

SR 167 Master Plan
Planning and Environmental Linkages Study

Attachment D. Final Study Recommendations Report

Final Study

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Washington State Department of Transportation



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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AM	morning
BRT	bus rapid transit
ETL	express toll lane
GIS	geographic information systems
I-	Interstate
MIC	manufacturing industrial centers
mph	miles per hour
PEL	Planning and Environmental Linkages
PM	afternoon/evening
project	SR 167 Master Plan Planning and Environmental Linkages study
PSRC	Puget Sound Regional Council
RGC	Regional Growth Center
SR	State Route
VMT	vehicle miles traveled
WSDOT	Washington State Department of Transportation

Chapter 1. Evaluation of Final Study Recommendations

This attachment details how the SR 167 Master Plan PEL Study Final Study Recommendations were developed upon completion of the Level 2b screening and the partner engagement at this stage. Figure 1-1 in *Attachment C* illustrates the process.

The basis of the Final Study Recommendations are the projects and strategies in Scenario B that are based on the analysis results and community and partner feedback from the Level 2b Screening. Scenario B served as the foundation for the Final Study Recommendations as it performed well at meeting the project Purpose and Need and as it was widely supported by the Equity Advisory Committee, Technical Advisory Committee, Policy Advisory Committee, community members, and partners. Evaluation results for Scenario B are presented in *Attachment C*, but in summary, Scenario B performed better than the Baseline Scenario for all project Purpose (Goal) areas, and it was the strongest performing Refined Scenario when it came to Mobility and Economic Vitality (Traffic Congestion), which is a topic of interest for the majority of community members, agencies, and partners the project team solicited input from.

Level 2b analysis indicated Scenario A projects performed very well in the areas of equity and multimodal mobility (transit and active modes). As such, Scenario B was enhanced for the Final Study Recommendations with high performing transit routes from Scenario A and active transportation facilities in the Regionwide and County centers. The SR 18/SR 167 interchange improvement from Scenario C was also included in the Final Study Recommendations as it provides similar freight mobility and traffic congestion benefits at a lower cost and with less environmental impact than the Scenario B version of the SR 18/SR 167 interchange project. Finally, a few projects were identified by local jurisdictions to help address gaps and challenges that were revealed through the Level 2b analysis, including a bottleneck that could result from the express toll lane (ETL) and interchange improvements and a project refinement that helped to reduce overall costs.

The Final Study Recommendations evaluation employed the same methods and assumptions that were used for the Level 2b Screening, as detailed in *Attachment C*. The following sections summarize the Final Study Recommendations performance relative to the Baseline Scenario and Refined Scenarios when evaluating how they support the project Purpose and Need categories of equity, safety, environment, multimodal, mobility and economic vitality, and practical solutions and State of Good Repair.

Equity

Table 1-1 summarizes the results related to equity and details the change (increase or decrease) for the Final Study Recommendations and each Refined Scenario compared to the Baseline Scenario. Refer to the Environment section for additional details related to environmental justice and equity.

Table 1-1. Evaluation Results – Equity

Performance Metric	Final Study Recommendation ^a	Scenario A ^a	Scenario B ^a	Scenario C ^a
Difference in the number of jobs within 45 minutes by bus or train from equity priority areas	+18% 12,000 jobs	+18% 12,000 jobs	+16% 11,000 jobs	+16% 11,000 jobs
Difference in the number of equity priority area households within 45 minutes by bus or train from equity priority areas	+50% 28,000 households	+50% 28,000 households	+46% 26,000 households	+46% 26,000 households
Equity priority area population within a half mile of frequent or on-demand transit	+110% 13,000 people	+110% 13,000 people	+45% 5,000 people	+45% 5,000 people
Difference in the number of bus hours of service in midday and evening periods	+49% (midday) 312,000 annual midday hours +149% (evening) 283,000 annual evening hours	+49% (midday) 312,000 annual midday hours +149% (evening) 283,000 annual evening hours	+9% (midday) 58,000 annual midday hours +45% (evening) 87,000 annual evening hours	+9% (midday) 58,000 annual midday hours +45% (evening) 87,000 annual evening hours
Travel cost (qualitative)	<ul style="list-style-type: none"> • Lower auto costs for ETL users relative to the Baseline Scenario due to a low-income toll program and dual ETLs • Similar transit costs 	<ul style="list-style-type: none"> • Lower auto costs for ETL users relative to the Baseline Scenario due to a low-income toll program and dual ETLs • Similar transit costs 	<ul style="list-style-type: none"> • Lower auto costs for ETL users relative to the Baseline Scenario due to a low-income toll program and dual ETLs • Similar transit costs 	<ul style="list-style-type: none"> • Lower auto costs for ETL users relative to the Baseline Scenario but higher than Scenarios A and B • Similar transit costs

Note:

^a Scenario results indicate the change relative to the Baseline Scenario.

The results in Table 1-1 indicate that the Final Study Recommendations and Scenario A perform identically with respect to the Baseline Scenario. This is because the key projects and strategies that influence the equity performance metrics are identical between the Final Study Recommendations and Scenario A. Ultimately, the Final Study Recommendations perform strongly with respect to the equity category of the project Purpose and Need.

Safety

Table 1-2 summarizes the results related to the safety category of the project Purpose and Need. For each safety evaluation performance metric, the table details the change (increase or decrease) for the Final Study Recommendations and each Refined Scenario compared to the Baseline Scenario. The scenarios were evaluated qualitatively for all safety performance metrics as detailed safety forecasting analysis requires extensive engineering and travel data that were not available for this analysis. However, the project team is familiar with quantitative safety analysis and applied best engineering judgement to the three qualitative performance metrics for safety.

