South Portland Circulation Study

Report and Recommendations



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Photos on front cover clockwise from top left: South Portland Circa, 1881. Oregon Historical Society, #OrHi5505 SW First Avenue (Naito Parkway) at Caruthers St. looking south, 1920's. Oregon Historical Society, #OrHi47144 West end of the Ross Island Bridge, early 1930's. Oregon Historical Society, #OrHi52595 Ross Island Bridge ramps under construction, 1947. Oregon Historical Society, #OrHi100197

SOUTH PORTLAND CIRCULATION STUDY

Report and Recommendations



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Table of Contents

Executive Summary and Recommendations
Chapter 1- Introduction and Background 1 Here's What the Study Area Looks Like Today 2 We Have Been Here Before Recent Transportation History of the South Portland Area 3 This Study's Process 3 What Problems Are We Trying to Solve? 4 The Study's Objectives 4 Other Studies, Plans and Projects Affecting the Study Area 5
Chapter 2- Existing Conditions 7 Population Change 7 Household Income/Rents 8 Existing Travel Through the Study Area is Complicated 11 Transit Travel 11 Pedestrian and Bicycle Network Issues 11
Chapter 3- Transportation Alternatives Studied15The Universe of Alternatives15Regional Connectors27Traffic Analysis of the Five Alternatives27The Finalists30Neighborhood Development Opportunities30Evaluation of Each Alternative and Criteria Measures31Summary of the Negatives and Positives of Each Alternative40
Chapter 4- Comparison of the 2015 Travel Forecasts
Chapter 5- Public Outreach 45 The Joint Citizen and Technical Advisory Committee 45 Additional Public Meetings/Neighborhood Meetings 45 Open House Events 46
Chapter 6- Policy Analysis 49 Regional Transportation Plan 49 City of Portland Transportation Element 49 Other Relevant Goal 6 Transportation Policies 50
Chapter 7- Implementation and Costs 53 Implementatoin and Phasing 53 Order of Magnitude Project Costs 53

List of Figures and Tables

Figure 1 - Recommended Alternative 5A, Illustrative Plan & Prototypical Cross Section vi, v
Figure 2 - Study Area
Figure 3 - Here's What the Study Area Looks Like Today
Figure 4 - Population Change (1990 to 1996)7
Figure 5 - Average Single Family Home Sales Price
Figure 6 - Average Rents
Figure 7 - Land Use
Figure 8 - Transit Service 12
Figure 9 - Pedestrian and Bike Needs
Figure 10 - Alternative 2
Figure 11 - Alternative 3
Figure 12 - Alternative 4
Figure 13 - Alternative 5 23
Figure 14 - Alternative 5 Option
Figure 15 - Regional Connectors
Figure 16 - Alternative 2: Naito Parkway as an Urban Arterial Street
Figure 17 - Alternative 4: Naito Parkway as a Limited Access Boulevard
Figure 18 - Alternative 5A: Naito Parkway as a Local Street
Figure 19 - Evaluation of Each Alternative
Figure 20 - 2015 PM Peak Hour Travel Forecasts - Alternative 2
Figure 21 - 2015 PM Peak Hour Travel Forecasts - Alternative 4
Figure 22 - 2015 PM Peak Hour Travel Forecasts - Alternative 5A 44

Table 1 - Portland City Household Income	. 7
Table 2- Household Income in the Study Area	. 8

I. PREFACE

The South Portland Circulation Study recommendations provide a long-term vision to guide transportation improvements that will reconnect the Lair Hill neighborhood and surrounding area as shown on the study area boundary map in Figure 2.

The Plan's primary objective is to separate regional from local traffic by removing the Ross Island Bridgehead ramps. This can be acheived by streamlining the connection between the Bridge and its connections to the I-5 and the I-405 freeways as well as changing the character of SW Naito Parkway to fit better with the surrounding neighborhood.

II. RECOMMENDATIONS OF THE JOINT CITIZEN AND TECHNICAL ADVISORY COMMITTEE

Adopt Alternative 5A, as shown in Figure 1, as the transportation concept plan for further study and refinement. Direct the Office of Transportation (PDOT) to proceed with preliminary engineering, as funds become available.

Alternative 5A would change Naito Parkway into a roadway with one lane of traffic in each direction and parallel on-street parking on each side. It would reconnect, wherever feasible, the east-west streets where they intersect Naito Parkway. Under this concept, Naito Parkway would resemble the current streets within the Corbett/Lair Hill Neighborhood and it would operate as a neighborhood collector street.

During the preliminary engineering phase, PDOT shall address the following unresolved issues:

- Whether there is a need to remove onstreet parking on Naito Parkway in the peak hours/peak direction of traffic flow to accommodate an additional lane of traffic.
- 2. The specific cross section design of Naito Parkway.
- 3. The design of Naito Parkway at the intersection of east-west streets.
- 4. The design of the reconfigured Ross Island Bridge ramps.
- 5. The design of the intersection of Naito Parkway and Kelly Way to determine if the existing grade separated intersection can successfully operate and provide a better gateway as an at-grade intersection.
- 6. Provisions for north-south bicycle traffic through the neighborhood.
- The need to mitigate any regional traffic impacts in the Corbett/Terwilliger/Lair Hill (CTLH) Neighborhood due to these recommended changes to Naito Parkway.

III. WHY RECOMMEND ALTERNATIVE 5A?

This alternative comes closest to meeting the adopted general objectives of the study:

- Reunite the Lair Hill community by reconnecting the east-west street grid across Naito Parkway.
- 2. Provide a sense of community by turning former rights-of-way currently used as bridge ramps and travel lanes into developable land for private investment in housing and commercial uses.
- Take non-local, regional traffic out of the heart of the Lair Hill Neighborhood by providing improved connections between the Ross Island Bridge, I-405, I-5, and Downtown.

- 4. Respect the historic character of the Lair Hill neighborhood by encouraging development that is in keeping with the urban design motif of the neighborhood.
- 5. Increase opportunities for multi-modal travel including access to the Willamette River.

IV. BACKGROUND

- Neighborhood History. The Corbett and Lair Hill neighborhoods are remnants of what was once Portland's oldest and strongest ethnic community - South Portland. Today these two neighborhoods have some of the best examples of turn-of-the-century architecture, and the neighborhood recently became a National Historic District.
- 2. Harbor Drive. In 1943 the State constructed Harbor Drive along the downtown waterfront as a part of the interstate highway system which extended across the Steel Bridge, then north along Interstate Avenue to the Columbia River and Vancouver. This project included widening the roadway currently called Naito Parkway as it went through South Portland. Later changes in 1950 and 1970 enhanced connections between the Ross Island Bridge and Naito Parkway, further dividing the CTLH Neighborhood and routing regional traffic into an established urban neighborhood.
- 1978 Plan. In the mid 1970s the Portland Bureau of Planning undertook a study of South Portland and its traffic conditions. The plan, which recommended closing Front Avenue (Naito Parkway) to all vehicular traffic, did not receive City Council approval. However, the Council reassured the CTLH Neighborhood Association that the city would reconsider the plan

pending improvements to the interchange of I-5 and SW Terwilliger Blvd. The improved 1-5/Terwilliger interchange opened in 1992. Since this 1978 plan, CTLH's goals have been to downsize SW Naito Parkway and to reunite the Corbett and Lair Hill sides of the neighborhood.

 Current Plan. In August 1992 the Corbett/Terwilliger/Lair Hill Neighborhood Association testified before City Council and requested that Council initiate a new, updated South Portland Circulation Study. The Council ultimately approved this request, and in April 1997, the TAC/CAC held its first meeting with PDOT and its team of consultants.

V. EXISTING TRANSPORTATION PROBLEMS

From a motorist's perspective, Naito Parkway and its ramped connections to the Ross Island Bridge look and feel like a freeway interchange. Grade changes and curves are smooth and gradual. There are no impediments to speed. But the neighborhood perspective is quite different. There are only a few spots along the length of Naito Parkway where local users can get on or off the system. Barricades at Naito Parkway prevent local east-west streets from crossing.

