



Project Advisory Committee (PAC) Meeting #2
June 11, 2020
3:00 pm - 5:00 pm

KLAMATH COUNTY TRANSPORTATION SYSTEM PLAN

Image Source: MB298 - Own work, CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=61088251>

 **KITTELSON**
& ASSOCIATES

MEETING AGENDA

- **Virtual Meeting Etiquette (Reminder)**
- **Project Overview**
 - Purpose and Need
 - Schedule
 - Next Steps
- **Existing and Future Conditions Inventory and Analysis (Tech Memo #3)**
- **Next Steps**



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VIRTUAL MEETING ETIQUETTE

- Mute your microphone unless you are talking
- Video and audio only options
- We will use the chat box for clarifying questions only. Keep other questions for the prompted discussion periods.
- Meeting will be recorded

“Sign In” Sheet



Please post your name and email in the chat box.



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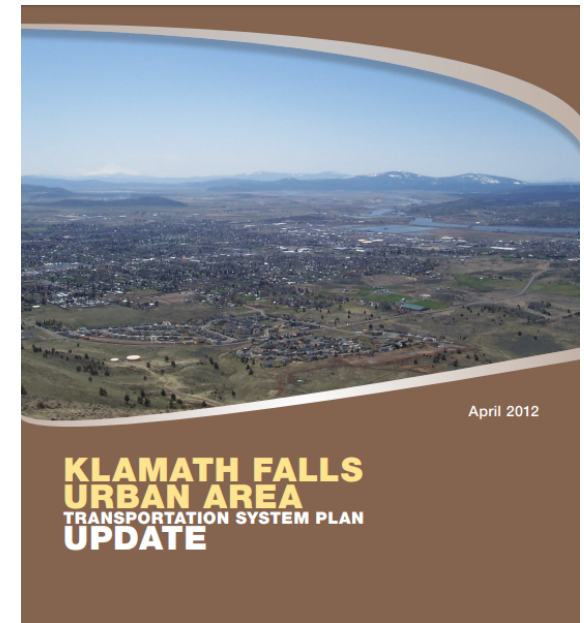
PROJECT PURPOSE AND NEED

- **Purpose of the TSP**
 - To guide the management and development of transportation facilities within Klamath County
 - To provide and encourage a safe, convenient, and economic transportation system
- **The TSP provides a 20-year vision for the County**



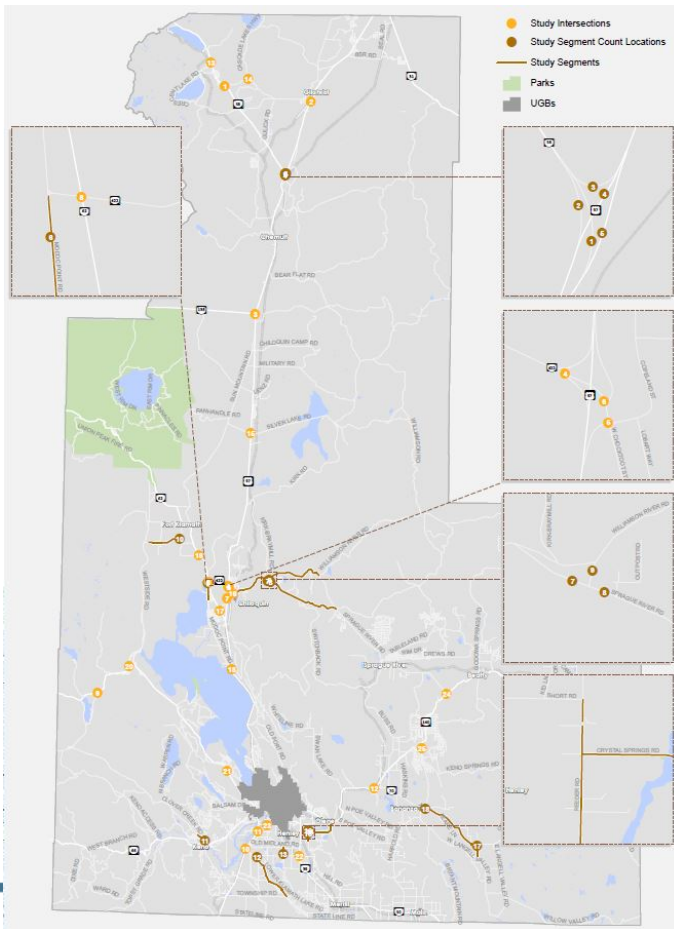
COORDINATION WITH URBAN AREA TSP

- **Klamath Falls Urban Area TSP (2012)**
 - Includes area inside the Urban Growth Boundary (UGB)
 - Some County roads within this area
- **County's TSP Update**
 - No additional analysis of roads within UGB
 - Urban Area TSP will be amended to capture County's plans and cost estimates for County roads only



STUDY AREA

Figure 1 in Existing and Future Conditions Memo



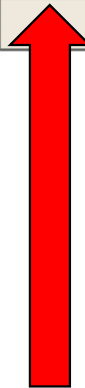
- Roadways outside of the UGB, including unincorporated communities



PROJECT SCHEDULE

	2020												2021		
month	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
Virtual Open Houses															
Project Advisory Committee Meetings															
Plans & Policy Review															
Transportation System Conditions, Deficiencies, and Needs															
Development & Analysis of Solutions															
Draft TSP															
Adoption															

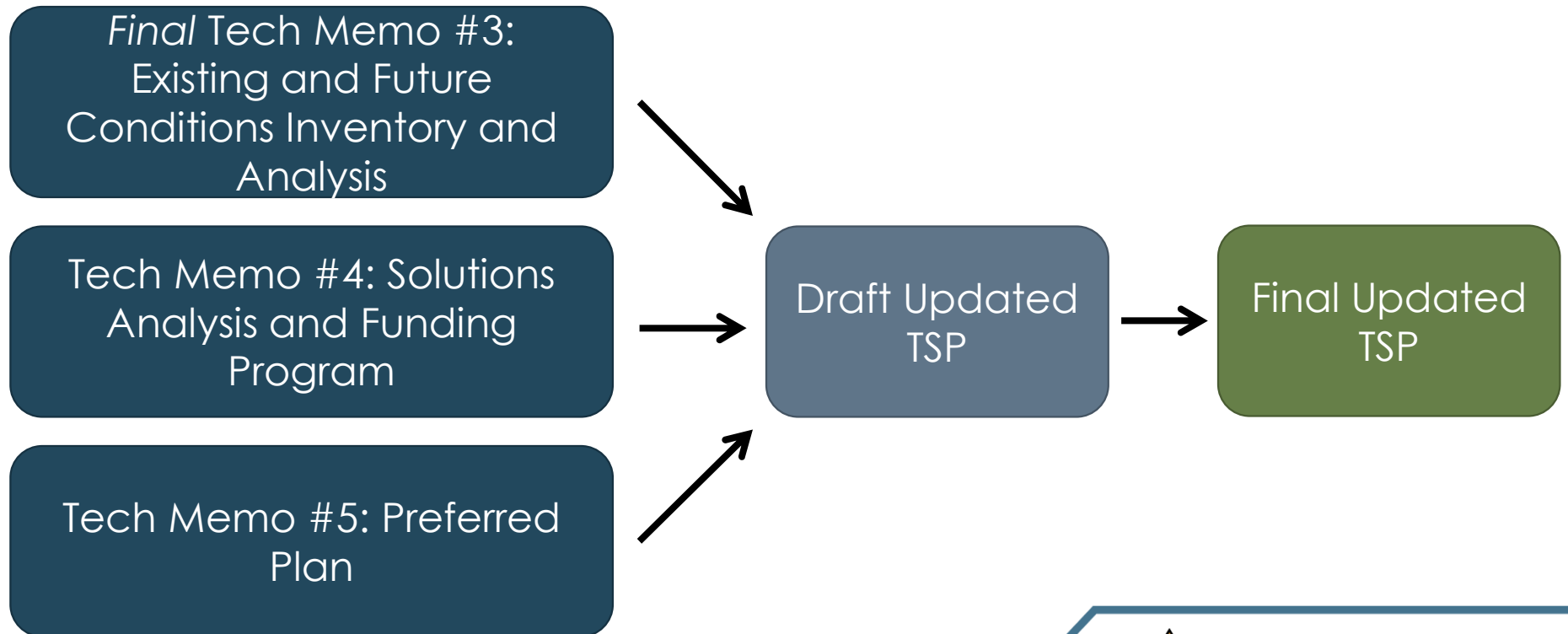
Note: After PAC Meeting #1, the Project Team decided to postpone Public Open House #1 to August. The schedule has been revised accordingly.



