

Snohomish County

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Appendix B

Scenario #40 – Closure of I-5 Bridge over Snohomish River

A. General Information

Planners identified two alternative routes as primary and secondary for all traffic in response to closure of the I-5 Bridge over the Snohomish River. However, the secondary route will be used only if the primary route is impassable. Detours for this section will entail rerouting traffic onto Broadway through the City of Everett from I-5 and return to I-5 at the next available on-ramp (primary). If the primary route is deemed impassable, the secondary route entails diverting traffic from I-5 at the Stevens Pass Hwy to SR 204 to SR 9 to SR 528 returning to I-5 at the next available on-ramp.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. Snohomish County Department of Emergency Management (DEM)
3. City of Everett
4. City of Marysville

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through the ESF – 1

function at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs), municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
2. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an interlocal agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short Term Solutions

Stakeholder identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing such as a establishing a One-Way Couplet, Adjusting Traffic Signal Timings, Restricting/Eliminating Road side parking, implementing Truck Restrictions and Turn Prohibitions on State Routes 9, 204, and 528. See Appendix E – Roadways Toolbox for further information.

2. Mid-Term Alternatives

The Short-Term solutions can be extended to provide Mid-Term Alternatives, as necessary. Several Mid-Term Alternatives have been identified such as closure of freeway ramps at the Interchanges of 198 and 195 and establishing new and/or extending transit services. Other alternatives include: Establish or expand Park and Ride lots, Tele-commuting, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long Term Options

Mid-term alternative transportation options can be extended to long term options, as necessary. In addition, a Long Term option includes changing current HOV rules, constructing an HOV Bypass and traffic signal interconnects. See Appendix E – Roadways Toolbox for further information.



Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
40 - Closure of I-5 over Snohomish River – Snohomish County	
North to South Routing (Primary)	South to North Routing (Secondary)
I-5 Southbound	I-5 Northbound
I-5 Southbound Exit 198 (SR 529)	I-5 Northbound Exit 192 (Broadway)
I-5 Southbound Ramp to SR 529	I-5 Northbound Ramp to Broadway
SR 529 Southbound	Broadway Northbound
SR 529 to Broadway	Broadway Northbound to SR 529 Northbound
Broadway Southbound	SR 529 Northbound to I-5 Northbound
Broadway to I-5 Southbound	I-5 Northbound (Interchange 198)
I-5 Southbound (Interchange 192)	

Note – SR 529 Primary Southbound, SR 9 Primary Northbound.

40 - Closure of I-5 over Snohomish River – Snohomish County	
North to South Routing (Secondary)	South to North Routing (Primary)
I-5 Southbound (Exit 199)	I-5 Northbound (Exit 194)
Ramp to SR 528 Eastbound (Traffic Signal)	US 2 Eastbound (Stevens Pass Highway)
SR 528 Eastbound (4 th St)	US 2 Eastbound Exit for SR 204 Eastbound
SR 528 Eastbound (64 th St NE)	SR 204 Eastbound
SR 9 Southbound (Traffic Signal)	SR 204 Eastbound to SR 9 North (Traffic Signal)
SR 9 Southbound to SR 204 Westbound	SR 9 Northbound
SR 204 Westbound	SR 9 Northbound to SR 528 Westbound
SR 204 Westbound Exit for US 2 Westbound	SR 528 Westbound (64 th St NE)
US 2 Westbound (Stevens Pass Hwy)	SR 528 Westbound (4 th St)
US 2 Westbound Exit for I-5 Southbound	SR 528 Westbound Ramp to I-5 Northbound
I-5 Southbound (Interchange 194)	I-5 Northbound (Interchange 199)

Note: Bridge on Broadway at Hewitt is scheduled for replacement June 2014 – Aug 2015

Note: SR 9 could be a primary for northbound traffic

Puget Sound Regional Transportation Recovery Plan						
40 - Closure of I-5 over Snohomish River – Snohomish County						
Mitigation Strategies						
Strategy	Implementation				Not Feasible Or N/A	Comments
	Short-Term	Mid-Term	Long-Term			
Alternative Routing	√	√	√			One-way couplet
Adjust Traffic Signal Timings	√	√	√			
Contra-flow Lanes New				√		
HOV Lanes – Convert				√		
HOV Lanes – New				√		
HOV Rules - Change			√			HOV 2 to HOV 3
Construct HOV Bypass			√			Interchange 194, 199
Ramp Metering				√		
Freeway Ramps - New				√		
Freeway Ramps – Closure		√	√			Interchange 198, 195
Truck Restrictions	√	√	√			Unsafe Truck Routes, TOD
Truck Preferences				√		Time of Day (TOD)
Shoulder - Convert to Driving Lane				√		
Parking Eliminate/Restrict	√	√	√			SR 9, SR 204, SR 528
Turn Prohibitions	√	√	√			SR 9, SR 204, SR 528 (one-way couplet)
Ferry Service Relocation				√		
Ferry Service New				√		
Ferry Service Increase Existing				√		
Congestion Pricing				√		
Vanpool Carpool Incentives	√	√	√			
Park – Ride Lots New/Expand	√	√	√			
Alternating Driving Days				√		
Bike Lanes				√		
Tolling Adjustments				√		
Transit Service New		√	√			
Transit Service Increase		√	√			
Improved Incident Management (Patrols)	√	√	√			
Technology – Electronic Signing or Surveillance	√	√	√			
Technology – Signal Interconnects			√			SR 528
Convert trails to special motorized use				√		
Tele-commuting	√	√	√			
Staggered Work Shifts	√	√	√			
Compressed Work Week	√	√	√			
Emergency Responder Routes		√	√			
Adjust Fleet Size				√		

Puget Sound Regional Transportation Recovery Plan					
40 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

Appendix B

Scenario #41 – Closure of I-5 at the SR 529 Interchange

A. General Information

For the closure of the I-5 at the SR 529 Interchange, planners identified an alternate route for all traffic. The detour for this section will entail rerouting from I-5 at the Stevens Pass Hwy to SR 204 to SR 9 to SR 528 returning to I-5 at the next available on-ramp.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. Snohomish County Department of Emergency Management (DEM)
3. City of Marysville

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through the ESF – 1 function at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs), municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.
2. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short Term Solutions

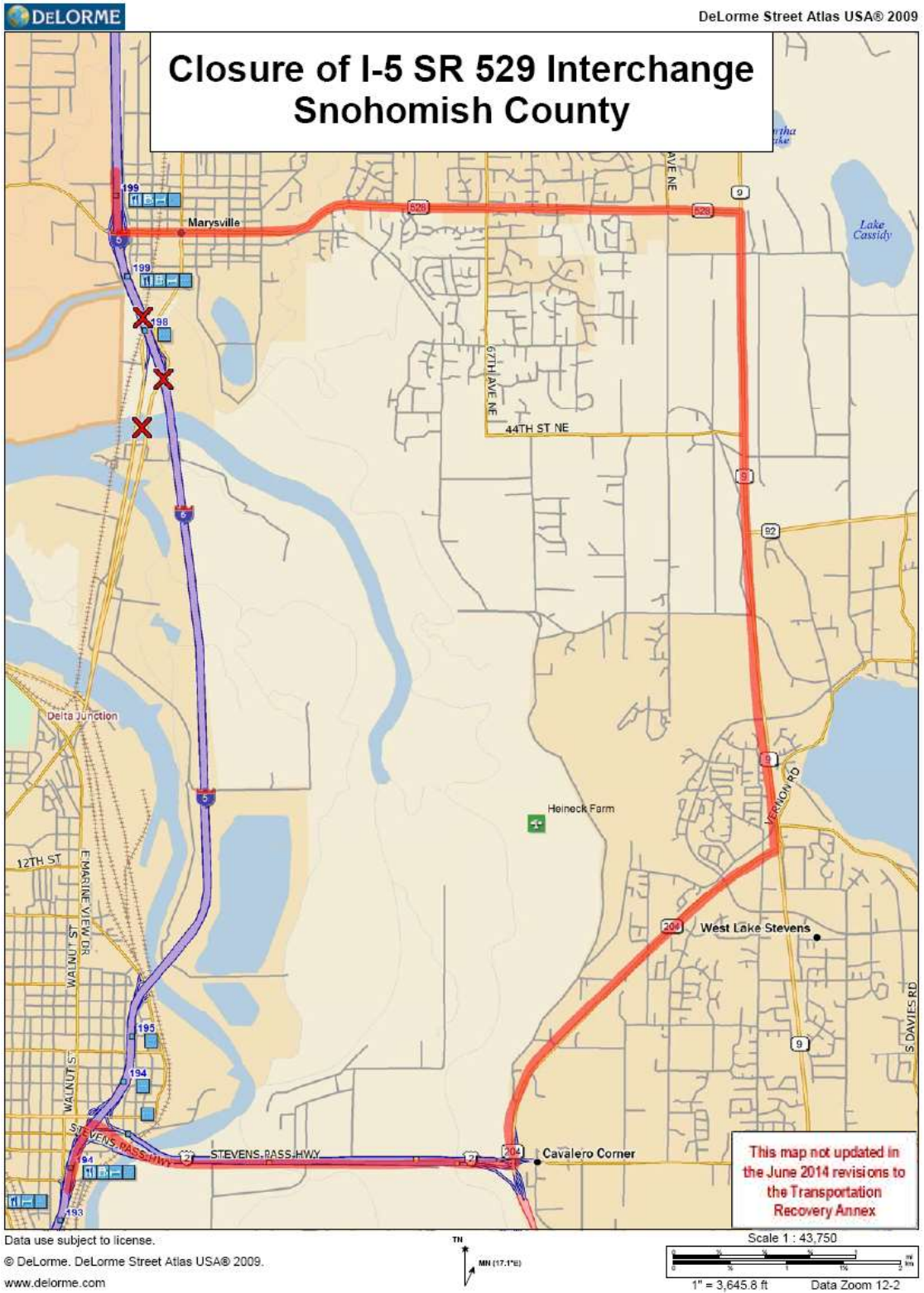
Stakeholders identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing such as a establishing a One-Way Couplet, Adjusting Traffic Signal Timings, Restricting/Eliminating road- side parking, implementing Truck Restrictions and Turn Prohibitions on State Routes 9, 204, and 528. See Appendix E – Roadways Toolbox for further information.

2. Mid-Term Alternatives

The Short-Term solutions can be extended to provide Mid-Term Alternatives, as necessary. Several Mid-Term Alternatives have been identified such as establishing new and/or extending transit services. Other alternatives include: Establishing or expanding Park and Ride lots, Telecommuting, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long Term Options

Mid-term alternative transportation options can be extended to long term options, as necessary. In addition, a Long Term option includes changing current HOV rules, constructing an HOV Bypass at Interchange 196 and 199 and traffic signal interconnects. See Appendix E – Roadways Toolbox for further information.

