BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF ENDORSING THE OREGON DEPARTMENT OF TRANSPORTATION I-5/HIGHWAY 217 SUBAREA TRANSPORTATION PLAN	RESOLUTION NO. 95-2232 Introduced by Councilor Rod Monroe, JPACT Chair

WHEREAS, The State of Oregon, acting by and through its Oregon Transportation Commission, has caused to be prepared and submitted to JPACT and the Metro Council a transportation plan for the I-5/Highway 217 Subarea for a resolution of support; and

WHEREAS, Said plan has been developed in collaboration with representatives of the cities and counties within the transportation subarea in consultation with key stakeholders and the public in the transportation subarea; and

WHEREAS, Said plan recommends two major components, the interchange design Alternative B and transportation system recommendation; and

WHEREAS, The I-5/Highway 217 Subarea Transportation Plan interchange and transportation system recommendations will guide development of local and regional Transportation System Plans for the subarea; now, therefore,

BE IT RESOLVED,

That JPACT and the Metro Council:

1. Accept this Subarea Transportation Plan.

2. Direct that the revised interchange design Alternative B be included in the RTP financially constrained network.

3. Urge adoption of interchange design Alternative B by the Oregon Transportation Commission.

4. Direct that the interagency consultation process to determine regional air quality conformity analysis be initiated.

5. Direct Metro staff to work with local governments and the public to develop the I-5/Highway 217 subarea local transportation system circulation plan element in coordination with local transportation system plans, the Waluga Triangle Study, the Tigard Triangle Study, and Phase II of the RTP Update, and to include a 2040 land use review.

6. Direct Metro staff to review transit system and transportation demand management recommendations in the I-5/Highway 217 Subarea Transportation Plan for consistency with and/or inclusion in other ongoing transportation studies.

ADOPTED by the Metro Council this 30 day of Nov., 1995.

J. Ruth McFarland, Presiding Officer

Approved as to Form:

Daniel B. Cooper, General Counsel

BB:lmk
10-27-95
95-2232.RES

Exhibit A

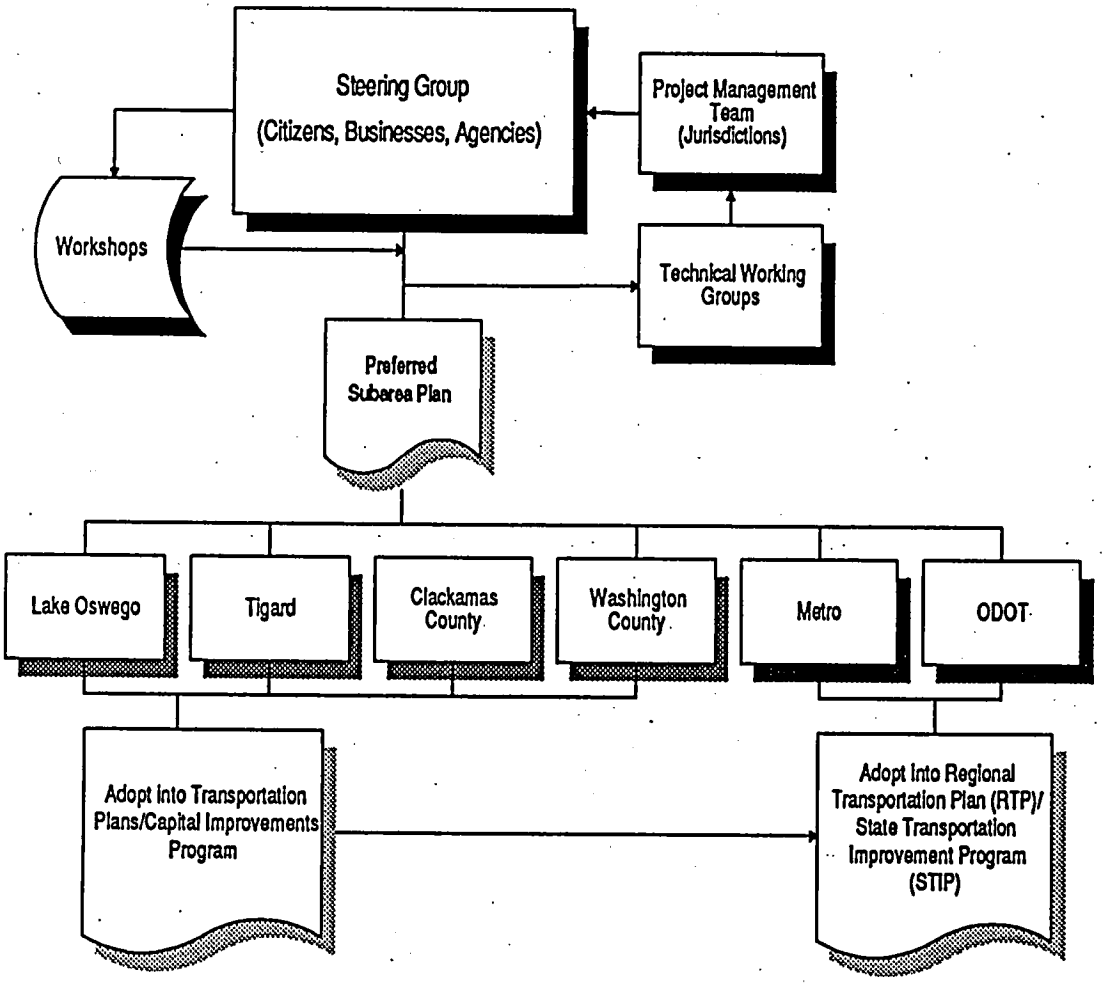
I-5 / Highway 217 Subarea Transportation Plan

