

# Planning Summary

## Aberdeen US 12 Highway-Rail Separation Project

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**ABERDEEN US 12**  
Highway-Rail Separation Project



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## ACRONYMS

DEA	David Evans and Associates, Inc.
FAQ	Frequently Asked Questions
LOS	Level of Service
PSAP	Puget Sound & Pacific Railroad, owned by Genesee and Wyoming, Inc.
US 12	US Highway 12
WSDOT	Washington State Department of Transportation

# EXECUTIVE SUMMARY

The following executive summary is an overview of the project work completed during the planning phase of the Aberdeen US 12 Highway-Rail Separation Project, including project approach, substantive findings and conclusions. This narrative is intended to quickly give the reader an understanding of the project. Technical readers will find a comprehensive narrative following this summary and detailed technical subject narrative contained in the appendices of this report.

## 1.1. Background

### **Project Limits:**

The Aberdeen US 12 Highway-Rail Separation Project is located between Morrison Riverfront Park and the Wishkah River Bridge in Aberdeen, Washington. Within the project limits, US 12 is a four-lane facility with a center turn lane, with commercial properties along the north and south sides of US 12. The Puget Sound & Pacific (PSAP) Railroad parallels US 12 on the south side within the project limits and serves the Port of Grays Harbor on the west side of Aberdeen.

### **Purpose and need:**

Improvements to the transportation system in east Aberdeen are necessary to relieve congestion, increase mobility, and improve safety on US 12, and improve non-motorized access and safety along US 12.

US 12 serves as the principal transportation route through Aberdeen from the east. In addition to serving as the primary route to the coastal communities on the Pacific Ocean and Olympic Peninsula, it is the arterial roadway for local residents, businesses, and moves freight and goods to and from the Port of Grays Harbor.

The commercial area on the south side of US 12 is a significant retail hub in Grays Harbor County and is located between the PSAP railroad and the confluence of the Wishkah and Chehalis Rivers. Local residents and visitors to Grays Harbor frequent the commercial area, as they patronize retail shops and restaurants. The only access to the commercial area from US 12 requires crossing over the PSAP Railroad's tracks at seven at-grade intersections and private driveways. When trains pass through east Aberdeen along the PSAP tracks, access to the commercial area is completely blocked until the train passes, which causes traffic congestion in East Aberdeen.

During this blockage, vehicles queue in the US 12 eastbound, right (outside) lane and the westbound, left turn lane until the train clears the intersections and access drives. As the waiting-vehicle queue lengths build up, it blocks US 12 through movement traffic in both the eastbound and westbound directions. Emergency vehicle access to the commercial area is not available when the trains are present, which can last up to 30 minutes depending on train length.

### **Project Partners:**

The City of Aberdeen (City) has been working with multiple project partners to solve congestion and access issues along US 12 in East Aberdeen since 2006.

In 2014, the East Aberdeen Mobility Alternatives Analysis project was initiated and sponsored by a partnership between Grays Harbor Council of Governments (GHCOG), the City, Port of Grays Harbor (Port), and Washington State Department of Transportation (WSDOT). The alternatives analysis was completed in 2015 and resulted in a preferred alternative for the US 12 corridor.

In 2017, the City received a state-funded grant which allowed the City to move into the current planning phase and retain the consultant team led by David Evans and Associates, Inc. to refine the preferred alternative concept. During this planning phase the project name transitioned to 'Aberdeen US 12 Highway-Rail Separation' Project.

### **Project Objectives:**

The main goal of the project is to develop a grade-separated access from US 12 to the commercial area to the south, over the Puget Sound and Pacific (PSAP) railway, to improve mobility and safety on US 12. In addition, accessibility and safety for non-motorized users in East Aberdeen is lacking and will be evaluated for incorporation into the project.

### **Project Phasing:**

The scope of this planning study includes researching existing site conditions, advancing the preferred alternative design concept to support a concept-level construction cost estimate, continuing outreach to the public and property owners, and pursuing funding sources for future phases.

The Future phases will include Preliminary Engineering (PE), Right of Way, and Construction. The City has secured approximately \$700,000 in state funding for a portion of the PE phase, which will begin in early 2021.

## **1.2. Planning Phase Work Completed to Date:**

The following work has been completed or is substantively complete to date:

- Public involvement with property owners, businesses, and general public
- Desktop review and field explorations of existing geotechnical conditions
- Performed traffic analysis of US 12 and proposed roundabout (build condition)
- Conceptual design of preferred design alternative
- Conceptual level construction cost estimate and construction schedule of preferred alternative
- Conceptual level evaluation of right of way impacts for preferred alternative

## **1.3. Substantive Findings**

The following list of findings from the work completed to date that had a significant impact on the development of the alternatives and most recently the refinement of the preferred alternative concept includes:

- Economic vitality of area businesses must be considered as a priority in refinement of the preferred alternative conceptual design
- Potential future Federal funding will trigger NEPA approval, which requires that environmental values are integrated into decision making processes for all phases of the project

