



Edmonds Waterfront

Access Study



Prepared by:



TETRA TECH



Edmonds Waterfront Access Study

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PRESENTED TO

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EXECUTIVE SUMMARY

Following completion of the Level 1 Screening of solution concepts, the Level 2 Evaluation of Alternatives, and consultation with the community in four public open house meetings, the Advisory Task Force presents the recommendations below for consideration. Recommendations for immediate, near-term, and longer-term actions are presented to mitigate as soon as possible the hazards that at-grade rail crossings present to safety, and to provide more comprehensive grade separation solutions when the substantial resources for a larger project can be secured.

Immediate Recommendations

Several enhancements are recommended for implementation independent of the specific alternatives identified in the Edmonds Waterfront Access Study. While these enhancements are supportive of some elements of the Waterfront Access Study objectives, they are more appropriately advanced directly by the City or collaboratively with different groups of stakeholders. Recommended near-term actions include:

- Construct *crosswalk improvements at the Main Street at-grade railroad crossing* to improve pedestrian safety and comfort (Level 1 Screening concept On-site 4). Recommend this be implemented directly by the City and coordinated with BNSF and Washington State Ferries.
- Construct *crosswalk improvements at the Dayton Street at-grade railroad crossing* to improve pedestrian safety and comfort (Level 1 Screening concept On-site 5). Recommend this be implemented directly by the City with support from the Port of Edmonds and coordinated with BNSF.
- Implement *emergency notifications between the 911 dispatch center and BNSF operations* when an emergency is reported on the west side of the railroad tracks to notify trains to halt outside of downtown Edmonds so that police and fire can respond without delay by passing trains (Level 1 Screening concept Operational 4). Recommend this be implemented through coordination between the City, Fire District 1, and BNSF.
- Create and implement a *Waterfront Emergency Evacuation Plan* with measures that respond to a broad range of potential emergencies (Level 1 Screening concepts On-site 1, On-site 3, and On-site 7). Recommend this be developed and implemented by an appropriate group that would include City departments, Fire District 1, Swedish Hospital, Port of Edmonds, and Washington State Ferries, among others.

Near-Term Recommendations

Until a long-term solution can be implemented, rail traffic is expected to grow substantially along with increased volumes of ferry traffic and growth in all modes of local traffic. Conflicts will grow, and delays will increase, impacting response times for police, fire and EMS units to emergencies west of the railroad tracks. Several measures are recommended to mitigate the effects of such conflicts.

Emergency Vehicle Access to the Waterfront – *Edmonds Street Emergency Access Overpass*. The proximity of this access route to the police and fire stations provides immediate access to respond to waterfront emergencies. This ramp also provides a full-time pedestrian and bicycle connection from Sunset Avenue to Brackett's Landing Park and the waterfront trail system, enhancing the walkability of the waterfront. During emergency shutdowns of the at-grade rail crossings, vehicles can be offloaded from ferries with proper traffic control. The Edmonds Street location is recommended over other similar emergency vehicle access alternatives for reasons of cost, anticipated use, and superior access for emergency response. Implementing this project will eliminate the need for an emergency vehicle access ramp from a future grade-separated, vehicle ferry access project, such as the Edmonds Crossing project referred to below.

Intermodal Connectivity – With increases in train traffic, and with eventual construction of the anticipated 2nd railroad track, there will be a growing need for safe pedestrian access to both sides of the railroad tracks. Of the several alternatives considered, the *Midblock Pedestrian Overpass* location would appear to best serve commuters, who would be the primary users. This overpass is collocated with rail, bus and ferry access points. Among the pedestrian overpass alternatives considered, the Midblock Pedestrian Overpass is most consistent with positive urban design objectives as it presents the least impact to established viewsheds, and its construction presents minimal environmental concerns due to its scale and setting. These features support the permissibility of this alternative, which is favored when assessing the ability to implement this project near-term. Safe access to passenger platforms on both sides of the future double-track rail corridor will necessitate a grade separated pedestrian overpass. It is recommended that Sound Transit lead the implementation of this solution.

Longer-Term Recommendation

Ultimately, grade separation for vehicles accessing ferries is necessary to resolve the growing conflicts between two major traffic movements through the downtown waterfront – rail traffic and vehicles loading and offloading the ferries. The combined effects of these growing pulses of traffic increasingly interrupt local traffic moving between residential and business centers in downtown and along the waterfront.

Based on currently foreseeable transportation funding conditions in the State, the timeframe for implementing grade separation of vehicle ferry access may be up to 20 years or longer. Washington State Ferries will appropriately take the lead in establishing the long-term direction of ferry operations, and WSF will soon initiate their Long Term Plan for the ferry system as a whole, including the Edmonds Terminal. The analysis and identification of alternatives within the Edmonds Waterfront Access study will inform WSF's planning efforts. In particular, the Task Force's review of several alternatives providing grade-separated vehicle ferry access concluded that the Edmonds Crossing project would be the superior option.

The Task Force recommends that the City *continue its current policy supporting the eventual implementation of the Edmonds Crossing project*, relocating ferry operations to a new terminal to be located at the Unocal property. Moreover, if ferry operations are relocated to the south end of the waterfront, in a configuration similar to the Edmonds Crossing project, it is recommended that the project also incorporate a means of emergency vehicle access to the south end of the waterfront. The Task Force recognized significant community benefit to an underpass along the Main Street alignment, but the projected comparative costs and long construction schedule make that option less desirable.

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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
BNSF	Burlington Northern Santa Fe Railroad
PSRC	Puget Sound Regional Council
WSDOT	Washington State Department of Transportation
WSF	Washington State Ferries

ACKNOWLEDGEMENTS

Participating Agencies

City of Edmonds
Port of Edmonds
Washington State Department of Transportation
Washington State Ferries
Burlington Northern Santa Fe Railroad
Sound Transit
Community Transit

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1.0 INTRODUCTION

1.1 PROJECT PURPOSE AND NEED

The purpose of the Edmonds Waterfront Access Study is to identify near-term and long-term solutions for the at-grade crossings at Main and Dayton Streets in order to provide safe, reliable and efficient access for vehicular traffic (including freight), transit, emergency vehicles, pedestrians, and bicyclists between downtown Edmonds and the waterfront, including regional transportation links. Refer to Figure 1-1. The project is intended to:

- Provide for continuous emergency response access
- Reduce delays and conflicts for pedestrians, bicyclists and motorists at the Dayton Street and Main Street railroad crossings
- Provide safe and efficient intermodal passenger connectivity between ferry, commuter rail, bus transit, pedestrian, bicycle and motor vehicle modes of travel.

Figure 1-1. At-grade Rail Crossing Locations



In 2014, the Main Street and Dayton Street railroad crossings averaged 36 daily train crossings from Sounder Commuter, Amtrak, and freight (BNSF Railway [BNSF]) trains. Train traffic will increase in the future as all three users of the BNSF tracks plan additional trains.

Due to the proximity of the two at-grade crossings, both through and stopping trains simultaneously block both Main Street and Dayton Street. The average daily traffic (ADT) at each crossing is approximately 6,000 vehicles. The Main Street crossing is approximately 150 feet east of the Edmonds Washington State Department of Transportation (WSDOT) Ferry Terminal and currently serves as the on/off loading access for the ferries.

As the rail traffic increases, the number and duration of railroad crossing gate closures across Main Street and Dayton Street will grow, further isolating the waterfront from downtown Edmonds, emergency services, transit connections, and interrupting vehicle on/off loading operations at the ferry terminal.

1.1.1 Emergency Services Access

Train passage with gate closures across Main Street and Dayton Street prevents timely delivery of emergency services to the west side of the BNSF railroad tracks. On the west side of the tracks, there are an active Senior Center, a marina with storage for 894 boats, a nationally significant salt-water dive park, three separate waterfront parks, several office buildings, two four- to five- story condominium buildings, several single-family homes, a popular dog park and pet exercise area, three restaurants, and the State Ferry Terminal. All of these are frequent users of paramedic, fire, and police services. The marina also is home to the Fire District 1 emergency response boat.

Fire and emergency calls to addresses west of the BNSF tracks during the period July 1, 2010 to December 8, 2015 numbered 277. Of those calls, 121 resulted in basic life support services and 72 in advanced life support services. There were 14 fires and eight recorded water-related rescues. Response times ranged from 2 minutes 2 seconds to just over thirty minutes. Beyond the 277 calls recorded in the Fire District 1 database, additional calls were responded to by the District accessing their marine rescue boat stationed at the Port of Edmonds marina; the number of such calls average 40-50 per year.

Delayed emergency responses of several minutes are not uncommon, and are attributable to multiple factors. On one documented occasion, heavy train traffic prevented an emergency vehicle carrying a critical patient to the hospital from getting off the arriving ferry. The risk of delayed emergency responses will increase in frequency and duration with increased train traffic.

1.1.2 At Grade Crossing Issues

At-grade railroad crossings in the middle of a vibrant community present safety concerns as vehicles or pedestrians try to cross the track in advance of a gate closing for an oncoming train. They also act as a barrier within the community, in this case, separating the waterfront and downtown Edmonds; and impact local traffic operations when trains are moving through the area.

Trains travel at high speeds, and due to the total weight of the trainset, they require an extended distance to come to a complete stop. This makes it nearly impossible for a train to stop in the event of a stalled vehicle at an intersection. In particular at Main Street, southbound trains enter a horizontal curve prior to the intersection, thereby further limiting the stopping sight distance. In the event of a collision on the tracks, the cost is high, and injuries are often fatal. These inherent risks associated with at-grade crossing make them dangerous in a small town where space and sight distance is limited.

1.1.3 Disconnection to Downtown

Train traffic and ferry loading and unloading interrupts access to local businesses. Pedestrian movement between the recreational opportunities on the Puget Sound waterfront and downtown is disrupted. Downtown Edmonds is cut off from the waterfront by the heavy volume of ferry and train traffic. A need to better integrate the downtown core with the waterfront, improve shoreline pedestrian access and traffic circulation, and encourage mixed-use development are apparent. The current train and ferry traffic make it difficult to move between the two

areas, minimizing the value of the shoreline as a public resource and amenity, and adversely affecting the potential for redevelopment.

1.1.4 Traffic Operations

Traffic at both the Main Street and Dayton Street intersections with SR-104 operate in free flow conditions according to the Edmonds Comprehensive Transportation Plan. The traffic operations issue is related to traffic interruptions when a train is crossing the intersections of Main and/or Dayton Streets. The 1998 design report for the Edmonds Ferry Terminal showed that an intermodal train would block an intersection for 3.5 minutes, a freight train for 3.0 minutes, and a passenger train for 1.5 minutes. (WSDOT, Final Report, Edmonds Ferry Terminal Vehicle/Rail Traffic Conflict Study, 1998) When that report was undertaken, the frequency of train crossings averaged one every 42 minutes. Train volumes have increased since then (both freight and passenger), as have the length of some freight/intermodal trains.

Recently, Washington State Ferries has begun tracking ferry delays due specifically to train operations. In the thirty-day period from November 15 through December 12, 2015, there were ten delays attributed to railroad crossing issues. Two of those were caused by problems with the railroad crossing gate (two ferries left with only walk-on passengers; several other cross-sound trips were cancelled), while the others were due to one or two trains crossing Main Street. Delays to ferry operations ranged from 3 to 15 minutes. Overall, the on-time performance (within ten minutes of schedule) of the Edmonds-Kingston route is 98% in 2015.

During the period 2010-2015, police responded to 33 collisions on or adjacent to Main Street west of 2nd Avenue, and 56 collisions on or adjacent to Dayton Street west of 2nd Avenue. During this same period, the Washington State Patrol responded to 47 accidents on SR-104 in the immediate vicinity of the ferry terminal (Main Street to Dayton Street).

1.1.5 Livability and Economic Development

Each train sounds its horn at a FRA regulated 110 decibels eight times at a distance of ¼ mile as it passes by the waterfront and downtown. Between residents, ferry riders, beach visitors, trail walkers, and others in close proximity to the tracks the horn sounding can be disruptive to their enjoyment or use of the Edmonds waterfront. This required sounding of the horn also limits desirability of future development at the Salish Crossing and Harbor Square properties which are significant keys to Edmonds' economic future. A wayside warning system that would reduce these sound levels, has been approved and should be in place by the end of 2016.

1.1.6 Pedestrian, ADA, and Bicycle Access

The at-grade railroad is a barrier to pedestrians' and bicyclists' easy enjoyment of the waterfront, the parks and recreation available along the waterfront and, conversely, to the Edmonds downtown. Integrate the downtown core with recreation and commercial activities along the waterfront to improve shoreline pedestrian access and traffic circulation. Persons using walkers or wheelchairs often require longer crossing times, which can become a higher risk decision when railroad tracks are involved. The senior center, located west of the tracks, is a popular destination for seniors in the Edmonds area, and is likely to attract a higher percentage of mobility-challenged pedestrians.

1.1.7 Freight Mobility

An efficient freight transportation system helps to maintain the Puget Sound regions' quality of life, ensures businesses can deliver products and services to market, and makes the most of the region's strategic position as a critical gateway for international trade. At the Edmonds' waterfront, freight moves by rail, truck and ferry. The Edmonds-Kingston ferry route has the highest cross-sound freight traffic volume in the Washington State Ferry System. Reliable and safe movement of freight via all travel modes should be maintained.

In October 2015, the Edmonds City Council authorized Tetra Tech, Inc. to prepare this Edmonds Waterfront Analysis identifying solutions to the problems with access across the railroad tracks to the city's waterfront.

1.2 STUDY PROCESS

The study process for the Edmonds Waterfront Analysis was structured about five phases, as summarized in Figure 1-2. The issues surrounding waterfront access across the railroad tracks are not new, and they have been examined in planning efforts over the past 25 years.

The first phase of the work defined and characterized the problems posed by the at-grade crossings, researched available records, documented existing conditions, and defined the purpose and need for the project.

The second phase of this study process emphasized the identification and consideration of the full range of potential solutions through:

- review of prior analyses
- consultation with transportation stakeholders, including: Burlington Northern Santa Fe Railroad (BNSF), Washington State Ferries, Washington State Department of Transportation, Sound Transit, Community Transit, Port of Edmonds, and City of Edmonds
- outreach to the community

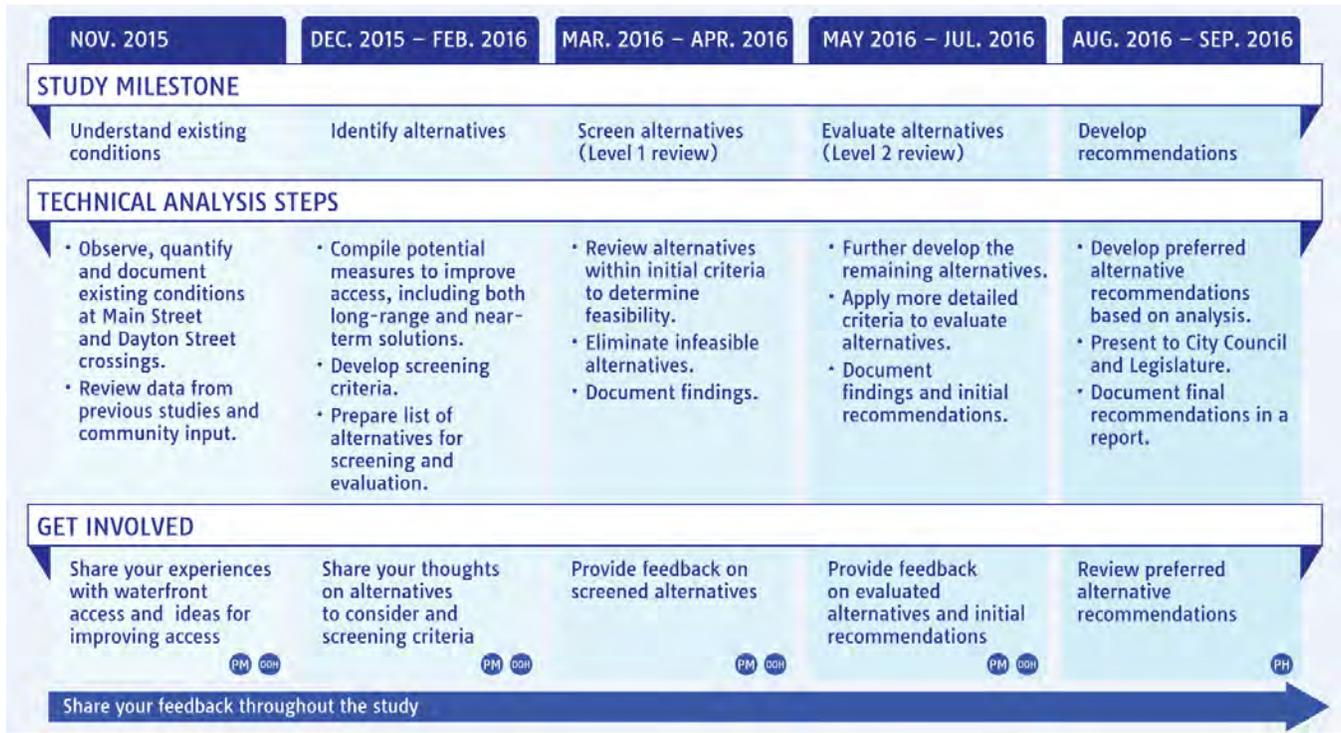
A total of 51 concepts, including a number of variants, were identified for consideration.

In the third phase of the project, the Level 1 Screening, the identified solutions were defined to a conceptual level and evaluated against qualitative criteria to assess their feasibility and their potential effectiveness in addressing the project purpose and need.

The most highly rated solution concepts were configured into formal alternatives in the fourth phase of the study, the Level 2 Evaluation. These alternatives were more fully developed to define their approximate footprints and geometries, examine their effectiveness and impacts, and estimate the cost to implement them. The alternatives were then assessed and compared using a more extensive and more quantified set of criteria in the Level 2 Evaluation.

The fifth phase consisted of the development of recommended actions drawn from the outcomes of the Level 2 Evaluation, and preparation of this study report.

Figure 1-2. Summary of Study Phases



1.2.1 Advisory Task Force

In August 2015, the City of Edmonds formed the Mayor’s Edmonds Waterfront Advisory Task Force on At-grade Rail Crossing Alternatives to guide the development of solutions and selection of a preferred alternative. The Task Force comprises representation of Edmonds residents and businesses, and owners and operators of transportation infrastructure along the Edmonds waterfront, including:

- Mike Nelson, Edmonds City Council (Co-chair)
- Jim Orvis, Port of Edmonds Commissioner (Co-chair)
- Cadence Clyborne, Edmonds resident and business district representative
- Kirk Greiner, Edmonds resident
- Phil Lovell, Edmonds resident
- Joy Munkers, Community Transit
- Rick Wagner, Burlington Northern Santa Fe Railroad
- Lorena Eng, Washington State Department of Transportation
- Lynne Griffith/Nicole McIntosh, Washington State Ferries Division
- Jodi Mitchell, Sound Transit

The Task Force conducted meetings twice monthly from September 2, 2015 through October 12, 2016 to review the work of the study team, conduct workshops to evaluate concepts and alternatives, and to develop the recommendations in this report. Agency representatives facilitated informational meetings with their staff to provide input to the analyses and technical review. Task force members also participated in four public meetings conducted throughout this study process to engage directly with the community, to explain the Advisory Task Force’s role in the work, and to respond to questions related to their agency’s operations along the Edmonds Waterfront.

1.2.2 Public Engagement

The community has been engaged in the Edmonds Waterfront Access Study throughout the process. Outreach to the community has been multifaceted and designed to reach across the entire City:

Open House Meetings were conducted at four key junctures in the study process (refer to Figure 1-2). These meetings were announced via newspapers, television, multiple social media platforms, email lists, on the City’s website, and posters displayed in public spaces and private businesses across Edmonds. The first open house meeting was also announced through a post card mailed to every address in the City. Announcements were published with language translations in Spanish and Korean. The four open houses were conducted:

November 18, 2015 – The study was introduced to the community, and initial input was gathered on defining the scope of problems with waterfront access, possible solutions, and appropriate criteria for evaluating alternatives.

January 27, 2016 - Feedback was solicited on the initial list of solution concepts and on the draft criteria for use in the Level 1 Screening.

May 12, 2016 – The results of the Level 1 Screening were presented, along with the Level 2 alternatives under development; feedback was solicited on the alternatives input was sought for criteria to be used in the Level 2 Evaluation.

September 14, 2016 – Discussed the results of the Level 2 Evaluation process and the alternatives being considered for implementation, and the recommendation process was explained. In advance of this meeting, an **informational booth** was staffed at the Edmonds Saturday Market on September 3.

On-line Open Houses (OOH) were launched to accompany each of the four open house meetings to provide additional opportunity to participate in the process. The OOHs presented the same materials available at the live meetings with capability to comment on each element of the display. OOHs were launched before the meetings and were maintained for 2 or 3 weeks following to allow community members to review and comment on the materials at their convenience, while offering timely input to the study process. **Table 1-1** summarizes the level of participation at the public meetings and accompanying on-line open houses.

Table 1-1. Open House Meeting Participation

Public Meeting Date	November 18 th	January 27 th	May 12 th	September 14 th
Public Meeting Attendees (signed in)	116	83 38 newcomers	58 28 newcomers	49 11 newcomers
On-line Open House Visits	326 visits 259 unique visitors	175 visits 131 unique visitors	268 visits 191 unique visitors	40 visits 30 unique visitors
Comment Submittals ¹	54	33	20	17

Note 1: Counts are limited to written comments received through handwritten forms and letters, email, and on-line. Does not include comments verbally received or noted on displays at meetings.

Continuous On-line Presence was maintained on the homepage of the City's website, where the public could access materials from prior meetings and Advisory Task Force meeting notes. Periodic postings through social media sites Facebook and twitter were used to maintain a profile for the study.

Press Releases were utilized to announce meetings and draw general media coverage by television, radio, and newspapers.

City Council Briefings were conducted periodically throughout the study process: February 9, 2016; June 7, 2016, and November 7, 2016. Regular activity reports were provided by co-chair Mike Nelson at Council meetings.

Other Public Presentations were made to the Port of Edmonds Commissioners and a local service group.

2.0 EXISTING CONDITIONS

An existing conditions analysis was completed in support of this study. The detailed documentation is provided in Appendix B to this report. This section summarizes the key findings of the affected environment analysis, as well as discussions and consultations with affected agencies including Fire District #1, Sound Transit, Community Transit, Washington State Ferries, the City of Edmonds, the Port of Edmonds, and the BNSF railway.

In support of future environmental review of any recommendations that come out of this study, the affected environment related to the major environmental disciplines common in environmental review were documented. In reviewing the existing conditions, the ones that initially appear to be key in the evaluation of alternatives are:

- Cultural and Historic Resources – potential to contain archaeological sites related to precontact and historic occupations and activities;
- Fish, Wildlife, and Vegetation – critical habitats along the shoreline and in and adjacent to the marsh;
- Hazardous Materials – a number of on-going cleanup sites within the project area;
- Public Services and Utilities – hindering of timely emergency services due to railroad crossing closures;
- Transportation – traffic operations affecting arriving and departing ferries; delays due to railroad crossing closures; and
- Visual Resources – elevated structures may interfere with existing views of Puget Sound, Olympics, and Kitsap Peninsula.

A further summary of these topics follows, as well as air quality, geology and soils, land use, noise, parks and recreation, social and economic, and water quality.

2.1 AIR QUALITY

Air quality in the Edmonds area is within federal standards. Particulate matter has been declining over the past decade, with fine particulate matter (PM_{2.5}) at 6.2 micrograms per cubic meter of air (ug/m³), compared to the new federal standard of 15.5 ug/m³. Carbon monoxide (CO) levels have been well below the federal standards since 1998.

The City of Edmonds has developed specific measures to address greenhouse gas emissions, including switching to biodiesel in many City-owned vehicles, retrofitting plumbing in City-owned buildings for efficiency, supporting rapid transit initiatives, installing energy-efficient LED lights in traffic signals, and offering public education on solid waste reduction and recycling.

2.2 CULTURAL AND HISTORIC RESOURCES

Background environmental, ethnographic, and archaeological information indicates that the Edmonds Waterfront has the potential to contain archaeological sites related to precontact and historic occupations and activities. Access to fresh water, salt water fishing, and varied shoreline, wetland, and upland forest resources would have provided many useful resources for native people. The area would have been easily reached by canoe from areas along the mainland coast and from the Kitsap Peninsula.

Previous archaeological investigations have been concentrated in the area of Edmonds Commuter Rail Station and the south end of the waterfront in vicinity of the UNOCAL property. A shell midden site was found in exposed soil at the Deer Creek Fish Hatchery along Shellabarger Creek southwest of Edmonds Marsh. Archeological testing conducted for the Commuter Rail Station found historic resources from about 60-155 cm below surface south of Main Street near the railroad line.

The potential for precontact archaeological resources in the project area is greatest on the margins of the former creek, wetland, and along the shoreline. Although previously identified in the earliest archaeological surveys as

containing areas of low archaeological potential, the area along the railroad and commuter rail station have demonstrated presence of buried historic archaeological remains. The lack of archaeological investigations within the undeveloped marsh area does not provide a positive source of data, but this area is anticipated to also have a higher probability for precontact archaeological remains. Further archaeological inventory of the range of alternatives is recommended in order to investigate the presence or absence of archaeological materials within the areas to be potentially affected by the proposed project.

The Edmonds Waterfront project area lies on the boundary between WDFW Salmon Management Areas (SMA) 9 and 10. The 1974 Boldt Decision upheld the right of Washington tribes to fish in their “usual and accustomed places.” Tribes with usual-and-accustomed fishing rights in this SMA include: the Lummi Nation, Lower Elwha Klallam, Port Gamble S’Klallam, Jamestown S’Klallam, the Swinomish, Skokomish, and Tulalip. These retained rights indicate a long-term relationship with the area that may include other significant traditional use areas (CH2M Hill 2003:32-102). During discussions for the Edmonds Crossing project in 1996, Bard and McClintock reported that the Suquamish and other tribes expressed concern with project construction and archaeological investigations in the Edmonds area. In other proceedings in the Puget Sound region, the tribes have voiced concerns over activities on the Puget Sound shorelines that might lead to environmental changes that affect traditional areas.

Two historic building surveys have been conducted that encompass the project area, in 1996 and 2004 (Cox and Bard 1996; BOLA 2004). The resulting previously recorded NRHP-eligible historic buildings are located north of Main Street in downtown Edmonds. Further NRHP-eligible resources are unlikely to be identified within the project area, but additional analysis of the alternatives will be required to ascertain whether those known resources will be potentially affected by the project, or if reevaluation of the project area will be required to investigate whether additional historic building resources are present or may be affected.

2.3 FISH, WILDLIFE, AND VEGETATION

Critical habitats within the City of Edmonds include those for Chinook salmon, bull trout, and killer whale. Bull trout habitat use along the Edmonds shoreline would be during periods of adult foraging and migration. Bull trout display wide-ranging foraging habits and are known to consume juvenile salmon (including Chinook) that inhabit shallow nearshore areas.

Critical habitat for Chinook salmon is the marine nearshore; they are not known to use the small creeks in the project area. During juvenile foraging and juvenile and adult migration, the shoreline habitat would be used by Chinooks. In particular, the eelgrass beds provide high quality foraging habitat for juvenile Chinook salmon.

The threatened Puget Sound resident killer whale (*Orcinus orca*) is not a common visitor to central Puget Sound. Since Edmond’s shoreline jurisdiction extends far offshore, killer whales could well transit through the area. Shoreline development, ferry and boat traffic, and lack of salmon-bearing streams in the immediate project area would not attract whales to the nearshore (Edmonds 2007).

Migratory birds that fall within the requirements of the Migratory Bird Treaty Act and that may migrate through the greater Edmonds area include: Black Swift, Caspian Tern, Fox Sparrow, Marbled Godwit, Olive-sided Flycatcher, Peregrine Falcon, Purple Finch, Rufous Hummingbird, Short-eared Owl, Western Grebe, and Willow Flycatcher.

There are no designated wildlife refuges in the project area. There is one wetland in the project area, the 23-acre Edmonds Marsh. It is a Category 2 wetland, also classified as a Wildlife Habitat and Natural Resource Sanctuary. The Marsh was once much larger prior to development on all four sides. Flows from the wetland into Puget Sound occur via pipes, ditches, and a 48-inch pipe, and a tide gate under Admiral Way. The tidal gate is normally kept closed from October through March. The pipe extends 1,275 feet into the lower intertidal beach south of the Edmonds Marina. The marsh is tidally influenced during spring and summer. The Edmonds Marsh is fed by Willow and Shellabarger Creeks, and runoff from approximately 900 acres of surrounding properties (Edmonds

2007). Willow Creek and Shellabarger Creek contain potential or actual fish habitat and meet the criteria for Type F waters (streams which contain fish habitat) pursuant to WAC 222-16-030. (ECDC 23.90.010).

Over 225 bird species have been known to use the marsh. The great blue heron, a Washington State monitored species, nests near the marsh (WDFW 2006a). Birds with priority habitats that occur within the City include bald eagle, purple martin, and great blue heron. The bald eagle is listed as a federal and state threatened species.

In the wetland riparian, and estuarine habitats along the Edmonds Shoreline, priority habitats for shellfish salmonids, eagle, great blue heron, California sea lion and harbor seals have been identified by WDFW/ Special status species that may occur nearshore include peregrine falcon, pileated woodpecker, Vaux's swift, merlin, purple martin, great blue heron, green heron, western big-eared bat, Keen's myotis bat, long-eared bat, and longlegged bat (WDFW 2006a).

The Edmonds Underwater Park was identified as a priority haulout area for harbor seals and California sea lions by WDFW in 2006. The floats installed for divers were taken over by sea lions, making the floats unusable by divers. The floats have subsequently been removed. Harbor seals are known to use adjacent beaches (Lider 2006 personal communication). Brackett's Landing Shoreline Sanctuary Conservation Area is defined in WAC 220-16-720 as those bed lands and tidelands owned by the City of Edmonds at Brackett's Landing Shoreline Sanctuary, and the water column above these bed lands and tidelands including all of the area known as Edmonds Underwater Park.

2.4 GEOLOGY AND SOILS

Soil maps prepared by the U.S. Department of Agriculture – Soil Conservation Service show that most of the project area is designated Urban Land, constituting fill material or developed land. There are no documented landslide hazard areas within the project area (Edmonds 2007). The project area is in Seismic Zone 3 (Uniform Building Code, 1997), meaning an area of high seismic risk. Seismic activity in the Puget Sound area is a result of collisions between the Juan de Fuca plate and the North American plate. No known active faults are mapped in the immediate project area (CH2M HILL 2003).

Shoreline slope stability refers to the relative stability of coastal slopes based on mapping completed by Ecology in the early to mid-1970s. Shoreline slopes in the project area are mapped as modified and stable (Edmonds 2007). There are no mapped hillside erosion hazard areas in the project area. Streams within Edmonds, however, are mapped with "extensive erosion hazard areas along their banks." Vegetation along the stream banks prevent soil compaction and erosion, limiting turbidity and sedimentation in waters that harbor fish and aquatic invertebrates (Edmonds 2007).

Figure 2-1. Geologic Hazards and Fault Zones



Figure 2-2. Soil Density



2.5 HAZARDOUS MATERIALS

Fourteen sites in the general study area are included in the Washington State Department of Ecology's database of facilities with past or current remediation efforts. Those with on-going cleanup activities include:

- Edmonds Dry Storage, 400 Admiral Way
- Edmond Port Fur Breeders Building, 335 Admiral Way
- Edmonds Port UST, 458 Admiral Way
- Edmonds Port W Dayton Site, 120-190 W Dayton Street
- Mar Vel Marble LLC, 202 Main Street
- Unocal Edmonds Bulk Fuel Terminal, 11720 Unoco Road

The largest hazardous waste facility in the Edmonds area is the Unocal site. According to Ecology, most of the Site is now clean. Ecology certified the Upper Yard was suitable for residential use in 2003 and Point Edwards Condominiums were subsequently constructed. Additional Interim Actions will begin in 2016 to clean up two remaining areas of contamination. One is the stormwater detention Basin 2 Area and other is the vicinity of a Washington State Department of Transportation (WSDOT) storm drain crossing the site (Ecology 2016).

Figure 2-3. Approximate Extents of Contamination



APPROXIMATE EXTENTS OF CONTAMINATION



0 700 Feet

2.6 LAND USE

The project area is comprised of land uses on both sides of the BNSF track(s). To the west of the railroad, land uses include parks, the ferry terminal, multi-family residential, commercial, restaurants, and the marina. Zoning code designations include Public Use (P) and Commercial Waterfront (CW). The Edmonds Comprehensive Plan designations for this area include Parks/Open Space, Shoreline Commercial, and Master Plan Development. East of the railroad tracks is a mix of open space, residential, and commercial uses. Zoning includes Master Plan 1 and 2, General Commercial, Community Business, Downtown Mixed Commercial and Office-Residential. The Comprehensive Plan designations include Downtown Mixed Commercial, Downtown Master Plan, Parks/Open Space, and Master Plan Development. Maps showing these zones are included in Appendix B.

The Edmonds City Council, in November 2014, passed a resolution stating its intent to adopt an update of the City's Shoreline Master Program (Edmonds, 2014). The Update is now undergoing review by the State Department of Ecology prior to final adoption by the City. In the Marine Shoreline South area, which constitutes the shoreline adjacent to the project area, the shoreline designations include Aquatic I (general Puget Sound), Aquatic II (ferry route and marina access), Conservancy (parks), Urban Mixed Use I (developments north of the marina and south the Brackett's Landing South), Urban Mixed Use II (marina area), Urban Mixed Use IV (developments adjacent to Edmonds Marsh), Urban Railroad (BNSF right-of-way), and Natural (Edmonds Marsh).

The ferry holding lanes and the BNSF tracks serve as barriers between the downtown business community and the waterfront uses. Main Street, just to the north of the holding lanes, provides the main pedestrian conduit between downtown and the waterfront, though frequent trains, many quite lengthy, cut off access for several minutes at a time. The draw of the waterfront parks, the ferry terminal, the senior center, and the marina and associated businesses remain strong, however, in spite of the periodic disruption of access.

2.7 PUBLIC SERVICES AND UTILITIES

The City of Edmonds operates and maintains the water distribution system in the project area. The City also operates and maintains a wastewater treatment plant on the corner of SR 104 and Dayton Street. Two wastewater outfalls enter Puget Sound north of the marina's breakwater and extend 1,200 feet into the sound. Sound Disposal provides solid waste and recycling pickup along the Edmonds waterfront and in downtown Edmonds. Republic Services provides services in the former Unocal site south of Edmonds marsh.

The Snohomish County Fire District No. 1 provides fire and emergency services to the City of Edmonds under a twenty-year interlocal agreement signed in 2010. The nearest fire station to the project area is Fire Station 17 located at 275 Sixth Avenue North.

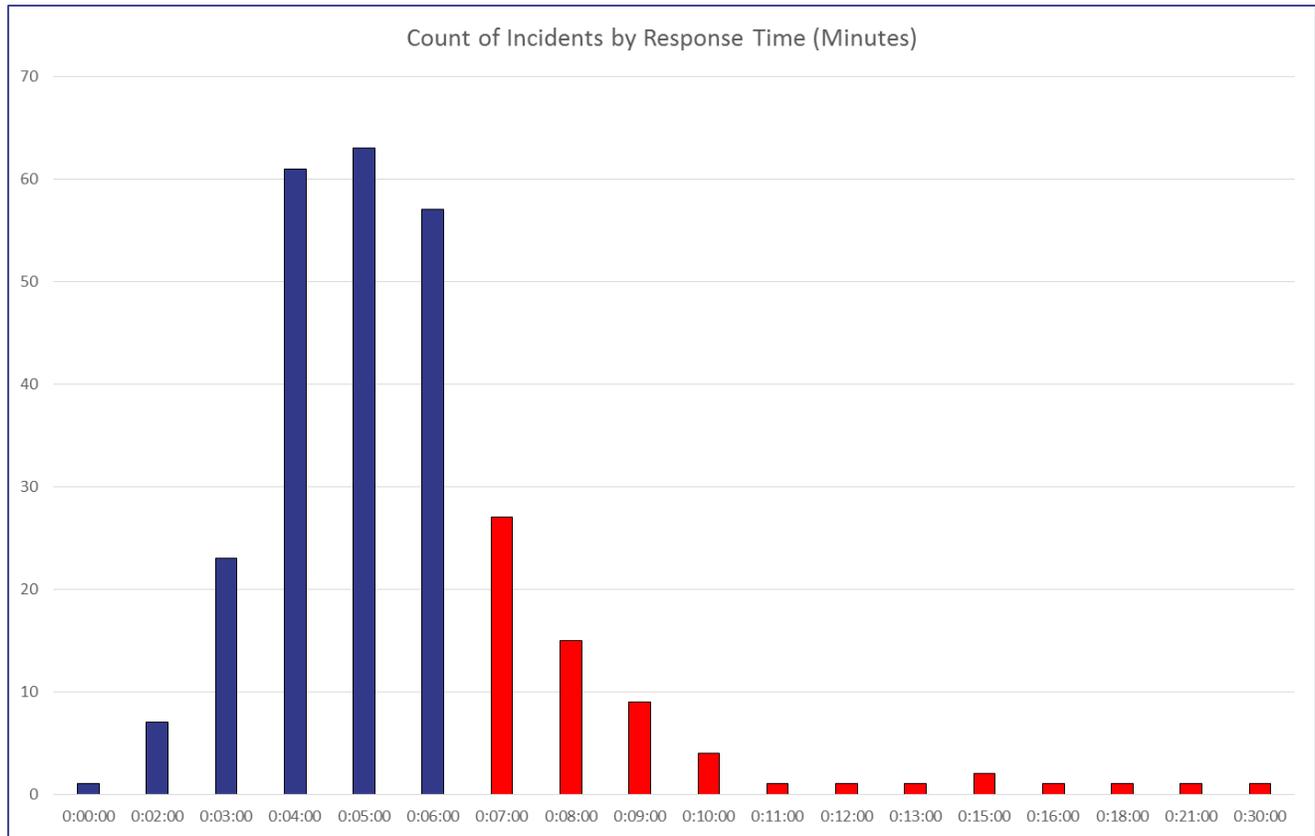
Train passage with gate closures across Main Street and Dayton Street prevents timely delivery of emergency services to the west side of the BNSF railroad tracks. On the west side of the tracks, there are an active Senior Center, a marina, a nationally significant salt-water dive park, three separate waterfront parks, several office buildings, two four- to five- story condominium buildings, several single-family homes, a popular dog park and pet exercise area, three restaurants, and the State Ferry Terminal. The marina also is home to the Fire District 1 emergency response boat. All of these are frequent users of paramedic, fire, and police services.

Delayed emergency responses of several minutes are not uncommon, and delays are projected to increase in frequency and duration with increased train traffic. On at least one occasion, heavy train traffic prevented an emergency vehicle carrying a critical patient to the hospital from getting off the arriving ferry. In April 2016, a pedestrian-train accident closed the Main Street and Dayton Street crossings for several hours, during which two unrelated emergency calls were received from the waterfront area, necessitating responders crossing through the stopped train on foot to treat and evacuate individuals needing care.

Fire and emergency calls to locations west of the BNSF tracks during the period July 1, 2010 to December 8, 2015 numbered 277. Of those calls, 121 resulted in basic life support services and 72 in advanced life support

services. There were 14 fires and eight water-related rescues. Response times ranged from 2 minutes and 2 seconds to just over thirty minutes; Figure 2-4 shows the distribution of response times for the 277 calls. In addition to the call records, Fire District 1 estimates they receive between 40 and 50 call-outs annually for their emergency response boat moored in the marina.

Figure 2-4. Emergency response time across railroad tracks



Police services are provided by the Edmonds Police Department, located at 250 5th Avenue North. During the period 2010-2015, police responded to 33 collisions on or adjacent to Main Street west of 2nd Avenue, and 56 collisions on or adjacent to Dayton Street west of 2nd Avenue. During this same period, the Washington State Patrol responded to 47 accidents on SR-104 in the immediate vicinity of the ferry terminal (Main Street to Dayton Street).

2.8 NOISE

According to monitoring done as part of the Edmonds Crossing project, existing ambient noise levels (vehicular traffic and other background noise sources, except trains) at various locations west of the railroad tracks ranged from 43 dBA-Leq (dBA are decibels on an A-weighted scale that approximate the response of the human ear; Leq levels are hourly equivalent sound pressure levels) to 59 dBA-Leq, compared to the FHWA peak-hour impact criterion of 67 dBA-Leq. The locations with the loudest sound levels were Brackett Park South (59 dBA); and the residences just north of Dayton Avenue west of Railroad Avenue (57 dBA).

Measurements of ferry noise were also made as part of the Edmonds Crossing analysis. Maximum noise levels of ferry operations at the Edmonds terminal ranged from 55 to 65 dBA at 100 feet. Typical noise levels during

launching and docking was 60 dBA. The ferry horn is sounded during ferry arrivals and departures per maritime safety rules and, thus, their noise levels were not quantified (CH2M HILL 2003).

Noise levels of passing trains were measured at 87 dBA at 100 feet from the tracks. The typical noise level of the train horn, which is sounded as a train approached a grade crossing, is 95 to 100 dBA at 100 feet (CH2M HILL 2003). The use of the horn is required for safe operations, though alternatives such as wayside horns can be used and are proposed for Edmonds.

2.9 PARKS AND RECREATION

There are seven parks within or adjacent to the project area operated and maintained by the City of Edmonds.

- • Marina Beach Park, 470 Admiral Way
- • Olympic Beach, 200 Admiral Way
- • Brackett's Landing South, 100 Railroad Avenue S.
- • Brackett's Landing North, Main St/Railroad Avenue.
- • Sunset Avenue, at Sunset Avenue N
- • Richard F. Anway Park, 131 Sunset
- • Edmonds Marsh, 180 W. Dayton Street

The Edmonds Marina, located between Marina Beach Park and Olympic Beach Park, includes 662 wet moorage slips and 232 dry storage spaces. Guest moorage is provided for overnight and short-term stays. The Edmonds terminal of the Washington State Ferries is located at the end of Main Street. While primarily a means of transportation, the ferry route to Kingston also serves a recreational role as it transport sightseers across Puget Sound. The Willow Creek (Deer Creek) Fish Hatchery, 95 Pine Street, adjacent to Edmonds Marsh, includes a wildlife habitat and native plant demonstration garden.

2.10 SOCIAL AND ECONOMIC

Population, employment, income, and housing information is contained in Appendix B.

The Port of Edmonds Marina is a principal business on the west side of the railroad tracks and is a major draw along the Edmonds waterfront. There is a one- to four-year waiting list for slips for vessels larger than 31 feet; slips for smaller vessels are more easily obtained. Thirty short-term slips are available. Two restaurants and several office buildings complete the business make-up of the waterfront.

The Edmonds Crossing FEIS looked at the relationship between the local Edmonds economy and the Edmond Ferry Terminal and route. While difficult to isolate the specific economic relationship due to the multitude of factors including lack of subarea specific economic data, the FEIS did look at a special case in 1995 where the ferry terminal was out of service in February of that year for reconstruction (passenger service continued to be provided). During that specific period, year-to-year change in sales and use tax distributions for Edmonds were actually up 19.7% from February 1994. It is possible, though, that sales in the immediate area may have been down, offset by increases in other parts of the City (CH2M Hill 2003).

2.11 TRANSPORTATION

Traffic at both the Main Street and Dayton Street intersections with SR-104 operate in free flow conditions according to the Edmonds Comprehensive Transportation Plan. In transportation parlance, level of service (LOS) denotes how free-flowing traffic conditions are at a given intersection or roadway segment. LOS A connotes an intersection delay of ten seconds or less, while LOS F connotes delays exceeding 80 seconds. LOS at the three intersections in or adjacent to the project area are all operating at LOS A or B, both now and projected in 2035 which signifies very little delay at intersections.

The real traffic operations issue is not average daily traffic but related to ferry ingress and egress pulses, and traffic interruptions when a train is crossing the intersections of Main and/or Dayton Streets. The 1998 design report for the Edmonds Ferry Terminal showed that an intermodal train would block an intersection for 3.5 minutes, a freight train for 3.0 minutes, and a passenger train for 1.5 minutes (WSDOT 1998). When that report was undertaken, the frequency of train crossings averaged one every 42 minutes. Train volumes have increased since then (both freight and passenger), as have the length of some freight/intermodal trains.

Recently, Washington State Ferries has begun tracking ferry delays due specifically to train operations. In the thirty-day period from November 15 through December 12, 2015, there were ten ferry delays attributed to railroad crossing issues. Two of those were caused by problems with the railroad crossing gate (two ferries left with only walk-on passengers; several other cross-sound trips were cancelled), while the others were due to one or two trains crossing Main Street. Delays to ferry operations ranged from 3 to 15 minutes. Overall, the on-time performance (within ten minutes of scheduled departure) of the Edmonds-Kingston route was 98% in 2015.

Accident figures presented in the Comprehensive Transportation Plan show that the intersection of Main Street and 3rd Avenue has the highest collision rate in the city, with 1.4 collisions per one million vehicles entering the intersection. Collision rates at the SR-104 intersections were at a lower rate, with SR-104 and Dayton at 0.7 collisions per million vehicles, while at SR-104 and Main, the rate was 1.2 per million.

During the period 2010-2015, police responded to 33 collisions on or adjacent to Main Street west of 2nd Avenue, and 56 collisions on or adjacent to Dayton Street west of 2nd Avenue. During this same period, the Washington State Patrol responded to 47 accidents on SR-104 in the immediate vicinity of the ferry terminal (Main Street to Dayton Street).

The BNSF mainline, on which Amtrak and Sounder passenger trains operate, passes through downtown Edmonds. It is also major freight corridor with intermodal, oil, coal trains. Approximately 43 trains pass through Edmonds daily (2014). Projections for 2020-2030 prepared for Pacific Northwest Railroad Coalition (December 2011) employed “moderate growth” and “high growth” scenarios, and forecast average daily train traffic of 63 to 70 trains by 2020 and 75 to 87 by 2030. They also forecast peak day train volumes of between 69 and 77 by 2020, and between 83 and 96 by 2030. The WSDOT Rail Plan (December 2013) forecasts an average of 64 trains/day by 2035.

According to data provided by BNSF for one day in February 2016 (Wagner 2016), gate closures at Dayton and Main Streets totally 100 minutes out of 1434 minutes, meaning that the crossings were closed 7% of the time and had an average closure time of 2.01 minutes. An analysis of 24 hour per day videotapes recorded by the City of Edmonds during a two week period in June 2012, showed a daily average of 37 gate closures, totaling 1 hour 20 minutes per day. This translates into an average closure duration of 2.16 minutes. A daily average of 10.6 delays in loading or unloading operations of the Edmonds-Kingston ferry were recorded (note that the ferry may still have departed on time depending on timing and duration of gate closure). Vehicles delayed by gate closures averaged 709 per day with 84 percent of delayed vehicles travelling to- and from the ferry dock; vehicle delays averaged 28.7 vehicle-hours daily. Pedestrians were delayed on average of 10 times per day affecting 115 pedestrians, while emergency vehicles were delayed a somewhat under 1 time per day (0.75 per day).

2.12 VISUAL RESOURCES

The principal views of the project area are from Puget Sound, surrounding neighborhoods and from persons travelling through by car, train, or non-motorized means. The main views from the project areas are to the west – the Sound, Kitsap Peninsula, and the Olympics. Pedestrians and bicyclists are among the most sensitive viewer groups, especially when engaging in recreational activities. The various waterfront parks, the fishing pier, and waterfront walkways have panoramic views to the west. The Edmonds Marsh trails are also frequented by recreational users, with the intended views primarily of wildlife. In general, users of these parks and facilities

would be highly sensitive to changes in the views. The duration of their viewing would generally be for as long as they are along the shoreline or in the marsh area.