Briefing Packet

October, 1995

I-5/Highway 217 Interchange Subarea Transportation Plan

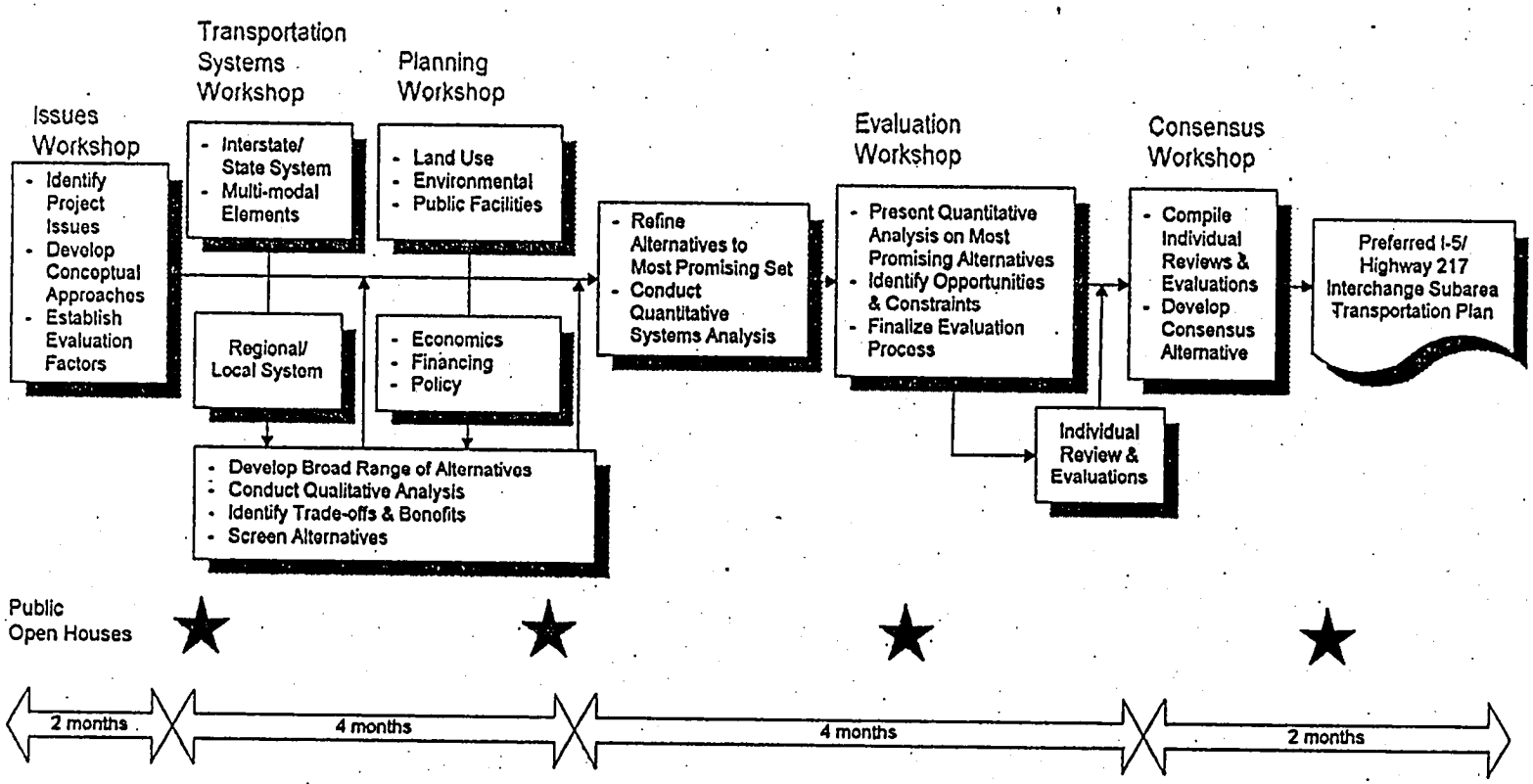
Decision Process



W&H PACIFIC

I-5/Highway 217 Interchange Subarea Transportation Plan

Participatory Planning Process



W&H PACIFIC

PROJECT GOAL:

Identify solutions to the transportation needs in the subarea that provide a reasonable and balanced system to accommodate local, regional, and statewide travel demand within and through the I-5/Highway 217 project area.

This project goal will be achieved by identifying transportation improvement projects and implementation strategies within the I-5/Highway 217 Subarea Transportation Plan that balance the following Project Objectives.

PROJECT OBJECTIVES: (Not listed in order of priority)

1 Develop the I-5/Highway 217 Subarea Transportation Plan in an open public forum where involvement of local governments, citizens, business and transportation users is actively solicited and respected.

NEIGHBORHOOD SAFETY AND LIVABILITY ISSUES ARE IMPORTANT PLAN CONSIDERATIONS.

2 Identify a transportation system hierarchy within the study area that:

A. Accommodates local, regional, and statewide access and circulation needs in a safe and efficient manner;

B. Reduces conflicts between various transportation modes and travel movements; and

C. Is compatible with and supports existing and future Comprehensive Plan land uses.

3 Develop a transportation system plan that provides for safe and convenient alternative modes including transit, bicycling and walking.

4 Develop transportation improvement strategies that support existing and future Compre-hensive Plan land uses, provide opportunities for continued economic development, and facilitate efficient movement of commerce throughout the area.

5 Ensure future transportation improvements support neighborhood livability by:

A. Improving safety and opportunities for walking, bicycling, and access to transit;

B. Supporting existing and planned land use patterns;

C. Minimizing transportation-related environmental impacts; and

D. Incorporating aesthetic considerations.

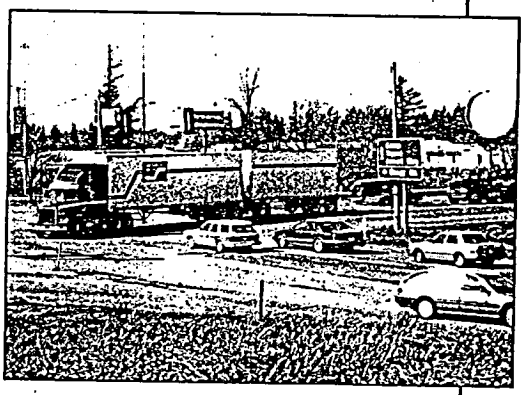
6 Ensure proposed transportation improvements are consistent with applicable local, regional, state and federal plans and adopted by implementing regulations, including:

A. The Comprehensive Plan of local jurisdictions;

B. Metro 2040 Growth Concept and the Regional Transportation Plan;

C. The Oregon Transportation Plan; and

D. State and Federal environmental regulations.



THE EFFICIENT MOVEMENT OF GOODS AND COMMERCE THROUGH THE REGION IS VITAL TO ITS ECONOMY.

7 Develop a transportation improvement program for the area that is cost-effective, identifies funding responsibilities, is attainable within reasonable funding expectations, and is prioritized to identify near term solutions at the I-5/Highway 217 Interchange and throughout the subarea.

RECOMMENDED INTERCHANGE

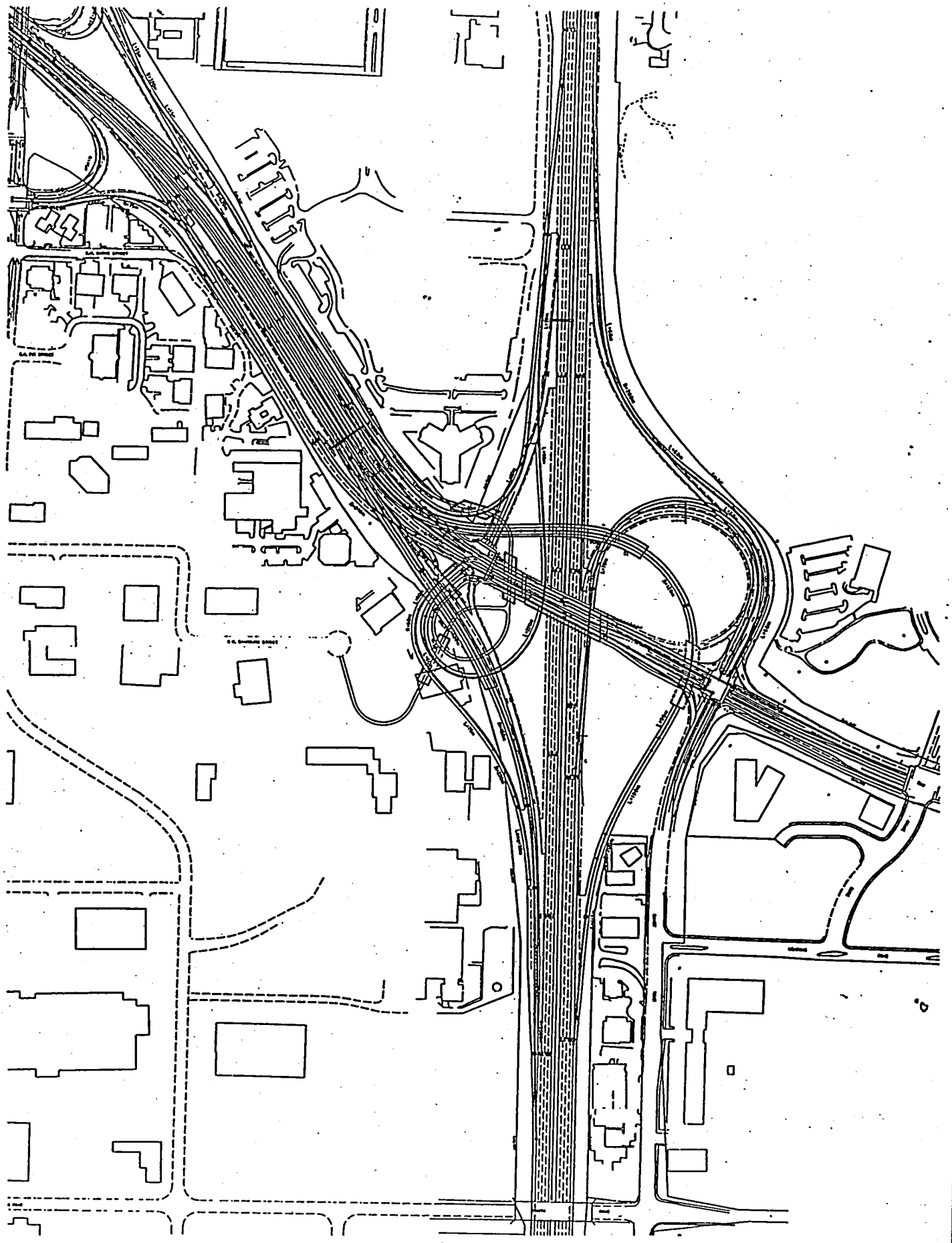
This project team narrowed the conceptual interchange alternatives from six alternatives to three - Phoenix, Interchange B, and Interchange B-Modified. The Phoenix design remained under consideration because it was the design most recently proposed for development by ODOT. While this interchange has shortcomings, it does provide for the dominant freeway-to-freeway movements at a given financial cost.

