

US 97 BAKER RD INTERCHANGE AREA MANAGEMENT PLAN (IAMP)

BEND MPO POLICY BOARD MEETING
FEBRUARY 15, 2022

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AGENDA

- 1 / MEETING PURPOSE AND PROJECT STATUS**
- 2 / BRIEF REVIEW OF ALTERNATIVES**
- 3 / FEEDBACK RECEIVED**
- 4 / DISCUSS A RECOMMENDATION**
- 5 / NEXT STEPS**

MEETING PURPOSE

- Confirmation of the preferred alternative
- Understand any additional information you'd like to see

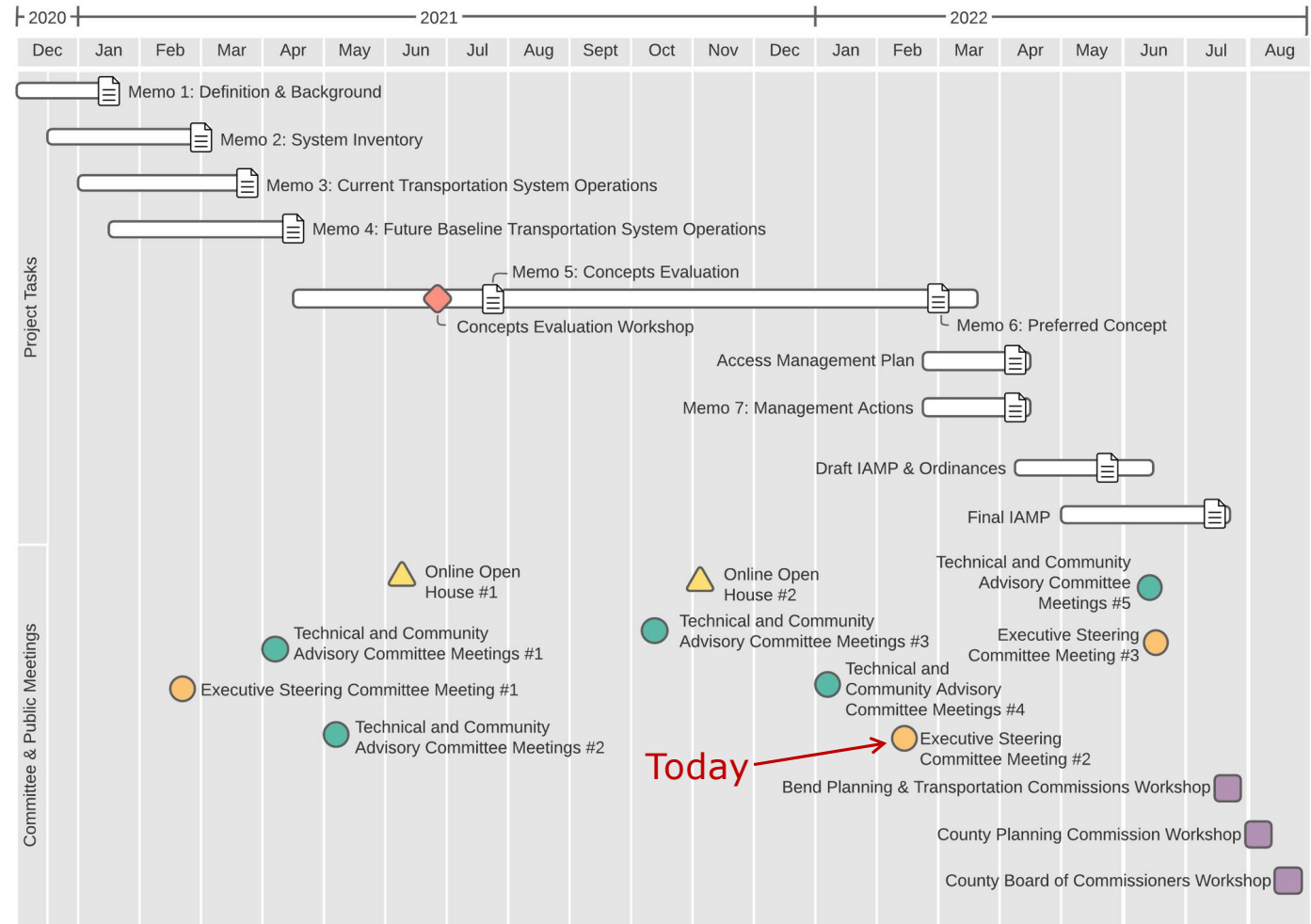


PROJECT STATUS

- Developed Project Goals, Objectives, and Evaluation Criteria
