



621 Woodland Square Loop SE  
Lacey, WA 98503 Drive SW  
PO Box 47250  
Olympia, WA 98504-7250  
(360) 664-1119 or (360) 664-1262

Web: [www.utc.wa.gov](http://www.utc.wa.gov)

Received  
Records Management

12/30/19 15:40

**GRADE CROSSING PROTECTIVE FUND  
2019 – 2021 GRANT APPLICATION  
OPEN CALL FOR PROJECTS**

State Of WASH.  
UTIL. AND TRANSP.  
COMMISSION

The Washington Utilities and Transportation Commission (UTC), through its Grade Crossing Protective Fund (GCPF), provides grants for projects that eliminate or mitigate public safety hazards at railroad crossings and along railroad rights-of-way in Washington State. Any public, private or non-profit entity may submit an application for a GCPF grant.

**To apply for a grant to eliminate or mitigate a public safety hazard at a railroad crossing or along a railroad right-of-way, complete the following information and submit it and any attachments to the UTC. If you are proposing a change to the warning devices at a public railroad crossing, complete the GCPF petition form.**

**Please be sure to complete the entire form. Incomplete or missing information will delay the grant review process.**

**Applicant Information**

Applicant Name: Matt Unzleman or Samuel Ballard  
Signature: \_\_\_\_\_  
Organization: Thurston County Public Works – Traffic Office  
Address: 9605 Tilly Rd S, Olympia, WA, 98502  
Phone: 360-867-2335 or 360-480-2655  
Email: [matt.unzleman@co.thurston.wa.us](mailto:matt.unzleman@co.thurston.wa.us) or [samuel.ballard@co.thurston.wa.us](mailto:samuel.ballard@co.thurston.wa.us)

**Project Information**

Attach additional sheets as necessary that provide the following:

1. A detailed summary of the hazard being addressed. Include any information about accidents or incidents at the site and photographs, drawings or other materials that support the application.

Old Highway 99 SE is major arterial (FFC #7) and a T4 freight route with an ADT of 9,000 that connects metropolitan Thurston County with the outlying rural parts of the county. North of Tenino is a reduced width (18'6") and height (12'6") legacy train tunnel that carries the BNSF main line above. This track also carries the Amtrak service between Vancouver BC and Salem OR.

Even though there are multiple signs along the road in both directions, (thanks to a previous UTC grant back in 2011 docket: # 101809) trucks frequently get stuck at the tunnel with no place to go, or room to get off the road. Recently when I-5 was closed due to an incident 13 tractor trailer units got stuck on Old Hwy 99 SE resulting in severe backups during evening rush hour in both directions. Most of these trucks are trying to avoid the Tilley Rd state detour route because it becomes so congested.

The previous UTC grant attempted to mitigate this issue by installing additional and larger warning signs in both directions prior to the tunnel. But this has proven to be inadequate as emphasized by the recent incident.

Since the previous grant the Thurston County Sheriff's Office reported that they have responded to 27 stuck trucks in vicinity of the Old Hwy 99 train underpass this year alone, with 6 truck strikes. This requires a significant amount of law enforcement resources to close Old Highway 99 in order to back up stuck trucks sometimes as far as a mile.

According to TCSO records there have been 9 over-height vehicle strikes since 2016, 44 stuck vehicles, and an approximately 27 hours of deputy's time spent conducting traffic control for these over-height stuck vehicles.

2. A detailed summary of the proposed project and how it will eliminate or mitigate the hazard. Include any drawings or construction plans for the proposed project.

Currently we're planning a three-phase project that will complete installation or upgrade of different guide, warning, regulatory and detour signs along with the installation of an advanced laser over-height detection system and warning beacons to alert misguided truck drivers.

Currently Public Works is working on Phase 1 of this project and expects to be finished in the field by late January 2020. This phase includes installing four additional large signs (48"x48" square) along Old Highway 99 SE and three upgraded and improved combination detour and directional guide signs near the BNSF crossing.

