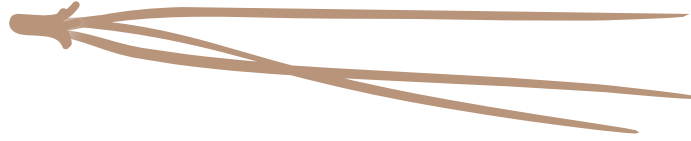


# Wickiup Junction

## REFINEMENT PLAN



ADOPTED JULY 2021 <sup>1</sup>



## ACKNOWLEDGMENTS

The City of La Pine, Deschutes County, and the Oregon Department of Transportation acknowledge the many members of the community that contributed to the development of this Refinement Plan. Everyone who provided input, feedback, expertise, including many members of the public who participated in workshops, open houses, and provided comment, have helped produce a community-driven plan that will guide investments in the area's transportation system into the future.

Special gratitude is due to the volunteer committee members, decision-makers, and staff who contributed countless hours to the development of this plan:

### Project Advisory Committee:

- Jake Obrist, City of La Pine Public Works
- Chris Doty, Deschutes County
- Cody Smith, Deschutes County
- Mike Harper, La Pine City Council
- Russ Smith, La Pine Planning Commission
- Tone DeBone, Deschutes County Board of Commissioners
- Hugh Palcic, Deschutes County Planning Commission
- Scott Asla, Business Representative
- Charlie Every, Every Trucking
- Kusum Katyal, Timber Crest Inn
- Bob Krohn, Gordy's Truck Stop/Restaurant
- Scott Morgan, BPAC Representative
- Karen Miller, La Pine Parks & Recreation
- Tina Bandy, Bend-La Pine School District Transportation District

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# PLAN OVERVIEW

The Wickiup Junction Refinement Plan provides a clear vision and implementation strategy for how the transportation system within the Wickiup community can be changed to support area growth while maintaining local and regional mobility on US 97. The Refinement Plan is intended to help prioritize near and mid-term transportation projects that support the area while maintaining forward compatibility with the Wickiup Junction Overcrossing project and long-term vision for US 97 through the area.

This Refinement Plan was developed through a robust process of technical review, policy assessment, and public engagement that informed the needs and confirmed the projects identified to meet those needs. The resultant Plan includes changes to the transportation system that support people walking, cycling, driving and the movement of freight on the City streets and along US 97. These outcomes were discussed and informed by various community engagement events and feedback from agency partners. Because of these efforts, the Refinement Plan represents a community-supported vision for the future of the transportation system within and through the Wickiup Junction area.

Figure 1 provides an overview of key Refinement Plan recommendations. Table 1 summarizes the recommended projects. Planning level cost estimates and recommended priorities are also noted. Each project is described in more detail in the following sections.

The remainder of the Refinement Plan details the long-term vision for the Wickiup Junction area, provides an overview of how the Refinement Plan was developed, outlines the specific needs identified, expands on the solutions identified to address those needs, and outlines next steps to implement the vision presented.



