

July 21
2021

CAP Report
Appendix H //

Development
Assessment
Framework
Evaluation

Task 2.2.2

ODOT EA:
PE002591000J71

ODOT // I-5 Rose Quarter Improvement Project

Appendix H //

ENVIRONMENTAL ASSESSMENT PATHWAYS

**INDEPENDENT
COVER ASSESSMENT**

**I-5 ROSE QUARTER
IMPROVEMENT PROJECT**

Task 2.2: Environmental Assessment Reevaluation Pathway

ODOT EA: PE002591000J71

July 21, 2021

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OVERVIEW

Purpose of this Document

This document presents proposed changes to project elements as previously evaluated in the Rose Quarter Improvement Project (RQIP) Environmental Assessment (EA) that would need to be reevaluated pursuant to National Environmental Policy Act (NEPA) requirements for federally funded highway improvement projects.

The reevaluation would identify and analyze impacts to the Historic Albina community as a means for the Federal Highway Administration (FHWA) to determine if the I-5 RQIP with Independent Cover Assessment (ICA) team-developed highway cover scenarios are consistent with the findings of the EA and the Finding of No Significant Impact (FONSI) remain valid for the project design changes.

Introduction

In response to direction from Oregon's governor and requests from local project stakeholders, the Oregon Transportation Commission (OTC) directed the Oregon Department of Transportation (ODOT) to retain an independent consultant team of local and national urban design, engineering, and environmental experts to conduct an independent assessment of the highway cover designs included in the I-5 RQIP. This is in response to an acknowledgement of I-5's past harm in disconnecting/dividing/displacing the African American community of Albina, and thus a desire to understand what highway cover design options might best serve the current community vision for the area. Concerns with the highway covers that were expressed by Metro, Multnomah County, City of Portland, Portland Public Schools, and the Albina Vision Trust helped shape the creation of the ICA process and define a scope of work, guiding values, and desired outcomes. The ICA is a more thorough examination of ways to use highway covers to restore justice to the Historic Albina community, improve mobility and reduce congestion, improve outcomes for public health, and revitalize community cohesion.

The ICA team conducted a 9-month process with equal concern of technical, urban design and public/stakeholder engagement to arrive at the development scenarios and hybrid options of those three scenarios presented in this document (Scenario 1, 4, and 5 and Hybrid 1, 2, and 3). By way of commitment to remain independent, the ICA team cannot recommend a preferred scenario. The ICA team reports findings to the Executive Steering Committee (ESC) and the ESC uses these findings and input from the Historic Albina Advisory Board (HAAB) and will recommend their preferred and next steps to the OTC.

To gain lead agency approval for construction and retain authorized funding within Oregon HB2017, certain project elements associated with the proposed highway cover for the RQIP must be examined.

Even though a NEPA decision has been made in the form of a FONSI, the RQIP will only move forward if the FHWA signs off on the final phases of the project. Any proposed changes to the project associated with highway cover or other elements require additional review and approval by FHWA pursuant to 23 CFR 771, Section 129:

After the Administration issues a combined final EIS/ROD, ROD, FONSI, or CE designation, the applicant must consult with the Administration prior to requesting any major approvals or grants to establish whether or not the approved environmental document or [Categorical Exclusion] CE designation remains valid for the requested Administration action. These consultations will be documented when determined necessary by the Administration.

Proposed design changes identified during the study of highway cover and the potential to restore the values of the Albina community require review and consideration by the FHWA before final project approval. In this context, the project, engineering design, and environmental document must be completely aligned. Reevaluation by the FHWA is required to ensure that the environmental review documentation is appropriate, up to date, and defensible (see 23 CFR 771, Section 129(c)). The procedure is necessary for FHWA to confirm that the findings of the EA and FONSI remain valid for project design changes.

The ICA team has proposed design elements (i.e., roadway, right-of-way, or structural changes) within this document that may trigger the need for some reevaluation to reaffirm the EA decision.

Below is a summary of the ICA team environmental findings on the EA and recommendations for an EA reevaluation.

- An EA was prepared by ODOT consistent with FHWA rules and requirements; then revised based on public review and comment, and a FONSI was issued by FHWA in October 2020.
- FHWA Rule 23 CFR 771 has the discretion to confirm design and environmental consistency through coordination/consultation, or to require documentation.
- OTC requested the ICA based on community requests and in acknowledgement of I-5's past harm in disconnecting/dividing/displacing the Black community and thus a desire to understand what highway covers design options might best serve the current community vision for the area.
- Some design elements in Scenarios 4 and 5 will require additional technical studies and a higher level of engineering design that could add 14-24 months to the schedule. Specific studies to assess the effect on properties that are federally protected under National Historic Preservation Act, USDOT Section 4f or that meet the criteria for Environmental Justice as described in Appendix H Table 1 would require an analytical and approval process prescribed by those statutes. Once an engineering design is selected, technical studies for the potential to affect land use (including right-of-way), transportation operations, air quality and noise related to design changes would need to be re-examined to meet FHWA NEPA reevaluation guidance.
- The ICA process yielded alternative cover design scenarios that provide substantive benefits to the Historic Albina community. If incorporated, these design refinements are subject to an EA reevaluation per FHWA rules.
- If ODOT changed its project description to include restorative justice for the Black Historic Albina community, there is a pathway to convey to the FHWA that Scenarios 4 and 5 are consistent with the expanded project description. These scenarios will likely have additional support from local government representatives and community stakeholders. However, this may involve going back through the NEPA process. Design modifications would still need to meet the Purpose and Need of the Rose Quarter Improvement Project.
- Additional technical analysis will be needed as in the Reevaluation Required and Technical Studies Needed columns in Tables 1 and 2.
- Based on preliminary ICA results in Appendices A, I, and J of this report, the proposed changes will not be substantively different in magnitude or duration from those impacts evaluated in the EA that concluded in no significant impacts; additionally, the design when implemented could result in community enhancements and benefits consistent with Executive Order 12898 as amended. The Environmental Justice guidance under Executive Order (EO) 12898 is being amended or replaced in EO 14008; guidance on how FHWA should interpret this for major highways is forthcoming.

HISTORIC ALBINA COMMUNITY CHANGES

Community Cohesion

It is well documented that the land clearance, construction, and operations of the I-5 since 1962 has and continues to adversely affect the social cohesion of the Lower Albina community. The original construction of the I-5 set in motion a series of public and private investments that:

- Displaced a substantial number of residents and demolished several hundred homes.¹
- Dispersed African American residents throughout the greater Portland metropolitan area.
- Isolated African American-owned businesses from their patrons.
- Separated African American community institutions (i.e., churches, and social welfare organizations) from their constituents.
- Disrupted the livability of local streets.
- Increased localized air pollution levels in the historic community.

Since the RQIP design alternatives were conceived for use in the N/NE Quadrant Broadway Weidler Facility Plan and the initial NEPA scoping process conducted in 2015 for the RQIP, a movement toward racial, social and restorative justice has swept the nation. As a result, minority community equity issues surrounding past and present infrastructure and public investments have become more prominent. The current EA generally addresses the socioeconomic and cumulative impacts as well adds some historical perspective regarding the Albina community. The ICA process has reexamined the initial impact of the I-5 construction and subsequent 60 years of upheaval and dispersal of much of the Historic Albina community. This provides a specific focus that assesses the RQIP design in the context of a restored, revitalized, and reconnected Albina community.