The effect is to divide the study area into three small neighborhoods. The current system of roads does not connect the South Portland neighborhood; rather it acts as a barrier. There is only one direct connection for vehicles and pedestrians between Lair Hill and Corbett, an underpass at SW Grover. There are no direct vehicular connections between the parcel containing the Northwest Naturopathic College and its neighborhoods to the west and south.

VI. THE PLANNING PROCESS

PDOT formed a joint Technical Advisory Committee (TAC) and Citizen Advisory Committee (CAC). This Committee has guided the study throughout its life. They helped develop the study objectives, the evaluation criteria, and the alternative plans. The TAC/CAC hosted two open houses during the course of the study. Finally, the Advisory Committee adopted the recommendations in this report.

The TAC/CAC used a consensus-building approach rather than voting to make decisions. Majority viewpoint, compromise and adherence to study objectives formed the basis for their actions.

VII. ALTERNATIVES STUDIED

The TAC/CAC developed five transportation alternatives to represent a broad range of options. After one open house and review of the technical analysis, the TAC/CAC narrowed the choice to the three alternatives listed below. The recommended Alternative, 5A, was crafted from these three alternatives, additional technical analysis and an additional open house presentation to the community.

The three alternatives seriously considered were: *(see Figures 16, 17, and 18)* Alternative 2: Naito Parkway as an Urban Arterial Street.

Alternative 4: Naito Parkway as a Limited Access Boulevard.

Alternative 5A: Naito Parkway as a Local Street.

VIII. RELATED PROJECTS

There are a number of regional system projects that are related to the long- term vision of this study but are not prerequisites for the recommended improvements cited above. These regional connections will significantly improve South Portland's access, circulation and environment by removing the heavy through traffic volumes destined for I-5, I-405, the Ross Island Bridge and Macadam Avenue from neighborhood local streets and shifting them to new regional highway connections. The regional system connections identified by this study and the Oregon Department of Transportation (ODOT) in their I-405 Reconnaissance Study include:

- 1. Direct ramp connections from the Ross Island Bridge to northbound I-405.
- Direct ramp connections from southbound I-405 to the Ross Island Bridge.
- 3. Direct ramp linkages between I-405 and Macadam Avenue.

IX. ADMINISTRATIVE RECOMMENDATIONS:

- Continue to work with the Oregon Department of Transportation (ODOT) to further develop, analyze and evaluate regional connections that will significantly improve South Portland's access, circulation and environment. This can be accomplished by removing regional traffic currently directed through the Lair Hill neighborhood and redirecting it to new or improved regional ramp connections to I-5, I-405, and the Ross Island Bridge.
- Continue to work with Tri-Met to design a Transportation Demand Management (TDM) program.

- Continue to work with Metro and ODOT to program and fund all elements of the study's conceptual design for local and regional facilities.
- Continue to work with the Portland Development Commission (PDC) to attain the study's land use and urban design objectives including increasing the opportunities for further housing, community centered retail and

commercial development along Naito Parkway and at the west end of the Ross Island Bridge in the area currently occupied with the bridge ramps.

 Define a specific monitoring and evaluation program to determine locations for future traffic calming within the Lair Hill neighborhood to protect against cut through traffic.



ILLUSTRATIVE PLAN by StastnyBrun, Architects



* Curb to curb cross section depends on need for on street parking or turn lanes.

ALTERNATIVE 5A-FIGURE 1 INSERTED HERE (11 X 17 COLOR) PRINT FROM DIGITAL FILE BLANK (BACK SIDE OF FIGURE 1)



The Corbett and Lair Hill neighborhoods are remnants of what was once Portland's oldest and strongest ethnic community- South Portland. transit, bicycle and pedestrian access in an area that, because of its land uses, historic character and proximity to downtown, should be a haven for such modes.

Over the years, development patterns in this area have physically divided neighborhoods, and regional traffic has degraded neighborhood access, circulation, safety and livability. This area is completely bisected by the important regional I-5 transportation corridor, which is squeezed between the Willamette River and Portland's West Hills. Incremental and piecemeal development of this and other major transportation corridors (US 26, Macadam Avenue and Barbur Boulevard) through South Portland has resulted in poor connections between major corridors as well as poor neighborhood connectivity. Moving between and on to these routes often requires traveling on local residential streets. Pedestrians crossing Naito Parkway must use unpleasant or inconvenient pedestrian bridges or tunnels. Traffic conflicts and congestion degrade

Figure 2 STUDY AREA



Figure 3 HERE'S WHAT THE STUDY AREA LOOKS LIKE TODAY

The South Portland Circulation Study area is a collection of quiet local streets, vestiges of old primary state routes and regional transportation connections between I-5, I-405 and the Ross Island Bridge as these photos show.



6. Corbett Ave. looking North.

5. West end Ross Is. Bridge access looking north.



1. Naito Parkway looking north at SW Hooker pedestrian overcrossing.



2. Naito Parkway frontage ramp looking north to the Kelly intersection.



 Westbound on Kelly looking toward Naito Parkway bridge.



 Foreground: Naito Parkway entering tunnel connection to southbound Barbur Blvd. Background: Naito Parkway northbound viaduct.

WE HAVE BEEN HERE BEFORE..... RECENT TRANSPORTATION HISTORY OF THE SOUTH PORTLAND AREA

South Portland's current transportation system is actually a "layer cake" of transportation history that reflects the evolution of Portland's transportation system since its early days. Changes in transportation technology over time, from horses and walking to the streetcar and automobiles meant continual modification of the area's street network. Squeezed between the Willamette River and the West Hills, the study area has been increasingly influenced by on-going regional travel demand south of downtown Portland.

The problems facing this area of Portland are not new, and this is not the first time the city has studied these issues. In 1978, the city explored the feasibility of transportation and redevelopment projects within the South Portland area and reached several key conclusions (*South Portland Circulation Study*, Portland Bureau of Planning, 1978):

- The South Portland area is critical as a corridor for the movement of both regional and city traffic, and as a point of access to downtown Portland.
- Traffic movement in the South Portland area is currently inefficient and confusing, and this results in a number of negative impacts upon the residential community.
- There are several alternative transportation plans which could reduce the confusing inefficiencies of traffic movement within the South Portland area and improve the quality of the neighborhood environment.
- Potential transportation improvement plans could also result in freeing up certain areas now poorly used in the

street system. In trun, this could provide the opportunity to redevelop these areas revitalizing the existing Corbett and Lair Hill residential neighborhoods and adding significantly to Portland's inner-city housing stock.

This 1978 study recommended that:

- A management plan be developed for traffic approaching the South Portland area to ensure the smooth operation of the arterial street system within that area during future peak periods.
- Further development of the transportation alternatives developed by this study should be undertaken through the accomplishment of environmental impact analyses and preliminary engineering activities.
- Further definition of the community redevelopment opportunities associated with the transportation improvement plans is required.

THIS STUDY'S PROCESS

This study was guided by input from a joint technical and citizen advisory committee that met monthly for the life of the project. These two groups helped develop the study objectives; developed and evaluated alternatives; provided a two-way dialogue between the neighborhoods and agencies they represented; and crafted the recommendations. Broader citizen input was gathered through two open houses. The citizen involvement program is discussed in more detail in Chapter 5. The Portland City Council directed the Office of Transportation to proceed with a fresh look of the issues outlined above. PDOT secured federal funds to complete the transportation analysis by a team of consultants, and the City provided the services of a team of urban designers and economic analysts.

WHAT ARE THE PROBLEMS WE'RE TRYING TO SOLVE?

- Over time the Lair Hill community has become a crossroads for many of the region's vital transportation links like I-405, I-5 and the Ross Island Bridge.
- As the system grew, regional traffic was routed along local and collector streets in this area instead of building freeway ramps.
- The community has been physically split in two parts and separated from the Willamette River and downtown due to incremental road building.

This Study Looks At:

- Ways to reconnect the Lair Hill/South Downtown area to the regional system by reshaping some of its existing connections.
- Redesigning SW Naito Parkway between SW Hamilton and I-405 to reconnect the east-west street grid for all modes and improve the streetscape design to be in keeping with the neighborhood.
- An assessment of the market for commercial and housing uses in areas where existing rights-of-way can be used for new purposes other than transportation.