Figure 1 - Summary of Refinement Plan Projects

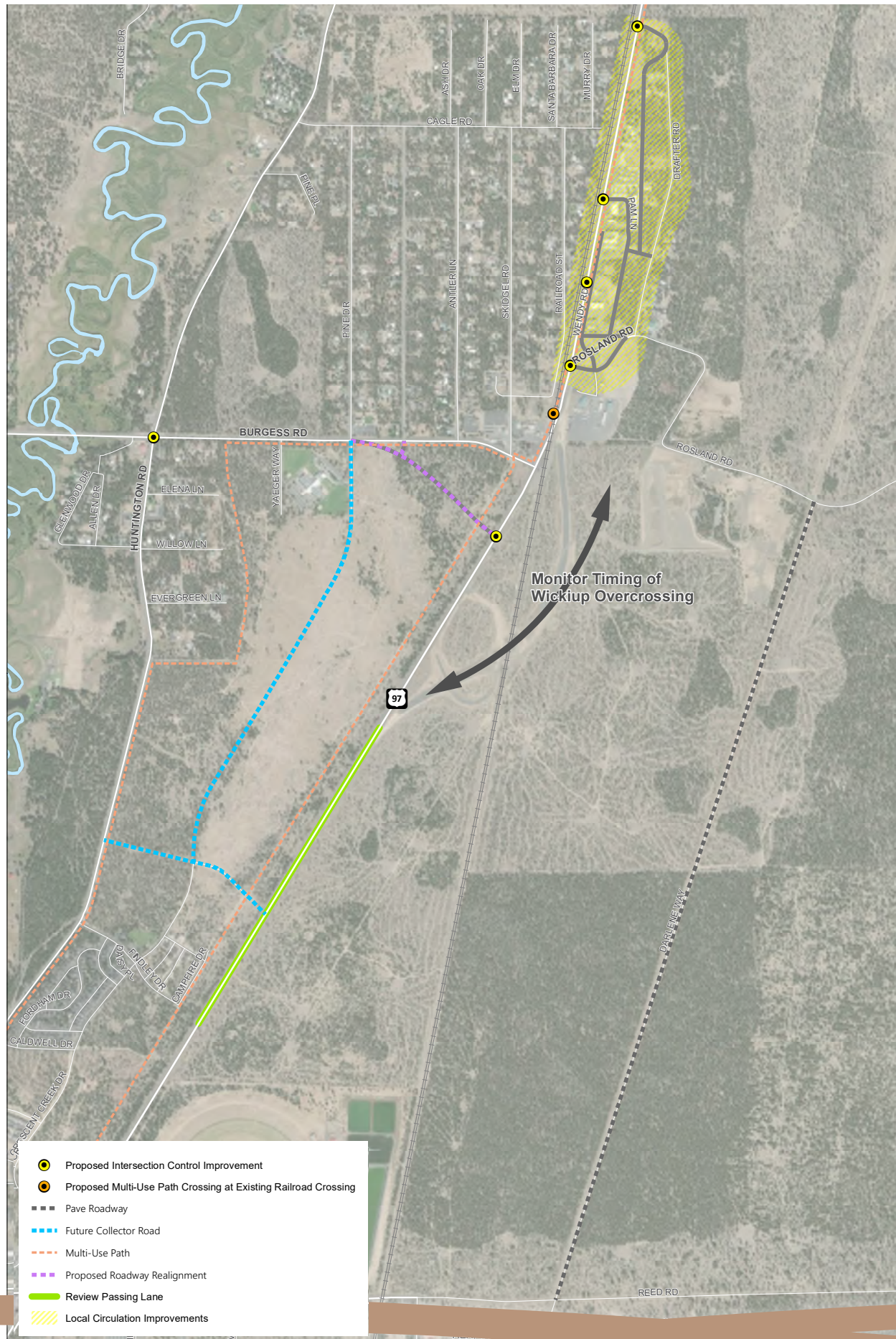


Table 1. Summary of Key Projects

| IMPROVEMENT   | NEED ADDRESSED   | PLANNING LEVEL COST ESTIMATE            |
|---|--|---|
| <b>Regional Connections</b>   |  |   |
| Realign Burgess Road and construct intersection changes at US 97/Burgess Road | Address identified safety, capacity, and local connectivity  | \$3,300,000                             |
| Multi-use Path from Crescent Creek to northern City limits                    | Support regional connectivity for those walking or riding bikes  | \$2,400,000                             |
| Passing Lane Removal  | Support urbanization of La Pine community and reduce speeds  | To be determined based on future design |
| Pave Darlene Way from Rosland Road to Reed Road                               | Support regional connectivity  | \$5,300,000                             |
| North-South Collector: Burgess Road to Crescent Creek Drive                   | Support regional connectivity  | \$6,200,000                             |
| East-West Collector: Huntington Road to US 97                                 | Support regional connectivity  | \$2,600,000                             |
|   |  | <b>Subtotal: \$19,800,000</b>           |
| <b>Local Connections</b>  |  |   |
| Pam Lane Extension to Rosland Road  | Support local circulation within the Wickup Junction Business District                                     | \$2,200,000                             |
| East-west road from Pam Lane Extension to Drafter Road                        | Support local circulation within the Wickup Junction Business District                                     | \$600,000                               |
| Access consolidation "backage" road   | Support local circulation within the Wickup Junction Business District and reduce conflict points on US 97 | \$3,400,000                             |
|   |  | <b>Subtotal: \$6,200,000</b>            |
| <b>Intersection Alternatives</b>  |  |   |
| US 97/Rosland Road  | Address identified congestion and safety needs   | \$3,000,000                             |
| US 97/Burgess   | Address identified congestion and safety needs   | Included in Burgess Road Realignment    |
| US 97/Pam Lane  | Support access to/from Wickup Junction Business District   | \$2,300,000                             |
| Huntington Road/Burgess Road  | Address rear-end collision crash history   | \$2,700,000 (long-term solution)        |
| US 97/Frontage Road (Wendy Road)  | Reduce conflict points and route vehicles to improved intersections  | \$350,000                               |
| US 97/Drafter Road  | Provide long-term access   | \$800,000                               |
| US 97/1st Street/Reed Road  | Provide long-term capacity at intersection   | To be determined based on future design |
|   |  | <b>Subtotal: \$9,150,000</b>            |
|   |  | <b>Total: \$35,150,000</b>              |



vel Center  
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# LONGER-TERM VISION FOR WICKIUP JUNCTION

US 97 crosses the Burlington Northern Santa Fe (BNSF) rail line within the Wickiup Junction area at a skew just to the north of Burgess Road. This existing intersection alignment creates challenges for people driving, freight traffic, and school buses, particularly in periods of inclement weather. The rail crossing serves 8-12 trains per day.

The Wickiup Junction Overcrossing project is intended to provide a grade-separated crossing of the BNSF rail line. Soil conditions prevented completion of the construction of the highway overcrossing in 2017. Since construction was halted, ODOT has continued its monitoring efforts to gauge the appropriate time to re-start the Wickiup Overcrossing construction. Ultimately, completion of this overcrossing represents the long-term vision for US 97 in the Wickiup area.

In recognition of the future completion of this project, ODOT, Deschutes County and the City of La Pine are committed to implementing needed changes to US 97 and to the City streets that can support future economic growth in the region, be completed in the next 5 to 15 years, and be compatible with ultimate construction of the Wickiup Junction Overcrossing.



The recommended changes to US 97 respond to the following identified needs:



### **Rail Crossing Considerations**

The existing rail alignment and at-grade crossings will remain in-place until the Wickiup Junction Overcrossing project is viable. Changes to the existing skew of the rail line would be overly costly to construct and would have significant impacts to adjacent properties within the City and were not deemed a viable option.



### **Walking and Cycling Needs**

Today, there are no sidewalks or bike lanes along the highway within Wickiup Junction. There are also no facilities that provide convenient and comfortable crossing options of US 97 for people walking and cycling between the homes, schools, civic uses, recreational areas, and businesses located to the east and west of the highway.



### **Recognizing the Changing Urban Environment**

The Wickiup Junction area is quickly developing and transitioning from a rural environment to one that provides a wide range of urban services. This Plan recognizes that shift and identifies several changes that support a more urban roadside culture while providing for the movement of freight and vehicles along US 97, which is and will remain a critical north-south route for Oregon.

The Wickiup Junction Refinement Plan does not identify the need within the planning horizon to provide additional vehicular capacity for through movements on US 97 within the study area. ODOT will monitor if or when additional vehicular capacity could be needed along US 97. If such a need is identified, ODOT, the County, and the City would consider a potential alternative to provide additional north-south mobility and capacity options to US 97 by utilizing the existing ODOT owned right-of-way east of Drafter Road to construct a new roadway. It is important to note that no planned or funded options have been identified at this point to construct a new roadway within this right-of-way corridor (ROW) and it is not recommended as part of the Wickiup Junction Plan. For illustrative purposes, Figure 2 provides a conceptual rendering of a potential reroute option that would utilize this ROW.



Figure 2 - Long Term Concept



The recommended projects included in this Plan reflect those that could potentially be funded and constructed prior to the Wickiup Junction Overcrossing project. Concepts that would be overly costly or have significant property impacts were eliminated by the City, County, ODOT, and the project team as not being viable projects.







