Funding Application

Competition: Regional FHWA
Application Type: Corridors Serving Centers
Status: submitted
Submitted: April 11th, 2022 12:29 PM
Prepopulated with screening form? No

Project Information

1. Project Title
   Canyon Rd. E.
2. Regional Transportation Plan ID
   4439
3. Sponsoring Agency
   Pierce County
4. Cosponsors
   N/A
5. Does the sponsoring agency have "Certification Acceptance" status from WSDOT?
   Yes
6. If not, which agency will serve as your CA sponsor?
   N/A

Contact Information

1. Contact name
   Peter Lewis-Miller
2. Contact phone
   12537986813
3. Contact email
   peter.lewis-miller@piercecountywa.gov

Project Description

1. Project Scope
   Widen and reconstruct the roadway to accommodate a four-lane facility with paved shoulders, curb, gutter, and sidewalk. The work will include illumination, interconnect, an enclosed drainage system, storm water flow control and runoff treatment facilities, retaining walls, stream relocation/enhancements where needed, and culvert improvements.

2. Project Justification, Need, or Purpose
   This project is part of the Canyon Road East Freight Corridor, a nearly three-decade series of capacity improvements that will connect the Port of Tacoma Manufacturing Industrial Center (MIC) to the Frederickson MIC. Improvements south of the project have widened Canyon Rd. E. into a four- to six-lane facility all the way to Frederickson. North of the project, two segments remain to complete the connection into Port of Tacoma MIC via 70th Ave. E. in Fife. This project will contribute to the corridor’s completion by widening the road to four lanes, and providing sidewalk, illumination, and surface water treatment. The project also provides stream relocation/enhancements and culvert improvements.
The Canyon Rd. E. corridor is a T1/T2 freight route which experiences the highest daily traffic volumes of any road in unincorporated Pierce County. This principle arterial is centrally located in Pierce County, and it boasts excellent capacity improvements for north-south traffic, linking directly between employment and industrial uses in Frederickson MIC, Port of Tacoma MIC, and Fife industrial areas. The current project complements surrounding improvements to prevent a bottleneck that could dampen the corridor's utility to regional centers.

Without this missing link between Frederickson and Port of Tacoma, freight traffic and commuters will continue to utilize existing routes through Tacoma (I-5 to SR-512) and Puyallup (SR-167 to SR-512) which are longer and more congested. Canyon Road's shorter route will reduce operating costs for corridor users, diminish particulate matter emissions (the project is within a PM 2.5 maintenance zone), and relieve pressure for the existing freight routes.

### Project Location

1. **Project Location**
   - Canyon Rd. E.

2. **Please identify the county(ies) in which the project is located. (Select all that apply.)**
   - Pierce

3. **Crossroad/landmark nearest the beginning of the project**
   - 336 Ft. North of 72nd St. E.

4. **Crossroad/landmark nearest the end of the project**
   - 1,000 South of Pioneer Way E.

5. **Map and project graphics**
   - CanyonCombinedAttachments.pdf, J2-CrashSummaryAndData.xls

### Plan Consistency

1. **Is the project specifically identified in a local comprehensive plan?**
   - Yes

2. **If yes, please indicate the (1) plan name, (2) relevant section(s), and (3) page number where it can be found.**
   - The project is shown on Pierce County's 2022 TIP, see attachment C1 for an excerpt. The project is also listed in the Transportation Element of the Pierce County Comprehensive Plan. See project ID MC49 on plan pages 12-145 and 12-148.

3. **If no, please describe how the project is consistent with the applicable local comprehensive plan, including specific local policies and provisions the project supports. In addition, please describe how the project is consistent with a transit agency plan or state plan, if applicable.**
   - N/A

### Federal Functional Classification

1. **Functional class name**
   - 14 Urban Principal Arterial

### Support for Centers

1. **Describe the relationship of the project to the center(s) it is intended to support. Identify the designated regional growth or manufacturing/industrial center(s) and whether or not the project is located within the center or along a corridor connecting to the center(s).**
   - The project continues expansion of the Canyon Road East Freight Corridor, which will provide a new direct connection between two designated Manufacturing Industrial Centers (MICs), Port of Tacoma MIC and Frederickson MIC, and expands capacity to accommodate a T-1 freight facility between them. (See att. F1)

### Criteria: Benefit to Regional Growth or Manufacturing/Industrial Center
1. **Describe how this project will benefit or support the housing and employment development in a regional growth center(s) and/or employment growth in a manufacturing/industrial center(s).**

The Canyon Road Freight Corridor Improvement is a Premier priority project within Pierce County's Comprehensive Plan (plan p. 12-148 and Mid-County Community Plan p. H-119, Map ID# MC 49). It strategically expands capacity and increases efficiency of the multi-modal transportation system to move goods, services, and people (PC Comp. Plan Goals T-1.1, T-22, T-24). Once completed, the new road will open a direct connection linking the Port of Tacoma MIC to the Frederickson MIC (PC Comp. Plan Goal T-6). This project is one of three remaining improvements to complete Canyon’s northern extension to 70th Ave. E. in Fife, where it provides access to I-5, Fife Industrial Areas, Port of Tacoma, and the new SR-167 alignment. The industrial and freight sector will see a drastic reduction in vehicle miles traveled when conducting freight between the Port of Tacoma and Frederickson. The Canyon Road Corridor is ~30% shorter than the alternate route through Tacoma (I-5 to SR-512) and ~20% shorter than the route through Puyallup (SR 167 to SR 512).

As a gateway to Frederickson MIC, the Canyon Road Freight Corridor is uniquely suitable for expanding business presence in the region. Studies indicate that more than 1,000 acres of vacant buildable lands are available in the Frederickson MIC, and another 550 acres are underutilized (Skillings-Connolly 2018 BCA, see attachment D1). The project will increase the economic viability and attractiveness of this land supply by completing a "straight-shot" connection between Frederickson and the Port of Tacoma, where projects like the SR-167 extension are creating a nexus for all the freight generators in the Tacoma/Pierce/King County areas.

2. **Describe how the project will support the development/redevelopment plans and activities (objectives and aims) of the center.**

**FREIGHT INFRASTRUCTURE and LAND UTILIZATION**

One of the major issues facing the Frederickson MIC is vacant or underutilized land supply. A 2018 economic assessment projects that Frederickson could support "up to 22,000 additional jobs on its 1,304 acres of vacant and potentially underutilized land" (Att. D3, p.1). Accordingly, the Pierce County Comprehensive Plan (PCCP) looks to capital investment to boost growth in Frederickson, stating "industrial users will be more willing to locate in the Employment Center with future Canyon Road improvements . . . improvements are necessary to make the Frederickson Employment Center an attractive place for industry to locate" (Att. E1, p.1). This project fulfills that need, adding direct connections between Frederickson and other manufacturing industrial hubs. Reductions in congestion and freight VMT will encourage new business to locate in Frederickson.

**TRANSIT VIABILITY**

Currently, there is no transit service linking the residential and employment sites along Canyon Road East. The PCCP contains multiple goals encouraging such a service along the corridor as a way of ensuring access to jobs, especially if the service also links to regional transit centers in Puyallup and Tacoma (Att. E1, p.2-5). Completion of the Canyon Road East Freight Corridor will make transit along Canyon Road East a much more appealing prospect by encouraging commuter demand for the corridor. The corridor crosses multiple Pierce Transit services lines, including the 'trunk' line route 4, and routes 400 and 409. A future bus route along Canyon which connects Frederickson to Port of Tacoma, or Downtown Tacoma, would be a huge boon for the corridor's efficiency and the regional transit system.

3. **Describe how the project will benefit a variety of user groups, including commuters, residents, and/or commercial users.**

The project facilitates regional connectivity to the Canyon Road East Freight Corridor. This will affect a variety of user groups:

--- Commuters will experience less congestion and shortened commute times between Frederickson, Port of Tacoma, and the Fife industrial areas.

--- Industry will benefit from an improved connection to the freight corridor, reducing travel time and operating costs.

--- Medically sensitive populations will benefit from reduced particulate matter emissions within a PM2.5 maintenance zone due to regionally-reduced vehicle miles traveled.

4. **Describe how the project will support the establishment of new jobs/businesses or the retention of existing jobs/businesses including those in the industry clusters identified in the adopted regional economic strategy.**

The project will help attract and retain jobs within the Frederickson and Port of Tacoma Manufacturing Industrial Centers by providing efficiency and a more direct route in the freight transportation network. Completion of this network is a top priority in Pierce County (PC Comp. Plan p. 6-9). A 2018 economic assessment estimated that 44% of Frederickson's developable areas are vacant, and a further 12% are underutilized (see attachment D1). This represents a huge potential for industrial/manufacturing expansion (up to 22,000 additional jobs, Skillings-Connolly 2018 Economic Assessment). With the appropriate infrastructure, businesses will have the mobility and the labor force to take advantage of this supply.

