



Evaluation of Local Transportation Impacts in the Vicinity of JBLM

Executive Summary

September 2020



INTRODUCTION

Joint Base Lewis-McChord, which covers more than 134 square miles of south Pierce County and eastern Thurston County, is an irreplaceable economic engine in both the Puget Sound region and Washington State. As one of the nation's power projection platforms, it hosts both Army and Air Force personnel and equipment critical to supporting U.S. forces and their mission here and across the globe. The communities surrounding the Joint Base, including Lakewood, Steilacoom, DuPont, Yelm, Roy, Lacey and Tacoma have long supported and valued the importance of the military population. Over the last decade, regional and state leaders have worked to address and relieve the transportation challenges within and around the base. In 2014, the State Legislature funded the WSDOT Interstate 5 Congestion Relief Study and in 2015 Connecting Washington funds were allocated to construct interchange and mainline improvements on a nearly eight-mile segment of I-5 through JBLM.

With these major investments on I-5 well underway, it is an opportune time to assess how the local transportation system is performing, where the critical bottlenecks are located in the vicinity of JBLM, and to identify and prioritize a set of multimodal strategies and projects that the SSMCP and their partner agencies can work together to fund and implement.



Project Purpose

This effort recommends and prioritizes projects, programs, and policies that improve access to Joint Base Lewis-McChord (JBLM) in order to maintain a safe and reliable transportation system both on- and off-base.

The project evaluated the existing and 2040 forecast conditions of the transportation network, focusing on key corridors that provide access to the installation, to develop an action plan that:



SUPPORTS the transportation needs of the JBLM workforce



INCREASES state and local roadway network efficiency



IMPROVES mobility of people and goods in the area



EXPANDS transportation choices



ENHANCES system safety and operations



ENRICHES the region's economy, environment, and overall quality of life

Project Overview

There are only a few local arterials in the vicinity of JBLM that either connect to an I-5 interchange or run parallel to I-5 and can serve as an alternative travel route during periods of congestion. Most of these arterials are located on the north side of the Base and are expected to see increasing delays as traffic spills back from the I-5 interchanges and local travel demand increases. Additionally, the SR 507 corridor on the south and east sides of JBLM is also expected to see substantive growth in volumes and congestion levels and existing bottlenecks will worsen.

Building on the substantial improvements underway along I-5, local and state agencies have identified a wide variety of improvements to local streets and arterial highways that can also enhance access to JBLM. This project will recommend and prioritize projects, programs, and policies that improve access to JBLM and maintain a safe and reliable transportation system both on- and off-base. For the purposes of this project, the capital investment programs (CIPs) and transportation investment programs (TIPs) developed by local agencies

served as a starting place for identifying potential solutions to the transportation problems in the region. A selection process was undertaken to determine which of the projects, programs, and policies identified in local plans would also address the growing need to accommodate the JBLM workforce on a safe, reliable, and efficient transportation network. The study effort focused on a series of arterial roadway corridors that provide connections to existing JBLM Access Control Points (gates). These arterials are illustrated in Figure 1 and include city streets, county roads and some state highways (other than I-5).