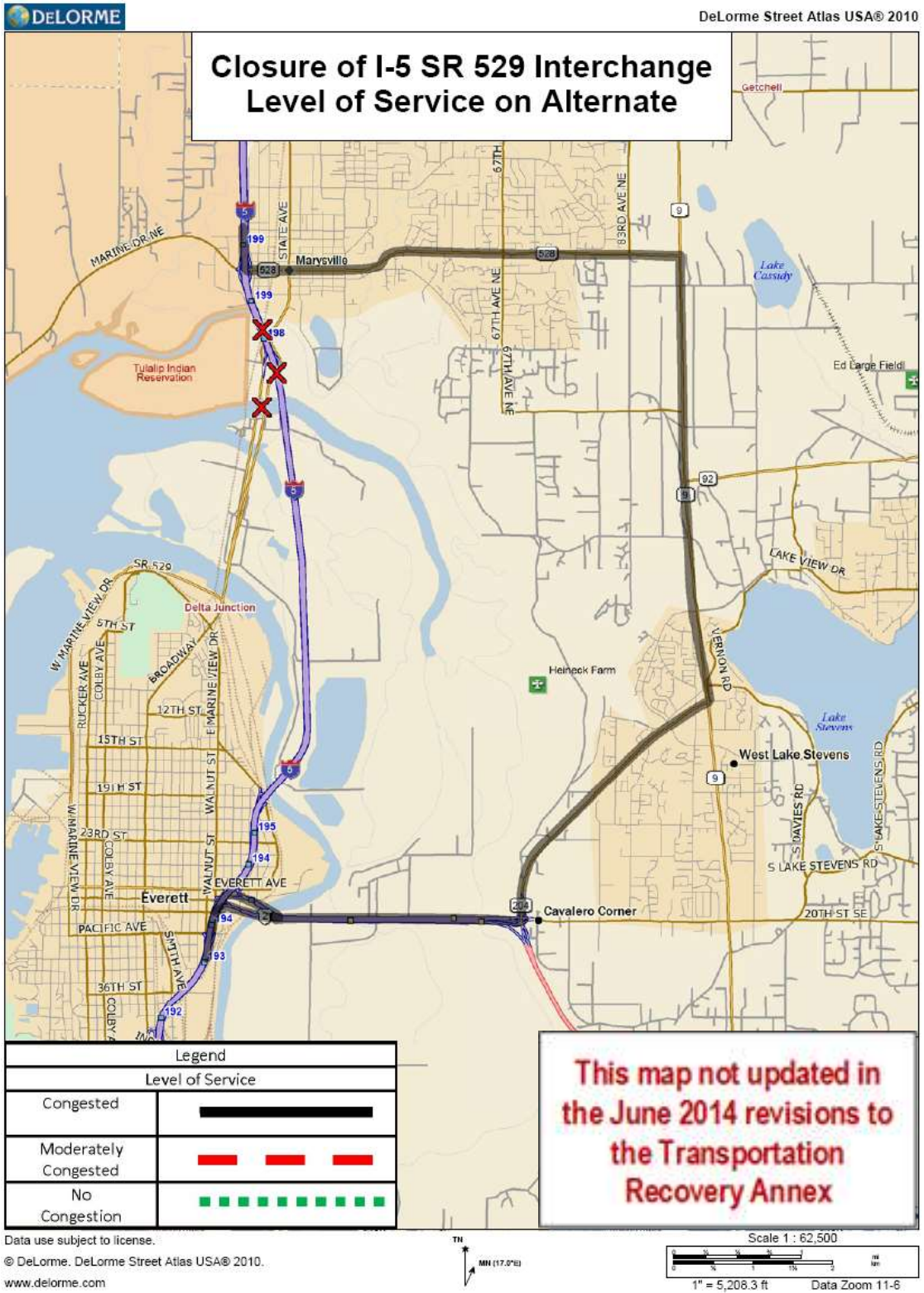


Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
41 - Closure of I-5 and SR 529 Interchange (Exit 198) – Snohomish County	
North to South Routing	South to North Routing
I-5 Southbound (Exit 199)	I-5 Northbound (Exit 194)
SR 528 Eastbound	US 2 Eastbound (Stevens Pass Highway)
SR 9 Southbound	SR 204 Northbound
SR 204 Southbound	SR 9 Northbound
US 2 Westbound (Stevens Pass Highway)	SR 528 Westbound
I-5 Southbound (Interchange 194)	I-5 Northbound (Interchange 199)

Note: SR 529 Traffic uses Walnut St. to Interchange 194.

Note: Possible alternative to use two-way traffic on available bridge spans.

Note: Overweight/over length freight movements to/from Port of Everett uses SR 9 and SR 96



Puget Sound Regional Transportation Recovery Plan						
41 - Closure of I-5 And SR 529 Interchange – Snohomish County						
Mitigation Strategies						
Strategy	Implementation				Not Feasible Or N/A	Comments
	Short-Term	Mid-Term	Long-Term			
Alternative Routing	√	√	√			
Adjust Traffic Signal Timings	√	√	√			
Contra-flow Lanes New				√		
HOV Lanes – Convert				√		
HOV Lanes – New			√			
HOV Rules - Change			√			HOV 2 to HOV 3
Construct HOV Bypass			√			Interchange 194, 199
Ramp Metering				√		
Freeway Ramps - New				√		
Freeway Ramps – Closure				√		
Truck Restrictions	√	√	√			Overweight to Everett (SR 96)
Truck Preferences				√		
Shoulder - Convert to Driving Lane				√		
Parking Eliminate/Restrict	√	√	√			SR 9, SR 204, SR 528
Turn Prohibitions	√	√	√			SR 9, SR 204, SR 528
Ferry Service Relocation				√		
Ferry Service New				√		
Ferry Service Increase Existing				√		
Congestion Pricing				√		
Vanpool Carpool Incentives	√	√	√			
Park – Ride Lots New/Expand	√	√	√			
Alternating Driving Days				√		
Bike Lanes				√		
Tolling Adjustments				√		
Transit Service New		√	√			
Transit Service Increase		√	√			
Improved Incident Management (Patrols)	√	√	√			
Technology – Electronic Signing or Surveillance	√	√	√			
Technology – Signal Interconnects			√			
Convert trails to special motorized use				√		
Tele-commuting	√	√	√			
Staggered Work Shifts	√	√	√			
Compressed Work Week	√	√	√			
Emergency Responder Routes				√		
Adjust Fleet Size				√		

Puget Sound Regional Transportation Recovery Plan					
41 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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Appendix B

Scenario #42 – Closure of US 2 from I-5 to SR 204

A. General Information

For the closure of SR 2 from I-5 to SR 204, planners identified an alternate route for both North and South traffic via State Routes 9 and 531 back onto US 2 (Stevens Pass Highway). The detour for traffic traveling south will entail diverting at Exit 206 from I-5 onto SR 531 to SR 9 to get to US 2. For traffic traveling north, the detour will start at Exit 186 to SR 96 Eastbound (128th St SW), to SR 96 Eastbound to Cathcart Way, Cathcart Way Eastbound to SR 9.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. Snohomish County Department of Emergency Management (DEM)
3. City of Snohomish

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through the ESF – 1 function at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs),

municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
2. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short Term Solutions

Stakeholders identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing, Adjusting Traffic Signal Timings, Restricting/Eliminating road-side parking, implementing Truck Restrictions and Turn Prohibitions on State Routes 9, 204, and 528. See Appendix E – Roadways Toolbox for further information.

2. Mid-Term Alternatives

The Short-Term solutions can be extended to provide Mid-Term Alternatives, as necessary. Planners identified several Mid-Term Alternatives such as establishing new and/or extending transit services. Other alternatives include: Establish or expand Park and Ride lots, Telecommuting, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

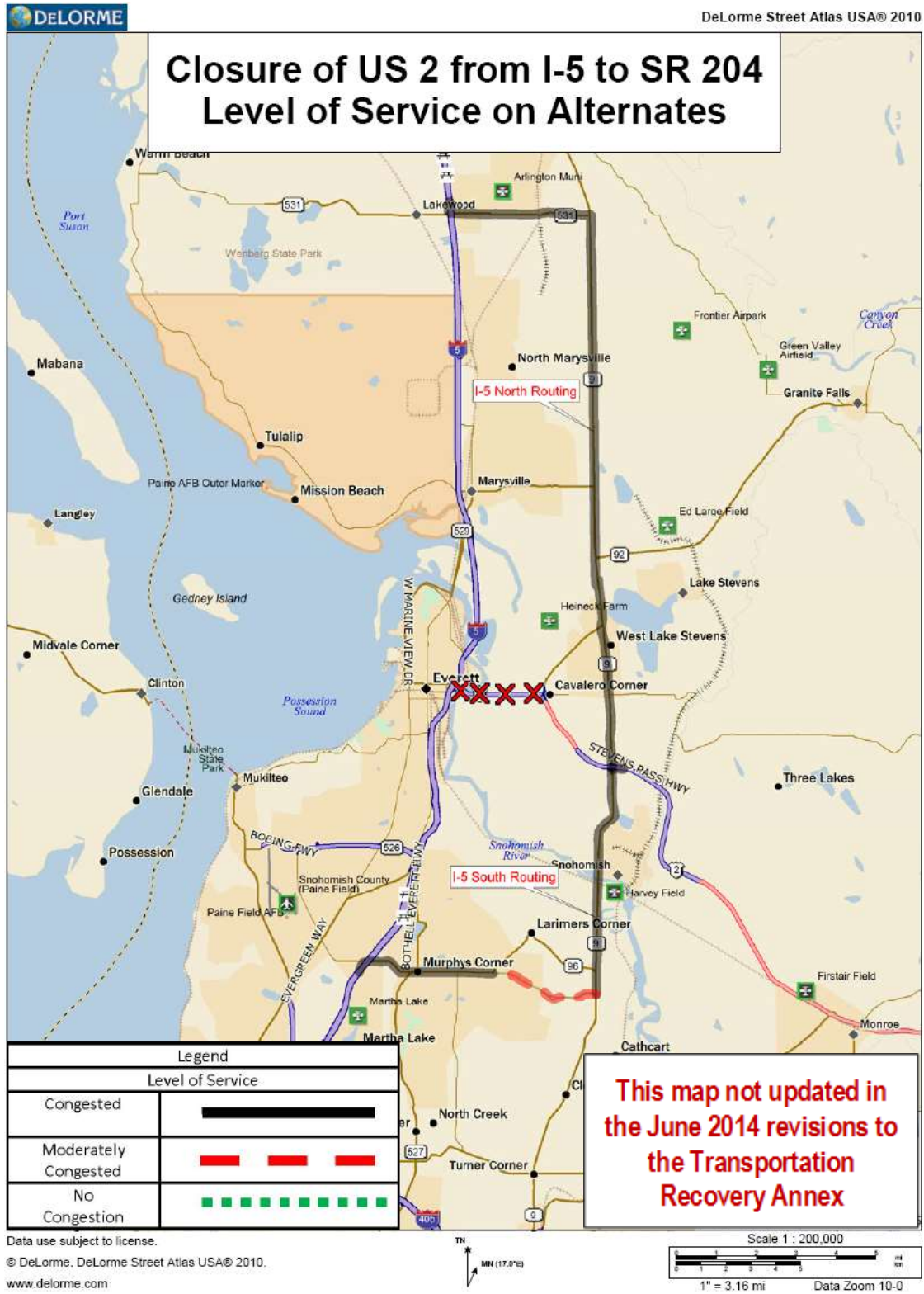
3. Long Term Options

Mid-term alternative transportation options can be extended to long term options, as necessary. In addition, a Long Term option includes changing current HOV rules, constructing an HOV Bypass at Interchange 199 and traffic signal interconnects. See the Roadway Reconstruction and Transportation Mitigation Strategies Toolbox for alternative transportation options for restoring the transportation network. See Appendix E – Roadways Toolbox for further information.



Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
42-Closure of US 2 from I-5 to SR 204 – Snohomish County	
East to West Routing (to/from I-5 (North))	West to East Routing (to/from I-5 (North))
US 2 Westbound (Stevens Pass Highway) US 2 Westbound Exit for SR 9 Northbound SR 9 Northbound SR 9 Northbound to SR 530 Westbound (Traffic Signal) SR 530 Westbound SR 530 Westbound Ramps to I-5 I-5 Northbound or Southbound (Interchange 208)	I-5 Exit 208 (SR 530) Ramp to SR 530 Eastbound (Traffic Signal) SR 530 Eastbound SR 9 Southbound (Traffic Signal) SR 9 Southbound Exit for US 2 Eastbound US 2 Eastbound (Stevens Pass Hwy)
East to West Routing (to/from I-5 (South))	West to East Routing (to/from I-5 (South))
US 2 Westbound (Stevens Pass Highway) US 2 Westbound to SR 9 Southbound SR 9 Southbound SR 9 Southbound to Cathcart Way Cathcart Way Westbound to SR 96 SR 96 Westbound (128 th St SW) SR 96 Westbound to I-5 Southbound Ramp I-5 Southbound (Interchange 186)	I-5 Northbound Exit 186 (SR 96) Ramp to SR 96 Eastbound (Traffic Signal) SR 96 Eastbound (128 th St SW) SR 96 Eastbound to Cathcart Way Cathcart Way Eastbound Cathcart Way Eastbound to SR 9 SR 9 Northbound (Traffic Signal) SR 9 Southbound to US 2 Eastbound US 2 Eastbound (Stevens Pass Hwy)

Note: SR 531 and SR 538 can provide access to I-5 for local traffic



Puget Sound Regional Transportation Recovery Plan					
42-Closure of US 2 from I-5 to SR 204 – Snohomish County					
Mitigation Strategies					
Strategy	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Alternative Routing	√	√	√		
Adjust Traffic Signal Timings	√	√	√		
Contra-flow Lanes New			√		
HOV Lanes – Convert			√		
HOV Lanes – New				√	
HOV Rules - Change			√		HOV 3 HOV 4
Construct HOV Bypass			√		Interchange 199
Ramp Metering				√	
Freeway Ramps - New				√	
Freeway Ramps – Closure				√	
Truck Restrictions				√	
Truck Preferences				√	
Shoulder - Convert to Driving Lane				√	
Parking Eliminate/Restrict	√	√	√		SR 9, SR 531
Turn Prohibitions	√	√	√		SR 9, SR 531
Ferry Service Relocation				√	
Ferry Service New				√	
Ferry Service Increase Existing				√	
Congestion Pricing				√	
Vanpool Carpool Incentives	√	√	√		
Park – Ride Lots New/Expand	√	√	√		
Alternating Driving Days				√	
Bike Lanes				√	
Tolling Adjustments				√	
Transit Service New		√	√		
Transit Service Increase		√	√		
Improved Incident Management (Patrols)	√	√	√		
Technology – Electronic Signing or Surveillance	√	√	√		
Technology – Signal Interconnects			√		
Convert trails to special motorized use				√	
Tele-commuting	√	√	√		
Staggered Work Shifts	√	√	√		
Compressed Work Week	√	√	√		
Emergency Responder Routes				√	
Adjust Fleet Size				√	

Puget Sound Regional Transportation Recovery Plan					
42-Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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Appendix B

Scenario #43 – Closure of I-5 at the I-405 Interchange (N)

A. General Information

Several scenarios and alternate routes relate to this section of I-5. The information within this appendix includes maps and routing information for the following:

- I-5 Through Traffic Routing
- I-5 (North) to/from I-405 Traffic Routing
- I-5 (South) to/from I-405 Traffic Routing
- I-5 to/from SR 525 Traffic Routing

See Route Maps and Alternate Route Plan for specific routing information. Although no routes in King County are involved, this disruption will have effects on traffic flow in King Co. so they are involved in the notification.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. King County Office of Emergency Management (OEM)
3. Snohomish County Department of Emergency Management (DEM)
4. City of Lynnwood
5. City of Mill Creek
6. City of Lake Forest Park
7. City of Edmonds

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency

Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through the ESF – 1 function at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs), municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
2. King County Emergency Coordination Center will notify Auburn Emergency Management, Bellevue Emergency Preparedness, Bothell Emergency Preparedness, Federal Way Emergency Management, Issaquah Emergency Management, Kent Emergency Management, Kirkland Emergency Management, Mercer Island Emergency Services, Redmond Office of Emergency Management, Renton Emergency Management, Seattle Office of Emergency Management, Shoreline Emergency Services, Skykomish Emergency Management, Snoqualmie Emergency Management, Tukwila Emergency Services and Woodinville Emergency Management as well as the Cities of Burien, Normandy Park, SeaTac and Des Moines and the Muckleshoot and Snoqualmie Tribes.
3. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement which includes the Tulalip Tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short Term Solutions

Stakeholders identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing, Adjusting Traffic Signal Timings, Restrict/Eliminate Road side parking, Truck Restrictions and Turn Prohibitions on 164th Street, 44th Avenue, and State Routes 99, and 104. See Appendix E – Roadways Toolbox for further information.

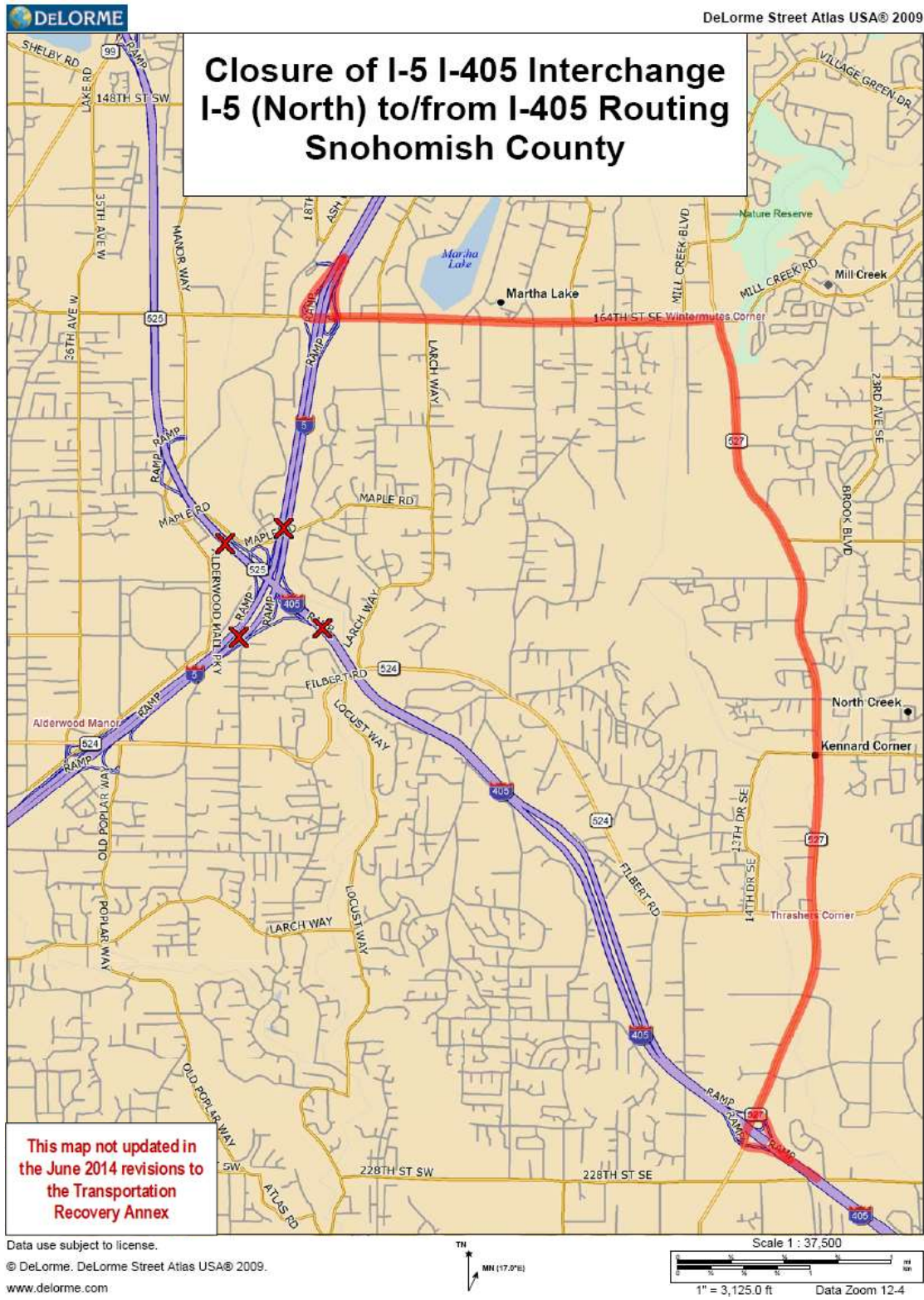
2. Mid-Term Alternatives

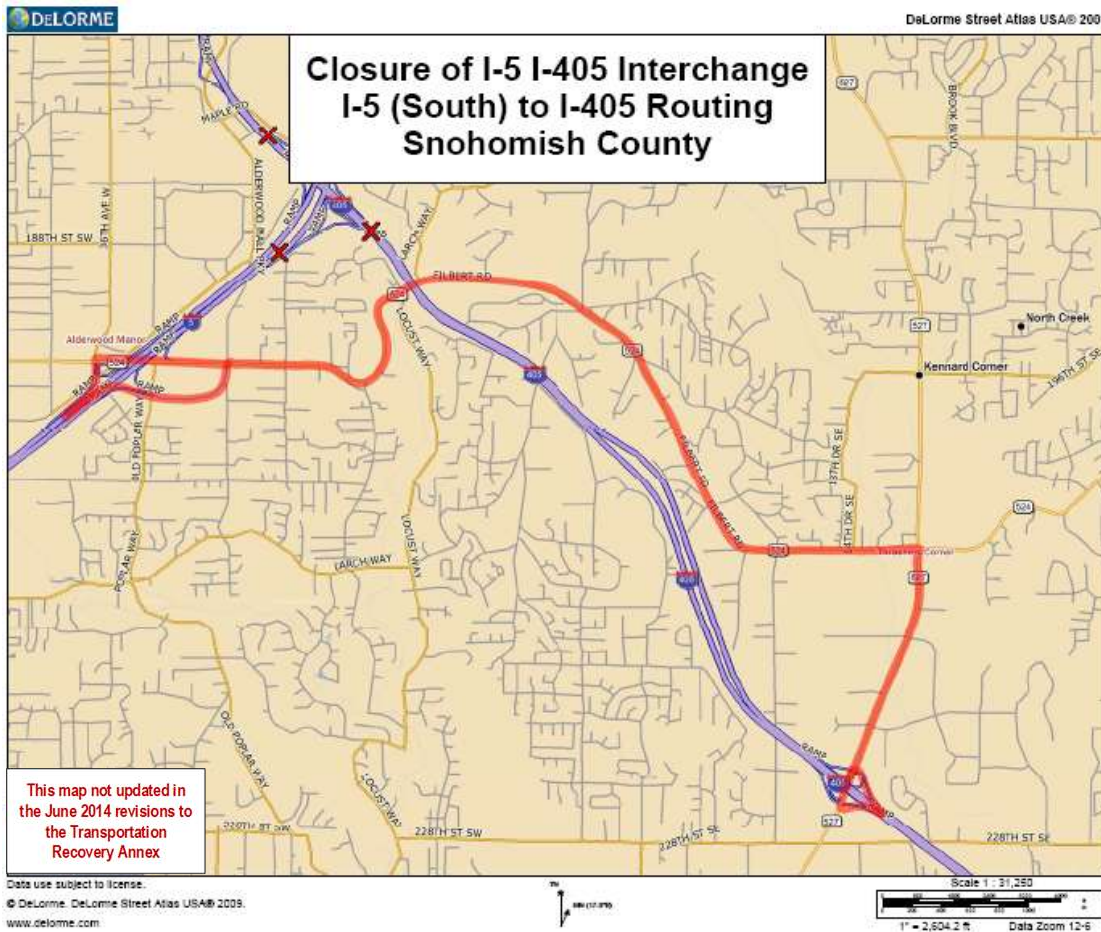
The Short-Term solutions can be extended to provide Mid-Term Alternatives, as necessary. Several Mid-Term Alternatives have been identified such as converting interstates and freeway shoulders to HOV driving lanes, establishing new and/or extending transit services. Other alternatives include: Establish or expand Park and Ride lots, Tele-commuting, Truck Preferences, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long Term Options

Mid-term alternative transportation options can be extended to long term options, as necessary. In addition, a Long Term option includes Freeway Ramp closures, changing current HOV rules, convert portions of Interstates 5 and 405 to HOV, constructing an HOV Bypass at bottleneck area and traffic signal interconnects at 164th Street, 44th Avenue, and State Routes 99, and 104. See Appendix E – Roadways Toolbox for further information.