The Study's Objectives Are:

- Reduce traffic through the neighborhood. Improve access for vehicles, pedestrians, and bicycles within the neighborhood.
- Put local traffic on local streets and regional traffic on regional roadways. Simplify and clarify traffic patterns.

- Reconnect the grid system of local streets in the neighborhood. Reunite the neighborhood and remove barriers to free movement for all forms of transportation within the neighborhood.
- 4. Improve traffic safety for vehicles, pedestrians and bicycles throughout the study area. Reduce or remove known hazards.
- 5. Improve pedestrian, bike and mass transit connections into the neighborhood and throughout the study area.
- 6. Improve neighborhood access to the Willamette River, with an emphasis on pedestrian and bicycle access.
- 7. Protect, preserve and enhance the historic nature of the neighborhood, with emphasis on the street patterns and the scale and pattern of new development.
- 8. Develop a plan to provide new and redeveloped housing for a range of income levels and densities comparable to the existing neighborhood.
- 9. Provide open spaces and park areas keeping with the urban character of the neighborhood.
- 10. Develop a neighborhood center that provides opportunities for civic buildings, convenient shopping, etc.

OTHER STUDIES, PLANS AND PROJECTS AFFECTING THE STUDY AREA

Other studies and plans currently underway or completed will affect the South Portland Circulation Study. Those with the greatest impact are summarized below. The complete overview of pertinent plans and projects is located in the Appendix.

Willamette River Crossing Study. Metro's South Willamette River Crossing Study evaluated and prioritized crossing improvements between the Marquam and I-205 Bridges. Several crossing options were studied. The options included:

- Using the existing Ross Island Bridge with improved connections to I- 405. Constructing a new bridge adjacent and parallel to the Ross Island Bridge with improved connections to I-405.
- Replacing the Sellwood Bridge as either a two-lane or four-lane facility.
- Building a new bridge between Riverwood and Milwaukie, linking OR 43, OR 99E and OR 224.
- Building a new bridge in the vicinity of the existing railroad bridge, linking River Road and McLoughlin Boulevard (99E).
- Building a new bridge between south of Lake Oswego and Oak Grove, linking OR 43 and McLoughlin Boulevard.

Out of these alternatives and public discussion, METRO recommeded that the Sellwood Bridge be reconstructed as a two lane facility (as it is today) and that no new vehicular capacity be provided.

North Macadam District Framework Plan and Urban Renewal Plan. The Portland Development Commission (PDC), with assistance from a Steering Committee, developed a plan that defines the goals, objectives and overall vision intended to guide the redevelopment of the North Macadam District. It also describes an implementation strategy which: a) proposes actions to be undertaken by the public and private sectors to achieve the vision and b) conceptual amendments to the City's Comprehensive Plan and development code to support the vision. The City Council adopted the Framework Plan in 1997. Discussion of transportation system and parking improvements are embodied in the Development Plan portion of the Framework Plan.

The Urban Renewal Plan shares similar goals and objectives with the Framework Plan but is not part of it. The Urban Renewal Plan is critical to the implementation of the Framework Plan. It identifies and funds many of the public investments, and it leverages the private investments required to attain the vision.

Southwest Community Plan. The Southwest Community Plan worked with neighborhoods to examine existing zoning, and it proposed changes that will strengthen these areas as urban pedestrian neighborhoods. Changes proposed for the South Portland study area focus on creating a more mixed-use area that will protect the existing historic structures and enhance the residential quality of the neighborhood. The Planning Commission has had many study sessions on this issue, and the City Council will complete it's review and adoption this summer.

I-405 Reconnaissance Study. This reconnaissance analysis evaluated

reconnaissance analysis evaluated improvements to the operation of I-405 and its east -west connections. It involved three distinct tasks:

- I-405 operations analysis.
- Ross Island Bridge to I-405 connections.
- South Willamette River crossings engineering analysis.

Several alternatives were proposed for the Ross Island Bridge to I-405 connections and reviewed for their engineering merit.



his chapter presents graphic information about existing conditions in the study area. Proposed solutions will address issues identified by the existing conditions analysis.

20%

South Portland is a diverse area with many different land uses. The area has a mix of single- and multifamily housing and commercial uses. Offices are located primarily north and south of the study area, and there is only minimal retail activity. The area is dotted with historic buildings. While South Portland is close to the river, it has limited parks and open space. (See Figure 7, page 9)

Population Change

Over the past 15 years, the South Portland area has experienced population growth at a slightly higher rate than the entire city.





Source: Claritas, Inc., Portland State University for Population Research and Census, The Real Estate Report and Leland Consulting Group.

Area Income

Income in South Portland is higher than in the city as a whole.

PORTLAND CITY HOUSEHOLD INCOME					
Income	1989	1996	1989-1996	2001	1996-2001
	(Census)	Estimate	% Change	Projection	% Change
Per Capita	\$14,606	\$19,718	35.00%	\$25,183	27.70%
Average Household	\$33,773	\$45,586	35.00%	\$57,916	27.00%
Median Household	\$25,746	\$33,207	29.00%	\$40,916	23.20%

Table 1

Source: Claritas, Inc., and Leland Consulting Group.

Table 2 HOUSEHOLD INCOME IN THE STUDY AREA

Income	1989	1996	1989-1996	2001	1996-2001
	(Census)	Estimate	% Change	Projection	% Change
Per Capita	\$21,866	\$30,366	38.90%	\$39,707	30.80%
Average Household	\$36,968	\$51,194	38.50%	\$65,987	28.90%
Median Household	\$27,557	\$39,750	44.20%	\$51,201	28.80%

Source: Claritas, Inc., and Leland Consulting Group.

The 1996 estimated median household income for South Portland was \$39,750. The median income for the city as a whole was \$33,207.

While much of the housing in the area is older detached housing, newer townhouses and apartments are part of the real estate mix. Both rent and sale prices are higher in the study area than in the city as a whole.



Figure 5

Region



Figure 6

The majority of the detached housing was built around the turn of the 20th century, and many have historic designations. Scattered infill, primarily of rowhouses and duplexes, has taken place during the past several decades. The net number of housing units increased from 1,105 to 1,445 between 1980 and 1996. This area has numerous rental units. Its proximity to transit, the freeway downtown and OHSU makes this area attractive to renters, especially young professionals and students with financial resources.

INSERT FIGURE 7 LAND USE MAP (11 X 17- COLOR) PRINT FROM DIGITAL FILE

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EXISTING TRAVEL THROUGH THE STUDY AREA IS COMPLICATED

Several major travel corridors traverse the study area creating confusing travel patterns bringing a lot of traffic through the area. Over the years the transportation system has grown more convoluted as the transportation system has expanded to support increased numbers of trips. South Portland is truly a regional crossroads on the way to many different destinations. Travel routes within the study area include:

- Trips to and from I-5 from downtown and the Ross Island Bridge.
- Trips to and from I-405 from Macadam Avenue and the Ross Island Bridge.
- Trips to and from Macadam Avenue from the Ross Island Bridge, I-5, I-405 and downtown.
- Trips to and from Barbur Boulevard from the Ross Island Bridge, I-5 and downtown.
- Trips to and from the Ross Island Bridge from Macadam Avenue, I-5, I-405 and downtown.

A snapshot of 1994 (base year of analysis) p.m. peak hour traffic volumes for key streets within the study area were:

• • • • • • • • • •
2,630
3,300
1,650
1,935
3,180
765

South Portland also has some of the highest accident locations in the city as measured against the number of vehicle miles traveled systemwide. The key location of safety concern is at the west end of the Ross Island Bridge. The second highest accident location in the city is the Naito Parkway connection to the Ross Island Bridge. The 25th highest site of accidents is the intersection of Kelly Avenue and Whitaker Street. An additional five high accident sites are located in this area.

TRANSIT TRAVEL

The study area has numerous north-south Tri-Met routes but only minimal transfer capabilities near the west end of the Ross Island Bridge. The linear nature of major north-south arterials and streets, coupled with the lack of east-west connector streets, has resulted in somewhat diminished transit service. Good, high frequency service is generally available to downtown Portland and the western boundaries of the south waterfront development. Although one cross-town line does provide service to the OHSU medical campus, most other destinations require transfers along the Transit Mall, downtown. North-south service is located on Barbur Boulevard, Naito Parkway and Macadam Avenues; because of barriers, it is difficult for residents who do not live along these streets to access these routes.