FHWA and Community Mitigation

The FHWA for many decades has placed importance on community impacts in project development, and in recent years has placed new emphasis on indirect, secondary and cumulative community impacts. FHWA acknowledges that these types of impacts are more nuanced i, yet the effects are important, particularly the interplay between past, present and foreseeable future actions in relation to federally funded projects. This perspective is further reinforced by Executive Order (EO) 12898 (Environmental Justice) and by the intent of executive order 14008, issued on January 27, 2021² which establishes that affected minority communities should receive 40 percent of the benefit of federal investment actions.³

¹ Gibson, Karen J. 2007. Bleeding Albina: A History of Community Disinvestment, 1940-2000. *Transforming Anthropology*, Vol. 15, Numbers 1, pgs. 3-25 American Anthropological Association

² Executive Order 14008 https://www.transportation.gov/sites/dot.gov/files/2021-05/FHWA-FY-2022-President-Budget_FINAL.PDF

³ The White House. "Fact Sheet: President Biden Takes Executive Actions to Tackle the Climate Crisis at Home and Abroad, Create Jobs, and Restore Scientific Integrity Across Federal Government" <https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/27/fact-sheet-president-biden-takes-executive-actions-to-tackle-the-climate-crisis-at-home-and-abroad-create-jobs-and-restore-scientific-integrity-across-federal-government/>. Accessed June 16, 2021.

SUPPLEMENTAL REVIEW OF SCENARIO ELEMENTS

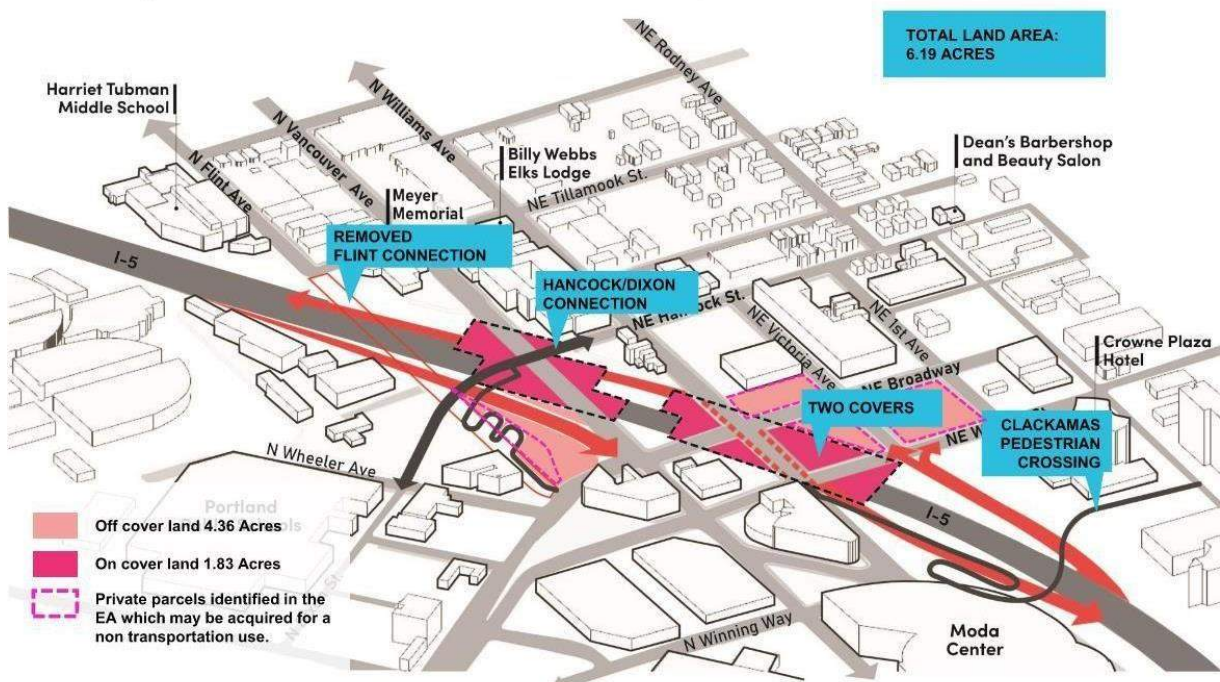
The ICA has identified seven elements that have impacts on the function, cost, and schedule of the scenarios.

- Element A – One continuous cover
- Element B – Structured covers for ramps
- Element C – Reconnect Hancock and Flint
- Element D – Reconfigure Green Loop corridor
- Element E – Merge Vancouver and Flint
- Element F – Relocate southbound ramps
- Element G – Relocate northbound ramps

Scenarios 1, 4, and 5 and Hybrids 1, 2, and 3 were developed with several elements in different combinations. All project changes associated with the highway cover will be evaluated to determine if the original environmental impacts of the EA and FONSI remain valid.

Environmental Assessment Base Case

Scenario Elements EA (Environmental Assessment)



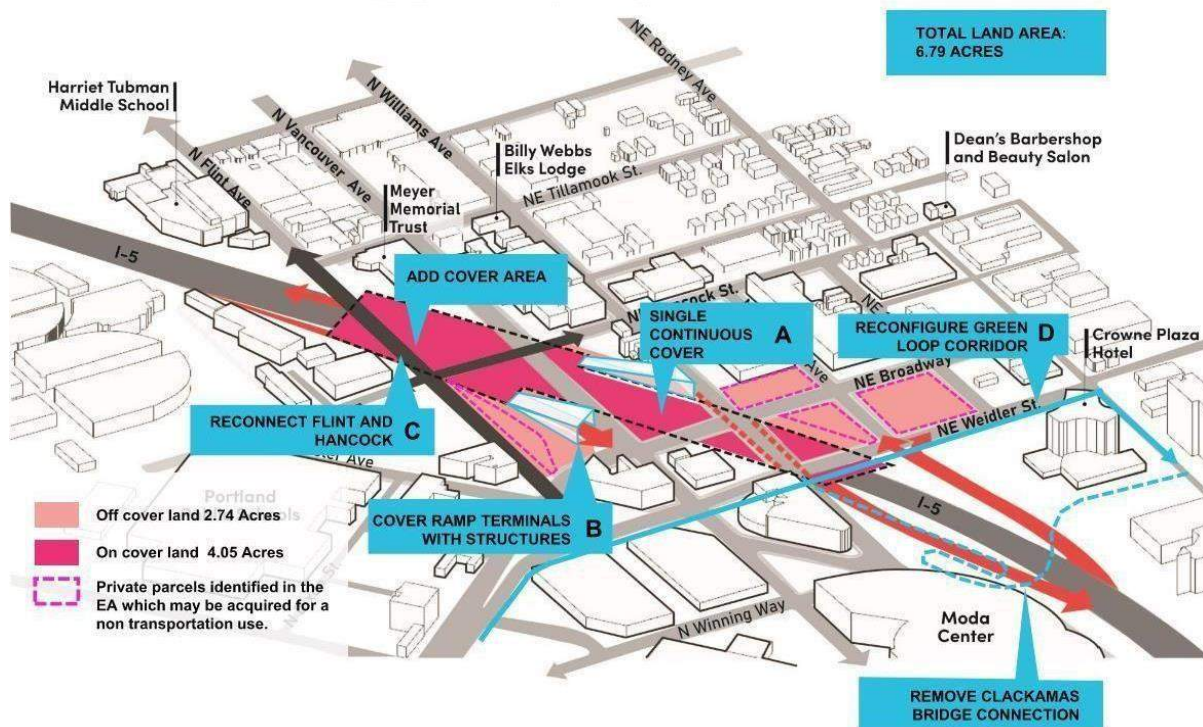
The EA base case was created through the N/NE Quadrant Plan and I-5 Broadway/Weidler Facility Plan process and adoption, with the purpose of improving safety and operations on I-5 in the vicinity of the Broadway/Weidler interchange.

