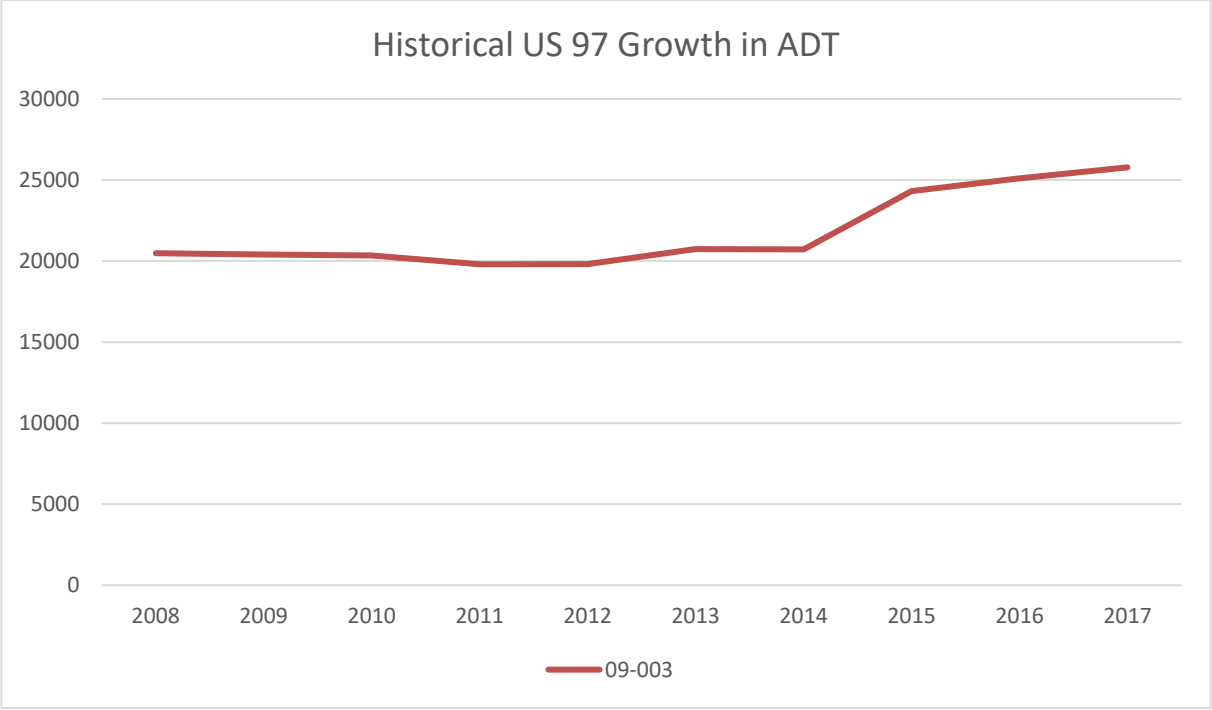


Figure 3. Historical Average Daily Traffic (ADT) growth along US 97.
ATR 09-003: Located near China Hat Road in Bend.

OPERATIONS ANALYSIS

All operations analysis within this report were prepared based on Synchro 10 analysis software and Highway Capacity Manual 6th Edition methodology. Overall intersection v/c ratios at signalized intersections are reported from the Highway Capacity Manual 2000 Edition.

An analysis of existing (mid-March) traffic conditions, seasonally adjusted existing conditions, and future year 2032 conditions with and without the rezone during the peak fifteen minutes of the evening commute hour are summarized in Table 3. This table summarizes the intersection delays, queues, and volume-to-capacity ratios.

The analysis shows that the signalized intersection of US 97/1st Street – Reed Road operates well today and provides nearly 50 percent reserve capacity. Even during the peak summer months the intersection is forecast to operate with 40 percent reserve capacity today. In the future, the 2034 analysis shows that the system is reaching the ODOT mobility standard, with limited reserve capacity during the peak fifteen minutes of the peak summer months. The additional trips from the rezone will reach the mobility standard but shows that the intersection would continue to operate within its carrying capacity even during the peak fifteen minutes of the peak summer month. The site access is shown to operate acceptably long-term with a single shared northbound lane and stop-sign control.

Table 3. Summary of Intersection Operations, Weekday PM Peak Hour

Intersection	Control Type/ Performance Standard[1]	Level of Service (LOS)	Delay (sec/veh)	Volume-to-Capacity Ratio (v/c)	95th Percentile Queue (ft)	Acceptable?
Year 2019 Existing Conditions Analysis						
US 97/ 1st Street – Reed Rd	Intx v/c < 0.85	Intx: LOS C	Intx: 23.4 s	**Intx: 0.51** EB TL: 0.72 EB R: 0.47 WB TL: 0.67 WB R: 0.35 NB L: 0.76 NB TR: 0.45 SB L: 0.68 SB TR:0.46	EB TL: 148 ft EB R: <25 ft WB TL: 104 ft WB R: <25 ft NB L: 74 ft NB TR: 275 ft SB L: 64 ft SB TR: 279 ft	Yes
Year 2019 Seasonally Adjusted Conditions						
US 97/ 1st Street – Reed Rd	Intx v/c < 0.85	Intx: LOS C	Intx: 23.5 s	**Intx: 0.61** EB TL: 0.72 EB R: 0.47 WB TL: 0.67 WB R: 0.35 NB L: 0.76 NB TR: 0.60 SB L: 0.68 SB TR:0.58	EB TL: 148 ft EB R: <25 ft WB TL: 104 ft WB R: <25 ft NB L: 74 ft NB TR: 407 ft SB L: 64 ft SB TR: 414 ft	Yes
Year 2034 Design Hour Volumes, With Current Zoning						
US 97/ 1st Street – Reed Rd	Intx v/c < 0.85	Intx: LOS D	Intx: 36.2 s	**Intx: 0.79** EB TL: 0.85 EB R: 0.55 WB TL: 0.78 WB R: 0.41 NB L: 0.80 NB TR: 0.78 SB L: 0.80 SB TR:0.77	EB TL: 269 ft EB R: 64 ft WB TL: 165 ft WB R: <25 ft NB L: 128 ft NB TR: 716 ft SB L: 109 ft SB TR: 672 ft	Yes
Year 2034 Design Hour Conditions, With Proposed Rezone						
US 97/ 1st Street – Reed Rd	Intx v/c < 0.85	Intx: LOS D	Intx: 45.0 s	**Intx: 0.85** EB TL: 0.88 EB R: 0.54 WB TL: 0.84 WB R: 0.51 NB L: 0.80 NB TR: 0.87 SB L: 0.82 SB TR:0.77	EB TL: 300 ft EB R: 70 ft WB TL: 226 ft WB R: 48 ft NB L: 129 ft NB TR: 756 ft SB L: 173 ft SB TR: 594 ft	Yes
Reed Road/ Future Access	Unsignalized LOS E, v/c < 0.90	NB LR: LOS B	NB LR: 12.6 s	NB LR: 0.15	NB LR: 25 ft	Yes