After a number of technical sessions with ODOT design staff, Interchange Alternative B was identified as the preferred interchange. The Project Management Team and Steering Group concurred with this recommendation.

Relative to all interchange alternatives evaluated, the most significant factors that went into the selection of Alternative B as the preferred alternative were:

- Maintains long-term acceptable operation of freeway-to-freeway movements.
- Maintains long-term operation of Interstate 5.
- Restores the access between Kruse Way and 72nd Avenue that was eliminated with the Phoenix interchange design.
- Can be constructed in phases if necessary.
- Maintains the current Kruse Way structure over I-5.
- Matches long-term plans for future widening improvements on Highway 217.
- Minimizes right-of-way requirements.

The following two figures illustrate the Recommended Interchange for the first and second phases. A digital image of what the completed interchange might look like is also included.

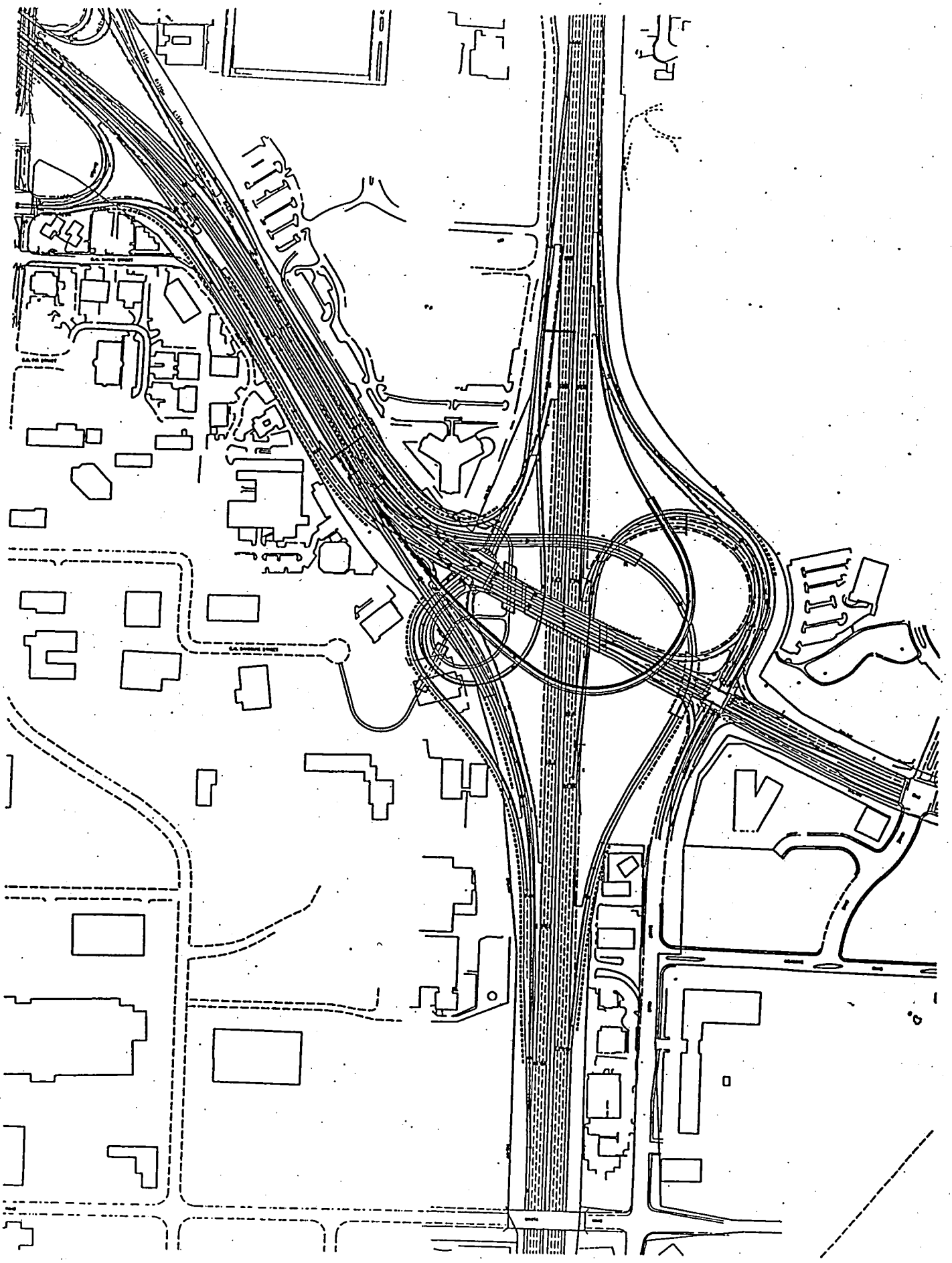


WH PACIFIC

Interchange B (Phase I)