The EA scope was not required to consider urban design subject matter broad enough to encompass social systems like restorative justice, placemaking or wealth creation. The EA cover design includes park and planted areas on two highway covers, improving the experience of crossing of I-5 and reducing noise and air pollution exposure for nearby properties. Street modifications include removing the N Flint Avenue overcrossing south of N Tillamook Street and replacing it with new pedestrian/bike paths and adding the Hancock-Dixon overcrossing connection.

The EA is provided for comparison as the baseline in evaluating the scenarios.

Scenario 1

Scenario Elements Flint + Broadway (Concept 1)



Scenario 1 includes Elements A, B, C, and D.

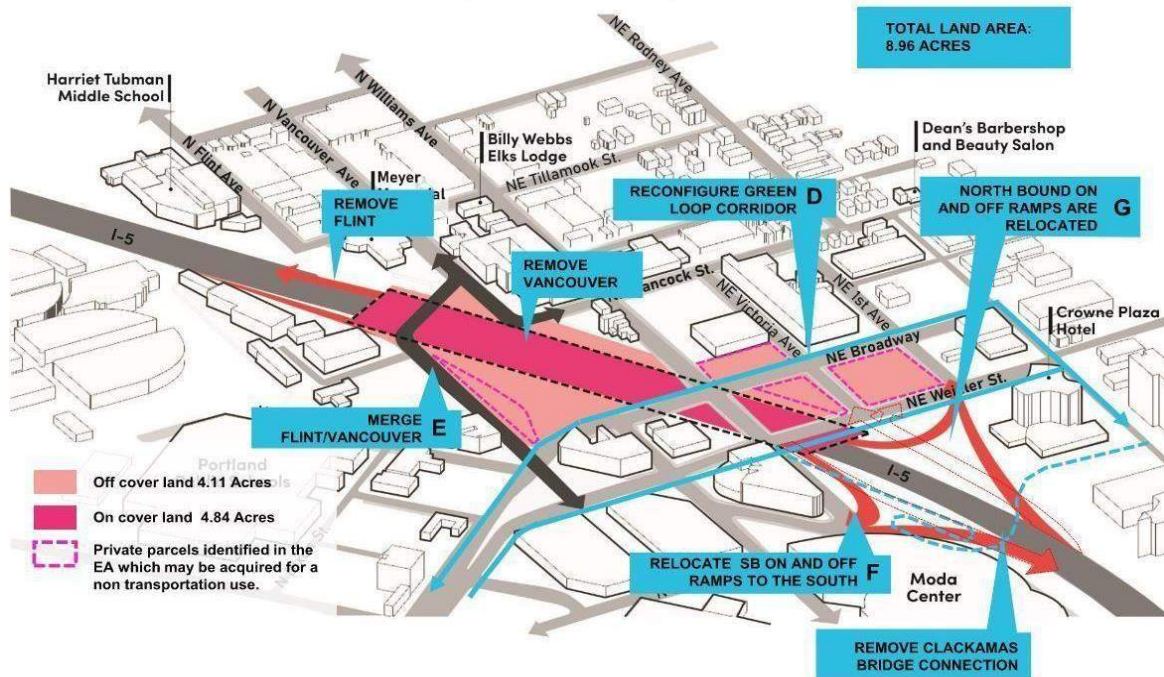
It proposes modifications to the EA base by modifying the two covers into a single continuous cover (Element A) and updating the Hancock Street connection to replace the Hancock to Dixon connection.

Scenario 1 proposes to reconnect N Flint from N Tillamook and extend it south to Weidler (Element C). The cover is extended further north to support Flint, and structures are proposed over the ramps to the north of Broadway to reduce air and noise pollution (Element B).

The Clackamas Overcrossing connection is proposed to be removed from project design and the Green Loop is aligned as a two-way facility on the south side of Weidler (Element D).

Scenario 4

Scenario Elements Center on the Cover (Concept 4)

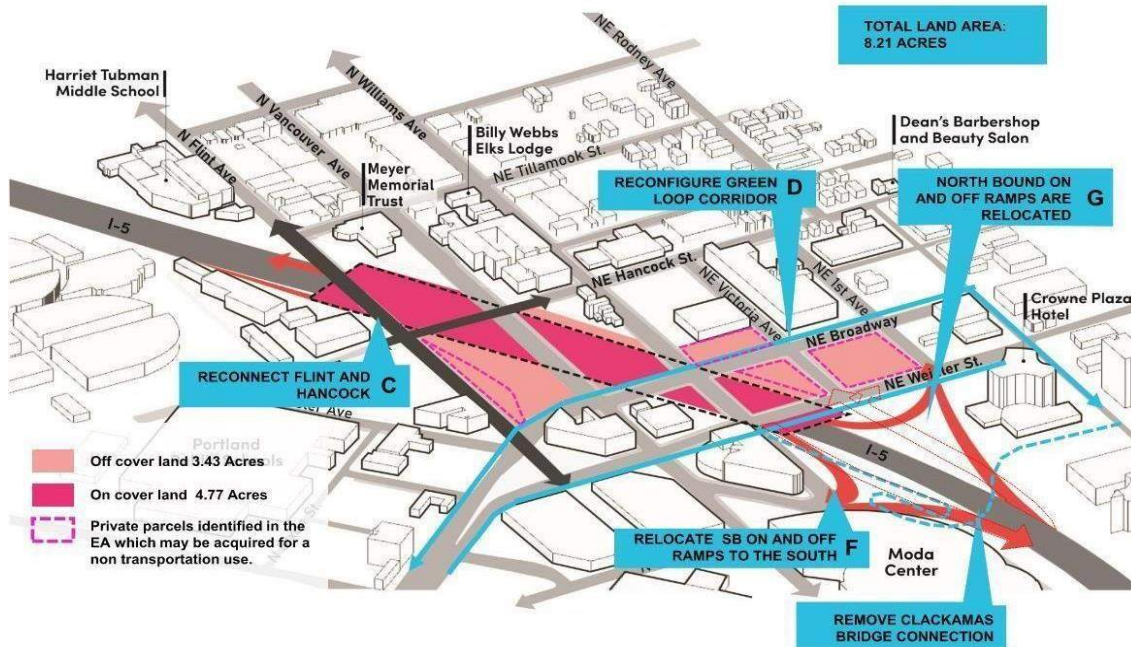


Scenario 4 includes elements A, D, E, F, and G.