- Discussed Interchange Area Transportation Needs
- Developed Improvement Alternatives
- Evaluated Alternatives, Using Project Evaluation Criteria and Feedback from Committees and Public
- Recommended a Preferred Alternative

US 97 / Baker Road Interchange Area Management Plan (IAMP)

Project Schedule



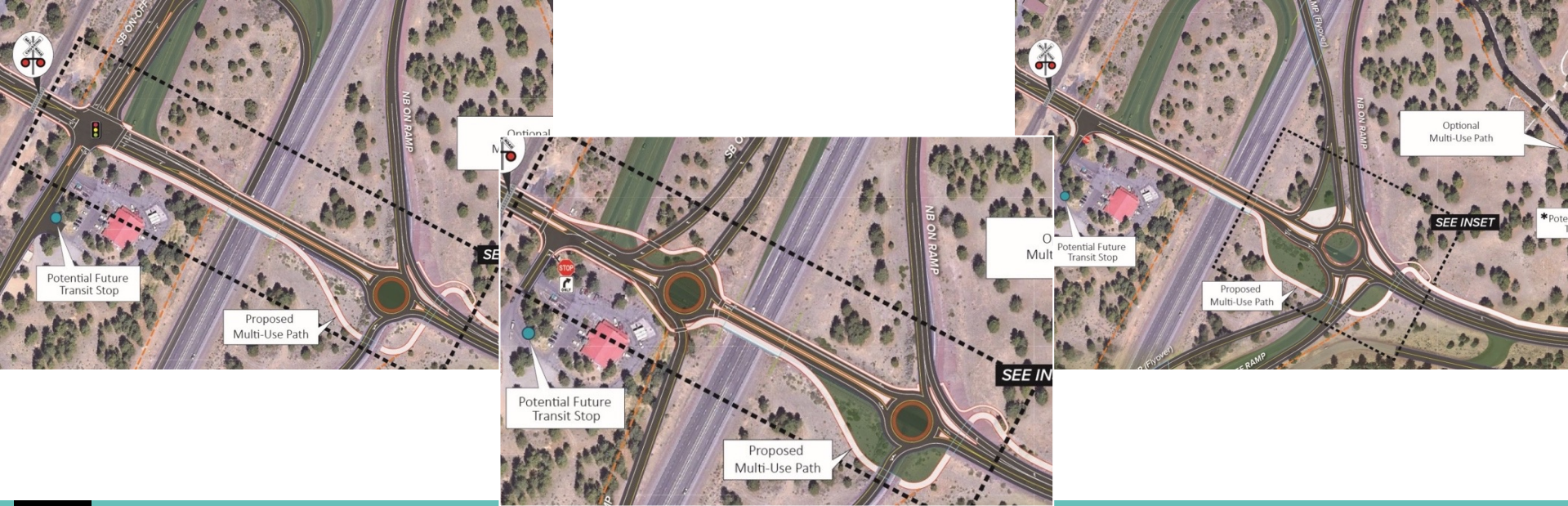
FEEDBACK FROM FIRST ROUND OF PUBLIC ENGAGEMENT

Technical and Community Advisory Committees, Virtual Public Workshop, and Online Open House (452 unique visitors, 34 survey responses)

