APPENDIX D

CORRIDOR DEFINITION, ASSESSMENT, AND PERFORMANCE MEASURES

Appendix D: Corridor Definition, Assessment, and Performance Measures

Corridor Definition

The Steering Committee adopted the following definitions of Regional and Subregional Corridors:

Regional Corridors are those which emulate a state highway in function, appearance and multimodal use. These corridors tend to carry regional highway and transit trips, long-haul truck / freight movement, and regional bicycle / pedestrian trips. They connect two or more non-contiguous urban centers, with at least one inside Clark County, and carry 10,000 or more person-trips per day (in the Visioning Scenario). A Regional Corridor could connect a Port or other major regional facility to the regional system. For the purposes of this Study, a regional trip is defined as a trip that has an average length of at least eight miles.

Subregional Corridors are those which emulate a minor or principal arterial in function and appearance, with some multimodal use. They carry an equivalent amount of regional and subregional trips. Subregional corridors connect to the Regional Transportation System from urban areas within the county and carry a mix of regional / subregional transit and highway trips. Truck / freight movement is primarily for intermodal facility or commercial center access, and these routes tend to carry localized and subregional bicycle / pedestrian trips. These could also include facilities which provide access to and circulation within a subarea, and which could parallel and relieve regional corridors.

Corridor Assessment and Performance Measures

The goal of the RTC Corridor Visioning Study is to create transportation corridors that will meet the needs of Clark County residents and businesses long into the future. The following will provide information on the steps taken to determine the best corridor alternatives.

Corridor Screening Methodology

The corridor screening process used screening and evaluation criteria to result in the selection of new regional corridors for further investigation. These criteria were used to help narrow the focus from a wide pool of candidate corridors to a more manageable number to carry forward in the analysis. The visioning study is aimed at identifying potential new, regional corridors that do not currently exist. There may be needs identified on existing regional corridors that result from the Visioning Study; however, the criteria summarized here are for identifying new corridors only.

There were three levels of corridor screening in this process, as follows:

