OR 126: VENETA TO EUGENE: LANE ACT PRESENTATION

January 12, 2022

Oregon Department of Transportation

PRESENTATION OUTLINE

- Project Background and Overview.
- Design and Environmental Update.
- Public Outreach Summary.
- Implementation Strategies.
- Next Steps.

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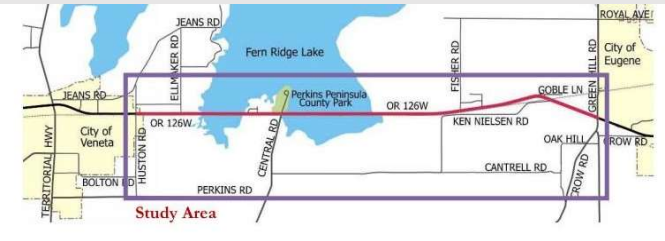
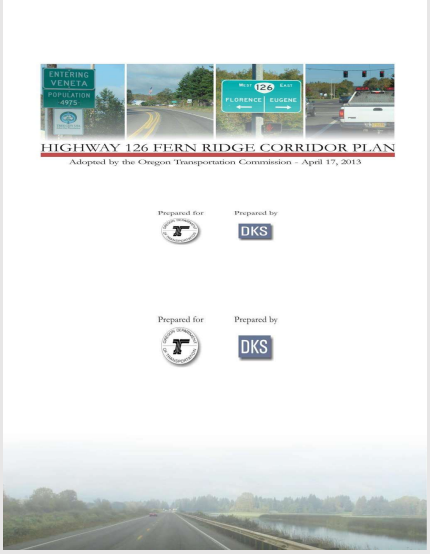
PROJECT BACKGROUND AND OVERVIEW

BACKGROUND

The **Fern Ridge Corridor Plan:**

- Evaluated a series of alternatives to address congestion and safety needs.
- Included extensive stakeholder outreach.
- Recommended plan was adopted by the Oregon Transportation Commission in April 2013.





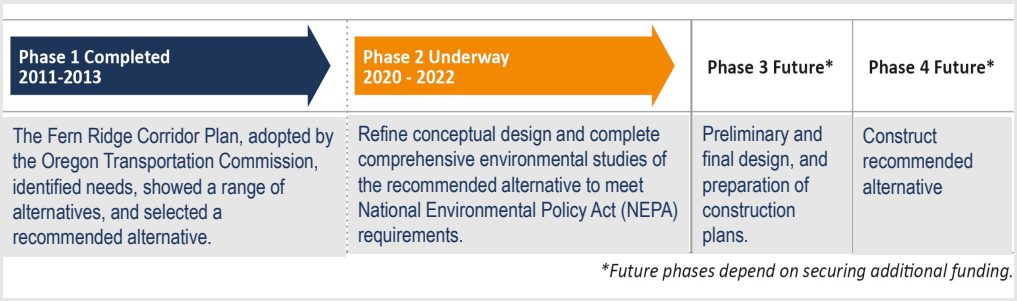
This project picks up where the Fern Ridge Corridor Plan concluded.

PROJECT OVERVIEW

Building on the Fern Ridge Corridor Plan, we have confirmed the outcome of the plan with the community, refined the design concept and are completing the environmental documentation needed to advance the project once additional funding is secured.

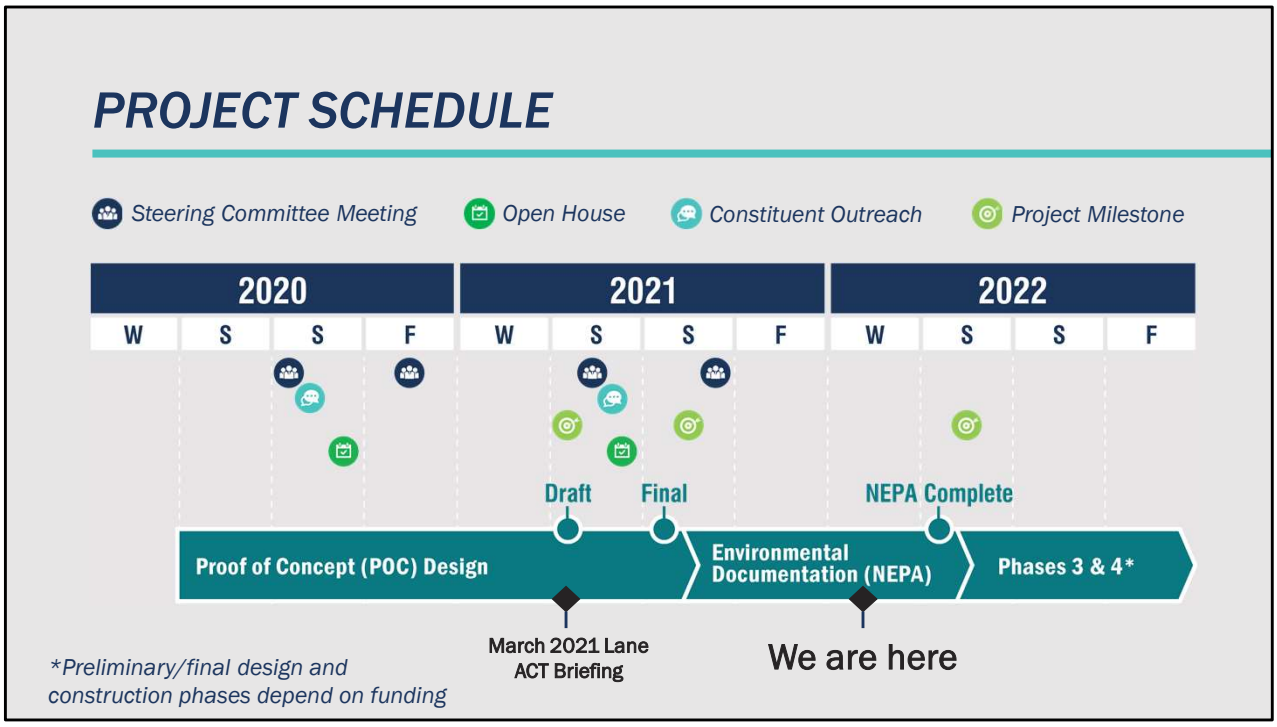
The corridor study east limits stopped at Green Hill Road, but this current effort includes an additional one-mile segment within Eugene from Green Hill Road to Terry Street. Terry Street is where the roadway currently changes from a four-lane roadway to two-lane roadway. Eugene has a project in their TSP to widen this one-mile segment to four-lanes, so we've incorporated that project into this effort for consistency.