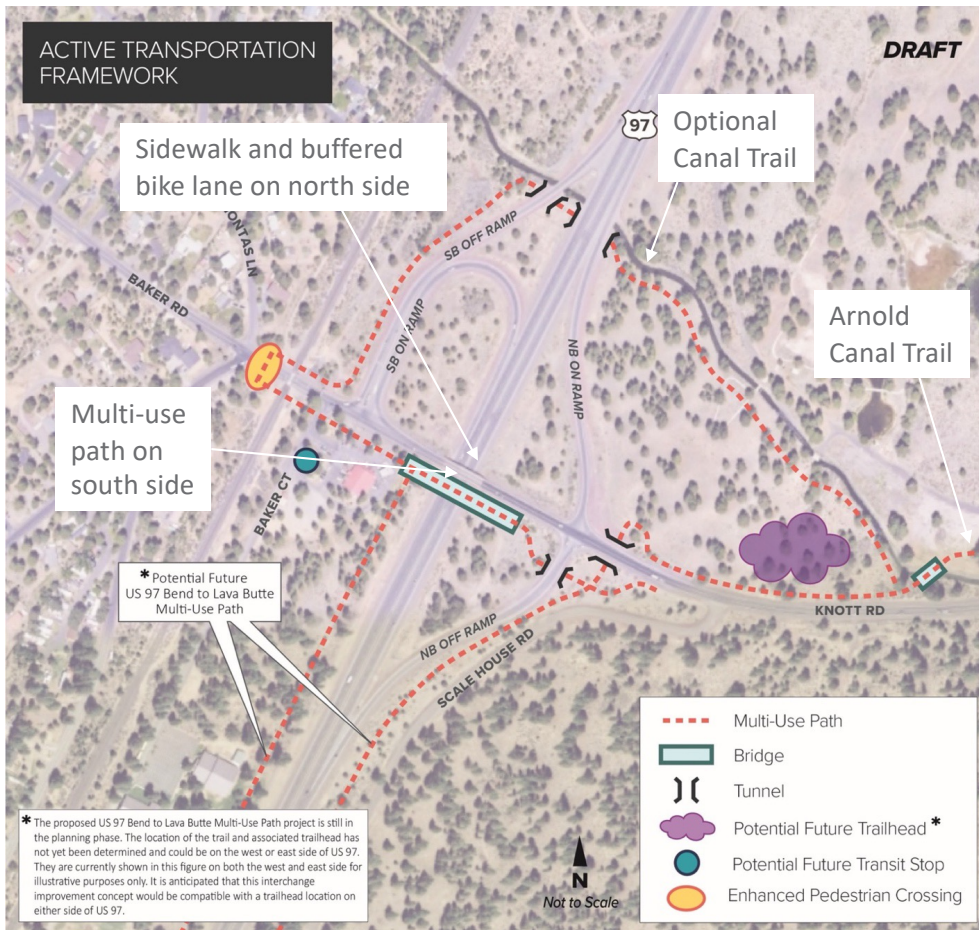
- Safety (Goal 2), Efficient Travel (Goal 1), and Multimodal Travel Options (Goal 4) were the top ranked project goals
- Importance of wildfire evacuation consideration
- Roundabouts generally preferred over traffic signals
- Concern about high-cost projects that won't be implemented
- Support for walking and biking improvements

DEVELOPMENT OF 3 PRELIMINARY ALTERNATIVES

Refined our best alternatives with the Technical and Community Advisory Committees to best meet project goals and community feedback