[1] ODOT Mobility Targets are considered "standards" for purposing of assessing compliance with the TPR for a rezone.

ROADWAY FUNCTIONAL CLASSIFICATIONS

In addition to review of forecast intersection operations, a review was also conducted of the City's functional classification hierarchy to ensure that facilities will continue to comply with their functional classifications. Figure 4 illustrates the classification of adjacent roads surrounding the subject property.

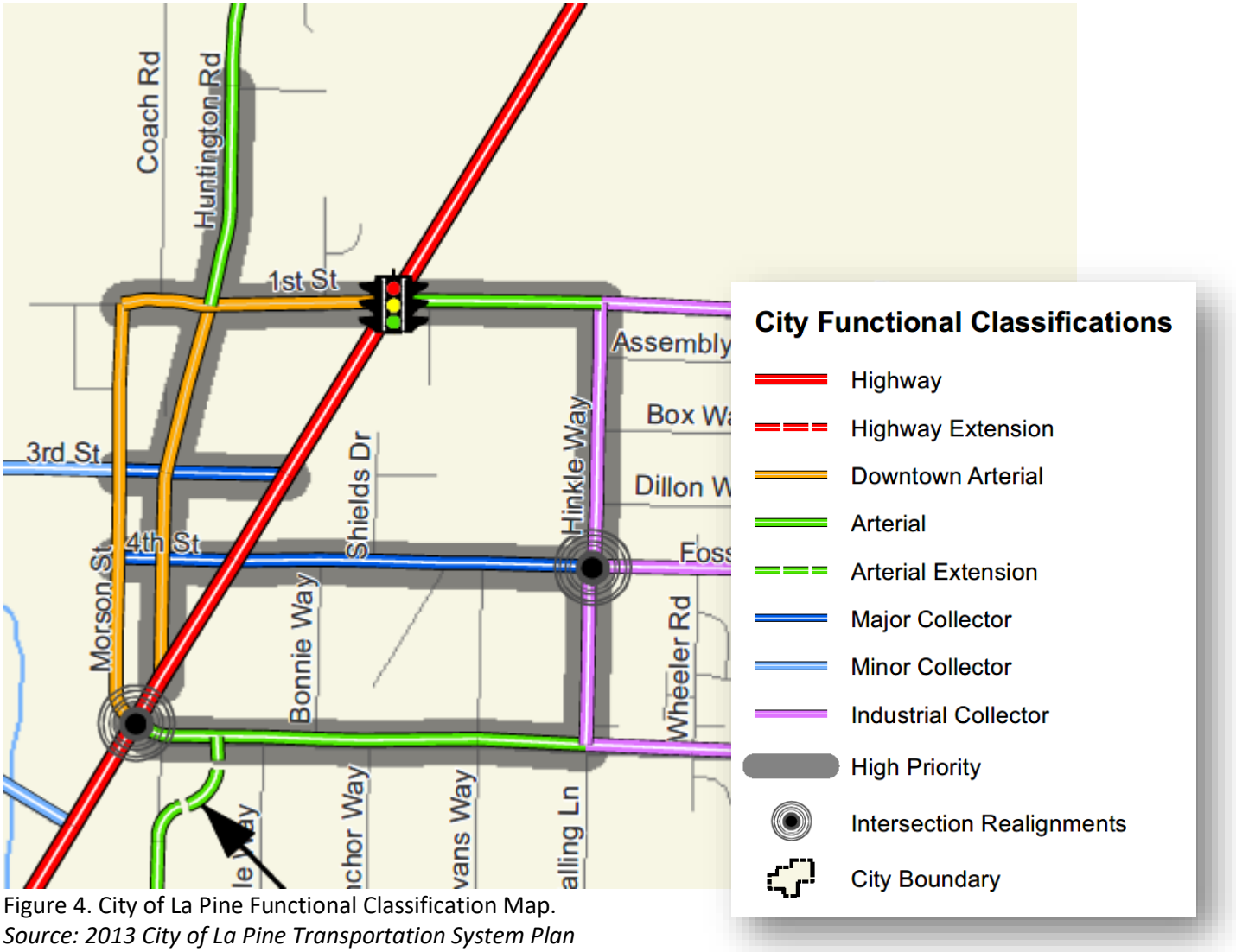


Figure 4. City of La Pine Functional Classification Map.
Source: 2013 City of La Pine Transportation System Plan

Policies within the City's Transportation System Plan do not identify specific volume thresholds for various street classifications, but do include wider travel lanes and a requirement for left-turn lanes on arterials, along with increased right-of-way width. The City also provides different access policies for arterials than it does for collectors and local streets, requiring a 300-foot access spacing (as measured from centerline to centerline). The subject property complies with this access spacing from the US 97 corridor.