1. First level screening: screening out of candidate corridors that are outside the scope of this study.

2. Second level screening: selection of promising regional corridors

3. Engineering the lines: connecting community centers along a candidate corridor using conceptual alignment criteria.

First Level Screening

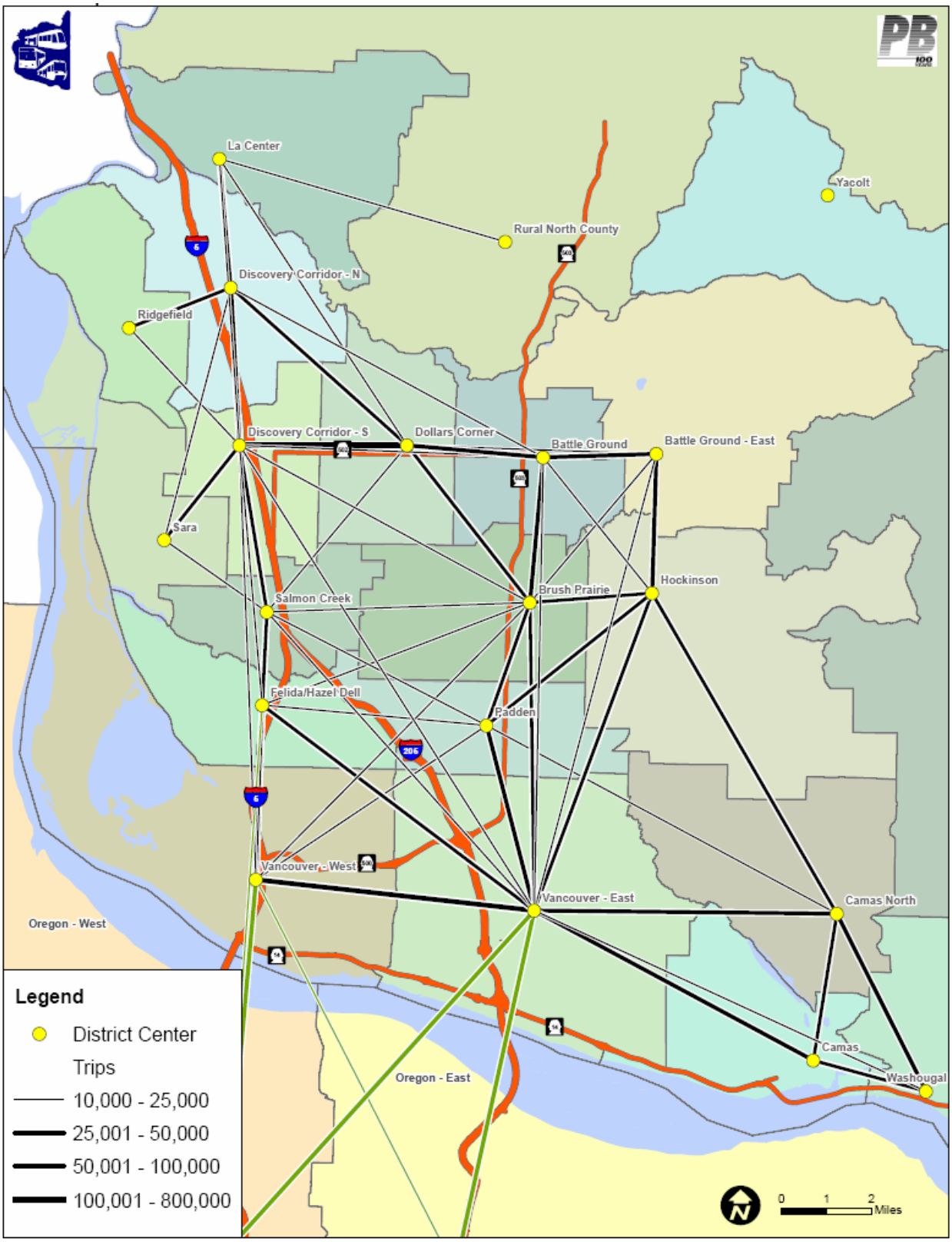
The objective of the first level screening was to screen out the initial range of origin-destination (O-D) desire lines (candidate corridors) due to being outside of the scope of this study. There were initially as many as a few hundred trip pairs. First level screening criteria are shown in Exhibit D-1.

Exhibit D-1 – First Level Screening Criteria

Criterion	Measure
Is the potential travel path along an established, regional corridor?	If yes, then it will not be considered as a "new corridor".
Does route serve current and/or future urban or growth centers?	If no, then it should not be considered.
Does the potential corridor serve primarily regional trips? *Regional trip is defined based on using the RTC model to determine the average work or regional trip length in Clark County.*	If the RTC model indicates that the majority of trips on the potential corridor are less than xx miles in length, then it should not be considered as a new regional corridor. The corridor could be a local or collector corridor which may be worthy of further planning discussion, but would be outside the scope of the Corridors Visioning Study.
Does the potential corridor carry enough trips to be considered a regional corridor? *Suggested definition: Based on a review of existing traffic volumes on regional corridors, the average regional corridor carries 10,000 or more person-trips per day.*	If the candidate corridor, or combination of O-D trip pairs that may utilize the same corridor, results in less than 10,000 trips per day in the RTC model then it should not be considered as a new regional corridor.

Exhibit D-2 illustrates the corridors that passed the first level screening process. This exhibit shows connections between different district centers that carries more than 10,000 trips per day.

Exhibit D-2 – Results of the First Level Screening Process



Second Level Screening

The objective of the second level screening process was to screen many candidate corridors to a manageable, reduced number of potential corridors by comparing them based on their ability to meet the Steering Committee's goals and objectives. Some of the criteria will be similar to those used in the First Level Screening; however, the degree to which the corridor meets the criteria was also assessed in the second level screening. These criteria are given in Exhibit D-3.

