Appendix F
RDP Development Files

Appendix F: RDP Development Files

CLICK ON THE BOLD TITLES IN THIS LIST OF DOCUMENTS TO JUMP TO THE FULL TEXT OF THE DOCUMENT DESCRIBED

The files listed below are all files used to create the SR 169 Route Development Plan (RDP).

SR 169 Route Development Plan Corridor Study Corridor Working Group Charter
Date: November 16, 2004
Content: The SR 169 Corridor Working Group Charter
Printed Pages: 5 pages
Form: Letter size

State Route 169 Corridor Study Goals & Objectives
Date: December 14, 2004
Content: Document states goals and objectives for corridor study
Printed Pages: 5 pages
Form: Letter size

State Route 169 Corridor Study Evaluation Criteria Technical Memorandum
Date: February 15, 2005
Content: Document discusses the evaluation criteria and metrics used to analyze improvement projects
Printed Pages: 10 pages
Form: Letter size

SR 169 ADT Directional Volumes
Date: October 31, 2006
Content: Existing ADT Conditions (2004); Future No-Build ADT Conditions (2030); Future Options #1, #2, & #3 ADT Conditions (2030)
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Corridor Final Screening of Potential Transportation Projects
Date: September 28, 2005
Content: Final results of potential improvement project screening
Printed Pages: 13 pages
Form: 6 pages letter size, 7 pages 11″ x 17″

SR 169 2030 Level of Service (LOS) Intersection Analysis – Summary

Date: October 31, 2006
Content: Intersection level of service analysis
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Level of Service (LOS) Segment Analysis – Summary

Date: October 31, 2006
Content: Highway segment level of service analysis
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Travel Time Summary

Date: October 31, 2006
Content: Travel Time by Segments
Printed Pages: 2 pages
Form: 1 page letter size, 1 page 11″ x 17″

SR 169 Turning Movement Volumes

Date: October 31, 2006
Content: turning movement analysis of options
Printed Pages: 14 pages
Form: 11″ x 17″

SR 169 Collision Data 2002 to 2004

Date: October 31, 2006
Content: SR 169 Collision Data by Segment from 2002 to 2004
Printed Pages: 8 pages
Form: 6 pages letter size, 2 pages 11″ x 17″

SR 169 Enumclaw Segment – Improvement Options

Date: October 31, 2006
Content: A colored map schematic displaying various kinds of improvements along SR 169.
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Rural / Agricultural Segment – Improvement Options

Date: October 31, 2006
Content: A colored map schematic displaying various kinds of improvements along SR 169.
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Black Diamond Segment – Improvement Options

Date: October 31, 2006
Content: A colored map schematic displaying various kinds of improvements along SR 169.
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Maple Valley Segment – Improvement Options

Date: October 31, 2006
Content: A colored map schematic displaying various kinds of improvements along SR 169.
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Cedar River Segment – Improvement Options

Date: October 31, 2006
Content: A colored map schematic displaying various kinds of improvements along SR 169.
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Renton Segment – Improvement Options

Date: October 31, 2006
Content: A colored map schematic displaying various kinds of improvements along SR 169.
Printed Pages: 1 page
Form: 11″ x 17″

SR 169 Route Development Plan
Corridor Study

Corridor Working Group Charter

Signed by Partners:
November 16, 2004

Project Vision

A set of consensus-based recommendations for SR 169 that will increase safety and reliability, reduce person and vehicle delay, manage access, and respond to growth in the years to come.

Project Goals

Develop context-sensitive recommendations that can be implemented and agreed to by study Corridor Working Group (CWG) partners. These projects will be politically acceptable, suitable for funding, environmentally sound, and responsive to the vision above. The recommendations will include:

- Immediate-term project opportunities that can be funded and/or implemented in the next 6-18 months.
- Short-term recommendations on an action strategy to construct and operate mobility and safety improvements in the next 6 years.
- Long-term recommendations for mobility and safety for the next 20-25 years.

Project Outcomes

This corridor study will be considered a success if the CWG partners agree to a Route Development Plan in which:

- Projects are clearly prioritized.
- The public is meaningfully involved in development of recommendations.
- There is a clear phasing plan for implementation.
- Plans fit into the context of the communities involved and recognize and respect the rural and urban character, as well as comprehensive plans, along the corridor.
- Opportunities are pursued to lessen the corridor's impact of dividing communities.

Corridor Working Group Operating Guidelines

A Corridor Working Group (CWG) has been formed to help guide the corridor study effort.

Ground Rules

CWG Partners agree to:

- Maintain a focus on projects that benefit the entire corridor.
- Share information openly and promptly.
- Be patient when information may not be readily available.
- Articulate concerns as early as possible.
- Remain flexible, open-minded and actively participate in meetings.
- Respect each other's time and commitment.
- Meet in locations along the corridor.

Roles and Responsibilities

WSDOT and the consultant team agree to:

- Effectively manage the scope, schedule and budget.
- Keep partners informed of study progress.
- Complete all necessary documentation to support recommendations.
- Provide technical expertise when requested.
- Manage logistics for meetings.
- Brief local decision-makers and produce briefing materials and reports when requested by partners.

CWG Partners agree to:

- Comment on materials promptly when requested.
- Identify the appropriate channels for communication within their organizations.
- Provide specific local expertise when requested, including identifying emerging local issues.
- Brief local decision-makers.

Communication

Between meetings:

- E-mail: WSDOT copied on all correspondence; full team copied when appropriate.
- Use phone log to track issues as they arise.
- WSDOT will maintain and update a project website.
- Meetings are only called when necessary and are driven by project need.

At meetings:

- At least one representative from each of the CWG partners should be present.
- Informed alternates are acceptable and encouraged if the partner cannot attend.
- Decisions are documented at the close of every meeting.
- Meetings end with clear understanding of expectations and assignments for next steps.

Decision Making

CWG Partners will strive to reach agreement by consensus at a level that can be characterized as partners being willing to "live with" the proposed action. Equal participation will be a goal of the team decision process, but only those partners with a direct stake in the outcome of a proposed action will be responsible for developing specific recommendations. Minority opinions will be reflected in the final report on recommendations.

In addition, partners will try to avoid spending an inordinate amount of time working toward consensus on any issue at the expense of reaching consensus on other issues. Partners will also try to avoid revisiting decisions once they have been made.

Conflict Resolution

When an issue arises that cannot be easily resolved, the partners agree to:

- Determine if the issue should be resolved within the group or outside and participate however is appropriate.
- Ensure the appropriate decision makers are at the table to resolve the issue.
- Remember that controversial projects are unlikely to receive funding; the intent of all parties is to resolve issues so projects can be funded.

Partners and Contacts

Points of contact are:

- Chris Searcy, City of Enumclaw
- Jason Paulsen, City of Black Diamond
- Dave Zielinski, City of Maple Valley
- Nick Afzali, City of Renton
- Ann Martin, King County
- Allison Dobbins, Puget Sound Regional Council
- Seth Stark, WSDOT

Partner Signatures

By signing below, I am committing to participate in the study process on behalf of my organization and agree with the outcomes and guidelines as discussed in this charter. Signing this charter does not commit my agency to a particular course of action or decision.

City of Black Diamond

City of Enumclaw

City of Maple Valley

City of Renton

Puget Sound Regional Council

King County

WSDOT

WSDOT / UPO

STATE ROUTE 169 CORRIDOR STUDY

GOALS & OBJECTIVES

December 14, 2004

Prepared for:

Washington State Department of Transportation
Urban Planning Office
401 2nd Avenue South, Suite 300
Seattle, Washington 98104

Washington State Department of Transportation

Prepared by:

Parsons Transportation Group
925 Fourth Avenue, Suite 1690
Seattle, WA 98104

GOALS & OBJECTIVES
SR 169 CORRIDOR STUDY

Introduction

The purpose of the SR 169 Corridor Study is to identify and prioritize transportation infrastructure projects that improve safety, mobility, and reliability of travel on the corridor while limiting adverse environmental affects and generating community support. Immediate, short, and long term* improvements would be aimed at alleviating safety concerns, traffic congestion, and travel delay on SR 169.

The final product of the Corridor Study will be a Route Development Plan (RDP). The RDP will address the transportation problems identified by the Corridor Working Group (CWG) partners, local jurisdictions, stakeholders, route users, and affected communities. The SR 169 CWG will develop an initial set of concept-level improvement alternatives reflecting the range of choices available. Those alternatives will then be discussed and evaluated, and a set of final recommendations will be developed. The improvement alternative packages will address the following goals and objectives.

Route Description

Located in southeast King County, the SR 169 corridor is an important two to five-lane north-south route for local, commuter, tourist, recreational, industrial, and commercial traffic. The route is about 32 miles long, extending southeast from I-405 in Renton to the SR 164 junction in Enumclaw. The corridor passes through the Maple Valley, Black Diamond, as well as unincorporated King County.

The corridor has experienced increased commercial and residential development in the last 15 years, which has changed some segments of the corridor from rural to a more suburban landscape. Traffic volumes along several sections of the corridor have increased between 4.6 and 5.7 percent annually. SR 169 is an arterial through Maple Valley and Black Diamond. The state route functions as a residential street in Enumclaw. Several schools and churches are located along the corridor, such as Rock Creek Elementary School, Cedar River Middle School and the Maple Valley Community Church. Commercial activity is concentrated at the intersection of SR 169 and SR 516 (Kent-Kangley Road), which is also

* immediate term = 6 to 18 months; short term = up to 6 years; and long term = 6 years to 20 - 25 years.

known by residents as the "Four Corners". The Lake Wilderness and Maplewood Golf Courses, which draw regional traffic, are also located along SR 169. Sand and gravel companies also use this corridor, representing a major industry in the area. Their trucks routinely travel the corridor, as do trucks hauling garbage to the Cedar Hills Landfill from around the county.

There are five (5) High Accident Corridors (HACs) and one (1) High Accident Location (HAL) on the SR 169 corridor.

Study Goals & Objectives

To determine the appropriate recommendations for SR 169, this study will identify improvement projects consistent with the following goals:

Safety and Reliability

Identified Problems or Concerns: Safety improvements along the corridor particularly related to student walk routes, bus routes, and emergency vehicle access are a primary concern for the Corridor Working Group. In addition to the HACs and HAL identified on the corridor, pedestrian and vehicular fatalities and injuries have occurred along the corridor. Parts of the corridor now carry between 30,000 to 45,000 vehicles per day and volumes are expected to continue increasing.

- Project Goal: Improve safety along the SR 169 corridor.

- Project Objective: Identify improvements that will reduce incidents and accidents in the corridor. At conflict locations, physical and/or operational improvements, including installing new traffic signals, improving local street connectivity, reducing speed limits, and employing access management measures, will be suggested to enhance the safety of the corridor.

Travel Demand and Mobility

Identified Problems or Concerns: In general, SR 169 is a two lane highway within the rural areas, and a five lane highway in more urban areas. There are distinct directional flows in morning and evening peak travel periods. These flows cause considerable congestion. This is particularly evident at major intersections including: I-405, SR 18 and SR 164. The corridor is used by commuters, tourists, recreationists, and commercial and industrial businesses. Traffic volumes are expected to increase in the future.

- Project Goal: Improve mobility and reduce person and vehicle delay along SR 169.

- Project Objective: Identify projects and operational improvements that address bottlenecks and chokepoints as a means of maximizing capacity along SR 169. These strategies could include operational improvements and new or improved corridor facilities that benefit all users. Transportation facilities should encourage safe use and access to transit, bicycle, and pedestrian facilities.

Goods Movements and Regional Traffic

Identified Problems or Concerns: Freight movement (specifically gravel trucks) along SR 169 is currently exceptionally heavy. Land use planning and economic projections suggest there will be an increase in trucks carrying goods in and out of the study area.

- Project Goal: Improve freight movement along the SR 169 corridor.

- Project Objective: Identify physical or operational projects to improve efficient truck movement of goods and services on SR 169. This strategy should either maintain or improve freight travel times and trip reliability, and reduce potential conflict points between trucks, passenger vehicles, and pedestrians.

Environmental Affects

Identified Problems or Concerns: Existing traffic and future roadway improvements may affect wetlands, river and stream crossings (e.g. Cedar and Green rivers), hazardous slopes, storm water runoff and the overall environmental quality.

- Project Goal: Minimize environmental affects of transportation system improvements on the SR 169 study area.

- Project Objective: Review projects for environmental effects and prioritize those projects that minimize (to the extent feasible) affects to natural and human issues, such as river and stream crossings, wetlands, hazardous slopes, wildlife habitat, noise, vibration, and quality of life within the SR 169 study area.

Public Outreach and Input

Identified Problems or Concerns: The study area traverses through the Cities of Black Diamond, Enumclaw, Maple Valley, and Renton and through unincorporated portions of King County. The issues affecting the stakeholders in these areas are very unique, and each of these potentially sensitive issues must be addressed. This will require the involvement and participation of various

interest groups, community organizations, and elected officials from the local jurisdictions.

- Project Goal: Incorporate an effective outreach and public participation program.

- Project Objective: Develop a locally preferred strategy that provides active participation of stakeholders, interest groups, and elected officials from local jurisdictions.

Project Phasing

Identified Problems or Concerns: Transportation improvements to SR 169 will need to be phased in over time to maximize effectiveness and financial resources.

- Project Goal: Maximize compatibility among immediate, short and long-term projects.

- Project Objective: Develop a phasing program that provides continuity and consistency among immediate, short and long-term proposed improvements.

STATE ROUTE 169 CORRIDOR STUDY

EVALUATION CRITERIA TECHNICAL MEMORANDUM

February 15, 2005

Prepared for:

Washington State Department of Transportation
Urban Planning Office
401 2nd Avenue South, Suite 300
Seattle, Washington 98104

Washington State Department of Transportation

Prepared by:

Parsons Corporation
925 Fourth Avenue, Suite 1690
Seattle, WA 98104

Introduction

This technical memorandum discusses the evaluation criteria and metrics that will be used to determine and compare the feasibility of the short- and long-term improvement projects proposed for the State Route 169 (SR 169) Route Development Plan (RDP). The evaluation criteria and metrics developed for this analysis are based on SR 169 *Goals and Objectives* identified by the Corridor Working Group (CWG) partners, stakeholders and the WSDOT team. The metrics will be used as a tool to compare the identified short-term and long-term physical or operational improvements along the corridor.

There will be two levels of project screening: initial screening and detailed screening. The initial screening will be a "fatal flaw" analysis to eliminate projects that fail to address the key problems along the corridor and/or present significant cost, feasibility or environmental issues. Some of the evaluation criteria in this list will be used for this initial screening process. Those are marked with (✱). A more in-depth metric may be used in the detailed screening process.

Following the initial screening process projects will be compiled to form a spectrum of alternatives for each roadway segment. These alternatives will be refined and a detailed screening of these alternatives will occur using all the evaluation criteria. This second screening will be conducted to select a Preferred Build Alternative(s) that will be carried forward as a whole or incrementally into subsequent project-level environmental review process(es).

For each screening process, the study team will use the best information and analysis available. See Appendix A for a flow diagram that describes the evaluation process steps and key terms.

Evaluation Criteria and Metrics

✱ Safety

The safety criteria will be used to address the estimated reduction in accident frequencies and accident severities compared to baseline Years 2001-2003 conditions. Each project will be evaluated and compared to assess the safety enhancements provided by the proposed projects along the corridor. An overall Safety evaluation or score will be determined from the following elements:

- Design Standards: There are likely to be segments of the corridor that do not meet current WSDOT design standards. The corridor will be evaluated using current standards to determine where deficiencies exist. This measure will evaluate whether the proposed improvements (projects or alternatives) mitigate the design deficiency.

  Metrics:
  - Does the improvement meet fully (+), meet generally (0), or significantly depart from (-) WSDOT's design standards?

- Does the improvement improve (+), have no effect on (0), or worsen (-) existing design deficiencies?

- Vehicle Accidents: This measure considers accidents that may be avoided by physical enhancements such as street illumination or the addition of a left turn signal. This measure will compare proposed accident prevention improvements using HAC/HAL data prepared by WSDOT.

  Metrics:
  - Does the improvement improve (+), have no effect on (0), or worsen (-) the likelihood of accidents in a particular location or segment of the corridor?

- Pedestrian Safety: There are a variety of pedestrian safety issues along the corridor. This metric considers pedestrian accident locations to compare how each improvement addresses pedestrian safety along the corridor.

  Metrics:
  - Does the improvement improve (+), have no effect on (0), or worsen (-) pedestrian safety at a particular location or segment along the corridor?

- School Buses and Crossings for Schoolchildren: There are several schools located in the vicinity of SR 169. Safe pedestrian crossings and walk routes are required at school bus stops to ensure that school children can walk next to or across the corridor safely. This measure will compare how each improvement addresses school crossing along the corridor.

  Metrics:
  - Does the improvement increase (+), have no effect on (0), or decrease (-) the number of safe pedestrian crossings for schoolchildren?

- Transit Buses and Crossings: King County Metro has several bus stops located on the SR 169 corridor. Safe pedestrian crossings and walk routes are needed near these stops to ensure that transit riders can walk next to or across the corridor safely. This measure will compare how each improvement addresses transit crossings along the corridor.

  Metrics:
  - Does the improvement increase (+), have no effect on (0), or decrease (-) the number of safe pedestrian crossings for transit riders?

Mobility

The mobility criteria will be used to compare the changes in the efficiency and reliability of vehicular and emergency response along the corridor with each of the proposed improvements.

- Access Management: Managing access along SR 169 would reduce or consolidate the number of access points where vehicles enter and exit the

corridor. Access management would reduce stop-and-go traffic and improve the safety of the corridor. This measure will qualitatively compare how access management improvements would affect mobility along the corridor.

Metrics:

- Does the project decrease (+), have no change (0), or increase (-) the number of access points (e.g. driveways and awkward angled intersections) along the corridor and the number of driveways within a jurisdiction's access control authority?

- Emergency Access: SR 169 is a primary emergency route used by Black Diamond, Enumclaw, Maple Valley, and portions of unincorporated King County. Improving the mobility or providing alternative emergency routes could improve the response time and reliability for emergency vehicles. This measure would qualitatively compare the effect of the proposed improvements on emergency response travel time and reliability, especially in congested portions of corridor during peak periods.

  Metrics:

  - Does the proposed improvement provide improved emergency access in congested areas of the corridor during peak periods (yes or no)?

- Freight: Freight enhancements such as freight-only lanes, bypass routes, large sized intersections for turning movements, or encouraging freight travel during off peak periods to lessen conflicts along the corridor during peak periods. This measure will compare the changes each improvement will have to freight mobility along the corridor.

  Metrics:

  - Does the proposed project decrease (+), have no effect on (0), or increase (-) freight travel times along the corridor?

- Specific Event Transit Measure: The corridor supports a number of large events (e.g. White River Amphitheater concerts, King County Fair) causing traffic conditions to worsen along the corridor. This measure will compare how the proposed transit improvements (transit service at external locations and transit amenities along the corridor) allow for expeditious and convenient movement of patrons to these venues (e.g. bus pullouts, HOV lanes and ancillary parking away from the event).

  Metrics:

  - Does the proposed event specific transit improvement enhance (+), have no effect (0), or worsen (-) traffic conditions along the corridor?

- Travel Delay: WSDOT has adopted quantitative traffic operation measures, including intersection level-of-service, total vehicle hours of delay, person hours of delay, and volume to capacity. These measures will be used to compare each of the proposed improvements.

Metrics:

- Does the proposed project improve (+), have no effect on (0), or worsen (-) intersection and segment level of service?
- Does the proposed project decrease (+), have no effect on (0), or increase (+) total intersection and person delay?
- Does the proposed project decrease (+), have no effect on (0), or increase (-) the volume to capacity ratio?
- Does the proposed project decrease (+), have no effect on (0), or increase (-) the travel time along the corridor?

Transit/HOV Use and Functionality

These criteria will be used to evaluate the existing and future performance of bus transit and high occupant vehicle (HOV) use and functionality along SR 169. The following is a list of potential performance measures to assess the effect of each of the proposed improvements on transit and high occupant vehicle (HOV) use and functionality.

- HOV Volumes: This measure will compare how each improvement influences HOV performance along the corridor.

  Metrics:
  - Does the proposed improvement increase (+), have no effect on (0), or reduce HOV person throughput along the corridor?

- Transit Mode Split: This measure will compare the mode split of each improvement to determine which ones would increase transit usage along the corridor.

  Metrics:
  - Does the improvement increase (+), have no effect on (0), or reduce (-) the percent transit usage into, away from, and within the study area?

- Transit Service: This measure will compare the difference in the transit and auto travel times for a set of origin-destination pairs to determine the transit benefits achieved with each of the improvements.

  Metrics:
  - Does the improvement reduce (+), have no effect on (0), or increase (-) transit travel times between selected locations along the corridor?

Pedestrian, Bicycle and Horse Riders Access

This criterion evaluates pedestrian, bicycle, and horse rider access across and parallel to the corridor. The following is a list of the criteria that will be used to measure the pedestrian, bicycle, and horse rider access benefits achieved by each of the proposed improvements.

- Pedestrian, Bicycle and Horse Trail Design Standards: This measure will use the American Association of State Highway and Transportation Officials (AASHTO) guidelines to identify where pedestrian, bicycle, and horse rider crossing points are required and to provide acceptable design standards to promote pedestrian, bicycle, and horse rider mobility.

  Metrics:
  - Does the improvement increase (+), have no effect on (0), or worsen (-) the number of pedestrian crossings along the corridor.
  - Does the improvement increase (+), have no effect on (0), or worsen (-) the number of bicycle routes on the corridor.
  - Does the improvement increase (+), have no effect on (0), or worsen (-) the number of horse rider trails near the corridor.

Environmental Effects

Environmental criteria will measure the effect each of the improvements has on the natural and built environment.

- Community and Business Disturbance: This measure will compare the potential effects on communities and businesses located near the corridor as a result of the proposed improvements.

  Metrics:
  - Does the proposed improvement improve (+), have no effect on (0), or worsen (-) the estimated number of community and business disturbances during construction?
  - Does the proposed improvement improve the quality of life of communities and businesses along the corridor (yes or no)?
  - Does the proposed improvement increase (+), have no effect on (0), or decrease (-) the number of available parking spaces available along the corridor?
  - Does the proposed project reduce (+), have no effect on (0), or increase (-) noise impacts on sensitive receptors?

- Development Rights, Open Space and Right-of-Way (ROW): Road widening or other projects might require the acquisition of additional ROW, and potentially result in the displacement of adjacent property or open space. This measure will use aerial photographs to estimate the effects road widening improvements might have on existing property, and open-space.

  Metrics:
  - At the project level, does the proposed project require additional right of way (yes or no)?
  - At the alternative level, how much additional right of way is required (quantity)?
  - Does the proposed improvement maintain property with special status (yes or no), (i.e. Open Space designation, Farmland Preservation Program, Historical Preservation, etc)?

- Environmental Justice: This measure compares the effects each of the improvements have on affordable housing, and low-income and minority population neighborhoods along the corridor.

  Metrics:
  - At the project level, does the proposed project change the characteristic of low income and/or minority communities (yes or no)? At the alternative level, how much impact does the alternative have on low income and/or minority communities (quantity)?
  - Does the proposed improvement decrease (+), have no change (0) or increase (-) the impacts on low income and/or minority neighborhoods?

* Historical / Cultural / Architectural Resources: This measure will compare the effects each improvement may have on near by known historical, cultural, and architectural sites.

  Metrics:
  - Does the proposed project have any adverse effects (yes or no) on known historical, cultural, and architectural site resources along the corridor?

* Natural Environmental Effects: This measure will determine the potential effects each of the proposed improvements have on the adjacent environment including wetlands, floodplains, fish and wildlife habitat, threatened or endangered species habitat, geologic hazards, and riparian areas based on field observations and existing environmental mapping of the area.

  Metrics:
  - Does the proposed improvement decrease (+), have no effect on (0), or increase (-) the number of salmon and fish bearing stream crossings along the corridor?
  - Does the proposed improvement decrease (+), have no effect on (0), or increase (-) the displacement / disturbance of threatened, endangered species and habitat along the corridor?
  - Does the proposed improvement increase (+), have no effect on (0), or decrease (-) the acreage by category of wetlands, and floodplains along the corridor?
  - Does the proposed improvement decrease (+), have no effect on (0), or increase (-) the potential impacts to geologically hazardous areas along the corridor?

Land Use and Policy Consistency

The land use and policy consistency criteria will measure whether the proposed improvements comply with the jurisdictional transportation and land use policies. The

following measures will be used to assess if each of the improvements is consistent with land use policies.

- Agriculture / Farmland Preservation Plan (FPP) Effects: Preserving the areas zoned agricultural and farmland is important to the residents along the corridor. Therefore, this measure will compare how much these improvements adversely affect the areas designated agricultural land.

  Metrics:
  - Does the proposed improvement increase (+), have no effect on (0), or decrease (-) the land located within an Agricultural Production District or land enrolled in a Farmland Preservation Program?
  - Does the proposed improvement create land use conflicts (yes or no) such as traffic, noise, development pressure, etc on agricultural practices?

- Comprehensive Plans: This measure will qualitatively determine if the improvements maintain the land use and transportation policies and plans of Black Diamond, Enumclaw, King County, Maple Valley, the Puget Sound Regional Council, and Renton.

  Metrics:
  - Does the proposed project maintain consistency (yes or no) with each jurisdiction's Comprehensive Plan land use and transportation policies?

- Support Economic Development: Mobility and safety improvements will encourage commercial and recreational trips along the corridor. This measure will determine if the improvement meets the jurisdictions' adopted visions and strategies for promoting economic development along the corridor.

  Metrics:
  - Does the proposed project meet each jurisdiction's adopted visions and strategies for promoting economic development (yes or no) in the region?

✱ Project Costs and Benefits

These criteria evaluate the financial costs and benefits to construct and maintain improvements along the corridor. Specific measures have been selected for this evaluation process based upon their appropriateness in estimating the capital cost, cost effectiveness, right-of-way and visual affects.

- Capital Costs: Capital costs will be estimated at a planning level for each of the improvements proposed. The costs will be normalized to Year 2005 dollars, and will be estimated using per-foot or per-mile averages experienced by improvements recently implemented in the area. This measure will compare the relative costs of each improvement.

  Metrics:

- What is the difference in the capital Year 2005 cost to build each of the proposed alternatives (comparison of estimated dollars to implement the alternative)?

- Operation and Maintenance: This measure will compare the operation and maintenance costs anticipated for each of the improvements based on estimates established by FHWA and FTA.

  Metrics:
  - What is the annual operation and maintenance cost to build and maintain each of the proposed alternatives (comparison of estimated operation and maintenance costs to maintain each of the alternatives)?

- Cost Effectiveness: This measure will look at cost savings benefits each of the alternatives provides to the user. The person hours saved and safety improvements will be the primary sources to evaluate cost effectiveness.

  Metrics:
  - What is the difference in the person-hours to travel across the corridor (comparison of the person-hours)?
  - Does the improvement decrease (+), have no effect on (0), or increase (-) the user's cost to travel on the corridor due to the potential safety improvements provided?

- Right-of-Way Effects: Layouts of each alternative's potential right-of-way limits will be created on aerial photographs to estimate the size of land that will be affected within each alternative.

  Metrics:
  - At the project level, does the proposed project require additional right-of-way (yes or no)?
  - At the alternative level, how much additional right-of-way is required (quantity)?
  - At the project level, does the proposed project require acquisition of dwelling units adjacent to the corridor (yes or no)?
  - At the alternative level, how many dwelling units will be required (quantity)?

Public Support

Public input for each alternative will be gathered by active participation of stakeholder, interests group, and elected officials. Input will be summarized and analyzed, and concerns, issues and perspectives will be considered in evaluating projects. Public support will be used as a tool to establish consensus for identifying a preferred alternative(s).

- Consensus: This measure will determine if agreement is reached by citizens, stakeholders, interest groups, and State, Local and Tribal Representatives in an effort to move forward with improvement strategies.

  Metrics:
  - Does the proposed improvement have support (+), is of no concern (0), or have major objections (-) from citizens, stakeholders, interest groups, and State, Local and Tribal Representatives?
  - Does the proposed improvement have support (+), is of no concern (0), or have major objections (-) from elected officials?