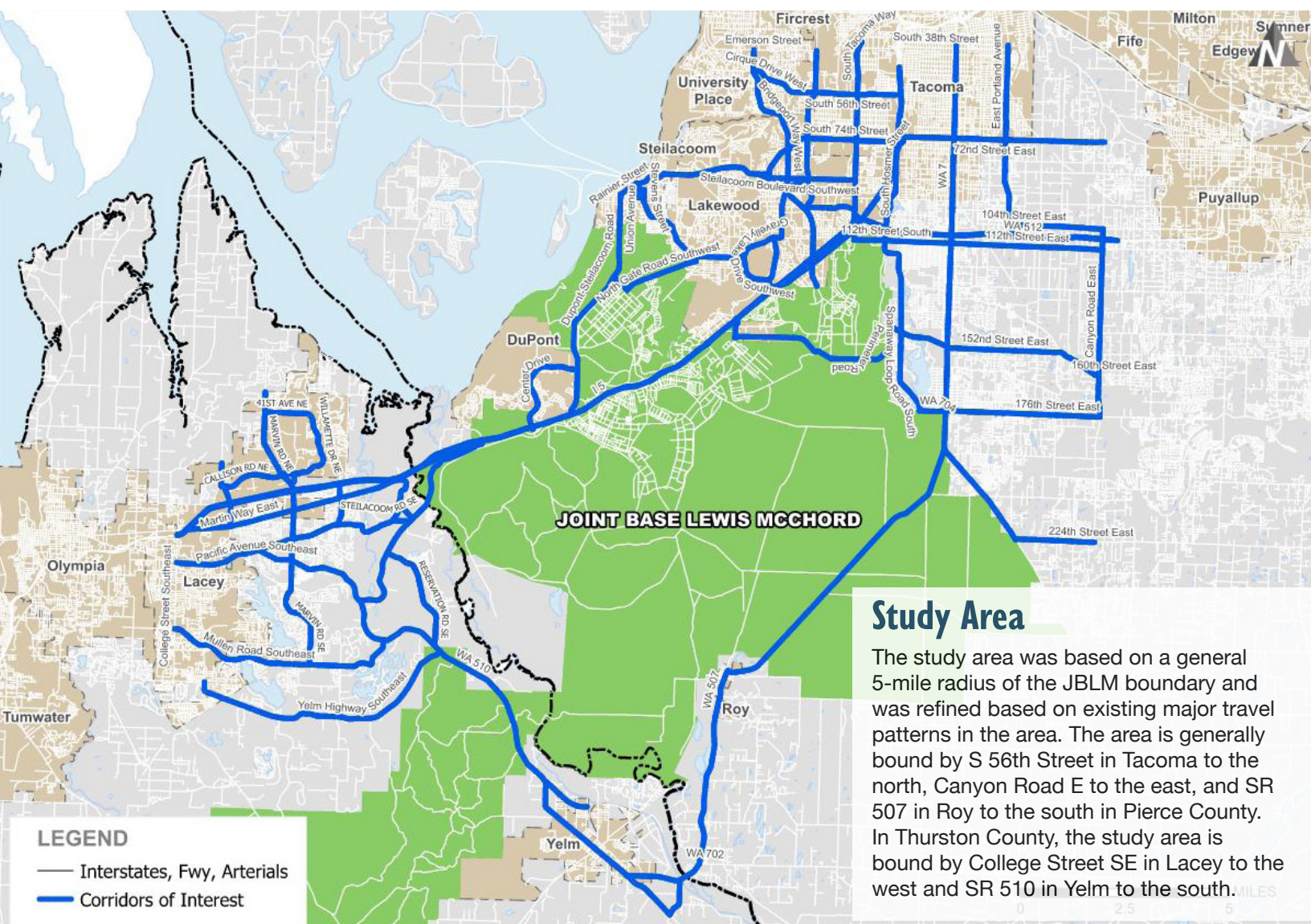


Figure 1. Study Area Corridors



STAKEHOLDER OUTREACH

Stakeholder outreach consisted of two components: Stakeholder Interviews and Working Group meetings. First, a series of interviews were conducted with local agency technical staff in order to gain a deeper understanding of transportation access and circulation challenges, especially those around the gates (Access Control Points) of JBLM. These scripted one-on-one interviews covered issues like transportation modes, safety, circulation and access and help to refine the purpose and need of the report. Similarly, the SSMCP's Transportation Working Group (TWG), (composed of an established group of transportation representatives and co-chaired by leadership from TRPC, WSDOT and Pierce Transit) met six times to provide feedback and technical review during each step of the process. The TWG confirmed the project vision, goals,

purpose and need, and defined the evaluation criteria and prioritization methods to be used to screen the agency project lists. Ultimately, the TWG made recommendations to the SSMCP Executive Leadership Team and Steering Committee on the final set of screened projects.

During the outreach process and the TWG meetings, participants were asked to identify potential projects. Stakeholders were asked to identify potential projects that could alleviate traffic obstacles in the JBLM region.

