BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE FY '00 UNIFIED WORK PROGRAM TO ADD THE SOUTH CORRIDOR TRANSPORTATION ALTERNATIVES STUDY AND AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) TO AUTHORIZE FY '99 SURFACE TRANSPORTATION PROGRAM (STP) FUNDS	))))))	RESOLUTION NO. 99-2795A Introduced by: Councilor Kvistad, Chair JPACT

WHEREAS, The FY '00 Unified Work Program was adopted by Resolution Number 99-2756; and

WHEREAS, Metro prepared a South/North Corridor Project Draft Environmental Impact Statement that evaluated numerous light rail transit (LRT) options, alignment alternatives and design options as well as a No-Build Alternative that would have served the South Corridor; and

WHEREAS, The Metro Council adopted Resolution 98-2674 on July 23, 1998 that adopted the Locally Preferred Strategy for construction of a light rail segment between the Clackamas Town Center and the Rose Quarter; and

WHEREAS, In November 1998, voters in the Portland metropolitan region rejected a ballot measure that would have reaffirmed the region's 1994 vote to authorize the sale of General Obligation bonds that would have provided $475 million in local funding necessary to construct the Locally Preferred Strategy; and

WHEREAS, "Listening Posts" were held by Metro throughout the region to better understand the public's perception of the South/North Corridor's transportation needs; and

WHEREAS, Numerous transportation improvements were suggested in the "Listening Posts" and included transit options such as increased express and local bus service, addition of high occupancy vehicles lanes, additional park-and-ride opportunities and improved transit centers; and

WHEREAS, A significant amount of technical analysis has already taken place in the South Corridor including: system studies, South/North Preliminary Alternatives Analysis, Design Option Narrowing, Cost-Cutting, Draft Environmental Impact Statement, ODOT's McLoughlin Boulevard Draft and Final Environmental Impact Statements and subsequent studies by Clackamas County and the City of Milwaukie that address McLoughlin Boulevard; and

WHEREAS, At the April 8, 1999 JPACT meeting, staff was asked to prepare a work program that outlines a program to advance non-light rail transportation options in the South Corridor and submit that plan at the June 1999 meeting of JPACT; and

WHEREAS, Resolution No. 96-2442 allocated $55 million of Regional STP funds towards a light rail project in the South/North Corridor, of which $1.5 million was programmed for FY '99; and

WHEREAS, An alternative transportation improvement program must be developed for the South Corridor as a result of the loss of funding for the rail project; and

WHEREAS, The region will endeavor to identify an early element of the South Corridor Improvement Program by December 1999 to be the basis of an FY 2001 federal transit funding request; and

WHEREAS, The attached work plan (Exhibit A) provides a work program for the South Corridor Transportation Alternatives Study; now, therefore,

BE IT RESOLVED:

That the Metro Council:

1. Amends the FY '00 Unified Work Program to add a South Corridor Transportation Alternatives Study with the attached work plan.

2. Amends the Transportation Improvement Program (TIP) to authorize $1.5 million of FY '99 STP funds reserved for the South/North Corridor and $171,682 of local match to fund the study.

3. Directs that Metro staff, ODOT and Tri-Met staff shall work together with participating jurisdictions including Clackamas County and the Cities of Gladstone, Milwaukie, Portland, and Oregon City to:

- Develop and prioritize non-light rail transportation options that are responsive to the travel demand in the corridor and to the community needs as defined in the attached work plan including the potential of commuter rail between Milwaukie and Lake Oswego and Tualatin; and
- Coordinate this study with the Willamette River Crossing Study; and
- Select a package of transportation improvements that can be implemented expeditiously or

moved forward into more advanced design, environmental analysis and construction; and

- Address community concerns expressed in the "listening post" meetings and through the public involvement process implemented for this study by developing fiscally responsible alternatives that can be implemented quickly; and
- Develop project capital and operating costs to a level that is appropriate upon which to base a federal funding request for any major capital investment; and
- Bring forward for adoption by the Metro Council a comprehensive transportation improvement strategy for the corridor, an implementation plan and funding strategy.

ADOPTED by Metro Council on this 24th day of June, 1999.

Rod Monroe, Presiding Officer

Approved as to Form:

Daniel B. Cooper, General Counsel

RR:lmk
99-2795A.res.doc
6-17-99

Exhibit A

South Corridor Transportation Alternatives Study

Draft Work Program
June 8, 1999

METRO

TABLE OF CONTENTS

1.0 INTRODUCTION

This section describes how the South Corridor Transportation Alternatives Study was developed and the events leading up to the decision to study alternative transportation modes in the corridor. This section also provides a description of the corridor, it's planning history and relationship to the Regional Transportation Plan (RTP).

1.1 Development of the South Corridor Transportation Alternatives Study

The South/North Corridor Transit Study identified light rail as the preferred alternative for the development of the transit system in the South Corridor. The first construction segment was to connect the Rose Quarter, north of the Portland Central Business District (CBD) with Milwaukie and Clackamas Regional Center, with the second construction segment between Rose Quarter and Kenton, and ultimately terminating in Vancouver, Washington.

In November 1998, tri-county voters did not approve a local funding measure for the South/North Light Rail Project. In response, Metro held a series of "listening posts", public meetings to take comments on what direction the region needs to take to further develop transportation options in the South/North Corridor. Generally speaking, the majority of those commenting at the listening post meetings supported the multi-modal emphasis the region has adopted as a tool to maintain livable communities. In Portland and inner Multnomah County, support for continued expansion of the light rail system was strong. Clackamas County residents voiced the strongest support for increased road capacity and the least support for light rail. Those who recommended alternatives or complements to a light rail system had a variety of suggestions, with improved bus service and high occupancy vehicle (HOV) lanes being the most common. Others suggested streetcars, bicycles, hovercraft, vanpooling, river transit, congestion pricing and flexible schedules for working and telecommuting.

At the April 8, 1999 meeting of the Joint Policy Advisory Committee on Transportation, (JPACT), Metro staff were directed to prepare a work program for adoption in June 1999 that outlines a program to advance non-light rail transportation options in the South Corridor. This work plan has been prepared in response to that request.

1.2 Corridor Description

The South Corridor is a funnel-shaped travelshed with ends in Oregon City and Clackamas Regional Center and which narrows between Milwaukie and downtown Portland (See Figure 1). The corridor includes portions of the cities of Portland, Milwaukie, Gladstone and Oregon City, as well as Clackamas County. This corridor has experienced tremendous growth in the past twenty years and by 2015, trip volumes will increase by 30 percent and the hours that drivers spend in delayed traffic will increase eight-fold.

Over the past twenty years, the population of the four-county region has grown by approximately 45 percent, from 1,100,900 residents in 1975 to 1,596,100 residents in 1995. The population trends over this period consisted of three distinctly different cycles. The 1970s were a period of rapid growth with a population growth rate of 2.1 percent per year on average. The early/mid-1980s were marked by a recession with population remaining virtually flat. Population has been growing rapidly since 1988, by about 250,000 residents over this period.

Since 1980, the rate of employment growth in the Portland/Vancouver region has been almost 40 percent higher than the national average. From 1980 to 1995, employment growth in the Portland/Vancouver region averaged 2.6 percent per year, increasing from 672,800 jobs in 1980 to 995,700 jobs in 1995, while the national average was 1.9 percent. During the late 1980s, the region's job growth ranked as the fourth fastest in the country, with annual job growth peaking at about 35,000 net new jobs per year. Employment growth slowed in the early 1990s, and was particularly sluggish in 1991 during a short national recession. Most recently, the region has again been experiencing strong job growth.

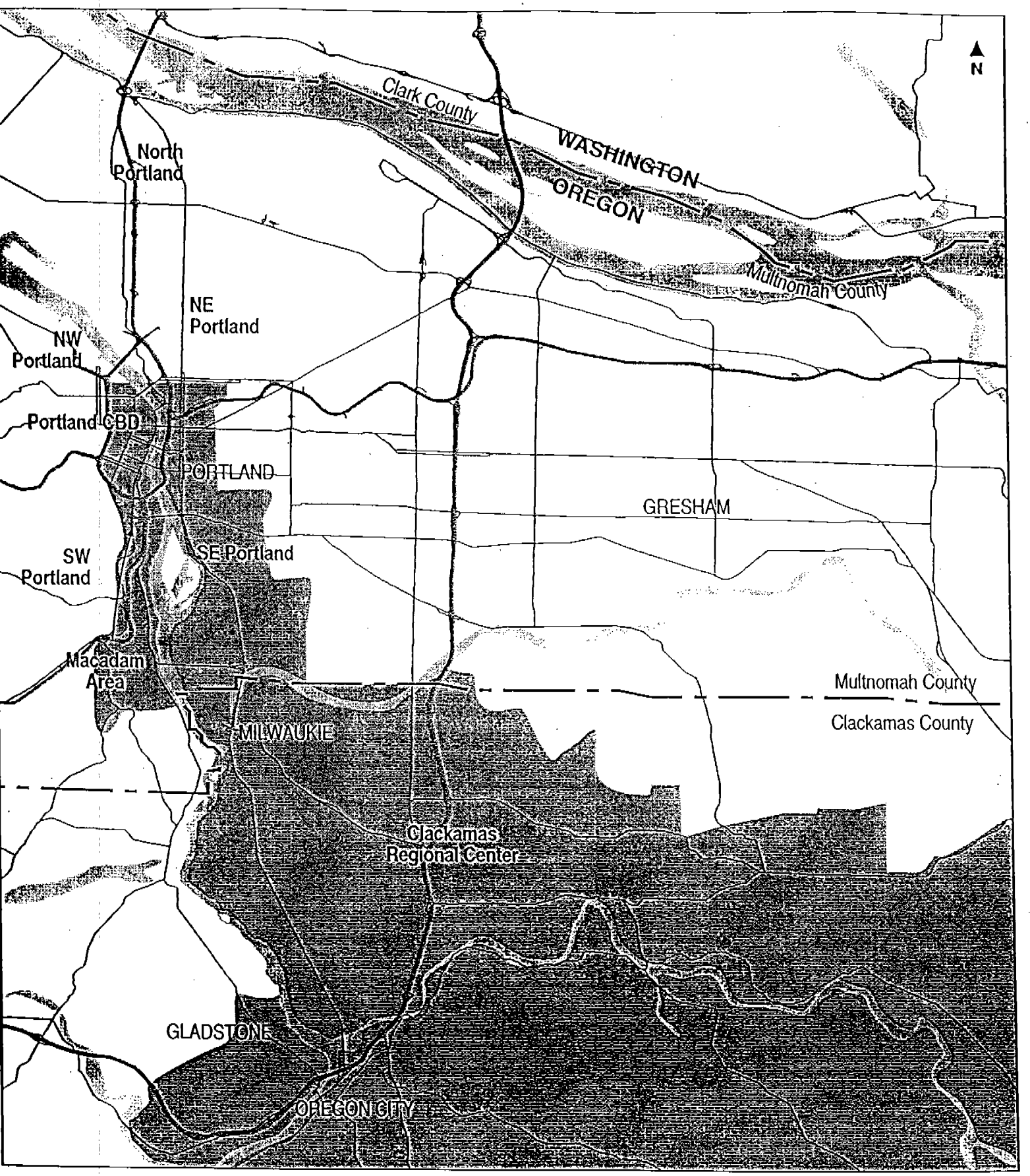
Clackamas County is a fast growing sector of the region. Between 1980 and 1994, the number of households in the county increased by about 2.3 percent per year and the number of jobs increased by 4.0 percent per year. The study corridor in Clackamas County currently contains about 80,600 households, with an expected growth rate of 2.4 percent per year between 1994 and 2015, reaching a total of 132,400 households by 2015. The study corridor also contains about 94,600 jobs, with an expected growth rate of 3.0 percent per year, reaching a total of 174,600 jobs by the year 2015. The Clackamas Regional Center, located near the northeast corner of Clackamas County, has been a major development site in recent years and is projected to continue to develop rapidly.

The South Corridor also includes the Portland Central City south of Burnside, including the Portland Central Business District (CBD). The Central City contains the largest concentration of employment in the region. As of 1994, the Central City contained 138,500 jobs and 11,900 households. Central City jobs are expected to grow by 2.0 percent per year reaching a total of 211,900 jobs by the year 2015. The number of households is expected to grow to 21,900 over the same period.

1.3 Corridor Planning History

This corridor has been the subject of many transportation planning efforts over the past twenty years. In 1979, the McLoughlin Boulevard Draft Environmental Impact Statement produced by the Oregon Department of Transportation (ODOT) called for widening McLoughlin Boulevard, with the possibility of adding a high-occupancy vehicle lane. The improvements south of Tacoma Street were built, while those north of Tacoma were deferred until after the completion of a light rail line. An early light rail feasibility study was completed in 1984 by Metro. In 1992, Metro and the region selected the Milwaukie Corridor over the I-205 Corridor and as the region's highest transit improvement priority. A scoping process narrowed the modes under consideration to light rail and bus service from a range of alternatives that also included commuter rail and river transit. In 1994, Metro and the region undertook an Alternatives Analysis to identify the best way to provide high capacity transit service in the Milwaukie (South) and I-5 (North) Corridors. The project was renamed the South/North Corridor Transit Study. Several light rail alignments, termini and design options were evaluated in the South/North Corridor Project's Draft Environmental Impact Statement (DEIS).

In July 1998, the Metro Council adopted the Locally Preferred Strategy for the South/North Corridor Project that called for a light rail line between Clackamas Regional Center and Kenton in north Portland, with the first construction segment between Rose Quarter and Clackamas Regional Center. This decision followed five years of planning, engineering and environmental analysis of transit options in the South Corridor. In November 1998 a local funding measure to provide the local share of project financing ($475 million) through Tri-Met's sale of general obligation bonds was not approved by tri-county voters.



April 1999

Figure 1

METRO

South Corridor Study Area

1.4 Relationship to Regional Transportation Plan

The Regional Transportation Plan (RTP) guides the region's investment in transportation infrastructure for both transit and highways. The region's 2020 RTP is currently being developed, with adoption planned for Fall 1999. The 2015 RTP was adopted by the Metro Council in 1995. The 2020 RTP, which will be adopted by the time this study concludes, would be modified by the results of this study, which will define transportation priorities in the South Corridor.

1.4.1 2015 RTP Improvements

The 2015 RTP includes several highway and transit improvements in the South Corridor. Two levels of expenditure were developed for the RTP, the constrained network based on existing resources, and the preferred network based on additional funding. These improvements include:

Financially Constrained Network

- South/North Light Rail
- Pedestrian improvements in support of the *Region 2040 Plan* in the McLoughlin Corridor

Preferred Network

The improvements listed above plus the following:

- Widen McLoughlin Boulevard to three travel lanes in each direction, Tacoma Street to Ross Island Bridge
- Widen Highway 224 to three travel lanes in each direction , McLoughlin to Johnson
- Build a 450 space park-and-ride lot sited on Highway 99E (McLoughlin Blvd) between Milwaukie and Oregon City
- Construct pedestrian improvements on McLoughlin/MLK/Grand between Tacoma and Multnomah Blvd.

The 2015 RTP includes South/North light rail as the primary transit investment in the Corridor. Although HOV lanes were addressed in the McLoughlin Boulevard Draft Environmental Impact Statement by ODOT, they were not included in the 2015 RTP due to the McLoughlin Corridor's designation as the region's priority corridor for light rail development. The proposed 2020 RTP does not emphasize light rail in the South Corridor.