We Are Here



REMAINING PROJECT DOCUMENTS



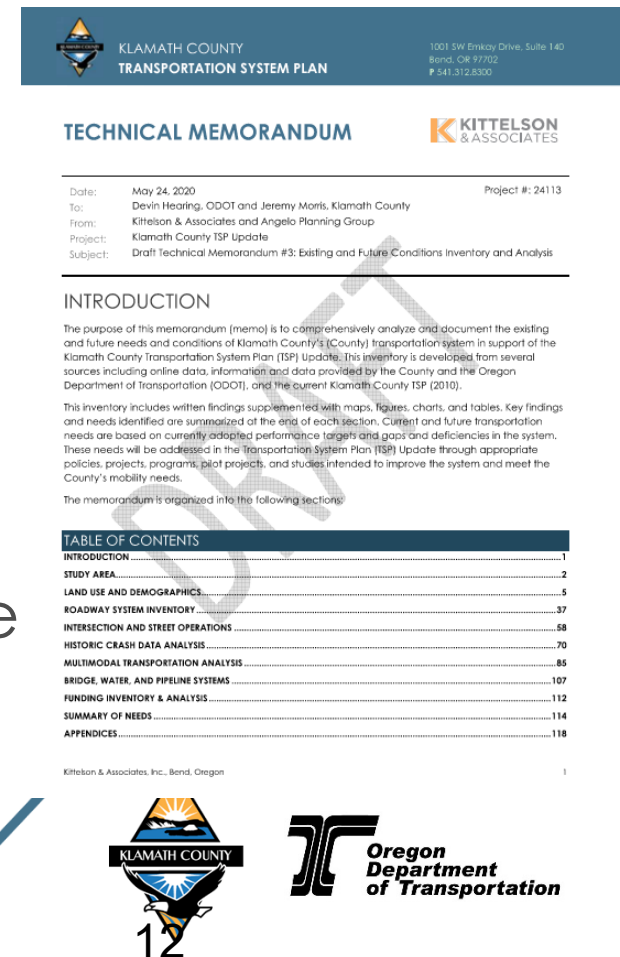
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PURPOSE OF TECH MEMO #3

- Identify the existing and future transportation deficiencies, gaps, and issues
 - Based on data analysis
 - PAC input will supplement data analysis to help project team identify key issues
 - The needs from Tech Memo #3 be used to develop draft solutions in Tech Memo #4



OPTIONS FOR PROVIDING FEEDBACK

- Discussion during today's meeting
- Complete online "form"
- Provide location-specific feedback on commenting map

Link emailed to you:

<https://forms.gle/eVmpHUjJDWw1FrhB8>

PAC 2 Meeting: Comments and Feedback

Please use this form for your comments, feedback, and input on this form at any time during the presentation.

Thank you for your participation, and we look forward to hearing from you.

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What key needs would you add regarding the County's roadway system?

Your answer

TECH MEMO #3 OVERVIEW

- Land Use and Demographics
- Roadway System Inventory
- Intersection and Street Operations
- Historic Crash Data Analysis
- Alternative Transportation Analysis
- Bridge, Water, and Pipeline System
- Funding Inventory



FUNDING INVENTORY

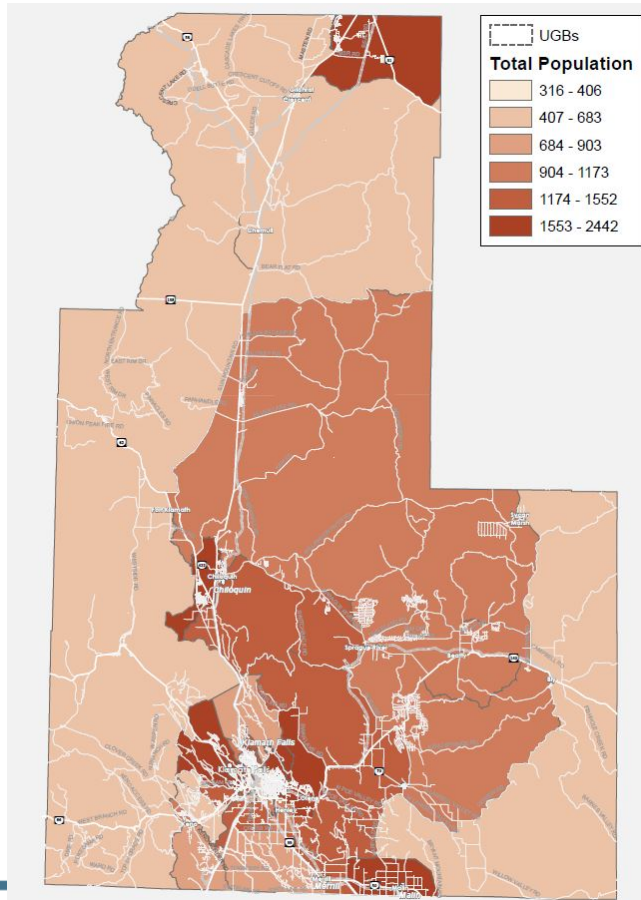
Year	Motor Vehicle Apportionment	SRS Funds	STP Funds	Total
2016/17	4,852,105	400,251	1,143,878	6,396,234
2017/18	5,247,151	4,505,768	599,651	10,352,570
2018/19	6,051,560	4,081,833	597,321	10,730,714
2019-20 (Estimated)	6,043,900	3,600,000	618,200	10,262,100
2020/2021 (Proposed)	6,267,300	3,300,000	633,800	10,201,100

- **Most funds are used for operating and maintaining the County's existing transportation system.**
- **Revenues from the Motor Vehicle Apportionment are expected to substantially decrease.**
 - Anticipated revenue loss over the next two years is about \$600k.
 - The COVID-19 pandemic and stay-in-place order have significantly reduced VMT.



POPULATION

Figure 12 in Memo

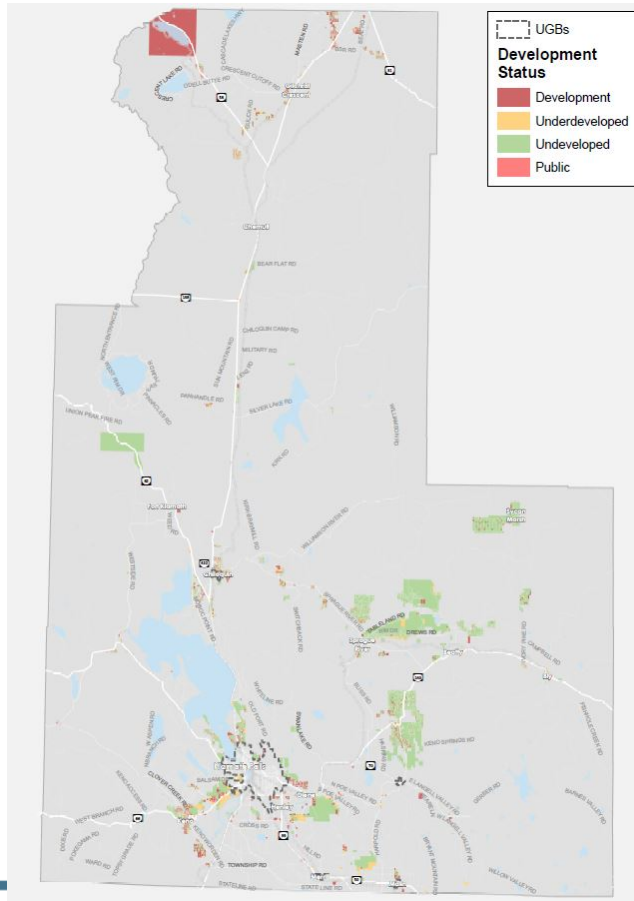


- The County has a population of approximately 67,000
- Average annual growth rates are between 0.2% and 0.4%



DEVELOPMENT STATUS

Figure 4 in Memo



- Large portions of undeveloped (non-resource use) lands are in the southern areas of the County
 - Southwest and southeast of Klamath Falls
 - Eastern Klamath County near Sprague River Rd