Commonalities among stakeholder interviews include looking for east-west connections within the study area, identifying improvements to safety as well as congestion, and finding strategies with community-wide benefits.

Stakeholders include the following:

- Washington State Department of Transportation (WSDOT)
- Pierce Transit
- City of Roy
- City of Tacoma
- Joint Base Lewis-McChord
- InterCity Transit
- City of Yelm
- Thurston County
- Washington National Guard
- Sound Transit
- City of Lacey
- Pierce County
- Puget Sound Regional Council
- City of Lakewood
- City of University Place
- Nisqually Indian Tribe
- Thurston Regional Planning Council (TRPC)
- City of DuPont
- Town of Steilacoom
- Clover Park School District

PROJECT SCREENING PROCESS

Project screening was conducted using a multi-step process that relied on three increasingly detailed levels of evaluation as illustrated in Figure 2. The process began with review of 38 planning documents from 15 different agencies in the study area. Documents included agency Transportation Plans, Transportation Studies, 6-Year Transportation Improvement and Capital Improvement Plans (TIPs and CIPs), and Transportation Development Plans. Based on review of the planning documents, a project list was compiled that advanced into the screening process.

The screening process involved the following:

- Level 1 analysis included developing a list of 151 transportation improvement options that were subjected to an initial screening based on their responsiveness to two key criteria: were the projects already funded and did they serve the key corridors leading to/from JBLM.
- Level 2 screened projects that remained after the Level 1 screening to determine projects that would be most effective in meeting the overall purpose and goals of the study.
- Level 3 involved an in-depth assessment of the projects based on the criteria in Figure 3 to further narrow the project list to a prioritized series of recommended improvements.

More details on the project screening process are summarized in the Technical Report.

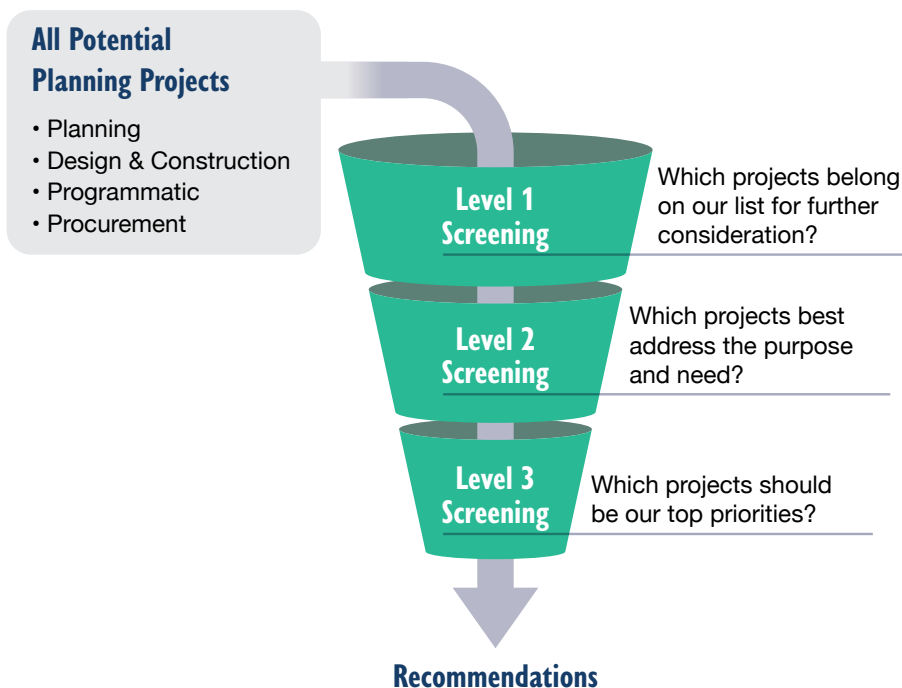


Figure 2. Project Screening Process



Ensure Mobility

- Vehicular Mobility
- Multimodal Circulation



Ready to Implement

- Agency Priority
- Unlikely to Advance Without Funding
- Project Sufficiently Defined



