Belfair Bypass Proviso Report

Kevin Dayton
Olympic Region Administrator

Paula Hammond
Secretary of Transportation

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Washington State Department of Transportation

SR 3 Belfair Bypass Proviso, Alternatives Outreach Report

WSDOT, Olympic Region Planning
PO Box 47440
Olympia, WA 98504-7440

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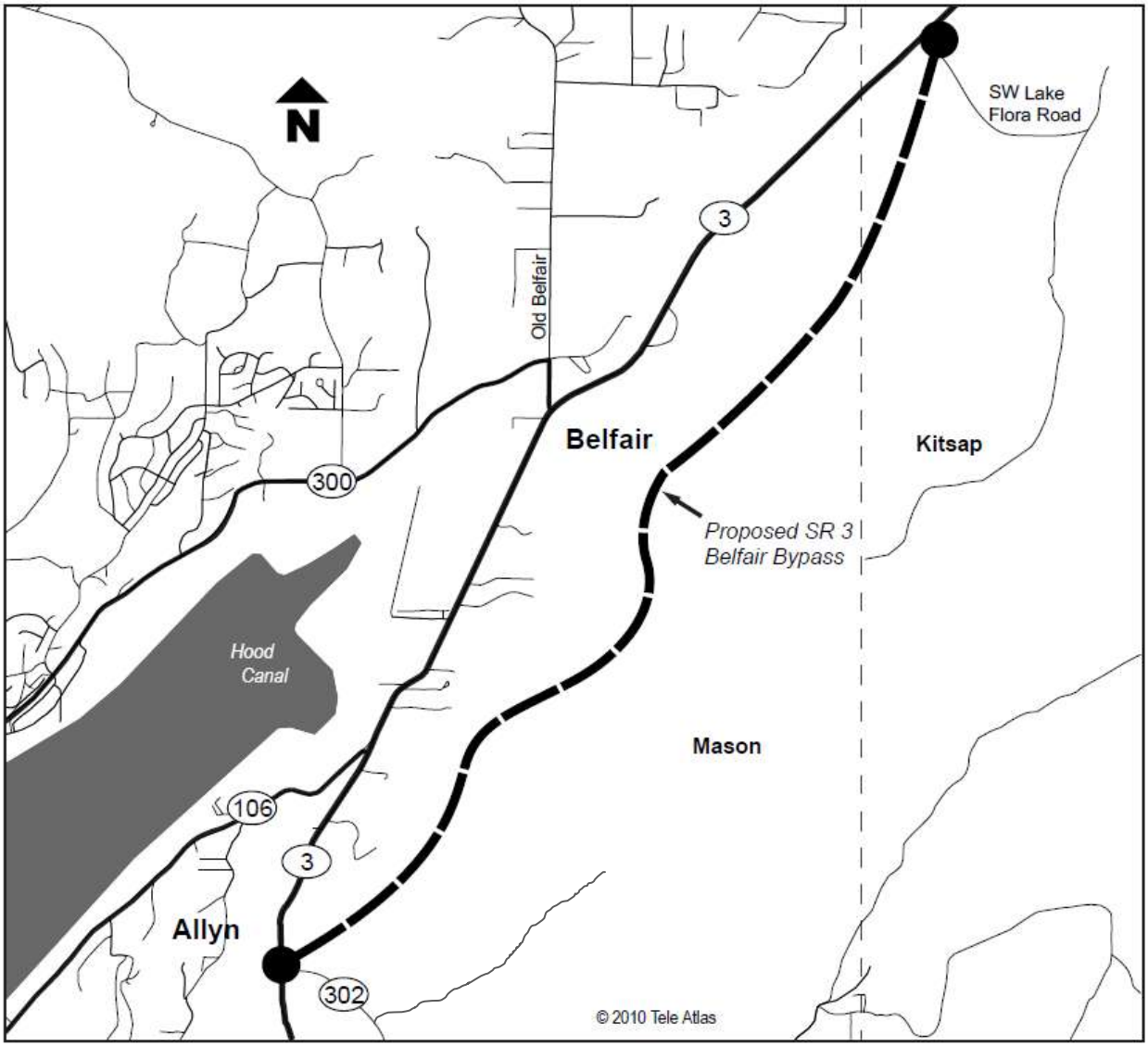

Washington State Department of Transportation

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Executive Summary

Why is WSDOT conducting this Belfair Bypass Outreach Effort?

In the 2009 State Transportation Budget, the Legislature included a proviso directing the Washington State Department of Transportation (WSDOT) to conduct a public outreach process to be used in reconsidering the scope and budget of the Belfair Bypass project.

How did WSDOT accomplish the tasks?

With the aid of elected officials, stakeholders and members of the community, WSDOT engaged in various fact finding activities to gain a better understanding of key aspects of the Belfair Bypass project in accordance with the budget proviso. WSDOT held a town hall meeting and conducted a two-day Expert Panel Workshop to assist in fulfilling the objectives of the 2009 Legislative Proviso. The information gathered at the open house and from the surveys was used to guide the expert panel through an analysis of the data, criteria, and constraints. The process concluded with four recommended actions that hold the most promise for fulfilling the community's needs.

What are the conclusions of this report?

The four most promising alternatives examined by the Expert Panel were forwarded to WSDOT staff for further consideration. These alternatives that were recommended by the Expert Panel will need additional engineering and environmental evaluation. The alternatives are listed and numbered below according to their original designation during the Workshop:

Alternative Idea #3
WSDOT should evaluate the benefits and potential cost savings of securing right-of-way for a 2-lane facility, instead of the ultimate 4-lane design as currently planned.

Alternative Idea #4
WSDOT should evaluate the benefits and potential cost savings of lowering the facility design speed. This would require the Department to evaluate and analyze lower design speed to determine if the purpose and need for the facility can be achieved at a lower construction cost. Typically this means 35 mph for end connections, but 45 – 55 mph posted for the center section, along the currently designed route.

A lower design speed may result in marginally lower construction costs. However, a lower design speed may impact future development of the Bremerton to Shelton corridor. The purpose of an evaluation would be to determine the relationship between design speed and facility use to determine an optimal cost benefit relationship.

Alternative Idea #9
WSDOT should evaluate the benefits and potential cost savings of a best value option for each end connection of the bypass alignment. The end connections in the baseline design could be altered to replace the high speed transition intersection with lower cost designs. This approach has the potential to lower construction costs by simplifying the intersection configurations, and reducing the roadway footprint and right-of-way.

Although this approach would likely lead to cost reductions, the balance of cost savings to loss of long-term effectiveness of the facility awaits more detailed analysis. It's anticipated that even if these end connections were constructed as part of an initial bypass project, the high speed end connections in the current design could be constructed at a later date.

Alternative Idea #17
WSDOT should evaluate the benefits and potential cost savings of a shorter bypass route. The proposed route would relocate both the north and south end connections to entirely new locations, while retaining a portion of the bypass in the middle where currently designed. The "shorter" alignment

would still function as a bypass, and would still allow for construction of the current design in the future. The alternative has the potential to reduce environmental impacts, property acquisition costs and eliminate two bridges resulting in reduced construction costs. This hybrid alternative awaits a more detailed analysis to determine the feasibility and cost.

A new location for the north end of the Bypass could join SR 3 at or near Log Yard Road. A new location for the south end of the Bypass could join SR 3 at a point north of the railroad crossing between SR 106 and North Mason High School. The most likely route would run along the south side of the powerline, and would also require a grade separation at the railroad.

Additional recommendations

Further evaluation - These four alternatives were deemed by the expert panel and WSDOT staff to be the most promising to come out of the Expert Panel process. Once funding becomes available, the next step is to evaluate each alternative by performing further engineering and environmental analysis that will confirm the actual benefits, costs, and feasibility of each.

Combination – As funding becomes available, the four alternatives can also be considered either singularly or in combination. It will be possible to combine each alternative in a way that allows for a phased implementation of the ultimate corridor solution.

Other improvements - WSDOT acknowledges studies and reports that reference potentially valuable improvements to the state and local roadway system not associated with the Belfair Bypass. Regardless of action on the Belfair Bypass, WSDOT and local agencies should work both independently and together to consider and pursue the most promising options that have been presented to address traffic congestion on SR 3 in and around Belfair and the vicinity.

Chapter 1: Introduction

Why did WSDOT create this report?

This report documents the outcome of a four month WSDOT effort to fulfill the requirements of the 2009 State Transportation Budget Proviso regarding the "SR 3 Belfair Bypass." The report identifies possible alternatives to the current SR 3 Belfair Bypass "New Alignment Project.", and the process used to identify and develop those alternatives.

What does the proviso say?

"The department shall conduct a public outreach process to identify and respond to community concerns regarding the Belfair bypass. The process must include representatives from Mason County, the legislature, area businesses, and community members. The department shall use this process to consider and develop design alternatives that alter the project's scope so that the community's needs are met within the project budget. The department shall provide a report on the process and outcomes to the legislature by June 30, 2010. (ESSB 5352, Section 306(16))"

What is the history of the Belfair Bypass Project?

The Belfair Bypass Project has long been identified as a solution to congestion along the SR 3 corridor through the community of Belfair. Discussions about the need for a Belfair Bypass span forty years or more. These studies mainly support the need for a Bypass, which provides an alternative route around the Belfair community.

The following is a list showing the significant history of transportation studies in the SR 3 Belfair Bypass area.

- WSDOT (2006) - SR 3 Belfair Bypass New Alignment Project

- Mason County (2001) - Belfair Bypass Environmental Assessment
- WSDOT (1997) - Belfair Bypass Analysis SR 3 Vicinity
- WSDOT (1966) - SR 3 Reconnaissance Study

WSDOT began work on the Bypass project in June 2006 and concluded work June 2009. Over this three-year period, a total of $2.5 million dollars was invested in development work on the project. As the result of the 2009 – 2011 Transportation Budget, no further funding for the Belfair Bypass project was provided beginning in July 2009 through 2018. As a result, WSDOT ended work on the project in June 2009.

What is the purpose of the Belfair Bypass project?

The purpose of the project is to relieve traffic congestion on SR 3 in Belfair. The need for action is described in the WSDOT June 2009 Proposed SR 3 Belfair Bypass Summary Report, which documents the traffic conditions along this important state highway. It shows several intersections in Belfair currently experience level of service failures during the PM peak period. It concludes that “all intersections and mainline SR 3 segments between Romance Hill Road. and Lake Flora Road. will be at a failing condition” if no action is taken. The report further states that “this (level of service) failure will be severe in several locations with predicted vehicle operating speeds averaging 9 mph, (by which time).” SR 3 would no longer be a viable freight corridor.

Will the Belfair Bypass solve the problem?

The purpose of the Belfair Bypass project is to relieve congestion in Belfair by providing a fast and safe route around Belfair for through traffic. In 2006, WSDOT concluded that, although the Bypass would improve traffic conditions in Belfair, it would not solve them, at least in the forecast year of 2035. In other words, as a stand-alone project, the Belfair Bypass is not predicted to provide sufficient trip diversion from the Belfair retail/commercial core along SR 3 to provide a satisfactory level of service in that area in 2035. The analysis shows that a high

percentage of the trips passing through Belfair originate from or are destined to the North Shore/Tahuya area, SR 106, or the Belfair retail/commercial area itself. Although additional transportation solutions continue to be discussed and evaluated along and adjacent to the SR 3 corridor in the greater Belfair area, these solutions are not a formal component of the Belfair Bypass project at this time.

What is the current proposal for the Belfair Bypass?

The WSDOT Belfair Bypass project proposes a facility designed to meet state highway standards for a two-lane roadway with a 60 mph design speed. The purpose of the facility and the project is to serve regional traffic in the Shelton to Bremerton corridor. Figure 1-1 on the next page depicts the proposed Bypass alignment, and its connections to the existing SR 3 at Lake Flora Road (north end) and just south of SR 302 (south end).

The Legislature created the SR 3 Belfair Bypass "New Alignment" project in the 2005 TPA (Transportation Partnership Account) Transportation Legislation. The purpose of the project was to relieve congestion. At the time, the act provided $15 million dollars to complete the required environmental process identify all right-of-way required and complete design including contract plans.

Access Classifications

Managed Access
Managed Access regulates access, location, spacing, design, and operation of driveways, city, street, and county road connections to state highways.

Limited Access
Limited Access controls and preserves the safety and efficiency of highways and preserve the public investment.

WSDOT proposes a two-lane, limited access facility for nearly the entire length of the project, from the intersection of SR 302 to the intersection of Lake Flora Road, with a short managed access portion just south of SR 302. The June 2009 Transportation Discipline Report described that this approach will provide sufficient traffic capacity through the project's design year of 2035. Although a state highway is proposed for this bypass, it's expected that the existing SR 3 route through Belfair would remain a state highway in order to provide connectivity with SR 300 and SR 106.

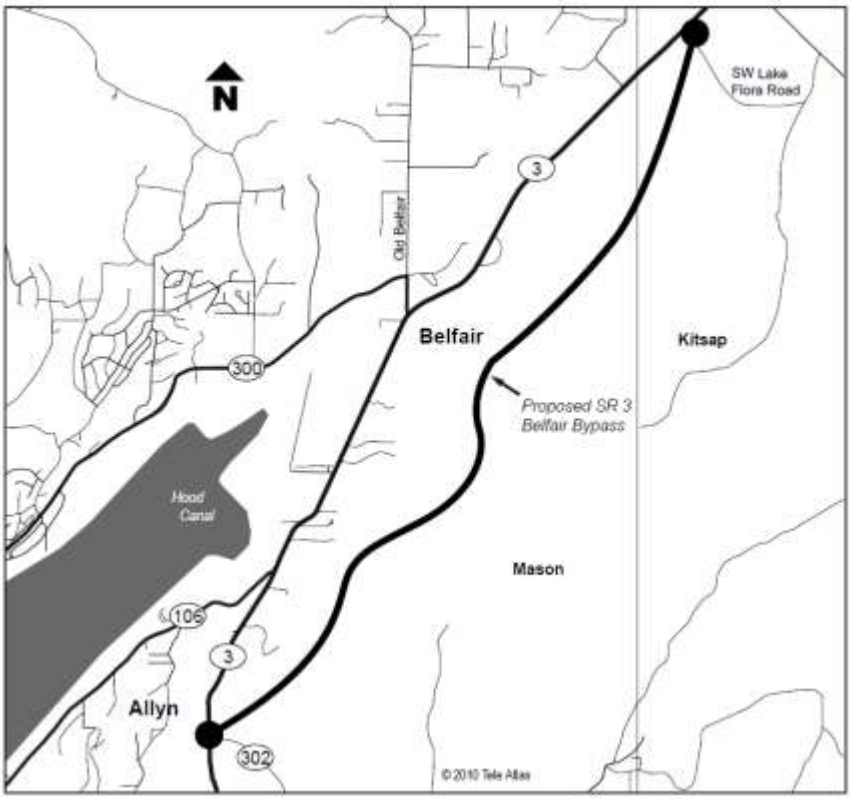


Figure 1-1 The Proposed SR 3 Belfair Bypass Route

What is the cost of the current Belfair Bypass proposal?

The cost estimate for the proposed Belfair Bypass facility (see Figure 1.2) was prepared by WSDOT and is documented in the project Summary Report (June, 2009). This estimate is based on design engineering conducted to that date, not including cost risk analysis, improvements to the existing SR 3 corridor or the Newkirk Road extension, which could be considered in combination with the bypass.

SR 3 Belfair Bypass Pre-construction Cost Estimate	
Design, Environmental, Contract Plans	$ 8,263,000
Right of way acquisition	$14,690,000
Construction Cost Estimate	$55,086,000
Project Total Cost Estimate	**$78,039,000**

Figure 1-2 SR 3 Belfair Bypass 2009 Cost Estimate

Chapter 2: Public Outreach

How was the Public Outreach conducted?

The Legislature directed WSDOT to conduct an outreach process to identify and respond to community concerns regarding the Belfair Bypass project.

WSDOT's goal was to provide a forum to collect input from as many community members as possible. To accomplish this goal, WSDOT initiated a multifaceted approach for the outreach process. Public comments were compiled using the following methods:

- Project Web site
- Project survey
- Stakeholder Interviews
- Town Hall Meeting

How was the Internet used?

The existing SR 3 Belfair Bypass New Alignment project's Web site was modified to feature the SR 3 Belfair Bypass Alternatives Outreach proviso project information. This modification would allow internet users to type in "Belfair Bypass" into their Web browser and be directed to the project's Web site found at www.wsdot.wa.gov/Projects/SR3/BelfairBypass

The modified Web site was up and running on February 9, 2010. The site's main features were the link to the online public survey and the town hall meeting information. The Web site also featured a list of community locations where a copy of the survey could be obtained.


Washington State Department of Transportation

SR 3 - Belfair Bypass - Alternatives Outreach

Status

May 2010

WSDOT received 398 responses to its public survey on alternatives to the SR 3 Belfair Bypass. Survey responses include:

- Who we've heard from
- How often people travel SR 3 in Belfair
- When SR 3 is most congested
- Purpose of trips when traveling SR 3 during congested times
- Most important issues contributing to traffic
- Best approach to fixing traffic
- Biggest challenges to improving SR 3 in Belfair
- Fixing one thing in Belfair, what would it be?