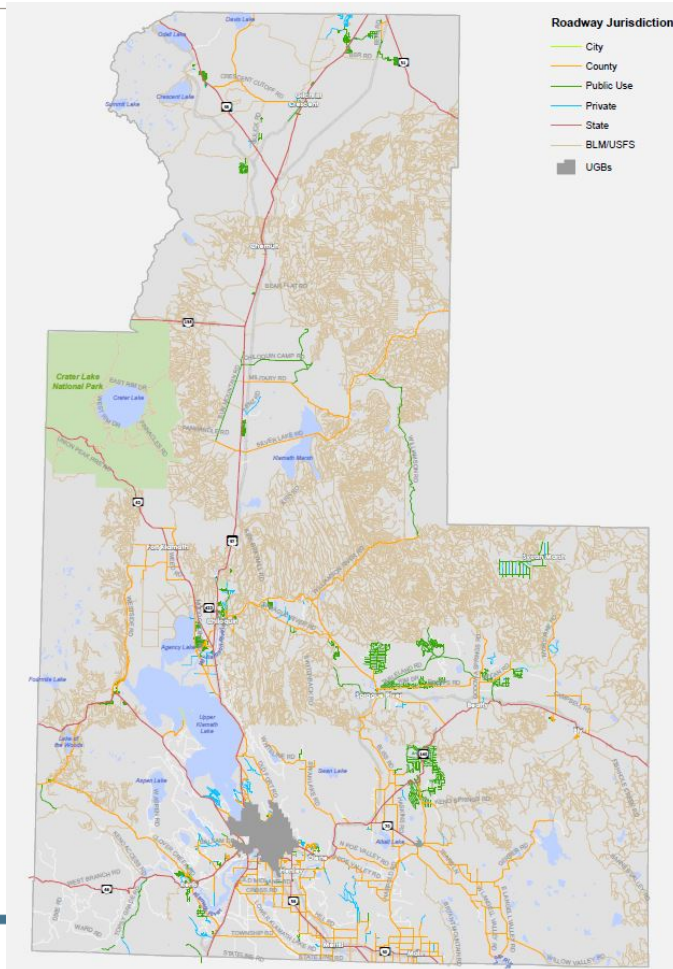


ROADWAY SYSTEM INVENTORY

- Roadway Jurisdiction
- Functional Classification
- Freight



ROADWAY JURISDICTION

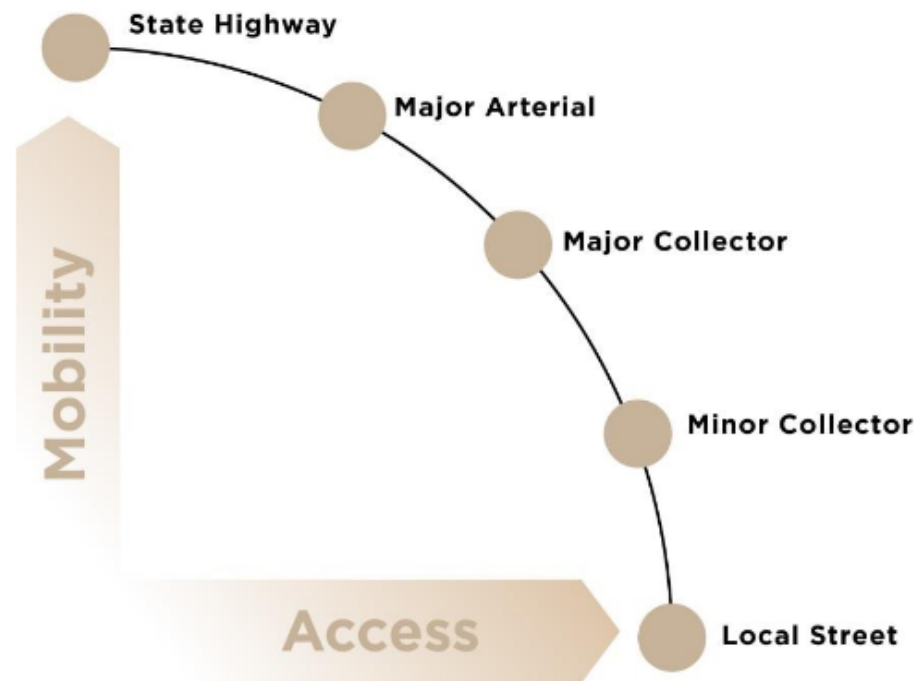


- Jurisdiction determines cross-section requirements and maintenance responsibility
- State Roads: 422 miles
- County Roads: 856 miles
- User Maintained Public Roads: 900 miles (approx.)

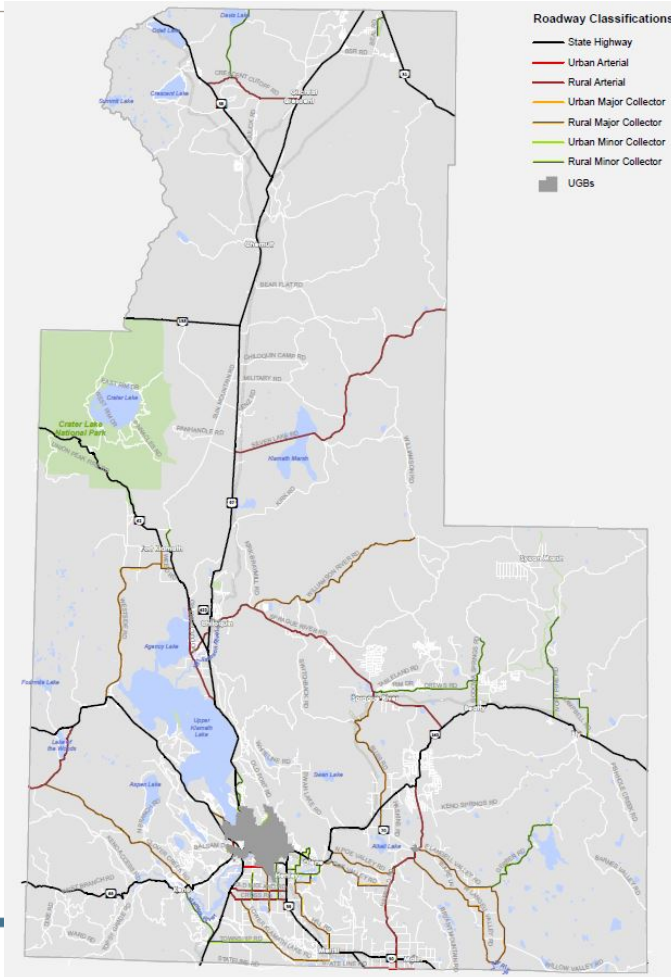


FUNCTIONAL CLASSIFICATION

- Roadways classified based on their primary function
- Cross-section standards are based on classification



FUNCTIONAL CLASSIFICATION

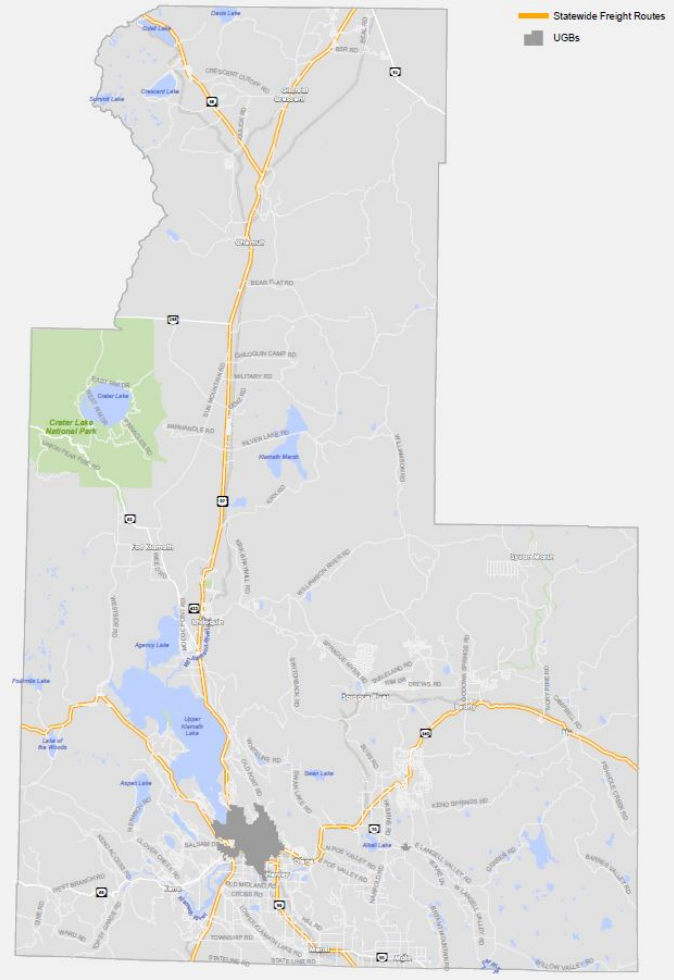


– Are there any roadways where functional classification may need to be updated, such as in more suburban areas?



Figure 23 in Memo

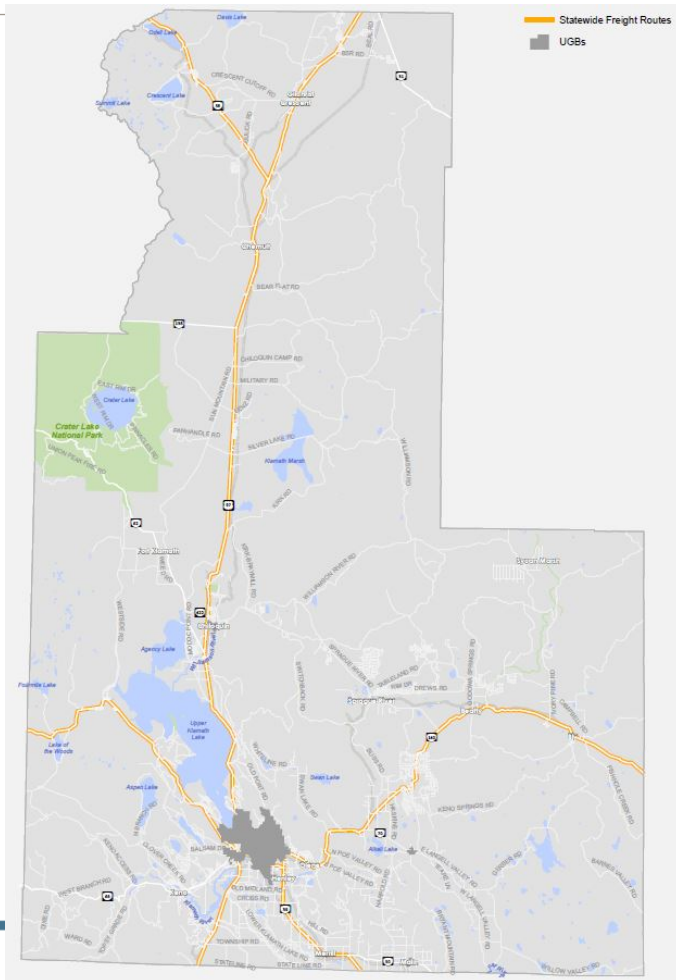
FREIGHT ROUTES



- There are no County-designated freight routes
- Passing lanes are limited on US97 south of Klamath Falls, OR39, and OR140 east of Klamath Falls



FREIGHT ROUTES



- Are there key County roads that should be designated as freight routes?
- Are there key locations where passing lanes are needed?