Table 1-2. Refined Scenario Evaluation Results – Safety

Performance Metric	Final Study Recommendations ^a	Scenario A ^a	Scenario B ^a	Scenario C ^a
Investments in areas with a history of SR 167 facility crashes (qualitative)	<i>Best performance:</i> Builds from the performance benefits of Scenario B, but also it assumes improvements at the I-405 interchange that would be implemented by the I-405 program.	<i>Good performance:</i> The SR 410/SR 512 interchange improvements reduce weaving and smooth traffic conditions in the south end of the corridor.	<i>Good performance:</i> System interchange improvements at SR 18 and SR 410/SR 512 reduce weaving and smooth traffic conditions in the south end of the corridor.	<i>Good performance:</i> System interchange improvements at SR 18 and SR 410/SR 512 reduce weaving and smooth traffic conditions in the south end of the corridor.
Investments in areas with a history of SR 167 speed differential (qualitative)	<i>Best performance:</i> Includes all the Scenario B improvements with additional improvements to address speed differentials on the north end of the corridor approaching I-405.	<i>Good performance:</i> Dual ETLs provide the most relief to speed differentials in the general purpose lanes.	<i>Good performance:</i> Dual ETLs provide the most relief to speed differentials in the general purpose lanes. Scenario B also improves five arterial interchanges that could queue back toward the mainline.	<i>Good performance:</i> Scenario C improves five arterial interchanges that could queue back toward the mainline. Truck-only lanes are better than in the Baseline Scenario, but they are less effective at addressing speed differentials compared to Scenarios A and B.
Investment in areas with a history of active mode crashes (qualitative)	<i>Good performance:</i> Includes all the Scenario B improvements along with Complete Streets improvements along additional routes like East Valley Highway, West Valley Highway, Ellingson Road, and Meridian Avenue.	<i>Best performance:</i> Scenario A has the most active mode improvements that could overlap with a history of safety issues, particularly in Regional Growth Centers (RGC).	<i>Good performance:</i> Scenario B closes sidewalk gaps in the RGCs and adds bicycle facilities on key arterial roads in the study area.	<i>Good performance:</i> Scenario C closes sidewalk gaps in the RGCs and adds bicycle facilities on key arterial roads in the study area.

Note:

^a Scenario results indicate the change relative to the Baseline Scenario.

The Final Study Recommendations have the best performance when it comes to safety metric results on SR 167. While Scenario A has the best performance with respect to areas with a history of active mode crashes, the Final Study Recommendations perform strongly and better than Scenarios B or C. The Final Study Recommendations and each of the three Refined Scenarios perform better than the Baseline scenario when considering the safety category of the project Purpose and Need.

Environment

The Final Study Recommendations would have similar environmental resource effects as what is described in *Attachment C*, and they would have effects along SR 167 similar to those identified for Scenario B and along arterial roadways similar to Scenario A. Reference *Attachment A, Appendix B* for an environmental resources map book. There is an overlay of the projects identified in the Final Study Recommendations for a visual representation of the potential effects relating to sensitive environmental areas. Reference *SR 167 Master Plan PEL Study, Chapter 5* for the environmental resource considerations, including a summary of potential effects

related to the Final Study Recommendations. Additional analyses will be needed in the future, as discussed in *Attachment A*.

Multimodal

Table 1-3 summarizes the results related to the multimodal category of the project Purpose and Need. For each performance metric, the table details the change (increase or decrease) for the Final Study Recommendations compared to the Baseline Scenario. The three Refined Scenarios are included for reference.

Table 1-3. Refined Scenario Evaluation Results – Multimodal

Performance Metric	Final Study Recommendations ^a	Scenario A ^a	Scenario B ^a	Scenario C ^a
System completeness for bicycle and pedestrian infrastructure within 1 mile of SR 167	Sidewalks: 91% complete +8 miles Bicycles: 39% complete +10 miles	Sidewalks: 100% complete +20 miles Bicycles: 39% complete +10 miles	Sidewalks: 83% complete +5 miles Bicycles: 39% complete +10 miles	Sidewalks: 83% complete +5 miles Bicycles: 39% complete +10 miles
Sidewalk system completeness within 1 mile of SR 167 and within RGCs	Sidewalks: 100% complete +5 miles	Sidewalks: 100% complete +5 miles	Sidewalks: 100% complete +5 miles	Sidewalks: 100% complete +5 miles
Closing active mode gaps across SR 167	Overpasses and underpasses impacted by ETLs would include Complete Streets improvements. Five arterial interchanges would be rebuilt.	Overpasses and underpasses impacted by ETLs would include Complete Streets improvements.	Overpasses and underpasses impacted by ETLs would include Complete Streets improvements. Five arterial interchanges would be rebuilt.	Overpasses and underpasses impacted by ETLs would include Complete Streets improvements. Five arterial interchanges would be rebuilt.
Daily transit boardings in study area	+10% 54,000	+9% 50,000	+7% 35,000	+6% 34,000
Daily transit boardings on SR 167 bus services	5,400	4,500	5,300	5,300

Note:

^a Scenario results indicate the change relative to the Baseline Scenario.

In general, the Final Study Recommendations perform strongly with respect to the multimodal category of the project Purpose and Need. While the sidewalk system completeness is not as high as Scenario A, the sidewalk infrastructure investments are generally focused on higher-density and equity priority areas. The Final Study Recommendations match Scenarios B and C with the greatest number of investments to reduce the level of traffic stress at interchanges, undercrossings, and overpasses of SR 167, reducing the barrier effect of the highway. The Final Study Recommendations also have the largest increase in daily transit boardings. This demonstrates that the alignment of the additional transit routes and the improvement to transit speed and reliability that the Final Study Recommendations achieve boosts the attractiveness of transit.

Mobility and Economic Vitality

This section summarizes results of the evaluation of the Final Study Recommendations against the criteria and related performance metrics for mobility and economic vitality. The performance metrics are related to three criteria: person throughput (i.e., number of people moved), traffic congestion, and freight mobility and reliability.

Person Throughput

Figure 1-1 illustrates the difference in person throughput during the peak travel periods at four locations along SR 167 for the Baseline Scenario and the Final Study Recommendations; the three Refined Scenarios are also presented as a reference. The two locations identified for the AM peak period are on northbound SR 167: north of 24th Street East in Sumner and north of Central Avenue in Kent. The two locations identified for the PM peak period are on southbound SR 167: south of South 212th Street in Kent and south of 8th Street East in Pacific. Figure 1-1 illustrates the person throughput per hour, under each scenario, in the general purpose lanes and the ETLs.