# HOW WAS THE PLAN DEVELOPED?

The Wickiup Refinement Plan was developed through technical and policy analysis as well as a robust community outreach and engagement effort.

Specific activities and groups that contributed to the Plan development include:



## **PROJECT MANAGEMENT TEAM**

Comprised of the City of La Pine, ODOT, and Deschutes County staff. This group provided regular input and day-to-day direction to the project team.



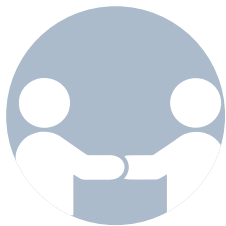
## **PROJECT ADVISORY COMMITTEE**

Included representatives from the community. This group met four times throughout the Plan development to provide input and feedback on key project



## **COMMUNITY MEETINGS**

The community was solicited at three points in the project to hear feedback from those who live, work, or recreate in the project vicinity.



## **AGENCY AND BUSINESS PARTNER COORDINATION**

Included broad coordination and input from Bend-La Pine School District, Cascades East Transit, local businesses, and other stakeholders with interests in the Refinement Plan area.









# WHAT TRANSPORTATION NEEDS DOES THIS PLAN ADDRESS?

An overview of the needs for people driving, walking, riding bikes and for freight movement along US 97 and the City street network is provided below.

These needs were identified and confirmed through input from the community, Project Advisory Committee, and agency partners.

## HIGHWAY MOBILITY

US 97 plays an important role in moving people and goods within the West Coast and Canada, the state of Oregon, and the City of La Pine. In recognition of these roles, ODOT classifies US 97 as a “statewide, expressway freight route.” US 97 is also classified as a Tier 1, Phase 1 Lifeline Route and considered vital for rescue and recovery operations in case of a natural catastrophe.

Near the Wickiup Junction, US 97 generally parallels the BNSF railroad. Both the rail line and the highway serve as barriers to people walking, riding bikes and driving east-west within the City.

In recognition of the many roles that US 97 serves, this Plan closely considers the following:

- Mobility for regional freight and vehicular traffic;
- Facilities for walking and riding bikes;
- Connections to the City’s street system; and,
- Roadway “features” that reflect an urban context (i.e., appropriate lane widths, pedestrian, bicycle facilities, and turning lanes) per policy guidance provided within ODOT’s Blueprint for Urban Design. This includes consideration to reduce speeds through the study area as roadway context changes.





## REGIONAL & LOCAL CONNECTIONS

The City and County street system provides options for people to walk, ride bikes, and drive between the homes, businesses, civic uses, and recreational areas near the Wickiup Junction. This Plan identifies changes to the existing street system that provide:

- Sidewalks, bike lanes, and pathways that connect people walking and riding bikes within the areas adjacent to and crossing US 97;
- Pathway and trail connections to the regional trails planned by the ODOT and the City of La Pine to the north and south, respectively;
- Vehicular access to, and improved circulation within the business area east of US 97;
- Increased vehicular capacity and treatments to help people cross the highway at key City street intersections with US 97;
- Additional north-south and east-west streets on both sides of the highway to reduce reliance on US 97 for local traffic circulation; and,
- Access to transit, including retaining access for drivers as well as people walking to the existing Cascades East Transit (CET) park-n-ride.





## INTERSECTION NEEDS

Several of the intersections near or within Wickiup Junction will likely need to be modified in the next fifteen years to address capacity and/or safety needs. These changes may include modifications to the number and/or type of travel lanes, traffic control devices (i.e., stop signs versus signals, etc.), and/or the walking and cycling facilities provided at the intersection.

The following intersections were identified to have higher than expected crash rates, require additional vehicle capacity, or require changes to reflect the City's vision for the local transportation system in the study area:

- US 97/Rosland Road - concepts address capacity and safety needs;
- US 97/Burgess Road - concepts address capacity and safety needs;
- US 97/1st Street/Reed Road - concepts address capacity and safety needs;
- US 97/Frontage Road Access - concepts address capacity needs;
- Huntington Road/Burgess Road - concepts address safety needs as well as changes that can address the City's vision for the intersection.









# WHAT ARE THE SOLUTIONS?

**The projects that comprise this Refinement Plan are intended for implementation in the next 5 to 15 years.**

These projects address both the needs identified as well as allow compatibility with the long-term vision for US 97 within the Wickiup Junction area. Specific elements of these projects will be further refined as each is advanced to the design and project delivery phase. Changes to US 97 may require future coordination and approval by the State Traffic Engineer.

The following sections document implementation strategies and specific solutions to address the identified needs.

## HOW WILL THE PLAN BE IMPLEMENTED?

Each project included in the Plan has been prioritized to help provide clarity to La Pine, ODOT, and Deschutes County as to which are most effective at meeting identified goals, useful at stimulating other system changes, and/or reflect how future funding resources could be allocated.

It is important to note that these are planning-level recommendations and subject to refinement and change over time. Factors that could change include local and regional economic activities and priorities, City Council and/or ODOT goals, budgets, and the City's Capital Improvement Program (CIP). Other variables include the ability to partner with other privately or publicly funded projects; annual fluctuations in revenue collections; and potential grants or non-local funding opportunities. The scope and scale of projects may also be revised as each is more fully developed through a specific design process.





For planning purposes, the projects are categorized into the categories listed below.

---



**High Priorities**

These projects address a key need, provide an essential link or connection that facilitates economic development and/or other transportation projects, and have been highly supported by community and project stakeholders.

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**Medium Priorities**

These projects support the high priority projects and continue to move the community towards the identified goals of the Refinement Plan.

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**Low Priorities**

These projects are unlikely to be needed until 15 to 20 years into the future. In general, these projects implement the La Pine Comprehensive Plan.

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**Development Driven**

The timing for these projects is tied to adjacent land development. The types of projects in this category may address both localized access needs as well as adding collector facilities to connect people walking, cycling and driving to the arterial system and to the highway. Some of these projects may be jointly funded using both public and private funding sources, such as Transportation System Development Charge (TSDC) funding, Development Agreements, or an area-planning process. Specific timing for implementation is dependent on market conditions related to the pace of development in specific areas. These projects contribute to the overall multimodal system and are an important component of the Refinement Plan.