Exhibit D-3 – Second Level Screening Criteria

Criterion	Measures – 3(favorable); 2(neutral); 1(poor)	
Does route have the potential to provide multi-modal benefit?	3	Provides good mobility and access for all of the vehicle, freight, transit, bicycle and pedestrian modes.
	2	Provides some mobility for some but not all of the modes.
	1	Provides mobility for primary one or two modes but not others.
Connecting Urban or Growth centers *Number and significance of connections to existing and/or future urban or growth centers. Significant centers could include current UGAs, and regional centers such as WSU, Vancouver Mall, and Cascade Park, and others.*	3	Connects two or more urban or growth centers and at least two significant community centers.
	2	Connects two or more centers and at least one significant center.
	1	Connects two or more centers but no significant centers.
Ability to Improve Safety	3	Corridor may improve safety (for example, by reducing congestion on adjacent route that is considered a High Accident Corridor).
	2	Corridor may have moderate impacts on safety.
	1	Corridor has no significant improvements in or may degrade safety.
Relief to existing regional corridors	3	Project relieves a corridor that currently and in the future will be over capacity during peak periods.
	2	Project provides some relief to a corridor that is projected to be over capacity in the future.
	1	Corridor has little or no impact on another regional corridor.
Compatible with planned land use *Rated for consistency with adopted 20-year land use plans, and whether they are supportive of the 50-year "vision".*	3	Supports current/planned land use; promotes land use patterns and economic vitality.
	2	No apparent incompatibilities with current land use or planned development.
	1	Incompatible with current land use, may promote development patterns unsupported by land use policies.

Exhibit D-4 summarizes the results of the second level screening process.

Exhibit D-4 – Results of the Second Level Screening Process

Corridor Start	Corridor End	Does the route have the potential to provide multi-modal benefit?		Connecting Urban or Growth Centers		Ability to Improve Safety		Relief to Existing Regional Corridors		Compatible with Planned Land Use		TOTAL
Battle Ground/East Battle Ground	Vancouver East	3	Will relieve congestion on potential I-205 transit corridor and I-205 and SR 503 truck route.	3	Serves two significant centers (Battle Ground and Vancouver-East)	2	May provide relief to SR 503 and minimal relief to I-205	3	May provide significant relief to SR 503	2	Connects established and Vision Plan urban centers and could follow arterials already in the Comprehensive Plan	13
La Center	Dollars Corner	2	Will relieve congestion on I-5 and SR 502 truck routes.	2	Serves two centers (La Center and Dollars Corner) but only one significant center (La Center)	3	May improve safety by reducing congestion along I-5 and SR 502	2	May provide some relief to I-5 and SR 502, both of which are projected to be over capacity	2	Connections mostly outside of established urban centers. May be compatible with arterial grid system	11
Discovery Corridor North	Dollars Corner--Battle Ground--Hockinson	2	Will relieve congestion on existing I-5, SR 502 and SR 503 truck routes.	2	Serves three centers (Dollars Corner, Battle Ground, and Hockinson) but one significant one (Battle Ground)	3	May improve safety by reducing congestion along I-5, SR 502 and SR 503	2	May provide relief to I-5, SR 502 and SR 503	2	Connects mostly new Vision Plan urban centers and could follow arterials already in the Comprehensive Plan	11
Discovery Corridor (North or South)	Ridgefield	2	Will relieve congestion to existing SR 501 and I-5 truck routes.	2	Serves two centers (Discover Corridor and Ridgefield) but only one significant center (Ridgefield)	2	May improve safety by reducing congestion along SR 501	3	May provide relief to SR 501	2	Would travel through land currently outside of UGAs but would connect Vision Plan centers.	11
Discovery Corridor (North or South)	Salmon Creek/Felida	3	Will relieve existing I-5 truck route and potential I-5 high capacity transit corridor.	1	Serves 2 center (SC/Felida and Discovery corridor)	3	May improve safety by reducing congestion along I-5.	3	May provide relief to I-5	2	Connects established and Vision Plan urban centers and could follow arterials already in the Comprehensive Plan	12
Battle Ground/East Battle Ground	Hockinson-Camas and Camas North-Washougal	2	Will reduce congestion along existing SR 503 truck route	3	Serves four centers (Battle Ground, Hockinson, Camas-North, and Camas or Washougal) and two significant centers (Battle Ground and Camas or Washougal)	3	May improve safety by reducing congestion along 182nd Ave and SR 503	1	Probably won't relieve an existing corridor	1	Would travel through land currently outside of UGAs but would connect established and Vision Plan centers. No established Comp. Plan arterial route.	10
La Center	I-5 North	2	Will relieve congestion on existing I-5 truck route.	3	Serves two significant centers (I-5 and La Center)	1	No impact on High Accident Corridors	2	May relieve congestion on I-5	1	Connects Woodland to La Center through some unstable slope areas.	9
Discovery Corridor (North or South)	Brush Prairie	2	Will reduce congestion along existing I-5 and SR 502 truck route	1	Serves two centers (Discovery Corridor and Brush Prairie) but no significant centers	2	May improve safety along I-5 and SR 502	2	May provide relief to SR 502 and I-5	2	Connects through currently rural designated lands but may follow established Comp. Plan arterials	9