- Geometry of the roundabout and overcrossing structure must accommodate the turning radii of emergency vehicles, recreational vehicles, and delivery vehicles as large as an AASHTO WB-67 semi-truck
- Vertical alignment of the overcrossing structure must meet the Genesee and Wyoming, Inc.'s., (PSAP Railroad's owner) vertical clearance requirement
- Poor subsurface conditions and bearing capacity will control the foundation type of the overcrossing structure and retaining walls
- Right of way impacts cannot be avoided but will be minimized where possible with minor adjustment to the preferred alternative design and use of retaining walls for the overcrossing approaches
- Construction phasing of the roundabout and Chehalis Street overcrossing is critical to minimizing impacts to the nearby residents, businesses, and traveling public

#### **1.4. Concept Development**

The following activities occurred in this planning phase to move the preferred design concept forward:

- Traffic Analysis of US 12 travel lanes and proposed roundabout at Newell Street
- Geometric design refinement including addition of the Auxiliary Eastbound Access Ramp to merge into the Chehalis Street overcrossing ramp
- Geotechnical field explorations in vicinity of Chehalis Street overcrossing and Auxiliary Eastbound Access Ramp to support structure foundation and retaining wall design
- Conceptual design renderings and modeling to support public outreach activities
- Construction and right of way impact cost development
- Project updates provided to property owners and critical stakeholders
- Online open house hosted by City to present conceptual design refinements, project schedule, and funding approach

#### **1.5. Next Steps**

This planning phase expands on the 2015 preferred alternative, *Chehalis Street Overcrossing*, and develops the conceptual design to a sufficient level of detail to allow the City and project partners to apply for state and federal grant programs for future phases of the project.

The refined conceptual design incorporates a two-lane roadway overcrossing bridge with bike lanes and a sidewalk over US 12 and the PSAP rail line, at Chehalis Street. An Auxiliary Eastbound Access Ramp with one travel lane will divert traffic from eastbound US 12, without entering the roundabout, and merges with the Chehalis Street overcrossing structure. Conceptual level right of way acquisition is estimated at \$7 Million and construction costs are estimated to be \$29 Million.

The City will pursue project funding for PE, R/W and CN phases through a combination of local, state and federal funds.

The City will partner with WSDOT to develop the future phases of the project, beginning with the start of the PE phase in March 2021.

# ABERDEEN US 12 HIGHWAY – RAIL SEPARATION PROJECT

## 1. Background

### 1.1. Project Study Area

The Project study area is located within the eastern limits of the City of Aberdeen (City), Grays Harbor County, Washington (see Figure 1).

**Figure 1: Vicinity Map**



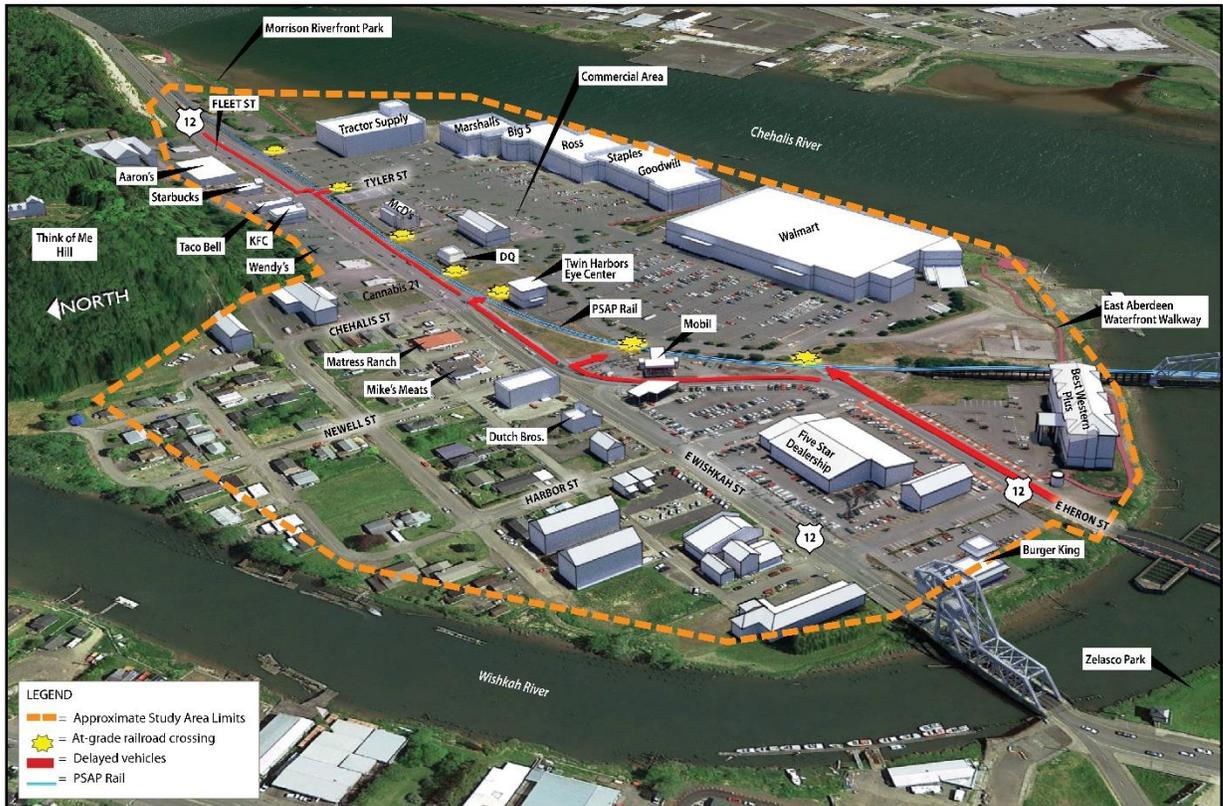
The study limits stretch approximately 0.5 miles along US 12 (E. Wishkah Street), and is bounded by Morrison Riverfront Park on the east, the Wishkah River on the west, the Chehalis River and the commercial area on the south, and the steep hillside of ‘Think-of-me-hill’ on the north (see Figure 2: Study Limits).