View larger image

Next Steps

In April, WSDOT will convene a panel of experts to consider the issues and concerns raised through outreach opportunities with the public and stakeholders as well as results of the survey.

A report detailing the outreach effort and outcome will be provided to the Legislature by June 30, 2010. In July, a copy of the report will be posted on the project Web page.

Belfair Bypass Proviso -

2009 Senate Substitute Bill 5352, Section 306 (16)

WSDOT shall conduct a public outreach process to identify and respond to community concerns regarding the Belfair bypass. The process must include representatives from Mason County, the legislature, area businesses, and community members. The department shall use this process to consider and develop design alternatives that alter the project's scope so that the community's needs are met within the project budget. The department shall provide a report on the process and outcomes to the legislature by June 30, 2010.

Why is WSDOT in the Belfair community?
The Washington State Department of Transportation (WSDOT) has been asked to conduct a public outreach process to identify and respond to community concerns regarding the Belfair Bypass.

The End Result
WSDOT will produce a written report to the legislature by June 30, 2010.

Project Benefits
This report will provide the legislature with feasible alternatives to the Belfair Bypass for their consideration.

What is the project timeline?
The Belfair Bypass report is due to the legislature by June 30, 2010.

Figure 2-1: SR 3 Belfair Bypass Alternatives Outreach Web Site

How was the survey used?

WSDOT developed a nine question, non-scientific survey to find out from community members what the existing transportation issues are and the best approach to improving them. The survey was available in both electronic and hard copy formats. The following questions were asked:

1. What community do you live in? (multiple choice)
2. How often do you travel on SR 3 in Belfair? (multiple choice)
3. When is SR 3 most congested? (multiple choice)
4. If you are traveling during those congested times, what is most frequently the purpose of your trip? (multiple choice)
5. What do you think are the most important issues contributing to traffic congestion in Belfair? (write in)
6. What do you think would be the best approach to fixing traffic congestion in Belfair? (write in)
7. What do you think are the biggest challenges to improving SR 3 in Belfair? (write in)
8. If we could fix one thing in Belfair, what would it be? (write in)
9. For future projects in the Belfair area, what is the best way to communicate with you and the community? (multiple choice)

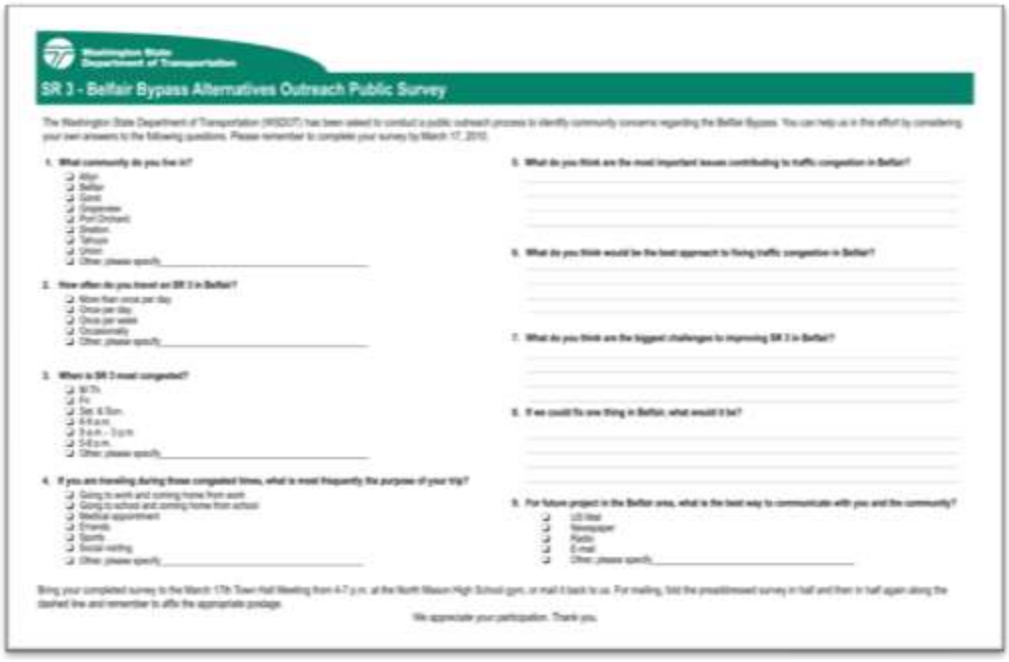

SR 3 - Belfair Bypass Alternatives Outreach Public Survey

Figure 2.2: SR 3 Belfair Bypass Alternatives Outreach Public Survey

How was the survey distributed?

An electronic version of the survey was linked to the project's Web site for internet access by community members.

Six thousand copies of the survey were also printed and distributed throughout the community. Respondents were given the choice of returning the pre-addressed survey by US Mail or hand delivering the survey to the Town Hall meeting that was held on March 17, 2010 at the North Mason High School in Belfair.

Copies of the survey were distributed to over five hundred and sixty nonprofit community organizations comprised of service groups, and homeowner associations in the communities of Allyn, Belfair, Grapeview, Port Orchard, Tahuya, Shelton and Union. Hardcopies of the survey were also distributed to local gathering spots in the community such as the Grapeview Fire Dept/Horton Community Center, the Ports of Allyn and Bremerton, Mason County PUD #3, North Mason Schools, North Mason Timberland Library, Mary E. Theler Community Center, Safeway, QFC, Alderbrook Resort & Spa, City of Shelton and Mason County.

What are the survey results?

WSDOT received over three hundred and ninety responses to the survey. All of the comments have been synthesized in this summary and documented in the project record.

Fifty-seven percent of the respondents completed the survey electronically over the internet and forty-three percent chose to mail in the paper copy version.

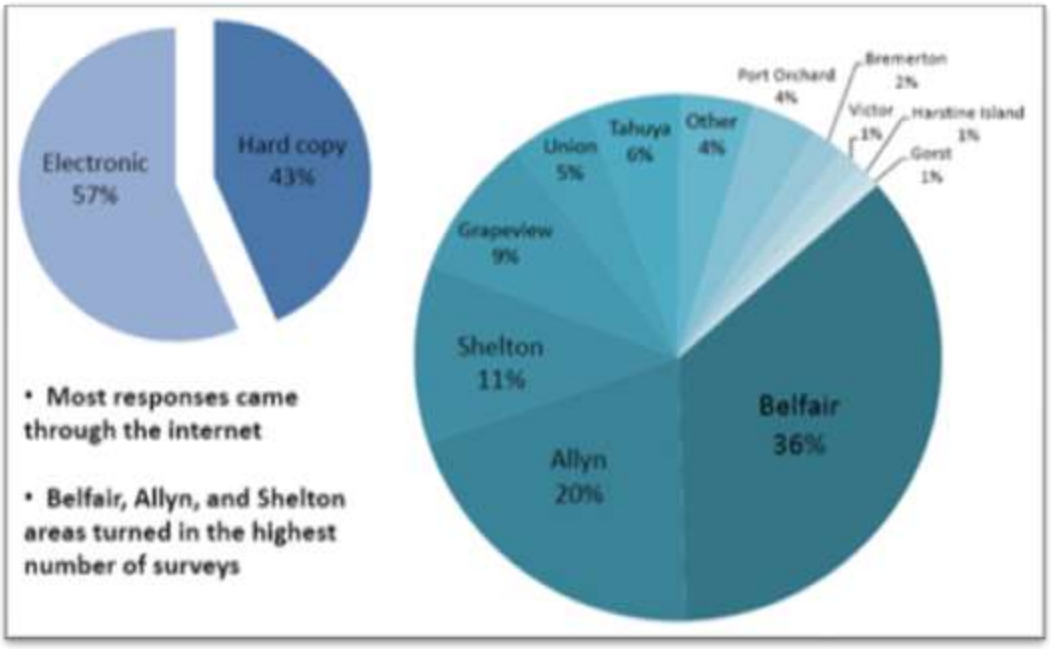


Figure 2-3: Number of survey responses received from each community

The Belfair, Allyn, and Shelton areas turned in the highest number of surveys.

Most respondents indicated that they:

- Traveled SR 3 in Belfair more than once per day
- Felt that SR 3 in Belfair is most congested on Fridays between the hours of 5-8 p.m.
- The most frequent purpose of their trip was to run errands and drive to and from work.

When asked "What do you think are the most important issues contributing to traffic congestion in Belfair?" Most commented that there were too many cars on the road and not enough travel lanes to accommodate them. Community members also stated that some roadway intersections need improvements and the lack of an alternate route adds to congestion especially during a traffic collision along SR 3.

According to the survey, the biggest challenges to improving SR 3 in Belfair are the high cost of the project and raising the money required to build it.

When asked “If we could fix one thing in Belfair, what would it be?” the majority of the survey responses said “build the bypass”.

Detailed survey results can be viewed in Appendix A.

Who did WSDOT interview?

WSDOT identified and interviewed several key stakeholders knowledgeable in the Belfair area. Notification of the Department’s project outreach effort was also provided to the Jamestown S’Klallam tribe; the Lower Elwha Klallam tribe; Port Gamble S’Klallam tribe; Skokomish Tribe; Squaxin Island tribe and the Suquamish tribe.

These stakeholders provided WSDOT with important insight about SR 3 in and around Belfair.

The following stakeholders were interviewed or offered an interview by WSDOT:

- Allyn Community Association
- Belfair Bypass New Alignment Project Manager
- Bremerton Economic Development Study (BEDS) Project Manager
- City of Shelton
- Economic Development Council of Mason County
- Kitsap County Public Works
- Federal Highways Administration
- Mason County Public Works
- Mason County Transit Authority
- North Mason Chamber of Commerce
- Port of Allyn
- Port of Bremerton
- Port of Shelton
- Shelton Mason County Chamber of Commerce

In addition, WSDOT maintained continuous project coordination with the following officials:

- State Representative Fred Finn
- State Senator Tim Sheldon
- Mason County Commissioners
- Washington State Transportation Commissioner Dan O’Neal

What were the stakeholders' issues and concerns?

Organizational comments were found to reflect the community's thoughts for the most part. However, some additional themes did emerge:

- WSDOT must not lose sight of the regional aspect to the Bypass
- The concern of some was that the project will not be constructed; adequate funding would be difficult to secure given the competitive climate at the state level
- Keep the momentum moving by continuing work on the Bypass
- Consider an alignment that allows the current SR 3 operations to not degrade business opportunities and growth
- Insure that the Bypass considers the community vision
- Corridor-level HOV and transit solutions should be expanded to include commuter alternatives
- A park and ride lot should be considered west of Belfair
- Securing Belfair Bypass funding should remain a high priority for WSDOT
- Coordinated planning between the State and Mason County is paramount to the success of the Belfair Bypass and local improvements along SR 3 in the vicinity of Belfair
- Plan the transportation infrastructure for the growth of the greater Belfair area and beyond, to include corridor-level travel between Shelton and Bremerton

What about public outreach?

WSDOT hosted a Town Hall meeting to give community members another opportunity to provide their comments on the Belfair Bypass project.

Figure 2-4 Town Hall Meeting at North Mason High School in Belfair

The Town Hall meeting was conducted on March 17, 2010 (4-7 p.m.) at the North Mason High School gymnasium. Participants were given the opportunity to listen to their neighbors' comments; and/or speak in front of the audience as a court reporter transcribed their comments. They also had the opportunity to view SR 3 Belfair Bypass New Alignment project displays; complete a copy of the survey or speak with project staff.

WSDOT developed a handout of Frequently Asked Questions and answers (FAQs) regarding the Belfair Bypass project. The handout addressed the thirteen most common questions asked regarding the project. A copy of the FAQs can be found in Appendix A.

How was the Town Hall meeting advertised?

To ensure broad outreach and publicity for the Town Hall meeting, WSDOT utilized a wide variety of outreach methods including the following:

- Word of Mouth. When contacting stakeholders for interviews, they were informed of the Town Hall

meeting and encouraged to pass the information on to other community members
- Information was displayed on the project's Web site
- Information was printed on the reverse side of the hard copy format of the project survey. Note: Six thousand copies of the survey were handed out at local gathering places in the community such as grocery stores, libraries and community halls.
- Paid newspaper advertising were printed in the: Port Orchard Independent, Kitsap Sun, Shelton-Mason County Journal, Belfair Herald, and the North Mason Life Magazine
- Paid advertising was displayed on the Mason County Daily News Radio's Web site

Around ninety community members participated in the Town Hall meeting. Among the most commonly expressed concerns were the following:

Many participants questioned the need for yet another study and felt the area had already been studied to death.

Some expressed skepticism and frustration about WSDOT's ability to complete the Belfair Bypass project within any reasonable amount of time.

Some suggested that WSDOT should consider safety or economic development, not just traffic congestion.

Many participants voiced concerns over the lack of a center left turn lane, bike lanes and sidewalks in Belfair.

Finally, a considerable number expressed concern about the lack of an alternate route, especially when a traffic collision occurs within the Belfair area. An emergency responder commented that it's very, very important that we have a viable road that we can access during an emergency.

What did we learn?

There are considerable differences in perceptions about, and the value of, previous and current work by transportation agencies and staff on the Belfair Bypass. There remain many potential areas of clarification about what's possible,

feasible, and fundable when it comes to the Belfair Bypass. The introduction of new, or the improvement of existing, outreach strategies, such websites, blogs, brochures, and community events, would all be helpful in keeping stakeholders and the public informed about facts surrounding the Belfair Bypass project, and the path forward towards implementation.

What were some common questions/concerns and answers?

A number of common questions from the survey and town hall meeting are presented below, with an answer immediately following:

Why not reduce the costs of the bypass by using the approach taken by the Port of Bremerton on the South Kitsap Industrial Area (SKIA) connector project?

This one mile long Port of Bremerton project is a lower volume with 35 mph roadway. Upon review, it was found that important roadway design elements such as horizontal, vertical, and cross-section are not consistent with a state highway. It was also found that other important cost considerations, such as environmental, right-of-way, and terrain, were much simpler or non-existent at the Bremerton location.

The Belfair Bypass has been studied and studied – isn't it time to build it?

Current studies are associated with the current WSDOT proposal. This work comes immediately on the heels of a similar proposal by Mason County, which was abandoned due to a number of concerns unrelated to the current proposal. This could be one reason why there may be fatigue in the community, in combination with a long history of discussion and study on the subject.

Why can't WSDOT build a gravel or bituminous surface treatment road?

Both WSDOT and Mason County management have determined not to consider constructing and maintaining a roadway that doesn't meet applicable standards.

Could State funding for the WSDOT SR 3 widening & safety project be moved to the Belfair Bypass project?

WSDOT program management staff suggested that the safety and mobility improvements the project provides to the community of Belfair were consistent with the level and purpose of the funding provided, and that the Department would not support such a change. While community members are free to work with the Legislature to shift project funds, there may be no guarantee that the resulting funds would be moved to the Belfair Bypass.

Why does the Belfair Bypass cost so much?

Even though the project design is complete only to a 10% level, the cost estimate appears consistent with expectations for the type of facility and bid environment used to develop it. Although a new estimate based on the most current bid environment would likely find decreased costs, the current estimate does not account for year of expenditure inflation, nor risk factors typically added at the next level of detail related to unforeseen engineering or environmental conditions, which would increase costs.

Why do we have a “gold plated” designed roadway?

The project is consistent with design standards per WSDOT policy. These design standards are in place to protect the public from unsafe conditions and the Department from liability.

Wasn’t the majority of the property for the Belfair Bypass being donated?

When Mason County led the Bypass project, county officials were in discussions with a major landowner regarding a potential property donation. That type of process is outside WSDOT policy. Upon receipt of an offer to purchase property using the established acquisition process, an owner can respond with whatever offer seems reasonable to them as part of the negotiation process.

Chapter 3: Independent Expert Panel Effort and Assumptions

Why did WDOT assemble a panel of experts?

WSDOT determined that in order to deliver corridor level design alternatives that considered community needs and cost reductions, the assistance of an independent effort was important. The Department assembled an independent panel of experts that possessed subject matter expertise, community ties and public agency representation. The information gathered at the open house and from the surveys was used to guide this expert panel through an analysis of the data, criteria, and constraints surrounding the project. The process concluded with four recommended actions that hold the most promise for fulfilling the community's needs.

Figure 3-1 Belfair Bypass Proviso Expert Panel Meeting

Who were the Expert Panel members?

Independent Expert Panel Members

Ken VanBuskirk, Local Area Citizen
Tim Wing, North Mason County Chamber of Commerce
Perry Shea, Shea Carr & Jewell, Local Engineering Consultant
Bill Bennett, Belfair Bypass Transportation Discipline Report
Mike Fleming, Project Design Expert
Dean Moberg, WA Division Area Engineer, Federal Highways Administration

WSDOT Staff and Contributors

Faris Al-Memar, Systems Analysis & Programming Manager
Pat Morin, Systems Analysis & Priority Programming Manager
David Smelser, Statewide Value Engineering Coordinator
Doug McClanahan, State Traffic Analysis Engineer
T.J. Nedrow, Belfair Bypass Proviso Project Manager
Bill Elliott, SR 3 Belfair Bypass New Alignment Project Office Project Engineer
Eric Yates, SR 3 Belfair Bypass New Alignment Project Team Leader
Debbie Clemen, Transportation Planning Office Liaison

What was the purpose of the Panel?