SR 169 ADT Directional Volumes

						Existing 2004								2030 No Build						Growth Rate	2030 Option #1						Growth Rate	2030 Option #2						Growth Rate	2030 Option #3						Growth Rate
						WSDOT 2004 ADT			PM Peak Hour			Exist % of ADT		ADT			PM Peak Hour			2004	ADT			PM Peak Hour				ADT			PM Peak Hour				ADT			PM Peak Hour			
SR	SEGMENT[1]	BARM	EARM	From	To	EB/SB	WB/NB	TOTAL	EB/SB	WB/NB	TOTAL			EB/SB	WB/NB	TOTAL	EB/SB	WB/NB	TOTAL	vs. No Build	EB/SB	WB/NB	TOTAL	EB/SB	WB/NB	TOTAL	vs. No Build	EB/SB	WB/NB	TOTAL	EB/SB	WB/NB	Total	vs. No Build	EB/SB	WB/NB	TOTAL	EB/SB	WB/NB	Total	vs. No Build
169	Enumclaw	0.00	0.41	SR 164	Kibler	3,741	4,605	8,300	446	381	830	11.9%	8.3%	5,200	6,200	11,400	620	510	1,130	36%	5,500	6,200	11,700	650	510	1,160	3%	5,500	6,200	11,700	650	510	1,160	3%	5,500	6,200	11,700	650	510	1,160	3%
169		0.41	0.67	Kibler	432nd St	4,270	5,657	9,900	509	468	980	11.9%	8.3%	6,300	9,700	16,000	750	800	1,550	58%	6,500	9,800	16,300	780	810	1,590	3%	6,500	9,800	16,300	780	810	1,590	3%	6,500	9,800	16,300	780	810	1,590	3%
169		0.67	1.17	432nd St	SE 424th St	4,706	5,101	9,800	561	422	980	11.9%	8.3%	7,200	8,300	15,500	860	690	1,550	58%	7,500	8,500	16,000	900	700	1,600	3%	7,500	8,500	16,000	900	700	1,600	3%	7,500	8,500	16,000	900	700	1,600	3%
169		1.17	1.67	SE 424th St	SE 416th St	4,288	4,134	8,400	535	417	950	12.5%	10.1%	6,300	7,500	13,800	790	760	1,550	63%	6,700	7,600	14,300	830	770	1,600	3%	6,700	7,600	14,300	830	770	1,600	3%	6,700	7,600	14,300	830	770	1,600	3%
169	Rural / Agricultural	1.67	2.67	SE 416th St	SE 400th Rd	4,811	4,497	9,300	547	353	900	11.4%	7.8%	7,300	8,800	16,100	830	690	1,520	69%	8,000	9,200	17,200	910	720	1,630	7%	8,000	9,200	17,200	910	720	1,630	7%	8,000	9,200	17,200	910	720	1,630	7%
169		2.67	3.52	SE 400th Rd	Franklin Rd	4,581	4,082	8,700	546	281	830	11.9%	6.9%	8,100	6,400	14,500	960	440	1,400	69%	8,800	6,700	15,500	1,050	460	1,510	8%	8,800	6,700	15,500	1,050	460	1,510	8%	8,800	6,700	15,500	1,050	460	1,510	8%
169		3.52	3.59	Franklin Rd	SE 385th St	4,089	4,119	8,200	517	261	780	12.6%	6.3%	7,400	6,500	13,900	930	410	1,340	72%	8,100	6,800	14,900	1,020	430	1,450	8%	8,100	6,800	14,900	1,020	430	1,450	8%	8,100	6,800	14,900	1,020	430	1,450	8%
169		3.59	6.02	SE 385th St	SE Green Valley Rd	5,002	3,991	9,000	594	231	830	11.9%	5.8%	9,000	7,800	16,800	1,070	450	1,520	83%	9,900	8,100	18,000	1,180	470	1,650	9%	9,900	8,100	18,000	1,180	470	1,650	9%	9,900	8,100	18,000	1,180	470	1,650	9%
169	Black Diamond	6.02	7.63	SE Green Valley Rd	Lawson Street	4,430	3,949	8,400	492	213	710	11.1%	5.4%	8,200	7,800	16,000	910	420	1,330	87%	9,000	8,200	17,200	1,000	440	1,440	8%	9,000	8,200	17,200	1,000	440	1,440	8%	9,000	8,200	17,200	1,000	440	1,440	8%
169		7.63	7.78	Lawson Street	Baker St	4,943	5,254	10,200	633	262	900	12.8%	5.0%	8,700	8,800	17,500	1,110	440	1,550	72%	9,500	9,200	18,700	1,220	460	1,680	8%	9,500	9,200	18,700	1,220	460	1,680	8%	9,500	9,200	18,700	1,220	460	1,680	8%
169		7.78	8.25	Baker St	Roberts Dr	5,171	5,163	10,300	681	373	1,050	13.2%	7.2%	8,100	9,100	17,200	1,070	660	1,730	65%	8,900	10,700	19,600	1,170	770	1,940	12%	8,900	10,700	19,600	1,170	770	1,940	12%	8,900	10,700	19,600	1,170	770	1,940	12%
169		8.25	8.28	Roberts Dr	Ravensdale Rd	6,771	6,423	13,200	778	409	1,190	11.5%	6.4%	12,400	11,300	23,700	1,430	720	2,150	81%	12,800	11,900	24,700	1,470	760	2,230	4%	12,800	11,900	24,700	1,470	760	2,230	4%	12,800	11,900	24,700	1,470	760	2,230	4%
169		8.28	10.02	Ravensdale Rd	SE 288th St	5,157	4,791	9,900	506	264	770	9.8%	5.5%	9,300	8,700	18,000	910	480	1,390	81%	11,200	11,300	22,500	1,100	620	1,720	24%	11,200	11,300	22,500	1,100	620	1,720	24%	11,200	11,300	22,500	1,100	620	1,720	24%
169		10.02	10.44	SE 288th St	SE 280th St	5,734	6,540	12,300	641	352	990	11.2%	5.4%	10,100	11,500	21,600	1,130	620	1,750	77%	12,200	14,900	27,100	1,360	800	2,160	23%	12,200	14,900	27,100	1,360	800	2,160	23%	12,200	14,900	27,100	1,360	800	2,160	23%
169		10.44	10.95	SE 280th St	SE 276th St	6,630	6,803	13,400	707	450	1,160	10.7%	6.6%	11,800	12,100	23,900	1,260	800	2,060	78%	14,300	15,700	30,000	1,530	1,040	2,570	25%	14,300	15,700	30,000	1,530	1,040	2,570	25%	14,300	15,700	30,000	1,530	1,040	2,570	25%
169		10.95	11.23	SE 276th St	SE 271st Place	8,135	6,983	15,100	841	530	1,370	10.3%	7.6%	10,700	9,700	20,400	1,110	740	1,850	35%	15,600	12,800	28,400	1,610	970	2,580	39%	15,600	12,800	28,400	1,610	970	2,580	39%	15,600	12,800	28,400	1,610	970	2,580	39%
169		11.23	11.44	SE 271st Place	SR 516	5,612	6,323	11,900	794	678	1,470	10.6%	8.6%	10,600	11,000	21,600	1,120	940	2,060	40%	13,400	11,300	24,700	1,410	970	2,380	16%	13,400	11,300	24,700	1,410	970	2,380	16%	13,400	11,300	24,700	1,410	970	2,380	16%
169		11.44	11.71	SR 516	SE 264th St	7,522	7,916	15,400	908	595	1,500	16.2%	9.4%	6,900	8,700	15,600	1,120	820	1,940	29%	10,000	9,000	19,000	1,610	850	2,460	27%	10,000	9,000	19,000	1,610	850	2,460	27%	10,000	9,000	19,000	1,610	850	2,460	27%
169		11.71	12.38	SE 264th St	SE 253rd	7,267	7,722	15,000	898	658	1,560	12.4%	8.5%	9,000	10,800	19,800	1,110	920	2,030	30%	12,900	11,100	24,000	1,590	950	2,540	25%	12,900	11,100	24,000	1,590	950	2,540	25%	12,900	11,100	24,000	1,590	950	2,540	25%
169		12.38	12.53	SE 253rd	SE 251st	7,081	7,416	14,500	875	632	1,510	12.4%	8.5%	8,700	10,300	19,000	1,070	880	1,950	29%	12,500	10,700	23,200	1,540	910	2,450	26%	12,500	10,700	23,200	1,540	910	2,450	26%	12,500	10,700	23,200	1,540	910	2,450	26%
169	Maple Valley	12.53	13.02	SE 251st	SE 244th St	8,855	9,154	18,000	868	614	1,480	9.8%	6.7%	10,900	12,700	23,600	1,070	850	1,920	30%	15,600	14,200	29,800	1,530	950	2,480	29%	15,600	14,200	29,800	1,530	950	2,480	29%	15,600	14,200	29,800	1,530	950	2,480	29%
169		13.02	13.14	SE 244th St	SE 231st Ave	10,213	9,071	19,300	984	636	1,620	9.6%	7.0%	12,500	12,600	25,100	1,200	880	2,080	28%	17,300	14,000	31,300	1,670	980	2,650	27%	17,300	14,000	31,300	1,670	980	2,650	27%	17,300	14,000	31,300	1,670	980	2,650	27%
169		13.14	13.37	SE 231st Ave	228th Ave SE	9,488	10,687	20,200	946	645	1,590	10.0%	6.0%	12,100	14,700	26,800	1,210	890	2,100	32%	15,800	17,400	33,200	1,580	1,050	2,630	25%	15,800	17,400	33,200	1,580	1,050	2,630	25%	15,800	17,400	33,200	1,580	1,050	2,630	25%
169		13.37	13.53	228th Ave SE	SE 240th St	10,640	12,333	23,000	1,043	624	1,670	9.8%	5.1%	12,500	15,600	28,100	1,230	790	2,020	21%	16,600	20,800	37,400	1,630	1,050	2,680	33%	16,600	20,800	37,400	1,630	1,050	2,680	33%	16,600	20,800	37,400	1,630	1,050	2,680	33%
169		13.53	13.86	SE 240th St	Witte Rd SE	12,548	11,908	24,500	1,093	607	1,700	8.7%	5.1%	14,500	15,300	29,800	1,260	780	2,040	20%	17,400	22,600	40,000	1,520	1,150	2,670	31%	17,400	22,600	40,000	1,520	1,150	2,670	31%	17,400	22,600	40,000	1,520	1,150	2,670	31%
169		13.86	14.04	Witte Rd SE	SE Wax Rd	18,482	18,727	37,200	1,861	860	2,720	10.1%	4.6%	22,900	29,800	52,700	2,310	1,370	3,680	35%	26,400	44,200	70,600	2,660	2,030	4,690	27%	26,400	44,200	70,600	2,660	2,030	4,690	27%	26,400	44,200	70,600	2,660	2,030	4,690	27%
169		14.04	14.14	SE Wax Rd	SE 231st St	21,993	17,690	39,700	1,617	971	2,590	7.4%	5.5%	29,700	28,400	58,100	2,180	1,560	3,740	44%	32,900	31,500	64,400	2,420	1,730	4,150	11%	33,300	31,500	64,800	2,450	1,730	4,180	12%	33,300	31,500	64,800	2,450	1,730	4,180	12%
169		14.14	14.95	SE 231st St	Baine St	13,912	12,995	26,900	1,191	759	1,950	8.6%	5.8%	16,000	20,900	36,900	1,370	1,220	2,590	33%	20,900	20,900	41,800	1,790	1,220	3,010	16%	22,000	21,900	43,900	1,880	1,280	3,160	22%	22,700	22,600	45,300	1,940	1,320	3,260	26%
169		14.95	15.07	Baine St	SE 216th Way	12,172	11,013	23,200	1,180	682	1,860	9.7%	6.2%	15,200	17,600	32,800	1,470	1,090	2,560	38%	19,800	19,700	39,500	1,920	1,220	3,140	23%	20,500	20,700	41,200	1,990	1,280	3,270	28%	21,100	21,300	42,400	2,050	1,320	3,370	32%
169	Cedar River	15.07	17.68	SE 216th Way	Cedar Grove Rd	9,758	9,290	19,000	1,060	417	1,480	10.9%	4.5%	13,000	12,300	25,300	1,410	550	1,960	32%	15,600	18,000	33,600	1,700	810	2,510	28%	16,200	18,900	35,100	1,760	850	2,610	33%	16,700	19,400	36,100	1,810	870	2,680	37%
169		17.68	19.22	Cedar Grove Rd	Jones Rd	9,823	9,593	19,400	978	514	1,490	10.0%	5.4%	13,100	12,500	25,600	1,300	670	1,970	32%	15,000	13,600	28,600	1,490	730	2,220	13%	15,700	14,200	29,900	1,560	760	2,320	18%	16,200	14,600	30,800	1,610	780	2,390	21%
169		19.22	22.32	Jones Rd	149th Avenue SE	9,217	10,673	19,900	1,411	644	2,060	15.3%	6.0%	13,800	23,200	37,000	2,120	1,400	3,520	71%	14,300	23,900	38,200	2,190	1,440	3,630	3%	14,800	26,500	41,300	2,260	1,600	3,860	10%	15,200	27,300	42,500	2,330	1,650	3,980	13%
169		22.32	22.99	149th Avenue SE	140th Way SE	15,949	15,251	31,200	1,500	1,125	2,630	9.4%	7.4%	21,300	19,800	41,100	2,000	1,460	3,460	32%	22,100	21,600	43,700	2,080	1,590	3,670	6%	23,300	24,000	47,300	2,190	1,770	3,960	14%	23,900	24,800	48,700	2,250	1,830	4,080	18%
169		22.99	23.34	140th Way SE	131st Avenue SE	19,305	15,585	34,900	2,231	975	3,210	11.6%	6.3%	27,200	20,500	47,700	3,140	1,280	4,420	38%	26,600	22,200	48,800	3,070	1,390	4,460	1%	27,300	24,800	52,100	3,150	1,550	4,700	6%	28,000	25,400	53,400	3,240	1,590	4,830	9%
169	Renton	23.34	23.99	131st Avenue SE	Monroe Avenue SE	20,283	14,242	34,500	2,344	891	3,240	11.6%	6.3%	27,000	18,500	45,500	3,120	1,160	4,280	32%	27,900	20,100	48,000	3,230	1,260	4,490	5%	28,700	22,400	51,100	3,320	1,400	4,720	10%	29,600	23,000	52,600	3,420	1,440	4,860	14%
169		23.99	24.20	Monroe Avenue SE	Park Place	18,831	24,784	43,600	1,952	933	2,890	10.4%	3.8%	29,900	32,400	62,300	3,100	1,220	4,320	49%	31,100	31,900	63,000	3,220	1,200	4,420	2%	32,700	35,300	68,000	3,390	1,330	4,720	9%	33,700	36,400	70,100	3,490	1,370	4,860	13%
169		24.20	25.18	Park Place	I-405 NB Ramps	25,265	26,086	51,400	2,318	982	3,300	9.2%	3.8%	34,100	33,700	67,800	3,130	1,270	4,400	33%	35,800	33,200	69,000	3,280	1,250	4,530	3%	37,800	36,900	74,700	3,470	1,390	4,860	10%	38,900	38,000	76,900	3,570	1,430	5,000	14%
169		25.18	25.26	I-405 NB Ramps	I-405 SB Ramps	22,638	32,487	55,100	2,077	1,223	3,300	9.2%	3.8%	29,300	42,500	71,800	2,690	1,600	4,290	30%	29,300	42,500	71,800	2,690	1,600	4,290	0%	30,700	46,500	77,200	2,820	1,750	4,570	7%	31,700	47,800	79,500	2,910	1,800	4,710	10%

1. Segments are based on count locations and are reasonably consistent with the segments defined in the Route Development Plan.

SR 169 ROUTE DEVELOPMENT PLAN

SR 169 Corridor
Final Screening of
Potential Transportation Projects

DRAFT

September 28, 2005

Washington State
Department of Transportation

DRAFT

SR 169 CORRIDOR STUDY -- FINAL SCREENING METHODOLOGY

Each project was evaluated based on the potential benefits it provides in terms of safety, mobility, transit and non-motorized travel enhancement. The potential impacts and costs were also assessed in terms of environmental effects, land use and policy consistency, project costs, and public support. Based on the results of the evaluation, projects were:

- Recommended to be carried forward for incorporation into the Route Development Plan
- Recommended for further study
- Recommended to be eliminated from further consideration

The following methodology was applied to evaluate the projects:

Step 1: The 22 measures of benefit and 24 measures of impact and cost, described in the SR 169 *Evaluation Criteria Technical Memorandum,* February 2005, were reviewed for applicability to the study goals and objectives, and the types of projects included in the project list. The list was modified by clarifying, combining and in some cases eliminating measures that were determined not to be applicable. New measures were also added to measure benefits or impacts not defined during the initial evaluation criteria designation period.

SCREENING CRITERIA - BENEFITS

SAFETY	1.	Meets WSDOT design standards	Eliminated	Proposed projects are expected to meet WSDOT design standards
	2.	Improves existing design deficiencies	Retained	
	3.	Reduces likelihood of accidents in a particular area (e.g. HAC or HAL)	Revised	**NEW:** Reduces likelihood of accidents in a particular area (may include a designated HAC or a HAL)
	4.	Improves pedestrian safety	Retained	
	5.	Increases number of safe crossings for school children	Eliminated	Addressed in criteria #4
	6.	Increases number of safe crossings for transit users	Eliminated	Addressed in criteria #4
MOBILITY	7.	Provides alternative access to plateau	Eliminated	Criteria was only applicable to a few specific proposed project.
	8.	Decreases number of driveways and awkward intersections	Retained	
	9.	Improves emergency access in congested areas in peak periods	Retained	
	10.	Decreases freight travel times	Retained	
	11.	Improves traffic conditions during an event	Retained	
MOBILITY	12.	Improves intersection and segment LOS	Revised	**NEW:** Improves operating Levels of Service
	13.	Decreases total intersection and person delay	Eliminated	Addressed in criteria #12
	14.	Decreases volume to capacity ratio	Eliminated	Addressed in criteria #12
	15.	Decreases corridor travel time	Eliminated	Addressed in criteria #12
TRANSIT/ HOV USE AND FUNCTION	16.	Increases corridor HOV person throughput	Combined with # 17	**NEW:** Enhances transit/HOV opportunities
	17.	Increases transit use	Combined with # 16	
	18.	Reduces transit travel times along the corridor	Eliminated	Somewhat redundant of increased transit use
PEDESTRIAN, BICYCLE AND HORSE RIDERS ACCESS	19.	Increases number of pedestrian crossings	Combined with # 20 and 21	**NEW:** Enhances non-motorized travel opportunities
	20.	Increases number of corridor bicycle routes	Combined with # 19 and 21	
	21.	Increases number of corridor horse trails	Combined with # 19 and 20	
PROJECT COSTS AND BENEFITS	22.	Decreases user's cost to travel the corridor	Eliminated	Amount of detail needed to assess this criteria is not available for this study.

SCREENING CRITERIA - IMPACTS/COST

ENVIRON-MENTAL EFFECTS	1.	Displaces business or community facilities	Retained	
	2.	Improves the quality of life of communities and businesses	Eliminated	This criteria is almost opposite of impact/cost #1
	3.	Increases number of parking spaces along corridor	Eliminated	Criteria is better suited for a more urban study
	4.	Creates noise impacts on sensitive receptors	Retained	
	5.	Requires additional right of way	Retained	
	6.	Impacts land with Open Space designation or Historic Preservation	Revised	**NEW:** Impacts Open Space or Parks
ENVIRON-MENTAL EFFECTS	7.	Changes the characteristic of low income and/or minority communities	Revised and combined with # 8	**NEW:** Significantly impacts low income and/or minority communities
	8.	Number of displaced households in areas with EJ protected populations	Revised and combined with # 9	Amount of detail needed to assess this criteria is not available for this study.
	9.	Adversely effects historical, cultural, and architectural site resources	Retained	
	10.	Impacts salmon and fish bearing stream crossings	Retained	
	11.	Displaces/disturbs threatened or endangered species or their habitat	Retained	
	12.	Impacts wetlands and floodplains	Retained	
	13.	Remediates existing geological hazard	Retained	
	14.	Is located in a geologically hazardous area	Retained	
LAND USE AND POLICY CONSIST-ENCY	15.	Impact land in Agricultural Production Districts or Farmland Preservation Programs	Retained	
	16.	Creates land use conflicts (traffic, noise, development pressure, etc) with agriculture	Eliminated	Criteria is somewhat similar to impact / costs #15
	17.	Does not maintain consistency with Comprehensive Plans, land uses, and transportation policies	Revised	Does not maintain consistency with Comprehensive Plans, land use, transportation, and economic development policies
	18.	Meets each jurisdiction's adopted visions and strategies for promoting economic development	Combined with #17	
PROJECT COSTS AND BENEFITS	19.	Capital Cost	Retained	
	20.	Annual operation and maintenance cost	Retained	
			Added	**NEW:** Right-of-way acquisition cost Added to achieve some level of ROW cost, versus just acknowledging its existence.
	21.	Requires acquisition of dwelling units	Revised	**NEW:** Displaces dwelling units
	22.	Number of dwelling units to be acquired	Eliminated	Amount of detail needed to assess this criteria is not available for this study.
PUBLIC SUPPORT	23.	Does not have support from citizens, stakeholders, interest groups, and State, Local and Tribal Reps	Retained	
	24.	Has support of elected officials	Eliminated, combined with #23	

Step 2: Each project received a score based on each of the benefit and impact/cost measures.

Benefit Measures:

If a project would provide the benefit indicated by a benefit measure, it was given a score of "1". If it did not, or if such a benefit was unknown, it was given a score of "0".

Impact Measures:

If a project was estimated to have an impact it was given a score of "-1". If it did not have an impact, or an impact was unknown, it was given a score of "0".

Cost Measures:

For the three measures of Project Cost --

If a project was estimated to have a relatively high level of cost, it was given a score of "-1".

If a project was estimated to have a relatively medium level of cost, it was given a score of "-0.5".

If a project was estimated to have a relatively low level of cost, it was given a score of "0".

Step 3: *Initial Weight*

The Project Team weighted each of the measures on a scale from 1 to 5, reflecting their relative importance to implementing such a project. The table below shows the weighting of each measure.

Equalized Weight

There are 10 benefit criteria and 18 impact/cost criteria. In order to equalize, or balance, the number of benefits versus the number of costs, the weighted measures were adjusted to allow for an equal score for both benefits and costs (90 possible benefits and -90 possible costs).

To get from the initial weights to the equalized weights each scoring designation (1,2,3,4, and 5) maintained its percent representation of the total possible score. For example a 5 in the initial weighing represented about 15% of 33 and the new equalized weight number "13" also represents about 15% of 90.

The weighted equivalent scores are shown below:

Measures of Benefit			**Measures of Cost/Impact**		
Initial Weight		**Equalized Weight**	**Initial Weight**		**Equalized Weight**
5	=	13	-5	=	-6.5
4	=	11	-4	=	-5
3	=	8	-3	=	-4
2	=	6	-2	=	-3
1	=	4	-1	=	-2

DRAFT

MEASURES OF BENEFIT

Measure	Initial Weight	Equalized Weight
Improves existing design deficiencies	2	6
Reduces likelihood of accidents in a particular area (may include a designated HAC or HAL)	5	13
Improves pedestrian safety	4	11
Decreases number of driveways and awkward intersections	3	8
Improves emergency access in congested areas in peak periods	4	11
Improves freight travel times	3	8
Improves traffic conditions during an event	3	8
Improves operating Levels of Service	5	13
Enhances transit/HOV opportunities	1	4
Enhances non-motorized travel opportunities	3	8
Total	**33**	**90**

MEASURES OF IMPACT/COST

Measure	Initial Weight	Equalized Weight
Displaces businesses or community facilities	-5	-6.5
Displaces dwelling units	-5	-6.5
Creates noise impacts on sensitive receptors	-3	-4
Requires additional right of way	-2	-3
Impacts open space or parks	-3	-4
Significantly impacts low income and/or minority communities	-5	-6.5
Potentially adversely effects historical, cultural and architectural sites	-5	-6.5
Impacts salmon and fish bearing stream crossing	-3	-4
Displaces/disturbs threatened or endangered species or their habitat	-3	-4
Impacts wetlands or floodplains	-4	-5
Remediates existing geological hazard	4	5
Is located in a geologically hazardous area	-3	-4
Impacts land in Agricultural Production Districts or Farmland Preservation Programs	-5	-6.5
Does not maintain consistency with Comprehensive Plans, land use, transportation, and economic development policies	-2	-3
Capital Cost	-5	-6.5
Annual operations and maintenance cost	-3	-4
Right of way acquisition cost	-5	-6.5
Does not have support from citizens, stakeholders, interest groups, and State, Local and Tribal reps.	-3	-4
Total	**-60**	**-90**

Cost Measures:

As discussed in Step 2 above the three Project Costs measures were given a High, Medium, and Low scoring multiplier of:

High = "-1" Medium = "-0.5" Low = "0".

As such the equalized scores were applied as follows:

Capital Costs:

High = "-6.5" Medium = "-3.25" Low = "0"

Annual operation and maintenance cost:

High = "-4" Medium = "-2" Low = "0"

Right of way acquisition:

High = "-6.5" Medium = "-3.25" Low = "0"

Step 4: Each project was scored, weighted, and then the total benefits, the total impact/costs and the total sum were compiled.

Step 5: Projects that were recommended to move forward in the RDP were:

1 Projects that received a total score of benefits plus costs was 21 or greater.
Total score (benefits + costs = or > 21)

21 is the median score of all the SR 169 scored projects

Projects that were recommended for further study were:

1 Those projects with a considerable benefit score (= or > 45) but only the total benefits + impact/costs score was less than 21 and greater than 0.

2 Projects that received their only negative impact score on cost or right-of-way acquisition.
For example if a project had a few benefits, but the only identified costs were for right-of-way acquisition or project cost, then the project was marked for further study

3 Projects that received no negative impact/costs score, but received a total score of less than 21.

Relevant Screening Statistics:

- 90 total projects
- 68 total projects screened
- 0 projects previously screened out and not a part of this screening analysis
- 4 projects incorporated into other projects and not a part of this screening analysis
- 2 projects part of I-405 improvement planning
- 1 project part of WSDOT regular maintenance program
- 15 projects previously approved and not a part of this screening analysis
- 55 projects recommended moving forward
- 14 projects recommended for further study
  These projects were:

-21 projects recommended for elimination

- 47 Short-Term Projects
- 43 Long Term Projects
- High total benefits and impacts/costs score: 66
- Low total benefits and impacts/costs score: -10
- Average total benefits and impacts/costs score: 22
- Median total benefits and impacts/costs score: 21
- High total benefits score: 86
- High total impacts costs score: -53

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

This is a working document that contains an inventory of projects currently underway and potential projects for consideration. This list includes projects provided by Corridor Working Group (CWG) partners and other projects identified by the study team in response to recognized safety and congestion issues on the corridor. Some of these potential projects will be eliminated during the screening analysis and will NOT be a part of the final recommended Route Development Plan (RDP).

The project descriptions will be revised as the project status changes or as projects are updated. Remaining projects are subject to further analysis, and based of the analysis, projects that appear to be in conflict will be reconciled or screened from the list.

Short Term = S Long Term = L	SR 169 Project Number	Location	Milepost	Segment	Project Description	Screening Criteria - Benefits: Safety: Improves existing design deficiencies	Safety: Reduces likelihood of accidents in a particular area (may include a designated HAC or HAL)	Safety: Improves pedestrian safety	Mobility: Decreases number of driveways and awkward intersections	Mobility: Improves emergency access in congested areas in peak periods	Mobility: Improves freight travel times	Mobility: Improves traffic conditions during an event	Mobility: Improves operating Levels of Service	Transit /HOV Use: Enhances transit/HOV opportunities	Non Motorized Travel: Enhances non-motorized travel opportunities	Subtotal - Benefits	Screening Criteria - Costs: Environmental Effects: Displaces business or community facilities	Displaces dwelling units	Creates noise impacts on sensitive receptors	Requires additional right of way	Impacts Open Space or Parks	Significantly impacts low income and/or minority communities	Potentially adversely effects on historical, cultural, and architectural site resources	Impacts salmon and fish bearing stream crossings	Displaces/disturbs threatened or endangered species or their habitat	Impacts wetlands and floodplains	Remediates existing geological hazard	Is located in a geologically hazardous area	Land Use and Policy Consistency: Impacts land in Agricultural Production Districts or Farmland Preservation Programs	Does not maintain consistency with Comprehensive Plans, land use, transportation, and economic development policies	Project Costs and Benefits: Capital Cost	Annual operation and maintenance cost	Right of way acquisition cost	Public Support: Does not have support from citizens, stakeholders, interest groups, and State, Local and Tribal Reps	Subtotal - Impacts/Costs	TOTALS
						6	13	11	8	11	8	8	13	4	8	**90**	-6.5	-6.5	-4	-3	-4	-6.5	-6.5	-4	-4	-5	5	-4	-6.5	-3	H = -6.5 M = -3.25 L = 0	H = -4 M = -2 L = 0	H = -6.5 M = -3.25 L = 0	-4	**-90**	
PROJECTS RECOMMENDED TO BE CARRIED FORWARD																																					
S	1	SR 169 from I-405 to New Cedar Park Entrance	25.26 - 25.00	Renton	INCORPORATED IN PROJECT #3b Synchronize the traffic signals along this roadway section.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
S	3a	Phase 1 - SR 169 in the I-405 vicinity	25.26 - 25.00	Renton	Relocate the Cedar River Park entrance 700' south w/ new signal; Close existing park entrance	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
S	3b	Phase 2 - SR 169 from I-405 to the new Cedar River Park entrance	25.26 - 25.00	Renton	Widen SR 169 from new Cedar River Park entrance (Phase 1) to I-405 (one additional lane each direction). Includes HOV queue jump at I-405 northbound ramp intersection.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
S	3c	Phase 3 - SR 169 @ 140th Way SE	23.00	Renton	Intersection improvements including eastbound and westbound HOV lanes.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
L	4	SR 169 @ Sunset Blvd/I-405 Southbound On-Ramp	25.26 - 25.00	Renton	Reconfigure the I-405 interchange to accommodate the current and future heavy traffic volume during the PM peak hours.	6	13	11	0	11	8	8	13	0	0	**70**	-6.5	0.0	-4	-3	-4	0.0	0.0	0	0	0	0	-4	0.0	3	-6.5	0	0.0	0	**-25**	**45**
L	8	SR 169 near Riverview park vicinity to SE 7th Street	25.00 - 23.99	Renton	Extend the new through lane from the flyover ramp to the new park entrance.	Project PART OF I-405 improvements and therefore not scored.																															
L	8	SR 169 near Riverview park vicinity to SE 7th Street		Renton	INCORPORATED INTO PROJECT #5 Extend the new through lane from the flyover ramp to the new park entrance.	Project PART OF I-405 improvements and therefore not scored.											Project PART OF I-405 improvements and therefore not scored.																					
S	10	SR 169 @ SE 5th Street		Renton	INCORPORATED INTO PROJECT #7 Close the park entrance and reconfigure the parking lot to provide access at SE 7th Street to help address the HAC west of Blaine Drive SE to east of Wildwood Creek.	See Project # 7											See Project # 7																					
S	T16-3	SR 169 @ 149th Ave SE	22.32	Renton	Provide transit improvements to address the HAC from 140th Way SE to 161st Avenue SE.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
S	14	SR 169 @ 149th Ave SE & SR 169 @ 152nd Ave SE	22.32 - 22.08	Renton	Replace the existing bridge at 149th Ave. SE with a new steel bridge at 152nd Place SE. Provide two travel lanes (one lane in each direction), a left-turn lane, shoulder, and sidewalk on the new bridge Connect the bridge to 154th Place SE.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
S	15	SR 169 @ 152nd Ave SE	22.08	Renton	Long-term intersection improvements to serve future growth beyond the ongoing improvements.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	0.0	0	-3	-4	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-14**	**27**
L	18	SR 169 from Jones Road (196th Avenue SE) to SE 231st St.	19.22 - 14.17	Cedar River	Repave the roadway.	Part of regular WSDOT Pavement Program, therefore not scored.											Part of regular WSDOT Pavement Program, therefore not scored.																					
L	19	SR 169 from Jones Road (196th Avenue SE) to SR 516	19.22 - 11.44	Cedar River, Maple Valley	Widen roadway and consider access management, sidewalk in developed areas, and bike lanes where parallel facilities are not paved or available. These projects will help address the bottleneck conditions at Jones Road (196th Avenue SE).	6	13	11	8	11	8	8	13	0	8	**86**	-6.5	-6.5	-4	-3	-4	0.0	-6.5	-4	0	-5	0	-4	0.0	0	-6.5	0	0.0	0	**-50**	**36**
S	20	SR 169 from Cedar Grove Park (north of 196th Avenue SE) to SR 516	19.22 - 11.44	Cedar River, Maple Valley	Pave Cedar River Trail to SR 516 where unpaved. (Note: there is debate over whether paved vs. gravel is a better option)	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
S	21	SR 169 near Jones Road/196th Avenue SE vicinity	19.22	Cedar River	Correct the steep slope problem, and repave damaged pavement.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																					
L	24	SR 169 south of 196th Avenue SE	19.22 - 18.80	Cedar River	Stabilize steep slope and slide area; reconstruct roadway to improve drivers' line of sight, increase narrow shoulder widths and make other improvements to address traffic service and safety at 196th Avenue SE and to its south.	6	13	11	0	11	8	8	13	0	0	**70**	-6.5	0.0	0	-3	-4	0.0	0.0	-4	0	-5	5	-4	0.0	0	-6.5	0	-6.5	0	**-35**	**36**
L	23	SR 169 @ Cedar Grove Road	17.68	Cedar River	Intersection improvements to address future capacity deficiency and existing safety. Specific improvement to be determined.	0	13	0	0	11	8	8	13	0	0	**53**	-6.5	0.0	0	-3	-4	0.0	0.0	-4	0	-5	0	0	0.0	0	0.0	0	0.0	0	**-23**	**31**
S	25	SR 169 @ SE 214th Street to SE 216th Place	15.34 - 15.23	Cedar River	Access management to help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	0	8	11	8	8	13	0	0	**61**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**0**	**61**
S	77	SR 169 from SE 216th Place to SR 18 Overpass	15.23 - 15.07	Cedar River	Provide sidewalk in front of commercial area to help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	11	0	0	0	0	0	0	0	**24**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**21**
L	30	SR 169 @ Witte Road SE (SE Bain Road)	14.95	Maple Valley	Conduct a geotechnical study on steep slopes near the corridor and implement improvements. Develop truck climbing lane and improve shoulders. These improvements will help address the HAC north of 218th Place SE to south of Witte Road SE, and the existing capacity issues south of Witte Road SE.	6	13	0	0	11	8	8	13	0	0	**59**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	5	-4	0.0	0	-3.25	0	0.0	0	**-5**	**54**

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

This is a working document that contains an inventory of projects currently underway and potential projects for consideration. This list includes projects provided by Corridor Working Group (CWG) partners and other projects identified by the study team in response to recognized safety and congestion issues on the corridor. Some of these potential projects will be eliminated during the screening analysis and will NOT be a part of the final recommended Route Development Plan (RDP).

The project descriptions will be revised as the project status changes or as projects are updated. Remaining projects are subject to further analysis, and based of the analysis, projects that appear to be in conflict will be reconciled or screened from the list.

Short Term = S Long Term = L	SR 169 Project Number	Location	Milepost	Segment	Project Description	Screening Criteria - Benefits											Screening Criteria - Costs																				
						Safety			Mobility					Transit /HOV Use	Non Motorized Travel		Environmental Effects											Land Use and Policy Consistency		Project Costs and Benefits			Public Support			
						Improves existing design deficiencies	Reduces likelihood of accidents in a particular area (may include a designated HAC or HAL)	Improves pedestrian safety	Decreases number of driveways and awkward intersections	Improves emergency access in congested areas in peak periods	Improves freight travel times	Improves traffic conditions during an event	Improves operating Levels of Service	Enhances transit/HOV opportunities	Enhances non-motorized travel opportunities	Subtotal - Benefits	Displaces business or community facilities	Displaces dwelling units	Creates noise impacts on sensitive receptors	Requires additional right of way	Impacts Open Space or Parks	Significantly impacts low income and/or minority communities	Potentially adversely effects on historical, cultural, and architectural site resources	Impacts salmon and fish bearing stream crossings	Displaces/disturbs threatened or endangered species or their habitat	Impacts wetlands and floodplains	Remediates existing geological hazard	Is located in a geologically hazardous area	Impacts land in Agricultural Production Districts or Farmland Preservation Programs	Does not maintain consistency with Comprehensive Plans, land use, transportation, and economic development policies	Capital Cost	Annual operation and maintenance cost	Right of way acquisition cost	Does not have support from citizens, stakeholders, interest groups, and State, Local and Tribal Reps	Subtotal - Impacts/Costs	TOTALS
						6	13	11	8	11	8	8	13	4	8	90	-6.5	-6.5	-4	-3	-4	-6.5	-6.5	-4	-4	-5	5	-4	-6.5	-3	H = -6.5 M = -3.25 L = 0	H = -4 M = -2 L = 0	H = -6.5 M = -3.25 L = 0	-4	-90	
L	31	SR 169 @ Witte Road SE (SE Bain Road)	14.95	Maple Valley	Intersection improvements and consolidation of driveways to improve traffic service. In addition increase traffic safety to help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	0	8	11	8	8	13	0	0	61	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	-3.25	0	-10	52
L	T44-1	SR 169 @ SE 231st Way (Access to SR 18)	14.17	Maple Valley	Provide transit improvements for buses coming into the existing park and ride lot. Construct a pedestrian walkway.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																				
L	32	SR 169 @ Wax Road SE	14.04	Maple Valley	Long-term intersection improvements to serve future growth beyond the capacity of the recent improvements at this location.	0	0	0	0	11	8	8	13	0	0	40	-6.5	-6.5	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	-3.25	0	-19	21
S	33a	SR 169 from Witte Road SE to SE 240th Street	13.80 - 13.53	Maple Valley	Add southbound travel lane and bike lane.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																				
L	33b	SR 169 from Witte Road SE to SE 240th Street	13.80 - 13.53	Maple Valley	Additional intersection improvements including northbound travel lane(s) and bike lane, street lighting, and improved signage.	0	13	0	0	11	8	8	13	0	8	61	-6.5	-6.5	-4	-3	0	0.0	0.0	0	0	0	5	-4	0.0	0	-3.25	0	-3.25	0	-26	36
S	79	SR 169 @ 228th Avenue SE	13.57	Maple Valley	Intersection improvements to improve existing traffic service.	0	0	0	0	11	8	8	13	0	0	40	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-3	37
L	35	SR 169 @ 231st Avenue SE	13.14	Maple Valley	Intersection improvements to address future capacity deficiency. Specific improvement to be determined.	0	0	0	0	11	8	8	13	0	0	40	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	-6	34
L	36	SR 169 @ SE 251st Street	12.53	Maple Valley	Intersection improvements to address future capacity deficiency. Specific improvement to be determined.	0	0	0	0	11	8	8	13	0	0	40	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	-6	34
L	37	SR 169 @ SE 253rd Place	12.38	Maple Valley	Intersection improvements to address future capacity deficiency. Specific improvement to be determined.	0	0	0	0	11	8	8	13	0	0	40	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	-3	37
S	T44-3	SR 169 @ SE 264th Street	11.74	Maple Valley	Construct sidewalks, and provide transit improvements (e.g. shelter footing and pullouts).	0	0	11	0	0	0	0	0	4	8	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
L	39	SR 169 from SR 516 to Ravensdale Rd	11.44 - 8.28	Maple Valley, Black Diamond	Repave or rebuild the roadway shoulders.	This project is a subset of #40 therefore not scored.											This project is a subset of #40 therefore not scored.																				
S	40	SR 169 from SR 516 to SE Green Valley Road vicinity	11.44 - 5.33	Maple Valley, Black Diamond, Rural Ag	Make improvements to the roadway shoulders.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																				
S	41	SR 169 @ SR 516 (also known as Kent Kangley Road, Four Corners)	11.44	Maple Valley	Widen the intersection with bike, and pedestrian to address bottleneck conditions at this intersection. In addition provide safety improvements.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																				
L	84	SR 169 from SR 516 to SE 288th St	11.44 - 10.02	Maple Valley	Widen the roadway to improve existing and future traffic flow and address HAC.	6	13	0	0	11	8	8	13	0	0	59	0.0	0.0	-4	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-6.5	0	-3.25	0	-17	42
S	80	SR 169 @ SE 271st Street	11.23	Maple Valley	Intersection improvements to improve existing traffic service.	0	0	0	0	11	8	8	13	0	0	40	-6.5	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-10	31
S	T44-5	SR 169 @ SE 280th St	10.49	Maple Valley	Construct bus pull outs, and sidewalks.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																				
L	43	SR 169 near SE 288th Street vicinity	10.02 - 9.86	Black Diamond	Intersection improvements to realign approaches and improve future traffic service, with consideration for bus pullouts and street lighting.	6	13	0	8	11	8	8	13	0	0	67	0.0	0.0	0	-3	0	0.0	0.0	0	0	-5	0	0	0.0	0	-3.25	0	0.0	0	-11	56
L	42	SR 169 north of SE 288th Street	10.02	Black Diamond	Intersection improvements to address future capacity deficiency Specific improvement to be determined.	This project is a subset of #43 therefore not scored.											This project is a subset of #43 therefore not scored.																				
S	45	SR 169 in the Black Diamond vicinity	9.09 - 6.75	Black Diamond	Construct sidewalks on east side of SR 169 consistent with state standards.	6	0	11	0	0	0	0	0	0	8	25	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	0	25
S	48	SR 169 from Ravensdale Road vicinity to Lawson Street	8.28 - 7.63	Black Diamond	Improve existing shoulder to help address HAC from north of Ravensdale Road to 1st Avenue vicinity.	6	13	11	0	11	0	0	0	0	0	41	0.0	-6.5	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	-3.25	0	-13	28
L	47	SR 169 from Ravensdale Road to Roberts Road vicinity	8.28 - 8.17	Black Diamond	Intersection improvements to realign approaches to address HAC from north of Ravensdale Road to 1st Avenue vicinity. In addition, improve traffic service.	6	13	0	8	11	8	8	13	0	0	67	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	-6	61
S	50	SR 169 @ Baker St	7.69	Black Diamond	Intersection improvements to improve traffic service.	0	0	0	0	11	8	8	13	0	0	40	-6.5	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.00	0	-10	31
S	51	SR 169 @ Lawson St/Green River Gorge	7.63	Black Diamond	Intersection improvements to improve traffic service.	0	0	0	0	11	8	8	13	0	0	40	-6.5	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.00	0	-10	31
S	52	SR 169 @ 1st Avenue SE	7.49	Black Diamond	Intersection improvements to realign approaches.	6	13	0	8	0	0	0	0	0	0	27	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	-3.25	0	0	0	-6	21
S	56	SR 169 @ SE Green Valley Rd	6.02	Rural Ag	Intersection improvements to improve traffic service.	0	0	0	0	11	8	8	13	0	0	40	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-3	37

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

This is a working document that contains an inventory of projects currently underway and potential projects for consideration. This list includes projects provided by Corridor Working Group (CWG) partners and other projects identified by the study team in response to recognized safety and congestion issues on the corridor. Some of these potential projects will be eliminated during the screening analysis and will NOT be a part of the final recommended Route Development Plan (RDP).