The Fife industrial areas will similarly benefit (see attachment D2), as will the commercial
The Fife industrial areas will similarly benefit (see attachment D2), as will the commercial
zoning all along the Canyon Road East Freight Corridor that connects these industrial areas
with T1 and T2 freight routes. The Canyon Road East route between Frederickson and Port of
Tacoma is 20%-30% shorter than I-5 or Puyallup/SR 167 routes, making it an attractive
location to house and retain a skilled labor force.

Criteria: Circulation, Mobility, and Accessibility

1. Describe how this project supports a long-term strategy to maximize the
efficiency of the corridor, including TDM and activities and ITS improvements that
use advanced technologies or innovative approaches to improve traffic flow.
Describe the problem and how this project will remedy it.

Pierce County maintains a fiber optic traffic signal interconnect system along our busiest
corridors. This network of signals allows for real-time monitoring of Canyon Rd. E., 112th St.
E., 176th St. E., and other select areas. Recent projects in the Frederickson area have
installed dynamic signal systems on Canyon Rd. E. which adjust traffic signal timings
automatically based on live traffic patterns. This reduces traffic delay, minimizes idling, and
enhances safety. The County is analyzing the performance of this system in hopes of
expanding the same functionality north along Canyon Rd. E. and to the other interconnected
corridors. The interconnect system makes such innovations possible, and provides the
detailed traffic data that supports their use.

This project will extend the existing interconnect system north to include several major
intersection improvements which are part of future projects. Without the connection, those
intersections will be isolated from the system and unable to provide the same level of
monitoring and potential innovation. Given the challenges of increased freight traffic
combined with an already-identified hill climb speed differential, this segment will benefit from
the close monitoring that the interconnect system will provide.

2. Describe how this project provides a “logical segment” that links to a regional
growth or manufacturing/industrial center.

This project is one of three remaining segments to complete a full 4- to 6-lane corridor in
Pierce County's unincorporated area all the way south to Frederickson MIC (Att. A2). Regional
and local investment in the corridor has steadily progressed from south to north over the past
two decades, and this final effort will complete the regional connection into Fife. Canyon
Road will harmonize with recent investments by Fife and WSDOT which provide access to Port
of Tacoma via either 70th Ave. E. over I-5, or the new SR 167 alignment.

3. Describe how the project fills in a missing link or removes barriers to/from a
center.

The existing connections between northern Canyon Rd. E. and 70th Ave. E. are not suitable
for freight or commuter traffic, especially not in the volumes that Canyon and 70th are
designed to accommodate as a corridor serving two regional MICs. The route winds through
various two-lane collectors and minor arterials, requiring six turning movements through
multiple acute-angle and/or unsignalized intersections, before finally reaching 70th Ave. E.
Speeds vary from 25 to 40 MPH, passing through a school zone at one point. In the middle of
the route, the functionally-obsolete Milroy Bridge over the Puyallup River presents an
especially narrow obstacle with vehicle size restrictions.

Altogether, these features constitute a major barrier to freight traffic. Two projects, together
dubbed the "Canyon Road Regional Connection," will realign the roadway to create a safer,
pedestrian-friendly, and more continuous freight route through the Puyallup valley and over
the Puyallup River. The subject of this grant application (informally dubbed the "Hill Climb," see
att. A2) is a project immediately to the south of that Regional Connection. It will supply the
appropriate capacity in preparation for a dramatic increase in freight and pedestrian traffic
resulting from planned growth within the MICs and along the corridor. Without this link, the
Regional Connection improvements will be little better than the existing route through the
Puyallup valley.

4. Describe how this project will relieve pressure or remove a bottleneck on the
regional transportation system and how this will positively impact overall system
performance.

Without this improvement the existing 2-lane road will cause a significant bottleneck for the
completed improvements to the south, and the two future improvements to the north, all of
which are 4- to 6-lanes. Projected ADTs in the design year exceed the service thresholds
established by Pierce County for a 2-lane arterial by 50-100%, and the County's 2021 Traffic
Study (Att.F3, p.2) indicates that total delay for southbound (uphill) travel will be 273 seconds
per vehicle in the design year. The chosen 4-lane section will reduce this to 2 seconds per
vehicle in the design year.

Additionally, the completed corridor adds efficiency to the regional transportation network by
providing an alternative freight route between Port of Tacoma MIC and Frederickson MIC which
is shorter than the existing routes (Att.F1). The Canyon Corridor is ~13 miles, whereas
traveling through Tacoma is ~18 miles, and the Puyallup route is ~16 miles. Canyon Road
East is expected to reduce VMT and help relieve longstanding congestion problems, such as
the truck bottleneck at I-5/SR-16, which ATRI has ranked among the 100 worst in the nation for many years (Att.F2).

5. **Describe how the project provides opportunities for active transportation that can lead to public health benefits.**

   Pierce County has been improving Canyon Rd. E. between Frederickson and Port of Tacoma for nearly three decades. Sidewalks installed by this project will tie into the corridor sidewalk network that Pierce County has already constructed during that years-long effort. The Pierce County Parks, Recreation, & Open Space Plan (PROS) classifies Canyon Rd. E. as a “Non-Motorized Transportation Plan Link” (PROS p. 6-12). The designation is intended to help develop a comprehensive and connected network of trails that supports recreation, contributes to healthy lifestyles and local economies, links transportation routes, and conserves wildlife corridors” (PROS p. 6-3). The Canyon Rd. E. project realizes this vision by continuing the non-motorized improvements northward.

   The project will create a link between existing and future active transportation facilities. Pierce County is designing two roadway/non-motorized improvements to the north which will continue the pedestrian network across the Puyallup Valley, over the Puyallup River, and into Fife. Those projects include railroad grade separation, a dedicated suspended pedestrian bridge, rectangular rapid flashing beacons, ADA improvements, and an extension of the long-planned Puyallup River Trail between Tacoma and Puyallup.

   The project is also adjacent to a recent "road diet" project which created a dedicated bike lane on 72nd St. E. (Att.G1). The bike lane connects to the Pipeline trail which is 1.5 miles west at Waller Rd. E. The pipeline trail also runs through Orange-Gate Park, which can be accessed with a 0.82 mile walk south from the intersection at 72nd St. E. The 160 acre park is open to horse riders, walkers, leashed animals, hikers, joggers, bird watchers and mountain bikers.

6. **Describe how the project provides or benefits a range of travel modes to users traveling to/from centers, or if it provides a missing mode.**

   The project expands access for freight, commuter, and non-motorized road users to reach the Port of Tacoma MIC, the Frederickson MIC, the Puyallup Regional Growth Center, and the Tacoma Regional Growth Center. In addition to being a critical north-south freight route, Canyon Rd. E. doubles as a vital commuter connection to family wage jobs in Pierce County's most significant employment centers. Transit access along 72nd St. E. is adjacent to the southern project limits where Pierce Transit's Route 409 links to the Puyallup Regional Growth Center. Future pedestrian improvements to the north will create another transit access point within 1 mile of the project to Route 400, which serves both Tacoma and Puyallup Regional Growth Centers.

**Criteria: Equity**

1. **Identify the population groups to be served by the project.**

   The project serves greater than average populations of disabled, elderly (65+), and youth (5-17), while also bridging areas of "Very Low" and "Moderate" opportunity shown on PSRC's opportunity index (See Att.H1 for equity maps). On a regional scale the project diverts traffic from congested routes that are adjacent to "Air Quality Focus Communities" identified by Puget Sound Clean Air Agencies (See Att.H2 and question 3 below).

2. **Identify the disparities or gaps in the transportation system / services for these populations that need to be addressed.**

   Each of the highly-affected populations that the project serves (disabled, elderly, and youth) experience their own mobility challenges which the project addresses. There is no sidewalk along Canyon Rd. E. connecting 72nd St. E. to Pioneer Way E., and thus no way for these populations to reach future improvements to the north, or the existing pedestrian network to the south, without the use of a vehicle. Street lighting is also absent, making travel during twilight or hours of darkness a hazard.

3. **Describe how the project is addressing those disparities or gaps and providing a benefit to the population groups identified under question 1 above.**

   The project's sidewalks, paved shoulder, and illumination will remedy non-motorized gaps, completing a safe and continuous network of non-motorized improvements along Canyon Rd. E. all the way from Frederickson to Fife.