The other sensitive viewers would be residents – along Railroad Avenue, along North Sunset Avenue, and on the Point Edwards Bluff. The duration of these views are the longest.

Motorists traveling to and through Edmonds constitute the largest viewer group. Over 11,000 passengers use the Edmonds ferry terminal daily, experiencing panoramic views of the Sound and project area (WSF, 2016). Persons arriving by vehicle see the project area as they approach the Edmonds Marsh. Persons waiting in the ferry queue have few opportunities to view the waterfront due to development between SR-104 and the waterfront.

2.13 WATER QUALITY

Through Ecology's BEACH program, Snohomish County conducts weekly water quality monitoring of recreational areas from May through September for bacteria that may pose a risk to people using the waterfront. Within Edmonds, water quality is monitored at Marina Beach Park and Edmonds Underwater Park. The 2015 results for each beach showed bacteria results substantially below the limits. On one day, bacteria results at the Marine Beach Park were in the swimming advisory range. Resampling showed low bacteria levels. On the same day at the Underwater Park, results were also very high (in the swimming closure range). Again, resampling showed lower bacteria levels.

The Federal Emergency Management Agency (FEMA) 100-year floodplain designations within the project area are limited to the Puget Sound shoreline and Edmonds Marsh (EDAW 2004). Some flooding has occurred along the coast, but more serious flooding has occurred in areas adjacent to the Edmonds Marsh/Shellabarger Creek in recent years (Edmonds 2007).

Puget Sound is expected to experience sea-level rise due to climate change in the coming years. The University of Washington's Climate Change Impacts group has prepared predictions as to the amount of sea-level rise and range from a low of 4 inches to a high of 56 inches, with the most likely being 24 inches of water surface elevation rise by 2100 (USCCI, 2015).

3.0 LEVEL 1 SOLUTION CONCEPT SCREENING

3.1 SOLUTION CONCEPT IDENTIFICATION

To identify near-term and long-term solutions for the at-grade crossings at Main and Dayton Streets a broad list of concepts was developed, including both structural and nonstructural solutions. Concepts were drawn from prior studies for the waterfront area, improvements applied to railroad crossings in other communities, consultation with local transportation agencies and other stakeholders, from the design experiences of the study team, and through extensive consultation with the community.

The team looked at near-term and long-term solutions aimed at improving the safety and reliability of the train crossings in Edmonds to support traffic, transit and emergency access to the waterfront. Concepts were developed through on-going task force meetings, public input, and previous studies. These ideas were compiled for review and evaluation with the Advisory Task Force.

The study involved two-stage evaluation of solutions. The first was the Level 1 Screening, which reviewed a wide array of solutions that were developed to a conceptual level. The qualitative criteria applied to the solutions in the Level 1 Screening were directed toward distinguishing between the concepts' abilities to meet the project's purpose and needs; those concepts that were infeasible or less effective were removed from further consideration. The concepts that remained after the Level 1 Screening were then further developed and evaluated using a set of more quantified criteria in the Level 2 Evaluation to determining preferred alternative(s) for implementation.

Over 40 distinct solution concepts were compiled from prior studies and analyses, public outreach efforts, and project team development. They are briefly described in Table 3-1, where they are organized by solution type. Multiple locations are identified where a given solution type may be appropriate, and the locations are indicated on Figure 3.1. Some concepts were developed to explore optional design features, resulting in 51 overall solution concepts. Detailed descriptions of each solution concept are provided in Appendix C.

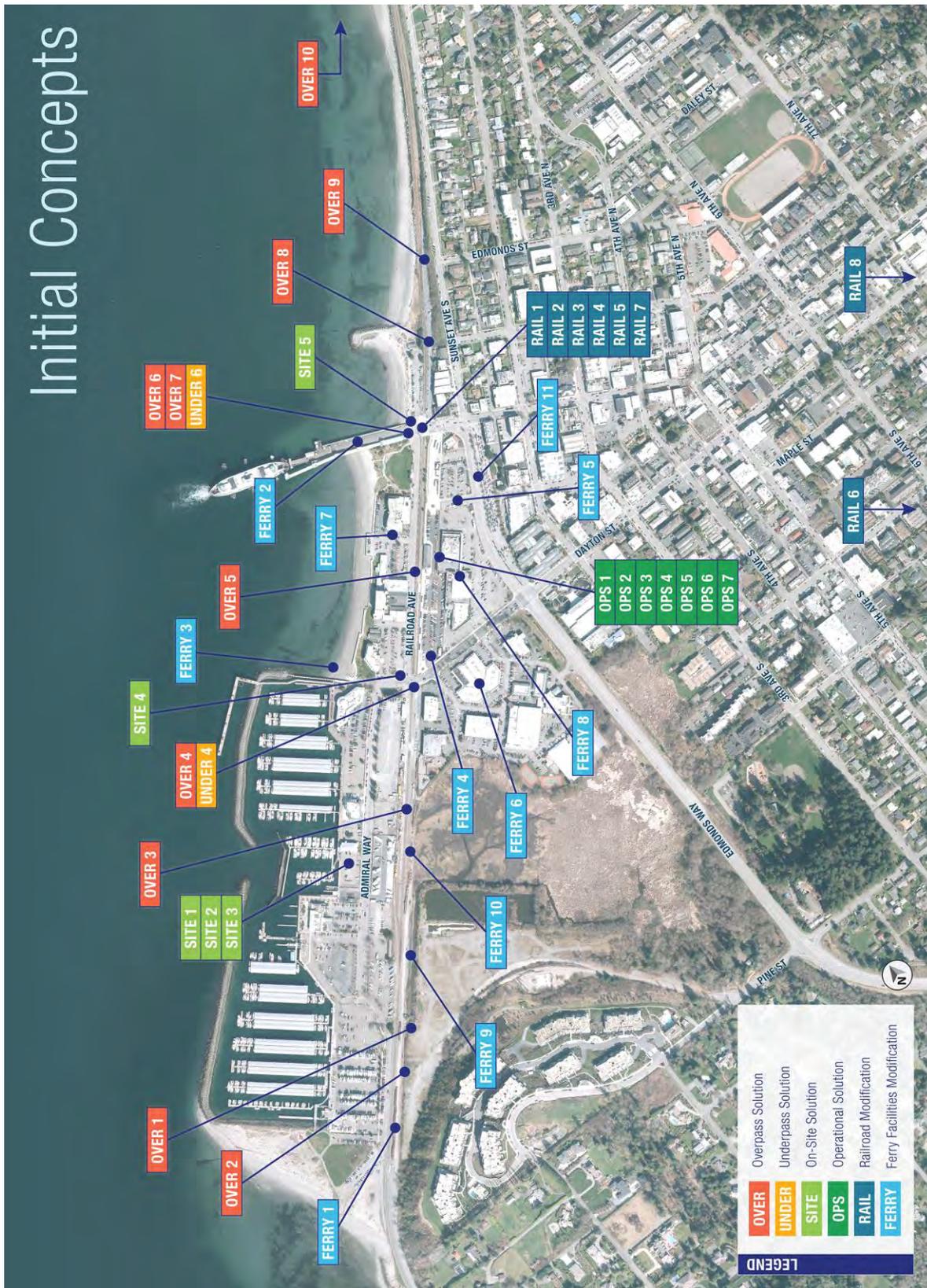
Table 3-1. Compiled Solution Concepts for Level 1 Screening

Identifier	Solution Concept Description
Roadway Overpass	
Overpass 1	South end of Admiral Way from lower yard at Unocal site ("Pine Street Extension")
Overpass 2	Marina Beach Park/Edmonds Crossing area from relocated ferry terminal flyover
Overpass 3	Near Edmonds Yacht Club
Overpass 4	Dayton Avenue
Overpass 5	Mid-block, near Senior Center
Overpass 6	Main Street (including ferry loading)
Overpass 7	Pedestrian/bicycle overpass spanning Main Street and Railroad
Overpass 8	Extension of Bell Street to Brackett's Landing Park North
Overpass 9	Extension of Edmonds Street to Brackett's Landing Park North
Overpass 10	Near Haines Wharf Park

Identifier	Solution Concept Description
Roadway Underpass	
Underpass 1	Main Street
Underpass 2	Dayton Street for all travel modes
Underpass 3	Salish Crossing (north of Dayton) for small service vehicles, pedestrians, bicycles only
Underpass 4	Main Street undercrossing for small service vehicles, pedestrians, bicycles only
Railroad Modifications	
Railroad 1	Train Trench: Full clearance under both Main & Dayton
Railroad 2	Train Trench: Full clearance under Main Street, with raised roadway at Dayton
Railroad 3	Combination Rail Underpass plus Roadway Overpass
Railroad 4	Combination Rail Overpass plus Roadway Underpass
Railroad 5	Elevated rail to pass over road crossings
Railroad 6	Relocate tracks into tunnel beneath Edmonds
Railroad 7	Double-track to optimize train passage and reduce passing time
Railroad 8	Relocate freight rail to east of I-405 along former Eastern Subdivision ROW
Operational	
Ops 1	Limit the daily number of long trains passing through crossings
Ops 2	Operate long trains only at night
Ops 3	Synchronize ferry schedule and train crossings to reduce conflicts
Ops 4	Emergency signals to halt trains short of Main Street and Dayton Street
Ops 5	Advance notification of hazardous cargo shipments on trains
Ops 6	Improve emergency operation of crossing gates
Ops 7	Tsunami evacuation plan
On-site Improvements	
Site 1	Emergency first aid training to employees on west side of railroad tracks
Site 2	Station emergency response staff and equipment on west side of railroad tracks
Site 3	Helipad for evacuation from west of railroad tracks
Site 4	At-grade crosswalk improvements at Dayton Street and Railroad Avenue
Site 5	At-grade crosswalk improvements at Main Street and Railroad Avenue
Ferry Terminal Modifications	
Ferry 1	Edmonds Crossing (Point Edwards Concept)
Ferry 2	Expanded Terminal Concept (enlarged trestle for greater vehicle storage)

Identifier	Solution Concept Description
Ferry 3	Mid-Waterfront Concept (vehicle storage @ Harbor Square w/ trestle at Dayton St.)
Ferry 4	Multimodal Center Garage/ferry vehicle storage, from Dayton St. to flyover to ferry
Ferry 5	Underground Ferry holding with pedestrian bridge extended
Ferry 6	Vehicle holding garage off Dayton Street with overpass to Railroad Avenue
Ferry 7	Trumpet flyover at Dayton Street with surface vehicle storage west of Railroad Avenue
Ferry 8	Surface parking at Salish Center with flyover at Main Street
Ferry 9	Railroad Avenue Holding Lanes accessed via at-grade crossing through Unocal site
Ferry 10	Railroad Avenue Exiting Lanes via at-grade crossing from through the Unocal site
Ferry 11	Relocate railroad tracks to current holding lanes; move holding lanes to west side of tracks

Figure 3-1. Level 1 Solution Concept Locations



3.2 SCREENING CRITERIA

Input to the proposed screening criteria was drawn from multiple sources: the stated purpose and need for the project, commonly applied evaluation and environmental review categories, and from community input. Table 3-2 presents the criteria applied in the Level 1 Screening.

The Level 1 criteria were intentionally qualitative in their design to appropriately correspond with the conceptual level of the solutions. The solution concepts were evaluated using a visual rating scheme of colored response icons, with a green icon being most positive, a red icon least positive, and a yellow icon indicating an intermediate rating between green and red; in some cases, the yellow icon represented a neutral or no-effect assessment. If it was found that a concept could not be feasibly implemented, it was noted to be fatally flawed.

Table 3-2. Level 1 Screening Criteria Descriptions

1 – Does the concept improve reliable emergency response to the west side of the railroad tracks?
Does the concept provide for continuous emergency response access across the railroad?
Does the concept reduce the likelihood of/potential for rail traffic delaying emergency response?
Does the concept improve emergency evacuation from the waterfront?
2 – Does the concept reduce delays to ferry loading/unloading of vehicles?
3 – Does the concept reduce delays and conflicts for pedestrians, bicycles and motorists at roadway/railroad crossings?
Does the concept reduce delays for pedestrians?
Does the concept reduce pedestrian conflicts between travel modes?
Does the concept improve connection between major destinations? (parks, transit, marina, ferry, downtown, restaurants)
4 – Does the concept provide safe and efficient intermodal passenger connectivity between ferry, commuter rail, bus transit, pedestrian, bicycle and motor vehicle modes of travel?
5 – Is the concept feasible to implement?
Is the concept feasible to construct?
Is the concept feasible to fund?
Is the concept feasible to permit?
6 – How well does the concept avoid environmental effects?
To ecosystem resources (streams, marsh/ wetlands, marine shorelines)?
To historic, cultural, and archaeological resources?

To visual aesthetics?

To noise levels?

To sites containing hazardous materials?

To use of park lands?

To air quality?

To soils and groundwater?

7 – How well does the concept avoid creating social and/or economic impacts?

What is the concept’s potential to avoid adverse effects on neighborhoods? To businesses?

Is the concept compatible with positive urban design?

What is the concept’s potential to avoid conflicts with parks/recreation assets?

Does the concept avoid creating safety hazards?

Does the concept improve freight mobility? (via rail, via ferry)

3.3 LEVEL 1 SCREENING OUTCOMES

The Level 1 Screening produced a number of near-term recommendations and selected a series of concepts to advance for further development and more detailed assessment in the Level 2 Evaluation of longer-term solutions.

3.3.1 Near-term Recommendations

Several concepts are recommended for implementation independent of the Edmonds Waterfront Access Study. While these concepts are supportive of some elements of the Waterfront Access Study objectives, they are more appropriately advanced either directly by the City of Edmonds or collaboratively with a different stakeholder group. Recommended near-term actions include:

- Construct crosswalk improvements at the Main Street at-grade railroad crossing to improve pedestrian safety and comfort (Level 1 Screening concept On-site 4). Recommended this be implemented directly by the City and coordinated with BNSF.
- Construct crosswalk improvements at the Dayton Street at-grade railroad crossing to improve pedestrian safety and comfort (Level 1 Screening concept On-site 5). Recommended this be implemented directly by the City and coordinated with BNSF.
- Implement emergency notifications, between the 911-call center and BNSF operations when an emergency is reported on the west side of the railroad tracks, to notify trains to halt outside of downtown Edmonds so that police and fire can respond without delay by passing trains (Level 1 Screening concept Operational 4). Recommended this be implemented through coordination between the City, Fire District 1, and BNSF.

Create and implement a Waterfront Emergency Evacuation Plan with measures that respond to a broad range of potential emergencies (Level 1 Screening concepts On-site 1, On-site 3, and On-site 7). Recommended this be

developed and implemented by an appropriate group that would include the City departments, Fire District 1, Swedish Hospital, Port of Edmonds, and Washington State Ferries, among others.

Figure 3-2. Near-term Recommendations



3.3.2 Solution Concepts Advanced to Level 2 Evaluation

Based on the results of the Level 1 Screening process, 13 of the solution concepts were selected to be further developed into formal alternatives for the Level 2 Evaluation. These concepts are denoted with blue checkmarks in **Table 3-3**, which presents a summary of the Level 1 Screening results. Details of the Level 1 reviews for each solution concept are provide in Appendix C.

Table 3-3. Level 1 Concepts Advanced to Level 2

Concept	Purpose and Need				Feasibility			Result
	Improves reliable emergency response access	Reduces delays to ferry loading/unloading	Reduces delays for all at rail crossings	Provides safe/efficient intermodal connectivity	Is feasible to implement	Avoids environmental effects	Avoids creating social and/or economic impacts	
ROADWAY OVERPASS								
OVER 1	▼	▼	■	■	▼	▼	▼	DISCONTINUE Displacement of dry moorage stacks is too extensive for the Port to accommodate
OVER 2A	▼	●	▼	▼	■	■	▼	DISCONTINUE Relies upon Edmonds Crossing (Ferry 1), which is discontinued from consideration as it was removed from WSF long range plans
OVER 2B	▼	●	▼	▼	■	■	▼	DISCONTINUE Does not meet purpose and need
OVER 3	■	■	■	■	■	Not Assessed	Not Assessed	DISCONTINUE Does not meet purpose and need
OVER 4A	●	▼	●	▼	▼	▼	■	DISCONTINUE Anticipated economic effects more extensive than Overpass 4B
OVER 4B	●	▼	●	■	▼	▼	▼	ADVANCE TO LEVEL 2 Dayton St Pedestrian / Emergency Access Overpass ✓
OVER 5	▼	■	▼	●	●	●	●	ADVANCE TO LEVEL 2 Midblock Pedestrian / Limited Emergency Access Overpass ✓
OVER 6	●	●	▼	●	■	■	■	ADVANCE TO LEVEL 2 Main Street Ferry Overpass 2 ✓
OVER 7A	▼	■	▼	●	●	▼	●	ADVANCE TO LEVEL 2 Main Street Pedestrian / Limited Emergency Access Overpass ✓
OVER 7B	▼	■	▼	●	●	▼	●	DISCONTINUE For similar functionality, the cost and visual impact is greater than for Overpass 7A
OVER 7C	▼	■	▼	●	●	▼	●	
OVER 7D	▼	■	▼	●	●	▼	●	
OVER 8	●	▼	▼	▼	▼	■	▼	DISCONTINUE Grades are steeper and impacts to park greater than for Overpass 9
OVER 9	●	▼	▼	▼	▼	■	▼	ADVANCE TO LEVEL 2 Edmonds Street Pedestrian / Emergency Access Overpass ✓
OVER 10	■	■	■	■	■	Not Assessed	Not Assessed	DISCONTINUE Does not meet purpose and need
ROADWAY UNDERPASS								
UNDER 1	●	●	●	●	■	■	▼	ADVANCE TO LEVEL 2 Combine features with Ferry 5 to become Main Street Ferry Underpass ✓
UNDER 2	●	▼	●	▼	■	▼	■	DISCONTINUE Provides lesser benefits than Underpass 1, and maintains at grade crossings under normal operations
UNDER 3	▼	■	▼	▼	●	●	▼	DISCONTINUE Does not meet purpose and need
UNDER 4	▼	■	▼	●	●	●	▼	ADVANCE TO LEVEL 2 Main Street Pedestrian / Limited Emergency Access Underpass ✓
RAILROAD MODIFICATIONS								
RAIL 1	●	●	●	●	✗	Not Assessed	Not Assessed	DISCONTINUE BNSF cannot accept changes in the horizontal or vertical alignment of the railroad tracks
RAIL 2	●	●	●	●	✗	Not Assessed	Not Assessed	
RAIL 3	●	●	●	●	✗	Not Assessed	Not Assessed	
RAIL 4	●	●	●	●	✗	Not Assessed	Not Assessed	
RAIL 5	●	●	●	●	✗	■	■	
RAIL 6	●	●	●	■	✗	Not Assessed	Not Assessed	DISCONTINUE Already planned for construction
RAIL 7	■	■	■	■	●	Not Assessed	Not Assessed	DISCONTINUE Rail right-of-way is no longer available for implementation
RAIL 8	■	■	■	■	✗	Not Assessed	Not Assessed	

KEY
 ● Yes, very well ▼ Yes, somewhat ■ Yes, but not very well ✗ Does not meet criteria; fatal flaw ● Suggested by the community
 ■ Yes, but with challenges

Table 3-3. continued

Concept	Purpose and Need				Feasibility			Result
	Improves reliable emergency response access	Reduces delays to ferry loading/unloading	Reduces delays for all at rail crossings	Provides safe/efficient intermodal connectivity	Is feasible to implement	Avoids environmental effects	Avoids creating social and/or economic impacts	
OPERATIONAL								
OPS 1	■	■	■	■	✗	Not Assessed	Not Assessed	DISCONTINUE BNSF does not have ability to schedule trains to pass at specific times as they are “built” remotely and scheduled to meet customer needs
OPS 2	■	■	■	■	✗	Not Assessed	Not Assessed	
OPS 3	■	■	■	■	✗	Not Assessed	Not Assessed	DISCONTINUE BNSF does not have ability to implement concept’s restrictions on the timing of the freight rail traffic
OPS 4	▼	■	■	▼	●	●	●	Concept should be implemented as a near-term solution to complement other concepts
OPS 5	■	■	■	■	✗	Not Assessed	Not Assessed	DISCONTINUE Does not meet purpose and need
OPS 6	■	■	■	▼	✗	Not Assessed	Not Assessed	DISCONTINUE Standardized train detection system cannot be modified locally
OPS 7	■	■	■	■	●	Not Assessed	Not Assessed	DISCONTINUE Propose concept be considered outside of Waterfront Access process
ON-SITE IMPROVEMENTS								
SITE 1	▼	■	■	■	●	Not Assessed	Not Assessed	DISCONTINUE Propose concept be considered outside of Waterfront Access process
SITE 2	●	■	■	■	●	●	●	ADVANCE TO LEVEL 2 Emergency Response Team
SITE 3	▼	■	■	■	●	●	●	
SITE 4	■	■	▼	▼	●	●	●	DISCONTINUE Propose concept be considered outside of Waterfront Access process
SITE 5	■	■	▼	▼	●	●	●	
FERRY TERMINAL MODIFICATIONS								
FERRY 1	▼	●	▼	▼	✖	✖	▼	DISCONTINUE High cost, and Edmonds Crossing is not a part of WSF’s Long Range Plan and therefore cannot be relied upon for access
FERRY 2	■	▼	■	▼	✖	Not Assessed	Not Assessed	DISCONTINUE Provides only for improved vehicle queuing and does not meet purpose and need
FERRY 3	●	●	▼	▼	✖	✖	✖	ADVANCE TO LEVEL 2 Dayton Street New Ferry Terminal (Offers an alternative to Edmonds Crossing and current ferry terminal location)
FERRY 4	●	●	▼	●	✖	✖	✖	ADVANCE TO LEVEL 2 Combine features with Ferry 8 concept to become Main Street Ferry Overpass 1 (Offers redevelopment opportunity)
FERRY 5	●	●	▼	●	✖	✖	▼	ADVANCE TO LEVEL 2 Combine features with Underpass 1 to become Main Street Ferry Underpass
FERRY 6	●	●	▼	●	✗	✖	✗	DISCONTINUE Not feasible for WSF due to roadway ownership and access issues
FERRY 7	●	●	▼	●	✗	✖	✗	DISCONTINUE Property is unavailable, and ferry traffic access along Railroad Avenue is unacceptable to WSF
FERRY 8	●	●	▼	●	✖	✖	✖	ADVANCE TO LEVEL 2 Combine features with Ferry 4 concept to become Main Street Ferry Overpass 1 (Offers redevelopment opportunity)
FERRY 9	■	▼	■	■	✗	Not Assessed	Not Assessed	DISCONTINUE Unacceptable to BNSF (new at-grade crossing) or WSF (relies on access along Railroad Avenue)
FERRY 10	■	■	■	■	✗	Not Assessed	Not Assessed	Does not provide emergency access
FERRY 11	■	▼	■	■	✗	Not Assessed	✖	DISCONTINUE Does not provide emergency access Unacceptable to BNSF (new at-grade crossing) Social and economic impacts are high

KEY
 ● Yes, very well ▼ Yes, somewhat ■ Yes, but not very well ✖ Yes, but with challenges ✗ Does not meet criteria; fatal flaw ● Suggested by the community

4.0 LEVEL 2 ALTERNATIVES DEVELOPMENT AND EVALUATION

4.1 ALTERNATIVES DEVELOPMENT

Moving from the Level 1 Concept Screening into the Level 2 Alternatives Evaluation, the most promising concepts were integrated into 10 solution alternatives addressing most, if not all, of the defined purpose and needs for the project. Table 4-1 summarizes the transition of Level 1 concepts into their corresponding Level 2 Alternatives.

Alternatives were developed having both near-term and long-term implementation timelines, and to allow for pairing of alternatives that could offer phased improvement of access. All of the alternatives provide waterfront access for emergency responders in the event the at-grade crossings are blocked; however, the level of service for emergency access differs between the alternatives, which are summarized as follows:

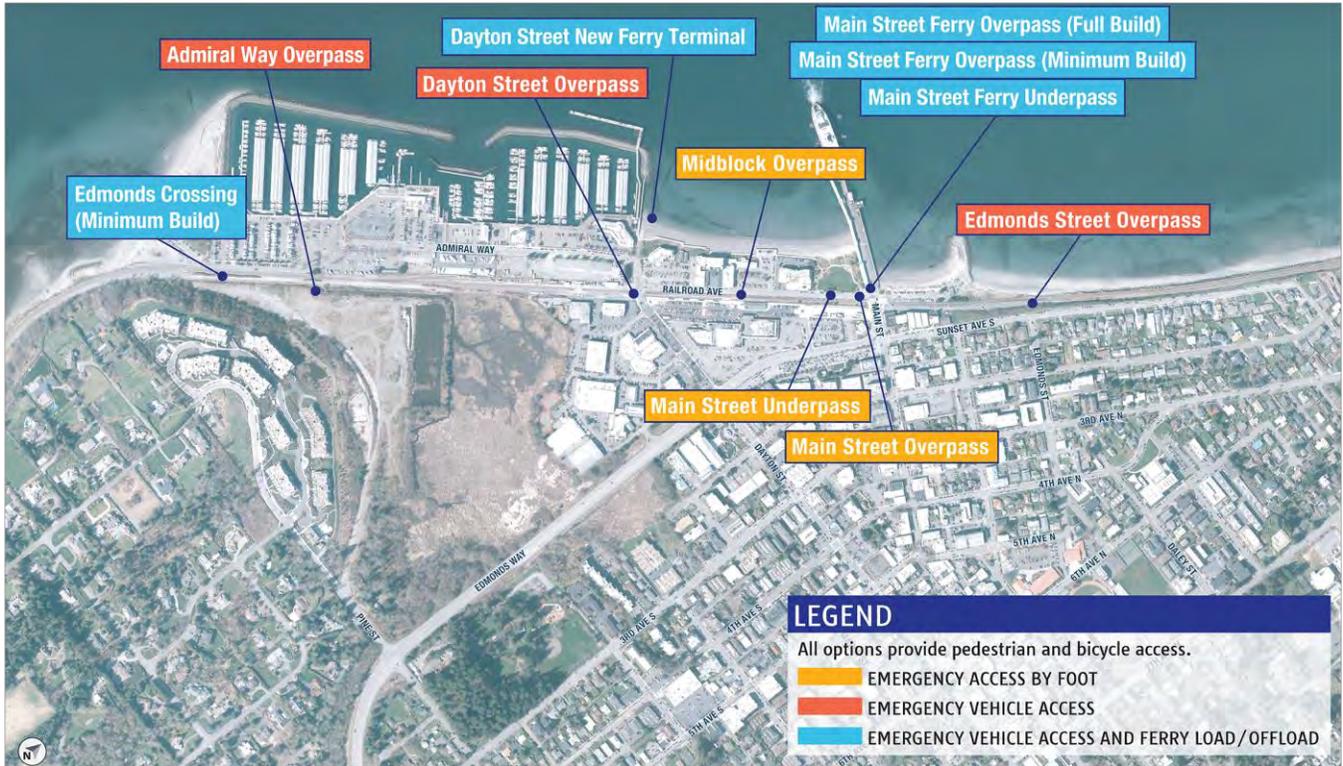
- Pedestrian/bicycle overpass or underpasses. Emergency responders cross over or under the railroad tracks on foot to access an aid car stationed in a secured garage on the waterfront side of the tracks. Overpasses/underpasses provide full-time pedestrian/bicycle/ADA access across the railroad tracks.
- Emergency vehicle overpasses. Emergency responders cross over the railroad tracks in their vehicles (police cars, aid cars, fire trucks) on access-controlled single lane roadway. Overpasses provide full-time pedestrian/bicycle/ADA access across the railroad tracks.
- Ferry access overpasses or underpasses. Emergency responders cross over or under the railroad tracks in their vehicles (police cars, aid cars, fire trucks) using the ferry vehicle access roadways and a ramp connecting to grade on the waterfront. Overpasses/underpasses provide full-time pedestrian/bicycle/ADA access across the railroad tracks.

During the Level 1 Concept Screening, the Edmonds Crossing ferry terminal relocation was eliminated from further consideration because it was not specified in the long-term plans of Washington State Ferries, it was perceived to have a high construction cost. As alternatives were under evaluation in the Level 2 process, and the estimated costs for other ferry access alternatives were found to be comparable to those for Edmonds Crossing, the Edmonds Crossing (Minimum Build) concept was reconsidered as an eleventh alternative.

Table 4-1 Level 1 Concepts with Corresponding Level 2 Alternatives

Level 1 Concepts	Level 2 Alternatives
Overpass 1	Admiral Way Pedestrian/Emergency Vehicle Overpass
Overpass 4B	Dayton Street Pedestrian/Emergency Vehicle Overpass
Overpass 9	Edmonds Street Pedestrian/Emergency Vehicle Overpass
Overpass 5/On-site 2	Midblock Pedestrian Overpass, with stationed equipment
Overpass 7A/On-site 2	Main Street Pedestrian Overpass, with stationed equipment
Underpass 4/On-site 2	Main Street Pedestrian Underpass, with stationed equipment
Ferry 4/Ferry 8	Main Street Ferry Overpass 1
Overpass 6	Main Street Ferry Overpass 2
Underpass 1/Ferry 5	Main Street Ferry Underpass
Ferry 3	Dayton Street New Ferry Terminal

Figure 4-1. Level 2 Alternative Locations



4.2 ALTERNATIVES DESCRIPTIONS

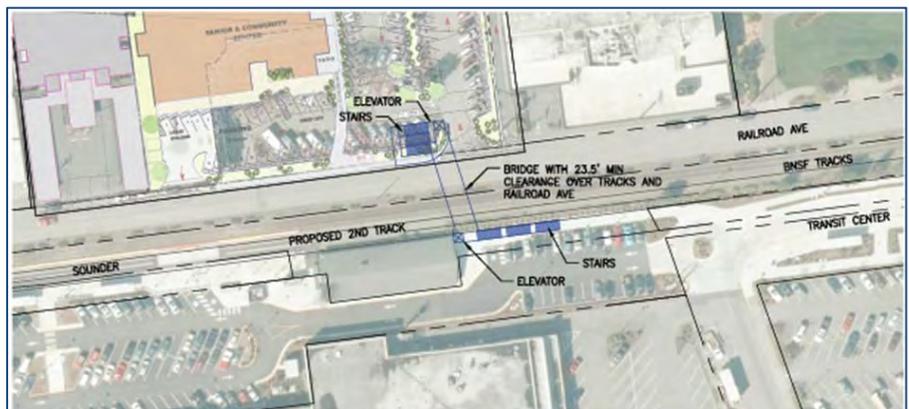
The eleven Level 2 alternatives are briefly described below, grouped according to the level of emergency access they provide. More detailed discussions of the features of each alternative can be found in the appendices.

4.2.1 Emergency Access by Foot Alternatives

Midblock Pedestrian Overpass

Constructs a pedestrian bridge over the railroad tracks in the vicinity of the train station and the Edmonds Senior Center, with an aid car stationed in a secure garage near the west terminus of the bridge. The overpass is accessed by stairs and elevators on each end.

Provides access for pedestrians, bicycles, ADA, and emergency evacuation.



Provides safe intermodal connections to both sides of the railroad tracks, and its use would be expected to grow once the second set of tracks is installed.

The location of this overpass minimizes impacts to views. The limited scale of this alternative makes it affordable, with minimal construction disruption and duration.

Provides an incremental improvement to emergency response access when trains are blocking at-grade crossings, as responders must cross on foot to reach aid car. Location of a garage to house an aid car must be determined.

Main Street Pedestrian Overpass

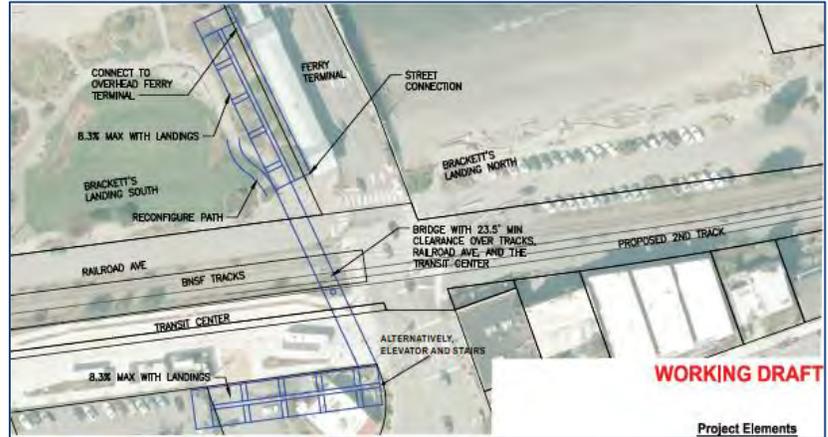
Constructs a pedestrian bridge over the railroad tracks next to Main Street, from the Transit Center to the overhead passenger ramp at the ferry dock, with an aid car stationed in a secure garage near the west terminus of the bridge. The east terminus is accessed by both stairs and elevator; alternately, a ramp was considered.

Provides access for pedestrians, bicycles, ADA, and emergency evacuation.

Provides safe intermodal connections to both sides of the railroad tracks. Its location and connection to the ferry passenger ramp would promote regular use by intermodal commuters.

The location of this overpass adjacent to ferry terminal and other transportation structures limits impacts to views. The limited scale of this alternative makes it affordable, with minimal construction disruption and duration.

Provides an incremental improvement to emergency response access when trains are blocking at-grade crossings, as responders must cross on foot to reach aid car. Location of a garage to house an aid car must be determined.



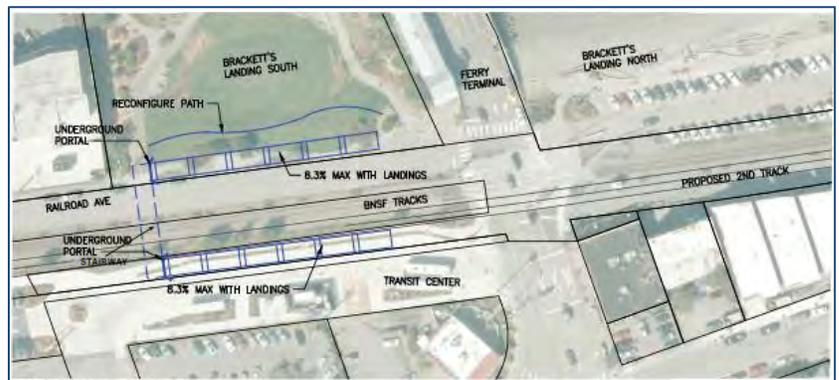
Main Street Pedestrian Underpass

Constructs a pedestrian tunnel crossing under the railroad tracks in the vicinity of the Transit Center and Brackett's Landing Park South, with an aid car stationed in a secure garage near the west terminus of the bridge. The underpass is accessed by ramps and stairs on each end.

Provides access for pedestrians, bicycles, ADA, and emergency evacuation.

Provides safe intermodal connections to both sides of the railroad tracks. Despite its convenient location, the below-grade configuration may appear uninviting and may be less used than other alternatives.

The underpass presents no view impacts. The limited scale of this alternative makes it affordable, with minimal construction disruption and duration. Drainage must be collected and pumped from the tunnel.

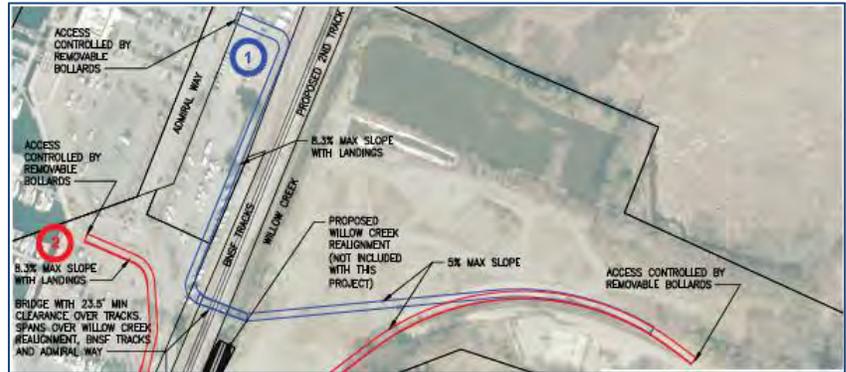


Provides an incremental improvement to emergency response access when trains are blocking at-grade crossings, as responders must cross on foot to reach aid car. Location of a garage to house an aid car must be determined.

4.2.2 Emergency Vehicle Access Alternatives

Admiral Way Overpass

Constructs a single-lane roadway bridge crossing over the railroad tracks and Willow Creek between the Unocal site to Admiral Way in the Port of Edmonds. Vehicle access restricted to emergency vehicles using mechanized retractable bollards. The roadway would also provide full-time pedestrian and bicycle access, connecting the waterfront trail system, around the south end of Edmonds Marsh, to Pine Street.



Provides continuous access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, emergency ferry loading/offloading, and emergency evacuation. Among the emergency vehicle access alternatives, this project entails the longest route from the fire station to the waterfront.

The overpass location does not serve intermodal connections. This alternative also does not reduce conflicts between transportation modes at the at-grade crossings.

The overpass structure sits below sightlines from the nearby Point Edwards development. Views from further east and from the northeast are obscured by the adjacent hillside, and so structure would not obstruct the views.

The location of this alternative limits disruption during construction.

Dayton Street Overpass

Constructs a single-lane roadway bridge crossing over the railroad tracks between the Sunset Avenue/ Dayton Street intersection to the north end of Admiral Way in the Port of Edmonds. Vehicle access restricted to emergency vehicles using mechanized retractable bollards. The roadway would also provide full-time pedestrian and bicycle access.



Provides continuous access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, emergency ferry loading/offloading, and emergency evacuation.

The overpass location does not conveniently serve intermodal connections. This alternative also does not reduce conflicts between transportation modes at the at-grade crossings.

The overpass would impact views along the Dayton Street corridor. Views from further east and from the northeast are obscured by the adjacent hillside, and so structure would not obstruct the views.

The location of this alternative limits disruption during construction.

Edmonds Street Overpass

Constructs a single-lane roadway bridge crossing over the railroad tracks between the Sunset Avenue/ Edmonds Street intersection to Brackett's Landing North and Railroad Avenue. Vehicle access restricted to emergency vehicles using mechanized retractable bollards. The roadway would also provide full-time pedestrian and bicycle access, connecting from Sunset Avenue to the Waterfront.



Provides continuous access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, emergency ferry loading/offloading, and emergency evacuation. Among the emergency vehicle access alternatives, this project provides the most direct route from the fire station to the waterfront.

The overpass location does not conveniently serve intermodal connections except when the at-grade crossings are closed for extended periods. This alternative does not significantly reduce conflicts between transportation modes at the at-grade crossings.

The overpass would marginally impact views from the east, as the overpass structure sits at and largely below the grade of Sunset Avenue, with the railings of the uppermost section extending upward into view as the structure approaches Sunset Avenue. The structure will, however, be visible when viewing north and south along the beach.

Because the east terminus is elevated above the railroad tracks, this alternative is the least costly to construct of the emergency vehicle access alternatives.

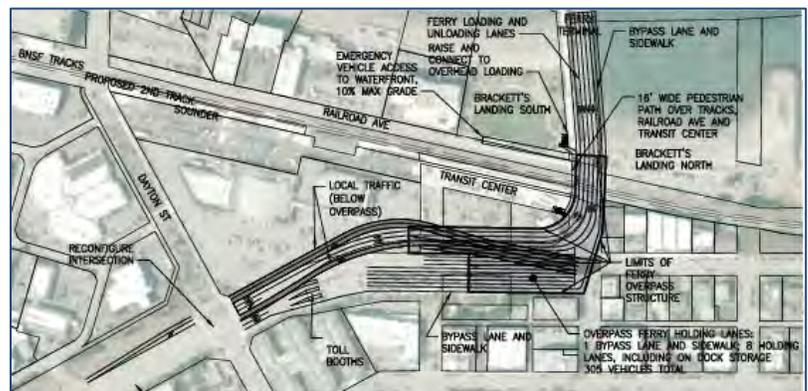
The location of this alternative requires design and construction that is sensitive to the shoreline environment.

4.2.3 Emergency Vehicle Access and Ferry Load/Offload

Main Street Ferry Overpass (Full Build)

Constructs a roadway bridge crossing over Main Street, Sunset Avenue, railroad tracks, and Railroad Avenue to the ferry dock. A single-lane ramp would provide restricted access for emergency vehicles from the bridge to Railroad Avenue.

Provides continuous grade-separated access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, ferry vehicle loading/offloading, and emergency evacuation.



Separates ferry vehicle traffic from downtown streets, reducing traffic volumes through the at-grade crossing at Main Street, and reducing conflicts and delays caused when loading and offloading ferries. Increases ferry queuing capacity from the 180 vehicles currently to 305 vehicles to meet ferry operating standards.

The overpass would impact views along Main Street below 3rd Avenue, along Sunset Avenue, and from properties immediately to the east of Sunset Avenue.

In order to maintain ferry operations, the construction will require a series of stages to relocate traffic flow and vehicle queuing through the site as portions of the project are built. This will extend the duration of construction and disruption.

The location and scale of this alternative requires right-of-way acquisition that will result in dislocating multiple businesses. The overwater footprint of the project should be consistent with current conditions.

Main Street Ferry Overpass (Minimum Build)

Similar to the Main Street Overpass (full Build) Alternative, but smaller in scale. Constructs a roadway bridge crossing over Main Street, Sunset Avenue, railroad tracks, and Railroad Avenue to the ferry dock. A single-lane ramp would provide restricted access for emergency vehicles from the bridge to Railroad Avenue.

Provides continuous grade-separated access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, ferry vehicle loading/offloading, and emergency evacuation.



Separates ferry vehicle traffic from downtown streets, reducing traffic volumes through the at-grade crossing at Main Street, and reducing conflicts and delays caused when loading and offloading ferries. Provides ferry queuing capacity at or slightly greater than the current 180 vehicles.

The overpass would impact views along Main Street below 3rd Avenue, along Sunset Avenue, and from properties immediately to the east of Sunset Avenue.

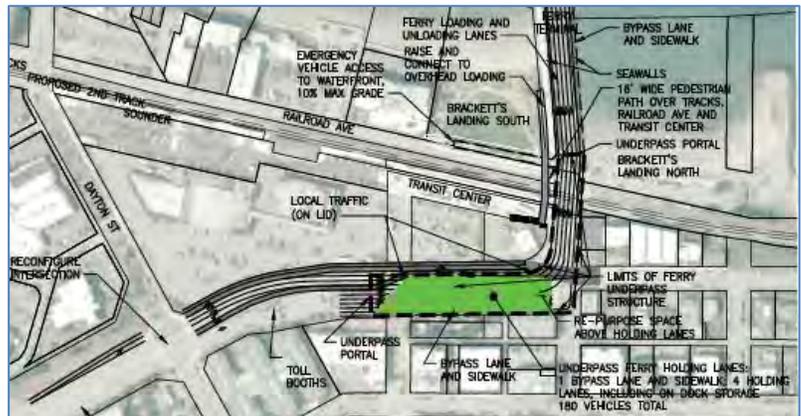
In order to maintain ferry operations, the construction will require a series of stages to relocate traffic flow and vehicle queuing through the site as portions of the project are built. This will extend the duration of construction and associated disruption.

The location and scale of this alternative requires right-of-way acquisition that will result in dislocating multiple businesses. The overwater footprint of the project should be consistent with current conditions.

Main Street Ferry Underpass

Constructs a roadway tunnel below Main Street, Sunset Avenue, railroad tracks, and Railroad Avenue to the ferry dock. A single-lane ramp would provide restricted access for emergency vehicles from the tunnel to Railroad Avenue.

Provides continuous grade-separated access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, ferry vehicle loading/offloading, and emergency evacuation.



Separates ferry vehicle traffic from downtown streets, reducing traffic volumes through the at-grade crossing at Main Street, and reducing conflicts and delays caused when loading and offloading ferries. Provides ferry queuing capacity at or slightly greater than the current 180 vehicles.

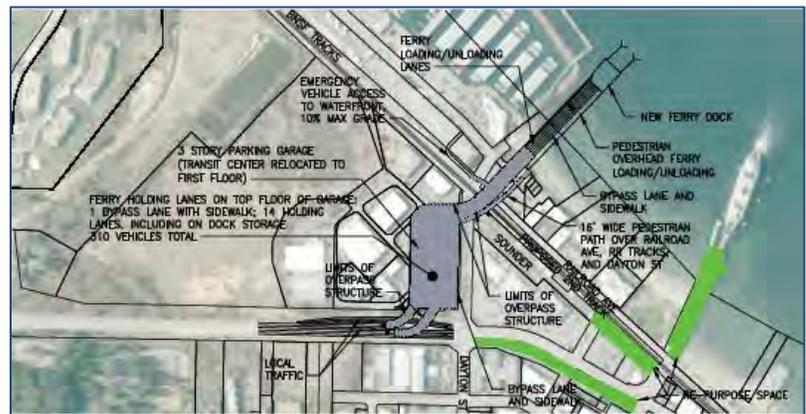
The underpass would not impact views and, with vehicles queued and passing below grade, would provide opportunities for redeveloping the streetscapes on along Main Street and Sunset Avenue to improve connectivity between downtown and the waterfront area.

In order to maintain ferry operations, the construction will require a series of stages to relocate traffic flow and vehicle queuing through the site as portions of the project are built. This will extend the duration of construction and associated disruption. Drainage must be collected and pumped from the tunnel.

Constructing the tunnel largely below the groundwater table will require heavy civil construction techniques to support excavation walls and the railroad tracks, and to rebuild the ferry pier. This will require right-of-way acquisition that will result in dislocating businesses. The overwater footprint of the project should be consistent with current conditions.

Dayton Street New Ferry Terminal

Relocates the ferry terminal to new facilities along the Dayton Street corridor. Constructs a parking garage in the Harbor Square business park for ferry vehicle queuing, commuter parking and bus transit center. Constructs a roadway bridge crossing from the parking garage over Dayton Street, railroad tracks, and Railroad Avenue to a new ferry dock. A single-lane ramp would provide restricted access for emergency vehicles from the bridge to Railroad Avenue.



Provides continuous grade-separated access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, ferry vehicle loading/offloading, and emergency evacuation.

Separates ferry vehicle traffic from downtown streets, reducing traffic volumes through the at-grade crossing at Main Street, and reducing conflicts and delays caused when loading and offloading ferries. Increases ferry queuing capacity from the 180 vehicles currently to 305 vehicles to meet ferry operating standards.

The overpass would impact views along Dayton Street, Admiral Way, Railroad Avenue, and along the shoreline.

The construction can progress without impacting ongoing ferry operations.

The location and scale of this alternative requires right-of-way acquisition that will result in dislocating multiple businesses. The overwater footprint of the project should be consistent with current conditions.

Edmonds Crossing (Minimum Build)

Relocates the ferry terminal to new tolling and queuing facilities on the former Unocal property, a new dock extending out from the south edge of the marina, and connected by a trestle over the railroad tracks, the Willow Creek realignment, and Admiral Way. A single-lane ramp would provide restricted access for emergency vehicles from the trestle to Admiral Way.