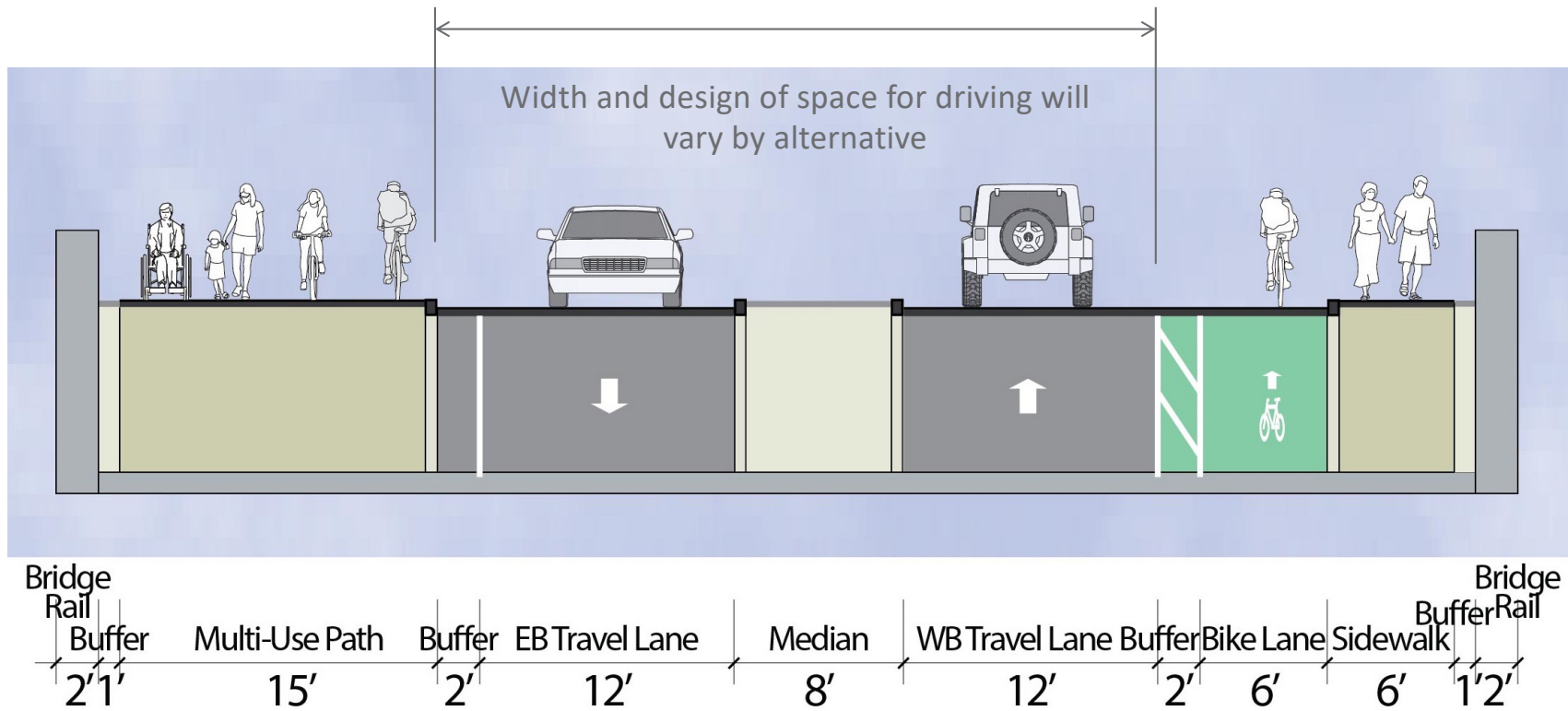


Active Transportation Improvements



- Multi-use path over US 97 along the south side of Baker Road, with buffered bike lane and sidewalk on the north side
- Multi-use path tunnels under the US 97 northbound off-ramp and Knott Road - improves safety for people walking and biking by eliminating conflicts with motor vehicles
- Allows the path to connect to the future Arnold Canal Trail
- Potential for a future trailhead to be located in the northeast quadrant, connecting to the paved multi-use path that is planned between this interchange and the Lava Lands Visitor Center (**the path could be either on the west or east side of US 97**)
- A transit stop could be located near the store