PEDESTRIAN AND BICYCLE NETWORK ISSUES

Walkers and bicycle riders have a difficult time getting around this neighborhood because it is so divided by busy streets and highways. The Naito Parkway viaduct is an above-grade facility requiring walkers to use tunnels. In other places, an at-grade Naito Parkway is so wide (eight lanes) that pedestrians must cross on bridges. The Ross Island Bridge ramps create a north-south barrier, and I-5 prevents access to the river. There are numerous unsafe pedestrian crossings, and bicycle facilities are limited.

Figure 8 TRANSIT SERVICE







SOUTH PORTLAND CIRCULATION STUDY

n order to determine the best alternative for the study area, citizen and technical group members identified a range of options. Through a process of listing pros and cons, the group defined five alternatives and then selected three finalists. This chapter briefly discusses the five options. It then goes into greater detail about the three final options.

THE UNIVERSE OF ALTERNATIVES

Through a process that included brainstorming and identifying a wide range of possibilities, five alternatives were selected. These options focused on ways to improve Naito Parkway as the main street in the neighborhood, while allowing through traffic to use either Barbur Boulevard or Kelly Way/Arthur/1st Avenue to access the bridge and downtown. These options were analysed with and without a set of regional connectors to improve the operations of the major regional arterials in the area.

Alternative 1- Base Case- "Do Nothing": Maintain Naito Parkway and the surrounding street system as they exist today as a baseline alternative. (no map)

Alternative 2- Naito Parkway as an Urban Arterial Street: The Naito Parkway viaduct would be removed and Naito Parkway would be redesigned with traditional intersections for pedestrian crossings, street front development, and improved neighborhood vehicle circulation. This alternative may increase travel times for through movements on Naito Parkway between southwest Portland and downtown and the Lloyd Center. Alternative 3- Construct a New Arterial Bypass Connecting Kelly Way North of the Ross Island Bridge with Barbur Boulevard at Hamilton Street: This option would move traffic from Naito Parkway to the new arterial street. This would create the opportunity to change the character of Naito Parkway and improve freeway access to the North Macadam District. This alternative would require extensive construction and would be costly in terms of both transportation improvements and properties acquired or disrupted for the new Hood Avenue and Hamilton Street widening.

Alternative 4- Naito Parkway as a Limited Access Through Boulevard: This alternative would maintain vehicle access to and from downtown and Lloyd Center. However, it would limit pedestrian crossing opportunities.

Alternative 5 - Naito Parkway as a Local Street: In this option the viaduct at Kelly Way would be removed and Naito Parkway would be designed to discourage through traffic. This would be accomplished through decreasing the number of travel lanes and using traffic calming techniques to slow traffic. Naito Parkway would be closed to through traffic at Barbur Boulevard, which would shift traffic to Barbur Boulevard potentially slowing its travel speed and adding some congestion.

Alternative 5 Option- Naito Parkway as a Local Street and Add a Direct Connection Between the Ross Island Bridge and Barbur Boulevard: While the redesign of Naito Parkway as a local street would strengthen east-west connectivity, the Ross Island Bridge-Barbur Boulevard direct connection would bisect the neighborhood and dislocate existing land uses.

SOUTH PORTLAND CIRCULATION STUDY

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INSERT ALTERNATIVE 5 OPTION- FIGURE 14 11 X 17 COLOR COPY (PRINT FROM COLOR HARD COPY) **BLANK**

REGIONAL CONNECTORS

While the alternatives discussed above focused on the function of Naito Parkway, each could be coupled with one or all of the set of regional connector improvements meant to simplify travel for regional trips, reduce accidents, and discourage through travel on local streets. (See Figure 15 on page 29)

The regional connectors options include:

- Direct ramps between Capitol Highway and I-5 to and from the north.
- A direct ramp from northbound Macadam Avenue and I-5 to the Ross Island Bridge.
- A signalized connection to the Ross Island Bridge approach for the ramp from northbound Macadam Avenue and I-5.
- A direct ramp from the Ross Island Bridge approach to Hood Avenue and southbound Macadam Avenue and I-5.
- A direct ramp to Hood Avenue from southbound I-405 to I-5 ramp.
- A direct ramp from the Ross Island Bridge to northbound I-5 to I-405 ramp.

BENEFITS OF THE REGIONAL CONNECTORS

With the regional connectors all alternatives:

- Provide for redevelopable lands at the west end of the Ross Island Bridge.
- Include new freeway connections that divert through traffic away from local streets.
- Eliminate high accident locations at the west end of the Ross Island Bridge.
- Eliminate weave problems on Hood Avenue.
- Provide alternative connections between Macadam Avenue and downtown.

Reduce traffic to and from I-5 cutting through the Corbett/Lair neighborhood.

TRAFFIC ANALYSIS OF THE FIVE ALTERNATIVES

To determine the effects of these alternatives on future traffic flow, this study applied the regional EMME/2 year 2015 travel forecasting model to the alternatives. The following summarizes the major findings:

- Expanding the Ross Island Bridge to Six Lanes: Attracts significant volumes of additional traffic. Eastbound p.m. peak hour volumes will increase by about 1,000 to 4,500 and westbound p.m. peak volumes will increase by about 500 to 3,000 trips.
- Alternative 1- Base Case-" Do Nothing": Increasing traffic volumes in the future will increase traffic congestion on the main arterials including Naito Parkway, Barbur Boulevard, the Ross Island Bridge, I-5 and I-405. It will also increase the volume of through traffic infiltrating neighborhood streets.
- Alternative 2- Improve Naito Parkway as an Urban Arterial Street: Increasingly heavy volumes of nonlocal traffic will continue to Naito Parkway; this street would need five lanes to ensure adequate levels of service for traffic.
- Alternative 3- Construct a New Arterial Bypass Connecting Kelly Way North of the Ross Island Bridge with Barbur Boulevard at Hamilton Street: The new Hamilton-Hood-Kelly bypass will not attract much of the through traffic that would otherwise use the

Naito Parkway viaduct. Peak hour peak direction southbound volumes would increase about 65 percent, and through traffic volumes on Corbett Avenue, Kelly Avenue and other neighborhood streets would increase, although not as much.

- Alternative 4- Retain Naito Parkway as a Limited Access Through Boulevard: Basic traffic flows and volumes would not be affected.
- Alternatives 5 and 5 Option Naito Parkway as a Local Street With and Without a Direct Connection to the Ross Island Bridge and Barbur Boulevard: Some of the through traffic that would otherwise use the Naito Parkway viaduct will shift to Barbur Boulevard, but most of it will continue to find its way through the neighborhood on local streets such as Corbett Avenue and Kelly Avenue.

Figure 15 REGIONAL CONNECTORS



THE FINALISTS

Of the five alternatives discussed above, three alternatives were selected for further investigation by the Advisory Committee and public comment from an open house. Alternative 3 - New Arterial Bypass was dropped because it creates problems on Barbur Boulevard and requires significant resources in terms of capital costs and rightof-way impacts. Alternative 5 Option - Local Street with Connections to Barbur Boulevard was dropped because the proposed Woods extension from the bridgehead to Barbur Boulevard would disrupt the neighborhood by bisecting it.

The three alternatives chosen for further study are: (See Figures 16, 17, & 18 on pages 32-37)

Alternative 2- Naito Parkway as an Urban Arterial Street: In this alternative, Naito Parkway is a five-lane street. There is onstreet parking. Grover Street is regraded and realigned to meet Naito Parkway. There is a direct at-grade connection to Barbur Boulevard; the existing tunnel is removed. There are at-grade intersections at Naito Parkway and Curry, Whitaker, Gibbs, Woods, Porter, Hooker and Meade Streets, some of which would be signalized.

