Anne McLaughlin

I-5/ EASTBANK OPTIONS STUDY

STAFF REPORT AND RECOMMENDATION TO CITY COUNCIL

PORTLAND OFFICE OF TRANSPORTATION
CITY OF PORTLAND
MARCH, 1989

PORTLAND CITY COUNCIL

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City of Portland, Oregon
Office of Transportation
March, 1989

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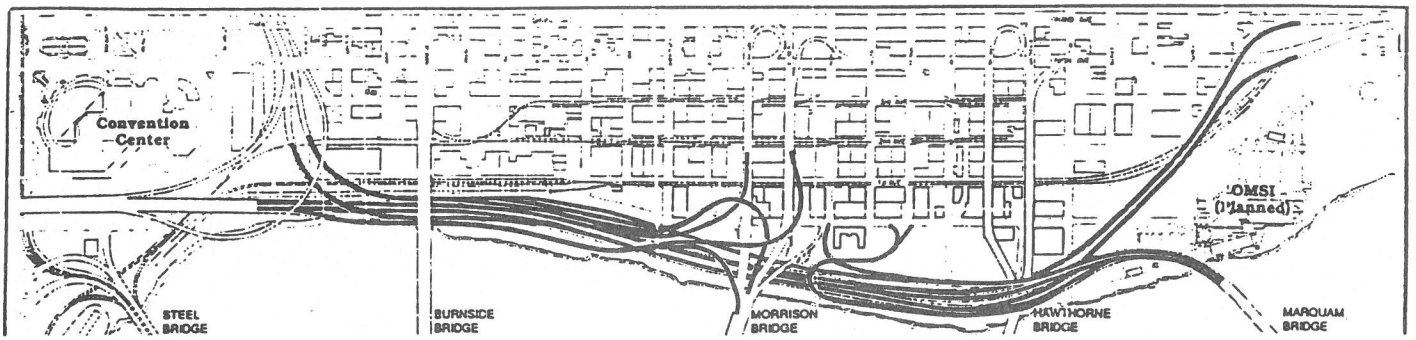

Figure 1 Alignment A: The Current Freeway with the East Marquam Improvements

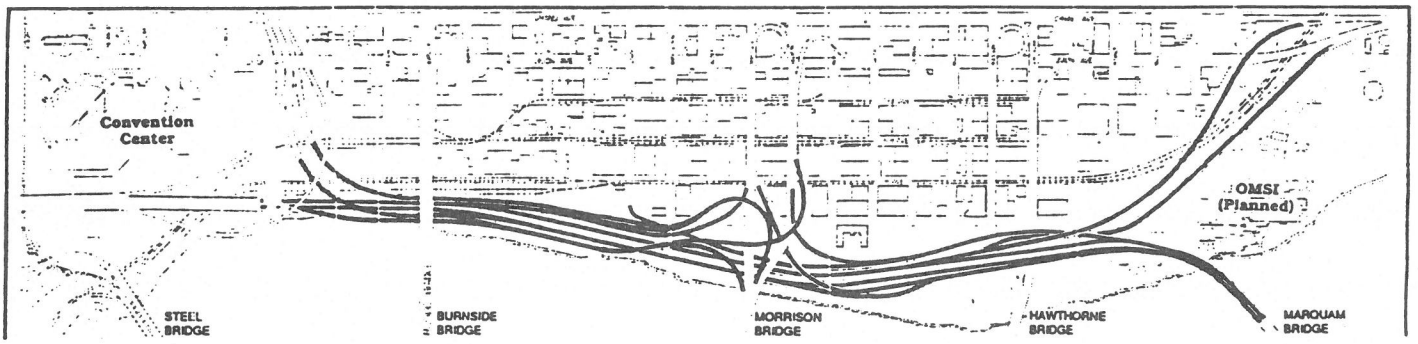

Figure 2 Alignment B: The ODOT Modified Alignment

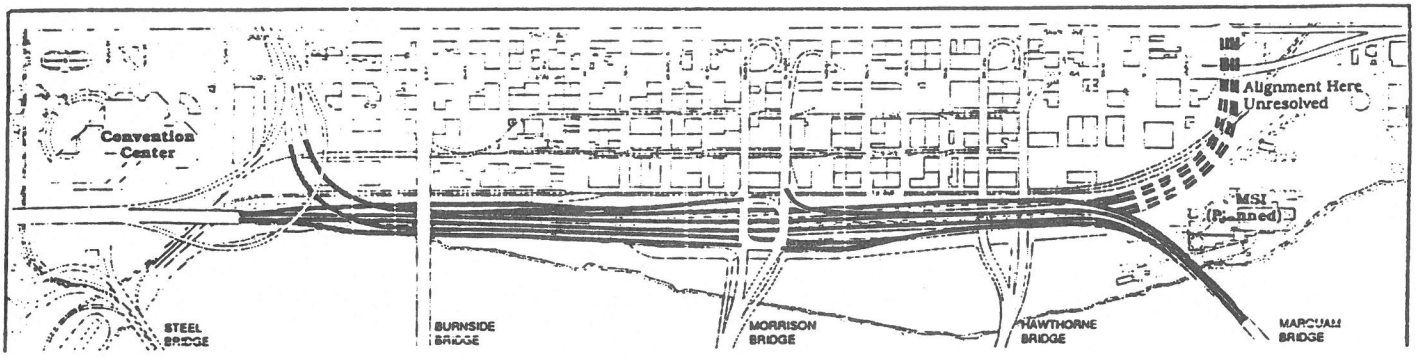

Figure 3 Alignment C: The Committee's Alignment

I. EXECUTIVE SUMMARY AND RECOMMENDATION

The question of the I-5 (Eastbank) Freeway was before Council in September of 1988. At that time, the Council requested ODOT to continue the dual track study process, with the locally-approved East Marquam Project (now called Alignment A) as one of the two tracks. The Council asked ODOT and the Eastbank Options Study Committee to continue their examination of "a detailed second alternative" design. The Council also directed various city bureaus to prepare reports related to land use visions, development implications and park development.

The committee and various work groups met frequently from October through January. At their meeting of January 30, 1989, the majority of the committee supported a recommendation of Alignment C (modified). They did not identify funding for this alternative.

During the September Council discussions, three major questions were identified which needed to be answered before an alternative project could move forward.

1) Is the alternative technical feasible?

2) What is the impact of the alternative on the Central Eastside's industrial character?

3) What is the funding strategy and what is the impact of that strategy on other transportation priorities?

The various reports dealt with these questions and the conclusions are summarized below:

Technical Feasibility: The committee, ODOT and their consultants have developed a technically feasible alternative called Alignment C. With the addition of a partial interchange at Harrison Street, the operational concerns raised at the previous hearing have been met. The various reports also confirm that the ODOT-modified alternative (now called Alternative B) is feasible. In concert with the work of the City bureaus, the local street and other improvement requirements have also been identified. The Planning Bureau's Visions Report provided the range of public and private uses that could take advantage of the land made available by relocating the freeway. Because Alignment C produces the most available land, it gives more opportunity to introduce a range of uses on the riverfront. It is clear that a technically feasible alternative project does exist and that riverfront benefits would result.

Impact on the Industrial District

The PDC Development Option report reviews the development impacts of the alignment alternatives. Alignment C would have the greatest potential for employment growth in the waterfront area. The alignment also

removes businesses in the block between Water and First Aves., leaving a two block-wide strip of industrial uses between the waterfront/freeway and the Union/Grand Corridor. The PDC report notes the high potential for conflicting land uses and uncertainty for existing businesses in the area.

It is clear that the impact of Alignment C on the industrial character is negative. The extent of that negative impact would be dependent upon the details of the redevelopment design and other programs in the district.

Financial Implications

The greater refinement of the alternative designs has resulted in significant cost increases. The Alternative C freeway cost has increased from $93 to $125 - 128 million; Alignment B, from $72 to $85.5 million. These are freeway costs only and do not include substnatial site prepartion, local street, and park development costs. The Options Committee conducted a significant research effort to find additional funding to match these costs. They established a funding subcommittee which included committee members and local transportation finance officials. They received the advice of ODOT's lobbyist and congressional staff as to the feasibility of various strategies.

While they did not reach a specific financing recommendation, the committee did reach several financing conclusions. Two of these were:

A. "The cost of added improvements above those of the original design (Alignment A) should be borne by the beneficiaries." (Committee report pg. iv)

B. "...Use of current federal and state transportation funding programs for this project is likely to impact timing of other regional transportation projects currently proposed..." (committee report page v).

These conclusions are significant since they imply that a major share of the costs should be paid by the City of Portland, and that this project would negatively impact financing for other primary projects, in particular the Westside LRT.

Since the committee's January 30th meeting, several specific funding proposals have been suggested by the funding subcommittee or individuals. These include (in various combinations): a federal demonstration grant of up to $50 million, a City of Portland general obligation bond of up to $32 million and the deletion or deferral of various already approved city or regional transportation projects.

It is clear that no funding alternative has been identified. Any funding alternative which could be adopted would negatively affect regional transportation priorities. It would also require redirection

of the city's current economic development activities supported by transportation and/or require an increase in City property taxes.

Staff Recommendation

Based on the work of the committee, staff concludes that an operationally feasible alternative exists but that it is not within the range of financial feasibility, given the broader objectives for transportation development within the Central City and the Region. Therefore, the Office of Transportation recommends that Council:

A. Terminate the dual-track analysis process; and

B. Request that ODOT proceed with construction of Alignment A, the original East Marquam Project.

II. INTRODUCTION/PURPOSE

A. Study Guidelines

City Council in September, 1988 adopted Resolution No. 34473 requesting ODOT carry out a dual-track process for the I-5/Eastbank Freeway Project. Council requested that the approved East Marquam Project (Alignment A) be one of the tracks and that two alternatives be evaluated as the other track. The two alternatives are described in this report as the ODOT Modified Alternative Alignment B, and the Committee Alternative Alignment C. The Council further requested that an expanded I-5/Eastbank Option Committee and ODOT should provide a detailed second alternative which:

- o Responds to the original guidelines given the study committee (Resolution 34388), including providing access to the CEID and the Sunrise Corridor as well as improving connections between I-5 and the Banfield;
- o Provides these improvements within a time similar to that identified in the current ODOT 6-Year Plan (FFY 1992) and
- o Uses the currently available $54.0 million in FAI funds; and
- o Searches for and recognizes other sources of funding.

In addition, Council expressed the intent that the recommended alternative must minimize the impact of additional funding requirements on other regional priority projects.

B. Purpose

This report represents the Portland Office of Transportation staff report and recommendation for a preferred alignment of the I-5/Eastbank freeway between the east end of the Marquam Bridge north to the Burnside Bridge and the I-5/I-84 interchange. The report is also intended to summarize and evaluate the major elements of each of three freeway alignments (described below) against the study guidelines and against City transportation, economic development and park objectives. The report further evaluates funding strategies for each of the elements to determine their relative feasibility. Finally, the report includes a list and discussion of the major findings contained in this report. From those findings an Office of Transportation recommendation to City Council is formulated for their review, consideration, and action.

The findings, conclusions, and recommendations contained in this report are those of the Portland Office of Transportation. Technical assistance in the preparation of this report was provided by the staff from the Portland Development Commission, the Portland Park Bureau, the Portland Bureau of Planning and the Highway Division of the Oregon Department of Transportation. In conjunction

with the staff assistance, the following reports provided background information for this report and are referenced throughout.

- o "Eastbank Development Options," Portland Development Commission; March, 1989.
- o "Visions for Portland's Eastside Riverfront," Portland Bureau of Planning; January, 1989.
- o "Capital and Operating Costs for a Park and Recreational Facilities on the Eastbank of the River," Portland Bureau of Parks and Recreation; February, 1989.
- o "Eastbank Freeway Options Study: Comparative Summary and Technical Report," Oregon Department of Transportation, Highway Division; January, 1989.

In addition, information prepared for the I-5/Eastbank Options Committee provided background for this report. The two main committee reports are:

- o "I-5/Eastbank Freeway Option Committee: Final Report," Barney and Worth, Inc.; March, 1989.
- o "Eastbank Freeway Relocation Federal Funding Feasibility Study," Stoel, Rives, Boley, Jones, and Grey; by Robert D. Van Brocklin; January, 1989.

C. Overview of Alternatives

In addition to the original ODOT East Marquam projects within the existing I-5/Eastbank alignment, the City Council in September, 1988 directed the I-5/Eastbank Options Study Committee to evaluate two relocation alignments, one identified by ODOT and another recommended by the Study Committee in June, 1988. The three designs are generally described below and shown in Figures 1, 2, and 3.

1. Original ODOT Design Alignment A - This alternative has not changed since the last Council review. It is proposed to be built within the current freeway right-of-way in three units:

    a. Widen the East Marquam Bridge approach to a standard four lanes, modify the northbound off-ramp to Water Avenue, and construct a new companion I-5 southbound on-ramp from Water Avenue.

    b. Construct new two-lane freeway-to-freeway, I-5 northbound to I-84 eastbound connector ramp.

c. Construct new northbound and southbound ramps between McLoughlin Boulevard and I-5 north.

In addition, the existing esplanade along the Willamette's east bank would be improved with pedestrian and bicycle access from the east side via Clay and Main streets, and from the west side via the Morrison and Hawthorne Bridges.

Transportation costs of Alignment A are estimated at $61.0 million, of which $54 million is committed through Interstate Completion funding and the remainder would come from future 4-R allocations. $1.0 million of $5.0 million of esplanade/ waterfront improvements are included in the transportation funding.