PROJECT OVERVIEW



The Oregon Legislature, through HB 2017, provided funding for this current phase of the project.

This project is in Phase 2.



The project schedule shown here shows the timeline for design efforts, which concluded in the early fall with the submittal of the Final Proof of Concept. Environmental studies should be completed this spring. Stakeholder outreach and public involvement are noted along the top, with two rounds of outreach held in 2020 and 2021, which are covered in more detail later in this presentation.

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DESIGN AND ENVIRONMENTAL UPDATE

Final Proof of Concept was submitted in early September to ODOT and the local agencies.

FUTURE (2044) INTERSECTION OPERATIONS

- Five intersections require additional improvements to meet ODOT mobility targets with the widening of OR126 to four lanes.
- Dual-lane roundabouts or traffic signals are recommended for the Green Hill Road, Central Road and Huston Road intersections.
- Dual-lane roundabouts or turn lane improvements on OR126 are recommended for the Fisher Road and Ellmaker Road intersections.

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A review of traffic volumes was completed last year. Out of the nine study intersections within the corridor, five were shown to need additional modifications to meet ODOT's mobility targets. We will review the proof of concept plans for Green Hill, Central, Huston and Ellmaker today.

OR126 CORRIDOR CRASH DATA

- 1998-2002: 13 crashes per year.
- 2005-2009: 25 crashes per year.
- 2014-2018: 42 crashes per year.

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Crashes along the project corridor have been increasing over the past 20 years.

INTERSECTION SAFETY PERFORMANCE

- Roundabouts reduce fatal and injury accidents by 82% compared to rural stop-controlled intersections.
- Converting a rural stop-controlled intersection to a signalized intersection can reduce angle crashes by 77%, but can also increase rear-end crashes by 58%.
- Converting a signalized intersection to a roundabout reduces all accidents by 78%.

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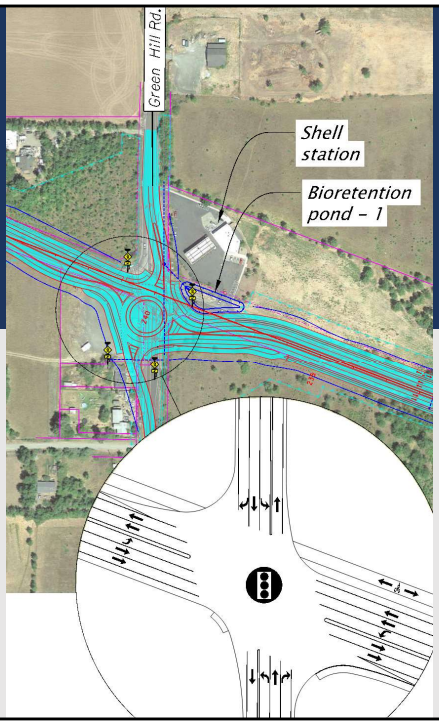
In developing the proof of concept plans, we've opted to develop designs for two options at each of the five intersections, to keep the options open for future determination of the best solution when funding is secured. Roundabouts provide clear safety benefits, as demonstrated here, but also cost more to construct and have a much larger footprint, creating more impact. Rear-end crashes are the most common crash type within the project corridor.

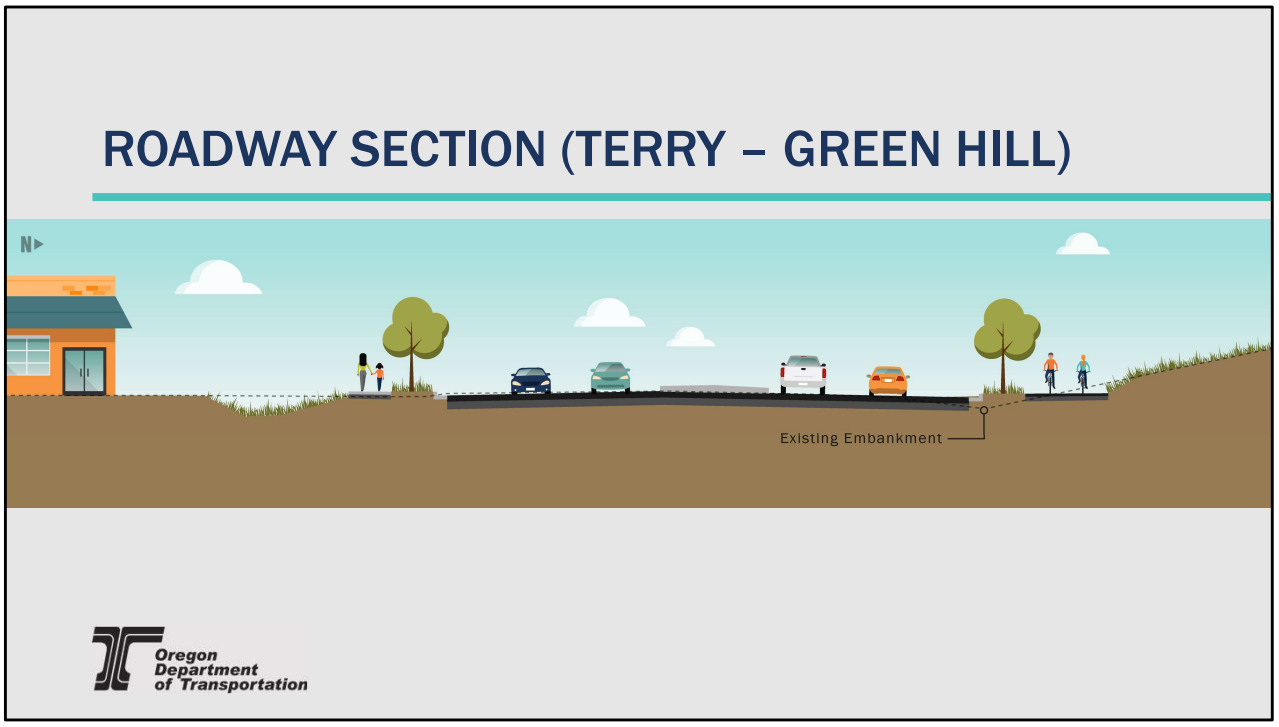
FINAL PROOF OF CONCEPT

Green Hill Road Intersection

- Roundabout or Traffic Signal



The following slides show excerpts from the Final Proof of Concept design completed in September. Shown here is the Green Hill Road intersection, where a roundabout or traffic signal is proposed. Design considerations included siting the roundabout off to one side of the existing road to reduce traffic impacts during construction, wetland and rare plant impacts and impacts to the residence south of the intersection.