I-5/Highway 217 Subarea Transportation Plan

FIGURE 1

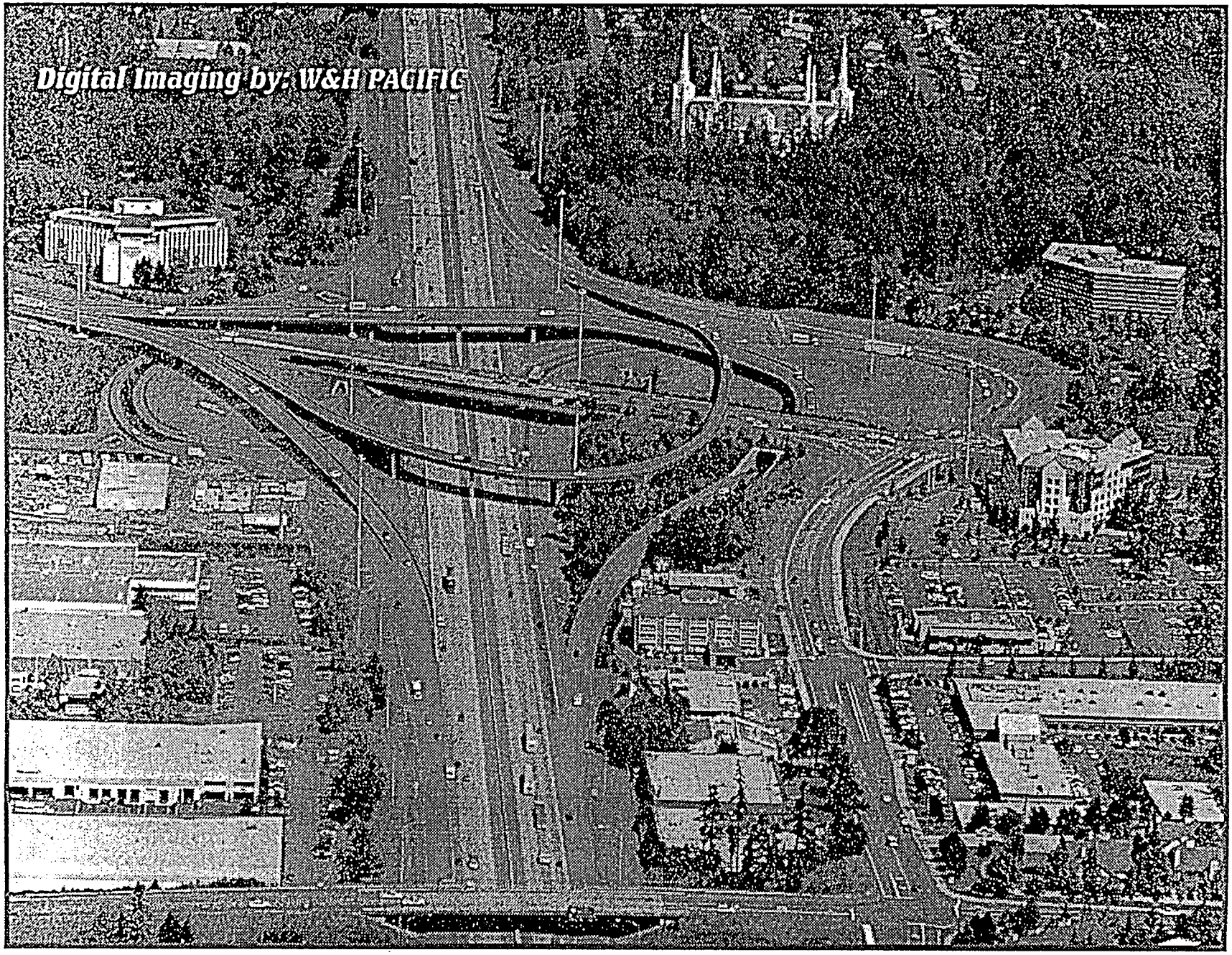


WHPACIFIC

Interchange B (Phase 2)

I-5/Highway 217 Subarea Transportation Plan

FIGURE 2



Digitally enhanced photograph illustrating Alternative B - Phase II.

I-5 / Highway 217 / Kruse Way

Comparison of Alternative B

with the

Phoenix Design

Alternative B Phase 1 Review

Pros: Improves long term acceptable operation for most freeway to freeway moves.

Improves long term operation of I-5 mainline.

Alt. B Phase 1 may operate better and last longer than Phoenix.

No work on Kruse Way structure over I-5.

Cons: Phase 1 more expensive than Phoenix.

Requires 11' travel lanes under the 72nd. structure.

Sight distance problems for fly-under / fly-over structures. Protective screening problems etc.

Sight distance problems for EB Kruse Way to see SB ramp terminal intersection.(structure, horizontal and vertical curve).

R/W acquisition required for one business, Western Family Food Offices.

Substandard lane and shoulder widths for Kruse Way on structure over I-5.

Closely spaced exit/exit on northbound I-5. May cause congestion and may be difficult to sign.

Requires dropping two auxiliary lanes consecutively on SB I-5 at the Carmen exit and under the structure.

Doesn't solve future problems at Bangy Intersection and 72nd. system

Visual impacts of bridges and retaining wall.

B Phase 1 Cost Estimate

Phase	Engineering $ (millions)	Construction $ (millions)	R/W $ (millions)	Totals (millions)
I	$1.1	$36.2	$2.2	$39.5
	Currently	Programmed		
	$.7	$14.6	$6.4	$21.7

B Phase 2 Alt. Review

Pros: Removes SB 217 to NB I-5 from Kruse and improves Kruse/Bangy intersection operation.

Cons: Still doesn't solve 72nd. Ave. system operation.

Additional visual impact of flyover from SB 217 to NB I-5.

B Phase 2 Cost Estimate

Phase	Engineering $ (millions)	Construction $ (millions)	R/W $ (millions)	Totals (millions)
I	$1.1	$36.2	$2.2	$39.5
II	$0	$7.7	$0	$7.7
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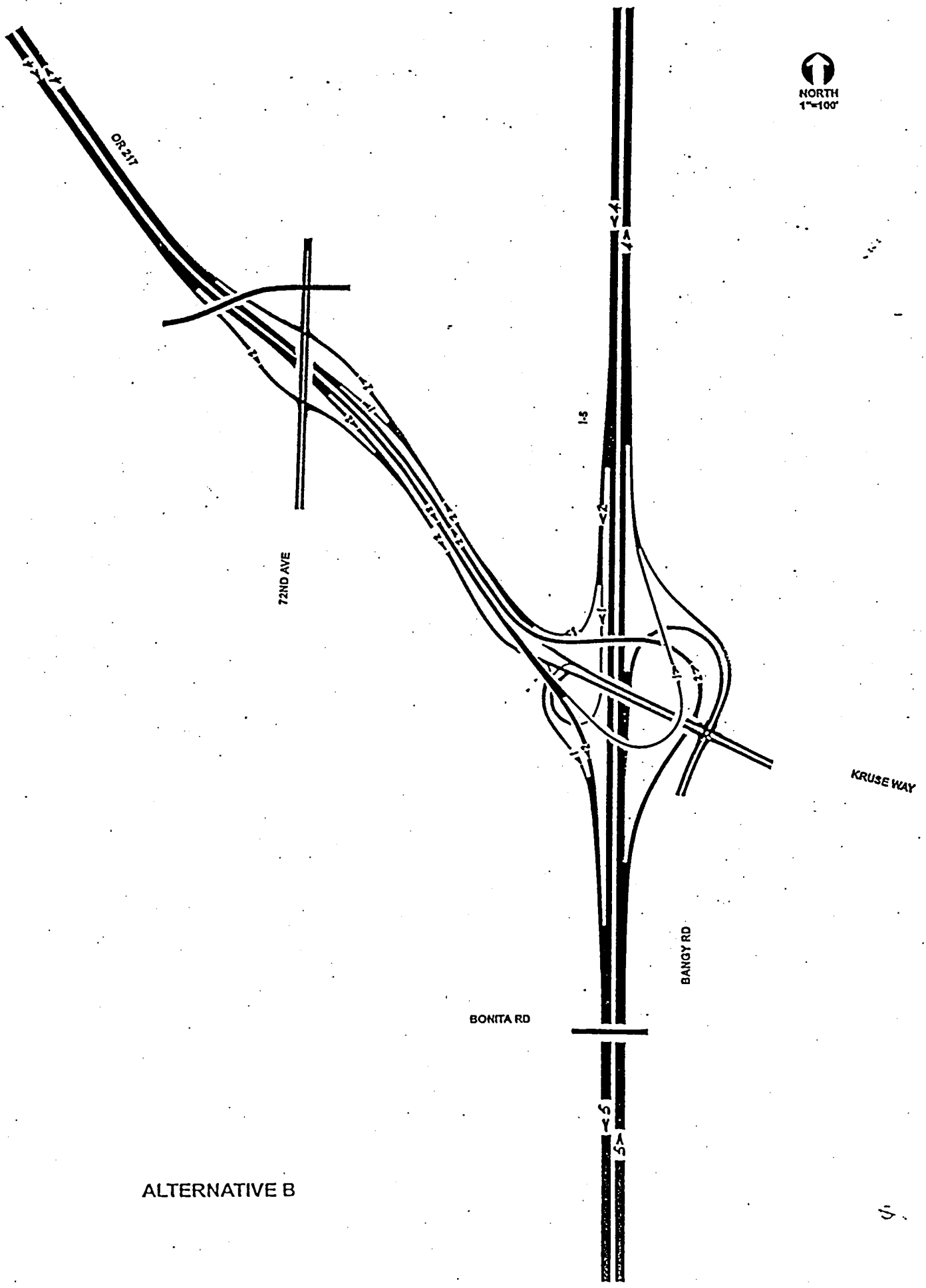
I & II	$1.1	$43.9	$2.2	$47.2
	Currently	Programmed		
	$.7	$14.6	$6.4	$21.7



ALTERNATIVE B

Phoenix Alternative Review

Pros:Improves long term acceptable operation for most freeway to freeway moves.

Improves long term operation of I-5 mainline.

Provides better long term alignment (shoulders on O'xing, better ramp alignment).

Least disruption of existing system during construction than other alternatives.

Less visual impact with no flyover structures and fewer retaining walls as compared to the other alternatives.

Fewer lanes on I-5 between Kruse Way and Carmen both NB and SB.

New I-5 overcrossing will meet seismic standards.

Cons:Doesn't solve future problems at Bangy Intersection and 72nd. system

R/W acquisition of two businesses, Coiltron and Western Family Food Offices. (However, the design might be able to be refined to avoid impacting Coiltron).