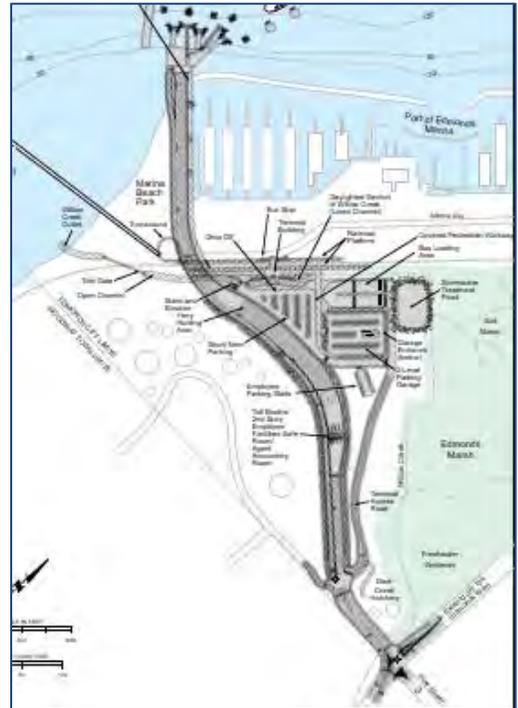
Provides continuous grade-separated access for pedestrians, bicycles, ADA, police, aid cars, fire trucks, ferry vehicle loading/offloading, and emergency evacuation.

Separates ferry vehicle traffic from downtown streets, reducing traffic volumes through the at-grade crossing at Main Street, and reducing conflicts and delays caused when loading and offloading ferries. Provides ferry queuing capacity at or slightly greater than the current 180 vehicles, with space available to expand queuing.

The overpass would impact views from the marina, Marina Beach Park, units in the residential area of Point Edwards, and along the shoreline.

The construction can progress without impacting ongoing ferry operations.

The location and scale of this alternative requires right-of-way acquisition that will displace upland uses at the south end port property.



4.3 EVALUATION CRITERIA

Input to the proposed screening criteria was drawn from a number of sources: the stated purpose and need for the project, commonly applied evaluation and environmental review categories, and community input. The criteria were also informed by the Level 1 concept screening discussions with the Task Force.

Applying the criteria to an alternative will result in a graphic response, applying a system of partially-filled circles sometimes referred to as a *Consumer Reports*-styled system, as shown in **Table 4-2**. Level 2 Rating Designations Table 4-2.

Table 4-2. Level 2 Rating Designations

Symbol	General Meaning
	Alternative greatly improves functionality/benefit
	Alternative somewhat improves functionality/benefit
	No Change
	Alternative somewhat degrades functionality/benefit
	Alternative greatly degrades functionality/ benefit
	Fatal flaw

Table 4-3 presents the set of criteria applied in the Level 2 alternatives evaluation. Although the criteria (logically) share many of the topic areas as the Level 1 screening criteria, they were phrased to elicit a more quantitative response (*How does the alternative...?*) than the Level 1 criteria (*Does the concept...?*).

Table 4-3. Level 2 Evaluation Criteria Descriptions

1 – Does the alternative improve reliable emergency response to the west side of the railroad tracks?
<ul style="list-style-type: none"> ⦿ = provides for fire truck to and from waterfront ◐ = provides for gator vehicle and emergency personnel access through elevators or ramps (limited), or fire truck to waterfront but longer response time ○ = No change from existing condition ◑ = some degradation from current emergency access ● = much degradation from current emergency access ✘ = fatal flaw – alternative is worse to a point that is unacceptable
2 – Does the alternative provide for emergency evacuation of the waterfront?
<ul style="list-style-type: none"> ⦿ = provides vehicle and pedestrian evacuation ◐ = provides pedestrian evacuation ○ = No change from existing condition ◑ = emergency evacuation is somewhat worse than existing ● = emergency evacuation is much worse than existing ✘ = fatal flaw – alternative is worse to a point that is unacceptable
3 – Does the alternative reduce delays to ferry loading/unloading of vehicles, bicycles and pedestrians?
<ul style="list-style-type: none"> ⦿ = Provides uninterrupted vehicle, bicycle and pedestrian loading/unloading ◐ = Provides uninterrupted pedestrian loading/ unloading, and/ or for vehicle loading/unloading in emergency circumstances ○ = no change from existing condition ◑ = ferry loading/ unloading is somewhat worse than existing ● = ferry loading/ unloading is much worse than existing ✘ = fatal flaw – alternative is worse to a point that is unacceptable
4 – Does the alternative improve circulation and reduce delays and conflicts for pedestrians, bicycles, motorists and freight at roadway/railroad crossings?
<p>Provides continuous pedestrian and bicycle access?</p> <p>Provides continuous vehicle access?</p> <p>Reduces pedestrian and/or bicycle conflicts with other travel modes?</p> <p>Reduces motorist conflicts with vehicles and other travel modes?</p> <p>Provides continuous freight mobility (via rail, via ferry)</p> <ul style="list-style-type: none"> ⦿ = Reduces delay and conflicts for most modes ◐ = Somewhat reduces delays and conflicts for some modes ○ = no change from existing condition ◑ = delay is somewhat more and/ or new conflicts are introduced for some modes ● = delay is more and/ or some new conflicts are introduced for most modes ✘ = fatal flaw – alternative is worse to a point that is unacceptable

5 – Does the alternative provide safer and more efficient intermodal passenger connectivity between ferry, commuter rail, bus transit for pedestrians, bicycles and motor vehicle travel?

Ferry to/ from commuter rail and bus transit

Ferry to/from downtown

Bus transit and commuter rail to/from downtown

- = safer and more efficient for most movements
- = somewhat safer and more efficient for some movements
- = no change from existing condition
- = somewhat less safe and efficient for some movements
- = less safe and efficient for most movements
- = fatal flaw – alternative is worse to a point that is unacceptable

6 – Does the alternative fit with urban design concepts and community goals?

Maintains views of Puget Sound and Olympic Mountains

Provides opportunities for urban design to enhance aesthetics/experience

Compatible with Edmonds’ small-town ambience

Minimizes impacts to neighborhoods

Minimizes impacts to businesses

Preserves use of parks and recreational assets

- = yes
- = somewhat
- = no change from existing condition
- = somewhat no
- = no
- = fatal flaw – alternative is worse to a point that is unacceptable

7 – Is the alternative consistent with Stakeholders’ current and future operations?

City of Edmonds

Washington State DOT

Washington State Ferries

Port of Edmonds

Sound Transit

Community Transit

BNSF Railroad

- = very consistent
- = somewhat consistent
- = no change from existing condition
- = somewhat inconsistent
- = Not consistent
- = fatal flaw – alternative is worse to a point that is unacceptable

8 – Is the alternative fundable and permissible?

Affordable based on project costs including design, construction and maintenance

Attractive to grant money and stakeholder contribution

Permittable by resource agencies, tribes, BNSF

- = Yes
- = somewhat
- = N/A
- = Not very
- = No
- = fatal flaw – alternative is worse to a point that is unacceptable

9 – Can the alternative avoid or minimize temporary construction impacts (measure of relative construction impacts)?

To sensitive environments

To residents

To businesses

To waterfront users

To freight traffic (on trains and to/ from ferry)

To bus transit users

To passenger rail users

To ferry users

To transportation functionality

- = Most construction impacts can be avoided or mitigated
- = Some construction impacts can be avoided or mitigated
- = N/A
- = Moderate construction impacts for some aspects of waterfront
- = Higher construction impacts for multiple aspects of waterfront
- = fatal flaw – alternative is worse to a point that is unacceptable

10 – How does the alternative affect the environment?

ecosystem resources (streams, marsh/ wetlands, marine shorelines)

historic, cultural, and archaeological resources

visual aesthetics

noise levels

sites containing hazardous materials

park lands or recreational

air quality

soils and groundwater

social and economic (incl. disproportionate impacts)

- ⊙ = Multiple environmental benefits/ enhancements
- ◐ = Some environmental benefits/ enhancements
- = no change from existing condition
- ◑ = environmental impacts to some areas of environment
- = environmental impacts to multiple areas of environment
- ✘ = fatal flaw – alternative is worse to a point that is unacceptable

11 – Does the alternative address impacts of sea level rise?

To existing infrastructure and access

Sea level rise considerations for design to ensure safety

- ⊙ = yes
- ◐ = somewhat
- = no change from existing condition
- ◑ = somewhat no
- = no
- ✘ = fatal flaw – alternative is worse to a point that is unacceptable

4.4 LEVEL 2 EVALUATION OUTCOMES

Each alternative was evaluated under the full set of criteria. In order to sufficiently distinguish the alternatives from one another, the sub-criteria were individually applied to the alternatives to inform the overall rating for a given criteria. The bases for the individual ratings were documented and are summarized in the evaluation matrices provided in Appendix D.

A key consideration in assessing the feasibility of an alternative is the associated cost to plan, design, permit, and construct the project. Planning level cost estimates were prepared for each alternative, utilizing cost databases from WSDOT and Sound Transit, which are summarized in Table 4-4. More detailed presentations of the cost estimates are provided in Appendix D. The Task Force’s assessment of an alternative’s financial feasibility, or affordability, considered the viability of funding the project through grants and interagency partnerships.

Table 4-5 summarizes the evaluation outcomes for the 11 alternatives under the 11 criteria. The alternatives are grouped by emergency access type to facilitate visual comparisons between alternatives of similar capacity.

As a further aid in comparing the alternatives, the evaluation rankings were converted to a numerical scoring format, where the graphic ratings have been translated to a numerical scale of 1 (corresponding to “Greatly Degrades”) to 5 (corresponding to “Greatly Improves”). Table 4-6 presents the results of the numerical ratings, where varying weighting schemes were applied to the scores to assess the sensitivity of the outcomes when sets of criteria were emphasized:

- Evenly weighted. All criteria scores summed directly for each alternative.
- Emphasizing emergency response. Scores under the following criteria were weighted 4 times more than other criteria:
 - Criterion 1 - Improving Emergency Response (assessing the level of service)
 - Criterion 8 - Fundable & Permittable (considering timing to place an alternative in service)
- Emphasizing reduced traffic conflicts and delays. Scores under these criteria were weighted 4 times more than other criteria:
 - Criterion 3 - Ferry delay reduction
 - Criterion 4 – Traffic circulation/reduced conflicts

Criterion 5 – Intermodal connectivity

Criterion 7 – Consistent with traffic operations

- Emphasizing the human and natural environment. Scores under these criteria were weighted 4 times more than other criteria:

Criterion 6 – Urban design/community goals

Criterion 9 – Temporary construction impacts

Criterion 10 – Environmental effects

Criterion 11 – Sea level rise

The numerical rating produced consistent results under the variously weighted scenarios, with the following alternatives receiving the highest ratings within their category, as noted in Table 4-6:

- Access by foot: Midblock Overpass
- Emergency vehicle access: Edmonds Street Overpass
- Ferry load/offload: Edmonds Crossing (Minimum Build)
Main Street Ferry Overpass (Minimum Build)

Table 4-4. Summary of Planning-level Cost Estimates

<i>All costs based in 2016 dollars</i>					
Alternative	Type	Construction Cost ¹	Project Costs	ROW	Total Cost
Admiral Way Overpass	Emergency Access Roadway	\$ 20,100,000	\$ 4,400,000	\$ 3,500,000	\$ 28,000,000
Dayton Street Overpass	Emergency Access Roadway	\$ 21,800,000	\$ 4,400,000	\$ 2,800,000	\$ 29,000,000
Edmonds Street Overpass	Emergency Access Roadway	\$ 18,100,000	\$ 4,200,000	\$ 1,700,000	\$ 24,000,000
Midblock Overpass	Pedestrian/Bicycle Access	\$ 4,200,000	\$ 700,000	\$ 1,100,000	\$ 6,000,000
Main Street Overpass - Elevators	Pedestrian/Bicycle Access	\$ 5,100,000	\$ 900,000	\$ 2,000,000	\$ 8,000,000
Main Street Underpass	Pedestrian/Bicycle Access	\$ 14,500,000	\$ 3,400,000	\$ 3,100,000	\$ 21,000,000
Dayton Street New Ferry Terminal	Ferry terminal relocation	\$ 210,000,000	\$ 47,000,000	\$ 29,000,000	\$ 286,000,000
Main Street Ferry Overpass - Full Build	Ferry terminal rebuild	\$ 123,000,000	\$ 26,000,000	\$ 9,000,000	\$ 158,000,000
Main Street Ferry Overpass - Min. Build	Ferry terminal rebuild	\$ 103,000,000	\$ 23,000,000	\$ 2,000,000	\$ 128,000,000
Main Street Ferry Underpass	Ferry terminal rebuild	\$ 291,000,000	\$ 62,000,000	\$ 4,000,000	\$ 357,000,000
Point Edwards Ferry Terminal - Min. Build ²	Ferry terminal relocation	\$ 232,000,000	\$ 51,800,000	\$ 10,200,000	\$ 294,000,000

¹ Using WSDOT and Sound Transit unit cost bases

² Point Edwards previous estimate was developed in 2009 as part of the minimum build report.

Table 4-5. Level 2 Evaluation Outcomes

LEVEL 2 EVALUATION RESULTS SUMMARY	Emergency Access by Foot			Emergency Vehicle Access			Emergency Vehicle Access & Ferry Load/Offload				
	Midblock Overpass	Main Street Overpass	Main Street Underpass	Admiral Way Overpass	Dayton Street Overpass	Edmonds Street Overpass	Dayton Street New Ferry Terminal	Main Street Ferry Overpass -Full Build	Main St Ferry Overpass-Minimum Build	Main Street Ferry Underpass	Edmonds Crossing-Minimum Build
(1) Does the alternative improve reliable emergency response to the west side of the railroad tracks?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(2) Does the alternative provide for emergency evacuation of the waterfront?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(3) Does the alternative reduce delays to ferry loading/unloading of vehicles, bicycles and pedestrians?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(4) Does the alternative improve circulation and reduce delays and conflicts for pedestrians, bicycles, motorists and freight at roadway/railroad crossings?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(5) Does the alternative provide safer and more efficient intermodal passenger connectivity between ferry, commuter rail, bus transit for pedestrians, bicycles and motor vehicle travel?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(6) Does the alternative fit with urban design concepts and community goals?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(7) Is the alternative consistent with Stakeholders' current and future operations?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(8) Is the alternative fundable and permissible?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(9) Can the alternative avoid or minimize temporary construction impacts (measure of relative construction impacts)?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(10) How does the alternative affect the environment?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉
(11) Does the alternative address impacts of sea level rise?	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉	☉

☉ Greatly Improves ☉ Somewhat Improves ☉ No Change ☉ Somewhat Degrades ● Greatly Degrades ✕ Fatal Flaw

Table 4-6. Numerical Ratings

 Top Rated in this Category

Categorized Criteria	EMERGENCY ACCESS BY FOOT			EMERGENCY VEHICLE ACCESS			EMERGENCY VEHICLE ACCESS AND FERRY LOAD/OFFLOAD				
	Midblock Overpass	Main Street Overpass	Main Street Underpass	Admiral Way Overpass	Dayton Street Overpass	Edmonds Street Overpass	Dayton Street New Ferry Terminal	Main Street Ferry Overpass (Full Build)	Main Street Ferry Overpass (Minimum Build)	Main Street Ferry Underpass	Edmonds Crossing (Minimum Build)
EVENLY WEIGHTED SCORE	 47	43	42	41	43	 45	41	40	 42	41	 42
EMERGENCY RESPONSE											
(1) Improve emergency response (8) Fundable & permissible	 74	70	66	65	73	 75	62	67	 72	62	63
TRAFFIC CONFLICTS AND DELAYS											
(3) Ferry delay reduction (4) Circulation / reduce conflicts (5) Intermodal connectivity (7) Consistent with operations	 95	91	90	80	88	 96	89	91	 93	92	87
HUMAN AND NATURAL ENVIRONMENT											
(6) Urban design / community goals (9) Temporary construction impacts (10) Environmental effects (11) Sea level rise	 101	85	84	 89	82	84	80	67	72	77	 87

5.0 RECOMMENDED PLAN

Based on the Level 1 and Level 2 evaluations, along with extensive community interaction, the project team and Advisory Task Force developed recommendations addressing waterfront access needs. Recommendations for immediate, near-term, and longer-term actions are presented to mitigate as soon as possible the hazards that at-grade rail crossings present to safety, and to provide more comprehensive grade separation solutions when the substantial resources for a larger project can be secured.

5.1 IMMEDIATE ACTIONS

Several enhancements are recommended for implementation independent of the specific alternatives identified in this Edmonds Waterfront Access Study. While these enhancements are supportive of some elements of the Waterfront Access Study objectives, they are more appropriately advanced directly by the City or collaboratively with different groups of stakeholders. Recommended near-term actions are located in Figure 5-1 and include:

- *Construct crosswalk improvements at the Main Street at-grade railroad crossing* to improve pedestrian safety and comfort (Level 1 Screening concept On-site 4). Recommend this be implemented directly by the City and coordinated with BNSF and Washington State Ferries.
- *Construct crosswalk improvements at the Dayton Street at-grade railroad crossing* to improve pedestrian safety and comfort (Level 1 Screening concept On-site 5). Recommend this be implemented directly by the City with support from the Port of Edmonds and coordinated with BNSF.
- *Implement emergency notifications between the 911 dispatch center and BNSF operations* when an emergency is reported on the west side of the railroad tracks to notify trains to halt outside of downtown Edmonds so that police and fire can respond without delay by passing trains (Level 1 Screening concept Operational 4). Recommend this be implemented through coordination between the City, Fire District 1, and BNSF.
- *Create and implement a Waterfront Emergency Evacuation Plan* with measures that respond to a broad range of potential emergencies (Level 1 Screening concepts On-site 1, On-site 3, and On-site 7). Recommend this be developed and implemented by an appropriate group that would include City departments, Fire District 1, Swedish Hospital, Port of Edmonds, and Washington State Ferries, among others.

Figure 5-1. Recommended Immediate Actions



5.2 NEAR-TERM RECOMMENDATIONS

Until a long-term solution can be implemented, rail traffic is expected to grow substantially along with increased volumes of ferry traffic and growth in all modes of local traffic. Conflicts will grow, and delays will increase, impacting response times for police, fire and EMS units to emergencies west of the railroad tracks. Several measures are recommended to mitigate the effects of such conflicts.

Emergency Vehicle Access to the Waterfront – *Edmonds Street Emergency Access Overpass*. The proximity of this access route to the police and fire stations provides immediate access to respond to waterfront emergencies. This ramp also provides a full-time pedestrian and bicycle connection from Sunset Avenue to Brackett’s Landing Park and the waterfront trail system, enhancing the walkability of the waterfront. During emergency shutdowns of the at-grade rail crossings, vehicles can be offloaded from ferries with proper traffic control. The Edmonds Street location is recommended over other similar emergency vehicle access alternatives for reasons of cost, anticipated use, and superior access for emergency response. Implementing this project will eliminate the need for an emergency vehicle access ramp from a future grade-separated, vehicle ferry access project, such as the Edmonds Crossing project referred to below.

Intermodal Connectivity – With increases in train traffic, and with eventual construction of the anticipated 2nd railroad track, there will be a growing need for safe pedestrian access to both sides of the railroad tracks. Of the several alternatives considered, the *Midblock Pedestrian Overpass* location would appear to best serve commuters, who would be the primary users. This overpass is collocated with rail, bus and ferry access points. Among the pedestrian overpass alternatives considered, the Midblock Pedestrian Overpass is most consistent with positive urban design objectives as it presents the least impact to established viewsheds, and its construction presents minimal environmental concerns due to its scale and setting. These features support the permissibility of this alternative, which is favored when assessing the ability to implement this project near-term. Safe access to passenger platforms on both sides of the future double-track rail corridor will necessitate a grade separated pedestrian overpass. It is recommended that Sound Transit lead the implementation of this solution.

5.3 LONGER-TERM RECOMMENDATION

Ultimately, grade separation for vehicles accessing ferries is necessary to resolve the growing conflicts between two major traffic movements through the downtown waterfront – rail traffic and vehicles loading and offloading the ferries. The combined effects of these growing pulses of traffic increasingly interrupt local traffic moving between residential and business centers in downtown and along the waterfront.

Based on currently foreseeable transportation funding conditions in the State, the timeframe for implementing grade separation of vehicle ferry access may be up to 20 years or longer. Washington State Ferries will appropriately take the lead in establishing the long-term direction of ferry operations, and WSF will soon initiate their Long Term Plan for the ferry system as a whole, to include the Edmonds Terminal. The analysis and identification of alternatives within the Edmonds Waterfront Access study will inform WSF's planning efforts. In particular, the Task Force's review of several alternatives providing grade-separated vehicle ferry access concluded that the Edmonds Crossing project would be the superior option.

The Task Force recommends that the City *continue its current policy supporting the eventual implementation of the Edmonds Crossing project*, relocating ferry operations to a new terminal to be located at the Unocal property. Moreover, if ferry operations are relocated to the south end of the waterfront, in a configuration similar to the Edmonds Crossing project, it is recommended that the project also incorporate a means of emergency vehicle access to the south end of the waterfront. The Task Force recognized significant community benefit to an underpass along the Main Street alignment, but the projected comparative costs and long construction schedule make that option less desirable.

6.0 REFERENCES

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APPENDIX A - PUBLIC OUTREACH

A.1 OPEN HOUSE MEETING 1 - NOVEMBER 18, 2015

A.1.1 Meeting Materials

Figure A-1. Open House Meeting 1 - Postcard

What does better access to the waterfront look like to you?

EDMONDS WATERFRONT ACCESS STUDY - *Studying alternatives to street-level rail crossings*









The City of Edmonds is working with our partners to study different ways to improve access to and from the waterfront for people, including emergency responders.

We are in the early stages of the Edmonds Waterfront Access Study. This is the first of several opportunities over the coming year to share your input.

Estamos estudiando maneras de mejorar el acceso a la zona costera de Edmonds. Usted puede informarse más y compartir sus ideas en nuestra reunión el día 18 de noviembre, de 6 p.m.-8 p.m. en el "Plaza Room" de la Biblioteca Pública de Edmonds o al visitar edmondswaterfrontaccess.org. Información estará disponible en español.

에드몬드(Edmonds)의 워터프론트(해안) 지역 접근성을 개선하기 위한 방안을 모색하고 있습니다. 오는 11월 18일, 오후 6시-8시 사이에 에드몬드 라이브러리 플라자 룸 (Edmonds Library Plaza Room) 에서 갖게 될 모임에 오시면 상세한 정보 입수와 함께 여러분의 의견을 제시하실 수 있습니다. 번역된 프로젝트 자료가 준비되어 있습니다. edmondswaterfrontaccess.org 를 방문하십시오.

WE WANT TO HEAR FROM YOU

- What concerns you about access to the waterfront area?
- What are your initial thoughts on options we should consider to improve access?

You can learn more and share your ideas at our meeting on Nov. 18, 6 to 8 p.m. at the Edmonds Library Plaza Room or by visiting edmondswaterfrontaccess.org



City of Edmonds
121 5th Ave N
Edmonds, WA 98020

EDMONDS WATERFRONT ACCESS STUDY - Community Meeting

Wednesday, Nov. 18, 2015, 6 - 8 p.m.
Edmonds Library, Plaza Room, 650 Main Street, Edmonds

ONLY HAVE A FEW MINUTES?
Come by anytime between 6 and 8 p.m. to view displays and talk with the project team

WANT TO GET INTO MORE DETAIL?
Participate in a presentation followed by small group conversations from 6:30 to 7:45 p.m.

Can't come but want to participate?

Visit our website to learn more about the study and share your ideas

WEBSITE edmondswaterfrontaccess.org
EMAIL info@edmondswaterfrontaccess.org
CALL 425-771-0235

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Figure A-2. Open House Meeting 1 - Poster

What does better access to the waterfront look like to you?



EDMONDS WATERFRONT ACCESS STUDY

Studying alternatives to street-level rail crossings

Community Meeting

Wednesday, Nov. 18, 2015, 6 - 8 p.m.

WE WANT TO HEAR FROM YOU

- What concerns you about access to the waterfront area?
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 TETRA TECH

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Figure A-3. Open House Meeting 1 - Meeting Display Boards

Edmonds Waterfront Access Study



WHAT IS THE EDMONDS WATERFRONT ACCESS STUDY?

The City of Edmonds is working with our partners to study different ways to improve access to and from the waterfront, including access for emergency responders. Through our study, we plan to identify one or more preferred alternatives to carry forward into environmental review and design. We will provide opportunities for the community to be involved.

SCHEDULE

2015		2016		
NOV.	DEC. – FEB.	MAR. – APR.	MAY – JUL.	AUG. – SEP.
Begin study; understand existing conditions	Identify alternatives	Screen alternatives	Evaluate alternatives	Recommend preferred alternatives
PM OOH	PM OOH	PM OOH	PM OOH	PH

Share your feedback throughout the study

PM Public meeting
OOH Online open house
PH Public hearing

WHO ARE OUR PARTNERS?

Mayor Earling appointed an Advisory Task Force to help guide and lend expertise to the process. Task Force members represent:

- Edmonds residents and businesses
- Washington State Ferries
- Community Transit
- City of Edmonds
- Sound Transit
- Port of Edmonds
- WSDOT
- BNSF



Edmonds Waterfront Access Study

WHAT ARE THE CURRENT PROBLEMS WITH WATERFRONT ACCESS?





Edmonds Waterfront Access Study

WHAT IS THE STUDY PURPOSE?

To study alternatives to street-level rail crossings at Main and Dayton streets that provide safe, reliable and efficient access between downtown Edmonds and the waterfront for emergency responders and people driving, moving freight, using transit, walking or biking.

WHY IS THIS NEEDED?

-  Expedite emergency response to waterfront area
-  Reduce congestion and delays
-  Increase efficiency of ferry loading and unloading
-  Improve connections to buses, train, and ferries
-  Increase comfort level of people using the waterfront area





Edmonds Waterfront Access Study

HOW WILL WE STUDY ALTERNATIVES?

NOV. 2015

DEC. 2015 – FEB. 2016

MAR. 2016 – APR. 2016

MAY 2016 – JUL. 2016

AUG. 2016 – SEP. 2016

STUDY MILESTONE

Understand existing conditions

Identify alternatives

Screen alternatives (Level 1 review)

Evaluate alternatives (Level 2 review)

Develop recommendations

TECHNICAL ANALYSIS STEPS

- Observe, quantify and document existing conditions at Main Street and Dayton Street crossings.
- Review data from previous studies and community input.
- Compile potential measures to improve access, including both long-range and near-term solutions.
- Develop screening criteria.
- Prepare list of alternatives for screening and evaluation.

- Review alternatives within initial criteria to determine feasibility.
- Eliminate infeasible alternatives.
- Document findings.

- Further develop the remaining alternatives.
- Apply more detailed criteria to evaluate alternatives.
- Document findings and initial recommendations.

- Develop preferred alternative recommendations based on analysis.
- Present to City Council and Legislature.
- Document final recommendations in a report.

GET INVOLVED

Share your experiences with waterfront access and ideas for improving access

Share your thoughts on alternatives to consider and screening criteria

Provide feedback on screened alternatives

Provide feedback on evaluated alternatives and initial recommendations

Review preferred alternative recommendations

PM 00H

PM 00H

PM 00H

PM 00H

PH

Share your feedback throughout the study

Public meeting Online open house Public hearing



Edmonds Waterfront Access Study

HOW WILL WE SCREEN AND EVALUATE ALTERNATIVES?

We will use criteria to compare different alternatives. The criteria we use will help us understand how alternatives meet the purpose and need, how feasible they are, and how they compare using various measures.

EXAMPLE EVALUATION CRITERIA

- Satisfies purpose and need
- Relative cost
- Feasibility
- Constructability
- Community input
- Equity
- Environmental impacts
- Visual impacts
- Property impacts
- Economic impacts
- Business impacts
- Aesthetics



Edmonds Waterfront Access Study

HOW CAN YOU PROVIDE INPUT?

At this meeting:

- Leave comments using a form or laptop
- Participate in a small group discussion
- Write thoughts on flipcharts

After this meeting:

- View materials and submit comments using our Online Open House until Dec. 11, 2015: www.edmondswaterfrontaccess.org
- Email info@edmondswaterfrontaccess.org
- Mail comments to:
Edmonds Waterfront Access Study
City of Edmonds
121 5th Ave N
Edmonds, WA 98020
- Call 425-771-0235 to ask questions
- Participate in future input opportunities

HOW WILL YOUR INPUT BE USED?

- Provide us with information on local conditions.
- Inform our work as we develop and evaluate alternatives.



Edmonds Waterfront Access Study



MEETING PURPOSE:

- Introduce the Edmonds Waterfront Access Study
- Help you become familiar with the process we will use to evaluate alternatives
- Answer your questions and hear your ideas



AGENDA FOR TONIGHT

- | | |
|---------------|--|
| 6 – 8 p.m. | View displays and talk with study team
Share your ideas on the flipcharts, comment forms or laptops |
| 6:30 p.m. | Listen to a presentation |
| 7:00 p.m. | Participate in small group discussions and report out |
| 7:40 – 8 p.m. | Follow up individually with study team |

WE WANT TO HEAR FROM YOU!

- What concerns you about access to the waterfront area?
- What are your initial thoughts on options we should consider to improve access?



Figure A-4. Open House Meeting 1 - Meeting Presentation

Edmonds Waterfront Access Study



Public Meeting – Nov. 18, 2015





Edmonds Waterfront Access Study

Agenda

- 6 – 8 View displays and talk with team
Share ideas on flipcharts, comment forms or laptops
- 6:30 Presentation
 - Phil Williams, City of Edmonds
 - Rick Schaefer, Tetra Tech
- 7:00 Participate in small group discussions and report out
- 7:40 – 8 Follow up individually with team



Edmonds Waterfront Access Study

WHAT IS THE STUDY PURPOSE?

Alternatives to street-level rail crossings at
Main Street & Dayton Street

Provide access between downtown Edmonds
and Waterfront for:

- Emergency Responders
- Walking
- Driving
- Transit
- Moving Freight
- Biking

WHY IS THIS NEEDED?

-  Expedite emergency response to waterfront area
-  Reduce congestion and delays
-  Increase efficiency of ferry loading and unloading
-  Improve connections to buses, train, and ferries
-  Increase comfort level of people using the waterfront area



Edmonds Waterfront Access Study





Edmonds Waterfront Access Study

HOW WILL WE STUDY ALTERNATIVES?

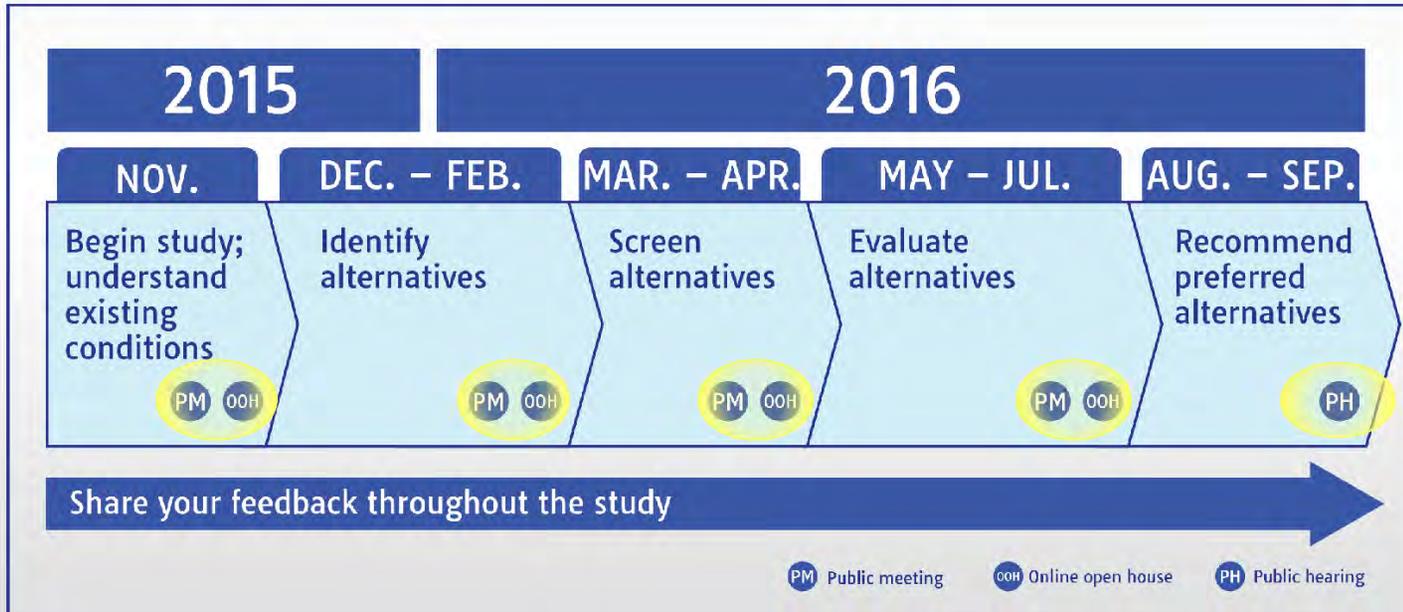
NOV. 2015	DEC. 2015 – FEB. 2016	MAR. 2016 – APR. 2016	MAY 2016 – JUL. 2016	AUG. 2016 – SEP. 2016
STUDY MILESTONE				
Understand existing conditions	Identify alternatives	Screen alternatives (Level 1 review)	Evaluate alternatives (Level 2 review)	Develop recommendations
TECHNICAL ANALYSIS STEPS				
<ul style="list-style-type: none"> Observe, quantify and document existing conditions at Main Street and Dayton Street crossings. Review data from previous studies and community input. 	<ul style="list-style-type: none"> Compile potential measures to improve access, including both long-range and near-term solutions. Develop screening criteria. Prepare list of alternatives for screening and evaluation. 	<ul style="list-style-type: none"> Review alternatives within initial criteria to determine feasibility. Eliminate infeasible alternatives. Document findings. 	<ul style="list-style-type: none"> Further develop the remaining alternatives. Apply more detailed criteria to evaluate alternatives. Document findings and initial recommendations. 	<ul style="list-style-type: none"> Develop preferred alternative recommendations based on analysis. Present to City Council and Legislature. Document final recommendations in a report.
GET INVOLVED				
Share your experiences with waterfront access and ideas for improving access <small>PM OOH</small>	Share your thoughts on alternatives to consider and screening criteria <small>PM OOH</small>	Provide feedback on screened alternatives <small>PM OOH</small>	Provide feedback on evaluated alternatives and initial recommendations <small>PM OOH</small>	Review preferred alternative recommendations <small>PH</small>
Share your feedback throughout the study				

- PM Public meeting
- OOH Online open house
- PH Public hearing



Edmonds Waterfront Access Study

SCHEDULE





Edmonds Waterfront Access Study

Small Group Facilitated Discussions

- Format: groups of 8-10
- Discussion: 4 questions, 20-25 minutes
- Ground rules: please follow them
- Report out: 1 minute per group



Photo taken by Larry Vogel, MyEdmondNews



Edmonds Waterfront Access Study

HOW CAN YOU PROVIDE INPUT?

At this meeting:

- Leave comments using a form or laptop
- Participate in a small group discussion
- Write thoughts on flipcharts

After this meeting:

- View materials and submit comments using our Online Open House until Dec. 11, 2015: www.edmondswaterfrontaccess.org
- Email info@edmondswaterfrontaccess.org
- Mail comments to:
Edmonds Waterfront Access Study
City of Edmonds
121 5th Ave N
Edmonds, WA 98020
- Call 425-771-0235 to ask questions
- Participate in future input opportunities



A.1.3 Open House Meeting 1 Comment Compilation

The following are comments received at the community or submitted via hardcopy comment forms, email, mail or the online open house. Flip charts were used during the open house and breakout group discussions, which are also transcribed. Comments included are verbatim. Any typos and spelling errors are from original comments.

Comments have been organized by subject area/question response. This includes all comments received through 12/11/2015.

Table A-1. Open House Meeting 1 - Comment Submissions

Type	Number
Comment forms	15
Returned at meeting	13
Mailed	2
Online Open House	31
Email	6
Phone	1
Other comments	1
Total	54

Question 1: Please check any of the following that apply to your experience on the waterfront

Table A-2. Open House Meeting 1 - Question 1 Summary

Option	Total
Walk	32
Resident	29
Drive vehicle	29
Park visitor	28
Use transit (bus, train, ferry)	24
Customer	22
Ride bicycle	11
Moorage tenant	2
Business owner	1
Employee	0

Other

- Kayak from waterfront
- I live a mile and a half from the tracks, and the noise awakens us all night long.
- Diver
- Fish from pier and shoreline area

- Sail
- Restaurants for meals
- Senior Center member, dental patient, attend meetings of Institute held in Senior Center, scuba diver, kayaker, picnics, tide pools, bird watcher, fishing at pier, diner, walk to dog park
- Beach use with granddaughter.
- Occasional moorage
- Senior center - regular user of services
- Senior Community Center Member
- Fishing, photography, beach combing.
- Ride the whale watching ship to the San Juan's (3x)
- Railroader
- We try and walk several miles every day to maintain our health, and walking to the waterfront each day to view the Sound and its wildlife is an essential component of our walks.is

Table A-3. Open House Meeting 1 - Question 1 Flipchart Transcription

Waterfront Access and Use
Walking - 7 <ul style="list-style-type: none"> • Brackett N&S - 1/7 • 5th Ave S to Brackett's -1/7 • Beach parking - 1/7
Driving - 5
Biking - 2
Enjoyment of outdoors - 4
Senior Center - 3
Restaurants - 3
Marina - 4
Ferry - 3
Business - 1
Recreation (exploring, fishing, exercise, reading, etc.) - 8
Train - 1
Dog park - 1

Question 2: What concerns you right now regarding access to the existing waterfront area? What problems are you experiencing with access?

Safety, Emergency Access

- Safety, wait times, excessive train noise and whistle blowing.
- Our concern is that anyone would need emergency care and would be held up behind a 100+ car train or if aid people need to get to a resident or visitor, scuba diver and are held up. Getting to and from the waterfront is only a problem in a life threatening emergency. Otherwise a limited time wait is something we can live with. The other "problems" - noise, pollution, etc. are just part of having train track there.
- While everyone can agree that this is a major problem facing Edmonds, it affects everyone differently, so the best solution is not readily settled on. It depends on which scenario you find yourself. Somebodies life

might depend on quick evacuation across the tracks to a hospital. If ferry traffic is re-directed to overhead bridges or tunnels that bypass downtown, business owners worry about their survival. Will the appeal of the Edmonds waterfront as a tourist destination be diminished with at-grade industrial double-tracking blocking access to either side? With that and the noise, will our real estate be devalued? What if there is an accident or explosion? And what happens to the Marsh? Some don't feel directly affected and are very hesitant to want to do anything because they fear higher taxes. As a community we share all these concerns.

- No concerns except lack of emergency vehicles
- [Phone conversation summary] As a survivor of two cardiac arrests (being saved by firefighters on both occasions), he is reluctant to visit the waterfront in Edmonds knowing the possibility exists that he may be unable to receive timely help if an emergency occurs.
- 1. Access for ferry and emergency vehicles.
- Main concerns are safety & noise. I've learned to live with the delays caused by trains in stride. Moreover, the ferry loading is not an issue because the process is very efficient.
- Safe (protected) ped./bike routes to parks, transit, marina, and ferry - no good connection on west side.
- Emergency responder access. Keeping the aesthetics of our beautiful waterfront. Limited parking at senior center, especially on Friday afternoons, because of people using the beach.
- Reliable emergency access is paramount in order to serve the waterfront. Increased train traffic will worsen current conditions.
- Emergency service vehicles, on demand needs: Fire, rescue, police, utilities.
- *Emergency Vehicle access
- Emergency response must be fixed.
- Safety is key. Eliminating rail crossings are good, but would like to pedestrians not have to cross ferry traffic as well.
- *pedestrian and vehicle safety is at risk;*Access for emergency vehicles is impossible at times

Wait Times, Delays

- It takes a long time to cross the tracks when a long train goes by. It will be hard for businesses on the other side and around for those who need emergency care. As more trains travel the tracks, the wait line and intersection will be longer and more numerous. Ferry travel lines will be problematic.
- Excessively long delays and backups at railroad crossing due to northbound coal and oil trains are unacceptable. If a train derails or some other train accident, there is no way to get out of the waterfront area. Coal dust from the uncovered mounds of coal carried by the long trains is polluting our City and Puget Sound.
- Long trains delay access. Extremely loud train horns that are close to people standing near the tracks and using the beach. I cover my ears, due to the level of loudness. I am curious if the city has measured what the decibel is, what possible damage to children and adults hearing occurs. In addition I am concerned about the speed at which the train travels through pedestrian and auto traffic. It is dangerous to all.
- 2. Between ferry traffic and train, it can be a long wait to cross on foot at Main. Will get worse if more oil and/or coal trains go through. Not a pleasant place to wait.
- Delays from trains.
- 1) Lengthy delays while trains pass;
- *Ferry Lines;*Train crossing waiting times
- There is no emergency access in an emergency. The City has talked about the problem for years and done nothing but the problem and fold it into much more expansive and expensive plans, never actual doing anything about public safety on the waterfront. This is no exception.
- I experience long waits very often so choose to go to other businesses and parks that I can get to and from more easily.

Trains, Prominence of Trains, Coal and Oil Trains

- Primary problem: trains control every things, a fundamental failure. Trains must be considered as one transiting waterfront element - not the supreme element that BNSF thinks they are.
- Long coal and oil trains.
- Sometimes trains block access.
- Public health, coal dust, diesel particulates, landslides, derailments, "blast zone"
- Without the possibility to stop the increase in Bakken crude oil trains coming through Edmonds, there will be no way to make the waterfront more accessible. Putting in a trench would not solve that additional amount of train traffic, not to mention there is no room to put in a train track to use while the trench is constructed. Too much of downtown Edmonds would be destroyed to accommodate trench construction.
- Trains
- I have concerns about the number of trains that currently travel through the waterfront area on a daily basis and the length of those trains that blocks off access to road traffic for long periods of time.
- The increasing number of coal and oil trains with 100+ railcars is of great concern not only for access, but for noise pollution and air pollution (coal dust). Also, if there is an accident involving oil trains, the impacts On People In The Area And On The Puget Sound Environment Would Be Huge.

Train Noise

- 1. Horns from passing trains when waiting at Main St crossing are painful to ears. Will directional signals help?
- The biggest problem is the noise created by train horns.
- Train is so loud. I have to cover my ears when I'm down enjoying the beach. I have to wait for train sometimes, but as a recreational user, it's not bad. If trains become more frequent, I am concerned about all the cars coming to park and taking up all the recreational users parking.
- Always waiting for the train. Live downtown and train whistles are getting to be almost non-stop
- The current train crossing is LOUD and mars dining at Demetri; Rory's, et al.
- Deafening blast of train horns 4x2x40=300 blasts per day

General Access

- 1) Getting stuck on the west side of the tracks, unable to return within a half hour to the east side of the tracks.
- Access to the beach side with increased train traffic. We have been stuck on the water side when a train had stalled and blocked both roadways.
- Lack of pedestrian access from the east at the south end. Drivers disregard for the crossing arms when trains are approaching. The Senior Center located on the west side of the tracks. No one is thinking about double, triple tracking in the future.
- 1) Getting stuck on the west side of the tracks, unable to return within a half hour to the east side of the tracks. 2) We cannot walk from the North edge of the water (parks and north Edmonds), to the south edge (dog park). It's a major opportunity and includes an under pass opportunity to get back to the east side for us walkers/bikers.
- Health of our waterfront environment for wildlife and people. Public access- I would like to see public access to the entire waterfront in our community for all to interact with Puget Sound. Waiting on trains, having safe pedestrian and vehicle crossings and providing emergency access- especially senior center and Dive Park.

Waterfront Amenities

- This should remain a beautiful place- our front porch - to meet, hang out, view the world and restore spirit. Play spaces beach and boat - travel by train, ferry, and bus.
- Public access to waterfront.

- No easy access for launching kayaks; Dive park restrictions reduce access
- Beautification of the waterfront area with wading pools, and recreation areas.

Economic Development

- 2. Do not want Edmonds to be an obstacle to job growth and rail export expansion in the area - work with railroad and regional transport to find win/win solutions.
- Commercial business requirements
- The projected increase in trains will very negatively hit Edmonds and other waterside towns. As the railroad is making a great deal of money on this traffic they should bear the brunt financially for any changes and additional safety requirements necessary for their increased passage through these towns. I'm also concerned that the overhead ramps proposed will ruin the character of our town. Why does our home have to be degraded for their profit?

Other

- My firm is 51 West Dayton St Edmonds, Bay Building - concerned.
- 3. Has the city consulted a good urban planner who's familiar with how other towns have solved similar issues?
- Keep it simple and don't take ferry away from retail core.
- Don't bust our budget!
- Power outages
- Easy access without over commercialization. All should be done in conjunction with environmental impact analyses in mind.
- Transportation, ferry traffic
- The ferry loading dock is difficult and risky to access as a pedestrian. It snarls traffic for residents trying to access the landings and parks or driving on Admiralty.
- NO MORE PARKING!!! Price it!

Table A-4. Open House Meeting 1 - Question 2 Flipchart Transcription

General Concerns
Train - 13 <ul style="list-style-type: none">• Noise – 5/13• Dust (coal trains) – 1/13• Oil trains – 1/13• Speed – 1/13• Traffic – 4/13• Quantity – 1/13
Safety - 8 <ul style="list-style-type: none">• Emergency access – 6/8<ul style="list-style-type: none">○ Bell street overpass• Resident access – 2/8
Waterfront utilization - 1
Shelter from weather - 1
Long term parking (1-7 days) - 1
Evacuation for residents - 1
Helicopters - 1

General Concerns

Edmonds crossing - 2

Trench - 2

- Impacts to Willow Creek - 1/2

Accidents - 10

- Vehicle and train - 2/10
- Extended delays - 2/10
- Mud slides - 1/10
- Tsunami safe areas - 1/10
- Derailment - 1/10
- Spill accident - 1/10
- Flood protection in a marsh environment - 1/10
- Public health - 1/10

Ferry terminal - 2

- Left turn at Main Street - 1/2

Pollution - 1

Lighting/alarm - 1

Terminal plans effect on project - 1

24/7 Access - 5

- To businesses - 1/5
- To Senior Center, Community Center, Salish Crossing - 1/5

Aesthetics - 3

- Small town feel - 1/3
- Need to match Edmonds - 1/3

Financial impacts to merchants - 1

Usage diversity (e.g., dentist, restaurant) - 1

Question 3: What options should we consider to improve access to the waterfront area?

Underpass – Pedestrian, Cyclist, Emergency Responder

- 2) We cannot walk from the North edge of the water (parks and north Edmonds), to the south edge (dog park). It's a major opportunity and includes an under pass opportunity to get back to the east side for us walkers/bikers.
- Going under the tracks with a walkway or two would be nice. I walk to and from the ferry daily. Dodging traffic and trains takes effort. I watched a women get hit in the head by the barrier arm as it lowered. I watch people run under and around the barriers all the time. Cheers for your efforts!

Underpass – All Modes

- Also consideration for a tunnel under wood way may be an option to look at. From my perspective this option would fix all problems though be expensive.
- Fewer trains would be the optimum answer, but barring that an overhead structure would destroy the aesthetics of the waterfront. This only leaves a below grade solution, albeit it is likely expensive.