TRANSPORTATION PLANNING RULE COMPLIANCE

OAR Section 660-012-0060 of the Transportation Planning Rule (TPR) sets forth the relative criteria for evaluating plan and land use regulation amendments. Table 4 summarizes the criteria in Section 660-012-0060 and the applicability to the proposed rezone application.

Table 4. Summary of Criteria in OAR 660-012-0060

Section	Criteria	Applicable?
1	Describes how to determine if a proposed land use action results in a significant impact.	Yes, see response below
2	Describes measures for complying with Criterion #1 where a significant impact is determined.	No
3	Describes measures for complying with Criteria #1 and #2 without assuring that the allowed land uses are consistent with the function, capacity and performance standards of the facility.	No
4	Determinations under Criteria #1, #2, and #3 are coordinated with other local agencies.	Yes (Application will require coordination with ODOT)
5	Indicates that the presence of a transportation facility shall not be the basis for an exception to allow development on rural lands.	No
6	Indicates that local agencies should credit developments that provide a reduction in trips.	No
7	Outlines requirements for a local street plan, access management plan, or future street plan.	No
8	Defines a mixed-use, pedestrian-friendly neighborhood.	No
9	Outlines requirements under which a local government may find that an amendment to a zoning map does not significantly affect an existing and planned transportation facility.	No
10	Outlines requirements under which a local government may amend a plan without applying performance standards related to motor vehicle traffic congestion, delay or travel time.	No
11	Outlines requirements under which a local government may approve an amendment with partial mitigation.	No

As noted in Table 4, there are eleven criteria that apply to Plan and Land Use Regulation Amendments. Of these, Criteria #1 and #4 are applicable to the proposed land use action. These criteria are provided below in italics with responses shown in standard font.

OAR 660-012-0060 (1) Where an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule, to assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume-to-capacity ratio, etc.) of the facility. A plan or land use regulation 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);

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

(c) As measured at the end of the planning period identified in the adopted transportation system plan:

(A) Allow land uses or levels of development that would result in types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

Response: The proposed rezone shows an increase in the trip generation potential of the site. However, this analysis shows that this rezone does not change the types of travel or functional classification of any of the existing or planned transportation facilities within the City's adopted Transportation System Plan. The location of the site provides adequate spacing from the US 97 corridor to comply with the City's access policies.

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

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standard identified in the TSP or comprehensive plan.

Response: The change in the site trip generation potential under a reasonable worst-case development scenario shows that the existing traffic signal will remain in compliance with City of La Pine and ODOT mobility standards.

NEXT STEPS

I trust that this report adequately addresses the Transportation Planning Rule requirements to support the proposed rezone of the Priday property to La Pine's *Traditional Commercial* designation and Comprehensive Plan Amendment. Thank you for your time and assistance, please let me know if you have any questions related to this project at (503) 997-4473 or via email at joe@transightconsulting.com.

K-D-N
KEY DATA NETWORK

Data Provided by K-D-N.com 503-594-4224	
N/S street:	*Hwy 97*
E/W street:	*1st St*
City, State	La Pine OR
Study ID #	
Location	43.67464 - -121.50022
Start Date	Thursday, March 14, 2019
Start Time	04:00:00 PM
Peak Hour Start	04:00:00 PM
Peak 15 Min Start	04:00:00 PM
PHF (15-Min Int)	0.92

Peak-Hour Volumes (PHV)

Northbound				Southbound				Eastbound				Westbound				Entering				Leaving			
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	NB	SB	EB	WB	NB	SB	EB	WB
53	316	37	0	42	253	97	0	83	58	79	0	51	40	41	0	406	392	220	132	383	440	190	137
Percent Heavy Vehicles																							
1.9%	14.6%	8.1%	0.0%	2.4%	15.8%	2.1%	0.0%	4.8%	6.9%	2.5%	0.0%	5.9%	7.5%	7.3%	0.0%	12.3%	11.0%	4.5%	6.8%	11.7%	12.0%	3.2%	5.8%

PHV- Bicycles																	PHV - Pedestrians				
Northbound				Southbound				Eastbound				Westbound					in Crosswalk				
Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	NB	SB	EB	WB	Sum
1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	2	0	0	0	2

All Vehicle Volumes

	Northbound Hwy 97				Southbound Hwy 97				Eastbound 1st St				Westbound 1st St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	2	27	2	0	3	24	7	0	8	6	10	0	4	4	3	0		
04:05:00 PM	3	39	2	0	2	18	9	0	5	2	10	0	7	8	3	0		
04:10:00 PM	9	26	4	0	3	19	6	0	12	10	5	0	2	5	4	0	313	
04:15:00 PM	5	22	6	0	3	26	10	0	9	6	2	0	3	2	3	0	310	
04:20:00 PM	2	23	1	0	6	16	7	0	6	4	8	0	4	6	4	0	289	
04:25:00 PM	6	35	3	0	9	18	6	0	3	5	4	0	4	0	7	0	284	
04:30:00 PM	5	20	6	0	4	19	11	0	7	4	7	0	4	4	2	0	280	
04:35:00 PM	7	12	2	0	6	12	9	0	11	5	6	0	5	2	4	0	274	
04:40:00 PM	2	30	5	0	0	27	6	0	3	1	4	0	4	1	4	0	261	
04:45:00 PM	1	29	1	0	2	33	8	0	6	1	8	0	6	3	4	0	270	
04:50:00 PM	4	26	1	0	2	27	12	0	5	7	4	0	4	2	0	0	283	
04:55:00 PM	7	27	4	0	2	14	6	0	8	7	11	0	4	3	3	0	292	1150
05:00:00 PM	4	20	2	0	3	29	4	0	2	7	10	0	3	4	3	0	281	1141
05:05:00 PM	8	26	0	0	6	25	5	0	9	2	6	0	3	2	4	0	283	1129
05:10:00 PM	7	21	2	0	1	30	11	0	2	2	7	0	5	4	4	0	283	1120
05:15:00 PM	5	16	2	0	3	23	6	0	4	1	4	0	2	3	0	0	261	1092
05:20:00 PM	3	25	2	0	2	24	2	0	5	8	3	0	6	3	1	0	249	1089
05:25:00 PM	5	22	5	0	0	22	4	0	4	2	7	0	4	2	2	0	232	1068
05:30:00 PM	4	27	4	0	1	27	8	0	3	2	12	0	1	2	4	0	258	1070
05:35:00 PM	6	23	1	0	3	22	7	0	1	4	8	0	3	8	4	0	264	1079
05:40:00 PM	1	21	2	0	6	35	6	0	5	5	9	0	4	2	4	0	285	1092
05:45:00 PM	3	22	6	0	4	20	11	0	3	2	8	0	2	0	1	0	272	1072
05:50:00 PM	3	11	3	0	3	19	5	0	5	3	1	0	5	1	6	0	247	1043
05:55:00 PM	7	21	1	0	7	14	4	0	3	5	5	0	3	3	2	0	222	1022