Scenario 4 proposes to relocate the southbound and northbound interchange ramps south of Weidler, away from the center of the highway cover (Element F and Element G). The streets are reconfigured by merging N Flint and N Vancouver Avenues (Element E), removing Vancouver to the south of Hancock. The Clackamas Overcrossing connection is proposed to be removed, and the Green Loop is reconfigured on Broadway and Weidler (Element D), bringing it through the restored neighborhood, and connecting it to other areas of the city.

Scenario 5

Scenario Elements Restore the Grid (Concept 5)



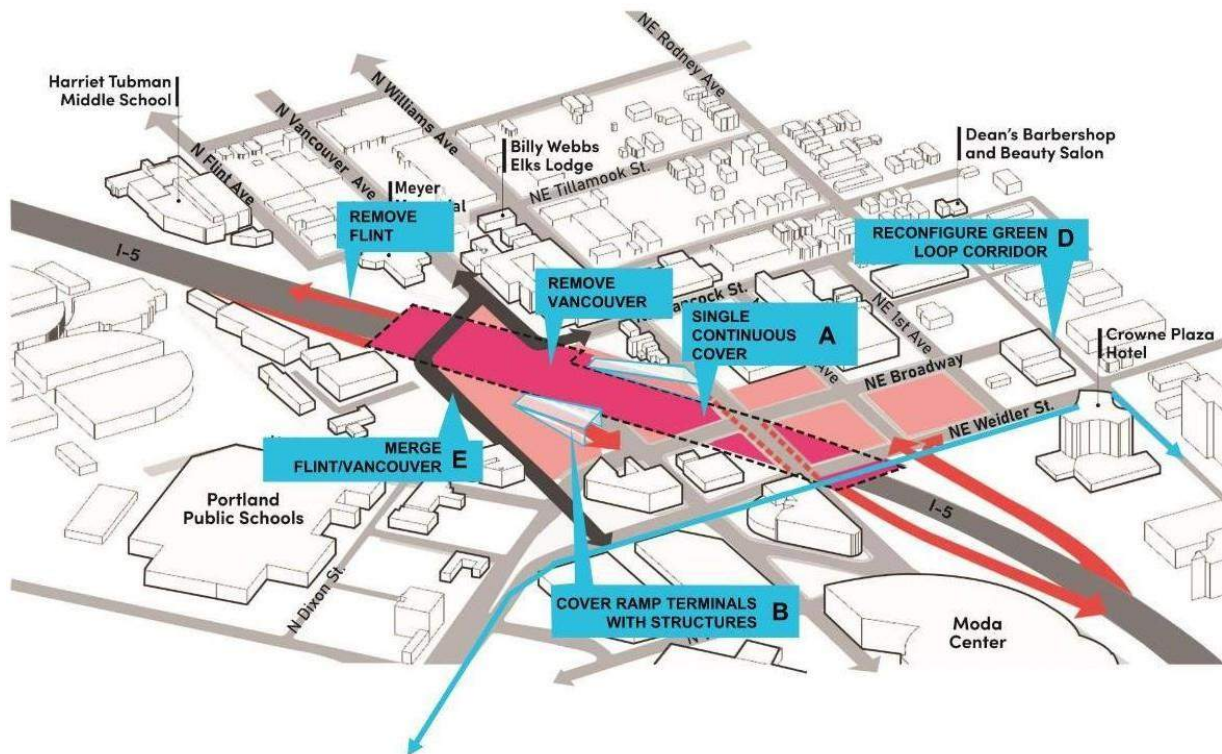
Scenario 5 includes elements C, D, F, and G.

Scenario 5, like Scenario 4, proposes to relocate the southbound and northbound interchange ramps south of Weidler, (Element F and Element G). N Flint is reconnected to N Tillamook and extended south to Weidler (Element C). The cover is extended further north to support Flint, and Hancock is reconnected straight across the highway. The Clackamas Overcrossing connection is proposed to be removed, and the Green Loop is reconfigured on Broadway and Weidler (Element D), bringing it through the restored neighborhood and connecting it to other areas of the City.

Hybrids

Hybrids, i.e., combination of various elements to form a new scenario, were developed to demonstrate how key project elements can be rearranged to reduce cost or delay to the project and create a shared solution for the Historic Albina community's goals.

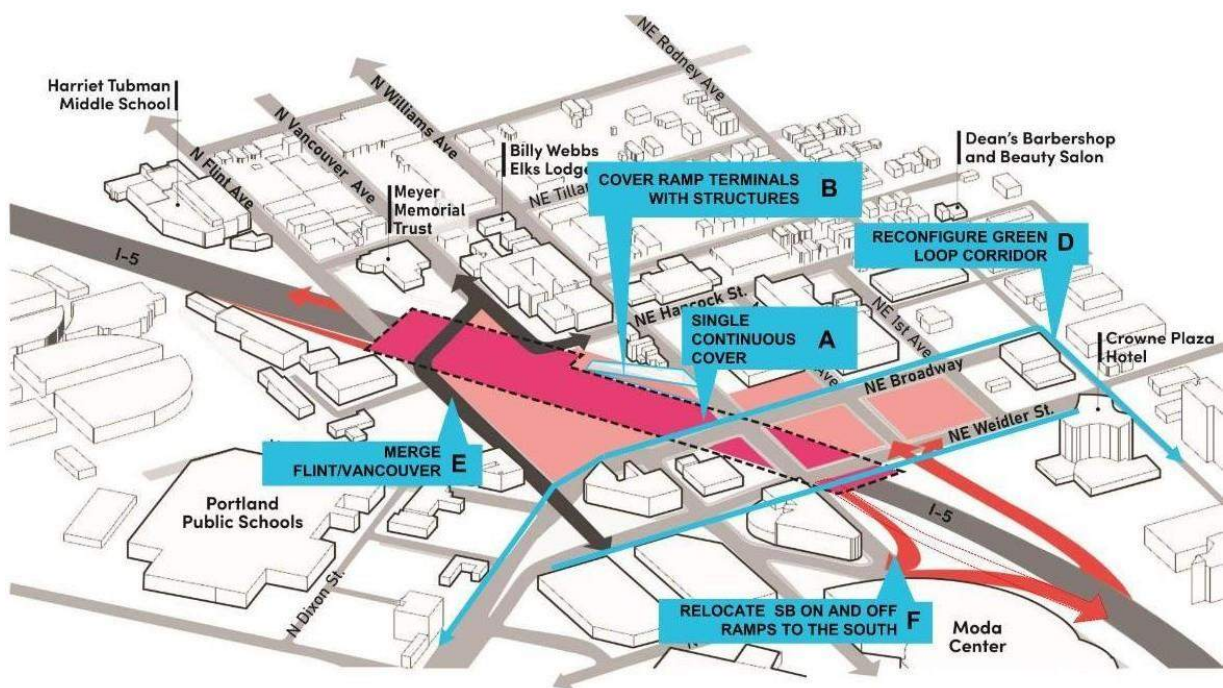
Hybrid 1



Hybrid 1 incorporates elements A, B, and D.

