



**DRAFT ALTERNATIVE PACKAGING
REPORT**

June 7, 2006

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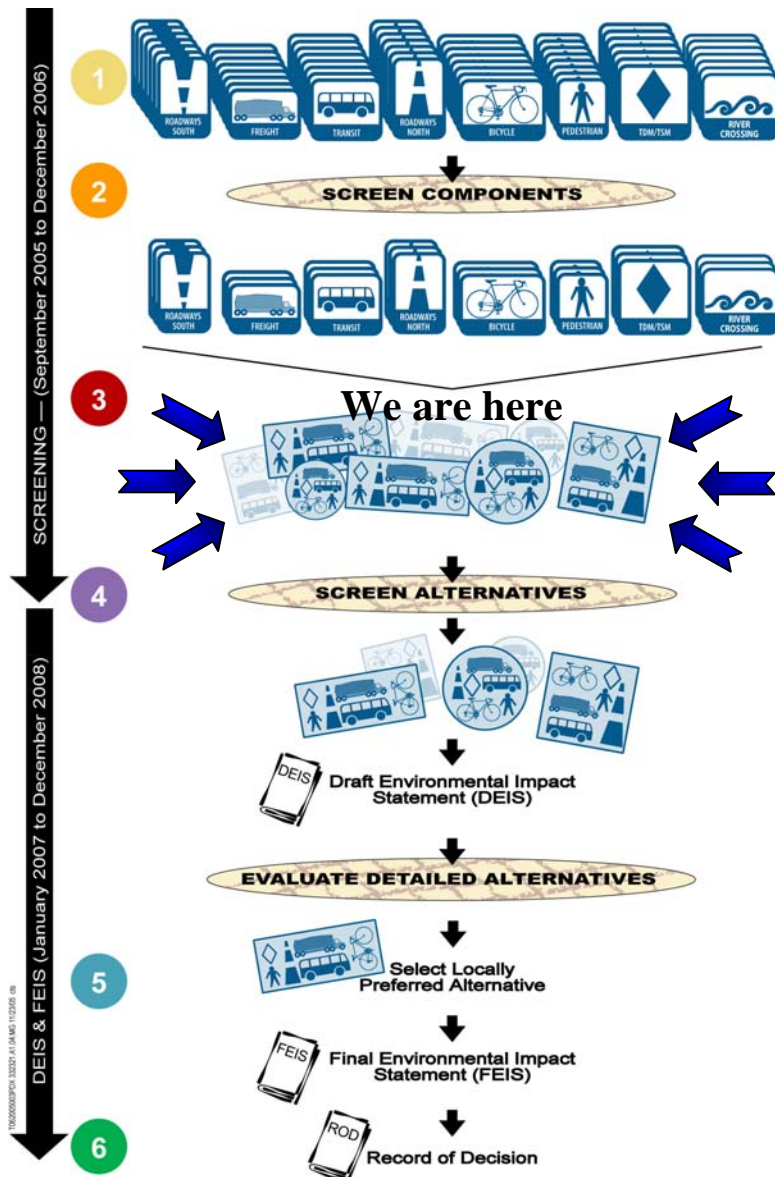
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1. Overview of Alternative Packaging

Following the adopted I-5 CRC evaluation framework depicted in **Figure 1-1**, the project team and Task Force identified the initial universe of project ideas (“components”) through a public scoping process (1) during fall 2005 and completed a two-step (Steps A and B) component screening process (2) in spring 2006 to narrow the list of river crossing and transit components to those most promising and consistent with the project’s adopted Purpose and Need. The

Figure 1-1. Evaluation Process



project team is now in the process of packaging promising components from the eight (8) transportation categories shown at the top of Figure 1-1 into fully formed Alternative Packages (3) for further study, screening, and refinement during the remainder of 2006.

This *Draft Alternative Packaging Report* describes the considerations and process undertaken by the project team to formulate the resulting 12 alternative packages being recommended to the Task Force for further study.

Purpose of Packaging

The purpose of alternative packaging is to test how various alternative packages, and features of those packages, perform and relate to one another given the adopted screening/evaluation criteria for this project.

Combining the remaining and most promising components into fully formed alternative packages will allow the project team to assess the inter-relationship of river crossing, transit, and other components for the first time.

What is learned will support further narrowing and refinement of ideas and ultimately set the range of alternatives that launch the draft Environmental Impact Statement (DEIS) process (4).

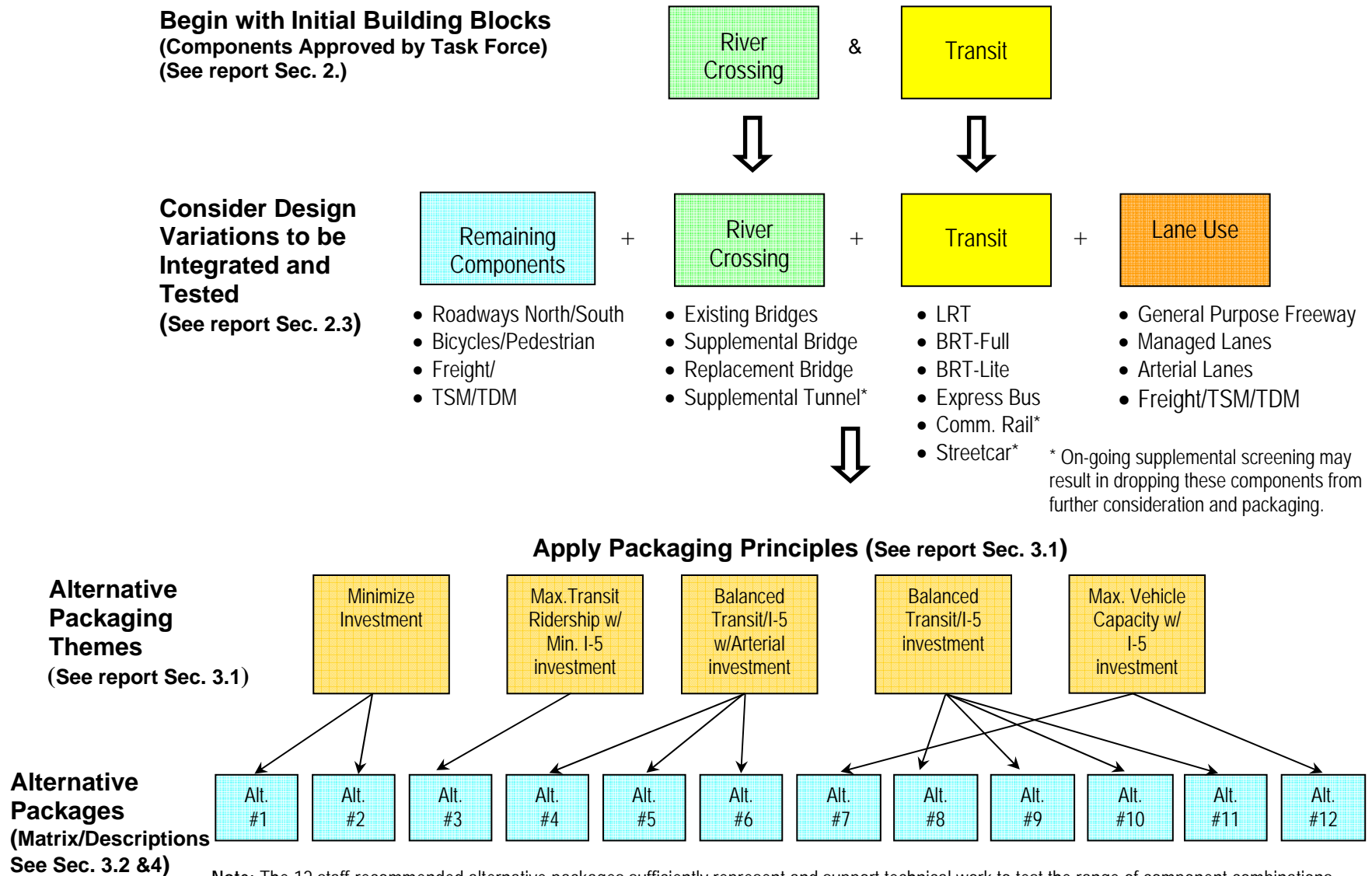
What's Inside this Report?