Bicycles on Road

	Northbound	Southbound	Eastbound	Westbound	

K-D-N
KEY DATA NETWORK

	Hwy 97				Hwy 97				1st St				1st St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
04:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
04:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
05:05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
05:10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
05:15:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:20:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:25:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:35:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:40:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:50:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:55:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Passenger vehicles and light trucks

	Northbound				**Southbound**				**Eastbound**				**Westbound**					
	Hwy 97				Hwy 97				1st St				1st St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	2	22	2	0	3	23	7	0	8	4	10	0	3	3	3	0		
04:05:00 PM	3	34	2	0	2	15	9	0	5	2	10	0	7	8	3	0		
04:10:00 PM	9	23	4	0	3	16	6	0	12	9	5	0	2	4	4	0	287	
04:15:00 PM	5	17	4	0	3	23	10	0	8	6	2	0	3	2	3	0	283	
04:20:00 PM	2	20	1	0	5	14	6	0	6	4	6	0	4	6	4	0	261	
04:25:00 PM	6	29	3	0	9	12	6	0	3	5	4	0	4	0	7	0	252	
04:30:00 PM	4	19	6	0	4	19	11	0	5	4	7	0	4	4	1	0	254	
04:35:00 PM	7	8	2	0	6	11	9	0	11	4	6	0	4	2	4	0	250	
04:40:00 PM	2	28	5	0	0	21	6	0	3	1	4	0	4	1	3	0	240	
04:45:00 PM	1	25	1	0	2	25	7	0	6	1	8	0	5	3	3	0	239	
04:50:00 PM	4	21	1	0	2	21	12	0	5	7	4	0	4	1	0	0	247	
04:55:00 PM	7	24	3	0	2	13	6	0	7	7	11	0	4	3	3	0	259	1038
05:00:00 PM	4	18	2	0	3	25	4	0	2	7	9	0	3	4	3	0	256	1032
05:05:00 PM	8	20	0	0	6	20	5	0	9	2	5	0	3	2	4	0	258	1016
05:10:00 PM	7	17	2	0	1	26	11	0	2	2	7	0	5	3	4	0	255	1006
05:15:00 PM	5	10	2	0	3	20	6	0	4	1	4	0	2	3	0	0	231	980
05:20:00 PM	3	19	2	0	2	22	2	0	5	8	3	0	6	3	1	0	223	978
05:25:00 PM	5	18	5	0	0	21	4	0	4	2	7	0	4	2	2	0	210	964

K-D-N
KEY DATA NETWORK

05:30:00 PM	4	22	4	0	1	22	8	0	3	2	12	0	1	2	4	0	235	961
05:35:00 PM	6	21	1	0	3	20	7	0	1	4	8	0	3	8	4	0	245	973
05:40:00 PM	1	15	2	0	6	30	6	0	5	5	9	0	3	2	4	0	259	983
05:45:00 PM	3	20	5	0	3	17	11	0	3	2	8	0	2	0	1	0	249	971
05:50:00 PM	3	9	3	0	3	16	5	0	5	3	1	0	5	1	6	0	223	949
05:55:00 PM	7	13	1	0	7	12	4	0	3	5	5	0	3	3	2	0	200	924

FHWA 4-13 -Truck/Multi-Unit/Heavy Trucks

	Northbound				**Southbound**				**Eastbound**				**Westbound**					
	Hwy 97				Hwy 97				1st St				1st St				15 Min	1 HR
Time	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Left	Thru	Right	Uturn	Sum	Sum
04:00:00 PM	0	5	0	0	0	1	0	0	0	2	0	0	1	1	0	0		
04:05:00 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	0		
04:10:00 PM	0	3	0	0	0	3	0	0	0	1	0	0	0	1	0	0	26	
04:15:00 PM	0	5	2	0	0	3	0	0	1	0	0	0	0	0	0	0	27	
04:20:00 PM	0	3	0	0	1	2	1	0	0	0	2	0	0	0	0	0	28	
04:25:00 PM	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	32	
04:30:00 PM	1	1	0	0	0	0	0	0	2	0	0	0	0	0	1	0	26	
04:35:00 PM	0	4	0	0	0	1	0	0	0	1	0	0	1	0	0	0	24	
04:40:00 PM	0	2	0	0	0	6	0	0	0	0	0	0	0	0	1	0	21	
04:45:00 PM	0	4	0	0	0	8	1	0	0	0	0	0	1	0	1	0	31	
04:50:00 PM	0	5	0	0	0	6	0	0	0	0	0	0	0	1	0	0	36	
04:55:00 PM	0	3	1	0	0	1	0	0	1	0	0	0	0	0	0	0	33	112
05:00:00 PM	0	2	0	0	0	4	0	0	0	0	1	0	0	0	0	0	25	109
05:05:00 PM	0	6	0	0	0	5	0	0	0	0	1	0	0	0	0	0	25	113
05:10:00 PM	0	4	0	0	0	4	0	0	0	0	0	0	0	1	0	0	28	114
05:15:00 PM	0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	0	30	112
05:20:00 PM	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0	26	111
05:25:00 PM	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	22	104
05:30:00 PM	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	23	109
05:35:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	19	106
05:40:00 PM	0	6	0	0	0	5	0	0	0	0	0	0	1	0	0	0	26	109
05:45:00 PM	0	2	1	0	1	3	0	0	0	0	0	0	0	0	0	0	23	101
05:50:00 PM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	24	94
05:55:00 PM	0	8	0	0	0	2	0	0	0	0	0	0	0	0	0	0	22	98