The Expert Panel was first asked to create a purpose statement to guide them in their mission:

> *To provide a report that recognizes community and regional needs (safety and congestion) and identifies corridor and local system design alternatives that provides the highest benefit for the lowest cost for further Legislative considerations.*

Because of the time constraints, the availability of quantitative analysis of ideas or data for the Expert Panel was limited. The Expert Panel was therefore asked to make qualitative, but supportable, observations and recommendations regarding the project and potential cost savings are based on available information at the time. Calculation of the actual project cost savings for each project alternative identified by the panel awaits further engineering analysis.

What were the expectations?

Early in its deliberations, the Expert Panel identified a fundamental issue with respect to their mission and the proviso language. Their concern was related to the proviso requirement to “alter the project’s scope so that the community’s needs are met within the project budget”. The original project budget line in the 2005 TPA legislation identified $15 million dollars “to complete the environmental process, identify all right-of-way required and complete design including contract plans.”

In the view of the Panel and WSDOT staff, the proviso’s intent appears to contradict that of the original law. The consensus of the Expert Panel was that $15 million dollars (as identified through the 2005 TPA assignment) would serve as the project budget. It was furthermore agreed upon that a Bypass level project could not be funded for $15 million dollars. Therefore, with the inability to deliver a feasible project for that amount, the focus turned to identifying the best possible opportunities for reducing project cost, based on an analysis of the information available.

How was the Panel conducted?

The two-day session utilized exercises that incorporated team-based brainstorming approaches and supported cooperative dialogue, encouraging the development of fresh ideas and collaborative problem solving within a value engineering structure. employed tools and exercises developed and delivered in WSDOT Value Engineering and CRA (Cost risk assessment) workshops. WSDOT staff responsible for the process took part in the process to help ensure the success of the panel.

During the first day, the Expert Panel developed their purpose, roles, and ground rules, and then brainstormed 26 potential approaches to reducing the cost of the project.

During the second day, the group reduced the potential alternatives from 26 to 7. The panel used an interactive, criteria driven approach to arrive at a final recommendation of four alternatives. All four were deemed by the panel to be distinct, and take into account expectations of the proviso

and ability to be implemented. The recommended alternatives are referred to using their numeric designations from the panel evaluation process of 3, 4, 9, and 17.

What information was presented to the Panel?

The results of the public survey, and input from the town hall meeting, were all presented to the panel for consideration (see Appendix A and B). The WSDOT Belfair Bypass Project Engineer, Bill Elliott, provided a briefing on that project and decisions made during design. Project staff provided technical support during the discussion process.

Figure 3-2 Belfair Bypass Proviso Expert Panel Members

Chapter 4: Potential Solutions

The four most promising alternatives examined by the Expert Panel were forwarded to WSDOT staff for further consideration. These alternatives recommended by the Expert Panel will need additional engineering and environmental evaluation. These alternatives are listed and numbered below according to their original designation during the Expert Panel process:

Alternative Idea #3
WSDOT should evaluate the benefits and potential cost savings of securing right-of-way for a 2-lane facility, instead of the ultimate 4-lane design as currently planned.

Advantages

- Potential cost savings
- Allows construction to proceed sooner

Disadvantages

- Requires future purchase of right-of-way for ultimate section
- Allows development along the section, which will escalate property value
- Not compatible with Bremerton Economic Development (BED) study or state plan

Potential risks

- Right-of-way costs likely to increase for ultimate section
- Not compatible with BED Study
- Lower cost way to meet community expectations
- May preclude building ultimate 4 lane section (rising costs of developed right-of-way)

Alternative Idea #4
WSDOT should evaluate the benefits and potential cost savings of lowering the facility design speed. This would require the Department to evaluate and analyze lower design speed to determine if the purpose and need for the facility can be achieved at a lower construction cost. Typically this means 35 mph for end connections, but 45 – 55 mph posted for center section, along the current designed route.

A lower design speed may result in lower construction costs. However, a lower design speed may impact facility utilization (traffic volumes). The purpose of an evaluation would be to determine the relationship between the design speed and facility use to determine an optimal cost benefit relationship.

Advantages

- Potential cost savings
- Community support
- Perceived less cost
- Easier to fund
- Potentially reduced environmental impact
- Reduced right-of-way needs

Disadvantages

- Longer travel time
- Potentially less utilization
- May not have much impact on cost

Potential risks

- May not meet driver expectations
- May be more attractive to owners on alignment
- May not have significant impact to lower cost
- Potential savings mostly at end connections

Alternative Idea #9
WSDOT should evaluate the benefits and potential cost savings of a best value option for each end connection of the bypass alignment. The end connections in the baseline design could be altered to replace the high speed transition intersection with lower cost designs. This approach has the potential to lower construction costs by simplifying the

intersection configurations, and reducing the roadway footprint and right-of-way needs.

This alternative would involve constructing “interim” connections that involve having stop condition intersections for the Bypass as it joins back in with SR 3 at the north and south ends of the Bypass.

Although this approach would likely lead to cost reductions, the balance of cost savings to loss of long-term effectiveness of the facility awaits more detailed analysis. It’s anticipated that even if these end connections were constructed as part of an initial bypass project, the high speed end connections in the current design would eventually have to be built.

Advantages

- Potential cost savings
- The north connection could be a dual purpose arterial for later phase as extension of Newkirk Road, a local roadway west of SR 3
- The north connection fits with the proposed grid system for future economic and residential growth
- Reduces State cost
- Does not require agreements with the County in similar options
- Allows downtown widening projects to move forward

Disadvantages

- Less traffic performance (lower Level of Service, lower throughput) at north end connection
- Will result in need, at a later time, for phase II work to build ultimate north connection at a higher cost

Potential risks

- Funds may not be available
- The north connection may not provide adequate traffic flow
- Deviation from community expectation associated with the revised north and south connection may cause issues

Alternative Idea #17
WSDOT should evaluate the benefits and potential cost savings of a shorter bypass route. The proposed route would relocate both the north and south end connections to entirely new locations, while retaining a portion of the bypass in the middle where currently designed. The resulting hybrid alignment would still function as a bypass, and would still allow for construction of the current design in the future. The alternative has the potential to reduce environmental impacts, property acquisition costs and eliminate two bridge structures resulting in reduced construction costs. This hybrid alternative awaits a more detailed analysis to determine the feasibility and cost.

A new location for the north end of the Bypass could join SR 3 at or near Log Yard Road. A new location for the south end of the Bypass could join SR 3 at a point north of the railroad crossing between SR 106 and North Mason High School. The most likely route would run along the south side of the powerline, and would also require a grade separation at the railroad (see Figure 4-1).

Advantages

- Potential cost savings
- About 30% less roadway length
- Avoids reconstruction of Lake Flora Road and SR 302 intersections
- No impact to North Mason High School property or Lake Devereaux scout camp
- Avoids need for two new bridges that are in the current design
- Does not require agreements with county as compared with similar options
- Allows downtown widening projects to move forward

Disadvantages

- Less traffic performance (lower level of service) at north end connection
- Will result in need, at a later time to build ultimate route with connection at a higher cost.
- Significant potential opposition by property owner
- Cost of new railroad grade separation
- Will require agreement to run under and near existing Bonneville Power Administration (BPA) power lines

- New end connections compromise the characteristics of the bypass as a regional route
- Does not correct deficiencies at SR 302 and Lake Flora Road intersections

Potential risks

- Funds may not be available
- North connection may not provide adequate traffic flow
- Deviation from community expectation of north and south connections may cause issues
- Bonneville Power Administration conflicts may increase cost

Figure 4-1 shows the proposed hybrid approach. The connection point in the north is in the vicinity of Log Yard Road, avoiding the more extensive rebuilding of the intersection with Lake Flora Road required by the current plan. The south connection shown is in the vicinity of the railroad crossing of SR 3 near the high school.

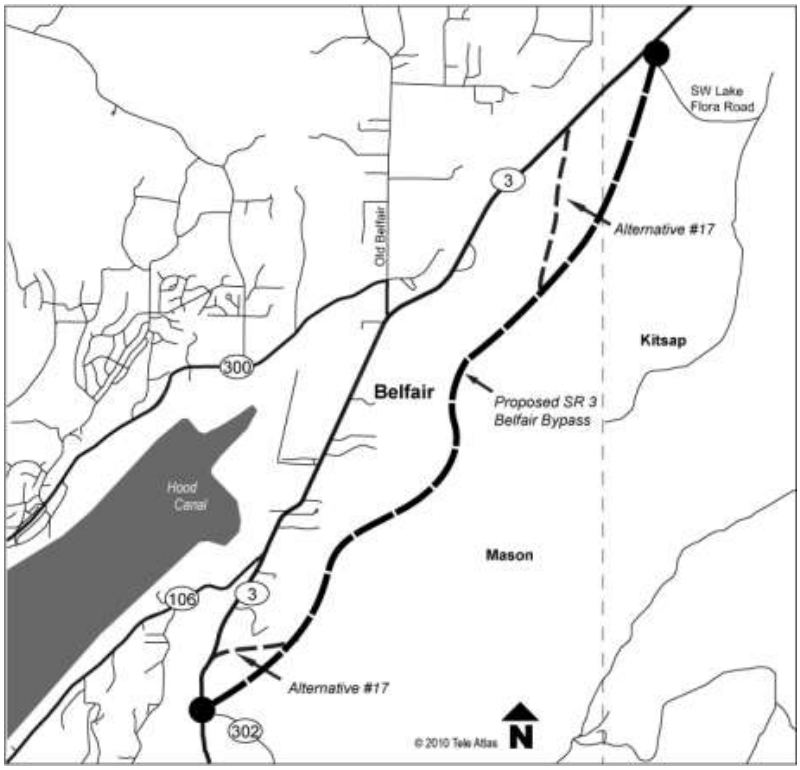


Figure 4-1 Alternative #17 Conceptual Drawing

Additional recommendations

Further evaluation - These four alternatives were deemed by the expert panel and WSDOT staff to be the most promising to come out of the public involvement process. Once funding becomes available, the next step is to evaluate each alternative by performing further engineering and environmental analysis that will confirm the actual benefits, costs, and feasibility of each.

Combination – As funding becomes available, the four alternatives can also be considered either singly or in combination. It will be possible to combine each alternative in a way that allows for a phased implementation of the ultimate corridor solution.

Other improvements – WSDOT acknowledges studies and reports that reference potentially valuable improvements to the state and local roadway system not associated with the Belfair Bypass. Regardless of action on the Belfair Bypass, WSDOT and local agencies should work both independently and together to consider and pursue the most promising options that have been presented to address traffic congestion in and around Belfair and vicinity.

Chapter 5: Conclusions

WSDOT staff conducted a public outreach process in order to identify design alternatives that have the potential to reduce the cost of the project and still meet the community's needs. A web survey was published and statistics developed to help determine community needs. A town hall meeting was held to provide a open forum community members to share their views. The majority opinion expressed by the community was they want a bypass and they want it soon.

WSDOT followed these public outreach efforts by convening an expert panel. The panel considered input from the community as well as technical staff in order to identify and rank potential solutions. The panel forwarded the four most promising alternative approaches to WSDOT staff for further consideration. Although the panel agreed that the four alternatives have the most potential for reducing project cost, further evaluation will be needed to confirm actual costs and benefits of each before proceeding.

In addition to the modifications to the bypass proposal, WSDOT further suggests that combinations of the suggested alternatives, additional outreach, and improvements to the existing SR 3 alignment and the local roadway system also hold considerable promise for providing short to mid-term solutions for relieving congestion in Belfair.

The 2010 Legislative Transportation budget provided $750,000 for the purpose of the environmental work on the Belfair Bypass. Accordingly, WSDOT will resume work on the environmental assessment to advance the project.

Appendix A: Public Outreach

Figure A-1: SR 3 Belfair Bypass Alternatives Outreach Web Site

Washington State Department of Transportation

SR 3 - Belfair Bypass - Alternatives Outreach

Status

May 2010

WSDOT received 398 responses to its public survey on alternatives to the SR 3 Belfair Bypass. Survey responses include:

- Who we've heard from
- How often people travel SR 3 in Belfair
- When SR 3 is most congested
- Purpose of trips when traveling SR 3 during congested times
- Most important issues contributing to traffic
- Best approach to fixing traffic
- Biggest challenges to improving SR 3 in Belfair
- Fixing one thing in Belfair, what would it be?

Next Steps

In April, WSDOT will convene a panel of experts to consider the issues and concerns raised through outreach opportunities with the public and stakeholders as well as results of the survey.

A report detailing the outreach effort and outcome will be provided to the Legislature by June 30, 2010. In July, a copy of the report will be posted on the project Web page.

View larger image

Belfair Bypass Proviso -

2009 Senate Substitute Bill 5352, Section 306 (16)

WSDOT shall conduct a public outreach process to identify and respond to community concerns regarding the Belfair bypass. The process must include representatives from Mason County, the legislature, area businesses, and community members. The department shall use this process to consider and develop design alternatives that alter the project's scope so that the community's needs are met within the project budget. The department shall provide a report on the process and outcomes to the legislature by June 30, 2010.

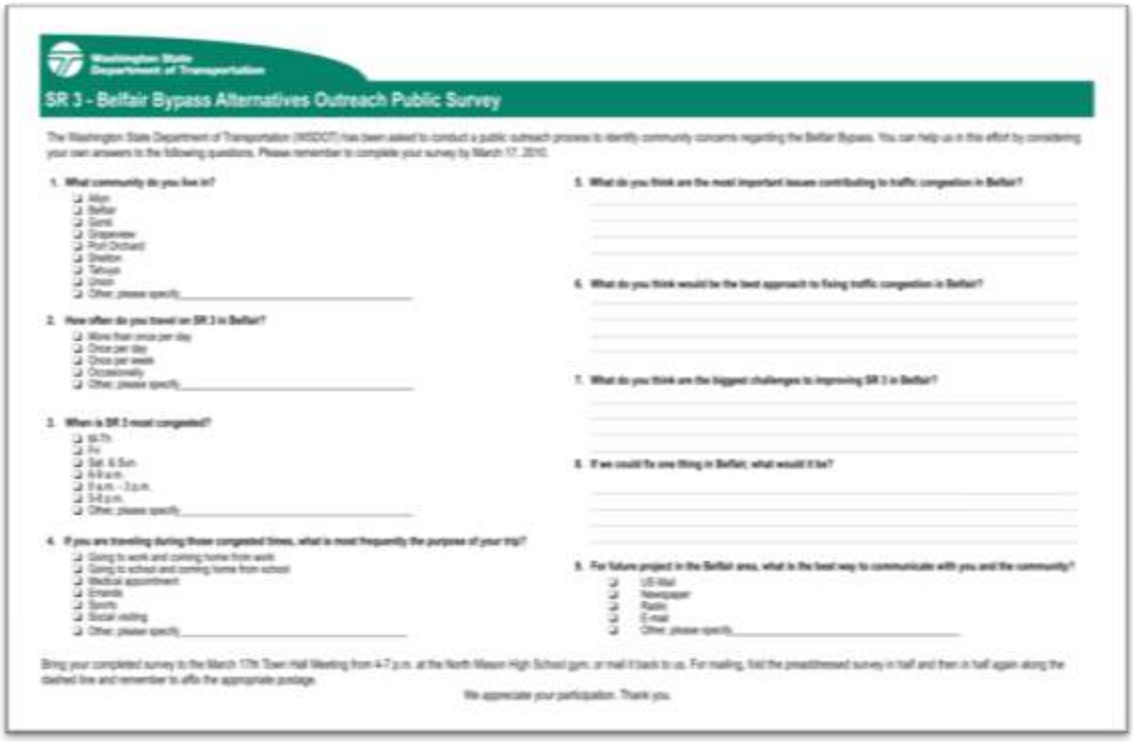
Why is WSDOT in the Belfair community?
The Washington State Department of Transportation (WSDOT) has been asked to conduct a public outreach process to identify and respond to community concerns regarding the Belfair Bypass.

The End Result
WSDOT will produce a written report to the legislature by June 30, 2010.

Project Benefits
This report will provide the legislature with feasible alternatives to the Belfair Bypass for their consideration.

What is the project timeline?
The Belfair Bypass report is due to the legislature by June 30, 2010.

Figure A-2: SR 3 Belfair Bypass Alternatives Outreach Public Survey



Washington State Department of Transportation

SR 3 - Belfair Bypass Alternatives Outreach Public Survey

The Washington State Department of Transportation (WSDOT) has been asked to conduct a public outreach process to identify community concerns regarding the Belfair Bypass. You can help us in this effort by considering your own answers to the following questions. Please remember to complete your survey by March 17, 2010.