The project descriptions will be revised as the project status changes or as projects are updated. Remaining projects are subject to further analysis, and based of the analysis, projects that appear to be in conflict will be reconciled or screened from the list.

Short Term = S Long Term = L	SR 169 Project Number	Location	Milepost	Segment	Project Description	Screening Criteria - Benefits											Screening Criteria - Costs																					
						Safety			Mobility					Transit /HOV Use	Non Motorized Travel		Environmental Effects											Land Use and Policy Consistency		Project Costs and Benefits			Public Support			
						Improves existing design deficiencies	Reduces likelihood of accidents in a particular area (may include a designated HAC or HAL)	Improves pedestrian safety	Decreases number of driveways and awkward intersections	Improves emergency access in congested areas in peak periods	Improves freight travel times	Improves traffic conditions during an event	Improves operating Levels of Service	Enhances transit/HOV opportunities	Enhances non-motorized travel opportunities	Subtotal - Benefits	Displaces business or community facilities	Displaces dwelling units	Creates noise impacts on sensitive receptors	Requires additional right of way	Impacts Open Space or Parks	Significantly impacts low income and/or minority communities	Potentially adversely effects on historical, cultural, and architectural site resources	Impacts salmon and fish bearing stream crossings	Displaces/disturbs threatened or endangered species or their habitat	Impacts wetlands and floodplains	Remediates existing geological hazard	Is located in a geologically hazardous area	Impacts land in Agricultural Production Districts or Farmland Preservation Programs	Does not maintain consistency with Comprehensive Plans, land use, transportation, and economic development policies	Capital Cost	Annual operation and maintenance cost	Right of way acquisition cost	Does not have support from citizens, stakeholders, interest groups, and State, Local and Tribal Reps	Subtotal - Impacts/Costs	TOTALS
						6	13	11	8	11	8	8	13	4	8	90	-6.5	-6.5	-4	-3	-4	-6.5	-6.5	-4	-4	-5	5	-4	-6.5	-3	H = -6.5 M = -3.25 L = 0	H = -4 M = -2 L = 0	H = -6.5 M = -3.25 L = 0	-4	-90	
L	55	SR 169 south of SE Green Valley Road to near SE 380th Street: Green River gorge from road crest north of the gorge to road crest south of the gorge	6.02 - 3.97	Rural Ag	Provide truck climbing lanes on the grades ascending from the Green River bridge and realign the roadway to reduce horizontal and vertical curves. Add truck climbing lanes north & south of the bridge.	6	13	0	0	11	8	8	13	0	0	59	0	0	0	-3	-4	0	0	0	0	-5	0	-4	0	0	-6.5	0	-3.25	0	-26	33
L	54	SR 169 @ Green River Bridge		Rural Ag	INCORPORATED INTO PROJECT #55 Add truck climbing lanes and realign the roadway to improve sight distance.	See project #55											See project #55																			
L	57	SR 169 @ Green River Bridge	6.02 - 5.20	Rural Ag	Repair/repave the bridge including its south end, and update bridge supports and railing. Construct bicycle and pedestrian improvements on the bridge, and add a truck lane north of bridge.	6	0	11	0	11	8	8	13	0	8	65	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	-3.25	0	-10	56
S	58	SR 169 from Green River Bridge to 264th Avenue SE	5.20 - 3.41	Rural Ag	Repave the roadway.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																			
S	65	SR 169 from 264th Avenue SE to Newaukum Creek Bridge	3.41 - 1.51	Rural Ag	Repave the roadway to address the HAL near SE 400th Street vicinity.	Project ALREADY APPROVED and therefore not scored.											Project ALREADY APPROVED and therefore not scored.																			
S	63	SR 169 from SE 416th Street to SR 164	1.67 - 0.00	Rural Ag Enumclaw	Repave the roadway and provide intersection and pedestrian improvements at SE 416th St intersection.	0	0	11	0	11	8	8	13	0	0	51	-6.5	0.0	0	-3	0	0.0	0.0	0	0	-5	0	0	-6.5	0	-3.25	0	-3.25	0	-28	24
L	64	SR 169 @ SE 416th Street	1.67	Rural Ag	Intersection improvements for future traffic service and turning radii.	6	13	0	0	11	8	8	13	0	0	59	-6.5	0.0	0	-3	0	0.0	0.0	0	0	-5	0	0	-6.5	0	-3.25	0	-3.25	0	-28	32
S	68	SR 169 @ McHugh Avenue	0.67	Enumclaw	Intersection improvements.	0	0	0	0	11	8	8	13	0	0	40	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-3	37
S	69	SR 169 @ Washington Avenue	0.17	Enumclaw	Realign the roadway. Provide advance warning sign for pedestrian crossing and repave pedestrian crosswalks.	0	0	11	8	0	0	0	0	0	8	27	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-3	24
S	70	SR 169 @ Washington Avenue	0.17	Enumclaw	Intersection improvements.	0	0	0	8	11	8	8	13	0	0	48	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-3	45
PROJECTS RECOMMENDED FOR FURTHER STUDY																																					
L	2 & 5	SR 169 from I-405 to Maplewood Avenue	25.19 - 23.86	Renton	Widen and repave roadway to help address HAC west of Blaine Drive SE to east of Wildwood Creek.	0	13	0	0	11	8	8	13	0	0	53	-6.5	-6.5	-4	-3	-4	0.0	0.0	-4	0	-5	0	-4	0.0	0	-6.5	0	-6.5	0	-50	3
L	6	SR 169 @ I-405 Northbound	25.19	Renton	Increase the existing on-ramp storage length to accommodate the current and future heavy traffic volume during the AM peak hours.	6	13	0	0	0	0	0	0	0	0	19	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	-3	16
S	T16-1	SR 169 @ near new Cedar River Park entrance (just east of I-405)	24.7	Renton	Provide transit improvements.	0	0	0	0	0	0	0	0	4	0	4	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	-3	1
S	7	SR 169 from Cedar River Park Entrance to SE 5th Street	24.55 - 23.99	Renton	Access management, close SE 5th Street entrance to Maplewood Riverside Park and expand existing Park parking lot at SE 7th Street. Address steep slope problem that reduces drivers' line of sight. Coordination between city and county park agencies required.	0	13	0	8	11	8	8	13	0	0	61	0.0	0.0	0	0	0	0.0	0.0	0	0	0	5	0	0.0	0	0.0	0	0.0	0	5	66
L	11	SR 169 from SE Maplewood Avenue to 140th Place SE	23.86 - 22.99	Renton	Widen roadway to improve existing and future traffic flow and address HAC.	0	13	0	0	11	8	8	13	0	0	53	0.0	-6.5	-4	-3	-4	0.0	0.0	-4	0	-5	0	0	0.0	0	-6.5	0	-6.5	0	-40	14
L	12	SR 169 from 140th Way SE to Jones Road (196th Avenue SE)	22.99 - 19.23	Renton	Widen roadway to improve existing and future traffic flow and address HAC.	0	13	0	0	11	8	8	13	0	0	53	-6.5	-6.5	-4	-3	-4	-6.5	0.0	0	0	-5	0	-4	0.0	0	-6.5	0	-6.5	0	-53	1
S	28	SR 169 @ SE 216th Place	15.23	Cedar River	Widen and restripe the roadway. Remove old guardrail and add new guardrail where it is needed, and increase street signing. These improvements will help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	0	0	11	8	8	13	0	0	53	-6.5	-6.5	-4	-3	0	0.0	0.0	-4	0	-5	0	0	0.0	0	-3.25	0	-3.25	0	-36	18
S	26	SR 169 from SE 216th Place to SR 18 Overpass	15.23 - 15.07	Cedar River	Reduce the bend on SR 169 and remove roadside obstacles to improve drivers' line of sight and to help address the HAC north of 218th Place SE to south of Witte Road SE.	6	13	0	0	0	0	0	0	0	0	19	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	-3.25	0	-10	10
L	73	Lake Wilderness Trail from Cedar River Trail to Flaming Geyser State Park	14.95 - 6.02	Maple Valley, Black Diamond	Pave trail from Cedar River Trail south to trail terminus (This is part of Projects 20 & 83), develop trail south of current terminus to Lake Sawyer and Flaming Geyser State Park.	0	0	11	0	0	0	0	0	0	8	19	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	-3.25	-2	-3.25	0	-12	8
L	34	SR 169 midblock between SE 253rd Pl and and SE 258th St.	12.2	Maple Valley	Grade separated trail crossing for new trail linking the Cedar River Trail and Lake Wilderness Trail. This would connect to the proposed Maple Valley Town Center/Legacy Place on west side of SR 169 and Rock Creek School / Park on east side.	0	0	11	0	0	0	0	0	0	8	19	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	-3.25	-2	-3.25	0	-12	8
L	83	SR 169 from SR 516 to BNSF Crossing	11.44 - 10.41	Maple Valley / Black Diamond	Improve the Cedar River Trail between SR 516 and BNSF Railroad and construct trail bridge over the BNSF Railroad.	0	0	11	0	0	0	0	0	0	8	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-3.25	-2	0	0	-5	14
L	81	SR 169 south of BNSF Railroad (Just north of Black Diamond north corp. limit.)	9.13	Black Diamond	Construct below-grade trail crossing of SR 169 for new trail linking Cedar River-Green River trail and the Renton-Mount Rainier trail, also linking Lake Sawyer and proposed regional sports facility	0	0	11	0	0	0	0	0	0	8	19	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	-6.5	-2	-3.25	0	-15	4

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

This is a working document that contains an inventory of projects currently underway and potential projects for consideration. This list includes projects provided by Corridor Working Group (CWG) partners and other projects identified by the study team in response to recognized safety and congestion issues on the corridor. Some of these potential projects will be eliminated during the screening analysis and will NOT be a part of the final recommended Route Development Plan (RDP).

The project descriptions will be revised as the project status changes or as projects are updated. Remaining projects are subject to further analysis, and based of the analysis, projects that appear to be in conflict will be reconciled or screened from the list.

Short Term = S Long Term = L	SR 169 Project Number	Location	Milepost	Segment	Project Description	Screening Criteria - Benefits: Safety: Improves existing design deficiencies	Safety: Reduces likelihood of accidents in a particular area (may include a designated HAC or HAL)	Safety: Improves pedestrian safety	Mobility: Decreases number of driveways and awkward intersections	Mobility: Improves emergency access in congested areas in peak periods	Mobility: Improves freight travel times	Mobility: Improves traffic conditions during an event	Mobility: Improves operating Levels of Service	Transit /HOV Use: Enhances transit/HOV opportunities	Non Motorized Travel: Enhances non-motorized travel opportunities	Subtotal - Benefits	Screening Criteria - Costs: Environmental Effects: Displaces business or community facilities	Displaces dwelling units	Creates noise impacts on sensitive receptors	Requires additional right of way	Impacts Open Space or Parks	Significantly impacts low income and/or minority communities	Potentially adversely effects on historical, cultural, and architectural site resources	Impacts salmon and fish bearing stream crossings	Displaces/disturbs threatened or endangered species or their habitat	Impacts wetlands and floodplains	Remediates existing geological hazard	Is located in a geologically hazardous area	Land Use and Policy Consistency: Impacts land in Agricultural Production Districts or Farmland Preservation Programs	Does not maintain consistency with Comprehensive Plans, land use, transportation, and economic development policies	Project Costs and Benefits: Capital Cost	Annual operation and maintenance cost	Right of way acquisition cost	Public Support: Does not have support from citizens, stakeholders, interest groups, and State, Local and Tribal Reps	Subtotal - Impacts/Costs	TOTALS
						6	13	11	8	11	8	8	13	4	8	**90**	-6.5	-6.5	-4	-3	-4	-6.5	-6.5	-4	-4	-5	5	-4	-6.5	-3	H = -6.5 M = -3.25 L = 0	H = -4 M = -2 L = 0	H = -6.5 M = -3.25 L = 0	-4	**-90**	
S	T44-2	SR 169 @ SE 240th Street	13.52	Maple Valley	Provide transit stop improvements.	0	0	0	0	0	0	0	0	4	0	**4**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**1**
S	38	SR 169 @ SR 516 (Kent Kangley, Four Corners) vicinity	11.44	Maple Valley	Develop Lake Wilderness Trail crossing of SR 516 near SR 169.	0	0	11	0	0	0	0	0	0	8	**19**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	-6.50	-2	0.0	0	**-9**	**11**
L	46	Location to be determined	9.13 - 6.25	Black Diamond	Construct alternative north/south route that would bypass portions of Black Diamond.	0	0	11	8	11	8	8	13	0	0	**59**	-6.5	-6.5	-4	-3	-4	-6.5	0.0	0	0	-5	0	-4	0.0	0	-6.5	0	-6.5	0	**-53**	**7**
S	71	SR 169 @ SR 164	0	Enumclaw	Intersection improvements to accommodate truck turns.	6	0	0	0	0	8	0	0	0	0	**14**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**11**
S	72	SR 169 @ south end of Green River Bridge	5.2	Black Diamond	Pre-level and overlay to realign bridge with roadway every ten years.	0	0	0	0	0	0	0	0	0	0	**0**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	-4	0.0	0	**-4**	**-4**
S	67	SR 169 in the Enumclaw vicinity	0.85 - 0.00	Enumclaw	Construct sidewalks on east side of SR 169 where missing (Would be included as part of Project 90 added by CWG).	0	0	11	0	0	0	0	0	0	8	**19**	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-3**	**16**
PROJECTS ADDED BY CWG TO CARRY FORWARD																																					
L	86	SR 169 from Washington Ave to Kibler Ave.	.17 - .41	Enumclaw	Construct center left turn lane by restriping roadway	Project Added by CWG after Scoring (Not Scored)										**0**	Project Added by CWG after Scoring (Not Scored).																			**0**	**0**
L	87	SR 169 from Kibler to McHugh Avenue	.41 - .67	Enumclaw	Construct center left turn lane by restriping roadway	Project Added by CWG after Scoring (Not Scored)										**0**	Project Added by CWG after Scoring (Not Scored).																			**0**	**0**
L	88	SR 169 near 424th St (Thunder Mtn. Middle School)	1.26	Enumclaw	Construct Pedestrian school crossing	Project Added by CWG after Scoring (Not Scored)										**0**	Project Added by CWG after Scoring (Not Scored).																			**0**	**0**
L	89	SR 169 at Thunder Mtn. Middle School (North entrance)	1.38	Enumclaw	Construct Pedestrian school crossing	Project Added by CWG after Scoring (Not Scored)										**0**	Project Added by CWG after Scoring (Not Scored).																			**0**	**0**
L	90	SR 169 between McHugh and Thunder Mtn. Middle School	.67 - 1.38	Black Diamond / Rural	Construct sidewalks on both sides of SR 169	Project Added by CWG after Scoring (Not Scored)										**0**	Project Added by CWG after Scoring (Not Scored).																			**0**	**0**
L	91	SR 169 between Roberts Drive and north city limit	8.17 - 9.09	Black Diamond	Construct center left turn lane between Roberts Drive and north city limits	Project Added by CWG after Scoring (Not Scored)										**0**	Project Added by CWG after Scoring (Not Scored).																			**0**	**0**
PROJECTS RECOMMENDED FOR ELIMINATION																																					
L	9	SR 169 @ SE 5th Street vicinity	24.2	Renton	Construct a noise barrier to minimize noise to adjacent land uses.	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
S	T16-2	SR 169 @ 140th Way SE	22.99	Renton	Construct bus pull outs to help address the HAC from 140th Way SE to 161st Avenue SE.	0	13	0	0	0	0	0	0	0	0	**13**	-6.5	0	0	-3	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-14**	**-1**
L	13	SR 169 @ 140th Way SE	22.99	Renton	Long-term intersection improvements to serve future growth beyond the ongoing improvements at this location.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	-6.5	0	-3	-4	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-23**	**17**
S	T16-4	SR 169 @ 152nd Ave SE	22.08	Renton	Provide transit improvements such as bus pull outs to address the HAC from 140th Way SE to 161st Avenue SE.	0	13	0	0	0	0	0	0	4	0	**17**	-6.5	0	0	-3	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-14**	**4**
L	17	SR 169 @ SE Jones Rd to Cedar Grove Rd	19.22 - 18.55	Cedar River	Stabilize steep slope and slide area, and reconstruct the roadway to improve drivers' line of sight and increase the narrow shoulder width.	6	13	11	0	11	0	0	0	0	0	**41**	-6.5	0	0	-3	-4	0	0	-4	0	-5	5	0	0	0	-6.5	0	-6.5	0	**-31**	**11**
L	22	SR 169 from 188th Avenue SE to south of SE 168th Street vicinity	18.50 -16.50	Cedar River	Realign to drivers' increase line of sight and improve the steep slope area just north of Jones Road (196th Avenue SE) on SR 169. Widen the entire roadway section to provide shoulders on both sides of the street.	6	13	11	0	11	0	0	0	0	0	**41**	-6.5	0	0	-3	-4	0	0	-4	0	-5	5	-4	0	0	-6.5	0	-3.25	0	**-31**	**10**
L	74	SR 169 bridge over Cedar River	15.07 - 15.00	Maple Valley	Widen bridge.	0	13	0	0	11	8	8	0	0	0	**40**	-6.5	-6.5	-4	-3	0	0	0	-4	0	-5	0	-4	0	0	-3.25	0	0	0	**-36**	**4**
L	29	SR 169 SE Bain Rd/Witte Rd to Maple Valley Park-and-ride	14.95 - 14.14	Maple Valley	Reconstruct roadway to improve drivers' line of sight and restripe the roadway to address HAC.	6	13	0	0	11	0	0	0	0	0	**30**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	-4	0.0	0	-6.5	0	0.0	0	**-14**	**17**
S	78	SR 169 from Wax Road SE to 228th Ave SE	14.04 - 13.37	Maple Valley	Provide continuous sidewalk on both sides of road.	0	0	11	0	0	0	0	0	0	8	**19**	0	0	0	-3	0	0	0	0	0	0	0	-4	0	0	0	0	-3.25	0	**-10**	**9**
S	T44-4	SR 169 @ Kent Kangley Road	11.44	Maple Valley	Provide transit stop improvements.	0	0	0	0	0	0	0	0	4	0	**4**	-6.5	0	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-10**	**-6**
S	53	SR 169 @ Jones Lake Rd	7.27	Black Diamond	Intersection improvements to realign approaches.	6	13	0	8	0	0	0	0	0	0	**27**	0	0	0	-3	0	0	0	0	0	-5	0	0	0	0	-3.25	0	0	0	**-11**	**16**
S	76	SR 169 south of Green River Bridge near overhead power lines	4.15	Rural Ag	Provide wildlife crossing or enhanced warnings to drivers.	0	13	0	0	0	0	0	0	0	8	**21**	0	0	0	-3	0	0	0	0	0	-5	0	0	0	0	0	0	0	0	**-8**	**13**
L	59	SR 169 @ SE 385th Street	3.59	Rural Ag	Intersection improvements to realign approaches.	6	13	0	8	0	0	0	0	0	0	**27**	0	0	0	-3	0	0	0	0	0	-5	0	0	0	0	-3.25	0	0	0	**-11**	**16**
L	60	SR 169 south of Enumclaw Franklin Rd SE	3.53 - 3.33	Rural Ag	Reconstruct roadway to improve sight distance.	6	13	0	0	0	0	0	0	0	0	**19**	0	0	-4	-3	0	0	0	0	0	0	0	0	0	0	-3.25	0	0	0	**-10**	**9**
L	61	Location to be determined	2.67 - 0.00	Rural Ag Enumclaw	Potential truck route bypass that would bypass downtown Enumclaw to help address the HAL near SE 400th Street vicinity and HAC from south of SE 416th Street to north of 264th Avenue SE.	0	0	0	0	0	8	8	13	0	0	**29**	0	0	-4	-3	0	0	0	0	0	-5	0	0	-6.5	0	-3.25	0	-3.25	0	**-25**	**4**
L	62	SR 169 from SE 416th Street to SE 432nd Street (McHugh Avenue)	1.67 - 0.67	Rural Ag Enumclaw	Widen roadway shoulders, and clear obstacles/foliage along the roadway that may impair drivers' line of sight.	6	13	11	0	11	0	0	0	0	0	**41**	0	0	0	-3	0	-6.5	0	0	0	-5	0	0	-6.5	0	-3.25	0	0	0	**-24**	**17**
S	66	SR 169 from Thunder Mountain Middle School to McHugh Avenue	1.26 - 0.67	Rural Ag Enumclaw	Extend the sidewalk on SR 169 to Thunder Mountain Middle School.	0	0	11	0	0	0	0	0	0	8	**19**	-6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-7**	**13**

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

SR 169 Project Number	Location	Project Description	Safety			Mobility					Transit /HOV Use	Non Motorized Travel	Subtotal - Benefits	Environmental Effects												Land Use and Policy Consistency		Project Costs and Benefits			Public Support	Subtotal - Impacts/Costs	TOTALS
7	SR 169 from Cedar River Park Entrance to SE 5th Street	Access management, close SE 5th Street entrance to Maplewood Riverside Park and expand existing Park parking lot at SE 7th Street. Address steep slope problem that reduces drivers' line of sight. Coordination between city and county park agencies require	0	13	0	8	11	8	8	13	0	0	**61**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	5	0	0.0	0	0.0	0	0.0	0	**5**	**66**
25	SR 169 @ SE 214th Street to SE 216th Place	Access management to help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	0	8	11	8	8	13	0	0	**61**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**0**	**61**
45	SR 169 in the Black Diamond vicinity	Construct sidewalks on east side of SR 169 consistent with state standards.	6	0	11	0	0	0	0	0	0	8	**25**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**0**	**25**
T44-3	SR 169 @ SE 264th Street	Construct sidewalks, and provide transit improvements (e.g. shelter footing and pullouts).	0	0	11	0	0	0	0	0	4	8	**23**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**23**
9	SR 169 @ SE 5th Street vicinity	Construct a noise barrier to minimize noise to adjacent land uses.	0	0	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**
83	SR 169 from SR 516 to BNSF Crossing	Pave the Cedar River Trail and Bridge the BNSF Railroad	0	0	0	0	0	0	0	0	0	8	**8**	0	0	0	0	0	0	0	0	0	0	0	0	0	3	-3.3	-2	0	0	**-2**	**6**
70	SR 169 @ Washington Avenue	Intersection improvements.	0	0	0	8	11	8	8	13	0	0	**48**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**45**
79	SR 169 @ 228th Avenue SE	Intersection improvements to improve existing traffic service.	0	0	0	0	11	8	8	13	0	0	**40**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**37**
68	SR 169 @ McHugh Avenue	Intersection improvements.	0	0	0	0	11	8	8	13	0	0	**40**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**37**
56	SR 169 @ SE Green Valley Rd	Intersection improvements to improve traffic service.	0	0	0	0	11	8	8	13	0	0	**40**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**37**
69	SR 169 @ Washington Avenue	Realign the roadway. Provide advance warning sign for pedestrian crossing and repave pedestrian crosswalks.	0	0	11	8	0	0	0	0	0	8	**27**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**24**
77	SR 169 from SE 216th Place to SR 18 Overpass	Provide sidewalk in front of commercial area to help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	11	0	0	0	0	0	0	0	**24**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**21**
67	SR 169 in the Enumclaw vicinity	Construct sidewalks on east side of SR 169.	0	0	11	0	0	0	0	0	0	8	**19**	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-3**	**16**
71	SR 169 @ SR 164	Intersection improvements to accommodate truck turns.	6	0	0	0	0	8	0	0	0	0	**14**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**11**
T44-2	SR 169 @ SE 240th Street	Provide transit stop improvements.	0	0	0	0	0	0	0	0	4	0	**4**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**1**
T16-1	SR 169 @ near new Cedar River Park entrance (just east of I-405)	Provide transit improvements.	0	0	0	0	0	0	0	0	4	0	**4**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-3**	**1**
37	SR 169 @ SE 253rd Place	Intersection improvements to address future capacity deficiency. Specific improvement to be determined.	0	0	0	0	11	8	8	13	0	0	**40**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-3**	**37**
6	SR 169 @ I-405 Northbound	Increase the existing on-ramp storage length to accommodate the current and future heavy traffic volume during the AM peak hours.	6	13	0	0	0	0	0	0	0	0	**19**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-3**	**16**
72	SR 169 @ south end of Green River Bridge	Pre-level and overlay to realign bridge with roadway every ten years.	0	0	0	0	0	0	0	0	0	0	**0**	0.0	0.0	0	0	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	-4	0.0	0	**-4**	**-4**
30	SR 169 @ Witte Road SE (SE Bain Road)	Conduct a geotechnical study on steep slopes near the corridor and implement improvements. Develop truck climbing lane and improve shoulders. These improvements will help address the HAC north of 218th Place SE to south of Witte Road SE, and the existing	6	13	0	0	11	8	8	13	0	0	**59**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	5	-4	0.0	0	-3.25	0	0.0	0	**-5**	**54**
47	SR 169 from Ravensdale Road to Roberts Road vicinity	Intersection improvements to realign approaches to address HAC from north of Ravensdale Road to 1st Avenue vicinity. In addition, improve traffic service.	6	13	0	8	11	8	8	13	0	0	**67**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-6**	**61**
36	SR 169 @ SE 251st Street	Intersection improvements to address future capacity deficiency. Specific improvement to be determined.	0	0	0	0	11	8	8	13	0	0	**40**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-6**	**34**
35	SR 169 @ 231st Avenue SE	Intersection improvements to address future capacity deficiency. Specific improvement to be determined.	0	0	0	0	11	8	8	13	0	0	**40**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-6**	**34**
52	SR 169 @ 1st Avenue SE	Intersection improvements to realign approaches.	6	13	0	8	0	0	0	0	0	0	**27**	0	0	0	-3	0	0	0	0	0	0	0	0	0	0	-3.3	0	0	0	**-6**	**21**
66	SR 169 from Thunder Mountain Middle School to McHugh Avenue	Extend the sidewalk on SR 169 to Thunder Mountain Middle School.	0	0	11	0	0	0	0	0	0	8	**19**	-6.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-7**	**13**
76	SR 169 south of Green River Bridge near overhead power lines	Provide wildlife crossing or enhanced warnings to drivers.	0	13	0	0	0	0	0	0	0	0	**13**	0	0	0	-3	0	0	0	0	0	-5	0	0	0	0	0	0	0	0	**-8**	**5**
38	SR 169 @ SR 516 (Kent Kangley, Four Corners) vicinity	Develop Lake Wilderness Trail crossing of SR 516 near SR 169.	0	0	11	0	0	0	0	0	0	8	**19**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	-2	0.0	0	**-8**	**11**

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

SR 169 Project Number	Location	Project Description	Safety			Mobility					Transit /HOV Use	Non Motorized Travel	Subtotal - Benefits	Environmental Effects												Land Use and Policy Consistency		Project Costs and Benefits			Public Support	Subtotal - Impacts/Costs	TOTALS
57	SR 169 @ Green River Bridge	Repair/repave the bridge including its south end, and update bridge supports and railing. Construct bicycle and pedestrian improvements on the bridge, and add a truck lane north of bridge.	6	0	11	0	11	8	8	13	0	8	**65**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	-3.25	0	**-10**	**56**
31	SR 169 @ Witte Road SE (SE Bain Road)	Intersection improvements and consolidation of driveways to improve traffic service. In addition increase traffic safety to help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	0	8	11	8	8	13	0	0	**61**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	-3.25	0	**-10**	**52**
80	SR 169 @ SE 271st Street	Intersection improvements to improve existing traffic service.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-10**	**31**
51	SR 169 @ Lawson St/Green River Gorge	Intersection improvements to improve traffic service.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.00	0	**-10**	**31**
50	SR 169 @ Baker St	Intersection improvements to improve traffic service.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.00	0	**-10**	**31**
26	SR 169 from SE 216th Place to SR 18 Overpass	Reduce the bend on SR 169 and remove roadside obstacles to improve drivers' line of sight and to help address the HAC north of 218th Place SE to south of Witte Road SE.	6	13	0	0	0	0	0	0	0	0	**19**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	-3.25	0	**-10**	**10**
T44-4	SR 169 @ Kent Kangley Road	Provide transit stop improvements.	0	0	0	0	0	0	0	0	4	0	**4**	-6.5	0	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**-10**	**-6**
78	SR 169 from Wax Road SE to 228th Ave SE	Provide continuous sidewalk on both sides of road.	0	0	11	0	0	0	0	0	0	8	**19**	0	0	0	-3	0	0	0	0	0	0	0	-4	0	0	0	0	-3.3	0	**-10**	**9**
60	SR 169 south of Enumclaw Franklin Rd SE	Reconstruct roadway to improve sight distance.	6	13	0	0	0	0	0	0	0	0	**19**	0	0	-4	-3	0	0	0	0	0	0	0	0	0	0	-3.3	0	0	0	**-10**	**9**
43	SR 169 near SE 291st Street vicinity	Intersection improvements to realign approaches and improve future traffic service, with consideration for bus pullouts and street lighting.	6	13	0	8	11	8	8	13	0	0	**67**	0.0	0.0	0	-3	0	0.0	0.0	0	0	-5	0	0	0.0	0	-3.25	0	0.0	0	**-11**	**56**
59	SR 169 @ SE 385th Street	Intersection improvements to realign approaches.	6	13	0	8	0	0	0	0	0	0	**27**	0	0	0	-3	0	0	0	0	0	-5	0	0	0	0	-3.3	0	0	0	**-11**	**16**
53	SR 169 @ Jones Lake Rd	Intersection improvements to realign approaches.	6	13	0	8	0	0	0	0	0	0	**27**	0	0	0	-3	0	0	0	0	0	-5	0	0	0	0	-3.3	0	0	0	**-11**	**16**
48	SR 169 from Ravensdale Road vicinity to Lawson Street	Improve existing shoulder to help address HAC from north of Ravensdale Road to 1st Avenue vicinity.	6	13	11	0	11	0	0	0	0	0	**41**	0.0	-6.5	0	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	-3.25	0	**-13**	**28**
15	SR 169 @ 152nd Ave SE	Long-term intersection improvements to serve future growth beyond the ongoing improvements.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	0.0	0	-3	-4	0.0	0.0	0	0	0	0	0	0.0	0	0.0	0	0.0	0	**-14**	**27**
29	SR 169 SE Bain Rd/Witte Rd to Maple Valley Park-and-ride	Reconstruct roadway to improve drivers' line of sight and restripe the roadway to address HAC.	6	13	0	0	11	0	0	0	0	0	**30**	0.0	0.0	0	-3	0	0.0	0.0	0	0	0	0	-4	0.0	0	-6.5	0	0.0	0	**-14**	**17**
T16-4	SR 169 @ 152nd Ave SE	Provide transit improvements such as bus pull outs to address the HAC from 140th Way SE to 161st Avenue SE.	0	13	0	0	0	0	0	0	4	0	**17**	-6.5	0	0	-3	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	**-14**	**4**
T16-2	SR 169 @ 140th Way SE	Construct bus pull outs to help address the HAC from 140th Way SE to 161st Avenue SE.	0	13	0	0	0	0	0	0	0	0	**13**	-6.5	0	0	-3	-4	0	0	0	0	0	0	0	0	0	0	0	0	0	**-14**	**-1**
84	SR 169 from SR 516 to SE 288th St	Widen the roadway to improve existing and future traffic flow and address HAC.	6	13	0	0	11	8	8	13	0	0	**59**	0.0	0.0	-4	-3	0	0.0	0.0	0	0	0	0	0	0.0	0	-6.5	0	-3.25	0	**-17**	**42**
34	SR 169 midblock between SE 231st Street and SE 244th Street	Grade separated trail crossing for new trail linking the Cedar River Trail and Lake Wilderness Trail.	0	0	11	0	0	0	0	0	0	8	**19**	0	-6.5	0	-3	0	0	0	0	0	0	0	0	0	-3	-3.3	-2	0	0	**-18**	**1**
32	SR 169 @ Wax Road SE	Long-term intersection improvements to serve future growth beyond the capacity of the recent improvements at this location.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	-6.5	0	-3	0	0	0	0	0	0	0	0	0	0	0	0	-3.3	0	**-19**	**21**
81	SR 169 south of BNSF Railroad	Trail crossing for new trail linking Cedar River-Green River trail and the Renton-Mount Rainier trail, also linking Lake Sawyer and regional sports facility	0	0	11	0	0	0	0	0	0	8	**19**	-6.5	0	0	-3	0	0	0	0	0	-5	0	0	0	0	-3.3	-2	0	0	**-20**	**-1**
23	SR 169 @ Cedar Grove Road	Intersection improvements to address future capacity deficiency and existing safety. Specific improvement to be determined.	0	13	0	0	11	8	8	13	0	0	**53**	-6.5	0.0	0	-3	-4	0.0	0.0	-4	0	-5	0	0	0.0	0	0.0	0	0.0	0	**-23**	**31**
13	SR 169 @ 140th Way SE	Long-term intersection improvements to serve future growth beyond the ongoing improvements at this location.	0	0	0	0	11	8	8	13	0	0	**40**	-6.5	-6.5	0	-3	-4	0.0	0.0	0	0	0	0	0	0.0	0	-3.25	0	0.0	0	**-23**	**17**
62	SR 169 from SE 416th Street to SE 432nd Street (McHugh Avenue)	Widen roadway shoulders, and clear obstacles/foliage along the roadway that may impair drivers' line of sight.	6	13	11	0	11	0	0	0	0	0	**41**	0	0	0	-3	0	-6.5	0	0	0	-5	0	0	-6.5	0	-3.3	0	0	0	**-24**	**17**
4	SR 169 @ Sunset Blvd/I-405 Southbound On-Ramp	Reconfigure the I-405 interchange to accommodate the current and future heavy traffic volume during the PM peak hours.	6	13	11	0	11	8	8	13	0	0	**70**	-6.5	0.0	-4	-3	-4	0.0	0.0	0	0	0	0	-4	0.0	3	-6.5	0	0.0	0	**-25**	**45**
61	Location to be determined	Potential truck route bypass that would bypass downtown Enumclaw to help address the HAL near SE 400th Street vicinity and HAC from south of SE 416th Street to north of 264th Avenue SE.	0	0	0	0	0	8	8	13	0	0	**29**	0	0	-4	-3	0	0	0	0	0	-5	0	0	-6.5	0	-3.3	0	-3.3	0	**-25**	**4**