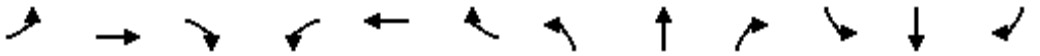
Pedestrians Crossing					15 Min	1 HR
Time	NB	SB	EB	WB	Sum	Sum
04:00:00 PM	0	0	0	0		
04:05:00 PM	0	0	0	0		
04:10:00 PM	0	0	0	0	0	
04:15:00 PM	0	0	0	0	0	
04:20:00 PM	0	0	0	0	0	
04:25:00 PM	0	0	0	0	0	
04:30:00 PM	0	0	0	0	0	
04:35:00 PM	1	0	0	0	1	
04:40:00 PM	0	0	0	0	1	
04:45:00 PM	1	0	0	0	2	
04:50:00 PM	0	0	0	0	1	
04:55:00 PM	0	0	0	0	1	2

K-D-N
KEY DATA NETWORK

05:00:00 PM	0	0	0	0	0	2
05:05:00 PM	0	0	0	0	0	2
05:10:00 PM	0	0	0	0	0	2
05:15:00 PM	0	0	0	0	0	2
05:20:00 PM	0	0	0	0	0	2
05:25:00 PM	0	0	0	0	0	2
05:30:00 PM	0	0	0	0	0	2
05:35:00 PM	0	0	0	0	0	1
05:40:00 PM	0	0	0	0	0	1
05:45:00 PM	1	0	0	1	2	2
05:50:00 PM	0	0	0	0	2	2
05:55:00 PM	0	0	0	0	2	2

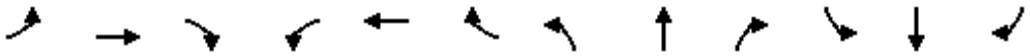
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	153	86	98	45	58	383	46	380
v/c Ratio	0.60	0.27	0.48	0.16	0.38	0.44	0.35	0.48
Control Delay	45.2	5.6	44.7	1.3	46.2	19.1	47.7	21.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	5.6	44.7	1.3	46.2	19.1	47.7	21.2
Queue Length 50th (ft)	79	0	51	0	30	145	24	142
Queue Length 95th (ft)	148	24	104	0	74	275	64	279
Internal Link Dist (ft)	340		665			557		518
Turn Bay Length (ft)		100		100	200		150	
Base Capacity (vph)	369	412	361	397	189	876	146	794
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.21	0.27	0.11	0.31	0.44	0.32	0.48

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	58	79	51	40	41	53	316	37	42	253	97
Future Volume (vph)	83	58	79	51	40	41	53	316	37	42	253	97
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.96	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1667	1458		1669	1422	1630	1689		1630	1645	
Flt Permitted		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1667	1458		1669	1422	1630	1689		1630	1645	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	90	63	86	55	43	45	58	343	40	46	275	105
RTOR Reduction (vph)	0	0	73	0	0	40	0	4	0	0	11	0
Lane Group Flow (vph)	0	153	13	0	98	5	58	379	0	46	369	0
Confl. Peds. (#/hr)	2					2						
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		12.9	12.9		8.8	8.8	6.7	43.8		4.2	41.3	
Effective Green, g (s)		12.9	12.9		8.8	8.8	6.7	43.8		4.2	41.3	
Actuated g/C Ratio		0.15	0.15		0.10	0.10	0.08	0.50		0.05	0.47	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		245	214		167	142	124	843		78	774	
v/s Ratio Prot		c0.09			c0.06		c0.04	c0.22		0.03	0.22	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.62	0.06		0.59	0.03	0.47	0.45		0.59	0.48	
Uniform Delay, d1		35.1	32.2		37.7	35.6	38.8	14.2		40.9	15.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.9	0.1		5.2	0.1	2.8	1.7		10.9	2.1	
Delay (s)		40.0	32.3		42.9	35.7	41.6	15.9		51.8	17.9	
Level of Service		D	C		D	D	D	B		D	B	
Approach Delay (s)		37.2			40.6			19.3			21.6	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	87.7	Sum of lost time (s)	18.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	58	79	51	40	41	53	316	37	42	253	97
Future Volume (veh/h)	83	58	79	51	40	41	53	316	37	42	253	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	90	63	86	55	43	45	58	343	40	46	275	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	87	183	83	65	127	77	765	89	67	593	226
Arrive On Green	0.13	0.13	0.13	0.09	0.09	0.09	0.05	0.50	0.50	0.04	0.50	0.50
Sat Flow, veh/h	984	689	1448	940	735	1443	1641	1514	177	1641	1188	453
Grp Volume(v), veh/h	153	0	86	98	0	45	58	0	383	46	0	380
Grp Sat Flow(s),veh/h/ln	1673	0	1448	1676	0	1443	1641	0	1691	1641	0	1641
Q Serve(g_s), s	6.6	0.0	4.1	4.3	0.0	2.2	2.6	0.0	10.9	2.1	0.0	11.3
Cycle Q Clear(g_c), s	6.6	0.0	4.1	4.3	0.0	2.2	2.6	0.0	10.9	2.1	0.0	11.3
Prop In Lane	0.59		1.00	0.56		1.00	1.00		0.10	1.00		0.28
Lane Grp Cap(c), veh/h	211	0	183	147	0	127	77	0	854	67	0	819
V/C Ratio(X)	0.72	0.00	0.47	0.67	0.00	0.35	0.76	0.00	0.45	0.68	0.00	0.46
Avail Cap(c_a), veh/h	413	0	357	404	0	348	212	0	854	164	0	819
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.5	0.0	30.5	33.2	0.0	32.2	35.3	0.0	11.9	35.5	0.0	12.2
Incr Delay (d2), s/veh	4.7	0.0	1.9	5.1	0.0	1.7	14.0	0.0	1.7	11.5	0.0	1.9
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	2.9	0.0	1.5	1.9	0.0	0.8	1.3	0.0	4.1	1.0	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	0.0	32.3	38.2	0.0	33.9	49.3	0.0	13.6	47.0	0.0	14.1
LnGrp LOS	D	A	C	D	A	C	D	A	B	D	A	B
Approach Vol, veh/h		239			143			441			426	
Approach Delay, s/veh		34.8			36.9			18.3			17.7	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	42.4		14.0	8.0	42.0		11.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	37.9		18.5	9.7	35.7		18.1				
Max Q Clear Time (g_c+I1), s	4.1	12.9		8.6	4.6	13.3		6.3				
Green Ext Time (p_c), s	0.0	2.4		0.8	0.0	2.4		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		23.4	
HCM 6th LOS		C	

