

# Edmonds Waterfront Access Study

## Purpose and Need Statement

### Project Purpose

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. 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

### Project Need

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.

Most train crossings simultaneously block both Main Street and Dayton Street. The average daily traffic (ADT) at each crossing is approximately 6,000 vehicles per day. 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 also increases, further isolating the waterfront from downtown Edmonds, emergency services, transit connections, and interrupting vehicle on/off loading operations at the ferry terminal.

### 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. 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 will 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.

During the period 2010-2015, police responded to 33 collisions on or adjacent to Main Street west of 2<sup>nd</sup> Avenue, and 56 collisions on or adjacent to Dayton Street west of 2<sup>nd</sup> 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).

Fire and emergency calls west of the BNSF tracks during the period July 1, 2010 to December 8, 2015 numbered 299. 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.

### At Grade Crossing Issues

At-grade railroad crossings in the middle of a vibrant community present challenges. They are often perceived as creating safety concerns as vehicles or pedestrians try to cross the track in advance of an on-coming 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.

### 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 has become increasingly 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.

### 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.

### [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.

### [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.

### [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.