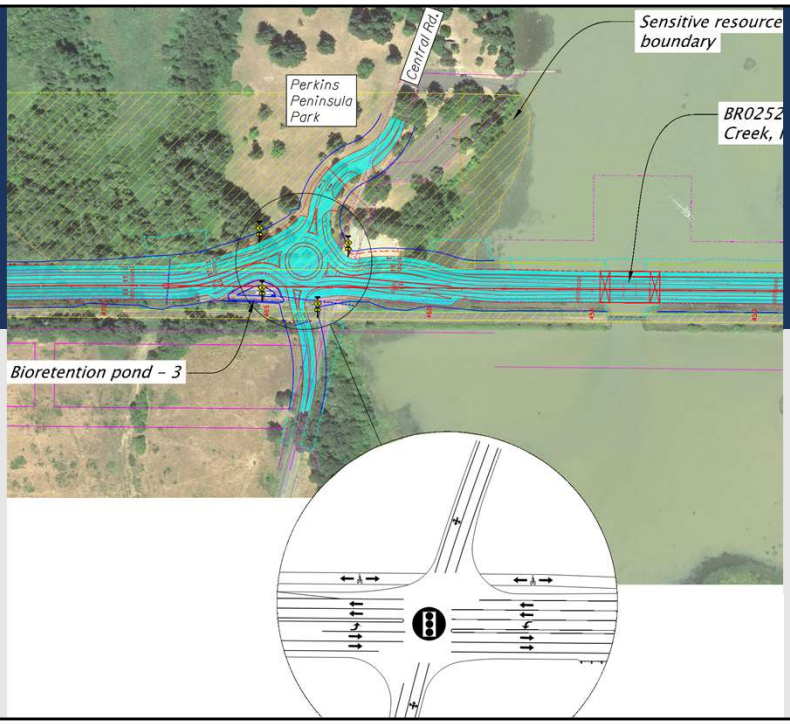


Within the City of Eugene, a four-lane urban section with a raised median or left-turn lane is proposed. Curbs and landscape strips frame the roadway, with a sidewalk along the south side and the shared-use path shown on the north side. The shared-use path is proposed to extend the entire length of the project, beginning at Terry Street. This would provide a good connection to the Fern Ridge Path, which has a trail head 0.3 miles north on Terry Street.