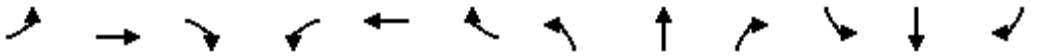
Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	153	86	98	45	58	514	46	484
v/c Ratio	0.60	0.27	0.48	0.16	0.38	0.59	0.35	0.61
Control Delay	45.2	5.6	44.7	1.3	46.2	22.5	47.7	24.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	5.6	44.7	1.3	46.2	22.5	47.7	24.7
Queue Length 50th (ft)	79	0	51	0	30	218	24	202
Queue Length 95th (ft)	148	24	104	0	74	#407	64	#414
Internal Link Dist (ft)	340		665			557		518
Turn Bay Length (ft)		100		100	200		150	
Base Capacity (vph)	369	412	361	397	189	878	146	798
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.21	0.27	0.11	0.31	0.59	0.32	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	58	79	51	40	41	53	436	37	42	349	97
Future Volume (vph)	83	58	79	51	40	41	53	436	37	42	349	97
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1667	1458		1669	1422	1630	1696		1630	1660	
Flt Permitted		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1667	1458		1669	1422	1630	1696		1630	1660	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	90	63	86	55	43	45	58	474	40	46	379	105
RTOR Reduction (vph)	0	0	73	0	0	40	0	3	0	0	8	0
Lane Group Flow (vph)	0	153	13	0	98	5	58	511	0	46	476	0
Confl. Peds. (#/hr)	2					2						
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		12.9	12.9		8.8	8.8	6.7	43.8		4.2	41.3	
Effective Green, g (s)		12.9	12.9		8.8	8.8	6.7	43.8		4.2	41.3	
Actuated g/C Ratio		0.15	0.15		0.10	0.10	0.08	0.50		0.05	0.47	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		245	214		167	142	124	847		78	781	
v/s Ratio Prot		c0.09			c0.06		c0.04	c0.30		0.03	0.29	
v/s Ratio Perm			0.01			0.00						
v/c Ratio		0.62	0.06		0.59	0.03	0.47	0.60		0.59	0.61	
Uniform Delay, d1		35.1	32.2		37.7	35.6	38.8	15.7		40.9	17.2	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.9	0.1		5.2	0.1	2.8	3.2		10.9	3.5	
Delay (s)		40.0	32.3		42.9	35.7	41.6	18.9		51.8	20.7	
Level of Service		D	C		D	D	D	B		D	C	
Approach Delay (s)		37.2			40.6			21.2			23.4	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	87.7	Sum of lost time (s)	18.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	58	79	51	40	41	53	436	37	42	349	97
Future Volume (veh/h)	83	58	79	51	40	41	53	436	37	42	349	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	90	63	86	55	43	45	58	474	40	46	379	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	87	183	83	65	127	77	791	67	67	648	180
Arrive On Green	0.13	0.13	0.13	0.09	0.09	0.09	0.05	0.50	0.50	0.04	0.50	0.50
Sat Flow, veh/h	984	689	1448	940	735	1443	1641	1567	132	1641	1298	360
Grp Volume(v), veh/h	153	0	86	98	0	45	58	0	514	46	0	484
Grp Sat Flow(s),veh/h/ln	1673	0	1448	1676	0	1443	1641	0	1699	1641	0	1658
Q Serve(g_s), s	6.6	0.0	4.1	4.3	0.0	2.2	2.6	0.0	16.1	2.1	0.0	15.5
Cycle Q Clear(g_c), s	6.6	0.0	4.1	4.3	0.0	2.2	2.6	0.0	16.1	2.1	0.0	15.5
Prop In Lane	0.59		1.00	0.56		1.00	1.00		0.08	1.00		0.22
Lane Grp Cap(c), veh/h	211	0	183	147	0	127	77	0	858	67	0	828
V/C Ratio(X)	0.72	0.00	0.47	0.67	0.00	0.35	0.76	0.00	0.60	0.68	0.00	0.58
Avail Cap(c_a), veh/h	413	0	357	404	0	348	212	0	858	164	0	828
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.5	0.0	30.5	33.2	0.0	32.2	35.3	0.0	13.2	35.5	0.0	13.3
Incr Delay (d2), s/veh	4.7	0.0	1.9	5.1	0.0	1.7	14.0	0.0	3.1	11.5	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	1.5	1.9	0.0	0.8	1.3	0.0	6.2	1.0	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	0.0	32.3	38.2	0.0	33.9	49.3	0.0	16.3	47.0	0.0	16.3
LnGrp LOS	D	A	C	D	A	C	D	A	B	D	A	B
Approach Vol, veh/h		239			143			572			530	
Approach Delay, s/veh		34.8			36.9			19.6			19.0	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	42.4		14.0	8.0	42.0		11.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.5	37.9		18.5	9.7	35.7		18.1				
Max Q Clear Time (g_c+I1), s	4.1	18.1		8.6	4.6	17.5		6.3				
Green Ext Time (p_c), s	0.0	3.3		0.8	0.0	3.0		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			23.5									
HCM 6th LOS			C									