Hybrid 1 replaces the Flint and Hancock connection (Element C) with the Flint and Vancouver merge (Element E), to open more developable land on the cover. This improves the traffic conflict at the southbound off-ramp terminal and Broadway and creates better pedestrian crossings at this intersection. Southbound transit movements on Vancouver will experience a delay due to the reconfiguration of N Vancouver Avenue.

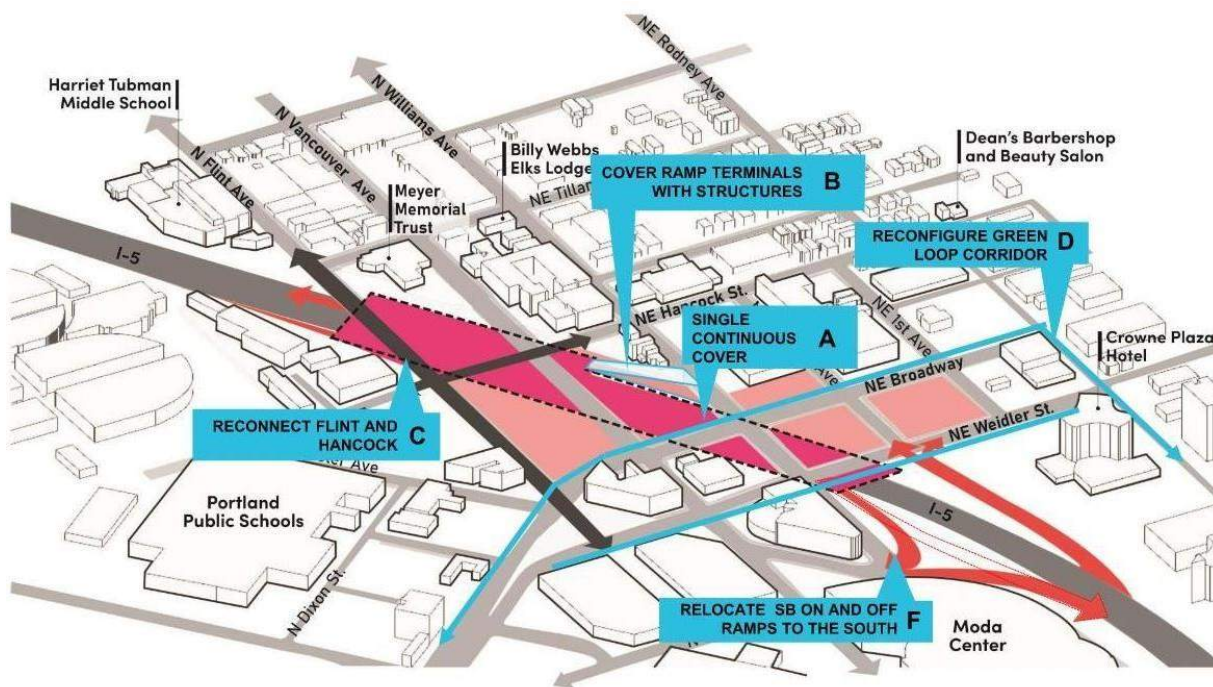
Hybrid 2



Hybrid 2 incorporates elements A, B, D, and E.

Hybrid 2 also replaces the Flint and Hancock connection (Element C) with the Flint and Vancouver merge (Element E), similar to Scenario 4. In addition, this Hybrid proposes moving only the southbound off-ramp to the south and keeping the existing southbound on ramp in its existing location. This removes the traffic conflict where the southbound off-ramp was and creates a better pedestrian experience along Broadway. By removing both N. Vancouver Avenue and the southbound off-ramp, this opens up a large flexible development parcel on and around the cover. Southbound transit movements on Vancouver would experience a delay due to the reconfiguration of N Vancouver Ave.

Hybrid 3



Hybrid 3 incorporates elements A, B, D and F.

Different from Hybrid 1 and 2, Hybrid 3 restores the Flint and Hancock connection (Element C). Similar to Hybrid 2 the southbound off-ramp is moved to the south, and the southbound on-ramp remains in its existing location (Element F). This Hybrid improves intersections for pedestrians and active-use building frontages along the restored streets: Flint and Hancock, and Vancouver and Broadway. Transit is likely not as impacted as in Hybrids 1 and 2.

The following table summarizes the seven elements: their benefits, considerations and anticipated environmental impacts that correspond with each of the scenarios or hybrids.

Element Name and Action	Benefits and Considerations
<p>Element A: One Continuous Cover Action: Creates one continuous cover instead of two separate covers</p>	<p>Benefit: Adds land and improves community cohesion. Benefit: Possibly reduces exposure to air and noise pollution on the cover and provides more area for community use and activities.</p>
<p>Element B: Structured covers for ramps Action: Cover segments of the southbound off-ramp and northbound on-ramp with structures</p>	<p>Benefit: Possibly improves air quality and noise of ramps near the cover. Benefit: Structures could be designed to expand the cultural art and landscape area on the cover. Consideration: Additional technical studies will be needed to verify air quality improvements.</p>
<p>Element C: Reconnect N. Hancock and N. Flint Action: Adjusts the street grid to replace the Hancock-Dixon Connection with Hancock extended straight across the highway. Reconnects N. Flint from N Tillamook south to N Weidler</p>	<p>Benefit: Reconnects NE Hancock from N Williams to N Flint for neighborhood access. Benefit: Reconnects N Flint Avenue between N Tillamook and N Weidler for safer bicycle and pedestrian travel, and improved neighborhood access. Consideration: Requires Environmental Assessment reevaluation and traffic study to establish if the new connection can meet the objectives of the Hancock-Dixon connection in the EA Base Case. Consideration: Additional technical studies will be needed to verify N. Flint grades along new and existing adjacent development. Consideration: Extending N. Flint between Broadway and Weidler will have private property impacts, and changes to existing right-of-way.</p>
<p>Element D: Reconfigure Green Loop Corridor Action: Eliminate the Clackamas Pedestrian Bridge and reconfigures the Green Loop through the neighborhood.</p>	<p>Benefit: Routing the Green Loop through the restored Albina Neighborhood on and around the cover will bring additional pedestrian access to new Black businesses on Broadway and Weidler and connect the neighborhood with other areas of the Central City. Benefit: Location on active street increases public safety on this length of Green Loop rather than located over a bridge. Consideration: By integrating the Green Loop into existing street corridors, a traffic study will need to demonstrate that Broadway and Weidler are improved alternatives to connect the Green Loop to other areas of the Central City. Consideration: Reconfiguring the Green Loop on Broadway and Weidler will create more intersection crossing points for users versus the Clackamas Overcrossing.</p>