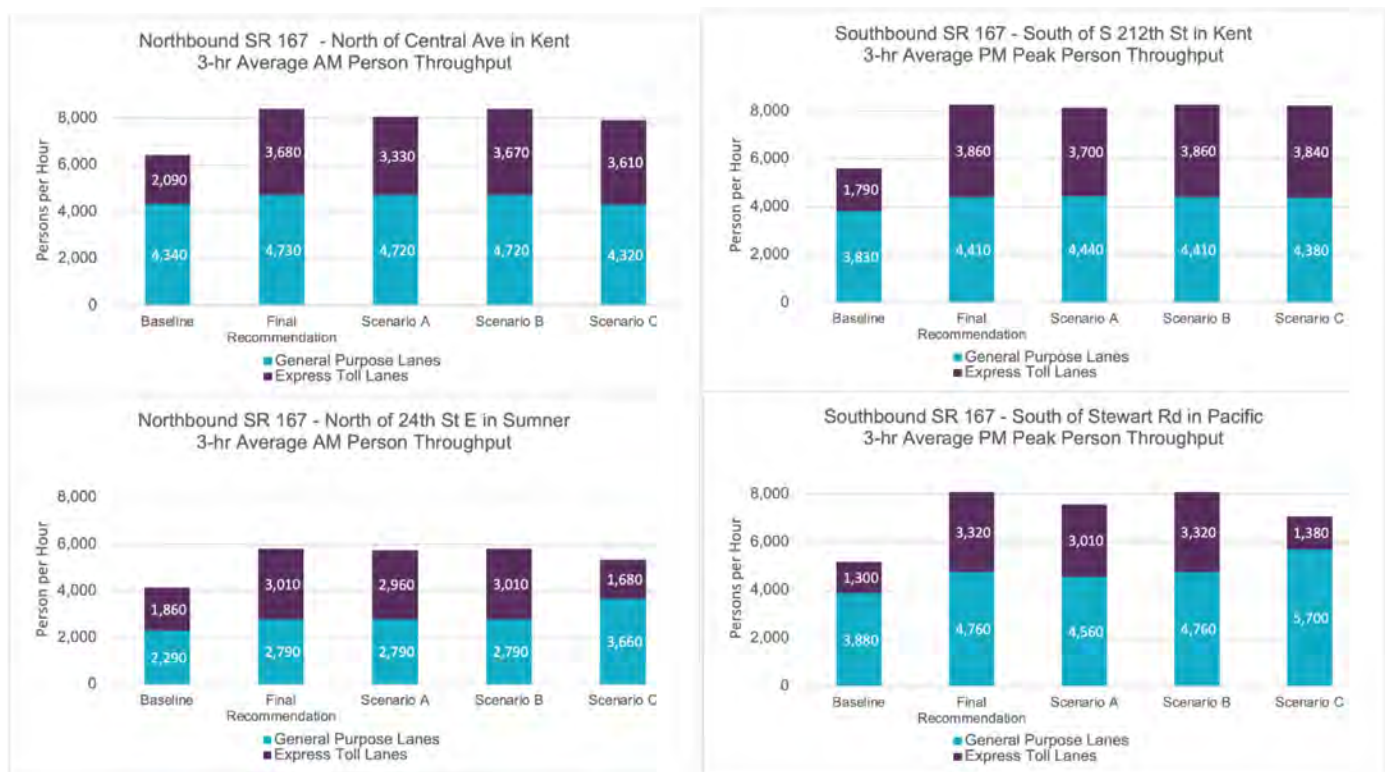


Figure 1-1. AM and PM Peak Period Person Throughput on SR 167 Near Kent and Pacific

As illustrated in Figure 1-1, the Final Study Recommendations are able to move substantially more people than the Baseline Scenario. This is because the dual ETL allows more higher-occupancy vehicles to move when compared to the congested single ETL and adjacent general purpose lanes in the Baseline Scenario. The Final Study Recommendations have similar person throughput as Scenario B.

Traffic Congestion

This section describes the evaluation results for five performance metrics related to traffic congestion:

- Average travel speeds for vehicles in general purpose lanes on SR 167
- Average travel speeds for vehicles in ETLs on SR 167

- Peak period congestion on SR 167 in the general purpose lanes
- Peak period congestion on SR 167 in the ETLs
- Peak period vehicle-hours of delay on SR 167 and arterials within 1 mile of SR 167

Figure 1-2 through Figure 1-5 summarize the differences in corridor travel speeds and traffic congestion along SR 167 in the northbound and southbound directions for the ETLs and general purpose lanes, respectively.

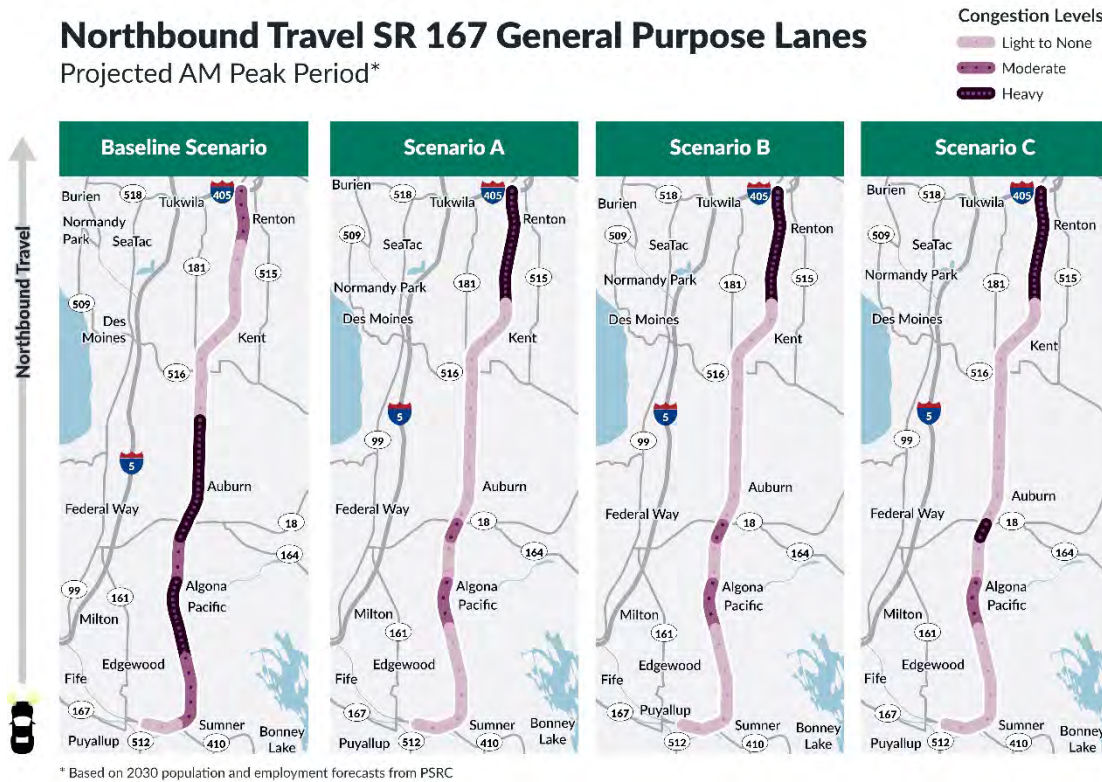
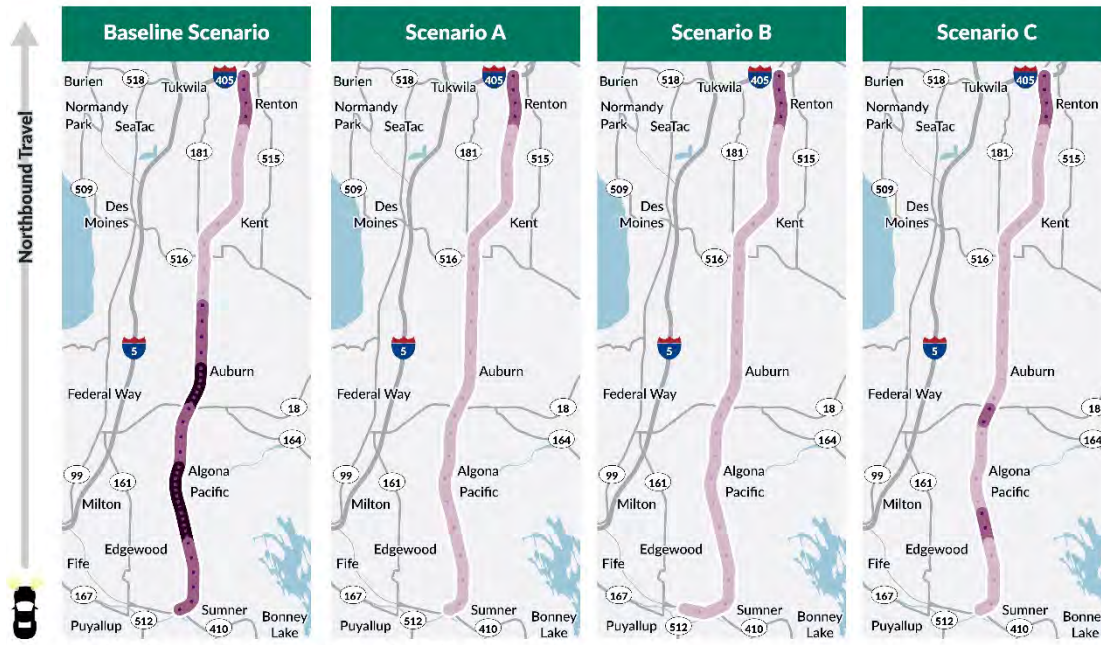