Train Trench

- train tunnel thru downtown crossings
- Underground trench for the railroad.
- A train trench approach would likely impact the ability for our community to daylight Willow Creek and reconnect across Marina Beach Park to Puget Sound.
- Having the train pass under Main Street in a long shallow dip (not a tunnel).
- Based on reason and common sense, this is a no-brainer: Build the train trench.
- *Train Trench;
- The trench however unpopular with our mayor, is really the only alternative that makes any sense.
- Put the track underground. The English Channel is much deeper and it works. Why not start lowering the track around Richmond Beach and bring it out past the slide areas that stop the trains anyway? And, the RR should pay for most, if not all of it.
- One of the alternatives being considered by the Task Force is called the "Train Trench" where the trains would pass through the populated portion of Edmonds in a below grade trench. A trench provides several unique means of fire and explosion protection to Edmonds. 1. In the case of an explosion resulting from an accident in the trench, the force of the blast would be directed upward by the walls of the trench, not laterally. This would reduce damage to property and injury to people near the incident. 2. The oil would be confined to the trench and would not spill over into Puget Sound or our marsh land. Pollution would therefore be limited or eliminated. 3. Piping could be installed when the trench was built that would allow firefighters to introduce firefighting foam into the trench from a safe distance away. Foam would smother the fire coming from released oil in the trench. Briefings on firefighting an oil train fire have generally considered there is not enough foam available to effectively fight an oil train fire. However, this did not address a fire constrained by a trench but was addressing fires from oil spreading across open land. My opinions are based on my firefighting training, as an instructor in Seattle of MARAD firefighting training of the Seattle Fire Department in the 1970s. And being in charge of marine firefighting in two cases.
- Train trench is the best idea. Also, if you're worried about delay of emergency personnel getting to the waterfront, you could consider placing a small, maybe volunteer run, emergency personnel station west of the train tracks.
- I hope that putting crossings underground is not recommended. The Seattle Bertha tunnel has been a money pit with no visible benefit.
- If a trench is considered, where does the side track go? Side track is the track laid next to the primary track while the trench is constructed.
- Something that eliminates the contention between train traffic and all other traffic. Either a trench or a lid.
- The train trench concept would be best. This a tried and true method to safeguard the public in cities all over the west coast. The companies that operate the trains should be bearing this cost as they have created a dangerous situation to the public.
- #4. Train below grade, bridge for cars crossing over tracks.
- Train trench would be ideal but is it really feasible without disrupting train traffic which BNSF is unlikely to support?
- YOUR TAXES: Be wary of solutions that promise to cost less money but only solve a single issue. Eventually, there will be no choice but to dramatically alter the waterfront with additional single issue solutions costing more for the taxpayer. By then, the town is already unrecognizable with overpasses and/or underpasses that cut up the waterfront. The Edmonds Train Trench will solve them all, becomes invisible and at less cost. (Chart)- (<http://www.edmondstraintrench.net/alternative-proposals/>). 1. The Tetra Tech Study's -(<http://tinyurl.com/nt5ax7f>) cost figure of \$250-290 million dollars for the Edmonds Train Trench published by the Mayor is misleading. Check it out. Actual train Trench construction costs were set at \$136 million. The other \$130 million was added in for administrative cost, management fees, etc. When alternatives are compared, be sure they include all the "extras" added in the Tetra Tech study. It's important to understand that the same or more will be eventually spent for less benefit and a negative,

not positive, economic and quality of life impact on Edmonds with the other solutions. 2. The Edmonds Train Trench also brings together more funding sources which means less of your taxpayer money, and a better solution for Edmonds. Uniquely, BNSF is interested enough in the Trench to put up \$50,000 to study it instead of just going ahead with their plan to double track. If BNSF prefers the Trench this would mean a private public partnership, where they put in a chunk of money for building, not just the taxpayers. In Reno, NV the RR put up \$40-50 million. They got a better system and so did the citizens of Reno, as well as saving the taxpayer's money compared to the alternatives. Private investment from BNSF is a once-in-a-lifetime opportunity to cut the public cost and get a better system. The pressure on BNSF to keep their multiple trains running motivates them to a quicker completion time. You cannot compare the benefit/cost/value to multiple bridges, the required new ferry dock and street regrading, construction time and the industrialization of downtown Edmonds, which almost undoubtedly makes the Trench the cheapest and most complete option. 3. Furthermore, Washington State Ferries (WSF) does not have to build a new ferry dock to meet the grade of the proposed over or underpass (which is all public money) and they can sell, not trade, their valuable land (proposed Edmonds Crossing area) to use for ferry maintenance or much needed new ferries. LIQUEFACTION SOIL: The wisdom of having bumper to bumper ferry traffic on an elevated overpass or tunnel in a known liquefaction zone goes against regard for public safety. If we have an earthquake, fewer people (and perhaps no train at the time) will likely be in the Trench, which is not true on an oversized/overhead structure. A Trench would reduce the number of potential casualties. Aside from the superior 24/7 access to safety vehicles provided by the Trench at less cost than 2 bridges, this aspect alone could make a huge difference in a RR accident. RR ACCIDENTS: Explosion protection, of course, would be a function of how far down in the Trench the train was when the explosion occurred, and is primarily intended to protect the more densely populated town areas between Dayton and Main. That's one of the unique benefits of the Trench. It is essentially a blast bunker that will also capture spills and contain fires. Drains can be closed manually or by sensors while hazmat equipment would pump out the spill. EDMONDS MARSH: Because of the Trench's concrete base running the entire length, the Marsh is protected for the first time ever from liquid spills, most fires, and runoff. If it starts at the daylighting structure, that far corner could include a retaining wall, or the Trench envisioned by Tetra Tech goes further south and completely covers the area. To date, every train for the past 100+ years has turned the soil below the tracks into an environmental hazard, which is why the double-tracking is made more expensive to contain the digging needed over the Marsh. Each time it rains, more contamination seeps into the Marsh, and the addition of double-tracking greatly increases the hazard of derailments and collisions, only one of which would turn the Marsh into a long term Superfund site. Only by adding the Trench to stop the toxic runoff can the Marsh actually be cleaned up and prepared for salmon and other restoration projects. In addition to eliminating crossing accidents and liability, the Trench protects the marsh from a slow motion or accidental sudden catastrophe. There are many considerations our city leaders will contemplate. It is our hope that the one with the most merit, that solves the most problems, will be given the opportunity to prove itself: the Edmonds Train Trench (<http://www.edmondstraintrench.net/>).

- 2. Build a ditch for the rail!!
- In addition to improving access, this would also: 1) Improve community safety in the event of an oil train derailment 2) Reduce the annoyance factor to a wider area, as the train horns can be heard for many blocks (often in the middle of the night).
- It's also needed because of the noise created by trains when they blow their horns. With the current frequency of trains and the incredible noise they create, we are unable to open our bedroom windows at night because the train horns wake us. The noise is also so loud when we are on the waterfront, that we have to stop talking and put our hands over our ears. We've had out-of-town guests comment on this and tell us that they would not choose to live here because of the trains. And we have personally thought of moving even though we've lived here for 25 years and have raised our family here. This is the single most important issue facing Edmonds right now. This decision will be a legacy decision that will change

the core nature of Edmonds either for the good or the bad for many years to come. Its impact will be greater than any other issue faced by the city. More than building height limits or moving the ferry terminal.

Overpass, Bridge, Flyover – All Modes

- The closing of Dayton or Main Street railroad crossing for construction of a tunnel or other passageway would be too disruptive and confound existing safety issues. The environmental issues around digging a trench adjacent to Puget Sound are mind-boggling. Take the simple approach of just constructing a bridge at the south end of Admiral Way that connects to Pine Street.
- Address emergency access issue with most simple/cost effective strategy - Bell St Bridge / Marina Beach Bridge - leave major projects like trench, or major reworks to later.
- Any viable option that does not necessitate the use of an above ground structure, bridge, etc.
- Options that do not include raised ramps and overpasses to move traffic above the train tracks. Those type of structure would seriously impact the use and beauty of the Edmonds waterfront which is treasured by the people of Edmonds.
- Concrete ramp at South Brackets landing park and at marina beach
- A very viable option is the “Pine Street Extension” alternative which would connect Pine Street with Admiral Way via a bridge over the railroad tracks. The Pine Street extension would be a road across the lower yard of the old Unocal site and thus be the least disruptive and probably most cost efficient option. The roadway could be placed so it would not conflict with the proposed Edmonds Crossing Project and aligned so it does not affect the area of final cleanup on the Unocal site.
- Put a bridge over RR tracks at south end of Admiral Way. The bridge could go to a road that crosses the lower yard of the Chevron/Unocal site out to Hwy 104. The City could obtain the Chevron property through eminent domain process and put road across area that is already clean up by Chevron (i.e., avoid remaining area of cleanup). This should be least disruptive approach and probably the cheapest.
- #2. Ferry fly over bridge at Marina beach and Edmonds crossing with emergency vehicle access provisions.
- Focus on above ground alternatives. Potential impacts for underground construction and passage will require a lengthy and expensive EIS. The ocean is more powerful than we can image even with the best engines and designers at the helm. That combined with the storm-water coming down the hills from more frequent 100 years rain from events (likely more of these will change) is likely to increase erosion - impacts. Let's do what's most feasible and not waste time and money pursuing a tunnel. Shift attention to Edmonds Crossing. It's been studied and would be a viable alternative. A crossing over Dayton Way may be worth considering as well. Get emergency access ASAP!
- Put an overpass where the current train station is. The North going traffic enters off Dayton where the input to parking for the Sounder Train and Amtrak is. The South going traffic enters (on Railroad Avenue) just past the ferry dock. The train station is under the overpass. The overpass is one story tall so as to not affect the current views from the East. The ramp is gradual (GOING NORTH-SOUTH DIAGONALLY) with open space underneath for people waiting for the train.
- Overpass - could raise Main W of 2nd without view impact.
- Put in another road at south end of Admiral Way with a bridge that goes over the railroad tracks so people can get out of the area quickly in an emergency and can have easier access when trains are present.

Overpass, bridge, flyover – pedestrian, cyclist, emergency responder

- Pedestrian overpass
- A simple bridge across the tracks...foot traffic and emergency vehicles only.
- 1. Immediately build a temporary overpass at Bell Street for emergency access only.
- Bridge for walking, biking, emergency vehicle access only from Bell St down to Brackets Landing Parking.
- #3. Pedestrian bridge over tracks.

- Build bridge as an extension to Bell St. into park below for emergency vehicles/responders and tie pedestrian walkway and bike to connect Sunset Ave to waterfront.
- There should be a walkway connected to Admiral Way. There should be three overpasses on Sunset Ave and an overpass near Marina Beach Park. Access can be obtained by having a pedestrian overpass either at Main St, Dayton or at the north end of Sunset St with a walk way to the south area. An emergency station west of the tracks should be considered.
- Pedestrian, bicycle bridge between Main and Dayton; Make it strong enough for emergency vehicles
- Low cost ped-bike-emergency access at Edmonds or Bell St.
- Ped bridge or two lane from south side.
- Pedestrian Bridge with ramps that would allow medical carts (like the one used at NFL games) access when trains are going by. Keep one fire truck on waterfront side.
- The team should closely study extending Pine Street to connect with Admiral Way via a road that goes through the Unocal lower site and crosses the RR tracks via a bridge. This approach should not be dismissed because of the potential Edmonds Crossing project nor because of the continuing cleanup at the Unocal site. The remaining cleanup at the Unocal lower yard is a small area and there is plenty of room south of that remaining cleanup area to put in a road. A new road/bridge could also be designed such that it would not hamper the Edmonds Crossing project (if that project ever occurs). The City should have legal authority through eminent domain to acquire the necessary area of the Unocal lower yard. This Pine Street 'extension' alternative is likely the most cost effective and least disruptive approach that would provide another entry/exit road to the waterfront and most importantly could be implemented in a short timeframe without overwhelming costs. This approach would also likely have the least environmental impacts of the alternatives that might be considered.
- Please do not dismiss a 'Pine Street Extension' alternative because of possible conflicts with the 'Edmonds Crossing proposal' - study the details and you will find ways to build a new road/bridge through the Unocal lower yard that may not affect future prospects for the Edmonds Crossing proposal. We also need to be cognizant that the Edmonds Crossing may never happen due to costs and it would be a travesty if the Pine Street Extension proposal was discarded due to concerns for a future project that doesn't actually happen.
- LONG TERM SOLUTIONS:
 - Construct vehicle overpass to waterfront.
 - Likely multiple overpass designs are possible.
 - Most useful is a vehicle overpass for ferry traffic and daily vehicle access, with provision for emergency vehicle responders as required.
 - One solution to serve the most useful needs is a vehicle overpass to a relocated ferry terminal. Former Union Oil property presents a logical location for a ferry terminal, vehicle overpass, parking and mass transportation access. This plan has been in discussion for decades and in my opinion remains the location with apparently comprehensive set of solutions.
 - Vehicle overpass for any ferry terminal must then include vehicle access to waterfront for emergency responders and optionally for public vehicle access.

Emergency Response on Waterfront, Other Short-Term Solutions

- Put EMS on W side.
- Require that BNSF inform Edmonds fire/police of shipments of hazardous product 14 days prior to travel through Edmonds.
- In February of this year [organization] sent the attached letter (highlights added) to the Mayor and City Council. At that time, several long term options had been put forth for providing access to the waterfront in the event of an emergency and in light of projected substantial increases in train traffic (including oil and coal transport). Since then, the Mayor has appointed an Advisory Task Force including stakeholders, Edmonds citizens and City staff, many of whom have specialized knowledge in the complex aspects of

this effort. Most of the options on the table in February and now - Edmonds Crossing, Bridge or Tunnel at Main Street or other points South, Train Trench - are long term projects likely to involve \$100 - \$250 million in cost. Our request was, and still is, to also include and prioritize short-term, less costly solutions in this process to provide at least some ways to responding to emergencies West of the tracks, including aid car/fire engine access over the tracks north of Main Street or elsewhere, establishing some form of smaller FD1 aid facility West of the tracks, comprehensive aid training for all employees and workers, and other potential short term, less expensive options. We are sending this letter again to all of you and request that while considering all of the long-term options, you concurrently address the short term solutions as part of your process. Everyone agrees that access to The Edmonds waterfront is often hindered by ever-increasing and longer freight train activity that is projected to increase over time. [Organization] has discussed this ongoing problem at several of our recent meetings, and had presentations on both Edmonds Crossing (by Stephen Clifton) and the train trench (by Charles Gold). Currently there are at least three long-term solutions that have been suggested:

- The Edmonds Crossing project, which is the current detailed solution in the Comprehensive Plan,
- Overhead access to the existing ferry landing area and holding lanes, and
- A train trench running North South along the existing track right of way.
- All of these alternatives will require extensive study and will face an uphill battle with the State Legislature, WSDOT and BNSF for the hundreds of millions of dollars of funding that each will require. The detailed studies and planning each will require means that any of these three options are many years away from becoming reality.
- There is a fourth alternative that has been suggested which does not appear to be nearly as expensive, can address immediate access for safety purposes and might also include pedestrian access over the tracks. Options to be considered include:
 - Access via a small bridge that could accommodate both emergency vehicles (ambulance and possibly small fire-fighting equipment) and pedestrian traffic, from Bell Street or possible from another area farther South,
 - Building a small emergency facility West of the tracks along the waterfront with ambulance and small fire-fighting capability and minimal staffing (See City of Tacoma Marine Security Operations Center, 3301 Ruston Way, \$4.7 million), and
 - Requiring (and funding) emergency training to those working on the waterfront.
- Some or all of these options could be employed together. The comprehensive plan currently before the council includes the following proposed new language relative to ongoing activities in the Downtown Waterfront Activity Center:
 - Increased concern about conflicts and safety issues related to the interaction of rail, ferry, vehicular and pedestrian traffic.
 - The time to act on these conflicts and safety issues is now. We have just read that the legislature has approved significant funding for studies of this problem in Edmonds, and we encourage the City and the Council to move forward on those studies as quickly as possible. More importantly, since this fourth alternative will likely be much less expensive and is not nearly as complex technically, we request that you authorize funding for it as quickly as possible to work toward some practical short term solutions. While we have been fortunate to avoid a major disaster, our luck may run out. Further, if one person is injured or has a medical emergency and cannot obtain needed short term assistance because of an accident or an oil or coal train moving more than 100 cars through downtown, that would be one person too many.
- **SHORT TERM SOLUTIONS:**
 - Station emergency equipment on the waterfront side of RR right-of-way, Construct pedestrian overpass to access equipment by responders. allow public use in non-emergency conditions

Train Schedule, Other Train Alternations

- #1. Train scheduling to minimize impacts on daily living activity and ferry schedule.
- What about requiring all train traffic to slow down to make it able to easily stop while going through our city that makes it possible for the train to stop for safely? Another idea is to regulate when long trains may proceed through the city. None of these ideas would be necessary with a train trench.
- Establish daily limit of long trains. Suggest BNSF haul shorter trains over Stevens Pass. Multiple shorter trains instead of one 100-110 car train.
- Require freight trains to run at night, when waterfront parks and many businesses are closed. If trains are relocated, require the train companies to pay the bulk of expenses for relocation.

Relocate Railroad Tracks

- Reestablish and rerouting freight train traffic to east of I-405 along the old eastern subdivision rights-of-way. Only keep passenger rail trains (Sounder, Amtrak, etc.) on these tracks.
- Relocate the tracks.
- Put the train track somewhere else.
- Require BNSF to consider alternate tracks including building new lines elsewhere.
- Options that separate train traffic from pedestrian and car traffic, especially with increased train traffic.
- North Everett too Seattle. Move Train tracks adjacent to existing tracks sound side and make new tracks sub-terrain or below current surface level current sound side track has several hollows & caverns from tide washing materials away! Type of inspection visual. Other benefits you will end up with a nice sound side sea wall with beach access ramps that head north & south in several locations. After completion of sub-terrain tracks you remove old tracks and install three sub-terrain lanes of traffic for cars south bound and three sub-terrain lanes north bound. Surface can be used for walk path & bicycles. 2 Obstacles: A. Ferry terminals B. Sewer lift stations -- remedy, install generator C. Drain 3 A. Benefits stop short line erosion and address slide areas with retaining walls! B. Trains and traffic will be unobstructed as will the surface. C. Better aesthetics 3. Build in place or use prefab yard in north Everett that's right next to two current railroad tracks. 4. Funding bonds/taxes 5. Other potentials for surface Monorail construction!
- Total move of location of the railroad tracks to make the city water connection seamless or deceptively seamless. Consideration for alternative routes for the railroad should also be studied. This may include running the railroad closer to the downtown core to remove the rail from the "waterfront."
- Honestly, I wish the railroad didn't ruin all the north end's waterfront. I wish the train could be re-routed inland. I have no idea how that would be accomplished...

Ferry, Ferry Terminal Changes, Edmonds Crossing

- Ferry access also likely to become a bigger issue. Is there a solution that addresses these with perhaps another solution for pedestrians?
- *Relocate Vehicle load/unload location; *Relocate Ferry Terminal
- Edmonds Crossing is 6 blocks long. The access roads must clear the RR tracks by, at least 23 feet. From there it is 900' down in each direction to land or to water, assuming a 3% grade. That's a total length of 1800 feet, or 6 blocks. Since 900', uphill, from the ferry to the terminal building exceeds DOT pedestrian standards, there will be a people-mover, presumably on tracks paralleling the access roads. The Terminal itself will straddle the RR tracks with its floor, at least, 23 feet above them. Dimensions of the terminal building aren't given. An 800-car parking lot (check) will be located on the hillside near the SR-104 exit. At night, all the above will be well-lit, plus there will be the constant movement of cars day and night. For those who live around Edmond's Crossing or even look at it from afar, dark quiet nights will be a thing of the past. I hope the Committee will take the time to examine Edmonds Crossing in greater depth than has been done before.
- In the 25 years that Edmonds Crossing project plans have been kicking round, they have never received the close scrutiny that they require. It is a massive project that will have a major visual impact, not just on

properties adjacent or near it, but throughout the Bowl. Physically speaking, the Edmonds Crossing location is front and center stage.

Other

- We have known for years that we need a road connecting to the overpass south of the present crossings. We have had the present crossings blocked for hours by trains and if there was an emergency it would be impossible to get help. Does someone have to die to get this fixed?
- I would like to see Edmonds govt. continue to be engaged in the regional discussion on train traffic and take the stand to reduce coal/oil trains in our region. I would like to see the City consider improvements to at grade crossings, elevated street crossings, relocating residential away from the immediate waterfront over time and rezoning to eliminate any new residential west of RR tracks, and elevated pedestrian crossings to improve walkability of our community.
- Consider the daily needs in priority of use; for example ferry transportation requires large volume vehicle pedestrian access every day; public access for business and pleasure regularly at random, emergency vehicle access in frequent and critical needs.
- BNFS knows how to fix the problem. The question is, will they step up to the plate to fix the problem of rail vs vehicle. See my article on how the Alameda Trench cured the vehicle vs train dilemma at Long Beach. <http://www.oil-electric.com/2010/01/high-speed-rail-geoduck.html>
- Dedicated bike lane and pedestrian walkway separated from vehicles are essential requirements.
- Protected bike lanes and wide sidewalks - don't prioritize cars.
- More Sounder trips.
- Simple, simple, simple!
- Is the Waterfront Access Study limited to the Dayton Street and Ferry Terminal access? Is anything being done to consider expanding waterfront access by doing something with the boat house near 67th Place West? Edmonds has developed a wonderful park there but people are prevented from gaining access to the waterfront. More public points of access are needed to the waterfront.
- To improve usability, please consider making the area behind the Senior Center a completed walk-way. Then people could walk from the dog park to Brackett's landing without having to cut through the Senior Center parking lot. Have a continuous walkway. An elevated wood bridge over the beach?

Table A-5. Open House Meeting 1 - Question 3 Flipchart Transcription

Options
Train - 5 <ul style="list-style-type: none">• Tunnel - 1/5• Reroute - 2/5<ul style="list-style-type: none">○ East• Limitations to time and length - 2/5
Trench
Bridge/Overpass - 8 <ul style="list-style-type: none">• At train tracks - 1/8• One lane pedestrian bridge that allows emergency access - 2/8<ul style="list-style-type: none">○ Sunset to Brackett's Landing• 3 overpasses (one for vehicles, one for pedestrians, one for the senior center) - 1/8• For vehicles - 1/8• At Main Street or Dayton Avenue - 1/8
Tsunami safe plan - 1

Options

Aid station (staffed at Senior Center area) - 1

Traffic - 3

- Double tracking for traffic flow optimizing - 1/3
- Rearranging traffic/location of key thing on the waterfront - 1/3
- Better organized routes - 1/3

Safe crossings (cars and pedestrians)

- Edmonds crossing - 2/5
- Main St ferry mix - 1/5
- Edmonds Yacht Club - 1/5
- Crosswalk on Dayton west of tracks - 1/5

Make solution invisible - 2

Look at options other towns have used - 6

- Europe - 1/6
- South Center - 1/6
- Mukilteo - 1/6
- Seattle - 1/6
- Bremerton - 2/6

City integration with WSDOT 104 plan to solve City plan - 1

Beneficial for all stakeholders - 1

Quiet crossings - 1

Question 4: Are there any specific issues you'd like the project team to know about?

- Please create walking opportunities in multiple places to go back and forth (by walking or pushing bike through).
- Is the pedestrian held as the prominent use/client?
- The longer you take, the more it will cost.
- When you develop the 3 leading alternatives: 1. overpass; 2. underpass and 3. Trench - please create visuals so the public can "see" what each alternative will look like. The overpass might end up being the cheapest and easiest fix, but it may permanently harm the aesthetics of our town which in turn will permanently harm tourism, livability, and our economy.
- I once mentioned to an architect that I had never seen an artist's rendering of Edmonds Crossing. She laughed and said renderings were passé, and that computers can now show, exactly, how a structure will look from any angle. I suggest that the Waterfront Access Committee retain a firm that does such work, and that can provide you and the public with an accurate description of how Edmonds Crossing would fit into The Bowl.
- If BNSF doesn't like it, it's probably a good idea.
- Dogs. I love them but there are too many in marine sanctuary/ waterfront parks now. What will team do to ensure this doesn't get worse?
- From my perspective digging down is pointless and useless upon completion due to expected sea level rise and this will all be a mute problem as soon as that happens as the railroad will need to be moved from where it is anyways. The option is to stand here and wait to be flooded or sit here spending lots of money on a project that will never use because it is flooded.
- High water table near train station.

- Get it done!
- Please keep in mind the vast number of families with young children who are in the beachfront parks every day.
- It needed to be done years ago, and it has been a problem for decades. Another study is another delay. Just get it done!
- I assume this project is or will be coordinated in some way with the reconstruction of the Senior Center.

Study elements and evaluation criteria

Climate Change, Sea Level Rise

- How will the rising sea levels impact any alternatives? What is potential of changing the land uses on the west side of the tracks including eliminating all of the non-marine uses? How to make the damned Railroad Companies pay for any and all improvements.
- Sea Level Rise due to Global Climate Change.

Aesthetics

- Should not involve a structure that is obtrusive/ugly. I am concerned that a roadway above the tracks would detract from the beauty of our waterfront.
- Solutions that have the least impact to the visual beauty of the Edmonds waterfront.
- Do not destroy the aesthetics of the waterfront. Do not build a viaduct or raised roadway. We don't want the Edmonds to have an "Alaska Way Viaduct";

Cost

- Cost.
- The cost seems way out of proportion to the benefits.

Questions, information needs

- What has happened in cities where this has occurred? Can we sue Burlington Northern for creating this unsafe situation of dangerous cargo? Would a trench help contain a spill?
- The materials show the hours per day that trains are projected to obstruct vehicle and pedestrian access. To me the more relevant figure would be what is the maximum time anyone train obstructs access? That is a fact I would like to know.

Other, Multiple Responses

- Feasibility, Constructability, Environmental Impacts, Economic Impacts
- Cost, time, environment
- Yes I would like the team to investigate the costs to our environment if there is a derailment with toxic spills, fire, explosions.
- Environmental impacts, visual impacts, aesthetics
- In considering the various means of access to the beach area, the Mayor's Task Force should not only consider reasons why we need access, but collateral benefits attributable to each alternative.
- Feasibility, purpose and need, impacts to property, economy, and environment, aesthetics, costs to taxpayers, benefits to local and regional jobs, minimize impacts on rail traffic.
- Minimal disruption to traffic, little/ no impacts on environment, short time to complete, low costs.
- I like the evaluation criteria listed here. I would like to include "service impact". I am happy to see equity as an evaluation criteria. The senior center is often crowded with minimal parking, and any redesign should consider the needs of seniors using the center and designated parking, at least during center hours.

- Keep it small town feeling. If you add park and rides etc. to address more train users, you risk turning that area into a more congested mess. I know we're all for growth--but I prefer it remains small.

Table A-6. Open House Meeting 1 - Study Elements and Evaluation Criteria Flipchart Transcription

Criteria/Things to Consider
Use the most conservative and best available science (i.e., anticipating the highest level of sea level increase) - 1
Evaluate the planning for hardscape development on long term development (i.e., 40 years or more) - 1
Pedestrian - 3 <ul style="list-style-type: none">• Safety - 1/3• Access to parks, waterfront, ferry - 1/3• Overpass wide enough for emergency vehicles - 1/3
Feasibility - 3 <ul style="list-style-type: none">• Cost/benefit analysis - 2/3• Cost of train trench vs. train - 1/3
Risks - 1
Property values - 1
Environmental impacts - 3 <ul style="list-style-type: none">• Marsh - 1• Toxic waste from train - 1• Beach - 1
Visibility - 3 <ul style="list-style-type: none">• Views of City and Puget Sound - 1/3• What will Dayton and Main St look like - 1/3
Good connection to and from all transit, close to retail core - 1
Opportunities for railroad to fund (or federal \$) - 1
Flyover landing zone - 1
Businesses - 2 <ul style="list-style-type: none">• Access to businesses on waterfront or downtown - 1/2• Their views of ferry traffic - 1/2
Community image to residents and visitors - 1
Future generations - 1
Train impacts to soil, bridges, and environment - 2

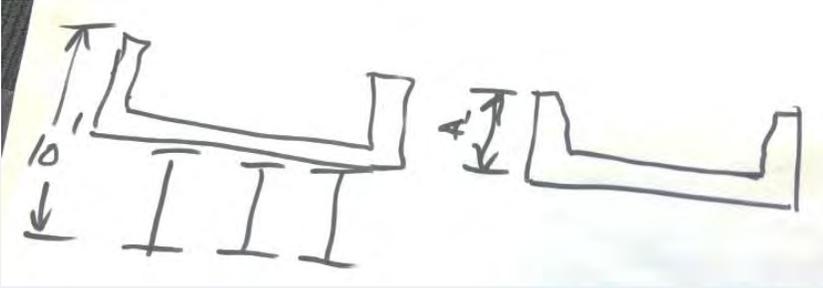
Additional comments

- While everyone can agree that this is a major problem facing Edmonds, it affects everyone differently, so the best solution is not readily settled on. It depends on which scenario you find yourself. Somebodies life might depend on quick evacuation across the tracks to a hospital. If ferry traffic is re-directed to overhead bridges or tunnels that bypass downtown, business owners worry about their survival. Will the appeal of the Edmonds waterfront as a tourist destination be diminished with at-grade industrial double-tracking

blocking access to either side? With that and the noise, will our real estate be devalued? What if there is an accident or explosion? And what happens to the Marsh? Some don't feel directly affected and are very hesitant to want to do anything because they fear higher taxes. As a community we share all these concerns. The assignment of the Mayor's Task Force is to work with a consulting company (Tetra Tech) to evaluate all possible solutions about these matters. This is a critical issue facing Edmonds and it is entering the political phase where sometimes the solution with the most merit is not selected because of private political dealing.

- Thanks to everyone who is working to solve these problems.
- Endless debate and study is maddening and costly. Build a solution before the end of 2020!
- I would like to see a running trail along the water. I'm not sure where it would go, but a gravel trail for running/walking/etc. that goes for several miles would bring many people to the waterfront.
- It does not seem fair for waterfront communities that have rail along them to suffer economically and otherwise from the increased train traffic. Especially when you consider the cargo they're carrying. Money is being made with transit of dirty coal and explosive oil to countries that should be considering alternative clean energy. With climate change that creates ocean acidification - thereby affecting the food chain of which we are at the top, and clean air with rising sea levels. Should we even be enabling this? The least the rail and oil companies can do is compensate cities for the negative impacts they will have, given the potential danger to people and the environment along with a serious hit to their economy. They're making money so they can share the cost of these infrastructure and safety improvements. They certainly have the means and it's the socially responsible thing to do. Thank you for considering my comments.
- I am a foot passenger on the ferry 4 times per week for the last 5 years. I have seen many close calls when pedestrians cross from south to north on the last crosswalk on hwy 104 as hwy 104 ends at the ferry itself. It is the crosswalk one would use to get from Brackett's Landing South to Brackett's Landing North. A week or so ago I saved a baby's life. I crossed that crosswalk from north to south. A father was pushing his baby from south to north, but was waiting on the south end of the crosswalk talking to someone. As I crossed I could see that a motor home was unloading from the ferry and headed towards the crosswalk. However, I could see that I had plenty of time to cross so I was walking at a normal pace. I had just gotten to the south end of the crosswalk when I could hear the father say goodbye to the people he was talking to. Out of the corner of my eye I could see that he was beginning to push the stroller towards the crosswalk and I turned as he entered the crosswalk. At that point I yelled as loud as possible for him to "lookout!" and he pulled the stroller out just in the nick of time to not get plowed by the motor home. There is a severe blind spot for both drivers and pedestrians. City ordinance says that pedestrians have right of way and that drivers must stop for pedestrians. However, in this case, drivers have learned that they can barrel through that crosswalk even when they can see many people waiting to cross. This creates confusion for some pedestrians who aren't accustomed to waiting so long at a crosswalk. That's when I see pedestrians jump out and try to dart between cars that are sometimes doing 25mph or more. It's like the game frogger. I know that a lot of money was just spent on the HAWK crosswalk that crosses hwy 104. I think a lot could be done to prevent a tragedy at the crosswalk at the terminal.
- In this week's Edmonds Beacon, there is a letter to the Editor which addresses "Opposition to possible Vancouver oil-by-rail terminal." Co-author of the article is Mark Johnson, president of the International Association of Firefighters. He said, "We cannot protect people from explosive oil trains. . . "The letter also addresses the oil contamination effect of the spill into the Columbia River. The trains he is concerned about are traveling through Edmonds right now. Two of them crossed Main Street about 15 minutes apart at 1 AM a few nights ago.

Table A-7. Open House Meeting 1 - Additional Comments Flipchart Transcription

Additional Comments
Know that transportation-oriented development in this part of town is a false assumption. Most residents who live in this area will only drive.
What happens if there is an explosion?
Less trains?
Please use expert planners
Size/visual impact
Do not spend a lot of money until determined there is a real need
Commercial impacts from moving ferry (taxes, vitality etc.)?
Design shallow/visual impact reduce


A.1.4 Open House Meeting 1 Summary

The study team conducted the initial outreach phase for the Edmonds Waterfront Access Study in November and December 2015. The study team sought input about existing conditions, evaluation criteria, and ideas for improving access to the waterfront area. People could share input through breakout group conversations at a public meeting, a comment form (hard copy or online), email, mail, or phone.

We received 54 comment submissions before the Dec. 11, 2015 deadline. The following document outlines the common themes, ideas and concerns raised through the comments received. Appendix A is a transcription of all comments received, organized by question or topic. The comment form used is shown in Appendix B.

Outreach Overview

Public Meeting: Nov. 18, 2015

- 116 attendees
- 13 comment forms
- Feedback from small group breakout sessions

Online open house: available Nov. 16 – Dec. 11, 2015

- 326 visits
- 259 unique visitors
- 31 comments submitted

Other outreach to encourage feedback

- Social media posts
- My Edmonds News articles
- Email update

Table A-8. Open House Meeting 1 - Comment Submissions Overview

Type	Count
Comment forms	
Returned at meeting	13
Mailed	2
Online Open House	31
Email	6
Phone	1
Other comments	1
Total	54

Key Themes

How and why do you access the waterfront area?

Participants were asked about how they access the waterfront area now, and what they do at the waterfront.

- Most participants access the waterfront by driving or using transit (ferry, bus, train).
- Walking along the waterfront for scenic views, shopping or eating out is one of the most common activities. Walking destinations mentioned include the pier, Brackett’s Landing, Edmonds Senior Center, and Marina Beach Off-Leash Park.
- Recreational activities such as fishing, diving, reading, biking and exercise are other popular uses for the waterfront.

Table A-9. Open House Meeting 1 - Comment Form Responses

Option	Total
Walk	32
Resident	29
Drive vehicle	29
Park visitor	28
Use transit (bus, train, ferry)	24
Customer	22
Ride bicycle	11
Moorage tenant	2
Business owner	1
Employee	0

What concerns you right now regarding access to the existing waterfront area?

Participants were asked to describe existing problems they experience when accessing the waterfront or list other general concerns regarding the waterfront.

- Access for emergency responders and residents (via vehicle, pedestrian, bike) is a primary concern, especially when trains are passing. Participants stated that longer trains tend to create a lot of traffic.
- Ferry traffic gets blocked and delayed when a train passes through.
- Increasing wait times to cross the tracks for all modes.
- Other top concerns were:
 - Train noise from blowing horns and/or the train engine.
 - Train accidents involving derailment and spills that might affect human health and the environment.
 - Increased amount of train traffic in the future.
 - Lack of parking in waterfront area.

What ideas do you have or have you heard that we should consider as part of this process?

Participants provided both specific and broad ideas, specific locations, and long and short-term solutions that should be studied.

- Train trench concept:
 - Build a “train trench” that puts the train tracks under the roadway and removes conflict with all vehicles, pedestrians, and cyclists.
 - Train trench provides waterfront protection from train accidents (derailment, explosions, etc.) and natural disasters (better protected in liquefaction soils); also would protect Edmonds Marsh area from contamination.
 - A train trench is too expensive and not feasible.
 - Begin underground track further north (Richmond Beach, Everett, etc.) and continue out past the mud slide areas.
 - Pass under Main Street in shallow dip (not necessarily a tunnel).
 - Tunnel underneath Woodway.
- Underpass or overpass, bridge, or flyover:
 - Build an underpass for pedestrians, cyclists, and emergency access.
 - A pedestrian/cyclist bridge that is large enough to accommodate emergency access when needed.
 - General pedestrian bridge.
 - Pedestrian, cyclist, and vehicle bridge.
 - Flyover specific to ferry loading with emergency vehicle access.
- Specific overpass locations include:
 - South end of Admiral Way crossing lower yard of Chevron/Unocal site out to Hwy 104.
 - Marina Beach/Edmonds crossing area.
 - Extension to Bell Street.
 - Main Street.
 - Dayton Avenue.
 - Edmonds Street.
- Other suggestions to improve emergency response:
 - Provide emergency response station or staff on the west side of the train tracks.
 - Require and fund emergency first aid training to employees on the west side of train tracks.

- Alter the train and/or train schedule in various ways, including:
 - Establish a daily limit of long trains (multiple shorter trains instead of long trains).
 - Run long trains only at night.
 - Sync ferry schedule and train schedules.
 - Build new train tracks further east, outside of the downtown/waterfront area.
 - Revise traffic flow and/or locations of key destinations on the waterfront.
 - Provide communications from emergency responders to railroad to halt train traffic short of the rail crossings.
 - Move freight traffic on tracks further east, keep passenger traffic on this track.
- Connect Pine Street with Admiral Way using an overpass over train tracks.
- Aesthetics and views are very important to the City, residents, and tourists. Overpass and bridge options should minimize or not impact views at all. Some were against an overpass because of the potential impact to views.
- Revisit and/or rework the Edmonds Crossing solution.
- Look at options other cities with similar issues have used, including Mukilteo, South Center, Seattle, Bremerton, Long Beach, and Europe.
- Any option should be safe for cars, cyclists, and pedestrians.
- Move the ferry terminal and/or relocate the load/unload area.
- Use a combination of short and long-term solutions to address access issues, particularly emergency access.

Study Elements and Evaluation Criteria

Respondents provided feedback on considerations that should be included in the study and specific evaluation criteria that should be used to compare alternatives.

- Environmental considerations
 - Incorporate climate change and potential for sea level rise.
 - Environmental impacts, specifically impacts to the Edmonds Marsh and beaches.
 - High water table in area.
- Cost
 - Cost-benefit analysis should address the feasibility of options.
- Aesthetics
 - Ensure options are aesthetically pleasing and fit visually into Downtown area.
 - Maintain views of Puget Sound.
- Safety
 - Pedestrian safety and access.
 - Train-related risks including hazardous waste, spills, and derailment.
- Other effects
 - Impacts to businesses during construction and after completion.
 - Impacts to traffic.
 - Benefits to local and regional jobs.
 - Equity, specifically for seniors who access area often.
- What is the maximum/average time a train obstructs access, and how often?
- Study and compare collateral benefits of each alternative.
- Ensure cost estimates are accurate and include “extras” for all alternatives (e.g. administrative costs, management, etc.).
- Compare potential funding sources of different alternatives.

Other Comments

- Implement a short-term alternative to address emergency access before proceeding with a long-term solution.
- Train horns are very loud.
- Add amenities to the waterfront area, including additional parking, more public access points, greenways, trails, parks, etc.
- Limit development on west side of train tracks.
- Expand development/uses surrounding the waterfront area.
- Add an urban planner to the project team.
- Create visuals/renderings of what alternatives would look like.
- Ensure option chosen is cost effective and feasible.
- Make sure construction of new alternative does not confound existing access issues.
- Find a solution quickly – there have been enough studies and delays.
- Preferred alternative for individuals depends on their personal use of the waterfront area.

A.2 OPEN HOUSE MEETING 2 - JANUARY 27, 2016

A.2.1 Meeting Materials

Figure A-6. Open House Meeting 2 - Meeting Display Boards

Edmonds Waterfront Access Study

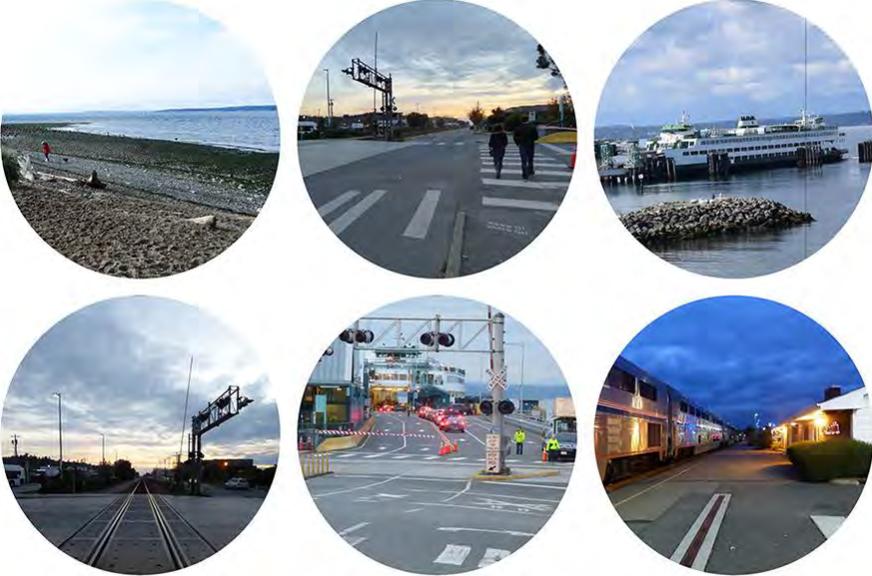


WHAT IS THE STUDY PURPOSE?

To study alternatives to street-level rail crossings at Main and Dayton streets that provide safe, reliable and efficient access between downtown Edmonds and the waterfront for emergency responders and people driving, moving freight, using transit, walking or biking.

WHY IS THIS NEEDED?

-  Expedite emergency response to waterfront area
-  Reduce congestion and delays
-  Increase efficiency of ferry loading and unloading
-  Improve connections to buses, train, and ferries
-  Increase comfort level of people using the waterfront area





Edmonds Waterfront Access Study

WHAT ARE THE CURRENT PROBLEMS WITH WATERFRONT ACCESS?





Edmonds Waterfront Access Study

WHAT ARE THE LEVEL 1 SCREENING CRITERIA?

We will compare potential concepts using the same screening criteria. The criteria we use will help us understand how the concepts meet the purpose and need, how feasible they are, and how they compare using various measures. Additional suggestions for criteria from the community can be incorporated into the next step of the screening process.

LEVEL 1 SCREENING CRITERIA

- Does the concept improve reliable emergency response to the west side of the railroad tracks?
 - Provide for continuous emergency response?
 - Reduce emergency response delays?
 - Improve emergency evacuation?
- Does the concept reduce delays to ferry loading/unloading of vehicles?
- Does the concept reduce delays and conflicts at roadway/railroad crossings for people walking, biking or driving?
 - Reduce delays for pedestrians?
 - Reduce pedestrian conflicts between travel modes?
 - Improve connection between major destinations?
- Does the concept provide safe and efficient passenger connectivity between available modes of travel?
- Is the concept feasible to implement?
 - To construct?
 - To fund?
 - To permit?
- How well does the concept avoid negative environmental effects?
 - To natural resources?
 - To historic, cultural, and archaeological resources?
 - To visual aesthetics?
 - To noise levels?
 - To sites containing hazardous materials?
 - To use of park lands?
 - To air quality?
 - To soils and groundwater?
- How well does the concept avoid creating social and/or economic impacts?
 - Avoid negative effects on neighborhoods and businesses?
 - Compatible with positive urban design?
 - Avoid conflicts with parks/recreation assets?
 - Avoid creating safety hazards?
 - Improve freight mobility?

 Suggested by the community



Edmonds Waterfront Access Study

MEETING PURPOSE:

- Share the list of concepts being considered to improve waterfront access
- Explain our next steps in the Level 1 screening process
- Hear your thoughts on the criteria we will use to compare concepts

HOW CAN YOU PROVIDE INPUT?

At this meeting:

- Leave comments using a form or laptop
- Participate in individual discussions with study team or Task Force members
- Write thoughts on flip charts

After this meeting:

- View materials and submit comments using our Online Open House until Feb. 12, 2016:
edmondswaterfrontaccess.publicmeeting.info
- Visit our website anytime: www.edmondswaterfrontaccess.org
- Email: info@edmondswaterfrontaccess.org
- Mail comments by Feb. 12, 2016
- Call 425-771-0235 to ask questions
- Participate in future input opportunities

HOW WILL YOUR INPUT BE USED?

- Provide us with information on local conditions.
- Inform our work as we develop and evaluate alternatives.





Edmonds Waterfront Access Study

WHAT ARE THE INITIAL CONCEPTS?

We compiled over 40 concepts from prior studies and analyses, community input, and the study team. These correspond with the concept location map. Next, we will apply Level 1 screening criteria to these concepts.

Roadway Overpass

- OVER 1** South end of Admiral Way from lower yard at Unocal site ("Pine Street Extension")
- OVER 2** Marina Beach Park/Edmonds Crossing area from relocated ferry terminal flyover
- OVER 3** Near Edmonds Yacht Club
- OVER 4** Dayton Avenue
- OVER 5** Mid-block, near Senior Center
- OVER 6** Main Street (including ferry loading)
- OVER 7** Pedestrian/bicycle overpass spanning Main Street and Railroad
- OVER 8** Extension of Bell Street to Brackett's Landing Park North
- OVER 9** Extension of Edmonds Street to Brackett's Landing Park North
- OVER 10** Near Haines Wharf Park

Roadway Underpass

- UNDER 1** Main Street
- UNDER 2** Dayton Street for all travel modes
- UNDER 3** Salish Crossing (north of Dayton) for small service vehicles, pedestrians, bicycles only
- UNDER 4** Main Street undercrossing for small service vehicles, pedestrians, bicycles only

Railroad Modifications

- RAIL 1** Train Trench: Full clearance under both Main & Dayton
- RAIL 2** Train Trench: Full clearance under Main Street, with raised roadway at Dayton
- RAIL 3** Combination Rail Underpass plus Roadway Overpass
- RAIL 4** Combination Rail Overpass plus Roadway Underpass
- RAIL 5** Elevated rail to pass over road crossings
- RAIL 6** Relocate tracks into tunnel beneath Edmonds
- RAIL 7** Double-track to optimize train passage and reduce passing time
- RAIL 8** Relocate freight rail to east of I-405 along former Eastern Subdivision ROW

Suggested by the community

Operational

- OPS 1** Limit the daily number of long trains passing through crossings
- OPS 2** Operate long trains only at night
- OPS 3** Synchronize ferry schedule and train crossings to reduce conflicts
- OPS 4** Emergency signals to halt trains short of Main Street and Dayton Street
- OPS 5** Advance notification of hazardous cargo shipments on trains
- OPS 6** Improve emergency operation of crossing gates
- OPS 7** Tsunami evacuation plan

On-site Improvements

- SITE 1** Emergency first aid training to employees on west side of railroad tracks
- SITE 2** Station emergency response staff and equipment on west side of railroad tracks
- SITE 3** Helipad for evacuation from west of railroad tracks
- SITE 4** At-grade crosswalk improvements at Dayton Street and Railroad Avenue
- SITE 5** At-grade crosswalk improvements at Main Street and Railroad Avenue

Ferry Terminal Modifications

- FERRY 1** Edmonds Crossing (Point Edwards Concept)
- FERRY 2** Expanded Terminal Concept (enlarged trestle for greater vehicle storage)
- FERRY 3** Mid-Waterfront Concept (vehicle storage @ Harbor Square w/ trestle at Dayton Street)
- FERRY 4** Multimodal Center Garage/ferry vehicle storage, from Dayton Street to flyover to ferry
- FERRY 5** Underground Ferry holding with pedestrian bridge extended
- FERRY 6** Vehicle holding garage off Dayton Street with overpass to Railroad Avenue
- FERRY 7** Trumpet flyover at Dayton Street with surface vehicle storage west of Railroad Avenue
- FERRY 8** Surface parking at Salish Center with flyover at Main Street
- FERRY 9** Railroad Avenue Holding Lanes accessed via at-grade crossing through Unocal site
- FERRY 10** Railroad Avenue Exiting Lanes via at-grade crossing from through the Unocal site
- FERRY 11** Relocate railroad tracks to current holding lanes and move holding lanes to west side of relocated tracks



Edmonds Waterfront Access Study

WHAT IS THE LEVEL 1 SCREENING PROCESS?