Between S. Newell Street and S. Fleet Street, US 12 consists of two-way traffic in the east-west direction with four travel lanes and a center turn lane. To the west of S. Newell Street, US 12 splits into one-way couplets, with the westbound traffic continuing along E. Wishkah Street and the eastbound traffic from downtown Aberdeen on E. Heron Street.

Non-motorized facilities within the US 12 corridor include a sidewalk on the north side of US 12 between the Wishkah River and S. Fleet Street, and the south side of E. Heron Street along the Best Western Hotel frontage. There are currently no bicycle lanes on US 12 within the study limits.

The PSAP rail line, owned by Genesee and Wyoming, Inc., is located adjacent to the southern edge of US 12 between the eastern edge of the study limits and Chehalis Street, at which point the rail line curves to the southwest towards a timber trestle and then crosses over a swing bridge at the Wishkah River. The PSAP railway carries rail traffic in both directions and crosses seven at-grade driveways/intersections between US 12 and the commercial area. Train speed in this vicinity is currently limited to 10 miles per hour (mph).

**Figure 2: Study Limits**



## 1.2. Project Partners

The City of Aberdeen (City) has been working with multiple project partners to solve congestion and access issues along US 12 in East Aberdeen since 2006.

In 2014, the East Aberdeen Mobility Alternatives Analysis project was initiated and sponsored by a partnership between Grays Harbor Council of Governments (GHCOG), the City, Port of Grays Harbor (Port), and Washington State Department of Transportation (WSDOT). The alternatives analysis was completed in 2015 and resulted in a preferred alternative for the US 12 corridor.

In 2017, the City received state funding, administered by WSDOT Rail Office, which allowed the City to move into the current planning phase and retain the consultant team led by David Evans and Associates, Inc. to refine the preferred alternative concept.

During this planning phase the project name transitioned to 'Aberdeen US 12 Highway-Rail Separation' Project.

## 2. Existing Conditions

The majority of the traffic congestion in East Aberdeen is the result of vehicles destined for the commercial area on the south side of US 12, which is the main retail hub in the community and Grays Harbor County. Local residents as well as visitors to Grays Harbor access the commercial area from US 12 by crossing over the PSAP Railway at seven, at-grade intersections/driveways. When trains are moving through east Aberdeen along the PSAP railway, to and from the Port of Grays Harbor, vehicular access to the commercial area is completely blocked. These blockages may last up to 30 minutes, multiple times a day. During this blockage, vehicles queue in the US 12 eastbound, right (outside) lane and the westbound, left turn lane until the train clears the access drives. As the waiting-vehicle queue lengths build up, it blocks US 12 through movement traffic in both the eastbound and westbound directions. For eastbound direction, traffic also backs up across the Heron Street Bridge into downtown Aberdeen.

Non-motorized facilities in East Aberdeen are limited to an existing sidewalk on the north side of US 12. Pedestrians are currently able to cross US 12 at the signalized intersections of Chehalis Street and Tyler Street, and an unsignalized crossing of eastbound US 12 at Harbor Street. There are currently no designated bike lanes within the US 12 corridor in East Aberdeen.

## 3. Previous Studies

In 2014, the East Aberdeen Mobility Alternatives Analysis project was initiated and sponsored by a partnership between Grays Harbor Council of Governments (GHCOG), the City, Port of Grays Harbor (Port), and Washington State Department of Transportation (WSDOT).

The work included evaluating roadway improvement alternatives for a grade-separated access over the PSAP railway to eliminate parked vehicles on US 12 that are waiting for trains to pass. The work also included evaluating non-motorized facilities such as sidewalks, cross walks and bike lanes within the project limits.