Also examined as part of this report is an Alignment A Modified. This alignment is the same as Alignment A except that the Water Avenue ramps would be replaced with on- and off-ramps to and from I-5 South with Belmont and Morrison. The modified ramp treatment would cost an additional $3.5 million.

2. ODOT Modified Design Alignment B - This alternative, also unchanged since the last review, is a freeway relocation project between the Marquam and Morrison Bridges on an alignment generally west of Water Avenue. Alignment B provides freeway/ramp/interchange improvements as described above for Alignment A. However, the Water Avenue ramps would be replaced with on- and off-ramps to/from I-5 south with Belmont and Morrison. The alignment would also provide access modifications for vehicles, bicycle traffic, and pedestrians to 13 acres of newly created waterfront property.

   Transportation costs, including local street access, would total $86.5 million. Unfunded costs total $32.5 million. This assumes the transfer to Alignment B of the $54 million currently allocated to Alignment A. Site preparation costs (excluding $4.6 million for land acquisition) related to land use scenarios identified in the Visions Report range from $1.9 to $4.5 million and are unfunded. Alignment B park improvements range from $7.2 to $20.6 million and are unfunded.

3. Committee's Alternative Alignment C - This alternative is a freeway relocation project that maintains an alignment west of SE First Avenue. Alignment C provides connections to meet the transportation and access objectives of the original project. A new split-diamond interchange would be constructed to Morrison and Belmont. The McLoughlin ramp design, unlike the other designs, is carried for the most part on grade with a half-diamond interchange at Harrison Street providing additional access to I-5 north. This Harrison St. Interchange is an

addition since Council's last review, and it resolves the traffic capacity concerns expressed at that time.

Access to 32 acres of newly created Waterfront property would be provided from the east at Stark Street via a tunnel and at Harrison Street via an overcrossing of the McLoughlin ramps. CBD access would be via Morrison and Hawthorne Bridge ramps.

Transportation costs, including local street improvements for access, would range from $139 to $143 million. Unfunded costs range from $85 to $89 million, assuming transfer of the $54 million currently allocated to Alignment A. Site preparation costs (excluding $11.2 million for land acquisition) related to land use scenarios identified in the Visions Report range from $3.9 to $7.8 million and are unfunded. Park improvements range from $15.5 to $30.0 million and are unfunded.

D. Visions Report

"Visions for Portland's Eastside Riverfront," was prepared by the Bureau of Planning. The Visions Report is intended to illustrate and describe possible visions for the eastside riverfront should the freeway be relocated. Each incorporates ideas that have been suggested for the Willamette Riverfront in the past, and each includes new ideas.

For each of the two relocation alignments, (B and C) three different visions were prepared. Visions 1 and 4 propose mostly offices, support retail and housing development at high densities with moderate amounts of public open space. Visions 2 and 5 propose that the entire riverfront area be developed as public open space. Visions 3 and 6, call for a limited amount of commercial development with the remaining areas devoted to public open space.

The visions report did not recommend one vision over another, nor has a "preferred" vision been developed. The selection of the final vision for the eastside riverfront should be reserved for a more-detailed analysis if the Council decides to relocate the freeway. Such an analysis would include full Central City Plan policy analysis, market analysis, local street system analysis, and other studies.

The Visions Report provided the framework for the information outlined in the Park Bureau and PDC reports. Essentially, those reports identify the benefits and costs associated with developing each vision should a decision be made to relocate the freeway. However, none of the reports examine in depth the impact of freeway relocation on the other Central City or City-wide land uses.

E. History

- o 1958 — Oregon State Highway Department begins study of alternative corridors for the I-5/Eastbank Freeway.
- o 1964 — The existing I-5/Eastbank Facility is constructed.
- o 1979 — ODOT project development activities for proposed improvements to the facility.
- o 1980 — Following public hearings, including City Council, a three phase project is approved for construction.
- o 1984 — City Council initiates Central City Planning Process. As part of that process, I-5/Eastbank relocation is considered. Adopted Central City Plan (August, 1988) calls for completing feasibility and engineering study for two-mile stretch of Eastbank Freeway by January, 1989 (Transportation Project T1).
- o January 1988 — In response to citizen requests, primarily Riverfront for People (RFP), Council adopts "dual-track approach" and agrees to fund half of $100,000 study with ODOT, known as Eastbank Freeway Options Study. State Senator Jane Cease is appointed chair of study committee. Study is contingent upon the absence of further appeals of any approvals/permits for the East Marquam Project.
- o June 1988 — Initial Freeway Options Study Complete. Committee recommends "Option 2" which would create a freeway alignment just west of the SPRR main line. (That option is essentially Alignment C discussed in this report).
- o July 1988 — Planning Commission recommends pursuing "Option 2" for further study.
- o September 1988 — Council requests further dual track approach to study three alignments as described in this report. Council establishes guidelines for the report and requests that an expanded I-5/Eastbank Options Study Committee forward a recommended alignment and funding strategy to Council by January 1989.

- o January 1989 — Study Committee votes 7 to 6, with one abstention to recommend Alignment C. Study committee takes no action on funding strategy or report of funding sub-committee.

- o March 1989 — Council hearings on recommended alignment.

III. SUMMARY OF ALTERNATIVES

A. Alignment A/Alignment A Modified

1. Description

Alignment A is the original East Marquam project which utilizes the current alignment. Alignment A modified also utilizes the current alignment. The primary difference between Alignment A and Alignment A modified is access to and from I-5 to the south.

Alignment A includes three phases. The first phase widens the east approaches of the Marquam Bridge to a four-lane width and adds a new on-ramp from Water Avenue to I-5 Southbound. The second phase constructs a new two-lane freeway-to-freeway ramp connecting I-5 northbound to I-84 eastbound. The third phase constructs ramps to and from McLoughlin Boulevard to and from I-5 North.

Alignment A leaves the essential elements of the Morrison/Belmont interchange intact. As noted by ODOT and the Study Technical Advisory Committee (TAC), one undesirable characteristic of this design is the left-hand off-ramp for southbound I-5 to McLoughlin Boulevard. A right-hand exit is more in line with normal driver expectancy and current off-ramp design practices.

Aside from Eastbank Esplanade improvements, no additional riverfront property nor access to the west side of the freeway is planned in this design. Access to the proposed OMSI site and PGE properties to the south is via Water Avenue. Access to and from I-5 via the existing Water Avenue off-ramp and the Water Avenue on-ramp would require crossing the Southern Pacific main line at SE First Avenue. The movement is consistent with the local access purpose of the ramp.

Alignment A modified differs from Alignment A in that new access to and from I-5 south would be constructed at the Morrison Bridge. The ramps to and from Water Avenue providing access to and from the CEID are replaced with a northbound off-ramp to eastbound Belmont, and a westbound on-ramp from Morrison to I-5 southbound. Access to the CEID and the new OMSI site from the freeway would be via Union Avenue. Traffic modifications would need to be determined and implemented to efficiently accommodate vehicular movement to the OMSI/PGE area via Water Avenue. The Alignment A modified improvements to the Morrison Bridge would occur as part of Phase One.

2. Cost

The cost of Alignment A is estimated at $61.0 million for the freeway elements. Included are $5.5 million in freeway improvements that will be necessary north of the Burnside Bridge regardless of alignment. Alignment A does not require any additional non-freeway or local access improvements. Alignment A would be constructed in three phases, as noted above, with Phase one costing $21 million, Phase two $10 million, and Phase three $28.5 million.

Alignment A modified is estimated at $64.5 million. Additional costs (not yet identified) to improve local access to OMSI/PGE may be necessary for Alignment A modified. Such improvements may involve low-cost signal and intersection improvements on Union between SE Taylor and SE Market or improvements to the Belmont to Union Avenue off-ramp. Phasing of freeway elements would be the same as for Alignment A. However, Phase one would cost $24.5 million to reflect the Morrison Bridge/I-5 ramp modifications.

3. Funding

$54 million of federal interstate completion funds have been allocated for completion of Alignment A. The funds must be expended by 1993. Alignment A has a shortfall of $7.0 million.

The same $54 million could also be applied to Alignment A modified, pending approval of the I-5 ramp modifications by the Federal Highway Administration (FHWA). The funding shortfall for A modified is $10.5 million.

See Section V, Funding, for a complete discussion of potential funding sources, strategies, and implications.

B. Alignment B

1. Description

Alignment B (or ODOT modified) was developed by ODOT as a compromise alignment creating riverfront property while maintaining an alignment west of Water Avenue to avoid major right-of-way acquisition. Most of the property west of Water Avenue had been acquired for the original East Marquam improvement and widening project.

Alignment B maintains essential elements of the Morrison/Belmont interchange with a slight variation as described above as part Alignment A modified. The ramps to and from Water Avenue providing access to and from the CEID are replaced with a

northbound off-ramp to eastbound Belmont, and a westbound on-ramp from Morrison to I-5 southbound. The left-hand exit ramp to McLoughlin Boulevard southbound from I-5 was corrected with a right-hand exit. Thirteen acres of new space along the river's east bank in the area of the Hawthorne Bridge would be created.

East side access to/from the new riverfront property from Union/Grand would primarily be at Clay for vehicular/bicycle and foot traffic with a two-lane service road running north from Clay. Additional access to a proposed parking structure, on-site, for low-clearance vehicles is provided at Madison Street. Parking under the freeway structures is accessed from Water Avenue. Access to the proposed OMSI site and PGE properties to the south would be via Clay Street and Water Avenue similar to the original design. However, as with Alignment A, modified signal/intersection or local street improvements may be necessary to achieve such access. Vehicular, bicycle, and foot traffic are accommodated to/from the west via new ramps at the Hawthorne and Morrison bridge.

Treatment for the McLoughlin ramps differs somewhat for Alignment B compared with either A Alignment. Both A Alignments carried the McLoughlin ramps on structure. For Alignment B, the northbound ramp remains the same, however, the southbound ramp is carried under I-5 on grade and depressed in a "cut and cover" tunnel under the Hawthorne approaches and Clay Street. The existing freeway and structures between the Marquam and Morrison Bridges would be totally removed.

2. Cost

Total construction and right-of-way costs for Alignment B freeway elements are estimated to be $85.5 million. This includes $5.5 million for improvements north of the Burnside Bridge. Non-freeway transportation costs are estimated at $1.0 million for Madison and riverfront access.

Site preparation improvements associated with Alignment B are estimated to cost in a range from $1.9 to $4.5 million (excluding land acquisition). Park improvements will range from $7.2 to $20.6 million.

Other potential cost issues regarding right-of-way are discussed on page 10 of the Committee Report. The issues relate to Federal payback of freeway land, State Highway Trust Fund payback, and a Division of State Lands settlement.

3. Funding

Assuming FHWA approval, $54 million currently committed to Alignment A could be used for funding freeway elements.

Consequently, for Alignment B and its associated land use visions, $31.5 million of freeway elements, $1.0 million of local street improvements, $1.9 to $4.5 million of site improvements, and $7.2 to $20.6 million for park improvements remain unfunded.[1]

Section V, Funding, provides a complete discussion of funding sources, strategies, and implications for freeway, local street, property, and park improvements.

C. Alignment C

1. Description

Alignment C represents an entirely new alignment east of the existing facility between the Marquam and Burnside Bridges. The freeway, ramps, and frontage road have been compressed as much as possible. A new SE First Avenue and relocated SPRR mainline set the easterly limits. The design is based on the Alternative 2 concept developed during the first study in early 1988.

Alignment C provides for a full split-diamond at the Morrison/Belmont one-way street couplet. All traffic movements except the northbound I-5 to Morrison Bridge (CBD) movement are provided by the interchange configuration. This interchange replaces the existing Morrison/Belmont interchange and the existing and proposed Water Avenue ramps.

As with the other alignments, the Marquam Bridge would be restriped to provide for four lanes on the top deck. At the I-84 junction, two lanes would provide an eastbound connection to I-84 and three lanes would continue north on the I-5 mainline. The third I-5 lane is dropped at the Morrison/Belmont interchange exit. The third lane is again added north past the Burnside Bridge by the entrance ramp from the Morrison/Belmont interchange.

Southbound, I-5 maintains use of the existing facilities at the Burnside Bridge - two lanes on the mainline and a single lane ramp connection to the Morrison and Belmont interchange. Just south of the Morrison Bridge, westbound I-84 merges with the I-5 mainline creating a four-lane section. A slip-ramp, similar to

[1]Excludes land acquisition costs.

the existing one, provides a connection from westbound I-84 and the Morrison/Belmont interchange. The McLoughlin exit consists of a two-lane off-ramp with three lanes continuing I-5 south. The Morrison/Belmont entrance ramp to I-5 adds a fourth lane to the freeway mainline to the Marquam Bridge. The bottom deck of the Marquam Bridge continues existing operations.

McLoughlin Boulevard is connected to I-5 by two surface ramps. Northbound, two lanes diverge from a proposed three-lane section of McLoughlin. The two-lane section would be carried north past the Harrison entrance ramp to a point just prior to the merge with I-5 where the second lane would be dropped. The remaining lane would provide an entrance ramp onto northbound I-5. Southbound, two lanes exit I-5 on the McLoughlin ramp. The right lane would be dropped at the Harrison exit; the left lane would connect with McLoughlin on the inside of the rebuilt Union Avenue viaduct.

Approximately 32 acres of riverfront space is created west of I-5. Access is provided to/from the new riverfront property from Union/Grand east of the river via a four-lane Stark Street tunnel on the north, and a four-lane Harrison Street overcrossing of the SPRR on the south. A frontage road would connect the two access points at the eastern fringe of the new property.