Minimize Environmental Issues

- Range of Impacts to Natural Environment
- Visual, Property Acquisition and/or Relocation Impacts



Enhance Safety

- Serve Area with Safety Problem
- Address Area Safety



Serve JBLM Priority Gate

- Improve Access to a Priority Gate



Geographic Equity

- Ensure diversity of jurisdictions

Figure 3. Level Three Screening Criteria

RECOMMENDATIONS

The results of the screening and evaluation process were scored and an aggregate project priority ranking was established as presented in the following project summaries. The top three ranked projects were identified for Tier 1 or priority implementation. The next three ranked projects were identified for Tier 2 implementation as additional funding resources become available.

For the Level 3 screening process, policy/study projects were qualitatively assessed to identify their potential benefits to improved JBLM access relative to each other. These projects are summarized on page 8.

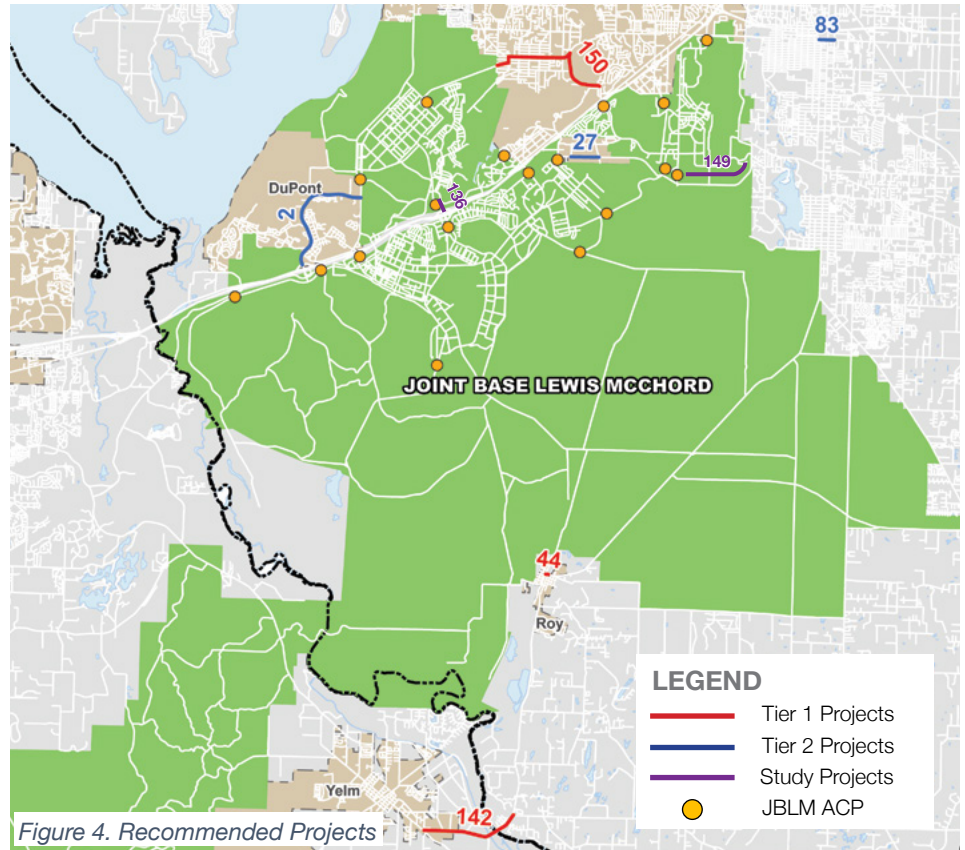


Figure 4. Recommended Projects

RECOMMENDED TIER 1

Rank 1, Project # 150

Washington Blvd/North Gate Rd/ Edgewood Ave SW Corridor Improvements

Project Description

Construct curbs, gutter, sidewalks, traffic control, bike lanes, street lighting, drainage, overlay