Note: Consider Alderwood Mall Parkway/Boulevard and 36th Ave West as secondary routes.
(See maps)

Note: Use Ballenger Way and SR 522 as a secondary route

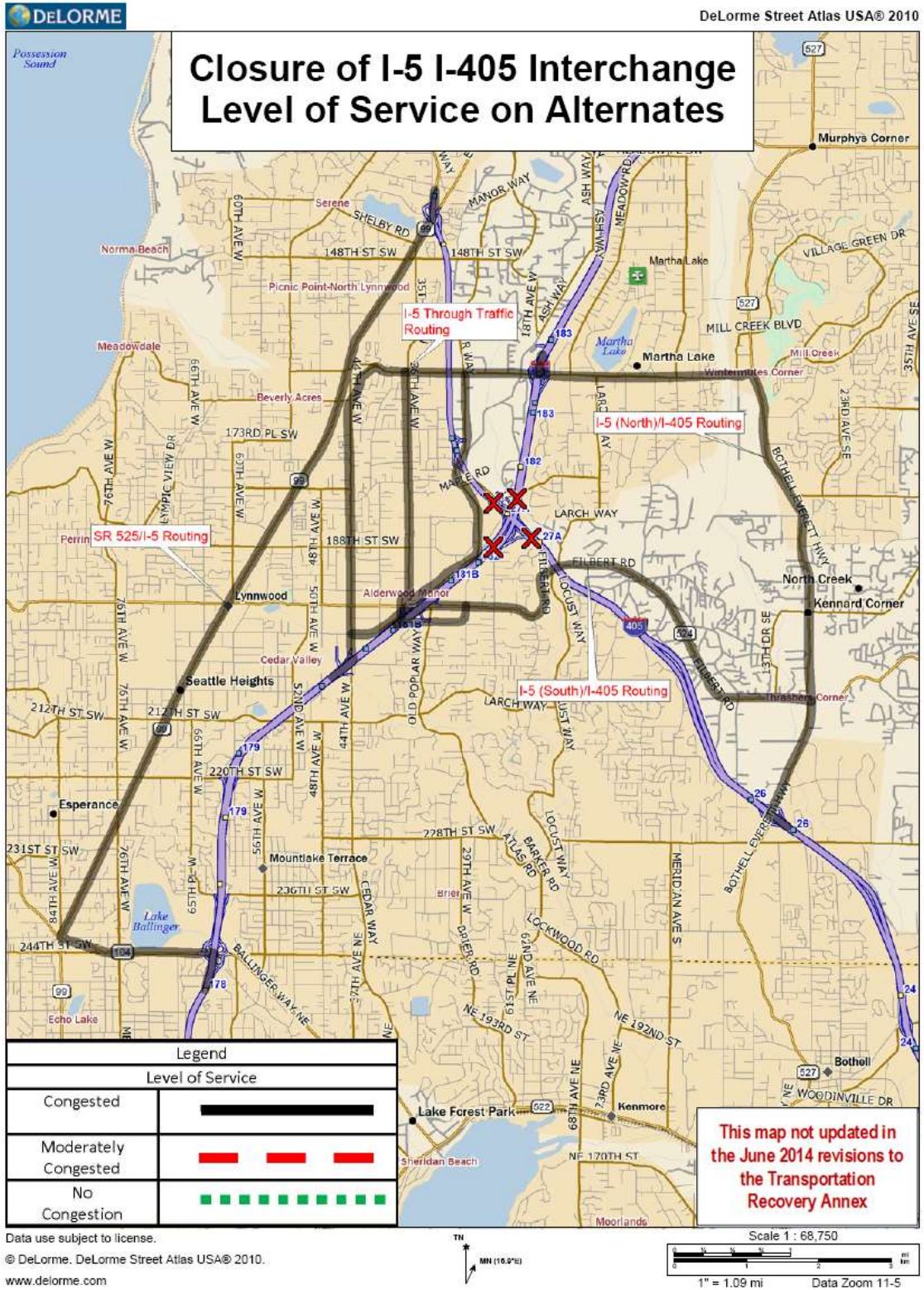
Note: Use SR 527 as a secondary route

Note: Use 220th Street SW as a secondary exit (See map)



APPENDIX B | SCENARIO #43 CLOSURE OF I-5 AT THE I-405 INTERCHANGE (N)

Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
43 - Closure of I-5 I-405 Interchange – Snohomish County	
North to South (I-5 (North) to I-405 Routing)	South to North (I-5 (North) to I-405 Routing)
I-5 Southbound I-5 Southbound Exit 183 (164 th St SW) (Traffic Sig.) 164 th St SW Eastbound 164 th St SE Eastbound 164 th St SE Eastbound to SR 527 Southbound (T.S.) SR 527 Southbound (Bothell Everett Hwy) SR 527 Southbound (Bothell Everett Hwy) - Exit to I-405 Southbound Ramp I-405 Southbound (Interchange 26) I-405 Southbound	I-405 Northbound I-405 Northbound Exit 26 (SR 527) I-405 Northbound ramp to SR 527 SR 527 Northbound (Traffic Signal) SR 527 Northbound SR 527 Northbound to 164 th St SE West (T.S.) 164 th St SE Westbound 164 th St SW Westbound 164 th St SW ramp to I-5 Northbound I-5 Northbound
North to South (I-5 Through Traffic Routing)	South to North (I-5 Through Traffic Routing)
I-5 Southbound I-5 Southbound Exit 183 (164 th St SW Eastbound) 164 th St SW Eastbound 164 th St SW Eastbound becomes 44 th Ave W West 44 th Ave W Southbound 44 th Ave W Southbound 44 th Ave W Southbound Ramp to I-5 Southbound I-5 Southbound (Interchange 181) Note: Alternative is Alderwood Mall Parkway	I-5 Northbound I-5 Northbound Exit 181A (44 th Ave W) 44 th Ave W Northbound (Traffic Signal) 44 th Ave W Northbound 44 th Ave Northbound becomes 164 th St SW 164 th St SW Eastbound 164 th Ave SW Ramp to I-5 Northbound I-5 Northbound (Interchange 183) Note: Alternative is Alderwood Mall Parkway
North to South (SR 525 to/from I-5 Routing)	South to North (SR 525 to/from I-5 Routing)
SR 525 Southbound SR 525 Southbound to SR 99 (Evergreen Way) SR 99 Southbound (Evergreen Way) SR 99 Southbound (Pacific Hwy) SR 99 Southbound (Pacific Hwy) Exit for SR 104 SR 104 Eastbound SR 104 Eastbound (Edmonds Way) SR 104 Eastbound (NW 205 th St) SR 104 Eastbound (Lake Ballinger Way) SR 104 Eastbound Exit to I-5 Southbound Ramp to I-5 Southbound I-5 Southbound (Interchange 177)	I-5 Northbound I-5 Northbound Exit 177 (SR 104) Ramp to SR 104 Westbound SR 104 Westbound SR 104 Westbound (Lake Ballinger Way) SR 104 Westbound (NW 205 th St) SR 104 Westbound (Edmonds Way) SR 104 Westbound Exit for SR 99 North SR 99 Northbound (Pacific Hwy) SR 99 Northbound (Evergreen Way) SR 99 Northbound Exit to SR 525 Northbound SR 525 Northbound
East to West (I-5 South to/from I-405 Routing)	West to East (I-5 South to/from I-405 Routing)
I-5 Northbound I-5 Northbound Exit 181 B Ramp to Alderwood Mall Pkwy Alderwood Mall Parkway Northbound Alderwood Mall Parkway Northbound to SR 524 SR 524 Eastbound (196 th St SW) (Traffic Signal) SR 524 Eastbound (196 th St SW) SR 524 Eastbound (Filbert Rd) SR 524 Eastbound (Filbert Rd) to SR 527 (TS) SR 527 Southbound (Bothell Everett Hwy) SR 527 Southbound Ramp to I-405 Southbound I-405 Southbound (Interchange 26)	I-405 Northbound I-405 Northbound Exit 26 (SR 527) SR 527 Northbound (Everett Bothell Hwy) SR 527 Northbound to SR 524 West (Traffic Signal) SR 524 Westbound (Filbert Rd) SR 524 Westbound (196 th St SW) SR 524 Westbound to ramp to I-5 South (Traf. Sig.) 37 th Ave W (Ramp to I-5 Southbound) I-5 Southbound



Puget Sound Regional Transportation Recovery Plan					
43 - Closure of I-5 I-405 Interchange - Snohomish County					
Mitigation Strategies					
Strategy	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Alternative Routing	√	√	√		
Adjust Traffic Signal Timings	√	√	√		
Contra-flow Lanes New				√	
HOV Lanes – Convert			√		I-5, I-405
HOV Lanes – New				√	
HOV Rules - Change			√		HOV 3, HOV 4
Construct HOV Bypass			√		Bottlenecks
Ramp Metering			√		
Freeway Ramps - New				√	
Freeway Ramps – Closure			√		Interchanges near closure point
Truck Restrictions	√	√	√		Time of Day
Truck Preferences		√	√		Critical Supplies, Mall Supply
Shoulder - Convert to Driving Lane		√	√		Interstates/Freeways HOV
Parking Eliminate/Restrict		√	√		164 th St, 44 th Ave
Turn Prohibitions		√	√		164 th St, 44 th Ave, SR 99, SR 104
Ferry Service Relocation				√	
Ferry Service New				√	
Ferry Service Increase Existing				√	
Congestion Pricing				√	
Vanpool Carpool Incentives	√	√	√		
Park – Ride Lots New/Expand	√	√	√		
Alternating Driving Days	√	√	√		
Bike Lanes		√	√		
Tolling Adjustments				√	
Transit Service New		√	√		
Transit Service Increase		√	√		
Improved Incident Management (Patrols)	√	√	√		
Technology – Electronic Signing or Surveillance	√	√	√		
Technology – Signal Interconnects		√	√		164 th St, 44 th Ave, SR 99, SR 104
Convert trails to special motorized use		√	√		Burke-Gilman, Interurban
Tele-commuting	√	√	√		
Staggered Work Shifts	√	√	√		
Compressed Work Week	√	√	√		
Emergency Responder Routes	√	√	√		
Adjust Fleet Size				√	

Puget Sound Regional Transportation Recovery Plan					
43 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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Appendix B

Scenario #44 – Closure of SR 9 over the Snohomish River

A. General Information

For the closure of SR 9 over the Snohomish River, planners identified an alternate route that will entail diverting traffic from SR 9 onto SR 96 to I-5; then to US 2 at Everett to SR 204 back onto SR 9.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. Snohomish County Department of Emergency Management (DEM)
3. City of Everett
4. City of Mill Creek

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through ESF – 1 at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs),

municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
2. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.

F. Current Available Alternatives

There are two local alternative routes. If the Airport Way Bridge is in service, traffic from SR 9 Northbound would exit SR 9 onto Airport Way, go north on Airport Way over the bridge and into the City of Snohomish. Then turn left onto 2nd Street and continue west on 2nd Street to SR 9 turning right and proceeding northbound. Southbound traffic could exit SR 9 on 2nd Street and continue east to Airport Way (99th Ave SE), turn right and proceed south to SR 9.