1. What community do you live in?
   - ☐ Allyn
   - ☐ Belfair
   - ☐ Grapeview
   - ☐ Port Orchard
   - ☐ Shelton
   - ☐ Tahuya
   - ☐ Union
   - ☐ Other, please specify:_____

2. How often do you travel on SR 3 in Belfair?
   - ☐ More than once per day
   - ☐ Once per day
   - ☐ Once per week
   - ☐ Occasionally
   - ☐ Other, please specify:_____

3. When is SR 3 most congested?
   - ☐ M-Th
   - ☐ Fri
   - ☐ Sat. & Sun.
   - ☐ 6-9 a.m.
   - ☐ 9 a.m. - 3 p.m.
   - ☐ 3-6 p.m.
   - ☐ Other, please specify:_____

4. If you are traveling during those congested times, what is most frequently the purpose of your trip?
   - ☐ Going to work and coming home from work
   - ☐ Going to school and coming home from school
   - ☐ Medical appointment
   - ☐ Errands
   - ☐ Sports
   - ☐ Social visiting
   - ☐ Other, please specify:_____

5. What do you think are the most important issues contributing to traffic congestion in Belfair?

6. What do you think would be the best approach to fixing traffic congestion in Belfair?

7. What do you think are the biggest challenges to improving SR 3 in Belfair?

8. If we could fix one thing in Belfair, what would it be?

9. For future project in the Belfair area, what is the best way to communicate with you and the community?
   - ☐ US Mail
   - ☐ Newspaper
   - ☐ Radio
   - ☐ E-mail
   - ☐ Other, please specify:_____

Bring your completed survey to the March 17th Town Hall Meeting from 4-7 p.m. at the North Mason High School gym, or mail it back to us. For mailing, fold the preaddressed survey in half and then in half again along the dashed line and remember to affix the appropriate postage.

We appreciate your participation. Thank you.

Figure A-3: Survey Question #1: What community do you live in?

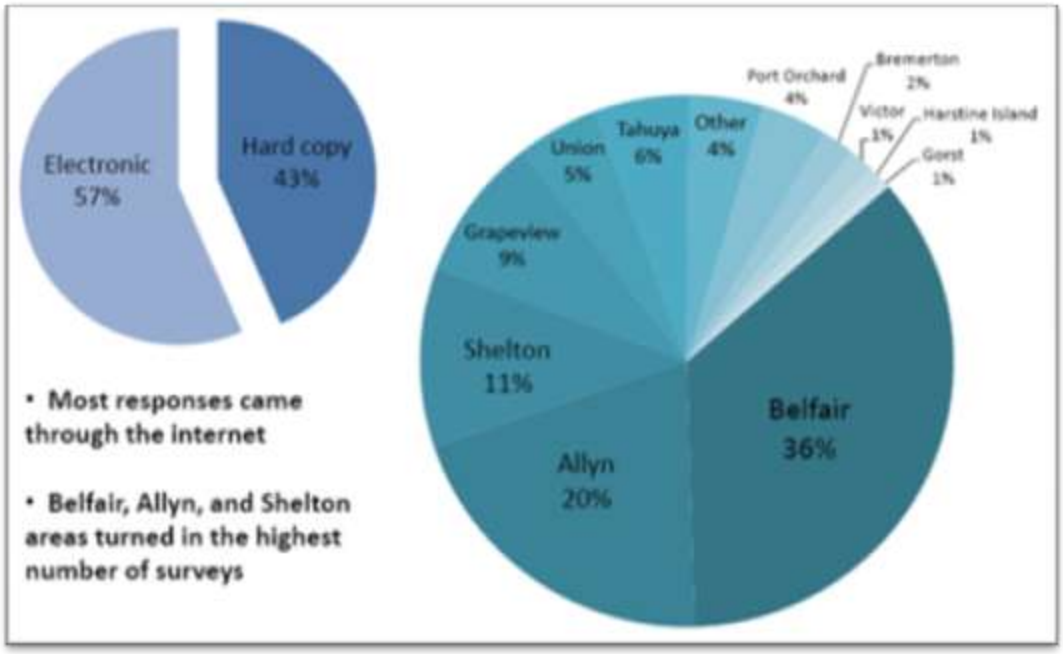


Figure A-4: Survey Question #2: "How often do you travel on SR 3 in Belfair?"

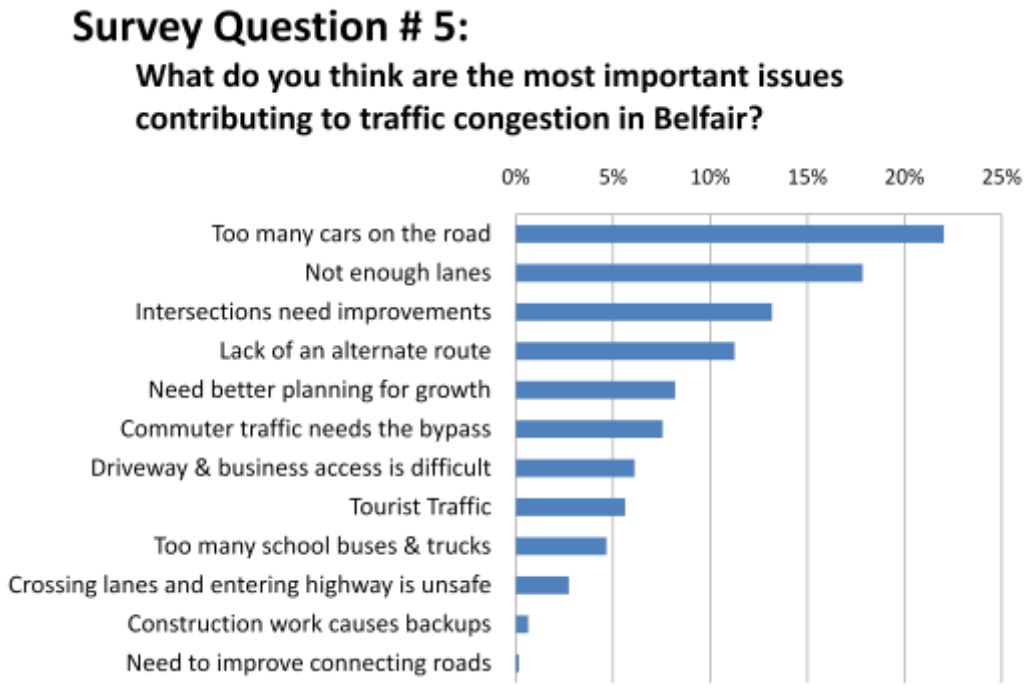


Figure A-5: Survey Question #3: "When is SR 3 most congested?"

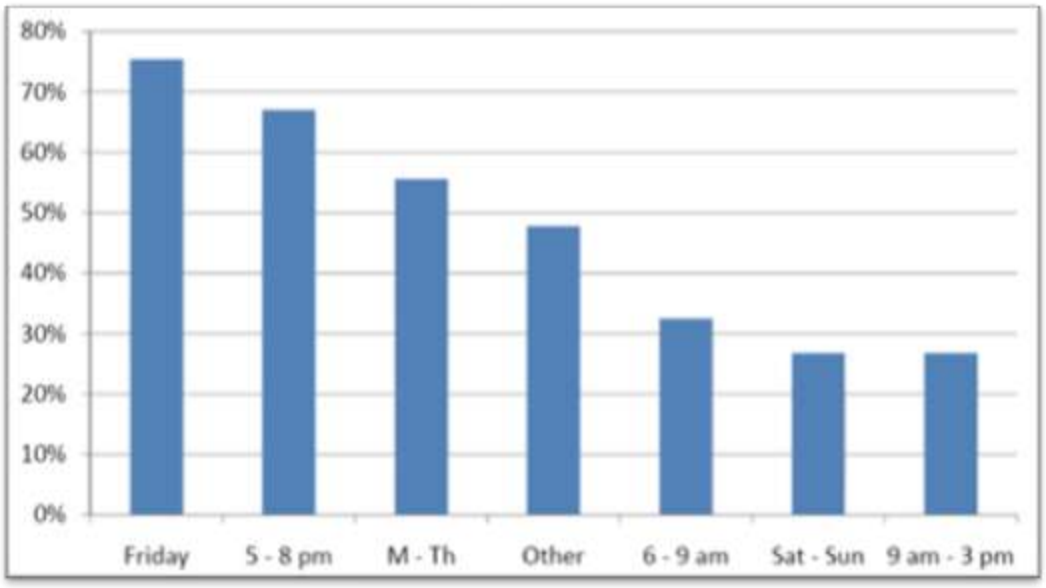


Figure A-6: Survey Question #4: "If you are traveling during those congested times, what is most frequently the purpose of your trip?"

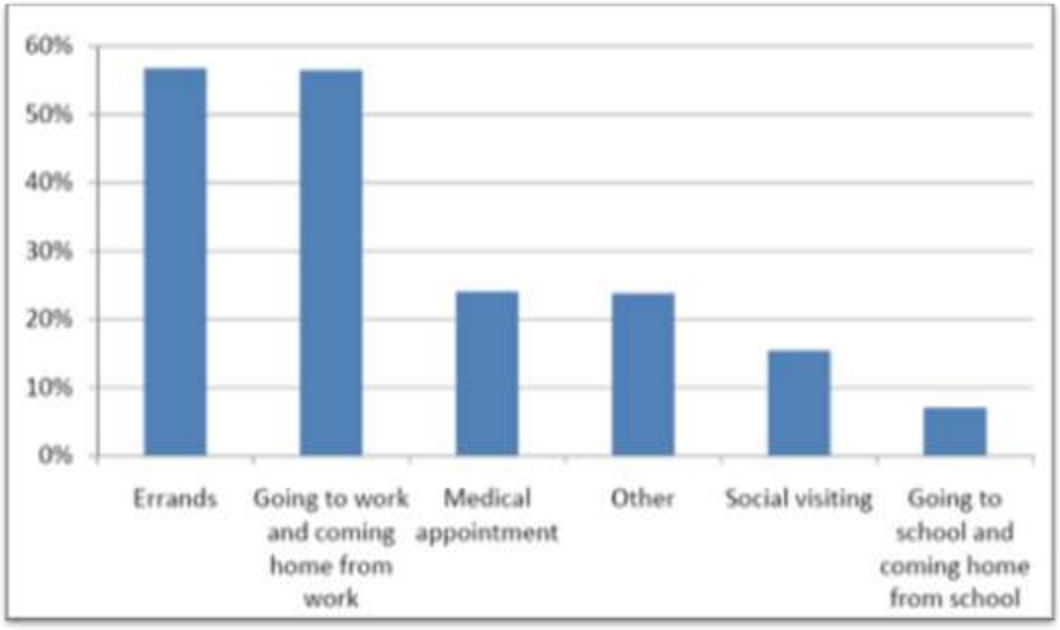


Figure A-7: Survey Question #5: "What do you think are the most important issues contributing to traffic congestion in Belfair?"

Figure A-8: Survey Question #6: "What do you think would be the best approach to fixing traffic congestion in Belfair?"

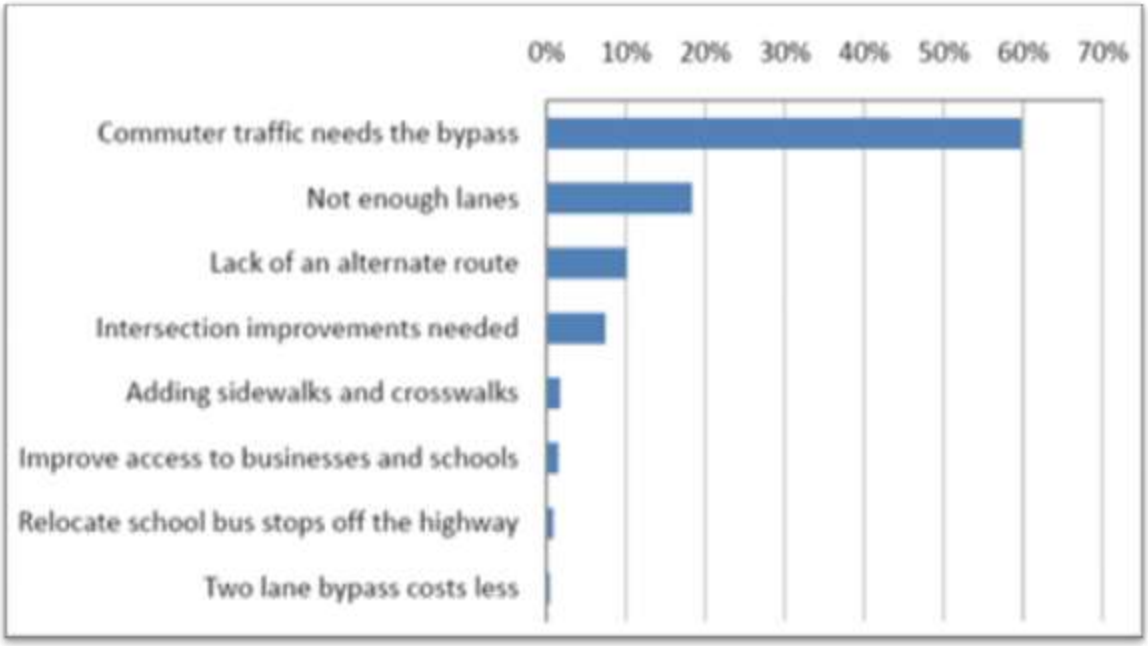


Figure A-9: Survey Question #7: "What do you think are the biggest challenges to improving SR 3 in Belfair?"

Figure A-10: Survey Question #8: "If we could fix one thing in Belfair, what would it be?"

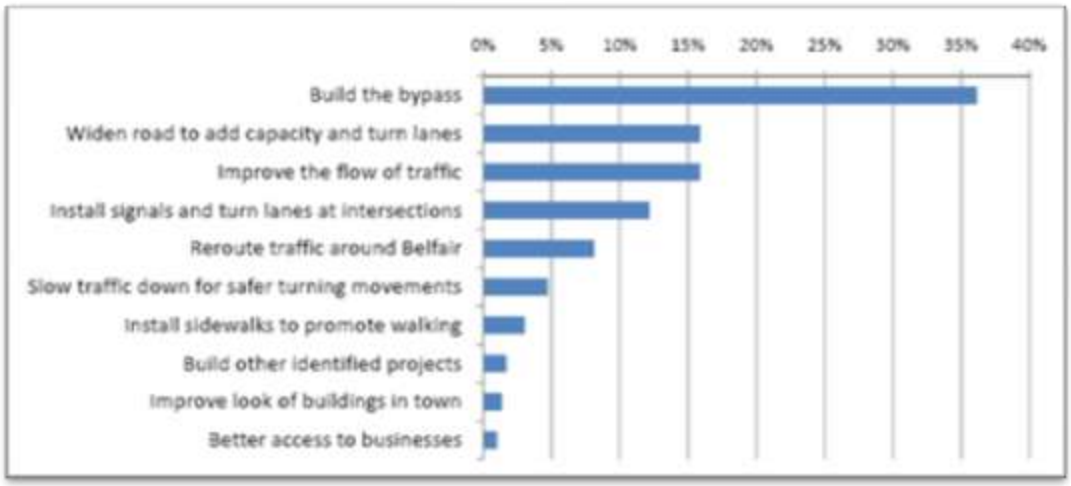


Figure A-11: Survey Question #9: "For future projects in the Belfair area, what is the best way to communicate with you and the community?"