   The project is also anticipated to reduce VMT on the regional scale (see the Air Quality section of this application) by providing an alternative to longer and more congested routes. These alternate freight routes cut through various "Air Quality Focus Communities," a designation used by the Puget Sound Clean Air Agency to highlight disproportionate socioeconomic impacts posed by the built environment. These communities are concentrated around freight routes that this project seeks to relieve (see Att.F1 & H2).

   Further, the benefits are all contained within Pierce County's PM2.5 maintenance area (Att.H2). The maintenance zone was designated in 2015 and monitoring will continue through 2035. Fewer miles traveled means that the region will have an easier time meeting its...
4. **Describe the public outreach process that led to the development of the project.**

The Canyon Road Freight Corridor is the result of several decades of near continuous joint planning between Pierce County citizens, their government, and the various groups with interests in the Mid-County and Frederickson areas. The project was identified as a Premier priority in the 1992 Transportation Plan, which became the Transportation Element of the Pierce County Comprehensive Plan. Both plans had significant public involvement opportunities to help craft the County's transportation priorities. Council resolutions in 1999 continued definition of the corridor by convening community planning boards to coordinate an appropriate design goal and vision for Canyon Road.

More recently, Pierce County's community and comprehensive plan updates (referred to as the "Centers and Corridors" legislation) have modernized the Mid-County and Frederickson plan elements, providing guidance for Canyon Rd. E. projects. The plans were developed, reviewed, and discussed with Pierce County staff, various land use advisory commissions, the Planning Commission, the Council, and other stakeholders. Public comment was solicited at multiple stages in successive legislative rounds. See attachment E1 p.6-7 for a community plan excerpt summarizing the recent public outreach.

5. **Describe how this outreach influenced the development of the project.**

Community outreach and comprehensive plan updates have solidified the vision of Canyon Rd. E. according to the public's desire “to see safe bicycle and pedestrian facilities and transit on Canyon Road East” (Att.E1, p.7) and focus on "widening of Canyon Road East north of SR-512" which “will be a major focal point for future investment” (Att.E1, P.8). The project was identified as a Premier priority in the 1992 Transportation Plan, which became the Transportation Element of the Pierce County Comprehensive Plan. Both plans had significant public involvement opportunities to help craft the County's transportation priorities.

6. **Is the project in an area of low, medium, or high displacement risk?**

The project is in an area of low displacement risk.

7. **If the project is in an area of medium or high displacement risk, identify the broader mitigation strategies in place by the jurisdiction to address those risks.**

N/A

Criteria: Safety and Security

1. **Describe how the project addresses safety and security.**

   The project adds paved shoulders, curb, gutter, sidewalk, and illumination for a segment of Canyon Road East where these elements are absent. The completed improvements, along with the two future projects to the north, will harmonize the needs of freight and pedestrians. Each will benefit from necessary facilities with fewer modal conflicts, fewer intersections, and more natural connections between communities in Fife, the Puyallup River, the Puyallup Valley, and the Canyon Corridor extending south.

   Between 2017 and 2021 there were 9 crashes within the project limits, and 30 at the adjacent intersections (Att. J1 & J2). See the next question for a discussion of how the project addresses these incidences.

2. **Describe how the project helps protect vulnerable users of the transportation system, by improving pedestrian safety and addressing existing risks or conditions for pedestrian injuries and fatalities, and/or adding or improving facilities for pedestrian and bicycle safety and comfort.**

   **GENERAL BENEFITS**

   Pierce County's project will enhance the safety of the existing transportation facility. The current road configuration does not allow faster vehicles to pass slow moving uphill traffic, the paved shoulder is narrow or nonexistent, there is no room for foot traffic along the roadside, and roadside obstacles prevent an adequate clear zone (see photo in Att. I1, p.1). The project will enhance safety by providing separation of non-motorized and vehicular traffic, paving and widening the shoulder, illuminating the roadway, and, to the extent possible, removing obstacles from the clear zone.

   The project also connects to safety improvements recently completed to the south as part of the 72nd St. E. road diet, and to future improvements to the north which are separating the grade over a freight-heavy railroad and constructing a dedicated pedestrian bridge over the Puyallup River. Without the connection provided by this project the pedestrian and road network will remain broken into separate northern and southern segments, limiting the benefit of improvements on either side.

   **CRASHES**

   From 2017 to 2021 there were 9 crashes within the project limits (See att. J1 for a crash map, and J2 for summary charts and the full crash data). Two-thirds of these incidences involved injuries. This is a much higher injury rate than crashes at the adjacent intersections, for which only one-third of the crashes involved injury. A summary of potential causes and mitigations for different crash types follows:

   **FREIGHT ACCIDENTS**
6 of the 9 crashes involved trucks, 2 of which were tractor-trailers. Both tractor-trailer incidences resulted from passenger vehicles attempting to pass in the southbound uphill direction, which hints at a speed differential between larger and smaller vehicles. The project will mitigate such crashes by adding additional lanes in each direction, allowing for slow moving vehicles to keep to the right while passing vehicles use the inside lanes.

ROADSIDE OBSTACLE ACCIDENTS
4 of the 9 crashes involved roadside obstacles like retaining walls, trees, signs, and concrete barriers. The existing roadway has a narrow clear zone, with limited or no shoulder area in some sections. The project's additional lanes, paved shoulder, and curb/gutter/sidewalk should reduce collisions with obstacles by providing greater roadway delineation and much more space for errant vehicles to recover.

NIGHTTIME ACCIDENTS
4 of the 9 crashes occurred at night, with 3 accident reports noting the absence of street lighting. The project will include illumination to improve visibility during hours of darkness.

3. Describe how the project reduces reliance on enforcement and/or designs for decreased speeds.
   This project uses mode separation, roadway delineation, and additional clear zone to enhance safety. Dedicated pedestrian facilities, paved shoulders for cyclists, and increased road capacity for freight/commuters will create a more predictable, forgiving, and visible environment which will decrease modal conflicts.

4. Does your agency have an adopted safety policy (e.g., Vision Zero, Target Zero, etc.)? How did these policies inform the development of the project?
   The project implements Pierce County's safety goals expressed in the Comprehensive Plan to protect non-motorized transport with sidewalk improvements and paved shoulders (Att.E1, P.9), especially throughout the Canyon Road East corridor (Att.E1, P.10).

Criteria: Air Quality and Climate Change

1. Please select one or more elements in the list below that are included in the project's scope of work, and provide the requested information in the pages to follow.
   Roadway Improvement, Bicycle and Pedestrian Facilities

Air Quality and Climate Change: Roadway Improvement

1. What is the length of the project?
   0.71 Miles

2. What is the average daily traffic before and after the project?
   Pierce County's 2021 Traffic Study determined that AADT in the previous year was 9,325 with 15% truck traffic, it also projected that 2045 AADT will be 23,600 (Att.F3, p.1). This confirms traffic studies for the adjacent projects to the north, which estimate North-South AADT to be between 27,000 and 38,000 ADT by 2040.

3. What is the average speed before and after the project?
   The current speed limit of 40 miles per hour is not expected to be changed.

4. What is the average daily transit ridership along the corridor?
   N/A

5. How many daily peak period transit trips serve the corridor?
   N/A

6. What is the expected increase in transit speed due to the BAT/HOV lanes?
   N/A

7. What is the expected increase in transit ridership due to the BAT/HOV lanes?
   N/A

8. What is the percentage of freight truck traffic on the facility?
   15%

9. Will the project result in shorter trips and reduced VMT? If so, please explain.
   Yes, the project will contribute to a significant VMT reduction in the region. This project, together with 2 remaining projects to the north, will complete the Canyon Road East freight corridor. This new continuous link between Port of Tacoma MIC and Frederickson MIC will be 3 to 5 miles shorter than alternative routes through Tacoma (via I-5 to SR 512 East) or Puyallup (via SR 167 to SR 512 West), see attachment F1 for a diagram. It is assumed that a significant portion of traffic will divert from these longer routes to Canyon Road East, saving time and operating expense.
The exact VMT saved is difficult to model and quantify, however, there is good reason to believe the reduction will be substantial. Traffic studies indicate that AADT in 2045 will increase to at least 23,600, and could be as high as 38,000. If one considers just the 15% freight traffic portion of this increase (+2,140 to +4,300 trucks) and assumes that this consists of trips that would otherwise use I-5 or SR 167, that would save at least 3 miles of travel per truck per day for an annual VMT savings of 2.3 to 4.7 million miles. While these assumptions are broad, they nonetheless illustrate the magnitude of the potential benefit, keeping in mind that the 2.3 to 4.7 million VMT figure is just for freight, and does NOT include passenger vehicles, which will also consist of some percentage of trips diverted from longer routes themselves. For lack of more comprehensive regional models, 2.3 million VMT saved is likely a minimum.

10. Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.).
Attachment F1 - Freight Route Comparison Map.
Attachment F3 - Pierce County 2021 Traffic Study

Air Quality and Climate Change: Bicycle and Pedestrian Facilities

1. Describe the facilities being added or improved
The project includes curb, gutter, and 6-foot-wide sidewalk on both sides of the roadway, 4-foot paved shoulders for shared bicycle use, and illumination.

2. What is the length of the proposed facility?
0.71 Miles

3. Describe the connections to existing bicycle/pedestrian facilities and transit.
The new facilities link to the completed Canyon Road Corridor to the south, which has full pedestrian facilities, paved shoulders, and intermittent bike lane markings. The southern project limits are adjacent to 72nd St. E. which has multiple non-motorized and transit facilities such as marked and paved bike lanes, connection to the Puyallup Regional Growth Center via Pierce Transit Route 409, and links to the Pipeline Trail. The southern project limits are also within 0.8 miles of Orange Gate Park where recreational users will find 160 acres dedicated to horse riding, walking, leashed animals, hiking, jogging, bird watching, and mountain biking.

4. Describe the current bicycle/pedestrian usage in the project area. If known, provide information on the shift from single occupancy vehicles.
Please use regional default data.

5. What is the expected increase in bicycle/pedestrian usage from the project? If known, provide information on the shift from single occupancy vehicles
Please use regional default data.

6. What is the average bicycle trip length?
Please use regional default data.

7. What is the average pedestrian trip length?
Please use regional default data.

8. Please describe the source of the project data provided above (e.g., Environmental Impact Statement, EPA/DOE data, traffic study, survey, previous projects, etc.)
N/A

Air Quality and Climate Change: CMAQ Questions

1. For CMAQ projects: PSRC will utilize the “Useful Life” table included in the “Air Quality Guidance” document contained in the Call for Projects. If you have an alternate useful life figure for your project, please explain and provide the appropriate documentation supporting the deviation from the approved Useful Life table.
N/A

2. For CMAQ projects: Is the project located as a 7 of 10 for diesel pollution and disproportionate impacts in the Washington Environmental Health Disparities map?
N/A
Criteria: Project Readiness and Financial Plan

1. **What is the PSRC funding source being requested?**
   - STP

2. **Has this project received PSRC funds previously?**
   - No

3. **If yes, please provide the project’s PSRC TIP ID**
   - N/A

<table>
<thead>
<tr>
<th>Phase</th>
<th>Year</th>
<th>Alternate Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>2025</td>
<td></td>
<td>$2,000,000.00</td>
</tr>
</tbody>
</table>

Total Request: $2,000,000.00

**Total Estimated Project Cost and Schedule**

**PE**

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Secured/Unsecured</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>STP</td>
<td>Unsecured</td>
<td>$2,000,000.00</td>
</tr>
<tr>
<td>Local</td>
<td>Reasonably Expected</td>
<td>$1,670,000.00</td>
</tr>
</tbody>
</table>

**Expected year of completion for this phase:** 2029

**ROW**

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Secured/Unsecured</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Unsecured</td>
<td>$4,632,000.00</td>
</tr>
</tbody>
</table>

**Expected year of completion for this phase:** 2029

**Construction**

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Secured/Unsecured</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>Unsecured</td>
<td>$20,540,000.00</td>
</tr>
</tbody>
</table>

**Expected year of completion for this phase:** 2031

**Summary**

1. **Estimated project completion date**
   - December 2031

2. **Total project cost**
   - $28,842,000.00

**Funding Documentation**

1. **Documents**
   - C1-2022_TIP_Excerpt.pdf

2. **Please enter your description of your financial documentation in the text box below.**
   - Pierce County has expended or committed $1,022,000 to the project (See attached 2022 TIP excerpt). If this grant is awarded, Pierce County will provide the remaining $648,000 to fully fund the PE phase from reasonably expected local traffic impact fees. Annual receipts from this funding source have averaged $7,300,000 in the past three years.
Project Readiness: PE

1. **Are you requesting funds for ONLY a planning study or preliminary engineering?**
   Yes

2. **What is the actual or estimated start date for preliminary engineering/design?**
   2019

3. **Is preliminary engineering complete?**
   No

4. **What was the date of completion (month and year)?**
   N/A

5. **Have preliminary plans been submitted to WSDOT for approval?**
   No

6. **Are there any other PE/Design milestones associated with the project? Please identify and provide dates of completion. You may also use this space to explain any dates above.**
   Pierce County has completed some preliminary design work already, and efforts are continuing to prepare the project for later design phases which may be federally-funded.
   - 2019 - Design begins
   - 2024 June - 30% design and NEPA start
   - 2024 Oct - Federal funding obligation
   - 2026 Nov - ROW plan completion
   - 2026 Dec - NEPA approval, ROW start
   - 2029 Dec - Design complete, ROW certification
   - 2030 Apr - Construction advertisement

7. **When are preliminary plans expected to be complete?**
   N/A, Pierce County is a CA agency

**Other Considerations**

1. **Describe any additional aspects of your project not requested in the evaluation criteria that could be relevant to the final project recommendation and decision-making process.**
   Pierce County is committed to the most cost-efficient solutions for completing the Canyon Rd. E. corridor. To right-size the project Pierce County's 2021 traffic study analyzed various 3-, 4-, and 5-lane options. The County has opted for a 4-lane road section which balances cost, environmental impacts, and right-of-way concerns with capacity and safety needs. The 4-lane option provides nearly all the design year capacity benefits of 5 lanes, while substantially improving over the projected level-of-service of 3 lanes.
   - The County is also studying alternatives for upgrading the Canyon Creek culvert, which crosses the road midway through the project. An alternative has been chosen which restores fish passage, shortens the crossing, and minimizes the cost.

2. **Describe any innovative components included in your project: these could include design elements, cost saving measures, or other innovations.**
   N/A

3. **Describe the process that your agency uses to determine the benefits of projects; this could include formal cost-benefit analysis, practical design, or some other process by which the benefits of projects are determined.**
   Each of Pierce County's projects are compared in the context of a specific set of transportation system needs. As a project develops it is placed into an evaluation category: Bridge, Concurrency, New Alignment, Ferry, Non-Motorized, Miscellaneous, Preservation, and Safety/Operations. Projects within each category are assessed against one another based on measures appropriate for each grouping. For example, the "Bridge" category incorporates Sufficiency Rating, The "Concurrency" category utilizes V/S ratio and peak flows, etcetera. Once rated within each category, the projects are then rated against one-another in a combined list.
   - As of 2021 the subject of this grant request ranked 4th in the "concurrency" category behind two other Canyon Rd. E. projects to the south, both of which will be complete this year. Two more Canyon Rd. E. projects to the north are ranked 1 and 2 in the "New Alignment" category. The rankings indicate our project's importance as a critical segment linking the County's highest priority improvements.

4. **Describe the jurisdiction’s Apprenticeship Utilization Program / Ordinance in place for projects over $1 million with at least 15% Apprenticeship Utilization or programs that prioritize the use of local hire and the diversification of the workforce.**
5. **Final documents**
   N/A
Port of Tacoma
Frederickson

Legend
- Project Location
- Urban Principal Arterial
- Urban Minor Arterial
- Urban Major Collector
- Urban Local Access
- Waterbodies
- Hydro Centerline

This is not a survey. Orthophotos and other data may not align. Pierce County assumes no liability for variations ascertained by actual survey. All data is expressly provided "as is" and with all faults.
Nearby Projects

Three Projects Remain:

Canyon Rd E
1. The Hill Climb
   72nd St E to Pioneer Way E

Canyon Rd Regional Connection
2. The Railroad Crossing
   Pioneer Way E to 52nd St E
3. The River Crossing
   52nd St E to 70th Ave E
### 2022-2027 TRANSPORTATION IMPROVEMENT PROGRAM

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Prior</th>
<th>Expend.</th>
<th>Local</th>
<th>Federal</th>
<th>State</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2022</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2023 Future Allocation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2024 Future Allocation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2025-2027 Future Allocation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2022 - 2027 TOTAL</td>
</tr>
</tbody>
</table>

#### Project Title: CANYON RD E
- **Limits:** 400 ft N/O 84 St E to 72 St E
- **Scope Description:** Widen and reconstruct roadway to provide additional lane(s).