The other alternative is to use Lowell Larimer Road.

G. Transportation Mitigation Strategies

1. Short Term Solutions

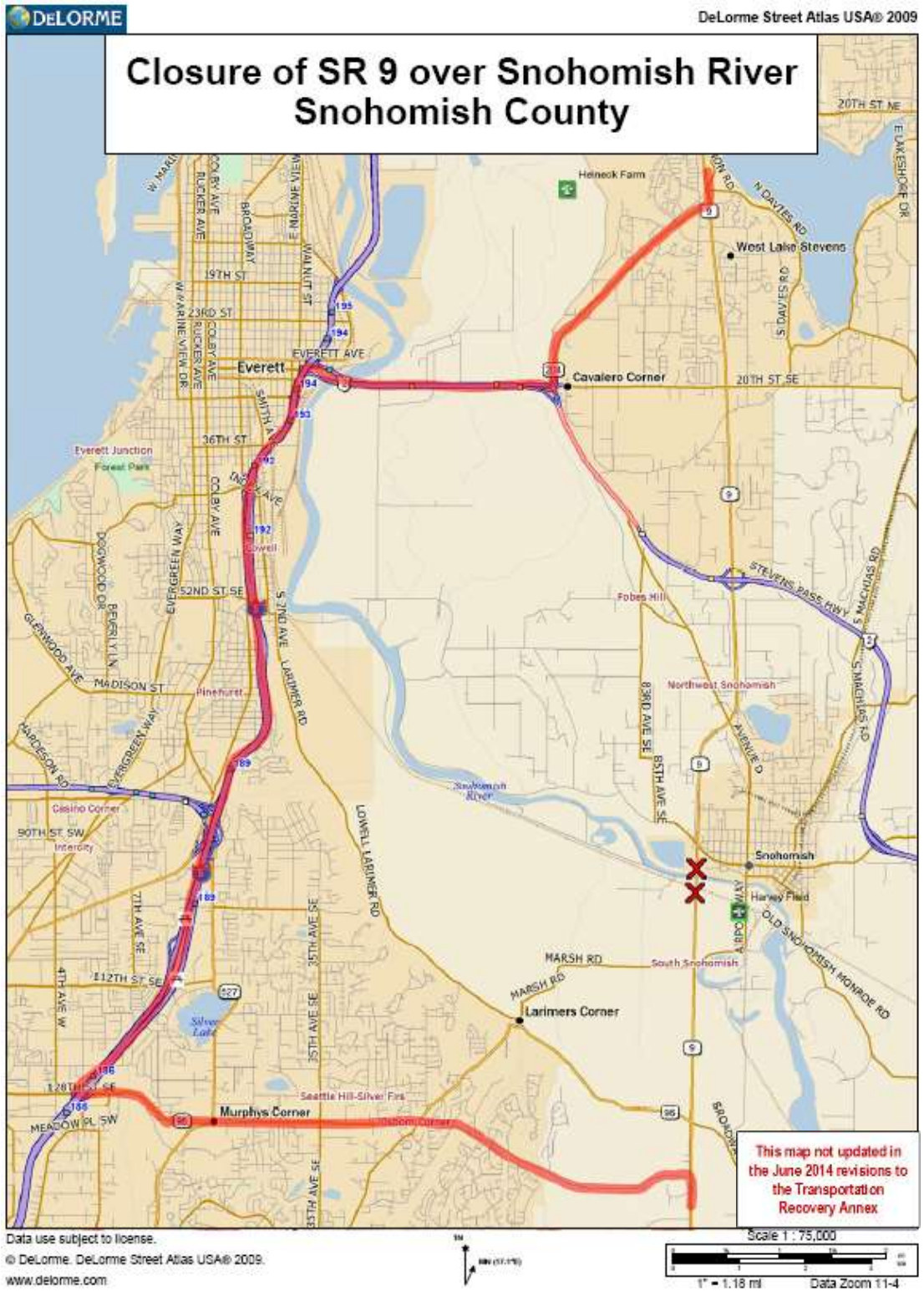
Stakeholders identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing, Adjusting Traffic Signal Timings, and establishing or expanding Park and Ride lots. See Appendix E – Roadways Toolbox for further information.

2. Mid-Term Alternatives

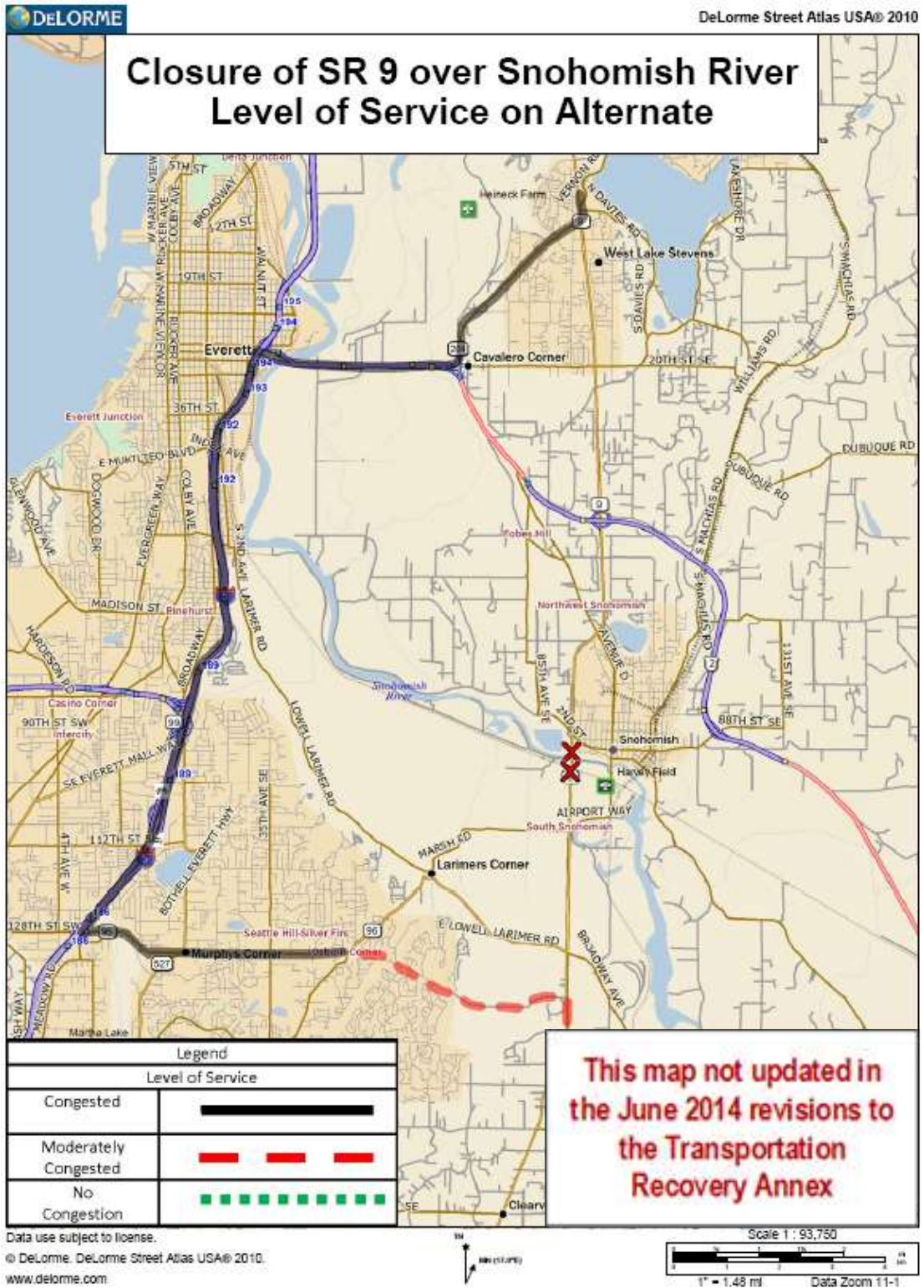
The Short-Term solutions can be extended to provide Mid-Term Alternatives, as necessary. Planners identified several Mid-Term Alternatives such as Turn Prohibitions on Lowell Larimer and River Road. Other alternatives include: Tele-commuting, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long Term Options

Mid-term alternative transportation options can be extended to long term options, as necessary. In addition, a Long Term option includes Truck Restrictions, changing current HOV rules, incorporating technology in traffic signal interconnects and freeway ramp metering on I-5. See Appendix E – Roadways Toolbox for further information.



Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
44 - Closure SR 9 over Snohomish River – Snohomish County	
North to South Routing	South to North Routing
SR 9 Southbound	SR 9 Northbound
SR 9 Southbound to SR 204 Westbound	SR 9 Northbound to Cathcart Way
SR 204 Westbound	Cathcart Way Westbound
SR 204 Westbound Exit to US 2 West	Cathcart Way Westbound to SR 96
US 2 Westbound	SR 96 Westbound (132 nd St SE)
US 2 Westbound Exit to I-5 Southbound	SR 96 Westbound (132 nd St SE) (Traffic Signal)
I-5 Southbound (Interchange 194)	SR 96 Westbound (128 th St SE)
I-5 Southbound	SR 96 Westbound Ramp to I-5 Northbound
I-5 Southbound Exit 186 (SR 96 Eastbound)	I-5 Northbound (Interchange 186)
SR 96 Eastbound (128 th St SE)	I-5 Northbound
SR 96 Eastbound (132 nd St SE)	I-5 Northbound Exit 194 (US 2)
SR 96 Eastbound (132 nd St SE) to Cathcart Way	Ramp for US 2 Eastbound
Cathcart Way Eastbound	US 2 Eastbound
Cathcart Way Eastbound to SR 9	US 2 Eastbound Exit for SR 204 Eastbound
SR 9 Southbound	SR 204 Eastbound
	SR 204 Eastbound to SR Northbound (Traffic Signal)
	SR 9 Northbound



Puget Sound Regional Transportation Recovery Plan						
44 - Closure of SR 9 over Snohomish River – Snohomish County						
Mitigation Strategies						
Strategy	Implementation				Not Feasible Or N/A	Comments
	Short-Term	Mid-Term	Long-Term			
Alternative Routing	√	√	√			
Adjust Traffic Signal Timings	√	√	√			
Contra-flow Lanes New				√		
HOV Lanes – Convert				√		
HOV Lanes – New				√		
HOV Rules - Change			√		HOV 3 HOV 4	
Construct HOV Bypass				√		
Ramp Metering			√		I-5	
Freeway Ramps - New				√		
Freeway Ramps – Closure				√		
Truck Restrictions			√		Unsafe Truck Routes	
Truck Preferences				√		
Shoulder - Convert to Driving Lane				√		
Parking Eliminate/Restrict				√		
Turn Prohibitions		√	√		Lowell Larimer, River Rd	
Ferry Service Relocation				√		
Ferry Service New				√		
Ferry Service Increase Existing				√		
Congestion Pricing				√		
Vanpool Carpool Incentives	√	√	√			
Park – Ride Lots New/Expand	√	√	√			
Alternating Driving Days				√		
Bike Lanes				√		
Tolling Adjustments				√		
Transit Service New				√		
Transit Service Increase				√		
Improved Incident Management (Patrols)	√	√	√			
Technology – Electronic Signing or Surveillance	√	√	√			
Technology – Signal Interconnects			√		SR 96	
Convert trails to special motorized use				√		
Tele-commuting	√	√	√			
Staggered Work Shifts	√	√	√			
Compressed Work Week	√	√	√			
Emergency Responder Routes			√			
Adjust Fleet Size				√		

Puget Sound Regional Transportation Recovery Plan					
44 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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Appendix B

Scenario #45 – Closure of I-405 at SR 527

A. General Information

The alternate route identified for the closure of I-405 at SR 527 will entail diverting traffic from I-405 onto SR 522 to SR 104 to I-5 back to I-405. For detailed information, see Alternate Routing Plan and Route Map.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. King County Office of Emergency Management (OEM)
3. Snohomish County Department of Emergency Management (DEM)
4. Cities of Lake Forest Park, Kenmore and Bothell

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. . The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through ESF – 1 at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs), municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.
2. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
3. King County Emergency Coordination Center will notify Auburn Emergency Management, Bellevue Emergency Preparedness, Bothell Emergency Preparedness, Federal Way Emergency Management, Issaquah Emergency Management, Kent Emergency Management, Kirkland Emergency Management, Mercer Island Emergency Services, Redmond Office of Emergency Management, Renton Emergency Management, Seattle Office of Emergency Management, Shoreline Emergency Services, Skykomish Emergency Management, Snoqualmie Emergency Management, Tukwila Emergency Services and Woodinville Emergency Management as well as the Cities of Burien, Normandy Park, SeaTac and Des Moines and the Muckleshoot and Snoqualmie Tribes.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short-Term Solutions

Stakeholders identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing, Adjusting Traffic Signal Timings, Restricting/Eliminating road- side parking, institute Truck Restrictions and Turn Prohibitions on 164th Street and SR 522. See Appendix E – Roadways Toolbox for further information.