Exhibit D-4 – Results of the Second Level Screening Process (continued)

Corridor Start	Corridor End	Does the route have the potential to provide multi-modal benefit?		Connecting Urban or Growth Centers		Ability to Improve Safety		Relief to Existing Regional Corridors		Compatible with Planned Land Use		TOTAL
Salmon Creek/Felida/Hazel Dell	Vancouver East	3	Will reduce congestion along existing I-5 and SR 500 truck route and potential High Capacity Transit corridor.	0	Only serves one center (Vancouver East)	2	May relieve congestion in I-5 and I-205	2	May provide relief to I-5 and I-205	2	Connects through mostly UGA lane and could follow established Comp. Plan arterials	9
Salmon Creek/Felida/Hazel Dell	Camas	3	Will reduce congestion along existing I-5, I-205, SR 14 and SR 500 truck route and potential High Capacity Transit corridor.	1	Serves two centers (SC and Camas)	2	May relieve congestion on I-5, I-205, and SR 14	2	May provide relief to I-5 and SR 14	2	Connects through mostly UGA lane and could follow established Comp. Plan arterials	10
Salmon Creek/Felida/Hazel Dell	Washougal	3	Will reduce congestion along existing I-5, SR 14 and SR 500 truck route and potential High Capacity Transit corridor.	2	Serves 3 centers (SC, Camas and Washougal)	2	May relieve congestion on I-5, I-205, and SR 14	2	May provide relief to I-5 and SR 14	2	Connects through mostly UGA lane and could follow established Comp. Plan arterials	11
Salmon Creek/Felida/Hazel Dell	Padden/SR 503 area	3	Will relieve I-5 and I-205 truck routes and potential I-5 and I-205 high capacity transit corridors.	1	Serves two centers (SC/Hazel Dell and Padden/SR 503)	2	May improve safety slightly along I-5 and I-205.	2	Might improve congestion along I-5 and I-205	2	Connects through mostly UGA lane and could follow established Comp. Plan arterials	10
Brush Prairie	Hockinson	1	No impact	1	Serves two centers (Brush Prairie and Hockinson) but no significant centers	1	No impact on High Accident Corridors	3	May provide relief to NE 159th St	1	Connects two Vision Plan centers but travels through currently agricultural land.	7
Battle Ground/East Battle Ground	Brush Prairie	1	Will relieve existing SR 503 truck route	2	Serves two centers (Battle Ground and Brush Prairie) but only one significant center (Battle Ground)	1	No impact on High Accident Corridors	2	May provide relief to SR 503	1	Connects two Vision Plan centers but travels through currently agricultural land.	7
Brush Prairie	Salmon Creek/Felida	1	No impact	1	Serves two centers (Brush Prairie and SC) with one significant center	1	No impact on High Accident Corridors	2	May provide relief to NE 179th St	1	Connects two Vision Plan centers but travels through currently agricultural land.	6
La Center	Northeast Clark county	1	No impact	0	Only serves one center (La Center)	1	No impact on High Accident Corridors	1	May provide some relief to I-5 north of SR 501	1	Connects two Vision Plan centers but travels through currently rural and resource land.	4
Brush Prairie	Hazel Dell	1	No impact	1	Serves two centers (Brush Prairie and Hazel Dell) but no significant centers	1	No impact on High Accident Corridors	1	Probably won't relieve an existing corridor	1	Connects a Vision Plan center to an established center; travels through a mix of currently urban and agricultural land.	5

Based on the results of the second level screening process, the corridor of Battle Ground/East Battle Ground to Vancouver East scored the highest points. Many other corridors fell closely behind this. The lowest scoring corridor is La Center to Northeast Clark County.