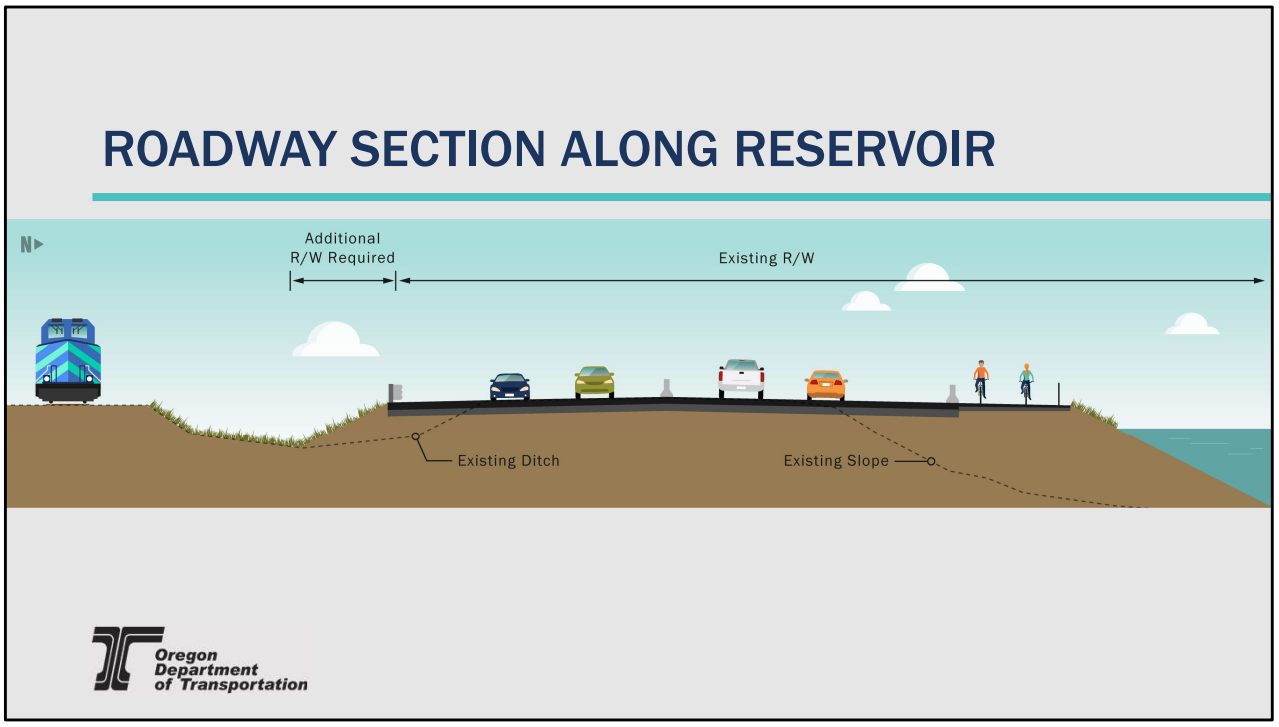
FINAL PROOF OF CONCEPT

Central Road Intersection

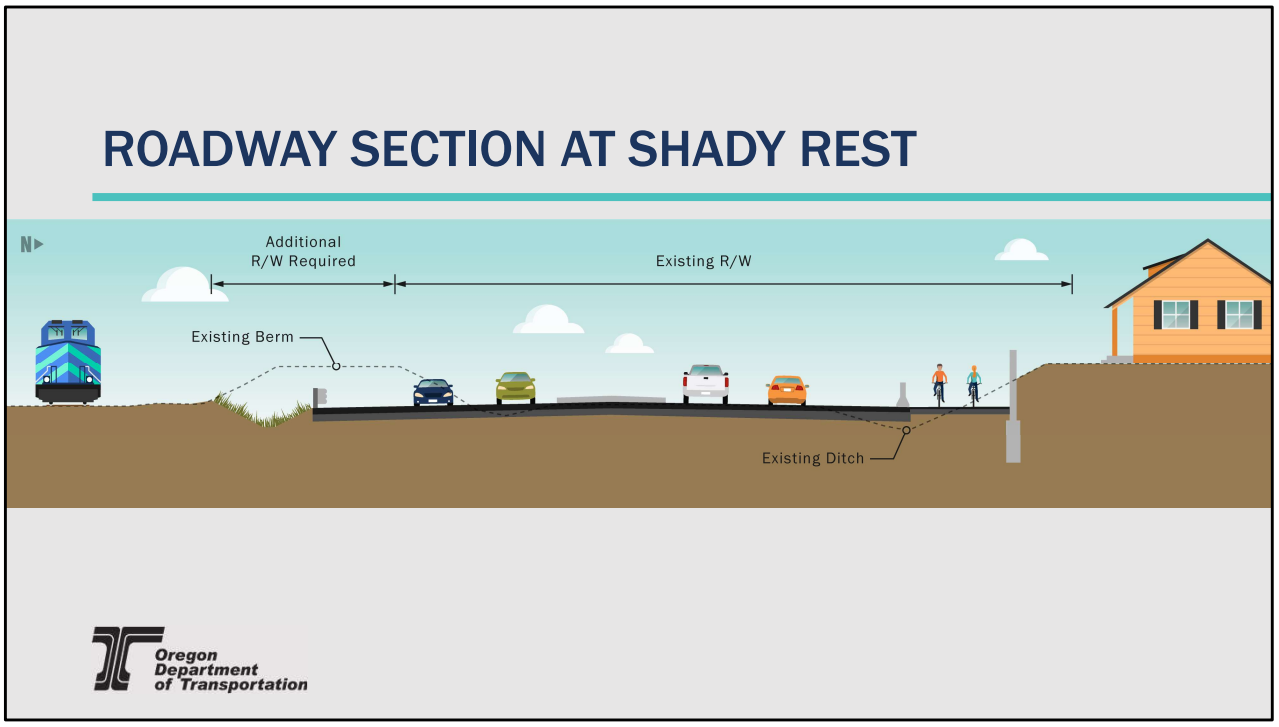
- Roundabout or Traffic Signal



This is the Central Road intersection. This intersection demonstrates the competing objectives when considering a roundabout at this location, in terms of the roundabout offering improved safety, while requiring more land to construct. Design refinements at this intersection included the park entrance showing revised gate location and connections to the boat launch area and gravel parking lot.



OR 126 is alongside the Fern Ridge Reservoir for about 2 miles of the project corridor. Design refinements include steepened embankment slopes on both sides of the road and shifting the roadway south toward the railroad to reduce the footprint and impact to the reservoir. A retaining wall has also been evaluated for some portions of the embankment area to reduce reservoir impacts. This concept would require some combination of ROW and easements from the railroad.

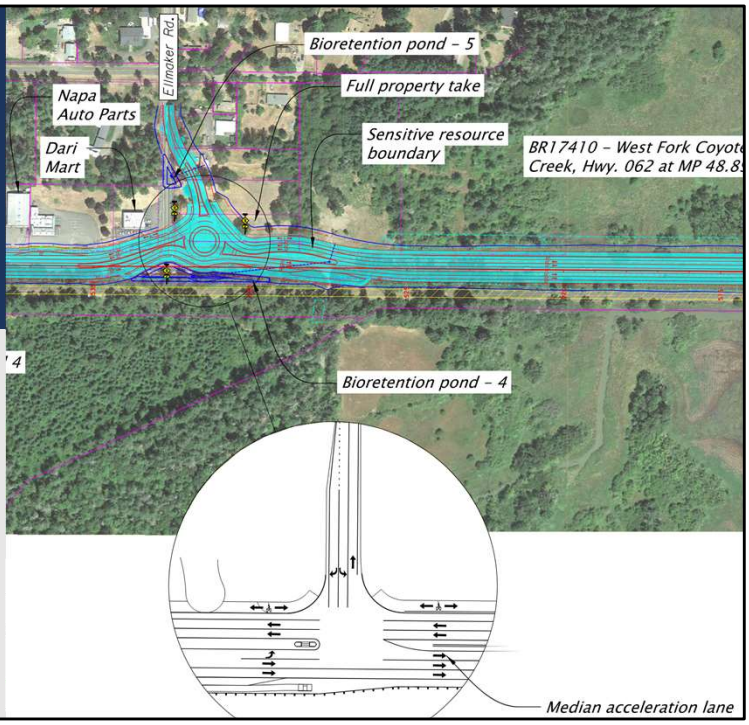


This roadway section is located at the Shady Rest neighborhood located between Central Road and Ellmaker Road. Design refinements include a retaining wall that reduces the ROW needs along the north side of the road to the side road areas. This was accomplished by shifting the roadway centerline south and would require some combination of ROW and easements from the railroad.