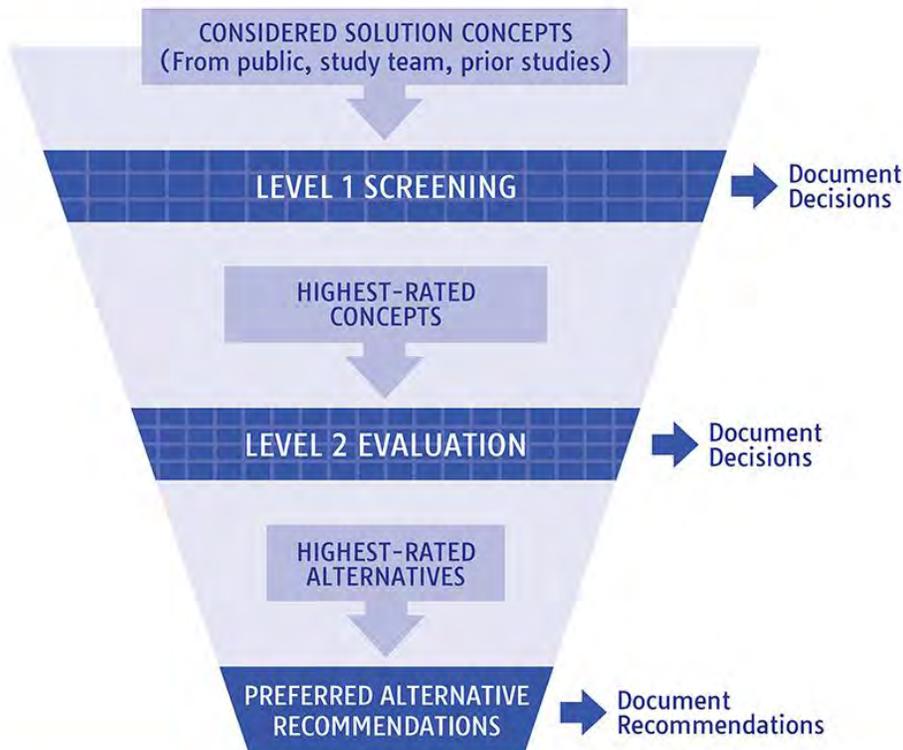
We are using a two-step process to screen concepts and evaluate alternatives. During Level 1 screening, we will:

- Eliminate concepts that do not meet purpose and need.
- Compare remaining concepts using the Level 1 screening criteria.
- Use best available information to rate how each concept meets individual criteria.
- Advance highest-rated concepts for Level 2 evaluation.

Concept ratings for criteria used in Level 1 Screening

-  Most positive
-  Least positive
-  Between Green and Red (in some cases neutral)

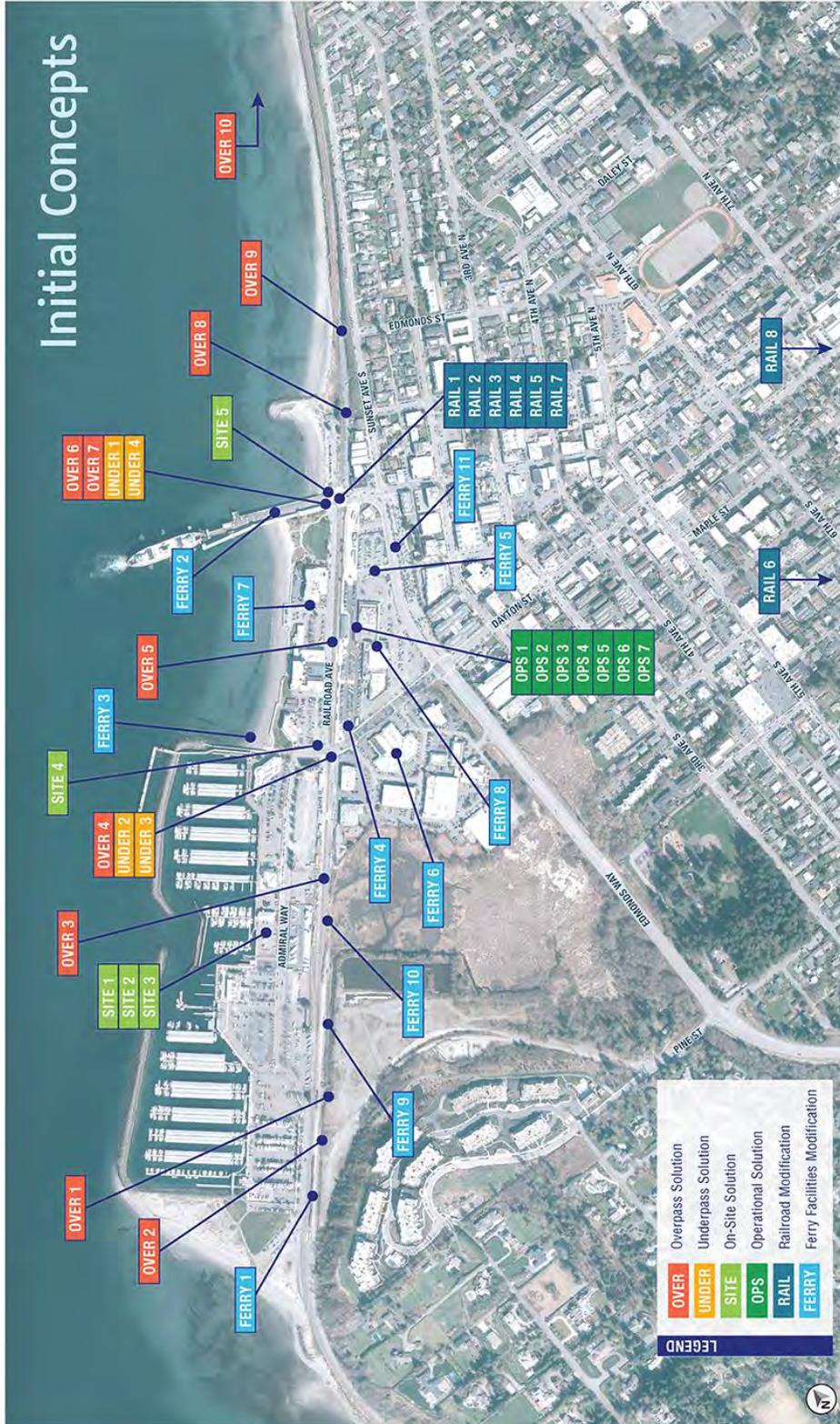
We will share more details about the results of Level 1 screening, and the Level 2 evaluation process at our next public meeting.





Edmonds Waterfront Access Study

Initial Concepts





Edmonds Waterfront Access Study

HOW WILL WE STUDY CONCEPTS AND ALTERNATIVES?

NOV. 2015

DEC. 2015 – FEB. 2016

MAR. 2016 – APR. 2016

MAY 2016 – JUL. 2016

AUG. 2016 – SEP. 2016

STUDY MILESTONE

Understand existing conditions

Identify concepts

Screen concepts (Level 1 review)

Evaluate alternatives (Level 2 review)

Develop recommendations

TECHNICAL ANALYSIS STEPS

- Observe, quantify and document existing conditions at Main Street and Dayton Street crossings.
- Review data from previous studies and community input.
- Compile potential measures to improve access, including both long-range and near-term solutions.
- Develop screening criteria.
- Prepare list of concepts for screening and evaluation.

- Review concepts within initial criteria to determine feasibility.
- Eliminate infeasible concepts.
- Document findings.

- Further develop the remaining concepts into potential alternatives.
- Apply more detailed criteria to evaluate alternatives.
- Document findings and initial recommendations.

- Develop preferred alternative recommendations based on analysis.
- Present to City Council and Legislature.
- Document final recommendations in a report.

GET INVOLVED

Share your experiences with waterfront access and ideas for improving access

Share your thoughts on concepts to consider and screening criteria

Provide feedback on screened concepts

Provide feedback on evaluated alternatives and initial recommendations

Review preferred alternative recommendations

Share your feedback throughout the study

Public meeting

Online open house

Public hearing

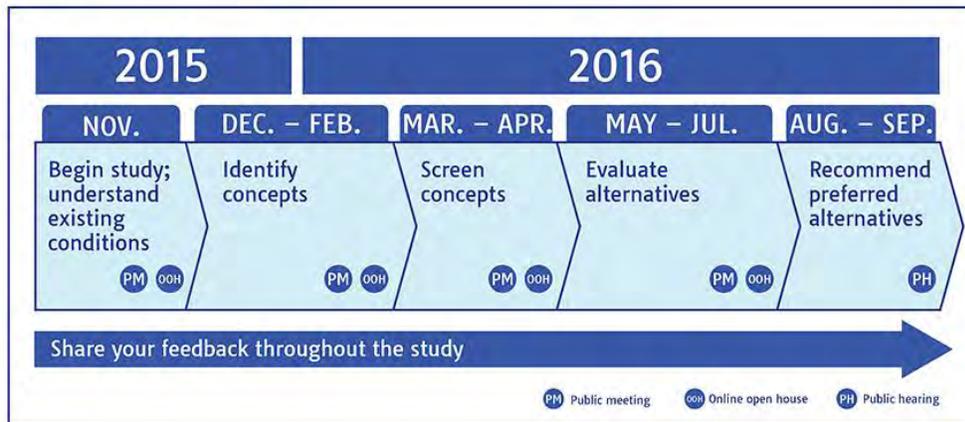


Edmonds Waterfront Access Study

WHAT IS THE EDMONDS WATERFRONT ACCESS STUDY?

The City of Edmonds is working with our partners to study different ways to improve access to and from the waterfront, including access for emergency responders. Through our study, we plan to identify one or more preferred alternatives to carry forward into environmental review and design. We will provide opportunities for the community to be involved.

SCHEDULE



WHO ARE OUR PARTNERS?

Mayor Earling appointed an Advisory Task Force to help guide and lend expertise to the process. Task Force members represent:

- Edmonds residents and businesses
- City of Edmonds
- WSDOT
- Washington State Ferries
- Sound Transit
- BNSF
- Community Transit
- Port of Edmonds

A.2.2 Open House Meeting 2 Comment Compilation

The following are verbatim comments received at the community meeting or submitted via hardcopy comment forms, email, mail or the online open house. Flip charts were used during the open house, which are also transcribed.

Comments have been organized by subject area/question response. This includes all comments received through February 1, 2016. This document will be updated as new comments are received. The comment deadline for this phase of outreach is February 12, 2016.

Table A-10. Open House Meeting 2 - Comment Submissions

Type	Number
Comment forms	
Returned at meeting	8
Mailed	
Online Open House	16
Email	
Phone	
Other comments	
Total	

Question 1: What are your thoughts on the list of concepts? Are there others we should consider?

Roadway Overpass

- Over 1: Pine street extension. An overpass is going to impact the waterfront view, but this location seems most unobtrusive to me.
- Over 7: This is a good idea to improve pedestrian and bicycle access to the waterfront. [Any overpass should be designed carefully so that it is architecturally pleasing and a positive aesthetic enhancement to the Edmonds Waterfront.
- Consider a pedestrian/small vehicle overpass at Dayton. The small vehicle could be an appropriately outfitted emergency vehicle which could be housed in Harbor Square. This would not solve delays for cars, but would deal with pedestrians, bicyclists and emergency response. The virtue of this approach would that it would be inexpensive and doable over the short term. Even if something more major was built at Main or north, it would still be well used.

Roadway Underpass

- Under 2 (Dayton Street undercrossing) seems like a good option to pursue. All of the rail options, except Rail 7, seem silly and do not reflect the reality of what a trench, elevated rail, or a relocation would cost in both capital and ongoing operational costs.
- The underpass concept seems to be the best solution to me but not sure how the passenger train would load/unload based off this presentation. 2 tracks in lieu of the current 1 track in downtown Edmond should be considered along with a way to load/unload passengers. The biggest problem with this is ADA access below or move the current train station south but that doesn't seem to have lots of real estate to do. It sure does seem that \$ will and env impact will be the biggest hurdles to elevate current train/auto/pedestrian congestion. If this could be done maybe a board walk that encloses the underpass for a determined distance could be used for park like environments. Would be curious to my reception to

my comments. Thanks for your time and great concept presentation at least on the web. In person with Q & A would surely help the concept feasibility and designs make more sense to me. Anything that keeps and enhances Edmond's quaint feel with waterfront enhancements will bring people to Edmond's and spend money is worth exploring

Operational

- Ops 4 should be investigated, but who would be authorized to trigger an emergency signal?

On-Site Improvements

- Site 4 and Site 5 should be pursued.

Ferry Terminal Modifications

- Ferry 9 and Ferry 10 seem like the best options for improving all aspects of safety and access.
- I'm not in favor of ferry 1 because I want Marina Beach to remain in its beautiful, natural state.

Railroad Modifications

- Eliminate the train trench options as being way too expensive for the minimal benefit received.
- I think the best solution is the Rail#1. I've seen this implemented in Holland decades ago, and there's even a waterway over the trenched roadway. It's the cheapest solution to the problem, and will allow the addition of a second track making things easier for BNSF with the removal of the Edmonds bottleneck.
- By trenching the train, emergency response vehicles are no longer impeded in their response to those in need.
- Trench under Main St.
- Can we limit the number of trains, especially those containing hazardous materials? It's only a matter of time till there is an accident, environmental impact. It impacts the quality of life in this "small town." As a frequent ferry user, this more and more impacts that process. Also dangerous for pedestrians, families, tourists! Overpasses, underpasses, moving the ferry terminal - all good ideas.

Combinations

- BNSF should find another route - mid-Snohomish County lines? Ops "short term" solutions could be done right now - like those
- Favor over tracks for peds and bikes, Edmonds Crossing for cars - Over 1, 4, 7; ferry 1, 8, 10.
- My preferences are a combination of OPS 1, 5 and 7; and UNDER 4 and RAIL 1. I like UNDER options for the rail because the trains are unsightly and noisy. The UNDER option also keeps the view nice without a raised roadway obstructing the ability to see the waterfront. I realize of course that UNDER options are probably more expensive to implement. The OPS options are less expensive. I would like Edmonds to maintain its small town feeling and that includes the view. I would like to take the opportunity to note that I am against making the waterfront a big business center. I like it calm and relaxed and not over crowded with ample parking. I've noticed that parking is becoming more difficult around Edmonds. It is being taken away by things such as new development and traffic calming. As part of this solution, please keep parking at waterfront. People in Edmonds don't really ride the bus too much as it's not very convenient. I took the Westgate center survey a few years back and the results were pretty anti-bus.

Other

- Much more ideas than thought would be – was fun to see great thoughts
- The list of concepts address a number of access and traffic issues. Implementation of some of the key concepts (e.g. Edmonds Crossing Multi-modal Center at the old Union Oil Lower Yard) would obviate the need for several of the other concepts (emergency access to the west side, ferry and pedestrian travel interruptions due to increasing train traffic, and other perceived needs). It would be interesting to compare

the financial feasibility of some of integral concepts to the list of smaller (less expensive) concepts that would most likely be solved by the “bigger solution”

- Your decision model leaves out an important element - future uncertainties. For example there may be climate uncertainties, funding uncertainties, railroad traffic uncertainties, harbor development uncertainties, etc. I challenge you, for each alternative, to ask what future scenarios (resolution of uncertainties) would make this a bad alternative to have chosen and what scenarios would make this a great alternative to have chosen. With a full understanding of the impact of uncertainty, you may develop better new alternatives and also be able to evaluate the robustness of each alternative under different future scenarios.
- Other: Improve Rail Road signals and safety alerts only! When reviewing stated reasons to explore options I do not see enough "positives" to justify the costs.

Table A-11. Open House Meeting 2 - Question 1 Flipchart Transcription

Flipchart Transcription
I like “operational” – why do you them immediately? While you are figuring out “overpass”, “underpass” & “ferry”
Any trench must begin with a life – cut & cover
Consider two overs, one south and one north
*There simply is not room to construct a trench, plus financially prohibitive – BNSF will not pay for any \$\$
No flyovers!
Rail #1 – proven in Holland, Cheapest option.
Trench. Just do it. Also like over 8.
Rail #1, #8 ← what would it take to implement rail #8? This solves a lot of issues.
Would like to see least amount of disruption as possible, so #6 and #7 overpass.

Question 2: Please tell us which of the screening criteria listed below are important to you and why.

Table A-12. Open House Meeting 2 - Question 2 Screening Criteria

Criteria	Count
Improves reliable emergency response time	12
Reduces ferry loading/unloading delays	8
Reduces delays/conflicts for pedestrians, bicyclists and motorists	12
Increases intermodal passenger connectivity	5
Is feasible to implement	9
Avoids negative environmental effects	11
Avoids social and/or economic impacts	8

Screening Criteria Responses

- Criteria look good. Like that ped/bike included. Would add criteria focused on how impacts all abilities (e.g. older adults, families with strollers, other ability needs).
- The list of Screening Criteria does not include maintaining BNSF's freight operations and Sound Transit's Commuter Rail operations.
- #1 Improve reliable emergency response - want safety assurance when I visit waterfront and for my fellow citizens who reside there
#2 Avoid negative env effects - coastal areas are already threatened and Edmonds Marsh is fragile - want to protect and improve what we have
#3 Avoid social/economic impacts - please no eyesore solution and leave burden of cost on affected parties and railroad
#4 Feasible is important but #4 for me
- This becomes particularly problematic when a failure with a train requires it to stop while it's blocking both Main and Dayton. Reduces delays/conflicts for pedestrians, bicyclists and motorists by removing the trains from the same level last the pedestrians. There's less likelihood of striking pedestrians as an added benefit. Is it feasible to implement? Yes it is. I've seen trenching like this in Holland, and it's very successful, easy to construct and durable. It uses current construction techniques, tried and true materials and hydrological methods. It's the safest, easiest answer to this issue.
- (6)Improves reliable emergency response time (1) Reduces ferry loading unloading delays (2) Reduces delays conflicts for pedestrians bicyclists and motorists (7) Increases intermodal passenger connectivity (4) Is feasible to implement (3) Avoids negative environmental effects (5) Avoids social and or economic impacts

Table A-13. Open House Meeting 2 - Question 2 Flipchart Transcription

Flipchart Transcription
of 911 calls delayed by RR (and how long & time of day?)
How will the criteria be weighted for down select?
What are the RR traffic projections?
What are the statistics that show there is an issue with ferry delays?
of fires W of RR tracks?
Total # 911 calls to waterfront and results of (survivability) of each of the above?

Additional Comments

- As an Edmonds resident and pedestrian/train commuter for 7 years, there are also major issues with pedestrian safety not directly related to waterfront access. There is a serious lack of marked and signed pedestrian cross-walks on Dayton, west of SR104, on Railroad Ave, and on Sunset at Bell. These should be addressed as part of a comprehensive plan for access to the study area.
- As an Edmonds resident and commuter to Seattle, Ferry Operations are a bigger impact on me than rail operations. Any plan should address the frequent delays to autos, bikes, and pedestrians caused by ferry loading and unloading operations.
- Camera enforced speed and stop compliance have environmental impacts to soil and groundwater be emphasized to upstream residents disturbing streams-by digging-using poisonous chemicals for pests and plant grown-give the overpass to the nice folks south of Haines Wharf Park
- Take away the conflict between ferry terminal and tracks.

- Thank you for the update and for allowing public comment. My first observation is that it seems we are proceeding to the “what shall we do” question before answering the “should we do anything” question. Has there been a thorough examination of the status quo? For example, the first (and presumably the most important) stated reason for taking any action is “to expedite emergency response to the waterfront area.” It seems like we would first want to know the current and anticipated impact of train traffic on emergency response times. What has been done in that regard? Have emergency responders provided any data? Have there been any studies on the maximum or average time the trains currently delay or potentially could delay any emergency response? I have seen the impact expressed on an hours per day basis, but I think a more meaningful statistic would be what is the maximum or usual time any particular train could delay an emergency response. My informal observation is about three to four minutes. Is that unacceptable? My second observation is the failure to include “cost” in the Level one screening criteria. Surely some of the proposals should be eliminated now on the basis of cost alone. Are we really going to seriously consider spending \$250 – 290 million on a train trench to avoid a delay of three to four minutes in emergency response time? Third, I would like to have some information on who will be paying the cost of any approved project.
- List is comprehensive and incorporates all the significant input. Great summary.
- How does improving freight mobility help the City of Edmonds? Is Edmonds benefiting from this or is it imposed by BNSF?
- How much skin does BNSF have in this issue? What is their liability in the event of a major accident causing injury, damage and death? What is their liability if someone were to die because they were blocking the road for emergency vehicles? How can we find legal precedents for holding them liable? I hope we have some attorneys working on this. It seems like some of the options might then become more viable.
- It would seem that pursuit of a long term solution to the ferry access would go a long way to improving the interruptions experienced along the Edmonds waterfront, as well as improving the connection of the core downtown area to the waterfront business and recreational assets. I think that it is important to consider the potential economic impacts to both the core downtown area and waterfront business if they can be connected in a more integrated fashion. Creating access bridges to the west side of the railroad does not weave these two areas together as a more comprehensive solution would bring about for the enhancement and long term vitality of the overall downtown area.
- Please also include as a screening criteria, or in assessing feasibility, the future impacts of estimated sea level rise, within the boundaries of uncertainty of the most recent models from UW.
- This is an extensive list of options. Thank you for your hard work in moving this forward. I am hopeful that we will find that making a trench for the railroad tracks is feasible.
- Regarding evaluation, a multi-party viewpoints might be helpful. Edmonds residents (from various areas), local businesses, State government (e.g. highway system), recreational users. etc. The tradeoffs among these interests should be explicit, clear, and open to discussion. Considering uncertainty, the relative risk of various alternatives also should be considered. Your list above of impacts neglects positive ones, such as has positive social or economic impacts, creates more revenue for the city, etc. This study seems to be framed negatively. How can it be made positive and attractive?
- How many 911 calls per week, per month, per year? How many of those calls responses are delayed by trains? For how long? What are estimated costs of each alternative?
- Come public with the statistics about 911 calls W of RR tracks in past 5 yrs how many were slowed by a train of any sort? How many survived without impediment (no slowdown) as compared to survival rate with (RR) impediment? if this comparison is infinitesimal (as I'm pretty sure it will be) why on earth are we spending millions to correct a non-existent problem

Figure A-7. Open House Meeting 2 – Comment Compilation

Edmonds Waterfront

From: Katherine Gold <kgoldcg@msn.com>
Sent: Saturday, February 06, 2016 3:37 PM
To: info@edmondswaterfrontaccess.org
Subject: Level 1 Screening Summary
Attachments: Level 1 Screening.xlsx; Screening criteria.pdf

Hi Rick and Edmonds Waterfront Access Study Team:

I have gone through the level one screening criteria (I added one of my own--see #7e) and did a comparison chart with all of the 40 concepts (see Excel file). You will need to reference the Screening Criteria pdf file attached that has your list numbered to make easier references. At the end of the Level 1 Screening Criteria, I added a page on why the Railroad 1 modification would be the best choice for Edmonds.

Thank you for making this process open and transparent. I really appreciate your efforts! Best - Kath :)

Level 1 Screening Criteria (Edmonds Waterfront Access Study)

1. **Does the concept improve reliable emergency response to the west side of the railroad tracks?**
 - a. Provide for continuous emergency response?
 - b. Reduce emergency response delays?
 - c. Improve emergency evacuation?
2. **Does the concept reduce delays to ferry loading/unloading of vehicles?**
3. **Does the concept reduce delays and conflicts at roadway/railroad crossings for people walking, biking or driving?**
 - a. Reduce delays for pedestrians?
 - b. Reduce pedestrian conflicts between travel modes?
 - c. Improve connection between major destinations?
4. **Does the concept provide safe and efficient passenger connectivity between available modes of travel?**
5. **Is the concept feasible to implement?**
 - a. To construct?
 - b. To fund?
 - c. To permit?
6. **How well does the concept avoid negative environmental effects?**
 - a. To natural resources?
 - b. To historic, cultural, and archaeological resources?
 - c. To visual aesthetics?
 - d. To noise levels?
 - e. To sites containing hazardous materials?
 - f. To use of park lands?
 - g. To air quality?
 - h. To soils and groundwater?
7. **How well does the concept avoid creating social and/or economic impacts?**
 - a. Avoid negative effects on neighborhoods and businesses?
 - b. Compatible with positive urban design?
 - c. Avoid conflicts with parks/recreation assets?
 - d. Avoid creating safety hazards?
 - e. **Avoid liability for the City of Edmonds** (Added this one to your screening list)
 - f. Improve freight mobility?

Level 1 Screening Criteria for **Railroad Modifications Concept #1:**

Responses to questions referred to on page above:

1. Yes – 24 hour access at Main and Dayton
 - a. Yes
 - b. Yes
 - c. Yes
2. Yes – Ferry loading will no longer have to wait for trains to cross at Dayton or Main
3. Yes – With the trains below grade, there is no longer conflict walking, riding or driving
 - a. Yes
 - b. Yes
 - c. Yes – Elevator from trains (in trench-below grade) takes commuters to cars, ferry and town at grade level.
4. Yes – With grade separation from railroad, passengers and travelers remain safe at different grades to freely move about.
5. Yes – A feasibility study was conducted by TetraTech in 2014 and their answer was expensive but positive.
 - a. Yes – working hand in hand with the Railroad
 - b. Yes – While it appears to have an expensive price tag, in the end it will prove cheaper because a public-private partnership leverages the money BNSF would use to double track Edmonds by uniquely receiving funding from additional public sources and ending up with a much better system of an uninterrupted corridor through Edmonds.
 - c. Yes – with the City and Railroad working as partners
6. Avoiding negative environmental effects?
 - a. Yes –
 - i. Contained liquid run-off from toxic railroad cargoes
 - ii. Capture of toxic substances in trench, dedicated drains to collect dust washed down by rain water
 - iii. Quieter atmosphere for natural habitat
 - b. Yes – Maintains the original town/waterfront concept to maintain historic presence and town feeling.
 - c. Yes – Does not carve up the waterfront view from town with above grade bridges and walkways. The trench will simply become invisible.
 - d. Yes – With at grade crossings removed, no train horns. Also, train movements within the trench is quieter than trains running at grade.
 - e. Yes – Safer for the town to have hazardous materials running below grade than at or above grade.
 - f. Yes – improves access to waterfront parks. Could possibly provide either a park or a ferry parking lot above trench.
 - g. Yes – Air quality would be improved by having hazardous substances carried below grade
 - h. Yes – Soil and ground water would be protected by the trench floor that would capture dust and toxic substances and then either removed or treated.
7. Avoiding social and economic impacts?
 - a. Yes – Because it carves up less of the town and waterfront area, it will preserve the neighborhoods and businesses near the waterfront. Improves their property values and will create more business development with a safe, quieter and healthier environment.
 - b. Yes
 - c. Yes – It will provide easier access to the Parks & Recs sites on the waterfront side with walkways over trench.

- d. **Yes** – Will safely contain and protect the City of Edmonds from hazardous waste explosions. Also, with less traffic/train/pedestrian conflicts, many hazards that exist now would be eliminated.
- e. **Yes** – If above grade bridges are built in a known liquification zone and there is an earth quake and there are many folks in cars on a collapsed bridge where people get hurt and die, the City could be liable for making this choice instead of a safer choice (liability wise for the City of Edmonds) of building a trench. In a tsunami, the water would be captured in the trench. In an earthquake, there would be fewer people in the trench.
- f. **Yes** – Can freely move freight with no restrictions with other traffic conflicts.

Thoughts about Sea Rise (Charles Gold):

If the railroad is concerned about eventual sea rise, then the city should bulldoze the entire waterfront up to a level they deem likely to be the new sea level. This of course would mean scrapping plans for the new senior community center, the Edmonds Marsh rehabilitation, removing the marina and the restaurants nearby, removing the restaurants and buildings at Sunset and removing the building on the Salish Crossing property, plus the former Edmonds Crossing Land where they plan to put up development that can't be built. The entire rail system would have to be built on stilts. That would improve the visual aesthetics of the Edmonds Waterfront.

The important thing to understand about sea level rise is that we don't really know how much if any will happen. We know as much about what 2116 will look like as people knew about 2015 would look like in 1915. As Florida, NYC, Louisiana, Bangladesh the Caribbean, the South Sea islands and a whole bunch of other countries disappear, it is hard to imagine that nothing will be done about global warming. There are many proposals (like global cooling) even now that solve problems controlling the carbon dioxide in the earth's atmosphere.

Approximately one third of all carbon dioxide emissions are caused by cars trucks and buses, A second third is caused by cattle emissions from the food they eat and their indigestion. Between those two things alone there is much room for improvement. Doing this is only the beginning before we really have a problem. Otherwise all the buildings below the 10 feet of high tide internationally should be banned.

Level 1 Screening Criteria	Roadway Over 1	Over 2	Over 3	Over 4	Over 5	Over 6
Question 1	Yellow					Red
Question 1a	Yellow					Red
Question 1b	Yellow					Yellow
Question 1c	Red		Yellow			Red
Question 2	Yellow					Red
Question 3	Red		Yellow			
Question 3a	Red		Yellow			
Question 3b	Yellow					
Question 3c	Yellow					
Question 4	Yellow					
Question 5	Yellow					
Question 5a	Yellow					
Question 5b	Yellow					
Question 5c	Yellow					
Question 6	Red					
Question 6a	Red					
Question 6b	Red					
Question 6c	Red					
Question 6d	Red					
Question 6e	Red					
Question 6f	Red					
Question 6g	Red					
Question 6h	Red					
Question 7	Red					
Question 7a	Red					
Question 7b	Red					
Question 7c	Red					
Question 7d	Red					
Question 7e	Red					
Question 7f	Red					

Level 1 Screening Criteria	Over 7	Over 8	Over 9	Over 10	Roadway Under 1
Question 1	Red	Yellow	Yellow	Red	Red
Question 1a	Red	Yellow	Yellow	Red	Red
Question 1b	Red	Yellow	Yellow	Red	Red
Question 1c	Red	Yellow	Yellow	Red	Red
Question 2	Red	Red	Red	Red	Yellow
Question 3	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3a	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3b	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3c	Yellow	Yellow	Yellow	Yellow	Yellow
Question 4	Yellow	Yellow	Yellow	Yellow	Red
Question 5	Yellow	Yellow	Yellow	Yellow	Yellow
Question 5a	Yellow	Yellow	Yellow	Yellow	Yellow
Question 5b	Yellow	Yellow	Yellow	Yellow	Yellow
Question 5c	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6	Red	Red	Red	Red	Red
Question 6a	Red	Red	Red	Red	Red
Question 6b	Red	Red	Red	Red	Red
Question 6c	Red	Red	Red	Red	Red
Question 6d	Red	Red	Red	Red	Red
Question 6e	Red	Red	Red	Red	Red
Question 6f	Red	Red	Red	Red	Red
Question 6g	Red	Red	Red	Red	Red
Question 6h	Red	Red	Red	Red	Red
Question 7	Red	Red	Red	Red	Red
Question 7a	Red	Red	Red	Red	Red
Question 7b	Red	Red	Red	Red	Red
Question 7c	Red	Red	Red	Red	Red
Question 7d	Red	Red	Red	Red	Red
Question 7e	Red	Red	Red	Red	Red
Question 7f	Red	Red	Red	Red	Red

Level 1 Screening Criteria	Under 2	Under 3	Under 4	Railroad 1	Rail 2
Question 1	Red			Green	
Question 1a					
Question 1b					
Question 1c					
Question 2	Yellow			Green	Yellow
Question 3	Yellow			Green Yellow	
Question 3a					
Question 3b					
Question 3c					
Question 4	Red			Green	Yellow
Question 5	Yellow			Green Yellow	
Question 5a					
Question 5b					
Question 5c					
Question 6	Red			Green Yellow	
Question 6a					
Question 6b					
Question 6c					
Question 6d					
Question 6e					
Question 6f					
Question 6g					
Question 6h					
Question 7	Red			Green Yellow	
Question 7a					
Question 7b					
Question 7c					
Question 7d					
Question 7e					
Question 7f					

Level 1 Screening Criteria	Rail 3	Rail 4	Rail 5	Rail 6	Rail 7	Rail 8
Question 1	Green	Yellow	Yellow	Yellow	Red	Green
Question 1a	Green	Yellow	Yellow	Yellow	Red	Green
Question 1b	Green	Yellow	Yellow	Yellow	Red	Green
Question 1c	Green	Yellow	Yellow	Yellow	Red	Green
Question 2	Yellow	Yellow	Yellow	Yellow	Red	Yellow
Question 3	Yellow	Yellow	Yellow	Yellow	Red	Green
Question 3a	Yellow	Yellow	Yellow	Yellow	Red	Yellow
Question 3b	Yellow	Yellow	Yellow	Yellow	Red	Yellow
Question 3c	Yellow	Yellow	Yellow	Yellow	Red	Red
Question 4	Yellow	Yellow	Yellow	Yellow	Red	Red
Question 5	Yellow	Yellow	Yellow	Yellow	Yellow	Red
Question 5a	Yellow	Yellow	Yellow	Yellow	Yellow	Red
Question 5b	Yellow	Yellow	Yellow	Yellow	Yellow	Red
Question 5c	Yellow	Yellow	Yellow	Yellow	Yellow	Red
Question 6	Red	Red	Red	Red	Red	Green
Question 6a	Red	Red	Red	Red	Red	Green
Question 6b	Red	Red	Red	Red	Red	Green
Question 6c	Red	Red	Red	Red	Red	Green
Question 6d	Red	Red	Red	Red	Red	Green
Question 6e	Red	Red	Red	Red	Red	Green
Question 6f	Red	Red	Red	Red	Red	Green
Question 6g	Red	Red	Red	Red	Red	Green
Question 6h	Red	Red	Red	Red	Red	Green
Question 7	Red	Red	Red	Red	Red	Green
Question 7a	Red	Red	Red	Red	Red	Green
Question 7b	Red	Red	Red	Red	Red	Green
Question 7c	Red	Red	Red	Red	Red	Green
Question 7d	Red	Red	Red	Red	Red	Green
Question 7e	Red	Red	Red	Red	Red	Green
Question 7f	Red	Red	Red	Red	Red	Green

Level 1 Screening Criteria	Operational 1	Ops 2	Ops 3	Ops 4	Ops 5	Ops 6
Question 1	Yellow	Yellow	Red	Yellow	Red	Red
Question 1a	Red	Red	Red	Red	Red	Red
Question 1b	Red	Red	Red	Yellow	Red	Red
Question 1c	Red	Red	Red	Yellow	Red	Red
Question 2	Yellow	Yellow	Yellow	Red	Red	Red
Question 3	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3a	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3b	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3c	Red	Red	Red	Red	Red	Red
Question 4	Red	Red	Red	Red	Red	Red
Question 5	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 5a	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 5b	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 5c	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 6	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6a	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6b	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6c	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6d	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6e	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6f	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6g	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 6h	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 7	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 7a	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 7b	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 7c	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 7d	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 7e	Yellow	Yellow	Red	Yellow	Yellow	Yellow
Question 7f	Red	Red	Red	Red	Red	Red

Level 1 Screening Criteria	Ops 7	On Site 1	Site 2	Site 3	Site 4	Site 5
Question 1	Red	Yellow	Green	Red	Red	Red
Question 1a	Red	Yellow	Green	Red	Red	Red
Question 1b	Red	Yellow	Green	Yellow	Red	Red
Question 1c	Red	Yellow	Yellow	Red	Red	Red
Question 2	Red	Yellow	Yellow	Yellow	Yellow	Yellow
Question 3	Yellow	Red	Red	Red	Yellow	Yellow
Question 3a	Yellow	Red	Red	Red	Yellow	Yellow
Question 3b	Yellow	Red	Red	Red	Yellow	Yellow
Question 3c	Red	Red	Red	Red	Yellow	Yellow
Question 4	Red	Red	Red	Red	Red	Red
Question 5	Yellow	Yellow	Green	Yellow	Yellow	Yellow
Question 5a	Yellow	Yellow	Green	Yellow	Yellow	Yellow
Question 5b	Yellow	Yellow	Green	Yellow	Yellow	Yellow
Question 5c	Yellow	Yellow	Green	Yellow	Yellow	Yellow
Question 6	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6a	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6b	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6c	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6d	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6e	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6f	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6g	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 6h	Yellow	Yellow	Green	Red	Yellow	Yellow
Question 7	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 7a	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 7b	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 7c	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 7d	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Question 7e	Yellow	Yellow	Green	Yellow	Yellow	Yellow
Question 7f	Red	Red	Red	Red	Red	Red

Level 1 Screening Criteria

- Question 1
- Question 1a
- Question 1b
- Question 1c

Ferry Terminal 1	Ferry 2	Ferry 3	Ferry 4	Ferry 5
Yellow	Red	Red	Yellow	Red
Yellow	Red	Red	Yellow	Red
Yellow	Red	Red	Yellow	Red

Question 2

Yellow	Yellow	Yellow	Green	Yellow
--------	--------	--------	-------	--------

- Question 3
- Question 3a
- Question 3b
- Question 3c

Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow

Question 4

Yellow	Yellow	Yellow	Yellow	Yellow
--------	--------	--------	--------	--------

- Question 5
- Question 5a
- Question 5b
- Question 5c

Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow

- Question 6
- Question 6a
- Question 6b
- Question 6c
- Question 6d
- Question 6e
- Question 6f
- Question 6g
- Question 6h

Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow

- Question 7
- Question 7a
- Question 7b
- Question 7c
- Question 7d
- Question 7e
- Question 7f

Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow
Yellow	Yellow	Yellow	Yellow	Yellow

Level 1 Screening Criteria	Ferry 6	Ferry 7	Ferry 8	Ferry 9	Ferry 10	Ferry 11
Question 1	Yellow			Red		
Question 1a	Yellow			Red		
Question 1b	Yellow			Red		
Question 1c	Red					
Question 2	Yellow			Red		
Question 3	Yellow					
Question 3a	Yellow					
Question 3b	Yellow					
Question 3c	Yellow					
Question 4	Yellow					
Question 5	Yellow					
Question 5a	Yellow					
Question 5b	Yellow					
Question 5c	Yellow					
Question 6	Yellow	Red		Yellow		Red
Question 6a	Yellow	Red		Yellow		Red
Question 6b	Yellow	Red		Yellow		Red
Question 6c	Yellow	Red		Yellow		Red
Question 6d	Yellow	Red		Yellow		Red
Question 6e	Yellow	Red		Yellow		Red
Question 6f	Yellow	Red		Yellow		Red
Question 6g	Yellow	Red		Yellow		Red
Question 6h	Yellow	Red		Yellow		Red
Question 7	Yellow					
Question 7a	Yellow					
Question 7b	Yellow					
Question 7c	Yellow					
Question 7d	Yellow					
Question 7e	Yellow					
Question 7f	Yellow					

A.2.3 Open House Meeting 2 Summary

Background

- Date: Jan. 27, 2016
- Time: 4:30 p.m. – 7:30 p.m.
- Location: Edmonds Library Plaza Room, 650 Main Street, Edmonds, WA 98020
- Purpose: To share the list of concepts being considered, explain the next steps in the Level 1 screening process, and hear the public's thoughts on the criteria the team will use to compare concepts

Attendance

83 members of the public attended the meeting; 76 people signed in. Based on the people who signed in, 38 of them did not attend the first meeting on Nov. 18, 2015. The following key individuals and staff attended the meeting

- Advisory Task Force Members and alternates:
 - Mike Nelson (Co-chair), Edmonds City Council
 - Jim Orvis (Co-chair), Port of Edmonds
 - Ian Sterling, WSF
 - Kirk Greiner, resident
 - Phil Lovell, resident
 - Joy Munkers, Community Transit
- Edmonds Elected Officials:
 - Dave Teitzel, Position #5
 - Kristiana Johnson, Position #1
 - Neil Tibbott, Position #7
- City of Edmonds:
 - Bertrand Hauss
 - Carolyn Douglas
 - Patrick Doherty
 - Phil Williams
 - Rob English
 - Royce Napolitano
- Consultant team:
 - Rick Schaefer, Tetra Tech
 - Sandy Glover, Parametrix
 - Katie DeLeuw, EnviroIssues
 - Hannah Litzenberger, EnviroIssues
 - Ashley Bagley, EnviroIssues

Open House

Participants viewed display boards and spoke with the project team. Display boards provided information on:

- Background and overview of work to date
- Schedule
- Purpose and need
- Level 1 screening process
- Level 1 screening criteria
- Initial concepts and map
- Outreach opportunities throughout process
- How public input will be incorporated

Participants responded to the following questions, written on flip charts:

- What do you think about the concepts?
- What do you think about the screening criteria?

At the comment station, participants could leave hardcopy comments and/or electronic comments using laptops provided. Translated project factsheets and comment forms were also available in Spanish and Korean.

What We Heard

Eight comments were submitted at the meeting.

Commons themes from attendees' comments through conversations, flip chart notes and comment forms are described below. The study team will be accepting input until Feb. 12 and will develop a separate comprehensive comment summary.

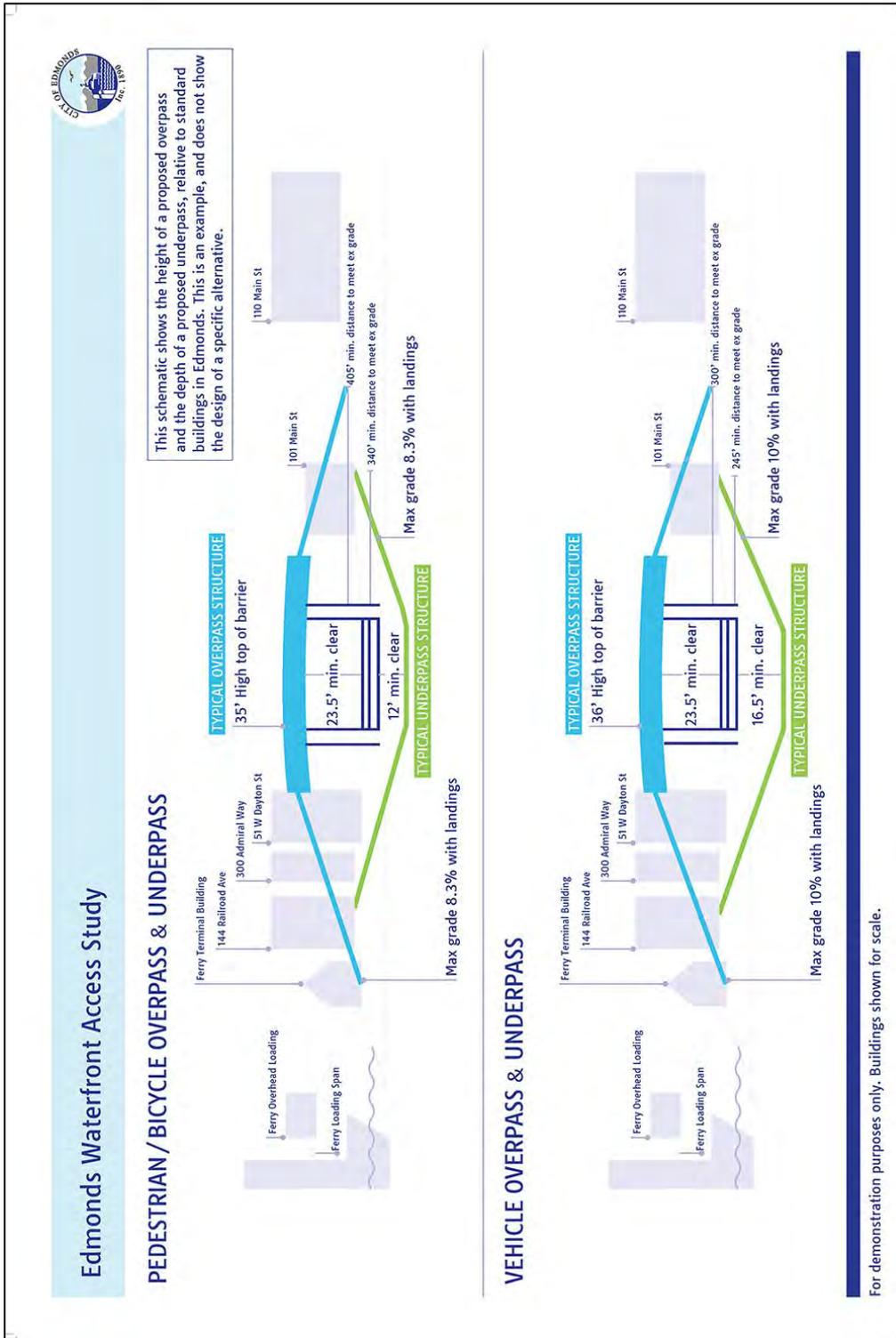
Key Themes

- Participants provided input on their preference for particular concepts or combination of concepts. Individuals commented on all of the concept categories.
- Some participants prioritized or ranked the screening criteria while others selected a few that were most important to them.
- Specific requests included:
 - Request to share statistics on emergency response calls and times to the waterfront, and impact on response by trains.
 - Include additional screening criteria, including cost, sea-level rise, and positive evaluation criteria.
- Participants brought up other issues not specific to the concepts or criteria, including:
 - Addressing pedestrian safety at railroad crossings, including additional signage
 - Train noise

A.3 OPEN HOUSE MEETING 3 - MAY 12, 2016

A.3.1 Meeting Materials

Figure A-8. Open House Meeting 3 - Meeting Display Boards



Edmonds Waterfront Access Study



MEETING PURPOSE:

- Share the results of the Level 1 screening process
- Review the list of alternatives being considered
- Explain the Level 2 evaluation process and review refined evaluation criteria
- Hear your thoughts on the alternatives and criteria

HOW CAN YOU PROVIDE INPUT?

At this meeting:

- Leave comments using a form or laptop
- Participate in individual discussions with study team or Task Force members
- Write thoughts on flip charts

After this meeting:

- View materials and submit comments using our Online Open House until May 23, 2016:
edmondswaterfrontaccess.publicmeeting.info
- Visit our website anytime: www.edmondswaterfrontaccess.org
- Email: info@edmondswaterfrontaccess.org
- Mail comments by May 23, 2016
- Call 425-771-0235 to ask questions
- Participate in future input opportunities



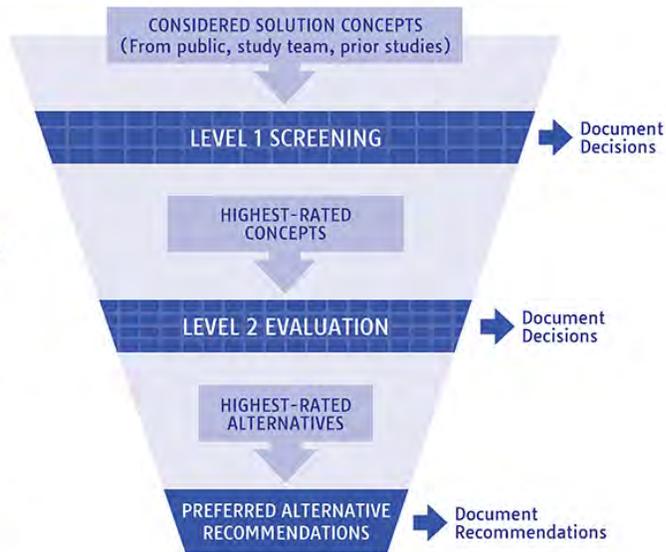


Edmonds Waterfront Access Study

WHAT IS THE LEVEL 2 EVALUATION PROCESS?

We are using a two-step process to screen concepts and evaluate alternatives. Level 1 screening is now complete. During Level 2 evaluation, we will:

- Compile Level 2 alternatives and further develop their features for evaluation.
- Refine evaluation criteria and apply ratings.
- Determine preferred alternative(s) using Level 2 evaluation ratings and community input.