1.4.2 Proposed 2020 RTP Improvements

The 2020 RTP includes South/North Light Rail, but adds other potential strategies to reflect that light rail is no longer the short term priority for the Corridor. Light rail will not be evaluated further as part of this study. Specific strategies in the proposed RTP include:

- Addition of a reversible HOV lane on McLoughlin Boulevard in Portland between the Ross Island Bridge and Harold Street.
- Expansion of McLoughlin Boulevard (Highway 99E) to a total of three general-purpose lanes from Harold Street to I-205.
- Implementation of access management on both McLoughlin Boulevard (Highway 99E) and Highway 224.

The following specific South Corridor projects are proposed for the 2020 RTP. These improvements may be modified by the results of this study and should not be perceived to in any way to influence the outcome of this study.

Bus Transit Improvements

The RTP includes several major improvements to transit service in the South Corridor. These include:

- South/North Rapid Bus between Clackamas Regional Center, Downtown Portland and Clark County, Washington (2000-2020).
- Improved bus service between the Milwaukie and Oregon City Transit Centers (future improvement, post-2020).
- Improved bus service between Clackamas Regional Center and Oregon City (2000-2005).
- Intercity passenger station in Oregon City to connect local transit with future intercity passenger rail (future improvement, post-2020)
- Development of park and ride facilities and transit centers, to be identified after further study (2000-2020).

Highway Improvements

The major highway improvements proposed in the 2020 RTP for the Corridor are listed below. Numerous other smaller projects address problems on specific streets and intersections.

- Widen McLoughlin Boulevard to six lanes between Reedway and Tacoma Streets (future improvement, post-2020).
- Construct new ramps from McLoughlin to I-5 northbound (2011-2020)
- Develop a reversible travel lane from the Ross Island Bridge to Harold Street (2011-2020)
- Widen McLoughlin to six lanes from Harold to I-205 (2011-2020)
- Implement access management controls on McLoughlin and Hwy 224 (2011-2020)

1.5 Land Use Context - Region 2040 Plan

In 1992, Metro district voters approved a new charter for Metro, which expanded Metro's land use role. The charter directs Metro to prepare and adopt a "Future Vision" for the region, covering a period of 50 years and addressing "preservation of regional land and natural resources" and "how and where to accommodate the population growth." The charter further directs Metro to adopt ordinances that would require local comprehensive plans and zoning regulations to comply with the regional framework plan.

Metro responded to the charter requirements by developing the Region 2040 Growth Concept and its implementing document, the *Region 2040 Framework Plan*. This plan establishes the urban growth boundary for the next 20 years and the pattern and densities for development within the boundary to the year 2040. The plan is designed to absorb 720,000 additional residents into the Oregon portion of the metropolitan region by the year 2040 with as little expansion of the existing Urban Growth Boundary (UGB) as possible.

The *Region 2040 Framework Plan* designates the Central City of Portland as the high-density employment hub of the Portland metropolitan region. The role of downtown Portland as the finance, cultural, tourism, retail and commerce center for the region is reinforced by the plan. The plan designates "Regional Centers" as mixed-use areas consisting of compact employment and residential developments that are served by high-quality transit services and "Town Centers," which are similar to Regional Centers but slightly less dense. Within the South Corridor, the area around the Clackamas Town Center, referred to as Clackamas Regional Center, and the downtown areas of Milwaukie and Oregon City are currently designated as Regional Centers.

2.0 TRANSPORTATION CONDITIONS IN THE SOUTH CORRIDOR

This section documents the growth in travel demand in the South Corridor that has occurred in the past and is projected to occur in the future. Developing alternative mode strategies to address this future demand is a key objective of this study.

2.1 Historic Trends

Over the past two decades, growth in traffic volumes on the South Corridor's regional roadways has increased significantly. Table 1 summarizes the historic growth in traffic volumes on SE McLoughlin Boulevard, the primary highway connecting activity centers in the southern portion of the corridor with the Portland Central City. Growth in traffic volumes on SE McLoughlin Boulevard from 1971 to 1995 has ranged from 21 percent at SE 17th Avenue to 60 percent at Highway 224 and 59 percent at I-205.

Table 1
Historic Growth in SE McLoughlin Boulevard Traffic Volumes

SE McLoughlin Boulevard at:	1971 ADT [1]	1995 ADT [1]	% Change
SE 17th Avenue	37,200	45,000	21%
Highway 224	30,300	48,600	60%
I-205	22,200	35,300	59%

Source: Metro, 1997.
ADT = Average Daily Traffic Volumes

2.2 Projected Future Conditions

Growth in traffic within the South Corridor is projected to continue over the next two decades. Table 2 summarizes forecast population and employment growth in the corridor, which will produce a 30 percent increase in vehicle miles of travel (VMT) in the southern portion of the corridor by the year 2015. This VMT growth is projected to lead to a three-fold increase in the miles of major roads in the southern portion of the corridor that are congested (i.e., have volumes that are in excess of 90 percent of the design capacity of the roadway).

Table 2
P.M. Peak Hour Summary Statistics for Major Roads in South Corridor by Sub-Area, 1994 and 2015 [1]

Sub-Area [2]	Vehicle Miles Traveled		Vehicle Hours of Delay		Road Miles with V/C [3] > 0.90	
	1994	2015	1994	2015	1994	2015
Southeast Portland (7)	18,000	22,400	83	378	2.5	5.1
Milwaukie (8)	17,300	22,200	96	338	2.8	5.5
Sunnyside (9)	49,200	66,700	50	641	1.9	10.8
Gladstone (10)	33,600	43,700	13	358	0.0	6.2
Oregon City (14)	36,000	51,000	58	720	2.2	10.2
Macadam (6)	45,300	53,300	80	480	4.2	6.1
South/North Corridor Total	199,400	259,300	380	2,915	13.6	43.9
Regional Total	1,617,400	2,328,800	2,181	17,442	85.0	292.0

Source: Metro travel forecasts, 1997.
[1] Based on the No-Build Alternative developed for the South/North Corridor Project
[2] Number in parenthesis is a Metro sub-district number (see the *South/North Transit Impacts and Travel Demand Forecasting Results Report* (Metro: February 1998) for a map illustrating the sub-districts.
2 V/C = ratio of vehicle volume to capacity.

As a result of this deterioration of road service levels, corridor drivers will experience an eight-fold increase in the number of hours they sit in delayed traffic. The worst decline in auto-travel quality is projected to occur in the Clackamas Regional Center area with a five-fold increase in over-capacity roadways and a thirteen-fold increase in vehicle hours of delay (i.e., added time spent on roadway segments with a V/C ratio greater than 0.9). Tables 3 and 4 show that by the year 2015, traffic on SE McLoughlin Boulevard and its parallel arterials will be at or over capacity for all or virtually all of their lengths within the corridor.

Table 3
P.M. Peak Hour Conditions on McLoughlin Corridor Southbound – Year 2015 [1]

Location [2] (Southbound Direction)	Volume [3]	V/C [4] Ratio
Grand Avenue near Powell Blvd. (E-20)	5,400	1.20
McLoughlin Blvd. near Sellwood (E-21)	4,100	1.13
McLoughlin Blvd. south of Milwaukie CBD (E-23)	2,800	1.58
McLoughlin Blvd. south of Concord Road (E-26)	2,100	1.00
McLoughlin Blvd. at Clackamas River (E-27)	2,800	1.34

Source: Metro travel forecasts, 1997.
[1] Based on the No-Build Alternative developed for the South/North Corridor Project
[2] Letter/Number designation in parenthesis is a Metro cutline number.
[3] Vehicles per hour.
3 V/C = ratio of vehicle volume to capacity.

Table 4
P.M. Peak Hour Conditions on Arterials Paralleling SE McLoughlin Boulevard Southbound – Year 2015 [1]

Location [2] (Southbound Direction)	Facility	Volume [3]	V/C [4] Ratio
Near SE Powell Blvd. (E-20)	SE Milwaukie Avenue	700	0.99
Near Sellwood (E-21)	I-205	6,200	0.94
	SE Johnson Creek Blvd.	1,000	1.13
	SE 82nd Avenue	1,500	0.86
Southeast of Milwaukie CBD (E-23)	Hwy. 224	2,300	1.10
Near Clackamas River (E-27)	I-205	7,300	1.04

Source: Metro travel forecasts, 1997.
[1] Based on the No-Build Alternative developed for the South/North Corridor Project.
[2] Letter/Number designation in parenthesis is a Metro cutline number.
[3] Vehicles per hour. [4] V/C = ratio of vehicle volume to capacity.

3.0 STUDY APPROACH, OBJECTIVES AND ORGANIZATION

This section describes the general approach to this study and identifies key objectives.

3.1 Study Approach

Because a tremendous amount of public involvement and technical analysis have taken place in this Corridor in the preparation of the *South/North Corridor Project Draft Environmental Impact Statement*, the study does not propose to "reinvent the wheel". This study will build on the information developed over the last five years and tailor it to the discussion of new non-light rail alternatives.

Because of the unique nature of the three main segments of this Corridor (see Figure 2) and recent planning efforts that have taken place since the November 1998 election, each segment will have a slightly different starting point. For example, Clackamas County is concluding a state and locally funded Transportation and Growth Management study of the McLoughlin Corridor in the unincorporated area of Clackamas County from Milwaukie to Gladstone. A public involvement process is concluding that will result in recommendations for the streetscape along McLoughlin and the composition of adjacent land uses. Starting from scratch would only create confusion and prolong the process unnecessarily for this study. Building on the results of the study and tying into the public involvement structure already in place makes sense. A similar situation exists in Milwaukie with the upcoming riverfront development planning, implementation of a recently funded boulevard project along the waterfront, and recent discussions with Tri-Met about development of a new transit center on the downtown Safeway site. In addition, Tri-Met is planning to increase service in the corridor in the Fall of 1999, with incremental service and bus stop improvements planned over the next three years. Tying into these efforts will result in better coordination with this study and make the best use of public input and talent, as well as tailoring the outcome to the specific need of these corridor segments.

Although the study is structured to meet the unique needs of each corridor segment, a comprehensive alternative mode strategy will be developed for the entire corridor that ensures compatibility between corridor segments. Section 3.4 discusses the mechanism by which a comprehensive strategy will be developed that ensures compatibility between the segments.

3.2 Objectives

Objectives for this study include:

1. Development and prioritization of non-light rail transportation options that are responsive to travel demand in the Corridor and to the community's needs.
2. Selection of a package of transportation improvements, specific to corridor segments, that can be expeditiously moved forward to service providers for implementation or into more advanced design and construction or which would be documented further in an environmental impact statement.
3. Address community concerns expressed in the "listening post" meetings and through the public involvement process implemented for this study, by developing fiscally responsible alternatives that can be implemented as expeditiously as possible.
4. Adoption by the Metro Council of a comprehensive transportation strategy, an implementation plan and funding plan for the corridor.
5. Development of project capital and operating costs to a level that is appropriate upon which to base a federal funding request.

3.3 Jurisdictional Involvement

The following jurisdictions will be represented in this study process:

- City of Portland
- City of Milwaukie
- City of Gladstone
- City of Oregon City
- Clackamas County
- Tri-Met
- Metro
- Oregon Department of Transportation

3.4 Project Management Structure

Metro is the overall lead agency for this study, with support provided from the agencies listed above. Tri-Met will have an important role in the development of bus service and capital improvement strategies, as will ODOT for the evaluation of highway-based alternatives such as a McLoughlin HOV lane. The study will be structured from a geographic standpoint to respond to the unique needs of each of the three major corridor segments to be studied. Three Corridor Teams will be made up of technical staff from the jurisdictions as well as Tri-Met, Metro and ODOT staff. This segmentation will streamline the study process, allow for individualized solutions and make sure that the time spent by jurisdictions is focused directly on the issues in their area. Tri-Met, Metro and ODOT would be technical resources to all of these Corridor

Teams. Figure 3 outlines the proposed study organization. Proposed representation for the Corridor Teams in each segment are as follows:

Portland CBD to Milwaukie
- City of Portland
- City of Milwaukie

Milwaukie to Clackamas Regional Center
- Clackamas County
- City of Milwaukie

Milwaukie to Oregon City
- City of Milwaukie
- City of Oregon City
- City of Gladstone
- Clackamas County
- City of Oregon City

The organization of the study into three Corridor Teams allows for solutions tailored to the needs of each segment. However, the transportation strategies for each segment must be compatible. Representatives from the City of Milwaukie, Metro, Tri-Met and ODOT will be part of all three Corridor Teams and can ensure that strategies are compatible and complement each other. Milwaukie is a particularly important area, because Milwaukie is the only common point for all three segments. The Policy Group would resolve any compatibility issues between the three segments. The three segment transportation strategies will be integrated into a single document that details the transportation strategies for the entire corridor. Incompatible alternatives or those that preclude options in other segments will not be chosen as transportation alternatives to move forward without first resolving compatibility issues.