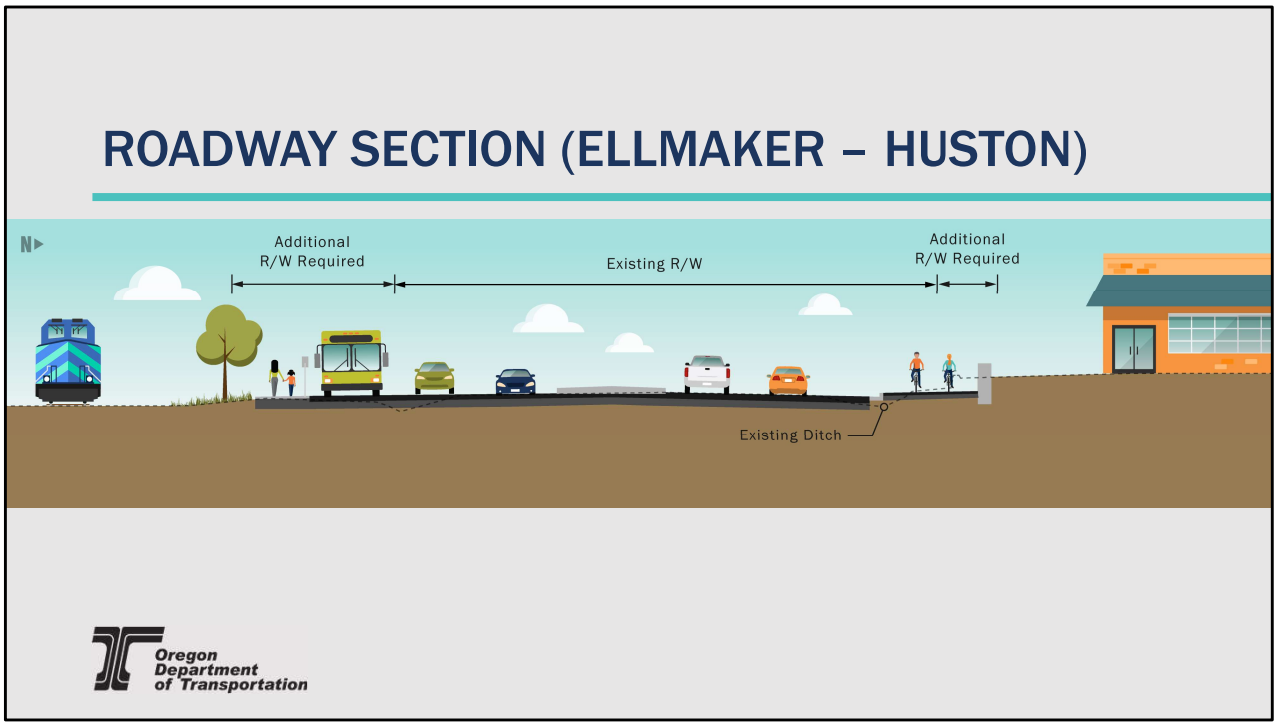
FINAL PROOF OF CONCEPT

Ellmaker Road

- Roundabout or Turn Lanes w/Median Acceleration Lane



This intersection, like Fisher Road, did not meet the requirements for a traffic signal. The intersection recommendations for this location are a roundabout or turn lane improvements, which include providing turn lanes on the side road and a median acceleration lane for vehicles entering the roadway to use. The roundabout concept would impact the Dari Mart and one residence on the east side of Ellmaker.

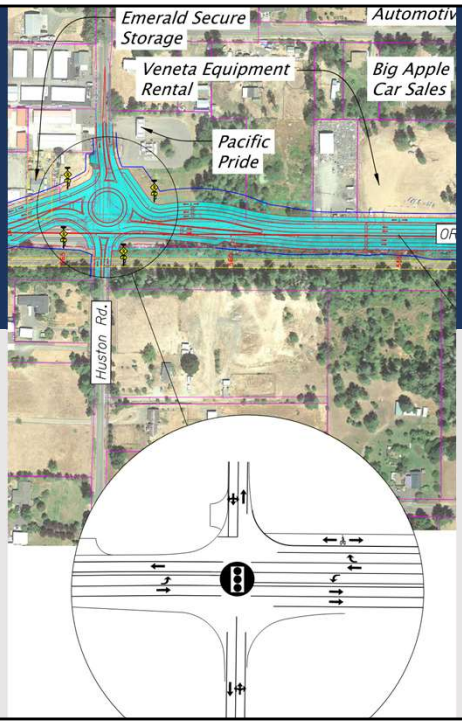


This roadway section between Ellmaker Road and Huston Road proposes widening the road, requiring ROW from the businesses on the north side of road and the railroad on the south. This section shows a bus pullout, similar to those constructed near Ellmaker Road in 2019.