2. Mid-Term Alternatives

Several Mid-Term Alternatives have been identified such as converting interstates and freeway shoulders to HOV driving lanes, establishing new and/or extending transit services. Other alternatives include: Convert trails to special motorized use, Establish or expand Park and Ride lots, Tele-commuting, Truck Preferences, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long-Term Options

Mid-term alternative transportation options can be extended to long-term options, as necessary. In addition, a Long-Term option includes Freeway Ramp closures, changing current HOV rules, convert portions of Interstates 5 and 405 to HOV, constructing an HOV Bypass at bottleneck area and traffic signal interconnects at 164th Street and State Route 522. See Appendix E – Roadways Toolbox for further information.



Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
45 - Closure of I-405 SR 527 Interchange – Snohomish County	
North to South Local SR 527 Traffic Interstate traffic to I-90 Eastbound	South to North Routing Local 527 Traffic Interstate traffic us I-90 Westbound
- *SR 527 Southbound	I-405 Northbound
- *To 164 th St Westbound (Traffic Signal)	I-405 Northbound Exit 23 (SR 522 Westbound)
- *164 th St SE Westbound	Ramp to SR 522 Westbound
- *164 th St SW Westbound	SR 522 Westbound (Woodinville Rd)
- *Ramp to I-5 Southbound	*SR 522 Westbound (Intersection w/ SR 527)
I-5 Southbound (Interchange 183)	SR 522 Westbound (Bothell Way NE)
I-5 Southbound	SR 522 Westbound (NE Bothell Way)
I-5 Southbound Exit 177 (SR 104 Eastbound)	SR 522 Westbound Ramp to SR 104 (Ballinger Way)
Ramp to SR 104 (Traffic Signal)	SR 104 Westbound (Ballinger Way NE)
SR 104 Eastbound (Ballinger Way NE)	SR 104 Westbound Ramp to I-5 Northbound
SR 104 Eastbound to SR 522 (Traffic Signal)	I-5 Northbound (Interchange 177)
SR 522 Westbound (NE Bothell Way)	- *SR 527 Traffic Exits I-5 Northbound at
SR 522 Westbound (Bothell Way NE)	Exit 183 (164 th St SW)
*SR 522 Westbound (Intersection w/ SR 527)	- *164 th St SW Eastbound
SR 522 Westbound (Woodinville Rd)	- *164 th St SE Eastbound
Ramp to I-405 Southbound	- *SR 527 Northbound Traffic Signal
I-405 Southbound (Interchange 23)	- *SR 527 Northbound

Note – Local traffic to from SR 527 accesses alternative Route at locations noted with asterisk *.

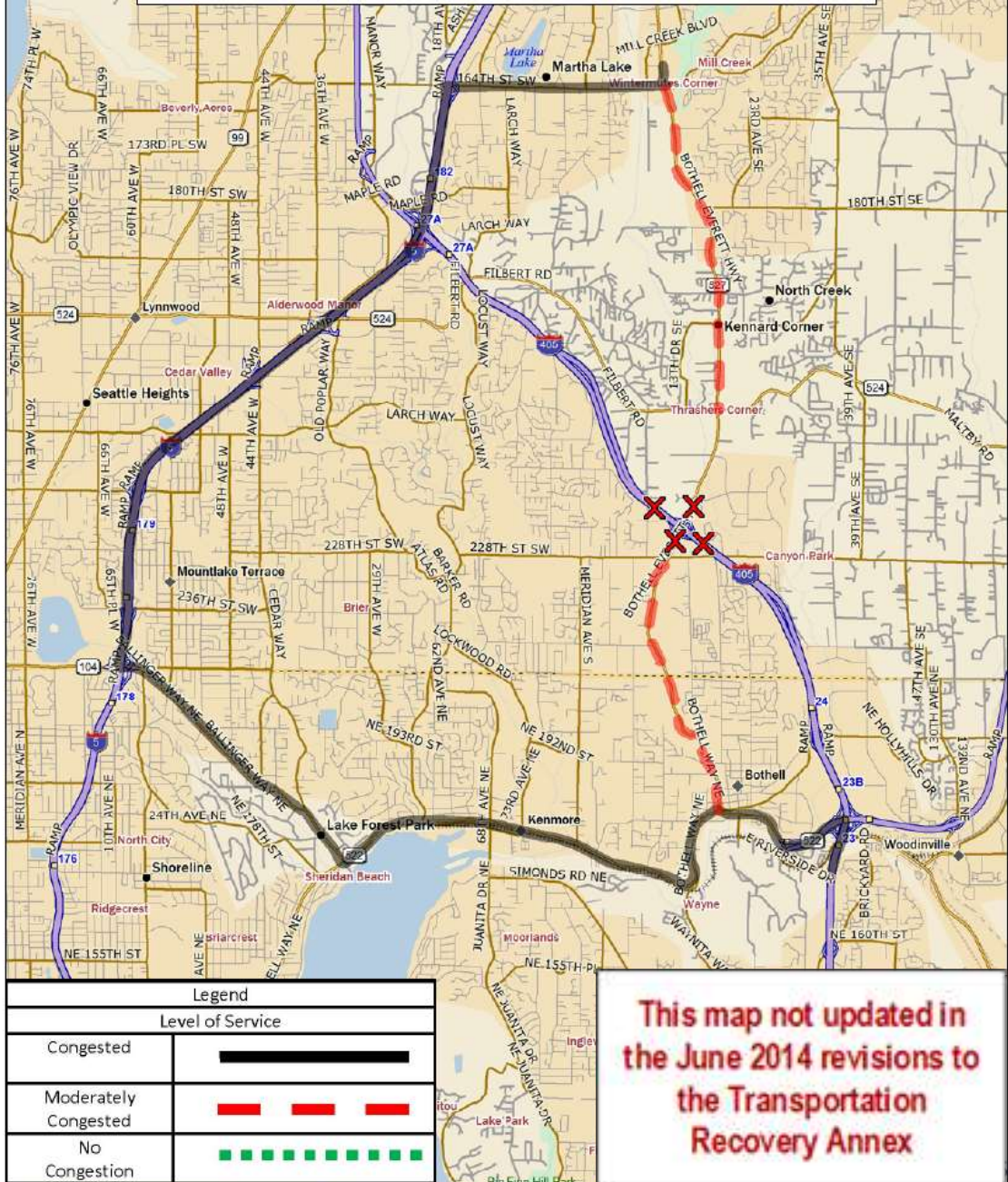
Note – I-405 closed at I-5 Interchange.

Note: Interstate traffic uses I-90, local 527 traffic uses SR 522 and SR 9



DeLorme Street Atlas USA® 2010

Closure of I-405 SR 527 Interchange Level of Service on Alternates



Data use subject to license.

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Puget Sound Regional Transportation Recovery Plan					
45 - Closure of I-405 SR 527 Interchange - Snohomish County					
Mitigation Strategies					
Strategy	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Alternative Routing	√	√	√		
Adjust Traffic Signal Timings	√	√	√		
Contra-flow Lanes New				√	
HOV Lanes – Convert			√		I-5, I-405
HOV Lanes – New				√	
HOV Rules - Change			√		HOV 3, HOV 4
Construct HOV Bypass			√		Bottlenecks
Ramp Metering			√		
Freeway Ramps - New				√	
Freeway Ramps – Closure			√		Interchanges near closure point
Truck Restrictions	√	√	√		Unsafe Truck Routes
Truck Preferences		√	√		Critical Supplies
Shoulder - Convert to Driving Lane		√	√		Interstates/Freeways HOV
Parking Eliminate/Restrict		√	√		164 th St
Turn Prohibitions		√	√		164 th St, SR 522
Ferry Service Relocation				√	
Ferry Service New				√	
Ferry Service Increase Existing				√	
Congestion Pricing				√	
Vanpool Carpool Incentives	√	√	√		
Park – Ride Lots New/Expand	√	√	√		
Alternating Driving Days	√	√	√		
Bike Lanes		√	√		
Tolling Adjustments				√	
Transit Service New		√	√		
Transit Service Increase		√	√		
Improved Incident Management (Patrols)	√	√	√		
Technology – Electronic Signing or Surveillance	√	√	√		
Technology – Signal Interconnects			√		164 th St, SR 522
Convert trails to special motorized use		√	√		
Tele-commuting	√	√	√		
Staggered Work Shifts	√	√	√		
Compressed Work Week	√	√	√		
Emergency Responder Routes	√	√	√		
Adjust Fleet Size				√	

Puget Sound Regional Transportation Recovery Plan					
45 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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Appendix B

Scenario #46 – Closure of SR 522 at the Snohomish River

A. General Information

Planners identified two alternative routes as primary and secondary for traffic in response to the closure of SR 522 over the Snohomish River. The secondary route presented will be used only if the primary route is impassable. Detours for this section will entail rerouting traffic onto SR 9 to US 2 then back onto SR 522 (primary). If the primary route is deemed impassable, the secondary route entails diverting traffic from at I-405 to I-5 to US 2 back onto SR 522.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. King County Office of Emergency Management (OEM)
3. Snohomish County Department of Emergency Management (DEM)
4. Cities of Everett, Snohomish, Woodinville and Duvall

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through ESF – 1 at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs),

municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
2. King County Emergency Coordination Center will notify Auburn Emergency Management, Bellevue Emergency Preparedness, Bothell Emergency Preparedness, Federal Way Emergency Management, Issaquah Emergency Management, Kent Emergency Management, Kirkland Emergency Management, Mercer Island Emergency Services, Redmond Office of Emergency Management, Renton Emergency Management, Seattle Office of Emergency Management, Shoreline Emergency Services, Skykomish Emergency Management, Snoqualmie Emergency Management, Tukwila Emergency Services and Woodinville Emergency Management as well as the Cities of Burien, Normandy Park, SeaTac and Des Moines and the Muckleshoot and Snoqualmie Tribes.
3. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short Term Solutions

Stakeholders identified several short term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing, Adjusting Traffic Signal Timings, Restricting/Eliminating road- side parking on SR 9, instituting Truck Restrictions and Turn Prohibitions on SR 9. See Appendix E – Roadways Toolbox for further information. See