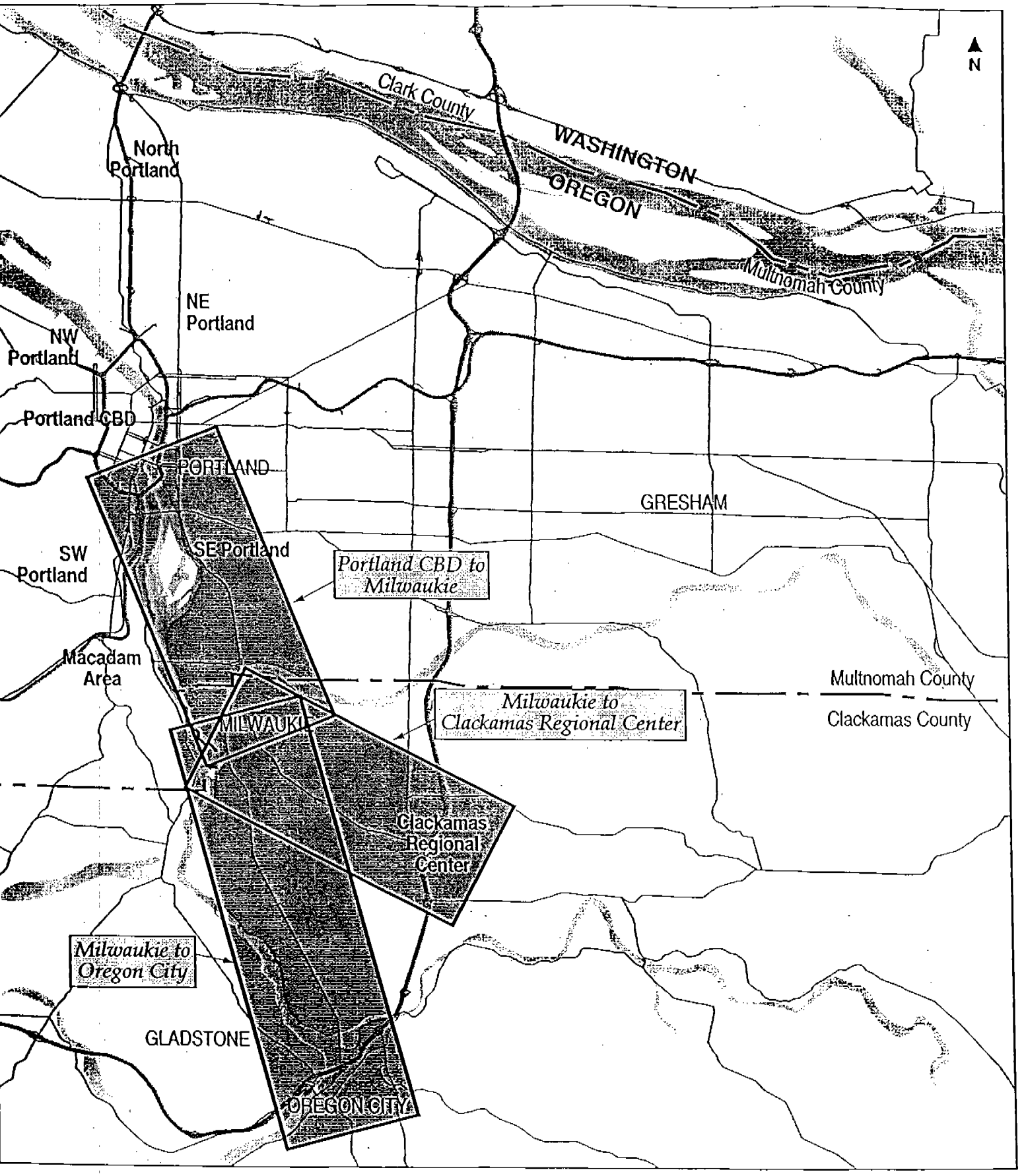


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Figure 2
Segment Map

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Segment Areas

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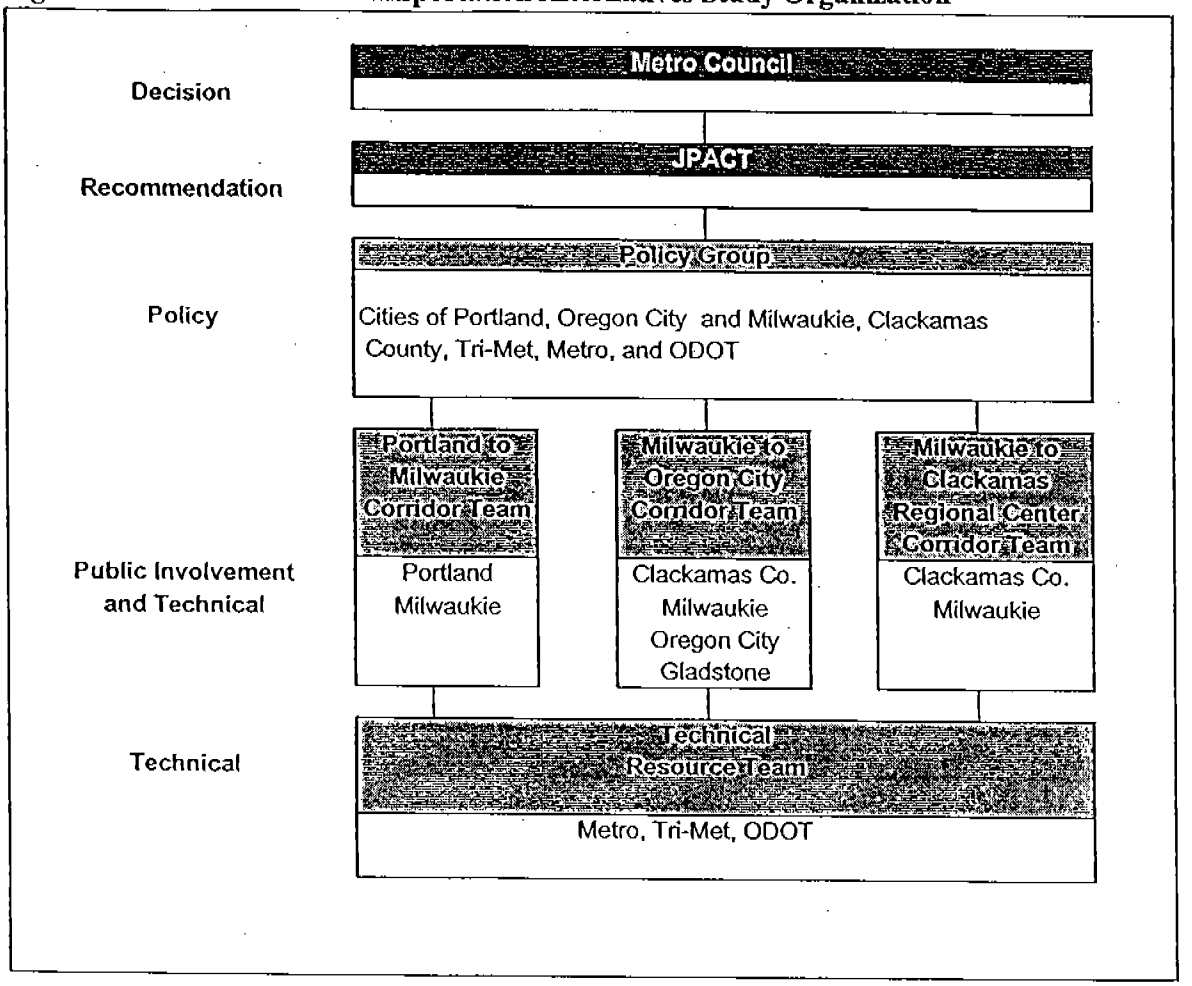
Figure 3. South Corridor Transportation Alternatives Study Organization



Policy Group

The Policy Group makes recommendations to the Joint Policy Advisory Committee on Transportation (JPACT) at several key points in the process. This group will be composed of either executive-level staff or elected officials from Metro, Tri-Met, ODOT, Clackamas County, Milwaukie, Gladstone, Portland, and Oregon City. This group would meet primarily at strategic decision points. This group would have responsibility for ensuring compatibility between segment strategies if the Corridor Teams are not able to reach consensus.

Corridor Teams

These teams provide technical input and are specific to each of the three segments (see Figure 2). These will be comprised of jurisdiction technical staff with a citizen representative on each Corridor Team. Metro, Tri-Met and ODOT would be represented on each team. Jurisdiction team members would be appointed by the involved local jurisdictions. The corridor teams may need to meet jointly to resolve compatibility issues

between strategies. If these issues cannot be resolved amongst the teams, the issue would be forwarded to the Policy Group.

3.5 Budget and Schedule

The budget for this study is $1,671,872 to be spent in fiscal years 1999-2000 and 2000-2001. The Transportation Improvement Program (TIP) and Unified Work Program (UWP) will be amended to include this study. Budget revenue sources are shown in Table 5.

The study will begin in July 1999 and conclude no later that December 31, 2000 for a maximum duration of 18 months. Figure 4 shows the proposed study process and key dates. Every effort will be made to shorten the timeline, and interim decisions on implementation of specific strategies could also occur, such as transit centers or park-and-ride lots. Metro will initiate an Intergovernmental Agreement with Tri-Met for the provision of transit service planning and engineering services in support of the study, and with other jurisdictions as required.

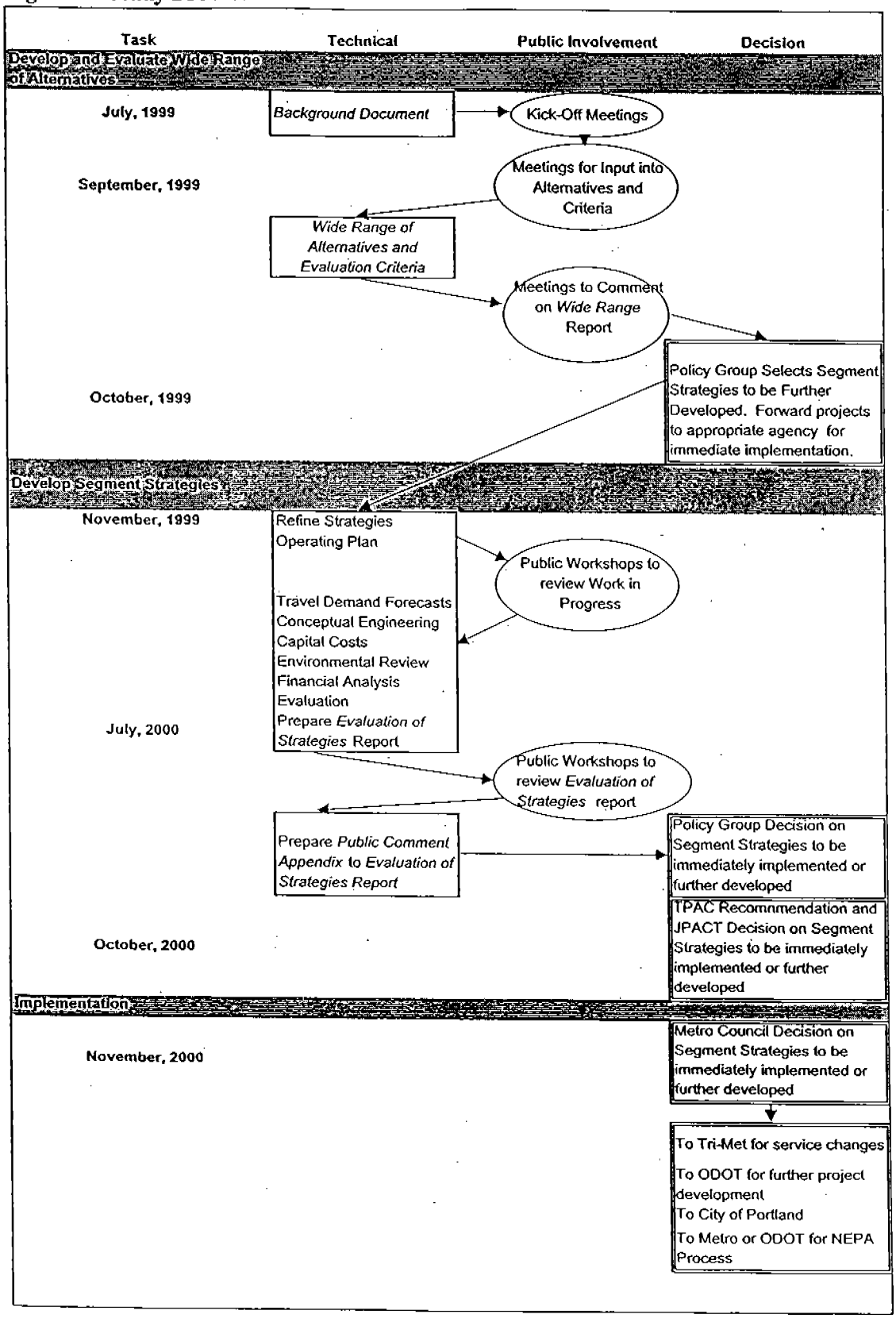
Table 5
South Corridor Transportation Alternatives Study Budget

	Local Funds	STP Funds	Total
Revenue	$171,872	$1,500,000	$1,671,872

Of particular importance to the project schedule and decision-making process is the evaluation of adding an additional lane to the Martin Luther King Jr. Boulevard and Grand Avenue viaducts in Portland. ODOT is planning to rebuild the viaducts and is entering the advanced stages of project development. If HOV lanes are shown to be a viable option in the McLoughlin corridor, Metro would need to advise ODOT early in the process so that the viaduct design could include a third lane option. If HOV is not an option, ODOT would continue design work to replace the two-lane viaducts.

Other schedule and decision point pressures affect this study. These include the proposed advancement of a Milwaukie Transit Center into design and construction, development of park and ride facilities, either permanent or shared use to accompany Tri-Met service increases, and the need to reconfigure transit facilities at Clackamas Town Center as a result of mall expansion.

Figure 3. Study Process



4.0 WORK PROGRAM

4.1 Introduction

This work program is designed to facilitate the selection of transportation strategies for each Corridor Segment that would in turn be combined into an overall corridor strategy. The realization that one strategy or project will not meet the transportation needs of the entire Corridor is the driving force behind this study process. A comprehensive integrated alternative mode strategy will be developed for the entire corridor based on the segment strategies. The goals of this work program are:

- To allow timely decisions to be made regarding the implementation of those strategies that are the least capital intensive early in the process, i.e those that require little or no new capital funding. These could range from bus stop improvements to a transit center or park and ride lot.

- To develop a comprehensive package of transportation improvement strategies, an implementation plan and a funding plan for the corridor to be adopted by the Metro Council.

- To perform analysis at the appropriate level to thoroughly evaluate transportation strategies; i.e., no environmental analysis or capital costs (aside from additional buses) would be required for transit service increases, while an environmental analysis and cost estimates would be prepared for a major capital project.

- To allow individual segments to pursue the options that are most attractive to them. Corridor Teams will meet jointly to resolve any incompatible recommendations. The Policy Group will resolve any conflicts that cannot be resolved between the Corridor Teams.

4.2. Start-Up Tasks

This group of tasks puts in place the contracts and other administrative machinery to undertake the study. In addition, the study's Policy Group would be appointed and past actions would be summarized in a *Study Background Document*. Tasks to be completed include the following:

- Refine study work plan, purpose and need, budget and schedule
- Refine public involvement plan
- Develop and execute Intergovernmental agreements
- Develop consultant scopes of work
- Procure consultant. This task includes preparation of a Request for Qualifications, advertisement of RFQ availability, review of proposals, selection, and contract negotiations. This task is started early in order for the consultant to be available to begin technical evaluation of alternatives. Special expertise will be required for transit operations, traffic engineering, civil design, ITS applications and HOV lane design and operation and other specialties tailored to specific alternatives.
- Develop *Study Background Document* that summarizes the extensive public involvement and technical analysis undertaken to date, the alternatives considered and the decisions reached regarding advancement of those alternatives. This

document will form the basis for the wide range of strategies that the public will be asked to consider.

No "one-size-fits-all" strategy is proposed for this study. Different strategies or combinations of strategies would be tailored to each individual segment. Alternatives previously considered in this Corridor by Metro, ODOT, the City of Portland, Tri-Met or community groups to date include:

- Expanded bus service
- Light Rail (not an option for further study)
- Transit options from Tri-Met's Transit Choices for Livability Study
- Commuter Rail
- Transportation Systems Management
- River Transit
- Streetcar
- High Occupancy Vehicle Lanes

Additional strategies to supplement those already studied could include:

- Intelligent Transportation Systems Applications
- Transportation Demand Management
- Pricing Strategies (High Occupancy Toll (HOT) lanes, or peak pricing)

A round of public involvement kick-off meetings will be used to distribute the *Study Background* report and to discuss the study's public involvement program, decision points and opportunities to get involved.

The next task develops evaluation criteria and screens a wide range of potential strategies down to several options. Alternative strategies will be developed for each corridor segment to be advanced for further refinement. As mentioned earlier in this work program, the Corridor Teams developing these strategies will work together to ensure that segment alternatives are compatible and complementary. The Policy Group would resolve any compatibility issues for which the Corridor Teams were not able to reach consensus.

4.3 Screening of Alternatives

This task develops the wide range of alternatives to a level where they can be evaluated technically and be reviewed by the Corridor Teams and the public. The *Range of Alternatives and Evaluation Criteria* report will contain the analysis of the wide range of alternatives and the evaluation criteria. The Corridor Teams and the public will review the alternatives and recommend segment strategies to the Policy Group for adoption.