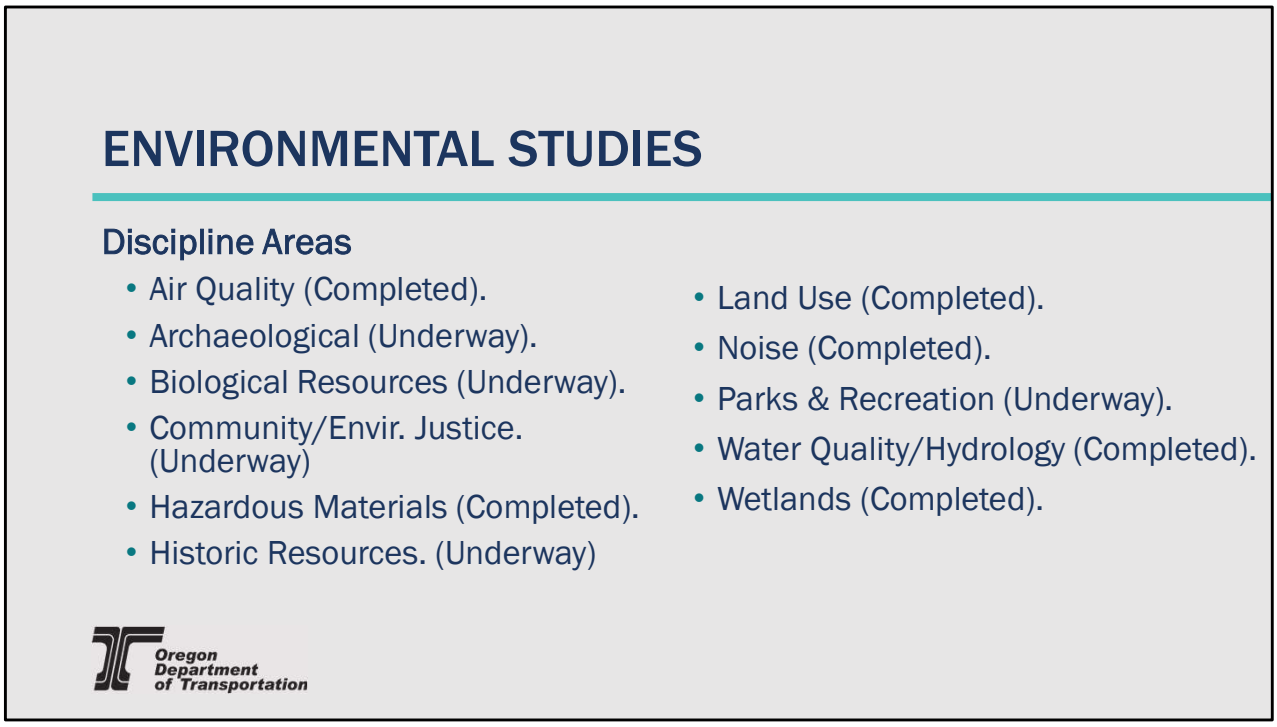
FINAL PROOF OF CONCEPT

Huston Road Intersection

- Roundabout or Traffic Signal



Huston Road Intersection. Once again, the roundabout concept would require more space and impact the commercial properties on the north side of the road, particularly on the west side of Huston Road.



Progress on the environmental studies continues. Many of the discipline areas have completed analysis. Of note, coordination with the USACE has not revealed significant concerns. The project team has provided the USACE copies of the technical work and design modifications have been made in response to their comments, including retaining a channel east of Coyote Creek to maintain water flow to an intake structure and canals that provide water to the Fisher Butte natural area. Design refinements have also been made to the Perkins Park entrance.

Wetland project impacts would be mitigated through a combination of onsite and offsite locations. Mitigation opportunities have been discussed with local natural resource groups reached during the constituent meetings. Stormwater treatment would also require a combination of onsite and offsite treatment.

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PUBLIC OUTREACH SUMMARY

SUMMARY OF PUBLIC INVOLVEMENT

STEERING COMMITTEE

11 representatives

1. July 15, 2020
2. November 18, 2020
3. March 18, 2021
4. October 28, 2021

CONSTITUENTS CONSULTATIONS #1

43 representatives

1. August 11, 2020
   HIGHWAY USERS
   Emergency vehicles | Freight
   Business | Commuters
2. August 11, 2020
   ADJACENT USERS
   Pedestrians | Bicylists | Boaters
3. August 12, 2020
   WETLANDS USERS
   Naturalists | Ecology Educators
   Fishers | Hunters

CONSTITUENTS CONSULTATIONS #2

35 representatives

1. April 14, 2021
   HIGHWAY USERS
   Emergency vehicles | Freight
   Business | Commuters
2. April 14, 2021
   ADJACENT USERS
   Pedestrians | Bicylists | Boaters
3. April 15, 2021
   WETLANDS USERS
   Naturalists | Ecology Educators
   Fishers | Hunters

INTERVIEWS

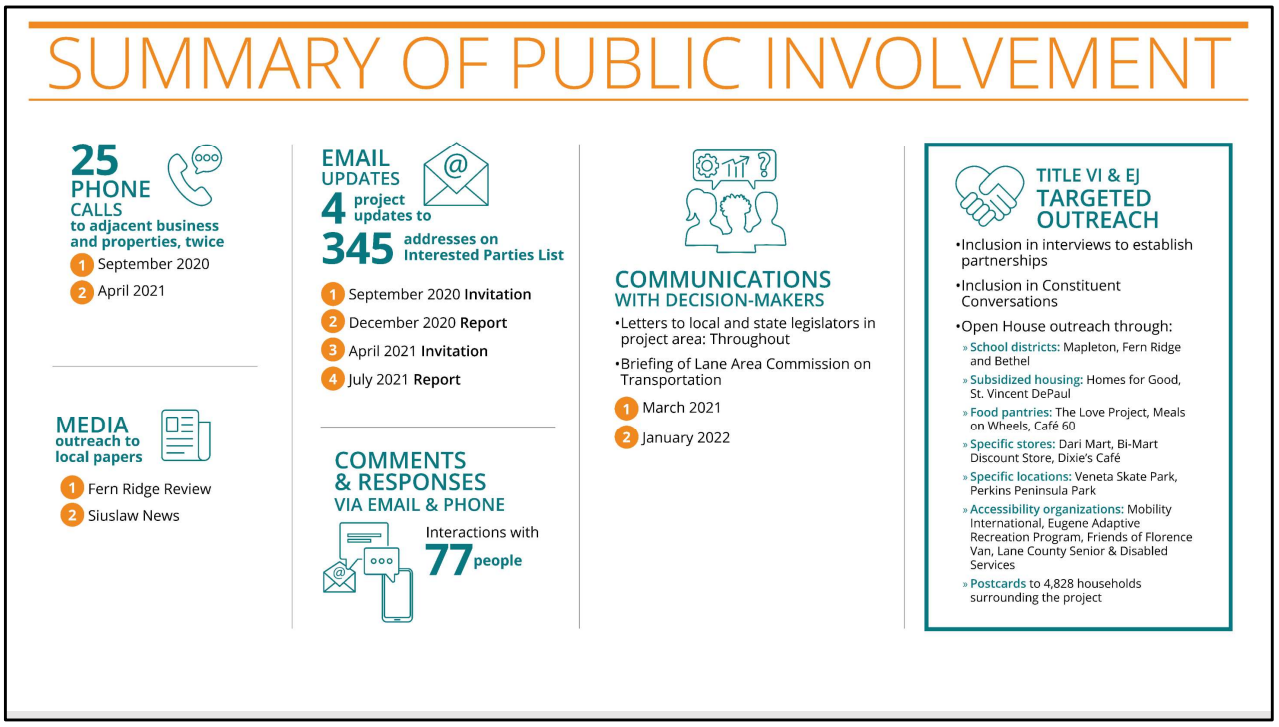
8 organizations
May 2020

OPEN HOUSES

#1 Sept. 8–25, 2020
- **748** unique visitors
- **296** responses via online open house
- **29** responses via hard copy/ phone/email
- **15** staff follow-up responses via phone and email

#2 April 26–May 9, 2021
- **756** unique visitors
- **68** responses via online open house
- **18** staff follow-up responses via phone and email

This slide summarizes the three primary means of reaching out to the community to gather feedback on the scope of the project and ultimately confirming that we were headed in the right direction with the project. The Steering Committee included staff and elected officials from the Cities of Eugene, Veneta, Florence, Coos Bay Rail, LTD and Lane COG. Two rounds of outreach to project constituents and the general public were held in August and September 2020 and April and May 2021.