Two of them are warning signs that are going to be installed with anticipation of the dual use active and passive flashing beacon system. The last two are of similar specification to the warning set, except they are regulatory.

Phase 1 of this project also includes installing three high wattage LED streetlights around the tunnel on Old Highway 99 SE on PSE power poles. Two of them are going to be installed in the curve on the north side of the tracks, and the third will be installed just south of the tunnel entrance on the south side of the underpass. These installations will illuminate both approaches at night, and should help to the night time collision rate.

PSE will also drop two lines to two new service cabinets. These service cabinets will provide power for the warning beacons and controller cabinets.

Phase 2 includes the installation of the remaining warning, detour and applicable guide signs to safely move over height vehicle around Old Highway 99 in general and the detour in specific.

Phase 3 of this plan calls for the installation of the three over height laser system and the integration of them with the blink link enable beacons provided by Tapco. This laser over-height detection system will remotely trigger the beacons should an over height vehicle break the beam before the detour routes. After the detour route, south of Waldrick Road a third and final sentry system will be installed to alert both the Public Works Department and the Sheriff's Office should a misguided truck bypass the regulatory Waldrick Road detour and get stuck.

This is important because the distance from the face of the tunnel to the Waldrick Road detour is the better part of 6,200' with no meaningful place to pull over and get off the road or place for trucks to turnaround.

3. A list of all other companies, organizations, state agencies or local governments that may be involved in implementing this proposal, and the contact name, address and phone number for each (if known).

Primary agency:

Thurston County Public Works – Traffic Office 9605 Tilly Rd S, Olympia WA 98502  
Traffic Office Supervisor – Matt Unzleman - [matt.unzleman@co.thurston.wa.us](mailto:matt.unzleman@co.thurston.wa.us) - 360-867-2335.

Project Coordinator – Samuel Ballard – [samuel.ballard@co.thurston.wa.us](mailto:samuel.ballard@co.thurston.wa.us) – 360-480-2655

4. A cost estimate, including:
  - a. An itemized list of the total costs of the project.

b. Names of parties contributing to the project, including the applicant and the amount each is contributing.

Given the increasing truck strikes, the high-profile nature of the undercrossing and the additional effect that any delays on this route have on the region wide road network we are immediately addressing this issue.

Currently, we are working on completing Phase 1 of this project with an expected start date of January 13<sup>th</sup>, 2020 and a phase 1 completion date of March 1<sup>st</sup>, 2020.

Accordingly, we would like to pursue the grant to offset some of the additional costs involved with implementing phase 2 & 3.

The following items are broken down by phase.

**Phase 1**

- New Signs and hardware.
- New PSE street light installation.
- PSE power tap fees for installation from overhead lines to meters.
- Service cabinets with meters (x2)
- Labor and Industries electrical inspection and permit fees.
- Tapco 12" beacons (x4), and Blink Link enabled wireless modem and radio controller cabinet (x2).
- Cages for poured cement bases(x2).
- Concrete, concrete forms and misc. items needed for making cement sign bases and service cabinets pads.
- Misc. electrical hardware such as schedule 80 pvc pipe, wire, support columns etc....

**Phase 2**

- Remainder of the new signs, sign hardware and special posts.

**Phase 3**

- Cages for poured cement bases (x6).
- Concrete for cement bases.
- 4.5" round breakaway poles, bases and mounting hardware.
- Misc. electrical wiring and essentials.
- Tapco over height laser detection system and long-range wireless controllers/modems.
- Horizontal drilling and installation of electrical conduit under the road.

Old Highway 99 over height detection and warning system estimated project total = \$130,000. Please see Addendum C for more a detailed breakdown

5. The name of the party responsible for long-term maintenance, such as repair of fencing.

Thurston County Public Works – Traffic Office will be responsible for the long-term maintenance and support for the signs, markings and ITS throughout this project.