Alternative 4- Naito Parkway as a Limited Access Boulevard: In this alternative, Naito Parkway is a four-lane boulevard with no onstreet parking. There is a tree-lined median preventing left turns in many places. The only full intersection with Naito Parkway is at Grover Street, although right turns in and out will be permitted where feasible. Alternative 5A- Naito Parkway as a Local Street: In this alternative, Naito Parkway is two lanes with on-street parking, bike lanes, widened sidewalks, and regraded to form full intersections at all east-west local streets. Although there are street connections to Barbur Boulevard, through traffic is "calmed" on local streets. These measures include the absence of turning lanes at most intersections and other techniques to improve the street for bicyclists and walkers.

NEIGHBORHOOD DEVELOPMENT OPPORTUNITIES WITH EACH ALTERNATIVE

Each alternative may support different development opportunities. The consultant team of economists, urban designers and transportation engineers looked at the best mix and scale of land uses that would support the neighborhoods planned vision for this part of the community. For example, introducing retail activities into the area requires that stores have visibility by passing automobiles. The study area has certain strengths and weaknessess in attracting retail development. Retail is more likely to occur in existing buildings at the street edge which do not exist in this segment. On the other hand, the proximity of the area to downtown may encourage retail potential. In all cases, reclaimed land now used as right-of-way for the Ross Island Bridge ramps could be redeveloped as a Lair Hill Village Center.

Alternative 2- Naito Parkway as an Urban Arterial Street: Supports major land redevelopment and some infill oriented to side streets. Commercial development along Grover Street and Naito Parkway near the intersection of these regional connectors would be auto-oriented. Commercial development that would be in keeping with the historic character of the neighborhood along Naito Parkway and would require a sizeable stock of vacant buildings or homes that could be converted to commercial businesses.

Alternative 4- Naito Parkway as Limited Access Boulevard: Supports a single major development that would play on the existing neighborhood texture.

Located in the bridgehead area east of Naito Parkway, this development could be focused inwardly toward the neighborhood and connected to the grid where possible. Connections at the street level on the east and west sides of Naito Parkway should be made as frequently as possible. The existing viaduct may be a way to make that connection. The residential side could be relatively high density.

Alternative 5A- Naito Parkway as a Local

Street: Supports neighborhood commercial activity and some activity at the north and south ends of Naito Parkway. Because Naito Parkway is a local street, it will not attract enough traffic to support anything other than neighborhood retail uses; however, Naito Parkway at Barbur Boulevard and Naito Parkway at Kelly Way can support regional commercial development.

EVALUATION OF EACH ALTERNATIVE

Evaluation of these three alternatives was approached from two ways. The joint Citizen and Technical Advisory Committee developed evaluation criteria based on the study objectives and applied them to the alternatives. Following that a summary of the negative and positive elements of each alternative was determined based on these same criteria. The evaluation criteria measures are summarized below and displayed in Figure 19.

EVALUATION CRITERIA MEASURES

Complies With Adopted State and Local Polices and Plans

Measure: Alternative does not conflict with the Region 2040 Plan, existing City land use designations, Transportation Element of the Comprehensive Plan, and the Central City Transportation Management Pan (CCTP); proposed street use complies with existing street classification.

- Major City Traffic Streets Barbur Boulevard, Arthur Street, Kelly Way, Hood Avenue, Naito Parkway north of Marquam Bridge, Macadam Avenue.
- Traffic Access Route Curry Street, Gibbs Street.
- Neighborhood Collector Corbett Avenue.
- Major Truck Street Macadam Avenue, Barbur Boulevard, Naito Parkway North of Ross Island, Kelly Way, Arthur Street.
- Major City Transit Street Arthur Street, Kelly Way, Hood Avenue.
- Regional Transitway and Major City Transit Street - Barbur Boulevard.
- Transit Access Street Moody Avenue, Macadam Avenue.
- Minor Transit Street Corbett Avenue.
- Central City Bikeway, Pedestrian and Transit Street - Moody Avenue.
- City Bikeway Corbett Avenue, Hamilton Court, Grover Street, First Avenue, Kelly Way, Barbur Boulevard.
- City Walkway Hamilton Court, Corbett Avenue, Porter Street, Hoover Street, Arthur Street, Sheridan Street, Hood Avenue, Kelly Way.

Figure 16 ALTERNATIVE 2: NAITO PARKWAY AS AN URBAN ARTERIAL STREET

ILLUSTRATIVE PLAN by StastnyBrun, Architects

LIMITED DEVELOPMENT Focus near regional connectors Auto-oriented development



Street Design Features

- 1. Allows SW Naito Parkway to be redesigned with traditional intersections for pedestrian crossings and street front development.
- 2. Provides for two travel lanes north and southbound and left turn opportunities for local street access, on-street parking, street trees and sidewalks.
- 3. Regrade and realign SW Grover or SW Woods to match SW Naito Parkway and connect to the Ross Island Bridge directly.
- 4. Street width may vary from 66 to 82 feet.
- 5. Remove tunnel at SW Barbur Blvd. and SW Naito Parkway providing a direct connection to SW Barbur Blvd.
- 6. Remove SW Naito Parkway viaduct at SW Arthur St. Regrade as traditional at-grade intersection.
- 7. Allows for limited, mostly auto-oriented development focused near Ross Island bridgehead. Some infill residential development possible on local streets.



ALTERNATIVE 2 CONCEPT DESIGN

Figure 17 ALTERNATIVE 4: NAITO PARKWAY AS A LIMITED ACCESS BOULEVARD



106' Usable Right-of-Way (Actual ROW varies)

Street Design Features

- 1. Retains the existing design treatment of SW Naito Parkway as a limited access facility that serves both through and local trips.
- 2. Provides for two travel lanes north and southbound, wide planted median to visually soften the street, no on-street parking, bike lanes, street trees at the curb edge and sidewalks added and improved.
- 3. Regrade and realign SW Grover St. to match SW Naito Parkway and connect to other local streets.
- 4. Right turn in and out of properties adjacent to SW Naito Parkway.
- 5. Street width curb-to-curb is wide to accommodate boulevard treatment.
- 6. Allows for possible single major destination development at the Ross Island bridgehead.

ALTERNATIVE 4 CONCEPT DESIGN



Figure 18 ALTERNATIVE 5A: NAITO PARKWAY AS A LOCAL STREET



PROTOTYPICAL CROSS SECTION



* Curb to curb cross section depends on need for on street parking or turn lanes.

Street design features

- 1. Changes the character of SW Naito Parkway from an arterial to a local street through redesign to a narrower street width.
- 2. Regrade SW Naito Parkway where necessary to intersect local streets. Regrade and realign SW Grover St. to meet SW Naito Parkway.
- 3. Provides for one travel lane north and southbound, left turn pockets where necessary for local access, on-street parking, bike lanes, street trees at the curb edge, sidewalks added and improved.
- 4. Remove tunnel at SW Barbur Blvd. and SW Naito Parkway, providing direct connection to SW Barbur Blvd.
- 5. Remove SW Naito Parkway viaduct at SW Arthur St. regrade as traditional at-grade intersection.
- Allows commercial development for local and regional users at the gateways to the area; residential and commercial infill on local streets.

ALTERNATIVE 5A CONCEPT DESIGN



Puts Traffic Where it Should Be

Measure: volumes on Corbett and Naito Parkway as a proxy for trips on local streets.

Improves Vehicular Safety

Measure: removes or improves high accident locations as identified by citywide analysis; limits potential conflict points.

Improves Bicycle/Pedestrian Safety

Measure: allows for improvements, addition of sidewalks, or facilities; eliminates conflict points; this is not a connectivity issue, pedestrian bridges or underpasses may be safer than street crossings.

Maintains or Improves Southwest Portland Connections to Regional Centers

Measure: travel time as measured by the addition of traffic signals that will slow traffic flow.

Improves Local Street Grids/Increases Number of Local Street Connections

Measure: number of local street connections or intersections in each alternative.

Unifies Neighborhoods - Removes Barriers Between Neighborhoods

Measure: major street or other barriers remaining in neighborhood.

Simplifies System - Maintains or Decreases Non-Local Trip Length

Measure: distance between Hillsdale and downtown Portland.

Provides Development/Redevelopment Opportunities Consistent with CTLH Goals

Measure: how well does alternative meet community goals of housing, economic development to serve community, the development of a community center, protection of historic structures and fabric.