Sections of this report describe the following:

- **Building Blocks** - A summary of the principal roadway and transit elements to be tested among the various alternative packages. Includes definitions of the roadway and transit elements.
- **Variations** - A graphical representation of the key variations among component categories that are being tracked for testing purposes. For example, three principal variations of river crossings include the following: (1) those that make use of the existing bridges only, (2) those that supplement one or more of the existing bridges, and (3) those that replace the existing bridges. Use of the river crossing's lanes also forms variations such as: (1) general purpose use, (2) arterial use, and (3) managed lane use.
- **Developing the Alternative Packages** - Describes the organizing principals and overall approach to packaging.
- **Alternative Packages Matrix** - A matrix summarizing the 12 staff-recommended alternative packages and the key elements of each from among the eight (8) component categories.
- **Alternative Package Descriptions** - Brief descriptions of each alternative package consisting of an overview and assumed element(s) from each of the following eight (8) transportation component categories: roadways north, roadways south, river crossing, transit, bicycle, pedestrian, freight, and transportation demand/system management (TDM/TSM).

Figure 1-2 depicts the overall packaging process /summarized in this report.

Figure 1-2. Alternatives Packaging Process



Note: The 12 staff-recommended alternative packages sufficiently represent and support technical work to test the range of component combinations. As needed, results can be used to assess other possible component combinations not expressly represented in the list of 12. Best performing elements of each alternative package will be available for repackaging and/or refining within the range of alternatives advanced into the Draft EIS.

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2. Alternative Package Building Blocks

The evaluation framework for this project identified eight (8) transportation categories used to organize the components identified during scoping. To date, only the transit and river crossing components have undergone screening. Components in the Pedestrian, Bike, Freight, Roadways north, Roadways south, and Transportation Demand Management/Transportation System Management (TSM/TDM) categories were not screened as components because their performance is dependant upon how they integrate with promising transit and/or river crossing improvements.

Principal building blocks for each alternative package include selection of a primary transit mode and roadway investment in I-5 for highway lanes only or for a combination of highway plus arterial lanes. All other components integrate after these selections are paired. **Table 2-1** summarizes the principal transit and roadway building blocks which will be tested within the range of alternative packages recommended by staff.

Transit Mode \ Roadway	Highway plus Arterial	Highway Only
Express Bus	●	●
BRT – Lite	●	●
BRT – Full	●	●
LRT	●	●
LRT plus Express Bus	●	●
Commuter Rail	These transit components are undergoing supplemental screening and staff recommendation to be dropped from further consideration and packaging.	
Streetcar		

2.1 Transit Mode Descriptions

Express Bus- Point-to-point peak period express bus service operating along I-5 in either general purpose or managed lanes. The suburban Clark County-based express bus service would connect Salmon Creek and downtown Portland and would have upgraded park-and-rides.

BRT Lite - Limited stop all-day bus rapid transit (BRT) service operating along I-5 in managed lanes and/or local arterial lanes. The suburban Clark County-based BRT service would connect Salmon Creek, downtown Vancouver, and downtown Portland. The BRT Lite system would have upgraded buses, passenger stops, and park-and-rides.

BRT Full - All-day BRT system similar to the Interstate Max Yellow line connecting Vancouver to the Exposition Center LRT station and downtown Portland. Within the Bridge Influence Area the BRT Full system would operate along an exclusive running way with light-rail type stations and performance.

LRT - An extension of the Interstate Max Yellow line from the Exposition Center LRT Station north to Vancouver with the same service characteristics as TriMet's 44-mile regional LRT system.

LRT/Exp. Bus- A combination of LRT and express bus as described above.

Note: Each of the public transportation modes described above include as a baseline a substantial increase in local or feeder bus service, additional park-and-ride facilities, expansion of key existing park-and-ride facilities, and additional transit passenger facilities both outside and within the Bridge Influence Area. It is possible that one or more public transportation modes above may ultimately be combined into a single composite alternative to serve multiple transit markets simultaneously.

2.2 Roadway Descriptions

Highway plus Arterial- New and/or existing lanes within the Bridge Influence Area between SR 500 and Columbia Boulevard, plus arterial connections between Vancouver, Hayden Island, and potentially Marine Drive.

Highway only- Increased capacity of existing I-5 within the Bridge Influence Area between SR 500 and Columbia Boulevard.

2.3 Design Variations

A series of high level design variations exist that will need to be tested during the alternative packaging screening process. The variations exist within the following categories:

- **Remaining components -** Components within the six transportation categories other than river crossing and transit.
- **River crossings -** Three principal variations of river crossings include the following: (1) those that make use of the existing bridges only, (2) those that supplement one or more of the existing bridges, and (3) those that replace the existing bridges.
- **Transit -** Four primary transit modes need to be tested consisting of light rail transit (LRT), BRT-Full, BRT-Lite, and express bus.