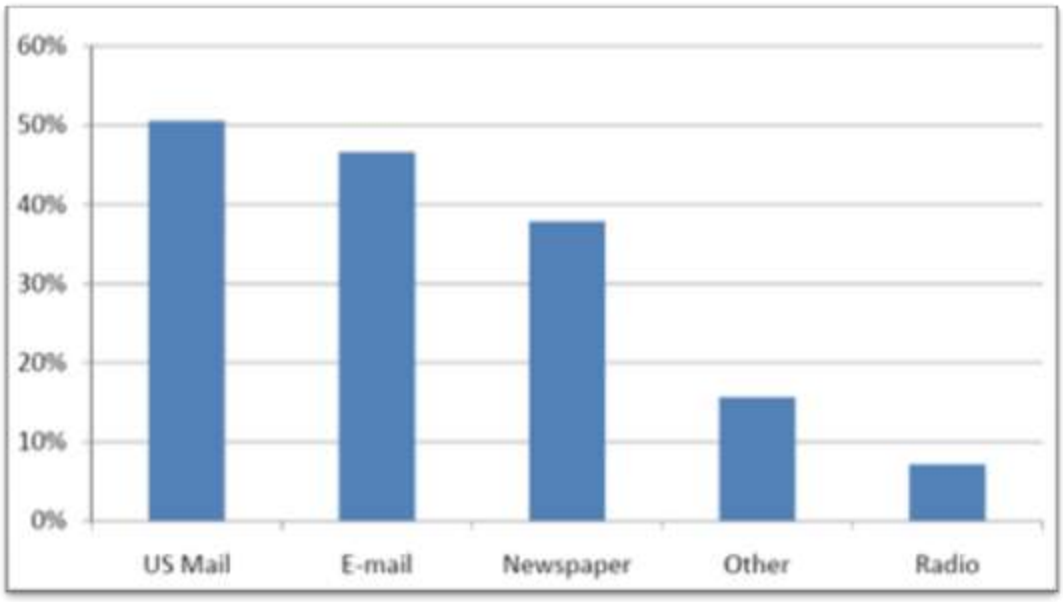


Figure A-12: Town Hall Meeting Advertisement Located on the Reverse Side of the Public Survey Form


SR 3 - Belfair Bypass Alternatives Outreach Survey & Meeting

Belfair Bypass Town Hall Meeting

Figure A-13: Distribution of afternoon rush hour traffic on SR 3 traveling northbound towards Port Orchard

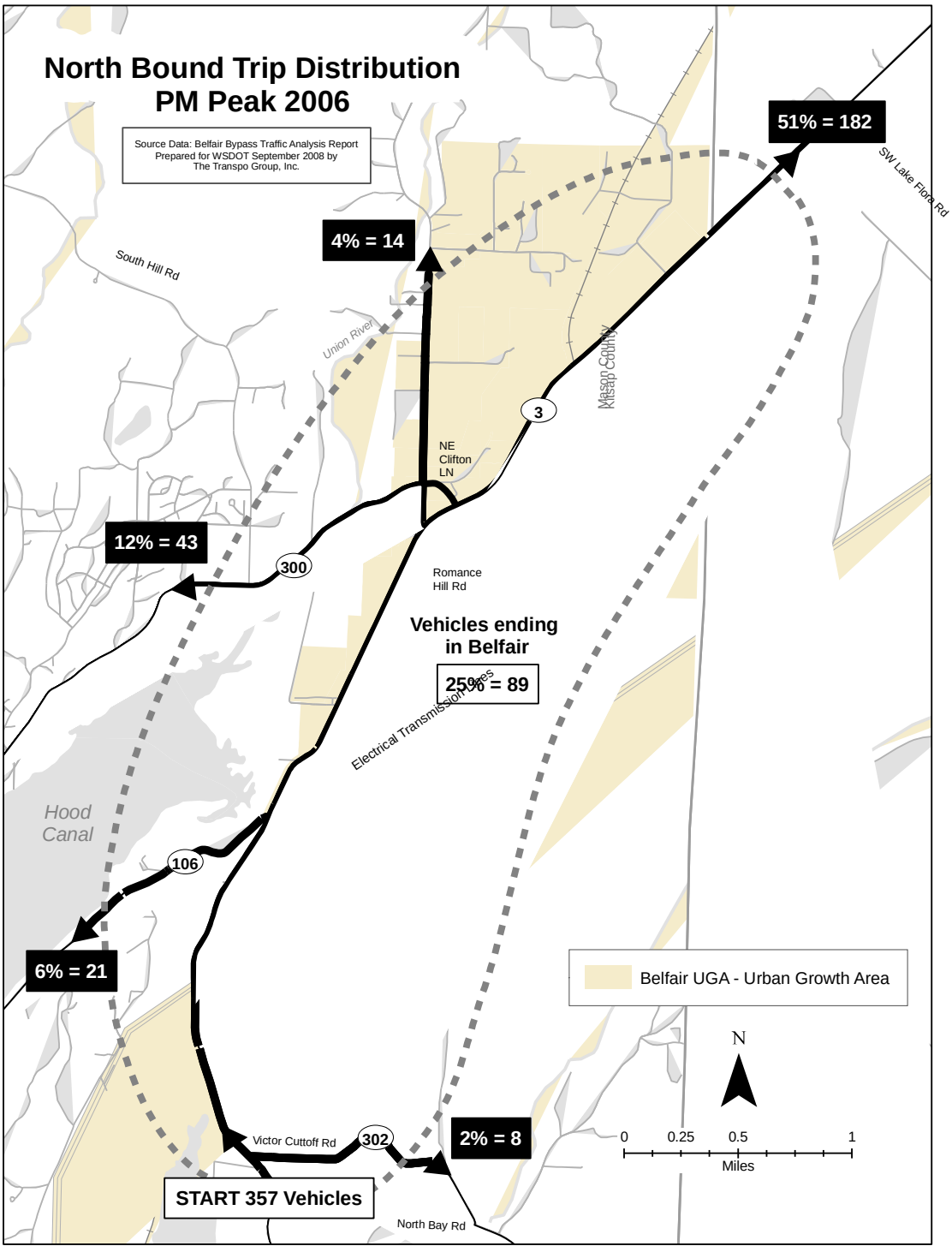


Figure A-14: Distribution of afternoon rush hour traffic on SR 3 traveling southbound towards Shelton

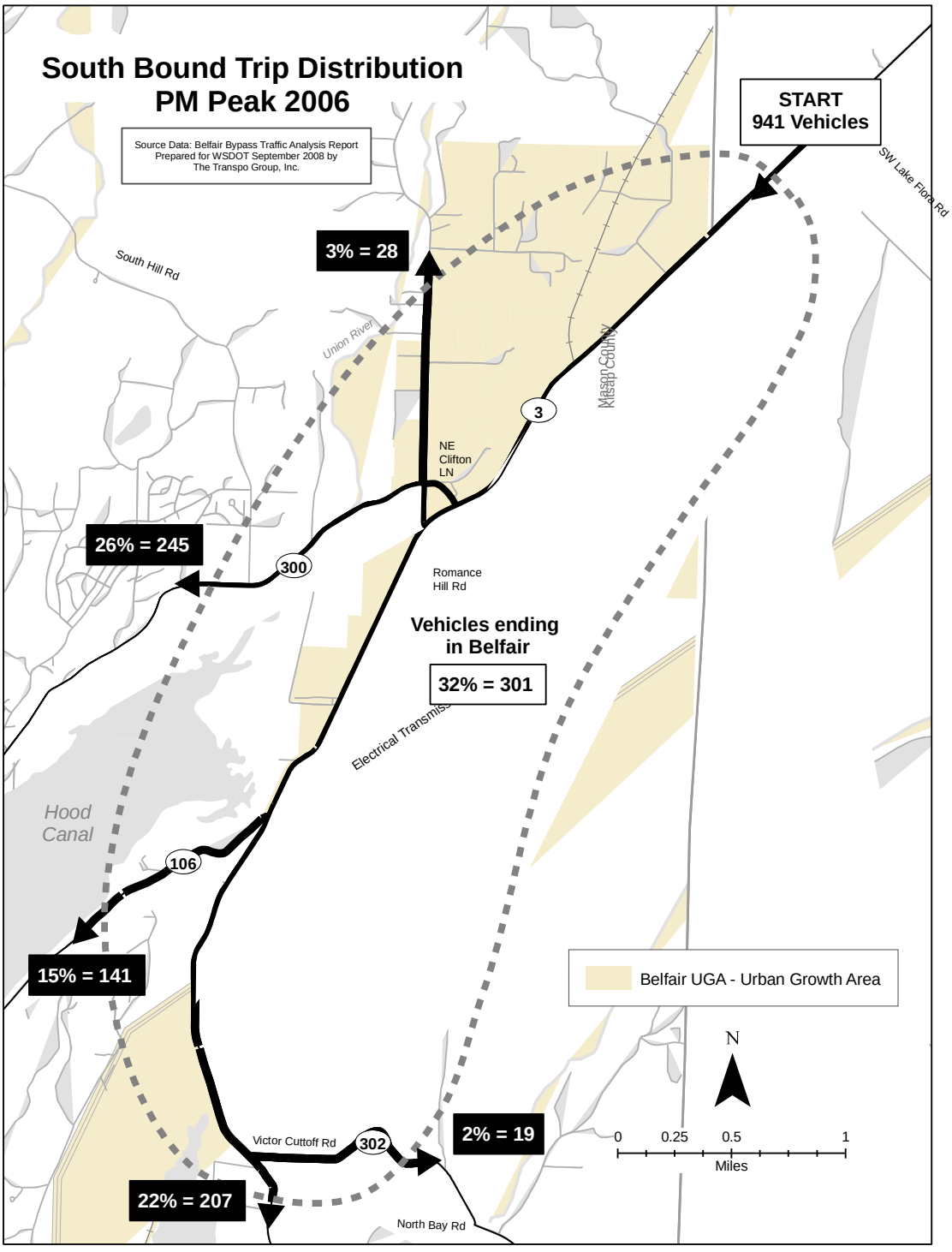
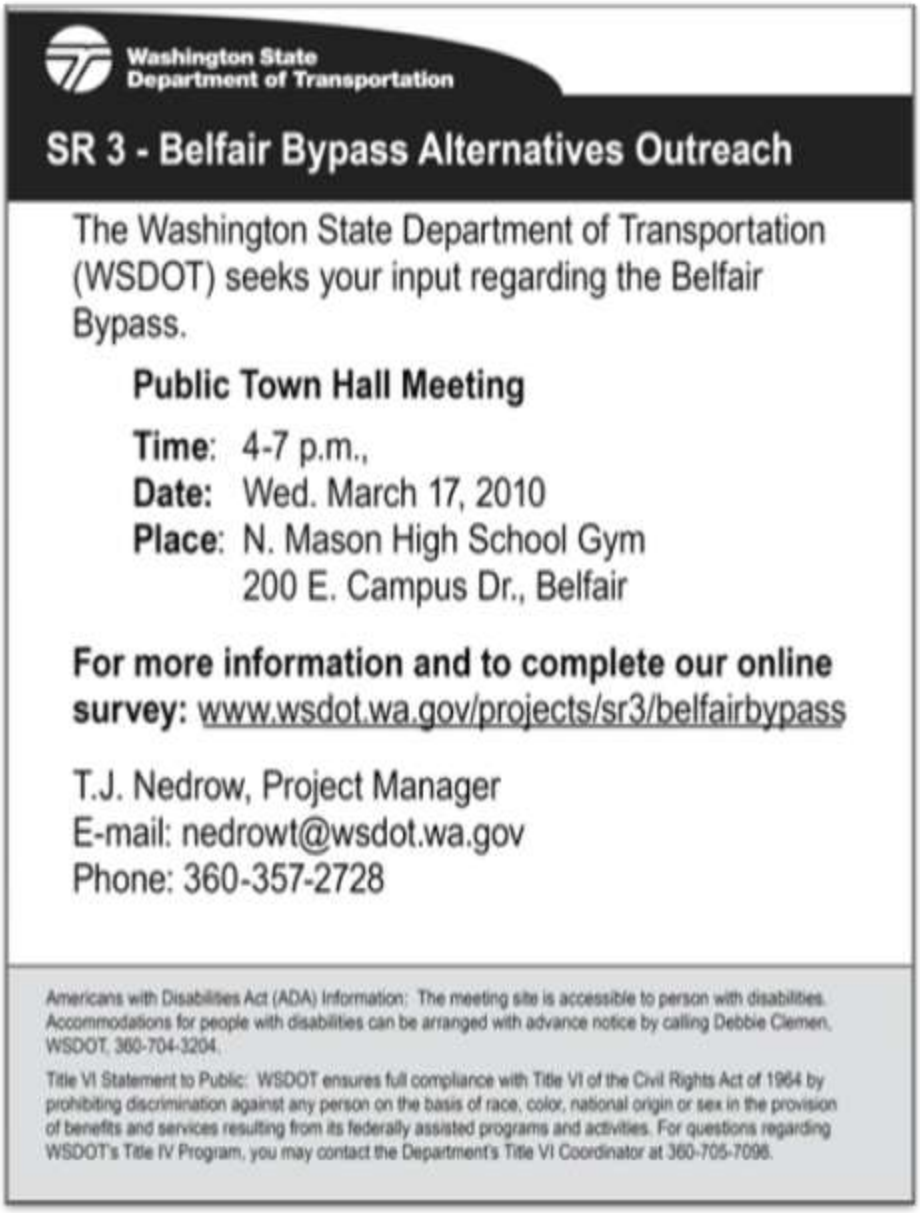


Figure A-15: Paid Newspaper Advertisements for the Town Hall Meeting



Washington State Department of Transportation

SR 3 - Belfair Bypass Alternatives Outreach

The Washington State Department of Transportation (WSDOT) seeks your input regarding the Belfair Bypass.

Public Town Hall Meeting

Time: 4-7 p.m.,
Date: Wed. March 17, 2010
Place: N. Mason High School Gym
200 E. Campus Dr., Belfair

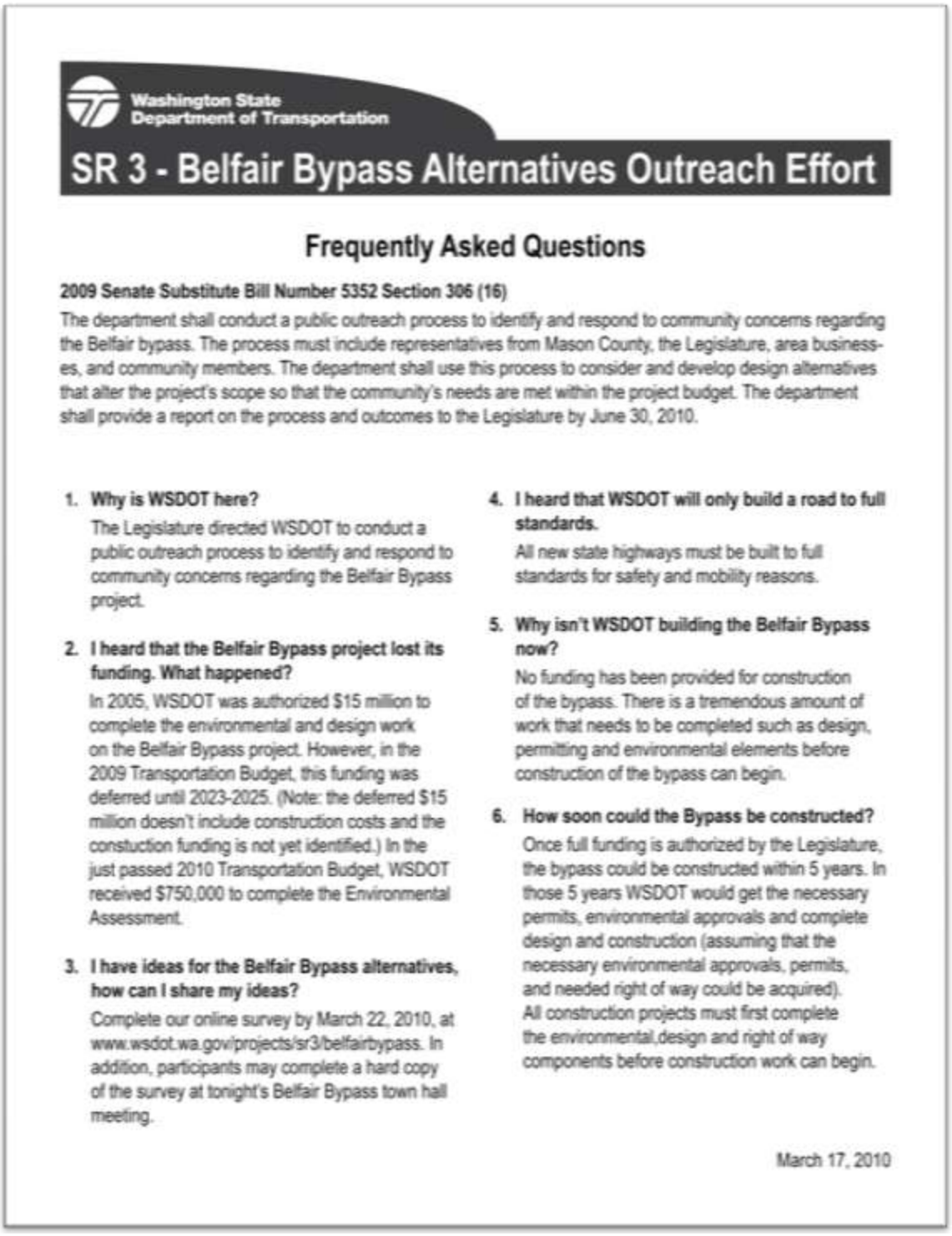
For more information and to complete our online survey: www.wsdot.wa.gov/projects/sr3/belfairbypass

T.J. Nedrow, Project Manager
E-mail: nedrowt@wsdot.wa.gov
Phone: 360-357-2728

Americans with Disabilities Act (ADA) Information: The meeting site is accessible to person with disabilities. Accommodations for people with disabilities can be arranged with advance notice by calling Debbie Clemen, WSDOT, 360-704-3204.

Title VI Statement to Public: WSDOT ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title IV Program, you may contact the Department's Title VI Coordinator at 360-705-7098.

Figure A-16: Frequently Ask Questions Town Hall Meeting Handout, Page 1 of 2



Washington State Department of Transportation

SR 3 - Belfair Bypass Alternatives Outreach Effort

Frequently Asked Questions

2009 Senate Substitute Bill Number 5352 Section 306 (16)

The department shall conduct a public outreach process to identify and respond to community concerns regarding the Belfair bypass. The process must include representatives from Mason County, the Legislature, area businesses, and community members. The department shall use this process to consider and develop design alternatives that alter the project's scope so that the community's needs are met within the project budget. The department shall provide a report on the process and outcomes to the Legislature by June 30, 2010.

1. **Why is WSDOT here?**
   The Legislature directed WSDOT to conduct a public outreach process to identify and respond to community concerns regarding the Belfair Bypass project.

2. **I heard that the Belfair Bypass project lost its funding. What happened?**
   In 2005, WSDOT was authorized $15 million to complete the environmental and design work on the Belfair Bypass project. However, in the 2009 Transportation Budget, this funding was deferred until 2023-2025. (Note: the deferred $15 million doesn't include construction costs and the constuction funding is not yet identified.) In the just passed 2010 Transportation Budget, WSDOT received $750,000 to complete the Environmental Assessment.

