

# US 97 BAKER RD INTERCHANGE AREA MANAGEMENT PLAN (IAMP)

PUBLIC MEETING

JUNE 9, 2021

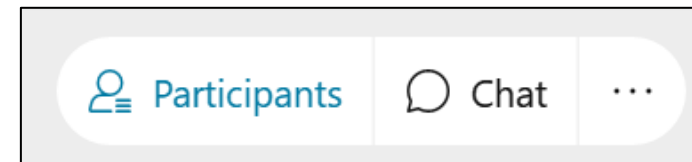
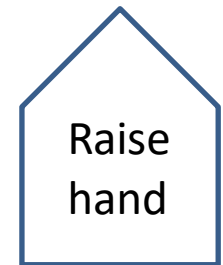
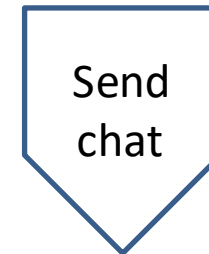
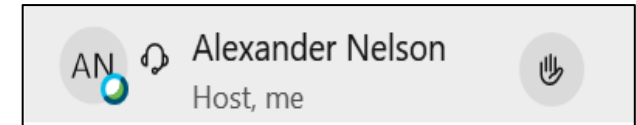
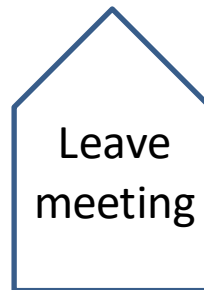
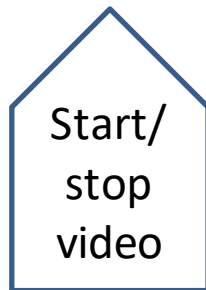
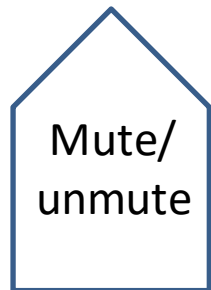
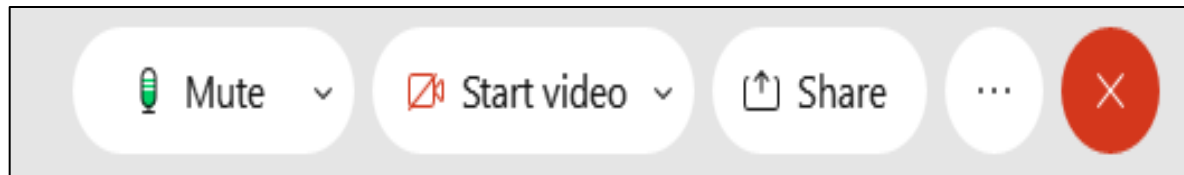
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# VIRTUAL MEETING GUIDELINES

- Please mute your microphone when not speaking.
- Please try not to speak over others.
- During the presentation, use the chat to ask questions.



# AGENDA

- 1 / TEAM INTRODUCTIONS AND PRESENTATION OVERVIEW**
- 2 / PROJECT OVERVIEW**
- 3 / GOALS AND OBJECTIVES**
- 4 / CURRENT AND FUTURE CONDITIONS**
- 5 / SOLUTION SUGGESTIONS**
- 6 / QUESTIONS AND ANSWERS FROM PARTICIPANTS**
- 7 / NEXT STEPS**