- **River Crossing Lane use** - Use of the river crossing’s lanes also forms variations such as: (1) general purpose use, (2) arterial use, and (3) managed lane use.
- **TDM/TSM** - The TSM/TDM components have been bundled into three categories for the purpose of developing and packaging alternatives. The categories are titled “basic,” “moderate,” and “aggressive” to reflect the varying levels of potential transportation system and demand management affects. For example, the “aggressive” category includes congestion pricing to manage demand while the “basic” category uses a package of incentives to manage demand. It should be noted that the “basic” package includes multiple actions currently not within either Metro’s Regional Transportation Plan or the Regional Transportation Council’s Metropolitan Transportation Plan. As a result, the “basic” package represents a stronger TSM/TDM approach than the region currently has. **Tables 2-2 through 2-4** summarize the elements of the three TSM/TDM bundles with “TM-XX” referring to the TDM/TSM component number from the original component list.

Initial evaluation of TSM/TDM impacts will be based on the bundled components. Later, in selecting the alternatives that will be evaluated in the DEIS, specific TSM/TDM strategies that can be unbundled are re-sorted to assure the best performing elements match the selected alternatives.

Table 2-2 Basic TDM/TSM Package					
Major Strategy	Individual Strategy	Description	TSM Strategy	TDM Strategy	Option Package
2030 No-Build Projects		The 2030 No-Build includes all planned projects in the region as per the RTC and METRO and serves as the building block of the 2030 TSM Alternative	X	X	Basic
TM-12: Improve the Package of Employer and Governmental TDM Policy Measures	Public Education and Promotion	Transportation agencies, professionals, and the public consider and understand TDM		X	Basic
	Rideshare programs	Rideshare promotion and matching and vanpools		X	Basic
	Bikes/Pedestrian System Support	Improve bicycle/pedestrian planning and facilities across the river	X		Basic
	Carsharing	Encourage carsharing (Flexcar)		X	Basic
	Parking Cash Out	Provide employees who don't drive the cash equivalent of parking subsidies		X	Basic
	Alternative Work Schedules	i.e., compressed work-week		X	Basic
	Telecommuting	Allow employees to work from home to reduce commute trips		X	Basic

Table 2-2 Basic TDM/TSM Package cont.					
Major Strategy	Individual Strategy	Description	TSM Strategy	TDM Strategy	Option Package
	Transportation Management Associations	TMAs provide trip reduction services in a commercial or employment center		X	Basic
	Transit/Pedestrian Friendly Urban Design	Develop neighborhoods that encourage walking, bicycling, and transit use	X		Basic
	Trip Reduction Ordinances	Employee commute reduction programs/ services	X	X	Basic
	Transit and Vanpool Fare Subsidies	Employer subsidies		X	Basic
TM-8: Ramp Queue Jump Lanes		Provide a bypass lane at all I-5 on-ramps within the Bridge Influence Area	X		Basic
TM-9: Increased Bus Service		Increased bus service in the I-5 corridor within identified future funding constraints		X	Basic
TM-10: Enhanced Park-and-Ride Capacity		Expand existing P&R capacity or build new P&R capacity	X	X	Basic
TM-11: Enhanced ITS Technology and Management Systems		Enhance Intelligent Transportation Systems within the I-5 corridor	X		Basic
TM-13: Reduced Passenger Travel Time on Interstate MAX		Reduce overall travel-times on Interstate MAX through operational changes		X	Basic
TM-14: Transit Priority Signal System		Preferential signal priority for transit in and serving the I-5 corridor	X		Basic
TM-16: Highway On-Ramp Metering		Meter I-5 on-ramps within the I-5 corridor	X		Basic
TM-18: Ramp Terminal Improvements		Improve capacity at all ramp terminal intersections	X		Basic

Table 2-3 Moderate TDM/TSM Package					
Major Strategy	Individual Strategy	Description	TSM Strategy	TDM Strategy	Option Package
Includes all Basic level TDM/TSM strategies plus those identified below					
TM-9: Increased Bus Service	Improve TriMet service levels in the I-5 corridor	Increase Bi-State, North and Northeast Portland service hours to approximately 100,000 annually*		X	Moderate
	Improve C-TRAN service levels in the I-5 corridor	Increase local and Bi-State commuter service hours to approximately 500,000 annually-systemwide**		X	Moderate
TM-1: Create Northern I-5 Managed Lane through re-striping		Re-stripe I-5 ROW to designate one highway lane per direction for a High Occupancy Vehicle (HOV) or Toll (HOT) lane; buses are not tolled but able to use this lane	X		Moderate
TM-3: Create I-5 Managed Lane within the Bridge Influence Area		Manage one existing I-5 lane as a High Occupancy Vehicle (HOV) or Toll (HOT) lane; buses are not tolled but able to use this lane	X		Moderate
TM-6: Direct Access Ramps		Provide interchange direct connection between I-5 Managed Lane(s) and other facilities for transit and/or other users	X		Moderate
TM-7: Preferential Managed Lane Merge(s)		Give priority to Managed Lanes at general purpose lane merge points within the Bridge Influence Area	X		Moderate
TM-17: Arterial Managed Lanes		Build new arterial lanes for transit and/or managed lane use	X		Moderate

*Current TriMet service hours for bi-State, north & northeast Portland are...

** Current C-Tran local and bi-State commuter service hours are approximately 375,000 annually.

<p align="center">Table 2-4 Aggressive TDM/TSM Package</p>					
Major Strategy	Individual Strategy	Description	TSM Strategy	TDM Strategy	Option Package
<p align="center">Includes all Basic and Moderate level TDM/TSM strategies plus those identified below</p>					
TM-9: Increased Bus Service	Improve TriMet service levels in the I-5 corridor	Increase Bi-State, North, and Northeast Portland service hours to approximately 250,000 annually		X	Aggressive
	Improve C-TRAN service levels in the I-5 corridor	Support additional funding opportunities to increase local/bi-State commuter service to approximately 750,000 hours annually		X	Aggressive
	Free or Reduced Bus Fares	Implement free or reduced bus fares on all bi-state transit routes		X	Aggressive
TM-15: Congestion Pricing on I-5		Congestion pricing of all I-5 lanes	X		Aggressive
Congestion Pricing on I-205		Congestion pricing of all I-205 lanes	X		Aggressive

3. Developing Alternative Packages

The building blocks and variations are combined to form preliminary project alternative packages that will be further developed and tested against the adopted evaluation criteria. The results of the evaluation will be used to guide the selection of the best alternative packages (or elements of those alternative packages) to be considered in the DEIS.

3.1 Packaging Principles

Ideas from each of the eight component categories are combined to form project alternative packages. The principles used to form the alternative packages include:

1. All components that pass Step A screening are considered for inclusion in one or more alternative packages.
2. Alternative packages should be organized by theme – what is (are) the key feature(s)?
3. Alternative packages should represent a full range of potential transportation solutions within the limits of the components that have passed Step A screening (those that have been determined to address the Purpose and Need).
4. Complementary components should be packaged together where feasible.
5. Alternative packages should be structured to identify strengths and weaknesses of individual components.
6. Well-performing components may be re-packaged with other alternatives for the DEIS.