DRAFT

SR 169 Corridor
Final Screening of Short-term and Long-term Potential Transportation Projects

SR 169 Project Number	Location	Project Description	Safety			Mobility					Transit /HOV Use	Non Motorized Travel	Subtotal - Benefits	Environmental Effects												Land Use and Policy Consistency		Project Costs and Benefits			Public Support	Subtotal - Impacts/Costs	TOTALS
33b	SR 169 from Witte Road SE to SE 240th Street	Additional intersection improvements including northbound travel lane(s) and bike lane, street lighting, and improved signage.	0	13	0	0	11	8	8	13	0	8	**61**	-6.5	-6.5	-4	-3	0	0.0	0.0	0	0	0	5	-4	0.0	0	-3.25	0	-3.25	0	**-26**	**36**
55	SR 169 south of SE Green Valley Road to near SE 380th Street: Green River gorge from road crest north of the gorge to road crest south of the gorge	Provide truck climbing lanes on the grades ascending from the Green River bridge and realign the roadway to reduce horizontal and vertical curves. Add truck climbing lanes north & south of the bridge.	6	13	0	0	11	8	8	13	0	0	**59**	0	0	0	-3	-4	0	0	0	0	-5	0	-4	0	0	-6.5	0	-3.3	0	**-26**	**33**
64	SR 169 @ SE 416th Street	Intersection improvements for future traffic service and turning radii.	6	13	0	0	11	8	8	13	0	0	**59**	-6.5	0.0	0	-3	0	0.0	0.0	0	0	-5	0	0	-6.5	0	-3.25	0	-3.25	0	**-28**	**32**
63	SR 169 from SE 416th Street to SR 164	Repave the roadway and provide intersection and pedestrian improvements at SE 416th St intersection.	0	0	11	0	11	8	8	13	0	0	**51**	-6.5	0.0	0	-3	0	0.0	0.0	0	0	-5	0	0	-6.5	0	-3.25	0	-3.25	0	**-28**	**24**
73	Lake Wilderness Trail from Cedar River Trail to Flaming Geyser State Park	Pave trail from Cedar River Trail south to trail terminus, develop trail south of current terminus to Flaming Geyser State Park.	0	0	11	0	0	0	0	0	0	8	**19**	0	0	0	-3	0	0	0	0	0	-5	0	-4	0	0	-6.5	-4	-6.5	0	**-29**	**-10**
17	SR 169 @ SE Jones Rd to Cedar Grove Rd	Stabilize steep slope and slide area, and reconstruct the roadway to improve drivers' line of sight and increase the narrow shoulder width.	6	13	11	0	11	0	0	0	0	0	**41**	-6.5	0	0	-3	-4	0	0	-4	0	-5	5	0	0	0	-6.5	0	-6.5	0	**-31**	**11**
22	SR 169 from 188th Avenue SE to south of SE 168th Street vicinity	Realign to drivers' increase line of sight and improve the steep slope area just north of Jones Road (196th Avenue SE) on SR 169. Widen the entire roadway section to provide shoulders on both sides of the street.	6	13	11	0	11	0	0	0	0	0	**41**	-6.5	0	0	-3	-4	0	0	-4	0	-5	5	-4	0	0	-6.5	0	-3.3	0	**-31**	**10**
24	SR 169 south of 196th Avenue SE	Stabilize steep slope and slide area; reconstruct roadway to improve drivers' line of sight, increase narrow shoulder widths and make other improvements to address traffic service and safety at 196th Avenue SE and to its south.	6	13	11	0	11	8	8	13	0	0	**70**	-6.5	0.0	0	-3	-4	0.0	0.0	-4	0	-5	5	-4	0.0	0	-6.5	0	-6.5	0	**-35**	**36**
28	SR 169 @ SE 216th Place	Widen and restripe the roadway. Remove old guardrail and add new guardrail where it is needed, and increase street signing. These improvements will help address the HAC north of 218th Place SE to south of Witte Road SE.	0	13	0	0	11	8	8	13	0	0	**53**	-6.5	-6.5	-4	-3	0	0.0	0.0	-4	0	-5	0	0	0.0	0	-3.25	0	-3.25	0	**-36**	**18**
74	SR 169 bridge over Cedar River	Widen bridge.	0	13	0	0	11	8	8	0	0	0	**40**	-6.5	-6.5	-4	-3	0	0	0	-4	0	-5	0	-4	0	0	-3.3	0	0	0	**-36**	**4**
11	SR 169 from SE Maplewood Avenue to 140th Place SE	Widen roadway to improve existing and future traffic flow and address HAC.	0	13	0	0	11	8	8	13	0	0	**53**	0.0	-6.5	-4	-3	-4	0.0	0.0	-4	0	-5	0	0	0.0	0	-6.5	0	-6.5	0	**-40**	**14**
19	SR 169 from Jones Road (196th Avenue SE) to SR 516	Widen roadway and consider access management, sidewalk in developed areas, and bike lanes where parallel facilities are not paved or available. These projects will help address the bottleneck conditions at Jones Road (196th Avenue SE).	6	13	11	8	11	8	8	13	0	8	**86**	-6.5	-6.5	-4	-3	-4	0.0	-6.5	-4	0	-5	0	-4	0.0	0	-6.5	0	0.0	0	**-50**	**36**
2 & 5	SR 169 from I-405 to Maplewood Avenue	Widen and repave roadway to help address HAC west of Blaine Drive SE to east of Wildwood Creek.	0	13	0	0	11	8	8	13	0	0	**53**	-6.5	-6.5	-4	-3	-4	0.0	0.0	-4	0	-5	0	-4	0.0	0	-6.5	0	-6.5	0	**-50**	**3**
46	Location to be determined	Construct alternative north/south route that would bypass portions of Black Diamond.	0	0	11	8	11	8	8	13	0	0	**59**	-6.5	-6.5	-4	-3	-4	-6.5	0.0	0	0	-5	0	-4	0.0	0	-6.5	0	-6.5	0	**-53**	**7**
12	SR 169 from 140th Way SE to Jones Road (196th Avenue SE)	Widen roadway to improve existing and future traffic flow and address HAC.	0	13	0	0	11	8	8	13	0	0	**53**	-6.5	-6.5	-4	-3	-4	-6.5	0.0	0	0	-5	0	-4	0.0	0	-6.5	0	-6.5	0	**-53**	**1**

SR 169 2030 Level of Service (LOS) Intersection Analysis – Summary

				2004 Existing PM Peak Hour			Improvement Descriptions	2030 No Build PM Peak Hour			Improvement Descriptions	2030 Build PM Peak Hour				2030 Option 1 PM Peak Hour				2030 Option 2 PM Peak Hour				2030 Option 3 PM Peak Hour		
Segment[1]	SRMP	Intersection	Existing Signal	LOS	Delay[2]	V/C (WM)[3]	Assumed Intersection Improvements	LOS	Delay[2]	V/C (WM)[3]	Assumed Intersection Improvements	LOS	Delay[2]	V/C (WM)[3]	Option #1 Improvements	LOS	Delay[2]	V/C (WM)[3]	Option #2 Improvements	LOS	Delay[2]	V/C (WM)[3]	Option #3 Improvements	LOS	Delay[2]	V/C (WM)[3]
Enumclaw	0.00	SR 169	X	A	9	0.51	Optimize	B	10	0.62	Optimize	B	10	0.62	Optimize	B	11	0.64	Optimize	B	11	0.64	Optimize	B	11	0.64
Rural/ Agricultural	1.67	SE 416th St		D	27	WB	Install new traffic signal and additional NBL & SBL lanes.	A	7	0.60	None	A	7	0.60	Optimize	A	8	0.63	Optimize	A	8	0.63	Optimize	A	8	0.63
	2.67	SE 400th Rd	X	B	20	0.70	Optimize	D	51	1.00	None	D	51	1.00	Optimize	E	70	1.07	Optimize	E	70	1.07	Optimize	E	70	1.07
	3.52	Enumclaw - Franklin Rd		B	15	WB	None	D	29	WB	None	D	29	WB		D	33	WB		D	33	WB		D	33	WB
	6.02	SE Green Valley Rd		C	18	EB	None	F	77	EB	Install traffic signal and add NBT truck lane	A	8	0.78	Optimize	B	11	0.85	Optimize	B	11	0.85	Optimize	B	11	0.85
Black Diamond	7.63	Lawson St - Green River Gorge Rd		B	13	WB	None	F	105	WB	Install traffic signal	B	10	0.82	Optimize	B	14	0.90	Optimize	B	14	0.90	Optimize	B	16	0.91
	7.69	Baker St		C	20	EB	None	F	>200	EB	Install traffic signal	B	15	0.80	Optimize	C	23	0.88	Optimize	C	22	0.88	Optimize	C	22	0.87
	8.25	Roberts Dr		D	25	EB	None	F	>200	EB	Install traffic signal	D	48	1.10	Optimize	E	61	1.21	Optimize	E	60	1.21	Optimize	E	61	1.21
	8.28	Black Diamond - Ravensdale Rd		F	71	WB	None	F	>200	WB	Install traffic signal; coordinate with Roberts Drive; Split WB lanes into WBR and WBL	D	48	1.05	Add NBR turn lane	E	59	1.07	Optimize	E	59	1.07	Optimize	E	56	1.07
Maple Valley	11.44	SR 516 - Kent Kangley Rd	X	E	60	0.88	Right-turn pockets at each approach have been converted to shared NBTR, SBTR, EBTR, and WBTR.	E	77	1.07	None	E	77	1.07	Add EBR, WBR, and SBR turn lanes	E	71	0.97	Optimize	E	71	0.97	Optimize	E	71	0.97
	13.53	SE 240th St	X	C	24	0.72	NBT and SBT lanes added	B	20	0.50	None	B	20	0.50	Optimize	C	27	0.70	Optimize	C	27	0.70	Optimize	C	25	0.70
	13.86	Witte Rd SE	X	D	53	0.94	Provide additional SBT lane (only one SBT exists today).	D	46	0.86	None	D	41	0.86	Optimize	E	77	1.04	Optimize	E	78	1.04	Optimize	E	77	1.08
	14.04	SE Wax Rd	X	C	26	0.82	Optimize	E	67	1.09	Add additional NBL and EBL turn lanes.	D	46	0.97	Optimize	E	69	1.13	Optimize	E	68	1.13	Optimize	E	69	1.13
	14.17	SE 231st St	X	C	30	0.66	Optimize	D	52	0.91	None	D	51	0.91	Optimize	E	75	1.05	Add NBR and SBR turn lanes	E	73	1.05	Optimize	E	79	1.07
Cedar River	15.07	SE 216th Way	X	C	33	0.92	Optimize	F	108	1.22	Add NBR lane (with WBL & WBTR)	E	59	1.04	NBT and SBT lanes added	D	36	0.90	Optimize	D	39	0.91	Optimize	D	43	0.94
	17.68	Cedar Grove Rd	X	B	17	0.75	Optimize	D	45	0.96	None	D	45	0.96	NBT and SBT lanes added	C	33	0.84	Optimize	C	35	0.86	Optimize	D	41	0.87
Renton	19.22	Jones Rd - 196th Ave SE	X	B	19	0.83	Optimize	D	45	1.03	None	D	45	1.03	NBT and SBT lanes added	B	16	0.76	Optimize	B	17	0.78	Optimize	B	18	0.80
	22.08	152nd Ave SE	X	A	6	0.61	A north leg to be constructed.	C	29	0.93	None	C	25	0.84	Optimize	C	28	0.87	Optimize	D	37	0.94	Optimize	C	27	0.84
	22.32	149th Ave SE	X	C	26	0.68	Reduction of traffic volumes at SB approach.	A	9	0.80	None	A	9	0.80	Optimize	A	9	0.81	Optimize	A	10	0.83	Add EBT and WBT lanes	A	8	0.67
	22.99	140th Way SE	X	D	41	0.99	Optimize	F	96	1.25	Add WBL lane (results in dual left-turns)	D	47	0.97	Optimize	E	75	1.04	Add WBT lane (total of 3)	F	95	1.12	Add EBT lane	E	61	1.06
	25.18	I-405 NB Off-Ramp		F	>200	NB	Construct a free NB right-turn lane onto SR 169	A	-	-	None	A	-	-	None	A	-	-	Add WBL (2 WBT, 1 WBL)	A	-	-	Optimize	A	-	-
	25.26	I-405 SB On-Ramp (Sunset Blvd)	X	D	39	0.97	Optimize	F	102	1.23	Add WBR lane. This would require widening of the underpass.	F	92	1.20	Optimize	F	93	1.20	Optimize	F	126	1.32	Optimize	F	104	1.36

1. Segments are based on roadway characteristics for LOS analysis and where possible, are consistent with the segments defined in the Route Development Plan.
2. Delay is in average seconds per vehicles.
3. V/C is Volume to Capacity ratio at signalized intersections; WM refers to Worst Movement for unsignalized intersections.

Shaded Cells: Intersection Operates at LOS F.

SR 169 Level of Service (LOS) Segment Analysis – Summary

SR 169 Highway and Arterial LOS

Segment[1]	# [2]	SRMP From	SRMP To	Segment Description	2004 Existing PM Peak Hour[5] LOS	2004 Existing PM Peak Hour[5] Avg Speed[3]	2004 Existing PM Peak Hour[5] PTSF(%)[4]	2030 No Build PM Peak Hour LOS	2030 No Build PM Peak Hour Avg Speed[2]	2030 No Build PM Peak Hour PTSF(%)[3]
Renton	1	22.9	25.3	EB Renton	C	25.2	-	E	14.6	-
				WB Renton	B	29.4	-	C	24.8	-
	2	19.2	22.9	EB King County Cedar River (5-Lane)	A	42.5	-	B	37.2	-
				WB King County Cedar River (5-Lane)	A	42.5	-	A	42.7	-
Cedar River	3	14.3	19.2	NB King County Cedar River (5-Lane)	E	32.2	84	E	28.1	90
				SB King County Cedar River (5-Lane)						
Maple Valley		13.5	14.3	Maple Valley Urban Area		19.9			13.7	
	4	11.5	13.5	NB Maple Valley Central (5-Lane)	E	26.9	83	E	23.0	89
				SB Maple Valley Central (5-Lane)						
		11.2	11.5	Four Corners Urban Area		23.9			11.2	
Black Diamond	5	8.0	11.2	Black Diamond North	E	36.6	74	E	29.0	87
		7.5	8.0	Black Diamond Urban Area		35.0			35.0	
	6	5.9	7.5	Black Diamond South	E	37.3	68	E	31.8	83
Rural/ Agricultural	7	5.3	5.9	NB King County Green River North	E	38.2	78	E	29.5	90
				SB King County Green River North	F	37.8	111	F	30.7	103
	8	4.3	5.3	NB King County Green River South	E	34.2	80	F	23.9	89
				SB King County Green River South	F	30.7	113	F	25.5	104
	9	1.5	4.3	King County Plateau	E	36.2	73	E	35.2	76
Enumclaw		0.0	1.5	Enumclaw Urban Area		35.0			35.0	

SR 169 Highway and Arterial LOS

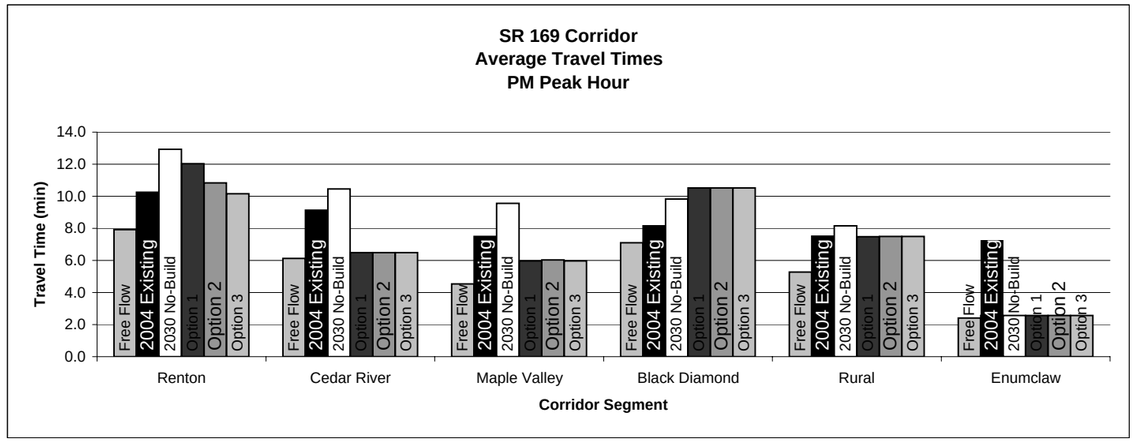
Segment[1]	# [2]	SRMP From	SRMP To	Segment Description	2030 Option 1 PM Peak Hour LOS	2030 Option 1 PM Peak Hour Avg Speed[2]	2030 Option 1 PM Peak Hour PTSF(%)[3]	2030 Option 2 PM Peak Hour LOS	2030 Option 2 PM Peak Hour Avg Speed[2]	2030 Option 2 PM Peak Hour PTSF(%)[3]	2030 Option 3 PM Peak Hour LOS	2030 Option 3 PM Peak Hour Avg Speed[2]	2030 Option 3 PM Peak Hour PTSF(%)[3]
Renton	1	22.9	25.3	EB Renton	F	12.9	-	C	22.5	-	C	26.1	-
				WB Renton	C	22.9	-	C	24.2	-	C	24.0	-
	2	19.2	22.9	EB King County Cedar River (5-Lane)	B	41.8	-	B	41.1	-	A	42.5	-
				WB King County Cedar River (5-Lane)	B	41.7	-	B	41.8	-	B	41.4	-
Cedar River	3	14.3	19.2	NB King County Cedar River (5-Lane)	B	45.3	-	B	45.3	-	B	45.3	-
				SB King County Cedar River (5-Lane)	C	45.8	-	C	45.8	-	C	45.8	-
Maple Valley		13.5	14.3	Maple Valley Urban Area		8.1			6.8			6.8	
	4	11.5	13.5	NB Maple Valley Central (5-Lane)	B	45.0	-	B	45.0	-	B	45.0	-
				SB Maple Valley Central (5-Lane)	C	45.5	-	C	45.5	-	C	45.5	-
		11.2	11.5	Four Corners Urban Area		5.8			5.3			5.3	
Black Diamond	5	8.0	11.2	Black Diamond North	E	26.1	90	E	26.1	90	E	26.1	90
		7.5	8.0	Black Diamond Urban Area		35.0			35.0			35.0	
	6	5.9	7.5	Black Diamond South	E	30.7	85	E	30.7	85	E	30.7	85
Rural/ Agricultural	7	5.3	5.9	NB King County Green River North	A	46.3	0	A	46.3	0	A	46.3	0
				SB King County Green River North	F	29.4	104	F	29.4	104	F	29.4	104
	8	4.3	5.3	NB King County Green River South	F	21.8	89	F	21.8	89	F	21.8	89
				SB King County Green River South	B	46.3	0	B	46.3	0	B	46.3	0
	9	1.5	4.3	King County Plateau	E	32.6	82	E	32.5	82	E	32.5	82
Enumclaw		0.0	1.5	Enumclaw Urban Area		35.0			35.0			35.0	

1. Segments are based on roadway characteristics for LOS analysis and where possible are consistent with the segments defined in the Route Development Plan.
2. Segments 3, 4, 5, 6, and 9 were evaluated with HCM two-way two-lane highway methodology; Segments 7 and 8 were evaluated with HCM directional two-lane highway methodology; Segments 1 and 2 were evaluated with HCM urban street arterial methodology.
3. Average speed is in miles per hour.
4. Percent time-spent-following (two-lane highways only).
5. Values taken from previous analysis.

SR 169 Travel Time Summary

Segment[1]	From	To	Distance (miles)	Distance (feet)	Average Speed Limit (mph)	Average Free Flow Travel Time (minutes)	2004 Average Speeds (mph)	2004 Existing Travel Time (minutes)	2030 No-Build Average Speeds (mph)	2030 No-Build Travel Time (minutes)	2030 Opt 1 Average Speeds (mph)	2030 Opt 1 Travel Time (minutes)	2030 Opt 2 Average Speeds (mph)	2030 Opt 2 Travel Time (minutes)	2030 Opt 3 Average Speeds (mph)	2030 Opt 3 Travel Time (minutes)
Renton	25.3	19.2	6.1	32,208	46.2	7.9	35.7	10.3	28.3	12.9	30.4	12.0	33.8	10.8	36.0	10.2
Cedar River	19.2	14.3	4.9	25,872	48.0	6.1	32.2	9.1	28.1	10.5	45.3	6.5	45.3	6.5	45.3	6.5
Maple Valley	14.3	11.2	3.1	16,368	41.0	4.5	24.8	7.5	19.5	9.6	31.2	6.0	30.9	6.0	31.2	6.0
Black Diamond	11.2	5.9	5.3	27,984	44.8	7.1	39.0	8.2	32.4	9.8	30.2	10.5	30.2	10.5	30.2	10.5
Rural	5.9	1.5	4.4	23,232	50.0	5.3	35.2	7.5	32.4	8.2	35.3	7.5	35.2	7.5	35.2	7.5
Enumclaw	1.5	0.0	1.5	7,920	37.3	2.4	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6	35.0	2.6
Total	**25.3**	**0.0**	**25.3**	**133,584**		**33.4**		**45.1**		**53.5**		**45.1**		**43.9**		**43.2**

1. Segments are based on roadway characteristics for LOS analysis and where possible are consistent with the segments defined in the Route Development Plan.



SR 169 Highway and Arterial LOS

		SRMP			2004 Existing PM Peak Hour[5]			2030 No Build PM Peak Hour			2030 Option 1 PM Peak Hour			2030 Option 2 PM Peak Hour			2030 Option 3 PM Peak Hour		
Segment[1]	#[2]	From	To	Segment Description	LOS	Avg Speed[3]	PTSF(%)[4]	LOS	Avg Speed[2]	PTSF(%)[3]	LOS	Avg Speed[2]	PTSF(%)[3]	LOS	Avg Speed[2]	PTSF(%)[3]	LOS	Avg Speed[2]	PTSF(%)[3]
Renton	1	22.9	25.3	EB Renton	C	25.2	-	E	14.6	-	F	12.9	-	C	22.5	-	C	26.1	-
				WB Renton	B	29.4	-	C	24.8	-	C	22.9	-	C	24.2	-	C	24.0	-
	2	19.2	22.9	EB King County Cedar River (5-Lane)	A	42.5	-	B	37.2	-	B	41.8	-	B	41.1	-	A	42.5	-
				WB King County Cedar River (5-Lane)	A	42.5	-	A	42.7	-	B	41.7	-	B	41.8	-	B	41.4	-
Cedar River	3	14.3	19.2	NB King County Cedar River (5-Lane)	E	32.2	84	E	28.1	90	B	45.3	-	B	45.3	-	B	45.3	-
				SB King County Cedar River (5-Lane)							C	45.8	-	C	45.8	-	C	45.8	-
Maple Valley		13.5	14.3	Maple Valley Urban Area		19.9			13.7			8.1			6.8			6.8	
	4	11.5	13.5	NB Maple Valley Central (5-Lane)	E	26.9	83	E	23.0	89	B	45.0	-	B	45.0	-	B	45.0	-
				SB Maple Valley Central (5-Lane)							C	45.5	-	C	45.5	-	C	45.5	-
		11.2	11.5	Four Corners Urban Area		23.9			11.2			5.8			5.3			5.3	
Black Diamond	5	8.0	11.2	Black Diamond North	E	36.6	74	E	29.0	87	E	26.1	90	E	26.1	90	E	26.1	90
		7.5	8.0	Black Diamond Urban Area		35.0			35.0			35.0			35.0			35.0	
	6	5.9	7.5	Black Diamond South	E	37.3	68	E	31.8	83	E	30.7	85	E	30.7	85	E	30.7	85
Rural/ Agricultural	7	5.3	5.9	NB King County Green River North	E	38.2	78	E	29.5	90	A	46.3	0	A	46.3	0	A	46.3	0
				SB King County Green River North	F	37.8	111	F	30.7	103	F	29.4	104	F	29.4	104	F	29.4	104
	8	4.3	5.3	NB King County Green River South	E	34.2	80	F	23.9	89	F	21.8	89	F	21.8	89	F	21.8	89
				SB King County Green River South	F	30.7	113	F	25.5	104	B	46.3	0	B	46.3	0	B	46.3	0
	9	1.5	4.3	King County Plateau	E	36.2	73	E	35.2	76	E	32.6	82	E	32.5	82	E	32.5	82
Enumclaw		0.0	1.5	Enumclaw Urban Area		35.0			35.0			35.0			35.0			35.0	

1. Segments are based on roadway characteristics for LOS analysis and where possible are consistent with the segments defined in the Route Development Plan.
2. Segments 3, 4, 5, 6, and 9 were evaluated with HCM two-way two-lane highway methodology; Segments 7 and 8 were evaluated with HCM directional two-lane highway methodology; Segments 1 and 2 were evaluated with HCM urban street arterial methodology.
3. Average speed is in miles per hour.
4. Percent time-spent-following (two-lane highways only)
5. Values taken from previous analysis.

			Alt 1			Alt 2			Alt 3		
Segment	**Speed Limit**	**Distance**	**% of speed limit**	**Adjusted Speed**	**AVG**	**% of speed limit**	**Adjusted Speed**	**AVG**	**% of speed limit**	**Adjusted Speed**	**AVG**
Renton	50	3.8	36%	18.0	16.1	45%	22.5	20.8	52%	26.1	24.1
Renton	40	2.3	32%	12.9		45%	18.0		52%	20.9	
Cedar River	40	1.0	84%	33.4	40.1	82%	32.9	39.4	85%	34.0	40.8
Cedar River	50	3.9	84%	41.8		82%	41.1		85%	42.5	
Maple Valley	40	0.9	91%	36.4	37.3	91%	36.4	37.3	91%	36.4	37.3
Maple Valley	45	1.4	91%	41.0		91%	41.0		91%	41.0	
Maple Valley	35	0.8	91%	31.9		91%	31.9		91%	31.9	
Black Diamond	35	1.5	52%	18.3	19.1	52%	18.3	19.1	52%	18.3	19.1
Black Diamond	50	2.0	52%	26.1		52%	26.1		52%	26.1	
Black Diamond	40	0.2	52%	20.9		52%	20.9		52%	20.9	
Rural	50	all									
Enumclaw	25	0.4			35			35			35
Enumclaw*	35	0.6		35			35			35	
Enumclaw	50	0.5									

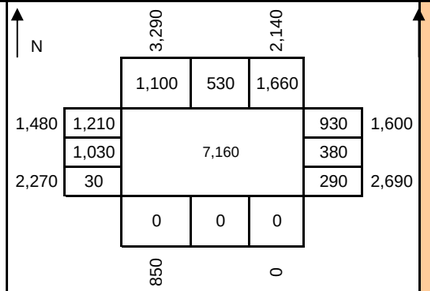
speed limit used in HCS analysis

* Speed Limit used as average speed

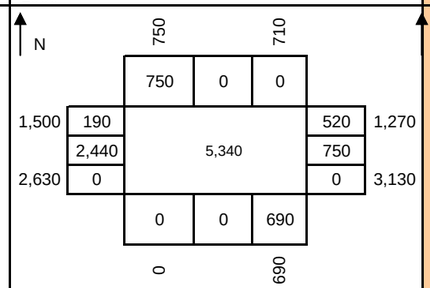
SR 169 Turning Movement Volumes

No Build 2030

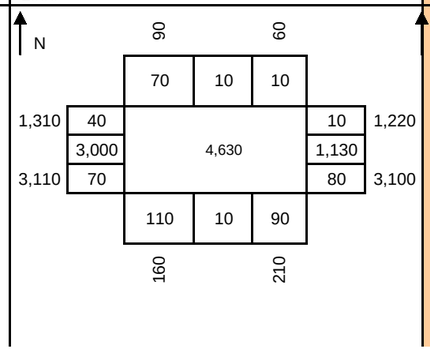
North-South Street	1	**Bronson Way / I-405 SB On-Ramp**	
East-West Street	1900	**SR 169**	



North-South Street	2	**I-405 NB Ramps**	
East-West Street	1900	**SR 169**	

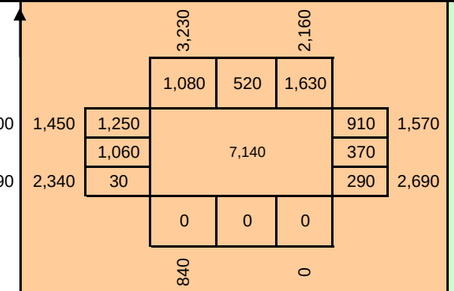


North-South Street	3	**Park Pl (City Park Entrance)**	
East-West Street	1900	**SR 169**	

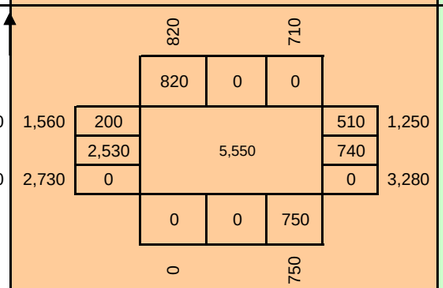


2030 Option 1

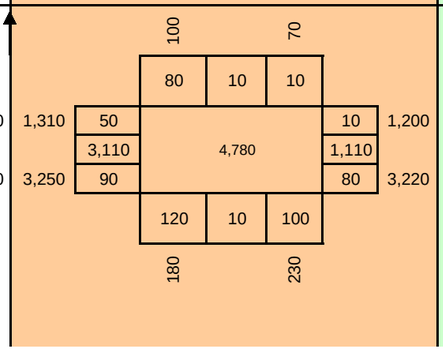
North-South Street	1	**Bronson Way / I-405 SB On-Ramp**	
East-West Street	1900	**SR 169**	



North-South Street	2	**I-405 NB Ramps**	
East-West Street	1900	**SR 169**	

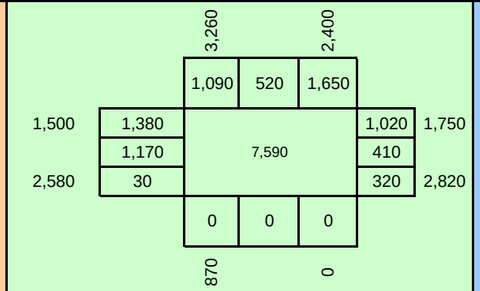


North-South Street	3	**Park Pl (City Park Entrance)**	
East-West Street	1900	**SR 169**	

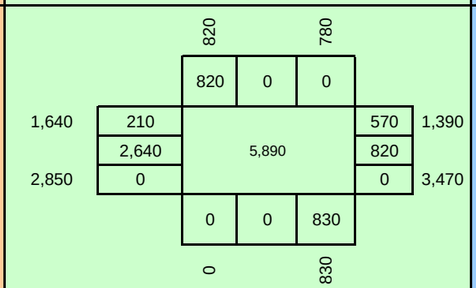


2030 Option 2

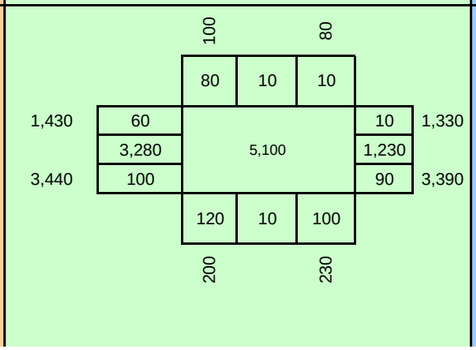
North-South Street	1	**Bronson Way / I-405 SB On-Ramp**	
East-West Street	1900	**SR 169**	



North-South Street	2	**I-405 NB Ramps**	
East-West Street	1900	**SR 169**	

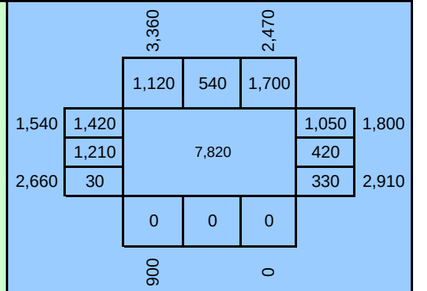


North-South Street	3	**Park Pl (City Park Entrance)**	
East-West Street	1900	**SR 169**	

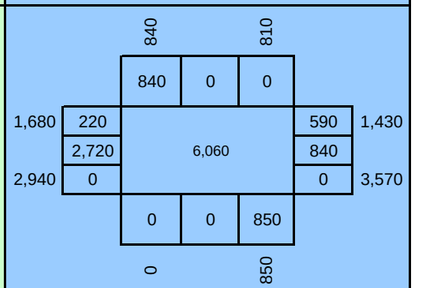


2030 Option 3

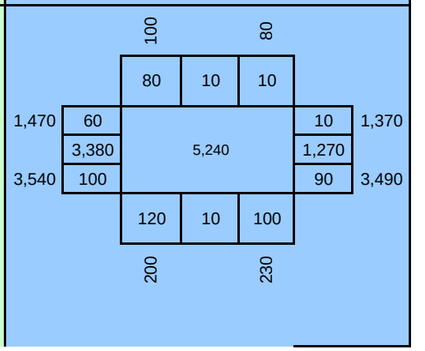
North-South Street	1	**Bronson Way / I-405 SB On-Ramp**	
East-West Street	1900	**SR 169**	