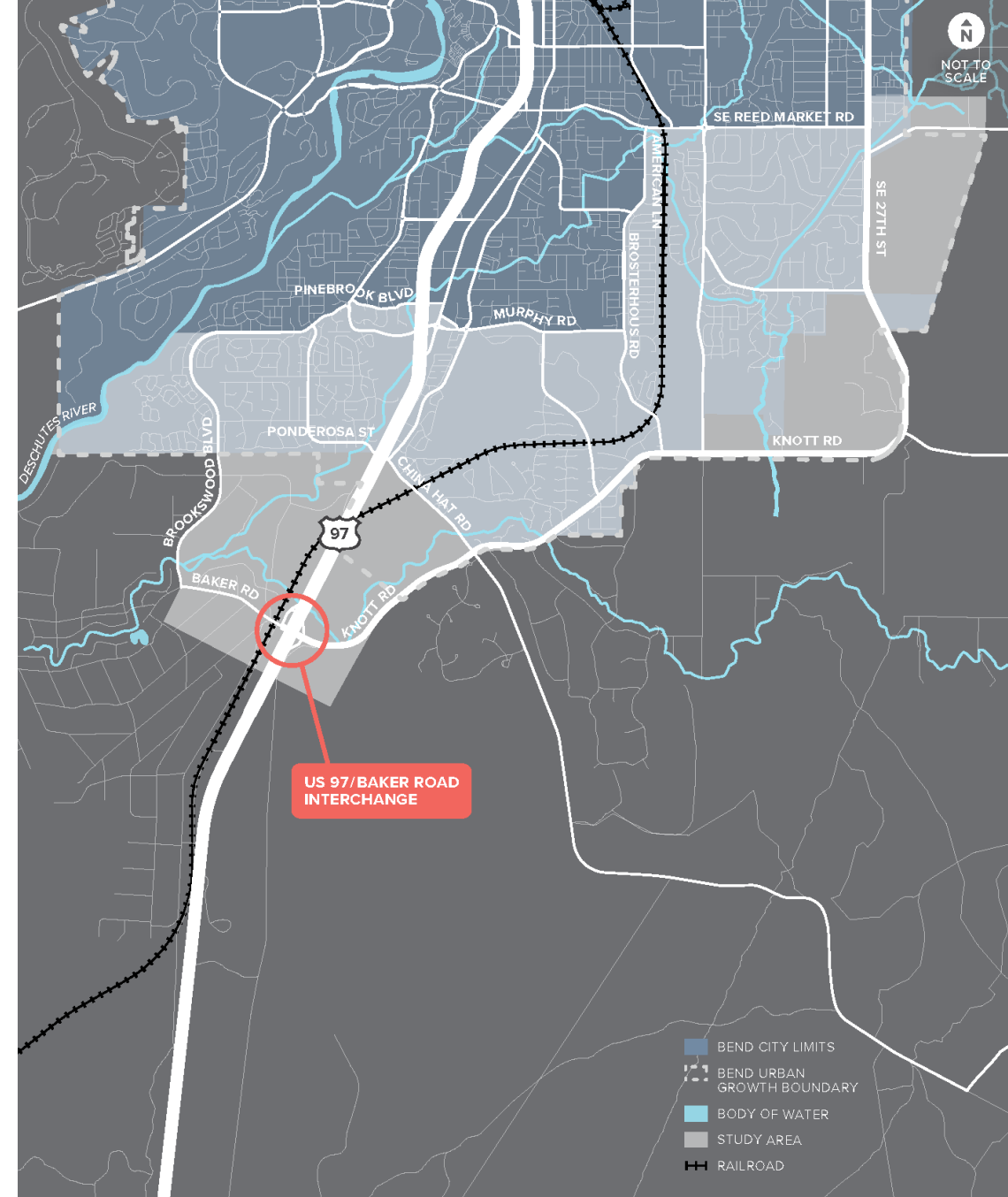
# INTRODUCTIONS



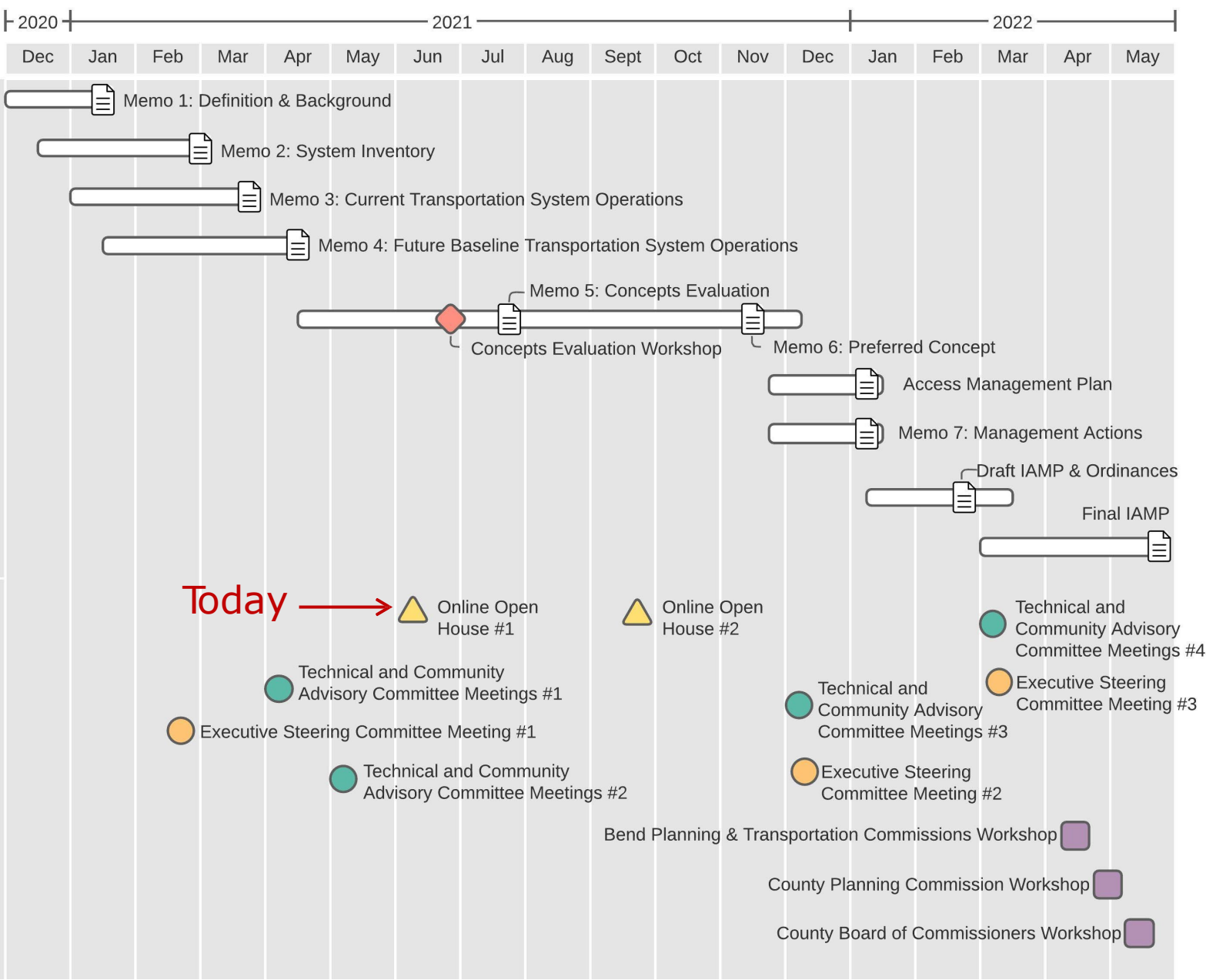


# PROJECT OVERVIEW

- 30-year-old interchange
- Increasing growth/population
- 20-year planning horizon
- Project will help address congestion and safety concerns by:
  - Ensuring the safe and efficient operation of the interchange area for people driving, walking, biking and using transit.
  - Identifying transportation improvements, management strategies and land use/policy actions needed to support planned development.



# PROJECT TIMELINE



# DECISION MAKING STRUCTURE

## **Project Steering Committee = Bend Metropolitan Planning Organization Policy Board**

- Bend City Council
- Deschutes County Board of Commissioners
- ODOT

## **Technical Advisory Committee = Advisory Role**

- Deschutes County Community Development, Health Services, and Emergency Services
- ODOT
- City of Bend
- Bend MPO
- Cascades East Transit
- Bend Fire & Rescue
- DLCD
- US Forest Service

## **Community Advisory Committee = Advisory Role**

- Deschutes River Woods
- Bend-La Pine School District
- Bend Park & Rec. District
- Central Oregon Coalition for Access
- Abilitree
- Deschutes County Bike/Pedestrian Advisory Committee
- Morning Star Christian School
- Riverwoods Country Store
- Arnold Irrigation District
- Homeless Leadership Coalition

# GOALS AND OBJECTIVES

1. Provide for efficient travel through the interchange area based on existing and planned land uses in the area
2. Improve safety for all modes of travel
3. Support regional and local economic development
4. Facilitate the use of multimodal travel options
5. Develop the project to support the community's value of equity
6. Practice good stewardship of the environment
7. Develop solutions that are consistent with the established shared corridor vision and adopted state and local plans
8. Develop implementable solutions for the interchange area