This packaging step provides the first real opportunity in the process to incorporate potential goals or aspirations into the discussion of specific project alternative packages. Prior steps, such as the adoption of project Vision and Values, the Problem Definition, and Evaluation Criteria set the stage broadly for what the project should accomplish and how the potential alternative packages should be evaluated. At this stage we can start to test how to structure the alternative packages to identify strengths and weaknesses of project components when combined as alternative packages, and the relative benefits, impacts, and costs of the alternative packages.

Alternative packages must illustrate the full range of potential choices. To do that, it is helpful to organize them around a variety of perspectives (or themes). At the May 17, 2006 Task Force meeting, some of the themes that were expressed include:

- Use Vision and Values
- Consider financing requirements for construction and operations
- Provide flexibility to address future needs
- Maximize transit ridership

- Maximize vehicle capacity
- Minimize investment
- Provide for a phased implementation
- Remove short-distance trips from I-5

The project Vision and Values led directly to the development of the Evaluation Criteria, which will be the principal tool for comparing and contrasting the alternative packages. The Evaluation Criteria includes criteria that address financial feasibility (under category 8 – Cost Effectiveness and Financial Resources) and flexibility to adapt to future needs (criteria 10.3 Provide flexibility to accommodate future transportation system improvements).

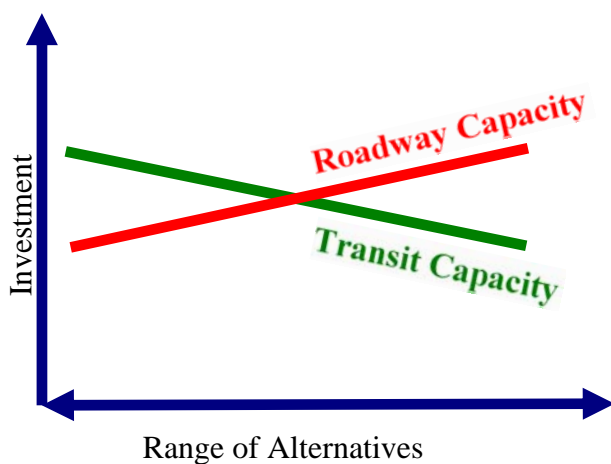
3.2 Range of Alternative Packages

Under the National Environmental Policy Act (NEPA), one of the alternatives considered must be a **no-action** alternative. Although this does not meet the project Purpose and Need, it establishes a baseline for comparison with other alternatives. It will include only existing facilities and services, as well as projects that can be reasonably anticipated for construction in the Metro and Southwest Washington regional transportation plans. Another “baseline” alternative required under NEPA is the TSM Alternative, and it represents a Minimum Investment strategy that focuses on strengthening regional TDM and TSM policies and actions without major capital investments for either roadway or transit capacity (although this would include some additional bus service).

Beyond those initial two alternative packages, others will focus on a mix of investments in transit, roadway capacity, and components from each of the other groups (river crossing, freight, etc.). As an organizing principle, the alternative packages will represent a range of investment scenarios – from those with a transit-intensive focus, to a more balanced approach, to a roadway capacity focus – as shown in the illustration below.

Each of the other perspectives noted above were used to guide the development of the range of alternative packages shown in **Table 3-1**. The remaining alternative packages (#3-12) include the construction of a new bridge and a major investment in transit improvements. The range of alternative packages can be represented by **Figure 3-1**.

Figure 3-1. Packaging Considerations



A couple of points to note: First, all alternatives (other than No-Build and TSM, as noted above) will include a mix of transit and roadway capacity improvements. Second, the range of scenarios is structured to inform the decision process rather than to produce specific DEIS alternatives. Thus, the goal will be to identify the benefits of varying investments in transit as well as varying levels of roadway capacity.

Note: The 12 staff-recommended alternative packages represented in this matrix sufficiently represent, and support technical work to test, the range of component combinations. As needed, results can be used to assess other possible component combinations not expressly represented in the list of 12. Best performing elements of each alternative package will be available for repackaging and/or refining within the range of alternatives advanced into the Draft EIS.



Table 3-1. Draft Alternative Packaging Matrix

Revision date: June 7, 2006

		Alternative Packages											
		Existing Bridges Only		Supplemental Bridge with Existing Bridges					Replacement Bridge				
		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12
Alternative Package Themes		No Action	Minimum Investment: TDM/ TSM Emphasis	Maximum Transit Ridership, Minimum 5 improvements	Balanced Transit/Highway Improvements with LRT	Balanced Transit/Highway Improvements with BRT-Full	Balanced Transit/Highway Improvements with BRT-Lite	Maximum Vehicle Capacity	Balanced Transit/Highway Improvements with LRT	Balanced Transit/Highway Improvements with LRT	Balanced Transit/Highway Improvements with BRT-Full	Balanced Transit/Highway Improvements with BRT-Lite	Maximum Vehicle Capacity
High Capacity Transit Mode across Col. River		None	None	LRT	LRT	BRT-full	None	None	LRT	LRT	BRT-full	None	None
Other Transit Mode(s) across bridge		Express bus, local bus	Express bus, local bus	Express bus, local bus	Local bus	Local bus	BRT-Lite	Express bus	Express bus, local bus	Local bus	Local bus	BRT-Lite	Express Bus, local bus
Function of Existing Bridges		I-5 (GP lanes)	I-5 (GP lanes)	I-5 (GP lanes)	Arterial+LRT	Arterial+BRT	Arterial + BRT	Arterial	N/A	N/A	N/A	N/A	N/A
Function of New Bridge		N/A	N/A	Arterial + LRT	I-5 NB & SB (w/ ML)	I-5 NB & SB (w/ ML)	I-5 NB & SB (w/ ML)	I-5 NB & SB (all GP)	I-5 NB & SB (w/ ML) & LRT	I-5 NB & SB (w/ ML) & LRT	I-5 NB & SB (w/ ML) & BRT	I-5 NB & SB (w/ ML) & BRT	I-5 w GP lanes & Express Bus
RC Components	RC-1	Repl/Down/Low/Mov											
	RC-2	Repl/Up/Low/Mov											
	RC-3	Repl/Down/Mid							✓	✓		✓	
	RC-4	Repl/Up/Mid									✓		✓
	RC-7	Supl/Down/Low/Mov											
	RC-8	Supl/Up/Low/Mov											
	RC-9	Supl/Down/Mid				✓	✓	✓	✓				
Roadways North/South	RC-13	Tunnel											
	RC-23	Arterial (New Bridge)			✓								
	RNS-1	Interchange Improvements				✓	✓	✓	✓	✓	✓	✓	✓
	RNS-2	Arterial improvements			✓	✓	✓	✓	✓	✓	✓	✓	✓
Transit Components	RNS-3	I-5 Safety Improvements	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
	TR-1	Express Bus in GP ²	✓	✓	✓			✓					✓
	TR-2	Express Bus in Managed Lanes						✓	✓			✓	
	TR-3	BRT-Lite						✓				✓	
	TR-4	BRT-Full					✓				✓		
	TR-5	LRT			✓	✓			✓	✓			
	TR-6	Streetcar											
Bicycle/ Pedestrian Components	TR-11	Commuter Rail											
	B/P-1	Enhance Existing		✓		✓	✓	✓	✓	✓		✓	✓
	B/P-2	Path on New Bridge			✓			✓	✓		✓		✓
	B/P-3	Path-only Bridge											
	B/P-4	Vanc. Connectivity		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	B/P-5	Hayden Is. Conn.		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Freight Components	B/P-6	N. Portland Pathway		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	F-1	Freight in Managed Lanes				✓	✓	✓			✓		
	F-2	Fr. Bypass Lanes			✓	✓	✓			✓	✓		
	F-3	Freight Restrictions											
	F-4	Inc. Truck Size											
TSM/TDM Components	F-5	Fr. DA Ramps									✓		
	T-B	Basic						✓					✓
	T-M	Moderate		✓				✓				✓	
	T-A	Aggressive			✓ ¹	✓	✓		✓	✓	✓		