FEEDBACK – ROADWAY SYSTEM INVENTORY

- *Do these needs capture key issues and challenges on the County's roads?*
 - *Is anything missing?*
 - *Should anything be modified or removed?*
-

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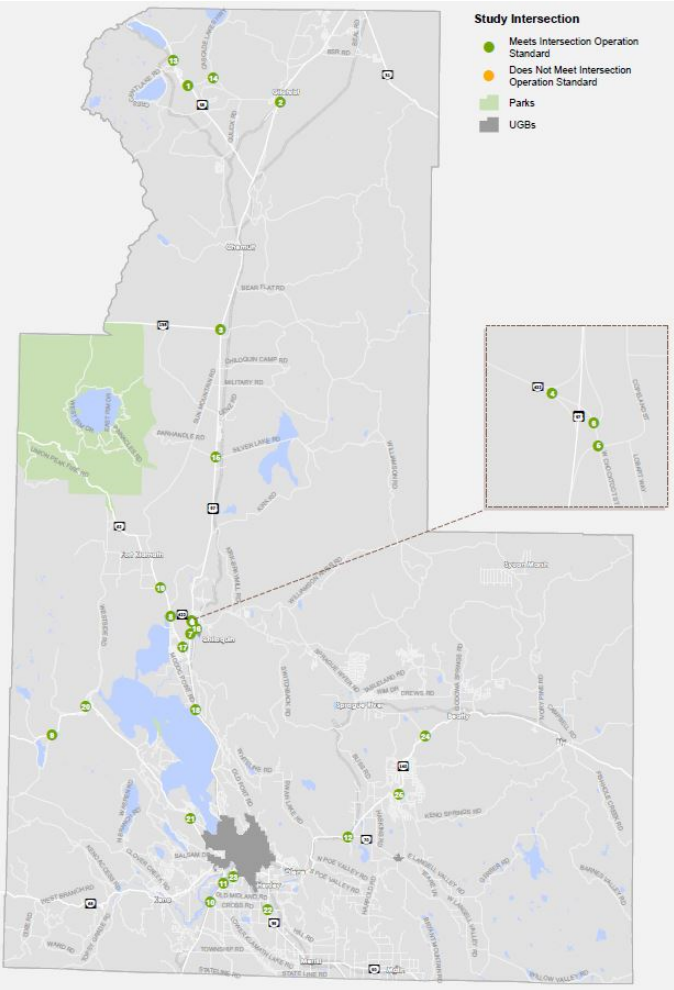


What key needs would you add regarding the County's roadway system?

Your answer

Figure 27 in Memo

OPERATIONS

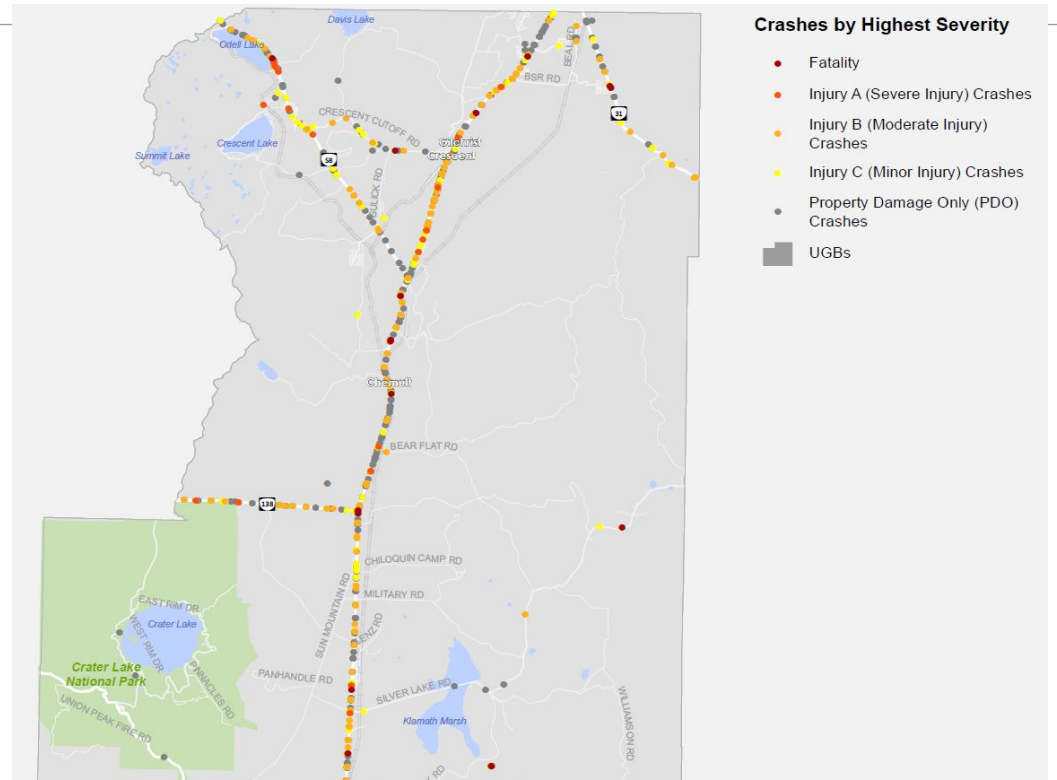
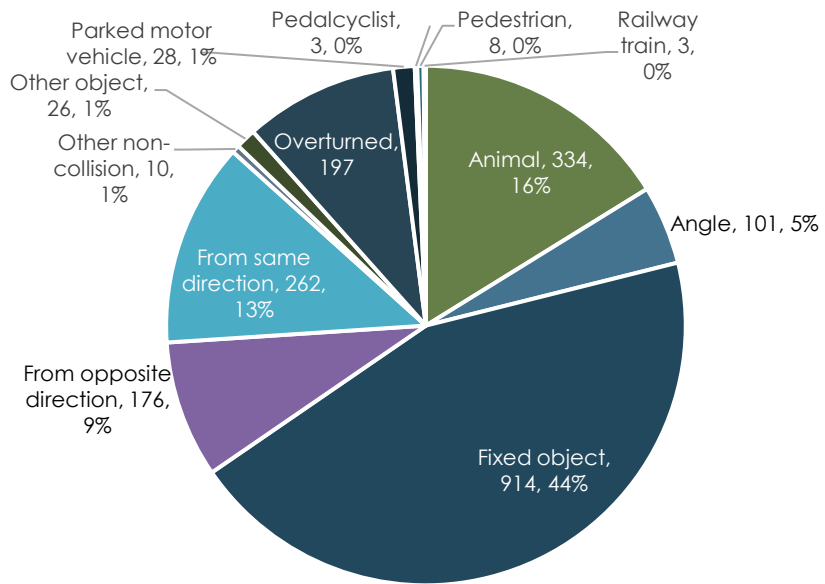


- All study intersections meet standards in existing and future conditions



HISTORIC CRASH DATA

- 2,217 Reported Crashes (2013-2017)



FATAL AND SEVERE CRASHES

	Crash Severity					
	Fatal	Injury A	Injury B	Injury C	PDO	Total
Number of Reported Crashes	53	96	440	431	1,197	2,217
Percent of Total Crashes	3%	4%	20%	19%	54%	100%

- **149 fatal/severe crashes (7%)**
- **Most common types:**
 - Fixed object crashes (53, 36%)
 - Head-on crashes (32, 21%)
- **Most common contributing factor:**
 - Speed too fast for conditions (32, 21%)



KLAMATH COUNTY TSAP

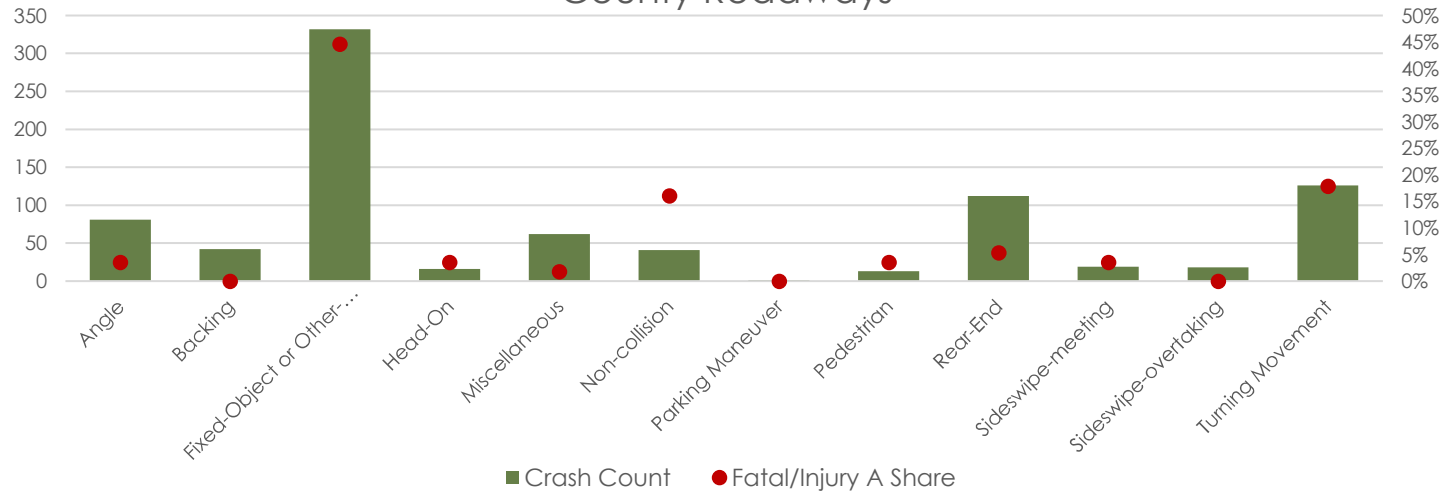
- **Transportation Safety Action Plan (TSAP) is ongoing**

- 3,199 reported crashes (2013-2017)
- Crash analysis **includes** areas within the UGBs