4.3.1 Development of Evaluation Criteria

This task produces evaluation criteria based on purpose and need, public comment and Corridor Team reviews. Evaluation criteria are the yardstick against which alternatives are measured. In order to respond to the needs of the unique corridor segments, evaluation criteria will be developed for each segment. These criteria will be tied to the function of the segment in the transportation system and its relation to the community. For example, the function of the Portland to Milwaukie segment is much more of a high capacity trunk

with Clackamas and Oregon City feeding in to it. Southeast Portland neighborhoods also will have unique needs that may or may not coincide with the trunk function of McLoughlin Boulevard. Different strategies will address different evaluation criteria with the anticipated outcome being a package of improvements that address multiple goals.

Development of the evaluation criteria and wide range of alternatives will include the second round of public meetings to ensure that all appropriate options are considered. The draft evaluation criteria will be drafted based on results of the Listening Posts, applicable local jurisdiction policies and comments received during the public meetings.

4.3.2 Develop Wide Range of Alternatives

This task develops the alternatives to the point where they can be evaluated and a determination made by the public, Corridor Teams and Policy Group as to which alternatives should be evaluated in detail. Enough information about the alternatives will be developed so that the evaluation criteria can be applied equally to every alternative, assuring a clear and objective comparison. The alternatives developed would be grouped into three categories; service alternatives, transportation system management alternatives, and capital improvement strategies. These would also be grouped according to the corridor segment being addressed. Examples are given below.

Service Options	TSM Options	Capital Improvements
• Little to no capital component • Increased bus service • Re-oriented bus routes • Additional bus modes dial-a-ride, small bus	• Mid-range capital component • Signal prioritization • Queue jump lanes • ITS applications • Pricing strategies	• Bus Rapid Transit/Busway • Commuter Rail • River Transit • Streetcar • Transit centers, park and rides, and transit streets • HOV Lanes

4.3.3 Prepare Range of Alternatives and Evaluation Criteria Report – Decision on Segment Strategies

This task develops and evaluates the wide range of alternatives. Each alternative will be considered based on the evaluation criteria. The report will be the subject of a third round of public meetings and Corridor Team meetings. Following incorporation of comments, the report will be forwarded to the Policy Group for a decision on which alternatives should be carried forward in each segment.

4.4 Development of Segment Strategies

This group of tasks more fully develops the costs and impacts of the small group of strategies defined in the previous task. The goal of these tasks is to develop the alternatives to a degree that accurate costs can be produced, based on conceptual

engineering where appropriate. Operating and maintenance costs will be based on refined operating plans, as will ridership forecasts. Because the exact range of strategies determines to a certain degree the analysis required, these tasks will be further defined as the outcome of Task 2.3 becomes clear. Figure 3 shows the analyses required for each type of strategy.

4.4.1 Develop Strategies

The development of segment strategies will include several opportunities for public involvement as the alternatives are developed and evaluated. Corridor Teams and small public working groups will play a significant role in guiding this part of the process.

Figure 3. Strategy Analyses Required

Analysis	Service Strategies	TSM Strategies	Capital Investments
Operating Plan	◆	◆	◆
Travel Demand Forecasts	□	◆	◆
Operating and Maintenance Costs	◆	◆	◆
Conceptual Engineering	○	□	◆
Environmental Review	○	□	◆
Capital Costs	□	□	◆
Financial Analysis	◆	◆	◆
Evaluation	◆	◆	◆

◆ = *required analysis* □ = *optional, to be determined*

○ = *not required*

4.4.2 Refine Strategy

This task will refine important characteristics of each strategy with the goal of matching it closely to the applicable evaluation criteria for each segment. In some cases, no changes will be needed. This is not intended to be a highly technical task, but rather a confirmation of or adjustment to the strategies developed for each segment. This task will more fully develop programmatic elements of alternatives such as a TDM Program or pricing strategies. Public workshops will support this task.

4.4.3 Develop Operating Plan and Capital Facilities Program

For each strategy, define the operating components that are required to complete travel demand forecasting. These include:

- Headway
- Transit line routings
- Service Span
- Number and effect of transit priority treatments
- Park-and-Ride Lots – size, location and service

- Station locations
- Transfer penalties

This task will be summarized in a *Detailed Transportation Strategies* technical memorandum that will form the basis of travel demand forecasting and conceptual engineering, if applicable.

4.4.4 Travel Demand Forecasts

In order to conserve budget and meet the study schedule, the minimum number of travel demand forecasts will be prepared that yield the full range of information required. These runs will combine strategies in a manner that bests highlights the trade-offs between alternatives and uses forecasting resources economically. The forecasts will provide inputs to several tasks, including operating and maintenance costing, environmental review and evaluation.

4.4.5 Operating and Maintenance Costs

Based on the travel demand forecast, operations and maintenance costs will be calculated for each strategy based on appropriate unit costs including vehicle miles traveled, vehicle hours traveled, number of stations, and length of fixed guideway or other linear facility. Costs will be produced in 1999 dollars.

4.4.6 Conceptual Engineering

This task will develop conceptual engineering. This conceptual engineering will form the basis for capital costs and will determine the extent of the transportation facility's environmental impacts. Conceptual engineering would be required to evaluate a bus rapid transit project, a streetcar extension, or an HOV lane. It may be needed for some TSM facilities as well, such as queue-jump lanes and signals. This will be primarily a consultant task.

4.4.7 Environmental Screening

This task will identify significant environmental impacts that would occur for the strategies. This is a reconnaissance-level analysis, designed to identify those impacts that would have the greatest effect in terms of cost and potential mitigation. Due to the tremendous amount of environmental documentation developed for the South Corridor as part of the South/North Corridor Project DEIS, this task will rely primarily on existing data, with a minimum of new data collection anticipated. Factors to be analyzed include:

- Traffic Impacts
- Land Use Impacts
- Neighborhood Impacts
- Noise and Vibration Impacts
- Ecosystems Impacts
- Visual and Aesthetic Impacts
- Historic Resources and Parklands

4.4.8 Capital Cost Estimates.

These will be prepared based on the conceptual engineering in the case of major capital investment projects or some TSM projects. For Service Strategies, this will consist of estimating the cost of additional vehicles. Appropriate local unit costs will be used if possible. If not, national averages will be used. The environmental review may result in some added costs for environmental mitigation if such measures are easily identified.

4.4.9 Financial Analysis

This analysis combines the results of the capital costs and operating and maintenance costs and identifies the revenue needs to implement the strategy. Potential funding sources and shortfalls will be identified. Because these strategies could draw from many sources, both transit and highway, this analysis is critical to determine the sources and likelihood of project funding for these strategies.

4.4.10 Evaluation

This section utilizes all of the analysis from the previous seven tasks and prepares a comparison of the costs and benefits of each of the strategies, addressing the evaluation criteria for each project segment.

4.4.11 Prepare Evaluation of Transportation Strategies Document.

This document summarizes the evaluation of the strategies. The Corridor Teams will combine the best performing strategies into improvement packages to be selected by the Policy Group, JPACT, and Metro Council for further development or immediate implementation. There will be an extensive public involvement process during this period, with public comments being included as an appendix to the evaluation document.

4.5 Selection of Preferred Transportation Strategies

The Policy Group will act on the *Evaluation of Transportation Strategies Document* and make a recommendation to JPACT and the Metro Council. This recommendation will include:

- A comprehensive package of transportation improvement strategies for the South Corridor
- An Implementation Plan for the strategies
- A Funding Plan

The Policy Group's recommendation will be forwarded to TPAC, JPACT and the Metro Council for adoption.

STAFF REPORT

CONSIDERATION OF RESOLUTION 99-2795A FOR THE PURPOSE OF AMENDING THE FY '00 UNIFIED WORK PROGRAM TO ADD THE SOUTH CORRIDOR TRANSPORTATION ALTERNATIVES STUDY AND AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) TO AUTHORIZE FY '99 SURFACE TRANSPORTATION PROGRAM (STP) FUNDS

Date: June 17, 1999 Presented by: Richard Brandman

PROPOSED ACTION

This resolution amends the FY '00 Unified Work Program (UWP) to add a South Corridor Transportation Alternatives Study, amends the Transportation Improvement Program (TIP) to allocate $1.5 million in STP funds from available South/North Transit Corridor Study resources and adopts Exhibit A, the *South Corridor Transportation Alternatives Study Work Program* as the work program for the study. The resolution also directs Metro staff to work together with Tri-Met, ODOT and the participating jurisdictions of Clackamas County and the cities of Portland, Milwaukie, Gladstone and Oregon City to:

1. Develop and prioritize non-light rail transportation options that are responsive to travel demand in the Corridor and to the community's needs.
2. Select a package of transportation improvements, specific to corridor segments, that can be expeditiously moved forward to service providers for implementation or into more advanced design, environmental analysis and construction.
3. Address community concerns expressed in the "Listening Post" meetings and through the public involvement process implemented for this study by developing fiscally responsible alternatives that can be implemented as expeditiously as possible.
4. Develop project capital and operating costs to a level that is appropriate upon which to base a federal funding request for any major capital investment.
5. Bring forward for adoption by the Metro Council a comprehensive transportation strategy for the corridor, an implementation plan and funding strategy.

JPACT unanimously recommends the proposed action and stressed the need to coordinate this study with the Willamette River Crossing Study and the potential to use the existing rail bridge between Milwaukie and Lake Oswego.

FACTUAL BACKGROUND AND ANALYSIS

I. Development of the South Corridor Transportation Alternatives Study

In July 1998, the Metro Council adopted the Locally Preferred Strategy for the South/North

Corridor Project that called for a light rail construction segment between Kenton, the Rose Quarter, downtown Portland, Milwaukie and Clackamas Town Center. This decision followed five years of planning, engineering and environmental analysis of transportation options in the South Corridor. In November 1998, a local funding measure to provide the local share of project financing ($475 million) through Tri-Met's sale of General Obligation bonds was not approved by tri-county voters.

In response to the defeat of the local funding measure, Metro held a series of "Listening Post" public meetings to receive comments on what the region should do next. Generally speaking, the majority of those commenting at the listening post meetings supported the multi-modal emphasis that the region has adopted as a tool to maintain livable communities. In Portland and inner Multnomah County, support for continued expansion of the light rail system was strong. Conversely, a large number of Clackamas County residents who commented were opposed to light rail in any form. Clackamas County residents also voiced the strongest support for increased road capacity and the least support for light rail. Those who recommended alternatives or complements to a light rail system had a variety of suggestions, with improved bus service and high occupancy vehicle (HOV) lanes being the most common. Others suggested streetcars, bicycles, vanpooling, river transit, congestion pricing and flexible schedules for working and telecommuting.

At the April 8, 1999 meeting of the Joint Policy Advisory Committee on Transportation, (JPACT), Metro staff were asked to prepare a work program for adoption in June 1999 that outlines a program to advance non-light rail transportation options in the South Corridor. This work plan was prepared in response to that request.

II. Relationship to the Regional Transportation Plan (RTP)

The Regional Transportation Plan (RTP) guides the region's investment in transportation infrastructure for both transit and highways. The region's 2020 RTP is currently being developed, with adoption planned for Fall 1999. The 2015 RTP was adopted by the Metro Council in 1995. The 2020 RTP, which will be adopted by the time this study concludes, would be modified by the results of this study, which will define transportation priorities in the South Corridor.

The 2015 RTP includes South/North light rail as the primary transit investment in the Corridor. Although a reversible HOV lane was addressed in the McLoughlin Boulevard Draft Environmental Impact Statement by ODOT, it was not included in the 2015 RTP due to the McLoughlin Corridor's designation as the region's priority corridor for light rail development.

The proposed 2020 RTP includes South/North Light Rail, but adds other potential strategies to reflect that light rail is no longer the short term priority for the Corridor. Light rail will not be evaluated further as part of this study. Specific strategies in the proposed 2020 RTP include:

- Addition of a reversible HOV lane on McLoughlin Boulevard in Portland between the Ross Island Bridge and Harold Street.
- Expansion of McLoughlin Boulevard (Highway 99E) to a total of three general-purpose lanes from Harold Street to I-205.
- Implementation of access management on both McLoughlin Boulevard (Highway 99E) and Highway 224.
- Improved bus transit service throughout the Corridor, including rapid bus from Vancouver to Milwaukie, Oregon City and Clackamas Regional Center.
- Development of park-and-ride lots and transit centers in the corridor.

These strategies and improvements proposed for the 2020 RTP may be modified by the results of this study and should not be perceived in any way to influence the outcome of this study.

III. Study Process and Organization

The study will take place between July 1, 1999 and December 31, 2000. As currently scoped, the study would be completed in November 2000. Figure 1 shows the study process and public involvement activities for the study.

In general, the study will revisit some options already studied as part of the South/North Corridor Project, with the exception of light rail, which will not be part of this study. New options may be added depending upon public comments received and ongoing technical analysis. This wide range of alternatives will be screened down to several promising alternatives for which more detailed analysis will be performed. The analysis in both the screening phase and the detailed analysis of alternatives will be geared toward evaluation criteria identified through the public involvement process and by the study's Policy Group.

Of particular importance to the project schedule and decision-making process is the evaluation of adding an additional lane to the Martin Luther King Jr. Boulevard and Grand Avenue viaducts north of the Ross Island Bridge in Portland. ODOT is planning to rebuild the viaducts and is entering the advanced stages of project development. If HOV lanes are shown to be a viable option in the McLoughlin corridor, Metro would need to advise ODOT early in the process so that the viaduct design could include a third lane option. If HOV is not an option, ODOT would continue design work to replace the two-lane viaducts.