Figure 1-2. AM Peak Period Northbound SR 167 Congestion and Speed – General Purpose Lanes

Northbound Travel SR 167 Express Toll Lanes Projected AM Peak Period*

Congestion Levels
 Light to None
 Moderate
 Heavy

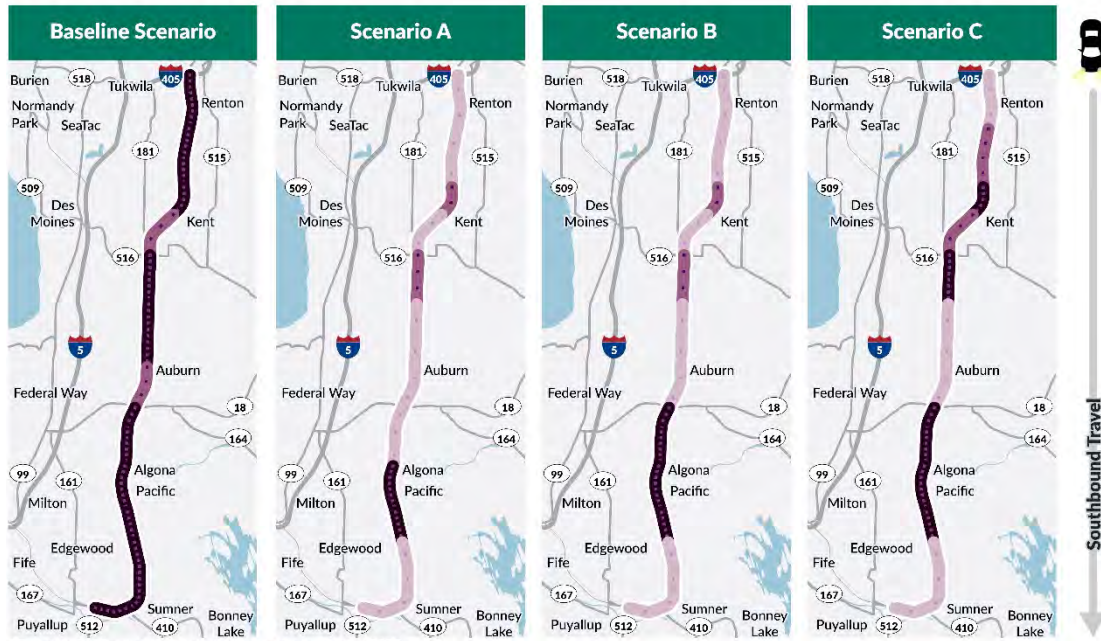


* Based on 2030 population and employment forecasts from PSRC

Figure 1-3. AM Peak Period Northbound SR 167 Congestion and Speed - ETLs

Southbound Travel SR 167 General Purpose Lanes Projected PM Peak Period*

Congestion Levels
 Light to None
 Moderate
 Heavy



* Based on 2030 population and employment forecasts from PSRC

Figure 1-4. PM Peak Period Southbound SR 167 Congestion and Speed - General Purpose Lanes