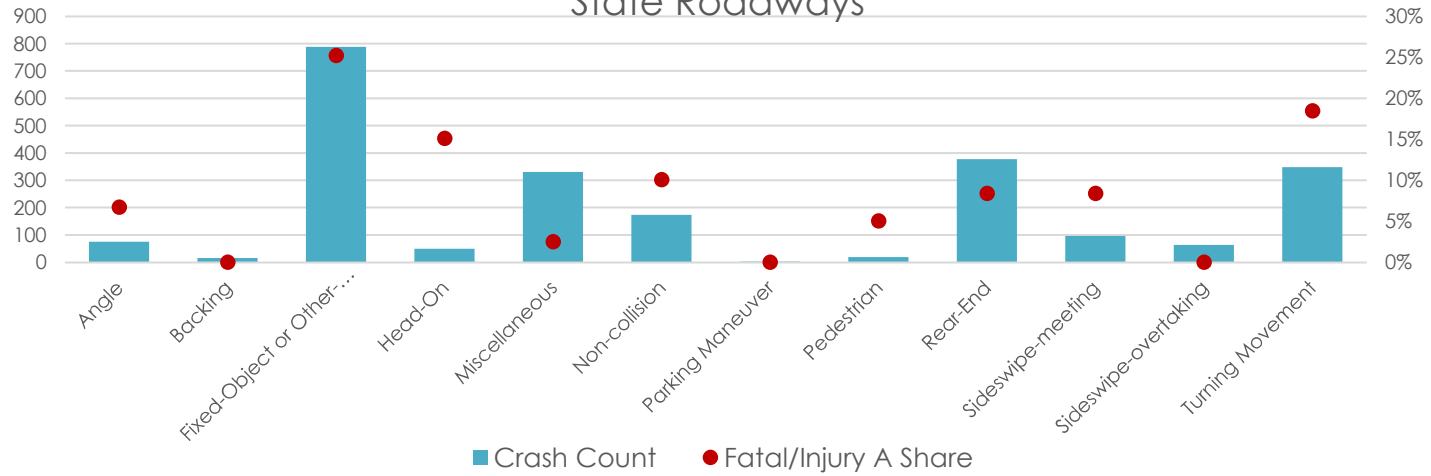
COUNTY ROADWAYS	STATE ROADWAYS
<ul style="list-style-type: none">▶ 863 reported crashes	<ul style="list-style-type: none">▶ 2,336 reported crashes
<ul style="list-style-type: none">• 6% resulted in a fatality or severe injury	<ul style="list-style-type: none">• 5% resulting in a fatality or severe injury



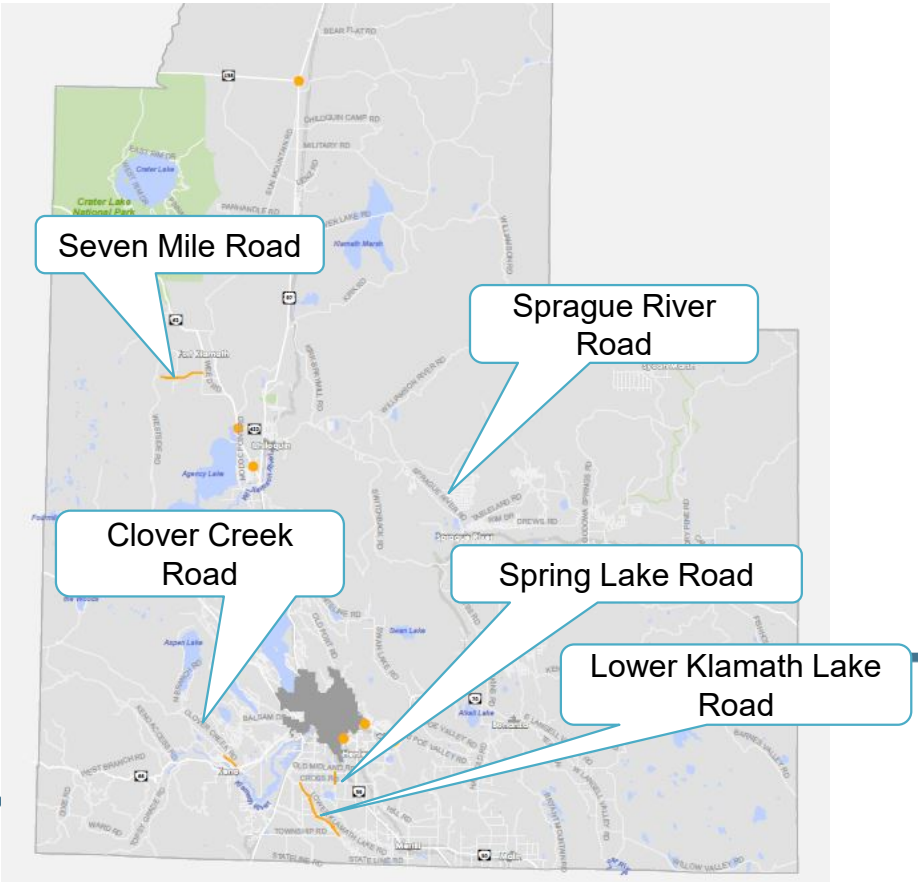
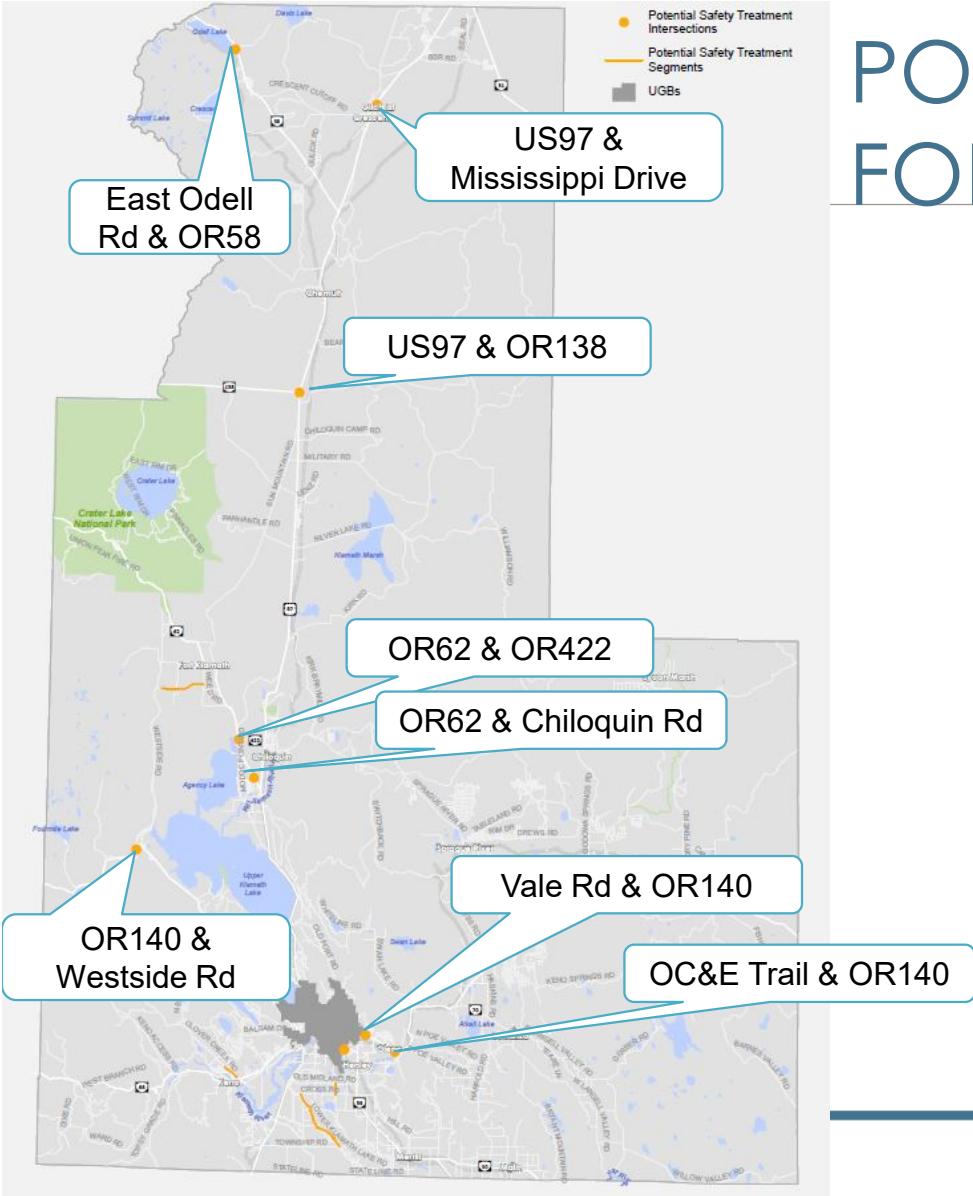
County Roadways



State Roadways



POTENTIAL LOCATIONS FOR SAFETY PROJECTS



FEEDBACK – SAFETY

- *Do these needs capture key issues and challenges on the County's roads?*
- *Is anything missing?*
- *Should anything be modified or removed?*
- **Example Locations Heard at PAC Meeting #1:**
 - Bliss Road
 - Sprague Road
 - US97
 - Rural county roads
 - US97/Shady Pine Road
 - US97/Algoma Road
 - Clover Creek Road
 - Silver Lake Road
 - Crescent Cutoff Road