Improves Pedestrian and Bicycle Access and Circulation in the Study Area

Measure: how well does alternative resolve modal issues identified.

Improves Neighborhood Access to Transit

Measure: percentage of neighborhood within 1/4 mile of transit and availability of pathways to transit.

Improves Transit Operations To and Through Study Area

Measure: minutes of additional bus delay from No Build Alternative.

Increases Land Available for Development/ Redevelopment

Measure: opportunity for land available.

Cost

Measure: comparison of costs of capital improvements.

These criteria were applied to the three promising alternatives through a process of discussion and review of technical information. The Advisory Committee's recommendation was selected using the above criteria and balancing the tradeoffs.

OVERALL

Alternative 5A meets more of the study's goals and objectives as well as evaluation criteria than any of the other alternatives.

Figure 19 EVALUATION OF EACH ALTERNATIVE

Evaluation Criteria	Does Not Support	Partially Supports	Fully Supports
Complies with adopted state and local policies and plans			
Puts local trips on local streets, through trips on regional facilities			
Improves vehicular safety			•
Improves bicycle/pedistrian safety			
Maintains or improves southwest Portland connections to regional centers (e.g. Downtown, Lloyd Center)			
Improves local street grids/increases number of local street connections			
Unifies neighborhoods; removes barriers between neighborhoods			
Simplifies system; maintains or decreases non-local trip length			
Provides development/redevelopment opportunities consistent with CTLH goals			1
Improves pedestrian and bicycle access and circulation in the study area			
Improves neighborhood access to transit			
Improves transit operations to and through the study area			
Increases land available for development/redevelopment			a
PRELIMINARY COST (excludes Ross Island Ramps)	Alternative 2= \$25.3M	Alternative 4= \$23.6M	Alternative 5A= \$21.7M
Alternative 2 Alternative 4	Alte	ernative 5A	

SUMMARY OF THE NEGATIVES AND POSITIVES OF EACH ALTERNATIVE

Alternative 2: Reconnect the Street Grid with SW Naito Parkway Boulevard Design THE NEGATIVES:

- Naito Parkway would be a five lane arterial which looks and operates similar to the existing design encouraging auto-oriented development near the bridgehead and limited residential development at the edges of the street face.
- Naito Parkway carries more traffic with this Alternative than 4 or 5A.

THE POSITIVES:

- Compared to the other alternatives, this one reduces traffic on Corbett/Kelly.
- Improves access between different sectors of the neighborhood.
- Meets more than half of the study's goals adequately.

Alternative 4: Naito Parkway as a Limited Access Boulevard

THE NEGATIVES:

- Does not reconnect the neighborhood as there are few new east-west street connections.
- Retains existing Naito Parkway design treatment as a limited access facility. More traffic on Naito Parkway than in Alternative 5A.
- Does not support the study's goals as well as Alternatives 2 or 5A.

THE POSITIVES:

- Improves appearance of Naito Parkway by providing 30 foot planted median.
- Less traffic on Corbett/Kelly than Alternative 5A.

Alternative 5A: Change the Character of SW Naito Parkway as a Local Street Design THE NEGATIVES:

May cause more traffic to divert to other local streets (if left unmanaged) than Alternatives 2 or 4 due to less street capacity on Naito Parkway.

THE POSITIVES:

- Provides a streetscape more in keeping with the neighborhood's character and improves access between areas now severed by Naito Parkway.
- Fully supports more of the study's goals than Alternatives 2 or 4.

Comparison of the 2015 Travel Forecasts

The following figures compare the "No Build" forecast traffic volumes during the p.m. peak hour in the year 2015. Although each of the three Alternatives can serve the study area's transportation needs from a capacity point of view, each has different attributes. The "No Build" or do nothing alternative, with some exceptions, will result in greater (or worse) traffic volumes than building any of the alternatives studied.

Alternative 2, designed as a five -lane arterial, would draw more non-local traffic to Naito Parkway than the other alternatives. With the level of traffic forecast, the study and neighborhood plan objectives would not be realized. More auto-oriented development would occur near the Ross Island Bridgehead and limit residential development at the edges of Naito Parkway. On a positive note, it would attract more traffic from local streets like Corbett Avenue. Both Alternatives 2 and 5A allow east-west street connections to be made which provide good pedestrian and bicycle access. Alternative 4, designed as a limited access facility with large median areas, would allow only a few east-west local street connections to be made. Traffic is projected to be greater on Naito Parkway than Alternative 5A but less than Alternative 2. Corbett/Kelly Avenue traffic is slightly more than the level in the southbound direction projected for Alternative 2 but slightly more than Alternative 5A. However, the objectives of reuniting the neighborhood with good alternative mode access would not be realized due to the amount of traffic and limited access.

Alternative 5A, designed as a local street, would appropriately shift more non-local traffic from Naito Parkway to Barbur Blvd. Likewise some traffic would shift to local streets within the study area if left unmanaged. The trade-off to be made is between greater accessibility and developability for all modes within the study area by reconnecting the east-west street grid vs. some increase in local traffic volumes.

Overall, Alternative 5A attains the study's objectives for both traffic operation as well as access and circulation better than Alternatives 2 and 4.

MARGUAMBRIDGE 210 1230 560 LINCOLN 1500 1040 220 WILLAMETTE RIVER 1710 111061 6 ← 1290 1030 % 530 160 760 OHSU 2390 ROSS ISLAND BRIDGE 3820 4830 → 2280 310 IJ GIBBS 870-> 15T 1470 **DOOH** NORTH MACADAM DISTRICT CORBETT 000 840 000 M (Corbett/Kelly) GAINES 530 CORBE 1720 1050 MACADAM Ł 2550 Legend No Build .3070 7680 2015 w/o Regional Connections 5 2015 with HAMILTON Regional Connections NORTH SCALE

Figure 20 2015 PM PEAK HOUR TRAVEL FORECASTS – ALTERNATIVE 2



Figure 21 2015 PM PEAK HOUR TRAVEL FORECASTS – ALTERNATIVE 4



Figure 22 2015 PM PEAK HOUR TRAVEL FORECASTS - ALTERNATIVE 5A

Public Outreach

From the beginning, this study has been driven by citizen interest in making their community more livable. Undertaking this analysis at this time is largely due to public demand to proceed on the Portland City Councils' twenty-year commitment to revisit the South Portland Circulation Study issues. It follows that public interest throughout the entire study process has run high.

THE JOINT CITIZEN AND TECHNICAL ADVISORY COMMITTEE (CAC/TAC)

To make the public process both informative and educational, a joint Citizen and Technical Advisory Committee was formed through solicitation from affected neighborhood associations, city bureaus and regional transportation agency staff.

The Advisory Committee was established in April 1997 with some basic parameters; their specific charge was to serve as a sounding board and review team to identify issues, set goals and objectives, formulate and evaluate alternatives, and arrive at a consensus recommendation to forward to the City Council.

The Advisory Committee has met approximately once a month over the life of the project. The project manager acted as the chair of the committee. Consensus or consent decision making was chosen over Committee voting.

The monthly Advisory Committee meetings developed goals and objectives and evaluation criteria at the outset of the project to lead decision-making. They also helped design the transportation network alternatives based on those directives. Allowing a diverse group of both technicians and lay persons to decide the parameters of the analysis teaches both groups about the others concerns. The outcome is a more informed advisory body that appreciates the difficulty of technical, political and practical trade-offs and decisions in a project as complex as this.

The composition of the Advisory Committee was set to provide balance from communities directly and indirectly affected by any proposed transportation circulation changes. With that charge representatives of the following groups and/or agencies were asked to participate in this group:

- Corbett/Terwilliger/Lair Hill Neighborhood Association
- Homestead Neighborhood Association
- South Burlingame Neighborhood Association
- Hillsdale Neighborhood Association
- Metro
- Southwest Neighbors Inc.
- Oregon Department of Transportation (ODOT)
- Tri-Met
- Oregon Health Sciences University (OHSU)
- Portland Bureaus of: Environmental Services Planning Fire Parks Police Portland Development Commission Transportation Engineering & Development Transportation Systems Management

ADDITIONAL PUBLIC MEETINGS/ NEIGHBORHOOD MEETINGS

The study falls within the purview of the clearinghouse for Southwest Portland neighborhood public outreach - the Southwest Neighbors Inc. (SWNI). Several meetings have been either held or hosted by

SWNI as part of a larger event to discuss the concepts of the South Portland Circulation Study.