#### Other project information:
- **Priority Group:** CAP
- **Work Class:** 2
- **CRP:** 5736
- **Est. Total Cost:** 14,800
- **Map ID:** 544
- **Fully funded:** Yes
- **Map Page No.:** 4
- **Council District:** 5
- **Length (miles):** 0.88
- **Elements:** A,B,D,F,G,H,K

<table>
<thead>
<tr>
<th>Revenue Sources in $1,000's</th>
<th>7,285</th>
<th>220 TIF</th>
<th>2,163</th>
<th>337</th>
<th>2,505</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total: 2023</strong></td>
<td>7,285</td>
<td>220</td>
<td>2,163</td>
<td>337</td>
<td>2,505</td>
</tr>
<tr>
<td><strong>Local:</strong></td>
<td>746</td>
<td>10 TIF</td>
<td>337</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Federal:</strong></td>
<td>377</td>
<td>5 TIF</td>
<td>2,163</td>
<td>337</td>
<td>3,663</td>
</tr>
<tr>
<td><strong>State:</strong></td>
<td>4</td>
<td></td>
<td>337</td>
<td>3</td>
<td>3,663</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>4</td>
<td></td>
<td>360</td>
<td>4</td>
<td>3,663</td>
</tr>
</tbody>
</table>

#### Project Title: CANYON RD E
- **Limits:** 72 St E to Pioneer Wy E
- **Scope Description:** Widen and reconstruct roadway to provide additional lane(s).

#### Other project information:
- **Priority Group:** CAP
- **Work Class:** 2
- **CRP:** 5903
- **Est. Total Cost:** TBD
- **Map ID:** 470
- **Fully funded:** No
- **Map Page No.:** 4
- **Council District:** 5
- **Length (miles):** 0.96
- **Elements:** A,B,D,F,G,H,J

<table>
<thead>
<tr>
<th>Revenue Sources in $1,000's</th>
<th>17,496</th>
<th>360 TIFP</th>
<th>312</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total: 2023</strong></td>
<td>17,496</td>
<td>360</td>
<td>312</td>
</tr>
<tr>
<td><strong>Local:</strong></td>
<td>1,231</td>
<td>10 TIFP</td>
<td>312</td>
</tr>
<tr>
<td><strong>Federal:</strong></td>
<td>806</td>
<td>10 TIFP</td>
<td>312</td>
</tr>
<tr>
<td><strong>State:</strong></td>
<td>4,648</td>
<td>10</td>
<td>312</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>4,648</td>
<td>10</td>
<td>312</td>
</tr>
</tbody>
</table>

#### Project Title: CANYON RD E
- **Limits:** 99 St Ct E to 900 ft N/O 84 St E
- **Scope Description:** Widen and reconstruct roadway to provide additional lane(s).

#### Other project information:
- **Priority Group:** CAP
- **Work Class:** 2
- **CRP:** 5726
- **Est. Total Cost:** 18,430
- **Map ID:** 471
- **Fully funded:** Yes
- **Map Page No.:** 4
- **Council District:** 5
- **Length (miles):** 1.21
- **Elements:** A,B,D,F,G,H,J

<table>
<thead>
<tr>
<th>Revenue Sources in $1,000's</th>
<th>17,496</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total: 2023</strong></td>
<td>17,496</td>
<td>10</td>
</tr>
<tr>
<td><strong>Local:</strong></td>
<td>1,231</td>
<td>10</td>
</tr>
<tr>
<td><strong>Federal:</strong></td>
<td>806</td>
<td>10</td>
</tr>
<tr>
<td><strong>State:</strong></td>
<td>4,648</td>
<td>10</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>4,648</td>
<td>10</td>
</tr>
</tbody>
</table>

**Total Previous + Programmed Amounts:**

\[
350,000 + 312,000 + 3,008,000 = 3,670,000
\]

("PE" and "FE" are both "Preliminary Engineering" in the County's TIP)
Project annual TIF receipts from which the match monies will be allocated.

2022-2027 Revenue Total $238,367,000

2022-2027 Expenditure Total $238,367,000
Development Capacity
Frederickson Industrial Area

Canyon Road
Economic Assessment
Potential Land Capacity Insets

- Parks & Open space
- County Line
- Study Area Employment Centers
- Lakes, Rivers & Water Features
- Rail Lines

Parcel by Land Supply Type
- Vacant (Less than $.001 Improvement Value per Square Foot of Parcel Land Area)
- Underutilized Tier A ($.001 - $2.50 Improvement Value per Square Foot of Parcel Land Area)
- Underutilized Tier B ($2.50 - $5.00 Improvement Value per Square Foot of Parcel Land Area)
Development Capacity
Fife Industrial Area

Canyon Road
Economic Assessment
Potential Land Capacity Insets
- Parks & Open space
- County Line
- Study Area Employment Centers
- Lakes, Rivers & Water Features
- Rail Lines

Parcel by Land Supply Type
- Vacant (Less than $.001 Improvement Value per Square Foot of Parcel Land Area)
- Underutilized Tier A ($.001 - $2.50 Improvement Value per Square Foot of Parcel Land Area)
- Underutilized Tier B ($2.50 - $5.00 Improvement Value per Square Foot of Parcel Land Area)
Exhibit 20 to Exhibit 21 on the following page illustrate the estimated employment capacity within the Fife Industrial Area and Frederickson RMIC.

**Significant Capacity for Additional Employment in Frederickson & Fife**

Based on locally-tested assumptions around Floor-Area Ratio (FAR) and space utilization, Frederickson alone could have sufficient capacity for up to 22,000 additional jobs on its 1,304 acres of vacant and potentially underutilized land. Together, the Fife and Frederickson industrial areas represent a significant portion of the region’s industrial employment capacity.

The completion of the Canyon Road East freight corridor and the associated improved connectivity can enhance the area’s competitive position and could potentially attract new businesses to the area and also encourage growth and expansion of current businesses. Our analysis has shown that there is significant capacity for additional growth and development in both the Frederickson MIC and the Fife Industrial Area - the two industrial centers in the study area which are likely to benefit the most from the proposed improvements.
ECONOMIC STRATEGIES

EMPLOYMENT CENTER

The Frederickson Employment Center is envisioned as being a major source of future employment in Pierce County. In order to realize this vision and ensure that new uses have a beneficial impact on the community, care must be taken in the development of the Employment Center and surrounding properties. The siting, design, and approval of new uses must take into consideration employment density, aesthetics, impacts to surrounding properties, future transportation projects, and other factors. Industrial users will be more willing to locate in the Employment Center with future Canyon Road improvements, construction of the Cross-Base Highway, and extended freight rail services. Additionally, infrastructure improvements are necessary to make the Frederickson Employment Center an attractive place for industry to locate.

COMMERCIAL CORE

A viable and well-designed commercial core is desired in the community in order to better define Frederickson as a place and to provide for the goods and service needs of the community in an efficient manner. Attractive, commercial areas create a positive image for the surrounding residential neighborhood and stimulate investment, which in turn provide economic growth for the area and its residents, and an increased tax base for local government.

BUSINESS ASSISTANCE AND MARKETING

Local businesses struggle with a variety of issues such as marketing and promoting strategies, managing employees, capital for operations, upgrades, and expansions, and long-term business goals. This plan is intended to illustrate methods or strategies for helping local businesses within the communities plan area stay in business while still enhancing community values.

PUBLIC/PRIVATE PARTNERSHIPS

The community desire of a balanced economic environment often requires commitment by both the public and private sectors. Public involvement can include providing the necessary infrastructure, facilities, services, and financial incentives that promote commercial and industrial development. Private investment can construct and maintain existing commercial and industrial uses in a way that enhances the area's viability. The community also desires to highlight creative methods of public and private interaction that serve to increase the potential for commercial and industrial development within the plan area.
ATTACHMENT E1
Pierce County Comprehensive Plan Excerpts

FR EC-6.1 Request that the Economic Development Department of Pierce County and other appropriate organizations prepare a market assessment for the Frederickson area to help determine the market strengths and weaknesses of the area.

FR EC-6.2 Market assessments shall provide an update of the commercial and industrial market through analyzing the area’s past and recent performance in the various sectors; documenting existing conditions, emerging trends, opportunities, and constraints (i.e., the depth of the market); and identifying a portfolio of key properties and development opportunities.

FR EC-6.3 The market assessment shall help rank and prioritize the potential target areas for the receipt of public improvements.

FR EC-6.4 Utilize existing or form new local business associations to help develop common promotion (advertising, joint merchandising, and special events) and future business development (leasing, business recruitment, and market research) within selected commercial target areas.

GOAL FR EC-7 Provide educational opportunities to businesses within the community plan area on community values.