The decision of what alternatives to implement in the South Corridor will ultimately be made by the Metro Council. Advising the Council will be TPAC and JPACT, as well as the study's Policy Group, comprised of either elected officials or executive level staff from the participating jurisdictions. Technical analyses will be overseen by three Corridor Teams specific to the three main segments for the study (shown in Figure 2):

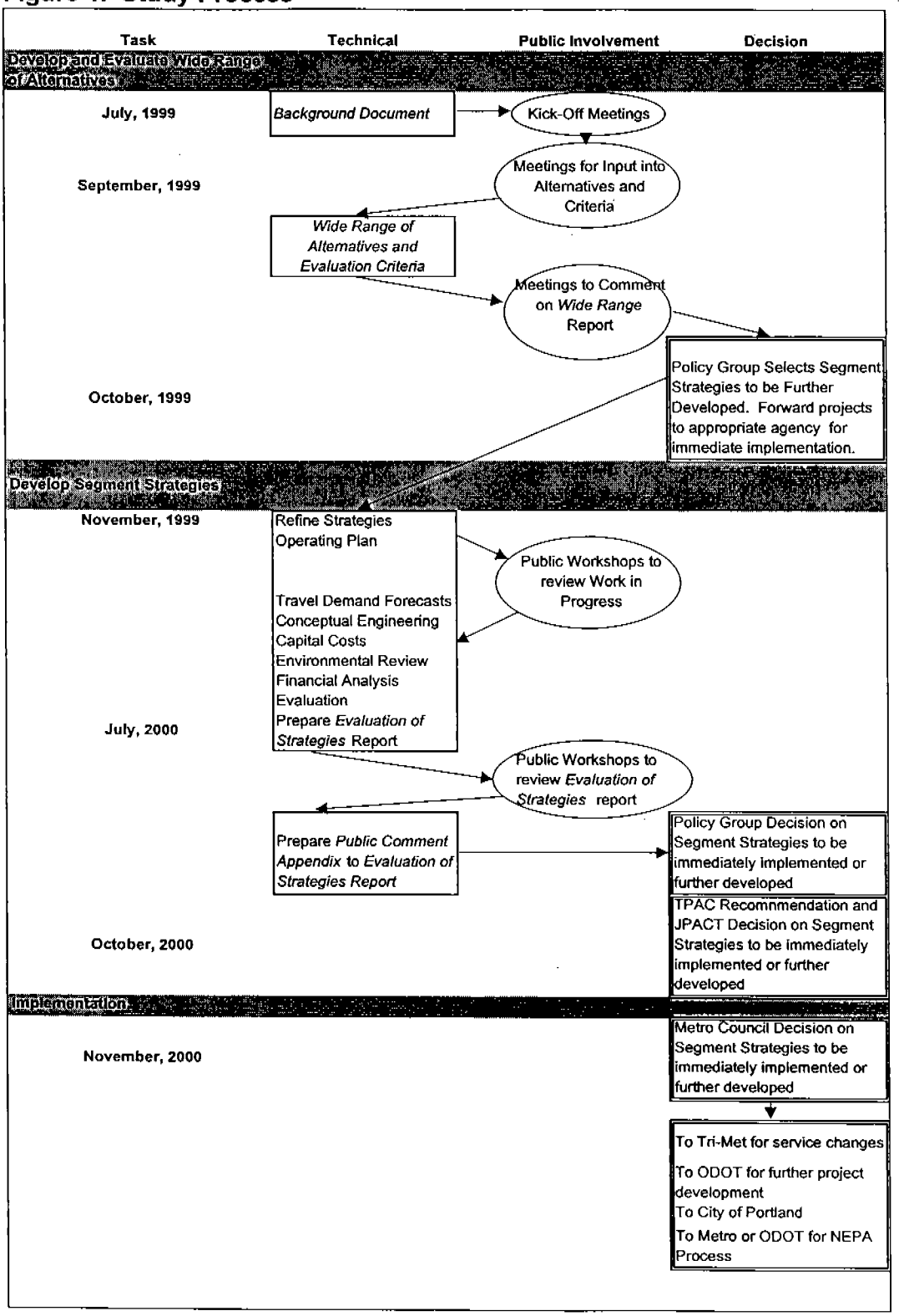
- Portland to Milwaukie
- Milwaukie to Oregon City
- Milwaukie to Clackamas Regional Center

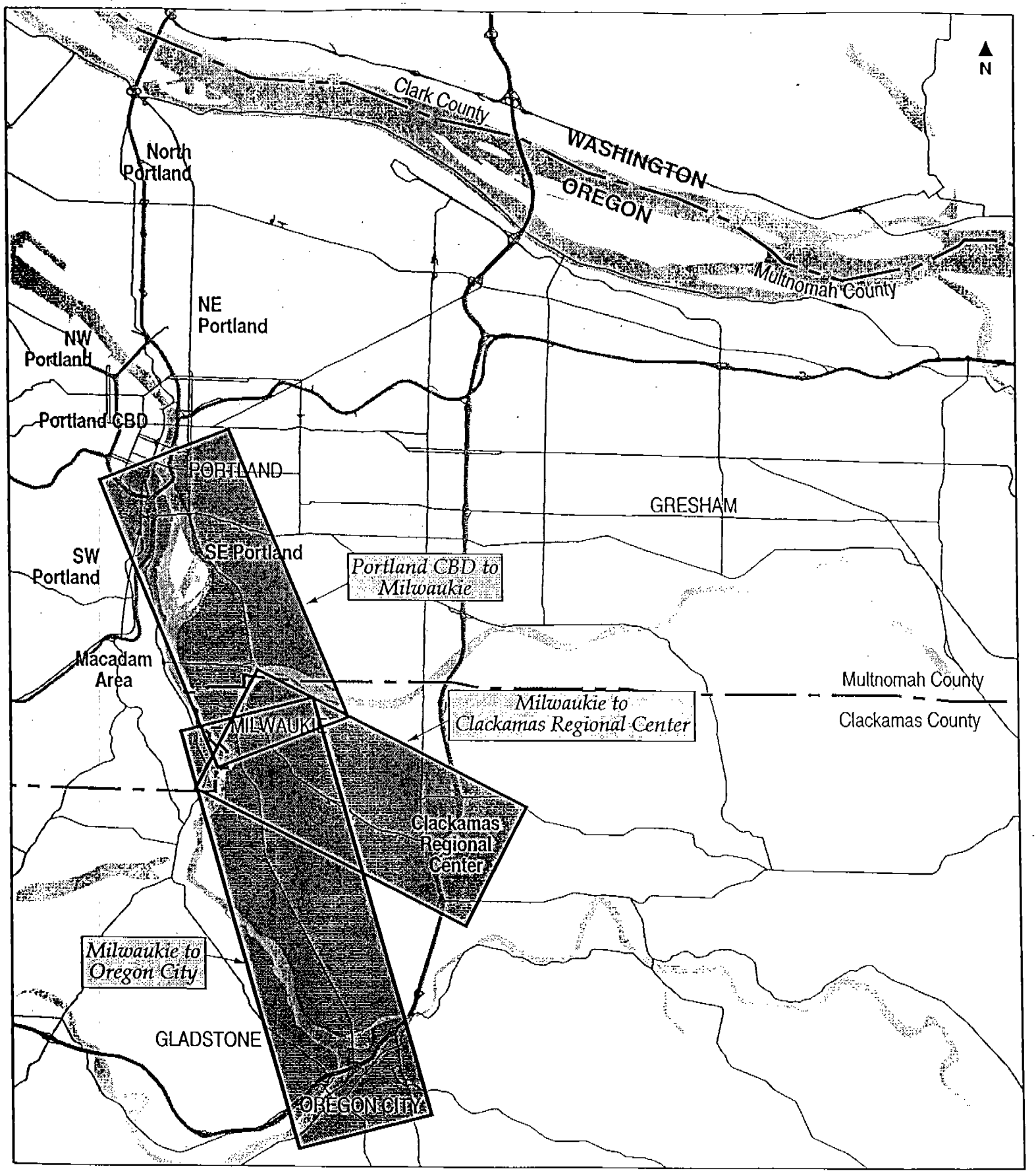
These teams will develop options and recommendations for their segments. Tri-Met, ODOT and Metro staff will assist to ensure that the recommendations are compatible between segments. A diagram of the study organization is included as Figure 3.

IV. Budget and Schedule

The budget for this study is $1,671,682 to be spent in fiscal years 1999-2000 and 2000-2001. $1.5 million in funding would come from FY '99 Regional STP funds currently programmed for the South/North Corridor and the remainder would be local match. The study will begin in July 1999 and conclude no later than December 31, 2000 for a maximum duration of 18 months.

Figure 1. Study Process





May 1999

Figure 2
Segment Map

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Segment Areas

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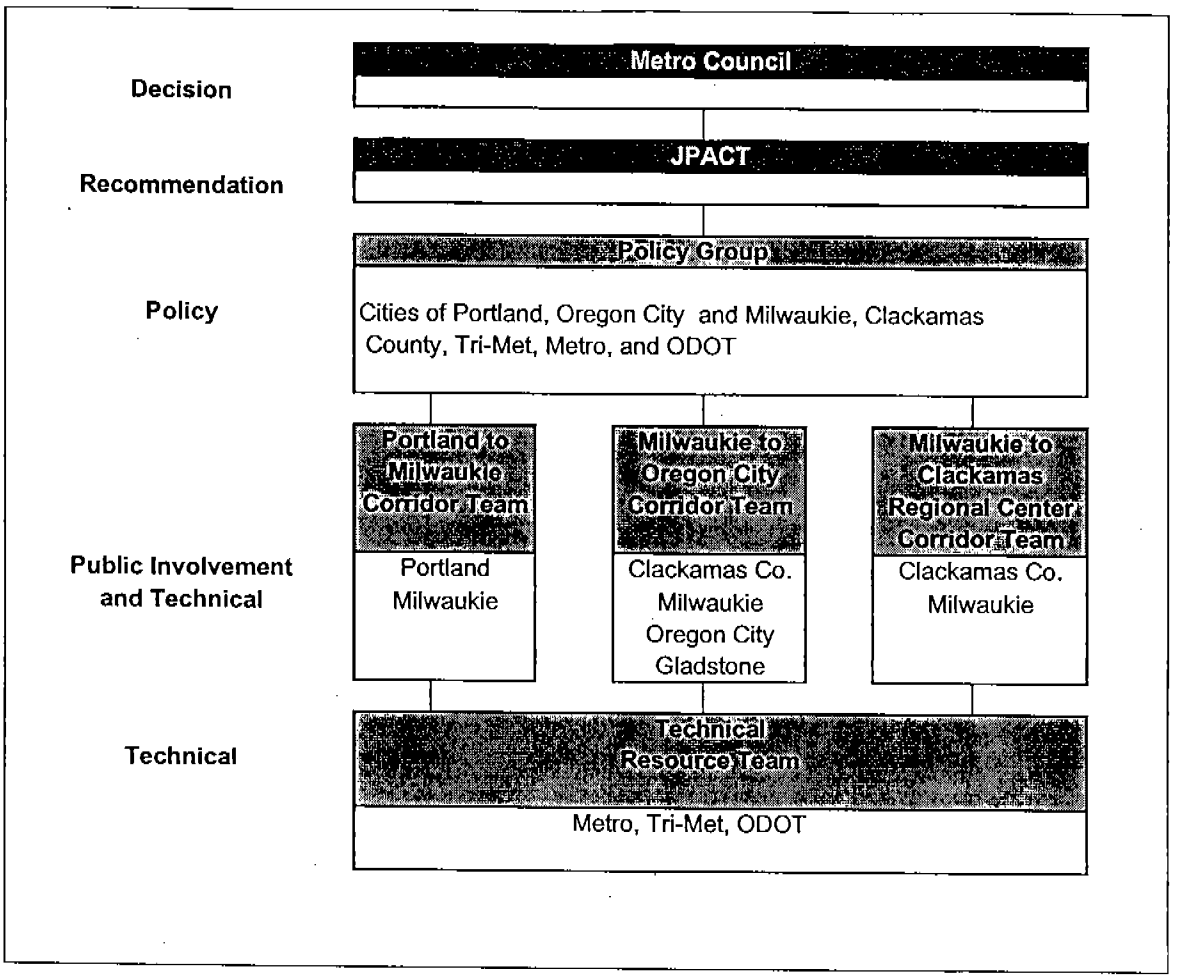
Figure 3. Study Organization



BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE FY '00 UNIFIED WORK PROGRAM TO ADD THE SOUTH CORRIDOR TRANSPORTATION ALTERNATIVES STUDY AND AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) TO AUTHORIZE FY '99 SURFACE TRANSPORTATION PROGRAM (STP) FUNDS	))))))	RESOLUTION NO. 99-2795A Introduced by: Councilor Kvistad, Chair JPACT

WHEREAS, The FY '00 Unified Work Program was adopted by Resolution Number 99-2756; and

WHEREAS, Metro prepared a South/North Corridor Project Draft Environmental Impact Statement that evaluated numerous light rail transit (LRT) options, alignment alternatives and design options as well as a No-Build Alternative that would have served the South Corridor; and

WHEREAS, The Metro Council adopted Resolution 98-2674 on July 23, 1998 that adopted the Locally Preferred Strategy for construction of a light rail segment between the Clackamas Town Center and the Rose Quarter; and

WHEREAS, In November 1998, voters in the Portland metropolitan region rejected a ballot measure that would have reaffirmed the region's 1994 vote to authorize the sale of General Obligation bonds that would have provided $475 million in local funding necessary to construct the Locally Preferred Strategy; and

WHEREAS, "Listening Posts" were held by Metro throughout the region to better understand the public's perception of the South/North Corridor's transportation needs; and

WHEREAS, Numerous transportation improvements were suggested in the "Listening Posts" and included transit options such as increased express and local bus service, addition of high occupancy vehicles lanes, additional park-and-ride opportunities and improved transit centers; and

WHEREAS, A significant amount of technical analysis has already taken place in the South Corridor including: system studies, South/North Preliminary Alternatives Analysis, Design Option Narrowing, Cost-Cutting, Draft Environmental Impact Statement, ODOT's McLoughlin Boulevard Draft and Final Environmental Impact Statements and subsequent studies by Clackamas County and the City of Milwaukie that address McLoughlin Boulevard; and

WHEREAS, At the April 8, 1999 JPACT meeting, staff was asked to prepare a work program that outlines a program to advance non-light rail transportation options in the South Corridor and submit that plan at the June 1999 meeting of JPACT; and

WHEREAS, Resolution No. 96-2442 allocated $55 million of Regional STP funds towards a light rail project in the South/North Corridor, of which $1.5 million was programmed for FY '99; and

WHEREAS, An alternative transportation improvement program must be developed for the South Corridor as a result of the loss of funding for the rail project; and

WHEREAS, The region will endeavor to identify an early element of the South Corridor Improvement Program by December 1999 to be the basis of an FY 2001 federal transit funding request; and

WHEREAS, The attached work plan (Exhibit A) provides a work program for the South Corridor Transportation Alternatives Study; now, therefore,

BE IT RESOLVED:

That the Metro Council:

1. Amends the FY '00 Unified Work Program to add a South Corridor Transportation Alternatives Study with the attached work plan.

2. Amends the Transportation Improvement Program (TIP) to authorize $1.5 million of FY '99 STP funds reserved for the South/North Corridor and $171,682 of local match to fund the study.

3. Directs that Metro staff, ODOT and Tri-Met staff shall work together with participating jurisdictions including Clackamas County and the Cities of Gladstone, Milwaukie, Portland, and Oregon City to:

- Develop and prioritize non-light rail transportation options that are responsive to the travel demand in the corridor and to the community needs as defined in the attached work plan including the potential of commuter rail between Milwaukie and Lake Oswego and Tualatin; and
- Coordinate this study with the Willamette River Crossing Study; and
- Select a package of transportation improvements that can be implemented expeditiously or

moved forward into more advanced design, environmental analysis and construction; and

- Address community concerns expressed in the "listening post" meetings and through the public involvement process implemented for this study by developing fiscally responsible alternatives that can be implemented quickly; and
- Develop project capital and operating costs to a level that is appropriate upon which to base a federal funding request for any major capital investment; and
- Bring forward for adoption by the Metro Council a comprehensive transportation improvement strategy for the corridor, an implementation plan and funding strategy.

ADOPTED by Metro Council on this _____ day of _____, 1999.