North-South Street	2	**I-405 NB Ramps**	
East-West Street	1900	**SR 169**	



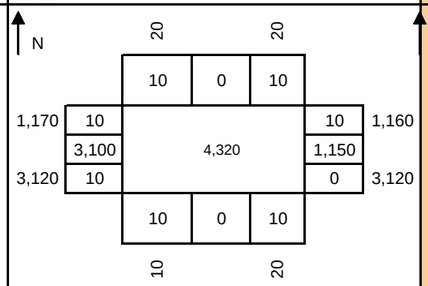
North-South Street	3	**Park Pl (City Park Entrance)**	
East-West Street	1900	**SR 169**	



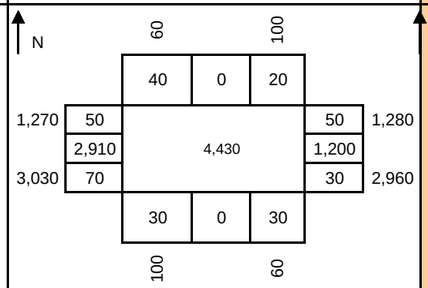
SR 169 Turning Movement Volumes

No Build 2030

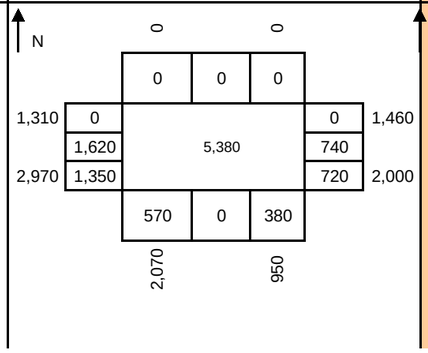
North-South Street	4	Monroe Ave SE	
East-West Street	1900	SR 169	



North-South Street	5	131st Ave SE (Maplewood Golf)	
East-West Street	1900	SR 169	

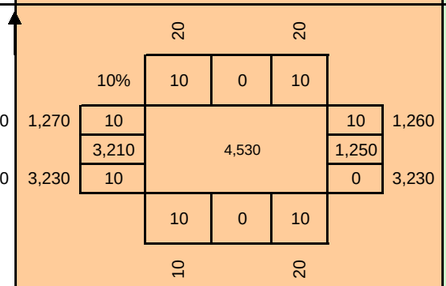


North-South Street	6	140th Way SE	
East-West Street	1900	SR 169	

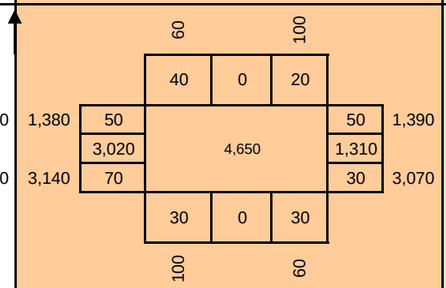


2030 Option 1

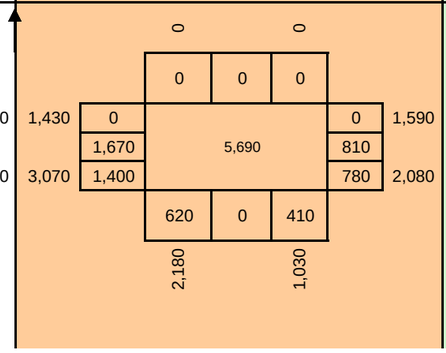
North-South Street	4	Monroe Ave SE	
East-West Street		SR 169	



North-South Street	5	131st Ave SE (Maplewood Golf)	
East-West Street		SR 169	

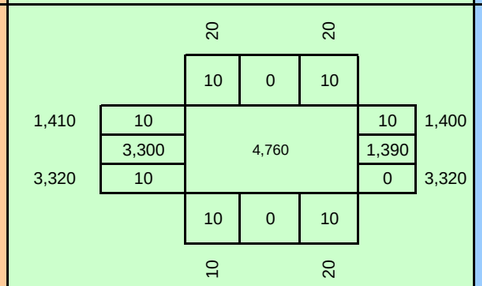


North-South Street	6	140th Way SE	
East-West Street		SR 169	

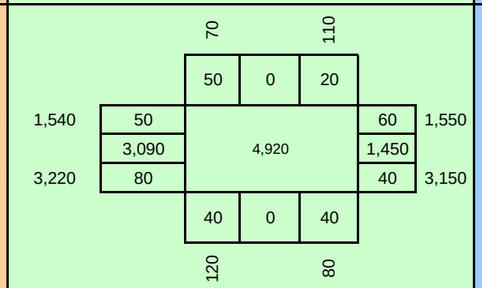


2030 Option 2

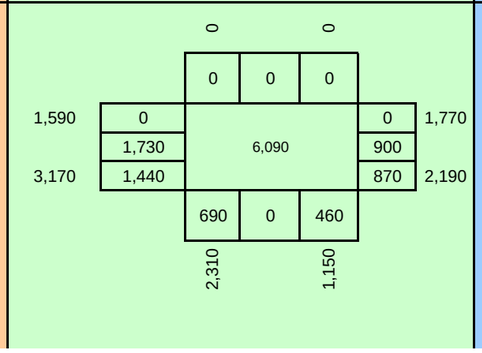
North-South Street	4	Monroe Ave SE	
East-West Street		SR 169	



North-South Street	5	131st Ave SE (Maplewood Golf)	
East-West Street		SR 169	

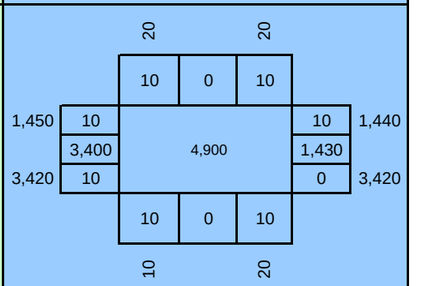


North-South Street	6	140th Way SE	
East-West Street		SR 169	

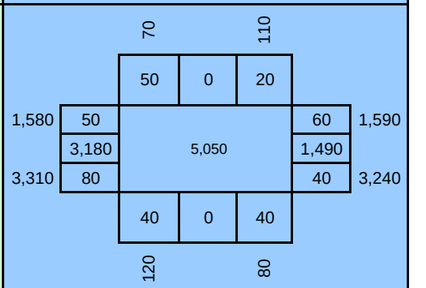


2030 Option 3

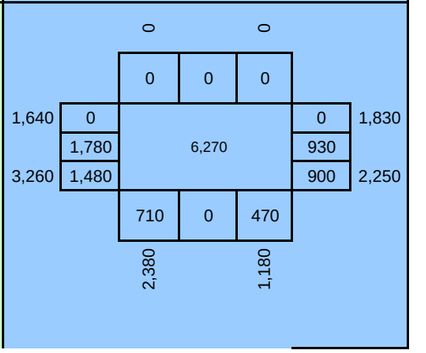
North-South Street	4	Monroe Ave SE	
East-West Street		SR 169	



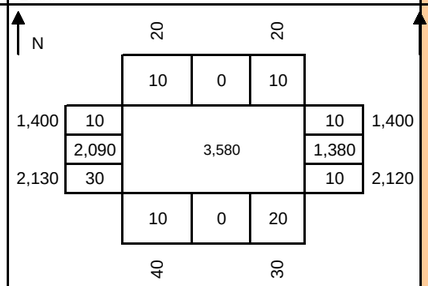
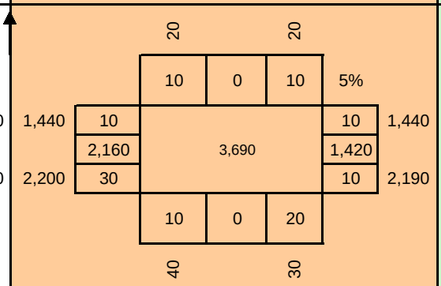
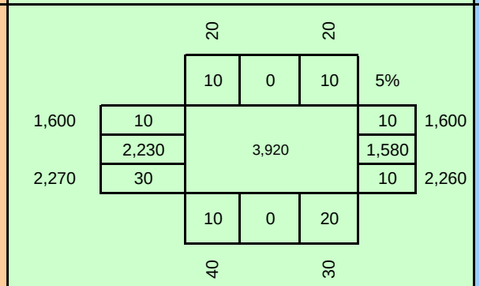
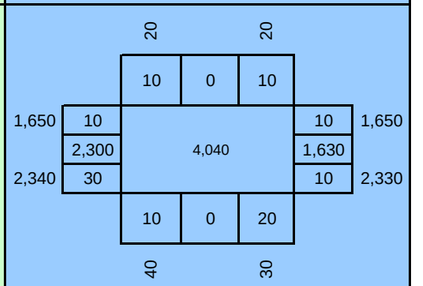
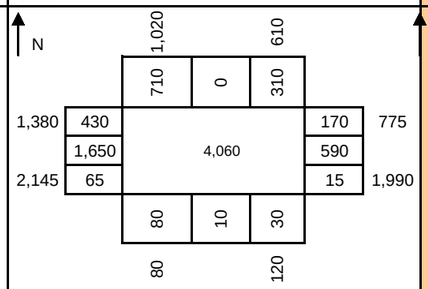
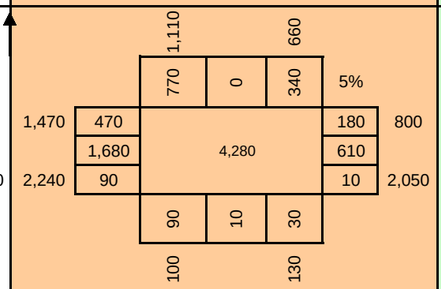
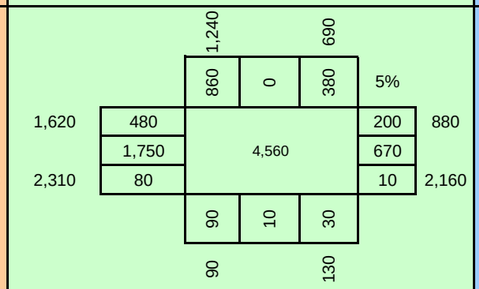
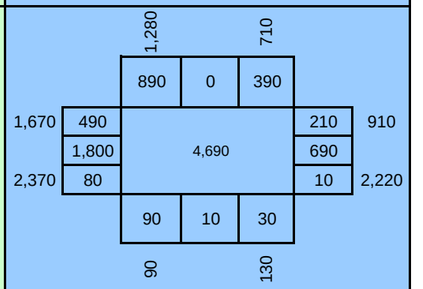
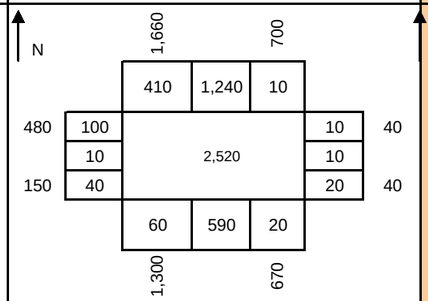
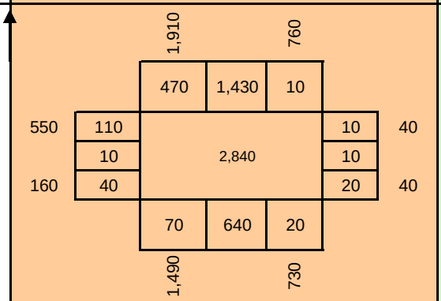
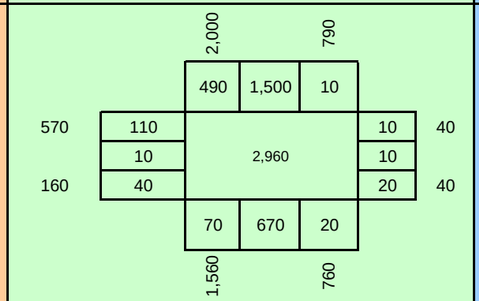
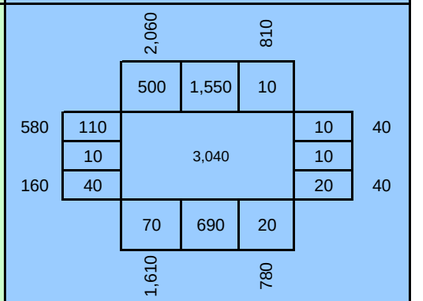
North-South Street	5	131st Ave SE (Maplewood Golf)	
East-West Street		SR 169	



North-South Street	6	140th Way SE	
East-West Street		SR 169	



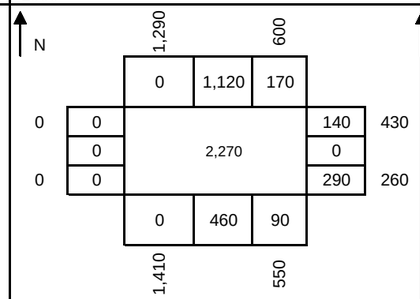
SR 169 Turning Movement Volumes

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North-South Street	7 — **149th Ave SE**	**149th Ave SE**	**149th Ave SE**	**149th Ave SE**
East-West Street	1900 — **SR 169**	**SR 169**	**SR 169**	**SR 169**
				
North-South Street	42 — **152nd Ave SE**	**152nd Ave SE**	**152nd Ave SE**	**152nd Ave SE**
East-West Street	1900 — **SR 169**	**SR 169**	**SR 169**	**SR 169**
				
North-South Street	8 — **SR 169**	**SR 169**	**SR 169**	**SR 169**
East-West Street	1900 — **Jones Rd - 196th Ave SE**	**Jones Rd - 196th Ave SE**	**Jones Rd - 196th Ave SE**	**Jones Rd - 196th Ave SE**
				

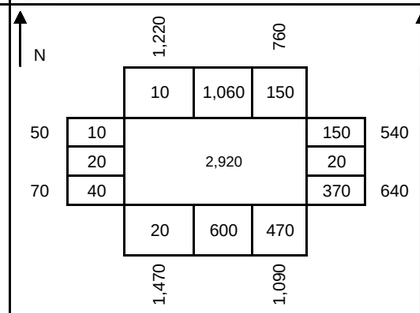
SR 169 Turning Movement Volumes

No Build 2030

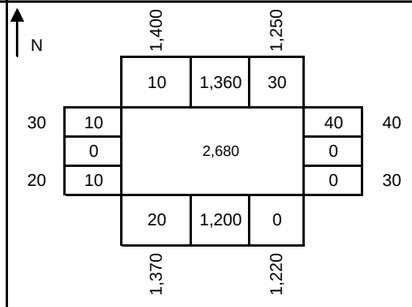
North-South Street	9 SR 169
East-West Street	1900 Cedar Grove Rd



North-South Street	10 SR 169
East-West Street	1900 SE 216th Way

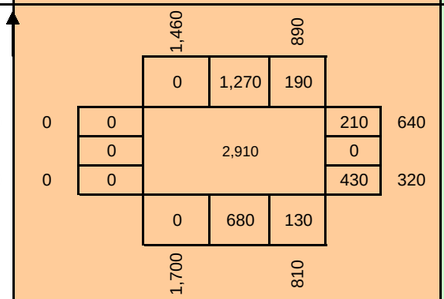


North-South Street	11 SR 169
East-West Street	1900 Bain St SE - Witte Rd SE

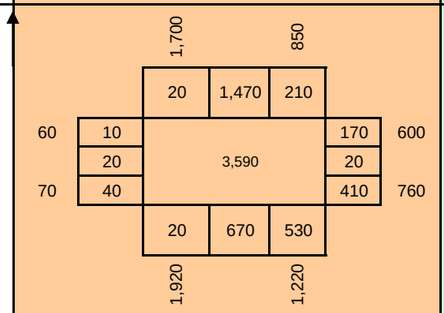


2030 Option 1

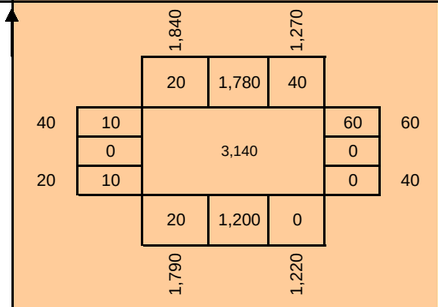
North-South Street	SR 169
East-West Street	Cedar Grove Rd



North-South Street	SR 169
East-West Street	SE 216th Way

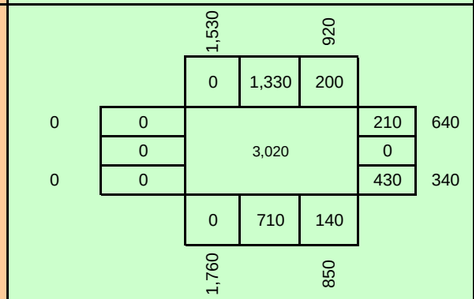


North-South Street	SR 169
East-West Street	Bain St SE - Witte Rd SE

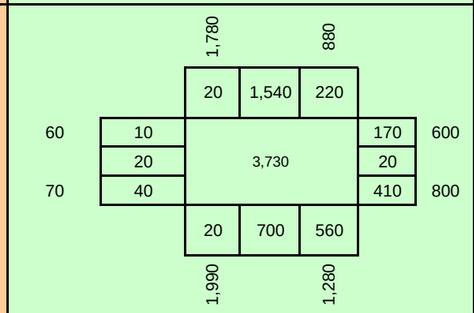


2030 Option 2

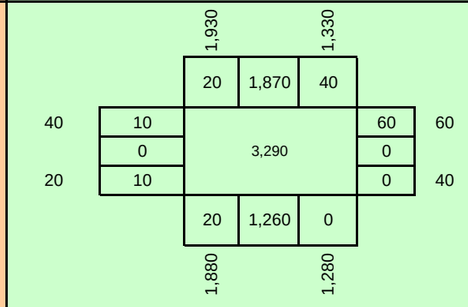
North-South Street	SR 169
East-West Street	Cedar Grove Rd



North-South Street	SR 169
East-West Street	SE 216th Way

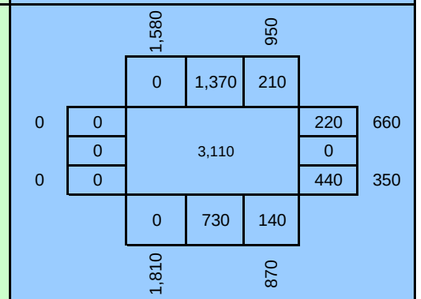


North-South Street	SR 169
East-West Street	Bain St SE - Witte Rd SE

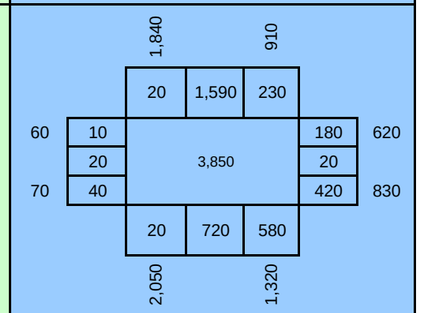


2030 Option 3

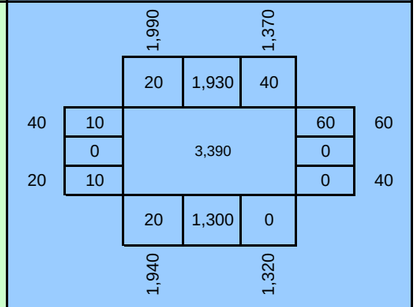
North-South Street	SR 169
East-West Street	Cedar Grove Rd



North-South Street	SR 169
East-West Street	SE 216th Way



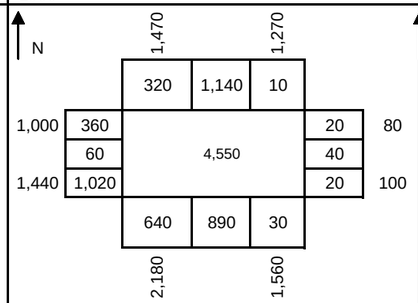
North-South Street	SR 169
East-West Street	Bain St SE - Witte Rd SE



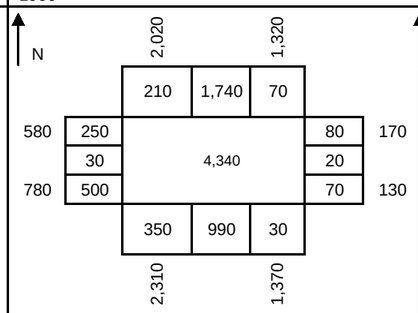
SR 169 Turning Movement Volumes

No Build 2030

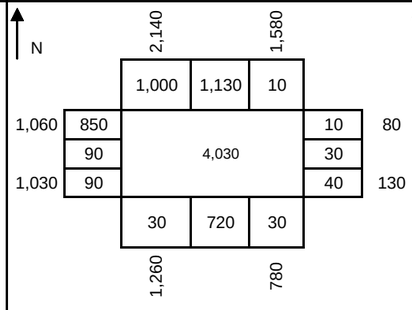
North-South Street	12	**SR 169**	
East-West Street	1900	**SE 231st St**	



North-South Street	13	**SR 169**	
East-West Street	1900	**SE Wax Rd**	

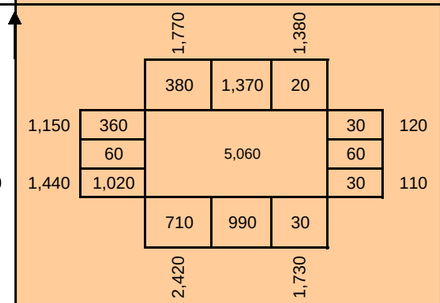


North-South Street	14	**SR 169**	
East-West Street	1900	**Witte Rd SE**	

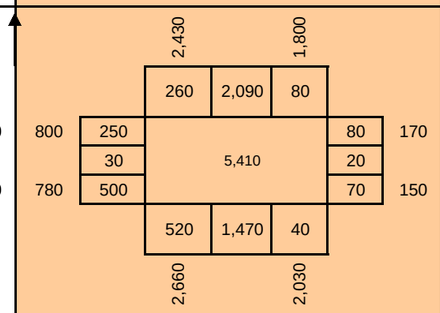


2030 Option 1

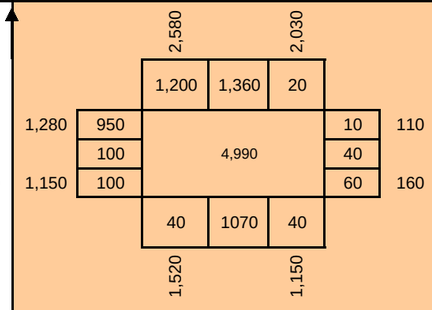
North-South Street		**SR 169**	
East-West Street		**SE 231st St**	



North-South Street		**SR 169**	
East-West Street		**SE Wax Rd**	

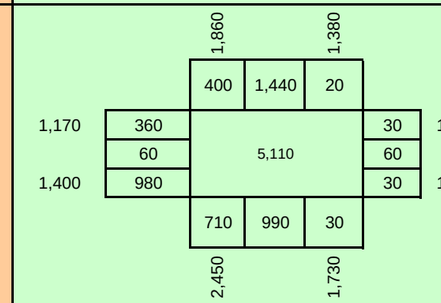


North-South Street		**SR 169**	
East-West Street		**Witte Rd SE**	

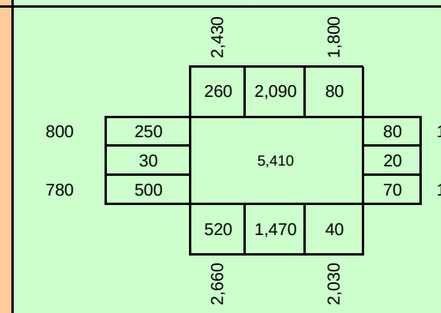


2030 Option 2

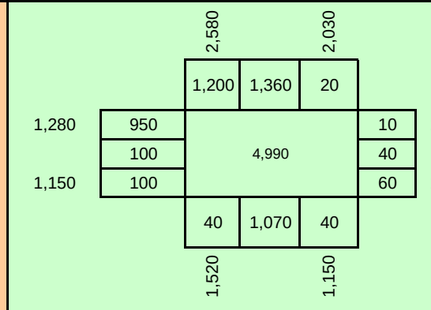
North-South Street		**SR 169**	
East-West Street		**SE 231st St**	



North-South Street		**SR 169**	
East-West Street		**SE Wax Rd**	

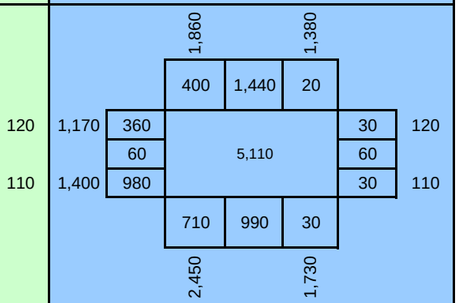


North-South Street		**SR 169**	
East-West Street		**Witte Rd SE**	

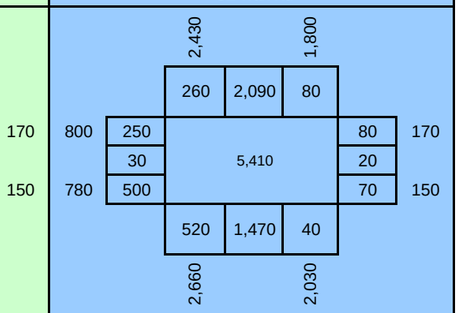


2030 Option 3

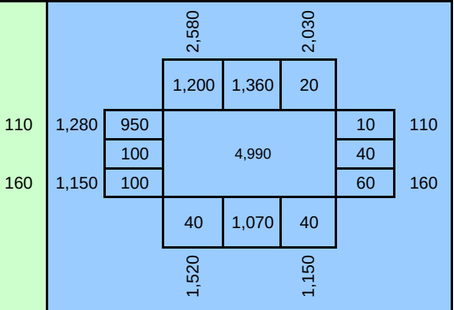
North-South Street		**SR 169**	
East-West Street		**SE 231st St**	



North-South Street		**SR 169**	
East-West Street		**SE Wax Rd**	



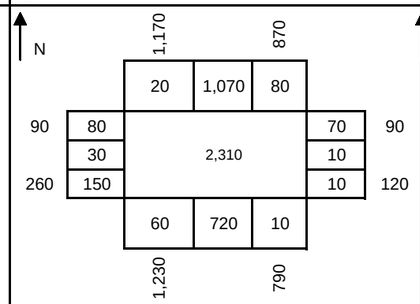
North-South Street		**SR 169**	
East-West Street		**Witte Rd SE**	



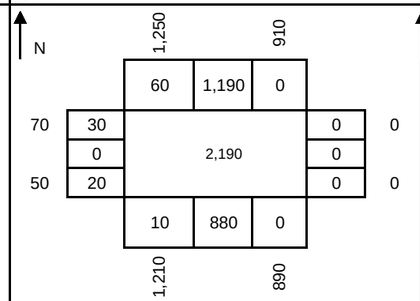
SR 169 Turning Movement Volumes

No Build 2030

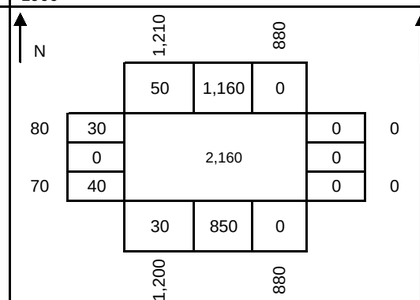
North-South Street: 15 — **SR 169**
East-West Street: 1900 — **SE 240th St**



North-South Street: 16 — **SR 169**
East-West Street: 1900 — **228th Ave SE**

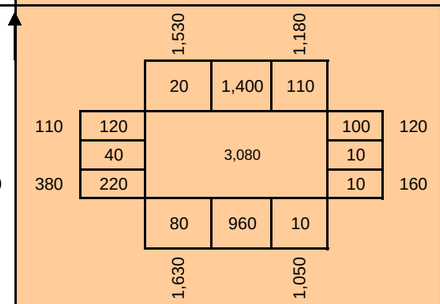


North-South Street: 17 — **SR 169**
East-West Street: 1900 — **231st Ave SE**

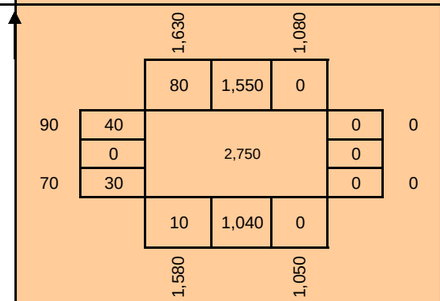


2030 Option 1

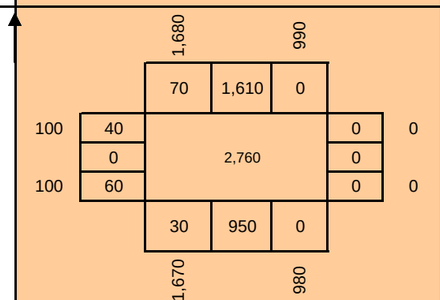
North-South Street: — **SR 169**
East-West Street: — **SE 240th St**



North-South Street: — **SR 169**
East-West Street: — **228th Ave SE**

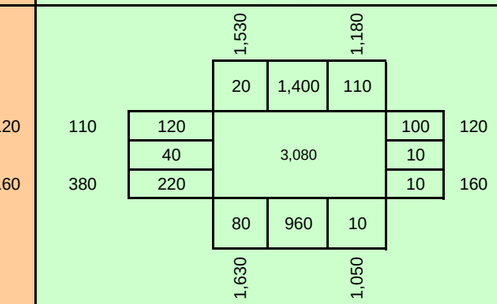


North-South Street: — **SR 169**
East-West Street: — **231st Ave SE**

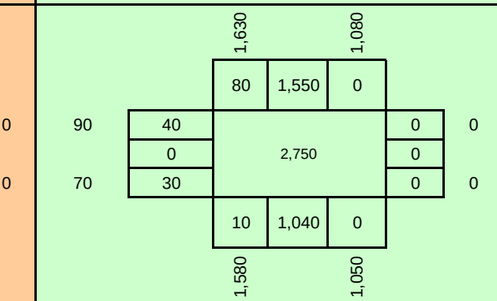


2030 Option 2

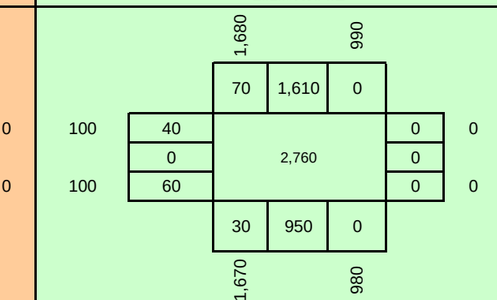
North-South Street: — **SR 169**
East-West Street: — **SE 240th St**



North-South Street: — **SR 169**
East-West Street: — **228th Ave SE**

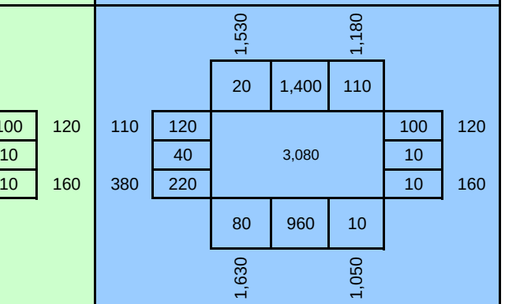


North-South Street: — **SR 169**
East-West Street: — **231st Ave SE**

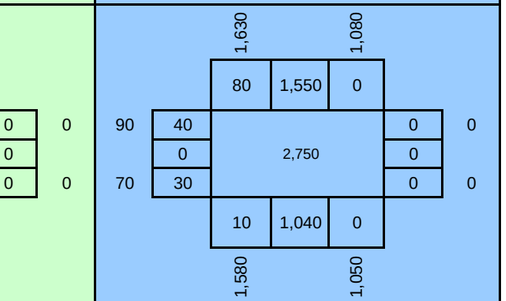


2030 Option 3

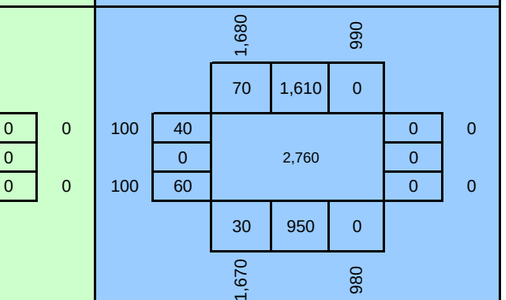
North-South Street: — **SR 169**
East-West Street: — **SE 240th St**



North-South Street: — **SR 169**
East-West Street: — **228th Ave SE**



North-South Street: — **SR 169**
East-West Street: — **231st Ave SE**



SR 169 Turning Movement Volumes

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North-South Street	18 SR 169	SR 169	SR 169	SR 169
East-West Street	1900 SE 244th St	SE 244th St	SE 244th St	SE 244th St
North leg (outer)	1,180 / 930	1,690 / 1,080	1,690 / 1,080	1,690 / 1,080
North leg (movements)	0 / 1,020 / 160	0 / 1,460 / 230	0 / 1,460 / 230	0 / 1,460 / 230
West leg (outer)	0 / 0	0 / 0	0 / 0	0 / 0
West leg (movements)	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0
Intersection total	2,200	2,890	2,890	2,890
East leg (movements)	120 / 0 / 50	180 / 0 / 70	180 / 0 / 70	180 / 0 / 70
East leg (outer)	170 / 200	250 / 280	250 / 280	250 / 280
South leg (movements)	0 / 810 / 40	0 / 900 / 50	0 / 900 / 50	0 / 900 / 50
South leg (outer)	1,070 / 850	1,530 / 950	1,530 / 950	1,530 / 950

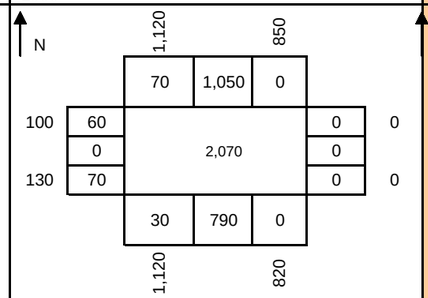
	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North-South Street	19 SR 169	SR 169	SR 169	SR 169
East-West Street	1900 SE 251st St	SE 251st St	SE 251st St	SE 251st St
North leg (outer)	1,060 / 850	1,520 / 890	1,520 / 890	1,520 / 890
North leg (movements)	0 / 1,030 / 30	0 / 1,480 / 40	0 / 1,480 / 40	0 / 1,480 / 40
West leg (outer)	0 / 0	0 / 0	0 / 0	0 / 0
West leg (movements)	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0
Intersection total	2,000	2,520	2,520	2,520
East leg (movements)	20 / 0 / 40	30 / 0 / 60	30 / 0 / 60	30 / 0 / 60
East leg (outer)	60 / 80	90 / 90	90 / 90	90 / 90
South leg (movements)	0 / 830 / 50	0 / 860 / 50	0 / 860 / 50	0 / 860 / 50
South leg (outer)	1,070 / 880	1,540 / 910	1,540 / 910	1,540 / 910