FR EC-7.1 Pierce County shall promote amenities within the commercial areas that address safety, adequate lighting and parking, and cleanliness through development of policies and implementing actions in the Land Use and Community Character and Design elements.

FR EC-7.2 Pierce County shall maintain current commercial and industrial site survey information, such as available and projected public services, surrounding land uses, transportation capabilities, critical areas, and other relevant economic information.

PUBLIC/Private Partnerships

GOAL FR EC-8 Pierce County shall participate in special public/private ventures within the community plan area when such ventures provide public benefits, support commercial or industrial development or commercial revitalization policies, and are appropriate to the long-range goals of the County.

FR EC-8.1 Pierce County shall seek opportunities to act in partnership with the private sector to fund infrastructure as part of the community plan to encourage redevelopment to convert outdated and underutilized land and buildings to high-valued or appropriate land uses.

FR EC-8.2 Pierce County shall budget for public infrastructure to encourage commercial and industrial development, with the priority towards those areas with substantial private development.

GOAL FR EC-9 Ensure access to jobs within the community plan area by coordinating public transportation between residential areas and commercial and Employment Center sites.
ATTACHMENT E1
Pierce County Comprehensive Plan Excerpts

FR EC-9.1  Encourage Pierce Transit to route bus service between and through residential neighborhoods and commercial and Employment Center sites and in those corridors such as Canyon Road East and 176th Street East, where service is currently not provided.

FR EC-9.2  Encourage employers to promote rideshare and public transportation subsidies for employees who utilize public transportation.

FR EC-9.3  Encourage express bus service or bus rapid transit service from the vicinity of the Frederickson Employment Center at 176th Street East and Canyon Road East with connections to regional transit centers in Puyallup and Tacoma.
ENVIRONMENTAL DESIGN

GOAL FR T-7  Allow active transportation connections, including trails, through wetland buffers and other sensitive areas where roads cannot occur.
FR T-7.1  Pierce County should explore the need and options for providing a safe wildlife crossing and pedestrian crossing of Canyon Road East in the Clover Creek corridor when Canyon Road East is improved between 160th Street East and 176th Street East.

ACTIVE TRANSPORTATION

GOAL FR T-8  Encourage provisions for active transportation facilities, including sidewalks and trails, where it is appropriate to provide safe and convenient access between properties and pedestrian oriented facilities.
FR T-8.1  Pierce County should work cooperatively with Bethel School District to develop a program to identify and fund the construction of needed sidewalks to provide safe access to existing and proposed schools.

GOAL FR T-9  Local active transportation networks should provide reasonable direct routes to properties within the area by minimizing dead end cul-de-sacs and providing direct connections to adjacent developments.
FR T-9.1  Discourage the vacation of right-of-way when the right-of-way could complete the grid system within the community.
FR T-9.2  Allow on-street parking on County roadways, provided the roads have adequate width.
FR T-9.3  Provide active transportation access between residential and commercial uses within Centers and Corridors.
FR T-9.4  Provide improved pedestrian crossings of arterials in Centers and Corridors.

RAIL SERVICE

GOAL FR T-10  Support and encourage rail service as an important element of the transportation system in the plan area.
FR T-10.1  Preserve rail lines in Frederickson to provide transportation and economic benefits to Pierce County.
FR T-10.2  Improve passenger and freight rail service.

TRANSIT

GOAL FR T-11  Encourage Pierce Transit to evaluate and prioritize service on the following routes:
ATTACHMENT E1
Pierce County Comprehensive Plan Excerpts

FR T-11.1 176th Street East between Pacific Avenue (SR-7) and Meridian Avenue East (SR-161); park and ride lot at 176th Street East/Tacoma Rail;

FR T-11.2 Canyon Road East to its new terminus; park and ride lot/train station in the vicinity of Canyon Road East/176th Street East; and

FR T-11.3 Express bus service to connect Canyon Road East and 176th Street East to the closest north commuter rail station, either in Tacoma or Puyallup, by way of Canyon Road East.
• Location and intensity of residential, commercial, and industrial uses.

The survey was conducted between December 2001 and February 2002. At the time the survey was conducted, it was estimated that the plan area contained 12,989 households. The survey was mailed to every third household totaling 4,329 households located within and adjacent to the community plan area boundaries.

The survey contained 75 questions broken down into different categories:

• Quality of Life;
• Natural Environment;
• Economic Element;
• Community Character;
• Transportation;
• Public Facilities;
• Public Services;
• Land Use; and
• Household Characteristics.

At the end of the survey, respondents were given the opportunity to add their own comments regarding the community or the survey. The results helped staff and the CPB assess community views regarding a variety of issues and were used as an aid in the development of the community plan.

A total of 664 surveys were completed and returned. This equates to a return rate of 6.5 percent. Statistically, a sufficient number of surveys were returned to obtain an accurate representation of household opinion within approximately +/- 5 percent.

The survey results showed that the areas of greatest concern related to quality of life were traffic, development patterns, local job opportunities, and availability of recreational areas. The areas of least concern were the quality/availability of emergency services and quality of schools.

2020 Community Plan Update (Public Outreach Commentary)

Pierce County Council Ordinance No. 2015-40 directed the Planning and Public Works department (PPW) to develop a schedule for the update of community plans. PPW determined that the four community plans within the County’s central Urban Growth Area (Frederickson, Mid-County, Parkland-Spanaway-Midland, and South Hill) should be updated simultaneously, because of commonalities between the areas.

In 2016, PPW began working with the Mid-County Land Use Advisory Commission (LUAC) to review the community plan and identify areas in need of update. In spring 2017, PPW conducted a significant public outreach process with the goal of gathering feedback from the community about their vision. This outreach included:

• A newsletter with information about the update to all properties within the plan area.
• A project website, including an online open house and survey.
Press release, media outreach, and interviews by local and regional media.

Community open houses and property owner meetings.

This outreach resulted in more than 600 responses to surveys and more than 900 people requesting to receive future plan updates (these numbers reflect public response for all four community plan areas). The most common survey responses from Mid-County residents included:

- High value of rural atmosphere and natural environment.
- Concerns about increased development pressure, increasing traffic, increasing crime, and loss of natural areas.
- Desire to see more jobs in the community, especially concentrated along Canyon Road East; most respondents currently commute to work outside of the plan area.
- Desire to see safe bicycle and pedestrian facilities and transit on Canyon Road East.

Based on public feedback, PPW and the LUAC proposed revisions to policies, zoning, and transportation improvement priorities. The draft plan and regulations were released and reviewed by the LUAC in 2018. The public process to adopt the draft plan began in spring 2019 and included a public open house, a series of LUAC and Planning Commission hearings, and hearings before the County Council Community Development Committee and Full Council.

**PURPOSE OF THE COMMUNITY PLAN**

The Mid-County Community Plan gives the residents, businesses, property owners, and the County a clear, more detailed sense of how the community should develop in the future and what standards could be utilized to emphasize and retain the desired character of the community. The desired outcomes of the Mid-County Community Plan include:

- Replace the Summit/Waller Community Plan;
- Develop a long-range vision for the Mid-County communities;
- Evaluate the vision for the Mid-County communities in light of the Pierce County Comprehensive Plan and make refinements as necessary to ensure consistency between the overall Countywide plan and the community plan; and
- Identify actions necessary to implement the policies of the community plan, including: adopting or revising land use regulations; identifying priorities for use of public funds to develop physical improvements, such as roads, sidewalks, street landscaping, street lights, water-related improvements, and park development; social programs; economic programs, etc.
Chapter 7: Transportation Element

INTRODUCTION

Despite the economic downturn during the last decade, the Mid-County Community Plan area and surrounding areas have experienced significant residential and commercial construction and resulting growth, causing increased traffic. Pierce County has implemented numerous improvements to the road system over this period to accommodate travelers using both motorized and active transportation modes (bicycling, walking, and skating), but keeping pace with growth is challenging.

Emerging transportation needs are especially evident on north-south routes, where high rates of traffic growth have occurred. *Widening of Canyon Road East north of SR-512* and operational improvements, such as traffic signals and turn lanes on Golden Given Road East, Waller Road East, and Woodland Avenue East, will be major focal points for future investment.

Despite rapid land use growth and increasing congestion, modes of travel have changed very little. U.S. Census data shows that between 75 percent and 80 percent of Pierce County commuters drove alone to work in 2010, which is very similar to the levels in 1990. These levels are likely to remain about the same in the near future, unless large investments in transit and active transportation facilities occur and residents significantly alter their travel behavior. A major focus of future transportation investments will be to construct sidewalks, trails, and bike lanes within Corridors and connecting to residential areas.