Southbound Travel SR 167 Express Toll Lanes Projected PM Peak Period*

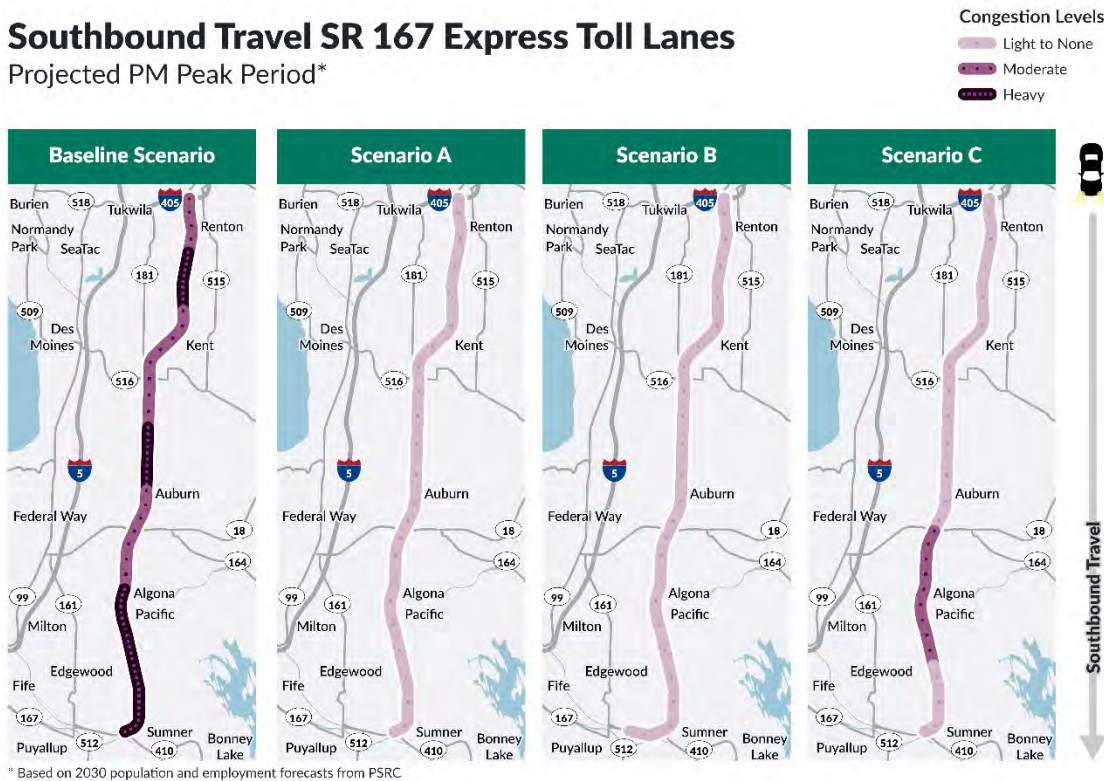


Figure 1-5. PM Peak Period Southbound SR 167 Congestion and Speed - ETLs

As illustrated in Figure 1-2 through Figure 1-5, the Final Study Recommendations have the best performance (least congestion) when compared against the Baseline or any of the Refined Scenarios.

In the northbound direction during the AM peak period, travel speeds in the general purpose lanes in the Final Study Recommendations are forecast to be above 50 miles per hour (mph) along all of SR 167. In contrast, the Baseline Scenario has heavy congestion (speeds less than 35 mph) in the segment between SR 410 and SR 516 and Scenarios A, B, and C have a stretch of heavy congestion between 212th Street in Kent and I-405.

The general purpose lanes in the southbound direction during the PM peak period would operate with average travel speeds of 30 to 50 mph for the Final Study Recommendations, which is similar to Scenario A and better than Scenarios B and C. Most of the congestion for the Final Study Recommendation is in the southern end of the corridor between SR 18 and Stewart Road. The Final Study Recommendations would operate better than the Baseline Scenario, which is expected to have average travel speeds in the range of 5 to 20 mph in the general purpose lanes with heavy congestion for nearly the entire stretch between I-405 and SR 512.

In the ETLs, the Final Study Recommendations are forecast to operate with little congestion and speeds greater than 55 mph. For the Baseline Scenario, the ETL would have average travel speeds of 45 to 50 mph with the slowest travel between SR 410 in Sumner and 212th Street in Kent.

During the PM peak period, average travel speeds in the southbound ETLs are also forecast to be at 55 mph or better for the Final Study Recommendations, which are considerably better than the Baseline Scenario.

Figure 1-6 and Figure 1-7 summarize the differences in vehicle hours of delay, which is a measure of the total amount of time travelers are delayed in stop-and-go traffic along SR 167 in the northbound and southbound directions, respectively.