3. **I have ideas for the Belfair Bypass alternatives, how can I share my ideas?**
   Complete our online survey by March 22, 2010, at www.wsdot.wa.gov/projects/sr3/belfairbypass. In addition, participants may complete a hard copy of the survey at tonight's Belfair Bypass town hall meeting.

4. **I heard that WSDOT will only build a road to full standards.**
   All new state highways must be built to full standards for safety and mobility reasons.

5. **Why isn't WSDOT building the Belfair Bypass now?**
   No funding has been provided for construction of the bypass. There is a tremendous amount of work that needs to be completed such as design, permitting and environmental elements before construction of the bypass can begin.

6. **How soon could the Bypass be constructed?**
   Once full funding is authorized by the Legislature, the bypass could be constructed within 5 years. In those 5 years WSDOT would get the necessary permits, environmental approvals and complete design and construction (assuming that the necessary environmental approvals, permits, and needed right of way could be acquired). All construction projects must first complete the environmental,design and right of way components before construction work can begin.

March 17, 2010

Figure A-17: Frequently Ask Questions Town Hall Meeting Handout, Page 2 of 2

7. **Can the Belfair Bypass project be built in stages?**

   Theoretically project construction can be built in stages. However, in the case of the Bypass, a partial road would not be a good use of public funds because it wouldn't provide a public benefit.

8. **What can we do to keep the Belfair Bypass project on track?**

   Help us brainstorm alternatives tonight. An expert panel will review all public comments and determine whether they are feasible to implement.

9. **Since construction bids are coming in so low due to the state of the economy, why can't we use the extra money for the bypass?**

   Over the last few months, WSDOT has received contractor bids for projects that are significantly lower than we estimated. The result is the WSDOT has more money available to fund more projects. WSDOT is funding projects based on a prioritized list of statewide transportation needs. The Belfair Bypass project will likely not benefit in the near term from those extra funds.

10. **What plans does WSDOT have in the short term to improve mobility through Belfair?**

    In 2012, WSDOT will construct a widening project on SR 3 in Belfair that will include a full length two-way left turn lane, wider shoulders, new sidewalks and improved lighting.

11. **I heard that the county has already completed an environmental document on the Belfair Bypass. Why can't WSDOT use it?**

    It is true that Mason County did a lot of work on an environmental document for the Belfair Bypass. When WSDOT inherited the Belfair Bypass project (2006), we considered and utilized those portions of the county's National Environmental Policy Act (NEPA) analysis that remained valid for the newly developed state highway proposal.

    However, WSDOT must complete the NEPA process and obtain Federal Highway Administration's (FHWA) approval via a "*Finding of No Significant Impact*" before design work can be completed.

12. **What would it cost to build the Belfair Bypass?**

    The WSDOT estimates that the Belfair Bypass would cost $78 million in 2009 dollars (including all construction, right of way and design elements.) Note: this estimate may increase if engineers discover any unforseen complications during construction or WSDOT includes additional improvements along SR 3.

13. **In the design prepared by WSDOT, how many lanes would be in the proposed Belfair Bypass?**

    Initially, WSDOT would build two lanes. Additionally WSDOT plans to purchase enough right of way to build two additional lanes (total of 4 lanes) to accommodate future expansion.

For More Information:

www.wsdot.wa.gov/projects/sr3/belfairbypass

T.J. Nedrow, Project Manager
E-mail: nedrowt@wsdot.wa.gov
Phone: 360-357-2728

Appendix B:
Independent Expert Panel Summary

Washington State Department of Transportation

SR 3 Belfair Bypass Proviso Independent Expert Panel Summary

April 27, 2010

Belfair Proviso Independent Expert Panel Summary
April 27, 2010

Introduction: This document serves to summarize relevant discussions, assumptions and process outcomes of the independent Expert Panel[1] assembled to assist WSDOT regarding the 2009 Legislative Proviso 'SR 3 Belfair Bypass'. Included is a detailed accounting of the idea generation, evaluation and recommendations from the expert panel. In addition, speculation form and each of the recommendations are incorporated. The intent of this summary is to accurately capture and describe the process used to generate and evaluate the ideas from the group, and present the recommendations from the Panel. The Summary will be incorporated into a final report, and covers the Expert Panel including community members on the Panel. Design alternative costs are not included in the Summary. Project staff concluded that that the resources were insufficient to adequately evaluate and analyze the alternatives and offer realistic conceptual cost estimates. WSDOT will look to summarize the conclusions in a qualitative manner.

History: In accordance with the direction spelled out in Substitute Senate Bill 5352, sec 306 (16), WSDOT shall conduct a public outreach process to identify and respond to community concerns regarding the Belfair Bypass. The process must include representatives from Mason County, the Legislature, area businesses, and community members. The Department shall use this process to consider and develop design alternatives that alter the project's scope so that the community's needs are met within the project budget. The department shall provide a report on the process and outcomes to the legislature by June 30, 2010. The department determined that there were three distinct action items within the Proviso;
1) Conduct an outreach process with the public and area stakeholders
2) Identify alternatives to the current Bypass design
3) Provide a report to the Legislature

Process Project Sponsor; Ron Landon P.E., WSDOT Olympic Region Program & Planning

Activities: Manager offered the group his expectations. Aside from the Proviso mandates he noted that it was unrealistic in a two-day workshop to finalize a completed product, but would ask "what can we live with between everything and nothing.

[1] Reference Appendix 4 for a detail list of Independent Expert Panel Members and Staff.

The Expert Panel is the final fact finding effort. The desired outcome or recommendations would be for the Panel to identify three alternatives. Project staff will expand and develop those into the final report. When complete WSDOT desires a document that can be supported, and ensure that the costs are in the ballpark.

T.J. Nedrow Proviso Project Manager identified the Goal of the Expert Panel as:

> *The department shall use an expert panel process to consider and develop design alternatives that alter the project scope so that the community's needs are met within the project budget.*

The Expert Panel composed and formally agreed to an Expert Panel Event Purpose Statement:

> *Provide a report that recognizes community and regional needs (safety and congestion) and identifies corridor and local system design alternatives that provides the highest benefit for the lowest cost for further Legislative considerations***.**

Process Facilitator Dean Moberg asked what each individual panel member wanted to accomplish or keep in the forefront over the two-day effort. Of the 28 items the Panel offered, the list was distilled to the essence of four different perspectives:

1) Value community needs – the better we can make the transportation system work within Belfair, the better off.
2) Strive for cooperative government action on all levels and regardless of those levels.
3) Be cautious as government agencies can only participate in the levels their funding allows them to participate. Look for opportunities to get City, State and possible federal funding to allow the project to happen.
4) Regional trips are important and are, in fact, the purpose of the SR 3 facility, but local needs must be accommodated.

In order to insure the group was focused and working towards the same goal, the panel agreed to the following;

- The Belfair Bypass is needed.
- WSDOT should continue with its environmental and design effort on the baseline alignment. [the design effort remains unfunded at this time]
- The Project was defined as the existing SR 3 Belfair Bypass "New Alignment" as indentified in the 2005 TPA (Transportation Partnership Account) Transportations Legislation. "*A new alignment is needed*

around the town of Belfair to relieve traffic congestion. $15 million will provide the resources to complete the environmental process, identify all right of way required and complete design including contract plans. When complete, this project will relieve congestion and improve the flow of traffic."

- The group agreed that the 'project budget' was in reference to the 2005 TPA project budget of $15 million.

The first half of day one was focused on presenting relevant information leading up to the two-day effort:

- The Port of Bremerton SKIA cross-connector
- WSDOT SR 3 Bremerton Economic Development Study (BEDS)
- The Belfair Bypass Proviso Public Outreach and Survey findings
- WSDOT's Project Generation and Evolution of Project Certainty
- Belfair Bypass Studies History (1966 – 2006)

In preparation of delivering on the goal to the Expert Panel, WSDOT Project Engineer Bill Elliott and one time Project Team leader Eric Yates provided an in-depth presentation of the 2005 TPA funded SR 3 Belfair Bypass "New Alignment" project effort.

The three-year effort associated with the project produced a wide range of alternatives, 10 of which were explained in detail. The Expert Panel was afforded the opportunity to fully understand the reasoning and engineering based logic for the selection of the preferred alternatives, the baseline alignment and rational for others to be dropped off from further consideration and analysis.

By the conclusion of numerous presentations the Expert Panel was aware of the following significant key points contained in the June 30, 2009 Summary Report of the Proposed SR 3, Belfair Bypass.

- The 2009 – 2011 Transportation Budget contains no funding for the Bypass project from July 2009 through 2018. As a result, WSDOT work was curtailed in June 2009. WSDOT began work on this project in June 2006 and concluded work on June 30, 2009. Over this period, a total of $2.5 million was invested in development work on this project.

- Many individuals perceive a Belfair Bypass as a "silver bullet" that will solve the transportation challenges in the Belfair area. Analysis conducted by this 2006 project effort concludes that is not correct. As a stand-alone project, the Belfair Bypass would not provide sufficient trip diversion from the existing retail/commercial area of Belfair to provide satisfactory service levels through existing SR 3

in the 2035 forecast year of the project. A high percentage of the trips passing through Belfair originate from or are destined to either the North Shore/Tahuya area, SR 106, or the Belfair retail/commercial area itself.

- Of the several improvements examined by 2006 project effort, the Bypass does offer the greatest degree of traffic relief to SR 3, at an estimated total cost of $78 million, but additional improvements will be necessary to maintain satisfactory service levels through Belfair. Without additional improvements, the Belfair Bypass would not be sufficient to meet the needs of the project.

- The proposed Bypass facility was designed to meet state highway standards for a two lane roadway with a 60 mph design speed. The purpose of this facility is to serve regional traffic in the Shelton to Bremerton corridor. It would be a limited access facility over the approximately five miles from SR 302 to Lake Flora Road, with three access points within this length. Over the course of the work on this project, it has been uncertain if the Bypass roadway would be four lanes (two each direction), or two lanes (one each direction.) The June 2009 Transportation Discipline Report to the project Environmental Analysis (EA) documents the results of modeling that shows only a two lane roadway is warranted through the project's design year of 2035.

- The cost estimate prepared for construction is for a two lane facility. It is expected that the existing SR 3 through Belfair would remain a state highway to provide connectivity with SR 300 and SR 106.

- The proposed project estimate was reviewed in detail. The Expert Panel was cautioned that the $78 million estimate is the preliminary estimate available at the time the project work was curtailed. In proper perspective, the June 2009 preliminary cost estimate does not include a cost risk assessment and was produced with accuracy common with a 10% design level product.

Idea Generation and Evaluation Process:

The Idea Generation process afforded the Expert Panel the ability to offer any and all ideas/alternatives to the existing SR 3 Bypass alignment. The ideas were generated by the Panel through a brain storming process. These ideas were carefully evaluated, and project-specific attributes are applied to each idea to assure an objective evaluation.

The ideas generated were collected in a list on the Idea Evaluation form as they were brought up. An initial screening was conducted after the brain storming was competed. Ideas were labeled with a number, as a Design Consideration (DC) or as Fatally Flawed (FF). All ideas that received a number which were then individually considered and ranked

according to the performance attributes selected or combined with other ideas.

The Idea Evaluation form/results are found in Appendix 2. Twenty-six distinct ideas were raised for consideration during the generation phase and are listed in Appendix 2. Of the 26, 18 were identified to advance into the Idea Evaluation process. The Panel used the paired comparison method to prioritize the key performance. Performance Attributes used to evaluate the ideas included:

- Improve Mainline Operations
- Reduce Environmental Impacts
- Reduce Risk
- Improve Local Operations
- Improve Maintainability

The Panel enlisted the assistance of the stakeholders and designers to develop these attributes so that the evaluation would reflect their specific requirements. The matrix below shows the relative importance of each of the attributes, and was used to rank the ideas.

PERFORMANCE ATTRIBUTE MATRIX

SR 3 Belfair Bypass Expert Panel Proviso Effort

Which attribute is more important to the project?					**TOTAL**	**%**
Improve Mainline Operations **A**	A/B	A	A	E	3.5	23.3%
Improve Local Operations **B**	B	B	E		3.5	23.3%
Improve Maintainability **C**	D	E			1.0	6.7%
Reduce Environmental Impacts **D**	E				2.0	13.3%
Improve Safety **E**					5.0	33.3%
					15.0	100%

Idea Evaluation

The Expert Panel was introduced to evaluation tools that WSDOT has been successfully using in its value engineering process – identifying and evaluating ideas that are worthy of further consideration.

It was during this phase that WSDOT project staff presented two new additional alternatives for the Panel to consider, presented as the SR 3 Bypass South End alignment and the SR 3 Belfair couplet. Much discussion followed on the values and benefits of the newly offered alternatives. The Panel ultimately came to agreement that the two new alternatives had merit and should be further considered in the process.

Idea Development

The Idea Development phase required a group exercise that took into account individual scoring of the 26 ideas generated. The ideas generated were collected in a list on the Idea Evaluation form as they were brought up. An initial screening was conducted after the brain storming was competed. Ideas were labeled with a number, as a Design Consideration (DC) or as Fatally Flawed (FF). All ideas that received a number were then individually considered and ranked according to the performance attributes selected or combined with other ideas. The Idea Evaluation form is attached as Appendix 1.

Evaluation Process

After initial screening, the Panel compared each of the ideas with the baseline concept (the Bypass as proposed by the WSDOT design team and detailed in the June 30, 2009 Summary Report) for each of the performance attributes, to determine whether it was better than, or worse than the original concept, using a 1 to 5 scale.

The Panel reached a consensus on the ranking of the idea. High-ranked ideas were then developed further; low-ranked ones were dropped from further consideration.

Expert Panel Recommendation Forms

The ideas that the Panel decided to move forward with were recorded on an Expert Panel Recommendation form. Eight individual recommendations were carried forward for further development. Each idea was assigned to a smaller team consisting of two community representatives and one WSDOT person. The ideas were developed and the advantages and disadvantages of each were listed. After the teams completed the analysis of each idea, the results were reported out to the Panel. The entire group then discussed each idea, refining the recommendation.

After consensus was reached on the description of each recommendation, the group discussed the advantages and disadvantages of each. A risk discussion was held on each recommendation and significant risks were noted. Due to the nature of the panel members, the risks collected were community, political, safety and efficiency related, not technical environmental, right of way, design and construction risks. A further risk analysis of the technical risks is required to complete this process. The Expert Panel Recommendation forms are attached as Appendix 3.

After reviewing the recommendations, the Panel members voted to determine which recommendations to move forward with. Each community member from the Expert Panel voted, and WSDOT representatives collectively had one vote.

The Expert Panel found that no one alternative was able to satisfy all concerns and/or considerations generated from public comments, various expert panel discussions or guiding decisions. All agreed that with the through screening processes the remaining 10 alternatives listed below possessed benefit for further consideration.

#1 Phased approach – SR 3 / local connection improvements first, regional roads and corridor follow. Develop an access management plan with the Belfair community that allows community and local connections to work, may involve a couplet.
Raw Score 747

#2 State builds 2-lane Bypass from county line (north end) to Rasor Road connection, with the county building the north and south connections, with a next phase south being a high speed connectors. Possible if there is continuity within the route (lane widths, design speed, etc).
Raw Score 760

#4 Build WSDOT's proposed design (red line (baseline) drawing).
Raw Score 873

#4a Lower design speed (45mph rather than 50 or 55 mph).
Raw Score 760

#4b Lower design speed (25mph rather than 50 or 55 mph).
Raw Score 647

#7 Bypass with south tie in at SR 106 location to Romance Hill vicinity as the north end connection.
Raw Score 700

#9 Use best value design at each end connection.
Raw Score 760

#10 Consider the Bonneville Power Administration's alignment for Bypass.
Raw Score 507

#12 Priority Projects – Widening project is in design, advertisement for construction bid date of Dec 2011, these dollars should be reallocated to bypass.
Raw Score 627

#17 New alignment suggested during workshop; North and South End Alignment connections.
No Raw Score applied

Expert Panel

Over the course of the second day the Expert Panel had reduced the number of alternatives from the initial 26 to 7. The final action of the Panel was to further reduce the number down to the requested 3 or 4 alternatives. After the results of thorough dialogue four alternatives were recommended to move forward. All four were distinct and took into account the expectations noted by the Panel.

Alternative Idea #1 is a planned phased approach to the Belfair corridor, including SR 3, SR 302, SR 106, SR 300, the Bypass, and local road improvements. The group consensus was that this is a long term planning issue, and was beyond the scope of the group or WSDOT alone to pursue. However, the group agreed that it was in the best interest of the greater Belfair community, Mason and Kitsap Counties, and WSDOT to work together to develop a comprehensive plan that meets the future transportation needs of all parties, and recommends that this process begin immediately. Developing a comprehensive plan with community support and communicating it will help focus future projects.

Alternative Idea #2 and 2a splits funding between WSDOT and Mason County, with WSDOT building the middle portion of the Bypass and Mason County building one or both ends of the facility as county roads until WSDOT can fund the final connections. This option was favored by some of the participants, and was an acceptable option, providing that Mason County can find funding for their portion.