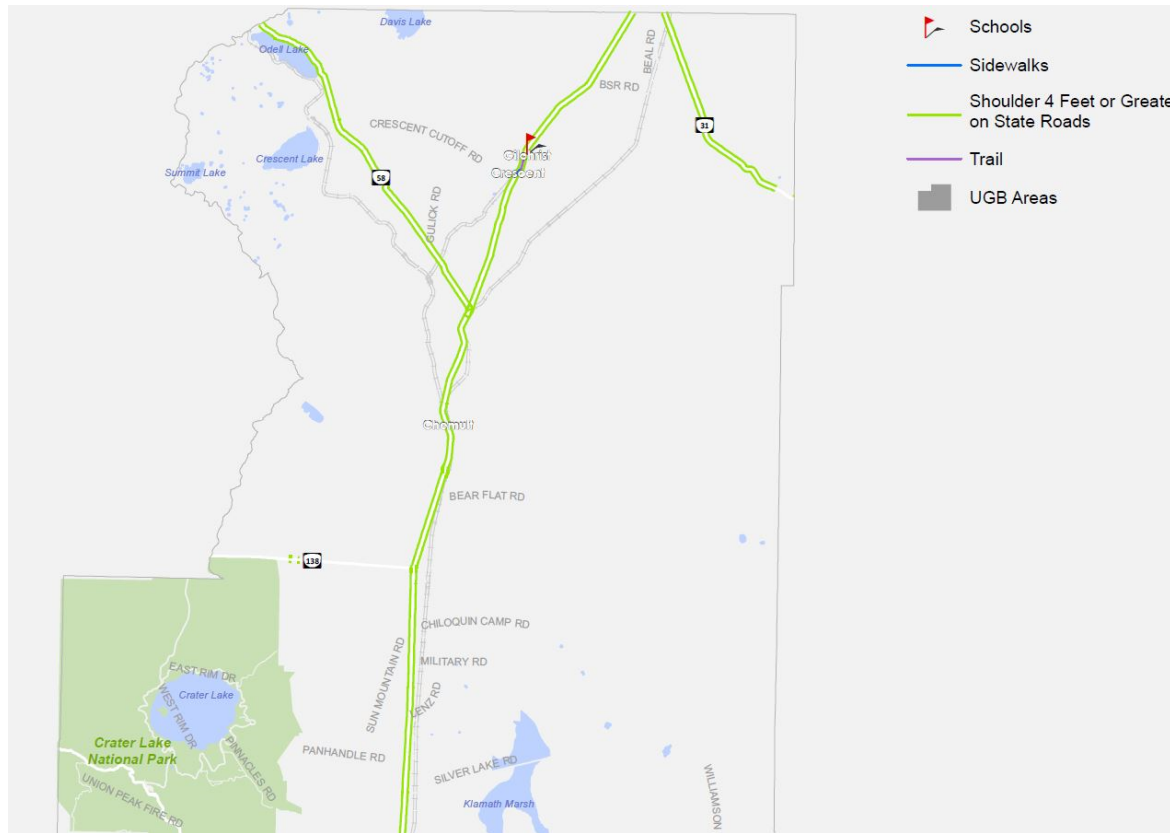
BICYCLE AND PEDESTRIAN SYSTEM

- Existing Bicycle and Pedestrian Facilities
- Bicycle LTS Analysis



EXISTING FACILITIES

Figure 32 in Memo

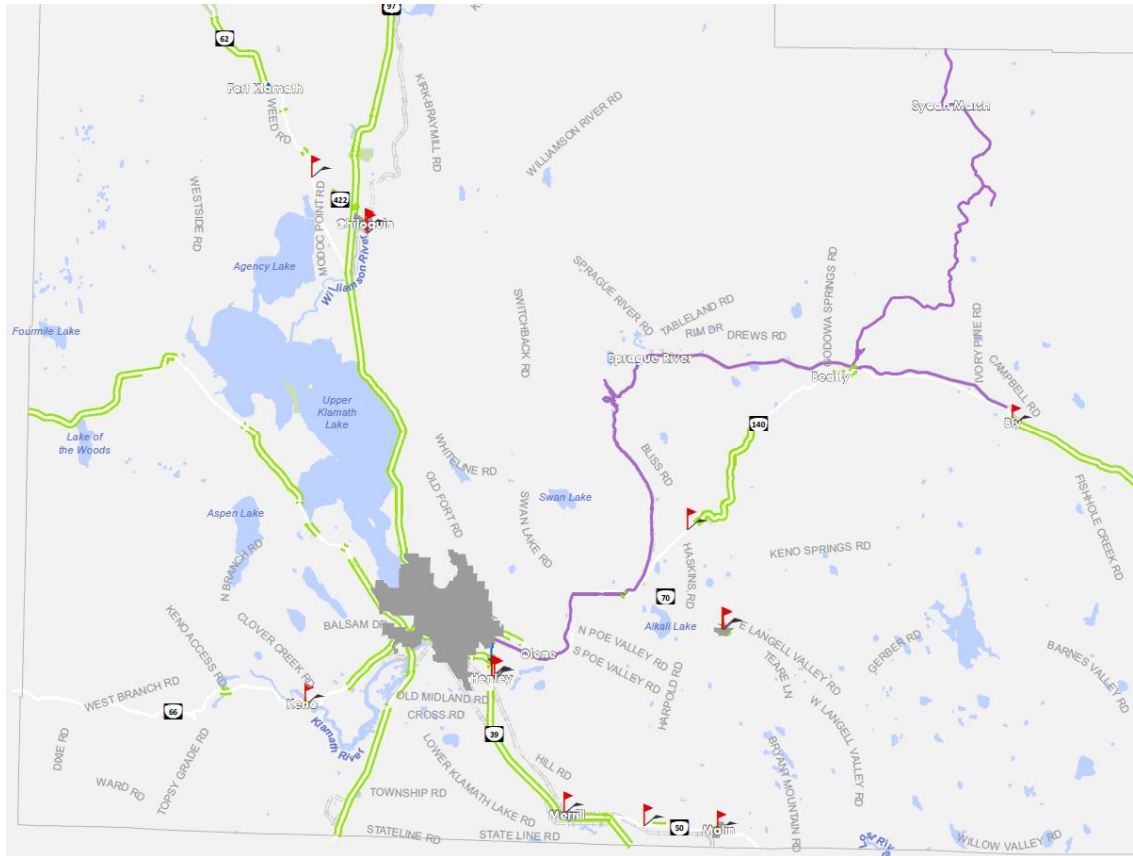


- Roadways have limited shoulder widths and carry high speed traffic



EXISTING FACILITIES

Figure 32 in Memo

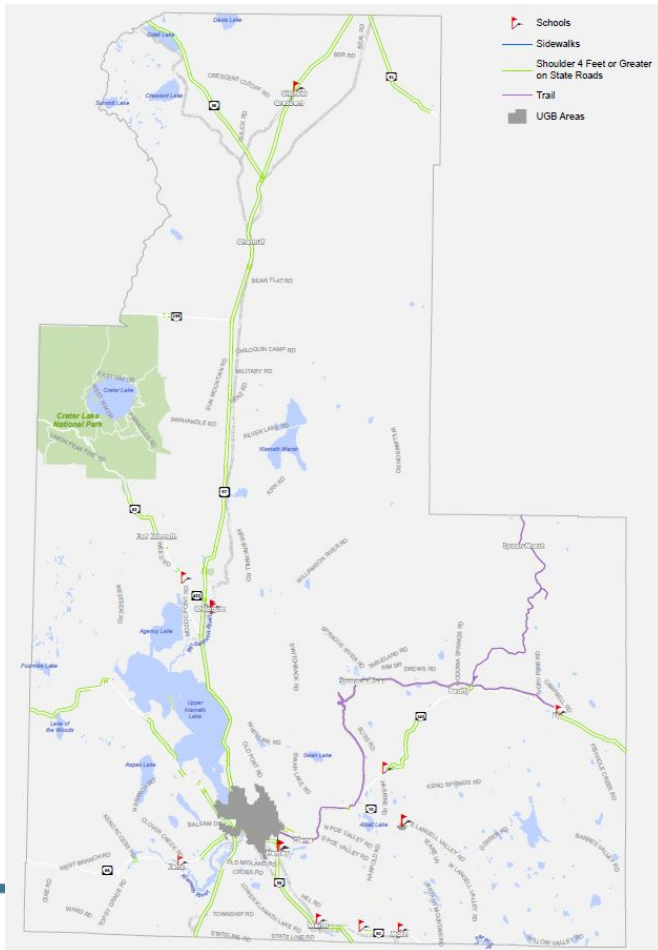


- Multi-use paths, sidewalks, and crossings are currently lacking in unincorporated areas, near schools, and to transit stops.



EXISTING FACILITIES

Figure 32 in Memo

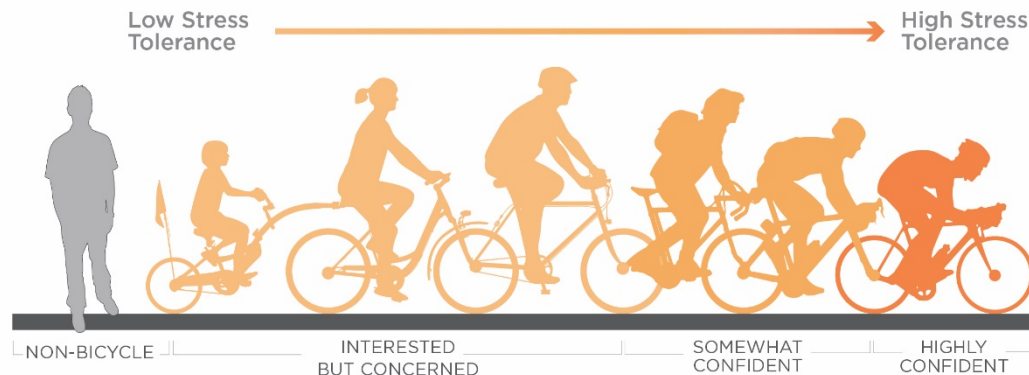


- Communities such as Keno may benefit from additional dedicated sidewalks or separated path facilities.
- OC&E Woods Line State Trail crossings with roadways currently lack striping.