Agency

City of Lakewood

Total Project Cost
\$19,000,000



RECOMMENDED TIER 1

Rank 2, Project # 44

JBLM Access Improvements, SR 507 to Muck Creek Bridge

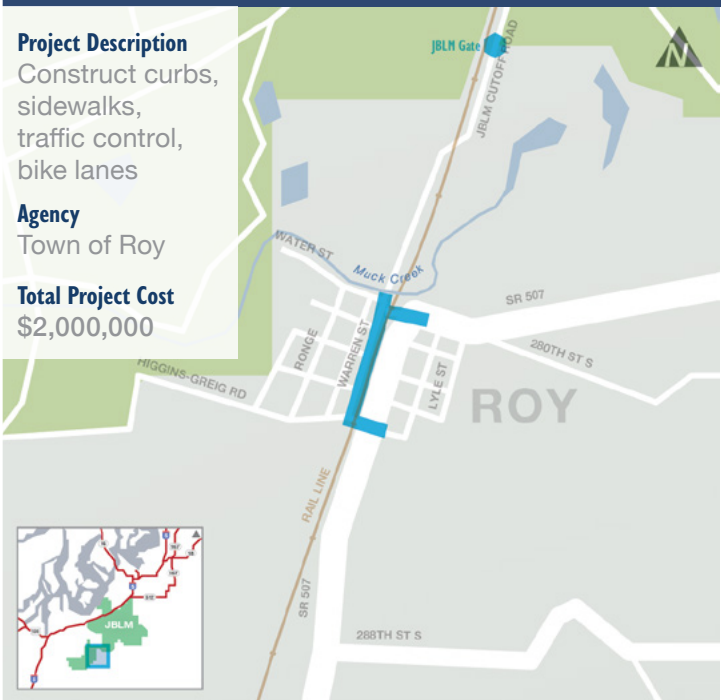
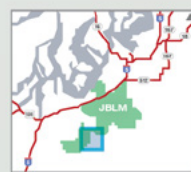
Project Description

Construct curbs, sidewalks, traffic control, bike lanes

Agency

Town of Roy

Total Project Cost
\$2,000,000



RECOMMENDED TIER 1

Rank 3, Project # 142

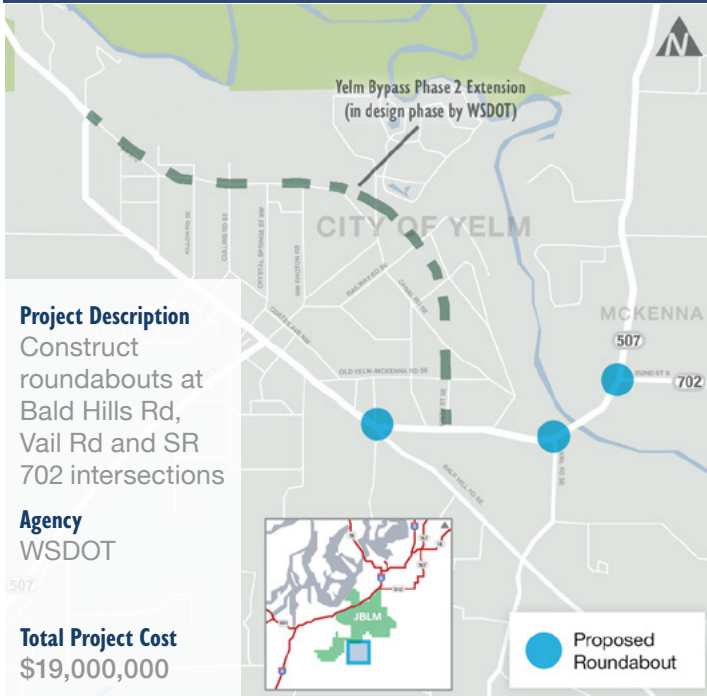
**SR 507/Bald Hills Rd to SR 702
Intersection Improvements****Project Description**