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	209	117	135	61	79	700	62	660
v/c Ratio	0.80	0.37	0.65	0.24	0.62	0.80	0.57	0.79
Control Delay	68.9	15.2	62.9	5.2	73.4	33.7	74.8	33.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.9	15.2	62.9	5.2	73.4	33.7	74.8	33.4
Queue Length 50th (ft)	150	10	98	0	58	445	46	415
Queue Length 95th (ft)	#269	64	165	16	#128	#716	#109	#672
Internal Link Dist (ft)	340		665			557		518
Turn Bay Length (ft)		100		100	200		150	
Base Capacity (vph)	301	346	274	313	139	870	114	838
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.34	0.49	0.19	0.57	0.80	0.54	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	82	111	72	56	58	75	613	52	59	491	136
Future Volume (vph)	117	82	111	72	56	58	75	613	52	59	491	136
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.97	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1667	1458		1669	1420	1630	1695		1630	1660	
Flt Permitted		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1667	1458		1669	1420	1630	1695		1630	1660	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	123	86	117	76	59	61	79	645	55	62	517	143
RTOR Reduction (vph)	0	0	85	0	0	53	0	2	0	0	8	0
Lane Group Flow (vph)	0	209	32	0	135	8	79	698	0	62	652	0
Confl. Peds. (#/hr)	2					2						
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		17.5	17.5		13.8	13.8	7.1	57.0		5.9	55.8	
Effective Green, g (s)		17.5	17.5		13.8	13.8	7.1	57.0		5.9	55.8	
Actuated g/C Ratio		0.16	0.16		0.12	0.12	0.06	0.51		0.05	0.50	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		260	227		205	174	103	861		85	825	
v/s Ratio Prot		c0.13			c0.08		c0.05	c0.41		0.04	0.39	
v/s Ratio Perm			0.02			0.01						
v/c Ratio		0.80	0.14		0.66	0.04	0.77	0.81		0.73	0.79	
Uniform Delay, d1		45.7	40.9		47.0	43.4	51.7	23.1		52.4	23.4	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		16.3	0.3		7.4	0.1	28.3	8.1		26.6	7.6	
Delay (s)		62.0	41.1		54.4	43.5	80.0	31.2		79.0	31.0	
Level of Service		E	D		D	D	F	C		E	C	
Approach Delay (s)		54.5			51.0			36.2			35.1	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	112.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	82	111	72	56	58	75	613	52	59	491	136
Future Volume (veh/h)	117	82	111	72	56	58	75	613	52	59	491	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	123	86	117	76	59	61	79	645	55	62	517	143
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	102	214	98	76	150	99	831	71	78	673	186
Arrive On Green	0.15	0.15	0.15	0.10	0.10	0.10	0.06	0.53	0.53	0.05	0.52	0.52
Sat Flow, veh/h	985	689	1450	943	732	1446	1641	1565	133	1641	1299	359
Grp Volume(v), veh/h	209	0	117	135	0	61	79	0	700	62	0	660
Grp Sat Flow(s),veh/h/ln	1673	0	1450	1676	0	1446	1641	0	1699	1641	0	1658
Q Serve(g_s), s	12.9	0.0	7.9	8.3	0.0	4.2	5.0	0.0	34.8	4.0	0.0	33.8
Cycle Q Clear(g_c), s	12.9	0.0	7.9	8.3	0.0	4.2	5.0	0.0	34.8	4.0	0.0	33.8
Prop In Lane	0.59		1.00	0.56		1.00	1.00		0.08	1.00		0.22
Lane Grp Cap(c), veh/h	247	0	214	174	0	150	99	0	902	78	0	859
V/C Ratio(X)	0.85	0.00	0.55	0.78	0.00	0.41	0.80	0.00	0.78	0.80	0.00	0.77
Avail Cap(c_a), veh/h	314	0	272	286	0	247	146	0	902	119	0	859
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.0	0.0	41.9	46.3	0.0	44.4	49.2	0.0	19.8	50.0	0.0	20.4
Incr Delay (d2), s/veh	15.5	0.0	2.2	7.2	0.0	1.8	17.3	0.0	6.5	18.8	0.0	6.5
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	6.4	0.0	3.0	3.8	0.0	1.6	2.5	0.0	14.6	2.0	0.0	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	0.0	44.0	53.5	0.0	46.2	66.5	0.0	26.3	68.8	0.0	26.9
LnGrp LOS	E	A	D	D	A	D	E	A	C	E	A	C
Approach Vol, veh/h		326			196			779			722	
Approach Delay, s/veh		53.9			51.2			30.4			30.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	60.8		20.2	10.9	59.4		15.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	7.7	56.3		19.9	9.4	54.6		18.1				
Max Q Clear Time (g_c+I1), s	6.0	36.8		14.9	7.0	35.8		10.3				
Green Ext Time (p_c), s	0.0	4.9		0.7	0.0	4.6		0.5				