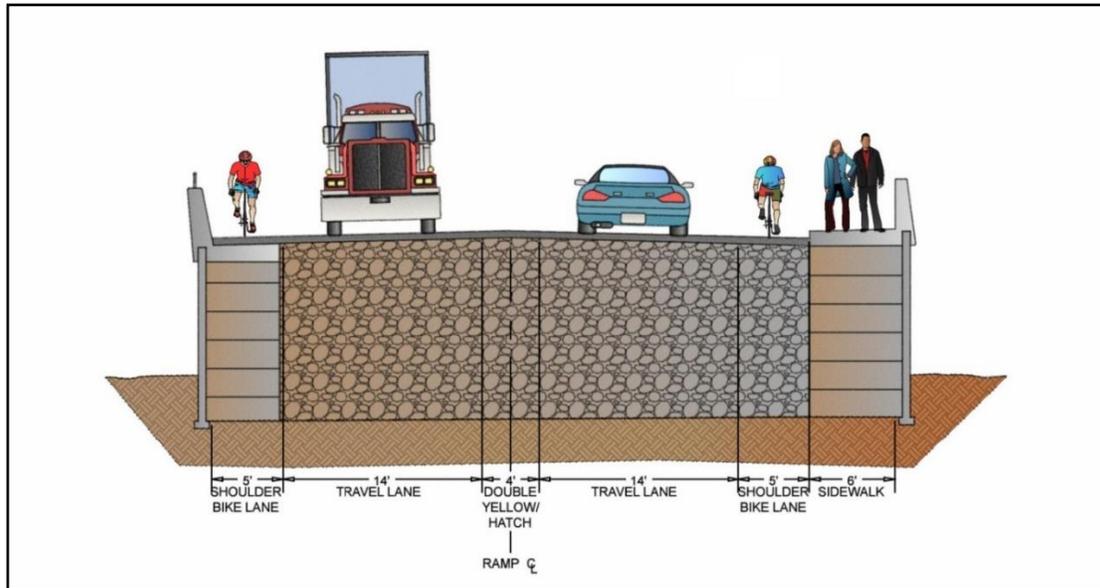
The project partners ranked the alternatives by project criteria and goals, and in 2015 selected a preferred alternative, ***Chehalis Street Overcrossing***, to move forward into subsequent project phases.

As shown in the rendering of the preferred alternative in **Figure 3**, a two-lane bridge would be constructed to cross over the entire width of US 12 and the PSAP railway. The northern bridge approach wraps around in an arc from a new roundabout at US 12 and Newell Street, and the southern bridge approach ramp touches down into the commercial area on the south side of US 12. As shown in the cross section sketch of the elevated structure and approach ramps in **Figure 4**, two 14-foot travel lanes, two bike lanes, and one sidewalk is included.

**Figure 3: Alternative C (Chehalis St. Overcrossing) Rendering**



**Figure 4: Alternative C Cross Section (Looking South)**



Relocation of the PSAP railroad tracks was not included as a viable alternative during the alternatives analysis. It is a logical question to ask if the railroad tracks can be relocated away from US 12 proximity, and thereby reduce or eliminate the congestion on US 12 resulting from cars waiting for the railroad tracks to clear. Unfortunately, there are several reasons why relocating the railroad tracks is not an option for this project. First and foremost, the PSAP railway is not under the jurisdiction of the project partners nor the state of Washington, rather it is privately owned by Genesee and Wyoming, Inc, and

the project partners have no authority to force a railway relocation. Hence, the East Aberdeen Mobility Project assumed that any viable solution to ease US 12 congestion would need to involve a grade-separation facility to allow vehicles, pedestrians, and bicycles to safely cross over the PSAP railway.

A summary of the Alternatives Analysis phase can be found on the GHCOG project web page <http://www.ghcog.org/aberdeenmobility.html>.

## 4. Preferred Alternative Concept Development

### 4.1. Conceptual Design Refinement

As a result of additional traffic modeling performed on the preferred alternative, it was noted the proposed roundabout at US 12 and Newell Street would operate more efficiently for US 12 through-traffic if eastbound left turn movement volumes destined for the new overcrossing access ramp could be reduced. A solution is to divert the eastbound US 12 traffic originating from downtown Aberdeen, prior to reaching the roundabout, by constructing an auxiliary eastbound access ramp to the overcrossing. As shown in the project rendering in **Figure 5**, a new auxiliary ramp was added to the project design during the planning phase. This new ramp departs from the US 12 right travel lane then climbs up and over the PSAP railway to form a T-connection with the original Chehalis Street overcrossing ramp. Due to dense commercial development in the area, the new ramp results in significant property impacts to the Exxon gas station and the Twin Harbors Eye Center building.

**Figure 5: Planning Phase Concept Layout**



The onsite circulation of the commercial area was evaluated to confirm fire trucks, buses, and large delivery trucks could navigate from US 12 and across the proposed overcrossing structure. The conceptual design layout was refined on the southern end of the overcrossing ramp, as it touches down to existing ground within the commercial area. Critical design consideration was given to ensure large delivery trucks (such as a WB67 design vehicle) could maneuver from the proposed overcrossing ramp to their loading/unloading docks, and then exit the commercial area either at the existing at-grade access drives or by using the proposed overcrossing structure. The onsite circulation route at the northern edge of the Walmart parking lot was maintained by creating a two-lane vehicle access tunnel under the proposed ramp and also at the at-grade access driveway on the east side of the gas station.