Construct roundabouts at Bald Hills Rd, Vail Rd and SR 702 intersections

Agency

WSDOT

Total Project Cost
\$19,000,000

**RECOMMENDED TIER 2**

Rank 4, Project # 2

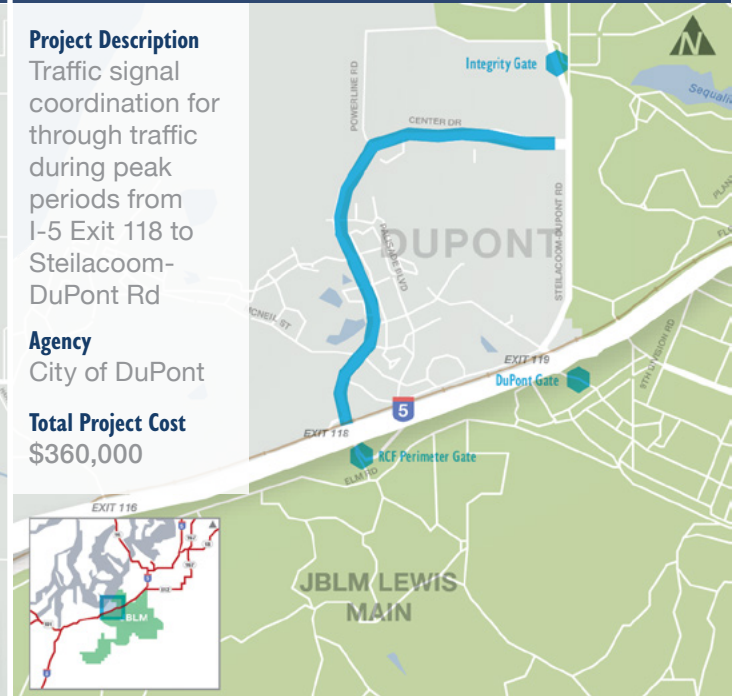
**Center Drive Traffic Signal
Coordination & Modernization****Project Description**

Traffic signal coordination for through traffic during peak periods from I-5 Exit 118 to Steilacoom-DuPont Rd

Agency

City of DuPont

Total Project Cost
\$360,000

**RECOMMENDED TIER 2**

Rank 5, Project # 27

**150th Street
Corridor Improvements****Project Description**

Widen to include bike/ped facilities, structural pavement improvements from Spring St to Woodbrook Dr

Agency

City of
Lakewood

Total Project Cost
\$2,150,000

**RECOMMENDED TIER 2**

Rank 6, Project # 83

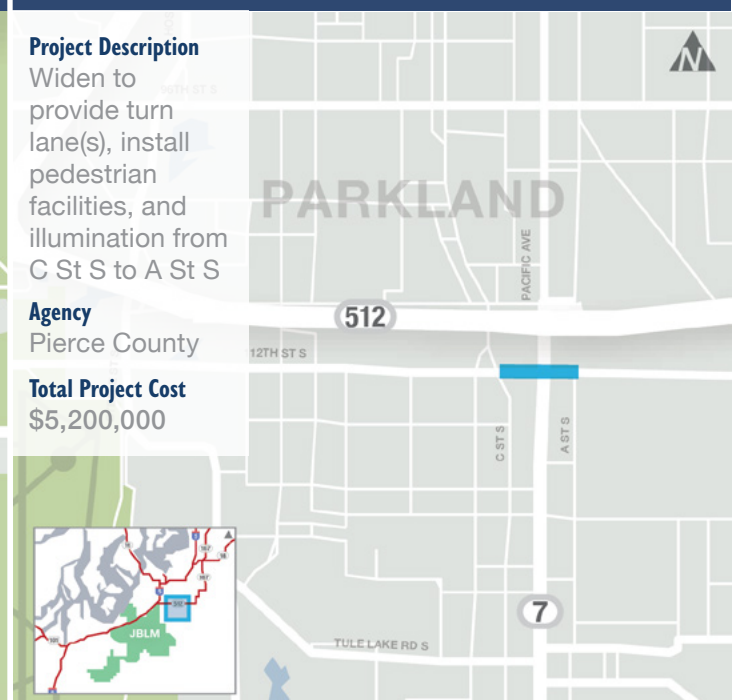
**112th Street S
Corridor Improvements****Project Description**