Does not provide direct access to and from Kruse Way to 72nd. Access would need to be from Bonita Rd. or Carmen Dr. Also does not provide direct access from 72nd. to northbound I-5; would need to use Haines IC.

WB Kruse Way to SB I-5 has unconventional left hand entrance onto SB 217 to SB I-5 ramp.

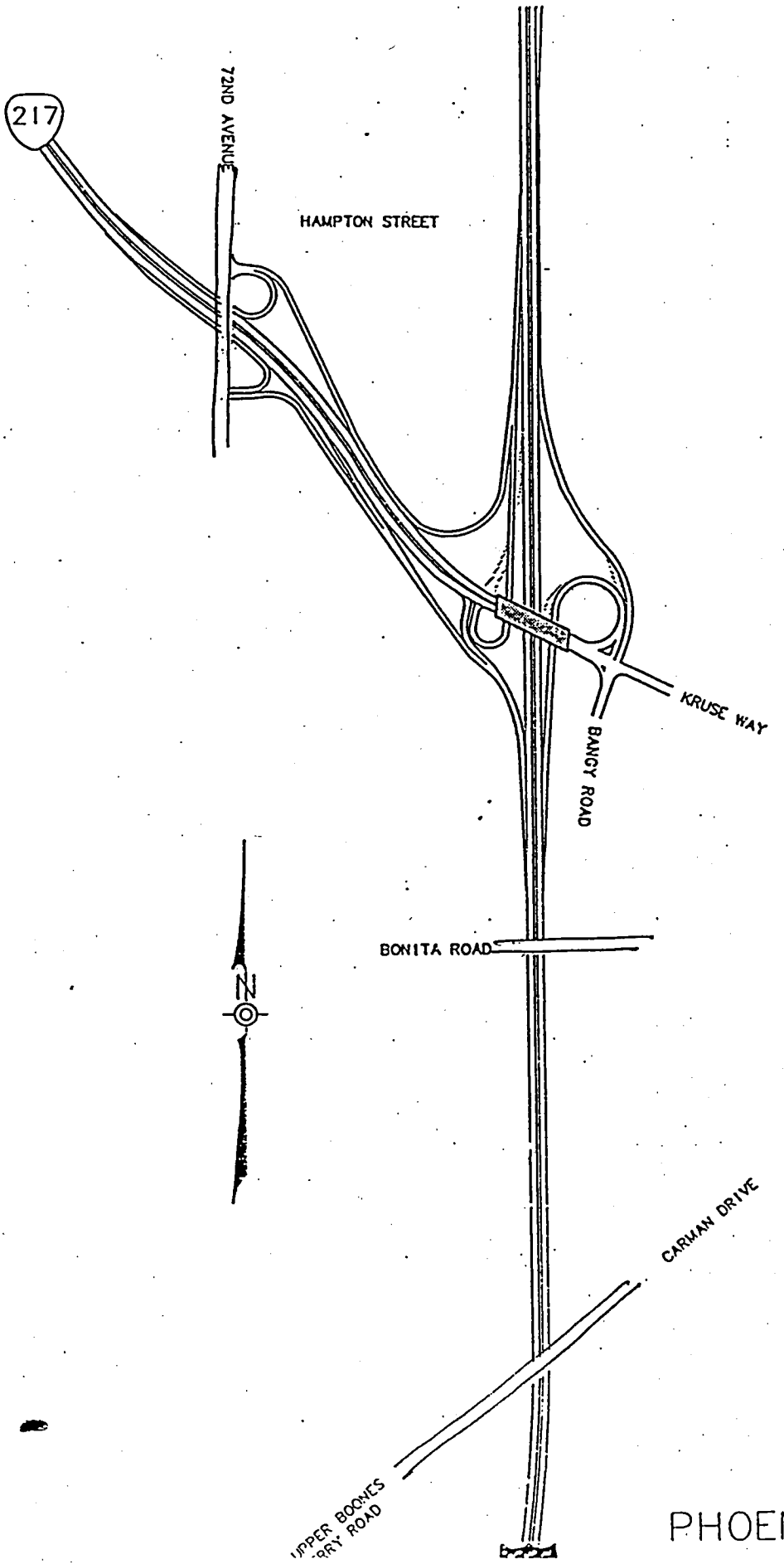
Requires merging 2 lanes of WB Kruse Way to 1 lane; and has a left hand entrance into 217.

Insufficient storage distance for ramp meter from westbound Kruse Way to southbound I-5. (Unable to meter Kruse to 217 NB.)

More "throw away" costs associated with future 217 improvements.

Phoenix Cost Estimate

Engineering $ (millions)	Construction $ (millions)	R/W $ (millions)	Total (millions)
$.7	$20.3	$4.2	$25.2
	Currently	Programmed	
$.7	$14.6	$6.4	$21.7



PHOENIX DESIGN

RECOMMENDED TRANSPORTATION SYSTEM

The following section presents the recommendations for the subarea transportation plan. These improvements would ensure that the interchange is accessible and separate traffic destined to the interchange from areas such as the Tigard Triangle and intra-subarea traffic.

The Steering Group members recognized that, given existing funding constraints, pursuit of the local system improvements in this recommendation is ambitious. The Project Management Team and the Steering Group did concur that these recommendations make the most sense from an operations standpoint.

There are several elements of the recommendation that are necessary for the interchange to work as designed. Other elements may be desirable over the next 20 years from a local transportation system perspective, while others stand a low chance of ever being implemented.

The recommended improvements are not meant to remedy all of the transportation problems within the subarea. The number of recently completed and proposed studies in the area, including Metro's 2040 Plan and Regional Transportation Plan, city and county transportation system plans, *Tigard Triangle Update Study*, and *Waluga Triangle Land Use and Transportation Plan*, attests to the need for coordination of improvements in this area. These studies and planning processes will be the basis for integrating the interchange needs with the other competing needs of the transportation system users of the subarea.

Based on the comments received, the recommended transportation system includes the Alternative B interchange, implementation of existing plans and policies (including bringing existing facilities up to adopted design standards) and the following improvements. These improvements are recommended for further public review and analysis in the local and regional transportation planning processes:

Highway 99W: 6 lanes (plus turn lanes at intersections) from I-5 to south of Hwy. 217;
72nd Avenue: 4 lanes (plus turn lanes at intersections) from Bonita to Hwy. 99 (Incl. diamond interchange and Hunziker/Hampton Flyover);
Bonita: 4 lanes (plus turn lanes at intersections) from Hall to Bangy; 2 lanes (plus turn lanes at intersections) from Bangy to Carman;
Carman: 2 lanes (plus turn lanes at intersections) from I-5 to Kruse;
Dartmouth to Hunziker: 3 lane new crossing of Hwy. 217;
Dartmouth: 4 lanes (plus turn lanes at intersections) from 72nd to 68th;
Kruse: 6 lanes (plus turn lanes at intersections) from Bangy to Boones Ferry, developed in phases.

DISCUSSION OF IMPROVEMENT RECOMMENDATIONS

Highway 99W: Widen to 6 lanes plus turn lanes, from I-5 to south of Hwy. 217 - This is desirable from a traffic operations standpoint. However, the cost, in terms of right-of-way acquisition and loss of businesses, could make the project cost-prohibitive and politically unfeasible. Other solutions may be needed to reduce congestion in this corridor.

Recommendation: Retain under consideration, as it is part of existing adopted plans. Examine implementation strategies, including access management programs, creation of a transportation management association, improved transportation system management/transportation demand management in Tigard and regional plans. This is consistent with the recommendations of the *Tigard Triangle Update Study.*

72nd Avenue: Widen to 4 lanes plus turn lanes from Bonita to Hwy. 99 (Incl. diamond interchange and Hunziker/Hampton Flyover). Widening 72nd is necessary to accommodate the anticipated growth in the Tigard Triangle. The current interchange is inefficient, and the bridge will ultimately need replacement to accommodate five lanes (two through lanes in each direction plus turning lanes for the interchange ramps). Bridge replacement will adversely impact the existing interchange ramps. The Hunziker/ Hampton flyover has shown some merit as a local transportation system improvement, although there may be properties that would be rendered undevelopable.