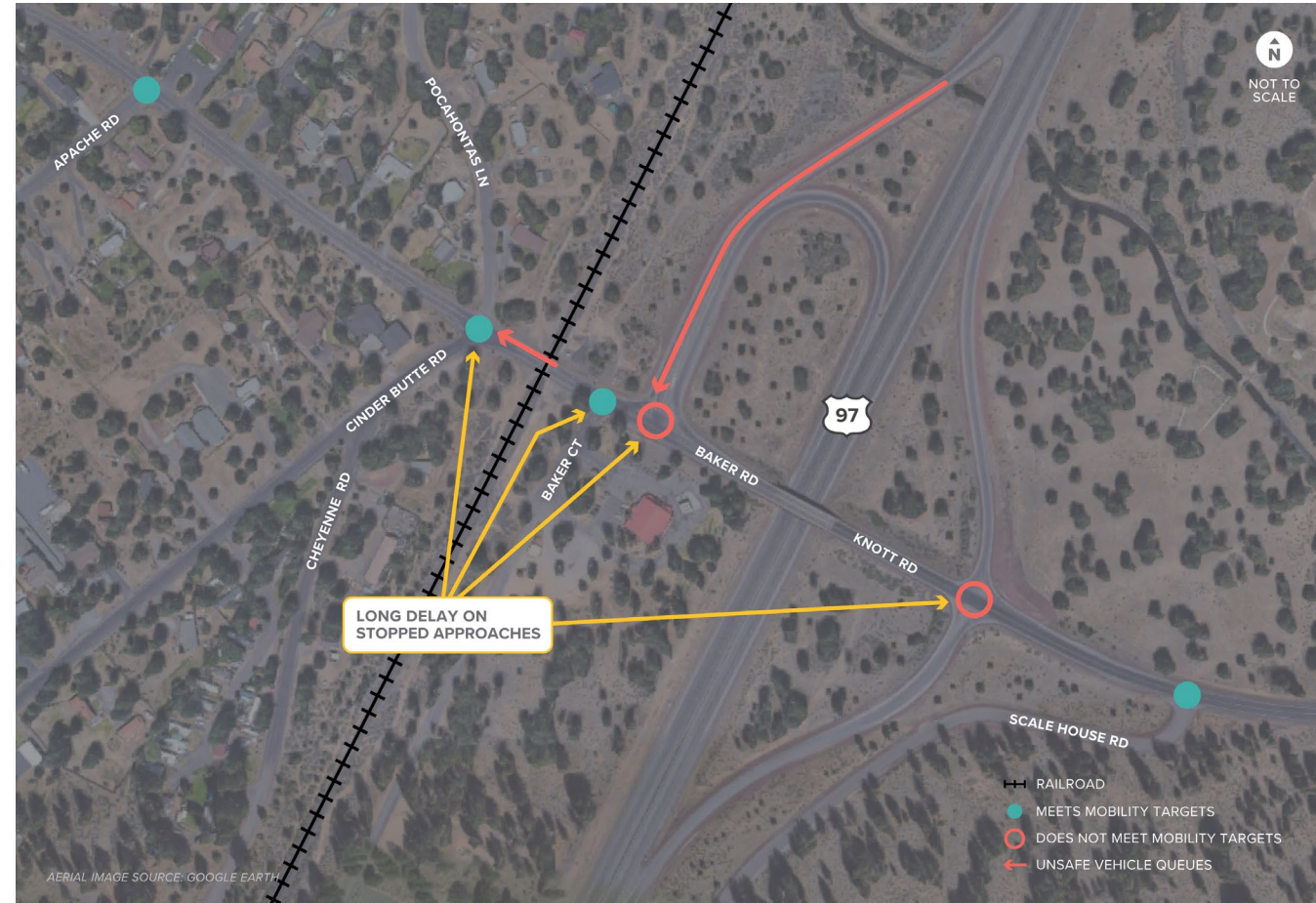


# CURRENT CONDITIONS



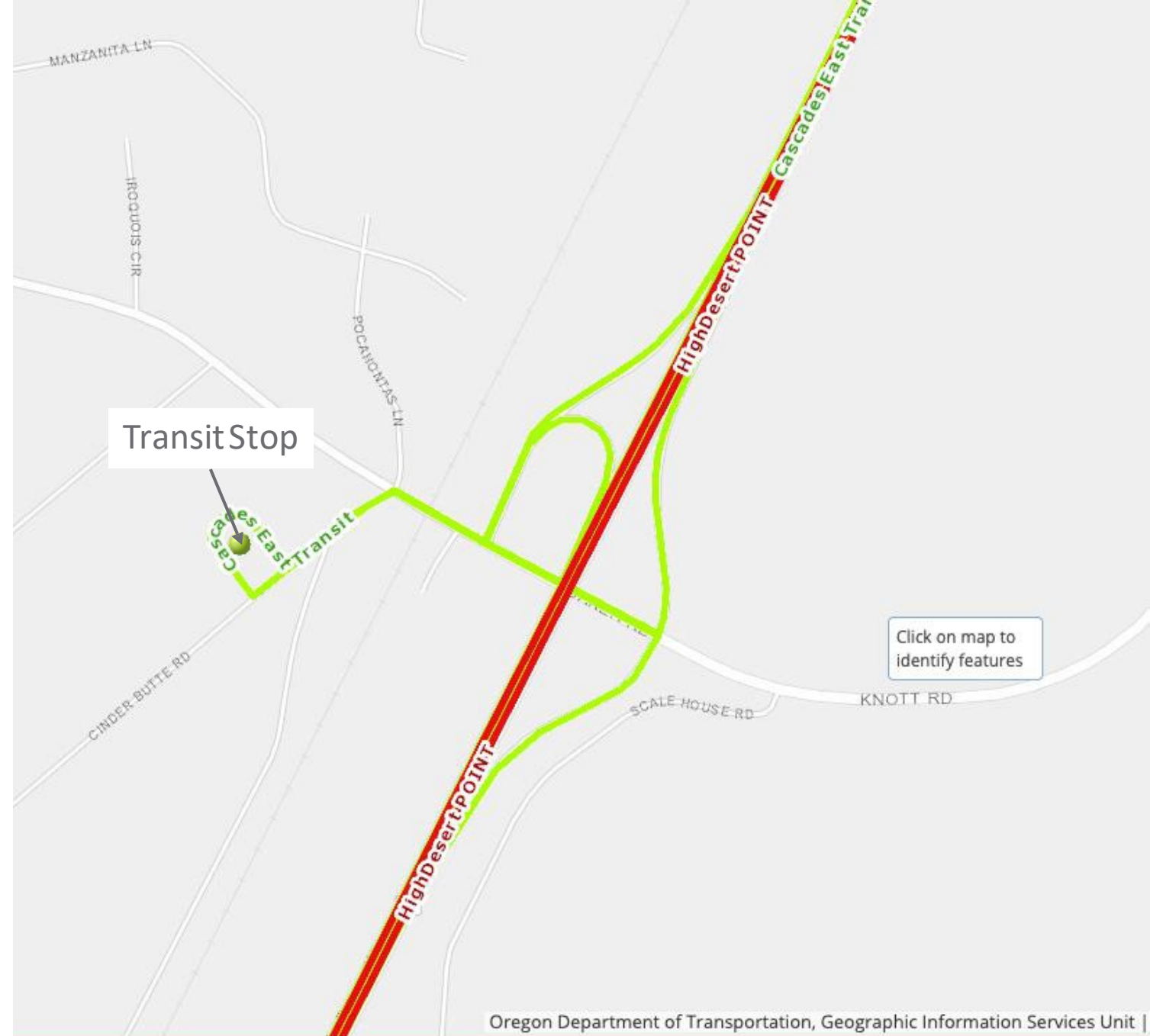
# CONGESTION

- Significant congestion and delays at both ramp terminals.
- Cinder Butte Road and Baker Court meet mobility targets but stopped approaches experience long delays.
- Queues on the southbound off-ramp back up near or to the highway.
- The westbound left queue to Cinder Butte Road backs across the railroad.
- Queues can block closely spaced intersections.



# TRANSIT

- Cascades East Transit provides fixed route service between Bend and LaPine (Route 30) – serving more than 7,300 rides per year
- Dial-a-Ride service
- Transit stop at Riverwoods Outreach Church – 3 stops per weekday
- Potential future improvements





# RAILROAD



- At-grade railroad crossing on Baker Rd. 225 feet west of the southbound ramps.
- Up to 8 train crossings/day (no passenger service).
- Average train crossing closes the road for about 1 minute and 50 seconds.



# WALKING AND BIKING

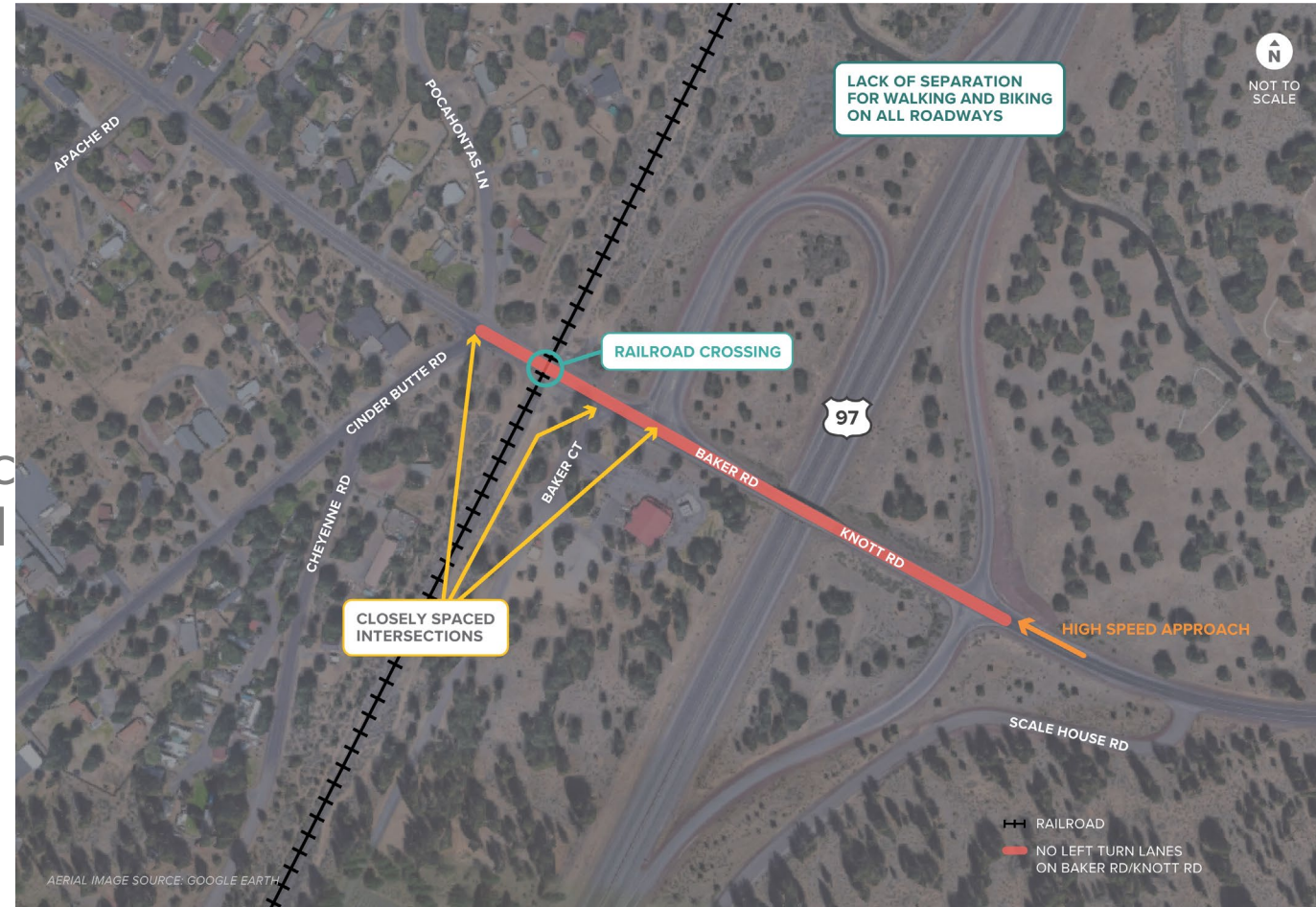
- No sidewalks or bike lanes near the Interchange.
- Limited sidewalks and bike lanes along China Hat Road.
- Baker Road interchange is the only way to safely cross US 97 for people walking or biking in the area (Murphy Road is 2 mi. north).
- Baker/Knott Road is a County Bikeway.
- Future growth to the east, as well as planned trails, will drive more walking and biking demand.