2. Mid-Term Alternatives

Planners identified several Mid-Term Alternatives such increased transit services. Other alternatives include: Tele-commuting, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long Term Options

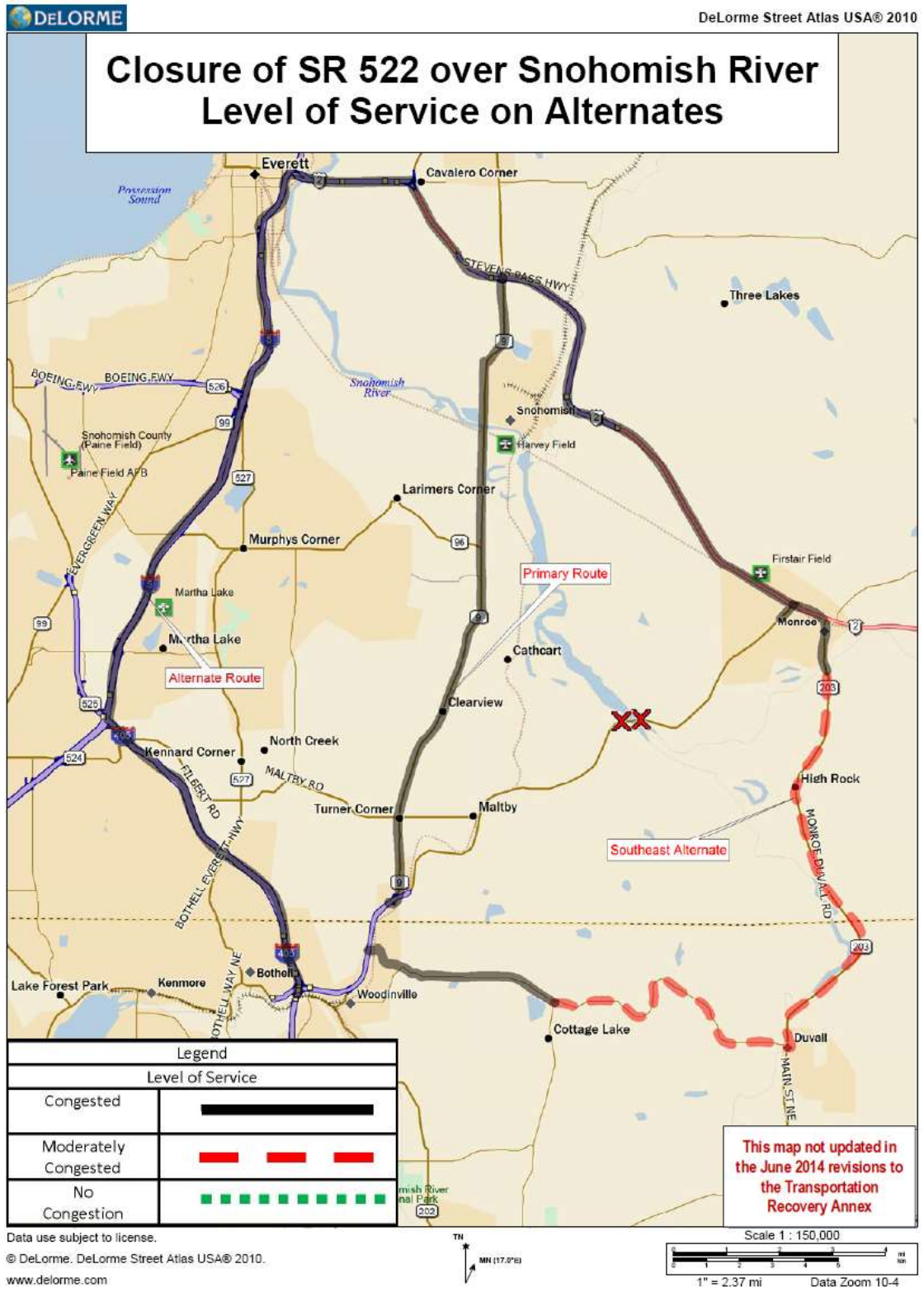
Mid-term alternative transportation options can be extended to long term options, as necessary. In addition, a Long Term option includes: Establish or expand Park and Ride lots, van/car pool incentives and new transit services. See Appendix E – Roadways Toolbox for further information.



Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
46 - Closure of SR 522 over Snohomish River – Snohomish County	
East to West Routing	West to East Routing
SR 522 Eastbound	SR 522 Eastbound
SR 522 to US 2 Westbound (Traffic Signal)	SR 522 Eastbound Exit to SR 9
US 2 Westbound (Stevens Pass Hwy)	Ramp to SR 9 (Traffic Signal)
US 2 Westbound Exit to SR 9	SR 9 Northbound (Snohomish Woodinville Hwy)
Ramp to SR 9	SR 9 Northbound
SR 9 Southbound	SR 9 Northbound Ramp for US 2 Eastbound
SR 9 Southbound (Snohomish Woodinville Hwy)	Ramp to US 2 Eastbound
SR 9 Southbound Exit for SR 522 Westbound	US 2 Eastbound (Stevens Pass Hwy)
SR 522 Ramp	US 2 Eastbound Ramp for SR 522 (Traffic Signal)
SR 522	SR 522

Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
46 - Closure of SR 522 over Snohomish River – Snohomish County	
East to West Alternate Route	West to East Alternate Route
SR 522 Eastbound to US 2	I-405 Northbound
US 2 Westbound (Stevens Pass Highway)	I-5 Northbound
US 2 Westbound (Stevens Pass Hwy) Exit to I-5	I-5 Northbound Exit to US 2 (Exit 194)
I-5 Southbound	Ramp to US 2 Eastbound
I-5 Southbound Exit 182 (I-405)	US 2 Eastbound (Stevens Pass Highway)
I-405 Southbound	US 2 Eastbound Exit for SR 522 (Traffic Signal)
I-405 Southbound Exit 23 (SR 522)	SR 522
SR 522	

Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
46 - Closure of SR 522 over Snohomish River – Snohomish County	
East to West Routing (Southeast Alternative)	West to East Routing (Southeast Alternative)
SR 522 Eastbound	SR 522 Eastbound
SR 522 to US 2 Eastbound (Traffic Signal)	SR 522 Eastbound Exit to NE 195 th St
US 2 Eastbound (Stevens Pass Hwy)	NE 195 th St Eastbound
US 2 Eastbound Exit to SR 203	NE N Woodinville Rd Eastbound
SR 203 Southbound (S Lewis St)	NE Woodinville Duvall Rd Eastbound
SR 203 Southbound (Monroe Duvall Rd)	SR 203 Northbound (Traffic Signal)
SR 203 Southbound (Duvall Monroe Rd NE)	SR 203 Northbound (Duvall Monroe Rd NE)
NE Woodinville Duvall Rd Westbound	SR 203 Northbound (Monroe Duvall Rd)
NE Woodinville Rd Westbound	SR 203 Northbound (S Lewis St)
NE 195 th St Westbound	US 2 Westbound
Ramp to SR 522 Westbound	US 2 Westbound to SR 522 (Traffic Signal)
SR 522 Westbound	SR 522



Puget Sound Regional Transportation Recovery Plan						
46 - Closure of SR 522 over Snohomish River – Snohomish County						
Mitigation Strategies						
Strategy	Implementation				Not Feasible Or N/A	Comments
	Short-Term	Mid-Term	Long-Term			
Alternative Routing	√	√	√			
Adjust Traffic Signal Timings	√	√	√			
Contra-flow Lanes New				√		
HOV Lanes – Convert				√		
HOV Lanes – New				√		
HOV Rules - Change				√		
Construct HOV Bypass				√		
Ramp Metering				√		
Freeway Ramps - New				√		
Freeway Ramps – Closure				√		
Truck Restrictions	√	√	√		Unsafe Truck Routes	
Truck Preferences				√		
Shoulder - Convert to Driving Lane				√		
Parking Eliminate/Restrict	√	√	√		SR 9	
Turn Prohibitions	√	√	√		SR 9	
Ferry Service Relocation				√		
Ferry Service New				√		
Ferry Service Increase Existing				√		
Congestion Pricing				√		
Vanpool Carpool Incentives			√			
Park – Ride Lots New/Expand			√			
Alternating Driving Days				√		
Bike Lanes				√		
Tolling Adjustments				√		
Transit Service New		√	√			
Transit Service Increase	√	√	√			
Improved Incident Management (Patrols)	√	√	√			
Technology – Electronic Signing or Surveillance	√	√	√			
Technology – Signal Interconnects				√		
Convert trails to special motorized use				√		
Tele-commuting	√	√	√			
Staggered Work Shifts	√	√	√			
Compressed Work Week	√	√	√			
Emergency Responder Routes				√		
Adjust Fleet Size				√		

Puget Sound Regional Transportation Recovery Plan					
46 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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Appendix B

Scenario #47 – Closure of US 2, SR 9 to the King Co. Line

A. General Information

For the closure of US 2 from SR 9 to the King County line, planners identified an alternate route that will entail diverting traffic from US 2 onto US 97 to SR 970 to I-90 to I-405 to I-5 back onto US 2. For detailed information, see Alternate Routing Plan and Route Map.

B. Lead Agency

(Agency or agencies with the primary responsibility to implement alternative routes)

1. WSDOT
2. WSP

C. Supporting and Coordinating Agencies and Jurisdictions

(Agencies with coordination responsibilities for routes used as alternatives)

1. Emergency Services Coordinating Agency (ESCA)
2. King County Office of Emergency Management (OEM)
3. Snohomish County Department of Emergency Management (DEM)

D. Transportation Disruption Notification

The State, counties, and other jurisdictions use a number of methods for notifying and coordinating transportation disruptions among state agencies, local jurisdictions and other transportation stakeholders. The agency having jurisdiction over a particular route, bridge, interchange or segment is responsible for notifying appropriate stakeholders in accordance with their respective emergency notification plans and procedures.

When disruptions occur on local routes, and detours and alternatives may impact state routes, WSDOT may be notified if local jurisdictions coordinate through WSDOT Regional Emergency Operations Centers (EOC)/Traffic Management Centers or through the State Emergency Operations Center. WSDOT may also get this information through WebEOC if EOCs are activated, from staff reports from the field, direct contact with local jurisdictions in the field or through liaisons placed in local EOCs.

If alternatives and detours are established for routes where WSDOT is the lead agency and coordination with local jurisdictions is necessary, WSDOT will provide information through their Regional EOCs/Traffic Management Centers to local jurisdictions and transportation agencies to coordinate detour implementation. The WSDOT EOC will coordinate through ESF – 1 at the State Emergency Operations Center. The State EOC will disseminate the information to local governments in accordance with State notification procedures.

When notified of diversions and detours on state routes that may impact local traffic flow, local jurisdictions will notify their respective departments, Department Operations Centers (DOCs), municipalities, and other transportation stakeholders, such as fire districts, school districts, transit agencies and ports in accordance with local notification procedures.

E. County Emergency Operations Center Notification Concept

1. Emergency Services Coordinating Agency (ESCA) will notify the cities of Brier, Edmonds, Kenmore, Lake Forest Park, Lynnwood, Mountlake Terrace, Mill Creek and Woodway.
2. King County Emergency Coordination Center will notify Auburn Emergency Management, Bellevue Emergency Preparedness, Bothell Emergency Preparedness, Federal Way Emergency Management, Issaquah Emergency Management, Kent Emergency Management, Kirkland Emergency Management, Mercer Island Emergency Services, Redmond Office of Emergency Management, Renton Emergency Management, Seattle Office of Emergency Management, Shoreline Emergency Services, Skykomish Emergency Management, Snoqualmie Emergency Management, Tukwila Emergency Services and Woodinville Emergency Management as well as the Cities of Burien, Normandy Park, SeaTac and Des Moines and the Muckleshoot and Snoqualmie Tribes.
3. Snohomish County Emergency Operations Center will notify Everett Emergency Management and Monroe Emergency Management as well as the jurisdictions and tribes with which they have an inter-local agreement, viz. the Tulalip tribe, Marysville, Arlington, Stanwood, Darrington, Granite Falls, Lake Stevens, Index, Gold Bar, Sultan and Snohomish as well as the Stillaguamish Tribe.