	<p>Consideration: This reconfiguration is a change to adopted policy agreements and city plans and will need to be approved by the City of Portland.</p>
<p>Element E: Merge N Flint and N Vancouver</p> <p>Action: Merge N Flint into N Vancouver the add a new signal at N. Flint and Broadway and adjust signal timing to reduce impact on transit. Assess benefit to current congestion at intersection Vancouver and Broadway</p>	<p>Benefit: Creates largest area of contiguous land on and around the cover.</p> <p>Benefit: Removes existing intersection complexity at Vancouver and Broadway at southbound I-5 off-ramp.</p> <p>Consideration: Adjust signal timing to reduce delay to TriMet service southbound to the Rose Quarter Transit Center.</p> <p>Consideration: Reassign street classifications in the City's transportation system plan in concert with community engagement through Portland Bureau of Transportation.</p> <p>Consideration: Requires a new signalized intersection at N. Flint and Broadway.</p>
<p>Element F: Move southbound ramps</p> <p>Action: Move southbound ramps. Relocate southbound off-ramp south of the highway cover and keeps southbound on-ramp in its current location.</p>	<p>Benefit: Creates more developable land with better street frontages on and around the cover for restoration of the Black Historic Albina neighborhood.</p> <p>Benefit: Likely minimizes air and noise pollution along Williams and Vancouver.</p> <p>Benefit: Improves pedestrian experience on N Broadway and removes existing intersection complexity at Vancouver and Broadway at southbound I-5 off-ramp.</p> <p>Consideration: Conduct traffic study to evaluate traffic operations impacts at Wheeler and on Winning Way.</p> <p>Consideration: Assess Madrona Studios Housing Environmental Justice impacts due to traffic operations of relocated southbound ramps.</p> <p>Consideration: Assess additional property and right-of-way impacts due to wider cover.</p> <p>Consideration: Interchange modification request required. New interchange eliminates the Clackamas Overcrossing and is inconsistent with the Facility Plan.</p>
<p>Element G: Move northbound ramps.</p> <p>Action: Relocate northbound on-ramp south of the cover and move northbound off-ramp to east</p>	<p>Benefit: Increases frontage of ground level active uses on Williams and Broadway improving social and community cohesion</p> <p>Consideration: Assess impacts of acquiring additional land from historic Travelodge at the Coliseum (Crowne Plaza), which is a 4(f) property.</p> <p>Consideration: Assess additional property and right-of-way impacts due to wider cover.</p> <p>Consideration: All traffic impacts are studied by the ICA team at a conceptual level and a comprehensive traffic analysis will need to be completed. This would include a traffic study to check effects on volume and distribution of traffic on NE 1st Avenue at between Broadway and Weidler.</p>

	<p>Consideration: Longer signal cycle lengths at Broadway and NE 1st Avenue, and Weidler and NE 1st Avenue.</p> <p>Consideration: Interchange modification request required. New interchange eliminates the Clackamas Overcrossing and is inconsistent with the Facility Plan.</p> <p>Consideration: Quantify potential delay for streetcar.</p> <p>Consideration: Will impact full Prosper Portland parcel.</p> <p>Consideration: Partially impacts the sites north of Broadway between NE 2nd Avenue and NE Victoria Avenue by approximately 8 to 12 feet.</p>
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REEVALUATION

Approach

Design refinements are typical for large infrastructure projects and NEPA reevaluations are a typical component for transportation project development. The reevaluation process may vary based on the type and size of a project and may have the potential need for supplemental, revised, and/or new levels of documentation. The reevaluation for the design changes recommend from the ICA would address the resources potentially affected by design changes reported in the EA and for the design changes recommended from the ICA.

The ICA team is anticipating that the reevaluation may require technical studies for, but not limited to: transportation (traffic, active transportation, right-of-way), air quality and climate change, noise, historic resources, Section 4(f), land use, and environmental justice to determine whether the environmental impacts in the EA and FONSI remain valid. FHWA would be consulted to determine the how an expanded Project Description inclusive of restorative justice and objectives could be reviewed and adopted as part of the reevaluation. In this context, the EA project design, combined with restorative justice and Historic Albina community opportunities in the highway cover scenarios, must be locally advocated to the FHWA in the NEPA reevaluation process.

Success will be defined as using the reevaluation process to address ODOT and ICA design changes to present the analyses to the FHWA, and assess whether the EA and FONSI remains valid, (e.g., either there are no greater impacts than what was disclosed in the current EA or that impacts are less than those disclosed and accompanied by substantial community cohesion benefits).

This proposed approach is likely the most efficient pathway toward reducing any remaining environmental clearance barriers, implementing community enhancements to restore community cohesion create the greatest potential for restorative justice outcomes, meeting project schedule objectives, and securing the necessary federal funding commitments.

Logistics

The following summarizes the reevaluation process:

- ODOT informs FHWA there are project design refinements (inclusive of the ICA design-related community benefits), and whether the EA/FONSI remains valid. Should the affected community and stakeholders support the proposed changes, ODOT informs FHWA.
- FHWA responds with a request for consultation and documentation supporting the ODOT claim consistent with the requirements in 23 CFR 771.129.
- ODOT prepares (with support from the ICA Team) a draft reevaluation document for FHWA review. This documentation would address appropriate EA topic areas and include focused technical studies pertinent to the decision on the efficacy of the current EA, and would be limited to areas where designs differ from the current EA. Anticipated updated technical studies would include, but may not be limited to:
 - Transportation (including right-of-way, roadway and structures, traffic operations, local circulation, etc.)
 - Noise
 - Air Quality and Climate Change
 - Historic and Cultural Resources (Section 106 National Historic Preservation Act)
 - Section 4(f) (Travelodge at the Coliseum and Willamette Greenway Boundary)
 - Land Use
 - Environmental Justice (Madrona Studios)

- Once revisions are finalized, FHWA reviews and accepts the reevaluation and files any necessary notification in the Federal Register regarding their determination(s) of whether the EA/FONSI remains valid. FHWA could also require that ODOT hold additional public meetings to inform the public about project changes.

If FHWA determines that a new EA is required and to provide the public a specific opportunity to comment on the project changes (public comment period), then the reevaluation document and updated technical studies would be repackaged for this purpose. Additional time would be needed for the FHWA EA review, public circulation, a public comment period and a revised FONSI from FHWA.

Risk to Schedule

Once a consensus agreement is achieved for the project design changes and public and stakeholder support is aligned for these changes (inclusive of ICA design-related community benefits), then the resource studies, environmental documentation, internal review, and submission to the FHWA could be accomplished. Any subsequent revisions, including the advancement of level of engineering design would extend the schedule before FHWA requirements are met.

Table 1 summarizes the risks to the overall reevaluation schedule based on the topics evaluated in the EA. These potential evaluations are associated with the ICA elements, level of engineering design, and anticipated agency coordination. As shown in the table, some design elements in Scenarios 4 and 5 (as well as the Hybrid options) would require additional technical studies and a higher level of engineering design that could add between 14 to 24 months to the schedule.

Table 2 shows that Hybrids would not require Element G and therefore eliminate the potential to impact historic (Section 106) resources, and Section 4(f) assets. This would eliminate resource investigations, alternatives analysis and agency coordination for the Section 4(f) property and with the State Historic Preservation Office (SHPO) for the Section 106 compliance.