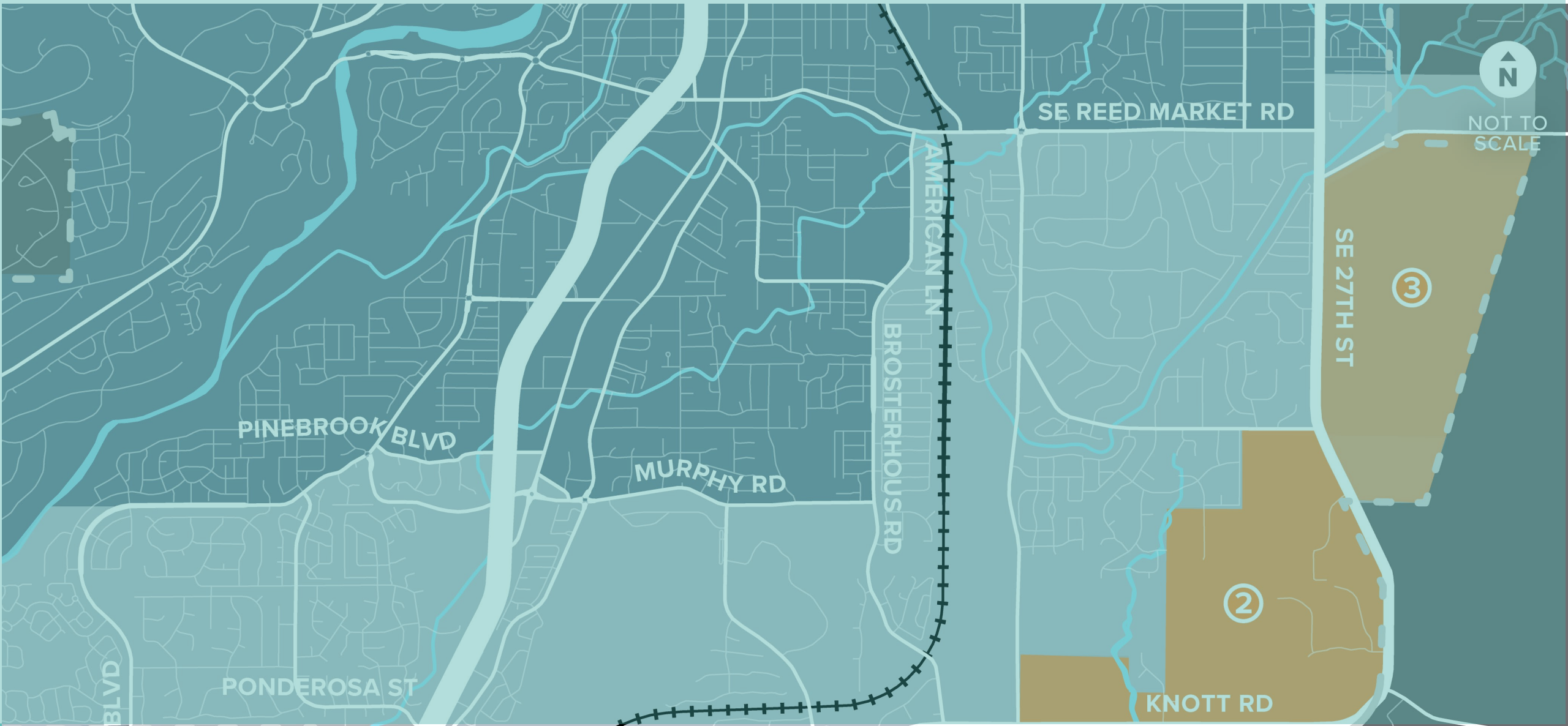


# SAFETY

- People walking and biking on shoulders are exposed to high-speed traffic.
- Closely spaced intersections create turning conflicts and confusion.
- The lack of left-turn lanes on Baker/Knott Road causes stops in traffic and increases the potential for rear-end collisions.
- Traffic approaching the interchange from the east is often traveling at high speeds.
- Cars sometimes back up across the railroad tracks.