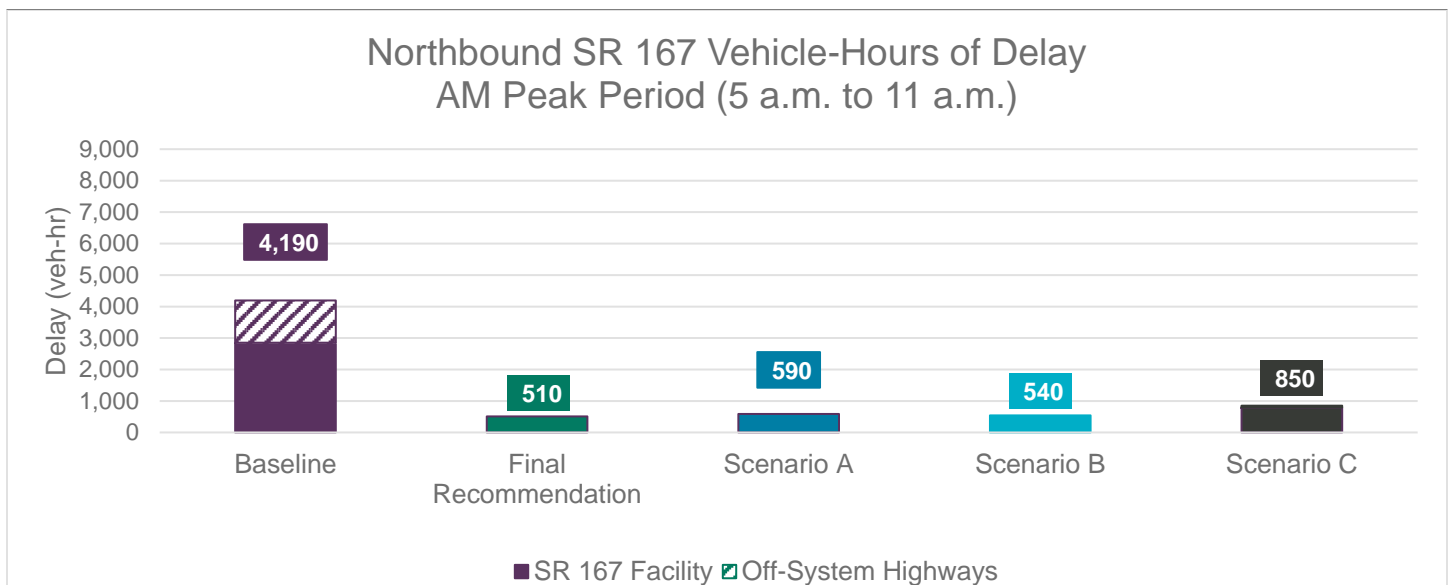


Figure 1-6. AM Northbound SR 167 Vehicle-Hours of Delay

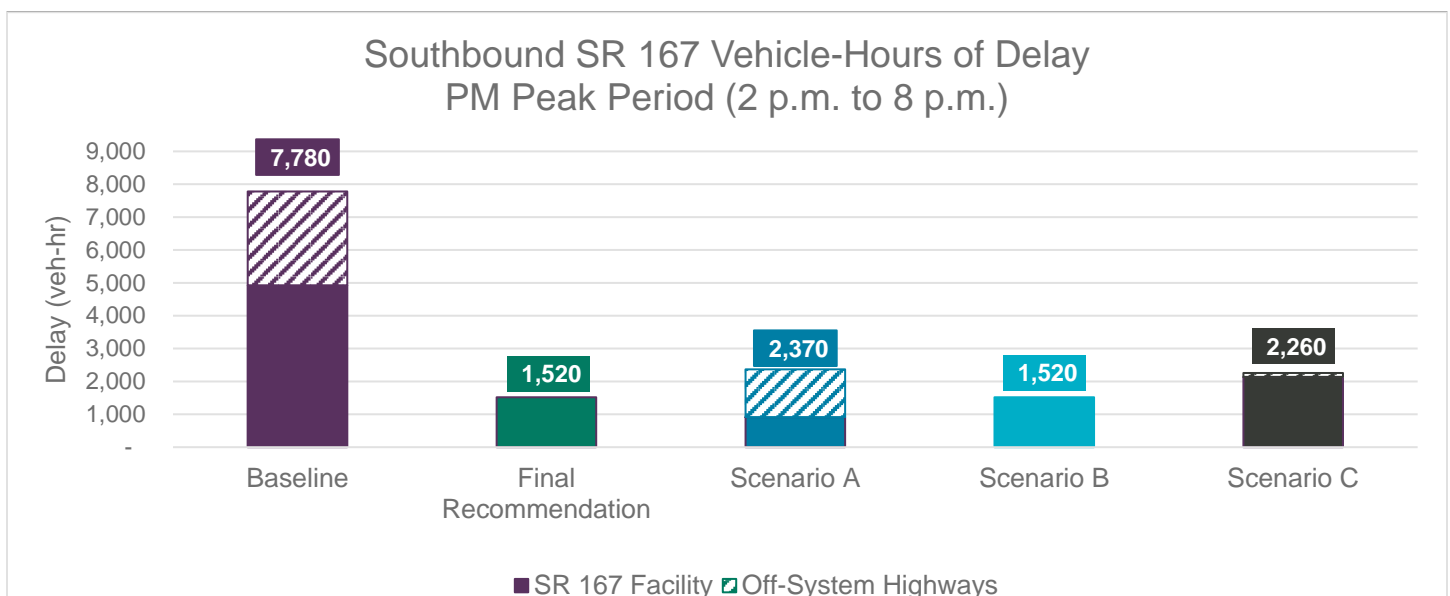


Figure 1-7. PM Southbound SR 167 Vehicle-Hours of Delay

As illustrated in Figure 1-6 and Figure 1-7, the Final Study Recommendations, with their higher person throughput, would provide the greatest reductions in vehicle hours of delay on SR 167 and on state highway segments that approach SR 167. In the AM peak period, the Final Study Recommendations reduce weekday vehicle hours of delay by 3,680 hours, or 88%, compared to the Baseline Scenario. In the PM peak period, the Final Study Recommendations reduce weekday vehicle hours of delay by 6,260 hours, or 80%, compared to the Baseline Scenario.

The Final Study Recommendations also reduce vehicle hours of delay on arterial streets within 1 mile of SR 167. Table 1-4 summarizes the results of arterial vehicle hours of delay.

Table 1-4. Refined Scenario Evaluation Results – Arterial Vehicle-Hours of Delay

Metric	Final Study Recommendations ^a	Scenario A ^a	Scenario B ^a	Scenario C ^a
Weekday vehicle hours of delay on arterials within 1 mile of SR 167	-10% -3,580 vehicle hours of delay	-11% -4,090 vehicle hours of delay	-10% -3,490 vehicle hours of delay	-8% -2,780 vehicle hours of delay

Note:

^a Scenario results indicate the change relative to the Baseline Scenario.

The results in Table 1-4 illustrate that the Final Study Recommendations reduce the vehicle hours of delay on arterials within 1 mile of SR 167 by more than 3,500 hours per weekday, or about 10%, compared to the Baseline Scenario. This reduction is a result of the increased capacity of the dual ETL system, which keeps trips from diverting away from SR 167 to avoid traffic congestion.

Freight Mobility and Reliability

The performance metrics for freight mobility relate to freight vehicle travel time and travel time reliability on SR 167 and local freight access at SR 167 interchanges.

Overall truck travel times and travel time reliability are key to freight mobility. The same general factors that affect general purpose travel times for the Final Study Recommendations also affect truck travel times and speeds. Average travel speeds for heavy trucks would be faster for the Final Study Recommendations compared to the Baseline Scenario. In the northbound direction during peak travel times, truck speeds are 20 to 25 mph for heavy trucks in the Baseline Scenario compared to about 50 to 55 mph in the Final Study Recommendations, cutting freight travel time almost in half. In the southbound direction during the PM peak period, heavy trucks would travel at 25 to 50 mph with the Final Study Recommendations while truck speeds in the Baseline Scenario would range from 5 to 20 mph, significantly reducing truck travel times. Heavy truck speeds/travel times in the Final Study Recommendations are similar to the three Refined Scenarios.

Travel time reliability is a measure of the variation in travel time from day-to-day. For freight vehicles, unreliable travel times can present more of a problem than slow, but reliable travel times. For the most part, travel time reliability and traffic congestion are closely related because a congested roadway has little ability to absorb further delays or reductions in capacity. As a result of the increased person throughput and reduced traffic congestion that are a benefit of the dual ETL system, the Final Study Recommendations have improved freight vehicle travel time reliability compared to the Baseline Scenario. While the project team is not able to specifically quantify the improvements to freight travel time reliability, the higher truck travel speeds/lower truck travel times in the general purpose lanes would improve overall truck travel time reliability. The Final Study Recommendations also include a strategy to allow medium-duty trucks (less than 20,000 pounds) in the ETLs. This recommended strategy would improve travel time reliability for medium-duty trucks, and it would increase capacity and improve efficiency for freight vehicles in the general purpose lanes by allowing additional vehicles to use the ETLs, freeing up additional capacity in general purpose lanes.

The Final Study Recommendations also enhance freight access within the study area by enhancing freight access through new or refined ramps at six key interchanges that provide access to large manufacturing and industrial areas. These interchanges include 84th Street South in Kent, SR 18 in Auburn, Ellingson Road and Stewart Road in Pacific, 24th Street East in Sumner, and Valley Road in Fife.

Practical Solutions and State of Good Repair

The project Purpose and Need evaluation related to practical solutions and State of Good Repair is qualitative, since there is no specific quantification related to these outcomes. WSDOT launched its Practical Solutions planning and design framework in 2013 as a way to implement mobility improvements that are more cost effective and that better integrate into their surroundings. The Final Study Recommendations have been developed in accordance with WSDOT's Practical Solutions framework and are of a scale that is consistent with other large WSDOT capital programs (the projected capital costs for the Final Study Recommendations is \$5.5 to \$6 billion). Therefore, the Final Study Recommendations are more cost conscious than earlier SR 167 planning efforts, and they are also more aligned with community priorities like multimodal investments and strong transit improvements. This context-sensitive outcome is a product of the data-driven and community and partner refined planning process that was incorporated as part of the SR 167 Master Plan PEL Study.