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North-South Street	20 SR 169	SR 169	SR 169	SR 169
East-West Street	1900 SE 253rd Pl	SE 253rd Pl	SE 253rd Pl	SE 253rd Pl
North leg (outer)	1,120 / 940	1,610 / 990	1,610 / 990	1,610 / 990
North leg (movements)	40 / 1,060 / 20	60 / 1,520 / 30	60 / 1,520 / 30	60 / 1,520 / 30
West leg (outer)	70 / 90	90 / 130	90 / 130	90 / 130
West leg (movements)	50 / 0 / 40	70 / 0 / 60	70 / 0 / 60	70 / 0 / 60
Intersection total	2,150	2,710	2,710	2,710
East leg (movements)	10 / 0 / 10	10 / 0 / 10	10 / 0 / 10	10 / 0 / 10
East leg (outer)	20 / 30	20 / 40	20 / 40	20 / 40
South leg (movements)	30 / 880 / 10	30 / 910 / 10	30 / 910 / 10	30 / 910 / 10
South leg (outer)	1,110 / 920	1,590 / 950	1,590 / 950	1,590 / 950

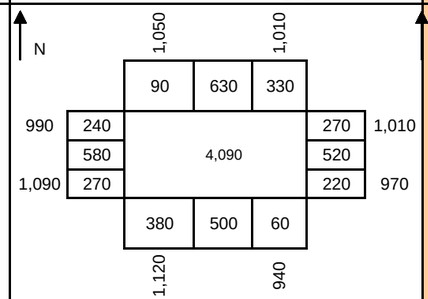
SR 169 Turning Movement Volumes

No Build 2030

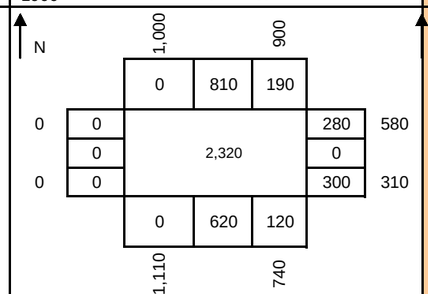
North-South Street	21 SR 169
East-West Street	1900 SE 264th St



North-South Street	22 SR 169
East-West Street	1900 SR 516 - Kent Kangley Rd

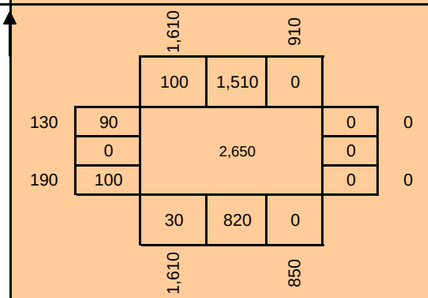


North-South Street	23 SR 169
East-West Street	1900 SE 271st Pl

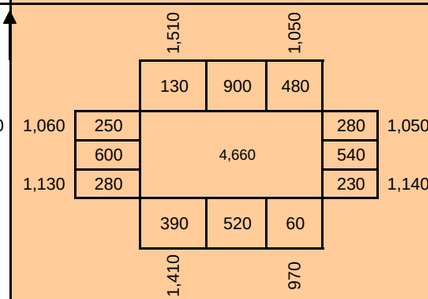


2030 Option 1

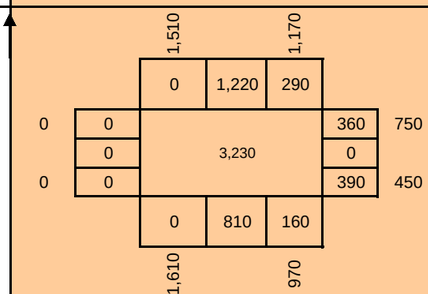
North-South Street	SR 169
East-West Street	SE 264th St



North-South Street	SR 169
East-West Street	SR 516 - Kent Kangley Rd

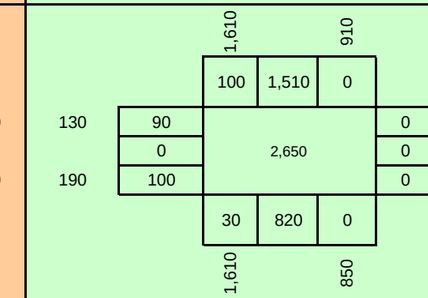


North-South Street	SR 169
East-West Street	SE 271st Pl

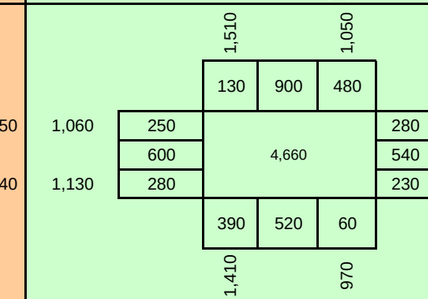


2030 Option 2

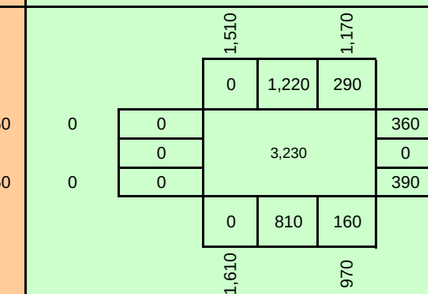
North-South Street	SR 169
East-West Street	SE 264th St



North-South Street	SR 169
East-West Street	SR 516 - Kent Kangley Rd

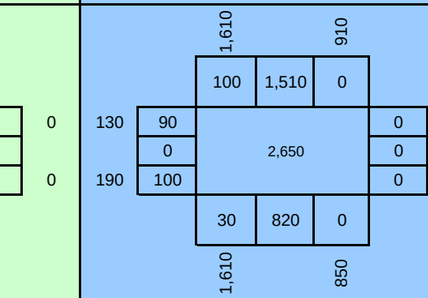


North-South Street	SR 169
East-West Street	SE 271st Pl

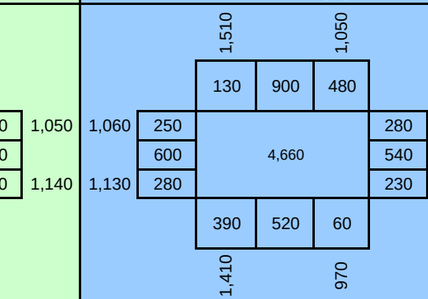


2030 Option 3

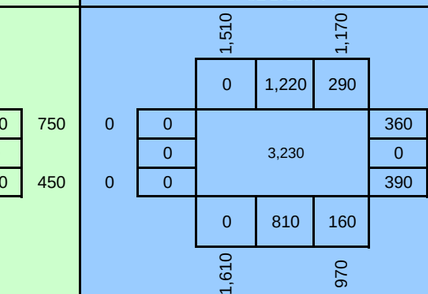
North-South Street	SR 169
East-West Street	SE 264th St



North-South Street	SR 169
East-West Street	SR 516 - Kent Kangley Rd



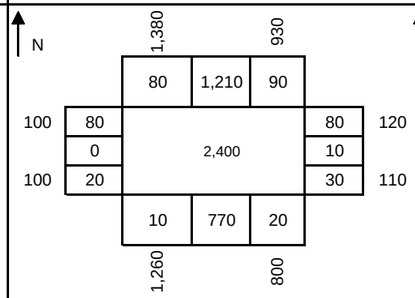
North-South Street	SR 169
East-West Street	SE 271st Pl



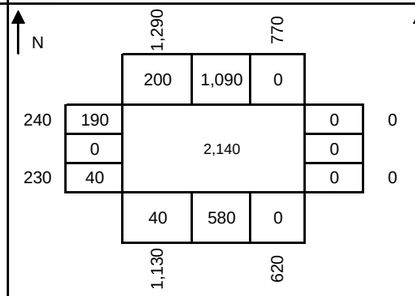
SR 169 Turning Movement Volumes

No Build 2030

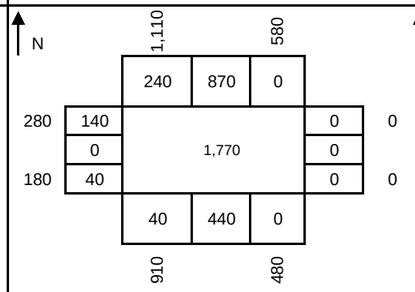
North-South Street: 24 — SR 169
East-West Street: 1900 — SE 276th St



North-South Street: 25 — SR 169
East-West Street: 1900 — SE 280th St

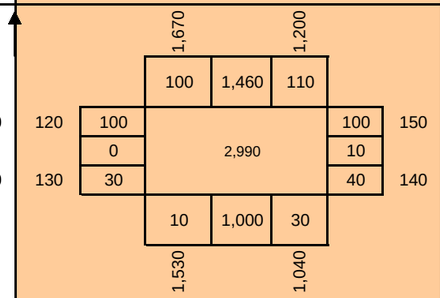


North-South Street: 26 — SR 169
East-West Street: 1900 — SE 288th St

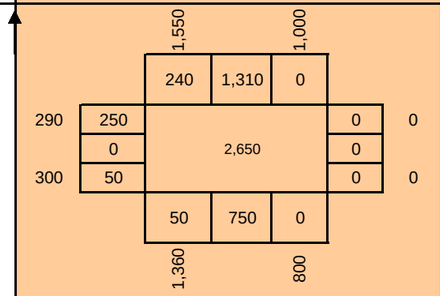


2030 Option 1

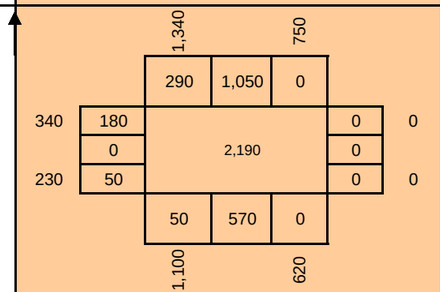
North-South Street: SR 169
East-West Street: SE 276th St



North-South Street: SR 169
East-West Street: SE 280th St

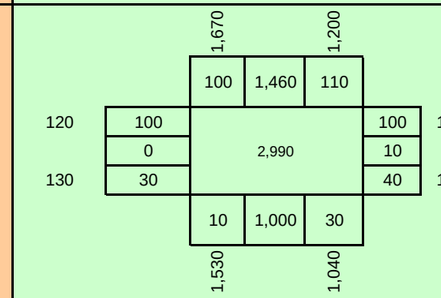


North-South Street: SR 169
East-West Street: SE 288th St

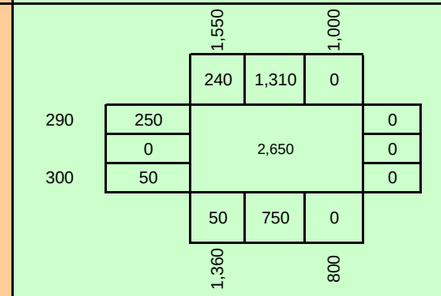


2030 Option 2

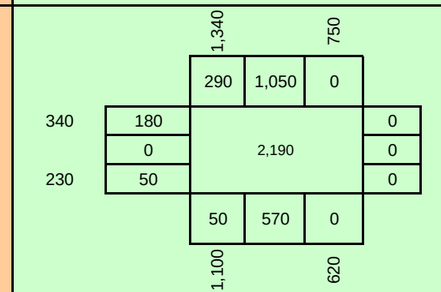
North-South Street: SR 169
East-West Street: SE 276th St



North-South Street: SR 169
East-West Street: SE 280th St

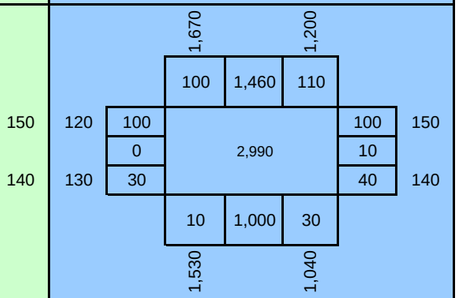


North-South Street: SR 169
East-West Street: SE 288th St

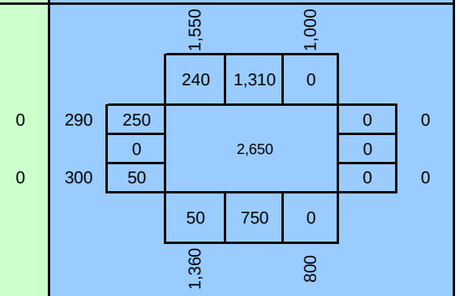


2030 Option 3

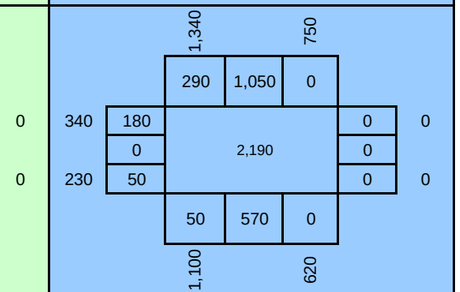
North-South Street: SR 169
East-West Street: SE 276th St



North-South Street: SR 169
East-West Street: SE 280th St



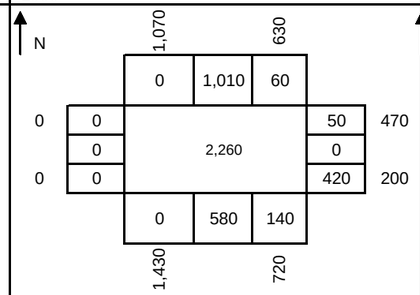
North-South Street: SR 169
East-West Street: SE 288th St



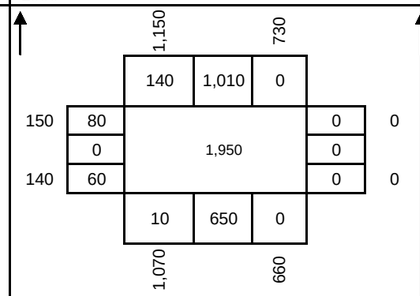
SR 169 Turning Movement Volumes

No Build 2030

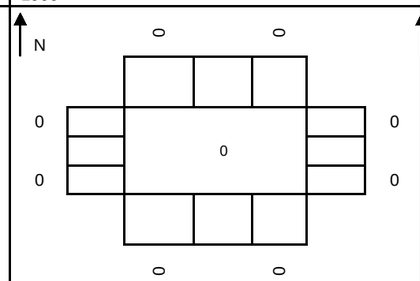
North-South Street 27 — **SR 169**
East-West Street 1900 — **Black Diamond - Ravensdale Rd**



North-South Street 28 — **SR 169**
East-West Street 1900 — **Roberts Dr**

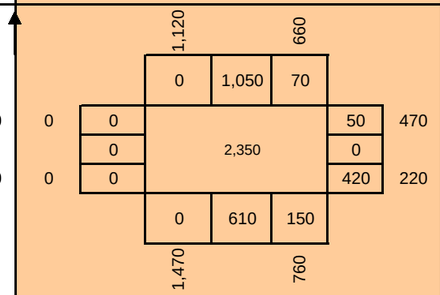


North-South Street 29 — **SR 169**
East-West Street 1900 — **Park St**

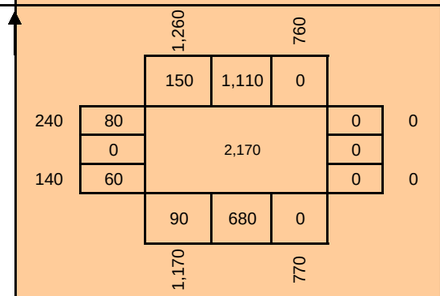


2030 Option 1

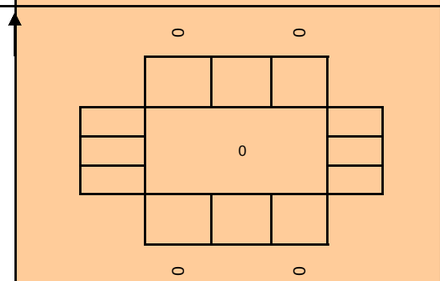
SR 169
Black Diamond - Ravensdale Rd



SR 169
Roberts Dr

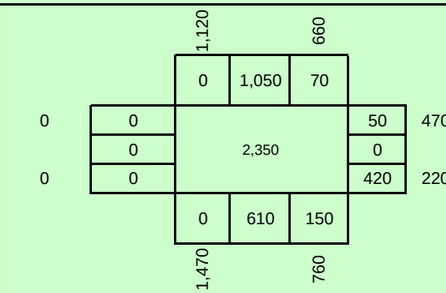


SR 169
Park St

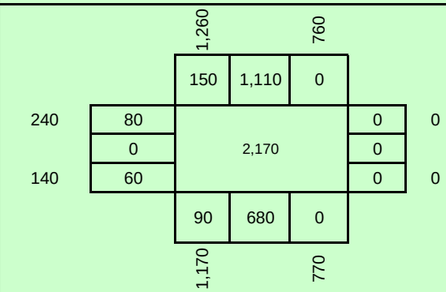


2030 Option 2

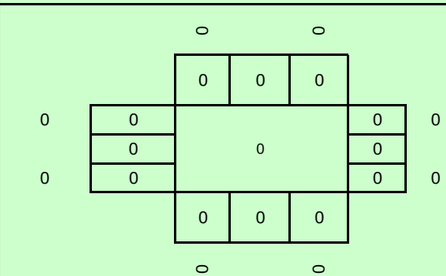
SR 169
Black Diamond - Ravensdale Rd



SR 169
Roberts Dr

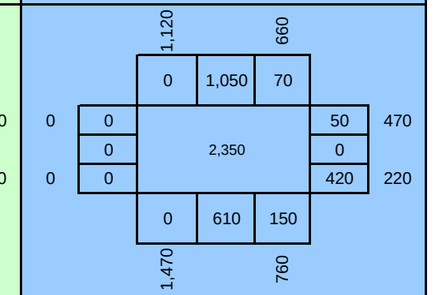


SR 169
Park St

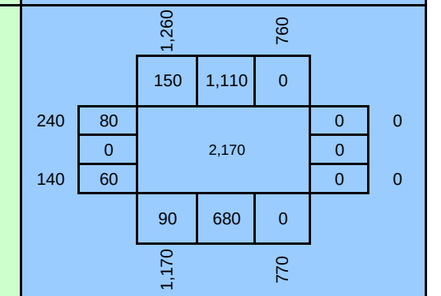


2030 Option 3

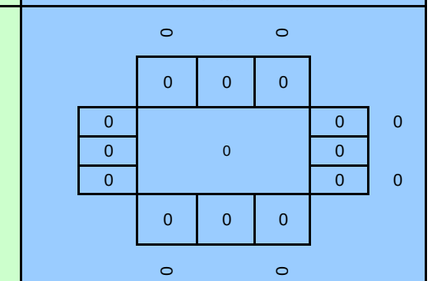
SR 169
Black Diamond - Ravensdale Rd



SR 169
Roberts Dr



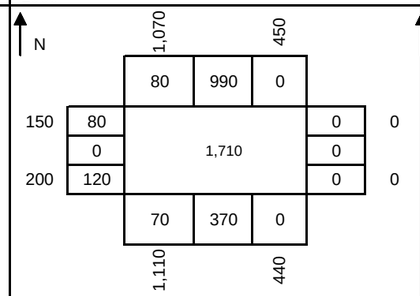
SR 169
Park St



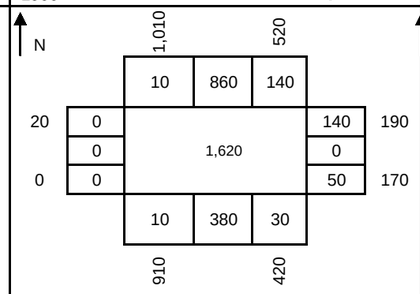
SR 169 Turning Movement Volumes

No Build 2030

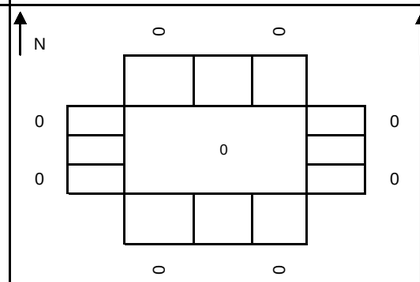
North-South Street: 30 — SR 169
East-West Street: 1900 — Baker St



North-South Street: 31 — SR 169
East-West Street: 1900 — Lawson St - Green River Gorge Rd

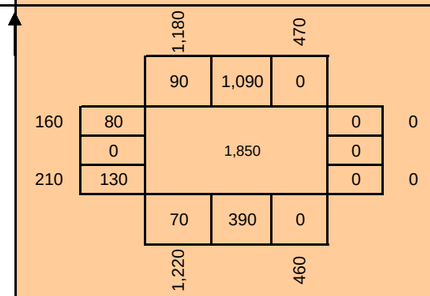


North-South Street: 32 — SR 169
East-West Street: 1900 — Jones Lake Rd

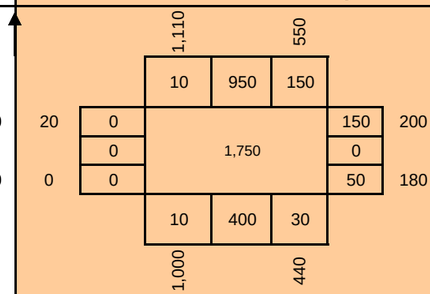


2030 Option 1

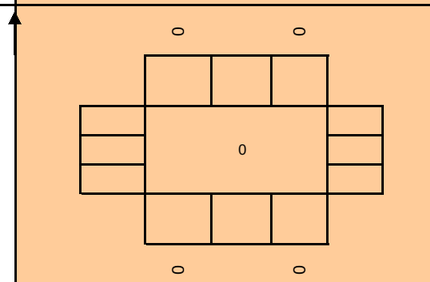
North-South Street: SR 169
East-West Street: Baker St



North-South Street: SR 169
East-West Street: Lawson St - Green River Gorge Rd

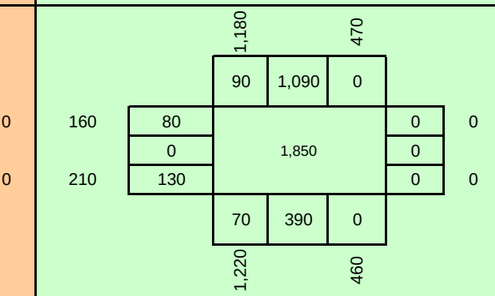


North-South Street: SR 169
East-West Street: Jones Lake Rd

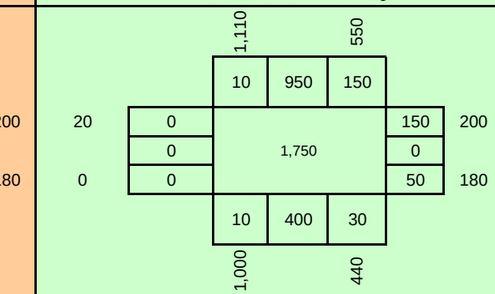


2030 Option 2

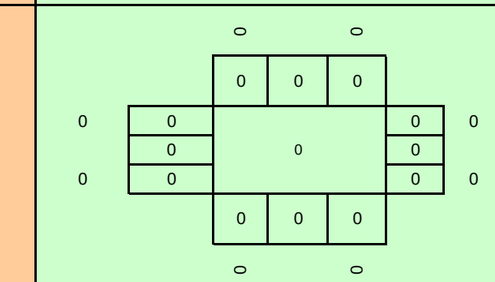
North-South Street: SR 169
East-West Street: Baker St



North-South Street: SR 169
East-West Street: Lawson St - Green River Gorge Rd

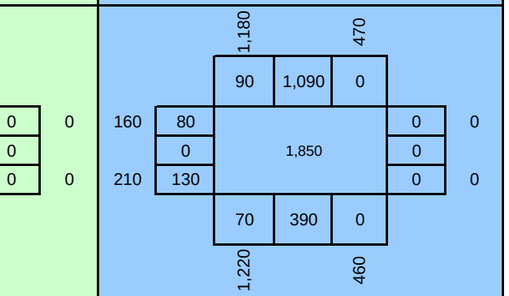


North-South Street: SR 169
East-West Street: Jones Lake Rd

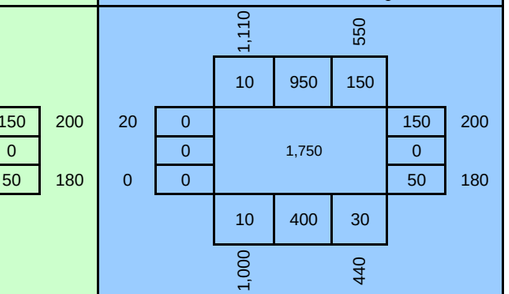


2030 Option 3

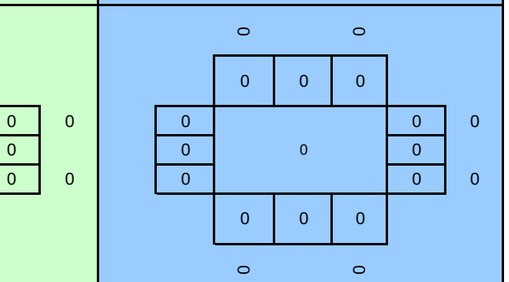
North-South Street: SR 169
East-West Street: Baker St



North-South Street: SR 169
East-West Street: Lawson St - Green River Gorge Rd



North-South Street: SR 169
East-West Street: Jones Lake Rd



SR 169 Turning Movement Volumes

North-South Street: 33 — SR 169
East-West Street: 1900 — SE Green Valley Rd

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North leg	1,090 / 480	1,200 / 500	1,200 / 500	1,200 / 500
North approach	40 / 1,050 / 0	40 / 1,160 / 0	40 / 1,160 / 0	40 / 1,160 / 0
West leg	60 / 70	60 / 70	60 / 70	60 / 70
West approach	50 / 0 / 20	50 / 0 / 20	50 / 0 / 20	50 / 0 / 20
Intersection total	1,610	1,740	1,740	1,740
East approach	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0
East leg	0 / 0	0 / 0	0 / 0	0 / 0
South approach	20 / 430 / 0	20 / 450 / 0	20 / 450 / 0	20 / 450 / 0
South leg	1,070 / 450	1,180 / 470	1,180 / 470	1,180 / 470

North-South Street: 34 — SR 169
East-West Street: 1900 — SE 385th St

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North leg	950 / 410	1,040 / 430	1,040 / 430	1,040 / 430
North approach	40 / 900 / 10	40 / 990 / 10	40 / 990 / 10	40 / 990 / 10
West leg	80 / 40	80 / 40	80 / 40	80 / 40
West approach	20 / 0 / 20	20 / 0 / 20	20 / 0 / 20	20 / 0 / 20
Intersection total	1,430	1,540	1,540	1,540
East approach	10 / 10 / 10	10 / 10 / 10	10 / 10 / 10	10 / 10 / 10
East leg	30 / 10	30 / 10	30 / 10	30 / 10
South approach	30 / 380 / 0	30 / 400 / 0	30 / 400 / 0	30 / 400 / 0
South leg	930 / 410	1,020 / 430	1,020 / 430	1,020 / 430

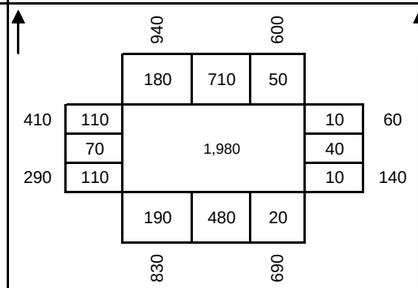
North-South Street: 35 — SR 169
East-West Street: 1900 — Enumclaw - Franklin Rd

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North leg	960 / 410	1,050 / 430	1,050 / 430	1,050 / 430
North approach	0 / 940 / 20	0 / 1,030 / 20	0 / 1,030 / 20	0 / 1,030 / 20
West leg	10 / 0	10 / 0	10 / 0	10 / 0
West approach	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0
Intersection total	1,440	1,550	1,550	1,550
East approach	10 / 10 / 20	10 / 10 / 20	10 / 10 / 20	10 / 10 / 20
East leg	40 / 60	40 / 60	40 / 60	40 / 60
South approach	0 / 400 / 40	0 / 420 / 40	0 / 420 / 40	0 / 420 / 40
South leg	960 / 440	1,050 / 460	1,050 / 460	1,050 / 460

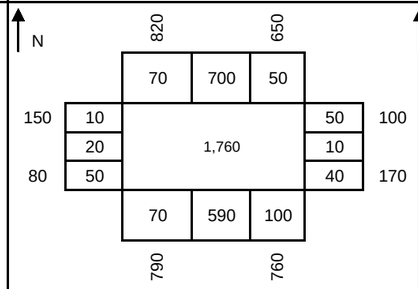
SR 169 Turning Movement Volumes

No Build 2030

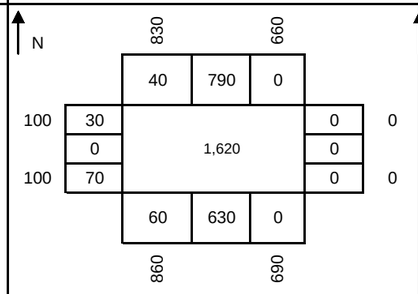
North-South Street: 36 — **SR 169**
East-West Street: 1900 — **SE 400th Rd**



North-South Street: 37 — **SR 169**
East-West Street: 1900 — **SE 416th St**

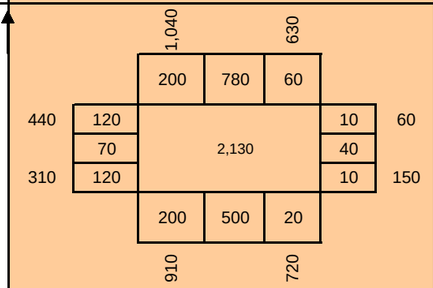


North-South Street: 38 — **SR 169**
East-West Street: 1900 — **SE 424th St**

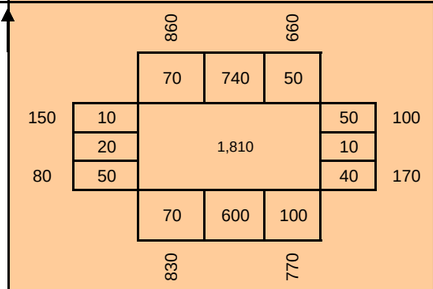


2030 Option 1

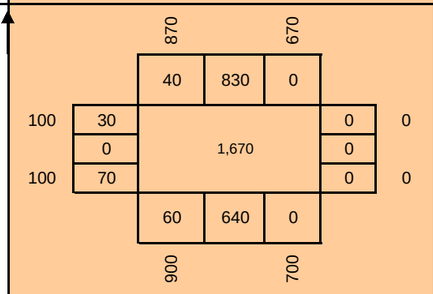
North-South Street: — **SR 169**
East-West Street: — **SE 400th Rd**



North-South Street: — **SR 169**
East-West Street: — **SE 416th St**

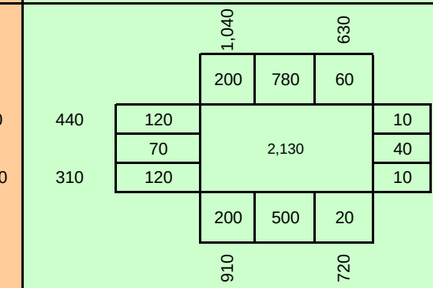


North-South Street: — **SR 169**
East-West Street: — **SE 424th St**

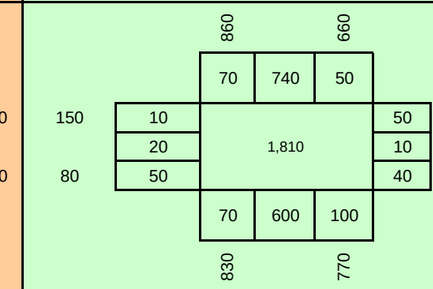


2030 Option 2

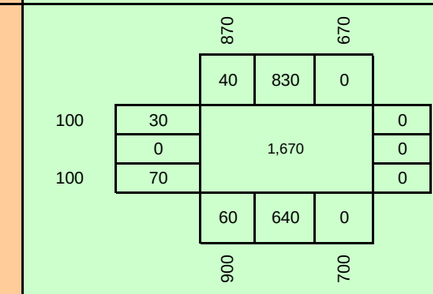
North-South Street: — **SR 169**
East-West Street: — **SE 400th Rd**



North-South Street: — **SR 169**
East-West Street: — **SE 416th St**

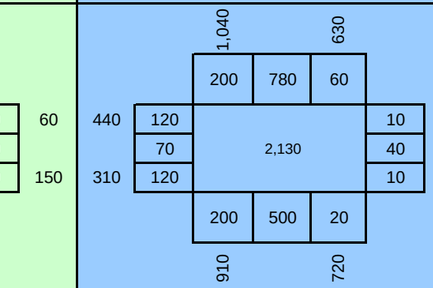


North-South Street: — **SR 169**
East-West Street: — **SE 424th St**

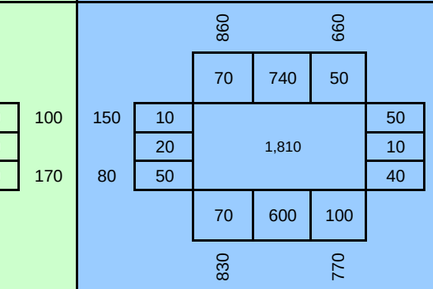


2030 Option 3

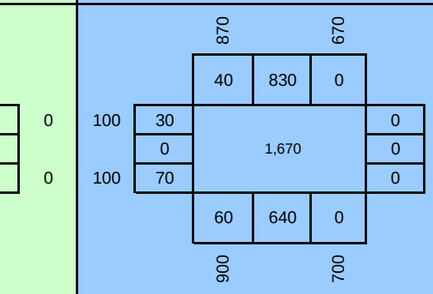
North-South Street: — **SR 169**
East-West Street: — **SE 400th Rd**