The consultant team developed a computer-aided design simulation using Infracore software to create renderings of the refined conceptual design (see Appendix A).

## **4.2. Project Research**

The consultant team performed site conditions research to support the conceptual design of the previously selected preferred alternative.

### **4.2.1. Existing Property Conditions**

The original project topographic survey was performed in 2013 by Berglund Schmidt Associates, for use as the existing conditions basemap for the Alternatives Analysis phase. The basemap was used to identify potential property impacts associated with the project design footprint. Additional surveying was not obtained during the planning phase, as it was deemed only minimal changes have occurred within the project study limits and none were in close proximity to the proposed roadway and overcrossing improvements. Following is a summary of the minor changed conditions that have occurred within the project limits after the 2013 survey basemap:

- 810 E Wishkah Street: site redevelopment with new tenant Dutch Bros. Coffee
- 1000 E Wishkah St: site development with construction of new retail business, Cannabis 21
- Walmart remodel/expansion on east side of building for curbside order pickup
- Construction of eastbound left turn lane with protected left turn signal at intersection of Wishkah Street and Chehalis Street, by WSDOT

As the project moves into the Preliminary Engineering phase, additional topographic surveying is recommended to capture these minor changes as well as expand the basemap within the private commercial area to accurately depict the parking configurations and access drives.

### **4.2.2. Environmental Considerations**

Environmental conditions do not appear to have changed since the 2014 desktop environmental review was performed. Environmental planning and permitting work will be performed in the future Preliminary Engineering (PE) phase of the project.

Wilson Creek, located on the east side of Fleet Street and crossing under US 12, is listed as a partial blockage fish passage barrier site (WDFW ID #990485). This location could be a possible

WSDOT sponsored fish barrier removal project in the future but is not currently required to be replaced as part of this project.

#### **4.2.3. Nearby Projects**

WSDOT has future plans to replace the Heron Street bridge, which carries eastbound traffic across the Wishkah River at the western limits of the project. Extensive project coordination occurred between the City's project team and WSDOT in 2019, to evaluate the potential bridge replacement design scenarios and possible impact to the City's US12 Highway Rail Separation project. In early 2020, WSDOT notified the City that the bridge replacement funding had been postponed and therefore the bridge replacement project would not begin the design phase in 2020 as they had previously anticipated. The City will continue to coordinate with WSDOT to ensure the construction of multiple projects within the City are developed in a cohesive manner so as to reduce construction impacts to the public and nearby businesses and residents.

### **4.3. Traffic Analysis**

During the Alternatives Analysis phase, traffic volumes and intersection turning movements for the peak AM and PM hours were gathered for the study limits in August 2014. The traffic data was used to evaluate Level of Service (LOS) and queue lengths overall for the study intersections for the top three 'build' alternatives and was a critical evaluation criteria for selection of the preferred alternative.

The purpose of the traffic analysis work in the current planning phase is to expand on the previous LOS and queue length evaluations. Transportations Solutions, Inc. (TSI) performed additional traffic analysis for the preferred alternative. Intersection turning movement counts for the PM peak hour of travel were gathered on June 28, 2018, at ten intersections within the project limits. In addition to the typical weekday PM peak hour, travel demand in the project area is also characterized by seasonal variations related to recreational destinations and events. By collecting traffic counts in late June, this analysis accounted for peak weekday seasonal PM-peak hour demand. Special event demand patterns were not included in this analysis.

Traffic counts were collected before WSDOT installed an eastbound left-turn movement from US 12 at Chehalis Street in June 2019. This movement serves a relatively small quantity of single-family residential and commercial development north of US 12 and is not likely to significantly impact corridor operations during the PM-peak hour of travel.

The traffic analysis described below was based on a snapshot in time representing the June 2018 PM-peak hour traffic counts and did not include the eastbound left-turn movement at Chehalis Street. More detailed traffic analysis information can be found in the Traffic Memorandum (see Appendix C).

#### **4.3.1. Scenario Design**

Traffic operations were evaluated for two scenarios:

1. **Baseline:** No changes from existing (2018) network

2. **Preferred Alternative:** Grade-separated crossing at Chehalis Street with auxiliary eastbound access ramp, providing access to commercial development during train crossing events, and new roundabout at intersection of US 12 and Newell Street.

#### **4.3.2. Performance Measures**

The analysis focused on intersection delay and queuing in the 2018 PM peak hour of travel.

#### **4.3.3. Traffic Simulation Modeling**

- Traffic simulation models were developed in PTV Vissim 11 software.
- The Baseline simulation model was calibrated to match observed traffic volumes and travel times through the project area.
- No train crossing events were observed during traffic volume and travel time data collection, therefore, the initial Baseline simulation model was calibrated with no freight train activity and freight rail demand was incorporated after finalizing calibration.
- Both model scenarios assumed a “worst case” train crossing scenario in which a 7,500-foot freight train traveled through the project area, blocking all seven at-grade rail crossings into the commercial area for the first 30 minutes of the PM peak hour.
- Intersection delay was calculated for both scenarios using Vissim 11 software.
- Vehicle queues were forecasted for the Baseline and Project Alternative scenarios, with the assumption that a train is present and blocking all the at-grade rail crossings south of US 12 for the first 30 minutes of the peak hour.