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## HIGHWAY PLAN

US 97 serves as a key route to, through, and within the Wickiup Junction area. Any future changes to the highway will consider the needs of those traveling through the City as well as providing access to the City street system for those walking, riding bikes, and driving.

The US 97 and local circulation changes included in the Plan are consistent with the overall vision of the Oregon Highway Plan to:

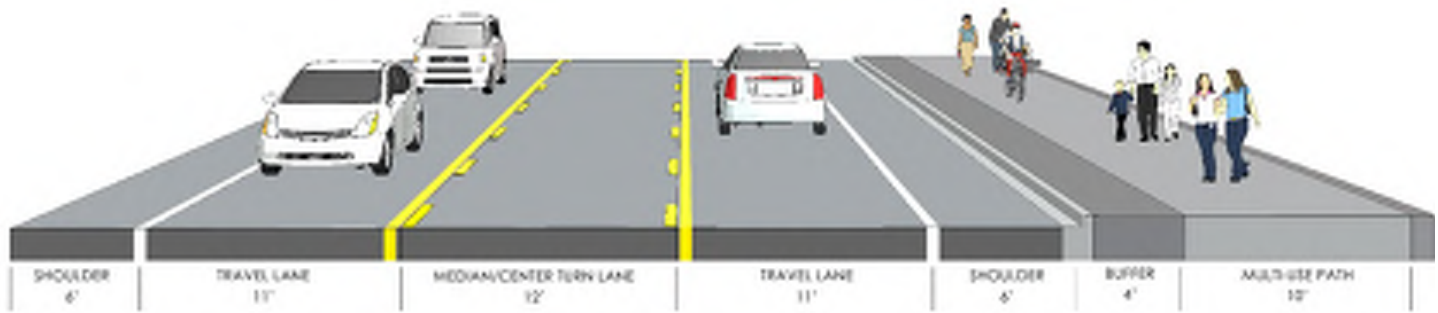
- Provide a state highway system that is safe, attractive, efficient, and dependable.
- Serve people, goods, services, and all modes of travel.
- Support economic opportunity, livability, and a sustainable environment.
- Strike a balance between local accessibility and through movement of people and goods in urban and rural communities.

In addition, the presented projects are supported by ODOT's recently published Blueprint for Urban Design. This document provides guidance for the design of state highways considering the specific context of each roadway. Per this policy guidance, the Wickiup Junction area is best defined as a "rural community" which would suggest the following roadway elements for US 97:

- Narrower lane widths to reduce pedestrian crossing distances at intersections and to manage vehicular speeds along the highway; and
- A multiuse path located adjacent to US 97 for walking and cycling in the corridor.



Figure 3 - Potential changes to US 97 within the Wickiup Junction area



Additional details related to how the Blueprint for Urban Design will shape changes to US 97 will be addressed when the Wickiup Junction alternatives are funded for design and construction.

With the location of the BNSF rail line to the west and existing development to the east, the right-of-way for US 97 varies between 60 and 70 feet in the Wickiup Junction area. Based on this ROW and considering ODOT policy guidance, Figure 3 identifies how US 97 could look in the future.

The changes to the highway may include:

- Separated multi-use path, including a buffer area. This path would be provided in lieu of on-street bicycle lanes and curb tight sidewalks along the highway. The path could occur on the west side of US 97 to the south of Rosland Road and the east side to the north. A traffic signal that meets traffic signal warrants and is approved by the State Traffic Engineer could provide an enhanced crossing of the highway and could be considered as part of the path network.
- Narrower lane widths to reduce pedestrian crossing distances at intersections and to manage travel speeds along the highway.
- Variable median or center turn-lane to provide for vehicles turning on or off the highway.
- Dedicated Shoulders to allow for highway maintenance, accommodation of vehicle over tracking, and snow storage.

These modifications to the highway create a more urban context that supports lower vehicle speeds on US 97. The highway is currently posted 45 miles per hour (mph) through much of the Wickiup Junction area. Reduced speeds would promote a “lower stress” environment for those walking or riding bikes, and potentially modify crossing requirements for buses and other large vehicles at the BNSF rail line. Currently, large vehicles such as school buses must travel out of direction to avoid the US 97 rail crossing due to high speeds on the highway and a lack of a wide shoulder to stop at the rail crossing in conformance with state law. ODOT and the City of La Pine will continue to monitor appropriate posted speeds limits as modifications to the highway are implemented.

US 97 through La Pine is identified as a Reduction Review Route subject to ORS366.215, which details requirements related to reduction of vehicle carrying capacity for any horizontal clearance or vertical clearance across or over the highway. Projects concepts and improvements presented in this Refinement Plan will require further evaluation at the time of design and implementation to ensure compliance with this statute.





## REGIONAL CIRCULATION PLAN

The following describes key projects that would support regional circulation for all users traveling to or through Wickup Junction. Specific elements of the plan are reflected in Figure 4. Projects are shown in Table 2.

### Pedestrian and Bicycle Connections

The City is planning a multi-use path on the west side of US 97 that would connect people walking and riding bikes between downtown and Burgess Road. ODOT is also in the early stages of planning a regional trail system that would extend from Bend south to La Pine.



#### MULTIUSE PATHWAY

Consistent with the City and ODOT plans, the Wickiup Junction Refinement Plan includes a multiuse pathway that:

- Extends from Burgess Road to downtown on the west side of US 97;
- Requires changes to the existing at-grade rail crossing to include signing, pavement markings, crossing devices and channelization, and other treatments needed to facilitate at-grade pedestrian and bicycle crossings; these changes will require close coordination with BNSF, ODOT Rail, and other applicable rail stakeholders. Future evaluation will determine if a crossing order associated with modifications to the rail crossing is required;





- Crosses US 97 in the vicinity of Rosland Road and continues to the north on the east side of US 97 to provide access to the Wickiup Junction business area. Extension of the westside pathway to the north of Rosland Road is not feasible due to the distance between the existing BNSF line and US 97 as well as the lack of any rail crossings into the neighborhoods on the west side of US 97. The lack of any access to the Cagle Subdivision to the west or any trails connections further to north limits the effectiveness of any trail that would be sited along US 97 to the north of Rosland Road.
  - North of Rosland Road, the design and location of the multiuse path on the east side of US 97 could follow the highway alignment or utilize local circulation roads, such as Pam Lane. The specific alignment will be determined through future design efforts.
- Is located a comfortable distance away from US 97 to provide a low-stress environment for those walking and riding bikes.