6. [An estimated timeline of the project.](#)

Phase 1 is currently in progress and we are anticipating having the first 7 sign sets installed by mid-January 2020. Along with installing 2 new service cabinets, pouring all applicable bases and installing underground electrical conduit. Having PSE provide a power drop and supply power to the new metered service cabinets then hardwire in the beacons, control cabinet and set up the blink link profile online, and 3 new street lights.

Phase 2. Remaining guide, warning and detour signage.

Phase 3 would see the integration and installation of the remaining laser over-height vehicle detectors that, will require 2 new service cabinets, 6 new 4.5” pedestal posts and horizontally drilling under the road to provide power taps as necessary and then reconfiguring the blink link system as necessary to act as an active, passive and sentry system as needed.

7. [A description of how the project’s success would be measured.](#)

Since 2011 when the previous project installed additional warning signs, we have had 7 reported collisions with the tunnel and numerous other events where by over height vehicle have become stuck sometimes a mile from the nearest turnaround spot. Each incident takes a significant law enforcement presence to temporarily close the road while the offending vehicle is backed up the length of the road in order to turn around.

For us, success would be not having any more road closures because of stuck over height vehicles or injuries due to vehicles striking the tunnel wall or ceiling.

8. [A description of the applicant’s experience in grant management or completing grant projects of this nature, including years of experience, types of projects completed and project cost/scope.](#)

Matt Unzleman is a senior engineer at Thurston County Public Works and the traffic office supervisor. Matt has worked on multiple civil engineering projects and grants since coming to TCPW.

Samuel Ballard is a Senior Maintenance Technician with TCPW in the traffic office and is learning about applying for grants and project implementation while working as the project coordinator for this project under the direct guidance of Matt Unzleman.

9. Any other information the applicant believes would be useful to the UTC in evaluating the project.

Please see the following attached documents with this application:

Addendum A: County Road Project # 041570 sign plans.

Addendum B: TCSO Report

Addendum C: Excel Spreadsheet with costs.

Available reported CLAS over height collision history for this crossing:

E973949, E521007, E136649, E285785, 3237452.

### **Railroad Commitment**

If the applicant is not the railroad owning the crossing or the tracks, the applicant must submit the attached Railroad Commitment form completed and signed by the railroad owning the crossing or tracks.

### **Submitting the Application**

After completing the application, please send the original to:

Washington Utilities and Transportation Commission

Attention: Grade Crossing Protective Fund

621 Woodland Square Loop SE

Lacey, WA 98503

PO Box 47250

Olympia, WA 98504-7250

A signed application may be filed electronically at [records@utc.wa.gov](mailto:records@utc.wa.gov). When filing electronically, please specify "Grade Crossing Protective Fund" in the subject line.

### **Assistance**

For questions or assistance, please contact:

- Mike Turcott at (360) 664-1119 or [mike.turcott@utc.wa.gov](mailto:mike.turcott@utc.wa.gov)
- Lori Halstead at (360) 664-1262 or [lori.halstead@utc.wa.gov](mailto:lori.halstead@utc.wa.gov)

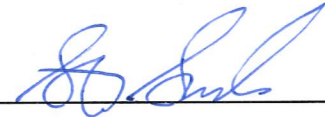
## Railroad Commitment

The undersigned represents the Railroad Company in the accompanying GCPF application.

We have reviewed the application and are satisfied that the conditions are the same as described by the applicant in this matter. We agree to allow construction, modification or demolition on a railroad right-of-way as described in the application.

Stephen Semenick

Printed name of Railroad Representative



Signature of Railroad Representative

Manager Public Projects

Title

BNSF Railway Co

Name of Railroad

2454 Occidental Ave S, Ste 2D, Seattle, WA 98134

Mailing Address of Railroad

206-625-6152

Telephone Number

stephensemennick@gmail.com

Email

Date:

12/30/2019