1. Assumes no managed lane beyond the existing northbound I-5 HOV lane in Portland.
 2. Includes use of existing northbound HOV lane in Portland.

Components that may be screened out by analyses during or after the packaging process.

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4. Alternative Package Descriptions

This section briefly describes each of the 12 alternative packages, including an overview of what the alternative package consists of and the primary components from each of the eight (8) transportation categories.

Alternatives were packaged using the principles described in Section 3.1 of this report. The project team built the alternative packages from work completed to date and incorporated values expressed by the Task Force at their May 22, 2006 meeting.

The project team believes the range of alternative packages sufficiently represents and supports technical work to test the range of component combinations. As needed, results can be used to assess other possible component combinations not expressly represented in the list of 12 alternative packages. Best performing elements of each alternative package will be available for repackaging and/or refining within the range of alternatives advanced into the Draft EIS.

4.1 Alternative Package #1: 2030 No Action

Overview

This alternative package includes planned improvements to the regional transportation system through the year 2030 for which the need, commitment, and financing are identified and are reasonably expected to be implemented. All transportation improvements included in the No-Action alternative package are included in either Metro's 2025 Regional Transportation Plan (including amendments) or the Southwest Washington Regional Transportation Council's (RTC) 2030 Metropolitan Transportation Plan (MTP).

River Crossing

Under this alternative package, the existing I-5 bridges would be retained, with three general-purpose traffic lanes in each direction.

Roadways North and South

With the exception of widening I-5 to six lanes from Lombard Street to Victory Boulevard, the No-Action alternative package does not assume any major capacity projects on I-5 through the Bridge Influence Area. Outside the Bridge Influence Area, there are some minor I-5 capacity enhancements and several major maintenance projects, specifically identified in the Portland Metro and Southwest Washington RTC financially constrained regional transportation plans.

Transit

Bi-state transit service would consist of C-TRAN express buses and TriMet local service. Transit service growth and/or reductions to the year 2030 will be allocated system-wide among both transit agencies, unless specifically identified in either regional plan. In addition, neither the RTP nor the MTP anticipate significant new funding for new bi-state transit services.

Bicycle/Pedestrian

No significant projects are currently planned, nor has funding been secured for either bicycle or pedestrian improvements in the I-5 Bridge Influence Area.

Freight

No freight-specific improvements are included in this alternative package.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of several TDM/TSM policies and actions that collectively represent a less robust TDM/TSM package than the defined "Basic" level. The measures included in the 2030 No-Action alternative are:

- Additional park-and-ride lots and capacity;
- Enhanced Intelligent Transportation Systems (ITS);
- A package of TSM/TDM policy measures; and
- Additional ramp meters in Washington.

A package of TSM/TDM policy measures, included in both Metro's 2025 Regional Transportation Plan (including amendments) or the RTC's 2030 MTP, will reduce travel demand and improve transportation system performance.

4.2 Alternative Package #2: 2030 TSM/TDM Alternative Package

Overview

This alternative package represents the “best that can be done” to manage overall transportation demand and improve the performance of the I-5 transportation system without building a new Columbia River crossing. The TSM alternative package does not make major capital investments in the Bridge Influence Area beyond levels needed to support the identified moderate TSM/TDM bundle for this alternative package.

River Crossing

Under this alternative package, the existing I-5 bridges would be retained, with three general-purpose traffic lanes in each direction.

Roadways North and South

With the exception of widening I-5 to six lanes from Lombard Street to Victory Boulevard, the TSM/TDM alternative package does not assume any major capacity projects on I-5 through the Bridge Influence Area beyond levels needed to support the identified moderate TSM/TDM bundle for this alternative package. Some specific I-5 safety projects would be undertaken within the Bridge Influence Area to address roadway design deficiencies and reduce crash potential. Outside the Bridge Influence Area, there are some minor I-5 safety improvements and several major maintenance projects, which are specifically identified in the Portland Metro and Southwest Washington RTC financially constrained regional transportation plans. This alternative package assumes that the existing I-5 northbound HOV lane would be retained and that I-5 would be re-stripped wherever possible to provide an additional lane for managed use.

Transit

Bi-state transit services will consist of C-TRAN express buses, C-TRAN local buses, and TriMet local service. Existing transit services would grow substantially to the year 2030 in order to better manage demand. Park-and-ride facilities would be improved along the I-5 corridor, and other transit passenger facilities would be constructed to make transit accessible to more residents.

Bicycle/Pedestrian

Bicycle and pedestrian improvements would be made on the existing I-5 bridge(s) where possible in an effort to enhance the current bike/pedestrian area. There would also be increased connections into downtown Vancouver, Hayden Island, and Metro’s 40-mile loop pathway.

Freight

Freight vehicles would benefit from enhanced ITS in the corridor, TDM measures, and arterial street improvements. However, no freight specific improvements are included in this alternative package.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of a moderate TSM/TDM bundle as described in Table 2-3 of this report. The managed lane system would include a re-striping of I-5 in both directions between approximately Fourth Plain Boulevard and 139th Street in Clark County to provide an additional lane and resulting extension of the managed lane system north of the river. The managed lane system would include preferential managed lane merges at both ends. In addition, this alternative package would include selected ramp queue jumps for transit vehicles.