For all scenarios, the actual time of delay will not be known until the City of Portland assesses their concerns for the project's conformance with the Comprehensive Plan. The range of time provided in this analysis is based on ODOT's stated assumption for Scenario 1 (no delay) and ICA team's assessment of the time required for a formal reevaluation for Scenarios 4 and 5 (14 to 24 months). When the City completes its assessment of the Project and makes a finding of support, any significant delay in the environmental review could be minimized in collaboration with the City of Portland.

Table 1. Risk to Schedule by EA Topic and Proposed ICA Development Scenarios

EA Topic	Impact Driver	Design Elements	Development Scenarios	Dependency	Re-Eval Needed	Re-Eval Tech Study/ Memo/ Drawings	Third Party Approval / Permit Process	Time Frame (in weeks/ months)	Risk to Schedule
Coordination/ Stakeholder Support	Overall strategy and greenlight to move forward in reevaluation process	N/A	1, 4, 5	N/A	N/A	N/A	N/A	N/A	High
Project Description	If element is a product based on an expanded Project Description	A, B, C, D, E, F, G	1, 4, 5	N/A	Y	N	OTC	2 weeks	Low
Engineering Design Refinement	If Criteria requires additional design refinements	A, B, C, D,	1	ICA elements and Scenarios	Y	Y	ODOT	8 weeks (2 months)	Med
Engineering Design Refinement	If Criteria requires additional design refinements	A, B, C, D, E, F, G	4, 5	ICA elements and Scenarios	Y	Y	ODOT	24 weeks (6 months)	High
Project Description	If element is a product based on an expanded Project Description	A, B, C, D, E, F, G	1, 4, 5	N/A	Y	N	OTC	2 weeks	Low
Air Quality	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	Transportation	Y	Y	N/A	8 weeks (2 months)	Low
Aquatic Biology	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	N/A	N	N	N/A	0	N/A
Archaeology (part of historic resources task)	If element is beyond order of magnitude concluded in the EA/FONSI	F, G	4, 5	ROW/API	Y	Y	Oregon SHPO	4 weeks (1 month)	Low
Climate Change	If element is beyond order of magnitude concluded in the EA/FONSI	N/A		Air Quality, Transportation	Y	N	N/A	1 week	Low
Environmental Justice	If element is beyond order Of magnitude concluded in the EA/FONSI; creates a new disproportionate adverse effect	C, D, E, F, G	4, 5	ROW/API; Transportation; Noise; Historic Resources	Y	Y	N/A	8 weeks (2 months)	Low

Hazardous Materials	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	ROW/API	Y	N	N/A	1 week	Low
Historic Resources	If element is beyond order of magnitude concluded in the EA/FONSI; adjacent to or located on historical resources	G	4, 5	ROW/API	Y	Y	Oregon SHPO	16 weeks (4 months)	High
Land Use	If element affects acquisitions	F, G	4, 5	ROW/API	Y	N	N/A	2 weeks	Low
Noise	If element is beyond order of magnitude concluded in the EA/FONSI; adjacent to or located on historical resources	F, G	4, 5	ROW/API; Transportation	Y	Y	N/A	8 weeks (2 months)	Moderate
Right-of-Way	If element requires additional acquisitions or displacements	A, B, C, D, E, F, G	1, 4, 5	ROW/API	Y	Y	N/A	8 weeks (2 months)	Moderate
Section 4(f)	If element is beyond order of magnitude concluded in the EA/FONSI; adjacent to or located on historical resources	G	5	ROW/API; Historic Resources; Noise	Y	Y	FHWA	16 weeks (4 months)	High
Socioeconomics	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	ROW/API	Y	N	N/A	2 weeks	N/A
Transportation	If element is beyond order of magnitude concluded in the EA/FONSI; creates changes to circulation patterns, street/freeway operations, vehicle miles travelled (VMT)	C, D, E, F, G	4, 5	ROW/API; Design Alignment; Operations	Y	Y	ODOT; Metro; City of Portland	16 weeks (4 months)	High
Utilities	If element is beyond order of magnitude concluded in the EA/FONSI; impacts to major utilities not previously identified	C, D, E, F, G	4, 5	ROW/API	Y	N	City; Local utility companies	12 weeks (3 months)	Low

Water Resources	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	N/A	N	N	N/A	0	N/A
Cumulative Effects	If element provides restorative community benefits not previously identified in the EA	A, B, C, D, E, F,G	1, 4, 5	Socioeconomics; Land Use; Transportation	Y	N	N/A	12 weeks (3 months)	Low

Note: The gray shade identifies the environmental topics that would be “high” risk to the overall schedule. Historical, Archaeological, 4(f) properties, environmental justice resource studies, reports and agency reviews are considered to be running concurrently using a 10 percent level of engineering design.

Table 2. Risk to Schedule by EA Topic and Proposed Hybrid Elements

EA Topic	Impact Driver	Scenario Element	Hybrid	Dependency	Re-Eval Needed	Re-Eval Tech Study/ Memo/ Drawings	Third Party Approval / Permit Process	Time Frame (in weeks/ months)	Risk to Schedule
Coordination/ Stakeholder Support	Overall strategy and greenlight to move forward in re-eval process	N/A	1, 2, 3	N/A	N/A	N/A	N/A	N/A	High
Project Description	If element is a product based on an expanded Project Description	A, B, C, D, E, F	1 = ABDE 2 = ABDEF 3 = ABCDF	N/A	Y	N	OTC	2 weeks	Low
Engineering Design Refinement	If Criteria requires additional design refinements	A, B, C, D, E, F	1 = ABDE 2 = ABDEF 3 = ABCDF	ICA elements and Scenarios	Y	Y	ODOT	20 weeks (5 months)	High
Air Quality	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	Transportation	Y	Y	N/A	8 weeks (2 months)	Low
Aquatic Biology	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	N/A	N	N	N/A	0	N/A
Archaeology ([part of the Historic Resources task])	If element is beyond order of magnitude concluded in the EA/FONSI	F	2, 3	ROW/API	Y	Y	Oregon SHPO	4 weeks (1 month)	Low
Climate Change	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	Air Quality, Transportation	Y	N	N/A	0	Low
Environmental Justice	If element is beyond order of magnitude concluded in the EA/FONSI; creates a new adverse disproportionate effect	C, D, E, F	1, 2, 3	ROW/API; Transportation; Noise	Y	Y	N/A	12 weeks (3 months)	Low
Hazardous Materials	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	ROW/API	Y	N	N/A	0	Low
Land Use	If element affects acquisitions	F	2, 3	ROW/API	Y	N	N/A	2 weeks	Low