Access from the west side of the Willamette could be provided via the Morrison and Hawthorne bridges but is not included as freeway cost. New ramps to and from the west would be constructed at local expense of $3.15 million in one-half diamond fashion to the riverside service road. The existing center ramp to and from the Hawthorne Bridge to Water Avenue would also intersect the new service road. The service frontage road would be constructed to accommodate vehicles, bicycles, pedestrians, and future LRT.

New bike/pedestrian ramps in one-half diamond interchange fashion will be constructed to and from the riverfront service road at the Hawthorne Bridge at additional local expense of $600,000.

The OMSI site would be provided dual access from the service road and Harrison Street during a latter phase of this option. An internal circulation road within the OMSI complex could link both accesses.

A large number of at-grade railroad crossings are eliminated by constructing the 40-foot wide industrial frontage road tight up against the easterly SE First Avenue right-of-way line and

realigning the SPRR mainline tracks westerly between SE Pine to SE Mill. This is not included in the freeway cost estimates.

All of the existing freeway and associated structures, including the existing interchange ramps at Morrison/Belmont, would be totally removed.

2. Cost

Total construction and right-of-way costs for Alignment C freeway elements are estimated to be between $125 and $128 million. This includes $5.5 million for freeway improvements north of the Burnside Bridge. Non-freeway funded transportation costs (tunnel, bicycle ramps, frontage road, etc.) are estimated to be between $14.0 and $15.0 million.

In addition to transportation elements, infrastructure, site preparation, and development assistance costs range from $3.9 to $7.8 million and are unfunded. Park improvements range from $15.5 to $35.0 million and are unfunded.[2]

Other potential cost issues regarding right-of-way are discussed on page 10 of the Committee Report. The issues relate to federal payback of freeway land, State Highway Trust Fund payback, and a Division of State Lands settlement.

3. Funding

The $54 million committed to Alignment A could possibly be reallocated for Alignment C freeway elements, subject to FHWA approval. Consequently, $76.5 to 79.5 million in freeway elements, $14 to 15 million in non-freeway transportation elements, $3.9 to $7.8 million in site preparation, and $15.5 to $30.0 million of park improvements remain unfunded.

Section V, funding, provides a complete discussion of funding sources, strategies, and implications for freeway, local street, property and park improvements.

[2]Excludes land acquisition costs.

IV. EVALUATION OF ALTERNATIVES

This section provides an overview of each of the alignments as they relate to transportation, economic development, park and open space, and other city objectives and considerations. The major findings of this section and a discussion of their implications are found in Section VI, Findings. For transportation, the various project elements are evaluated for service, safety, operations, and policy considerations. The economic development evaluation focuses on employment, development, necessary public and private improvements, potential costs, policy and other implications. The parks analysis summarizes potential improvements and costs, examines policy considerations and lists general implications of each alignment relevant to potential land use.

The "Visions Report" provides the framework for the evolution. Economic Development considerations are excerpted from PDC's "Eastbank Development Options." Park considerations are based on the Park Bureau's report on "Capital and Operating Costs for a Park and Recreational Facility on the East Bank of the River." ODOT's "Technical Report and Comparative Summary" provided background information for the transportation evaluation.

A. Alignments A and A Modified

1. Transportation Objectives

a. Freeway Considerations

1) Service Level

Mainline freeway operations will be at a Level-of-Service (LOS) 'E' under both Alignments A and A modified. LOS 'E' is the minimum acceptable standard; LOS 'D' is desirable.

2) Geometry/Safety

Both Alignments A and A modified are consistent with current design standards. The Marquam Bridge east end curve is eight degrees.

3) Right-of-way

No additional right-of-way is required.

b. Interchanges

1) McLoughlin Ramps

a) Service Level

Northbound, with ramp control, the McLoughlin/I-5 merge will operate at LOS 'E'. The McLoughlin southbound exit will operate at 'C'.

b) Safety

Both A alignments include a left-hand exit ramp to McLoughlin Blvd. southbound from I-5. A right-hand exit would be more in line with normal driver expectancy and modern off-ramp design practices.

c) Connectivity

The connection provides for a major objective of the East Marquam project.

2) I-5 South

a) Service Levels

The Water Avenue (Alignment A) on-ramp adds a lane to the freeway providing a continuous 4-lane section to and across the Marquam Bridge. LOS would be 'D' (desirable).

The Morrison on-ramps (Alignment A modified) would add a lane southbound joining with the four-lane lower deck of the Marquam Bridge. LOS would be 'E' (minimum).

b) Safety

Adequate distance is provided for either the Water Avenue/I-5 or a Morrison ramp/I-5 merge. Under both alignments, on-ramps to I-5 South prohibit movement to McLoughlin South.

c) Connectivity

Both Alignments (A or A modified) provide the required I-5 southbound access. The Water Avenue ramps provide direct access to the CEID, although at-grade rail crossings are required for local circulation.

3) I-5/I-84

a) Service Levels

The I-84 exit will operate at LOS 'C'. The remaining I-5 segment to and under the Burnside Bridge will operate at LOS 'F', until corrected as part of the future Greeley/Banfield project.

b) Safety

All alignments operate essentially the same through this area. Rear-end type accidents will be greatly reduced due to the additional I-5/I-84 lane.

c) Connectivity

The connection meets the project objectives.

c. City Street Considerations

1) Service Levels

Local street service levels were determined for Alignment A during the project EIS. The Water Avenue report, completed several years ago, provides acceptable service levels on local streets. A preliminary analysis of local street service levels was conducted to examine the impact of relocating the Water Avenue ramps to Morrison and Belmont as described for Alignment A Modified. The results show a significant shift in traffic from Water and Clay to Morrison and Belmont. The greatest impact will be on the Morrison/Belmont ramps west of Union with volumes increasing 1100/800 during the p.m. peak. Lesser increases would be felt on Union and Grand and on Morrison/Belmont east of Union. Service levels on bridgehead streets would jump from currently acceptable levels to the E/F range. To maintain service levels an additional lane would be required on both the Morrison/Belmont approaches.

2) Policy Issues

a) ASCP

Alignment A would encourage through or regional traffic to access the regional system via neighborhood collector streets and through the CEID. Alignment A modified could increase traffic volumes on inner-southeast collectors as traffic seeks access to the Morrison ramps. The extent of that traffic has not been determined and will be influenced by the I-5/McLoughlin connection.

b) RTP

Alignments A and A Modified are consistent with and help implement the RTP.

c) Central City Plan

Alignments A and A Modified, best implement the general Central City Transportation Goal and its associated objectives:

Policy 4: Transportation

Improve the Central City's accessibility to the rest of the region and its ability to accommodate growth by extending the light rail system and by maintaining and improving other forms of transit and the street and highway system while preserving and enhancing the City's livability.

Because it is by far the least expensive alternative for meeting the project's goals, it does not impact the primary transportation focus of the Plan - providing regional access to Central City with an LRT system.

3) Neighborhood Impacts

Alignments A and A modified could be expected to have the least impact on neighborhood traffic due to the single I-5 access points and low intensity riverfront land uses.

d. Access

1) OMSI/PGE

Alignment A provides direct access via Water Avenue. Alignment A modified requires access via Clay and Water. Movement from I-5 to Union to Clay (westbound) is currently restricted.

2) CEID

Alignment A provides direct access to/from I-5 via the Water Avenue ramps. Alignment A modified would distribute traffic to/from I-5 via the Morrison ramps, Union/Grand, and local streets.

3) Riverfront

Vehicular access to the riverfront would be via Clay and Main from the east, and via the Morrison and Hawthorne Bridges from the west. Additional pedestrian access is provided from both bridges.

e. Transit

Future north-south LRT operations (MAX or vintage trolley) through the CEID may be accommodated on Grand Avenue, consistent with the Central City Plan. If adequate traffic capacity is not available on Grand, LRT would most likely be aligned on SE 6th or SE 7th.

f. Cost/Phasing

Freeway	Alignment A	Alignment A Modified
Ph. 1	$ 28 Million	$ 31.5 Million
Ph. 2	10	10
Ph. 3	23	23
Sub-Total	$ 61 Million	$ 64.5 Million
Local Streets	0	0
Total	$ 61 Million	$ 64.5 Million

2. Economic Development Objectives

a. Employment

The Central Eastside currently includes approximately 1,400 businesses and 17,000 jobs. The direct, short-term impact of selecting Alignment A would be to increase the level of certainty and economic stability in the area. Since this alignment requires the least amount of additional right-of-way acquisition, it would be expected to have the least negative impacts on existing employment.

Over the longer time-frame, this alternative would result in increased employment. Within the immediate area (west of 1st Avenue), up to 4 acres of vacant land would be expected to develop for industrial uses within 5 years following the freeway improvements, providing an additional 100 - 175 jobs. Beyond the project area, both Commercial development within the CE zone and Industrial development within the GI-1 areas would be expected to generate employment.

In short, improvements as envisioned by Alignment A would support the Central City Plan Economic Development Policy (1. F.) of retention and expansion of existing businesses and attracting new businesses.

b. Development

Alignment A provides an opportunity for increased development by relieving the local street system from congestion associated with freeway destined traffic and by providing improved access to I-5 southbound. In addition, I-5 impact mitigation measures will include funding of esplanade area improvements which will improve the environment and overall ambiance of the area.

Alignment A provides the most certainty and could be completed within the shortest time-frame. For existing businesses, and for newer investors such as OMSI, these factors are very important. It does not create any new waterfront development areas. However, future exploration of opportunities to develop the existing riverbank and possibly over the river seems warranted.

c. Public, Public/Private Improvements

The City Council adopted a concept plan for the Esplanade and riverfront improvements including a parking facility, potential for a riverfront restaurant, vehicle and pedestrian ramp connections to the Hawthorne, Morrison, and Burnside Bridges, and riverfront access facilities which might include floating walkways and light marine craft tie-ups. If Alignment A is selected, efforts should be directed toward exploring the potential for private participation in riverfront development activities. Any development within the waterfront area will be required to meet numerous regulatory and environmental tests. These sensitive issues can be expected to bring numerous public agencies into play. In the event that a waterfront restaurant or marina is developed, a positive public commitment and presence may be prerequisite to leveraging private investment.

The Central Eastside Urban Renewal Plan includes goals and objectives which were adopted through a process including public and private participation. Future business and development assistance, infrastructure improvements, and parks/esplanade projects will continue to incorporate private participation whenever possible.

d. Development Costs

Development along the waterfront, or over the river can be expected to incur high costs because of regulatory, environmental, and land characteristics. However, the soil characteristics pose less of a problem for low-rise development, as typically utilized for Industrial facilities, than for mid or high-rise development. Any development greater than 2 or 3 stories would be expected to require piling for foundation support in this area.

Alignment A would not result in significant new Commercial or Residential development in the sensitive riverfront area. Future development costs of Industrial facilities would be expected to be competitive with those currently experienced for new industrial development throughout the Central Eastside. However, no additional public costs have been identified as required for Alignment A at this time.

e. Phasing

Improvements beyond the freeway funded elements of the Esplanade Plan could be deferred until funding is available. However, it would seem prudent to commit public resources to see that at least minimal improvements are made as soon as possible.

f. Potential Local Costs

Alignment A anticipates development of Esplanade facilities along the waterfront. An Esplanade concept plan has been endorsed by City Council which could be expected to cost more than $5 million in local funds if developed. The Central Eastside Urban Renewal program has conditionally allocated $2.8 million toward Parks/Esplanade improvements. Urban renewal funds will be utilized, when available, to meet these and other urban renewal plan goals and objectives.

In summary, the Alignment A alternatives are expected to contribute to the area's stability and modest growth while facilitating significant riverfront improvements. The proposal is supportive of the existing industrial sanctuary and existing commercial corridors in the Central Eastside. However, the proposal does not add new riverfront land to the Central City land inventory.

For a more detailed review of Economic Development impacts, refer to the "Eastbank Development Options" report by the Portland Development Commission.

g. Economic Development Overview

1) Development

Retained development - approximately 10 acres
Redevelopment - approximately 4 acres (3 acres west of Water Ave., 1 acre east of Water Ave.)

2) Public Costs/Improvements

Land Acquisition	0
Water Ave. Improvements (included in East Marquam improvements)	
Public Improvements	
Park/Open Space	$1,000,000 - $5,500,000

3) Private Investment Potential

New Industrial	$2,100,000 - $3,500,000

4) Basic Economic Impacts

Property Tax Revenues (retained)	$496,000
(new)	$65,000 - $108,500
Jobs	
Retained	435
Generated	105 - 175
Total	540 - 610

5) Implications

- o Retention of 34 businesses and 436 jobs
- o Economic certainty and stability conducive to new investment and development (including OMSI)
- o Minimal public investment beyond existing commitments
- o Positive near-term impacts on urban renewal objectives & resources
- o Conformance with existing zoning and land use designations
- o Minimal opportunity for new riverfront development
- o Seriously reduces opportunity of future I-5 relocation
- o Minimal public-use waterfront area

3. Park and Open Space Objectives

a. Public Improvements

The park improvements related to the freeway alignments consist of redevelopment of the existing Eastside Esplanade. The development plan includes:

- o Regrading and stabilizing the river bank
- o 12 foot wide greenway trail with lighting and landscaping
- o Waterfront restaurant
- o Fishing piers and boat docks
- o Floating trail and cascading fountains
- o Overlooks and amphitheater
- o Spiral ramp connection to Morrison and Burnside Bridges
- o Ramp connection from Hawthorne Bridge

b. Potential Costs

The costs for improvements between S.E. Clay Street and the Burnside Bridge is estimated at $5,000,000 based on 1985 dollars.

c. Phasing

Phase I: Includes regrading and river bank stabilization, greenway trail, spiral ramp to Morrison Bridge at the cost of approximately $1,000,000.