4.3 Alternative Package #3: New Supplemental Arterial Bridge with LRT and an Aggressive TDM/TSM Strategy

Overview

This alternative package includes construction of a new downstream arterial bridge which would carry arterial and transit traffic between Oregon and Washington, coupled with an LRT double-track extension from the Expo Center to Vancouver. Interstate traffic would remain on the existing I-5 bridges in general purpose lanes. The alternative package includes congestion pricing to maintain a consistent level of service for the new facilities and an aggressive set of TSM/TDM measures to manage travel demand.

River Crossing

The new supplemental arterial bridge would be located downstream of the existing I-5 bridges and is assumed to be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and ramp locations. The Hayden Island interchange on the existing I-5 bridge would be removed, with I-5 access to Hayden Island from the new arterial crossing and/or from the Marine Drive interchange.

Roadways North and South

The alternative package includes improvements both north and south of the river required to make the arterial connections to the new river crossing. The improvements would include arterial street and I-5 safety improvements, with limited interchange improvements serving the supplemental bridge. Outside the Bridge Influence Area, there are some minor I-5 safety improvements and several major maintenance projects, which are specifically identified in the Portland Metro and Southwest Washington RTC financially constrained regional transportation plans. This alternative package assumes only the continuation of the northbound HOV lane Portland between Alberta Street and Marine Drive.

Transit

LRT would be extended from the Expo Center to Vancouver on the new arterial bridge and would serve local and regional transit travel. Local bus connections to LRT stations would also be increased. Express buses carrying passengers from existing and/or new Clark County park-and-rides to downtown Portland would operate in general-purpose lanes on the existing I-5 bridge beyond the existing northbound HOV lane in Portland. Additional bi-state transit services will consist of C-TRAN express and shuttle services and TriMet local service. Existing transit services would grow substantially to the year 2030 in order to better manage demand-requiring additional new revenue sources. Park-and-ride facilities would be improved along the I-5 corridor, and other transit passenger facilities would be constructed to make transit accessible to more residents.

Bicycle/Pedestrian

A new bicycle and pedestrian path would be provided on the new arterial bridge, and connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

Freight vehicles may benefit from potentially increased mobility on I-5 and arterial street improvements. In addition, this alternative package would include freight bypass lanes in congested locations where trucks have difficulty merging on and off I-5.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of an aggressive TSM/TDM bundle as described in Table 2-4 of this report except that it does not include I-5 managed lanes beyond what exists today. This alternative package would include ramp queue jumps for transit vehicles where ramp meters operate, managed lanes on arterial streets for transit use, and transit priority signal systems. Congestion pricing would be implemented for all travel lanes on the new arterial bridge and existing I-5 bridge to maintain an appropriate and consistent level of service.

4.4 Alternative Package #4: New I-5 Supplemental Downstream Bridge with LRT and I-5 Managed Lanes

Overview

This alternative package includes construction of a new I-5 supplemental, downstream bridge which would carry I-5 traffic with both general purpose and managed lanes. The existing I-5 bridges would be retained, with the western bridge carrying an LRT double-track extension to downtown Vancouver and the eastern bridge carrying arterial traffic between Oregon and Washington. All I-5 traffic would be carried on the supplemental new bridge. The alternative package includes congestion pricing to maintain a consistent level of service for the new facilities.

River Crossing

The new supplemental downstream I-5 bridge is assumed to be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

LRT would be extended from the Exposition LRT Station in Portland to a terminal station north of downtown Vancouver on the existing western I-5 bridge. LRT would have the same service characteristics as TriMet's 44-mile regional LRT system. LRT would serve both local and regional travel and significant new local bus service would connect and support the new LRT service. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

Bicycle and pedestrian improvements would be made on the existing I-5 bridge(s) in conjunction with the adaptive reuse of the structure for light rail and arterial traffic. Connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

This alternative package would include freight-only lanes on the new supplemental highway bridge, and would include freight bypass lanes in congested locations where trucks have difficulty merging on and off I-5. Arterial street improvements would also improve truck access to and from I-5.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of an aggressive TSM/TDM bundle as described in Table 2-4 of this report.

A single managed lane in each direction would be provided on the new I-5 supplemental bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-stripped wherever possible to provide an additional lane for managed use between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges at each end. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

Congestion pricing would be implemented for all travel lanes on the supplemental new I-5 bridge and existing I-5 bridge to maintain an appropriate and consistent level of service.

4.5 Alternative Package #5: New I-5 Supplemental Downstream Bridge with BRT Full in Exclusive Lanes and I-5 Managed Lanes

Overview

This alternative package includes construction of a new I-5 supplemental, downstream bridge which would carry I-5 traffic in both general purpose and managed lanes. The existing I-5 bridges would be retained, with the western bridge carrying BRT Full in exclusive lanes and the eastern bridge carrying arterial traffic between Oregon and Washington. The alternative package includes congestion pricing to maintain a consistent level of service for the new facilities.

River Crossing

The new supplemental downstream I-5 bridge is assumed to be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations. The new highway bridge would include a managed lane.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

BRT Full would serve local and regional travel needs, and would operate from a terminal station north of downtown Vancouver to downtown Portland in a mixture of exclusive and general purpose lanes. Within the bridge influence area BRT Full would operate in an exclusive running way and would connect downtown Vancouver to the Exposition Center LRT station south of Hayden Island. Over the Columbia River, BRT Full would operate in an exclusive running way on the existing western I-5 bridge. South of the Exposition Center LRT Station, BRT Full would continue to downtown Portland along I-5 in general purpose travel lanes. Within the bridge influence area the BRT Full system would have light-rail type stations and performance. Significant local bus service would connect and support the new BRT Full service. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

Bicycle and pedestrian improvements would be made on the existing I-5 bridge(s) in conjunction with the adaptive reuse of the structure for BRT Full and arterial traffic. Connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

This alternative package would include freight-only lanes on the new supplemental highway bridge, and would include freight bypass lanes in congested locations where trucks have difficulty merging on and off I-5. Arterial street improvements would also improve truck access to and from I-5.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of an aggressive TSM/TDM bundle as described in Table 2-4 of this report.

A single managed lane in each direction would be provided on the new I-5 supplemental bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-striped wherever possible to provide for managed lanes between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges north and south. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

Congestion pricing would be implemented for all travel lanes on the supplemental new I-5 bridge and existing I-5 bridge to maintain an appropriate and consistent level of service.

4.6 Alternative Package #6: New I-5 Supplemental Downstream Bridge with BRT-LITE in Managed Lanes

Overview

This alternative package includes construction of a new supplemental, downstream bridge which would carry I-5 traffic with both general purpose lanes and a managed lane. The existing I-5 bridges would be retained and carry arterial traffic and BRT-Lite in general purpose travel lanes. BRT Lite would operate between downtown Portland and the Salmon Creek park-and-ride in both I-5 managed and general purpose lanes.