TRANSPORTATION GOALS

Improvements to the transportation system need to efficiently facilitate existing and projected travel by all modes. The policies in this element strive to safely connect roadways, sidewalks, bike lanes, and trails to residential neighborhoods, schools, parks, community services, and commercial areas, while facilitating traffic flow with improvements to existing roadways. Plan policies and action steps prioritize:

- Safe sidewalk connections or pedestrian pathways from schools and recreation areas to surrounding neighborhoods;
- Sidewalk and bicycle connections within Corridors and connecting to adjacent residential areas;
- Improve north-south capacity and connectivity on Canyon Road East;
- Improve capacity and operations on north-south and east-west roadways through installation of traffic signals and turn lanes; and
- Expand the Pierce County Public Transportation Benefit Area for transit routes to be added within the plan area, especially on Canyon Road East.
MC T-1.2.1.7 160th Street East from Canyon Road East to Woodland Avenue East.

MC T-1.3 Support implementation of capacity improvements on the state highway system. These projects are expected to provide congestion relief by diverting pass-through traffic away from the Mid-County area. Priority should be given to the improvement of the SR-512/Canyon Road East interchange and the SR-512/Portland Avenue East interchange.

MC T-1.4 Collaborate with developers to identify and preserve right-of-way within proposed transportation corridors.

ACTIVE TRANSPORTATION

GOAL MC T-2 Consider strategies that make pedestrian circulation systems safe, convenient, and efficient.

MC T-2.1 Sidewalks should be provided in the urban area and paved shoulders in the rural area.

MC T-2.2 Accommodate pedestrian and bicycle travel by providing continuous paved shoulders, sidewalks, and/or wide curb lanes along at least one east-west and one north-south roadways through the community.

MC T-2.3 Provide pedestrian access to commercial developments either in the form of sidewalks for large centers or trails and paths in smaller centers. Priority should be given to the commercial areas near SR-512 and Canyon Road East.

MC T-2.4 Provide paved shoulders, sidewalks, or wide curb lanes on arterials and on some local streets to improve safety for pedestrians, bicyclists, and equestrians.

MC T-2.5 Provide paved shoulders, sidewalks, or wide curb lanes on roads leading to all schools to allow children to walk or bike to school.

MC T-2.5.1 Priority should be given to the routes connecting to Franklin Pierce High School.

MC T-2.6 Separate pedestrian facilities from roads with planting strips, where adequate right-of-way exists, in high use areas, such as schools, commercial, and recreation areas.

MC T-2.7 Convert roadside ditches into shoulders through the use of covered culverts or grating, if feasible, at schools, parks, and recreational fields.

MC T-2.7.1 The length of the shoulder improvement should be no more than one-half mile.

MC T-2.8 Provide shoulders or paths on roadways with ditches to improve pedestrian safety.

MC T-2.8.1 If the shoulder or path cannot be provided alongside the ditch, then it should be located on the opposite side of the roadway where ditches are not located.

MC T-2.8.2 Consider lowering speeds on roads that do not have safe pedestrian facilities.
GOAL MC T-3
Consider active transportation facilities in all development approvals and roadway construction.

MC T-3.1
Require new subdivisions, new multifamily complexes, and new manufactured home parks that are adjacent to an active transportation route within the Pierce County Transportation Element to provide direct access to the route.

MC T-3.2
Require developers of residential, commercial, and industrial projects to construct facilities for pedestrians on existing County arterials that abut their property, whenever feasible.

MC T-3.2.1
In urban areas, a sidewalk, path, or paved shoulder shall be provided on the sides of the arterial where the development is located.

MC T-3.2.2
In rural areas, a paved or gravel shoulder shall be provided on the sides of the arterial where the development is located.

MC T-3.2.3
Where adequate right-of-way exists in rural areas, a pedestrian pathway that is separated from the arterial should be considered.

MC T-3.3
Require pedestrian linkages between adjacent business properties to encourage more pedestrian movement between those properties and reduce unnecessary vehicular movements.

MC T-3.4
Provide facilities for pedestrians when reconstructing or building new arterials, whenever feasible.

MC T-3.4.1
In urban areas, sidewalks shall be provided on both sides of the arterial.

MC T-3.4.2
In rural areas, a paved or gravel shoulder shall be provided on both sides of the arterial.

MC T-3.4.3
Where adequate right-of-way exists in rural areas, a pedestrian pathway that is separated from the arterial should be considered.

MC T-3.5
Include paved shoulders or wide curb lanes to accommodate bicyclists when reconstructing or building new arterials, whenever feasible.

GOAL MC T-4
Provide safe and continuous pedestrian access throughout the Canyon Road East corridor.

MC T-4.1
Provide pedestrian access onto new development sites from Canyon Road East.

MC T-4.1.1
Where a use fronts more than one street, pedestrian access should be provided from both streets, if possible and desirable.

MC T-4.2
Provide an internal sidewalk or pathway system connecting individual businesses, office, and residential buildings with the adjacent sidewalk system, parking lots, open spaces, and adjacent properties, where desirable.

GOAL MC T-5
Plan and implement a pedestrian and bicycle system to connect with the pedestrian and bicycle systems that exist or are planned in the surrounding communities of Midland, Frederickson, South Hill and the cities of Tacoma and Puyallup.
Canyon Rd. E. (72nd St. E. to Pioneer Way E.)
Frederickson to Port of Tacoma - Freight Route Comparisons

Legend
- Project Location
- Future SR-167
- Route A: I-5
- Route B: Canyon
- Route C: SR-167
- Interstate
- Principal Arterial Freeway
- Other Principal Arterial
- Major Collector
- Minor Arterial
- Minor Collector
- Industrial Areas (Fife)

Tacoma Route A
~18 Mi.

Canyon Route B
~13 Mi.

Puyallup Route C
~16 Mi.

Note: This is not a survey. Orthophotos and other data may not align. Pierce County assumes no liability for variations ascertained by actual survey. All data is expressly provided “as is” and with all faults.

PSRC 2022 Regional Competition - Canyon Road Freight Corridor
Tacoma, WA: I-5 at I-705/SR 16

Summary

<table>
<thead>
<tr>
<th>National Ranking by Congestion Index</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Speed</td>
<td>43.7</td>
</tr>
<tr>
<td>Peak Average Speed</td>
<td>37.7</td>
</tr>
<tr>
<td>Nonpeak Average Speed</td>
<td>46.5</td>
</tr>
<tr>
<td>Nonpeak/Peak Ratio</td>
<td>1.23</td>
</tr>
<tr>
<td>Peak Average Speed Percent Change 2020 - 2021</td>
<td>-12.1%</td>
</tr>
</tbody>
</table>
Growth Rates
Based on the county’s transportation planning area model, an annual growth rate of 3.5 percent was used on Canyon Road East and a growth rate of 1.5 percent was used on the side streets to determine both the build-out year (2025) and the design year (2045) projected volumes. The growth rates assume that the Canyon Road East northerly extension will be completed by the design year.

<table>
<thead>
<tr>
<th>Location</th>
<th>Growth Rate</th>
<th>Existing AADT</th>
<th>2025 AADT</th>
<th>2045 AADT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canyon Road East s/o Pioneer Way East</td>
<td>3.5 %</td>
<td>9,325</td>
<td>11,875</td>
<td>23,600</td>
</tr>
</tbody>
</table>

Project Buildout Year Projected Volumes
*Canyon Road East at Miles Driveway*

![Diagram of Canyon Road East at Miles Driveway]
Travel Delay

<table>
<thead>
<tr>
<th>Year</th>
<th>2045 PM</th>
<th>2025 PM</th>
<th>2020 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Configuration</td>
<td>272.8</td>
<td>1.8</td>
<td>1.3</td>
</tr>
<tr>
<td>Three lane cross-section</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane 1</td>
<td>2.1</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Lane 2</td>
<td>1.2</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Four Lane Cross-Section</td>
<td>2.1</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Lane 1</td>
<td>1.2</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Lane 2</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Five Lane Cross-section</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane 1</td>
<td>2.1</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Lane 2</td>
<td>1.1</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Five Lane Cross-section (Truck Climbing lane)</td>
<td>2.3</td>
<td>1.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Truck Climbing Lane</td>
<td>1.5</td>
<td>0.6</td>
<td>0.3</td>
</tr>
</tbody>
</table>

SimTraffic 11

Capacity

2025 PM Build-Out Year: 429 vehicles per hour / 2 lanes = 214.5 vehicles per hour per lane < 1440 vehicles per hour per lane (Threshold for Level of Service D per Pierce County flow rates)

2045 PM Design Year: 853 vehicles per hour / 2 lanes = 426.5 vehicles per hour per lane < 1440 vehicles per hour per lane (Threshold for Level of Service D per Pierce County flow rates)

Findings and Discussion

Alternative one would not provide any improvements to Canyon Road East from 72 Street East to Pioneer Way East. Travel delay would continue to get worse as the volume increases. This alternative was removed from consideration.