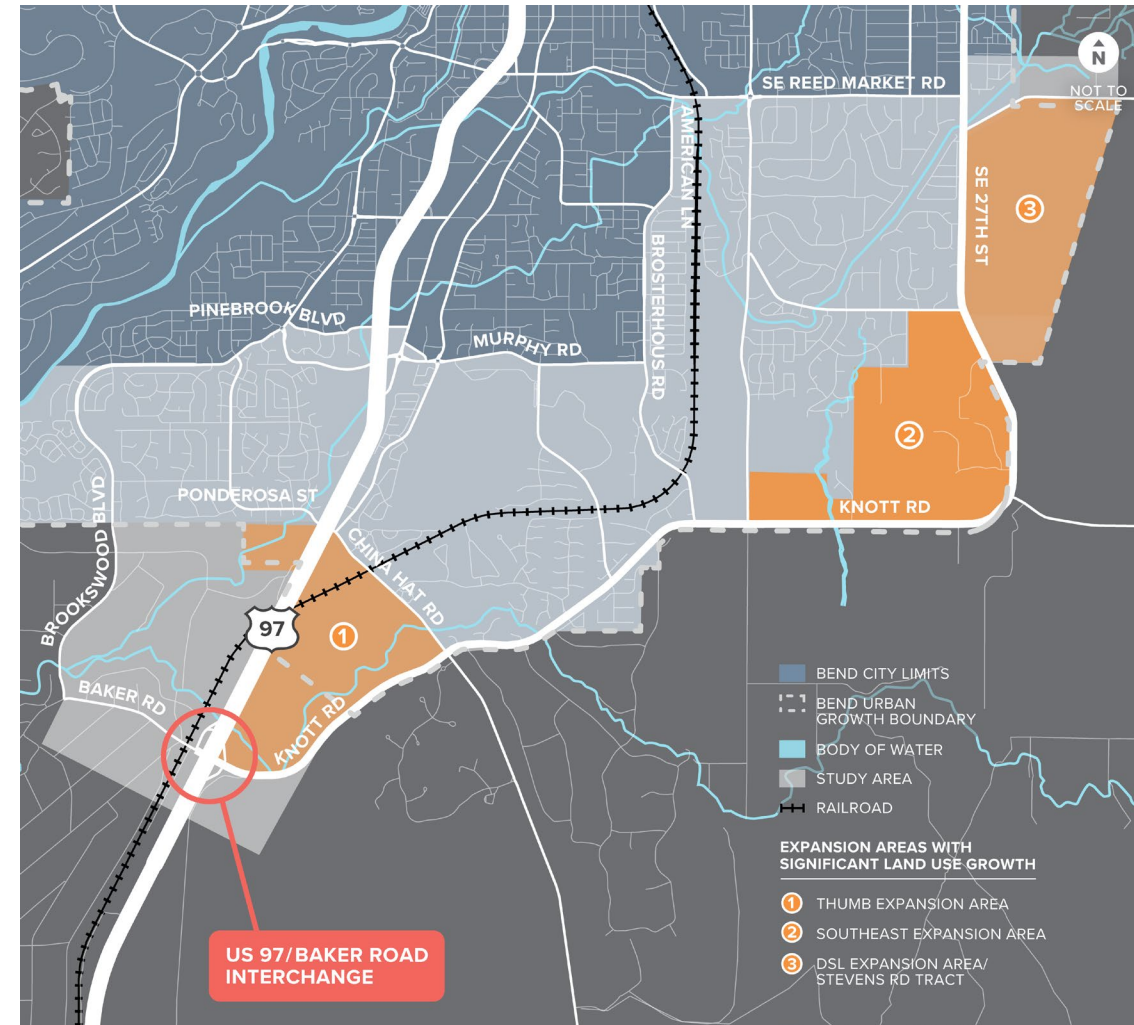
# FUTURE CONDITIONS 2040





# PROJECTED HOUSING AND EMPLOYMENT GROWTH

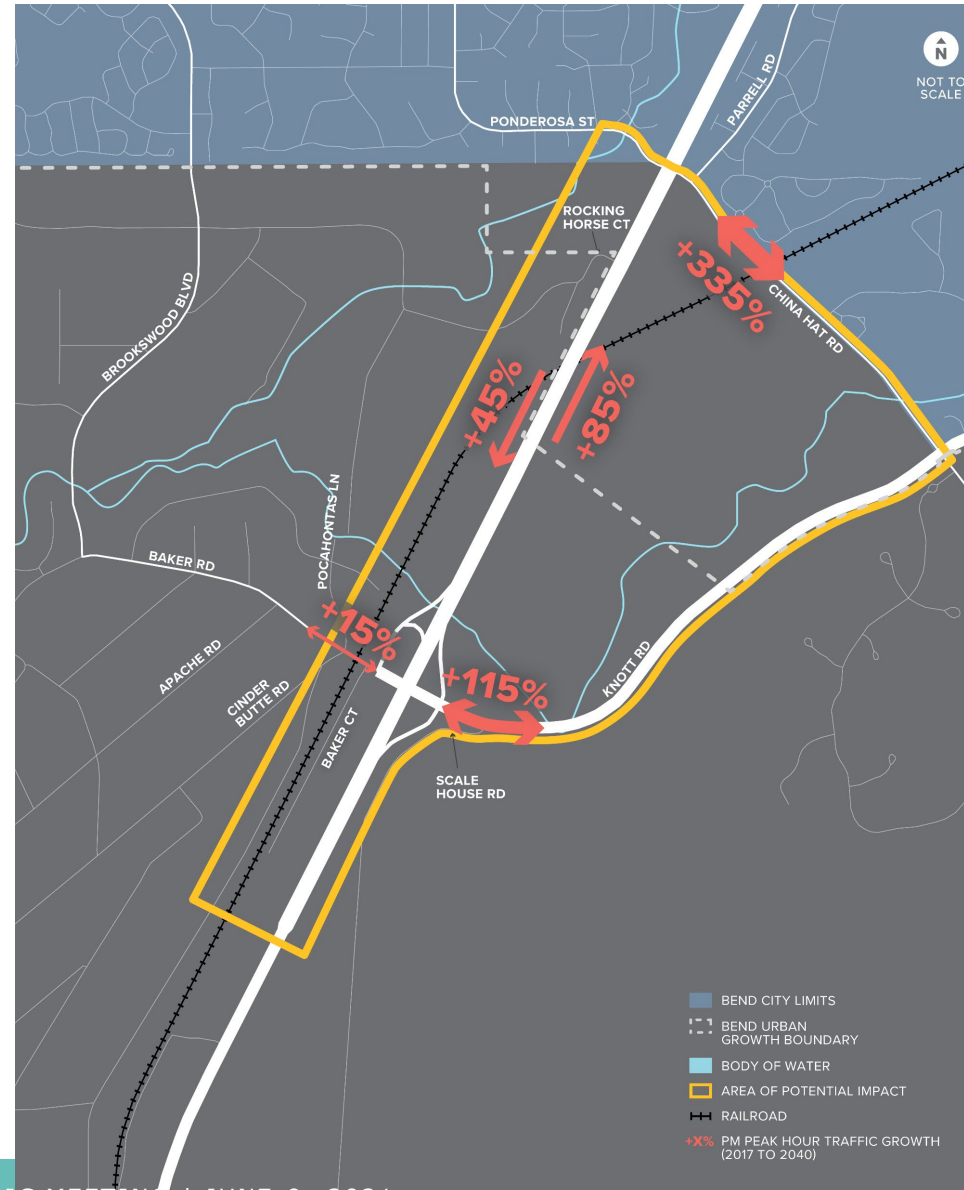
Three major expansion areas to the east of the interchange anticipating to include over 2,400 households and over 7,000 jobs by 2040.





# FUTURE GROWTH IMPACTS ON TRAFFIC

Most traffic growth through the interchange by 2040 will be from trips to and from the east.



# FUTURE GROWTH IMPACTS ON TRAFFIC





# SOLUTION SUGGESTIONS





# PRELIMINARY BASE IMPROVEMENTS: ACTIVE TRANSPORTATION

- 1 Multiuse paths separated from the street (bridges over US 97 and the canal)
- 2 North side of Baker Rd and Knott Road would have sidewalk and bike lane
- 3 Potential future trailhead
- 4 Tunnels under Knott Road and US 97 ramps
- 5 Enhanced pedestrian crossing to connect paths

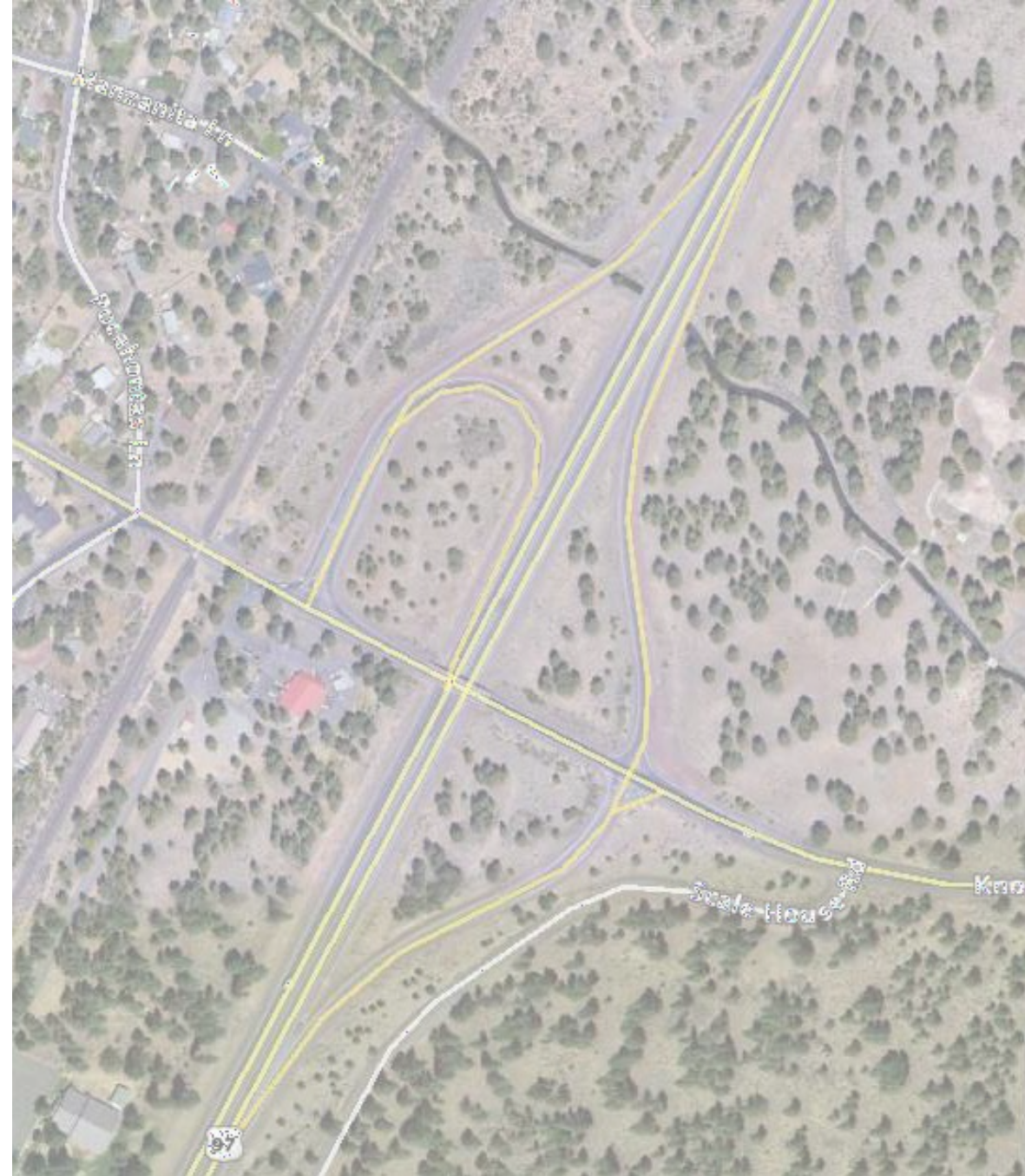




# PRELIMINARY BASE IMPROVEMENTS: INTERCHANGE

## Widen existing structure

- Travel/turn lanes
  - Additional turn lane (Alternative 1)
  - Eastbound and westbound left turn lanes at ramp terminals (Alternatives 2-8)
- Raised multi-use path next to eastbound lane
- Buffered bike lane next to westbound lane





# ALTERNATIVE 1 – LOW BUILD

Maintain existing interchange configuration with improvements at ramp terminals to add capacity.