Baker Road Cross Section with Active Transportation Improvements

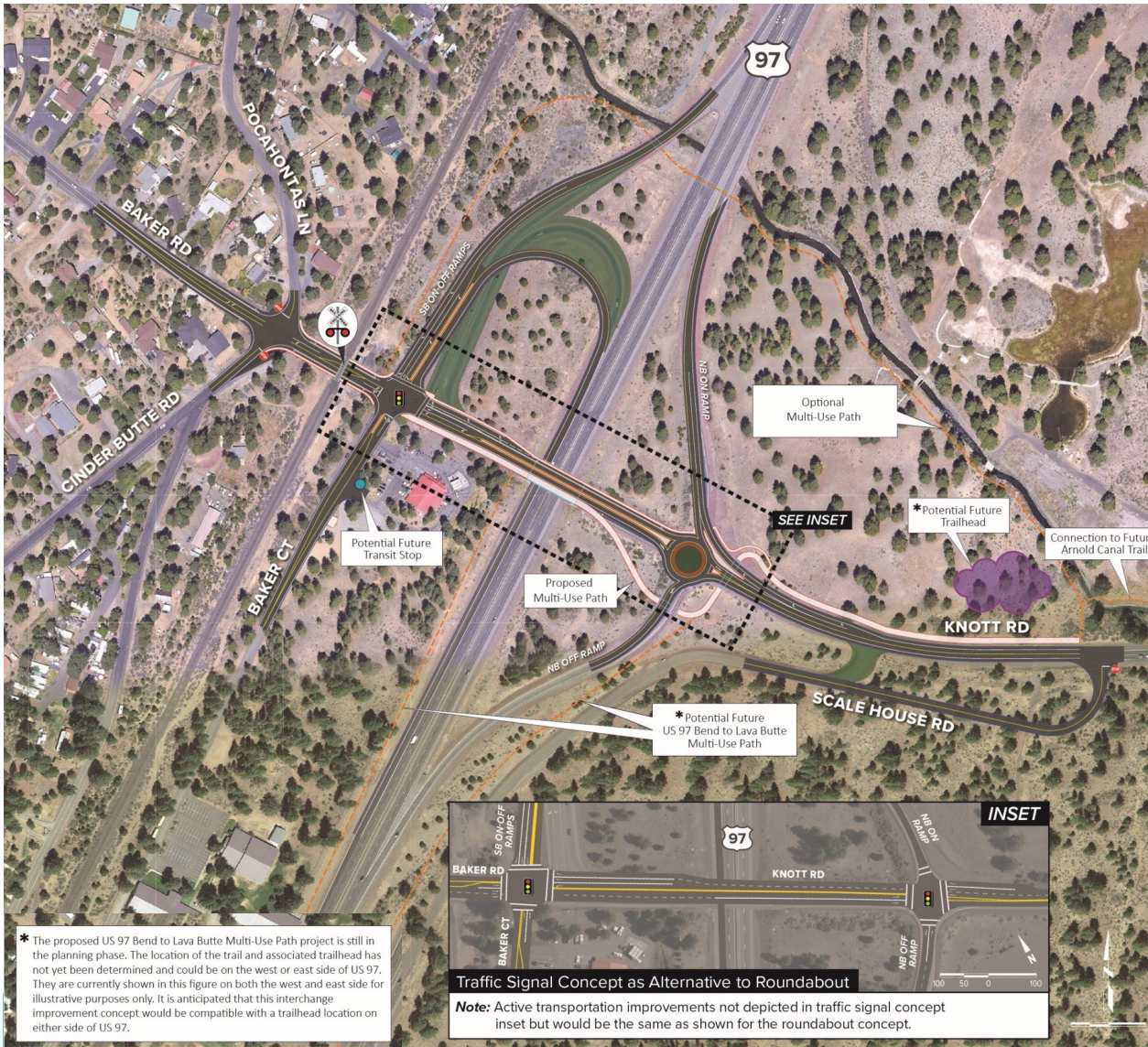


Roundabouts or Traffic Signals



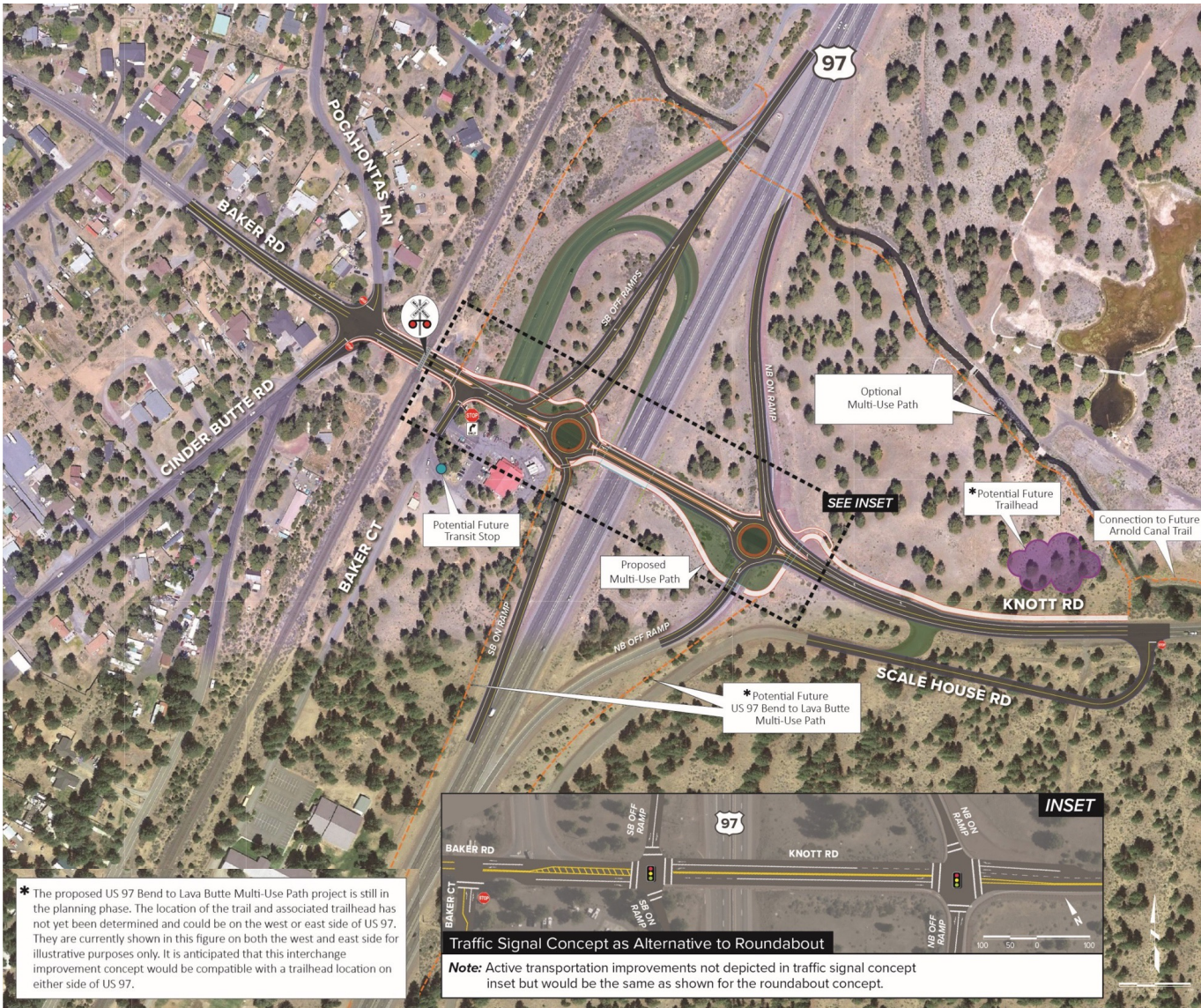
Source: The Columbian

All alternatives include roundabouts at one or more US 97 ramp terminals. Any roundabouts on the state highway system would be subject to the stakeholder engagement process for approval outlined in ODOT Highway Directive DES 02. If during the stakeholder engagement process it was determined roundabouts would be infeasible at the US 97 ramp terminals, traffic signals would be necessary instead. Therefore, intersection operations were analyzed for both roundabouts and traffic signals at the ramp terminals.



Alt. 1: Enhanced Existing Ramp Terminals

- Focuses on enhancing the existing ramp terminals to address the operational deficiencies along Baker Road
- Reduces the potential for queue spillback onto US 97 with a longer southbound off-ramp
- Lengthens the southbound on-ramp
- Eliminates turning conflicts between closely spaced intersections
- The southbound ramp terminal intersection is closer to the railroad – the signal must be coordinated with the crossing to clear queues
- Signal provides a wide, but controlled ped/bike crossing
- Est. Cost: **\$14.1 Million**