Engineering the Lines

Environmental data that was most recently updated in June 2007 was obtained from the Clark County Geographic Information Systems database for use in creating alignments. The analysis included the roadway network, floodplains, steep sloped, sensitive habitats, contours, and zoning layers.

Corridors were initially analyzed by mapping critical constraints (floodplains, steep slopes, wetlands, residential and industrial zoning, and habitats) and overlaying the existing roadway network. Final alignments were developed to utilize existing roadways whenever possible while also minimizing impacts to natural and man-made resources.

Among the environmental constraints, preservation of existing wetlands and sensitive habitats was of highest priority, followed by existing constraints in the built environment and other critical lands such as industrial centers, floodplains, or steep slopes.

Alternatives Tested

A. Northwest Quadrant

For the I-5 North to La Center alignment, the following option was considered:

- Follow Hayes Road east to the intersection with 12th Ave, turn south along 12th through its merge with Jenny Creek Road, then take14th Ave south to Bolen Street, and then south on Pacific Highway to La Center. This alternative was eliminated because it would require widening lesser roadways.

From Discovery Corridor-South to Dollars Corner, the following option was considered:

- Utilize 219th Street from Discovery Corridor-South to Dollars Corner. Since this corridor is already slated for expansion into a major arterial, it was not included as a proposed enhanced corridor within this study.

B. Northeast Quadrant

Using the guidelines, above, upgrading of SR 502 through Battle Ground was eliminated. Similarly, alignment 4b (westerly alternative to SR 503) is preferred over 4a (upgrade of SR 503). Finally, a new direct alignment traveling from Battle Ground to Hockinson was eliminated due to impacts to zoned commercial land uses, a creek and associated floodplains, a railroad, and numerous wetlands.

C. Southeast Quadrant

Alignment Challenges

The following natural resource and built environment constraints posed challenges to the alignments.

A. Northwest Quadrant

I-5 North – La Center – Dollars Corner:

- Large forested area with wetlands, floodplains and steep slopes that separates La Center from the rest of the county.
- Steep slopes, floodplains, wetlands, and sensitive habitats along Pacific Highway.
- Oil pipeline north of La Center.

Discovery Corridor-North – Dollars Corner:

- Steep slopes perpendicular to and north of Carty Road.
- Steep slopes and wetlands north of 259th Street.
- Sensitive habitat west of 72nd Avenue.

Discovery Corridor-North – Ridgefield – Discovery Corridor-South:

- Steep slopes and floodplains parallel to 6th/Hillhurst Road
- Sensitive habitat and steep slopes south of Hillhurst Road

Discovery Corridor-South – Brush Prairie:

- Industrial land along I-5 Corridor between 219th Street and junction of I-5 and I-205

B. Northeast Quadrant

- Presence of the creek, a relatively small stream with a very large flood plain, which would require long bridges to span. Upgrading (widening) the existing SR 503 bridge may be preferable to the construction of a new bridge west of Brush Prairie.
- Presence of the railroad, which extends north-south along the east side of Battle Ground. The activity level on this rail alignment is unknown, but limiting crossing points should be considered. Grade separation may be desirable depending on future plans for the track.

C. Southeast Quadrant

- **Camas North to Camas** – avoided the airport that the **Hockinson to Camas North** alignment seemed to be impacting near SE Everett Rd. Also wanted to avoid the sharp curve at 7th Street, and smooth the ‘s’ curves along SE Crown Road.

- **Camas North to Camas** – developed a route to the west of SR 500 in order to take advantage of an existing Washougal River crossing at NE 3rd Avenue (instead of loading the SE 6th Avenue river crossing).

- **Camas North to Washougal** – Considered existing Washougal River crossings at NE 3rd Avenue and N Washougal River Road to be a constraint, so created two new options for enhancing E/W access between the new N/S **Camas North to Camas** route and existing N/S N. Washougal River Road route to Washougal.