Noise	If element is beyond order of magnitude concluded in the EA/FONSI; adjacent to or located near sensitive receptors	F	2, 3	ROW/API; Transportation	Y	Y	N/A	8 weeks (2 months)	Moderate
Right-of-Way	If element requires additional acquisitions or displacements	A, B, C, D, E, F	1, 2, 3	ROW/API	Y	Y	N/A	8 weeks (2 months)	Moderate
Socioeconomic s	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	ROW/API	Y	N	N/A	0	Low
Transportation	If element is beyond order of magnitude concluded in the EA/FONSI; creates changes to circulation patterns, street/freeway operations, VMT	C, D, E, F	1, 2, 3	ROW/API; Design Alignment; Operations	Y	Y	ODOT; Metro; City of Portland	14 weeks (3.5 months)	High
Utilities	If element is beyond order of magnitude concluded in the EA/FONSI; impacts to major utilities not previously identified	C, D, E, F	1, 2, 3	ROW/API	Y	N	City; Local utility companies	0	Low
Water Resources	If element is beyond order of magnitude concluded in the EA/FONSI	N/A	N/A	N/A	N	N	N/A	0	N/A
Cumulative Effects	If element provides restorative community benefits not previously identified	A, B, C, D, E, F	1, 2, 3	Socioeconomics; Land Use; Transportation	Y	N	N/A	12 weeks (3 months)	Low

Note: The gray shade identifies the environmental topics that would be “high” risk to the overall schedule. Resource studies, eg., environmental justice study, reports and agency reviews are considered to be conducted concurrently using a 10 percent level of engineering design.

Environmental Timeline for FHWA Reevaluation Approval

This environmental timeline is a comparative planning level schedule for the design and FHWA approval of a reevaluation of the existing EA within the existing FONSI (Figure 1). This schedule is predicated on FHWA agreeing in a coordination meeting prior to the start date that the reevaluation is an appropriate pathway for the RQIP under federal rules 23 CFR 771.129 and the Agency formalizing this agreement with FHWA on NEPA environmental process for a selected scenario prior to the start date.

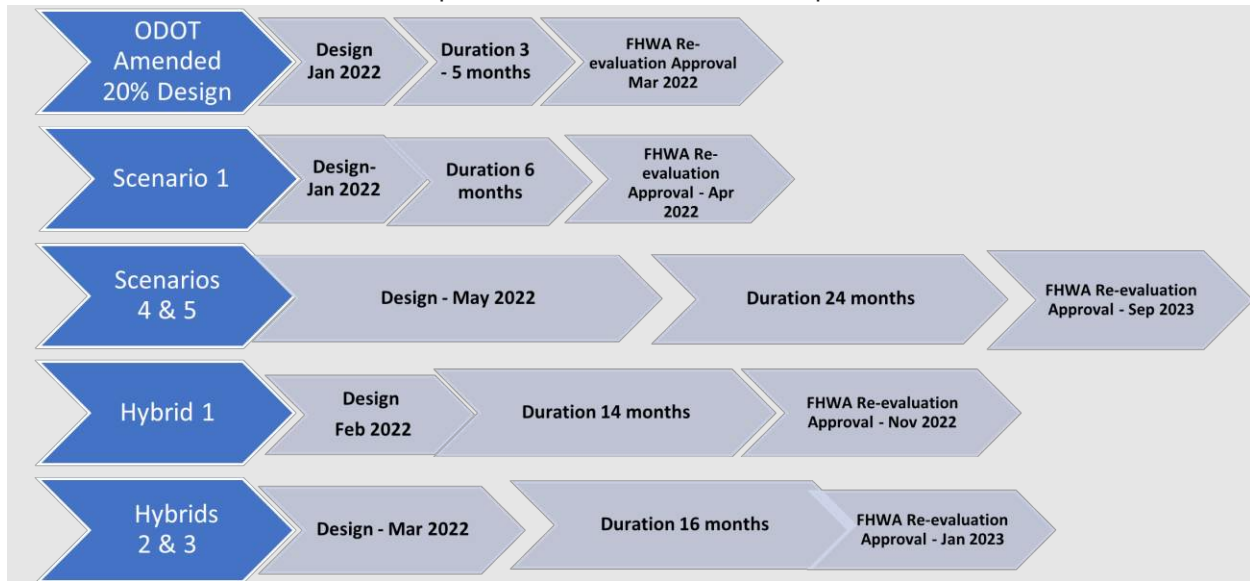


Figure 1. Comparative Planning Level Timeline for FHWA Reevaluation under NEPA by Scenario

The timeline schedule assumes a single scenario is selected and the highway cover design phase starts September 1, 2021. The current RQIP amended 20% design is assumed to be elevated to a 30% design no later than December 30, 2021. After elevation of the 30% design FHWA review would ensue along with additional review and approval of construction drawings and specifications.

Although it may be clear, it should be stated that these schedule implications are not for the entire project, this is the time estimated for the FHWA reevaluation approval under NEPA. The process, once agreed between the FHWA and ODOT, would be similar for any of the proposed scenarios or hybrids and FHWA approval milestones related to the statutory process. The selected highway cover, update of the roadway, structures and right-of-way must first be designed to a level to effectively proceed with environmental effects analysis. This engineering design update would be the first step required under all the scenarios, except Scenario 1 which is analogous to ODOT's amended 20% design.

The milestones for FHWA environmental reevaluation process (Figure 1) range from approximately 3 months to a maximum of 24 months for the ICA Scenarios 4 and 5 that both involve relocating the northbound and southbound ramps south of the highway covers. (Elements F and G). Scenario 1 engineering would be the same as the EA for the 20% amended design of the Hancock/Flint connection; therefore, the time required for the reevaluation would involve minimal additional time to include the new description of the highway cover and conduct effects analysis for specific topic areas, eg., land use and traffic as shown in Tables 1 and 2 under Reevaluation Required and Reevaluation Technical Study Needed). Scenarios 4 and 5 both require engineering design for closed and added ramps, street reconnections and new configurations for one continuous highway cover. Estimated as 6 months for a sufficient level of design to be reviewed with FHWA, the studies of transportation operations and local traffic, transit and associated resource effects. i.e., air and noise, land use, can be undertaken. Two additional resource investigations of the potential "taking" of 4(f) or historical resources, i.e., the

Travelodge at the Coliseum (Crowne Plaza Hotel) and Environmental Justice (EJ) study for the Madrona Studio property are estimated to extend the project environmental reevaluation approval timeline for 18 months. Although review times can vary for these additional agency reviews, the timeline is since both resources are within the Area of Potential Impact (API) and were included in the EJ study and the Section 4(f) Technical report and Section 106 for the adopted EA. The reevaluation should not require extensive new review time but must meet statutory requirements for notification and approval within the context of the existing FONSI and Programmatic Agreement with SHPO.

Hybrid 1 involves a traffic study regarding the performance of local roads with the freeway and coordination with the Portland Bureau of Transportation (PBOT) with the reassignment of Vancouver and Flint. The engineering design would precede the traffic study so local streets performance could be analyzed with focus on transit, bike, pedestrian, and vehicular modes; estimate 5 months study with limited resource studies. Hybrid 2 and 3 each add redesign of the southbound off-ramp (Element F) with the proposed new cover in the location that it is currently. This would trigger examination of the properties listed under the environmental justice impacts, may include a public 30-day notice and extend consultation to address comments. Estimated five months for engineering design with eleven months for the additional FHWA reevaluation approval process.