F. Current Available Alternatives

Depending on damage and identified impacts, there are other detour alternatives on state and local routes.

G. Transportation Mitigation Strategies

1. Short-Term Solutions

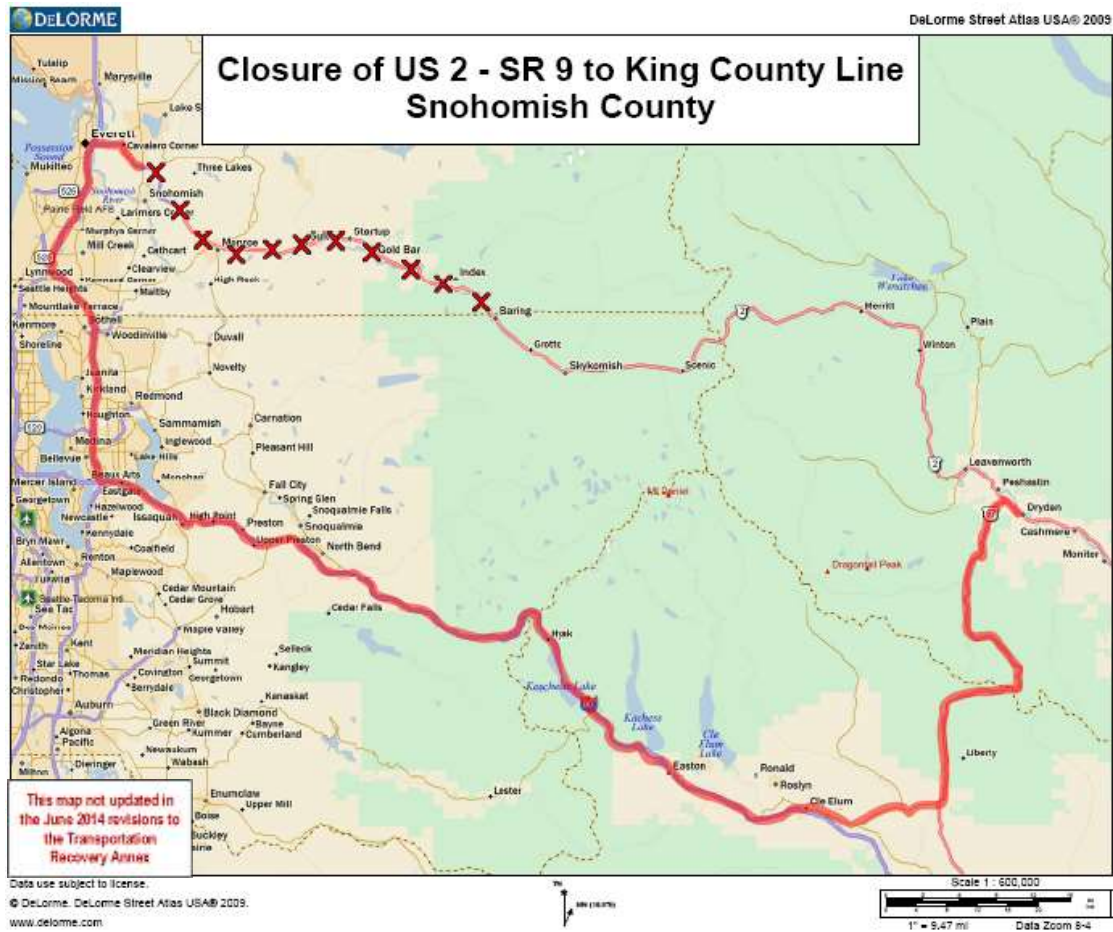
Stakeholders identified several short-term solutions such as providing alternate routing for all vehicle traffic. Solutions include: Alternate Routing, and Adjusting Traffic Signal Timings. See Appendix E – Roadways Toolbox for further information.

2. Mid-Term Alternatives

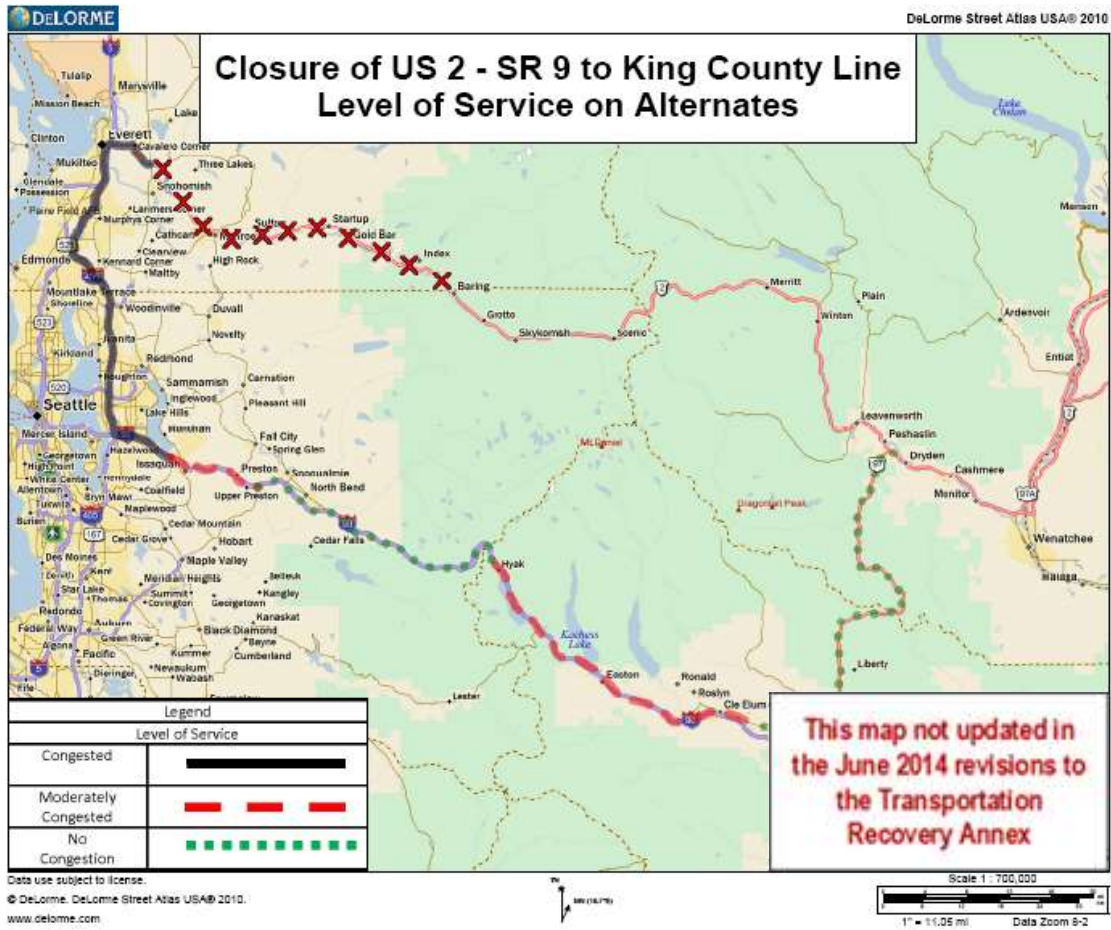
The short-term solutions can be extended to provide mid-term alternatives, as necessary. Planners identified several mid-term alternatives such as offering Van/Car Pool Incentives. Other alternatives include: Establish or expand Park and Ride lots, Tele-commuting, Staggered Work Shifts, Electronic Signage and/or Surveillance, as well as Compressed Work Week. Restoring this section of highway will require freight movement to and from the destructed area. See Appendix E – Roadways Toolbox for further information.

3. Long-Term Options

Mid-term alternative transportation options can be extended to long-term options, as necessary. In addition, a long-term option includes Freeway Ramp Metering, changing current HOV rules, and establishing new HOV lanes. See Appendix E – Roadways Toolbox for further information.



Puget Sound Regional Transportation Recovery Plan – Alternative Routing Plan	
47 - Closure of US 2 from SR 9 to King Co. Line – Snohomish County	
East to West Routing	West to East Routing
US 2 Eastbound	US 2 Westbound (Stevens Pass Highway)
US 97 Southbound	I-5 Southbound (Interchange 194)
SR 970 Westbound (to Cle Elum)	I-5 Southbound (Exit 182)
SR 970 Westbound (Sunset Hwy)	I-405 Southbound
SR 970 to I-90 West Interchange 84	I-405 Southbound (Exit 11)
I-90 Westbound (Interchange 84)	I-90 Eastbound
I-90 Westbound (Exit 10)	I-90 Eastbound (Exit 84)
I-405 Northbound (Interchange 11)	SR 907 Eastbound
I-405 Northbound (Exit 27)	US 97 Northbound
I-5 Northbound	US 2 Westbound
I-5 Northbound (Exit 194)	
US 2 Eastbound (Stevens Pass Highway)	



Puget Sound Regional Transportation Recovery Plan						
47 - Closure of US 2 from SR 9 to King County Line – Snohomish County						
Mitigation Strategies						
Strategy	Implementation				Not Feasible Or N/A	Comments
	Short-Term	Mid-Term	Long-Term			
Alternative Routing	√	√	√			
Adjust Traffic Signal Timings	√	√	√			
Contra-flow Lanes New				√		
HOV Lanes – Convert				√		
HOV Lanes – New			√			
HOV Rules - Change			√		HOV 2 – HOV 3	
Construct HOV Bypass				√		
Ramp Metering			√		I-5, I-405	
Freeway Ramps - New				√		
Freeway Ramps – Closure				√		
Truck Restrictions				√		
Truck Preferences				√		
Shoulder - Convert to Driving Lane				√		
Parking Eliminate/Restrict				√		
Turn Prohibitions				√		
Ferry Service Relocation				√		
Ferry Service New				√		
Ferry Service Increase Existing				√		
Congestion Pricing				√		
Vanpool Carpool Incentives	√	√	√			
Park – Ride Lots New/Expand	√	√	√			
Alternating Driving Days				√		
Bike Lanes				√		
Tolling Adjustments				√		
Transit Service New				√		
Transit Service Increase				√		
Improved Incident Management (Patrols)	√	√	√			
Technology – Electronic Signing or Surveillance	√	√	√			
Technology – Signal Interconnects				√		
Convert trails to special motorized use				√		
Tele-commuting	√	√	√			
Staggered Work Shifts	√	√	√			
Compressed Work Week	√	√	√			
Emergency Responder Routes			√			
Adjust Fleet Size				√		

Puget Sound Regional Transportation Recovery Plan					
47 - Roadway Reconstruction Elements					
Roadway Reconstruction Elements	Implementation				Comments
	Short-Term	Mid-Term	Long-Term	Not Feasible Or N/A	
Debris removal of damaged roadway and roadway structures	√				
Prioritize segment restoration/reconstruction	√				
Provide engineering contract mechanisms (assume design-build for roadways and roadway structures of high priority)	√				
Meet with stakeholders to discuss options		√			Pre-planning should identify conceptual level-plans for roadway sections that are susceptible to failure
Determine long-term contracting needs		√			
Identify recovery options for the roadway section			√		
Coordinate with utility purveyors for utilities in roadway rights-of-way			√		
Develop long-term contracting procedures			√		

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