Alternative two would provide a three-lane cross-section (two southbound lanes and one northbound lane) on Canyon Road East. This alternative would also provide a right-turn lane at the Miles Construction driveway to match what is currently provided. This alternative would increase the capacity over the existing configuration.

Alternative three, the recommended alternative would provide a four-lane cross-section (two lanes each direction) on Canyon Road East. This alternative was analyzed with a right-turn lane at the Miles Construction driveway, which is desirable to construct, if it is economically feasible to do so. This alternative would increase the capacity over the existing configuration.

Alternative four would match the proposed cross-sections of CRP 5736 and CRP 5643 with a five-lane cross-section (two lanes each direction and a two-way left-turn lane). This alternative was analyzed with a right-turn lane at the Miles Construction driveway, which is desirable to
Active Transportation Projects

72nd Street East reconfiguration

What's happening?
72nd Street East between Waller Road East and Canyon Road East will be reconfigured to three lanes after the road is resurfaced in late July.

About the work
The 1.5-mile-long section is currently four lanes, with two lanes in each direction. After the road is chipsealed and fog sealed, it will be restriped as a three-lane road.

There will be a lane in each direction and a center two-way left-turn lane. Several turn lanes will be added, including left-turn lanes at Vickery Avenue East, an eastbound right-turn only lane at Waller Road East, and a westbound right-turn only lane at Canyon Road East. Existing left-turn lanes will remain at Waller Road East and Canyon Road East. Bike lanes in both directions will be added.

Schedule
**Update on July 24:** The resurfacing work has been rescheduled to avoid impacts to those participating the Goodguys 32nd Pacific Northwest Nationals car show July 26-28 at the Washington State Fair Events Center in Puyallup.

The chipsealing work is expected to begin on July 29 and continue on July 30 if needed. The fog sealing work is expected to be take place July 30 and 31. This work was originally scheduled for July 24-26.

The restriping work is expected to take place in early August.

The work is weather dependent. Work hours will be 7 a.m. to 5 p.m. Lane restrictions may be in place during the work.

We will post any schedule changes on this page.

**Benefits**
This change is expected to increase safety, improve sight distance for motorists entering 72nd Street East from side roads, and reduce rear-end crashes.

The reconfiguration will help moderate traffic flow and speed on this corridor. While there will be fewer through lanes, there will still be sufficient capacity to handle current traffic volumes.

**About the chipsealing work**
The chipsealing work will extend the road’s life by seven to 10 years and reduce maintenance costs.

During chipsealing, a coat of liquid asphalt and a layer of rock chips are applied to the road. The roadway is then swept clean of loose rock chips. Motorists can drive on the road immediately after the application.

During fog sealing, a final application of liquid asphalt will be spread over the surface of the road to keep water out and improve rock retention. Traffic control measures will be in place for three to seven hours after the application, depending on temperature and humidity.

---

**Contact Us**

<table>
<thead>
<tr>
<th>Send a message</th>
<th>Phone: (253) 798-7250</th>
<th>Tacoma Mall Plaza</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2702 S 42nd St, Suite</td>
</tr>
<tr>
<td>After Hours</td>
<td></td>
<td>109</td>
</tr>
<tr>
<td>Emergency:</td>
<td>(253) 798-8000</td>
<td>Tacoma, WA 98409</td>
</tr>
</tbody>
</table>
ATTACHMENT H1
Canyon Rd. E. (72nd St. E. to Pioneer Way E.)
Equity Maps

Disabled Population

Older Adults Population
ATTACHMENT H1
Canyon Rd. E. (72nd St. E. to Pioneer Way E.)
Equity Maps

Youth Population

Opportunity Index

2022 PSRC Project Selection Resource Map
PM$_{2.5}$ Maintenance Zone

Canyon Rd E
72nd To Pioneer

Air Quality Focus Communities (PSCAA)

Canyon Rd E
72nd To Pioneer

To Frederickson
ATTACHMENT I1
Canyon Rd. E. (72nd St. E. to Pioneer Way E.)
Photos

*Canyon Rd. E., Looking South: Narrow shoulders, no pedestrian facilities, no lighting.*
Crash Type Breakdown

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>INJURY</th>
<th>NON-INJ.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within Limits</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Adjacent to Limits</td>
<td>8</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>OBJECT</td>
<td>OBJECT DEC</td>
<td>COUNTY</td>
<td>CITY</td>
</tr>
<tr>
<td>----------</td>
<td>--------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>29</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>30</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>31</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>32</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>33</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>34</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>35</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>36</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>37</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>38</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>39</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>40</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>41</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>42</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>43</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>44</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
<tr>
<td>45</td>
<td>County Road</td>
<td>Pierce</td>
<td>95550</td>
</tr>
</tbody>
</table>

**ATTACHMENT J2**

Canyon Rd. E. (32nd St. E to Pioneer Way E.)

Full Crash Data, 2017-2021
### Within Project Limits

<table>
<thead>
<tr>
<th>OBJECT_ID</th>
<th>JUNCTION_RELATIONSHIP</th>
<th>WEATHER</th>
<th>SURFACE_LIGHTING_CONDITION</th>
<th>FIRST_COLLISION_TYPE</th>
<th>OBJECT_STRUCK</th>
<th>VEHICLE_1_ACTION</th>
<th>VEHICLE_2_ACTION</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>CONTRIBUTING_CIRCUMSTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - both moving - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Fellow Too Close</td>
</tr>
<tr>
<td>31 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Under Influence of Alcohol</td>
</tr>
<tr>
<td>32 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Exceeding Safe Speed</td>
</tr>
<tr>
<td>33 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Operating Defective Equipment</td>
</tr>
<tr>
<td>34 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Under Influence of Alcohol</td>
</tr>
<tr>
<td>35 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Exceeding Safe Speed</td>
</tr>
<tr>
<td>36 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>37 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>38 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>39 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>40 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>41 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>42 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>43 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>44 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>45 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>46 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
<tr>
<td>47 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-Street Lights On</td>
<td>Over Entrainment - No Guardrail Present</td>
<td>Geol Straight Ahead</td>
<td>Going Straight Ahead</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>South</td>
<td>North</td>
<td>Improper Turn/Merge</td>
</tr>
</tbody>
</table>

### Adjacent to Project Limits

<table>
<thead>
<tr>
<th>OBJECT_ID</th>
<th>JUNCTION_RELATIONSHIP</th>
<th>WEATHER</th>
<th>SURFACE_LIGHTING_CONDITION</th>
<th>FIRST_COLLISION_TYPE</th>
<th>OBJECT_STRUCK</th>
<th>VEHICLE_1_ACTION</th>
<th>VEHICLE_2_ACTION</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>COMPASS_DIRE</th>
<th>CONTRIBUTING_CIRCUMSTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>30 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>31 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>32 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>33 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>34 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>35 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>36 County Road</td>
<td>Not an intersection and not related</td>
<td>Clear or Partly Cloudy</td>
<td>Wet</td>
<td>Dark-No Street Lights</td>
<td>From same direction - both going straight - one stopped - rear-end</td>
<td>Geol Straight Ahead</td>
<td>Stopped for Traffic</td>
<td>Southeast</td>
<td>Northwest</td>
<td>Southwest</td>
<td>Northwest</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
**Within Project Limits**

<table>
<thead>
<tr>
<th>OBJECTID</th>
<th>JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-48</td>
<td>County Road</td>
</tr>
<tr>
<td>49-51</td>
<td>County Road</td>
</tr>
<tr>
<td>52-54</td>
<td>County Road</td>
</tr>
</tbody>
</table>

**Adjacent to Project Limits**

<table>
<thead>
<tr>
<th>OBJECTID</th>
<th>JURISDICTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>29-27</td>
<td>County Road</td>
</tr>
<tr>
<td>28-26</td>
<td>County Road</td>
</tr>
<tr>
<td>25-23</td>
<td>County Road</td>
</tr>
</tbody>
</table>

**T_LOCATION City County Misc_Trafficway E_SOUTH X Y**

<table>
<thead>
<tr>
<th>CONTRIBUTING_CIRCUMSTANCE_3__UNIT_2_</th>
<th>Lane of Primary Trafficway</th>
<th>Past the Outside Shoulder of Primary Trafficway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distractions Outside Vehicle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inattention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow Too Close</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under Influence of Alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>