_____
Rod Monroe, Presiding Officer

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

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6-17-99

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE FY '00 UNIFIED WORK PROGRAM TO ADD THE SOUTH CORRIDOR TRANSIT OPTIONS STUDY AND AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) TO AUTHORIZE FY '99 SURFACE TRANSPORTATION PROGRAM FUNDS (STP).	)))))))	RESOLUTION NO. 99-2795 Introduced by: Councilor Kvistad, Chair JPACT

WHEREAS, The FY '00 Unified Work Program was adopted by Resolution Number 99-2756; and

WHEREAS, Metro prepared a South/North Corridor Project Draft Environmental Impact Statement that evaluated numerous light rail transit (LRT) options, alignment alternatives and design options as well as a No-Build Alternative that would have served the South Corridor; and

WHEREAS, The Metro Council adopted Resolution 98-2674 on July 23, 1998 that adopted the Locally Preferred Strategy for construction of a light rail segment between the Clackamas Town Center and the Rose Quarter; and

WHEREAS, In November 1998, voters in the Portland metropolitan region rejected a ballot measure that would have reaffirmed the region's 1994 vote to authorize the sale of General Obligation Bonds that would have provided $475 million in local funding necessary to construct the Locally Preferred Strategy; and

WHEREAS, "Listening Posts" were held by Metro throughout the region to better understand the public's perception of the South/North Corridor's transportation needs; and

WHEREAS, Numerous transportation improvements were suggested in the "Listening Posts" and included transit options such as increased express and local bus service, addition of high occupancy vehicles lanes, additional park-and-ride opportunities and improved transit centers; and

WHEREAS, A significant amount of technical analysis has already taken place in the South Corridor including: system studies, South/North Preliminary Alternatives Analysis, Design Option Narrowing, Cost-Cutting, Draft Environmental Impact Statement, ODOT's McLoughlin Boulevard Draft and Final Environmental Impact Statements and subsequent studies by

Clackamas County and the City of Milwaukie that address McLoughlin Boulevard; and

WHEREAS, At the April 8, 1999 JPACT meeting, staff was asked to prepare a work program that outlines a program to advance non-light rail transit options in the South Corridor and submit that plan at the June 1999 meeting of JPACT; and

WHEREAS, Resolution Number 96-2442 allocated $55 million of Regional STP funds towards a light rail project in the South/North Corridor, of which $1.5 million were programmed for FY '99; and

WHEREAS, A transit improvement program must be developed for the South Corridor as a result of the loss of funding for the rail project; and

WHEREAS, The attached work plan (Exhibit A) provides a work program for the South Corridor Transit Options Study; now, therefore,

BE IT RESOLVED:

That the Metro Council:

1. Amends the FY '00 Unified Work Program to add a South Corridor Transit Options Study with the attached work plan.

2. Amends the TIP to authorize $1.5 million of FY '99 STP funds reserved for the South/North Corridor and $171,682 of local match to fund the study.

3. Directs that Metro staff, ODOT and Tri-Met staff shall work together with participating jurisdictions including Clackamas County, and the Cities of Gladstone, Milwaukie, Portland, and Oregon City to:

- Develop and prioritize non-light rail transit options that are responsive to the travel demand in the corridor and to the community needs; and
- Select a package of transit improvements that can be implemented expeditiously or moved forward into more advanced design, environmental analysis and construction; and
- Address community concerns expressed in the "listening post" meetings and through the public involvement process implemented for this study by developing fiscally responsible alternatives that can be implemented quickly; and
- Develop project capital and operating costs to a level that is appropriate upon which to

base a federal funding request for any major capital investment; and

- Bring forward for adoption by the Metro Council a comprehensive transit strategy for the corridor, an implementation plan and funding strategy.

Adopted by Metro Council on this _____ day of _____, 1999.

_____
Rod Monroe, Presiding Officer

Approved as to Form:

_____
Daniel B. Cooper, General Counsel

Exhibit A

South Corridor Transit Options Study

TPAC Review Draft

Work Program
May 18, 1999

METRO

1.0 INTRODUCTION

1.1 Corridor Description and History

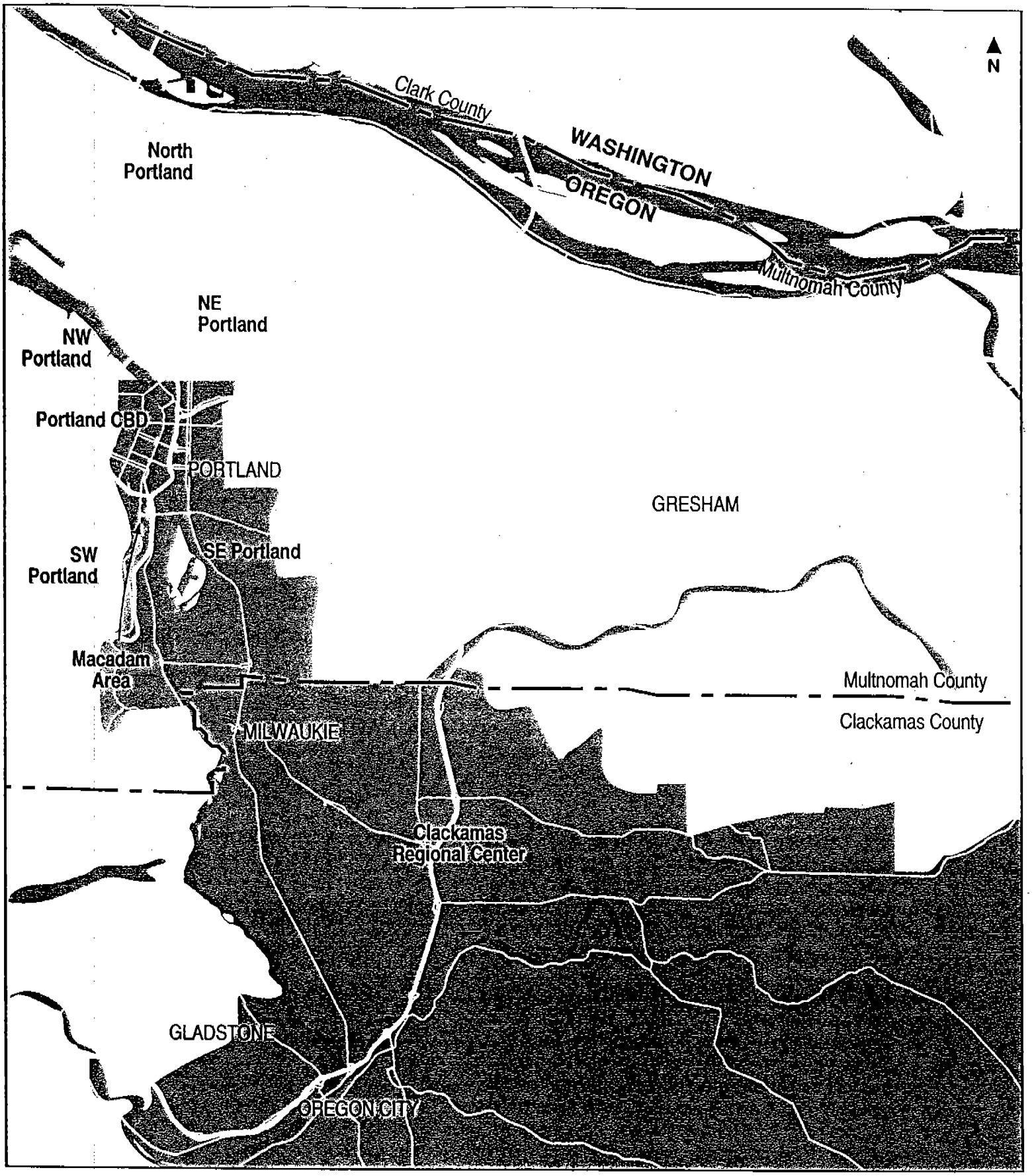
The South Corridor is a funnel-shaped travelshed with ends in Oregon City and Clackamas Regional Center which narrows between Milwaukie and downtown Portland (See Figure 1). The corridor includes portions of the cities of Portland, Milwaukie, Gladstone and Oregon City, and Clackamas County. This corridor has experienced tremendous growth in the past 20 years and by 2015, trip volumes will increase by 30% and the hours that drivers spend in delayed traffic will increase eight fold.

Over the past 20 years, the population of the four-county region has grown by approximately 45 percent, from 1,100,900 residents in 1975 to 1,596,100 residents in 1995. The population trends over this period consisted of three distinctly different cycles. The 1970s was a period of rapid growth with a population growth rate of 2.1 percent per year on average. The early/mid-1980s were marked by a recession with population remaining virtually flat. Population has been growing rapidly since 1988, by about 250,000 residents over this period.

Since 1980, the rate of employment growth in the Portland/Vancouver region has been almost 40 percent higher than the national average. From 1980 to 1995, employment growth in the Portland/Vancouver region averaged 2.6 percent per year, increasing from 672,800 jobs in 1980 to 995,700 jobs in 1995, while the national average was 1.9 percent. During the late 1980s, the region's job growth ranked as the fourth fastest in the country, with annual job growth peaking at about 35,000 net new jobs per year. Employment growth slowed in the early 1990s, and was particularly sluggish in 1991 during a short national recession. Most recently, the region has again been experiencing strong job growth.

Clackamas County is a fast growing sector of the region. Between 1980 and 1994, the number of households in the county increased by about 2.3 percent per year and the number of jobs increased by 4.0 percent per year. The study corridor in Clackamas County currently contains about 80,600 households, with an expected growth rate of 2.4 percent per year between 1994 and 2015, reaching a total of 132,400 households by 2015. The study corridor also contains about 94,600 jobs, with an expected growth rate of 3.0 percent per year, reaching a total of 174,600 jobs by the year 2015. The Clackamas Regional Center, located near the northeast corner of Clackamas County, has been a major development site in recent years and is projected to continue to develop rapidly.

The South Corridor also includes the Central City south of Burnside, including the Portland Central Business District (CBD). The Central City contains the largest concentration of employment in the region. As of 1994, the Central City contained 138,500 jobs and 11,900 households. Central City jobs are expected to grow by 2.0 percent per year reaching a total of 211,900 jobs by the year 2015. The number of households is expected to grow to 21,900 over the same period.



April 1999

Figure 1

METRO

South Corridor Study Area

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This corridor has been the subject of many transportation planning efforts over the past twenty years. In 1979, a Draft Environmental Impact Statement produced by the Oregon Department of Transportation (ODOT), called for widening McLoughlin Boulevard, with the possibility of adding a high-occupancy vehicle lane. These improvements south of Tacoma Street were built, while those north of Tacoma were deferred until after the completion of a light rail line. An early light rail feasibility study was completed in 1984 by Metro. In 1992, Metro and the region selected the Milwaukie Corridor over the I-205 Corridor and as the region's highest transit improvement priority. A scoping process narrowed the modes under consideration to light rail and bus service from a range of alternatives that also included commuter rail and river transit. In 1994, Metro and the region undertook an Alternatives Analysis to identify the best way to provide high capacity transit service in the Milwaukie (South) and I-5 (North) Corridors. The project was renamed the South/North Corridor Transit Study. Several light rail alignments, termini and design options were evaluated in the South/North Corridor Project's Draft Environmental Impact Statement (DEIS).

In July 1998, the Metro Council adopted the Locally Preferred Strategy for the South/North Corridor Project that called for a light rail construction segment between the Rose Quarter, downtown Portland, Milwaukie and Clackamas Regional Center. This decision followed five years of planning, engineering and environmental analysis of transit options in the South Corridor. In November, 1998 a local funding measure to provide the local share of project financing ($475 million) through Tri-Met's sale of general obligation bonds was defeated by tri-county voters.

1.2 Land Use Context - Region 2040 Plan

In 1992, Metro district voters approved a new charter for Metro, which expanded Metro's land use role. The charter directs Metro to prepare and adopt a "Future Vision" for the region, covering a period of 50 years and addressing "preservation of regional land and natural resources" and "how and where to accommodate the population growth." The charter further directs Metro to adopt ordinances that would require local comprehensive plans and zoning regulations to comply with the regional framework plan.

Metro responded to the charter requirements by developing the Region 2040 Growth Concept and its implementing document, the *Region 2040 Framework Plan*. This plan establishes the urban growth boundary for the next 20 years and the pattern and densities for development within the boundary to the year 2040. The plan is designed to absorb an additional 720,000 residents into the Oregon portion of the metropolitan region by the year 2040 with as little expansion of the existing UGB as possible.

The *Region 2040 Framework Plan* designates the Central City of Portland as the high-density employment hub of the Portland metropolitan region. The role of downtown Portland as the finance, cultural, tourism, retail and commerce center for the region is reinforced by the plan. The plan designates "Regional Centers" as mixed-use areas consisting of compact employment and residential developments that are served by high-quality transit services and "Town Centers," which are similar to Regional Centers but slightly less dense. Within the South Corridor, the area around the Clackamas Town Center, referred to as Clackamas Regional Center, and the central areas of Milwaukie and Oregon City are currently designated as Regional Centers.

1.3 Past and Future Transportation Conditions in the South Corridor

Over the past two decades, growth in traffic volumes on the South Corridor's regional roadways has increased significantly. Table 1 summarizes the historic growth in traffic volumes on SE McLoughlin Boulevard, the primary highway connecting activity centers in the southern portion of the corridor with the Portland Central City. Growth in traffic volumes on SE McLoughlin Boulevard from 1971 to 1995 has ranged from 21 percent at SE 17th Avenue to 60 percent at Highway 224 and 59 percent at I-205.

Table 1
Historic Growth in SE McLoughlin Boulevard Traffic Volumes

SE McLoughlin Boulevard at:	1971 ADT [1]	1995 ADT [1]	% Change
SE 17th Avenue	37,200	45,000	21%
Highway 224	30,300	48,600	60%
I-205	22,200	35,300	59%

Source: Metro, 1997.
[1] ADT = Average Daily Traffic Volumes

Growth in traffic within the South Corridor is forecast to continue over the next two decades. Table 2 summarizes forecast population and employment growth in the corridor, which will produce a 30 percent increase in vehicle miles of travel (VMT), in the southern portion of the corridor by the year 2015. This VMT growth is projected to lead to a three-fold increase in the miles of major roads in the southern portion of the corridor that are congested (i.e., have volumes that are in excess of 90 percent of the design capacity of the roadway).

Table 2
P.M. Peak Hour Summary Statistics for Major Roads in South Corridor by Sub-Area, 1994 and 2015 [1]

Sub-Area [2]	Vehicle Miles Traveled		Vehicle Hours of Delay		Road Miles with V/C [3] > 0.90	
	1994	2015	1994	2015	1994	2015
Southeast Portland (7)	18,000	22,400	83	378	2.5	5.1
Milwaukie (8)	17,300	22,200	96	338	2.8	5.5
Sunnyside (9)	49,200	66,700	50	641	1.9	10.8
Gladstone (10)	33,600	43,700	13	358	0.0	6.2
Oregon City (14)	36,000	51,000	58	720	2.2	10.2
Macadam (6)	45,300	53,300	80	480	4.2	6.1
South/North Corridor Total	199,400	259,300	380	2,915	13.6	43.9
Regional Total	1,617,400	2,328,800	2,181	17,442	85.0	292.0

Source: Metro travel forecasts, 1997.
[1] Based on the No-Build Alternative developed for the South/North Corridor Project
[2] Number in parenthesis is a Metro sub-district number (see the *South/North Transit Impacts and Travel Demand Forecasting Results Report* (Metro: February 1998) for a map illustrating the sub-districts.
[3] V/C = ratio of vehicle volume to capacity.

As a result of this deterioration of road service levels, corridor drivers will experience an eight-fold increase in the number of hours they sit in delayed traffic. The worst decline in auto-travel quality is projected to occur in the Clackamas Regional Center area with a five-fold increase in over-capacity roadways and a thirteen-fold increase in vehicle hours of delay (i.e., added time spent on roadway segments with a V/C ratio greater than 0.9). Tables 3 and 4 show that by the year 2015, traffic on SE McLoughlin Boulevard and its parallel arterials will be at or over capacity for all or virtually all of their lengths within the corridor.