The multi-use path alignment along Burgess Road and Huntington Road may be refined through further planning of the area, including changing the alignment and timing of the planned collector roads. The multi-use alignment illustrated in Figure 4 allows for its simultaneous construction with the planned collector roads, which may reduce right-of-way needs, improve connectivity, and reduce costs.

## Planned Local Roadway Improvements

The City's street system plays an important role in providing access to homes, businesses, and civic uses as well as linking to US 97. A number of changes to the City street system are included in the Plan.





*Varies by  
Location*

### **PROVISIONS OF NEW TRAFFIC SIGNALS ALONG US 97**

The need for future traffic signals at Rosland Road and possibly other locations would support long-term economic vitality within the City and Region.

- The provision of signals at these locations will need to be reviewed and approved by the State Traffic Engineer.
  - A preliminary review of potential traffic signal progression along the US 97 corridor between Burgess Road and Rosland Road if traffic signals were installed revealed that queuing along the corridor and overall mobility can be provided if these signals are added along the highway in the future. For reference purposes, detailed findings of the progression analysis are included in Alternatives Analysis conducted previously in this planning process.



### **NEW NORTH-SOUTH COLLECTOR STREET**

This street could extend from Crescent Creek Drive to Burgess Road. In addition to providing a parallel route to both US 97 and Huntington Road, this street could serve the developable lands on the west side of the highway. Traffic control at the new intersection with a realigned Burgess Road should be further evaluated based on future land uses planned along the collector street and the proximity of the intersection to the US 97/ Burgess Road intersection.





### **NEW EAST-WEST COLLECTOR STREET BETWEEN HUNTINGTON ROAD AND US 97**

This new street could provide a new connection between Huntington Road and US 97 approximately 1,500 feet north of Findley Drive. This street would also intersect with the new North-South Collector. This new street would provide for a new city street intersection with the highway. Today, no intersections are provided on US 97 between Burgess Road and 1st Street/Reed Road, a distance over 2 miles. Accordingly, providing the new east-west connection could reduce the potential traffic volumes at the 1st Street/US 97 and Burgess Road/US 97 intersections and provide additional options for localized travel in the future. This new intersection with US 97 would require approval from ODOT.



### **DARLENE WAY IMPROVEMENTS**

This is a dirt/gravel roadway maintained by Deschutes County and the Bureau of Land Management (BLM). Paving this roadway and adding bike lanes and sidewalks between Reed Road and Rosland Road could provide a north-south connection for people driving, walking, riding bikes and moving freight on the east side of US 97. The timing and need for these changes will be coordinated with future development of the properties adjacent to the roadway.



### **BURGESS ROAD REALIGNMENT**

The US 97/Burgess Road intersection is approximately 400 feet south of the BNSF rail crossing of the highway. Realigning Burgess Road from Pine Drive to a new location south on US 97 would provide more distance between the rail crossing and a future traffic signal at the US 97/Burgess Road intersection. This increased separation would be necessary to accommodate queuing if traffic control at the intersection is necessary. Additional considerations include:

- Moving Burgess Road to the south should be coordinated with the potential new traffic signal at US 97/Rosland Road. Future capacity needs at US 97/Burgess may be affected by gaps in traffic on US 97 that could result from a traffic signal to the north.
- As plans for relocating Burgess Road are further refined, ODOT will perform a detailed intersection control evaluation in collaboration with the City and County. This future evaluation will refine the need for modifications to the intersection based on the long-term vision for US 97 through the study area, including the Wickiup Overcrossing project.
- Constructing the new segment of the street would require ROW from lands owned by Deschutes County.
- The potential for re-zoning of the new parcel that would be created between the existing and future realignment of the roadway could be further evaluated by the County and City. Based on a preliminary review by the two agencies, the potential for allowing commercial uses adjacent to the highway could help to provide retail opportunities west of US 97 in an area where limited options are provided today. In addition, the property could provide expanded function for the existing park-n-ride facility located at the US 97/Burgess intersection.





## REVIEW PASSING LANE

Today, there are intermittent passing lanes along the highway between the Wickiup Junction area and downtown La Pine. ODOT and the City of La Pine may coordinate the future removal of these passing lanes. Some of the key considerations of the passing lane's removal include:

- These were constructed prior to La Pine's incorporation as a City and are reflective of a more rural highway environment;
- The presence of these lanes suggests to the driver an expectation of higher vehicular speeds, which are not compatible with the existing and future urbanization of La Pine;
- The speed differential that is inherent to vehicles utilizing passing lanes could conflict with future City street intersections added along the highway to support continued economic growth and adjacent land development;
- The Blueprint for Urban Design (ODOT, 2020) has no provisions for stand-alone passing lanes within cities; and
- A two-lane cross-section on US 97 will serve the mobility and capacity needs over the next twenty years within La Pine.

If the passing lanes are removed, the City and ODOT will coordinate on the reallocation of ROW that would become available due to the narrower highway cross-section to promote a more urban context for the community. Specific uses of the existing pavement and ROW could include:

- Gateway features;
- Traffic calming elements, such as landscaping or visual cues for vehicles to slow; and/or
- Incorporation of the planned multi-use path along US 97.

Specific plans to remove these passing lanes will require a design process and future review from ODOT mobility advisory groups and possible consideration by the Oregon Transportation Commission (OTC).