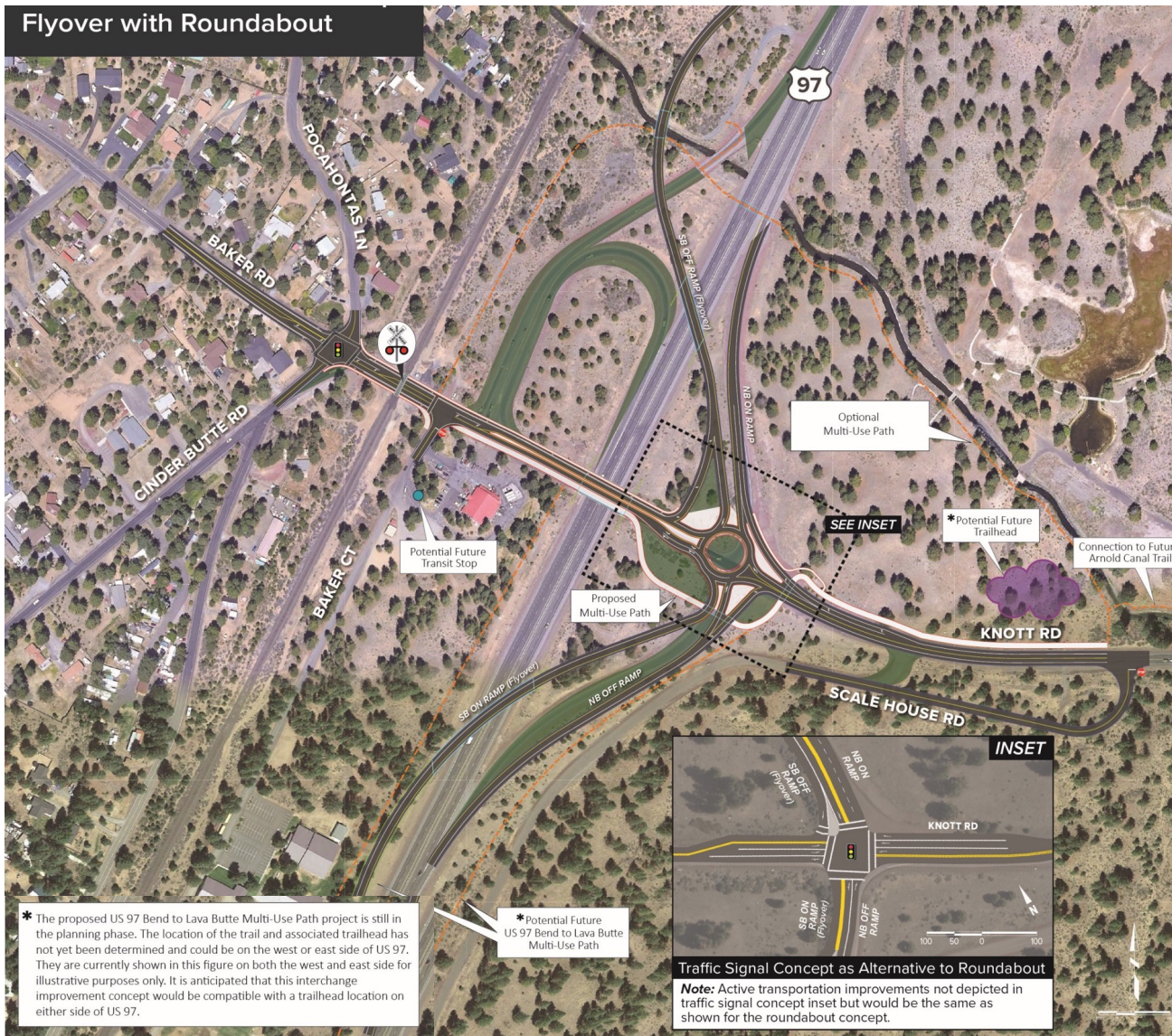
* The proposed US 97 Bend to Lava Butte Multi-Use Path project is still in the planning phase. The location of the trail and associated trailhead has not yet been determined and could be on the west or east side of US 97. They are currently shown in this figure on both the west and east side for illustrative purposes only. It is anticipated that this interchange improvement concept would be compatible with a trailhead location on either side of US 97.

Traffic Signal Concept as Alternative to Roundabout
 Note: Active transportation improvements not depicted in traffic signal concept inset but would be the same as shown for the roundabout concept.