Recommendation: Tigard should incorporate a 4/5-lane section for 72nd into their Transportation System Plan update. Tigard should also consider incorporation of the flyover. This is in agreement with the recommendations of the *Tigard Triangle Update Study*, completed this year.

Durham Rd: Widen to 5 lanes from Highway 99 to I-5. This action shows some merit as an improvement for accessing the Carman interchange. Recent street improvements in this area, along with development along the road, suggest that widening from three to five lanes is not likely.

Recommendation: Leave Durham Rd. as shown in existing plans and policies (3 lanes).

Bonita: Widen to 4 lanes plus turn lanes at intersections from Hall to Bangy; reconstruct to standard 2 lanes plus turn lanes at intersections from Bangy to Carman;

Carman: Reconstruct to standard 2 lane cross-section plus turn lanes at intersections from I-5 to Kruse. Widening Bonita west of I-5 is needed to accommodate traffic from 72nd and growth in the southwest interchange quadrant. The improvements east of I-5 are needed to maintain the system hierarchy of major collectors on the east side of I-5. The congestion anticipated along Kruse Way in the 20-year horizon shows a need to accommodate non-freeway trips on the local arterial/collector network. Without these improvements, traffic may seek less congested paths through the neighborhoods. The improvement to Carman is consistent with the 1992 Lake Oswego Public Facilities plan.

Recommendation: Lake Oswego and Clackamas County should amend their transportation plans to include future development of Carman and Bonita to a major collector standard. Tigard should include widening Bonita to 4/5 lanes between Hall and Bangy.

Dartmouth to Hunziker: Construct a new 3 lane crossing of Hwy. 217; **Dartmouth:** Widen to 4 lanes plus turn lanes from 72nd to 68th. The new crossing of Highway 217 provides some relief for Highway 99W. Widening Dartmouth would provide improved access to/from the Haines interchange, which could attract trips away from the subject interchange.

Recommendation: Tigard should consider including the new overcrossing as a local transportation system improvement. The widening should be considered by Tigard as a project to improve access to I-5 and the Tigard Triangle. This recommendation is in agreement with the recommendations of the *Tigard Triangle Update Study*.

Kruse: Widen to 6 lanes from Bangy to Boones Ferry. This project is necessary to provide adequate access to the interchange and to provide for east-west circulation to keep arterial traffic off of the local street system. Because of the configuration of the various ramps and Kruse Way, the section of Kruse way between I-5 and Westlake will need to be six lanes at the time the interchange is operational. Volume estimates, including turning movements into the neighborhoods to the north and business and neighborhoods to the south, show that six lanes will be needed along the entire segment to accommodate the 2015 demand.

Recommendation: Lake Oswego and Clackamas County should include widening Kruse Way to six lanes, initially between I-5 and Westlake, and ultimately to Boones Ferry in their Transportation System Plans. Creation of a transportation management association (TMA) in this area, as described in the *Waluga Triangle Land Use and Transportation Plan* and initial development studies, should be implemented.

OTHER SYSTEM RECOMMENDATIONS

As with the roadway improvements, these system elements are believed to be needed in order for the interchange and subarea to function at an acceptable level.

Pedestrian and Bicycle: When existing surface streets are rehabilitated or upgraded, sidewalks and bicycle lanes appropriate to the street's functional classification should be constructed. Pathways and trails in the local jurisdiction plans should be implemented as defined. While the interchange includes pedestrian and bicycle facilities, there is a need to explore alternative systems on surface streets which may provide a lower cost and more effective routing for users.

Public Transportation: There is a need for Tri-Met to conduct a Southwest Subarea study which would quantify the changing commuter and social travel patterns of Southwest Portland, Tigard, Lake Oswego and unincorporated areas. Current transit system plans do not address the change from suburb-to-central city commute to suburb-to-suburb commute, and continue to focus on the central city. Current and planned development patterns, including the 2040 concept, and other changes would be used to identify a system that may be more productive than that currently proposed. The end result would be to develop a service plan to meet the local and regional needs of the study area as both an employment and residential base.

Transportation Demand Management (TDM): As part of regional and local transportation plans, transportation system management elements are being supported. These include use of alternate work hours, telecommuting, use of alternate modes of travel, and provision of worksite incentives and amenities to encourage use of travel modes other than single occupant vehicles. Within the study area, there are numerous opportunities for an array of TDM actions to be implemented which could result in a reduction of peak period vehicular demand on the road system.

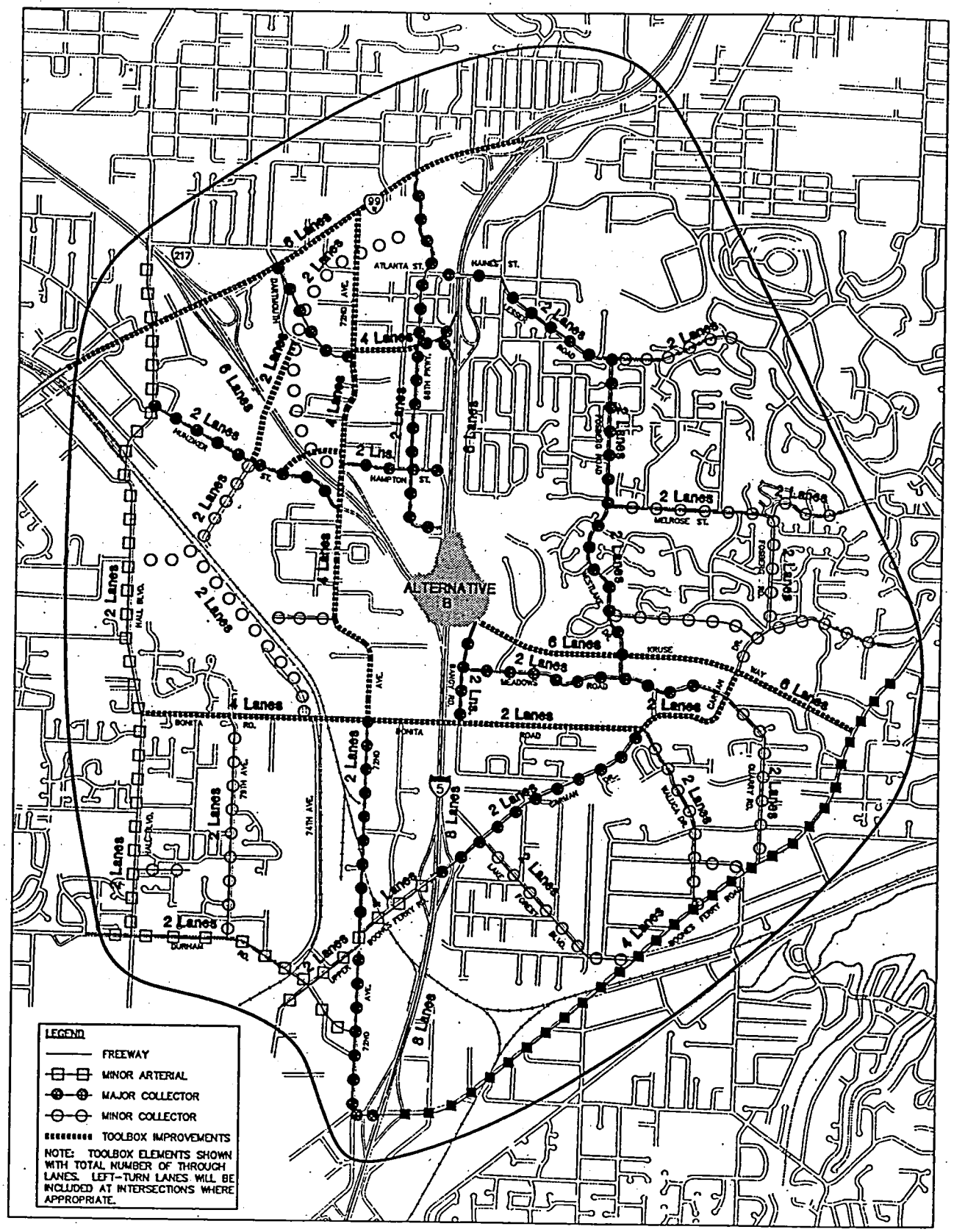


FIGURE 3 - RECOMMENDED TRANSPORTATION PLAN

I-5/HIGHWAY 217 SUBAREA TRANSPORTATION PLAN

INTERCHANGE B WITH SYSTEM IMPROVEMENTS

IMPLEMENTATION

There are three areas where further work is needed in order to make the transportation improvement plans a reality: technical, funding and strategy. A schematic diagram of the timing of these actions is presented after this discussion. The following is a summary of what steps are needed within each of these areas. The recommended strategy is to pursue a new gas tax or other state-based funding mechanism (see 5A below).