Table 2. Regional Connection Projects







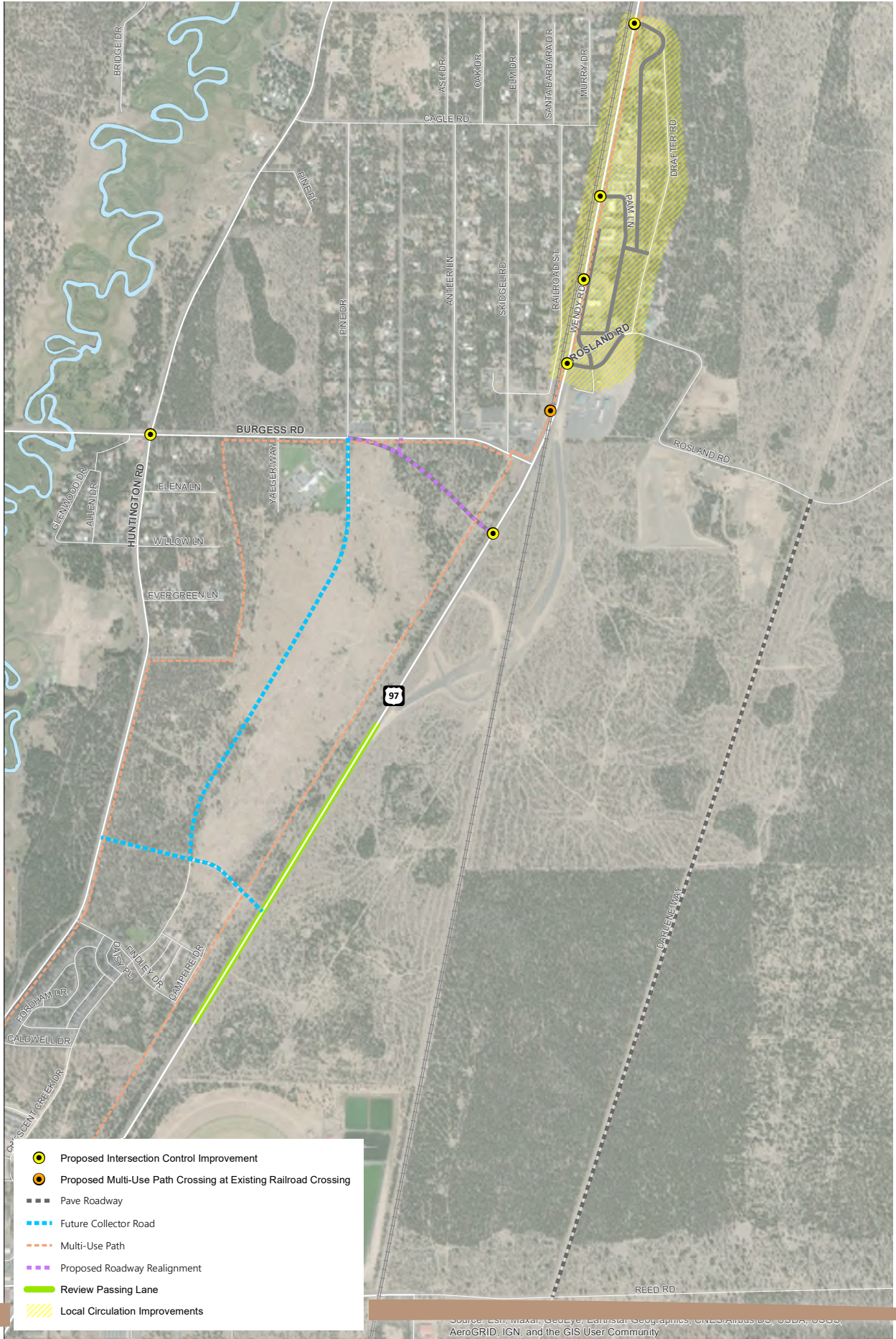
| IMPROVEMENT  | PLANNING LEVEL<br>COST ESTIMATE         | NOTE  | RECOMMENDED<br>PRIORITY   |
|--|---|---|---|
| <b>Realign Burgess Road and construct intersection changes at US 97/Burgess Road</b> | \$3,300,000                             | Includes two vehicular lanes, curbs, sidewalks, and bike lanes plus addition of a traffic signal at the intersection  | <br>Medium               |
| <b>Multi-use Path from Crescent Creek to northern City limits</b>                    | \$2,400,000                             | Includes 10-foot wide path construction only; does not include costs of associated railroad crossing needs; as part of project development, these costs will need to be further refined.  | <br>High                 |
| <b>Passing Lane Removal</b>  | To be determined based on future design | Re-stripe US 97 between downtown La Pine and Wickiup Junction to remove passing lanes. The existing pavement and associated right-of-way (ROW) can be reallocated to other transportation needs. Specific roadway details will be determined based on future ODOT and City of La Pine design processes. | <br>Medium               |
| <b>Pave Darlene Way from Rosland Road to Reed Road</b>                               | \$5,300,000                             | Includes two vehicular lanes but no curbs, sidewalks, or bike lanes   | <br>Low                 |
| <b>North-South Collector: Burgess Road to Crescent Creek Drive</b>                   | \$6,200,000                             | Includes two vehicular lanes, curbs, sidewalks, and bike lanes  | <br>Development Driven |
| <b>East-West Collector: Huntington Road to US 97</b>                                 | \$2,600,000                             | Includes two vehicular lanes, curbs, sidewalks, and bike lanes  | <br>Development Driven |
| <b>Subtotal \$19,800,000</b>   |   |   |   |

Figure 4: Regional Connections





# LOCAL CIRCULATION PLAN

Connections between the Wickiup Junction business area and US 97 are provided by Rosland Road, Pam Lane, and an access to the north-south frontage road. Several changes could occur to the City streets and intersections that could improve circulation within the business area and provide for better coordinated access to US 97. Conceptual changes to the local circulation and access are described below. Specific elements are shown in Figure 5. Projects are shown in Table 3.

## Business District Circulation

Access to businesses and vacant parcels within the Wickiup Junction business district currently rely on Rosland Road, Pam Lane, and the north-south frontage road. Not all streets are paved, some abruptly end without connecting to other streets, and the overall circulation system can be confusing for drivers unfamiliar with the area. These conditions can result in an overreliance on US 97 for local circulation.

To provide for better access to the businesses and reduce reliance on the highway, the following changes are recommended:



### PAM LANE EXTENSION TO ROSLAND ROAD

- Added turn lanes and a proposed traffic signal at the US 97/Rosland Road intersection.
- Added southbound left-turn lane at the US 97/Pam Lane intersection.
- Extending Pam Lane south to Tracy Road. This extension would ideally occur between the properties adjacent to the frontage road and Drafter Road. Extending Pam Lane would allow for existing and future business to conveniently access US 97 at the Rosland Road and Pam Lane intersections.
  - The specific alignment of the Pam Lane extension and connection to Tracy Road (or Rosland Road) will require additional ROW and coordination with property owners.
  - The specific design of the Pam Lane extension should be further evaluated based on available ROW and specific roadway features that should be included. Figure 6 shows a conceptual rendering of a possible cross-section based on 62 feet of ROW, which is typical of minor collector standards within the City.