BICYCLE LTS ANALYSIS

Figure 33 in Memo



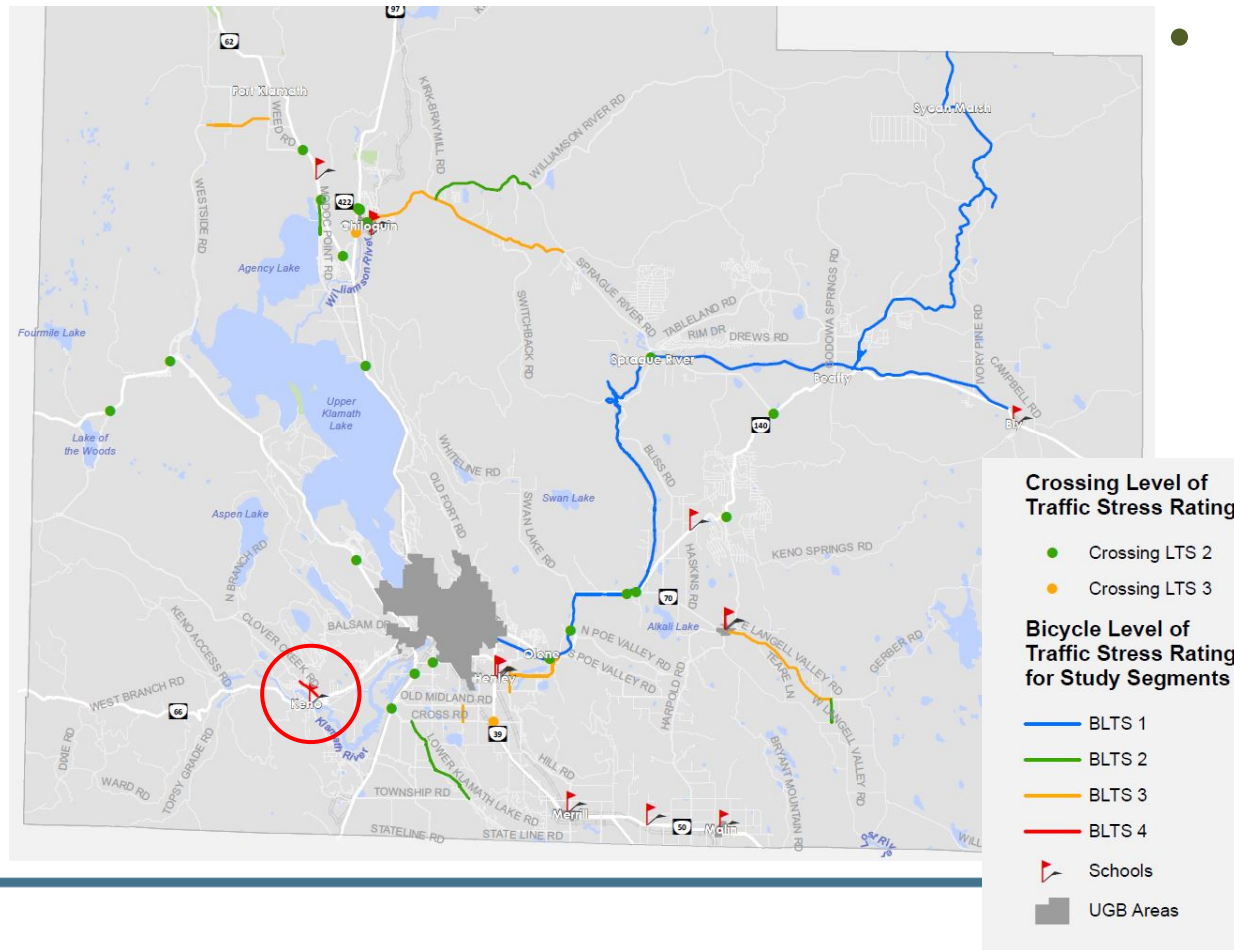
- **Bicycle LTS Scores**

- **LTS 1:** Little traffic stress and suitable for all cyclists
- **LTS 2:** More traffic stress than young children can generally handle while biking and suitable for teen and adult cyclists
- **LTS 3:** Moderate traffic stress and suitable for most adult bicyclists
- **LTS 4:** High traffic stress and suitable for highly experienced and skilled cyclists



BICYCLE LTS ANALYSIS

Figure 33 in Memo



- **18 segments were analyzed**

- Clover Creek Rd: LTS 4 score
- Sprague River Rd and Crescent Cutoff Rd: high-speed and volume corridors with narrow shoulders



FEEDBACK – BICYCLE/PEDESTRIAN SYSTEM

- *Do these needs capture key issues and challenges on the County's facilities?*
- *Is anything missing?*
- *Should anything be modified or removed?*



MULTIMODAL SYSTEM

- **Public Transit**
- **Rail**
- **Air Transportation**
- **Bridges**



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PUBLIC TRANSIT

- **Service Providers**

- **Basin Transit** (Klamath Falls area, expanding to outside of UGBs)
 - Plans to expand bus service to Keno, Malin, Merrill, Bonanza, Running Y, Beatty, and Bly
 - Study in-process to evaluate route between Klamath Falls and Bend
- **Quail Trail Public Transit** (primarily Chiloquin and Klamath Falls)
- **Amtrak Thruway** (Chemult, La Pine, and Deschutes County)
- **Oregon POINT** (Klamath Falls and Jackson County)

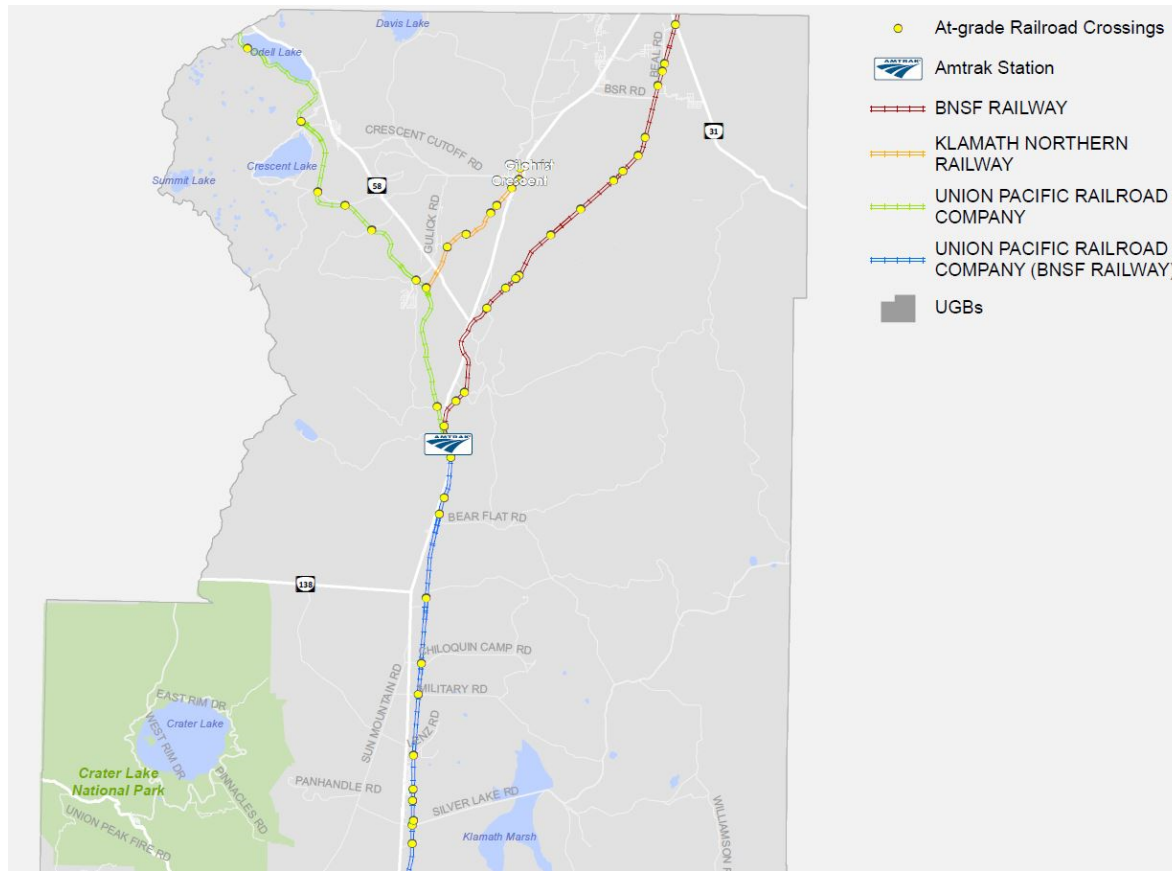
- **Findings and Needs**

- No connected public transit services between La Pine and Klamath Falls
- Solo reliance on Amtrak's Thruway Bus Service in North Klamath County
- Existing routes and services not well coordinated



RAIL SYSTEM

Figure 35 in Memo

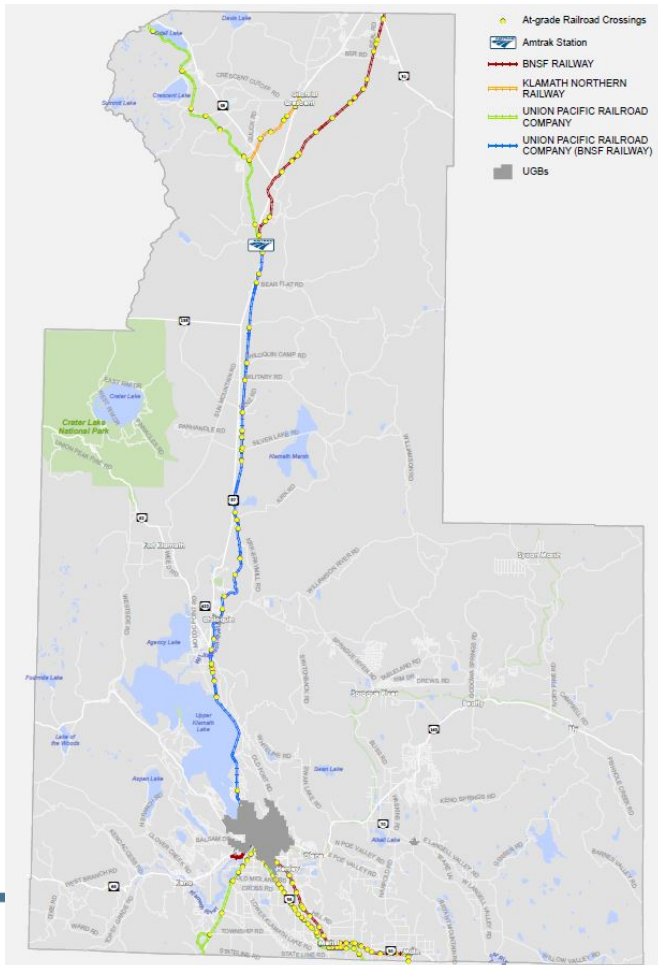


- **Three freight rail lines run:**
 - UP
 - BNSF
 - Klamath Northern Railway
- **Amtrak Station in Chemult**