Phase II: Pedestrian connection to Burnside and Hawthorne Bridges, lighting, landscaping, park furniture, fishing piers, overlooks at an approximate cost of $2.9 million.

Phase III: Other park amenities, such as boat docks, floating trails, cascading fountain at an approximate cost of $1.1 million.

d. Central City Plan Objectives

1) Willamette Riverfront (Policy 2)

The esplanade improvements will support Central City Policy 2, Willamette Riverfront, to "Enhance the Willamette River as the focal point for views, public activities, and development which knits the city together." In addition, Alignment A esplanade improvements are consistent with most of the associated Policy 2 objectives to locate public attractors, improve bridges for pedestrians and bicyclists, and fostering opportunities for "touching and entering" the Willamette River. However, Alignment A does not directly allow for

the recapture of the east bank for non-vehicular uses nor encourage a mixture of land uses along the river.

2) Parks and Open Spaces (Policy 8)

The esplanade improvements will generally enhance Policy 8 to "Build a park and open space system of linked facilities that tie the Central City districts together and to the surrounding community." The improvements also support objectives to create green belts between areas of existing open space and ensuring a balance of passive and active parks. It is questionable whether the esplanade improvements would fulfill the objective meeting the open space and recreation needs of the central eastside.

e. Implications

- o Improves appearance of the Esplanade
- o Provides better pedestrian connection to the bridgeheads than exists today
- o Increases public contact with the river
- o Noise mitigations are not sufficient to reduce noise level to a comfortable level for outdoor recreation use.
- o Proximity of the freeway and associated ramps inhibits the opportunity to address the issue of isolation and public safety in the area between the Morrison and Burnside Bridges.
- o The narrow width of the park limits the opportunity for a variety of recreational uses.

B. Alignment B

1. Transportation Objectives

a. Freeway Considerations

1) Service Level

Northbound service levels will generally be D/C, south of the McLoughlin ramp entrance, E to the I-84 entrance, and F through and north of the Burnside Bridge. Southbound, south of the I-84 entrance, service levels will be D/E. With the exception I-5 north of Burnside, service levels are acceptable and consistent with the other alternative alignments.

2) Safety

Alignment B is consistent with current design standards. The Marquam Bridge east end curve is eight degrees.

3) Right-of-Way

Two businesses will need to be relocated at a cost of approximately $1,000,000 as a result of Alignment B.

b. Interchanges

1) McLoughlin Ramps

a) Service Level

McLoughlin southbound ramp will operate at LOS B (p.m. peak). The McLoughlin/I-5 north connection will operate at LOS E and require ramp metering.

b) Safety

Alignment B will connect the left-hand exit ramp to McLoughlin from I-5 with a right-hand exit more consistent with driver expectancy and modern freeway design.

c) Connectivity

Study objectives are met.

2) I-5 South

a) Service Levels

The Morrison/I-5 on-ramp (southbound) would add a lane joining with the existing four lanes on the Marquam Bridge. LOS to and from I-84 to the west end of Marquam Bridge would be E (I-84 to McLoughlin off-ramp) to D (McLoughlin off-ramp across Marquam Bridge). A LOS C can be achieved at the ramp terminal with this design.

b) Safety

Ramp safety meets project objectives. The new I-5 South movements would reduce rail crossings within the CEID for freeway access movements. However,

safety problems have not been identified at these crossings.

c) Connectivity

The connection is consistent with study objectives.

3) I-5/I-84

a) Service Levels

Two lanes, both northbound and southbound, would provide I-5/I-84 connections. Service levels would be within desirable standards.

b) Safety

All alignments improve safety by improving service levels and reducing rear-end type accidents related to stopping and starting on I-5 as vehicles queue for I-84 (north to east). The new I-5/I-84 connections satisfy the project objectives.

c) Connectivity

The new I-5/I-84 connections satisfy the project objectives.

c. City Streets

1) Service Levels

A preliminary analysis of local street service levels was conducted to examine the impact of relocating the Water Avenue ramps to Morrison and Belmont as described for Alignment B. The results show a significant shift in traffic from Water and Clay to Morrison and Belmont. The greatest impact will be on the Morrison/Belmont ramps west of Union with volumes increasing 1100/800 during the p.m. peak. Lesser increases would be felt on Union and Grand and on Morrison/Belmont east of Union. Service levels on bridgehead streets would jump from currently acceptable levels to the E/F range. To maintain service levels an additional lane would be required on both the Morrison/Belmont approaches.

2) Policy Issues

a) ASCP

Alignment B could act to increase traffic volumes on inner-southeast collectors due to traffic movements to and from the Morrison ramps. Such movement could conflict with ASCP objectives. Completion of I-5/McLoughlin connections could be expected to reduce this impact.

b) RTP

The B Alignment would be consistent with RTP objectives to improve access to the CEID. However, an RTP amendment to reorder projects based on funding constraints may be necessary. An amendment to the Transportation Improvement Program (TIP), would be required.

c) Central City Plan

The B Alignment is consistent with the Central City Plan Objective to improve Central City accessability. However, reordering of priorities to finance the alignment may jeopardize or significantly delay other Central City projects. Such delay would be contrary to Central City objectives.

3) Neighborhood Issues

Alignment B would have a slight to moderate impact on neighborhood streets dependent on riverfront land use and demand for access to and from the Morrison ramps.

d. Access

1) OMSI/PGE

Access would be via Clay and Water with a single access point. I-5 access to OMSI/PGE would be from the I-5/Belmont off-ramps via Union. Intersection, ramp, or signal improvements would likely be necessary to provide for Union to Water Avenue movements. Due to Hawthorne Bridge ramp conflicts, the southbound Union to westbound Clay movement is currently restricted.

2) CEID

The B Alignment would distribute traffic to/from I-5 via Morrison/Belmont ramps, Union/Grand, and local streets.

3) Riverfront

Access to the riverfront would be via Clay and Madison from the east; and via the Hawthorne Bridge/Water Avenue ramp from the west. Pedestrian access would be available from both the Hawthorne and Morrison Bridges.

e. Transit

North-South LRT operations (MAX or vintage trolley) through the CEID would be accommodated on Grand Avenue, consistent with the Central City Plan. However, if capacity is not available on Grand, operations would likely shift to SE 6th or 7th. Alignment B is not conducive to a waterfront alignment. However, such an alignment is neither a study nor City objective. An OMSI/PGE stop would be retained through the McLoughlin/Downtown LRT connection.

f. Cost/Phasing

Freeway	Alignment B
Ph. 1	$ 1.0 million (right-of-way)
Ph. 2	74.5
Ph. 3	10.0
Sub-total	$85.5 Million
Local Streets	$ 1.0 Million
Total	$86.5 Million

2. Economic Development Objectives

a. Employment

The direct short-term impacts of this Alignment B are anticipated to include an initial modest decrease in employment as several businesses relocate from ODOT owned facilities. The Visions report outlines scenarios which could lead to a net increase of 200 to 1,730 jobs, depending on whether the Parks and Recreation or commercial development approach is followed.

Indirect employment impacts are more difficult to predict. However, a successful relocation of the freeway to Alignment B would be expected to have a positive impact on overall employment throughout the Central Eastside. It would provide needed transportation improvements and an opportunity for waterfront development to proceed without major conflicts with the existing business community.

b. Development

Alignment B provides an opportunity for Riverfront Development of significant Parks and Recreation facilities as well as commercial and residential development. The range of possibilities envisioned by the Vision Report includes up to 500,000 s.f. of Commercial space and 200 residential units as the dense development alternative, or parks and recreation development which might include several acres of open space in addition to a Conservatory Botanical Garden, Riverfront Restaurant, Aquatic Center, and light watercraft marine center. PDC's evaluation of "Vision Alternatives" suggests that up to $78,860,000 of private investment could follow recreation to Alignment B.

Beyond the riverfront development area, Alignment B would be expected to have a positive impact on the Central Eastside development environment. Central Eastside business interests have historically supported objectives of improving the waterfront and providing better access to the waterfront area. New interest in Central Eastside development would be expected to soon follow a realization of freeway plans.

c. Public, Public/Private Improvements

Transportation elements are explained in section 1, and the possible park improvements are explained in section 3. It should be noted that the Parks Bureau has suggested that certain park facilities, such as a conservatory or aquatic center, could include significant amounts of private investment.

d. Development Costs

Development costs are expected to be relatively high due to difficulties typically associated with waterfront development in general, and specifically related to soil conditions and other environmental factors affecting this site. Waterfront development in similar areas in other cities occurred after substantial public subsidies designed to encourage and realize public development objectives.

e. Phasing

The burden of funding local costs might be partially deferred by phasing the riverfront area related development activities. While it appears that certain elements must be developed at or near the time of freeway construction, other improvements might wait for suitable market conditions and funding. The type of local improvements which are felt to be necessary and logical to construct around the time of freeway construction include minimal access to the site and provisions for utilities, site clean-up, clearing, leveling and seeding the area, security lighting and basic irrigation.

The cost of improvements required at or near the time of freeway construction is expected to be approximately $1,525,000, exclusive of property acquisition. Local expenditures for property acquisition would b $4,550,000 for the entire waterfront parcel at $8.00 per square foot. If only part of the site needed to be acquired, the land costs would be proportionally lower.

f. Potential Local Costs

Total local (City of Portland) costs required to facilitate full development of the riverfront site range from approximately $15,800,000 for the Parks and Recreation scenario, to $27,650,000 for the dense Commercial and Residential approach. However, the Parks bureau has suggested that certain facilities might be developed by private interests as commercial enterprises, thereby reducing the demand on local funds.

Local costs associated with non-park improvements range from approximately $7,300,000 to $9,700,000. Included are the approximately $1,000,000 required street improvements as identified above as transportation local street costs.

The Central Eastside Urban Renewal Plan also specifies Parks/Esplanade improvements as well as business and development assistance, and infrastructure improvements as potential projects. Urban renewal assistance is contingent upon fund availability.

In summary, Alignment B could be expected to contribute to the economic growth and vitality of the Central Eastside, provided sufficient funds are available for the actual freeway relocation. Within the riverfront area, development might be phased to accommodate local funding capabilities and to take best advantage of existing market conditions.

For a more detailed review of Economic Development impacts, refer to the "Eastbank Development Options" report by the Portland Development Commission.

g. Economic Development Overview (based on land use visions 1 - 3)

1) Development Parcel 13 acres (5.5 net developable acres)

2) Public Costs/Improvements

Land Acquisition, Streets, Utilities
Parking, Soil Mitigation, Park/Open Space, Financing Assistance

MINIMUM LEVEL (Phases I + II)	$6,591,600
MAXIMUM LEVEL (Phase III)	$9,199,400 - 21,053,480
TOTAL LOCAL COSTS	$15,791,000 - 27,645,000

3) Private Investment Potential $ 1,373,400 - 57,013,800

TOTAL INVESTMENT POTENTIAL $29,018,400 - 74,377,800

4) Basic Economic Impacts

Property Tax Revenues	$41,202 - $1,260,414 annually
Job Generation	200 - 1,733 (at full build out)

5) Implications

- o Development of major riverfront area for public and private uses
- o Potential new job creation and tax revenues
- o Substantial local public investment required and no source of funds clearly available for moving or public improvements
- o Additional costs for off-site street improvements and public facilities; no funds identified
- o Displacement of 18 businesses and 162 jobs (includes land use displacements and freeway right-of-way relocations)
- o Potential for conflicting land uses with existing industrial district
- o Delay in design, funding and construction will create uncertainty for existing businesses and retard construction and expansion until freeway is constructed.

3. Park and Open Space Objectives

a) Public Improvements

The total public park area varies from 5.5 acres to 12.5 acres, depending on the extent of development envisioned in the three alternative land use plans reported in the "Visions Report."

The public improvements will include some or all of the following:

- o River bank stabilization
- o Esplanade walk and lighting
- o Park furniture
- o Play courts and playgrounds
- o Lawn, landscaping and irrigation
- o Terraced lawn and swimming beach
- o Spiral pedestrian ramps to bridges
- o Overlooks and steps to river
- o Floating pier and docks
- o Plaza fountain
- o Conservatory and botanic garden
- o Surface parking
- o Waterfront restaurant
- o Aquatic center

b) Potential Costs

Total park development costs vary from $7,174,582 for the 5.5 acre park as proposed in Vision 1 of the "Visions Report," to $20,635,440 for a 12.5-acre park as depicted in Vision 2 and $8,417,293 for a 7-acre park in Vision 3.

c. Phasing

The park area under any of the three visions can be developed in a minimum of three phases.

Phase I: Could include minimal improvements such as site preparation, esplanade walk and lawn area. The approximate costs for development of this phase is estimated at $220,000 for Vision 1; $550,550 for Vision 2; and $304,920 for Vision 3.

Phase II: Basic park improvements such as: playgrounds, play courts, lawn and landscaping, pedestrian connection to bridges, plazas, and restrooms could be developed at this phase at the approximate cost of $4,577,240 for Vision 1;

$5,286,800 for Vision 2; and $3,929,450 for Vision 3.

Phase III: Park amenities that enhance water contact such as piers and docks, river steps, etc. could be developed all at this phase or spread out over an additional phase.

Additional probable costs for these amenities are: Vision 1, $2,376,000; Vision 2, $14,798,000; and $4,183,000 for Vision 3.

d. Central City Plan Objectives

1) Willamette Riverfront (Policy 2)

The improvements will support Central City Plan Policy 2, Willamette Riverfront, to "Enhance the Willamette River as the focal point for views, public activities, and development which knits the City together." In addition, Alignment B improvements support, to a certain degree, the associated Policy 2 objectives.