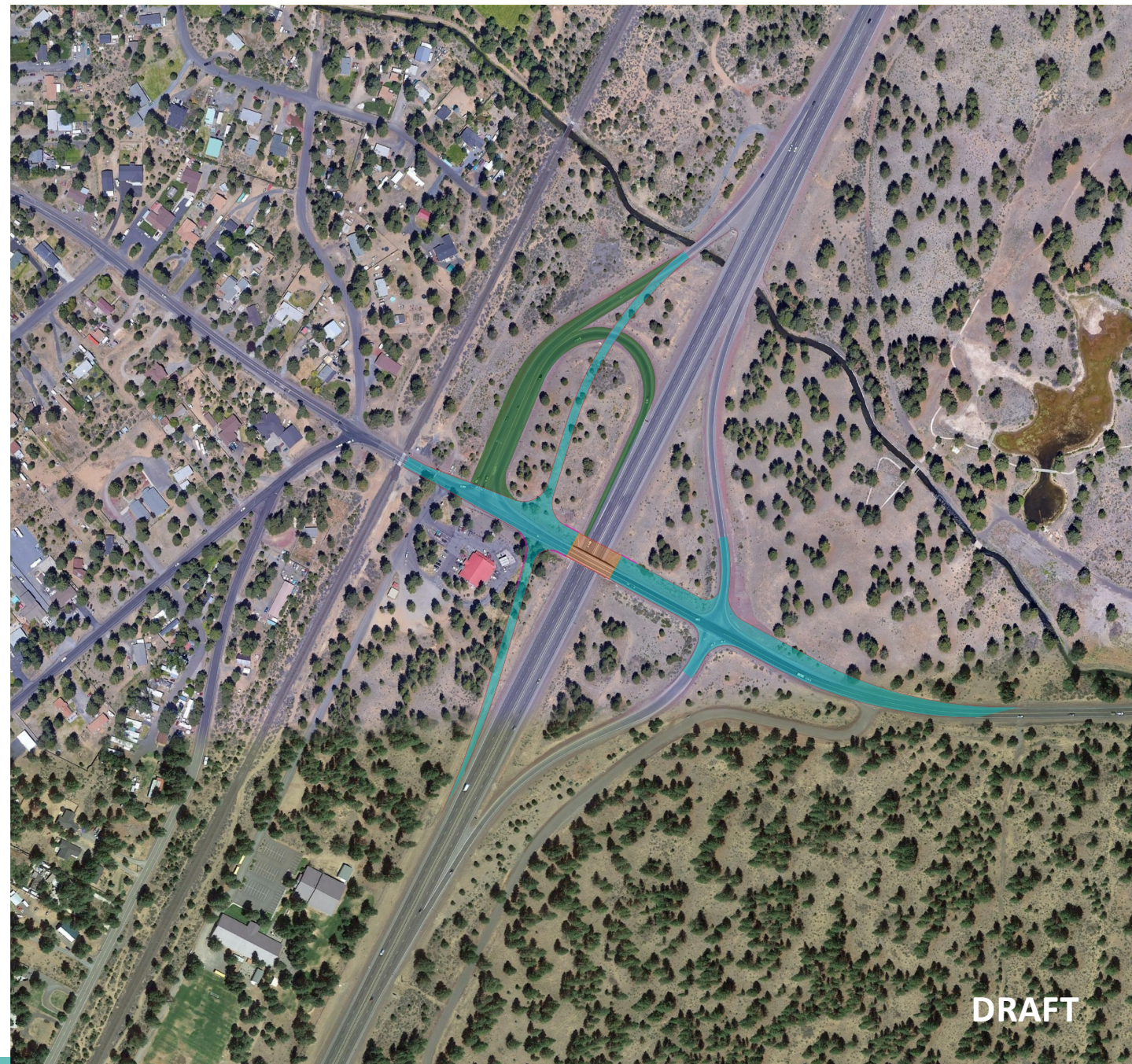


# ALTERNATIVE 2 – TIGHT URBAN DIAMOND INTERCHANGE

Reconstruct the southbound on and off ramp by removing the existing loop ramp and realigning the existing southbound off ramp.

## Reconstruct southbound ramp terminal

- Remove loop ramp
- New southbound on ramp and retaining walls
- Intersection improvements at northbound ramp terminal to add capacity



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## **ALTERNATIVE 3 – SOUTHBOUND ON AND OFF RAMP FLYOVERS WITH SIGNALIZED INTERSECTION**

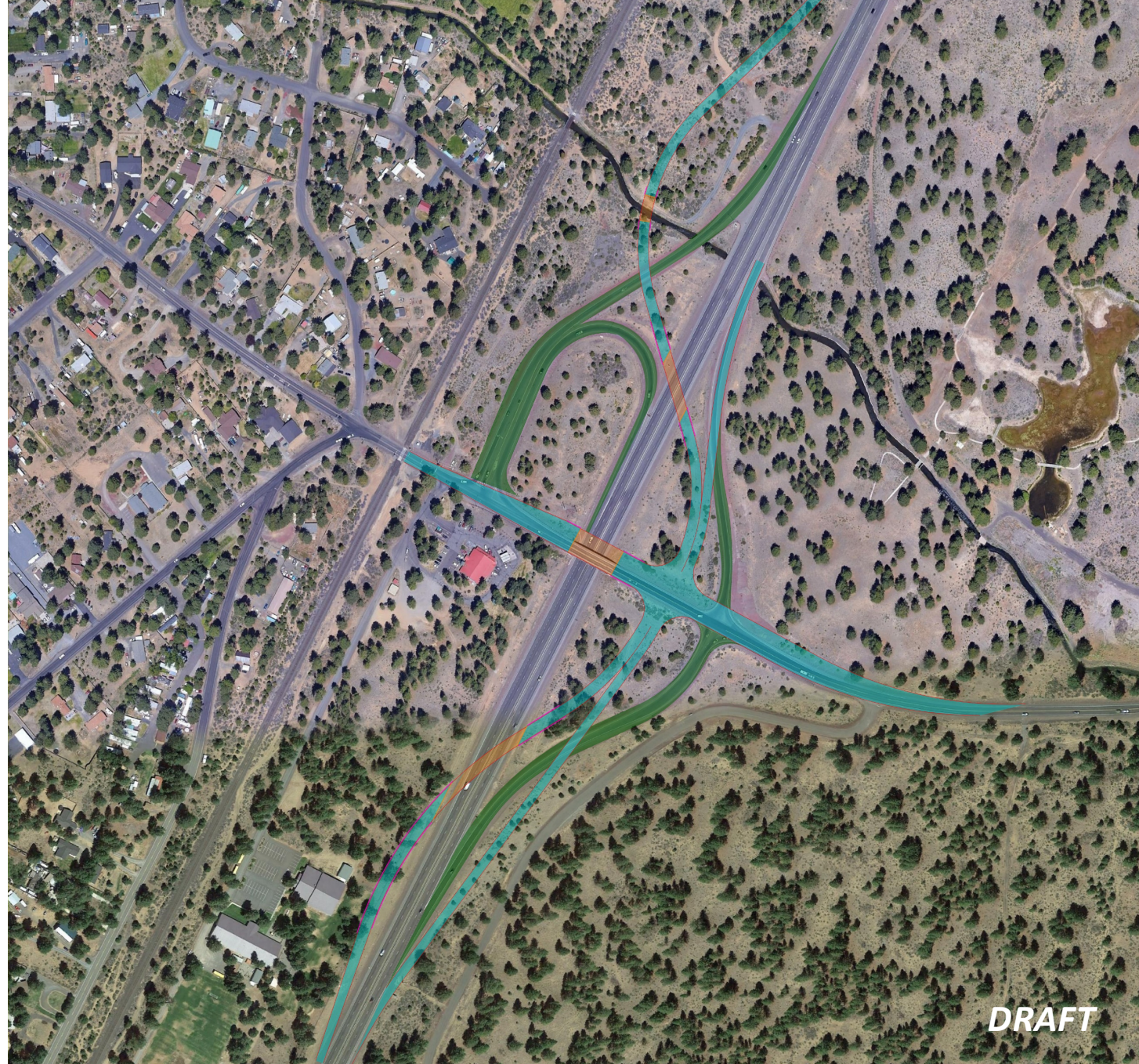
Reconstruct the southbound on and off ramp by removing the existing loop ramp and realigning the existing southbound off ramp.