Alt. 2: Tight Urban Diamond Interchange (TUDI)

- Reconstructs the interchange to use a more traditional “diamond” configuration
- Both ramp terminals are controlled by roundabouts
- Requires minimal widening of the bridge structure over US 97, with only two lanes of motor vehicle traffic needed across the bridge
- This alternative is the only one that includes an at-grade crossing with the multi-use path on the south side of Baker Road (though it is only a one-lane crossing)
- No direct left out of Baker Court – must U-turn at roundabout
- Est. Cost: **\$18.3 Million**
































Flyover with Roundabout



Alt. 3: Southbound On- And Off-Ramp Flyovers with Roundabout (Flyover Interchange)

- Reconstructs the US 97 southbound on- and off-ramps by realigning them to a shared intersection with the northbound ramps on the east side of US 97
- This would require new bridges over US 97 for the southbound on- and off-ramps and a new bridge over the Arnold Canal
- All of the on- and off- ramps would connect at one partial multilane roundabout intersection
- Baker/Cinder Butte intersection assumed signalized to provide a controlled west side ped/bike crossing
- Est. Cost: **\$34.5 Million**

Goals & Scoring – Summary by Goal

GOALS	NO-BUILD	ALT. 1 (ENHANCE EXISTING)	ALT. 2 (TUDI)	ALT. 3 (FLYOVER)
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.	NA			

QUALITATIVE SCORE	PERFORMANCE
	Excellent
	Good
	Fair
	Poor
	Very Poor

FEEDBACK FROM SECOND ROUND OF PUBLIC ENGAGEMENT

Technical and Community Advisory Committees, Virtual Public Workshop, and Online Open House (45 unique visitors, 12 survey responses)

- Roundabouts are generally preferred over traffic signals
- Ability to accommodate evacuation needs is essential
- Desire to get improvements soon and recognition that project costs will impact that
- Concern about serving more traffic from the new high school or more traffic than anticipated from new development to the east

FEEDBACK FROM SECOND ROUND OF PUBLIC ENGAGEMENT

- Should we consider a protected or raised bike lane on the north side?
- Would like more focus on improving Baker Court access
- A lot of interest in how improvements could be constructed in phases

FEEDBACK FROM SECOND ROUND OF PUBLIC ENGAGEMENT

- Alternative 1 brings the ramp terminal close to the railroad but also resolves access conflicts
- Alternative 2 has a less desirable at-grade crossing with the multi-use path on the south side
- Alternative 2 does not fully address access conflicts on the west side
- Alternative 3 cost is high, and the complex construction risks may increase the cost further
- Alternative 3 may be more difficult to build in phases

FEEDBACK FROM SECOND ROUND OF PUBLIC ENGAGEMENT

Which Alternative do people prefer?

Community Advisory Committee (3 responses)

- > Preference for Alternative 3, but recognize cost is high. Second choice is Alternative 1 (2 votes) or Alternative 2 (1 vote).

Virtual Public Workshop (20 attendees)

- > Most expressed interest was for Alternative 3, but want an interim improvement also

Online Open House (12 responses)

- > Alternative 2 favored slightly over Alternative 1
- > Alternative 3 favored the least (9 last place votes)

TECHNICAL AND COMMUNITY ADVISORY COMMITTEE RECOMMENDATION

Key Considerations

- Alternative 3 performs the best but the high cost could be a barrier for getting improvements soon
- Alternative 1 does a better job than Alternative 2 at resolving access conflicts and improving Baker Ct. access
- Alternative 1 may be the best alternative for efficient transit travel
- Alternative 1 includes a traffic signal, but roundabouts are preferred
- Alternative 2 has the only crossing of the proposed low-stress multi-use path on the south side of Baker Road

TECHNICAL AND COMMUNITY ADVISORY COMMITTEE RECOMMENDATION

Recommendation

Advance Alternative 1 as the preferred alternative but retain the ability to implement Alternative 3 (if needed beyond the 20-year planning horizon, if growth exceeds expectations, if sufficient funding becomes available).

DISCUSSION

NEXT STEPS

- Refine the preferred alternative
- Draft Interchange Area Management Plan
- Last TAC and CAC Meetings end of spring
- Last Policy Board Meeting in June

US 97 / Baker Road Interchange Area Management Plan (IAMP)

Project Schedule