#### **4.3.4. Findings**

##### **Baseline:**

- Eight of the 10 study intersections operate poorly at LOS F, with average delay exceeding five minutes per vehicle at seven intersections
- US 12 is characterized by extensive queuing and unstable flow in both directions, assuming a 30-minute blockage of all seven at-grade intersections by a train during a summer weekday PM peak hour

##### **Preferred Alternative:**

- Nine of the 10 study intersections operating at LOS D or better. The intersection of US 12 & Tyler St will continue to operate at LOS F but average delay will be reduced by 86 percent from the Baseline scenario
- A two-lane roundabout at US 12 and Newell St will operate well at LOS B during the PM peak hour
- The grade-separated crossing eliminates queuing from the US 12 mainline, reducing eastbound 95th percentile queue by over 99 percent and significantly improving travel time reliability during train crossing events. The elimination of queue stacking also improves property access along the corridor.
- The northbound/westbound flyover ramp will include significant queuing during a 30-minute train blockage, with queues likely to enter the commercial area for a portion of the peak hour.

- Westbound stop-control at the Newell Street ramp terminal intersection will meter demand at the Newell Street roundabout to the south, preventing southbound queues from blocking the ramp terminal intersection in the PM peak hour.
- The eastbound auxiliary ramp will operate with 95th percentile queue of less than two cars and queuing will not impact the US 12 mainline.

#### **4.4. Geotechnical Investigations**

A preliminary geotechnical memorandum prepared by Landau Associates in August, 2020 (see Appendix B) expanded on desktop geotechnical evaluations performed during the Alternatives Analysis phase and supported the refinement of the conceptual design and construction cost estimate.

Site subsurface conditions were explored in January 2020, in the vicinity of the proposed bridge foundations of the Chehalis Street overcrossing and the eastbound auxiliary access ramp. Existing soil conditions encountered during the explorations will present the following geotechnical challenges:

- Static and liquefaction-induced embankment instability
- Additional loading on bridge abutments and foundations caused by liquefaction-induced instability
- Static settlement of new walls and fills installed on compressible soil layers

Based on these initial subsurface explorations and analysis, preliminary geotechnical recommendations include the following:

- Bridge foundations will likely consist of drilled shafts or driven steel pipe piles. Embedment depths to bedrock range from 50-feet below ground surface (BGS) to approximately 125-ft BGS across the project limits, as shown in Exhibit 3, Appendix B.
- The proposed bridge approach embankments will settle excessively and require shallow ground improvement to mitigate bearing capacity failure. Typical options include overbuilding the embankments (which could require up to about one year of settling before final grading and paving) or using lightweight fills and wick drains to reduce settlement magnitude.
- Mechanically stabilized earth (MSE) walls are recommended for use in conjunction with ground improvement methods; MSE walls are more flexible than other wall types and are generally well suited for this type of application.
- Existing underground utilities will need to be rerouted from beneath bridge approach embankments and their immediate vicinity in order to avoid damage imparted by embankment settlement.
- Bridge approach embankments are expected to require repairs after a design earthquake due to liquefaction-induced settlement and potentially lateral spreading. Ground improvement below the embankments will be necessary to keep the approach embankments operational during or shortly after a design earthquake. Options for ground improvement will be studied further in the Preliminary Engineering Phase, and could include stone columns, compaction grout, jet grout, etc.

## 4.5. Construction Cost and Schedule Development

A conceptual level cost estimate was prepared for the preferred alternative during the Alternatives Analysis phase in 2014 which resulted in a project cost range of \$16.5M to \$18.5M, including property impacts.

An updated construction cost estimate has been developed to incorporate the refinement of the preferred alternative conceptual design. This work was performed by Ott-Sakai & Associates, LLC, in May 2020 (see Appendix D). The cost estimate was prepared using a hybrid approach between historical unit pricing and a bottom-up 'Contractor' approach for some activities. The estimate preparation included developing a project construction schedule, developing a work plan, and performing work quantity takeoff based on the conceptual design and WSDOT 2020 Standard Specifications for Road, Bridge, and Municipal Construction.

The updated conceptual level construction cost associated with the refined project design is \$29 M. The increase in costs from the earlier construction cost estimate are attributed to multiple factors:

- Addition of the auxiliary eastbound access ramp
- More detailed bridge foundation and ground improvement data obtained from geotechnical subsurface explorations
- Inflation costs from 2014
- More detailed cost analysis using bottom-up contractor pricing approach
- Consideration of construction duration for contractor labor and overhead costs

The construction duration is estimated to be approximately 18 months, as shown in a detailed schedule in Appendix D. A significant portion of this construction activity is consumed with the ground settlement mitigation of ground improvements under the overcrossing ramps. Much of the auxiliary ramp and main Chehalis Street overcrossing ramp can be constructed without impacting traffic on US 12. Construction of the bridge girders over US 12 and the new roundabout at Newell Street will have the most impact to the traveling public, which can be place with a few nighttime closures of US 12.