Considering that the Final Study Recommendations are similar in scale and scope to other ongoing WSDOT programs, there is no reason to assume the projects and strategies would not be maintained in a State of Good Repair well into the future. Some of the projects identified in the Final Study Recommendations could be implemented to replace infrastructure that will be reaching the end of its service life over the coming years. Examples of aging infrastructure that will need to be replaced and that were considered for this study include: bridges built during SR 167's initial construction period, pavement, and communications, tolling, and Transportation Systems Management and Operations (TSMO) infrastructure.

The Final Study Recommendations meet the practical solutions and State of Good Repair project Purpose and Need by demonstrating that they would replace aging infrastructure in a timely manner and all new infrastructure would be at a scale that can be maintained over time at a reasonable cost.

Chapter 2. Final Study Recommendations

Table 2-1 and Figure 2-1 present the projects and strategies included in the Final Study Recommendations.

Table 2-1. SR 167 Master Plan Final Study Recommendations Table

Project or Strategy	Project or Strategy Description
Additional ETL in Both Directions of SR 167 from I-405 to SR 512	Dual ETLs between I-405 and SR 512 (20 miles); include upgrades to communications infrastructure (fiber, Intelligent Transportation Solutions)
SR 167/SR 18 Interchange	Add eastbound (EB) to southbound (SB) and northbound (NB) to westbound (WB) ramps; rebuild the WB to SB ramp to improve freight mobility; include NB and SB auxiliary lanes on SR 167 between Ellingson Road and SR 18
SR 167/SR 512 ETL Flyover Ramp	Provide direct access ramp from SR 167 ETLs to SB SR 167 to WB SR 512 and EB SR 512 to NB SR 167
SR 18: SR 167 to SR 164 Auxiliary Lane	Add an auxiliary lane on EB SR 18 from the SR 167 interchange to SR 164
NB 167 Auxiliary Lane from 277th Street to SR 516	Add an auxiliary lane on NB SR 167 from 277th Street to SR 516
43rd Street/180th Street Interchange Improvements	Rebuild interchange to reduce congestion and improve active mode access across SR 167
84th Avenue/Central Avenue Interchange Improvements	Improve truck access and reduce active mode conflicts from SR 167 to/from 84th Avenue/Central Avenue by adding turn lanes; add Complete Streets improvements across SR 167
Kent Direct Access Ramp	Improve access from the SR 167 ETLs to downtown Kent for transit and ETL users; exact design and location to be determined through a future study
SR 167/SR 516/SR 181 Interchange Improvements	Intersection improvements at interchange; add Complete Streets improvements across SR 167
15th Street NW Interchange Improvements	Intersection improvements at the interchange; add Complete Streets improvements across SR 167
Auburn Direct Access Ramp	Improve access from SR 167 ETLs to downtown Auburn for transit and ETL users; exact design and location to be determined through a future study
Ellingson Interchange Improvements	Reduce truck congestion at interchange, could involve widening for additional turn lanes under SR 167; add Complete Streets facilities across SR 167
Jovita Boulevard/Stewart Road Interchange Improvements	Reduce truck congestion at interchange, could involve widening for additional turn lanes under SR 167; potential roundabout at closely spaced West Valley Highway and SB SR 167 ramp intersections; ensure existing Interurban Trail connection across SR 167 is maintained or enhanced
24th Street E Interchange Improvements	Improve ramp terminal intersections to improve freight access and reduce the level of traffic stress for bicycles and pedestrians at the interchange; add Complete Streets improvements across SR 167
Sumner Direct Access Ramp	Improve access from SR 167 ETLs to downtown Sumner for transit and ETL users; exact design and location to be determined through a future study
Complete SR 167 Extension/Valley Interchange (Gateway Project)	Complete the SR 167 Extension/Valley Avenue interchange; include new tolling equipment

Project or Strategy	Project or Strategy Description
C Street SW and 15th Street SW Intersection Improvements	Construct additional turn lanes and upgrade channelization at the intersection to improve traffic flow and transit priority; complete sidewalk improvements to connect the trail along C Street SW to 15th Street SW and provide bike facilities along 15th Street SW to connect to the Outlet Collection area and the Interurban Trail
Ellingson Road BNSF Overcrossing Rebuild	Reconstruct the existing BNSF overcrossing of Ellingson Road to accommodate an additional travel lane and a multipurpose path; remove the existing center column to improve lane alignment and safety for all modes
East Valley Highway	Build Complete Street with one to two travel lanes in each direction, a center turn lane where needed, and low-stress pedestrian and bicycle infrastructure (sidewalk, shared-use path, buffered bike lanes, etc.) between the White River Trail terminus/Lakeland Hills Way to Terrace View Drive
West Valley Highway	Build Complete Street with one travel lane in each direction, a center turn lane where needed, and low-stress pedestrian and bicycle infrastructure (sidewalk, shared-use path, buffered bike lanes, etc.) between 15th Avenue NW and Edgewood Drive E (7 miles)
Fryar Avenue and Zehnder Street Intersection Improvements	Improve intersection operations to enhance freight access to Sumner/Pacific Manufacturing Industrial Center
Meridian Business Access and Transit (BAT) Lanes	Add BAT Lanes to Meridian Avenue between Spencer Street and 24th Avenue E; a new bridge across railroad tracks and repurposing existing NB climbing lane north of Dechaux Road; Complete Streets improvements for pedestrian and bicycle access
Grady Way/Rainier Avenue Intersection Improvements	Improve transit operations at the Grady Way/Rainier Avenue intersection; look for opportunities to enhance multimodal access and safety at the intersection
Kent Transit Center – Access, Mobility, and Safety Improvements	Refine travel lanes to improve bus access, build new bicycle connections, and improve sidewalk and crossings to the Kent Transit Center
SR 167 Bus Rapid Transit (BRT)	New SR 167 BRT service between Puyallup and Renton with possible extension to Link light rail
Metro Connects Route 2028	New express route between Enumclaw and Auburn Station via SR 164
Metro Connects Route 3054	New local route between Kent and Tukwila via Southcenter Parkway
Metro Connects Route 3055	New local route between East Hill-Meridian and SeaTac Airport via Kent
Metro Connects Route 3061	New local route between Green River College and Renton Highlands via 132 nd Avenue SE
Metro Connects Route 3068	New local or on-demand route between Auburn Station and Sunset Park via Stuck
Metro Connects Route 3069	New frequent route between Auburn Station and Angle Lake Station via Des Moines
Metro Connects Route 3062	New local route between Black Diamond and Kent Station via Wilderness Village
Metro Connects Route 3099	New local route between Federal Way Transit Center and Kent Station via Lakeland North
Metro Connects Route 3162	New frequent route between Green River College and Renton Transit Center via Kent East Hill
Metro Connects Route 3168	New local or on-demand route between Pacific and Auburn Station via Algona