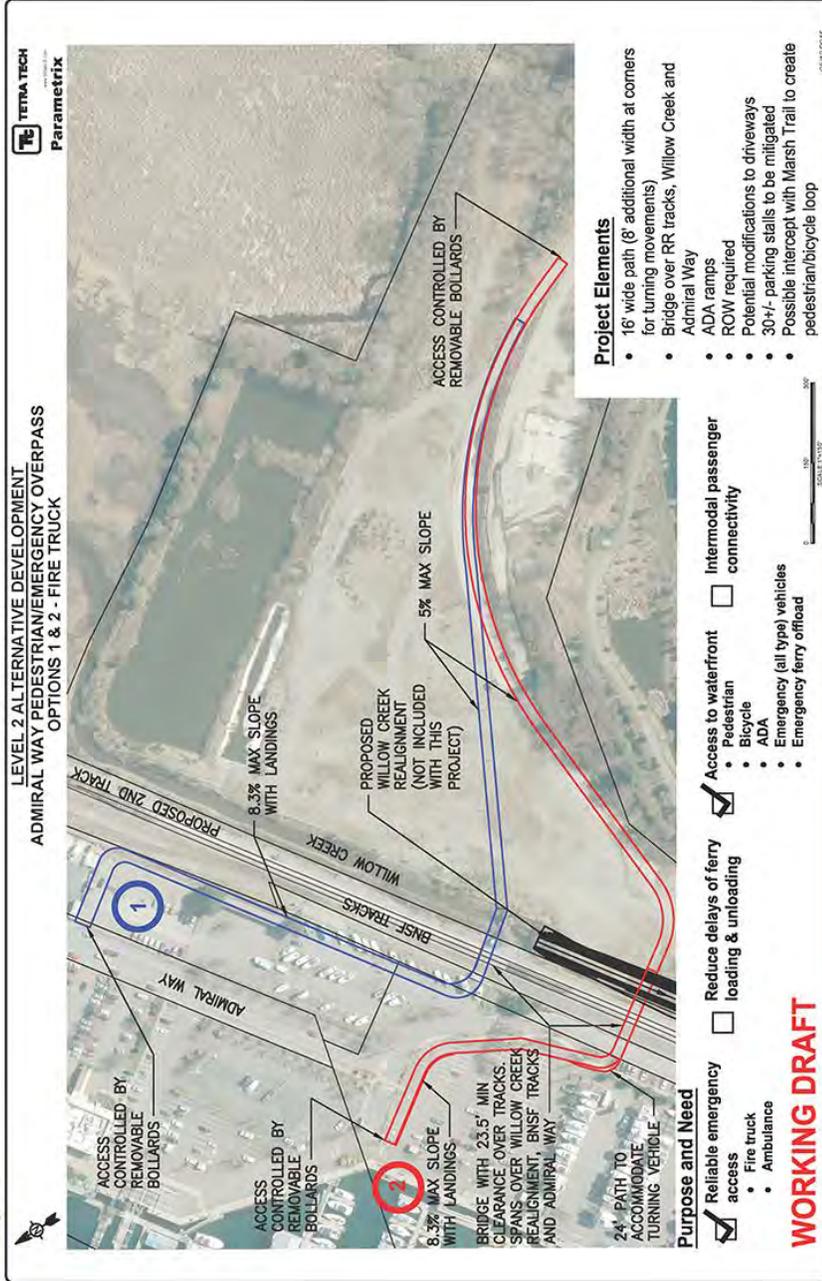
ALTERNATIVE RATINGS USED IN LEVEL 2 EVALUATION

SYMBOL	GENERAL MEANING
⊙	Alternative greatly improves functionality/benefit
◐	Alternative somewhat improves functionality/benefit
○	No Change
◑	Alternative somewhat degrades functionality/benefit
●	Alternative greatly degrades functionality/ benefit
✕	Fatal flaw



LEVEL 2 PRELIMINARY ALTERNATIVES – ADMIRAL WAY

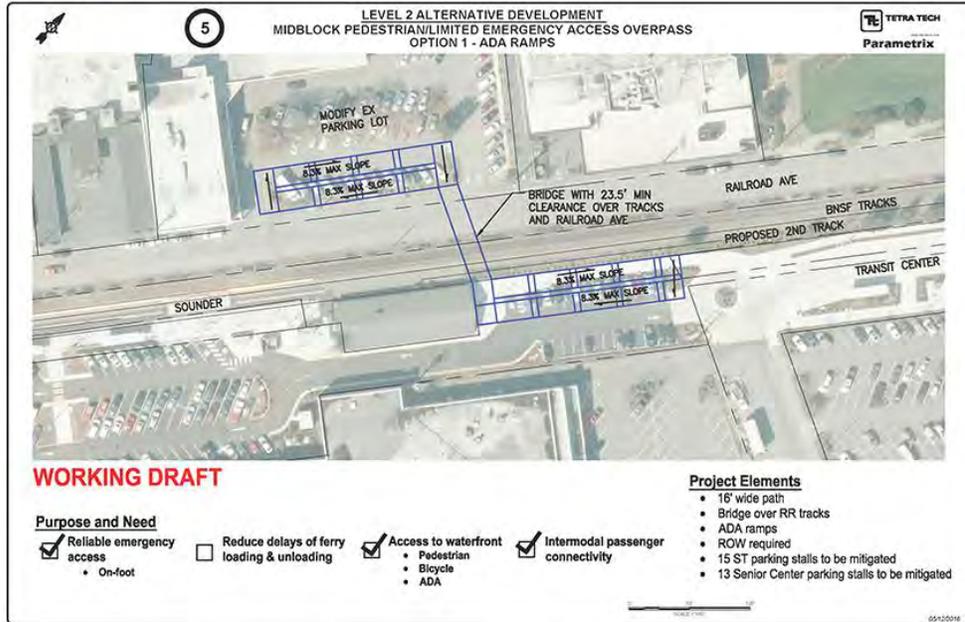
Overpass 1



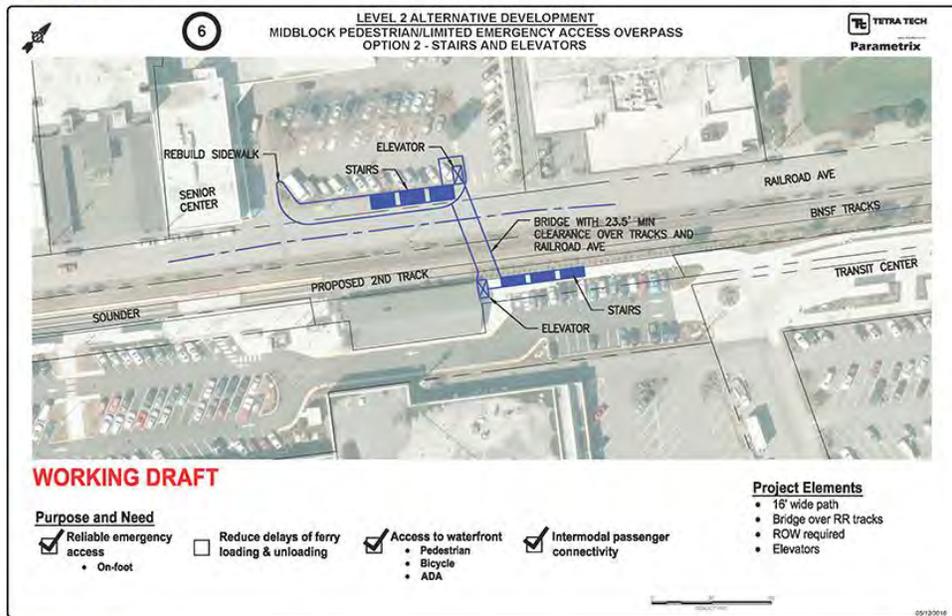


LEVEL 2 PRELIMINARY ALTERNATIVES – MIDBLOCK

Overpass 5



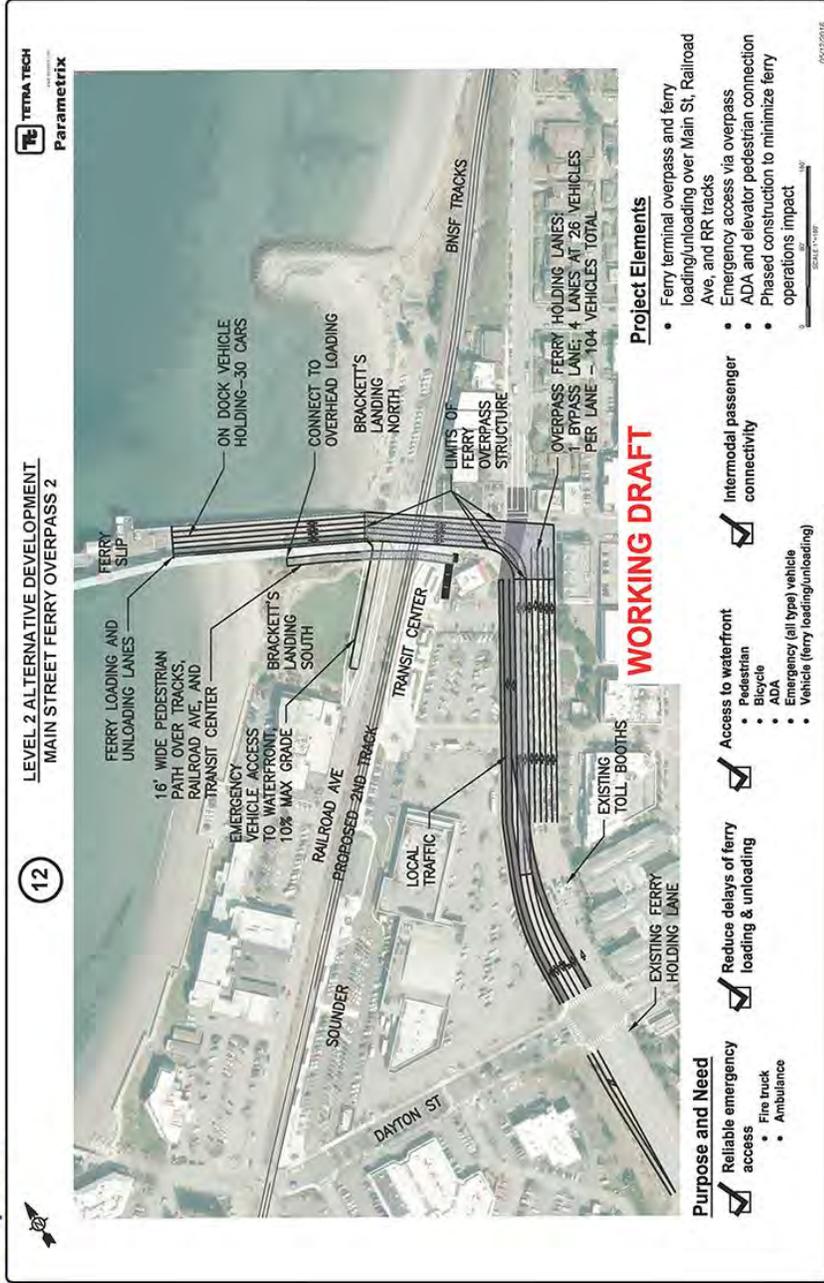
Overpass 5





LEVEL 2 PRELIMINARY ALTERNATIVES – MAIN STREET

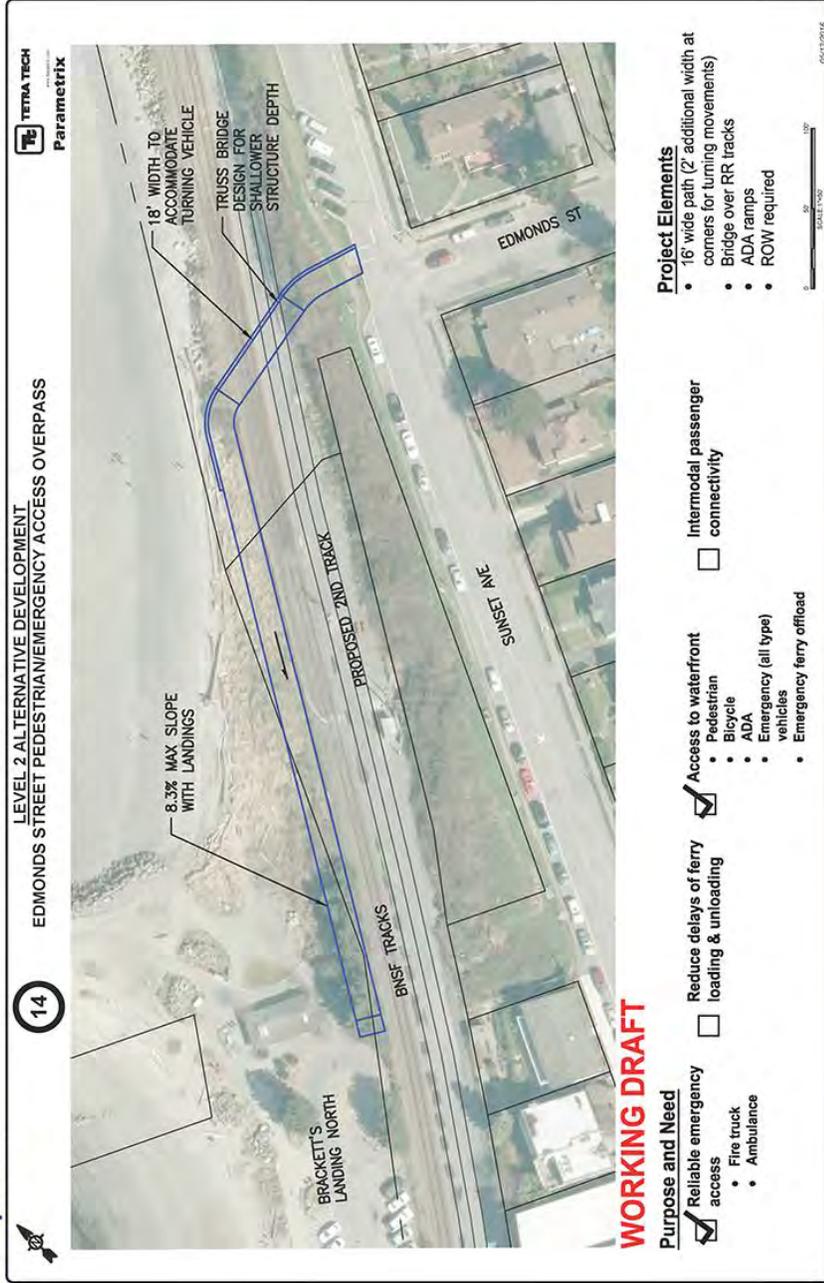
Overpass 6





LEVEL 2 PRELIMINARY ALTERNATIVES – EDMONDS STREET

Overpass 9



Edmonds Waterfront Access Study



LEVEL 2 PRELIMINARY ALTERNATIVES – DAYTON STREET

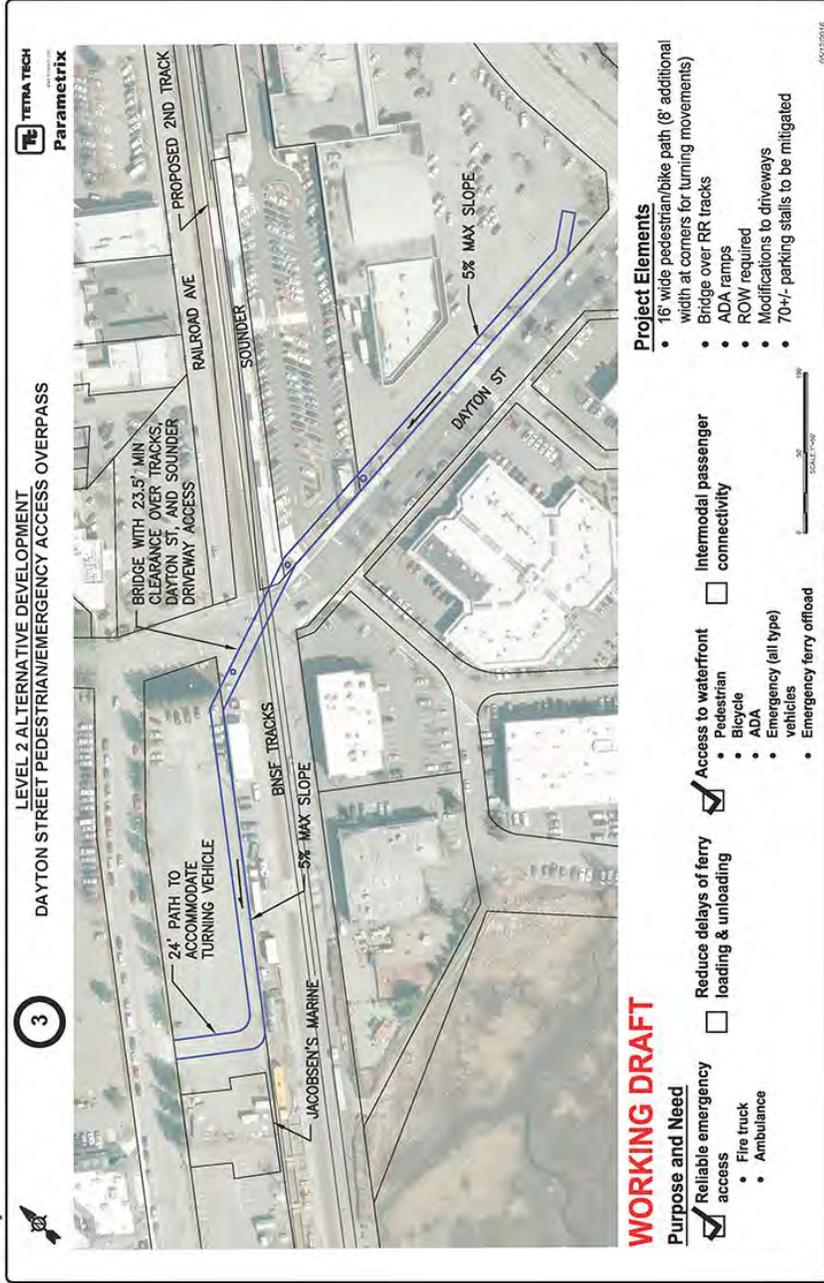
Ferry 3





LEVEL 2 PRELIMINARY ALTERNATIVES – DAYTON STREET

Overpass 4B



TETRA TECH
Parametrix

3

LEVEL 2 ALTERNATIVE DEVELOPMENT
DAYTON STREET PEDESTRIAN/EMERGENCY ACCESS OVERPASS

WORKING DRAFT

Purpose and Need

- Reliable emergency access
 - Fire truck
 - Ambulance
- Reduce delays of ferry loading & unloading
- Access to waterfront
 - Pedestrian
 - Bicycle
 - ADA
 - Emergency (all type) vehicles
 - Emergency ferry offload
- Intermodal passenger connectivity

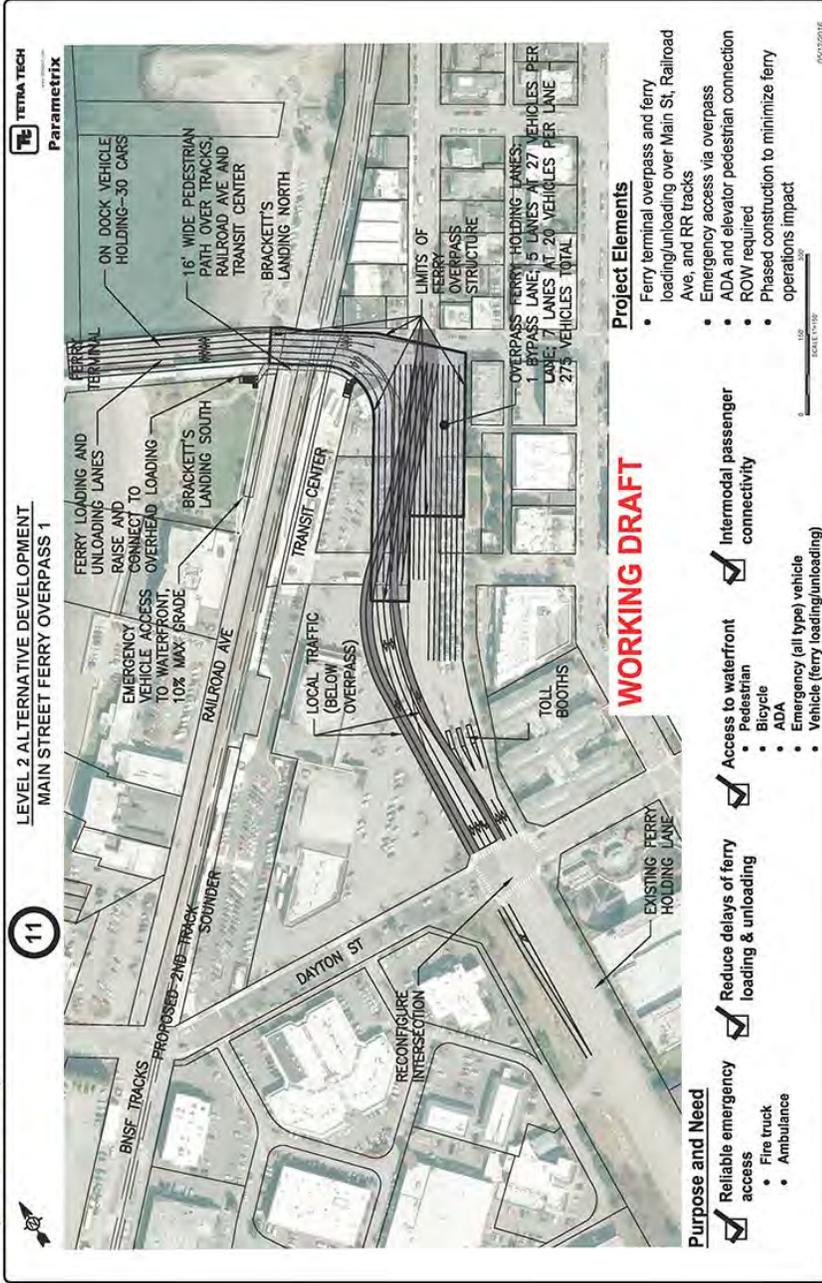
Project Elements

- 16' wide pedestrian/bike path (8' additional width at corners for turning movements)
- Bridge over RR tracks
- ADA ramps
- ROW required
- Modifications to driveways
- 70+/- parking stalls to be mitigated



LEVEL 2 PRELIMINARY ALTERNATIVES – MAIN STREET

Ferry 4 / Ferry 8





LEVEL 2 PRELIMINARY ALTERNATIVES – MAIN STREET

Ferry 5 / Underpass 1

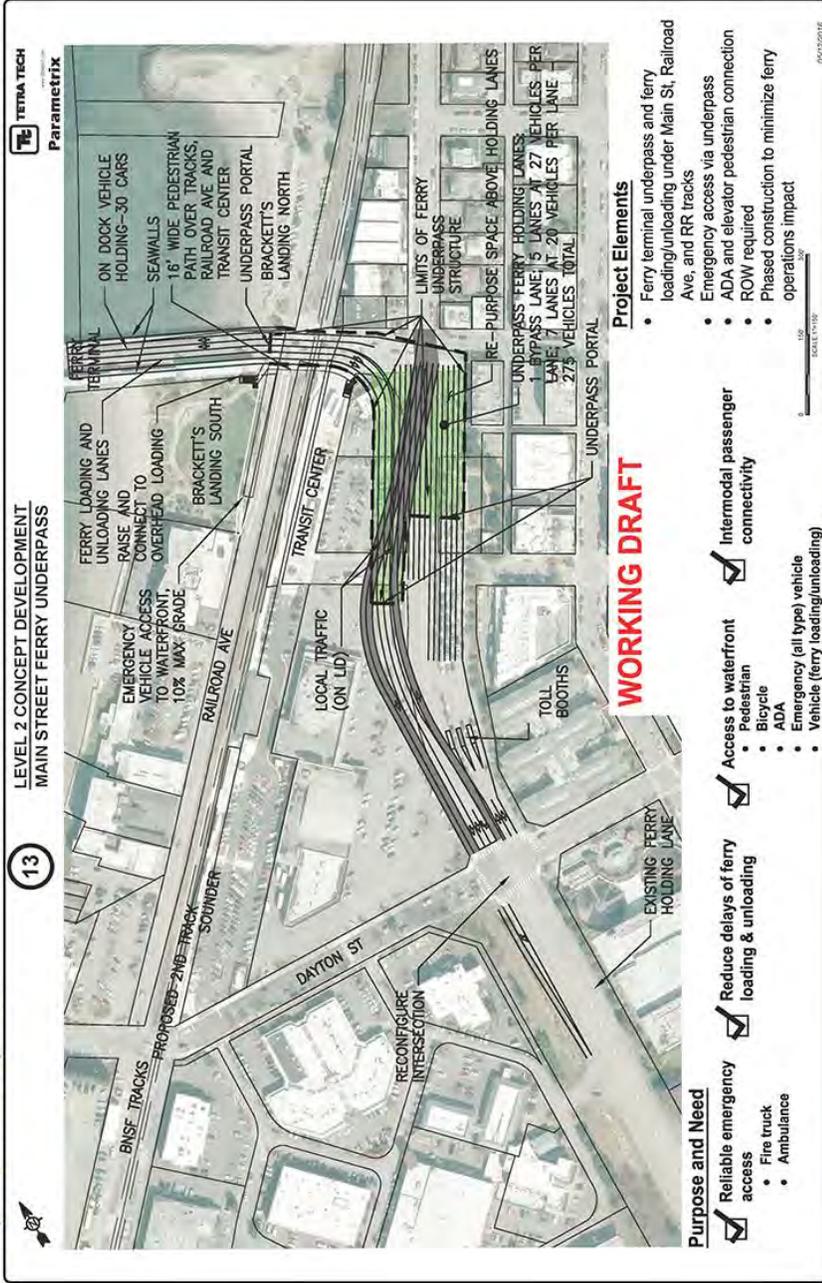


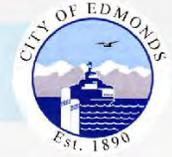
Figure A-9. Open House Meeting 3 - Meeting Presentation

Edmonds Waterfront Access Study



Public Meeting – May 12, 2016





Agenda

- 6:00 – 8 View displays and talk with team
Share ideas on flipcharts, comment forms or laptops
- 6:15 Presentation
- 6:40 Questions & Answers
- 7:00 – 8 Open house





Advisory Task Force

WHO ARE OUR PARTNERS?

Mayor Earling appointed an Advisory Task Force to help guide and lend expertise to the process. Task Force members represent:

- Edmonds residents and businesses
- City of Edmonds
- WSDOT
- Washington State Ferries
- Sound Transit
- BNSF
- Community Transit
- Port of Edmonds



Edmonds Waterfront Access Study





How does Rail Traffic Affect Access?

Gate Closures at Main Street and Dayton Street crossings:

- 37.5 closures average per day
- 80 minutes average per day (5.5% of the day)
- 2:12 average closure duration (3:54 for unit trains)

At Main Street crossing (daily average):

Vehicles Delayed (84% ferry traffic)	Pedestrians Delayed
709 delayed by closures	115 delayed by closures
28.7 vehicle-hours	4.7 person-hours

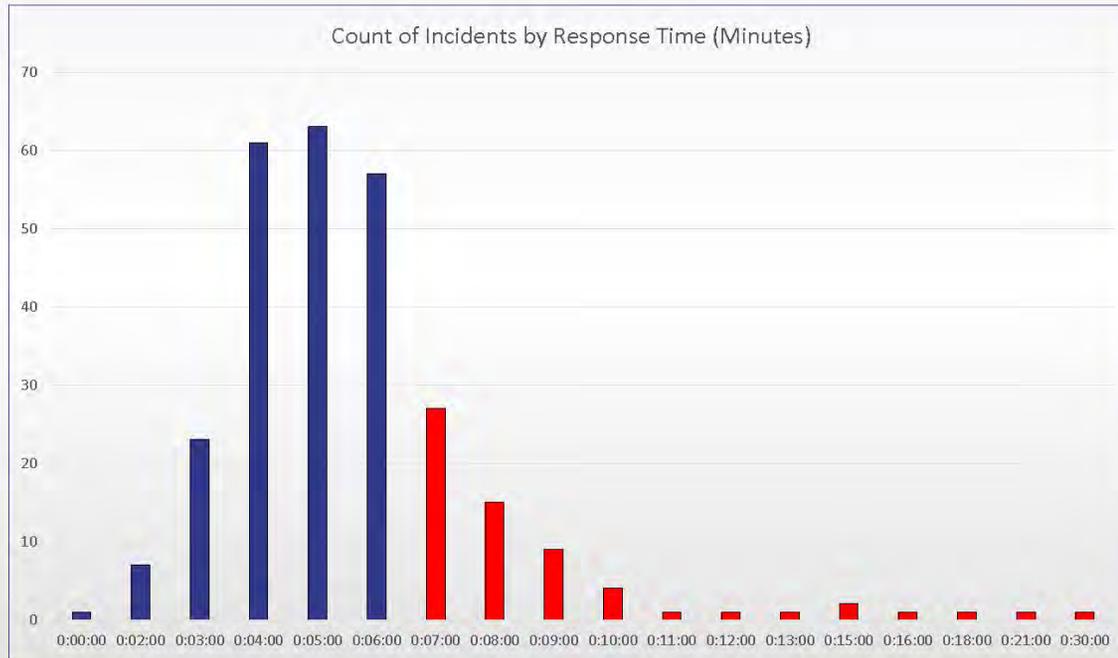
Over 10 ferry loadings/off-loadings affected daily

Based on traffic recorded, June 16 through July 3, 2012





Emergency Calls Across the Tracks



277 incidents

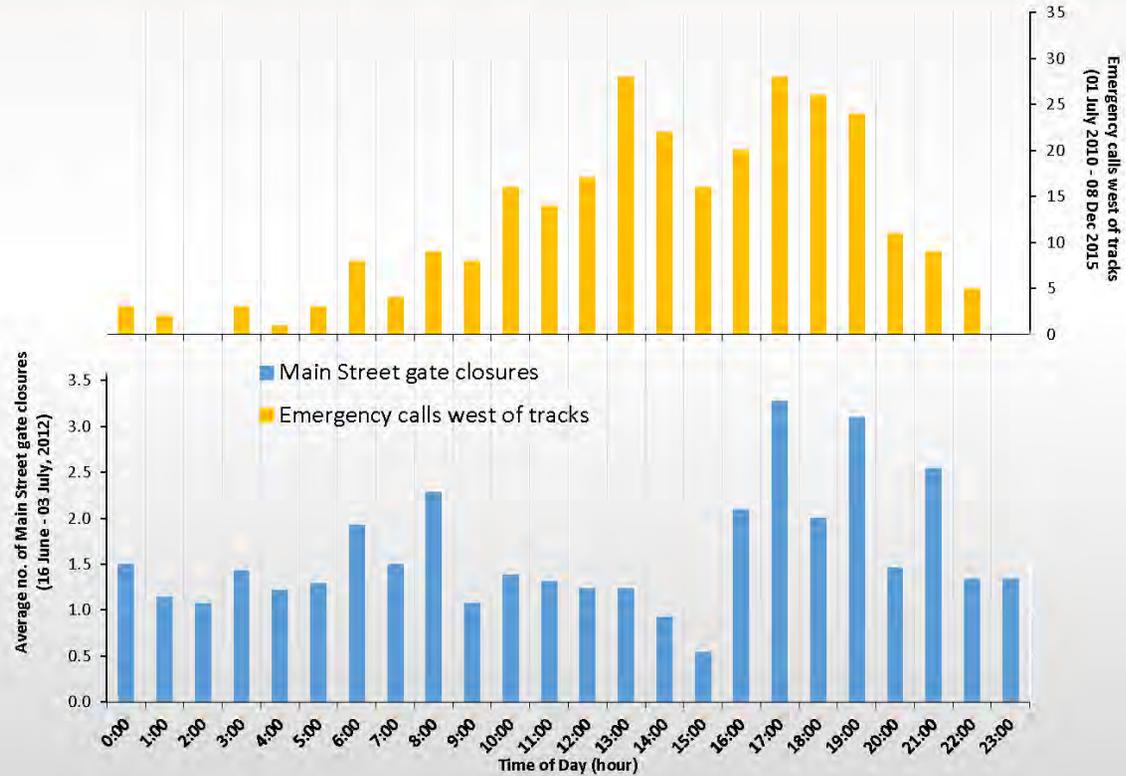
64 had response times of 7 minutes or longer

Variety of causes for delays

Fire District 1 records July 1, 2010 to December 8, 2015



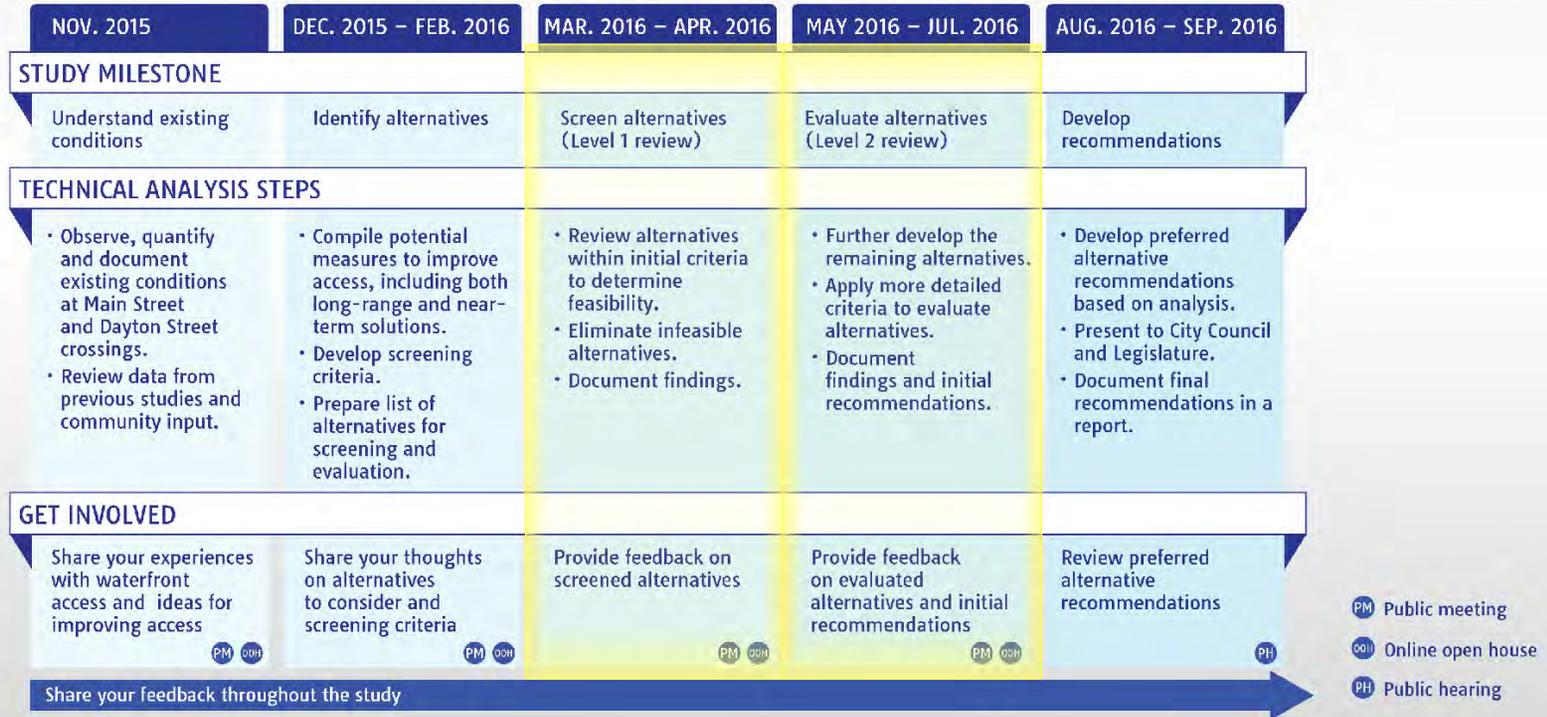
Hour Distribution of Emergency Calls and Gate Closures



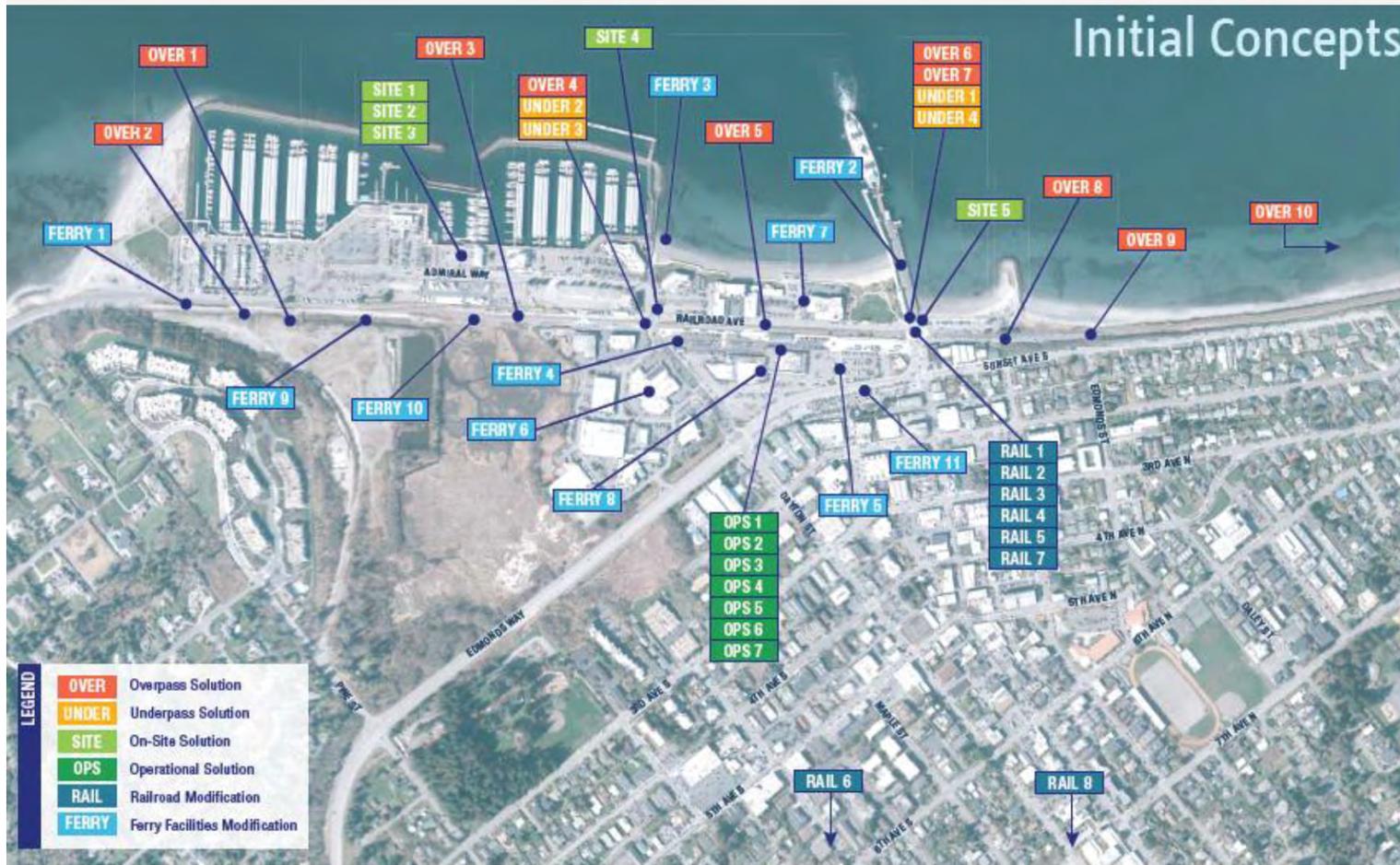


Edmonds Waterfront Access Study

HOW WILL WE STUDY ALTERNATIVES?

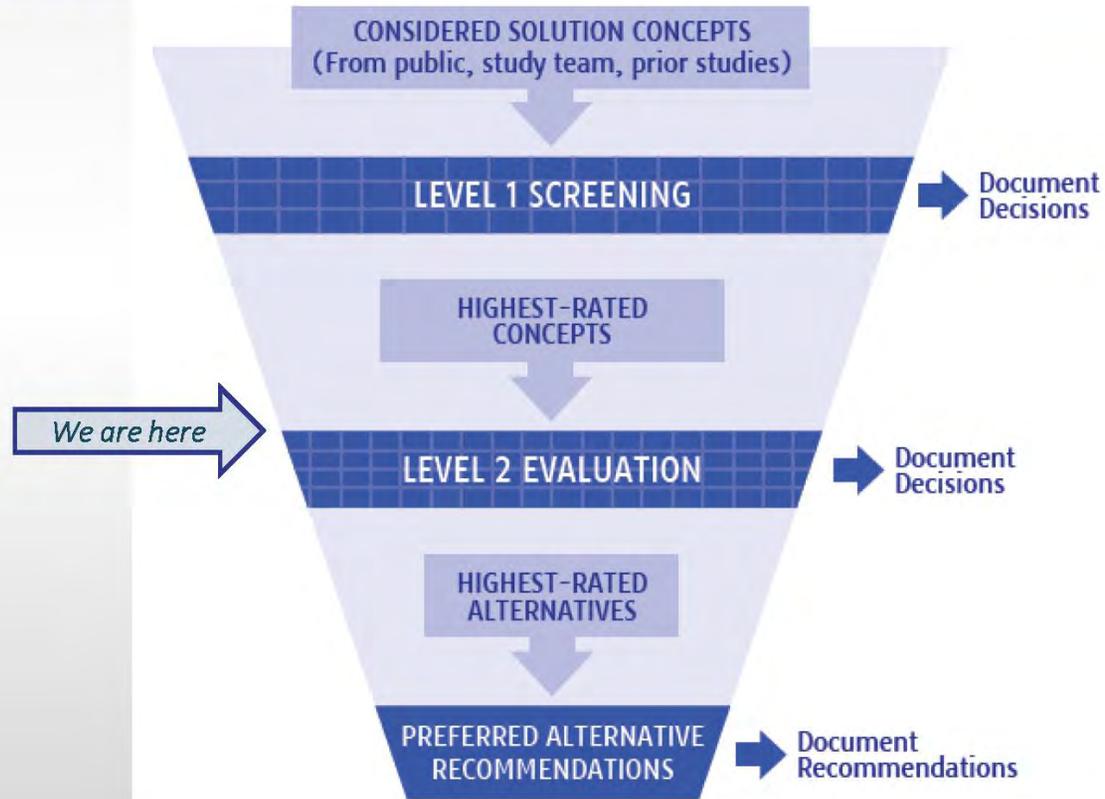


- PM Public meeting
- OOH Online open house
- PH Public hearing





2-Stage Screening / Evaluation Process





Level 1 Outcomes





Level 1 Concept Screening Criteria

<p>1 - Does the concept improve reliable emergency response to west side of the railroad?</p>	<p>3 - Does the concept reduce delays & conflicts at street/ railroad crossings for people walking, biking or driving?</p>	<p>5 - Is the concept feasible to implement?</p>
<p>2 - Does the concept reduce delays to ferry loading/ unloading of vehicles?</p>	<p>4 - Does the concept provide safe and efficient passenger connectivity between available modes of travel?</p>	<p>6 - Does the concept avoid creating social and/or economic impacts?</p>
<p><i>Purpose & Need</i></p>		<p>7 - Does the concept avoid negative environmental effects?</p>

	- Yes		- Somewhat		- Not Very Well	X	- No, Fatal Flaw
					- With Challenges		

Edmonds Waterfront Access Study

Concept	Purpose and Need				Feasibility			Result
	Improves reliable emergency response access	Reduces delays to ferry loading/unloading	Reduces delays for all at rail crossings	Provides safe/efficient intermodal connectivity	Is feasible to implement	Avoids environmental effects	Avoids creating social and/or economic impacts	
ROADWAY OVERPASS								
OVER 1	▼	▼	■	■	▼	▼	▼	DISCONTINUE Displacement of dry moorage stacks is too extensive for the Port to accommodate
OVER 2A	▼	●	▼	▼	✖	✖	▼	DISCONTINUE Relies upon Edmonds Crossing (Ferry 1), which is discontinued from consideration as it was removed from WSF long range plans
OVER 2B	▼	●	▼	▼	✖	✖	▼	
OVER 3	■	■	■	■	✖	Not Assessed	Not Assessed	DISCONTINUE Does not meet purpose and need
OVER 4A	●	▼	●	▼	▼	▼	✖	DISCONTINUE Anticipated economic effects more extensive than Overpass 4B
OVER 4B	●	▼	●	■	▼	▼	▼	ADVANCE TO LEVEL 2 Dayton St Pedestrian/Emergency Access Overpass ✓
OVER 5	▼	■	▼	●	●	●	●	ADVANCE TO LEVEL 2 Midblock Pedestrian/ Limited Emergency Access Overpass ✓
OVER 6	●	●	▼	●	✖	✖	✖	ADVANCE TO LEVEL 2 Main Street Ferry Overpass 2 ✓
OVER 7A	▼	■	▼	●	●	▼	●	ADVANCE TO LEVEL 2 Main Street Pedestrian/ Limited Emergency Access Overpass ✓
OVER 7B	▼	■	▼	●	●	▼	●	
OVER 7C	▼	■	▼	●	●	▼	●	DISCONTINUE For similar functionality, the cost and visual impact is greater than for Overpass 7A
OVER 7D	▼	■	▼	●	●	▼	●	
OVER 8	●	▼	▼	▼	▼	✖	▼	DISCONTINUE Grades are steeper and impacts to park greater than for Overpass 9
OVER 9	●	▼	▼	▼	▼	✖	▼	ADVANCE TO LEVEL 2 Edmonds Street Pedestrian/Emergency Access Overpass ✓
OVER 10	■	■	■	■	✖	Not Assessed	Not Assessed	DISCONTINUE Does not meet purpose and need



Level 1 Outcomes – Early Recommendations

Recommend City advance independently:

- Crosswalk improvements at Main Street/Railroad Avenue (On-site 4)
- Crosswalk improvements at Dayton Street/Railroad Avenue (On-site 5)

Recommend City advance with BNSF:

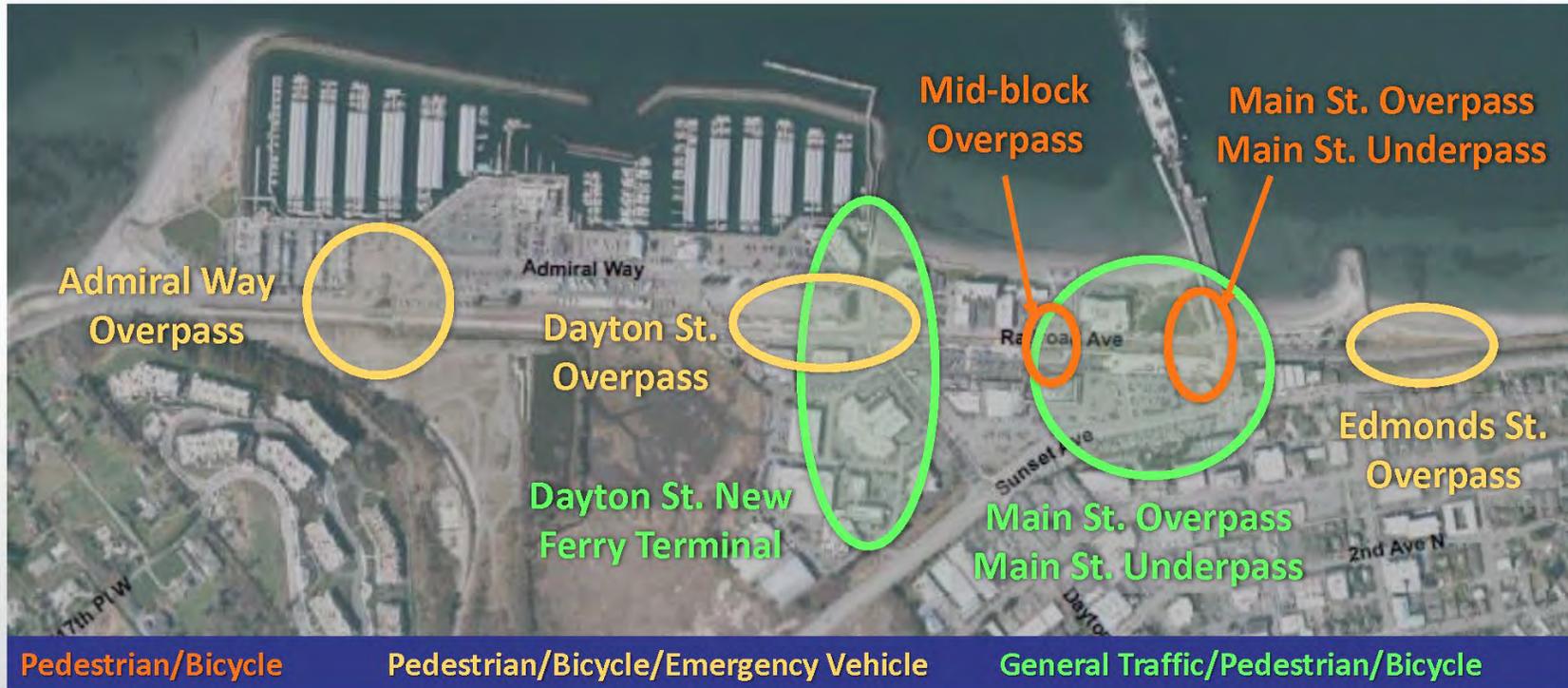
- Emergency notification to stop trains outside of Edmonds (Operational 4)

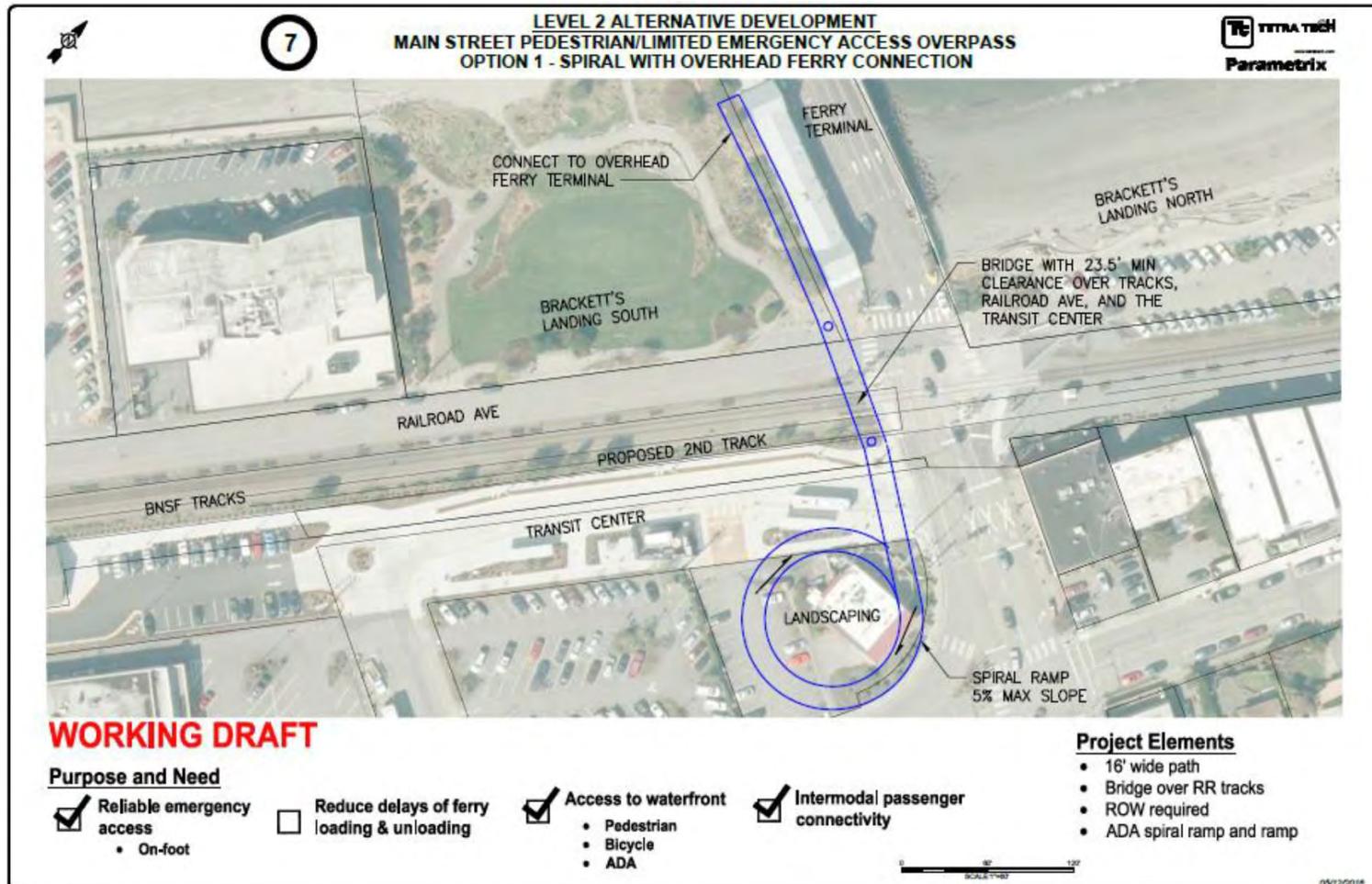
Recommend local agencies create/implement a Waterfront Emergency Evacuation Plan:

- First aid training for waterfront staff and residents (On-site 1)
- Helipad operational planning (On-site 3)
- Tsunami evacuation plan (Operational 7)



Preliminary Level 2 Alternatives







Level 2 Alternative Evaluation Criteria

1 - Does the alternative improve **reliable emergency response** to west side of the railroad?