River Crossing

The new supplemental downstream I-5 bridge is assumed to be a mid-level fixed-span structure. The exact location and height of the new highway bridge would depend on favorable highway geometry and interchange ramp locations. The existing bridges would carry arterial traffic and managed lanes for BRT.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

BRT Lite would serve local and regional travel needs, and would operate between downtown Portland and the Salmon Creek park-and-ride in both managed and general purpose lanes. The suburban Clark County-based service would operate in I-5 managed lanes from the 139th Street interchange south to downtown Vancouver. In downtown Vancouver BRT Lite would operate in general purpose arterial lanes. Over the Columbia River BRT Lite would operate in a general purpose lane on the existing I-5 bridge. South of the Victory Blvd. interchange BRT Lite would continue to downtown Portland along I-5 in general purpose lanes. The BRT Lite system would have upgraded buses, passenger stops, and park-and-rides. Some point-to-point express buses operating in I-5 managed lanes would continue to carry passengers from existing Clark County park-and-ride lots to downtown Portland, but the express bus service would not be as robust as in other alternatives due to the new BRT Lite service. Significant local bus service would connect and support the new BRT Lite service. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

A new bicycle and pedestrian path would be provided on the new NB I-5 bridge, and connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

Freight vehicles would benefit from increased mobility on I-5 and arterial street improvements. However, no freight specific improvements would be included in this alternative package.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of a moderate TSM/TDM bundle as described in Table 2-3 of this report.

A single managed lane in each direction would be provided on the new I-5 supplemental bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-stripped wherever possible to provide for managed lanes between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges north and south. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

4.7 Alternative Package #7: New I-5 Supplemental Downstream Bridge with Express Buses in I-5 General Purpose Lanes

Overview

This alternative package includes construction of a new I-5 supplemental, downstream bridge which would carry I-5 traffic with general purpose lanes. The existing I-5 bridges would be retained and carry directional arterial traffic. The supplemental bridge would carry all I-5 traffic in general purpose lanes. Buses would operate in mixed traffic. The alternative package includes increased bus service and transit priority at traffic signals to provide time savings for transit riders.

River Crossing

The new, supplemental, downstream I-5 bridge is assumed to be a mid-level fixed-span structure. The exact location would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

Express buses carrying passengers from existing and/or new Clark County park-and-rides to downtown Portland would operate in general lanes on the new I-5 supplemental bridge and existing bridges. An increased number of express buses would travel between Vancouver and downtown Portland primarily in the peak period. Local bus connections to express bus stops would also be increased.

Bicycle/Pedestrian

Bicycle and pedestrian improvements would be made on the existing I-5 bridge(s) in conjunction with the adaptive reuse of the structure for southbound I-5 traffic. Connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

Freight vehicles would benefit from increased mobility on I-5 and arterial street improvements. However, no freight specific improvements would be included in this alternative package.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of a basic TSM/TDM bundle as described in Table 2-2 of this report.

Increased bus service would serve expanded park-and-ride facilities. Ramp terminal capacity and on-ramp metering would be implemented and transit could be given priority at the meters. Buses would receive signal priority over general traffic at key intersections to gain travel time advantage. A package of TSM/TDM policy measures would be included to reduce travel demand and improve transportation system performance.

4.8 Alternative Package #8: New I-5 Replacement Downstream Bridge with LRT and I-5 Managed Lanes

Overview

This alternative package includes construction of a new I-5 replacement, downstream bridge which would carry I-5 traffic with both general purpose and managed lanes and an LRT double-track extension from from the Exposition Center LRT Station in Portland. The existing I-5 bridges would be removed. North of the bridge, the LRT line would serve downtown Vancouver and Clark College before returning to the I-5 right-of-way and terminating north of the Bridge Influence Area. Some additional express bus service would operate in managed lanes on I-5. The alternative package includes congestion pricing to maintain a consistent level of service for the new facilities.

River Crossing

The new downstream I-5 bridge would be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

LRT would be extended from the Exposition Center LRT station onto the west side of the new I-5 bridge to downtown Vancouver, then head east to Clark College before reentering the I-5 right-of-way and terminating north of the Bridge Influence Area. LRT would serve local and regional transit travel. Express buses carrying passengers from existing and/or new Clark County park-and-rides to downtown Portland would operate in managed lanes within the Bridge Influence Area, but express bus service would not be as robust as in other alternative packages due to the LRT service. Local bus connections to LRT stations would be also be increased. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

A new multi-use path(s) for bicyclists and pedestrians would be provided on the new bridge. Improved connections to Hayden Island, downtown Vancouver, and North Portland would be provided.

Freight

Freight vehicles would benefit from increased mobility on I-5 and arterial street improvements. In addition, this alternative package would include freight bypass lanes in congested locations where trucks have difficulty merging on and off I-5.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of an aggressive TSM/TDM bundle as described in Table 2-4 of this report.

A single managed lane in each direction would be provided on the new I-5 replacement bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-striped wherever possible to provide for managed lanes between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges north and south. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

Congestion pricing would be implemented for all travel lanes on the new I-5 bridge to maintain an appropriate and consistent level of service.

4.9 Alternative Package #9: New I-5 Replacement Downstream Bridge with LRT and I-5 Managed Lanes

Overview

This alternative package includes construction of a new I-5 replacement, downstream bridge which would carry I-5 traffic with both general purpose and managed lanes and an LRT double-track extension from the Exposition Center LRT Station in Portland. The existing I-5 bridges would be removed. North of the bridge, the LRT line would serve downtown Vancouver and Clark College before returning to the I-5 right-of-way and terminating north of the Bridge Influence Area. The alternative package includes congestion pricing to maintain a consistent level of service for the new facilities.

River Crossing

The new downstream I-5 bridge would be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

LRT would be extended from the Exposition Center LRT Station in Portland to a terminal station north of downtown Vancouver on a new, downstream replacement I-5 bridge. LRT would have the same service characteristics as TriMet's 44-mile regional LRT system. LRT would serve both local and regional travel and significant new local bus service would connect and support the new LRT service. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

A new multi-use path(s) for bicyclists and pedestrians would be provided on the new bridge. Improved connections to Hayden Island, downtown Vancouver, and North Portland would be provided.

Freight

This alternative package would include freight-only lanes on the new replacement highway bridge, and would include freight bypass lanes in congested locations where trucks have difficulty merging on and off I-5. Arterial street improvements would also improve truck access to and from I-5.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of an aggressive TSM/TDM bundle as described in Table 2-4 of this report.