Widen to provide turn lane(s), install pedestrian facilities, and illumination from C St S to A St S

Agency

Pierce County

Total Project Cost
\$5,200,000



RECOMMENDED STUDIES

Rank 1, Project # 136 Revised

Main Gate Flyover Feasibility Evaluation

Project Description

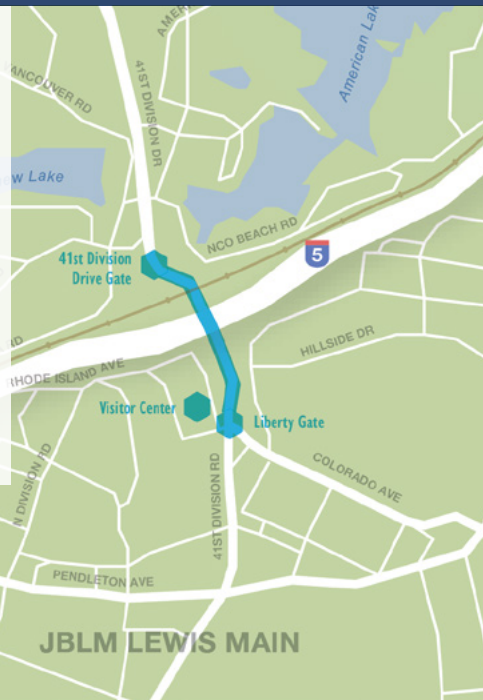
Provide secure connection between Lewis Main and Lewis North in vicinity of I-5/Exit 120 interchange

Agency

JBLM/SSMCP

Total Project Cost

\$1,500,000



Implementation Strategies

To implement the six recommended projects and two recommended studies prioritized by the evaluation process, the following strategies can be used to promote the coordination and project funding advocacy that will be necessary for success:

- **Establish and maintain agency coordination.** Agencies will need to continue to coordinate and partner with SSMCP and adjoining agencies to move the recommended projects forward.
- **Conduct on-going monitoring using the established Transportation Working Group (TWG).** Continually assessing the progress of these key projects within the regularly scheduled SSMCP meeting setting will encourage communication and further coordination to shepherd the projects to completion
- **Carry out Legislative Advocacy.** The SSMCP will be required to promote funding and implementation of the recommended projects. The recommended projects will require funding from both state and federal governments. To secure this funding, the SSMCP will need to advocate for the recommended projects within the partnership's legislative priorities.
- **Identify and Pursue Funding Sources.** A new funding source or combination of local revenues may be needed to fund the identified projects and studies. For example, DOD OEA funds can be pursued for the study projects.

RECOMMENDED STUDIES

Rank 2, Project # 149

Perimeter Road Corridor Study

Project Description

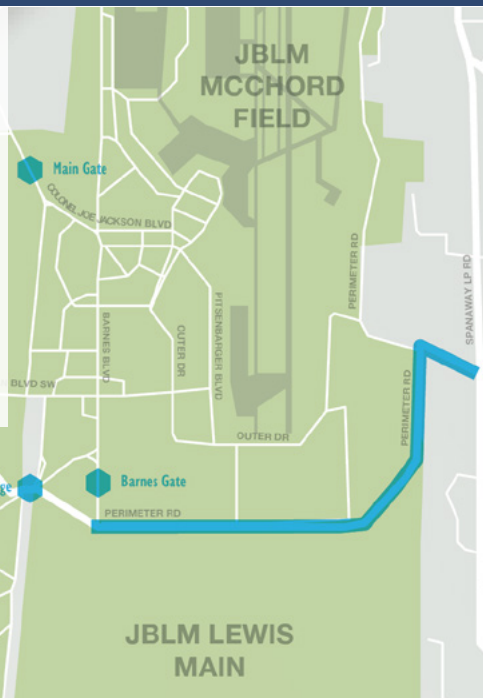
Improve multimodal access along corridor from Military Road to Barnes Gate

Agency

JBLM/SSMCP

Total Project Cost

\$350,000



For more information

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Communities Partnership

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