### EAST-WEST ROAD FROM PAM LANE EXTENSION TO DRAFTER ROAD

- Provision of an east/west roadway between the Pam Lane extension and Drafter Road. This new street would also require ROW acquisition and should be coordinated with property development. Today, some businesses rely on “informal” connections and cut-through routes via private properties/parking areas in lieu of a public street system.
- Added turn-lanes at US 97/Drafter Road, if needed to support future land development

Figure 6 - Conceptual Pam Lane Cross-section



## North-South Frontage Road

The existing north-south frontage road plays a key role in providing access to the local businesses today. However, the existing ROW is narrow and the roadway has been constructed only 40 feet east of the highway. This can lead to queuing interactions on the highway as well as on the frontage road itself. These constraints limit the long-term potential of this roadway to serve new businesses and, at the same time, provide safe and convenient access to US 97.



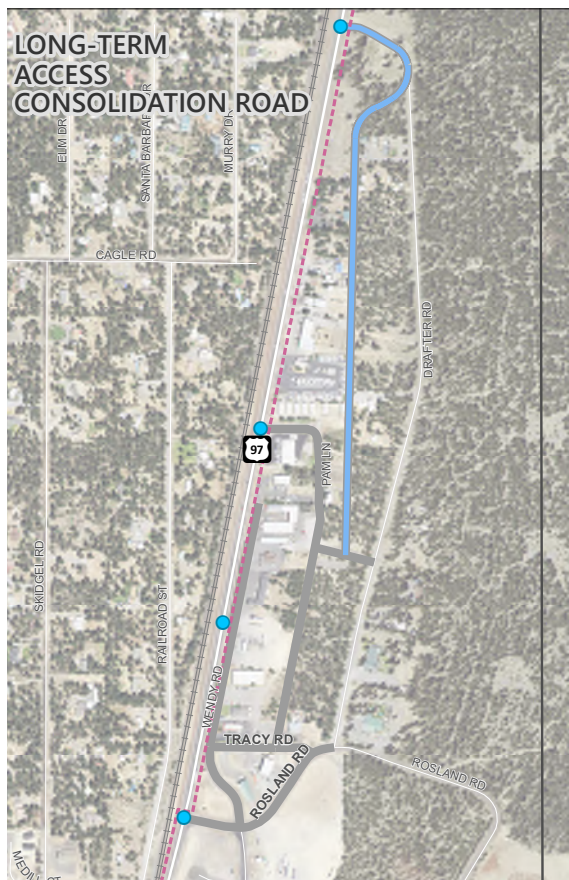
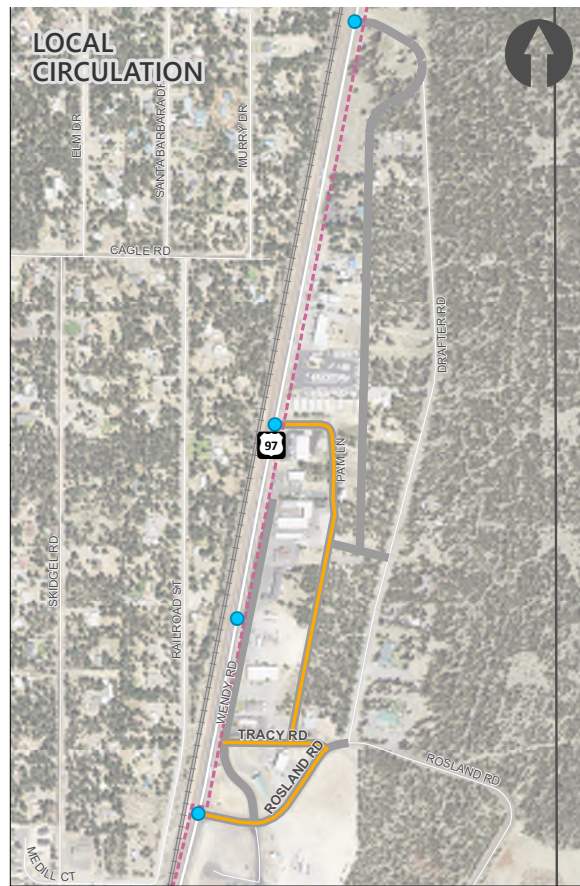
### ACCESS CONSOLIDATION

Most of the properties north of Pam Lane have direct access to US 97 via private driveways today. Use of the highway for local circulation between parcels and for direct property access is inconsistent with regional and State policy guidance. In the short-term, consolidating these access points may be pursued and coordinated with ODOT. In the long-term, the City, County, and ODOT can collaborate on the design and construction of a “backage road” that would extend between properties located adjacent to US 97 and Drafter Road. This facility would help support continued economic development in the business district. Some considerations related to creation of this new roadway include:

- Increased access and visibility can be an incentive for future development along Drafter Road.
- The paving of the Drafter Road connection to US 97 and construction of a backage road will be coordinated to prioritize access to businesses. The local circulation that can be created by these connections is shown in Figure 5.
- Construction of the backage road will require ROW and coordination with property owners.



Figure 5: Local Connections



- The north and south terminus of the backage road will need to be further refined in the context of changes to the Drafter Road and Pam Lane intersections with US 97.
- As properties develop/redevelop along Drafter Road and the backage road is completed, the potential to eliminate direct access to US 97 should be prioritized.