TECHNICAL

1. Wait for TPAC/JPACT and Oregon Transportation Commission approval before proceeding with final design (anticipated in November, 1995).
2. Get FHWA approval of design concept.
3. Conduct air quality "hot spot" analysis.
4. Reconfirm that a "Major Investment Study" is not needed.
5. Prepare Transportation Operations Tech Memo.
6. Prepare Drainage/Water Quality/Mitigation Plan.
7. Update right of way area and cost estimates.
8. Assure compliance with Metro Congestion Management System.
9. Confirm that a new EA or EIS is not needed.

These activities should be completed by the end of 1995. The primary responsibility lies with ODOT for their completion.

FUNDING

Existing Programmed funds in State Transportation Improvement Program (STIP):

Engineering	700,000
ROW	6,400,000
Construction	14,600,000
TOTAL	$21,700,000

Phase 1 Alternative B:

Engineering	$1,100,000 (est.)
ROW	2,200,000
Construction	36,200,000
TOTAL	$39,500,000

Shortfall is about $17.8 million assuming that ROW surplus may be converted to construction dollars. It is about $22,000,000 if ROW surplus cannot be converted. The current ODOT information is that it cannot be converted.

Phase II Alternative B:

Construction 7,700,000

Total shortfall is about $29.7 million assuming ROW funds cannot be used for construction.

The concept of a large project Steering Group was identified to serve two purposes. The first was to gather as many ideas as possible and assure representation of key interest groups in the study area The second purpose was to gather a group of community leaders who can serve as project advocates as the solution identified by the Steering Group moves toward implementation.

IMPLEMENTATION STRATEGY

1. ADOPT ALTERNATIVE B

A. TPAC/JPACT/Metro Council briefing on the selected alternative and funding implications, along.with Sunset Highway, I-5 to 99W Expressway, I-5 and other top priority projects in the region.

B. Presentation/approval from Oregon Transportation Commission of interchange plan and funding strategy (Steering Group members invited to make presentation in support of project).

C. Develop documentation on why the selected alternative is appropriate: I-5 traffic operations, cost-benefit, Region 2040 consistency, community support.

2. DEVELOP PROJECT COST AND REVENUE INFORMATION (ODOT Region 1 and statewide)

A. Develop documentation on revenue projections for 1999-2000; acknowledge that a new funding source (such as gas tax increase) is needed and bonds can be issued against future revenue stream to keep project on schedule.

B. Develop documentation on the cost of high priority major projects (Sunset Highway, I-5 to 99W Expressway, I-5 and others). Money can not be spent on this interchange and ignore other needs.

3. DEVELOP INFORMATION FOR PUBLIC AND LEGISLATURE

A. Provide letter and other materials to legislators on importance of various projects, costs, revenue projections and need for gas tax increase.

B. Develop public information/media releases on project, costs, revenues, et cetera, including information that there is no money elsewhere in the state to transfer to this project.

4. DEVELOP AND APPROVE LOCAL TSPs AND AMENDMENTS

A. Metro and local governments develop and adopt local TSPs, including approvals of interchange and subarea improvements.

B. Develop agreements with Lake Oswego, Tigard, Clackamas Co., Washington Co., and Metro regarding land use, transportation impacts et cetera in the study area.

C. Develop agreements to commit to a phasing program wherein the timing of ODOT freeway improvements are alternated with local improvements.

5. RECOMMENDED FUNDING STRATEGY -

A. Identify new statewide money sources (gas tax increases? other legislative package?). Possible use of bonding against this source to speed construction schedule.

6. CONSIDERED FUNDING STRATEGIES - Options included (in no particular order)

A. Delay or delete existing ODOT projects -
   1. STIP may be over-programmed as it is; there may be a need to delete projects just to balance the existing STIP;
   2. Not many projects in the 1998-99 fiscal years to delay;
   3. Difficult political decision.

B. Capture funds from any ODOT/Regional project programmed for 1996-98 that are delayed or stopped for any reason -
   1. No such projects identified.

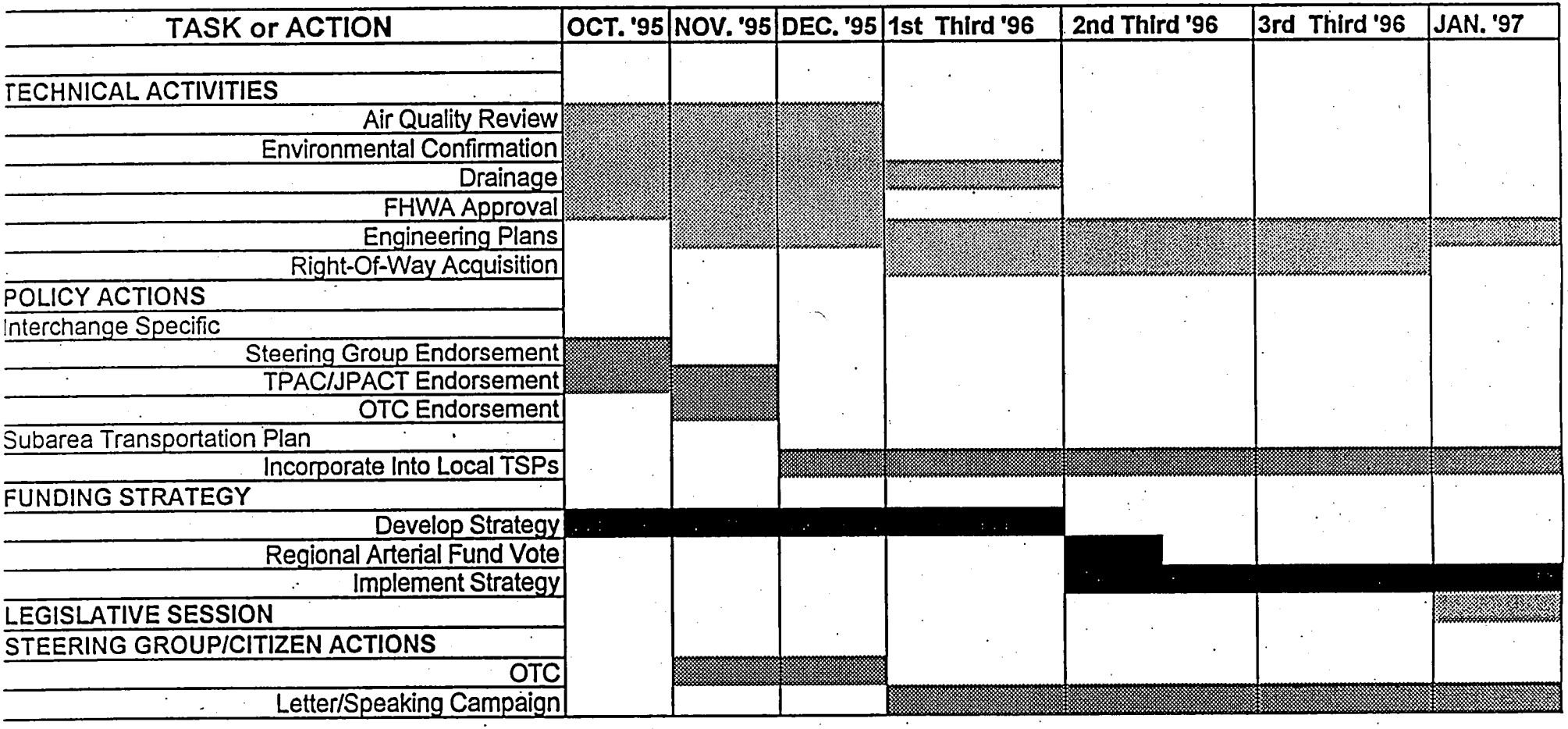
C. Tap into potential Regional Arterial Fund (Regional Gas Tax supported):
   1. Uncertain regional support;
   2. More appropriate to fund local improvements in study area.