### **Construct new southbound on and off flyover ramps**

- Remove existing southbound on and off ramp
- New bridges over US 97
- New bridge over channel

### **Construct new intersection on east side of US 97**

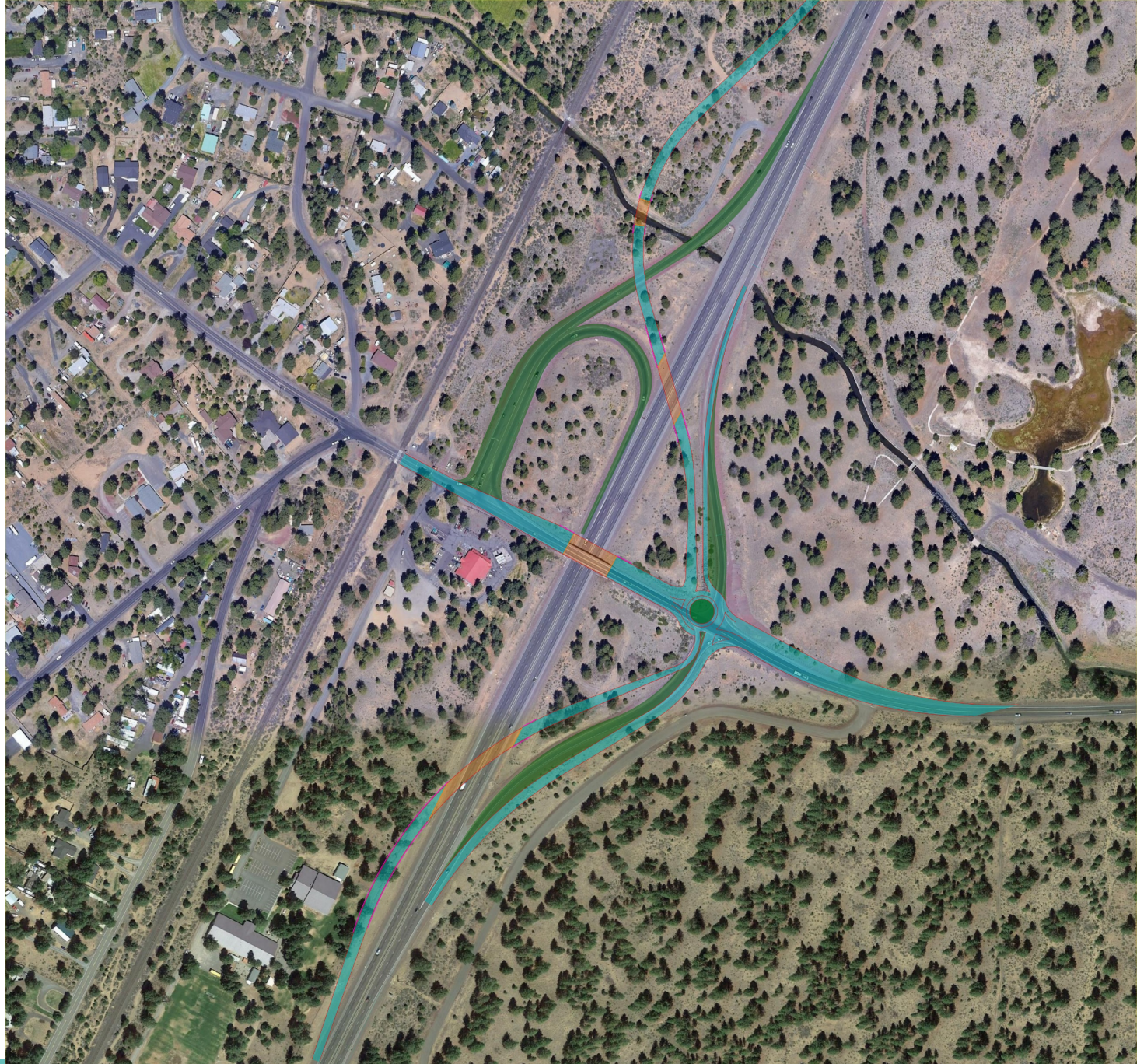
- All on and off ramps will go through one signalized intersection





# ALTERNATIVE 4 – SOUTHBOUND ON AND OFF RAMP FLYOVERS WITH ROUNDABOUT INTERSECTION

Same as Alternative 3 with a roundabout





# ALTERNATIVE 5 – SOUTHBOUND OFF RAMP FLYOVER WITH SIGNALIZED INTERSECTION

## Construct new southbound off flyover ramps

- Remove existing southbound off ramp
- New bridge over US 97
- New bridge over channel

## Construct new intersection on east side of US 97

- All off ramps will go through one signalized intersection

## Maintain existing southbound loop ramp





# ALTERNATIVE 6 – SOUTHBOUND OFF RAMP FLYOVER WITH ROUNDBOUT INTERSECTION

Same as Alternative 5 with a roundabout





## **ALTERNATIVE 7 – SOUTHBOUND OFF RAMP FLYOVER WITH SIGNALIZED INTERSECTION AND NEW SOUTHBOUND DIAMOND ON RAMP**

### **Construct new southbound off flyover ramps**

- Remove existing southbound off ramp
- New bridge over US 97
- New bridge over channel

### **Construct new intersection on east side of US 97**

- All off ramps will go through one  
signalized intersection

### **Construct new southbound diamond on ramp**

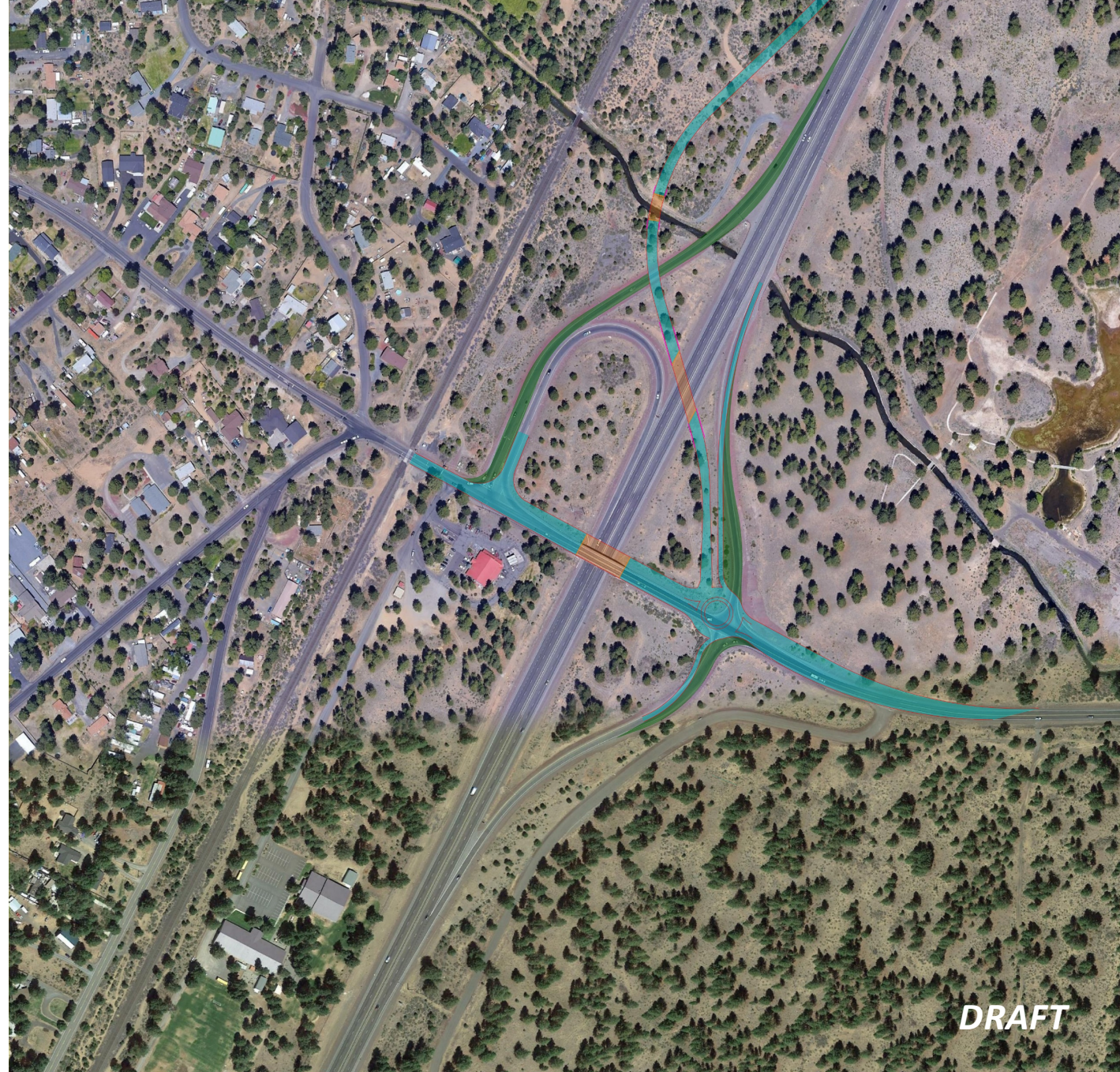
- Mitigates concern for vehicles  
queuing back to the existing  
railroad intersection