Table 3. Local Connection Projects

| IMPROVEMENT   | PLANNING LEVEL COST ESTIMATE | NOTE   | RECOMMENDED PRIORITY  |
|---|------------------------------|--|---|
| <b>Pam Lane Extension to Rosland Road</b>                     | \$2,200,00                   | Includes two vehicular lanes, curbs, sidewalks, and bike lanes | <br>Medium               |
| <b>East-west road from Pam Lane Extension to Drafter Road</b> | \$600,000                    | Includes two vehicular lanes, curbs, sidewalks, and bike lanes | <br>Medium               |
| <b>Access consolidation "backage" road</b>                    | \$3,400,000                  | Includes two vehicular lanes, curbs, sidewalks, and bike lanes | <br>Development Driven |
| <b>Subtotal</b>   | <b>\$6,200,000</b>           |  |   |



# INTERSECTION PLAN

To support continued growth and development, several of the intersections near Wickiup Junction will require changes in the number and/or type of travel lanes, traffic control devices (i.e., stop signs versus signals, etc.), sidewalks, bike lanes, and treatments that help people walking and riding bikes across the intersections. A description of the types of changes anticipated at each intersection and recommended implementation priority are presented in Table 4 and discussed below.

## Improved access to the Wickiup Junction Business area



### US 97/ROSLAND ROAD

Proposed Traffic Signal at US 97/Rosland to address vehicular congestion and the difficulty of turning onto and off of US 97 and help to address existing and future intersection safety. Future evaluation and design of the traffic signal should consider:

- The intersection modification should provide enough space for northbound vehicles on US 97 to not block the rail crossing to the south when waiting for the traffic signal to turn green;
- The traffic signal should be designed to be compatible with the final construction of Wickiup Junction Overcrossing Project, including providing adequate sight lines;
  - Adequate infrastructure for those walking and biking to cross the intersection; and,
  - Interconnect with BNSF railroad to the south, including needed railroad crossing upgrades.



### US 97/PAM LANE

Adding turn lanes at US 97/Pam Lane to increase the comfort, convenience and safety for motorists to turn onto and off of US 97. These changes would:

- Be consistent with the City's local circulation plan;
- Better identify the space for people driving, riding bikes and walking on Pam Lane both approaching the US 97 intersection as well as along the street itself; and
- Help connect people to the businesses as well as to Drafter Road to the east and the Frontage Road to the south.



### US 97/FRONTAGE ROAD (WENDY ROAD)

Restricting movements at the Frontage Road/US 97 to allow drives to only turn right onto and off of US 97. Motorists wishing to turn left onto or off of the highway could do so at the recommended future traffic signal to the south at Rosland Road/US 97 and/or to the north at the US 97/Pam Lane.



### US 97/DRAFTER ROAD

Adding a left-turn lane and right-turn lane on Drafter Road at US 97 to support economic development.



### **US 97/BURGESS ROAD**

Realignment of Burgess Road/US 97 intersection and possible capacity increases to address vehicular congestion and safety for all users by address the difficulty of turning onto and off of US 97. Project should consider:

- Future alignment and capacity additions should be consistent with the Wickiup Junction Overcrossing project;
- The timing, need for, and specifics of the project should be coordinated with master planning of the Deschutes County property east of US 97 and south of the current Burgess Road alignment; and,
- The need for capacity additions at US 97/Burgess Road should be monitored in conjunction with other system changes, including at Rosland Road and improved network connectivity.



### **US 97/REED LANE/1ST STREET**

Adding left-turn lanes on Reed Road and 1st Street at the US 97 intersection to increase the capacity of the intersection consistent with current ODOT plans.

### **HUNTINGTON ROAD/BURGESS ROAD**

Near-term and long-term changes at the Burgess Road/Huntington Road signal. These include:



- Near-term: Providing systemic safety improvements to address crash history, including increasing the visibility of the signage and “signal heads.”



- Long-term: Consider installation of a roundabout to provide flexibility for increased economic growth.

Recommended changes at each location are preliminary and subject to further refinement through detailed alternatives analysis and design. In addition, all changes to the highway, including proposed traffic signals, will need to be reviewed and approved by the State Traffic Engineer.

More detailed information on the needs at each intersection and the effectiveness of the recommended changes are included the Alternatives Analysis Memorandum included in the appendix.



Table 4 - Summary of Intersection Improvement Plan

| IMPROVEMENT                        | PLANNING LEVEL COST ESTIMATE                    | NOTE  | RECOMMENDED PRIORITY  |
|------------------------------------|---|---|---|
| US 97/Rosland Road                 | \$3,000,000                                     | Install traffic signal, including interconnect with railroad crossing and traffic calming measures to support signal operations and reduce approach speeds. | <br>High                 |
| US 97/Burgess Road                 | Included in Burgess Road Realignment            | Realign intersection south, install traffic signal  | <br>Medium               |
| Huntington Road/<br>Burgess Road   | \$50,000  | Improve existing signal with systemic safety treatments.  | <br>High                 |
|                                    | \$2,700,000                                     | Construct single lane roundabout  | <br>Low                  |
| US 97/Pam Lane                     | \$2,300,000                                     | Add turn lanes  | <br>Medium              |
| US 97/Frontage Road<br>Wendy Road) | \$350,000                                       | Restrict side-street to right-in, right-out movements   | <br>Medium             |
| US 97/Drafter Road                 | \$800,000                                       | Add southbound left-turn lane   | <br>Development Driven |
| US 97/Reed Lane/1st Street         | To be determined based on future design efforts | Add eastbound and westbound left-turn lanes   | <br>Medium             |
| <b>Subtotal</b>                    | <b>9,200,000</b>                                |   |   |



## WHAT'S NEXT?

The Wickiup Junction Refinement Plan provides a comprehensive framework intended to improve the transportation system. This Plan includes recommendations to increase the comfort, convenience and safety for all users and improve access to local businesses and residences. Implementation of this plan will require ongoing coordination between the City of La Pine, ODOT, and Deschutes County.

The following describes key steps the partner agencies will pursue to adopt and implement this plan:

- **Adoption of Refinement Plan:** This may include action by the La Pine City Council to incorporate the plan into the La Pine TSP by reference and consideration of the plan by the Oregon Transportation Commission;
- **Identification of Future Funding Sources:** The partner agencies will collaborate to identify and secure funding sources to design and construct various plan elements. This may include public funding sources, grants, or future private partnerships, including the development review process; and
- **Continued Public Engagement and Project Development:** The partner agencies will continue to engage with area businesses, residents, and stakeholders to refine and further develop specific elements of the identified projects, including roadway alignment, multi-use pathway alignment, and intersection design.



# Wickiup Junction

REFINEMENT PLAN