The 2nd slide is a continuation of outreach and input. We formed great partnerships with organizations that reach thousands of local residents.
For example, the Fern Ridge School District twice sent out a phone message to 1,500 households in Veneta, Elmira, Walton and Noti reaching 3,000–5,000 people.
The area housing authorities and food pantry services partnered with us 100% to reach their constituents.
The City of Veneta used Facebook to reach residents.
And we sent postcards to almost 5,000 households.
Our e-invites went to 1,700 recipients.
We placed information of A-frames and reader boards that reached folks as they passed through the corridor.
And we called adjacent properties and businesses twice for direct questions and personal conversations.

CONSTITUENT CONSULTATIONS – ROUND 2

Some Key Messages from Participants

- Continued support for 4-lane alternative with separate multi-use path.
- A mix of support and apprehension with roundabouts.
- Concern with project impacts to fish, wildlife and plants.

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At our March 2021 briefing, we summarized what we heard from the community during the first round of outreach in August and September 2020. This slide outlines key messages from the second round of meetings in April 2021 when we presented the draft Proof of Concept.

ONLINE OPEN HOUSE #2

Input Summary

- Continued support for 4-lane alternative with separate multi-use path (four of 68 comments opposed road widening due to concerns over natural resource and climate impacts).
- Two-thirds of comments indicated a preference for traffic signals over roundabouts.

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The second Open House was held April 26-May 9th. Key messages are summarized on this slide.

REGARDING ROUNDABOUTS

- A decision on the intersection treatment (roundabouts vs other alternatives) has not been made. Roundabout intersections take up more space and are therefore being used for the environmental evaluations. A decision on the intersection type will be made when funding is secured for the project.

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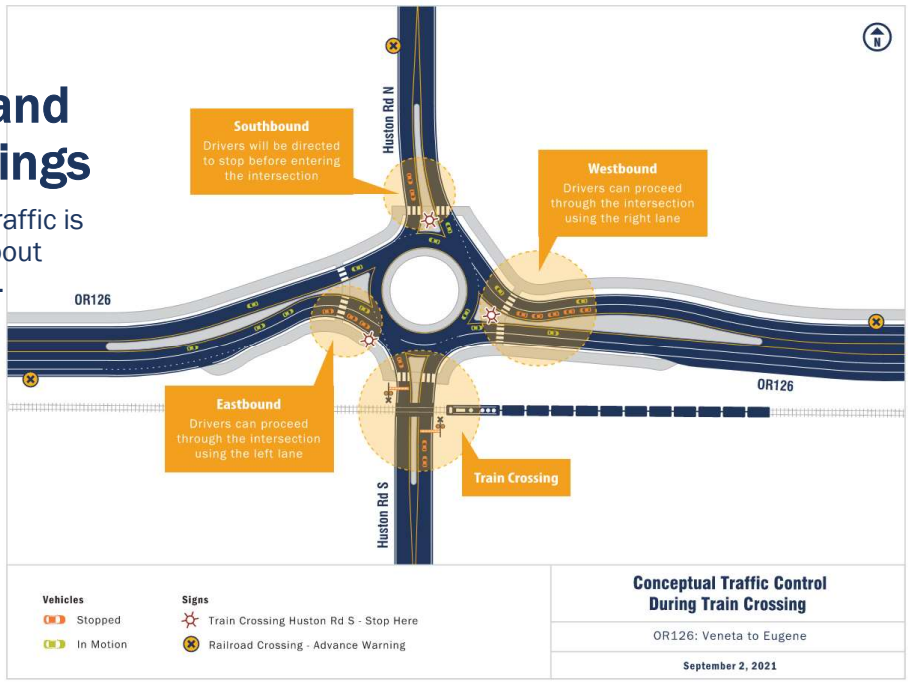
Roundabouts and Railroad Crossings

- Graphic explains how traffic is controlled at a roundabout when a train is present.



Based on feedback from the Veneta community, this graphic was prepared and shared with the City of Veneta staff to present to the City Council and the community.

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IMPLEMENTATION PLAN

IMPLEMENTATION PLAN

As part of refining the design concept, an implementation plan was drafted, recognizing that funding to complete the project all at once is unlikely. This plan was developed based on the following considerations:

- Traffic volumes and accident rates are higher on the east end, so starting at east end with improvements would ensure the highest benefit to cost with Phases 1 and 2.
- the existing four lane section ends at Terry Street
- There are other phasing scenarios that could be explored, depending on funding levels, type of funding and community priorities.

There may be a need for earlier project phases that do not involve construction of the roadway, but rather address other project needs, such as wetland, habitat, and stormwater offsite mitigation, archeological recovery, land use actions.

Preliminary

Phase	Phase Name	Phase Description	Length (miles)	Cost ($M) 2027 Dollars
1	Green Hill	Widen OR126 within City of Eugene from Terry Street to and including Green Hill Road intersection. Extend improvements 0.1 miles west of Green Hill Road.	1.1	$24.8 to $34.7
2	CBR Overcrossing	Widen OR126 from west end of Phase 1 to 0.3 miles west of Coos Bay Rail Line (CBR) overcrossing. Construct a new westbound bridge over CBR.	1.0	$28.1 to $39.4
3	Fisher Road	Widen OR126 from west end of Phase 2 to 0.1 miles west of Fisher Butte Parking Lot, including intersection upgrades at Fisher Road.	1.5	$20.7 to $29.0
4	Fern Ridge Reservoir	Widen OR126 from west end of Phase 3 to and including Ellmaker Road intersection. This phase includes intersection upgrades at Central Road, several bridge replacements and highway widening into the reservoir.	3.0	$161.0 to $225.4
5	Huston Road	Widen OR126 from west end of Phase 4 to the project's west terminus, including intersection upgrades at Huston Road.	0.5	$13.3 to $18.6
			Total Cost:	$247.9 to $347.1

Preliminary cost estimates for the 5 segments are shown on this slide.