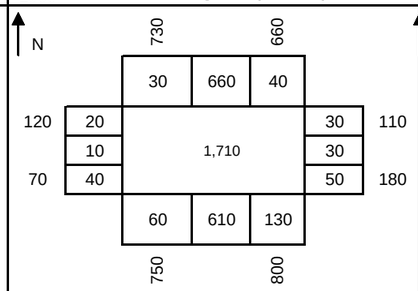
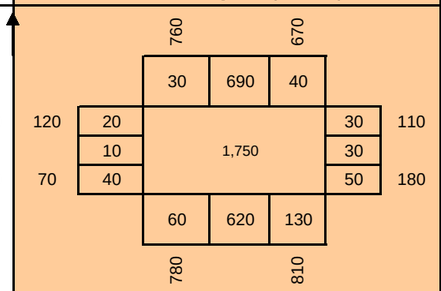
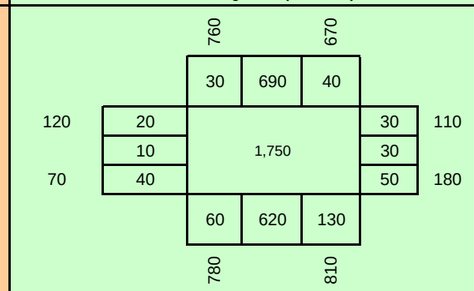
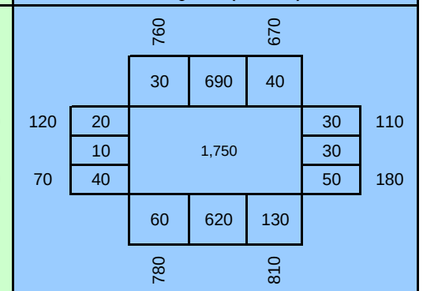
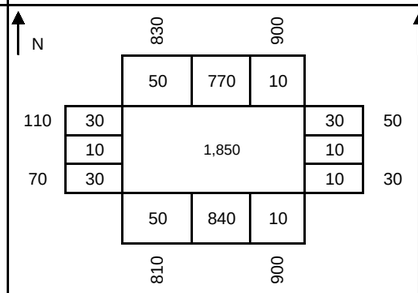
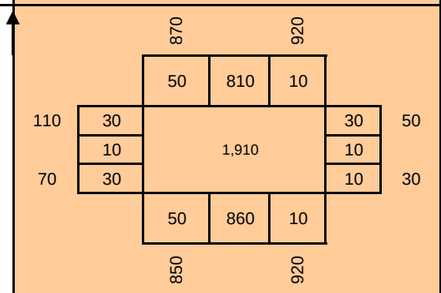
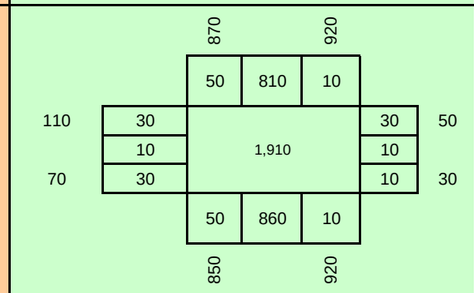
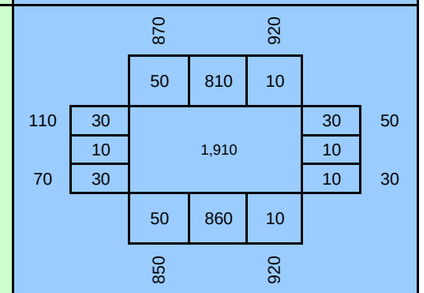
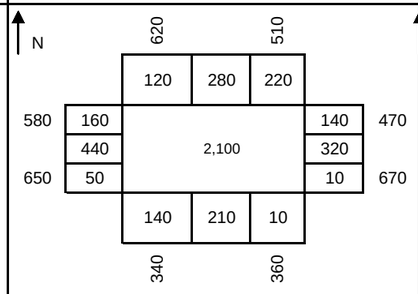
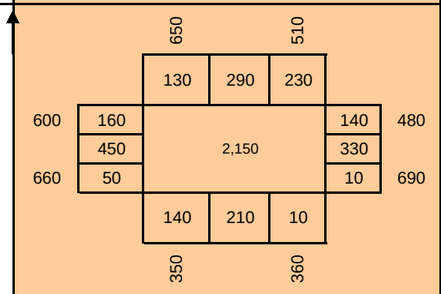
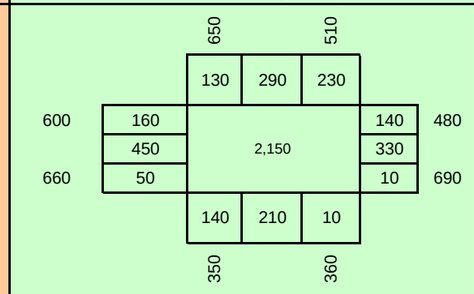
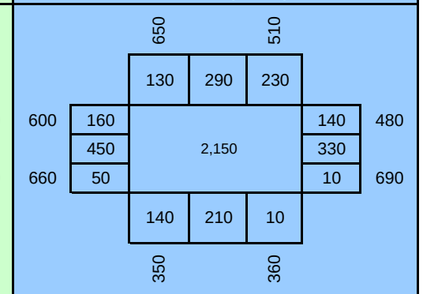
North-South Street: — **SR 169**
East-West Street: — **SE 416th St**



North-South Street: — **SR 169**
East-West Street: — **SE 424th St**



SR 169 Turning Movement Volumes

	No Build 2030	2030 Option 1	2030 Option 2	2030 Option 3
North-South Street	39 SR 169	SR 169	SR 169	SR 169
East-West Street	1900 McHugh Ave (432nd St)	McHugh Ave (432nd St)	McHugh Ave (432nd St)	McHugh Ave (432nd St)
				
North-South Street	40 SR 169	SR 169	SR 169	SR 169
East-West Street	1900 Kibler Ave	Kibler Ave	Kibler Ave	Kibler Ave
				
North-South Street	41 SR 169	SR 169	SR 169	SR 169
East-West Street	1900 Griffin Ave (SR 164)	Griffin Ave (SR 164)	Griffin Ave (SR 164)	Griffin Ave (SR 164)
				

SR 169 Collision Data 2002 to 2004

YEAR	TOTAL COLS	PROP DAMAGE COLS	POSS INJURY COLS	EVID INJURY COLS	DISABLING INJURY COLISION	TOTAL INJURY COLISIONS	FATAL COLISIONS	# OF INJURIES	# OF FATALITIES	# OF VEHS	ALCOHOL RELATED COLISIONS	FIXED OBJECT COLISIONS	REAR-END COLISIONS	OPPOSING DIRECTION COLISIONS	ENTER AT ANGLE	OVER TURN COLS	PEDL CYC COLS	PEDES COLS	OTHER
2002	220	127	53	30	10	93	0	158	0	417	24	30	86	23	24	7	2	1	47
2003	208	123	56	16	11	83	2	134	3	395	22	27	92	18	21	3	2	2	43
2004	211	134	50	21	5	76	1	123	1	410	15	22	93	16	32	6	0	2	40
TOTALS	**639**	**384**	**159**	**67**	**26**	**252**	**3**	**415**	**4**	**1222**	**61**	**79**	**271**	**57**	**77**	**16**	**4**	**5**	**130**

Segment	Segment Limits					Milepost to Milepost		
Enumclaw	junction with SR 164 (Griffin Avenue) to North of SE 424th Street					0.00	to	1.26
Rural/Agricultural	North of SE 424th Street to SE Green Valley Road					1.26	to	6.75
Black Diamond	SE Green Valley Road to SE 288th Street					6.75	to	10.02
Maple Valley	SE 288th Street to SE 216th Street					10.02	to	15.07
Cedar River	SE 216th Street to Jones Road / 196 Avenue SE					15.07	to	19.22
Renton	Jones Road / 196 Avenue SE to I-405					19.22	to	25.26

SR 169 Collision Data 2002 to 2004 by Segment

TOTALS	TOTAL COLS	PROP DAMAGE COLS	POSS INJURY COLS	EVID INJURY COLS	DISABLING INJURY COLISION	TOTAL INJURY COLISIONS	FATAL COLISIONS	# OF INJURIES	# OF FATALITIES	# OF VEHS	ALCOHOL RELATED COLISIONS	FIXED OBJECT COLISIONS	REAR-END COLISIONS	OPPOSING DIRECTION COLISIONS	ENTER AT ANGLE	OVER TURN COLS	PEDL CYC COLS	PEDES COLS	OTHER
Enumclaw	15	7	5	2	1	8	0	12	0	24	2	7	4	0	1	1	0	0	2
Rural/Ag	63	33	12	8	10	30	0	54	0	109	7	12	10	11	16	4	0	0	10
Black Diamond	50	30	11	7	2	20	0	44	0	92	2	6	16	4	10	1	1	0	12
Maple Valley	233	146	59	22	5	86	1	130	1	462	11	16	106	21	31	3	2	3	51
Cedar River	100	56	26	12	5	43	1	71	1	198	14	15	53	8	3	5	0	1	15
Renton	178	112	46	16	3	65	1	104	2	337	25	23	82	13	16	2	1	1	40
TOTALS	**639**	**384**	**159**	**67**	**26**	**252**	**3**	**415**	**4**	**1222**	**61**	**79**	**271**	**57**	**77**	**16**	**4**	**5**	**130**

SR 169 Collision Data 2002 by Segment

TOTALS	TOTAL COLS	PROP DAMAGE COLS	POSS INJURY COLS	EVID INJURY COLS	DISABLING INJURY COLISION	TOTAL INJURY COLISIONS	FATAL COLISIONS	# OF INJURIES	# OF FATALITIES	# OF VEHS	ALCOHOL RELATED COLISIONS	FIXED OBJECT COLISIONS	REAR-END COLISIONS	OPPOSING DIRECTION COLISIONS	ENTER AT ANGLE	OVER TURN COLS	PEDL CYC COLS	PEDES COLS	OTHER
Enumclaw	4	3	1	0	0	1	0	1	0	4	2	3	0	0	0	1	0	0	0
Rural/Ag	22	11	4	3	4	11	0	22	0	38	2	4	4	3	7	2	0	0	2
Black Diamond	16	6	6	3	1	10	0	19	0	30	1	2	5	1	4	1	0	0	3
Maple Valley	71	45	16	9	1	26	0	44	0	142	3	2	33	7	8	2	1	0	18
Cedar River	39	22	11	4	2	17	0	23	0	75	4	9	18	4	1	0	0	1	6
Renton	68	40	15	11	2	28	0	49	0	128	12	10	26	8	4	1	1	0	18
TOTALS	**220**	**127**	**53**	**30**	**10**	**93**	**0**	**158**	**0**	**417**	**24**	**30**	**86**	**23**	**24**	**7**	**2**	**1**	**47**

SR 169 Collision Data 2003 by Segment

TOTALS	TOTAL COLS	PROP DAMAGE COLS	POSS INJURY COLS	EVID INJURY COLS	DISABLING INJURY COLISION	TOTAL INJURY COLISIONS	FATAL COLISIONS	# OF INJURIES	# OF FATALITIES	# OF VEHS	ALCOHOL RELATED COLISIONS	FIXED OBJECT COLISIONS	REAR-END COLISIONS	OPPOSING DIRECTION COLISIONS	ENTER AT ANGLE	OVER TURN COLS	PEDL CYC COLS	PEDES COLS	OTHER
Enumclaw	5	0	3	1	1	5	0	7	0	8	0	2	1	0	0	0	0	0	2
Rural/Agicultural	19	9	4	2	4	10	0	18	0	33	2	5	3	4	4	0	0	0	3
Black Diamond	17	11	2	3	1	6	0	9	0	29	1	3	5	1	2	0	1	0	5
Maple Valley	86	53	25	6	2	33	0	54	0	173	4	6	42	9	9	0	1	1	18
Cedar River	32	19	7	3	2	12	1	22	1	62	7	4	17	2	0	3	0	0	6
Renton	49	31	15	1	1	17	1	24	2	90	8	7	24	2	6	0	0	1	9
TOTALS	**208**	**123**	**56**	**16**	**11**	**83**	**2**	**134**	**3**	**395**	**22**	**27**	**92**	**18**	**21**	**3**	**2**	**2**	**43**

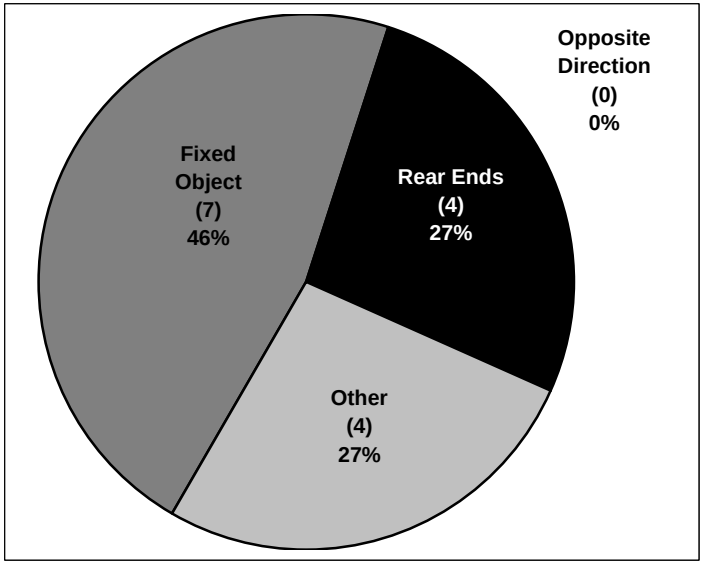
SR 169 Collision Data 2004 by Segment

TOTALS	TOTAL COLS	PROP DAMAGE COLS	POSS INJURY COLS	EVID INJURY COLS	DISABLING INJURY COLISION	TOTAL INJURY COLISIONS	FATAL COLISIONS	# OF INJURIES	# OF FATALITIES	# OF VEHS	ALCOHOL RELATED COLISIONS	FIXED OBJECT COLISIONS	REAR-END COLISIONS	OPPOSING DIRECTION COLISIONS	ENTER AT ANGLE	OVER TURN COLS	PEDL CYC COLS	PEDES COLS	OTHER
Enumclaw	6	4	1	1	0	2	0	4	0	12	0	2	3	0	1	0	0	0	0
Rural / Agricultural	22	13	4	3	2	9	0	14	0	38	3	3	3	4	5	2	0	0	5
Black Diamond	17	13	3	1	0	4	0	16	0	33	0	1	6	2	4	0	0	0	4
Maple Valley	76	48	18	7	2	27	1	32	1	147	4	8	31	5	14	1	0	2	15
Cedar River	29	15	8	5	1	14	0	26	0	61	3	2	18	2	2	2	0	0	3
Renton	61	41	16	4	0	20	0	31	0	119	5	6	32	3	6	1	0	0	13
TOTALS	**211**	**134**	**50**	**21**	**5**	**76**	**1**	**123**	**1**	**410**	**15**	**22**	**93**	**16**	**32**	**6**	**0**	**2**	**40**

ENUMCLAW SEGMENT 2002 - 2004 Collision Data

2002–2004 Total Collisions:		Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
15		7	4	0	4	0	2

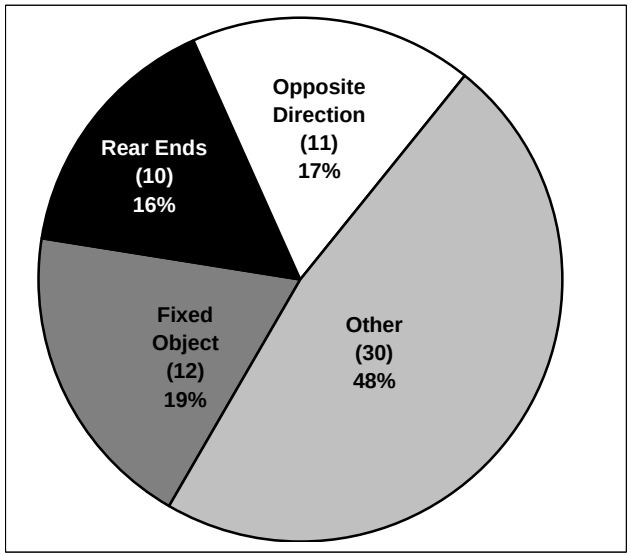
Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
7	4	0	4	0	2



RURAL / AGRICULTURAL SEGMENT 2002 – 2004 Collision Data

2002-2004 Total Collisions:	Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
63	12	10	11	30	0	7

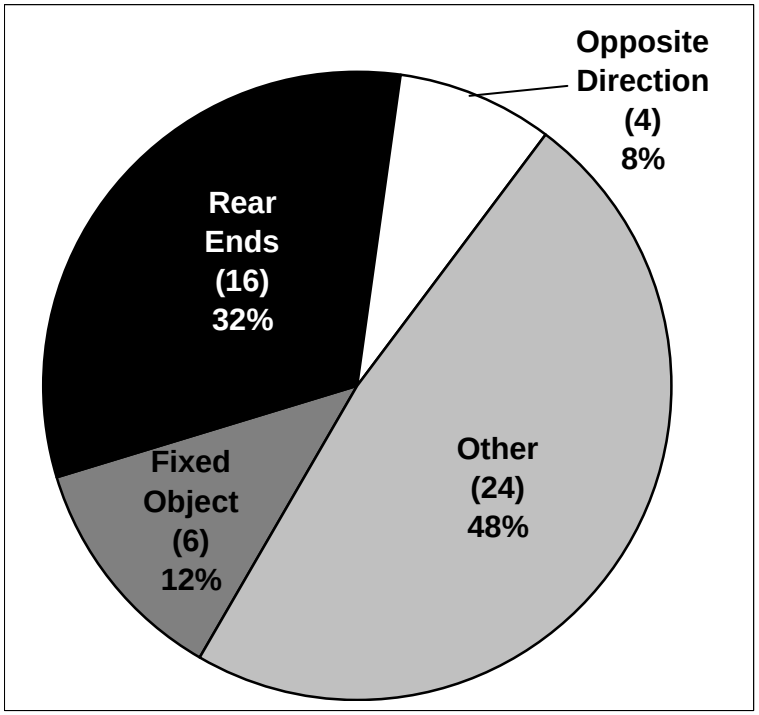
Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
12	10	11	30	0	7



BLACK DIAMOND SEGMENT 2002 - 2004 Collision Data

2002-2004 Total Collisions:		Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
50		6	16	4	24	0	2

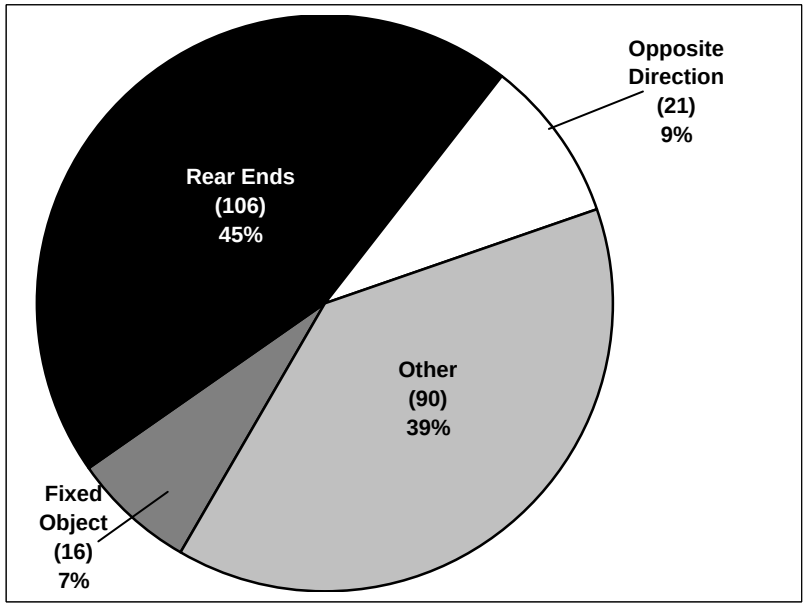
Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
6	16	4	24	0	2



MAPLE VALLEY SEGMENT 2002 - 2004 Collision Data

2002-2004 Total Collisions:		Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
233		16	106	21	90	1	11

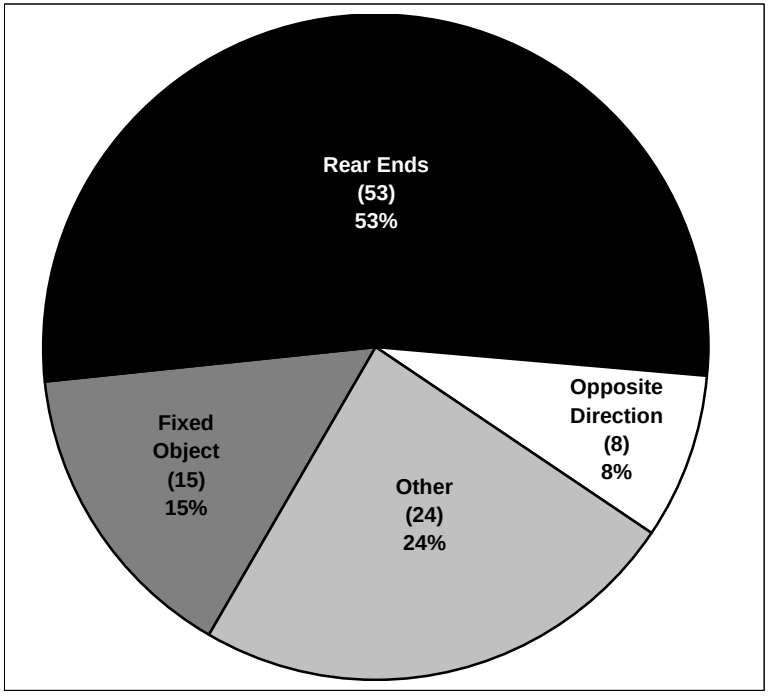
Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
16	106	21	90	1	11



CEDAR RIVER SEGMENT 2002 - 2004 Collision Data

2002-2004 Total Collisions:		Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
100		15	53	8	24	1	14

Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
15	53	8	24	1	14



RENTON SEGMENT 2002 - 2004 Collision Data

2002-2004 Total Collisions:		Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
178		23	82	13	60	2	25

Fixed Object	Rear Ends	Opposite Direction	Other	Fatalities	Alcohol Related
23	82	13	60	2	25

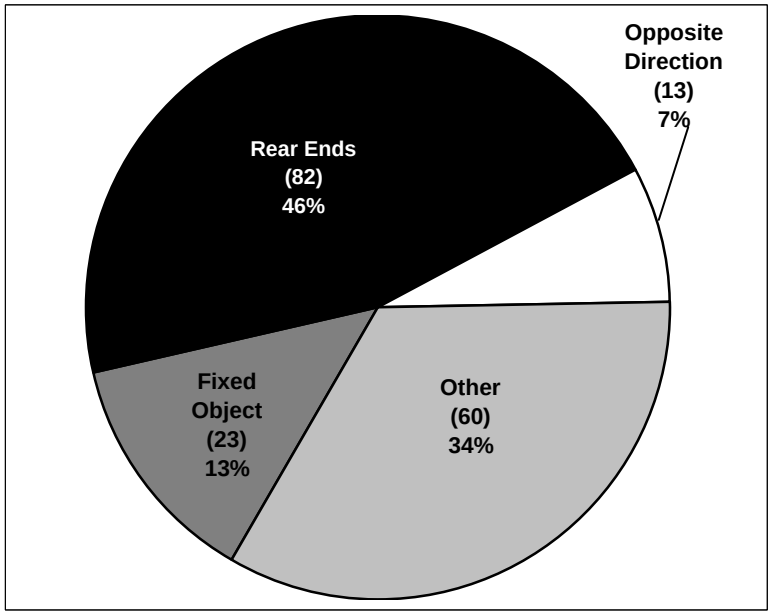
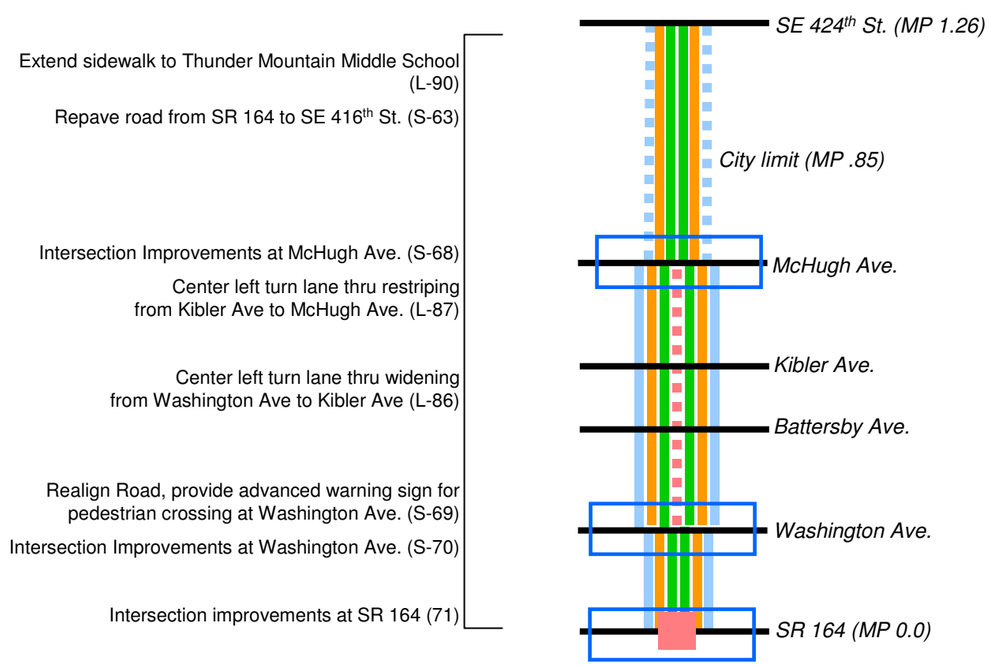


Exhibit F · Attachment 11: SR 169 Enumclaw Segment – Improvement Options

No Build Option

Options 1 thru 3



Legend

Note: Not all signalized intersections are depicted

- **Sidewalk**
- **New Sidewalk**
- **Existing Shoulder**
- **New Center Turn Lane**
- **Existing Through Lane**
- **Existing Signal**
- **Intersection**
- **Intersection Improvement**

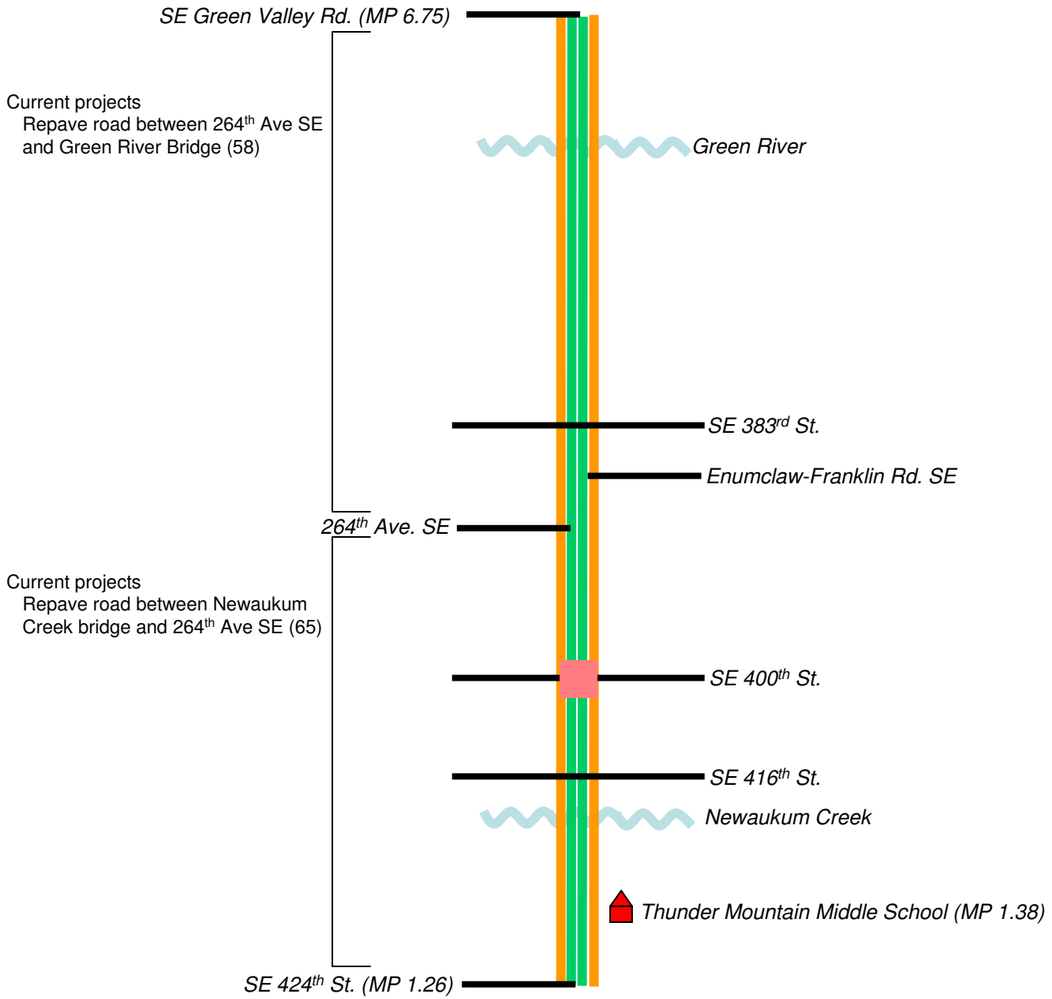
(S-X) **Short-term project**

(L-X) **Long-term project**

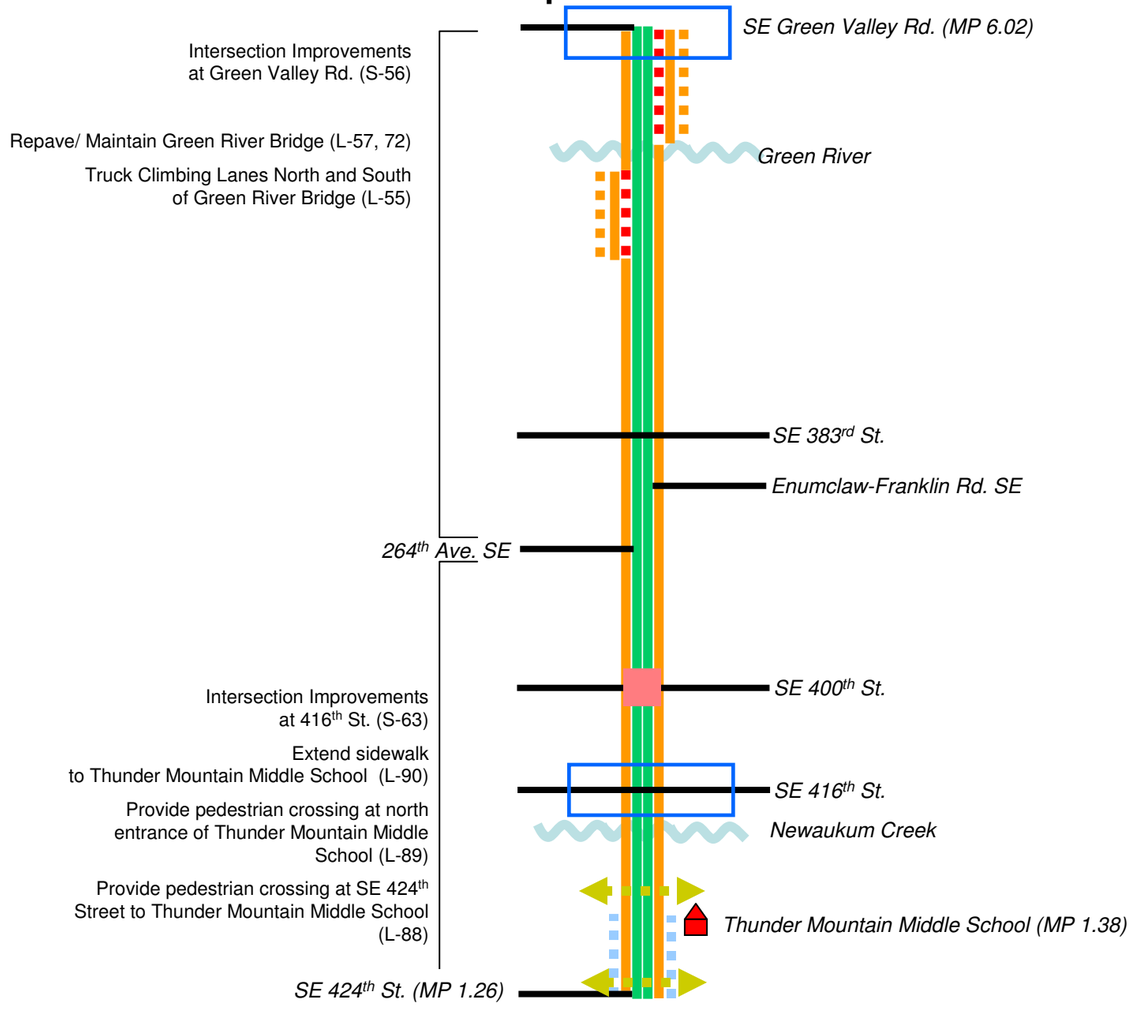
(X) **Immediate project (Existing Conditions) or Project for further consideration**

Exhibit F – Attachment 12: SR 169 Rural / Agricultural Segment – Improvement Options