## 4.6. Property Impacts

Property impacts are nearly impossible to avoid when constructing a project of this magnitude within a heavily developed urban area like East Aberdeen.

The majority of the property impacts are related to building up the access ramps to provide sufficient vertical clearance at the overcrossings with US 12 and the PSAP railway. Configurations for the layout of these access ramps were evaluated during the Alternatives Analysis phase and minimizing property impacts was a critical evaluation factor in the selection of the preferred alternative. Following is a summary of the assumed parcels with property impacts, as shown in **Table 1**.

**Table 1: Property Impact Costs**

Assessor Parcel No.	Residence or Business	Partial or Total 'Take'	Relocation Required
010102301100	R	Total	Y
010102301000	R	Total	Y
010102300900	R	Total	Y
010102300800	R	Total	Y
010102300701	R	Total	Y
010102300702	R	Total	Y
010102300703	R	Total	Y
010102300603	B	Total	Y
010102300602	B	Total	Y
010102300601	B	Total	N
010102300100	B	Partial	N
010102400500	B	Total	Y
010101900701	B	Total	Y
010101900301	B	Total	Y
010102000901	B	Total	N
NA see note 2	B	Total	Y
010102101200	B	Total	N
010102101300	B	Partial	N
010102100100	B	Partial	N
010101400200	B	Partial	N
010102000100	B	Partial	N

Impacts to existing structures, both residential and commercial, are shown in **Figure 6**.

**Figure 6: Property Impacts**



Based on the current conceptual layout of the preferred alternative, Universal Field Services performed a desktop analysis of estimated property impact costs. This evaluation considered land and structure costs for total acquisition, land value for partial acquisition, 'damages' costs for impacts to a remainder, relocation of residents and businesses, and temporary construction easements. Land and building values were based on current assessed values, with a 4% inflation factor added for two years. The total estimated property impact cost is approximately \$7 M. See Appendix E for more detailed breakdown of costs.

## **5. Public Outreach**

The goal for public outreach during the planning phase was two-fold. First, inform the public of past alternatives analysis phase decisions and the resulting preferred concept design, and second, to provide updates for concept design refinement that was occurring during the planning phase. The public outreach audience consisted of the general public and a more focused group of property/business owners within the project limits.

The following public outreach activities were performed by the project team, including City staff, Envirolssues, Inc., and DEA.

### **5.1. Property Owner Notifications**

In November 2019, after the project team had developed design refinements of the preferred alternative, project notification letters were sent out to a focused group of property and business owners within the project limits. The purpose of this outreach was to expand on the one-on-one property owner communications performed during the Alternatives Analysis phase and explain the refined project design elements with the use of the future build condition renderings. Letters were sent out to seven property/business owners that are adjacent to the proposed project improvements and 12 property/business owners that are anticipated to be partially or wholly impacted by the project design footprint. See sample notification letters in Appendix F1 and F2. The letters included contact information for City and DEA project team members who would be available for direct communication, if so desired. Several one-on-one communications were facilitated by the City and DEA as a result of the letters, which allowed the property owners to gain further understanding of the project schedule, extent of impacts to their parcel, and an explanation regarding how the City would adhere to State and Federal requirements for compensating or relocating property owners impacted by the project.

### **5.2. General Public Notifications**

The broader public was included in the following outreach opportunities that were meant to build on the information provided during the Alternatives Analysis phase:

#### **5.2.1. Open House #1**

On March 20, 2019, WSDOT sponsored a public meeting at the Log Pavilion event center, in East Aberdeen, to introduce their Heron Street Bridge Replacement project to the community. The City's US 12 Highway Rail Separation project team was invited to the meeting to demonstrate the two projects would be developed in coordination, due to their close proximity to each other.

The City used this opportunity to review the preferred alternative design selected during the Alternatives Analysis phase, educate the public on roundabout design and operational benefits, and identify next steps for the project development. See Appendix F3 for open house #1 graphics.

### **5.2.2. Open House #2**

In August 2020, the City was ready to introduce the refined conceptual design and provide schedule updates to the public, with a second open house meeting. However, as a result of COVID-19 restrictions for in-person meetings, an online open house was developed. The City sent out a project fact sheet and online open house notification flyer (see Appendix F4) within their utility bills to garner widespread notice of the event. The online open house was hosted by EnviroIssues Inc. with their participate.online software, and was available to the public between August 17 and September 4, 2020.

The open house content included project need, background, and partners. The refined conceptual design was introduced with future-condition simulation images and ‘drive-through’ videos of the project simulations. Property impacts associated with the conceptual design were identified, with notice the extent of impacts could change slightly as key design elements are further refined during the final design stage. A preliminary project timeline was provided, with an estimated construction start date in late 2024.

Online open house participants were invited to complete an online survey. Approximately 4,150 individual people visited the open house and 87 responses were collected and summarized by EnviroIssues, for evaluation by the project team. The comments were grouped by subject matter and used to develop a follow-up Frequently Asked Questions (FAQ) document.