RAIL SYSTEM

Figure 35 in Memo



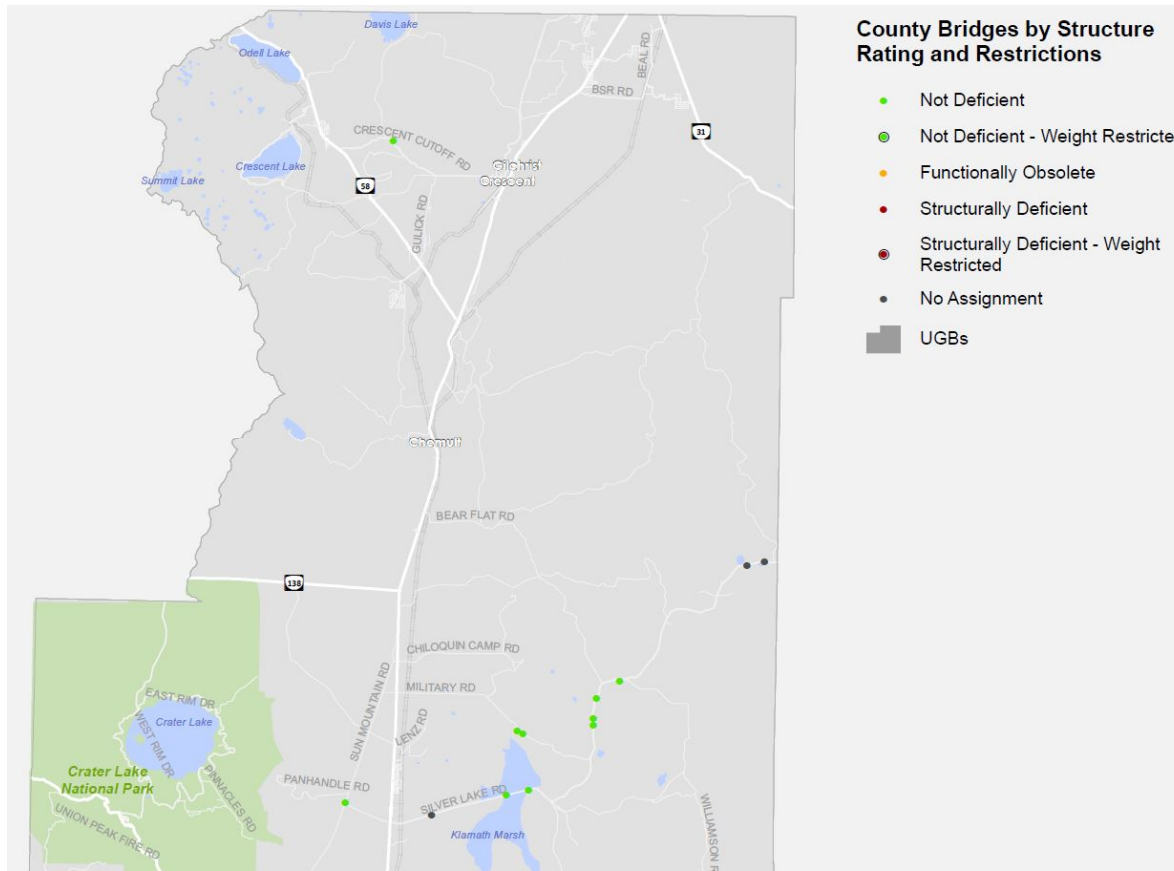
- ## Key Findings

- 152 of the 170 (89%) of rail crossings in the County are at-grade
- Most crossings are passive



BRIDGES

Figure 37 in Memo



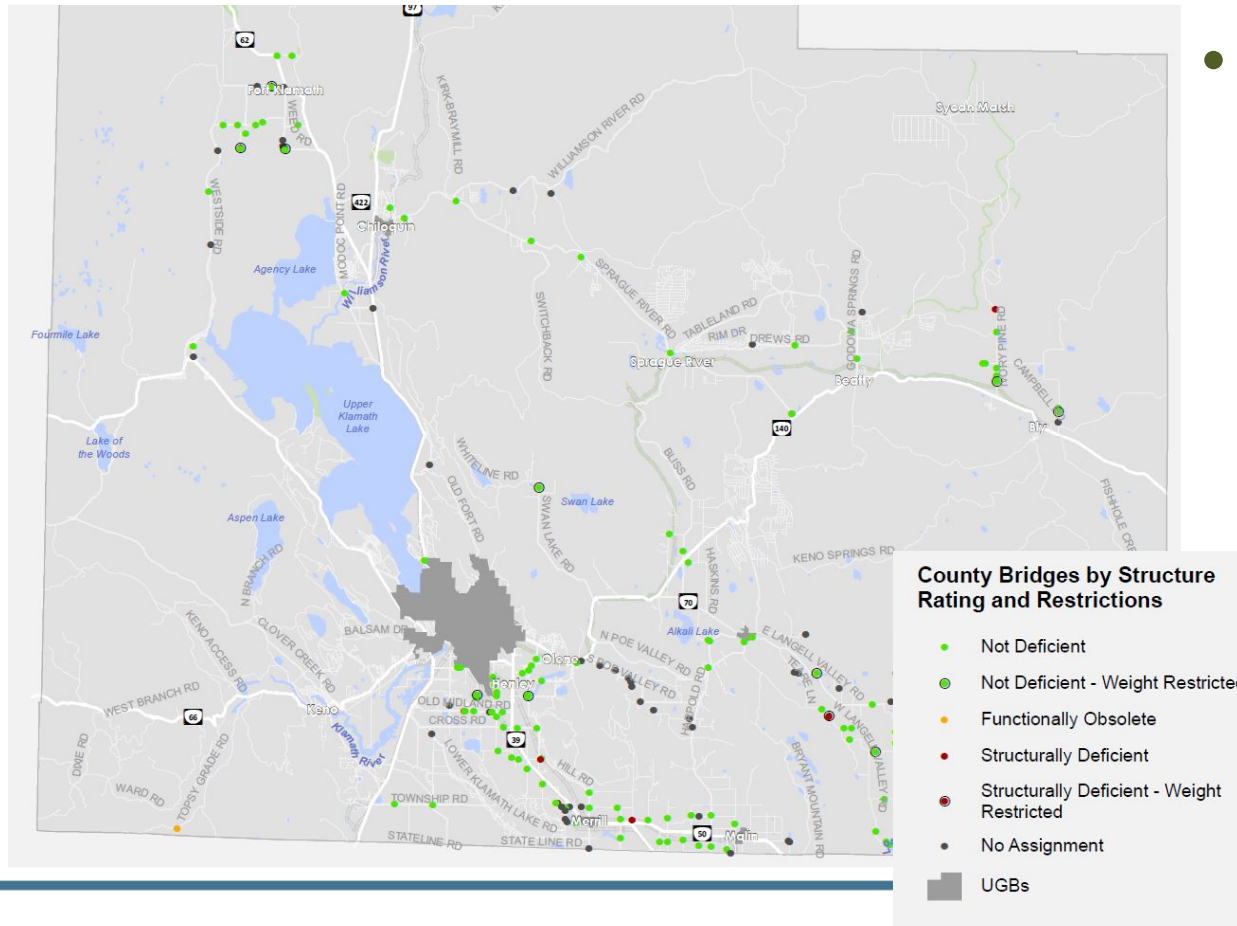
- **308 total bridges in Klamath County outside of the UGBs**
 - 205 County-owned bridges



BRIDGES

Figure 37 in Memo

- **Three County bridges have sufficiency ratings below 50**
 - Langel Valley Rd
 - Matney Way
 - Ivory Pine



FEEDBACK – TRANSIT, RAIL, BRIDGES

- *Do these needs capture key issues and challenges on the County's facilities?*
- *Is anything missing?*
- *Should anything be modified or removed?*



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DISCUSSION

- **What gaps and needs do you observe in the County?**
 - Are these reflected in the needs presented today?
 - How do your observed needs differ from the needs presented?
 - Should any needs be modified or removed?
- **Are any findings or needs missing?**
- **Anything else to share?**



FEEDBACK

- Please provide comments through the commenting form and online map by Friday, June 19th
- Link emailed to you:
- <https://forms.gle/eVmpHUjJDWw1FrhB8>

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NEXT STEPS

- **Provide Input on Tech Memo #3**
 - Please provide comments by Friday, June 19th
- **PAC Meeting #3: August 2020**
- **Public Open House #1 will be held on the same day as PAC Meeting #3**

Link for commenting form emailed to you:

<https://forms.gle/eVmpHUjJDWw1FrhB8>



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