2) Parks and Open Space (Policy 8)

The improvements will generally enhance Policy 8 to "Build a Park and Open Space system of linked facilities that tie the Central City districts together and to the surrounding community." Alignment B is also supportive, to a certain degree, of the associated Policy 8 objectives.

e. Implications

- o More land becomes available for open space depending on the extent of other land use development.
- o The opportunity for noise and visual mitigation of the freeway is enhanced.
- o The opportunity for provision of a variety of recreational facilities is enhanced.
- o The area between the Morrison and Burnside Bridges will still be considered as noisy and potentially unsafe.
- o The proximity of the freeway and its noise may hinder the development of viable revenue generating recreational facilities such as the conservatory or outdoor aquatic park.
- o The recaptured area is not large enough to include mixed use development and a park sufficiently large enough to share the demand that is put on Tom McCall Waterfront Park.

C. Alignment C

1. Transportation Objectives

a. Freeway considerations

1) Service Level

Northbound, the freeway would operate at a LOS of E or better, although ramp metering would be required at the McLoughlin merge to maintain minimum service level. As with other alignments, I-5 north of the Burnside Bridge would exceed minimum service levels where both the Morrison and I-84 movements join the mainline freeway. Southbound, freeway improvements would provide for LOS E or better between the I-84 on-ramp and the Marquam Bridge.

2) Geometry/Safety

Alignment C is consistent with current design standards. The Marquam Bridge east end curve is seven degrees.

3. Right-of-Way

Alignment C would relocate 19 businesses at a cost of $12.5 million.

b. Interchanges/Ramps

1) McLoughlin Ramps

a) Service Level

Northbound, ramp operations would have to be metered both a.m. and p.m. to accommodate minimum LOS E service levels at the I-5 entrance. Southbound, the McLoughlin off-ramp would be provided for with two-lanes at LOS B.

b) Safety

Alignment C will correct the left-hand exit ramp to McLoughlin from I-5 with a right hand exit more consistent with driver expectancy and modern freeway design.

c) Connectivity

The McLoughlin ramps satisfy a major study objective.

2) I-5 South

a) Service Levels

The modified split-diamond interchange for Morrison/Belmont connections would provide a forecast peak-hour service level of D/E (minimum acceptable).

b) Safety

The split-diamond interchange, together with modifications to the SPRR mainline and a reconstructed SE First Avenue would eliminate most mainline rail crossings within the CEID. However, these are not currently a problem. In addition, the split diamond interchange would create the potential for rear-end type accidents.

c) Connectivity

The split-diamond is consistent with study objectives for I-5 south movements.

3) I-5/I-84

a) Service Levels

Two lanes both northbound and southbound would provide I-5/I-84 connections. Service levels would be within desirable standards.

b) As with Alignments A and B, Alignment C would improve safety by improving service levels. The improved service levels would reduce rear-end type accidents related to stopping and starting on I-5 as vehicles queue for I-84 eastbound.

c) Connectivity

The new I-5/I-84 connections satisfy the project objectives.

c. City Streets

1) Service Levels

Service levels were not determined for Alignment C. However, given the focus of access at the Morrison split diamond, and high density waterfront uses, similar shifts in traffic as described for Alignments A Modified and B could be expected. Additional traffic demand would be placed on both Morrison and Belmont ramps west of Union. Service levels on Union south of Belmont could approach E/F (unacceptable). The Harrison Street access, when built, would act to relieve some of this congestion.

2) Policy Issues

a) ASCP

New streets and connections will require review for Arterial Streets Classification Policy (ASCP) consideration. Also, the impact on existing streets and classifications will need review.

b) RTP

RTP amendments may be required. Given the funding impact potential on other regional projects, Alignment C would not likely satisfy RTP objectives as a Transportation project. A TIP amendment would be required.

c) Central City Plan

Alignment C conflicts with Central City Plan transportation objectives. The reordering of priorities would significantly impact the city's ability to implement light rail. The Central City Plan recognizes LRT as the key to improving Central City accessibility. Without LRT, traffic congestion would worsen on Central City and inner-city neighborhood streets, parking demand would increase, and air quality deteriorate.

d) Neighborhood Issues

Traffic analysis and mitigation (traffic control) may be necessary given the high trip generation potential. Railroad crossing closures, a rebuilt SE First Avenue, and SPRR mainline relocation improves

access to the waterfront, safety, and circulation in the CEID and for southeast neighborhoods.

d. Access

1) OMSI/PGE

After completion of the entire project, access to OMSI/PGE would be excellent with access via both Harrison and via the Riverfront frontage road and Stark Street tunnel. In the interim, access would be indirect. Street connections between Union and Water would need to be reviewed. Alternatives for access may include signal and intersection improvements and possible Morrison Bridge ramp alterations.

2) CEID

Access to the CEID would also be good and would be from two points: the Morrison split-diamond or the Harrison Street connection (upon completion of the full project).

3) Riverfront

From the east, Stark, Harrison, and the riverfront frontage/service road provide access. From the west, access would be possible from both the Morrison and Hawthorne Bridges via the frontage road.

e. Transit

The provision of an LRT connection along the Waterfront is not a study or City objective. However, LRT north and south could possibly be accommodated within the newly created property. Such an alignment would be subject to review for consistency with Central City Plan objectives for the CEID and any changes envisioned for CEID land use and development. An OMSI/PGE transit stop would be retained through the McLoughlin/downtown LRT connection.

f. Cost/Phasing

Freeway	Alignment C
Ph. 1	$ 12.5 Million (right-of-way)
Ph. 2	90.0
Ph. 3	$ 22.5 to 25.5
Sub-Total	$125.0 to 128.0 Million

Local Streets	$ 14.0 to 15.0 Million
Total	$139.0 to 143.0 Million

2. Economic Development Objectives

a. Employment

Alignment C is expected to result in an initial decrease in employment of approximately 435 jobs. However, it also offers the possibility of significant employment growth over time within the new riverfront area. Property acquisition within the one block strip between Water Ave. and 1st Ave. would be the primary cause of the initial job loss. To the extent that the project might be met with significant funding shortages and delays, additional disinvestment and job loss would be expected.

The Visions report outlines scenarios which could lead to a net increase of almost 2,600 jobs, at full build-out. The most modest development scenario for the area would be primarily parks and recreation uses generating a much lower amount of employment. The Visions' dense development alternatives would lead to employment in the office, professional services, business services and consumer services sectors. In general, the employment opportunities within the riverfront area would be expected to be similar with those currently available in the Downtown, Lloyd Center and Macadam areas.

Impacts beyond the riverfront area are difficult to predict. However, it is noted that the area between the proposed alignment and 3rd Ave. would comprise a 2-block wide industrial strip approximately 12 blocks in length, located between the freeway and commercial corridors along Union-Grand and the new riverfront. Uses in the area are predominantly warehousing and distribution. Whether or not the industrial functions would remain viable in this are is uncertain. Currently, this area provides more than 1,700 jobs.

b. Development

Alignment C provides the greatest opportunity for riverfront development of commercial office, support retail, and parks and recreation facilities. Total private investment in the riverfront area could approach $80,000,000 for the highest density scenario, including residential components. The commercial development could total more than 700,000 s.f., in addition to 200,000 s.f. of residential space. If

residential development was not included, an estimated 775,000 s.f. of commercial space could be developed with sufficient space remaining for significant Parks and Recreation facilities such as a conservatory, terraced bowls and overlooks, a small conference center or restaurant, and a light water craft marina.

Development of the riverfront would be perceived as a positive statement regarding development opportunities and Central Eastside property values. Envisioning a strip of new investment along the waterfront, essentially extending from OMSI on the south to the Oregon Convention Center on the north creates a strong image of new investment and vitality. The direct impact on the area east of the development would be buffered by the freeway. However, access into and out of the area would result in traffic and exposure to Central Eastside industrial and commercial areas. Traffic levels on Union and Grand are so high currently that they constrain commercial activities. One of the objectives of the freeway improvements has been to reduce traffic on Union/Grand. Significant commercial development along the waterfront may have the opposite effect.

c. Public/Private Improvements

Transportation elements are explained in section 1, and the possible park improvements are explained in section 3. Parks Bureau staff have suggested that certain park facilities might be developed by private interests as commercial enterprises. It could be possible to require private development interests to pay for certain infrastructure improvements, provided the overall economic value of the area is sufficient to offset development costs. However, it is probably more realistic to expect the private funding of public improvements to come in the form of property tax revenues. Initially, development of the riverfront would be expected to require local subsidies.

Public participation in private development efforts, beyond typical regulatory policies and requirements, may be an important element of creative development of the area. Because of potential noise impacts, soil conditions, and regulatory and environmental issues related to the river and riverfront, numerous public agencies might be expected to be involved. Facilitation of public/private agendas might be useful in preventing or minimizing delays and "red tape".

d. Development Costs

Development costs are expected to be relatively high due to difficulties typically associated with waterfront development in general, and specifically related to soil conditions and other environmental factors affecting this site. Waterfront development in similar areas in other cities occurred after substantial public subsidies designed to encourage and realize public development objectives.

e. Phasing

The cost of improvements recommended initially upon freeway construction is expected to be approximately $6,775,000, not including any property acquisition costs. Local expenditures for property acquisition would be $11,200,000 for the entire waterfront parcel if the property was purchased at $8.00 per s.f. If only part of the land needed to be purchased, the acquisition costs would be proportionately lower.

The burden of funding local costs might be partially deferred by phasing the riverfront area development activities. While it appears that certain elements must be developed at or near the time of freeway construction, other improvements might wait for suitable market conditions and funding. At minimum, access to the site, provision for utilities, site clean-up and clearing, grading and seeding the area, security lighting and basic irrigation should be provided immediately.

Urban renewal could possibly constitute a source of funding over the long run. However, it is anticipated that the program will not generate any funds for a number of years following ODOT's acquisition of property for the Alignment C improvements.

f. Potential Local Costs

Total local (City of Portland) costs required to facilitate full development of the riverfront site as suggested by the Vision and Uses scenarios range from approximately $45,600,000 to $60,180,000. However, if some of the park facilities were developed by private interests as commercial enterprises, local funding demand would be partially relieved.

Local costs associated with non-park improvements range from approximately $25,780,000 to $30,900,000. Depending on the vision scenario, this includes all but approximately $3.0 to

$5.0 million of local street costs. However, not all of the local costs associated with the full development of any of the Visions would have to be incurred immediately. (The "phasing" section of this report specifies which expenditures are clearly required for improvements immediately related to the freeway construction and preserving future development opportunities.)

Certain recommended improvements may be optional. Local costs could be reduced if, for example, ramps connecting the area to Downtown via the Morrison Bridge and pedestrian ramps at the Hawthorne Bridge were eliminated, saving approximately $3,750,000. If the tunnel connecting the area to the Central Eastside at Stark Street were eliminated, another $3.2 million might be saved. Elimination of the tunnel would greatly reduce the riverfront area's access, development capacity, and security.

In summary, Alignment C could provide the greatest opportunity for dramatic, highly visible, new waterfront development. It provides the greatest opportunity for long term employment growth in the Waterfront area. It also would be likely to bring about the greatest challenges to the area's existing land use, development, and business patterns.

For a more detailed review of Economic Development issues, refer to the Eastbank Development Options report by the Portland Development Commission.

g. Economic Development Overview (Based on land use visions 4 through 6)

1) Development Parcel 32 acres (18.5 net developable acres)

2) Public Costs/Improvements

Land Acquisition, Streets, Utilities
Parking, Soil Mitigation, Park/Open Space, Financing Assistance

MINIMUM LEVEL (Phases I + II)	$17,973,000
MAXIMUM LEVEL (Phase III)	$27,998,800 - 42,122,500
TOTAL LOCAL COSTS	$45,607,000 - 60,178,500

3) Private Investment Potential	$ 1,373,400 - 78,859,200
TOTAL INVESTMENT POTENTIAL	$61,172,150- 174,954,700

4) Basic Economic Impacts

Property Tax Revenues	$41,202 - $1,870,020 annually
Job Generation	200 - 2,583 (at full build out)

5) Implications

- o Development of major riverfront area for public and private uses
- o Potential new job creation and tax revenues
- o Substantial local public investment required and no source of funds clearly available
- o Additional costs for off-site street improvements and public facilities
- o Displacement of 34 businesses and 436 jobs (includes land use displacements and freeway right-of-way relocations)
- o Potential for conflicting land uses with existing industrial district
- o Delay in design, funding and construction will create uncertainty for existing businesses and retard construction and expansion until freeway is constructed.

3. Park and Open Space Objectives

a. Public Improvements

The public open space area varies from 18 acres (in the maximum development option) to 29 acres (maximum open space option).

The park improvements will include some or all of the following:

- o River bank stabilization
- o Lawn, landscaping and irrigation
- o Plazas, overlooks, river steps
- o Playgrounds and play courts
- o Pedestrian connections to bridges
- o Parking, restrooms
- o Lighting, park furniture
- o Floating piers and docks
- o Marine, waterfront restaurant
- o Conservatory and botanical garden

b. Potential Costs

Probable development costs for park and recreational facilities varies from $15,500,000 to $34,980,000 under this

alignment, depending on which of the three alternative visions for the recaptured area is selected.

c. Phasing

Development scenario of the open space area could include minimum of three phases, similar to Alignment B.

Phase I: Minimal park improvement at the costs ranging from $480,000 for Vision 4; $1,179,000 for Vision 5; $836,800 for Vision 6.