INTERIM IMPLEMENTATION PLAN

Recognizing the need to improve safety along the corridor, ODOT has developed an interim plan that targets those locations along the corridor where crashes have occurred. This map of the project corridor identifies eleven locations where modifications are proposed to improve safety, and in some cases reduce congestion.

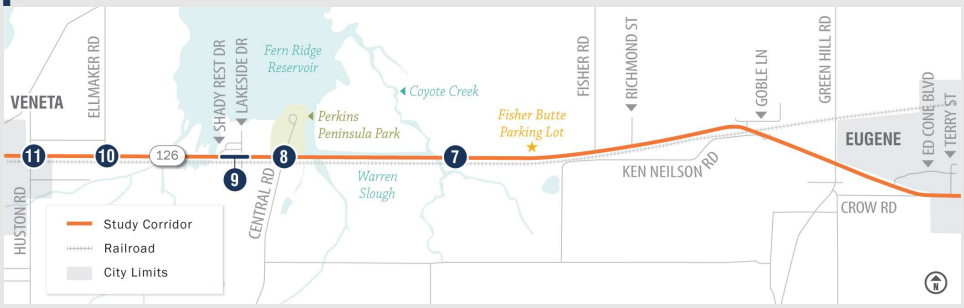
Interim Implementation Plan

Preliminary

Location	Description of Solution	Safety Benefits	Option A Estimated Cost ($M)*	Option B Estimated Cost ($M)*
1.Ed Cone Blvd Intersection	left-turn lane, widened shoulders, access control	All crashes in this segment were rear end crashes. A turn lane reduces risk of rear end crashes by allowing eastbound turning vehicle to pull out of travel lane.	$2.0 to $2.3	$2.0 to $2.3
2.Green Hill Rd Intersection	Option A: Improved lighting and access control	30% of crashes involve turning movements. Access control with raised median prevents left-turns into or out of driveways adjacent to intersection.	$0.3 to $0.4	
	Option B: Double lane roundabout	This intersection is a top 5% SPIS site with 33 crashes. Converting to a roundabout can reduce crashes by 78%.		$6.0 to $8.0
3.Ken Neilsen Rd Intersection	Westbound left-turn lane, widened shoulders.	All crashes in this segment were rear end crashes. Turn lane reduces risk of rear end crashes by allowing turning vehicle to pull out of travel lane.	$1.3 to $1.6	$1.3 to $1.6
4.Goble Ln Curve	Widened shoulders, improved signage.	About 60% of crashes are departure crashes. Wider shoulders with rumble strips would provide a larger recovery zone.	$0.9 to $1.1	$0.9 to $1.1
5.Fisher Rd Intersection	Option A: Improved lighting and signage.	Limited crash history at intersection (one non-injury crash). Improved lighting recommended for bus stops.	$0.2 to $0.3	
	Option B: Double lane roundabout	Converting stop-controlled intersections to roundabouts can reduce all types of injury related crashes by 82%.		$4.0 to $6.0
6.Fisher Butte Parking Lot	Eastbound left-turn lane, widened shoulders.	Majority of crashes were rear end crashes or departure crashes that appear to have occurred to avoid a rear end collision. Turn lane reduces risk of rear end crashes by allowing turning vehicle to pull out of travel lane.	$1.0 to $1.2	$1.0 to $1.2

This plan includes two options. Option A identifies a series of corridor modifications that are lower cost with limited intersection changes. Option B includes the installation of a double lane roundabout at the five intersections as identified in the Proof of Concept Design. Six of the eleven locations are identified on this slide. The Green Hill intersection has the highest accident rate within the corridor and should be a high priority to improve. The Goble Lane curve has the highest segment crash rate.

Interim Implementation Plan



Preliminary

Location	Description of Solution	Safety Benefits	Option A Estimated Cost ($M)*	Option B Estimated Cost ($M)*
7.Coyote Creek Access	Extend guardrail to close parking area.	There were four serious accidents including two fatalities in the vicinity of this gravel shoulder area.	$0.1 to $0.2	$0.1 to $0.2
8.Central Rd Intersection	Option A: Improved lighting and signage	Improved signage alerts drivers on side street of stop ahead. Improved lighting recommended for bus stops.	$0.2 to $0.3	
	Option B: Double lane roundabout	Eight crashes at this intersection including three minor injury crashes and two possible injury crashes.		$7.0 to $9.0
9.Lake Side Drive Intersection	Eastbound left-turn lane, widened shoulders, access control, improved signage.	Two rear end crashes including a fatality, involving eastbound drivers stopping to turn into side street. Turn lane reduces risk of rear end crashes.	$1.3 to $1.6	$1.3 to $1.6
10.Ellmaker Road Intersection	Option A: Improved signage	Improved signage alerts drivers on side street of stop ahead.	$0.01	$0.01
	Option B: Double lane roundabout	Ten crashes at this intersection including five minor injury crashes and two possible injury crashes.		$4.0 to $6.0
11.Huston Road Intersection	Option A: Westbound right-turn lane, Through Route Activated Warning System.	About 60% of crashes involved vehicles attempting to travel across OR 126 from the side street including one serious injury crash. This data does not include two fatalities that occurred in July 2021 due to this type of collision.	$0.4 to $0.5	
	Option B: Double lane roundabout	This intersection is a top 10% SPIS site. Twelve crashes at this intersection including one serious injury crash, five minor injury crashes and two possible injury crashes.		$6.0 to $8.0
	Total Cost:		$7.7 to $9.5	$33.6 to $45.0

*2022 Dollars

The five locations listed on this slide complete the list of eleven total locations. There are a variety of combinations for how the improvements could be implemented. The Huston Road intersection has the second highest intersection crash rate and should be a high priority for improvements.

NEXT STEPS

Spring/Summer 2022

- Complete NEPA.

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QUESTIONS