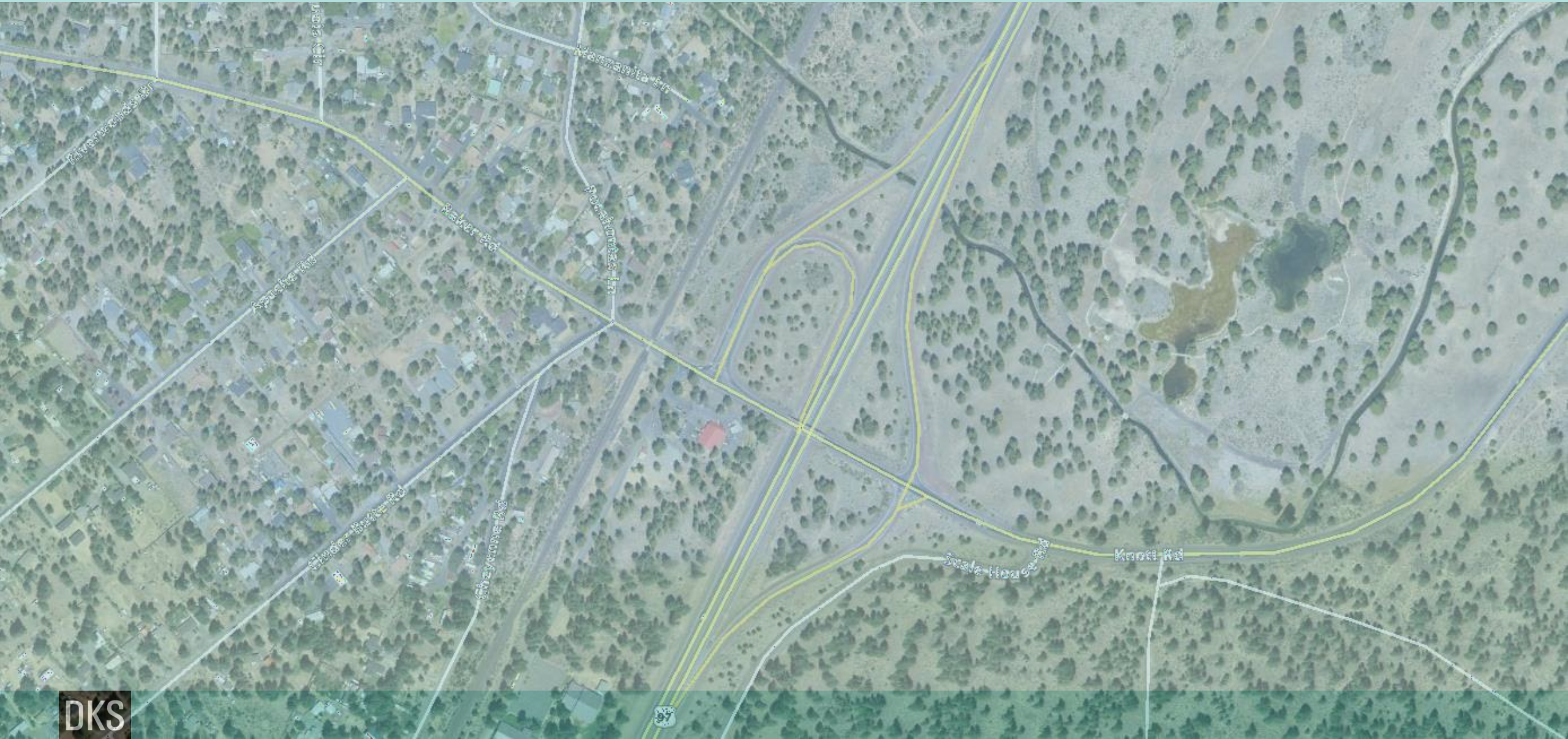
## ALTERNATIVE 8 – SOUTHBOUND OFF RAMP FLYOVER WITH ROUNDABOUT INTERSECTION AND NEW SOUTHBOUND DIAMOND ON RAMP

Same as Alternative 7 with a roundabout





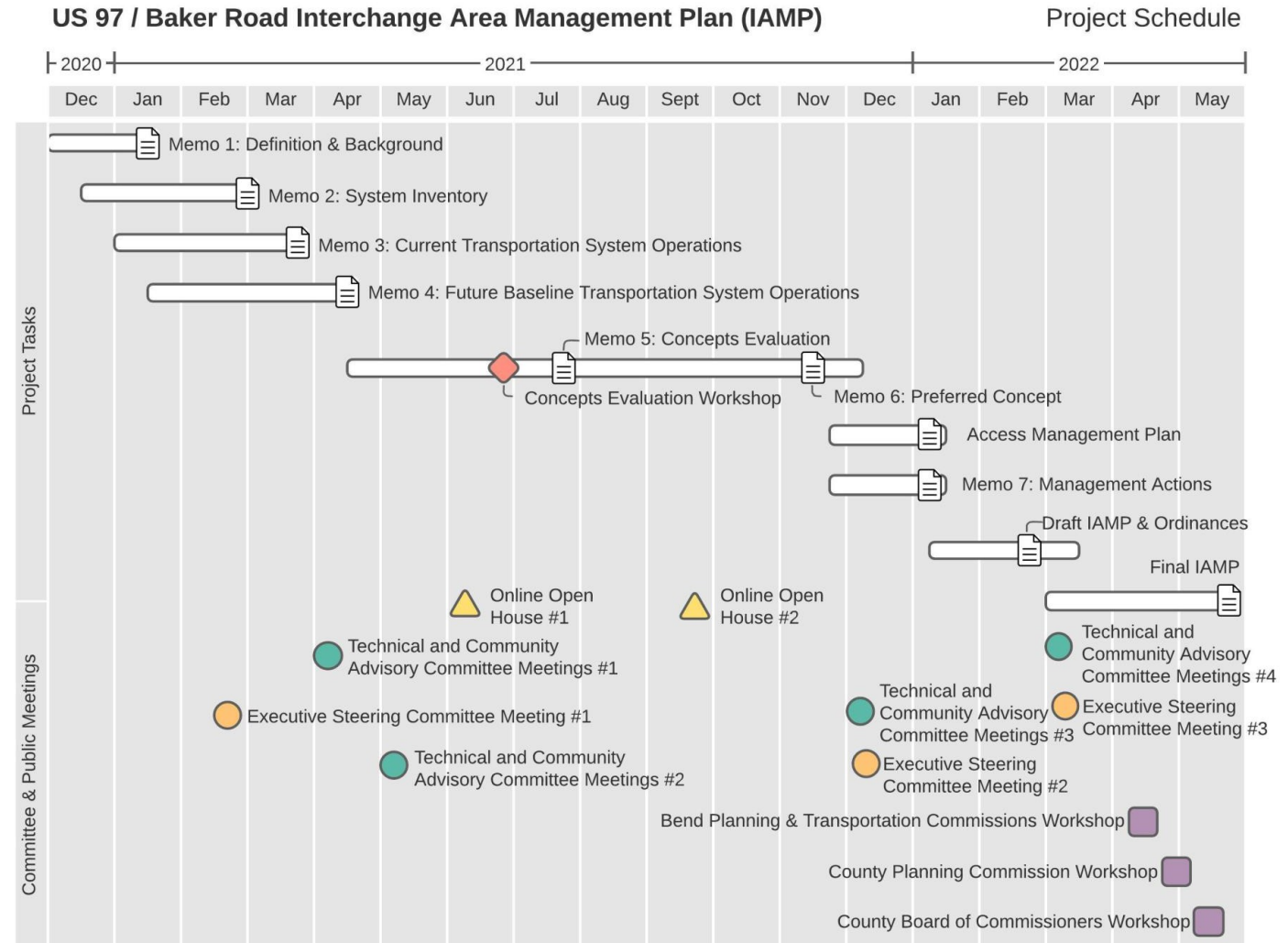
# QUESTIONS AND ANSWERS





# NEXT STEPS

- Online Open House and survey open through June 20
- Jun. 2021: Concept Evaluation Workshop
- Jul. 2021: Evaluate Concepts
- Fall 2021: Second Online Open House and survey
- Nov. 2021: Preferred Concept
- Feb. 2022: Draft IAMP





# THANK YOU

**VISIT**  
**[tinyurl.com/BakerRoadIAMP](https://tinyurl.com/BakerRoadIAMP)**