Project or Strategy	Project or Strategy Description
Metro Connects Route 3221	New local route between Kent Station and The Landing via 84th Avenue S/Lind Avenue SW
Metro Connects Route 2402	New express route between Seattle and Auburn via SR 167
Metro Connects Route 1046	New frequent route between Fairwood and Des Moines via SeaTac
Metro Connects Route 1514	New frequent route between Covington and SeaTac via Kent
Metro Connects Route 1515	New frequent route between Kent and Twin Lakes via Star Lake
Metro Connects Route 1049	New frequent route between Kent and Rainier Beach via Tukwila
Metro Connects Route 1052	New frequent route between Twin Lakes and Green River College via Federal Way
Metro Connects Route 1056	New frequent route between Highline College and Green River College via Kent
Pierce Transit Route 498	New local route between Fife Link Light Rail Station and Auburn Sounder Station
Pierce Transit Meridian HCT	High-capacity transit along Meridian SR 161 (similar to Route 402)
Expanded Sounder Service	Look for opportunities to add additional Sounder trips throughout the day
On-demand Transit to Manufacturing Industrial Centers (MIC), Equity Priority Areas, and Transit Hubs	Provide on-demand transit connections between transit hubs and employers in MICs
Interurban Trail Gap Closure and Extension	Close gaps in Interurban Trail between Fife and Pacific
Interurban Trail Safety and Access Enhancements	Improve lighting, crossing, and access to the Interurban Trail throughout the entire study area; includes improvements on the Interurban Trail and on low-stress facilities that connect to or could be constructed to connect to the trail
Regional Trail Improvements	Close gaps in and improve access to regional trails within the study area; this strategy is in addition to the specific improvements to the Interurban Trail Potential trail projects identified in local plans that are consistent with this strategy include but are not limited to the White River Trail, Puyallup Riverwalk Trail, Foothills Trail Link to Riverwalk Trail, Lake to Sound Trail, Green River Trail, and other connections between these trails and from these trails to the Interurban Trail
New Sidewalks in the Regional Growth Centers and Countywide Centers (5 miles)	Fill sidewalk gaps and provide safe arterial crossings within RGCs and Countywide Centers within 1 mile of SR 167; assume 5 miles of new sidewalks
Bicycle Connections	Complete gaps in the bicycle network and/or build new low-stress bicycle infrastructure between community-identified destinations; goal of 5-10 miles of new facilities
Low-income Toll Program	Implement a statewide low-income toll program with final details to be defined by the Washington State Transportation Commission
Medium-duty Trucks in ETL	Allow medium-duty trucks (10,000-20,000 pounds) in ETLs; final weight limitations to be determined by the Washington State Transportation Commission

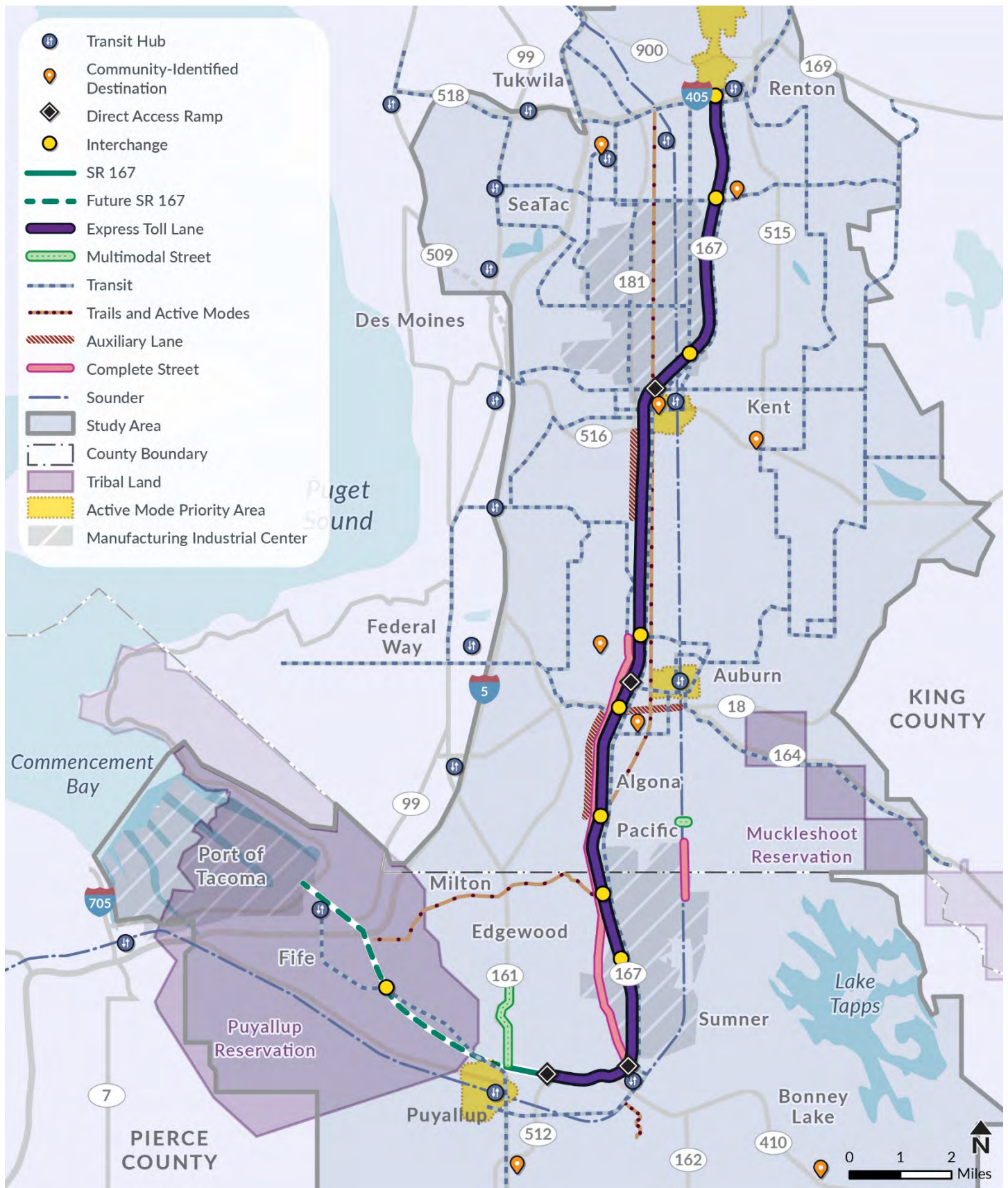


Figure 2-1. SR 167 Final Study Recommendations