See Appendix F5 for the online open house content and activity report.

### **5.2.3. Project Website**

The City understands the need for long term public outreach for the US12 Highway Rail Separation Project, as this multiple phase project stretches out over the next several years. To provide continuity and consistency across future project phases a project specific webpage will be developed.

The following Planning Phase content will be uploaded to the project website:

- FAQ document from Open House #2
- Future-condition simulation photos and drive-through videos
- Project timeline
- Funding updates

Development of the project website will be included in the Preliminary Engineering phase. The consultant team will be tasked with maintaining and updating the project webpage as the project moves forward.

## **5.3. Project Support and Acceptance**

The US12 Highway Rail Separation project has received significant community and stakeholder support since it’s inception in 2014. Major proponents include Port of Grays Harbor, Grays Harbor

Council of Governments, Grays Harbor County, City of Hoquiam, City of Cosmopolis, Greater Grays Harbor, Aberdeen Fire Department, Aberdeen Police Department, WSDOT, Washington Public Ports Association, PSAP Rail, representative Brian Blake, representative Mike Chapman, representative Steve Tharinger, senator Kevin VanDeWege, senator Dean Takko, senator Maria Cantwell, senator Jeff Wilson, congressman Derek Kilmer, Ag Processing Inc., Westport Visitor Information Center & Westport/Grayland Chamber of Commerce, Brusco Tug & Barge, and Pasha Group. Many of these project stakeholders have provided project support letters (see Appendix G) to USDOT for the 2019 and 2020 BUILD Grant application.

## 6. Next Steps

### 6.1. Project Schedule

The City has initiated a partnership with WSDOT to develop the future phases of the project. The City will maintain project ownership but will rely on WSDOT staff to deliver portions of the work which could include survey, environmental planning, design, right of way, and construction administration. The City will continue to rely upon consultant team support for the remaining portions of the project that are not assigned to WSDOT staff. Estimated start date for the PE phase is early 2021 (see Figure 7: Project Timeline).

**Figure 7: Project Timeline**

Project Task	2021				2022				2023				2024				
	Q4	Q1	Q2	Q3	Q4												
Planning Phase Complete (Funded)	◆																
Preliminary Design (Funded)		■	■	■	■												
Environmental Documentation (Funded)					■	■	■	■	■								
Right of Way Planning (Not yet funded)					■	■	■	■									
Right of Way Acquisition (Not yet funded)									■	■	■	■	■	■	■		
Final Design (Not yet funded)						■	■	■	■	■	■	■					
Begin Construction (Not yet funded)																	◆

## 6.2. Project Funding

In the fall of 2017, the City received state funding in the amount of \$300,000 to support the current Planning Phase. An additional \$700,000 in state transportation funding was assigned to the Project in March 2020 to partially fund the future Preliminary Engineering (PE) phase. The Right of Way (R/W) and Construction (CN) phases are unfunded.

The City's program funding strategy is to pursue local and state funding to leverage as the 'local' match for federal grants. The City and local partners including Port of Grays Harbor and Grays Harbor County will contribute approximately \$700,000 as the local match. In addition, the city intends to request additional funding from the Washington State legislators during the 2021-2023 biennium, to fund the remainder of the Preliminary Engineering phase as well as right of way and construction phases.

Currently, the City has pursued the following federal grants:

- Better Utilizing Investments to Leverage Development (BUILD) transportation grant is sponsored by the US DOT. The City applied for the grant in 2019 and 2020 but was not selected. This grant is very competitive and typically only awarded to a handful of projects within each state. Based on grant reviewer debrief conversations on November 4<sup>th</sup>, 2020, the City received valuable feedback to refine the application for submission in 2021.
- Consolidated Rail Infrastructure and Safety Improvements (CRISI) program is sponsored by the Federal Railroad Administration (FRA). The City applied for this grant in October 2019, but was unsuccessful.

The City will continue to pursue applicable state and federal grants to fully fund all phases of the project.

## **APPENDICES**

**Appendix A: Conceptual Design Graphics**

**Appendix B: Geotechnical Memorandum**

**Appendix C: Traffic Analysis Summary**

**Appendix D: Preliminary Construction Cost and Schedule Summary**

**Appendix E: Right of Way Impact Summary**

**Appendix F: Public Outreach Summary**

**F1 – Adjacent Property Owner Letter**

**F2 – Impacted Property Owner Letter**

**F3 - Open House #1 Presentation**

**F4 – Open House #2 Mailer**

**F5 – Open House #2 Online Content**

**Appendix G: Project Support Letters**

## **Appendix A**

### **Conceptual Design Graphics**

**Appendix B**

**Geotechnical Memorandum,  
Landau Associates, August 2020**

**Appendix C**

**Traffic Analysis Summary,  
TSI, May 2020**

**Appendix D**

**Preliminary Construction Cost and Schedule Summary,  
Ott-Sakai & Associates, LLC, May 2020**

**Appendix E**

**Right of Way Impact Summary**

**Appendix F**

**Public Outreach Summary**

## **Appendix G**

### **Project Support Letters**