Alternative Idea #3 WSDOT buy ROW for only the current 2 lane design, and not purchase ROW for the ultimate 4 lane design as currently planned. This option was favored by some of the participants. An analysis of true costs savings is necessary to quantify savings, as much of the current alignment is undeveloped land, and reasonably inexpensive. The most costly ROW is at the connections, where there is more development, and the choice of design alternative for each connection drives the ROW requirements at those locations. The Panel recommends that WSDOT evaluate this approach for cost savings.

Alternative Idea #4 choose the best value design speed for the facility. Choosing a design speed lower than the current 55 mph may lower the cost of the facility. This option was favored by some of the participants. It is recognized that this may not result in significant savings unless the design speed is lowered to 35 mph for the end connections. The Panel recommends that WSDOT analyze this approach and evaluate cost savings.

Alternative Idea #9 choose the best value option for each end connection. This allows construction of the entire corridor at a lower cost sooner so the utility is realized, recognizing that in the future, high speed connections may have to be built. This option was favored by a majority of the participants and provides early functionality at minimum cost. The Panel recommends that WSDOT evaluate the potential end connections for the best value design and proceed with that design.

Alternative Idea #12 involved moving the funding from currently 2012 funded widening project on SR 3 in Belfair to the Bypass project. The intent would be to provide additional funding for the Bypass project. This action could however result in other necessary and or critical projects in Belfair could be delayed indefinitely. WSDOT staff furthermore cautioned the group on legal ramifications to such a shift of funding away from a scheduled project. The majority of the Panel does not recommend this course of action.

Alternative Idea #17 a new alignment proposal that was developed by the WSDOT design team during the workshop in response to discussion of options by the Expert Panel. This design would provide a shorter, functional bypass while retaining the ability to build the full Bypass later. This option was favored by a majority of the participants. The Panel recommends that WSDOT evaluate this idea as part of #9 and proceed with the best value design option.

Summary

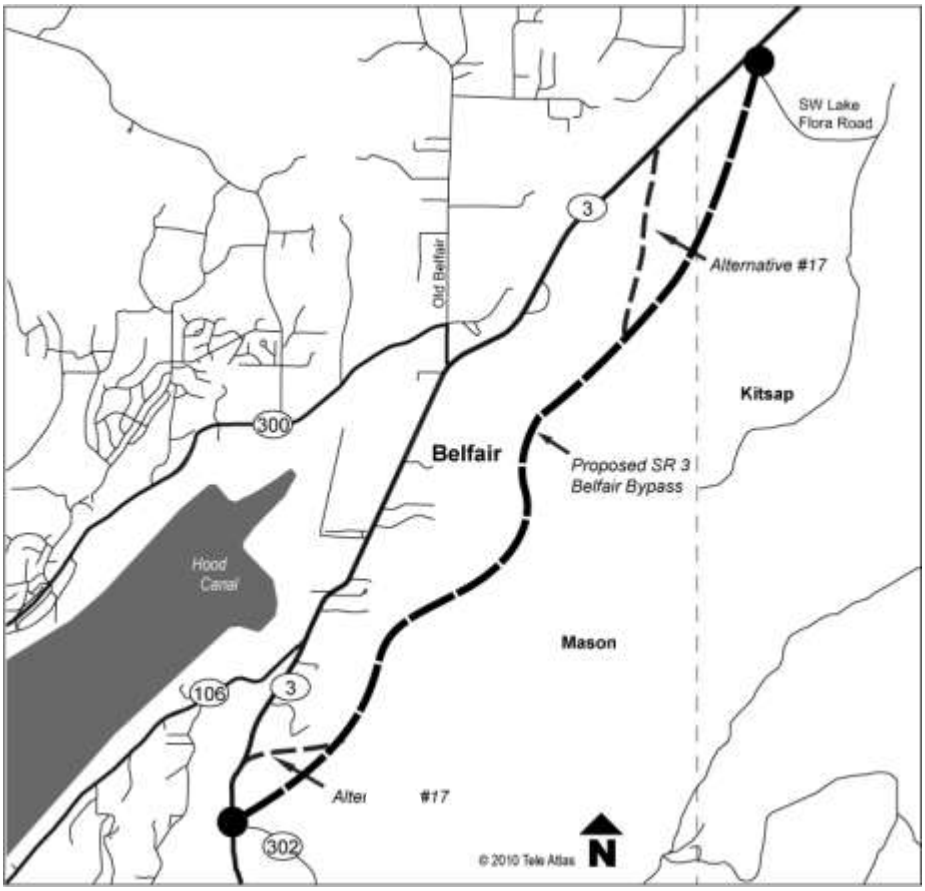
The Expert Panel outcomes from the two-day efforts:
Alternative Idea #3 WSDOT buy ROW for only the current 2 lane design, and not purchase ROW for the ultimate 4 lane design as currently planned. The Panel recommends that WSDOT evaluate this approach for cost savings.

Alternative Idea #4 is choosing the best value design speed for the facility. The Panel recommends that WSDOT analyze this approach and evaluate cost savings.

Alternative Idea #9 is choosing the best value option for each end connection. This allows construction of the entire corridor at a lower cost

sooner so the utility is realized, recognizing that in the future, high speed connections may have to be built. The Panel recommends that WSDOT evaluate the potential end connections for the best value design and proceed with that design.

Alternative Idea #17 is a new alignment proposal that was developed and offered by the WSDOT design team during the workshop in response to discussion of options by the expert panel. This Hybrid north and southern end connection design would provide a shorter, functional bypass while retaining the ability to build the full bypass later. The Panel while aware of it being a concept were in agreement that it did have merit to further evaluate and analyze. The Panel recommends that WSDOT evaluate this idea as part of #9 and proceed with the best value design option.



Conceptual draft of Alternative #17 north and south end Hybrid connections

Notable Thoughts, Comments and Observations during the Expert Panel (EP)

1. Efforts to indentify realistic and succinct cost savings during the Proviso has been difficult at best to deliver on. The conclusion was that with the very limited amount of time in the two day Expert Panel (all volunteer participants) event coupled with the overall unfunded proviso made it impractical to conduct the detailed work necessary to produce meaningful cost estimates.

2. That the complete, best resolution to traffic in Belfair, isn't simply a Bypass, but has to involve county roads that connect to SR 3. If this report doesn't address it the county has a duty to be involved in overall traffic issues, we (the EP) haven't done our job. A bypass will not resolve. 25% traffic will come out if bypass, but more traffic will come and congestion will be just as bad. The report needs to state that in addition to building a Bypass, whatever design, in addition county must build connector roads and other feeder roads to help solve the issues.

3. The traffic problem is congestion; the solution in part is the Bypass, but not totally the solution. Believe the purpose should include a discussion about what other things need to be done to reduce congestion. If WSDOT builds the Bypass, in 10-15 years, traffic will be just as bad as it is now. The Bypass will reduce traffic by 20-25%, in 15 years traffic will be up 25%, so traffic will be just as bad as it is now.

4. The Bypass is not the final solution to traffic problem in Belfair. (The solution) Needs to include connector roads, to a level that would be acceptable to community. To include building the Belfair Bypass and implement improvements listed in the BEDs studies. The Belfair Bypass is most critical element to a corridor-lever study – The Bypass around Belfair could be better supported in the Legislature, if they understand it's a regional issue, and potential federal funding opportunities.

5. The Bypass will not solve the community's traffic issues.

6. WSDOT corridor level design includes other related traffic improvements, i.e., non state highway need to be made: county road improvements are imperative.

7. Is there a formula for risk assessment? Yes. Disciplined methodologies developed in 2001 use a interdisciplinary study group over the course of two to five days using a risk modeling process. The group looks at project and identifies what risks could the project encounter. The length of the Expert Panel event will

diminish a thorough evaluation and analysis process. WSDOT staff will look to alternative methods of potential opportunities and alternatives.

8. Priority Projects? Can a certain amount of money allocated for widening project be transferred? It was noted that at one time the North Mason School district board voiced a desire to take the money for the widening project and shift it to the bypass. [WSDOT has not been verified this position]

9. The WSDOT will continue to have open dialogue with Mason County officials on emerging opportunities to advance planning efforts associated with the transpiration infrastructure in and around the Belfair community.

10. The WSDOT will continue with its Highway System Planning efforts to identify transportation improvements that address safety and mobility solutions on and along the SR 3 highway corridor.

Next Steps: This Expert Panel Summary is to be distributed to the panel member for comments, due back to WSDOT no later than 4 PM Friday May 6, 2010. At which time WSDOT staff will record comments and amend the Summary as appropriate.

On May 7th WSDOT project staff will commence with compiling a complete report of the Proviso process; Expert Panel efforts and Recommendations and Project design alternatives. The Proviso Report will contain the Expert Panel Summary as a reference document in the appendices. The Proviso report with suitable alternatives for consideration shall be delivered to the Legislature no later than June 30, 2010.

Appendix 1
Idea Generation and Evaluation
Independent Expert Panel Summary

1 Idea Generation and Evaluation

Introduction

The ideas were generated by the team through a brain storming process. These ideas were carefully evaluated, and project-specific attributes are applied to each idea to assure an objective evaluation.

Idea Generation Process

The ideas generated were collected in a list on the Idea Evaluation form as they were brought up. An initial screening was conducted after the brain storming was competed. Ideas were labeled with a number, as a Design Consideration (DC) or as Fatally Flawed (FF). All ideas that received a number were then individually considered and ranked according to the performance attributes selected or combined with other ideas.

The Idea Evaluation form/results are found in Appendix C. Twenty-six distinct ideas were raised for consideration during the generation phase and are listed in Appendix B. Of the twenty-six ideas, eighteen were identified to advance into the Idea Evaluation process.

Performance Attributes

The team used the paired comparison method to prioritize the key performance attributes for this project:

- Improve Mainline Operations
- Improve Local Operations
- Reduce Risk
- Reduce Environmental Impacts
- Improve Maintainability

The team enlisted the assistance of the stakeholders and designers to develop these attributes so that the evaluation would reflect their specific requirements. The matrix shows the relative importance of each of the attributes, and was used to rank the ideas.

PERFORMANCE ATTRIBUTE MATRIX

Project Name

	Which attribute is more important to the project?				**TOTAL**	**%**
Improve Mainline Operations **A**	A/B	A	A	E	3.5	23.3%
Improve Local Operations **B**		B	B	E	3.5	23.3%
Improve Maintainability **C**			D	E	1.0	6.7%
Reduce Environmental Impacts **D**				E	2.0	13.3%
Improve Safety **E**					5.0	33.3%
					15.0	100%

Evaluation Process

After initial screening, the team compared each of the ideas with the baseline concept (the bypass as proposed by the WSDOT design team and detailed in the June 30, 2009 Summary Report) for each of the performance attribute to determine whether it was better than, or worse than the original concept, using a 1 to 5 scale. The team reached a consensus on the ranking of the idea. High-ranked ideas were then developed further; low-ranked ones were dropped from further consideration.

Expert Panel Recommendation Forms

The ideas that the team decided to move forward with were recorded on an Expert Panel Recommendation form. Eight individual recommendations were carried forward for further development. Each idea was assigned to a smaller team consisting of two community representatives and one WSDOT person. The ideas were developed and the advantages and disadvantages of each were listed. After the teams completed the analysis of each idea, the results were reported out to the group. The entire group then discussed each idea, refining the recommendation.

After consensus was reached on the description of each recommendation, the group discussed the advantages and disadvantages of each. A risk discussion was held on each recommendation and significant risks were noted. Due to the nature of the panel members, the risks collected were community, political, safety and efficiency related, not technical environmental, right of way, design and construction risks. A further risk analysis of the technical risks is required to complete this process. After reviewing the recommendations, the team members voted to determine which recommendations to move forward with. Each community member from the expert panel voted, and WSDOT representatives collectively had one vote.

Expert Panel Recommendations

Idea #1 is a planned phased approach to the Belfair corridor, including SR 3, SR 302, SR 106, SR 300, the bypass, and local road improvements. The group consensus was that this is a long term planning issue, and was beyond the scope of the group or WSDOT alone to pursue. However, the group agreed that it was in the best interest of the greater Belfair community, Mason and Kitsap Counties, and WSDOT to work together to develop a comprehensive plan that meets the future transportation needs of all parties, and recommends that this process begin immediately. Developing a comprehensive plan with community support and communicating it will help focus future projects.

Idea #2 and 2a splits funding between WSDOT and Mason County, with WSDOT building the middle portion of the bypass and Mason County building one or both ends of the facility as county roads until WSDOT can fund the final connections. This option was favored by some of the participants, and was an acceptable option, providing that Mason County can find funding for their portion.

Idea #3 is that WSDOT buy ROW for only the current 2 lane design, and not purchase ROW for the ultimate 4 lane design as currently planned. This option was favored by some of the participants. An analysis of true costs savings is necessary to quantify savings, as much of the current alignment is undeveloped land, and reasonably inexpensive. The most costly ROW is at the connections, where there is more development, and the choice of design alternative for each

connection drives the ROW requirements at those locations. The team recommends that WSDOT evaluate this approach for cost savings.

Idea #4 is choosing the best value design speed for the facility. Choosing a design speed lower than the current 55 mph may lower the cost of the facility. This option was favored by some of the participants. It is recognized that this may not result in significant savings unless the design speed is lowered to 35 mph for the end connections. The team recommends that WSDOT analyze this approach and evaluate cost savings.

Idea #9 is choosing the best value option for each end connection. This allows construction of the entire corridor at a lower cost sooner so the utility is realized, recognizing that in the future, high speed connections may have to be built. This option was favored by a majority of the participants and provides early functionality at minimum cost. The team recommends that WSDOT evaluate the potential end connections for the best value design and proceed with that design.

Idea #12 involved moving the funding from currently funded widening projects on SR 3 in Belfair to the bypass project. This could provide additional funding for the bypass project, but would mean that other necessary projects in Belfair could be delayed indefinitely. The majority of the team does not recommend this course of action.

Idea #17 is a new alignment proposal that was developed by the WSDOT design team during the workshop in response to discussion of options by the expert panel. This design would provide a shorter, functional bypass while retaining the ability to build the full bypass later. This option was favored by a majority of the participants. The team recommends that WSDOT evaluate this idea as part of #9 and proceed with the best value design option.

Appendix 2
Idea Evaluation
Independent Expert Panel Summary

Independent Expert Panel Summary
April 14 – 15, 2010, Tumwater Project Engineer Office

Expert Panel Idea Generation Results

1. **Phased approach – SR3 / local connection improvements first, regional roads and corridor follow. Develop an access management plan with Belfair community that allows community and local connections to work, may involve a couplet.**
2. **State build 2 lane bypass from county line (north end) to Razor Rd connection, with county building connections (N & S), with next phase (S) for state being connectors. Possible if there is continuity within the route (lane widths, design speed, etc)**
3. **Buy ROW for 2 lane facility (or buy minimum ROW needed)**
4. **Build WSDOT proposed design (red line)**
5. **Lower design speed (45mph rather than 55 mph)**
6. **Lower design speed (25mph posted rather than 50 or 55 mph)**
7. **Lower functional class of loop road**
8. **Build bypass as a county road (State build road to county (AASHTO) standards and turn over to county) Analyze with 4/4a**
9. **Bypass with south tie in at SR 106 loc, Romance Hill connection, and the north end connection**
10. **Least cost design rather than full design level for each end connection.**
11. **Use best value design at each end connection**
12. Reduce LOS of intersections at both ends
13. Follow 2001 county alignment (already compared with current alignment, county eng had a $15m (2001 yr) estimate.)
14. **Consider BPA alignment for bypass (power line alignment is not grade sensitive, does not follow SR3, requires improvements on Lake Flora Rd., EPA is not in favor of this option)**
15. **Avoid bridges at canyon (ravine) and/or school (option for #4)**
16. **Priority Projects – Widening project is in design, Ad date of Dec 2011, should these moneys be reallocated to bypass**
17. **Continue current SR3 improvements (remaining elements of current widening and add intersection mitigation) do bypass later**
18. Limit left turns on existing SR 3 (local improvements)
19. 3 lane existing SR3 and use roundabouts to increase flow
20. Existing SR3 reversible lane
21. Look at other TDM ideas – transit, etc
22. Low cost alternative to maximize use of current facility (signal optimization, low cost improvements)
23. **Make bypass a toll road (or HOT)**
24. **Public / private partnership**
25. Reduce shoulder width
26. **Build 2 lane facility rather than half of 4 lane facility (reduce shoulder to 6' or 8'(Build sub standard shoulders (design consideration for #4)**

*Bolded text indentified concept idea worthy for further consideration and evaluation.