Phase II: Basic park amenities at $5,005,000 for Vision 4; $7,841,500 for Vision 5; and $6,461,200 for Vision 6.

Phase III: Additional park amenities such as the overlooks, piers and docks, fountain plazas, aquatic center, etc. could be developed at this or subsequent phases at the additional probable cost of $24,842,900 for Vision 4; $25,960,000 for Vision 5; and $13,200,000 for Vision 6.

d. Central City Plan Objectives

1) Willamette Riverfront (Policy 2)

The improvements best support Central City Policy 2, Willamette Riverfront, to "Enhance the Willamette River as the focal point for views, public activities, and development which knits the City together." The amount of open space created and the potential for numerous activities create greater opportunities to implement the policy. The Alignment C improvements also best support the associated Policy 2 objectives.

2) Parks and Open Spaces (Policy 8)

The improvements will best enhance Policy 8 to "Build a Park and Open Space System of linked facilities that tie the Central City districts together and to the surrounding community" with full build-out, Alignment C also best supports associated Policy 8 objectives.

e. Implications

o A substantial area of park and open space becomes available under Vision 5 and 6

- o Provides the best opportunity for mixing development and open space to create an attractive environment for park users
- o Offers the greatest opportunity for noise and visual mitigation of the freeway
- o Enhances the recreational opportunities along the entire length of the river between S.E. Clay Street and the Burnside Bridge
- o Offers the greatest opportunity for improving public safety along the isolated sections of the esplanade
- o Provides the best opportunity for development of viable revenue generating public attractors such as the conservatory and aquatic center
- o Is the most expensive

V. FUNDING

This section lists the costs associated with the various elements of each of the three proposed alignments and examines possible funding sources which may be available to construct and operate the identified unfunded improvements.

The improvements are those as included for each alignment as part of ODOT's "Technical Report and Comparative Study" and the Bureau of Planning's "Visions for Portland's Eastside Riverfront." Cost estimates are from the ODOT Technical Report (as above), P.D.C.'s "Analysis of Opportunities and Challenges," and the Park Bureau's Capital and Operating Costs for a Park and Recreational Facility on the Eastbank of the River." The above sources also assisted in developing and evaluating funding strategies for the identified improvements. In addition, funding strategies are in part based on information provided to and examined by the Funding Sub-Committee to the I-5/Eastbank Options Committee. Particularly useful is the report entitled "Eastbank Freeway Relocation Federal Funding Feasibility Study," Stoel, Rives, Boley, Jones and Grey; by Robert D. Van Brocklin; 1/16/89.

For each alignment, costs and potential (or committed) funding is identified for freeway elements, freeway related (or necessary) street improvements, site preparation improvements, and park features. The implications of each funding strategy and the availability of funds are listed for each of the elements. These implications are summarized and further discussed in the findings section of this report. A recommended funding scheme for a preferred alignment is included in the recommendations section.

A. Alignment A/Alignment A Modified

1. Freeway Elements

a. Total Cost

1) Alignment A: $61 Million
2) Alignment A Modified: $64.5 Million

b. Committed Funds

$54 Million FAI (Completion Funds)

c. Unfunded Costs

1) Alignment A: $7.0 Million
2) Alignment A Modified: $10.5 Million

d. Recommended Funding Strategy/Implications

1) Alignment A

FAI-4R at $5.5 to $7.0 Million.

The increased estimate of $7.0 million is due to $5.5 million of improvements to I-5 mainline north of Burnside Bridge necessary to meet a minimum level of service and $1.5 million of TSM measures required during project construction. These improvements would also be required for the relocation alignments B and C and ODOT will likely fund under all proposals.

2) Alignment A Modified

a) FAI-4R at $5.5 to $7.0 Million
Likely ODOT funding for I-5 improvements north of Burnside Bridge and construction TSM.

b) FAI-4R at $3.5 Million
For modified Morrison ramps to and from I-5 south FHWA may approve additional amount, with ODOT support, for improved interchange and possibly the reduction in traffic required to cross SPRR mainline.

2. Freeway Related Street Improvements
Not Applicable

3. Site Preparation Improvements
Not Applicable

4. Park Features

a. Total cost

$ 5.0 Million for full esplanade improvements

b. Committed Funds

$ 1.0 Million (as part of the $54 million committed FAI completion funds)

c. Unfunded Costs

$ 4.0 Million

d. Recommended funding strategy/implications

The Park Bureau and PDC have identified a number of funding sources possible for Park/Esplanade improvements beyond the basic features to be funded by ODOT. Methods appropriate for financing Alignment A/A Modified improvements include General Obligation bonds, Park Levy, Tax Increment Financing, Federal Land and Water conservation Fund, and possibly State Marine Board Funds, Corporate/Non-Profit Foundations, or the City's General Fund.

Any strategy for funding would be competing with other identified Park Bureau capital or maintenance needs depending upon the funding source.

B. Alignment B

1. Freeway Elements

a. Total Cost

$85.5 Million

b. Committed Funds

$54.0 Million, FAI (Completion Funds)
Assumes FHWA approval; due to design modifications actual amount may vary.

c. Unfunded Costs

$ 31.5 Million

d. Recommended Funding Strategy

1) FAI-4R at $5.5 to $7.0 Million. The increased estimate of up to $7.0 Million is due to improvements to I-5 north of Burnside necessary to achieve minimum service levels and $1.5 million of TSM measures required during project construction. These improvements would also be required under alignments A and C and ODOT will likely fund under all proposals.

2) Reordering of $24.5 to 26.0 Million of existing FAI-4R funds committed to the region.

o Congressional approval for use of 4R funds for relocation;

- o Regional consensus required in order to reorder priorities (JPACT);
- o Would likely impact City of Portland projects with potential for significant delay, including: SW Terwilliger ramps; I-5 between N. Greely and I-84; I-5 widening between N. Columbia and N. Portland Blvd.; I-205, Airport Way interchange improvements; and others.
- o RTP/TIP amendments may be required;
- o Complete required funding changes by 6/30/89 (OTC directive).

2. Freeway Related Street Improvements

   a. Total Cost

      $ 1.0 Million

   b. Committed Funds

      $ 0.0

   c. Unfunded Costs

      $ 1.0 Million

   d. Funding Possibilities

      1) $ 1.0 Million FAU funds

         (GTR for local match). Would require reordering of City FAU projects. Amount is roughly 70% of City's annual FAU allocation. Among affected projects would be local street improvements associated with the Oregon Convention Center.

      2) $ 1.0 Million GTR

         Would require $1.0 million cuts in existing transportation programs or delay other CIP project(s). The City's ability to leverage federal funds would be diminished.

3. Site Preparation and Development Costs

   Included as part of the site preparation costs are costs for surface parking, utilities, soil mitigation, site clean-up/lawn,

and development financing for housing. Local street improvements were discussed above, park improvements below. Land acquisition costs are not included, however, total $4.6 million for Alignment B. Specific costs are detailed in PDC's "Eastbank Development Options" report. The identified costs are based on Visions one through three of the Planning Bureau's "Visions Report."

a. Total Cost

$ 1.9 Million to $ 4.5 Million

b. Committed Funds

$ 0.0

c. Unfunded Costs

$ 1.9 Million to $ 4.5 Million.

d. Funding Possibilities

Potential sources of funds, as identified by PDC, include: HCD funds, state and federal grants, State Economic Development Department assistance programs, Federal Economic Development Administration grants, General Obligation Bonds, general fund monies, local street construction funds, urban renewal funds (tax increment financing).

Any strategy for funding the identified improvements would compete with other federal, state, and local development efforts. Locally, these efforts include, but are not limited to, the Northeast Revitalization Strategy, Oregon Convention Center Area Development Strategy, Union Station Redevelopment, South Waterfront Phase II Improvements, and local HCD neighborhood strategies.

4. Park Features

a. Total Cost

$ 7.2 Million to $20.6 Million

b. Committed Funds

$ 0.0

c. Unfunded Costs

$ 7.2 to $20.6 Million

d. Recommended Funding Strategy/Implications

The Park Bureau and PDC have identified a number of funding sources possible for Park improvements in conjunction with Alignment B as listed in visions one through three. Depending on the purpose of a particular improvement, the following sources may be eligible: general obligation bonds, revenue bonds, park levy, tax increment financing, Federal Land and Water Conservation Funds, corporate/non-profit foundations, private/public partnership, general fund

Any funding strategy would compete with other Park Bureau capital and maintenance needs depending upon the funding source and any associated restrictions. In addition, certain funding strategies utilizing city-wide revenue sources would compete with other city capital and maintenance needs; some potentially related to other aspects of the I-5/Eastbank freeway relocation and development.

C. Alignment C

1. Freeway Elements

a. Total cost

$ 125 to $128 Million

b. Committed Funds

$ 54 Million, FAI (Completion Funds).

Assumes FHWA approval. Due to design modifications, actual amount may vary.

c. Unfunded Costs

$ 71 to $ 74 Million

d. Recommended Strategy for Achieving Funding

1) FAI-4R at $5.5 to $7.0 Million. The increased estimate of up to $7.0 Million is due to improvements to I-5 mainline north of the Burnside Bridge necessary to achieve minimum service levels and $1.5 million of TSM measures required during project construction. These improvements would also be required under alignments A and B and ODOT will likely fund under all proposals.

2) Up to $5.0 Million Federal Rail Administration Grant.

   Available money nationwide is relatively low. FHWA and the Van Brocklin report question whether the project qualifies for such funds.

3) $10 Million for additional FAI (completion fund). FHWA approval normally required; amount may vary depending upon final design. But FHWA has stated that the reconstruction/realignment would not qualify. Van Brocklin report notes that both authorization and appropriations by Congress would therefore be required. Van Brocklin report notes only two such actions since 1983. In each case (Massachusetts and Florida) considerable local congressional influence was required.

4) Up to $25 Million Federal Highway Demonstration Grant. Demonstration grant would require support of Oregon's congressional delegation. This support would require (as identified in Van Brocklin report):

   a) OTC and JPACT designation of the relocation project as the state's and region's federal transportation funding priority.

   b) Maintaining CEID and other transportation objectives.

   c) Satisfactorily assuring the Oregon delegation that other statewide transportation priorities would not be jeopardized.

   d) Assuring the Oregon delegation that existing authorized funding will be obligated.

   e) Senator Hatfield's and Rep. AuCoin's determination that this project is a political priority for Oregon (if authority is requested through the appropriations process).

   f) Rep. DeFazio's determination that this is a political priority for Oregon (if authority requested through the authorizations process).

The Van Brocklin report also states that Congressional approval of Demonstration Project funds is unlikely because:

   a) The request would compete with other transportation priorities as the State's and region's priority

demonstration concept. The State is requesting demonstration funds for Highway 101 Parkway improvements in conjunction with both California and Washington State.

b) These projects typically involve amounts less than $5 million (larger amounts generally have gone to state's with a senior member of an authorizing committee. Oregon does not have a senior member on an authorizing committee.)

c) There is no assurance future transportation authorization and appropriation bills will include new demonstration projects (due to pressures to balance the federal deficit).

FHWA is also recommending that demonstration grants be phased out due in part to their potential for inclusion in state obligation ceilings. Such inclusion affects other project schedules by delaying other programmed funds.

d) The relocation request would also compete against demonstration grants nationally. FHWA has expressed a desire to phase out such funds. Demonstration grants may fall victim to efforts to balance the federal budget.

In addition, based on the opinions of congressional staff and local transportation funding staff, such a request would compete with the region's existing transportation priority -- Westside LRT -- for funding. Freeway relocation would likely delay Westside LRT significantly.

5) Up to $32 Million (or remaining costs) for City of Portland General Obligation or Revenue (gas tax) Bond. Would require voter approval and would compete with other local priorities for property tax or gas tax revenues.

The impact on an average $60,000 home in the City of Portland would be about $18 per year for 10 years. If a $32 million, 10 year capital levy was passed by the voters to pay off general obligation bonds, the rate would be approximately $.30 per $1,000 assessed valuation.

2. Freeway Related Street Improvements

   a. Total Cost

      $ 14 to $ 15 Million

   b. Committed Funds

      $ 0.0

   c. Unfunded

      $ 14 to $ 15 Million

   d. Funding Sources

      FAU funds are the only currently available source for these street improvements. Approximately 11 - 12 years worth of City FAU allocations would be required. The state would have to trade their funds now in exchange for the City's future FAU dollar stream. Most revisions proposed for the 1991 reauthorization of the federal highway program eliminate the FAU funding.

      Use of GTR funds would significantly impact other City services and/or projects.

      State Lottery funds are also a potential source. The project would compete with other regional economic development strategies.

3. Site Preparation Costs

   Included as part of the site preparation costs are costs for surface parking, utilities, soil mitigation, site clean-up/lawn, and development financing for housing. Local street improvements were discussed above, park improvements below. Land acquisition costs are included only for the high public park version, where land costs would not be recouped as part of private development. Specific costs are detailed in PDC's report "Eastbank Development Options." The costs are associated with the Planning Bureau's "Visions Report."

   a. Total Cost

      $3.9 to $7.8 Million

   b. Committed Funds

      $ 0.0

c. Unfunded Costs

$3.9 to $7.8 Million

d. Funding Possibilities

Potential sources include: HCD funds, state and federal grants, State Economic Development Department assistance programs, Federal Economic Development Administration grants, general obligation bonds, general fund monies, local street construction funds, urban renewal funds (tax increment financing).

Any strategy for funding the identified improvements would compete with other federal, state, and local development efforts. Locally, these efforts include, but are not limited to, the Northeast Revitalization Strategy, Oregon Convention Center Area Redevelopment Strategy, South Waterfront Phase II improvements, and local HCD neighborhood strategies.