Intersection Summary			
HCM 6th Ctrl Delay		36.2	
HCM 6th LOS		D	

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	218	117	177	94	79	720	97	642
v/c Ratio	0.86	0.39	0.77	0.34	0.65	0.88	0.80	0.76
Control Delay	79.6	17.2	71.3	12.3	77.9	42.3	95.4	32.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.6	17.2	71.3	12.3	77.9	42.3	95.4	32.4
Queue Length 50th (ft)	166	15	132	0	60	498	75	412
Queue Length 95th (ft)	#300	70	#226	48	#129	#756	#173	#594
Internal Link Dist (ft)	340		665			557		518
Turn Bay Length (ft)		100		100	200		150	
Base Capacity (vph)	267	313	260	302	129	814	122	841
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.37	0.68	0.31	0.61	0.88	0.80	0.76

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	90	111	106	62	89	75	596	88	92	474	136
Future Volume (vph)	117	90	111	106	62	89	75	596	88	92	474	136
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00	1.00		1.00	0.97	1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1669	1458		1663	1420	1630	1682		1630	1658	
Flt Permitted		0.97	1.00		0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1669	1458		1663	1420	1630	1682		1630	1658	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	123	95	117	112	65	94	79	627	93	97	499	143
RTOR Reduction (vph)	0	0	81	0	0	81	0	4	0	0	8	0
Lane Group Flow (vph)	0	218	36	0	177	13	79	716	0	97	634	0
Confl. Peds. (#/hr)	2					2						
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		17.7	17.7		16.2	16.2	7.3	57.2		8.8	58.7	
Effective Green, g (s)		17.7	17.7		16.2	16.2	7.3	57.2		8.8	58.7	
Actuated g/C Ratio		0.15	0.15		0.14	0.14	0.06	0.49		0.07	0.50	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		250	218		228	195	100	816		121	825	
v/s Ratio Prot		c0.13			c0.11		0.05	c0.43		c0.06	0.38	
v/s Ratio Perm			0.02			0.01						
v/c Ratio		0.87	0.17		0.78	0.07	0.79	0.88		0.80	0.77	
Uniform Delay, d1		49.0	43.7		49.1	44.3	54.5	27.2		53.7	24.1	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		26.6	0.4		15.2	0.1	33.3	12.8		30.5	6.8	
Delay (s)		75.6	44.0		64.3	44.4	87.9	40.0		84.2	30.9	
Level of Service		E	D		E	D	F	D		F	C	
Approach Delay (s)		64.6			57.4			44.7			37.9	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	47.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	117.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	90	111	106	62	89	75	596	88	92	474	136
Future Volume (veh/h)	117	90	111	106	62	89	75	596	88	92	474	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	123	95	117	112	65	94	79	627	93	97	499	143
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	108	215	134	78	183	98	725	107	119	652	187
Arrive On Green	0.15	0.15	0.15	0.13	0.13	0.13	0.06	0.49	0.49	0.07	0.51	0.51
Sat Flow, veh/h	945	730	1450	1057	613	1448	1641	1466	217	1641	1287	369
Grp Volume(v), veh/h	218	0	117	177	0	94	79	0	720	97	0	642
Grp Sat Flow(s),veh/h/ln	1675	0	1450	1670	0	1448	1641	0	1684	1641	0	1656
Q Serve(g_s), s	14.5	0.0	8.5	11.8	0.0	6.9	5.4	0.0	43.0	6.6	0.0	35.5
Cycle Q Clear(g_c), s	14.5	0.0	8.5	11.8	0.0	6.9	5.4	0.0	43.0	6.6	0.0	35.5
Prop In Lane	0.56		1.00	0.63		1.00	1.00		0.13	1.00		0.22
Lane Grp Cap(c), veh/h	249	0	215	211	0	183	98	0	832	119	0	839
V/C Ratio(X)	0.88	0.00	0.54	0.84	0.00	0.51	0.80	0.00	0.87	0.82	0.00	0.77
Avail Cap(c_a), veh/h	276	0	238	269	0	233	134	0	832	127	0	839
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	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.4	0.0	44.8	48.5	0.0	46.4	52.8	0.0	25.4	52.0	0.0	22.6
Incr Delay (d2), s/veh	24.1	0.0	2.1	16.6	0.0	2.2	21.3	0.0	11.7	31.0	0.0	6.6
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	7.7	0.0	3.2	5.9	0.0	2.6	2.8	0.0	19.2	3.7	0.0	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.5	0.0	47.0	65.1	0.0	48.6	74.1	0.0	37.1	83.0	0.0	29.2
LnGrp LOS	E	A	D	E	A	D	E	A	D	F	A	C
Approach Vol, veh/h		335			271			799			739	
Approach Delay, s/veh		62.9			59.4			40.7			36.2	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	60.7		21.4	11.3	62.1		18.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	8.8	56.2		18.7	9.3	55.7		18.3				
Max Q Clear Time (g_c+I1), s	8.6	45.0		16.5	7.4	37.5		13.8				
Green Ext Time (p_c), s	0.0	3.9		0.4	0.0	4.4		0.5				

Intersection Summary												
HCM 6th Ctrl Delay			45.0									
HCM 6th LOS			D									

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	193	77	11	186	71	8
Future Vol, veh/h	193	77	11	186	71	8
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	210	84	12	202	77	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	294	0	478	252
Stage 1	-	-	-	-	252	-
Stage 2	-	-	-	-	226	-
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	-	-	1268	-	546	787
Stage 1	-	-	-	-	790	-
Stage 2	-	-	-	-	812	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1268	-	540	787
Mov Cap-2 Maneuver	-	-	-	-	540	-
Stage 1	-	-	-	-	781	-
Stage 2	-	-	-	-	812	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	12.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	558	-	-	1268	-
HCM Lane V/C Ratio	0.154	-	-	0.009	-
HCM Control Delay (s)	12.6	-	-	7.9	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.5	-	-	0	-