IDEA EVALUATION									Washington State Department of Transportation
Ideas		Performance Attributes					Advantages	Disadvantages	Raw Score
#	Description	Main Line	Loc Rd	Maint	Env	Safe			
1	**Phased approach – SR3 / local connection improvements first, regional roads and corridor follow. Develop an access management plan with Belfair community that allows community and local connections to work, may involve a couplet.**	4	4	2	3	4	♦ See Recommendation #1	♦ See Recommendation #1	747
2	**State build 2 lane bypass from county line (north end) to Rasor Rd connection, with county building connections (N & S), with next phase (S) for state being connectors. Possible if there is continuity within the route (lane widths, design speed, etc)**	5	4	3	3	4	♦ See Recommendation #2 and 2a	♦ See Recommendation #2 and 2a	760

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
3	Buy ROW for 2 lane facility (or buy minimum ROW needed)						♦ Initial lower cost	♦ Land is undeveloped at this time for most of the ROW. ♦ As land develops, cost will increase ♦ Traffic studies show that additional capacity will be needed ♦ Significant increase in cost likely when additional lanes are needed ♦ Not likely to add significantly to the project cost	
4	**Build WSDOT proposed design (red line on drawing)**	5	4	3	3	5	♦ See recommendation #4	♦ See recommendation #4	873
4a	**Lower design speed (45mph rather than 50 or 55 mph)**	4	4	3	3	4	♦ See recommendation #4	♦ See recommendation #4	760
4b	**Lower design speed (25mph rather than 50 or 55 mph)**	3	4	3	3	3	♦ See recommendation #4	♦ See recommendation #4	647
5	Lower functional class of loop road						♦ Possibly lower design standards, reducing cost	♦ Would not meet the need of a bypass ♦ Would allow more accesses, decreasing efficiency ♦ Dropped from consideration	

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
6	Build bypass as a county road (State build road to county standards and turn over to county)						♦ This item analyzed with 4a, as it is similar in scope.	♦	
7	**Bypass with south tie in at SR 106 loc to Romance Hill vic as the north end connection**	3	3	3	3	3	♦	♦	600
8	Least cost design rather than full design level for each end connection.						♦ This item analyzed with 9, as it is similar.	♦	
9	**Use best value design at each end connection**	4	4	3	3	4	♦	♦	760
FF	Use RR alignment for new bypass and/or relocate RR (cost similar to rd in other locations, ends difficult at elevation)						♦	♦ RR ROW sharing not compatible ♦ Connections difficult due to close proximity to RR crossings	
DC	Federal funding opportunities						♦	♦	

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
10	**Consider BPA alignment for bypass**	2	2	3	3	3	♦ Alignment is relatively development free	♦ Power line is not grade sensitive, roadway is ♦ Does not follow SR 3 at north end ♦ Requires improvements on Lake Flora Rd ♦ EPA is not in favor of this option ♦ Difficulty aligning roadway under power lines and around towers	507
DC for 1	Stage the project with a couplet as a local improvement						♦	♦	
DC for 1	Donation of land in exchange for an intersection (tied to access plan idea)						♦	♦	
DC	Evaluate Guardrail against slopes to get best value						♦	♦	
DC	Allow deviations to reduce cost						♦	♦	

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
DC	Look for opportunities between sewer or other local projects or utility corridors that can reduce costs (possibly connection road to sewer plant)						♦	♦	
DC for 1	Develop an access management plan with Belfair community that allows community and local connections to work						♦	♦	
FF	Gravel road (addressed through county comm.)						♦ Lower initial cost roadway	♦ County public works cannot embrace ♦ WSDOT will not accept a gravel facility due to maintenance ♦ Not likely to attract significant traffic ♦ High maintenance costs	
DC	Lower design speed						♦	♦	

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
11	Avoid bridges at canyon (ravine) and/or school						♦ Avoid costs of bridges	♦ Adds additional costs at school by requiring higher value properties to be purchased and more significant redesign of intersections with SR 302 and SR 3 ♦ Adds additional costs at ravine by impacting wetlands	
FF	Relocate Belfair						♦	♦ Community is not likely to move	
12	**Priority Projects – Widening project is in design, Ad date of Dec 2011, these $'s should be reallocated to bypass**	4	2	2	2	4	♦ Moves $'s allocated to widening projects already in design to bypass project ♦ Provides partial additional funding for bypass ♦ Cost for bypass may be lower if done sooner due to inflation	♦ Traffic analysis shows that both improvements in Belfair on existing SR 3 and a bypass is required for significant improvement to congestion ♦ Legislative action is required ♦ If funding is removed from widening project, the legislature may decide not to allocate it to bypass ♦ If funding is removed from widening, new funding for widening is unlikely ♦ Widening funding is not enough to meet funding needs for bypass ♦ May increase tort liability	627

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
DC for 8/9	Reduce LOS of intersections at both ends						♦	♦	
13	Continue current SR3 improvements (remaining elements of current widening and add intersection mitigation) do bypass later						♦ Moves $'s allocated to bypass into widening project in Belfair, allowing these improvements to progress more rapidly ♦ Short term improvements to congestion ♦ Traffic analysis shows these improvements are necessary	♦ Requires legislative action ♦ $'s may not be allocated to widening by legislature if removed from bypass ♦ Does not meet community expectations	
FF	Tie into 302 rather than 3 to avoid school (steep slope, difficult 302 I/S)						♦	♦ Does not provide through access for SR 3 ♦ Does not meet purpose of loop	
DC 1/ 13	Low cost alternative to maximize use of current facility (signal optimization, low cost improvements)						♦	♦	
14	Make bypass a toll road (or HOT)						♦ Funding option	♦ Expensive to put infrastructure in place ♦ Route is not likely to generate much revenue	
DC	Call it a loop not a bypass						♦	♦	

IDEA EVALUATION								Washington State Department of Transportation	
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
15	Public / private partnership						♦ Funding option	♦ Only viable if private partner has profit potential ♦ Not likely	
DC	Follow geography to minimize fill or balance job						♦	♦	
FF	County/county/city/state partnership (Bremerton study – this area is close to the BED study area)						♦	♦ Funding option – not a design option	
DC	Use permeable surface to reduce storm water costs (in shoulders)						♦	♦	
DC	Innovative design to reduce storm water impacts (LID)						♦	♦	
w/16	~~Reduce shoulder width~~						♦	♦	
16	Build 2 lane facility rather than half of 4 lane facility (reduce shoulder to 6' or 8')						♦ Analyzed as cost option for #4	♦	
DC for 4	Build sub standard shoulders						♦ Cost option on #4	♦ Not bicycle and pedestrian friendly ♦ Could be safety issue	

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
FF	Prohibit trucks to allow smaller pavement section						♦	♦ Does not meet purpose to build a facility that does not meet requirements for commercial vehicles	
FF	Toll existing SR3 and put traffic on bypass						♦	♦ Tolling is not an option for this facility at this time ♦ Cost prohibitive	
DC	Limit access for the bypass (continue limited access section through bypass, currently only 1 in design to Alta development, 3 possible)						♦	♦	
DC for 13	Limit left turns on existing SR 3 (local improvements)						♦	♦	
FF	Don't build bypass and 4 lane existing SR 3 through town (will destroy most of downtown buildings)						♦	♦	
DC for 13	3 lane existing SR3 and use roundabouts to increase flow						♦	♦	

IDEA EVALUATION									Washington State Department of Transportation
Ideas		**Performance Attributes**					**Advantages**	**Disadvantages**	**Raw Score**
#	**Description**	**Main Line**	**Loc Rd**	**Maint**	**Env**	**Safe**			
DC for 13	Existing SR3 reversible lane						♦	♦	
DC 8/9	Follow 2001 county alignment (already compared with current alignment, county eng had a $15m (2001 yr) est.)						♦	♦	
DC 13	Look at other Traffic Demand Management ideas – transit, etc						♦	♦	
FF	Light rail on the navy line (Coordination required with USN, not enough density)						♦	♦ Light Rail is outside the scope of this design	
17	**New alignment suggested during workshop**						♦ See recommendation #17	♦ See recommendation #17	

Appendix 3
Expert Panel Recommendations
Independent Expert Panel Summary

EXPERT PANNEL RECOMENDATION *SR 3 – Belfair Bypass*	Washington State Department of Transportation
Function: Comprehensive Planning Approach	**NUMBER** 1
Title: Planned Phased Approach – Local Improvements First	**PAGE NO.** 1 of 1

Basic Description:

Both a bypass and local improvements are necessary to meet safety and congestion relief for the Belfair area in the long term. Recognizing funding constrains, it may not be possible to do all desired improvements in the short term. A planned, phased approach with the lower cost options first allows more immediate improvements while planning for long term solutions.
WSDOT should continue to pursue the Belfair (Lake Flora rd to SR 302) improvements (to maximize the utility and safety of existing SR3) that will be necessary in the future, while progressing with the permitting and design of the bypass. Funding should be secured for the bypass in the near future. Recommend that all necessary elements (including local grid improvements) of the final solution be included in the plan.
Buy ROW, finish design for selected design first with any $'s allocated.

Risks:

Bypass may be delayed until local improvements are completed. If community does not develop comprehensive plan or is in disagreement, then funding may go elsewhere.
Community expects a bypass. Delaying this or doing other improvements first may be an issue with the community.
Design risks may be more than bypass as bypass is partially designed.
Perception may be that by funding smaller projects that there is no need for bypass funding.
Delaying construction will increase costs, so ROW and/or construction costs for bypass may get too expensive to build.
Improvements are no identified or quantified yet.
May not be compatible with BED study (BED study assumes bypass is built, and not yet accepted by WSDOT)
May not be compatible with community feedback.

Advantages:

- Enhance financial feasibility for local improvements
- Provides opportunity for short term congestion relief
- Construct necessary local improvements that complement construction of the bypass.
- Maximize utilization and safety of existing SR3

Disadvantages:

- Potential community opposition – perception is that bypass is needed first
- Many of these improvements need to be identified and funded.
- May not be as efficient as the bypass to relieve congestion
- Eventual bypass will cost more if it is delayed

EXPERT PANNEL RECOMENDATION *SR 3 – Belfair Bypass*		Washington State Department of Transportation
Function:	Split Funding Options	**NUMBER** 2
Title:	Phased Construction – County Funds N1 and S1, state funds center section, build entire project	**PAGE NO.** 1 of 1

Basic Description:

State build 2 lane bypass from county line (north end) to Rasor Rd connection, with county building connections (N & S), with next phase (S) for state being connectors. Possible if there is continuity within the route (lane widths, design speed, etc)
Use N1 & S1 connections constructed with county funds and use state funds to connect those ends.
Purchase ROW for ultimate corridor.

Risks:

South connector may be too expensive for county to accept responsibility for.
County will be challenged to find funding for both ends.
None of the pieces of this project have independent utility
One project with dual funding sources is required
Political – may not be able to get public support
Not S4/N3 comment

Advantages:

- Reduces state contribution
  - N1 by $32m
  - S1 by $29m
- State budget goes to $17m
- County to $61m

Disadvantages:

- Lower level of service to N & S ends
- S1 is $20.6m more expensive than S4 (paid by county)
- Will require future phase work to construct ultimate by pass
- County will be challenged to find funding
- All three projects need to be delivered before any utility is provided (inter agency agreement will be required)

EXPERT PANNEL RECOMENDATION *SR 3 – Belfair Bypass*	Washington State Department of Transportation
Function: Split Funding Options	**NUMBER** 2a
Title: Phased Construction – County Funds N1	**PAGE NO.** 1 of 1

Basic Description:

State builds 2 lane version of entire project. South end to S4 north end at N1. State buys ultimate section ROW. County funds N1 connection.
Promotes state/county partnership. This option may have best chance for success.

Risks:

County will be challenged to find funding for north end.
North extension is not built so efficiency of N intersection may not meet needs.
May not have public/political support in the county to get funding.

Advantages:

- Moves $32m current cost to future phase and reduces state cost by that amount
- N1 is a dual purpose arterial for later phase as extension of Newkrik
- N1 fits with proposed grid system for future economic and residential growth
- State budget $46m
- County $16m (or whatever N end is)

Disadvantages:

- Requires future phase construction of N3
- Lower level of traffic service on N end
- County required to fund N1
- Will require future phase work to construct ultimate by pass
- County will be challenged to find funding
- All three projects need to be delivered before any utility is provided (inter agency agreement will be required)

EXPERT PANNEL RECOMENDATION *SR 3 – Belfair Bypass*	Washington State Department of Transportation
Function: Reduce Footprint	**NUMBER** 3
Title: Reduced ROW Width	**PAGE NO.** 1 of 1

Basic Description:

Purchase half width ROW (140+)

Purchase only ROW required for a 2 lane section rather than the ultimate section. Assumption is 1/3 savings in ROW costs.

Risks:

ROW costs likely to increase for ultimate section
Not compatible with BED Study
Lower cost way to meet community expectations
May preclude building ultimate 4 lane section (due to rising costs of developed ROW)

Advantages:

- Potentially saves $5m
- Allows construction to proceed sooner

Disadvantages:

- Requires future purchase of ROW for ultimate section
- Allows development along the section, which will escalate property value
- Not compatible with BED study or state plan

EXPERT PANNEL RECOMENDATION *SR 3 – Belfair Bypass*	Washington State Department of Transportation
Function: Reduce Footprint	**NUMBER** 3
Title: Reduced ROW Width	**PAGE NO.** 1 of 1

Basic Description:

Purchase half width ROW (140+)
Purchase only ROW required for a 2 lane section rather than the ultimate section. Assumption is 1/3 savings in ROW costs.

Risks:

ROW costs likely to increase for ultimate section
Not compatible with BED Study
Lower cost way to meet community expectations
May preclude building ultimate 4 lane section (due to rising costs of developed ROW)

Advantages:

- Potentially saves $5m
- Allows construction to proceed sooner

Disadvantages:

- Requires future purchase of ROW for ultimate section
- Allows development along the section, which will escalate property value
- Not compatible with BED study or state plan

VALUE ENGINEERING RECOMENDATION
Project Name

Washington State Department of Transportation

Function:	Best Value Design	**NUMBER** 9
Title:	Phase Construction Using N1 Connection	**PAGE NO.** 1 of 1

Basic Description:

Use lowest cost connection (N1 and S4)
Construct 2 lanes of ultimate 4 lane section, but purchase ROW for ultimate 4 lane section.
State builds entire facility and purchases ultimate section ROW.

Risks:

Funds may not be available.
N1 may not provide adequate traffic flow.
Deviation from community expectation of N3 and S4 may cause issues.

Advantages:

- North use of N1 saves $16m
- N1 is a dual purpose arterial for later phase as extension of Newark
- N1 fits with proposed grid system for future economic and residential growth
- Reduces state cost by $16m
- Does not require agreements with county in similar options
- Allows downtown widening projects to move forward

Disadvantages:

- Less traffic performance (lower LOS, lower throughput) at north end connection
- Will result in need, at a later time, for phase II work to build ultimate N3 connections at a higher cost.

VALUE ENGINEERING RECOMENDATION *Project Name*	Washington State Department of Transportation
Function: Funding Option	**NUMBER** 12
Title: Move $'s from Widening Project to Bypass	**PAGE NO.** 1 of 1

Basic Description:

Move $s currently allocated to existing SR3 improvements (widening and intersection) BAWSI to bypass

Risk:

$'s could be lost as it is not enough to build bypass
Lessens immediate impact to current utilities (they do not have to move because widening will not occur)
Community may not be aware of impacts of this course of action
Appears to meet expectation from some in the community that bypass is most important improvement
Money may be dropped from widening project and NOT get transferred to bypass by Leg

Advantages:

- Faster bypass delivery
- Further investment in the bypass
- Community support of bypass(perceived)
-

Disadvantages:

- Community opposition (business)
- Not enough $'s to build bypass
- Requires leg action to move $'s
- Deferred safety projects in Belfair (existing SR3)
- No guarantee finish date to bypass

EXPERT PANNEL RECOMENDATION *SR 3 – Belfair Bypass*	Washington State Department of Transportation
Function: Best Value Design	**NUMBER** 17
Title: Phase Construction Using New South Alignment with N1	**PAGE NO.** 1 of 1

Basic Description:

Use new connection at new suggested Alignment (developed during workshop) – Under cross RR, parallel to power line and intersect SR3 west of RR.
Construct 2 lanes of ultimate 4 lane section, but purchase ROW for ultimate 4 lane section.

Risks:

Funds may not be available.
N1 may not provide adequate traffic flow.
Deviation from community expectation of N3 and S4 may cause issues.
BPA conflicts may increase cost

Advantages:

- North and South connections may save significant $'s
- 28% less length
- Does not require agreements with county in similar options
- Allows downtown widening projects to move forward

Disadvantages:

- Less traffic performance (lower LOS, lower throughput) at north end connection
- Will result in need, at a later time, for phase II work to build ultimate N3 connections at a higher cost.
- Significant potential opposition by property owner
- Cost of new RR undercrossing
- BPA Power line conflicts (may not agree to alignment near/under power line)

Appendix 4
Expert Panel Members and Staff
Independent Expert Panel Summary

Independent Expert Panel Members and Staff

Independent Expert Panel Members

Ken VanBuskirk, Local Area Citizen
Tim Wing, North Mason County Chamber of Commerce
Perry Shea, Shea Carr & Jewell, Local Engineering Consultant
Bill Bennett, Belfair Bypass Transportation Discipline Report
Mike Fleming, Project Design Expert
Dean Moberg, WA Division Area Engineer, Federal Highways Administration

WSDOT Staff and Contributors

Faris Al-Memar, Systems Analysis & Programming Manager
Pat Morin, Systems Analysis & Priority Programming Manager
David Smelser, Statewide Value Engineering Coordinator
Doug McClanahan, State Traffic Analysis Engineer
T.J. Nedrow, Belfair Bypass Proviso Project Manager
Bill Elliott, SR 3 Belfair Bypass New Alignment Project Office Project Engineer
Eric Yates, SR 3 Belfair Bypass New Alignment Project Team Leader
Debbie Clemen, Transportation Planning Office Liaison