D. Phase/Delay Alternative B until funds are accumulated -
   1. Final engineering, air quality, environmental, et cetera in the next two years;
   2. Right of way in FY '98-99;
   3. Construction after 2000.

E. Identify other new money sources -
   1. Cities or Counties?
   2. Federal (ISTEA reauthorization?)
   3. Bonding against same source of funds as above?

F. Creative funding sources -
   1. Congestion pricing;
   2. Tolling;
   3. Public-private partnerships.

-5/Highway 217 Interchange Implementation Schedule



STAFF REPORT

CONSIDERATION OF RESOLUTION NO. 95-2232 FOR THE PURPOSE OF ENDORSING THE OREGON DEPARTMENT OF TRANSPORTATION I-5/ HIGHWAY 217 SUBAREA TRANSPORTATION PLAN

Date: October 27, 1995 Presented by: Andrew Cotugno

PROPOSED ACTION

This resolution endorses the Oregon Department of Transportation (ODOT) I-5/Highway 217 Subarea Transportation Plan. With the endorsement, Metro Council and JPACT recognize the subarea transportation plan as providing recommendations for further analysis of the subarea transportation system and for inclusion of the I-5/Highway 217 interchange design Alternative B as part of the Regional Transportation Plan (RTP) Update, Phase II.

TPAC has reviewed the I-5/Highway 217 Subarea Transportation Plan and recommends approval of Resolution No. 95-2232.

FACTUAL BACKGROUND AND ANALYSIS

Interchange History

Over the past decade, a number of designs to improve the I-5/ Highway 217 Interchange have been considered. A design developed in the early 1990's that relied on substantial reconstruction of the interchange and the use of a collector-distributor road system was abandoned in 1993. This design did not meet the needs of both regional and local traffic. A "down-scaled" design, referred to as the Phoenix Design, was suggested later in 1993. This design addressed the freeway-to-freeway movements, but some local traveling deficiencies remained and local access between Lake Oswego and Tigard was restricted. As a result, the Phoenix Design was not accepted as an effective solution by local jurisdictions and businesses in the area. The I-5/Highway 217 Subarea Plan encompasses a larger project area than previously considered and recommends both system and interchange transportation projects. The plan's purpose is to identify solutions to the transportation needs in the subarea that provide a reasonable and balanced system to accommodate local, regional, and statewide travel demand within and through the I-5/Highway 217 project area.

Subarea Transportation Plan

The subarea transportation plan recommendations are identified in Exhibit A. There are two major components to the recommendations, the interchange design alternative recommendation and the transportation system recommendation.

The recommended interchange design, referred to as Alternative B, was one of six major interchange design alternatives analyzed, and provides for full freeway-to-freeway movements without traffic signals. Alternative B also provides for all movements to/from Kruse Way and 72nd Avenue to/from Highway 217 and I-5. Exhibit A describes the interchange recommendation in more detail.

The transportation system recommendation builds upon programmed and planned improvements in the I-5/Highway 217 subarea with a number of roadway widening projects recommended for further public review and analysis. Pedestrian and bicycle facility improvements, transportation demand management strategies and additional transit service planning are recommended in order for the interchange and subarea to function at an acceptable level. Exhibit A describes the transportation system recommendations in more detail.

Process

The key steps in the planning process are described in Exhibit A. A Steering Group of 55 members and a Project Management Team made up of sponsoring jurisdictions identified issues, project alternatives and recommendations over a 10-month period. The six sponsoring jurisdictions include ODOT Region 1, Metro, Clackamas County, Washington County, the City of Lake Oswego and the City of Tigard.

Four Steering Group meetings were held to identify issues and evaluate existing conditions, define a range of plan alternatives, define a preferred system plan, and make final plan recommendations. Three open house public workshops were attended by an average of 200 persons per workshop. Four project newsletters were published and distributed; an information hotline was used extensively by the public; and over 250 written comments were received from concerned citizens.

The I-5/Highway 217 Subarea Transportation Plan was completed in October 1995, with the Steering Group making a preferred alternative recommendation to the Project Management Team. At this step in the process, the plan is being forwarded to each of the sponsoring jurisdictions for endorsement or adoption.

Key Findings

The I-5/Highway 217 Subarea Transportation Plan includes recommendations for improvements at the interchange and on nearby regional and local roads. The subarea transportation plan was developed to be consistent with other regional planning efforts, including the Region 2040 Growth Concept and the Regional Transportation Plan Update.

Interchange Recommendation. A number of preliminary interchange designs, including the 1993 Phoenix Design, were developed and

analyzed to identify operational benefits and weaknesses, costs, land acquisition constraints, safety concerns, and other issues. Two alternatives, the Phoenix Design and Interchange Alternative B, moved into a comprehensive technical analysis.

Both the Phoenix Interchange Alternative and Interchange Alternative B serve freeway traffic with free-flowing connections between I-5 and Highway 217 without passing through traffic signals. However, the Phoenix Interchange eliminates local movements that currently exist between Kruse Way and 72nd Avenue and 72nd Avenue to I-5 northbound, while Interchange Alternative B serves movements between Kruse Way and 72nd Avenue, and 72nd Avenue to I-5 northbound by extending Kruse Way to the west to 72nd Avenue.

Interchange Alternative B was identified as the preferred interchange. Other significant factors that went into the selection of Alternative B include maintenance of long-term acceptable operation, maintenance of the current Kruse Way structure over I-5, coordination with long-term plans for future widening of Highway 217, ability to construct in phases, and less right-of-way acquisition.

Subarea Transportation System Recommendation. Seven combinations of improvements to the subarea transportation system were analyzed, including an alternative to make no improvements to the interchange and implement only those transportation system improvements that are already funded. The remaining alternatives included the Phoenix design and Interchange Alternative B design. With the recommended Interchange Alternative B design, the system alternatives included the following:

- Build the Alternative B Design and implement funded transportation system improvements.
- Build the Alternative B Design and implement existing plans and policies for transportation improvements.
- Build the Alternative B Design, implement existing plans and policies for transportation improvements, and additional projects to improve transportation.

The recommended transportation system includes the Alternative B interchange, implementation of existing plans and policies, and additional projects subject to further review and analysis. Multi-modal road widening projects include Highway 99W, 72nd Avenue, Kruse Way, Bonita Road, Carman Drive and adding a crossing over Highway 217 from Hunziker Street to Dartmouth Street. Other system recommendations include further study of suburban transit service planning, improvements to bikeways and sidewalks at the interchange and on surface streets, and inclusion of transportation demand management strategies.

Implementation. The Implementation section in Exhibit A describes further technical work as well as alternative funding strategies necessary to implement the preferred interchange

design and the transportation system improvements recommended in the plan. Existing programmed funds in the State Transportation Improvement Program (STIP) total $21.7 million. Interchange Alternative B can be constructed in two phases. The estimated cost of Phase 1 is $39.5 million, a shortfall of $17.8 million. The estimated cost of Phase II construction is $7.7 million.

TPAC, JPACT and Metro Council endorsement is the next step in the implementation process, prior to ODOT proceeding with final I-5/ Highway 217 interchange design. The next steps toward implementation for ODOT include final design in late 1995, with construction scheduled for 1998. Right-of-way acquisition will occur in about one year. ODOT will continue to work with Metro to obtain any additional funds needed for Phase I construction. Also, the I-5/Highway 217 Subarea Transportation Plan system recommendations will be considered as part of the Regional Transportation Plan update in 1996.

EXECUTIVE OFFICER'S RECOMMENDATION

The Executive Officer recommends approval of Resolution No. 95-2232.