- **Vancouver East to Camas North** – Any new route in this area is highly constrained by existing routes, existing interchanges and existing land uses. A new E/W route would utilize portions of existing NE 28th Street and 18th Street. Further study may indicate that not transitioning to NE 18th Street is preferred, and that it is preferable to stay along NE 28th Street. The reason why NE 28th Street wasn't identified as the preferred route is because of the existing residential uses between 162nd and 187th Avenues. The reason that NE 18th Avenue was not utilized entirely throughout the alternative was that NE 28th Street is preferred for a new interchange with I-205, and because west of I-205, NE 28th Street becomes NE Burton Road (a major road). To the east, the alignment was designed to snake between Warman Lake and Leghtenberg Park, but may cause an impact to the (farm?) house that is located northwest of NE 202nd Avenue/NE 16th Street.

  The transition between NE 18th and NE 28th Streets is assumed along 112th Avenue (near I-205), as no other easily-identifiable route seems practical. Further studies may indicate a more preferred route.

- **Vancouver East to Padden** – This route is highly constrained by the existing major roadways which already exist and by the interchanges which already exist along these major routes. It is anticipated that most improvements between Vancouver East to Padden would occur via operational or capacity improvements to existing facilities.

- **Padden to Battle Ground** – This route is highly constrained by the existing major roadways which already exist and by the interchanges which already exist along these major routes. It is anticipated that most improvements between Padden and Battle Ground would occur via operational or capacity improvements to existing facilities.

- **Vancouver East to Felida** – This route is highly constrained by the existing major roadways which already exist and by the interchanges which already exist along these major routes. It is anticipated that most improvements between Vancouver East and Felida would occur via operational or capacity improvements to existing facilities.

- **Felida to Padden (as extended to NE 117th Avenue)** Existing land uses and existing interchanges seem to prevent construction of new roadways. Spacing between existing interchanges is already 1 mile (minimum).

Benefits of Proposed Alignments

A. Northwest Quadrant

The alignments chosen for corridors within the northwest quadrant of Clark County would enhance mobility and accessibility to current and future urban centers, particularly I-5 North, La Center, Ridgefield, Discovery Corridor North and South, and Dollars Corner. Users of the transportation system would be able to easily access many more centers than are currently accessible given the alignments presented here.

The enhancement of existing roadways would further prepare the region for future growth and development, planning for the needs of Clark County to 2050. New roadways and redundancy between urban centers would also reduce overcrowding and congestion on existing corridors.

B. Northeast Quadrant

- East-west direction seems better served by a roadway located north of the Battle Ground city limits. It offers a good connection northerly via SR 503.
- Connections south to Hockinson and beyond to Camas North seem logically made by upgrading NE 182nd Ave.
- From Dollars Corner and Battle Ground to Brush Prairie and beyond to the south, a road generally on the western limits of Battle Ground seems to make more sense due to the various environmental constraints located to the east of it.

C. Southeast Quadrant

- **Camas North to Camas** –The reason for the alternative selected was that it avoided an airport, created an improved N/S route and took advantage of the NE 3rd Avenue river crossing.
- **Camas North to Washougal** – Instead of creating an additional N/S route, this final alignment instead provide two options for improving E/W movements between the already existing N/S routes and the improved N/S route recommended in Camas North to Camas.
- **Vancouver East to Camas North** – The final alignment took advantage of an ideal crossing location at I-205 at NE 28th Street, and avoided residential impacts further to the east. Ideally, following NE 28th Street would have been preferred, but it seems unlikely with the existing residential land uses.

- **Vancouver East to Padden** – This route is highly constrained by the existing major roadways which already exist and by the interchanges which already exist along these major routes. It is anticipated that most improvements between Vancouver East to Padden would occur via operational or capacity improvements to existing facilities.
- **Padden to Battle Ground** – This route is highly constrained by the existing major roadways which already exist and by the interchanges which already exist along these major routes. It is anticipated that most improvements between Padden and Battleground would occur via operational or capacity improvements to existing facilities.
- **Vancouver East to Felida; Felida to Padden (as extended to NE 117th Avenue)** – All of these routes are highly constrained by existing land uses, roadways and interchanges. Improvements recommended are primarily to operations and capacity.