Many individual neighborhood association meetings were held by staff to make sure that directly and indirectly affected residents, businesses and property owners have been involved in the major decision points throughout this study. The Advisory Committee members of each neighborhood association attended, acted as ambassadors to introduce the study's history, goals and objectives and alternatives at different points in the study's progress. Having involved citizens as sponsors provided a bridge between neighborhood association members, city staff and the study's process and progress. Reaction from neighborhood associations varied from intense positive interest to outright skepticism at the beginning of the study to general support for the transportation goals and design concepts. Issues of specific design modifications or directives of Naito Parkway were the most discussed and challenged. Further engineering design of the recommended concept for Naito Parkway will answer these operational issues.

One major universal notion has been accepted. Regional traffic should be diverted away from local and neighborhood streets through improvements to the ramping systems to/from the Ross Island Bridge, I-405 and I-5.

In addition, the notion of reuniting the Lair Hill neighborhood on both sides of Naito Parkway appeals to those directly and indirectly affected. Most folks understand the importance of getting rid of barriers and the need to physically be one community. Providing the recommended improvements to Naito Parkway will require physically regrading and reconnecting east-west streets over an eight to ten block area that are severed today by Naito Parkway.

Folks outside the Lair Hill community understand the real and visual importance of reconnecting the street grid as well as narrowing the width of Naito Parkway. They are willing to support that notion because of strong convictions in adjacent neighborhoods to complete similar work on different facilities.

OPEN HOUSE EVENTS

The first open house was held in the fall of 1997 to introduce the transportation study, its goals, objectives, history, existing data and circulation alternatives tested. Over 100 people attended the event and provided valuable comment about the alternatives tested, their impact on individuals and specific properties. A broad mailing to several thousand southwest postal addresses, plus media attention helped to increase the number of attendees and quality of comment.

In the summer of 1999, a second open house was held to showcase the leading transportation alternatives. Detailed results of the transportation modeling to assess future traffic conditions; an urban design scheme for development of excess public right-of-way; detailed transportation circulation drawings and sketches of the Naito Parkway roadway design all provided a snapshot pictorial of where the Advisory Committee started, what developed and where they were headed. Again, over 110 people attended the afternoon and evening event and had definite opinions about the three "leading" alternatives that had been advanced for further study by the Advisory Committee.

All comments received generally approved of the basic notion of removing regional traffic from local and collector roadways. The vast majority of those expressing an opinion sided with Alternative 5A which narrows the Naito Parkway curb-to-curb distance to accommodate just two travel lanes, one in each direction, turn lanes where necessary, a bike lane in each direction, on-street parking and wider sidewalks.

The runners-up in this "contest" were nearly a tie between the other two alternatives provided for discussion - Alternatives 2 and 4. Each continues with a four to five lane arterial similar to today's Naito Parkway; the design of Barbur/Naito Parkway and Arthur/ Kelly Way/Naito Parkway intersections received a great deal of comment. Most wanted to retain the Barbur viaduct and remove the Kelly Way viaduct.

A consistently positive response was received about the remodeling of the west end of the Ross Island Bridge ramps (total demolition) and future look at reconfiguration of some of the regional connections between the Ross Island Bridge, I-5 and I-405.

Although not working members of the Advisory Committee, representatives of the North Macadam Framework Plan Steering Committee attended the open house forums and kept abreast of overlapping interests between them and the Lair Hill neighborhood via PDC and PDOT staff working on both transportation projects and the establishment of an urban renewal district.

SOUTH PORTLAND CIRCULATION STUDY

REGIONAL TRANSPORTATION PLAN (RTP)

In August 2000, the Metro Council adopted the RTP to set a transportation blueprint for the future growth of the region. The RTP is based on the 2040 Growth Concept Plan which embodies the region's land use and transportation goals, shifting emphasis from a mostly road - oriented plan to a more multimodal one. The RTP in the Study area designates I-5 and I-405 as Principle Arterials (freeways); Naito Parkway south of I-405 as a Street of Regional Significance; Barbur Boulevard, 4th, 6th, Caruthers, Arthur and Kelly Way and the Ross Island Bridge ramps as Major Arterials. The only designation in conflict with the study recommendation is that of Naito Parkway. However, Metro has indicated that, on balance, the achievement of other transportation and land use goals makes this designation less important since the recommended design of Naito Parkway will change the character of use of the street from a facility for through and local trips to that of a local neighborhood collector-main street type of street.

The Public Transportation Map Designations shows Rapid Bus use on the 4th, 6th, Caruthers, Arthur, Kelly Way, Ross Island Bridge Ramps. Corbett and 1st are designated as streets for Regional Bus use, and Barbur Boulevard is shown as a Potential Light Rail or Rapid Bus corridor. All of those designations are supportive of the recommended alternative in that they provide for a connected, compact village atmosphere within the heart of the Lair Hill neighborhood by providing improved transit services to this area and the rest of the region.

The Regional Bicycle System designations show 4th, 6th ,and Barbur Boulevard as the Regional On-street Bikeway Corridors. The Ross Island Bridge is also shown as a Regional Corridor for an Off-street Bikeway. These designations support the multi-modal approach to transportation circulation that is recommended in the Plan.

The Regional Pedestrian System designations show Transit/Mixed Use Corridors on the Naito Parkway/Kelly Way/Ross Island Bridge corridor and on Barbur Boulevard. Both are supported by the recommended Plan in that mixed land uses are planned for these areas and the rerouting of traffic away from the core of the Lair Hill neighborhood will support further intensification of development.

THE CITY OF PORTLAND TRANSPORTATION ELEMENT (TE) OF THE COMPREHENSIVE PLAN

City of Portland's Transportation Element of the Comprehensive Plan (TE) includes transportation policies, street classification descriptions and maps, and district policies that are adopted as part of the Comprehensive Plan. Its primary purpose is to establish a framework within which transportation projects and plans are developed and implemented within the City of Portland. The focus of this discussion is on the policies that are pertinent to the South Portland Circulation Study.

This study has a long history as a policy issue of import with the City Council and expressed as an area of interest in the TE. It was first identified in the 1977 edition of the TE policy document as an important area of study. Upon completion of the first South Portland Circulation Study, the City Council asked that the area be reanalyzed upon the completion of the Terwilliger Bridge reconstruction. In the Southwest District Policies - Policy 2 Accessibility states: "Provide direct interchanges between Regional Traffficways and Major City Traffic Streets. Improve accessibility for automobile and truck traffic on arterials and District Collectors to commercial and institutional centers. The City desires connectivity of streets, especially collectors."

The Policy goes on to say:

"Potential Actions: Implement the South Portland Circulation Study objectives in conjunction with I-405, North Macadam Avenue and Terwilliger Boulevard interchange improvements."

"the I-405 reconnaissance project should assess circulation issues which currently impact the Corbett-Terwilliger-Lair Hill neighborhood and businesses."

By completion of this study we have fulfilled the intent of these specific district policies in the TE.

The TE designations of Naito Parkway as a Local Service Street and the complex of streets (Arthur, Kelly Way, et al) leading to the Ross Island Bridge as Major City Traffic and Transit Streets support the Study's recommendations for removing the Ross Island Bridge ramps, moving the regional traffic to the edge of the Lair Hill neighborhood and changing the character of Naito Parkway to that of a Neighborhood Collector Street.

In general, the TE analyzes the functionality of the street, the way in which the City (as expressed by the community) would like the street to operate in the future considering the current and future adjacent land uses.

All streets have a designation in the TE. Most are Local Service Streets that provide for access from private property to a system of Neighborhood Collector Streets. In the study area, Naito Parkway south of Arthur Street is designated a Local Service Traffic and Transit Street which is intended to provide for trips between Local Service Streets and Major City Traffic Streets linking transportation districts. Barbur Boulevard has the dual designation of a Regional Transitway and Major City Traffic Street, City Walkway and Bikeway. Barbur Boulevard serves as the primary link between outer southwest Portland, downtown, the Lloyd District and Central Eastside as well as access to I-405 and I-5.