2 - Does the alternative reduce delays to **ferry loading/ unloading** of vehicles, bicycles and pedestrians?

3 - Does the alternative improve circulation and reduce **delays & conflicts for pedestrians, bicyclists, motorists and freight** at roadway/ railroad crossings?

4 - Does the alternative provide safer and more efficient **passenger connectivity** between ferry, commuter rail, bus transit for pedestrians, bicycles and motor vehicle travel?

Purpose & Need



Level 2 Alternative Evaluation Criteria

5 - Does the alternative provide for **emergency evacuation** of the waterfront?

6 - Does the alternative fit with **urban design** concepts and **community goals**?

7 - Is the alternative consistent with current and future **transportation operations**?

8 - Is the alternative **fundable and permittable**?

9 - Can the alternative avoid or minimize **temporary construction impacts**?

10 – How does the alternative **affect the environment**?

11 - Does the Alternative address impacts of **sea level rise**?



Edmonds Waterfront Access Study

HOW CAN YOU PROVIDE INPUT?

At this meeting:

- Leave comments using a form or laptop
- Participate in individual discussions with study team or Task Force members
- Write thoughts on flip charts

After this meeting:

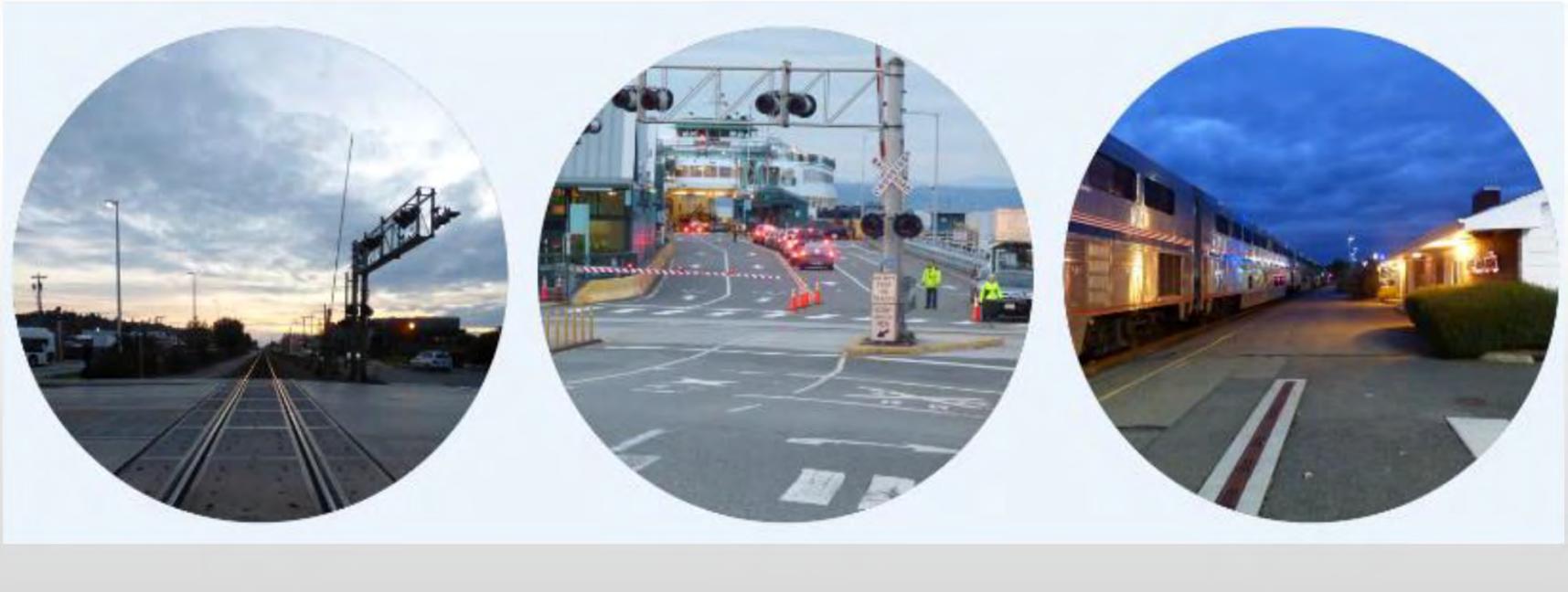
- View materials and submit comments using our Online Open House until May 23, 2016:
edmondswaterfrontaccess.publicmeeting.info
- Visit our website anytime: www.edmondswaterfrontaccess.org
- Email: info@edmondswaterfrontaccess.org
- Mail comments by May 23, 2016
- Call 425-771-0235 to ask questions
- Participate in future input opportunities





Edmonds Waterfront Access Study

Questions?



A.3.2 Open House Meeting 3 Comment Compilation

Figure A-10. Open House Meeting 3 – Comment Compilation

EnviroLytical - Communications
Page 1 of 12

Edmonds Waterfront Access Study - Communications (13 Total)

Date Received
from 5/9/2016 to 5/20/2016

Communication (5/18/2016)
May OOH Comment

Comment Phase:
Communication Source: Online Open House
Please check any of the following:
Please check any of the following ... other:
What concerns you right now regarding access:
What options should we consider :
Are there any specific issues:
Additional Comments:
What are your thoughts on the list of concepts:
Which of the screening criteria are important:
Additional Comments: Please make a recommendation that is financially feasible and that can be done in a reasonable amount of time, in keeping with the scale of what is needed. Some of the presentation on May 12th spoke of the delays experienced, but to my mind, most of these are minimal. With present Greater Seattle traffic we have gotten used to long delays. The minimal delays we experience in Edmonds going largely to recreation are more than acceptable for this time and place. Deal with the delays that are genuinely life threatening, or property damaging (fire), and for the rest - people (myself included) can wait a few minutes. It won't kill them
Please provide the study team: Midblock Overpass 5 proposal is incompatible with the plans for the new Waterfront Community Center being built by the Senior Center on the existing site. This proposal would compromise parking and access to the site.
What are your thoughts : Edmonds Street overpass 9 would be far and away my first choice. It provides robust emergency access (fire engines and aid vans)and would allow for ferry off loading in the event of an extended train stoppage. It would be heavily used by pedestrians. Of all of the options, I believe it would get the most pedestrian traffic. Coupled with a traffic light on 3rd Ave and Edmonds St, it would facilitate rapid emergency access to the waterfront, particularly to the dive park where it is most needed. The light could be blinking yellow on 3rd Ave and blinking red on Edmonds St. most of the time, but green and red for emergency access and off loading of the ferry. This option also has the benefit of modest cost and could be done quickly with grants, or perhaps bonds. All of the underpass options would be far more costly and delay the process for years. The other solely pedestrian overpasses do not provide the kind of robust emergency access that is appropriate.
What are your thoughts on the Level 2 : They are fine.

Owner(s):

Contact ID	Name	Type	Phone	Email
485188	Farrell Fleming	Individual	425-954-2518 (work)	execdirector@scscedmonds.org

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Communication (5/17/2016)

May OOH Comment

Comment Phase:

Communication Source: Online Open House

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments: All railroad concepts discontinued because BNSF does not want anything to change. Why not double track through Edmonds?

Please provide the study team: BNSF's refusal to consider any change to their existing operations halted all railroad change options. But why do they not want to double track operations through downtown, so that trains do not clog up on the single track?

What are your thoughts : They seem like the only way forward if the railroad refuses to cooperate

What are your thoughts on the Level 2 : Sound

Owner(s):

Contact ID	Name	Type	Phone	Email
519390	Jim Landers	Individual		landers.is@gmail.com

Communication (5/16/2016)

May OOH Comment

Comment Phase:

Communication Source: Online Open House

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments: Main Street Overpass 1 and Main Street Overpass 2 appear to be the best options. They meet the 4 objectives and the ferry won't be required to move. Moving the ferry simply moves the problem to another location. What about other vehicle traffic? The options shown seem to only deal with the ferry traffic and emergency vehicles. What about the visitors to the beaches, waterfront, Port of Edmonds, and restaurants?

Please provide the study team:

What are your thoughts : Any alternative must meet all 4 requirements. Underpasses are going to be expensive because of the water table.

What are your thoughts on the Level 2 :

Communication (5/14/2016)

I attended the second phase meeting to plan for getting emergency vehicles west of the BNSP rail lines was held May 12th at the Edmonds Library Plaza. While there was talk about pedestrians and bicycles and poodles, the primary reason we were meeting was to find an access for emergency vehicles to get to the west side of the BNSP RR tracks in a crisis situation when the normal roadway is blocked by a train. This is an important but infrequent need. The remedy should be one that does not require overpasses, underpasses, buildings or extensive roadway construction. We should not let the problem we set out to solve morph into some unintended outcome. Other concerns should be dealt with as separate issues.

Comment Phase:

Communication Source:

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments:

Please provide the study team:

What are your thoughts :

What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
519243	Ron Hamberg	Individual		rlhamber@comcast.net

Communication (5/14/2016)

May OOH Comment

Comment Phase:
Communication Source: Online Open House
Please check any of the following:
Please check any of the following ... other:
What concerns you right now regarding access:
What options should we consider :
Are there any specific issues:
Additional Comments:
What are your thoughts on the list of concepts:
Which of the screening criteria are important:
Additional Comments: Please explain why BNSF cannot be required to make track realignments. All the Main St plans look like they would be an eyesore for the local community.
Please provide the study team:
What are your thoughts :
What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
519240	Barry Somers	Individual		somerstab@gmail.com

Communication (5/14/2016)

May OOH Comment

Comment Phase:
Communication Source: Online Open House
Please check any of the following:
Please check any of the following ... other:
What concerns you right now regarding access:
What options should we consider :
Are there any specific issues:
Additional Comments:
What are your thoughts on the list of concepts:
Which of the screening criteria are important:
Additional Comments: Main Street overpass solves all the issues and has the least cost.
Please provide the study team:
What are your thoughts :
What are your thoughts on the Level 2 :

Communication (5/12/2016)
May OOH Comment

Comment Phase:
Communication Source: Online Open House
Please check any of the following:
Please check any of the following ... other:
What concerns you right now regarding access:
What options should we consider :
Are there any specific issues:
Additional Comments:
What are your thoughts on the list of concepts:
Which of the screening criteria are important:
Additional Comments: I attended the public meeting. Was disappointed that the presentation did not have a slide for each option under consideration for level 2 -- we all would have benefited with a 3 minute overview of each option as it was shown on the screen, with a listing of its pluses and minuses. Standing in front of the posters to do side by side comparisons was good, but only after we all had a better understanding of each. Next time, give each option a short discussion during the meeting.
Please provide the study team: Agree with the results, best alternatives still on the table.
What are your thoughts : There are a number of feasible approaches on the table. The alternatives that address most of the issues seem to be imposing projects/structures situated at the ferry terminal. These seem unsightly alternatives. Any that make it through this screening will need some artistic rendition to help us understand what we might have to live with to solve all our problems. I am for the simple overpasses at Edmonds Street or Edmonds Crossing. they have least visible impact yet meet priority issue of emergency access.
What are your thoughts on the Level 2 : All are valid criteria, but some seem more important than others. The visual impact of the final product and mess we would have to live with during construction are the most important factors for me. As an occasional ferry rider, inconvenience to schedules due to train blockage is not my highest priority.
Owner(s):

Contact ID	Name	Type	Phone	Email
484895	James (Jim) Clark	Individual		jclark7636@hotmail.com

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May OH Comment

Communication (5/12/2016)

May OH Comment

Ferry 3 - Dayton St looks good. Get traffic away from Main St. We need an auto bridge or underpass.

Documents: CommentForm.pdf

Comment Phase: Phase 3 (May 2016)

Communication Source: In Person

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments:

Please provide the study team:

What are your thoughts : Ferry 3 - Dayton St looks good. Get traffic away from Main St. We need an auto bridge or underpass.

What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
<u>483428</u>	<u>Anonymous</u>	Individual		

May OH Comment

Communication (5/12/2016)

May OH Comment

None of the alternatives improve conditions without the 2nd track south of Dayton.

Documents: CommentForm.pdf

Comment Phase: Phase 3 (May 2016)

Communication Source: In Person

Please check any of the following:
checkbox: Resident

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments:

Please provide the study team: When will the 2nd track be restored south of Dayton Street to King County?

What are your thoughts : None of the alternatives improve conditions without the 2nd track south of Dayton.

What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
<u>520736</u>	<u>Gary Nelson</u>	Individual		<u>garynelsonsmail@gmail.com</u>

May OH Comment

Communication (5/12/2016)

May OH Comment

I am concerned that on site improvement idea to add emergency response resources on the west side of the tracks was not represented in the Level 2 results in front of room while it was identified as advancing to Level 2 in the materials in the back of the room. Why isn't this option being equally vetted? It seems the task force predisposed to a high cost over a underpass solution. The idea to simply add emergency response resources pm west side of tracks without further need for costly over and underpass solutions. Needs to be included with all Level 2 options. Without the most current information (updated slides) and complete list of Level 2 ideas being considered, this open comment opportunity was not as effective as it could have been. Disappointing preparation.

Documents: CommentForm.pdf

Comment Phase: Phase 3 (May 2016)

Communication Source: In Person

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments:

Please provide the study team:

What are your thoughts :

What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
520738	Chris Cimino	Individual		chris.d.cimino@gmail.com

Communication (5/11/2016)

May OOH Comment

Comment Phase:

Communication Source: Online Open House

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments:

Please provide the study team:

What are your thoughts : Any option that just allows for pedestrian or bicycle overpass is not a good use of money. The solution must address ferry traffic, other vehicles trying to cross the train tracks, and emergency response.

What are your thoughts on the Level 2 :

Communication (5/11/2016)

May OOH Comment

Comment Phase:

Communication Source: Online Open House

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments: It appears to me that all the alternatives will require significant time for the planning, approval and execution stages. What do we do in the meantime? This may be beyond the commission's purview, but I believe it would make sense to station at least two emt/firefighters, together with an engine, on the west side of the tracks during daytime (busiest) hours. This crew should also be capable of operating the fire boat which is not accessible during a train crossing. A temporary shelter such as a mobile office on space provided by the Port could be used to house the crew.

Please provide the study team:

What are your thoughts :

What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
516443	Bruce Strasser	Individual		strasserbruce@gmail.com

Communication (5/10/2016)

I urge you to keep Edmonds Crossing as one of the potential options. The City and the citizens should put pressure on WSF to reconsider putting it back in its long term plan. Also, we should try to work with the natives regarding the fishing rights issue to see if the dock can be moved farther south to avoid the dog park and Marina Beach. I know both Chris Keuss and Stephen Clifton have background information on this issue.

Regarding cost, have preliminary budgets been established for the other ferry options, both flyovers and tunnels under? If so, please disclose those along with what the cost to resurrect and complete the Edmonds Crossing alternative is for comparative purposes.

Thanks. John Reed

Comment Phase:

Communication Source:

Please check any of the following:

Please check any of the following ... other:

What concerns you right now regarding access:

What options should we consider :

Are there any specific issues:

Additional Comments:

What are your thoughts on the list of concepts:

Which of the screening criteria are important:

Additional Comments:

Please provide the study team:

What are your thoughts :

What are your thoughts on the Level 2 :

Owner(s):

Contact ID	Name	Type	Phone	Email
513300	JOHN J REED JR	Individual		jreed5@comcast.net

A.3.3 Open House Meeting 3 Summary

Background

- Date: May 12, 2016
- Time: 6:00 - 8:00 p.m.
- Location: Edmonds Library Plaza Room, 650 Main Street, Edmonds, WA 98020
- Purpose: The purpose of this community meeting was to present the results of the Level 1 screening process, including explaining why some concepts were eliminated, present the alternatives being considered in Level 2 evaluation, explain the Level 2 evaluation process, and to gather feedback and input.

Attendance

58 members of the public attended the meeting; 64 people signed in (including some of the individuals listed below), 28 of whom had not attended a prior meeting. The following key individuals and staff attended the meeting:

- Advisory Task Force Members and alternates:
 - Mike Nelson (Co-chair), Edmonds City Council
 - Jim Orvis, Port of Edmonds
 - Rick Wagner, BNSF
 - Ian Sterling, WSF
 - Kirk Greiner, resident
 - Phil Lovell, resident
 - Lorena Eng, WSDOT
- City of Edmonds:
 - Bertrand Hauss
 - Carolyn Douglas
 - Patrick Doherty
 - Phil Williams
 - Rob English
- Edmonds Elected Officials:
 - Councilmember Neil Tibbott, Position #7
 - Councilmember Kristiana Johnson, Position #1
- Consultant team:
 - Rick Schaefer, Tetra Tech
 - Sandy Glover, Parametrix
 - Katie DeLeuw, EnviroIssues
 - Hannah Litzenberger, EnviroIssues
 - Ashley Bagley, EnviroIssues

Agenda

Table A-14. Open House Meeting 3 - Agenda

Time	Agenda Item
6:00 – 6:15 p.m.	Sign-in View displays and meeting materials Talk with study team

6:15 – 6:00 p.m.	Introductory remarks by Katie DeLeuw and Phil Williams Presentation by Rick Schaeffer
6:40 – 7:00 p.m.	Q&A session facilitated by Katie DeLeuw
7:00 – 8:00 p.m.	Open house format Talk with study team
8:00 p.m.	Meeting adjourned

Open House

Participants viewed display boards and spoke with the project team. Display boards provided information on:

- Background and overview of work to date
- Schedule
- Purpose and need
- Level 1 screening process
- Level 1 screening criteria
- Level 2 evaluation process
- Level 2 evaluation criteria
- Concept rating matrix cross-reference to alternatives
- Initial concepts and map
- Outreach opportunities throughout process

Participants had the opportunity to respond to the following questions, written on flip charts:

- What do you think about the Level 1 screening results?
- What do you think about the Level 2 evaluation criteria?
- What do you think about the preliminary alternatives?

At the comment station, participants could leave hardcopy comments and/or electronic comments using laptops provided. Translated project factsheets and comment forms were also available in Spanish and Korean.

Presentation

Phil Williams (City of Edmonds) gave introductory remarks on the purpose of the study and introduced the Advisory Task Force members. Rick Schaefer (Consultant team, Tetra Tech) presented on the following topics:

- Background and schedule
- Purpose and need
- Work completed: Compilation of concepts and Level 1 screening results; key factors informing process, balancing multiple needs and must keep operations in mind
- Work ahead: Alternatives being considered after Level 1; Level 2 evaluation criteria and process
- How public input was used
- Outreach opportunities throughout process and explain what input we're looking for tonight
- How input will be incorporated

My Edmonds News recorded the presentation, which can be viewed here:

<http://myedmondsnews.com/2016/05/on-video-citizens-get-update-on-edmonds-waterfront-access-study/>

Table A-15. Open House Meeting 3 - Summary of Facilitated Question and Answer Session

Questions	Responses
When will BNSF complete the second track south of Dayton Street?	Rick Wagner (BNSF) informed everyone that implementation of a second track is not currently scheduled. Preliminary designs have been developed but a decision on when to move forward has not been made.
Why is the emergency station on the west side noted as a concept that will advance to Level 2, but it isn't shown in any of the alternatives?	Rick Schaefer (Tetra Tech) responded that an emergency station on the west side has been forwarded to Level 2, and will be considered as a component to multiple alternatives, particularly those which provide pedestrian/bicycle-only capacity crossings.
Is Edmonds Crossing off the table for WSF?	Ian Sterling (WSF) commented that it is not currently in WSF's long-term plan, and if it happens, it will be decades, not years.
Will cost be considered as a criterion for Level 2?	Rick Schaefer (Tetra Tech) replied that cost is not explicitly listed as a criterion in Level 2, but it was considered under the criterion of implementation feasibility. Rick added that for Level 2 cost is specifically identified within the fundable/permit-able criterion and will be considered as the team reviews preliminary alternatives.
For the ferry alternatives, how will traffic that is destined for Main Street get there? How will general traffic in that area be impacted?	Rick Schaefer (Tetra Tech) said that through the ferry alternatives, direct offloading traffic would be directed towards Dayton Street. For Main Street ferry alternatives, this would require a left turn from Sunset/SR104 onto Dayton Street, then another left to get back to Main Street.
Has the idea of eliminating the Edmonds Ferry Terminal been considered?	<p>Rick Schaefer (Tetra Tech) replied that the study team has not heard of that as a prospect. The Edmonds-Kingston route is the northernmost connection to the Olympic Peninsula and a core element of the WSF system.</p> <p>Ian Sterling (WSF) added that it has not been considered as the route carries the highest freight traffic within the WSF system.</p>
Is BNSF willing to consider or negotiate on any railroad modifications?	Rick Wagner (BNSF) responded that BNSF looks at all proposals.

A.4 OPEN HOUSE MEETING 4 - SEPTEMBER 14, 2016

A.4.1 Meeting Materials

Figure A-11. Open House Meeting 4 - Meeting Display Boards

Edmonds Waterfront Access Study 

MEETING PURPOSE:

- Share the results of the Level 2 evaluation process
- Review alternatives being considered for recommendation
- Explain how public input has and will be used up to this point
- Discuss next steps in deciding the recommended alternative(s)

HOW CAN YOU PROVIDE INPUT?

At this meeting:

- Leave comments using a form or laptop
- Participate in individual discussions with study team or Task Force members
- Write thoughts on flip charts

After this meeting:

- View materials and submit comments using our Online Open House until Sept. 28, 2016:
edmondswaterfrontaccess.publicmeeting.info
- Visit our website anytime: www.edmondswaterfrontaccess.org
- Email: info@edmondswaterfrontaccess.org
- Mail comments by Sept. 28, 2016
- Call 425-771-0235 to ask questions



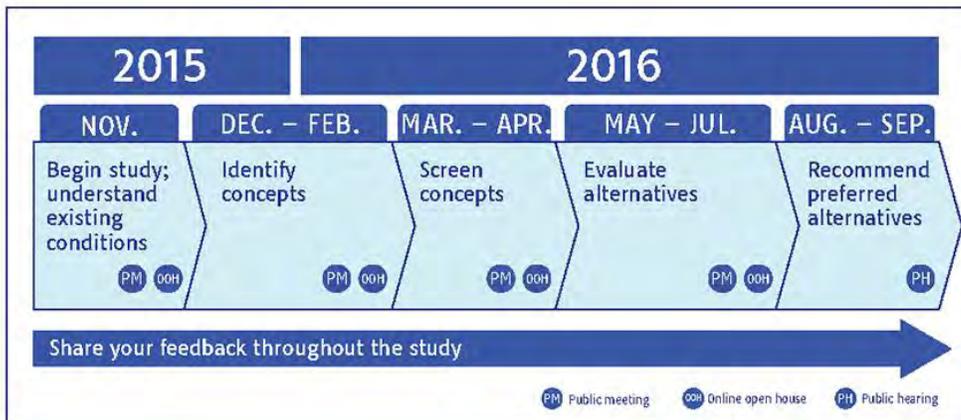


Edmonds Waterfront Access Study

WHAT IS THE EDMONDS WATERFRONT ACCESS STUDY?

The City of Edmonds is working with our partners to study different ways to improve access to and from the waterfront, including access for emergency responders. Through our study, we plan to identify one or more preferred alternatives to carry forward into environmental review and design. We will provide opportunities for the community to be involved.

SCHEDULE



WHO ARE OUR PARTNERS?

Mayor Earling appointed an Advisory Task Force to help guide and lend expertise to the process. Task Force members represent:

- Edmonds residents and businesses
- City of Edmonds
- WSDOT
- Washington State Ferries
- Sound Transit
- BNSF
- Community Transit
- Port of Edmonds



Edmonds Waterfront Access Study

HOW WILL WE STUDY CONCEPTS AND ALTERNATIVES?



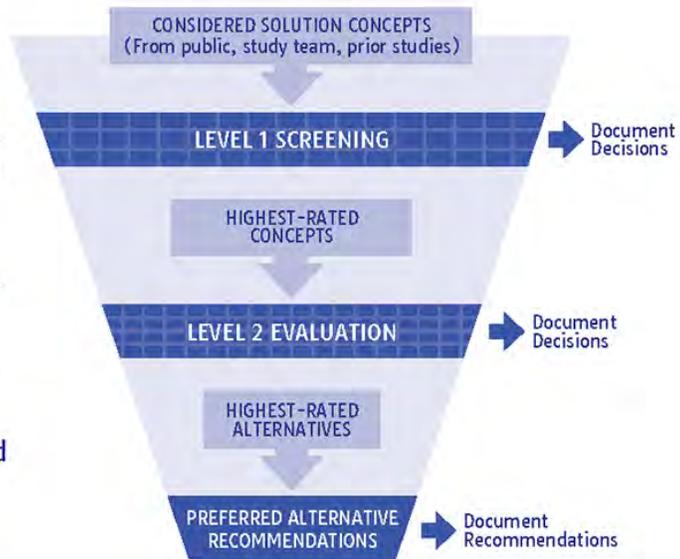


Edmonds Waterfront Access Study

WHAT IS THE LEVEL 2 EVALUATION PROCESS?

We are using a two-step process to screen concepts and evaluate alternatives. Level 1 screening is complete. During Level 2 evaluation we:

- Compiled Level 2 alternatives and further developed their features for evaluation.
- Refined evaluation criteria and applied ratings.
- Will determine the preferred alternative(s) using Level 2 evaluation ratings and community input.



ALTERNATIVE RATINGS USED IN LEVEL 2 EVALUATION

RATING	GENERAL MEANING
⊙-5	Alternative greatly improves functionality/benefit
◐-4	Alternative somewhat improves functionality/benefit
○-3	No Change
◑-2	Alternative somewhat degrades functionality/benefit
●-1	Alternative greatly degrades functionality/ benefit
✕-0	Fatal flaw



Edmonds Waterfront Access Study

ALTERNATIVES SUMMARY

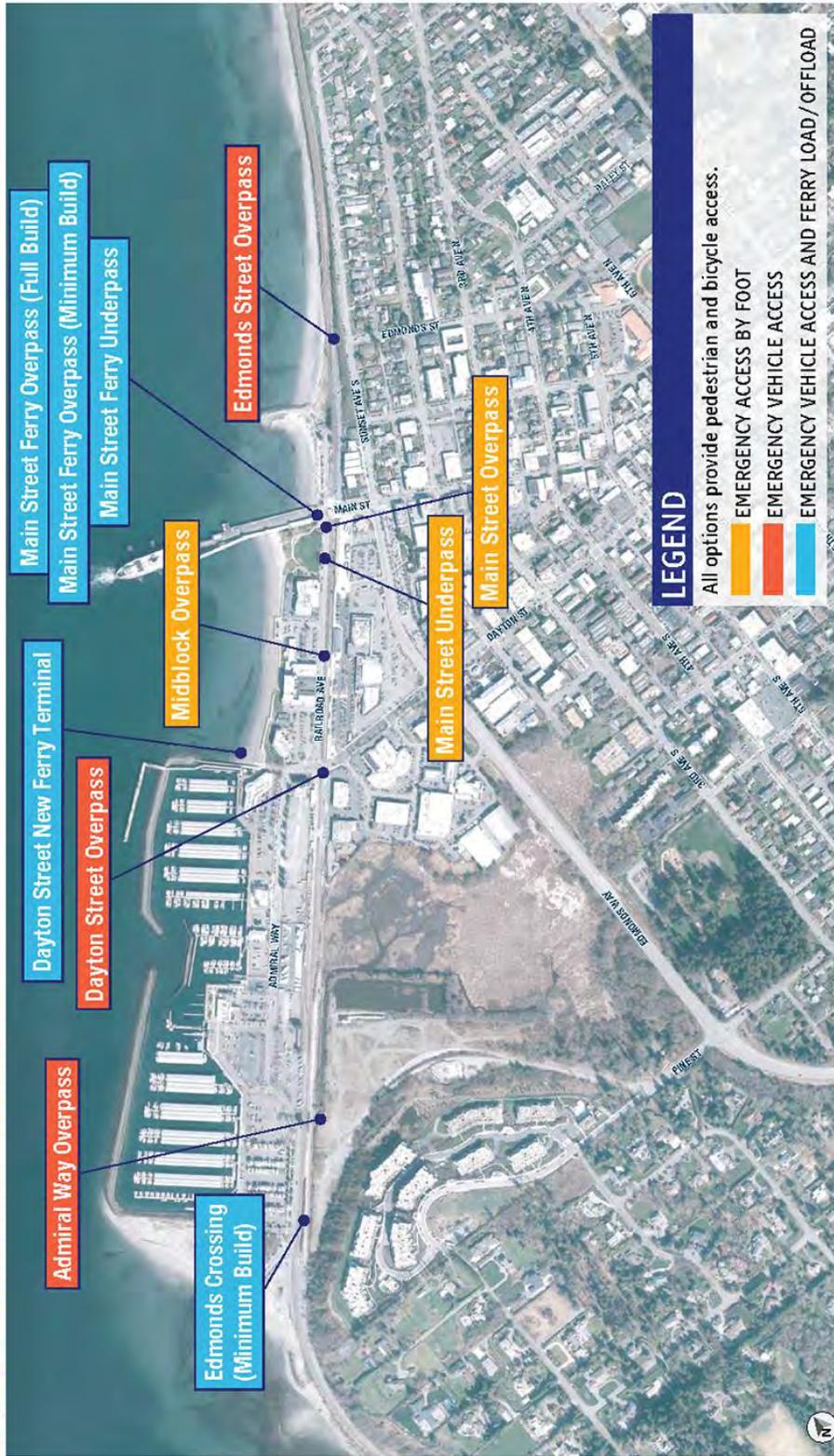
Top Rated in this Category

Categorized Criteria	EMERGENCY ACCESS BY FOOT			EMERGENCY VEHICLE ACCESS			EMERGENCY VEHICLE ACCESS AND FERRY LOAD/OFFLOAD				
	Highhook Overpass	Main Street Overpass	Main Street Underpass	Admiral Way Overpass	Dayton Street Overpass	Edmonds Street Overpass	Dayton Street New Ferry Terminal	Main Street Ferry Overpass (Full Build)	Main Street Ferry Overpass (Minimum Build)	Main Street Ferry Underpass	Edmonds Crossing (Minimum Build)
EVENLY WEIGHTED SCORE	47 ✓	43	42	41	43	45 ✓	41	40	42 ✓	41	42 ✓
EMERGENCY RESPONSE											
(1) Improve emergency response	74 ✓	70	66	65	73	75 ✓	62	67	72 ✓	62	63
(8) Fundable & permitable											
TRAFFIC CONFLICTS AND DELAYS											
(3) Ferry delay reduction	95 ✓	91	90	80	88	96 ✓	89	91	93 ✓	92	87
(4) Circulation/ reduce conflicts											
(5) Intermodal connectivity											
(7) Consistent with operations											
HUMAN AND NATURAL ENVIRONMENT											
(6) Urban design/ community goals	101 ✓	85	84	89 ✓	82	84	80	67	72	77	87 ✓
(9) Temporary construction impacts											
(10) Environmental effects											
(11) Sea level rise											



Edmonds Waterfront Access Study

ALTERNATIVE LOCATIONS



Edmonds Waterfront Access Study



MIDBLOCK OVERPASS

Overview

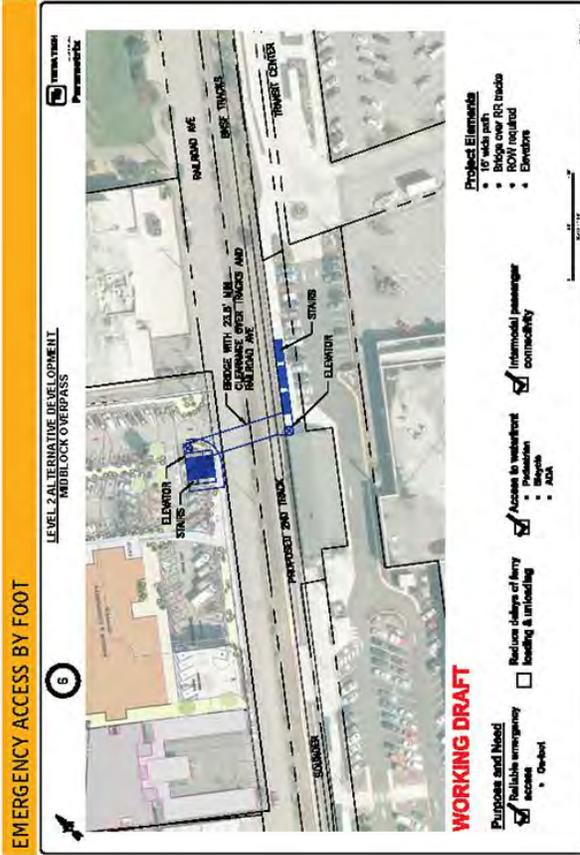
- Pedestrian bridge over railroad tracks in the vicinity of the train station and Edmonds Senior Center, with aid car stationed on Waterfront
- Access: Pedestrian, bicycle, ADA, emergency evacuation

Benefits

- Affordable, with minimal construction disruption and duration
- Improves safe intermodal connections to both sides of railroad tracks
- Minimal view impacts due to surrounding buildings

Challenges

- Emergency responders must cross over railroad tracks on foot to access aid car stationed west of tracks
- Site for aid car garage



Edmonds Waterfront Access Study



MAIN STREET OVERPASS

Overview

- Pedestrian bridge over railroad tracks next to Main Street from transit center to overhead passenger ramp at ferry dock, with aid car stationed on Waterfront
- Access: Pedestrian, bicycle, ADA, emergency evacuation

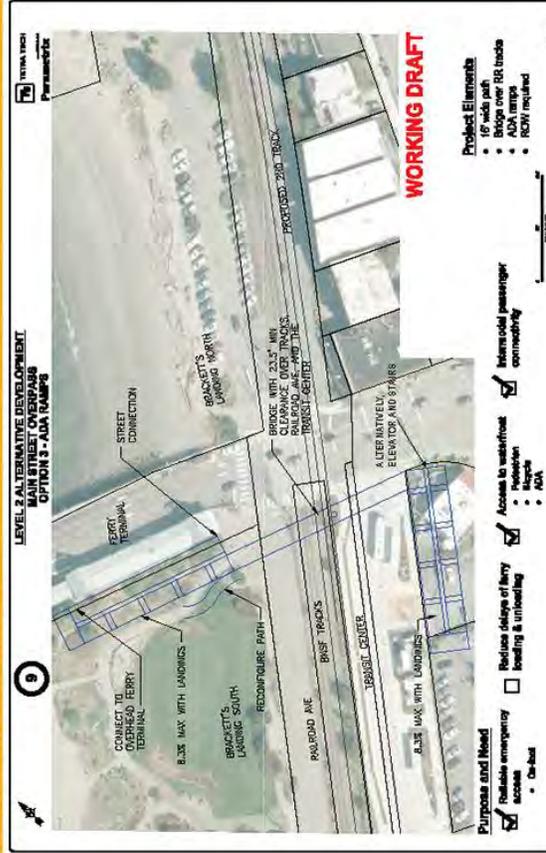
Benefits

- Most convenient for ferry commuters and Main Street pedestrian traffic
- Affordable, with minimal construction disruption and duration
- Improves safe intermodal connections to both sides of railroad tracks

Challenges

- Emergency responders must cross over railroad tracks on foot to access aid car stationed west of tracks
- Site for aid car garage
- Affects views, but with minimal impacts in vicinity of ferry and other transportation structures

EMERGENCY ACCESS BY FOOT



Edmonds Waterfront Access Study



MAIN STREET UNDERPASS

Overview

- Pedestrian underpass below railroad tracks near Main Street from transit center to Railroad Avenue / Brackett's Landing Park South, with aid car stationed on Waterfront
- Access: Pedestrian, bicycle, ADA, emergency evacuation

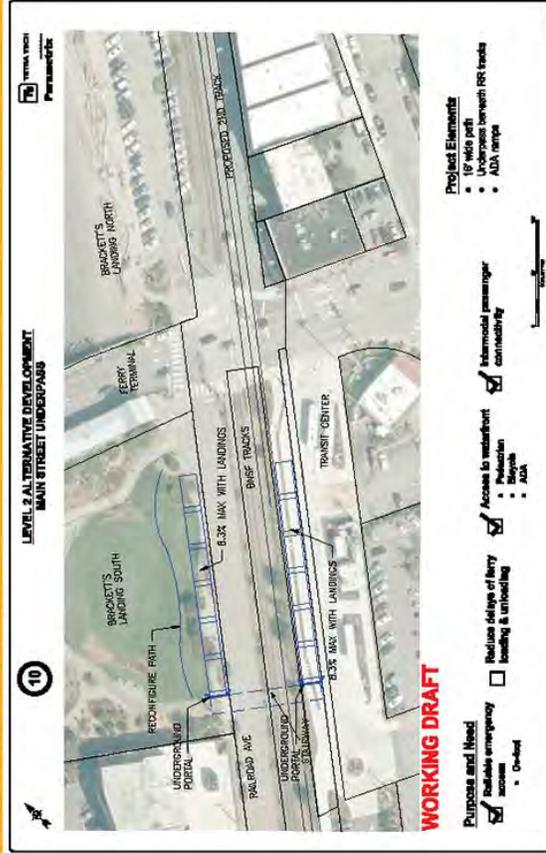
Benefits

- Below grade, no view impact
- Convenient for ferry commuters
- Improves safe intermodal connections to both sides of railroad tracks

Challenges

- Emergency responders must cross under railroad tracks on foot to access aid car stationed west of tracks
- Site for aid car garage
- Below-grade passageways are uninviting and may be less used
- Pumping required for stormwater and groundwater control

EMERGENCY ACCESS BY FOOT



Edmonds Waterfront Access Study



ADMIRAL WAY OVERPASS

Overview

- Bridge over railroad tracks and Willow Creek from Unocal site to Admiral Way
- Access: Pedestrian, bicycle, ADA, aid car, fire truck, emergency ferry offload, emergency evacuation

Benefits

- Continuous access for aid car and fire truck to south end of Waterfront
- Creates pedestrian /bicycle connection around south end of Edmonds Marsh
- Provides for emergency ferry offloading during extended rail crossing closures
- Construction impacts are relatively limited

Challenges

- Does not reduce conflicts between pedestrians, bicycles, vehicles, and trains
- Does not improve intermodal passenger safety or efficiency
- Displaces property designated for development within the port
- Long route for emergency response to most of Waterfront

EMERGENCY VEHICLE ACCESS



Edmonds Waterfront Access Study



DAYTON STREET OVERPASS

Overview

- Bridge over railroad tracks from Sunset Avenue / Dayton Street intersection to Admiral Way
- Access: Pedestrian, bicycle, ADA, aid car, fire truck, emergency ferry offload, emergency evacuation

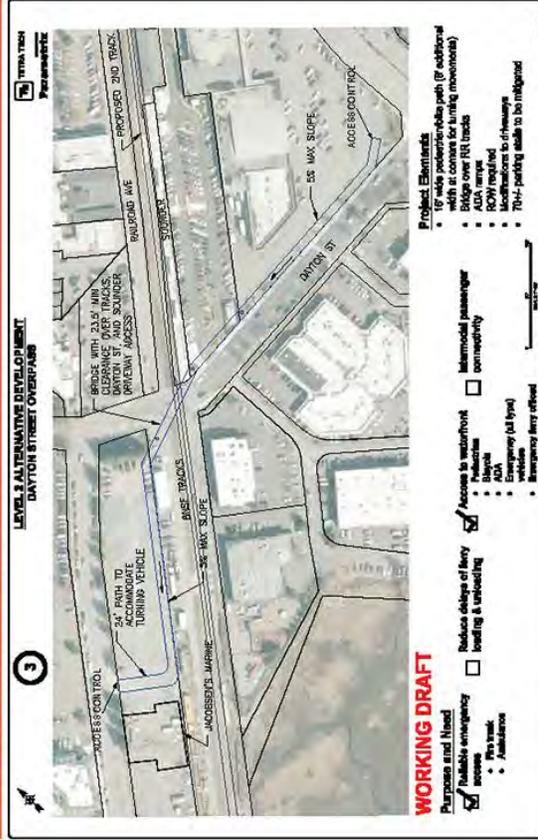
Benefits

- Continuous access for aid car and fire truck to center of Waterfront
- Provides for emergency ferry offloading during extended rail crossing closures
- Emergency evacuation route from center of Waterfront

Challenges

- Does not reduce conflicts between pedestrians, bicycles, vehicles, and trains
- Does not improve intermodal passenger safety or efficiency
- Displaces commercial property at Salish Crossing and property designated for development within the port

EMERGENCY VEHICLE ACCESS



Edmonds Waterfront Access Study



DAYTON STREET NEW FERRY TERMINAL

Overview

- Relocates ferry terminal to Dayton Street
- Constructs parking garage for ferry vehicle queuing, commuter parking, and bus transit center
- Constructs bridge over railroad tracks and Railroad Avenue to ferry terminal and emergency access ramp
- Access: Pedestrian, bicycle, ADA, aid car, fire truck, ferry vehicle loading/offloading, emergency evacuation

Benefits

- Continuous access for aid car and fire truck to center of Waterfront
- Separates ferry vehicle traffic from downtown streets, reducing conflicts and delays
- Allows redevelopment of existing ferry dock facilities and Main Street/Sunset Avenue corridor
- Allows construction without impeding ongoing ferry operations

EMERGENCY VEHICLE ACCESS AND FERRY LOAD/OFFLOAD



Challenges

- Displaces Olympic Beach Park with ferry dock adjacent to fishing pier
- Displaces office building and much of the Port's Harbor Square property
- Impacts view along Dayton Street corridor and Waterfront
- Relatively high construction cost and permitting effort



Edmonds Waterfront Access Study

MAIN STREET FERRY OVERPASS (MINIMUM BUILD)