A single managed lane in each direction would be provided on the new I-5 replacement bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-stripped wherever possible to provide for managed lanes between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges north and south. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

Congestion pricing would be implemented for all travel lanes on the new I-5 bridge to maintain an appropriate and consistent level of service.

4.10 Alternative Package #10: New I-5 Replacement Upstream Bridge with BRT- Full and I-5 Managed Lanes

Overview

This alternative package includes construction of a new I-5 replacement, upstream bridge which would carry I-5 traffic in general purpose lanes. Within the bridge influence area BRT Full would have an exclusive running way with light rail-like stations and performance. Direct access ramps would provide for direct access by buses on and off I-5. The alternative package includes congestion pricing to maintain a consistent level of service for the new facilities.

River Crossing

The new replacement upstream I-5 bridge would be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, I-5 safety improvements, and a barriered transit-only lane.

Transit

BRT Full would serve local and regional travel needs, and would operate from a terminal station north of downtown Vancouver to downtown Portland in a mixture of exclusive and general purpose lanes. Within the bridge influence area, BRT Full would operate in an exclusive running way and would connect downtown Vancouver to the Exposition Center LRT station south of Hayden Island. Over the Columbia River, BRT Full would operate in an exclusive running way on a new replacement upstream I-5 bridge. South of the Exposition Center LRT Station, BRT Full would continue to downtown Portland along I-5 in general purpose travel lanes. Within the bridge influence area the BRT Full system would have light-rail type stations and performance. Significant local bus service would connect and support the new BRT Full service. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

A new bicycle and pedestrian path would be provided on the new NB I-5 bridge, and connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

This alternative package would include freight-only lanes on the new replacement highway bridge, and would include freight bypass lanes and direct freight access ramps at key interchanges in congested locations where trucks have difficulty merging on and off I-5. Arterial street improvements would also improve truck access to and from I-5.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of an aggressive TSM/TDM bundle as described in Table 2-4 of this report.

A single managed lane in each direction would be provided on the new I-5 replacement bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-striped wherever possible to provide for managed lanes between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges north and south. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

Congestion pricing would be implemented for all travel lanes on the new I-5 bridge to maintain an appropriate and consistent level of service.

4.11 Alternative Package #11: New I-5 Downstream Replacement Bridge with BRT-LITE in I-5 Managed Lanes

Overview

This alternative package includes construction of a new I-5 downstream, mid-level bridge, which would carry I-5 traffic in both general purpose and managed lanes. Under this scenario, the existing I-5 bridges would be removed. BRT Lite would operate between downtown Portland and the Salmon Creek park-and-ride in both I-5 managed and general purpose lanes.

River Crossing

The replacement downstream I-5 bridge would be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

BRT Lite would serve local and regional travel needs, and would operate between downtown Portland and the Salmon Creek park-and-ride in both managed and general purpose travel lanes. The suburban Clark County-based service would operate in I-5 managed lanes from the 139th Street interchange south to downtown Vancouver. In downtown Vancouver, BRT Lite would operate in general purpose arterial lanes. Over the Columbia River, BRT Lite would operate in a managed lane on a new downstream I-5 replacement bridge. South of the Victory Blvd. interchange, BRT Lite would continue to downtown Portland along I-5 in general purpose travel lanes. The BRT Lite system would have upgraded buses, passenger stops, and park-and-ride stations. Some point-to-point express buses operating in I-5 managed lanes would continue to carry passengers from existing Clark County park-and-ride lots to downtown Portland, but the express bus service would not be as robust as in other alternatives due to the new BRT Lite service. Significant local bus service would connect and support the new BRT Lite service. Additional bi-state transit service would include C-TRAN and TriMet local buses serving primarily local travel needs.

Bicycle/Pedestrian

A new bicycle and pedestrian path would be provided on the new NB I-5 bridge, and connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

Freight vehicles will benefit from increased mobility on I-5 and arterial street improvements. However, no freight specific improvements would be included in this alternative package.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of a moderate TSM/TDM bundle as described in Table 2-3 of this report.

A single managed lane in each direction would be provided on the new I-5 replacement bridge and within the Bridge Influence Area. The managed lane system assumes that I-5 would be re-striped wherever possible to provide for managed lanes between 139th Street in Clark County and approximately Alberta Street (for northbound I-5) or Victory boulevard (for southbound I-5). The managed lane system would include preferential managed lane merges north and south. In addition, this alternative package would include selected ramp queue jumps for transit vehicles where ramp meters operate.

4.12 Alternative Package #12: New I-5 Upstream Replacement Bridge with Express Buses in I-5 General Purpose Lanes

Overview

This alternative package includes construction of a new I-5 upstream, mid-level bridge, which would carry I-5 traffic in general purpose lanes. Under this scenario, the existing I-5 bridges would be removed and replaced. The alternative package also includes many additional demand management measures and capital improvements to maintain a consistent level of service for the new facilities.

River Crossing

The replacement upstream I-5 bridge would be a mid-level fixed-span structure. The exact location and height would depend on favorable highway geometry and interchange ramp locations.

Roadways North and South

The alternative package includes improvements both north and south of the river. Improvements would include interchange reconfigurations, arterial street improvements, and I-5 safety improvements.

Transit

Express buses carrying passengers from existing and/or new Clark County park-and-rides to downtown Portland would operate in general purpose lanes on a new I-5 bridge. An increased number of express buses would travel between Vancouver and downtown Portland, primarily in the peak period. Local bus connections to express bus stops would also be increased.

Bicycle/Pedestrian

A new bicycle and pedestrian path would be provided on the new NB I-5 bridge, and connections would be improved to North Portland, Hayden Island, and downtown Vancouver.

Freight

Freight vehicles will benefit from increased mobility on I-5 and arterial street improvements. However, no freight specific improvements would be included in this alternative package.

Transportation System/Transportation Demand Management (TSM/TDM)

The alternative package consists of a basic TSM/TDM bundle as described in Table 2-2 of this report.

Increased bus service would serve expanded park-and-ride facilities. Ramp terminal capacity and on-ramp metering would be implemented and transit could be given priority at the meters. Buses would receive signal priority over general traffic at key intersections to gain travel time advantage. A package of TSM/TDM policy measures would be included to reduce travel demand and improve transportation system performance.

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5. Next Steps – Alternative Package Study and Results

During summer/fall 2006, the project team will complete travel demand forecasting, conceptual design, and evaluation of the alternative packages. Evaluation will be conducted in accordance with the Task Force-adopted evaluation criteria established for this project. This work will be compiled in a report of alternative package performance and ranking for Task Force and public review and comment prior to initiating the draft EIS process.

Based on what is learned from study of the alternative packages and feedback from the Task Force and the public, the most promising alternative packages and features will be advanced or repackaged and refined to form the range of alternatives advanced into the DEIS.