Both of the latter freeways are designated Regional Trafficways providing a regional crossroads both north-south and east-west. The Ross Island Bridge is designated in the Central City Traffic Management Plan as a Traffic Access Street linking the east and west sides of the Willamette River as well as providing access to the freeway system.

At the east edge of the study area Macadam Avenue is designated a Major City Traffic and Transit Street and City Walkway. Although Macadam Avenue does not provide direct access to streets in the study area, it attracts " cut through" traffic from the balance of the city and region. The Lair Hill neighborhood, unlike other mixed use residential and commercial areas, suffers from having too many major transportation facilities bisecting and the area.

OTHER RELEVANT GOAL 6 TRANSPORTATION POLICIES:

Policy 6.1 Intergovernmental Coordination From its initiation the South Portland Circulation Study has had a partnership with all other regional transportation agencies. They have served on the joint Citizen/ Technical Advisory Committee and have provided valuable input in all phases of the analysis.

Policy 6.2 Regional and City Travel Patterns

This policy encourges the use of the regional system for interregional traffic. One of this study's key objectives is to place regional traffic on regional facilities and local traffic on local streets. The recommended plan does so by pushing the through movement of traffic to the easterly edge of the neighborhood on streets that are currently directly connected to the Ross Island Bridge and the freeway system. The plan goes further to remove the regional parts of the transportation system from the heart of the community- the Ross Island Bridge ramps.

Policy 6.4 Coordinate Land Use and Transportation Planning

By calling on the expertise of an urban design and economics team of consultants, we were able to determine what implementation of the Comprehensive Plan means to the properties adjacent to Naito Parkway and the area " under" the Ross Island Bridge ramps. Several schemes were produced to look at different ways in which the land uses could be developed in the area now occupied by the bridge ramps. All of the options looked at totally integrating the transportation system improvements with the village center vision of the core area of Lair Hill.

Policy 6.5 Neighborhood Collector and Local Service Street Traffic Management

The Lair Hill neighborhood has gained the support of the City Council to have traffic management devices provided in the northerly portion of the neighborhood to diminish the impact of the future development of the North Macadam District. Some pre-existing traffic speed and cut through issues plague the neighborhood, especially on Corbett Avenue and some of the east-west streets that serve Corbett. Completion of this traffic management project is a first step to the resolution of this issue. The South Portland Circulation Study goes further and recommends that the City Council also determine if a similar traffic management program is needed in the area west of Naito Parkway to Barbur Boulevard once the east-west streets are reconnected.

Policy 6.6 Urban Form

The compact urban form of the geographic center of the Lair Hill neighborhood can be realized with the implementation of this plan. The existing Ross Island Bridge ramps would be demolished and removed under this plan. They would be replaced with the kind of multi-use development that the neighborhood plan and transportation policy support. Likewise, the east-west reconnection of streets as a result of these recommendations would enhance the overall mobility in the neighborhood especially to other modes, places of special interest and the downtown.

Policy 6.7 Public Transit

The study's plan calls for much higher use of public transit by making the street system more transit friendly. This is achieved by encouraging a greater number of local service buses to be routed from Barbur Boulevard to Naito Parkway and Corbett Avenue. Additionally, the provision of eastwest pedestrian connections through the neighborhood allows for greater accessibility to transit from the local street system.

Policy 6.9 Transit-Oriented Development

This plan recommendation reinforces the link between transit and land use by providing transportation infrastructure improvements in the form of east-west street connections, traffic management devices and sidewalk enhancements that enable the type of development envisioned for the area both along Naito Parkway as well as the bridgehead properties.

Policy 6.11 Pedestrian Transportation

As stated above, both improvements recommended on Naito Parkway and in other sectors of the Lair Hill neighborhood will provide greater accessibility to the neighborhood's central core, the Willamette River, downtown and transit.

Policy 6.12 Bicycle Transportation

Bicycle improvements are part of the recommended plan for the reconfiguration of Naito Parkway. The two- lane design for the street provides for on-street bike lanes that are not available today. In addition, the provision of east-west connections across Naito Parkway will provide a wider network of streets for bicyclists to use in the neighborhood and as part of the overall City system of bike routes.

Policy 6.15 On-Street Parking Management

With the recommended plan for Naito Parkway, on-street parking is renewed. There are provisions of the recommendations that allow for potential removal of the onstreet parking during the peak hours, peak direction of traffic flow. So doing would require on-street parking be moved to other local streets.

Policy 6.27 Public Involvement

This study has had a large public involvement process leading the decision making of this analysis. A joint Citizen/ Technical Advisory Committee was established to serve as the study's overseer and guiding public forum. In addition to that committee, staff met with individual neighborhoods and held two widely publicized open house meetings to ask the opinions of the analysis and proposed transportation alternatives.

Statewide Planning Goal 12: Transportation and OAR 660-12 The Transportation Planning Rule

The Statewide Planning Goal and Transportation Planning Rule serve to provide and encourage a safe and economic transportation system. The goal also encourages consideration of all modes of transportation, avoidance of any one- mode choice for trips, minimization of adverse social, economic and environmental impacts and costs, conservation of energy and the facilitation of flow of goods and services.

This study's recommendations serve as a model for meeting each of those statewide goals. Access to all modes is improved, modal choices are enhanced without being accomplished at the expense of other important community values.

Implementation and Phasing

Since this study looks only at the concept design phase of this overall strategy, the unanswered questions posed to the Council in the recommendations for further analysis are key to answering questions about how this project would actually be constructed. As the study recommendations stand, significant traffic operational analysis would need to be funded and completed before questions of construction technique and phasing were answered. Typically, all transportation projects rise from a design concept like Alternative 5A and undergo more rigorous transportation impact analysis, preliminary and final design engineering and public conversation to reach an agreed upon project that can move forward to construction.

With this study, the Council is being asked to guarantee that any further analysis and design work is done with the understanding that the design principles that were set by this concept design will be the guide for the upcoming work. Additionally, as the analysis progresses, it is imperative that the Advisory Committee membership be involved in the decision making. City Council will also be asked to approve a final design and financing plan for the final proposed project.

This will be a multi-phased construction project. As stated, we will not know the detail of its complexity until we are much further into the engineering of the project. Change in ownership of the right-of-way beneath the Ross Island Bridge ramps from the ODOT to the City is not a simple transaction. Negotiation about this issue needs to be concurrent with the preliminary and final design engineering. After the transfer of title is complete, an entire construction management, phasing and traffic management plan will need to be engineered and agreed upon with the community.

Order of Magnitude Project Costs

At the concept design phase of any project, construction costs are provided as order of magnitude costs since many unknowns are still apparent. Hence the costs that are shown below for the recommended alternative include all items that are likely to be included as special to this project's construction. Those items include:

- Twin ornamental street lighting the length of Naito Parkway.
- Removal of the Ross Island Bridge Ramps.
- Removal of the Arthur/Kelley Way Viaduct.
- Removal of the pedestrian overcrossing at Grover.
- Landscaping.
- Mast arm signals.
- Bicycle racks.
- Waste receptacles.
- Sound walls.
- Contingency.

Total for construction of the street reconstruction elements of Alternative 5A	\$21,715,271
Total for demolition of the Ross Island Bridge ramps	\$ 6,577,766
Grand Total for all elements of Alternative 5A	\$ 28,293,037

Financing

Although currently, there is no secure funding for this project it has received a great deal of support at the regional level by being placed on Metro's Regional Transportation Plan 20-year capital investment list. This list is formulated based on regional development, safety and other planning criteria. Selection of potential projects is based on the criteria as well as public hearings, federal, state and local funding availability. The South Portland Circulation Study project is listed on Metro's "priority system" RTP list, which means it has a secure position for implementation in the 20-year timeframe of the plan.

The South Portland Circulation project will also be noted in the City's Transportation Systems Plan project list. As part of the annual capital improvement program, high priority projects such as this are moved from the Transportation Systems Plan to the twoyear capital budget implementation list.