Table 3
P.M. Peak Hour Conditions on McLoughlin Corridor Southbound – Year 2015 [1]

Location [2] (Southbound Direction)	Volume [3]	V/C [4] Ratio
Grand Avenue near Powell Blvd. (E-20)	5,400	1.20
McLoughlin Blvd. near Sellwood (E-21)	4,100	1.13
McLoughlin Blvd. south of Milwaukie CBD (E-23)	2,800	1.58
McLoughlin Blvd. south of Concord Road (E-26)	2,100	1.00
McLoughlin Blvd. at Clackamas River (E-27)	2,800	1.34

Source: Metro travel forecasts, 1997.
[1] Based on the No-Build Alternative developed for the South/North Corridor Project
[2] Letter/Number designation in parenthesis is a Metro cutline number.
[3] Vehicles per hour.
[4] V/C = ratio of vehicle volume to capacity.

Table 4
P.M. Peak Hour Conditions on Arterials Paralleling SE McLoughlin Boulevard Southbound – Year 2015 [1]

Location [2] (Southbound Direction)	Facility	Volume [3]	V/C [4] Ratio
Near SE Powell Blvd. (E-20)	SE Milwaukie Avenue	700	0.99
Near Sellwood (E-21)	I-205	6,200	0.94
	SE Johnson Creek Blvd.	1,000	1.13
	SE 82nd Avenue	1,500	0.86
Southeast of Milwaukie CBD (E-23)	Hwy. 224	2,300	1.10
Near Clackamas River (E-27)	I-205	7,300	1.04

Source: Metro travel forecasts, 1997.
[1] Based on the No-Build Alternative developed for the South/North Corridor Project.
[2] Letter/Number designation in parenthesis is a Metro cutline number.
[3] Vehicles per hour.
[4] V/C = ratio of vehicle volume to capacity.

1.4 Development of the South Corridor Transit Options Study

In response to the defeat of the November, 1998 local funding measure for the South/North Light Rail Project, Metro held a series of "listening posts", public meetings to take comments on what the region ought to do next. Generally speaking, the majority of those commenting at the listening post meetings support the multi-modal emphasis that the region has adopted as a tool to maintain livable communities. In Portland and inner Multnomah County, support for continued expansion of the light rail system was strong. Clackamas County residents voiced the strongest support for increased road capacity and the least support for light rail. Those who recommended alternatives or complements to a light rail system had a variety of suggestions, with improved bus service and high occupancy vehicle (HOV) lanes being the most common. Others suggested streetcars, bicycles, hovercraft, vanpooling, river transit, congestion pricing and flexible schedules for working and telecommuting.

At the April 8, 1999 meeting of the Joint Policy Advisory Committee on Transportation, (JPACT), Metro staff were directed to prepare a work program for adoption in June, 1999 that outlines a program to advance non-light rail transit options in the South Corridor. This work plan has been prepared in response to that request.

1.5 Study Approach

Because a tremendous amount of public involvement and technical analysis have taken place in this Corridor in the preparation of the *South/North Corridor Project Draft Environmental Impact Statement*, the study does not propose to "reinvent the wheel". This study will build on the information developed over the last five years and tailor it to the discussion of non-light rail alternatives. Because of the unique nature of the three main segments of this Corridor and recent planning efforts that have taken place since the November, 1998 election, each segment will have a slightly different starting point. For example, Clackamas County is concluding a state and locally funded Transportation and Growth Management study of the McLoughlin Corridor in the unincorporated area of Clackamas County south of Milwaukie to Gladstone. A public involvement process is concluding that will result in recommendations for the streetscape along McLoughlin and the composition of adjacent land uses. Starting from scratch would only create confusion and prolong the process unnecessarily for this study. Building on the results of the study and tying into the public involvement structure already in place makes sense. A similar situation exists in Milwaukie with the upcoming riverfront development planning, implementation of a recently funded boulevard project along the waterfront, and recent discussions with Tri-Met about development of a new transit center on the downtown Safeway site. In addition, Tri-Met is planning to increase service in the corridor in the fall of 1999, with incremental service and bus stop improvements planned over the next three years. Tying into these efforts will result in better coordination with this study and make the best use of public input and talent, as well as tailoring the outcome to the specific need of these corridor segments.

1.6 Objectives

Objectives for this study include:

1. Development and prioritization of non-light rail transit options that are responsive to travel demand in the Corridor and to the community's needs.
2. Selection of a package of transit improvements, specific to corridor segments, that can be expeditiously moved forward to service providers for implementation or into more advanced design, environmental analysis and construction.
3. Address community concerns expressed in the "listening post" meetings and through the public involvement process implemented for this study, by developing fiscally responsible alternatives that can be implemented as expeditiously as possible.
4. Adoption by the Metro Council of a comprehensive transit strategy, an implementation plan and funding plan for the corridor.
5. Develop project capital and operating costs to a level that is appropriate upon which to base a federal funding request.

1.7 Jurisdictional Involvement

The following jurisdictions will be represented in this study process:

- City of Portland
- City of Milwaukie
- City of Gladstone
- City of Oregon City
- Clackamas County
- Tri-Met
- Metro

1.8 Project Management Structure

Metro is the overall lead agency for this study, with support provided from the agencies listed above. Tri-Met will have an important role in the development of bus service and capital improvement strategies, as will ODOT for the evaluation of highway-based alternatives such as a McLoughlin HOV lane. The study will be structured from a geographic standpoint to respond to the unique needs of each of the three major corridor segments to be studied. This segmentation will streamline the study process, allow for individualized solutions and make sure that the time spent by jurisdictions is focused directly on the issues in their area. Tri-Met, Metro and ODOT would be technical resources to all of these committees and would ensure that compatible solutions are developed in each segment. Figure 2 outlines the proposed study organization. Proposed representation for the corridor segments is as follows:

<u>Portland CBD to Milwaukie</u>
- City of Portland
- City of Milwaukie

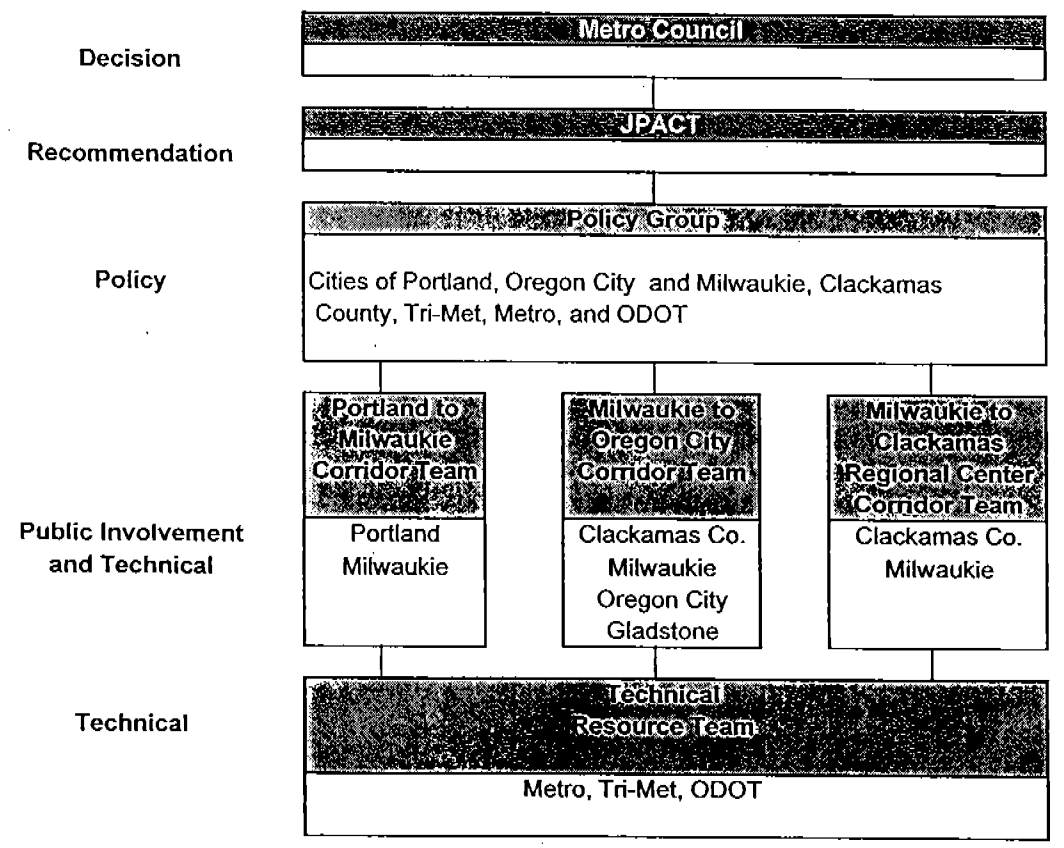
<u>Milwaukie to Clackamas Regional Center</u>
- Clackamas County
- City of Milwaukie

Milwaukie to Oregon City

- City of Milwaukie
- City of Oregon City
- City of Gladstone
- Clackamas County
- City of Oregon City

Study groups include policy and technically focused groups. These groups are described below.

Figure 2. SOUTH CORRIDOR TRANSIT OPTIONS STUDY ORGANIZATION



Policy Group

The Policy Group makes recommendations to the Joint Policy Advisory Committee on Transportation (JPACT) at several key points in the process. This group will be composed of either executive-level staff or elected officials from Metro, Tri-Met, ODOT, Clackamas County, Milwaukie, Gladstone, Portland, and Oregon City. This group would meet primarily at strategic decision points.

Corridor Teams
These teams provide technical input and are specific to each of the three segments (see figure 1). These will be comprised of jurisdiction technical staff with a citizen representative on each Corridor Team. Metro, Tri-Met and ODOT would be represented on each team, appointed by the involved local jurisdictions. The teams may need to meet jointly to resolve compatibility issues between strategies. If these issues cannot be resolved amongst the teams, the issue would be forwarded to the Policy Group.

1.9 Budget and Schedule

The budget for this study is $1,671,872 to be spent in fiscal years 1999-2000 and 2000-2001. *[A detailed budget is currently being developed and will be presented at TPAC on 5/28/99].*

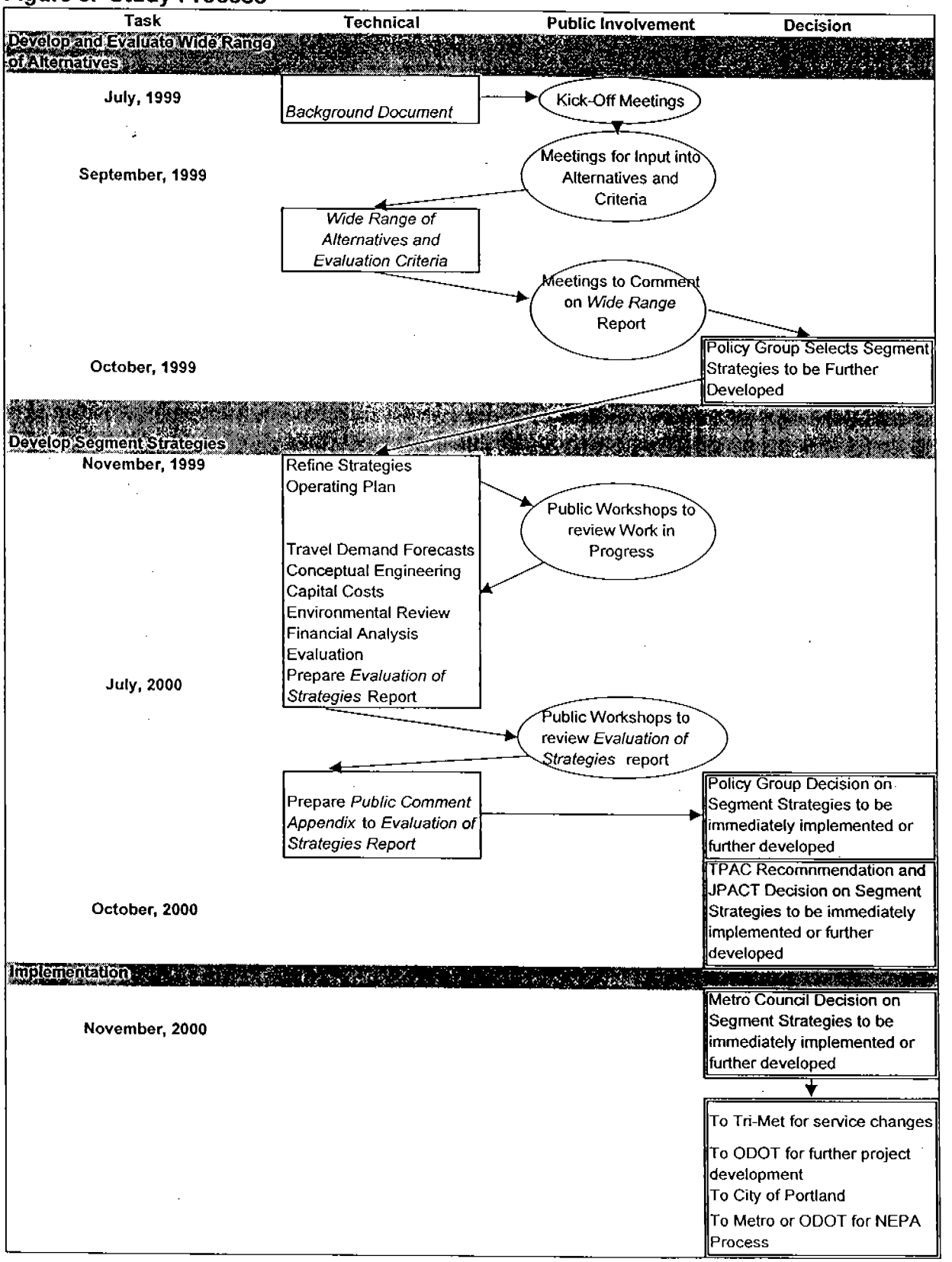
The study will begin in July 1999 and conclude no later that December 31, 2000 for a maximum duration of 18 months. Figure 3 shows the proposed study process and key dates. Every effort will be made to shorten the timeline, and interim decisions on implementation of specific strategies could also occur. Metro will initiate an Intergovernmental Agreement with Tri-Met for the provision of transit service planning and engineering services in support of the study.

Table 5 – Study Budget - to be added

Of particular importance to the project schedule and decision-making process is the evaluation of adding an additional lane to the Martin Luther King Jr. Boulevard and Grand Avenue viaducts in Portland. ODOT is planning to rebuild the viaducts and is entering the advanced stages of project development. If HOV lanes are shown to be a viable option in the McLoughlin corridor, Metro would need to advise ODOT early in the process so that the viaduct design could include a third lane option. If HOV is not an option, ODOT would continue design work to replace the two-lane viaducts.

Other schedule and decision point pressures affect this study. These include the proposed advancement of a Milwaukie Transit Center into design and construction, development of park and ride facilities, either permanent or shared use to accompany Tri-Met service increases, and the need to reconfigure transit facilities at Clackamas Town Center as a result of mall expansion.

Figure 3. Study Process



2.0 WORK PROGRAM

2.1 Introduction

This work program is designed to facilitate the selection of multiple transit strategies for each Corridor Segment. The realization that one strategy or project will not meet the transit needs of the entire Corridor is the driving force behind this study process. The goals of this work program are:

- To allow timely decisions to be made regarding the implementation of those strategies that are the least capital intensive early in the process, i.e. those that require little or no new capital funding.

- To develop a comprehensive package of transit improvement strategies, an implementation plan and a funding plan for the corridor to be adopted by the Metro Council.