4. Park Features

The costs associated with the park features respond to improvements included as part of the Planning Bureau's "Visions Report." Specific park capital and operating costs are detailed for each vision in the Park Bureau's "Capital and Operating Costs for a Park and Recreational Facilities on the East bank of the River."

a. Total Cost

$15.5 Million to $35.0 Million

b. Committed Funds

$ 0.0

c. Unfunded Costs

$15.5 to $35.0 Million

d. Recommended Funding Strategy/Implications

The Park Bureau and PDC have identified a number of funding sources possible for park improvements in conjunction with Alignment C as listed in visions four through six. Depending on the purpose of a particular improvement, the following sources may be eligible: general obligation bonds, revenue bonds, park levy, tax increment financing,

Federal Land and Water Conservation Fund, State Marine Board Funds, state lottery fund, corporate/non-profit foundations, private/public partnership, general fund.

Any funding strategy would compete with other Park Bureau capital and maintenance needs depending upon the funding source and any associated restrictions. In addition, certain funding strategies utilizing city-wide revenue sources would compete with other City capital and maintenance needs; some potentially related to other aspects of the I-5/Eastbank freeway relocation and development.

VI. FINDINGS

Included in this section is a summary and discussion of the major findings of this report. The findings summarize the major costs and benefits associated with each of the alignments and summarizes the impact of each alignment on study objectives. The alignments are compared for their relative feasibility and relationship to City priorities. The findings provide the basis for the conclusions and recommendation outlined in Section VII of this report.

A. Purpose

1. The intent of the I-5/Eastbank Options Study is to develop and evaluate two alternative alignments to the I-5 East Marquam Project.

2. Based on the evaluation; ODOT is requested to recommend to City Council the alternative which would be advanced to Council.

3. Based on recommendations from the Portland Office of Transportation, the Oregon Department of Transportation, the Portland Park Bureau, and the I-5/Eastbank Options Committee, and based on public testimony, City Council is now requested to determine the preferred alignment and recommended funding strategy.

B. Alignment Descriptions

1. Alignment A, Original ODOT. This alignment proposes freeway widening and ramp and interchange improvements within the existing alignment. Alignment A modified, also discussed as part of this report, is the same as Alignment A with exception of ramp modifications to/from I-5 South at Morrison/Belmont.

2. Alignment B, ODOT Modified. This alignment moves the freeway back as much as 350 feet from the Willamette River and opens up approximately 13 acres for waterfront redevelopment. The alignment is generally within ODOT right-of-way.

3. Alignment C, Committee Alternative. This alignment would move the freeway back by as much as 700 feet from the Willamette River and would open up approximately 32 acres for waterfront redevelopment. The alignment represents new right-of-way. This alignment was recommended by a 7 to 6 vote as the preferred alternative by the I-5/Eastbank Options Committee.

C. Costs

1. Alignment A/A Modified costs are broken down as follows:

	Alignment A	Alignment A Modified
Freeway Elements	$61.0 Million	$64.5 Million
Local Streets	0.0	0.0
Site Preparation	0.0	0.0
Park Improvements	5.0	5.0
Total	$66.0 Million	$69.5 Million

2. Alignment B costs are as follows (Site preparation and park improvements are based on visions one, two, and three as identified in the Visions Report):

	Alignment B
Freeway Elements	$85.5 Million
Local Streets	$ 1.0
Site Preparation	$ 1.9 to 4.5
Park Improvements	$ 7.2 to 20.6
Total	$95.6 to 111.6 Million

3. Alignment C costs are as follows (Site preparation and park improvements are based on visions four, five, and six as identified in the Visions Report):

	Alignment C
Freeway Elements	$125.0 to 128.0 Million
Local Streets	14.0 to 15.0
Site Preparation	3.9 to 7.8
Park Improvements	15.5 to 35.0
Total	$158.4 to 185.8 Million

D. Funding

1. $54 Million of FAI (Completion Fund) money is currently allocated to fund the freeway and the mitigation elements of Alignment A.

2. The $54 Million FAI (Completion Fund) money can most likely be transferred to the two relocation alignments. FHWA approval would be necessary and the amount may vary due to project specifics. Completion Fund dollars are only eligible for project features identified as necessary to complete the Interstate Freeway System.

3. For all of the alignments, roughly $7.0 million of the unfunded costs are related to $5.5 million of improvements north of the Burnside Bridge on I-5 necessary in order to meet acceptable service levels. Another $1.0 to 2.0 million will be changes required during construction phases. ODOT has indicated a willingness to work with FHWA to fund those elements.

4. Alignment A has unfunded freeway costs of $7.0 million; and unfunded esplanade costs of $4.0 million. For Alignment A modified the unfunded costs are $10.5 million and $4.0 million respectively.

5. Total Alignment A unfunded costs are $11 million, Total Alignment A modified unfunded costs are $14.5 million.

6. Alignment B has unfunded freeway costs of $31.5 million; unfunded local streets at $1.0 million; unfunded site preparation costs between $1.9 and $4.5 million; and unfunded park improvement costs of $7.2 to $20.6 million.

7. Total Alignment B unfunded costs range from $41.6 to 57.6 million.

8. Alignment C has unfunded freeway costs of $71 to $74 million; unfunded local street costs of $14.0 to $15.0 million; unfunded site preparation costs of $3.9 to 7.8 million; and unfunded park improvement costs of $15.5 o $35.0 million.

9. Total Alignment C unfunded costs range from $104.4 to $131.8 million.

10. For Alignment B, additional funding for freeway elements would likely require reordering $24.5 to $26.0 million of existing FAI-4R funds committed to the region. This would require JPACT and congressional approval and would delay other 4R priorities (e.g. Terwilliger ramps; I-5 between Greeley and I-84; I-205/Airport Way interchange, etc.).

11. For Alignment C, the Funding Sub-committee recommends as a potentially achievable strategy a number of sources including: $5.0 million from a Federal Rail Administration Grant; $10 million administratively approved by FHWA for safety improvements; up to $25 million from a Federal Highway Demonstration Grant; and up to $32 million for a City of Portland general obligation bond.

12. Considerations related to each potential funding source include:

- o Federal Rail Administration Grant: Availability of money nationwide is low. ($15 million total last year).

- o Additional FAI (completion fund): FHWA notes that freeway relocation projects do not qualify. Congressional action required.

- o Federal Highway Demonstration Grant: According to the Van Brocklin report, demonstration grant would require support of Oregon's congressional delegation. To achieve support, the relocation project would have to be the state's and region's federal transportation priority; other statewide transportation priorities could not be jeopardized; the project would have to be a political priority for Oregon congressional members on authorization and appropriations committees. The Van Brocklin report concludes a demonstration project is unlikely since the project would compete with other transportation priorities. Demonstration grants are typically less than $5.0 million and the FHWA has indicated a desire to phase out such grants; and future authorization and appropriation bills may not include such grants.

  Finally, based on the opinions of Oregon's congressional delegation and local transportation funding staff, such a request would compete with the region's existing transportation priority -- Westside LRT -- for funding. The congressional effort needed to secure a demonstration grant would preclude another major Congressional funding effort.

- o General Obligation Bond. Would require voter approval and would compete with other local priorities for property tax revenues. The impact on an average $60,000 home in the City of Portland would be about $18 per year for 10 years ($.30 per $1,000 assessed on a 10 year, $32 million capital levy).

13. Unfunded Alignment C street improvements would require 11 - 12 years worth of the City's allocated FAU funds. State lottery funds are a potential source but would compete with other regional economic development strategies.

14. For both Alignment B and Alignment C, potential site preparation funding sources include: HCD funds, state and federal grants, state Economic Development Department assistance programs, Federal Economic Development Administration grants, general obligation bonds, general fund monies, local street construction funds, and urban renewal funds (tax increment financing).

15. Any funding strategy for site preparation using the funds listed above under item 15 would compete with other federal, state, and local economic development efforts. Locally, these efforts

would include, but not be limited to, the Northeast Revitalization Strategy, Oregon Convention Center Area Redevelopment Strategy, South Waterfront Phase II improvements, and local HCD neighborhood strategies.

16. For both Alignment B and Alignment C, the Park Bureau and PDC have identified a number of potential park improvement funding sources. Depending on the purpose of a particular improvement, the following sources may be eligible: general obligation bonds, revenue bonds, park levy, tax increment financing, Federal Land and Water Conservation Fund, State Marine Board Funds, State Lottery Fund, corporate/non-profit foundations, private/public partnership, general fund.

E. Transportation Considerations

1. Alignments A and A Modified, best implement the general Central City Plan Transportation Goal and its associated objectives:

Policy 4: Transportation

Improve the Central City's accessibility to the rest of the region and its ability to accommodate growth by extending the light rail system and by maintaining and improving other forms of transit and the street and highway system while preserving and enhancing the City's livability.

Because it is by far the least expensive alternative for meeting the project's goals, it does not impact the primary transportation focus of the Plan - providing regional access to Central City with an LRT system. Alternative C and to a lesser extent Alternative B will infringe upon the City's ability to implement the Central City Transportation Policy and objectives. As noted, the funding effort required to implement Alignment C will significantly delay the City's ability to expand light rail

2. Each alignment satisfies the original project objectives to: provide access to/from I-5 South to/from the CEID; improve freeway operations and the I-5/I-84 connections; provide connections to/from I-5 north with McLoughlin Blvd.; and improve safety on the Marquam Bridge.

3. All these projects can be phased. Alignment A requires $28.0 million for phase 1, Alignment B 75.0 million, and Alignment C $102.5 million.

4. Freeway service levels are roughly the same for each alignment.

5. Each alignment is considered to meet identified project design standards. The Marquam Bridge east end curve is eight degrees for Alignments A and B, and seven degrees for Alignment C. Alignment A includes a left-hand exit ramp to McLoughlin Blvd. south southbound from I-5. Alignments B and C provide a right-hand exit more in line with normal driver expectancy and modern off-ramp design practices.

6. Local street service levels were determined for Alignment A during the project EIS. The Water Avenue report, completed several years ago, provides acceptable service levels on local streets. A preliminary analysis of local street service levels was conducted to examine the impact of relocating the Water Avenue ramps to Morrison and Belmont, similar to Alignment A Modified and Alignment B connections. The results show a significant shift in traffic from Water and Clay to Morrison and Belmont. The greatest impact will be on the Morrison/Belmont ramps west of Union with volumes increasing 1100/800 during the p.m. peak. Lesser increases would be felt on Union and Grand and on Morrison/Belmont east of Union. Service levels on bridgehead streets would jump from currently acceptable levels to the E/F range. To maintain service levels an additional lane would be required on both the Morrison/Belmont approaches. Service levels were not determined for Alignment C. However, given the focus of access at the Morrison split diamond, and high density waterfront uses, similar impacts on service levels could be assumed.

7. Alignment A could be expected to have the least impact on neighborhood traffic due to the single I-5 access and low intensity riverfront land uses. Other alternatives encourage additional traffic to inner-southeast streets to access the street system.

8. None of the alignments provides significant local street safety improvements. Alignment C will close up to 12 at grade railroad crossings. However, the closures are in an area which does not have a history of vehicular/railroad accident conflicts. Alternative C will result in increased accident potential due to the three signals at the Morrison split-diamond interchange and at five new signals related to the frontage surface road and the Harrison street connection.

9. Alignment C would provide more direct freeway access to the CEID and OMSI. However, it does so with signalized intersections which will result in delays for most drivers. Alignment A has more grade separations, reducing delays for the major traffic flows. However, it does maintain at grade rail crossings, resulting in occasional delays for comparatively small traffic flows.

10. Each alternative provides adequate riverfront vehicular access to support the development suggested in the vision reports.

11. Each alternative could provide pedestrian access for the three bridgeheads. Alignments A and B allow for at-grade pedestrian access to the esplanade on each side of the Hawthorne Bridge, where the greatest public activity is proposed. Alignment C provides these connections via a freeway undercrossing at Stark St. and an overcrossing at Harrison -- at each end of the development area.

F. Economic Development Considerations

1. Alignment A/A Modified retains approximately 10 acres for industrial development. Redevelopment potential for A/A Modified is 4 acres. Alignment B would produce a 13 acre site with 5.5 net developable acres. Alignment C would provide for a 32 acre development parcel and a net 18.5 net developable acres.

2. Private investment potential for Alignments A/A Modified is estimated at 2.1 to $3.5 million (for industrial development). Private investment potential for Alignment B is estimated at $29.0 to $74.4 million based on visions one through three as described in the Visions Report. Private investment potential for Alignment C is estimated at $1.4 to $78.9 million for visions four through six as described in the Visions Report.

3. Property tax revenues under Alignments A/A Modified will be $496,000 per year (retained) and $65,000 to $108,500 per year (new).

   Under Alignment B property taxes are estimated to be $41,202 to $1,260,414 per year; and under Alignment C $41,202 to $1,870,020 per year.

4. Alignment A will retain 435 jobs and potentially provide space for 105 to 175 new jobs (total 540 to 610); Alignment B will provide space for 200 to 1,733 new jobs at full build out; and Alignment C 200 to 2,583 jobs at build out.

5. Alignment A alternatives are expected to contribute to the area's stability and modest growth while facilitating significant riverfront improvements. The proposal is supportive of the existing industrial sanctuary and existing commercial corridors in the Central Eastside.

   The improvements as envisioned by Alignment A alternatives support the Central City Plan Economic Development Policy (1. F.) of retention and expansion of existing businesses and

attracting new businesses. However, the A Alignments do not add new riverfront land to the Central City land inventory.