Overview

- Constructs bridge over Main Street, Sunset Avenue, railroad tracks, and Railroad Avenue to ferry terminal and emergency access ramp
- Access: Pedestrian, bicycle, ADA, aid car, fire truck, ferry vehicle loading/offloading, emergency evacuation

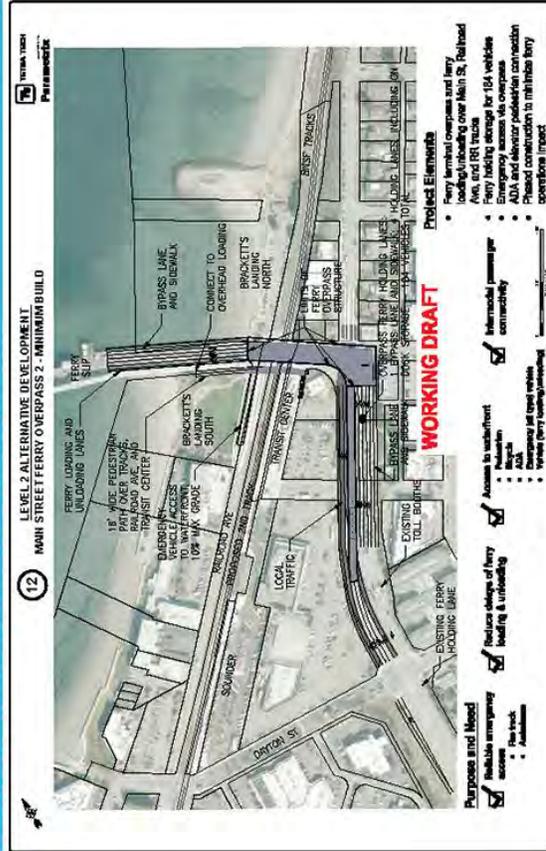
Benefits

- Continuous access for aid car and fire truck to north end of Waterfront
- Separates ferry vehicle traffic from downtown streets, reducing conflicts and delays
- Maintains ferry queuing capacity of 184 vehicles and reduces delays to ferry loading/offloading

Challenges

- Obstructs view and impacts community along Main Street and the ferry holding lanes on Sunset Avenue
- Extended construction duration and staging/phasing to maintain ferry operations
- Permanently dislocates a business property for right-of-way

EMERGENCY VEHICLE ACCESS AND FERRY LOAD/OFFLOAD



Edmonds Waterfront Access Study



MAIN STREET FERRY UNDERPASS

Overview

- Constructs underpass below Main Street, railroad tracks, and Railroad Avenue to ferry terminal and emergency access ramp
- Access: Pedestrian, bicycle, ADA, aid car, fire truck, ferry vehicle loading/offloading, emergency evacuation

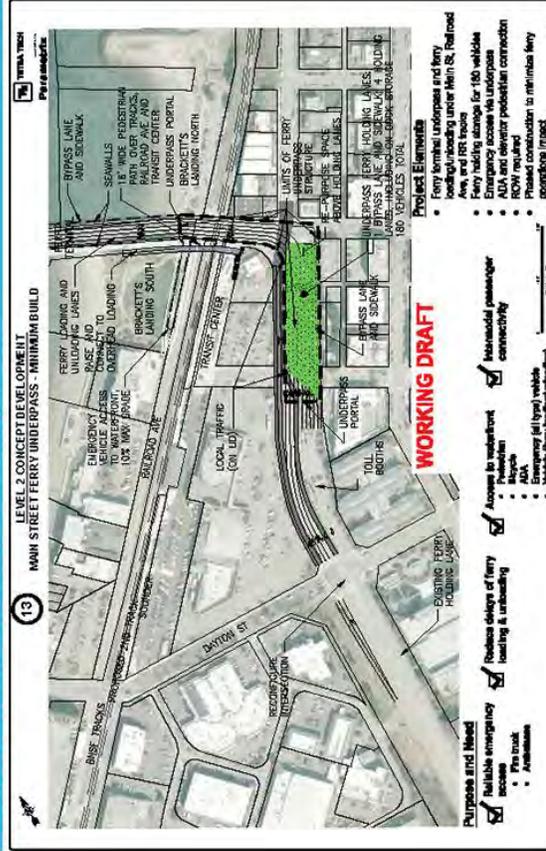
Benefits

- Continuous access for aid car and fire truck to north end of Waterfront
- Separates ferry vehicle traffic from downtown streets, reducing conflicts and delays
- Allows redevelopment of existing ferry dock facilities and Main Street/Sunset Avenue corridor
- Maintains corridor views
- Reduces delays to ferry loading/offloading

Challenges

- Relatively high construction cost
- Extended construction duration and staging/phasing to maintain ferry operations
- Permanently dislocates a business property for right-of-way
- Pumping required for stormwater and groundwater control

EMERGENCY VEHICLE ACCESS AND FERRY LOAD/OFFLOAD





Edmonds Waterfront Access Study

EDMONDS CROSSING (MINIMUM BUILD)

Overview

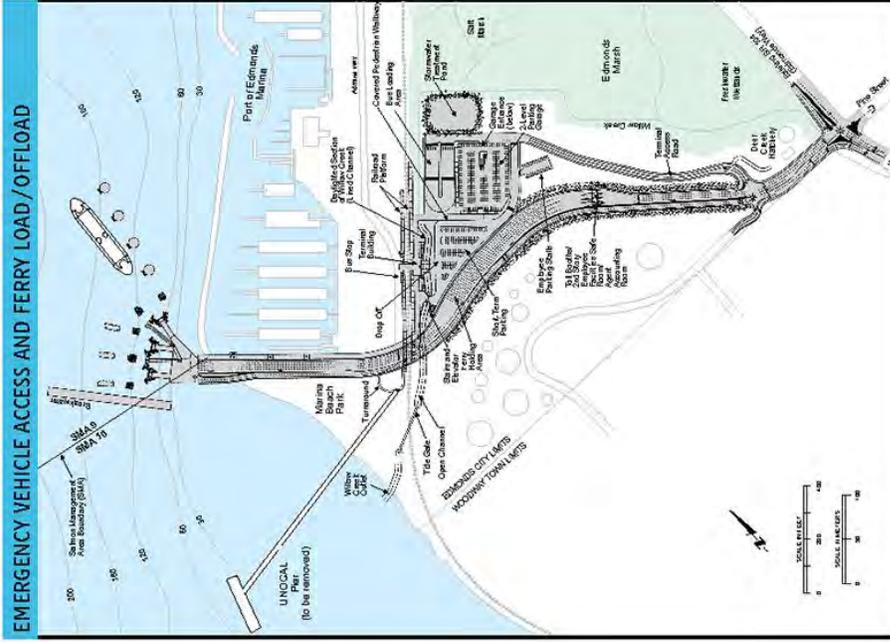
- Relocates ferry terminal to Unocal site with ferry vehicle queuing and relocated train platforms and bus transit center.
- Constructs bridge over railroad tracks, Willow Creek, port, and Marina Beach Park to ferry terminal and emergency access ramp
- Access: Pedestrian, bicycle, ADA, aid car, fire truck, ferry vehicle loading/offloading, emergency evacuation

Benefits

- Continuous access for aid car and fire truck to south end of Waterfront
- Separates ferry vehicle traffic from downtown streets, reducing conflicts and delays
- Allows redevelopment of existing ferry dock facilities and Main Street / Sunset Avenue corridor
- Allows construction without impeding ongoing ferry operations

Challenges

- Impacts to Marina Beach Park and port properties
- Relatively high construction cost
- Changes in views from nearby residential areas
- Long route for emergency response to most of Waterfront





Edmonds Waterfront Access Study



Main Street Overpass (Minimum Build)



Edmonds Waterfront Access Study



Edmonds Street Overpass



Edmonds Waterfront Access Study



Midblock Overpass

Figure A-12. Open House Meeting 4 - Meeting Presentation

Edmonds Waterfront Access Study



Agenda September 14, 2016

- 6:00 – 8 View displays and talk with team
Share ideas on flipcharts, comment forms or laptops
- 6:15 Presentation
- 6:45 Questions & Answers
- 7:10 – 8 Open house

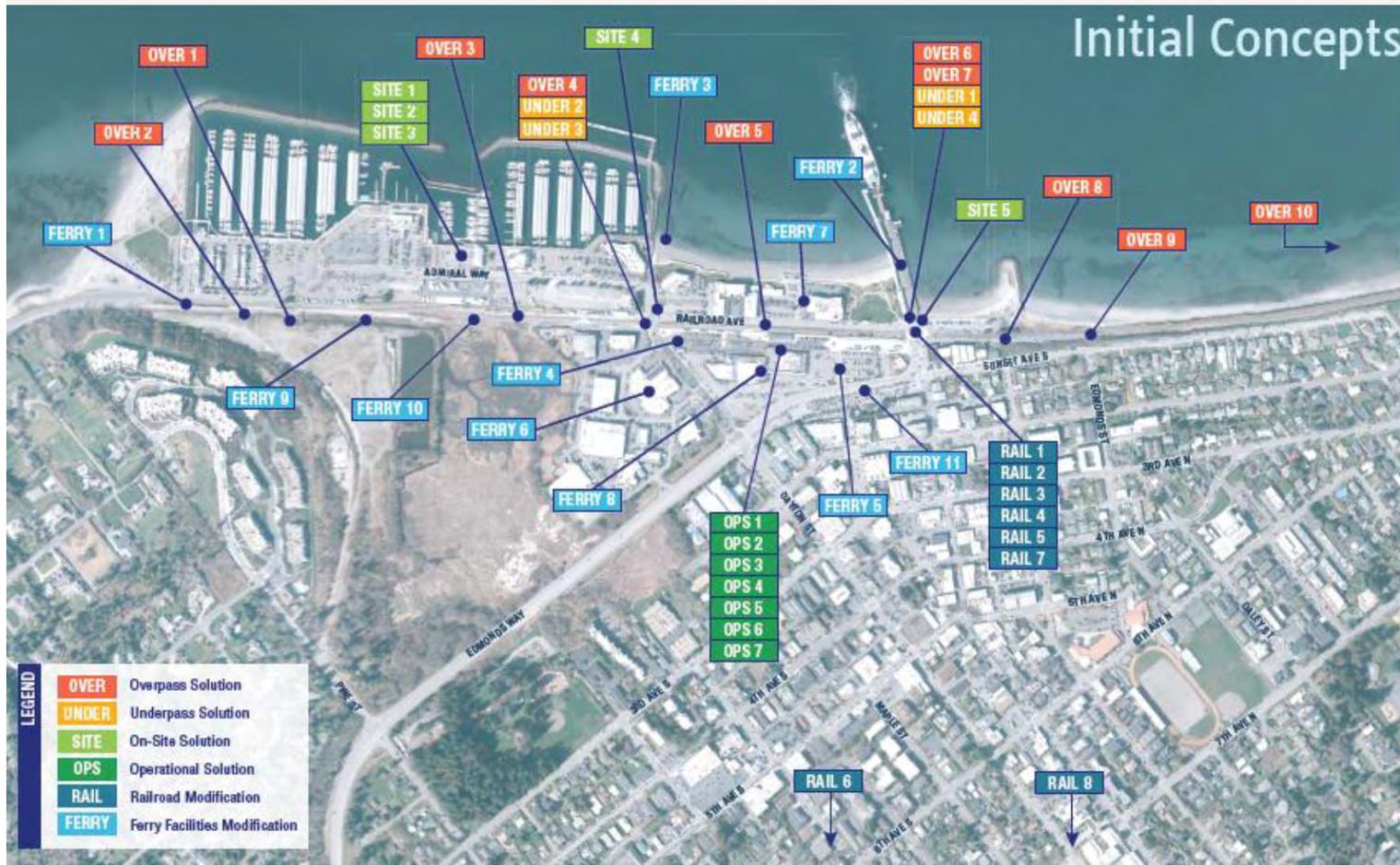




Edmonds Waterfront Access Study



	November 18 th	January 27 th	May 12 th
	116 attendees	83 attendees - 38 newcomers	58 attendees - 28 newcomers
	326 online visits - 259 unique visitors	175 online visits - 131 unique visitors	268 online visits - 191 unique visitors
	54 comment submittals	33 comment submittals	20 comment submittals





Level 1 Outcomes



* An 11th alternative was added during the Level 2 Evaluation



Near-term Recommendations





Level 1 Outcomes – 13 Advancing Concepts

Level 1 Concepts	Level 2 Alternatives
Overpass 1	Admiral Way Pedestrian/Emergency Vehicle Overpass
Overpass 4B	Dayton Street Pedestrian/Emergency Vehicle Overpass
Overpass 9	Edmonds Street Pedestrian/Emergency Vehicle Overpass
Overpass 5/On-site 2	Midblock Pedestrian Overpass, with stationed equipment
Overpass 7A/On-site 2	Main Street Pedestrian Overpass, with stationed equipment
Underpass 4/On-site 2	Main Street Pedestrian Underpass, with stationed equipment
Ferry 4/Ferry 8	Main Street Ferry Overpass (Minimum Build)
Overpass 6	Main Street Ferry Overpass 2 (Full Build)
Underpass 1/Ferry 5	Main Street Ferry Underpass
Ferry 3	Dayton Street New Ferry Terminal

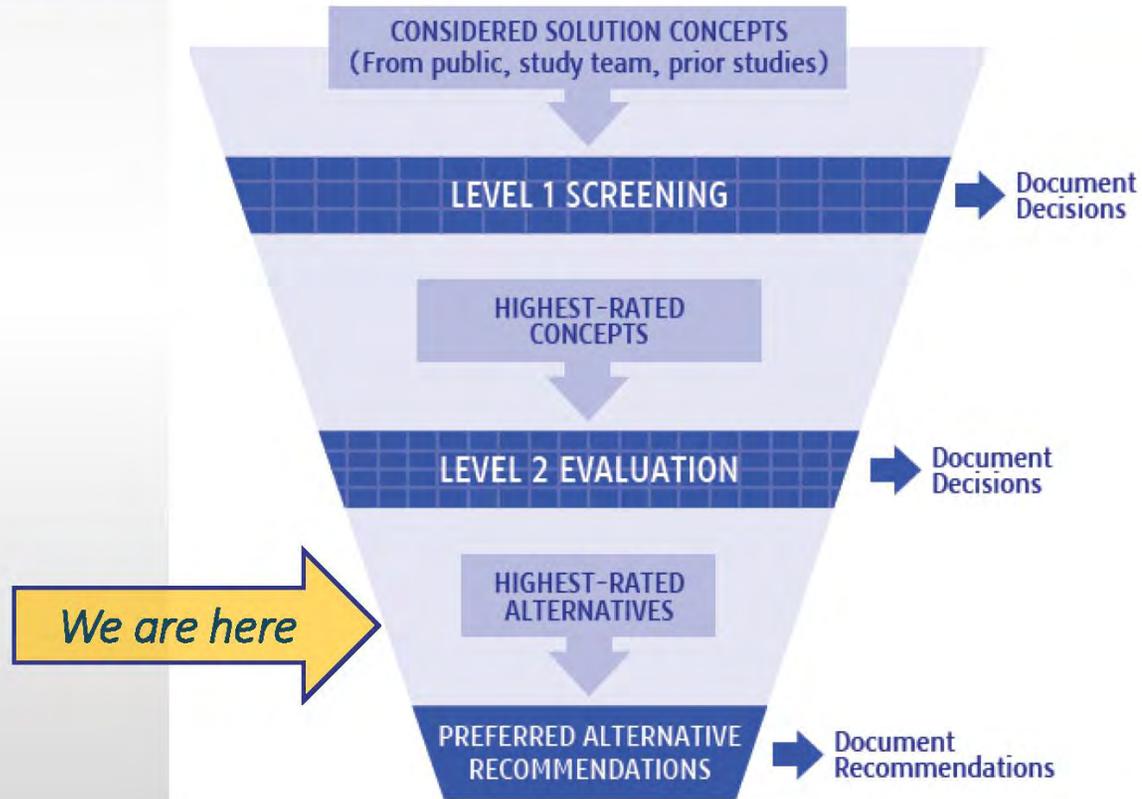


Alternative Types & Locations





2-Stage Screening / Evaluation Process





Level 2 Alternative Evaluation Criteria

Purpose & Need

1. Reliable emergency response
2. Reduce ferry delays
3. Reduce delays & conflicts at crossings
4. Safe/efficient passenger connections

Other Function

5. Emergency evacuation
6. Urban design & community goals
7. Consistent with transportation operations

Implementation

8. Fundable and permittable
9. Temporary construction impacts
10. Environmental effects
11. Address sea level rise impacts

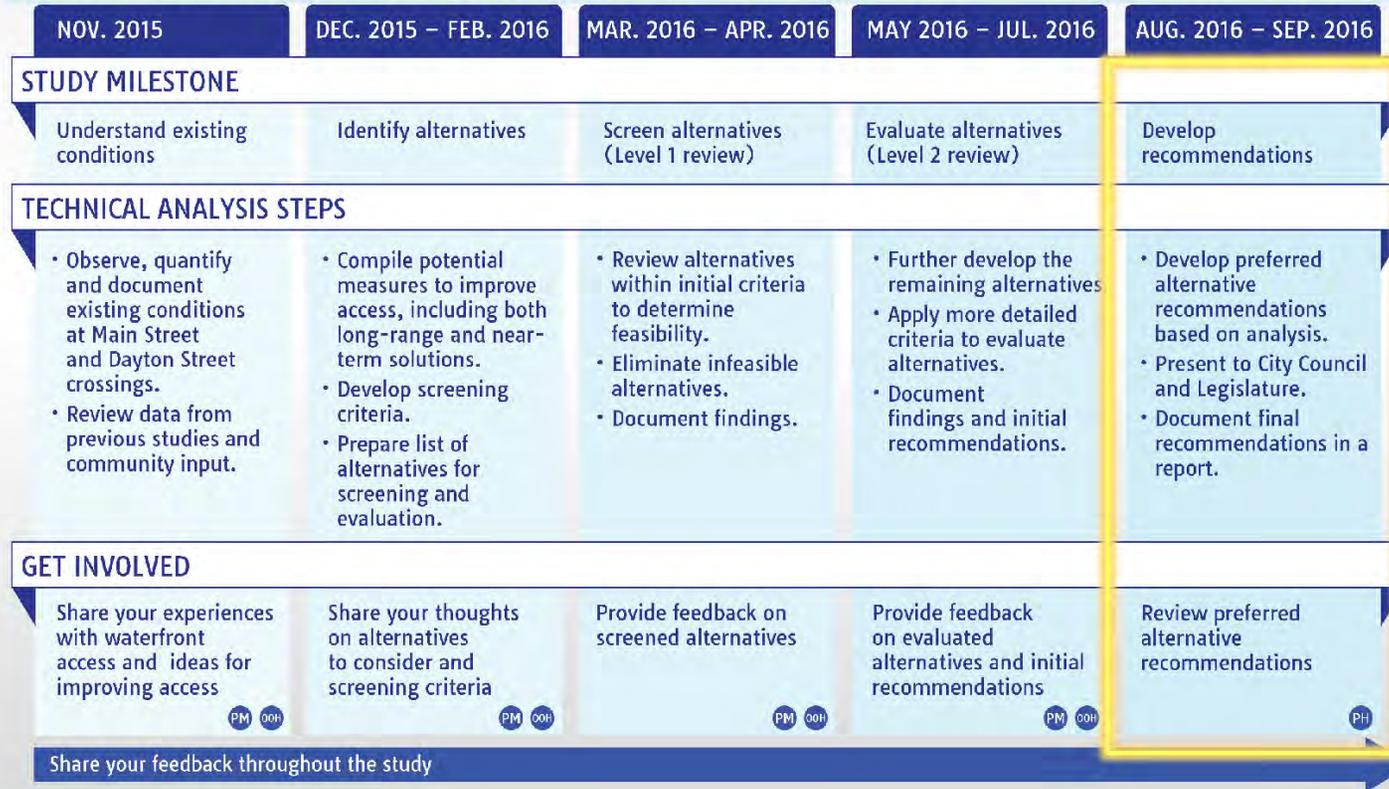


Alternatives Evaluation Summary

Categorized Criteria	EMERGENCY ACCESS BY FOOT			EMERGENCY VEHICLE ACCESS			EMERGENCY VEHICLE ACCESS AND FERRY LOAD /OFFLOAD				
	Midblock Overpass	Main Street Overpass	Main Street Underpass	Admiral Way Overpass	Dayton Street Overpass	Edmonds Street Overpass	Dayton Street New Ferry Terminal	Main Street Ferry Overpass (Full Build)	Main Street Ferry Overpass (Minimum Build)	Main Street Ferry Underpass	Edmonds Crossing (Minimum Build)
EVENLY WEIGHTED SCORE	47	43	42	41	43	45	41	40	42	41	42
EMERGENCY RESPONSE											
(1) Improve emergency response	✓ 74	70	66	65	73	✓ 75	62	67	✓ 72	62	63
(8) Fundable & permissible											
TRAFFIC CONFLICTS AND DELAYS											
(3) Ferry delay reduction	✓ 95	91	90	80	88	✓ 96	89	91	✓ 93	92	87
(4) Circulation/ reduce conflicts											
(5) Intermodal connectivity											
(7) Consistent with operations											
HUMAN AND NATURAL ENVIRONMENT											
(6) Urban design/ community goals	✓ 101	85	84	✓ 89	82	84	80	67	72	77	✓ 87
(9) Temporary construction impacts											
(10) Environmental effects											
(11) Sea level rise											



HOW WILL WE STUDY ALTERNATIVES?



- PM Public meeting
- OOH Online open house
- PH Public hearing



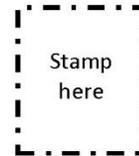
Edmonds Waterfront Access Study

Questions?



Additional Comments

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Edmonds Waterfront Access Study
City of Edmonds
121 5th Ave. N
Edmonds, WA 98020

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A.4.3 Open House Meeting 4 Comment Compilation

The study team conducted the fourth outreach phase for the Edmonds Waterfront Access Study in September 2016. The study team sought input on the Level 2 evaluation results and 11 alternatives.

We received 15 comment submissions for the phase four comment period (Sept. 13 – Sept. 28). The following are verbatim comments received at the community meeting or submitted via hardcopy comment forms, email, mail or the online open house. Flip charts were used during the community meeting, which are also transcribed.

Comment forms were available in English, Spanish, and Korean. The comment form used is shown in **Figure A-13**

Comments have been organized by subject area/question response and are transcribed verbatim, as they were received.

Table A-16. Open House Meeting 4 - Comment Submissions

Type	Number
Comment forms returned at meeting	1
Online Open House	13
Website	0
Email	1
Total	15

Question 1: What do you think about the Level 2 results?

- I think many people are too short sighted. The city of Edmonds needs to think of its growth, the growth of the Kitsap Peninsula, and what gaining the existing property from WSF would mean to Edmonds. Furthermore, Edmonds needs to think about traffic problems in the city (Main Street and turning left on 3rd), as traffic continues to increase. Relocation of the dock to route all traffic to Highway 104 resolves a lot of problems, improves the view of Edmonds residents by removing the traffic and dock from the end of Main. There’s no reason why a dock rebuild couldn’t include emergency vehicle access to the waterfront, especially with the inclusion of the Edmonds Ave ramp. The city of Edmonds needs to think 50 years down the road and see what’s coming at us. Ignoring the problems hoping they go away is a foolhardy tactic that ultimately fails the people. As for the cost, look at interest rates. They are at all-time lows. NOW is the time to finance big ticket items. If ever there were a time to act, it would be now.
- It’s also needed because of the noise created by trains when they blow their horns. You have not included aesthetics into the evaluation criteria. This project has the potential to ruin our beautiful waterfront - like putting a concrete choke chain around the neck of our city!
- Excellent summary. Comprehensive and well-presented.
- The recommendations focus primarily on access, cost and visual impact of the various alternatives. One key aspect of the waterfront-railroad situation that has not been addressed is an acceptable solution to the egregious noise pollution caused by the numerous trains, day and night. Safety is obviously important, but citizens in their homes up to a mile from the railroad crossings is nothing but noise pollution. In the final solution, PLEASE include provisions to focus and limit railroad horn noise to the crossing areas only, where it is needed for safety. Thank you.
- The coal trains are not being addressed. Sounds like this survey/project is mainly regarding emergency as in a crisis. I believe sucking up coal dust is an emergency to the residents of Edmonds. Need 3-D visuals. The Mayor of Edmonds quoted Edmonds being called “Deadmonds” previously; now we want to direct traffic away from the downtown core. Why?

- Since the WA Ferry system is not planning any additional ferries for 20 plus years, don't change the loading of ferries. Don't negatively impact the view of the central corridor for walkers, tourists, etc. near Main St., Edmonds/Bell etc. which would damage the views significantly and remove the beauty and quaintness that is uniquely Edmonds waterfront.
- I like the FIT WITH URBAN DESIGNS concept. Our town is very unique and keeping the "small town" appeal is critical. The design to place a concrete over-pass anywhere in the downtown area would be a disaster. If one must be placed, put it further south closer to the marina, but even this would be an environmental risk.
- I was unable to attend the meeting and do not understand all the proposals. It is good that topographical mock-ups have been made, but the ones I have seen are not viewed from the same distance (as can be seen by the varying heights of the persons in the foreground and so it is still not possible to get a comparative "hold" on the heights.
- Comprehensive, a lot of alternatives. My biggest concern is the environment, not views and I think moving the terminal would be most damaging.
- It appears as though all the alternatives assume the railroad right-of-way cannot be relocated. Although it would be very expensive, if that ends up providing the best solution for future generations then it should at least be considered.
- I appreciate the thoughts behind these alternatives and look forward to further discussion, but realistically, I don't think that most are feasible due to cost and practicality. Keep the concrete over-passes out - they are unsightly and would create an environmental nightmare.

Table A-17. Open House Meeting 4 – Question 1 Summary

Concerns	Number
Traffic (due to city's growth)	1
Noise pollution	2
Environment	1
Coal (as a human health hazard)	1
View, aesthetics	2
No 3-D visuals	1

Question 2: What are your thoughts on the 11 alternatives?

- I think that both Edmonds Avenue Emergency ramp from Sunset and Edmonds Crossing need to be implemented.
- Of the three emergency vehicle access alternatives, I like the Admiral Way overpass the best. Of the alternatives listed in Part 3, I like the Edmonds Crossing best. It gets the ferry traffic out of our waterfront area. Right now the ferry traffic holding lanes, etc. are a huge barrier between downtown Edmonds and the waterfront. We've lived with it for so long, we almost can't think of what it would be like if it were gone! It would make such a positive impact on our city to remove this barrier! Please don't let "cost" be the driving force in making your decision! This project has the potential to make an enormous change to our city in either a good or bad way. It is incredibly important to get it right!
- **I support an Underpass at Main Street.** It is an investment that would benefit Edmonds for 50 to 100 years. It would enhance the City's Downtown over all...traffic, view, accessibility, and businesses. **I support a Mid-Block Overpass** to meet our short term goals. Will serve the most people daily. Once the Main Street Over/Under Pass is built, there will be access for vehicles. No need to build another. Would rather have the savings put toward an Underpass solution.

- What is the impact of the Edmonds Crossing project on the Willow Creek daylighting? How was the environmental effects weighting scale determined? What impact did that criteria, in particular, have on each alternative?
- I have a few comments. First, I strongly advise against any vehicle overpasses on Main St. It would significantly impact the character of the city and the view of the waterfront from Main St. The budget for this plan also plays a large role. How much of this is to be paid for by WSF? With a large budget, I would advise either the Edmonds Crossing Full Build or the Main St. Ferry Underpass. As someone who used to frequent the ferries, I know how frustrating it can be to miss a ferry because of train traffic. It would make a huge difference to have the train traffic not impact ferry traffic. I also like the idea of having a park or more retail/restaurant space where the existing ferry waiting line is located. However, these options seem expensive. The mid-block overpass could be a good choice if we want to consider one of the larger projects at a later date, as it would be minimally intrusive and maintain its usefulness at the train terminal. I would love to see Edmonds develop one of the larger projects and upgrade our ferry access. I hope that the budget supports the Main St. Ferry Underpass; but if not, the mid-block overpass is a solid alternative.
- I think the focus should be to leave ferry traffic as is today. To get help to people on the west side of the tracks, create the less expensive bike/pedestrian overpass at Admiral or Edmonds Crossing area, while working on the vehicular overpass at Edmond Crossing for the longer term solution. Don't put any ugly overpass anywhere near Main, Edmonds St, or Dayton! Keep construction at the southern end. A bike/pedestrian crossing could be built first and then a vehicle overpass adjacent perhaps. The Admiral Way and Edmonds Crossing would be most preferred to keep the valuable Main St. and waterfront areas retained and minimize environmental impact/destruction. Thanks.
- I strongly favor a pedestrian overpass at the Amtrak station. At all costs, I would not want any alternative that crosses the Edmonds Marsh which the community has fought years to protect!
- The Main Street overpass makes the most sense money and environmentally. Prefer Main Street ferry overpass (minimum build) good access for emergency vehicles and pedestrians.
- None of Ferry Offload alternatives work, except for Edmonds Crossing which sounds years away. The Dayton Street terminal will ruin the fishing pier and Olympic beach, although it would be nice to have the terminal gone from Brackett's landing. People visit and come to live in Edmonds because of its ambiance and relationship to the water. Large structures, especially any of the Main Street overpasses, seem to ignore that principle. Seattle finally figured out that having a huge viaduct dominating its waterfront was no longer in its best interest. Will Edmonds Leaders arrive at that wisdom? (maybe they already have, or maybe they disagree). Ultimately Edmonds Crossing seems best for our city, except of course for the small businesses that depend on those in line. Perhaps they can be relocated. It seems best to find a less expensive alternative until the state is ready to move the ferry landing to Edmonds Crossing. The Main Street underpass alleviates a lot of the dangers we see every day with pedestrians, cars and trains all vying for the same space at the same time. In terms of "challenges" its hard to understand why acquiring the land for an aid car station and having emergency personnel go under or over the tracks on foot is that much of a "challenge." Compared to all of the land and construction needs for the larger projects? Also, since so many people won't walk to the corner of a long block to use a crosswalk (and we have seen many people cross 104 at the Best Western instead of using our new \$1 million crosswalk because "it's too far out of the way), it seems like pedestrian ferry passenger crossings located any distance from the terminal will invite dangerous at grade jaywalking. Have you thought of extending the tunnel on the west side so one access point is at the ferry passenger terminal, and another on the north side of Main, at Brackets Landing North? A LOT of people drop off and pick up ferry passengers during the day. Furthermore, on busy days, the majority of Brackett's Landing users park somewhere south of Main, since parking is so limited within the park. The current plan means these people still will want to cross Main from the passenger terminal entrance area to Brackett's Landing North. But I'm guessing nobody is going to walk down to the Midblock overpass. Emergency ferry offload should not be a criterion. That currently exists. Any ferry can be offloaded in case of an emergency. Vehicles just can't get across the

tracks if a train occupies them. But there is plenty of room down Admiral way and around the marina to offload one ferry. So it is a good value to spend more money to provide for emergency ferry offload?

- Perhaps the most expensive option to consider is this: Re-route the railroad tracks, from just west of the base of Point Edwards to a few hundred yards north of the crossing at Main Street. The track would have a down-gradient as it rounded the base of Point Edwards, skirting the edge of the wildlife refuge, until it would run within a cut-and-cover tunnel under SR104. It would continue under the SR 104 right-of-way and head north until it gradually increased in elevation, coming through the hillside below Sunset and re-joining the existing track in that vicinity. This realignment would likely be built with two tracks (something the Railroad may have plans to do anyway, within its existing right-of-way. A new Sound Transit and Amtrak Station could be built, either at the location of the old Skippers or perhaps immediately south of the new Top Pot Doughnuts. Since the tracks would be underground, most of the station could be also, minimizing at-grade construction. Perhaps a third train siding is provided so that passenger trains could be stopped without impeding freight traffic. The abandoned railroad right-of-way could then be redeveloped into a wonderful pedestrian-friendly waterfront environment, with better beach access provided. Railroad Avenue could be widened into a beautiful boulevard with pedestrian-scaled retail on both sides. This could even continue south of Dayton if the development interest is there. The benefits are many: A. Not only are there no conflicts with train traffic and every mode of circulation, but the tracks themselves are no longer visible from the downtown area. B. Since there are no crossings, there would be no more train whistles/horns. C. There would no longer be any obstructions to accessing the waterfront, and with new retail there it would become quite a draw to residents and tourists alike. D. As part of the waterfront redevelopment, a multilevel parking garage could be included, serving not only the retail but also Sound Transit and ferry parking. E. Construction disruption is minimal, with the most impact occurring with building the cut-and-cover tunnel along SR104. Likely the lanes could be temporarily narrowed and/or moved east, or perhaps the southbound traffic is reduced to one lane during construction. A tunnel boring machine (TBM) perhaps could be barged-in for the tunnel segment north of main street- cut-and-cover would not likely be feasible. One of the incentives to offer the railroad could be the completion of their two-track line from Seattle. I am aware that the single-line track in Edmonds does cause some freight traffic delays, made worse with the Amtrak and Sounder trains sharing it as well. This will certainly only get worse as rail traffic increases. I would be happy to discuss this in more detail.

Table A-18. Open House Meeting 4 – Question 2 Summary

Favored alternatives	Number
Edmonds Street Overpass	1
Edmonds Street Crossing	5
Admiral Way Overpass	2
Main Street Underpass	2
Main Street Overpass	1
Midblock Overpass	3
Main Street Ferry Underpass	1
Main Street Ferry Overpass (Min)	1

Flipchart Transcriptions

Emergency Access by Foot

- Anything that preserves the views from the approach to the waterfront is best. Underpass would probably do that better than an overpass.
- Prefer an alternative that accommodates emergency vehicles!

Emergency Vehicle Access

There were no comments for this category.

Emergency Vehicle Access and Ferry Load/Offload

- “Edmonds” is the view down Main St to the Sound. This view – down Main St to a freeway overpass is not “Edmonds”.
- Overpass at Main St is an ugly alternative – I hate it! 1. Do Midblock access by foot first. 2. While building Admiral Way Overpass. 3. Do not put overpass at Edmonds or Dayton!!
- Don't be do anything until the options are better defined and understood.

A.5 COUNCIL BRIEFING - NOVEMBER 7, 2016

A.5.1 Meeting Materials

Figure A-14. Council Briefing – Council Agenda Item

City Council Agenda Item

Meeting Date: 11/7/2016

Report and Recommendations From the Mayor's Task Force on the Alternatives Analysis for At-Grade Rail Crossing Conflicts (60 min.)

Staff Lead: Phil Williams

Department: Public Works & Utilities

Preparer: Phil Williams

Background/History

On June 7th, 2016, Council was updated on the Edmonds Waterfront Access study and the Alternatives Analysis of At-Grade Crossing Conflicts

On February 9, 2016, Tetra Tech updated Council on the Edmonds Waterfront Access Study.

On October 20, 2015, City Council approved the Local Agency Consultant Agreement with Tetra Tech for the Edmonds Waterfront Analysis.

Staff Recommendation

Receive the report and consider approval of recommendations from the Task Force and Mayor Dave Earling regarding specific recommendations contained therein

Narrative

The purpose of the Waterfront Analysis has been to identify near-term and long-term solutions at the Main St. and Dayton St. railroad crossings to address the following:

- waterfront access issues that prevent 24/7 emergency access,
- at-grade rail conflicts between vehicles and trains,
- improvements in pedestrian and bicycle access to Edmonds Waterfront

Tetra Tech has been analyzing the existing conditions through discussions with the stakeholder agencies and Edmonds citizens appointed to the Task Force. Agencies represented included Sound Transit, Community Transit, Washington State Ferries, WSDOT and Burlington Northern Santa Fe (BNSF) Railway. Since October 2015, bimonthly meetings were held with the Advisory Task Force. Open Houses were held in November 2015, January 2016, May 2016 and July 2016.

During the Level 1 Screening process, 43 concepts were evaluated based on a set of agreed upon criteria. The 13 highest rated concepts then moved to the Level 2 Screening process. Those were evaluated based on an expanded set of more detailed criteria. The highest rated alternatives have been presented to the Mayor. The Mayor is now presenting these results and his recommendation to City Council. Council is being asked to evaluate these recommendations and select a preferred alternative for implementation.

The total funding for this project was \$690,000, with funding coming from the State Legislature, the City of Edmonds, the Port of Edmonds, BNSF, Sound Transit, and Community Transit.

ts:

- Edmonds Street Flyover rendering 2
- Edmonds Street Flyover rendering 1
- Edmonds Waterfront Access report draft 20161103
- Edmonds Waterfront Access Council Briefing 20161107

Figure A-15. Council Briefing – Task Force Recommendation



MEMORANDUM

TO: MAYOR EARLING

FROM: CO-CHAIR MIKE NELSON, EDMONDS CITY COUNCILMEMBER
CO-CHAIR JIM ORVIS, PORT OF EDMONDS COMMISSIONER
ADVISORY TASK FORCE ON AT-GRADE RAIL CROSSINGS ALTERNATIVES
ANALYSIS

CC: PHIL WILLIAMS, PATRICK DOHERTY, BERTRAND HAUSS, ROB ENGLISH

SUBJECT: ADVISORY TASK FORCE RECOMMENDATIONS

DATE: OCTOBER 11, 2016

Following completion of the Level 1 Screening of solution concepts, the Level 2 Evaluation of Alternatives, and consultation with the community in four public open house meetings, the Advisory Task Force presents the recommendations below for consideration. Recommendations for immediate, near-term, and longer-term actions are presented to mitigate as soon as possible the hazards that at-grade rail crossings present to safety, and to provide more comprehensive grade separation solutions when the substantial resources for a larger project can be secured.

Immediate Recommendations

Several enhancements are recommended for implementation independent of the specific alternatives identified in the Edmonds Waterfront Access Study. While these enhancements are supportive of some elements of the Waterfront Access Study objectives, they are more appropriately advanced directly by the City or collaboratively with different groups of stakeholders. Recommended near-term actions include:

- Construct *crosswalk improvements at the Main Street at-grade railroad crossing* to improve pedestrian safety and comfort (Level 1 Screening concept On-site 4). Recommend this be implemented directly by the City and coordinated with BNSF and Washington State Ferries.
- Construct *crosswalk improvements at the Dayton Street at-grade railroad crossing* to improve pedestrian safety and comfort (Level 1 Screening concept On-site 5). Recommend this be implemented directly by the City with support from the Port of Edmonds and coordinated with BNSF.
- Implement *emergency notifications between the 911 dispatch center and BNSF operations* when an emergency is reported on the west side of the railroad tracks to notify trains to halt outside of downtown Edmonds so that police and fire can respond without delay by passing trains (Level 1 Screening concept Operational 4). Recommend this be implemented through coordination between the City, Fire District 1, and BNSF.
- Create and implement a *Waterfront Emergency Evacuation Plan* with measures that respond to a broad range of potential emergencies (Level 1 Screening concepts On-site 1, On-site 3, and On-site 7). Recommend this be developed and implemented by an appropriate group that would include City departments, Fire District 1, Swedish Hospital, Port of Edmonds, and Washington State Ferries, among others.

Near-Term Recommendations

Until a long-term solution can be implemented, rail traffic is expected to grow substantially along with increased volumes of ferry traffic and growth in all modes of local traffic. Conflicts will grow, and delays will increase, impacting response times for police, fire and EMS units to emergencies west of the railroad tracks. Several measures are recommended to mitigate the effects of such conflicts.

Emergency Vehicle Access to the Waterfront – *Edmonds Street Emergency Access Overpass*. The proximity of this access route to the police and fire stations provides immediate access to respond to waterfront emergencies. This ramp also provides a full-time pedestrian and bicycle connection from Sunset Avenue to Brackett's Landing Park and the waterfront trail system, enhancing the walkability of the waterfront. During emergency shutdowns of the at-grade rail crossings, vehicles can be offloaded from ferries with proper traffic control. The Edmonds Street location is recommended over other similar emergency vehicle access alternatives for reasons of cost, anticipated use, and superior access for emergency response. Implementing this project will eliminate the need for an emergency vehicle access ramp from a future grade-separated, vehicle ferry access project, such as the Edmonds Crossing project referred to below.

Intermodal connectivity – With increases in train traffic, and with eventual construction of the anticipated 2nd railroad track, there will be a growing need for safe pedestrian access to both sides of the railroad tracks. Of the several alternatives considered, the *Midblock Pedestrian Overpass* location would appear to best serve commuters, who would be the primary users. This overpass is collocated with rail, bus and ferry access points. Among the pedestrian overpass alternatives considered, the Midblock Pedestrian Overpass is most consistent with positive urban design objectives as it presents the least impact to established viewsheds, and its construction presents minimal environmental concerns due to its scale and setting. These features support the permissibility of this alternative, which is favored when assessing the ability to implement this project near-term.

Longer-Term Recommendation

Ultimately, grade separation for vehicles accessing ferries is necessary to resolve the growing conflicts between two major traffic movements through the downtown waterfront – rail traffic and vehicles loading and offloading the ferries. The combined effects of these growing pulses of traffic increasingly interrupt local traffic moving between residential and business centers in downtown and along the waterfront.

Based on currently foreseeable transportation funding conditions in the State, the timeframe for implementing grade separation of vehicle ferry access may be up to 20 years or longer. Washington State Ferries will appropriately take the lead in establishing the long-term direction of ferry operations, and WSF will soon initiate their Long Term Plan for the ferry system as a whole, including the Edmonds Terminal. The analysis and identification of alternatives within the Edmonds Waterfront Access study will inform WSF's planning efforts. In particular, the Task Force's review of several alternatives providing grade-separated vehicle ferry access concluded that the Edmonds Crossing project would be the superior option.

The Task Force recommends that the City *continue its current policy supporting the eventual implementation of the Edmonds Crossing project*, relocating ferry operations to a new terminal to be located at the Unocal property. Moreover, if ferry operations are relocated to the south end of the waterfront, in a configuration similar to the Edmonds Crossing project, it is recommended that the project also incorporate a means of emergency vehicle access to the south end of the waterfront. The Task Force recognized significant community benefit to an underpass along the Main Street alignment, but the projected comparative costs and long construction schedule make that option less desirable.

A thorough discussion of the Task Force's deliberations will be provided in the study report, to be issued this month.

Edmonds Waterfront Access Study



Council Briefing November 7, 2016





Edmonds Waterfront Access Study





HOW WILL WE STUDY ALTERNATIVES?

NOV. 2015	DEC. 2015 – FEB. 2016	MAR. 2016 – APR. 2016	MAY 2016 – JUL. 2016	AUG. 2016 – SEP. 2016
STUDY MILESTONE				
Understand existing conditions	Identify alternatives	Screen alternatives (Level 1 review)	Evaluate alternatives (Level 2 review)	Develop recommendations
TECHNICAL ANALYSIS STEPS				
<ul style="list-style-type: none"> Observe, quantify and document existing conditions at Main Street and Dayton Street crossings. Review data from previous studies and community input. 	<ul style="list-style-type: none"> Compile potential measures to improve access, including both long-range and near-term solutions. Develop screening criteria. Prepare list of alternatives for screening and evaluation. 	<ul style="list-style-type: none"> Review alternatives within initial criteria to determine feasibility. Eliminate infeasible alternatives. Document findings. 	<ul style="list-style-type: none"> Further develop the remaining alternatives. Apply more detailed criteria to evaluate alternatives. Document findings and initial recommendations. 	<ul style="list-style-type: none"> Develop preferred alternative recommendations based on analysis. Present to City Council and Legislature. Document final recommendations in a report.
GET INVOLVED				
Share your experiences with waterfront access and ideas for improving access <small>PM OOH</small>	Share your thoughts on alternatives to consider and screening criteria <small>PM OOH</small>	Provide feedback on screened alternatives <small>PM OOH</small>	Provide feedback on evaluated alternatives and initial recommendations <small>PM OOH</small>	Review preferred alternative recommendations <small>PH</small>
Share your feedback throughout the study				

- PM Public meeting
- OOH Online open house
- PH Public hearing



How does Rail Traffic Affect Access?

Gate Closures at Main Street and Dayton Street crossings:

- 37.5 closures average per day
- 80 minutes average per day (5.5% of the day)
- 2:12 average closure duration (3:54 for unit trains)

At Main Street crossing (daily average):

Vehicles Delayed (84% ferry traffic)	Pedestrians Delayed
709 delayed by closures	115 delayed by closures
28.7 vehicle-hours	4.7 person-hours

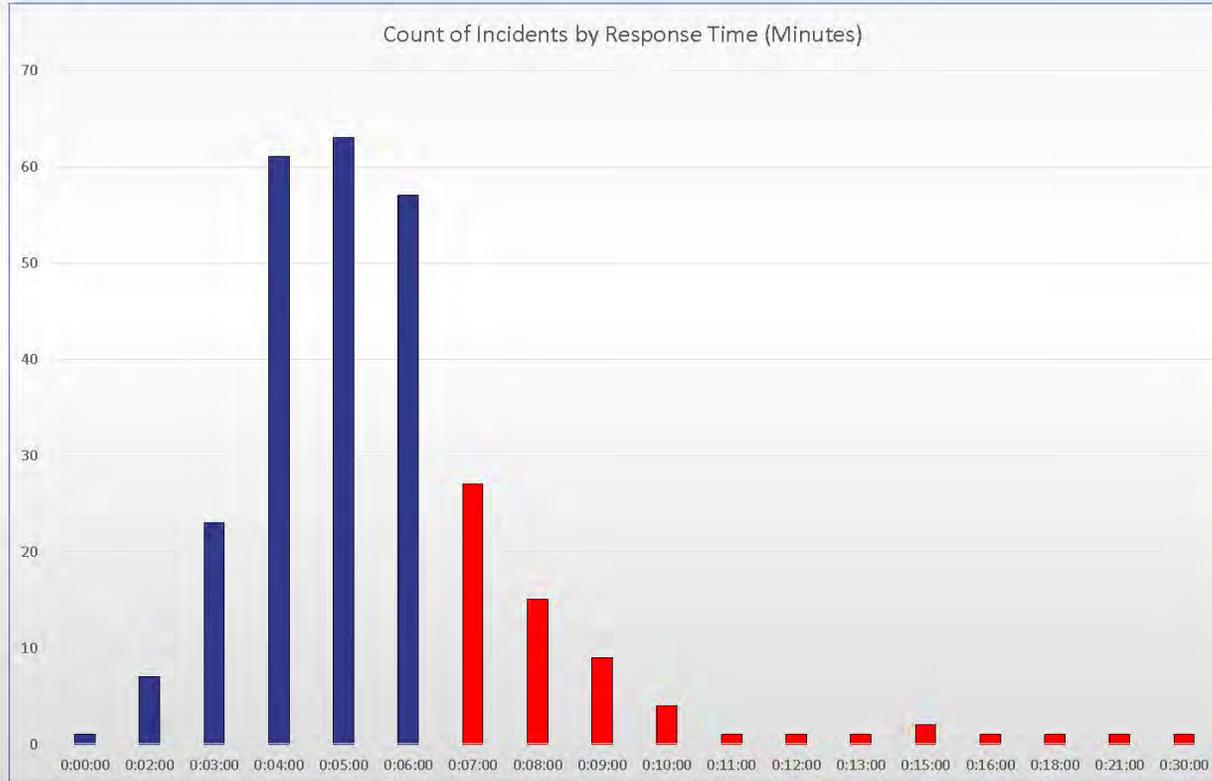
Over 10 ferry loadings/off-loadings affected daily

Based on traffic recorded, June 16 through July 3, 2012





Emergency Calls Across the Tracks



277 incidents

64 had response times of 7 minutes or longer

Variety of causes for delays

Additional 40-50 call-outs per year for rescue boat

Fire District 1 records July 1, 2010 to December 8, 2015



Hourly Distribution of Emergency Calls and Gate Closures





2-Stage Screening / Evaluation Process