No Build Option



Options 1 thru 3



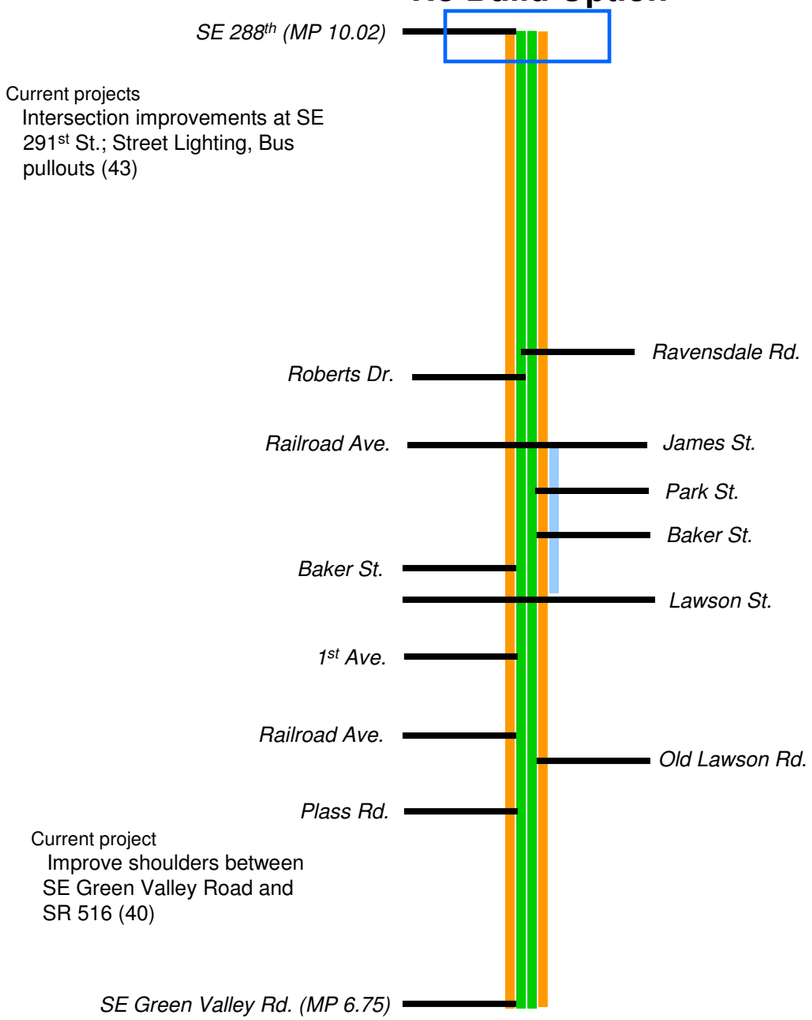
Legend

Note: Not all signalized intersections are depicted

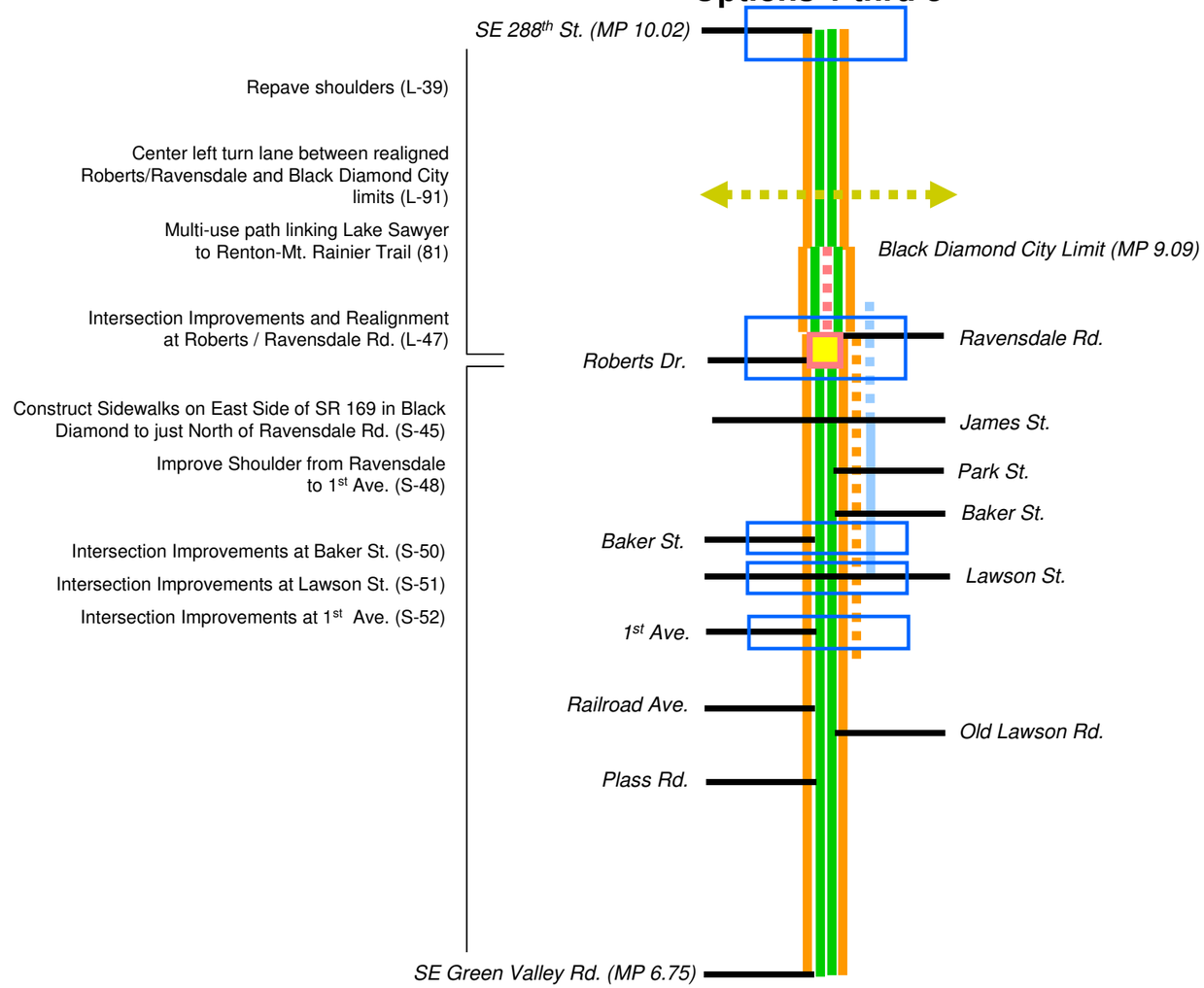
- **Existing Shoulder**
- **Widen Shoulder**
- **New Sidewalk**
- **New Pedestrian crossing**
- **Existing Through Lane**
- **Truck Climbing Lane**
- **Creek, River, Stream**
- **Existing Signal**
- **School**
- **Intersection**
- **Intersection Improvement**
- (S-X) **Short-term project**
- (L-X) **Long-term project**
- (X) **Immediate project (Existing Conditions) or Project for further consideration**

Exhibit F – Attachment 13: SR 169 Black Diamond Segment – Improvement Options

No Build Option



Options 1 thru 3



Legend

Note: Not all signalized intersections are depicted

- **Sidewalk**
- **New Sidewalk**
- **Existing Shoulder**
- **Widen Shoulder**
- **Existing Through Lane**
- **New Center Turn Lane**
- **New Multi-Use Path**
- **New Signal**
- **Intersection**
- **Intersection Improvement**

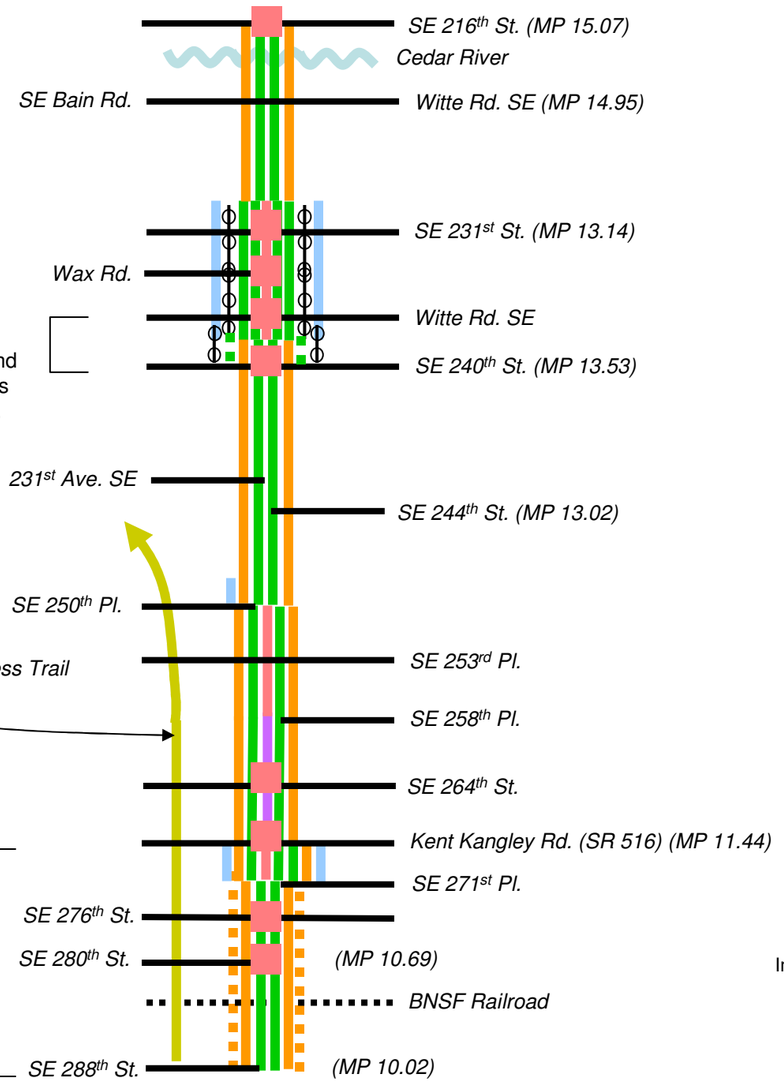
(S-X) **Short-term project**

(L-X) **Long-term project**

(X) **Immediate project (Existing Conditions) or Project for further consideration**

Exhibit F – Attachment 14: SR 169 Maple Valley Segment – Improvement Options

No Build Option



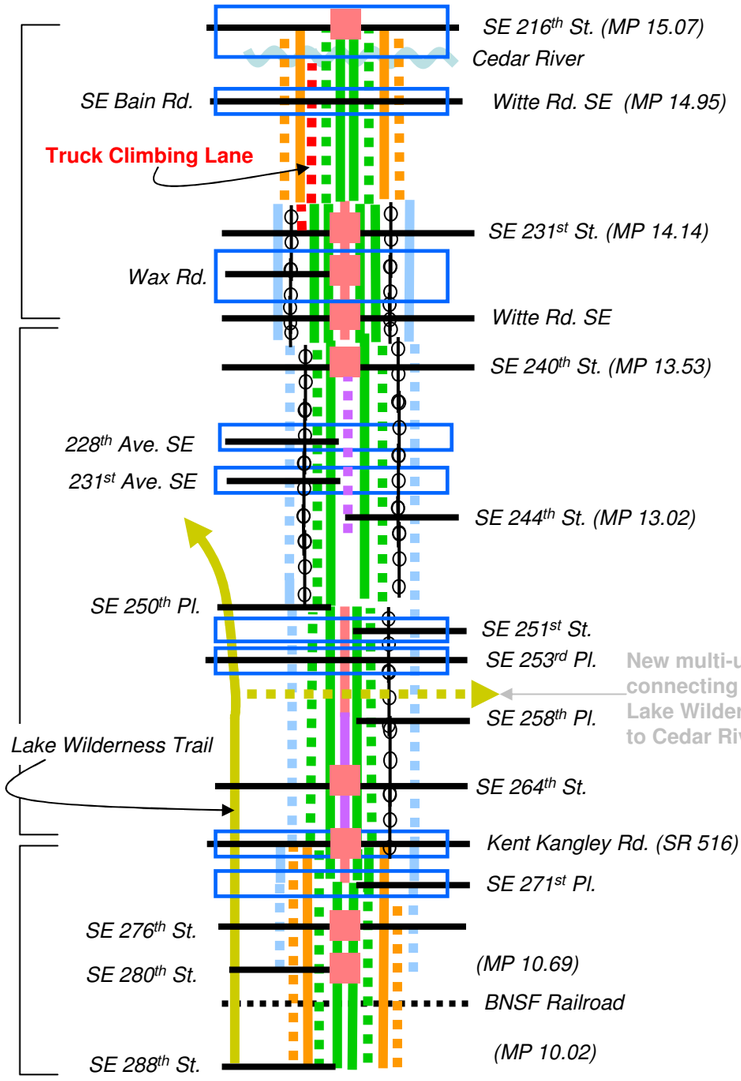
Current projects
Add northbound and southbound lane, bike lanes, and other intersection improvements between Witte and SE 240th St. (33a/b)

Current projects
Intersection improvements at SR 516 (41)

Improve shoulders (40)

Pave Lake Wilderness Trail (20)

Options 1 thru 3



Widen to SR 169 to 4/5 Lanes / Access Management (L-19)

Truck Climbing Lane and Improved Shoulders from Cedar River to SE 231st St. (L-30)

Intersection Improvements / Access Management at Witte Rd SE / SE Bain Rd. (L-31)

Repave SR 169 from SE 231st to Jones Rd. (L-18)

Intersection improvements at Wax Road (L-32)

Widen SR 169 to to 4/5 Lanes / Access Management (L-19)

Bike Lanes and Sidewalks in Developed Areas (L-19)

Intersection Improvements at 228th Ave SE (S-79)

Intersection Improvements at 231st Ave SE (L-35)

Intersection Improvements at SE 251st St. (L-36)

Intersection Improvements at SE 253rd Pl. (L-37)

Pave Lake Wilderness Trail (73)

Provide New Multi-Use Path connecting Lake Wilderness Trail to Cedar River Trail near SE 253rd Pl. (34)

Intersection Improvements at SE 271st Pl. (S-80)

Widen Road between SR 516 and SE 291st St. (L-84)

Improve Trail between SR 516 and BNSF Railroad (38, 83)

Intersection improvements north of SE 288th St (L-42)

Legend

Note: Not all signalized intersections are depicted

- **Sidewalk**
- **New Sidewalk**
- **Existing Shoulder**
- **Widen Shoulder**
- **Existing Through Lane**
- **New Through Lane**
- **Bike Lane**
- **Multi-Use Path**
- **New Multi-Use Path**
- **Creek, River, Stream**
- **Railroad**
- **Truck Climbing Lane**
- **Existing Signal**
- **Center Turn Lane**
- **Median w/ Turn Pockets**
- **Intersection**
- **Intersection Improvement**

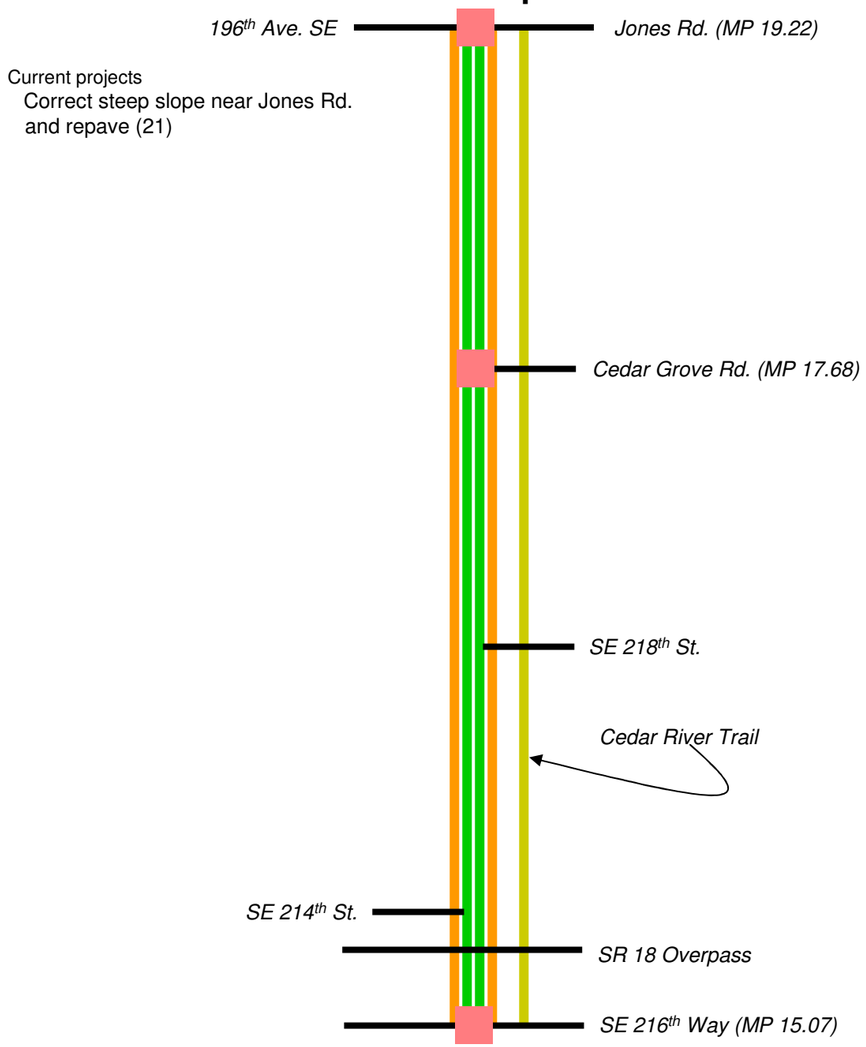
(S-X) **Short-term project**

(L-X) **Long-term project**

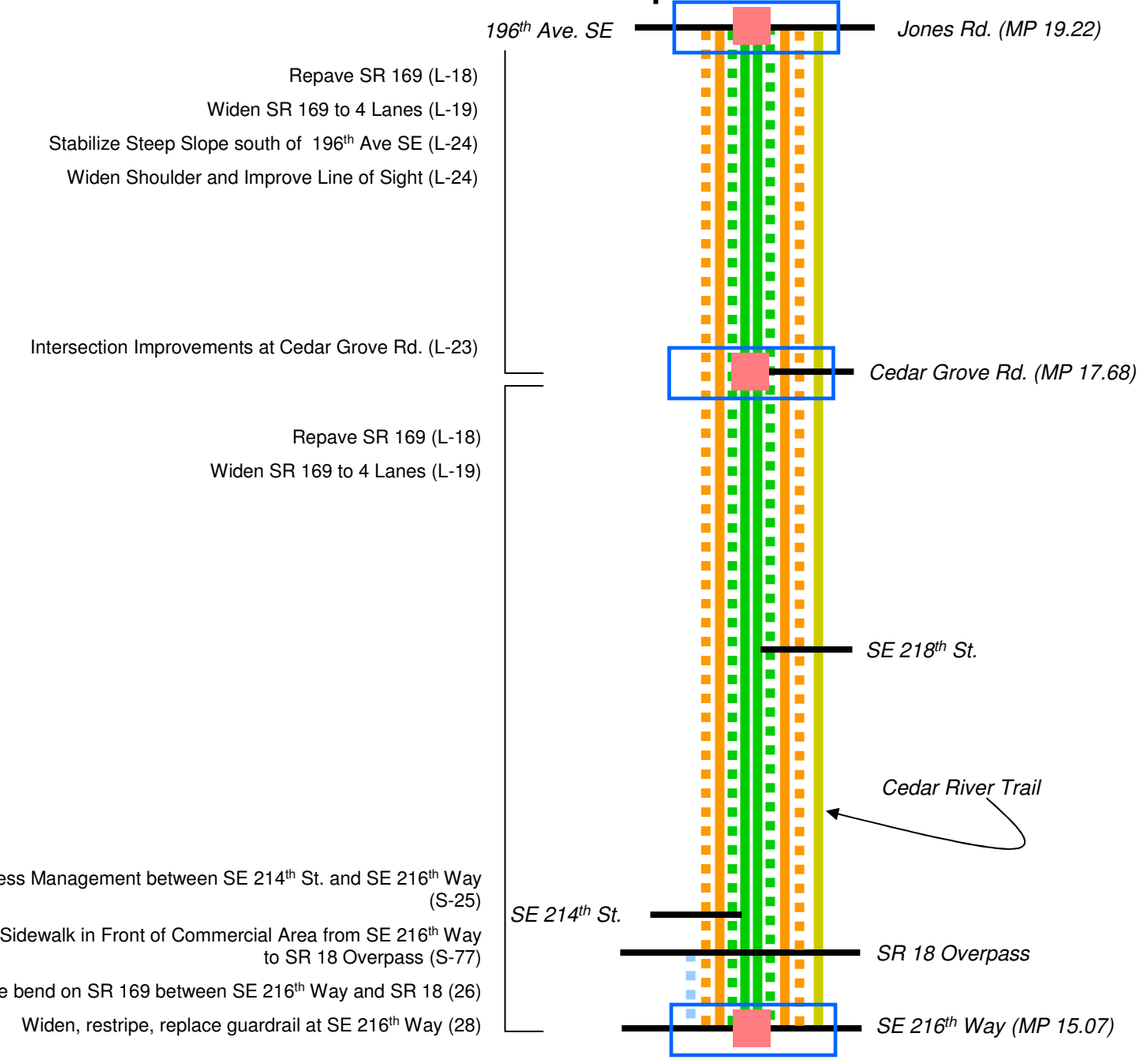
(X) **Immediate project (Existing Conditions) or Project for further consideration**

Exhibit F – Attachment 15: SR 169 Cedar River Segment – Improvement Options

No Build Option



Options 1 thru 3



Legend

Note: Not all signalized intersections are depicted

- **New Sidewalk**
- **Existing Shoulder**
- **Widen Shoulder**
- **Existing Through Lane**
- **New Through Lane**
- **Existing Signal**
- **Multi-Use Path**
- **Intersection**
- **Intersection Improvement**

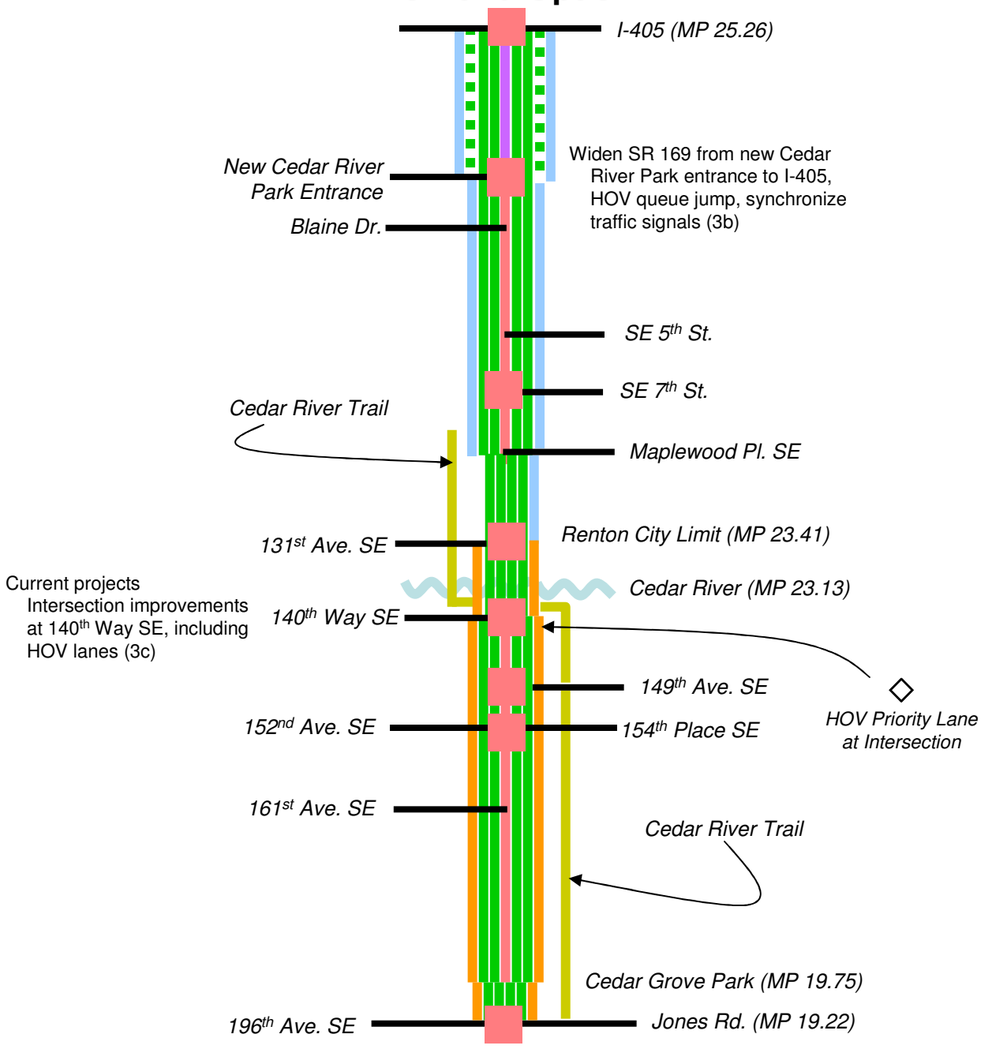
(S-X) **Short-term project**

(L-X) **Long-term project**

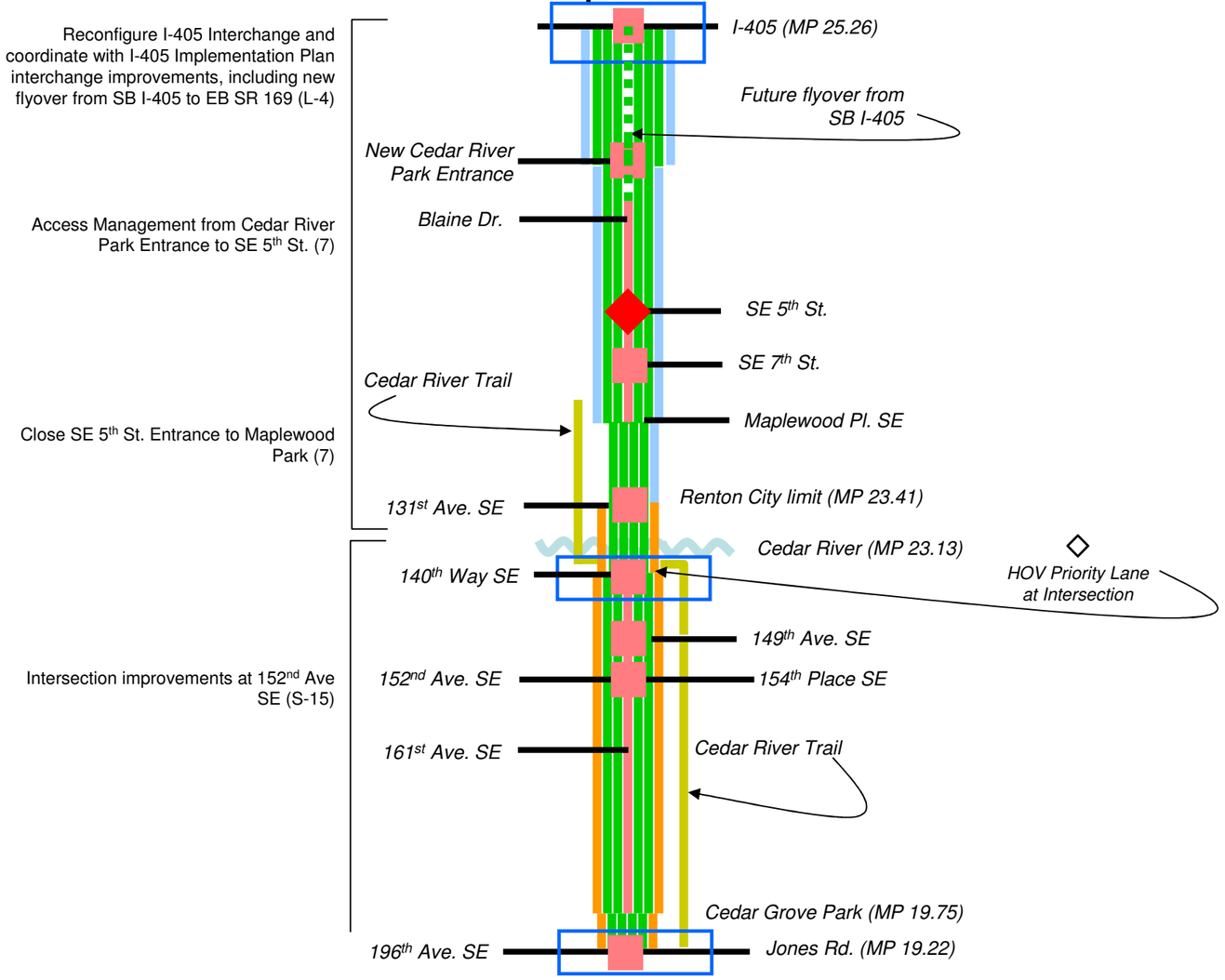
(X) **Immediate project (Existing Conditions) or Project for further consideration**

Exhibit F – Attachment 16: SR 169 Renton Segment – Improvement Options – Page 1

No Build Option



Option 1



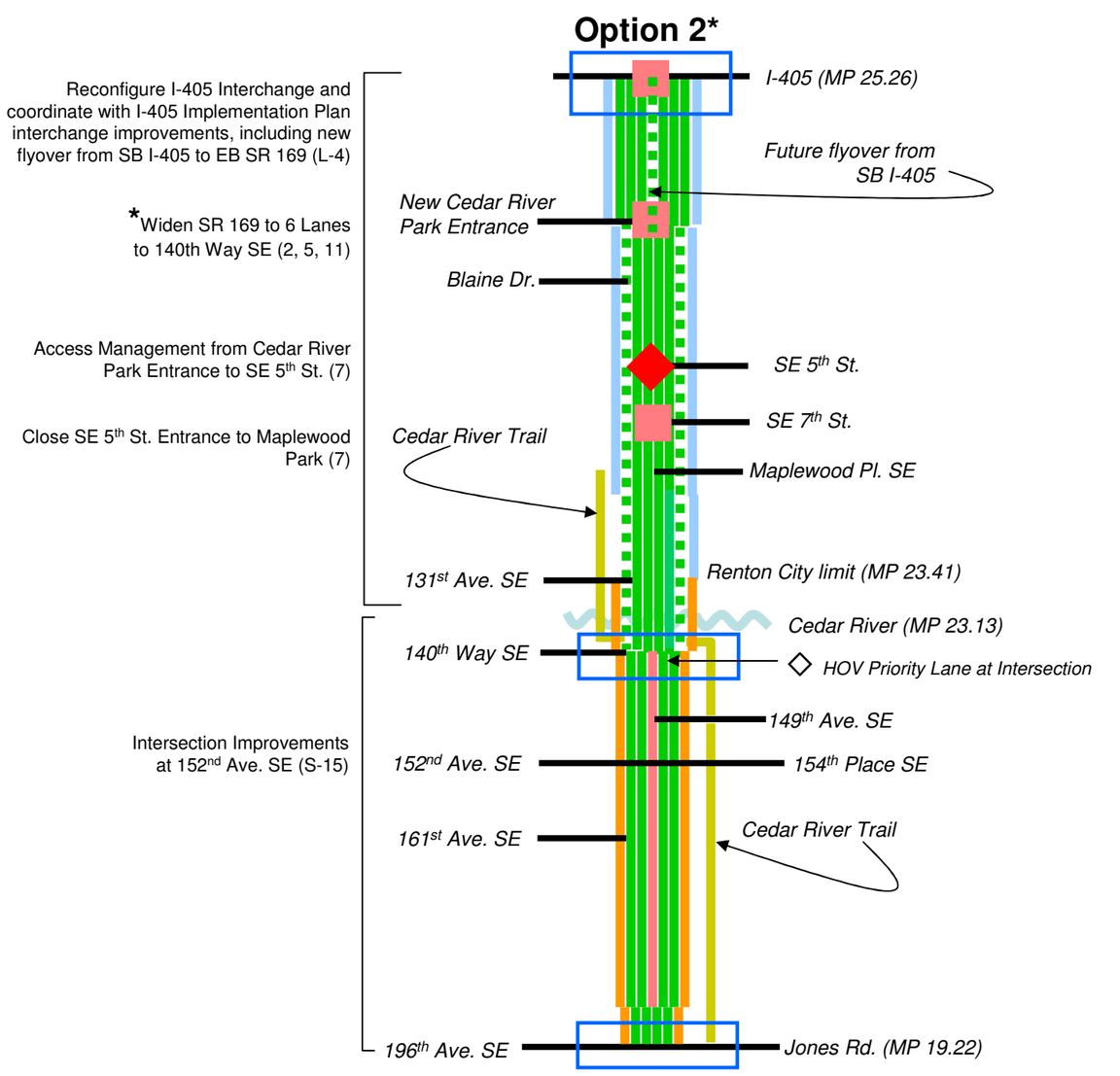
Legend

Note: Not all signalized intersections are depicted

- **Existing Shoulder**
- **Close Roadway Access**
- **Existing Through Lane**
- **New Through Lane**
- **Creek, River, Stream**
- **Multi-Use Path**
- **Sidewalk**
- **Center Turn Lane**
- **Median**
- **Intersection**
- **Intersection Improvement**
- **Existing Signal**
- **Signal Improvement**
- (S-X) **Short-term project**
- (L-X) **Long-term project**
- (X) **Immediate project (Existing Conditions) or Project for further consideration**

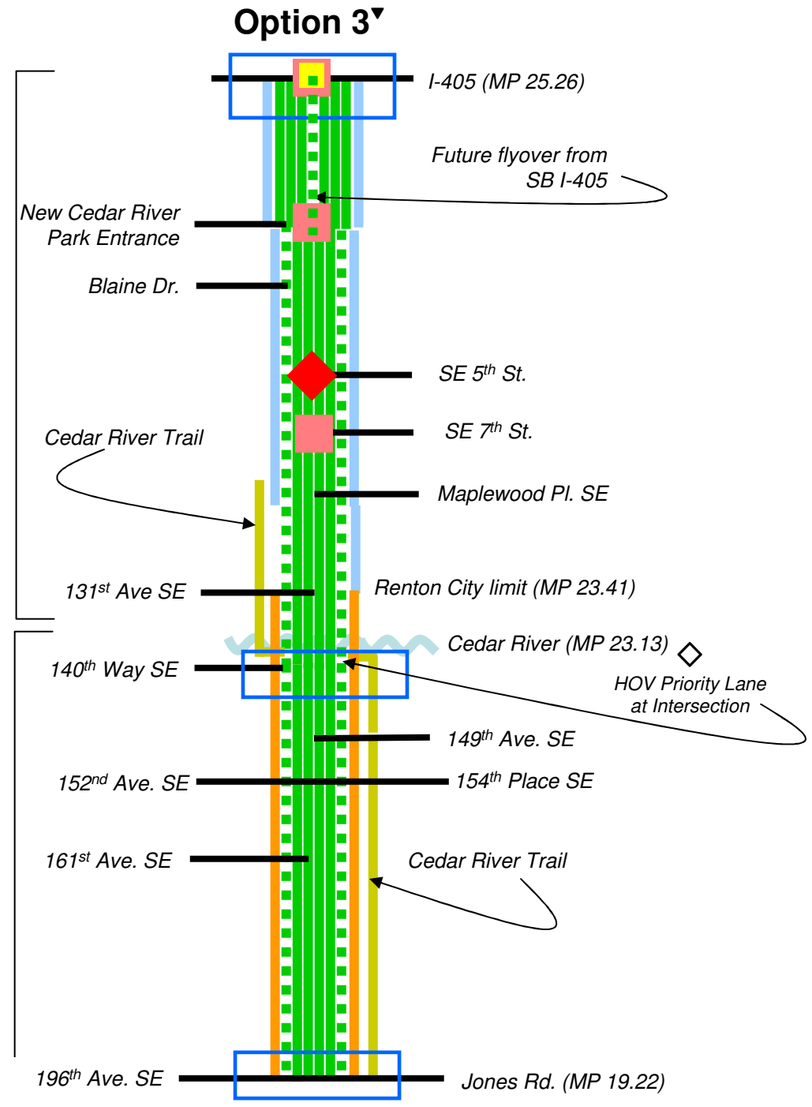
Exhibit F – Attachment 16: SR 169 Renton Segment – Improvement Options – Page 2

Option 2*



* = Differences between Option #1, Option #2, and Option #3

Option 3▼



▼ = Differences between Option 2 and Option 3

Legend

Note: Not all signalized intersections are depicted

- Existing Shoulder
- Closed roadway access
- Existing Through Lane
- New Through Lane
- Creek, River, Stream
- Trail
- Sidewalk
- Center Turn Lane
- Median w/ Turn Pocket
- Intersection
- Intersection Improvement
- Existing Signal
- Signal Improvement
- (S-X) Short-term project
- (L-X) Long-term project
- (X) Immediate project (Existing Conditions) or Project for further consideration