6. The economic development implications of the A Alignments are:

   - o Retention of 34 businesses and 436 jobs
   - o Economic certainty and stability conducive to new investment and development (including OMSI)
   - o Minimal public investment required beyond existing commitments
   - o Positive near-term impacts on urban renewal objectives and resources
   - o Conformance with existing zoning and land use designations
   - o Minimal opportunity for new riverfront development
   - o Seriously reduces opportunity of future I-5 relocation
   - o Minimal public-use waterfront area

7. Alignment B could be expected to contribute to the economic growth and vitality of the Central Eastside, provided sufficient funds are available for the actual freeway relocation. Within the riverfront area, development might be phased to accommodate local funding capabilities and to take best advantage of existing market conditions.

8. The economic development implications of Alignment B are:

   - o Development of major riverfront area for public and private uses
   - o Potential new jobs and tax revenues
   - o Substantial local public investment required and no source of funds clearly available for moving or public improvements
   - o Additional cost for off site street improvements and public facilities; no funds identified
   - o Displacement of 18 businesses and 162 jobs
   - o Potential for land uses conflicting with existing industrial district
   - o Delay in design, funding and construction will create uncertainty for existing businesses and retard construction and expansion until freeway is constructed.

9. Alignment C could provide the greatest opportunity for dramatic, highly visible, new waterfront development. It provides the greatest opportunity for long term employment growth in the Waterfront area. It also would be likely to bring about the greatest challenges to the area's existing land use, development, and business patterns.

10. The economic development implications of Alignment C are:

    - o Employment opportunities similar with those currently available in downtown, Lloyd Center and Macadam areas.

- o Development of major riverfront area for public and private uses
- o Potential new jobs and tax revenues
- o Substantial local public investment required and no source of funds clearly available
- o Additional cost for off site street improvements and public facilities
- o Displacement of 34 businesses and 436 jobs
- o High potential for land uses conflicting with existing industrial district
- o Delay in design, funding and construction will create uncertainty for existing businesses and retard construction and expansion until freeway is constructed.

G. Parks Development Considerations

1. The A Alignments do not provide for additional park land beyond the esplanade improvements; Alignment B will provide for 5.5 to 12.5 acres depending on the land use vision as identified in the Visions Report; Alignment C provides from 18 to 29 acres depending on the vision.

2. Public park improvements related to Alignment A esplanade redevelopment includes:

   - o Regrading and stabilizing the river bank
   - o 12 foot wide greenway trail with lighting and landscaping
   - o Waterfront restaurant
   - o Fishing piers and boat docks
   - o Floating trail and cascading fountains
   - o Overlooks and amphitheater
   - o Spiral ramp connection to Morrison and Burnside Bridges
   - o Ramp connection from Hawthorne Bridge

3. Potential park improvements associated with Alignment B redevelopment includes:

   - o River bank stabilization
   - o Esplanade walk and lighting
   - o Park furniture
   - o Play courts and playgrounds
   - o Lawn, landscaping and irrigation
   - o Terraced lawn and swimming beach
   - o Spiral pedestrian ramps to bridges
   - o Overlooks and steps to river
   - o Floating pier and docks
   - o Plaza fountain
   - o Conservatory and botanic garden
   - o Surface parking
   - o Waterfront restaurant
   - o Aquatic Center

4. Potential park improvements associated with Alignment C may include some or all of the following:

   o River bank stabilization
   o Lawn, landscaping and irrigation
   o Plazas, overlooks, river steps
   o Playgrounds and play courts
   o Pedestrian connections to bridges
   o Parking, restrooms
   o Lighting, park furniture
   o Floating piers and docks
   o Marine, waterfront restaurant
   o Conservatory and botanical garden

5. Each of the three alignments is consistent with and enhances Central City Plan policies and objectives for the Willamette Riverfront (Policy 2) and Parks and Open Space (Policy 8). However, based on the amount of open space created and the potential for numerous activities, Alignment B provides a better opportunity to implement the policies than the A Alignments. For the same reason, Alignment C provides a better opportunity to implement the policies than either the A Alignments or Alignment B.

6. The park development implications of the A Alignments are:

   o Improves appearance of the Esplanade
   o Provides better pedestrian connection to the bridgeheads than exists today
   o Increases public contact with the river
   o Noise mitigations are not sufficient to reduce noise level to a comfortable level for outdoor recreation use
   o Proximity of the freeway and associated ramps inhibits the opportunity to address the issue of isolation and public safety in the area between the Morrison and Burnside Bridges.
   o The narrow width of the park limits the opportunity for a variety of recreational uses.

7. The park development implications of Alignment B are:

   o More land becomes available for open space depending on the extent of other land use development
   o The opportunity for noise and visual mitigation of the freeway is enhanced
   o The opportunity for provision of a variety of recreational facilities is enhanced
   o The area between the Morrison and Burnside Bridges will still be considered as noisy and potentially unsafe
   o The proximity of the freeway and its noise may hinder the

development of viable revenue generating recreational facilities such as the conservatory or outdoor aquatic park
- o The recaptured area is not large enough to include mixed use development and a park sufficiently large enough to share the demand that is put on Tom McCall Waterfront Park

8. The park development implications of Alignment C are:

- o A substantial area of park and open space becomes available under Vision 5 and 6
- o Provides the best opportunity for mixing development and open space to create an attractive environment for park users
- o Offers the greatest opportunity for noise and visual mitigation of the freeway
- o Enhances the recreational opportunities along the entire length of the river between S.E. Clay Street and the Burnside Bridge
- o Offers the greatest opportunity for improving public safety along the isolated sections of the esplanade
- o Provides the best opportunity for development of viable revenue generating public attractors such as the conservatory and aquatic center at this location.
- o Is the most expensive

VII. CONCLUSIONS

A. Purpose

1. In September 1988 the Portland City Council identified three major questions associated with an alternative alignment to the approved I-5/Eastbank Freeway project. The questions were:

   - o Is the alternative technically feasible?
   - o What is the impact of the alternative on the Central Eastside's industrial character?
   - o What is the funding strategy and what is the impact of that strategy on other transportation priorities?

2. City Council requested staff, ODOT and the I-5/Eastbank Options Committee to evaluate two alternatives which:

   - o Respond to the guidelines of the original study including providing access to the CEID and the Sunrise Corridor as well as improving connections between I-5 and I-84.
   - o Provides these improvements within a time similar to that identified in the current ODOT 6-Year Plan.
   - o Uses the currently available $54.0 million in FAU funds.
   - o Searches for and recognizes other sources of funding while minimizing the impact on other regional priority projects.

B. Alignments

Three alignment concepts, each with modifications, were evaluated as part of this study.

1. Alignment A, Original ODOT. This alignment proposes freeway widening, ramp, and interchange improvements within the existing alignment.

2. Alignment B, ODOT Modified. This alignment moves the freeway back as much as 350 feet from the Willamette River and opens up approximately 13 acres for waterfront redevelopment.

3. Alignment C, Committee Alignment. This alignment would move the freeway back by as much as 700 feet from the Willamette River and will open up approximately 32 acres for waterfront redevelopment.

C. Costs

1. Alignment A will cost a total of $66.0 million, including $61.0 million for freeway improvements and $5.0 for esplanade improvements. An alignment A Modified alternative would cost $64.5 million.

2. Alignment B costs range from $95.6 to $111.6 million, including $85.5 million for freeway improvements and approximately $10.1 to $26.1 million for local street, site preparation, and park improvements.

3. Alignment C costs range from $158.4 to $185.8 million, with $125 to 128 million identified as freeway costs and $33.4 to $57.8 million for local street, site preparation, and park improvements.

D. Funding

1. Alignment A can be funded. Currently, $54.0 million in FAI (Completion Fund) dollars are committed to the project. ODOT has directed it will work with FHWA to secure an additional $7.0 million to cover unfunded TSM construction costs and improvements to I-5 north of the Burnside Bridge.

2. The $54.0 million allocated to Alignment A could be reallocated to alignments B and C to cover similar elements. ODOT has also indicated a willingness to work with FHWA to secure $7.0 million to cover TSM construction and the I-5 improvements north of the Burnside Bridge for Alignments B and C.

3. To fund Alignment B freeway improvements, an additional $24.5 million will likely be required. An Alignment B funding strategy would likely require reordering regional FAI-4R funds. The strategy would require JPACT approval and congressional action. Such a funding strategy would conflict with the identified study objectives and guidelines.

4. No funds are allocated for Alignment B land use improvements. Any strategy to identify funds would compete with other economic and park development priorities and funds.

5. To fund Alignment C freeway improvements, $64 to $67 million will be required, assuming transfer of the $54.0 million currently allocated to alignment A and a commitment from ODOT to fund up to $7.0 million for I-5 north of Burnside improvements and construction TSM.

6. Contrary to study objectives, a feasible strategy for funding Alignment C improvements was not identified by the committee. A general funding strategy for Alignment C was assembled by the Funding Sub-committee to the I-5/Eastbank Options Committee. The strategy includes requesting Federal approval of up to $15 million for project safety improvements or additional completion fund dollars, up to $32 million for a City of Portland general obligation bond, and up to $25 million for a Federal Highway Demonstration Project grant. The latter grant could increase up to $50 million dependent upon the availability of other sources.

7. The Alignment C funding strategy was not adopted by the full options committee. The Funding Sub-Committee, with background from the Van Brocklin Report, noted that pursuit of the strategy would require recognition of the Alignment C project as the region's and state's transportation priority in order to ensure support from Oregon's congressional delegation.

8. Based on the opinions of Oregon's congressional delegation and local transportation funding staff, such a request would compete with the region's existing transportation priority -- Westside LRT -- for funding. The congressional effort needed to secure a demonstration grant would preclude another major congressional funding effort.

9. The Options Committee Report notes in their conclusions:

   "The cost of added improvements above those of the original design (Alignment A) should be borne by the beneficiaries." (p. iv).

   "...Use of current federal and state transportation funding programs for this project is likely to impact timing of other regional transportation projects currently proposed.." (page v).

   These conclusions are significant since they imply that a major share of the costs should be paid by the City of Portland, and that this project would negatively impact financing for other primary projects, in particular the Westside LRT.

10. In sum, no feasible alternative has been identified for Alignment C relocation. Any funding alternative which could be adopted would negatively affect regional transportation priorities. It would also require redirection of the city's current economic development activities supported by transportation and/or require an increase in City property taxes.

11. No funds are allocated for Alignment C land use improvements. Any strategy to identify funds would compete with other economic and park development priorities and funds.

E. Transportation Conclusions

1. Each of the three alternative alignments is technically feasible and meets the transportation objectives of the study for freeway, interchange, and ramp operations, as well as safety and local pedestrian, bicycle, and vehicular access.

2. Alignments A and A Modified best implement the Central City Plan Transportation Goal. Because Alignments A and A Modified are by far the least expensive and almost entirely funded, they do not impact the primary transportation focus of the Plan - providing regional access to the Central City with an LRT system.

F. Land Use Conclusions

1. The Planning Bureau's Visions Report provided the range of public and private uses that could take advantage of land made available by relocating the freeway. Alternative C gives the most opportunity to introduce a range of uses on the riverfront.

2. Each of the three alignments is consistent with and enhances Central City Plan policies and objectives for the Willamette Riverfront (Policy 2) and Parks and Open Space (Policy 8). However, based on the amount of open space created and the potential for numerous activities, Alignment B provides a better opportunity to implement the policies than the A Alignments. For the same reason, Alignment C provides a better opportunity to implement the policies than either the A Alignments or Alignment B.

3. Alignment A will retain 435 jobs and potentially provide space for 105 to 175 new jobs (total 540 to 610); Alignment B will provide space for 200 to 1,733 new jobs at full build out; and Alignment C 200 to 2,583 jobs at build out.

4. Alignment A alternatives are expected to contribute to the area's stability and modest growth while facilitating significant riverfront improvements. The proposal is supportive of the existing industrial sanctuary and existing commercial corridors in the Central Eastside.

   The improvements as envisioned by Alignment A alternatives support the Central City Plan Economic Development Policy (1.

F.) of retention and expansion of existing businesses and attracting new businesses. However, the A Alignments do not add new riverfront land to the Central City land inventory.

5. Alignment B could be expected to contribute to the economic growth and vitality of the Central Eastside, provided sufficient funds are available for the actual freeway relocation. Within the riverfront area, development might be phased to accommodate local funding capabilities and to take best advantage of existing market conditions.

6. Alignment C could provide the greatest opportunity for dramatic, highly visible, new waterfront development. It provides the greatest opportunity for long term employment growth in the Waterfront area. It also would be likely to bring about the greatest challenges to the area's existing land use, development, and business patterns.

7. The PDC Development Option report reviews the development impacts of the alignment alternatives. Alignment C would have the greatest potential for employment growth in the waterfront area. The alignment also removes businesses in the block between Water and First Aves., leaving a two block-wide strip of industrial uses between the waterfront/freeway and the Union/Grand Corridor. The PDC report notes the high potential for conflicting land uses and uncertainty for existing businesses in the area.

   It is clear that the impact of Alignment C on the industrial character is negative. The extent of that negative impact would be dependent upon the details of the redevelopment design and other programs in the district.

VIII. STAFF RECOMMENDATIONS

Based on the work of the committee, staff concludes that an operationally feasible alternative exists but that it is not within the range of financial feasibility, given the broader objectives for transportation development within the Central City and the region. Therefore, the Office of Transportation recommends that Council:

A. Terminate the dual-track analysis process; and

B. Request that ODOT proceed with construction of Alignment A, the original East Marquam Project.

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