Summary of Findings

A. Northwest Quadrant

1. **I-5 North - La Center - Dollars Corner** follows Pacific Highway to the intersection with Timmen Road, follows Timmen Road south until it becomes 10th Avenue, continues along 10th Avenue, turns west along 259th Street, and then turns south along 72nd Avenue.
2. **Discovery Corridor North - Dollars Corner** follows 289th Street east creating a new connection to 10th Avenue, turns south at 10th Avenue, turns east at 259th Street, then turns south at 72nd Avenue to Dollars Corner.
3. **Discovery Corridor North - Ridgefield - Discovery Corridor South** follows 289th Street west, turns south at the intersection with Main Road, turns east at a new connection with Hillhurst Road, follows Hillhurst Road southeast, then turns east at 219th Street creating a new connection to 11th Avenue.
4. **Discovery Corridor South – Brush Prairie** creates a new connection between I-5 and 219th Street, travels north along 10th Avenue to Carty Road, turns east along Carty Road to 92nd Avenue, turns south and creates a new corridor along 92nd Avenue, then creates a new corridor along 159th Street.

B. Northeast Quadrant

5. **Dollars Corner to Battle Ground**
    a. Follows NE 72nd Ave northbound from NE 219th Street (SR 502) to NE 239th Street, then turns eastbound and follows NE 239th Street, then curves onto NE 244th Street to NE 122nd Ave (SR 503).
    b. Follows NE 72nd Ave southbound to from NE 219th Street (SR 502) to NE 199th Street, then turns eastbound and follows NE 199th Street to NE 122nd Ave (SR 503).

6. **Dollars Corner to Brush Prairie** follows NE 72nd Ave southbound to NE 159th Street, then turns eastbound and follows NE 159th Street to NE 117th Ave (SR 503).
7. **Battle Ground to Battle Ground East**
    a. Follows NE 244th Street eastbound from NE 122nd Ave (SR 503) to vicinity of Battle Ground Lake State Park, then turns southbound on NE 182nd Ave to NE 219th Street.
    b. Follows NE 199th Street eastbound from NE 122nd Ave (SR 503) to NE 182nd Ave then turns north to NE 219th Street.
8. **Battle Ground to Brush Prairie**
    a. Upgrade of SR 503 from Main Street (SR 502) to NE 154th Street.
    b. Extends NE 102nd Ave southbound from Main Street (SR 502) to NE 199th Street, then turns in southeasterly direction to meet SR 503 north of the creek at the transition curve from NE 122nd Ave to NE 117th Ave.
9. **Battle Ground to Hockinson** follows NE 199th Street eastbound from NE 122nd Ave (SR 503) to NE 182nd Ave, then turns south to NE 159th Street.
10. **Battle Ground East to Hockinson** follows NE 182nd Ave southbound from NE 219th Street to NE 159th Street.
11. **Battle Ground to Vancouver East** 4a or 4b, plus upgrading SR 503 from Brush Prairie south to NE 119th Street.
12. **Hockinson to Camas North** follows NE 182nd Ave southbound to NE 119th Street.

C. Southeast Quadrant

13. **Camas North to Camas** – This alignment begins a transition from an alignment provided by others which was developed between **Hockinson to Camas North**. The NE Team shows this alignment to follow NE 182nd Avenue southbound to NE 119th Street. The mapping provided to our team showed an alignment from (we're assuming) NE 119th Street to SE Everett Road at about NE 3rd Street. Our team backed up to approximately NE Brunner Road and NE 267th Avenue in order to a) avoid an existing airport that is thought to be impacted with the SE Everett Road alignment, and b) consider the constraints of the Washougal River crossings in Camas.

    Therefore, from NE 267th Avenue near NE Robinson Road, transition southeast to 283rd Avenue (SE Crown Road) to NE 3rd Avenue in Camas.
14. **Camas North to Washougal** - Two options were developed for a route between Camas North to Washougal. Either of these options would provide a new E/W route between the proposed **Camas North to Camas** alignment just described, and N. Washougal River Road. N. Washougal River Road would provide the access to Washougal. Either option would take advantage of the existing N/S crossings of the Washougal River at NE 3rd Avenue and at N. Washougal River Road. Both of these river crossings may need to be improved.

a. Option 1 – This option improves NE 3rd Avenue from SE Crown to N. Shepherd Road east to N. Washougal River Road. The purpose of this improved road is to provide an alternate E/W road, north of the Washougal River, to complement NE 3rd Ave (E Street) which provides E/W movement south of the Washougal River.

b. Option 2 – This option would cause two major intersections to be created at 283rd Avenue and SE 23rd Street, and at a new SE 22rd Street and N. Washougal River Road. SE 23rd Street would be extended east along a new alignment to existing (but improved) SE 22nd Street to N. Washougal River Road.

15. **Vancouver East to Camas North** – From West to East – a new interchange would be created at I-205 and NE 28th Street. The route would transition along NE 112th Avenue to NE 18th Street. The route would follow NE 18th Street to the east, where a transition occurs from NE 18th Street and 192nd Avenue to NE 28th Street. The new route ends at SR 500 (242nd Avenue) and N. Dresser Road. However, continuing to the east/southeast along existing SR 500 would connect this route at NE 267th Avenue/NE Brunner Road to the route described for **Camas North to Camas** route above.

16. **Vancouver East to Padden** – This route begins along 112th Avenue which was described above in the **Vancouver East to Camas North**. From 112th and 28th Street, the route would utilize existing but an improved 112th and 117th Avenues. The transition between 112th and 117th Avenues occurs along SR 500. The interchanges at SR 500/NE Gher Road and at SR 500/NE 4th Plain Blvd/NE 117th Avenue may need to be improved. Improvements end at approximately NE 117th Avenue and NE 99th Street.

17. **Padden to Battleground** – Continue operational/capacity improvements described above in the **Vancouver East to Padden** alternative, along NE 117th (SR 503) Avenue to Battleground.

18. **Vancouver East to Felida** – This route also begins along 112th Avenue and NE 28th Avenue which was described above in the **Vancouver East to Camas North** at the new I-205/NE 28th Avenue interchange described in the **Vancouver East to Camas North** route. West of I-205, the route would follow the existing but improved roadway of NE Burton Road. At NE 25th Street and NE Andresen Road, intersection and operational improvements would occur to ensure reasonable access to the existing interchange at NE Andresen Road and SR 500.

19. **Felida to Padden (as extended to NE 117th Avenue)**. – From West to East – Start at existing interchange along I-5 at NE 99th Street. Follow NE 99th Street to NE St. John's Road. Modify intersections at NE 99th Street/St. John's Road. Modify intersections at St. John's Road and 72nd Avenue and NE 119th St. Improve NE 119th St. to NE 117th Street.

Potential Environmental Impacts

Once the corridor alignments were selected, detailed analysis was conducted to determine the impacts these corridors have on the environment. Exhibit D-5 summarizes the impacts of each of the final corridor alignments.

Exhibit D-5 – Potential Environmental Impacts

Corridor	Floodplains (linear ft)	Wetlands (linear ft)	Steep Slopes (linear ft)	Habitat (linear ft)	Wildlife (linear ft)	# of Stream / River Crossings	Names of Major Streams & Creeks Crossed
North 1	3,000	520	170	2,000	680	23	Weaver Creek, Flume Creek
North 2	4,000		2,000			11	
West 1	45,000	3,000		370		3	
West 1A	14,000	2,000			12,000	2	Flushing Channel; Lake River
West 1B	7,000	3,000	3,000	3,000		10	Whipple Creek; Flushing Channel; Lake River
West 1C	2,000	1,000	300			3	Flushing Channel; Lake River
West 2	15,000	3,000	920	690		10	Salmon Creek, Vancouver Lake; Burnt Bridge Creek Delta
West 3	11,000	580				1	Columbia River, Columbia Slough
West 4	10,000	2,000				1	Columbia River, Columbia Slough
West 4A	3,000	380				2	Willamette River
72nd Avenue & Daybreak	3,000	3				7	Salmon Creek
SUB	4,000	4,000	6,000	1,000		49	
East 1	2,000	900				13	Salmon Creek, Morgan Creek, Mud Creek, Fifth Plain Creek, Shanghai Creek
East 2	3,000					5	Salmon Creek, Morgan Creek, Mud Creek, China Ditch
East 3	12,000	4,000	630	5,000		8	Lacamas Creek (using existing crossing), Columbia River
East 4	17,000	5,000	220	4,000		16	Lacamas Creek basin, Columbia River, Matney Creek