- Analysis will be performed at the appropriate level to thoroughly evaluate transit strategies; i.e. no environmental analysis or capital costs (aside from additional buses) would be required for transit service increases, while an environmental analysis and cost estimates would be prepared for a major capital project.

- The study will allow individual segments to pursue the options that are most attractive to them. Corridor Teams will meet jointly to resolve any incompatible recommendations. The Policy Group will resolve any conflicts that cannot be resolved between the Corridor Teams.

2.2. Start-Up Tasks

This group of tasks puts in place the contracts and other administrative machinery to undertake the study. In addition, the study's Policy Group is appointed and past actions are summarized in a *Study Background Document.* Tasks to be completed include the following:

- Refine study work plan, purpose and need, budget and schedule
- Refine public involvement plan
- Develop and execute Intergovernmental agreements
- Develop consultant scopes of work
- Procure consultant. This task includes preparation of a Request for Qualifications, advertisement of RFQ availability, review of proposals, selection, and contract negotiations. This task is started early in order for the consultant to be available to begin technical evaluation of alternatives. Special expertise will be required for transit operations, traffic engineering, civil design, ITS applications and HOV lane design and operation and other specialties tailored to specific alternatives.
- Develop *Study Background Document* that summarizes the extensive public involvement and technical analysis undertaken to date, the alternatives considered and the decisions reached regarding advancement of those

alternatives. This document will form the basis for the wide range of strategies that the public will be asked to consider.

No "one-size-fits-all" strategy is proposed for this study. Different strategies or combinations of strategies would be tailored to each individual segment. Alternatives previously considered in this Corridor by Metro, ODOT, the City of Portland, Tri-Met or community groups to date include:

- Expanded bus service
- Light Rail (not an option for further study)
- Transit options from Tri-Met's Transit Choices for Livability Study
- Commuter Rail
- Transportation Systems Management
- River Transit
- Streetcar
- High Occupancy Vehicle Lanes

Additional strategies to supplement those already studied could include:

- Intelligent Transportation Systems Applications
- Transportation Demand Management
- Pricing Strategies (HOT lanes, or peak pricing)

A round of public involvement kick-off meetings will be used to distribute the *Study Background* report and to discuss the study's public involvement program, decision points and opportunities to get involved.

The next task develops evaluation criteria and screens a wide range of potential strategies down to several options. Alternative strategies will be developed for each corridor segment to be advanced for further refinement.

2.3 Screening of Alternatives

This task develops the wide range of alternatives to a level where they can be evaluated technically and be reviewed by the Corridor Teams and the public. The *Range of Alternatives and Evaluation Criteria* report will contain the analysis of the wide range of alternatives and the evaluation criteria. The Corridor Teams and the public will review the alternatives and recommend Segment Strategies to the Policy Group for adoption.

2.3.1 Development of Evaluation Criteria

This task produces evaluation criteria based on purpose and need, public comment and Corridor Team reviews. Evaluation criteria are the yardstick against which alternatives are measured. In order to respond to the needs of the unique corridor segments, evaluation criteria will be developed for each segment. These criteria will be tied to the function of the segment in the transit system and its relation to the community. For example, the function of the Portland to Milwaukie segment is much more of a high capacity trunk with Clackamas and Oregon City feeding in to it. Southeast Portland neighborhoods also will have unique needs that may or may not coincide with the trunk function of McLoughlin Boulevard. Different strategies will address different evaluation

criteria with the anticipated outcome being a package of improvements that address multiple goals.

Development of the evaluation criteria and wide range of alternatives will include the second round of public meetings to ensure that all appropriate options are considered. The draft evaluation criteria will be drafted based on results of the Listening Posts, applicable local jurisdiction policies and comments received during the public meetings.

2.3.2 Develop Wide Range of Alternatives

This task develops the alternatives to the point where they can be evaluated and a determination made by the public, Corridor Teams and Policy Group as to which alternatives should be evaluated in detail. Enough information about the alternatives will be developed so that the evaluation criteria can be applied equally to every alternative, assuring a clear and objective comparison. The alternatives developed would be grouped into three categories; service alternatives, transportation system management alternatives, and capital improvement strategies. These would also be grouped according to the corridor segment being addressed. Examples are given below.

<u>Service Options</u>

- Little to no capital component
- Increased bus service
- Re-oriented bus routes
- Additional bus modes dial-a-ride, small bus

<u>TSM Options</u>

- Mid-range capital component
- Signal prioritization
- Queue jump lanes
- ITS applications
- Pricing strategies

<u>Capital Improvements</u>

- Bus Rapid Transit/Busway
- Commuter Rail
- River Transit
- Streetcar
- Transit centers, park and rides, and transit streets
- HOV Lanes

2.3.3 Prepare Range of Alternatives and Evaluation Criteria Report – Decision on Segment Strategies

This task develops and evaluates the wide range of alternatives. Each alternative will be considered based on the evaluation criteria. The report will be the subject of a third round of public meetings and Corridor Team meetings. Following incorporation of comments, the report will be forwarded to the Policy Group for a decision on which alternatives should be carried forward in each segment.

2.4 *Development of Segment Strategies*

This group of tasks more fully develops the costs and impacts of the small group of strategies defined in the previous task. The goal of these tasks is to develop the alternatives to a degree that accurate costs can be produced, based on conceptual engineering (10-15% design level) where appropriate. Operating and maintenance costs will be based on refined operating plans, as will ridership forecasts. Because the exact range of strategies determines to a certain degree the analysis required, these

tasks will be further defined as the outcome of Task 2.3 becomes clear. Figure 3 shows the analyses required for each type of strategy.

2.4.1 Develop Strategies

The development of segment strategies will include several opportunities for public involvement as the alternatives are developed and evaluated. Corridor Teams and small public working groups will play a significant role in guiding this part of the process.

Figure 3. Strategy Analyses Required

Analysis	Service Strategies	TSM Strategies	Capital Investments
Operating Plan	◆	◆	◆
Travel Demand Forecasts	□	◆	◆
Operating and Maintenance Costs	◆	◆	◆
Conceptual Engineering	✋	□	◆
Environmental Review	✋	□	◆
Capital Costs	□	□	◆
Financial Analysis	◆	◆	◆
Evaluation	◆	◆	◆

◆ = *required analysis*
□ = *optional, to be determined*
✋ = *not required*

2.4.2 Refine Strategy

This task will refine important characteristics of each strategy with the goal of matching it closely to the applicable evaluation criteria for each segment. In some cases, no changes will be needed. This is not intended to be a highly technical task, but rather a confirmation of or adjustment to the strategies developed for each segment. This task will more fully develop programmatic elements of alternatives such as a TDM Program or pricing strategies. Public workshops will support this task.

2.4.3 Develop Operating Plan and Capital Facilities Program

For each strategy, define the operating components that are required to complete travel demand forecasting. These include:

- Headway
- Transit line routings
- Service Span
- Number and effect of transit priority treatments
- Park and Ride Lots – size, location and service
- Station locations
- Transfer penalties

This task will be summarized in a *Detailed Transit Strategies* technical memorandum that will form the basis of travel demand forecasting and conceptual engineering, if applicable.

2.4.4 Travel Demand Forecasts

In order to conserve budget and meet the study schedule, the minimum number of travel demand forecasts will be prepared that yield the full range of information required. These runs will combine strategies in a manner that bests highlights the trade-offs between alternatives and uses forecasting resources economically. The forecasts will provide inputs to several tasks, including operating and maintenance costing, environmental review and evaluation.

2.4.5 Operating and Maintenance Costs

Based on the travel demand forecast, operations and maintenance costs will be calculated for each strategy based on appropriate unit costs including vehicle miles traveled, vehicle hours traveled, number of stations, and length of fixed guideway or other linear facility. Costs will be produced in 1999 dollars.

2.4.6 Conceptual Engineering

This task will develop conceptual engineering to approximately a 10 – 15% design level. This design will form the basis for capital costs and will determine the extent of the transit facility's environmental impacts. Conceptual engineering would be required to evaluate a bus rapid transit project, a streetcar extension, or an HOV lane. It may be needed for some TSM facilities as well, such as queue-jump lanes and signals. This will be primarily a consultant task.

2.4.7 Environmental Screening

This task will identify significant environmental impacts that would occur for the strategies. This is a reconnaissance-level analysis, designed to identify those impacts that would have the greatest effect in terms of cost and mitigation. Due to the tremendous amount of environmental documentation developed for the south corridor as part of the South/North Corridor Project DEIS, this task will rely primarily on existing data, with a minimum of new data collection anticipated. Factors to be analyzed include:

- Traffic Impacts
- Land Use Impacts
- Neighborhood Impacts
- Noise and Vibration Impacts
- Ecosystems Impacts
- Visual and Aesthetic Impacts
- Historic Resources and Parklands

2.4.8 Capital Cost Estimates.

These will be prepared based on the conceptual engineering in the case of capital investment projects or some TSM projects. For Service Strategies, this will consist of

estimating the cost of additional vehicles. Appropriate local unit costs will be used if possible. If not, national averages will be used. The Environmental Review may result in some added costs for environmental mitigation if such measures are easily identified.

2.4.9 Financial Analysis

This analysis combines the results of the capital costs and operating and maintenance costs and identifies the revenue needs to implement the strategy. Potential funding sources and shortfalls will be identified. Because these strategies could draw from many sources, both transit and highway, this analysis is critical to determine the sources and likelihood of project funding for these strategies.

2.4.10 Evaluation

This section utilizes all of the analysis from the previous seven tasks and prepares a comparison of the costs and benefits of each of the strategies, addressing the evaluation criteria for each project segment.

2.4.11 Prepare Evaluation of Transit Strategies Document.

This document summarizes the evaluation of the strategies and ranks them based on the evaluation criteria. The Corridor Teams will combine high-ranking strategies into improvement packages to be selected by the Policy Group, JPACT, and Metro Council for further development or immediate implementation. There will be an extensive public involvement process during this period, with public comments being included as an appendix to the evaluation document.

2.5 Selection of Preferred Transit Strategies

The Policy Group will act on the *Evaluation of Transit Strategies Document* and make a recommendation to JPACT and the Metro Council. This recommendation will include:

- A comprehensive package of transit improvement strategies for the South Corridor
- An Implementation Plan for the strategies
- A Funding Plan

The Policy Group's recommendation will be forwarded to TPAC, JPACT and the Metro Council.

STAFF REPORT

CONSIDERATION OF RESOLUTION 99-2795 FOR THE PURPOSE OF AMENDING THE FY '00 UNIFIED WORK PROGRAM TO ADD THE SOUTH CORRIDOR TRANSIT OPTIONS STUDY AND AMENDING THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) TO AUTHORIZE FY '99 SURFACE TRANSPORTATION PROGRAM FUNDS (STP).

Date: May 28, 1999 Presented by: Richard Brandman

PROPOSED ACTION

This resolution amends the FY '00 Unified Work Program (UWP) to add a South Corridor Transit Options Study, and adopts Exhibit A, the *South Corridor Transit Options Study Work Program* as the work program for the study. The resolution also recommends that Metro, Tri-Met and ODOT staff, work together with the participating jurisdictions of Clackamas County and the cities of Portland, Milwaukie, Gladstone and Oregon City to:

1. Develop and prioritize non-light rail transit options that are responsive to travel demand in the Corridor and to the community's needs.
2. Select a package of transit improvements, specific to corridor segments, that can be expeditiously moved forward to service providers for implementation or into more advanced design, environmental analysis and construction.
3. Address community concerns expressed in the "Listening Post" meetings and through the public involvement process implemented for this study, by developing fiscally responsible alternatives that can be implemented as expeditiously as possible.
4. Develop project capital and operating costs to a level that is appropriate upon which to base a federal funding request for any major capital investment.
5. Bring forward for adoption by the Metro Council a comprehensive transit strategy for the corridor, an implementation plan and funding strategy.

FACTUAL BACKGROUND AND ANALYSIS

I. Development of the South Corridor Transit Options Study

In July 1998, the Metro Council adopted the Locally Preferred Strategy for the South/North Corridor Project that called for a light rail construction segment between the Rose Quarter, downtown Portland, Milwaukie and Clackamas Town Center. This decision followed five years of planning, engineering and environmental analysis of transit options in the South Corridor. In November 1998, a local funding measure to provide the local share of project financing ($475 million) through Tri-Met's sale of general obligation bonds was defeated by tri-county voters.

In response to the defeat of the local funding measure, Metro held a series of "Listening Post", public meetings to receive comments on what the region should do next. Generally speaking, the majority of those commenting at the listening post meetings supported the multi-modal emphasis that the region has adopted as a tool to maintain livable communities. In Portland and inner Multnomah County, support for continued expansion of the light rail system was strong. Conversely, a large number of Clackamas County residents who commented were opposed to light rail in any form. Clackamas County residents also voiced the strongest support for increased road capacity and the least support for light rail. Those who recommended alternatives or complements to a light rail system had a variety of suggestions, with improved bus service and high occupancy vehicle (HOV) lanes being the most common. Others suggested streetcars, bicycles, vanpooling, river transit, congestion pricing and flexible schedules for working and telecommuting.

At the April 8, 1999 meeting of the Joint Policy Advisory Committee on Transportation, (JPACT), Metro staff were asked to prepare a work program for adoption in June 1999 that outlines a program to advance non-light rail transit options in the South Corridor. This work plan was prepared in response to that request.

II. Study Process and Organization

The study will take place between July 1, 1999 and December 31, 2000. As currently scoped, the study would be completed in November 2000. Figure 1 shows the study process and public involvement activities for the study.

In general, the study will revisit some options already studied as part of the South/North Corridor Project, with the exception of light rail, which will not be part of this study. New options may be added depending upon public comments received and ongoing technical analysis. This wide range of alternatives will be screened down to several promising alternatives for which more detailed analysis will be performed. The analysis in both the screening phase and the detailed analysis of alternatives will be geared toward evaluation criteria identified through the public involvement process and by the study's Policy Group.

Of particular importance to the project schedule and decision-making process is the evaluation of adding an additional lane to the Martin Luther King Jr. Boulevard and Grand Avenue viaducts in Portland. ODOT is planning to rebuild the viaducts and is entering the advanced stages of project development. If HOV lanes are shown to be a viable option in the McLoughlin corridor, Metro would need to advise ODOT early in the process so that the viaduct design could include a third lane option. If HOV is not an option, ODOT would continue design work to replace the two-lane viaducts.

The decision of what alternatives to implement in the South Corridor will ultimately be made by the Metro Council. Advising the Council will be TPAC and JPACT, as well as the study's Policy Group, comprised of either elected officials or executive level staff

from the participating jurisdictions. Technical analyses will be overseen by three Corridor Teams specific to the three main segments for the study:

- Portland to Milwaukie
- Milwaukie to Oregon City
- Milwaukie to Clackamas Town Center

These teams will develop options and recommendations for their segments. Tri-Met, ODOT and Metro staff will assist to ensure that the recommendations are compatible. If discrepancies exist between the three segments, the Corridor Teams would meet jointly to resolve the issue, with the Policy Group being the final arbiter of any incompatible strategies. A diagram of the study organization is included as Figure 2.

III. Budget and Schedule

The budget for this study is $1,671,682 to be spent in fiscal years 1999-2000 and 2000-2001. $1.5 million in funding would come from FY '99 Regional STP funds currently programmed for the South/North Corridor and the remainder be local match. The study will begin in July 1999 and conclude no later than December 31, 2000 for a maximum duration of 18 months.

Figure 1. Study Process

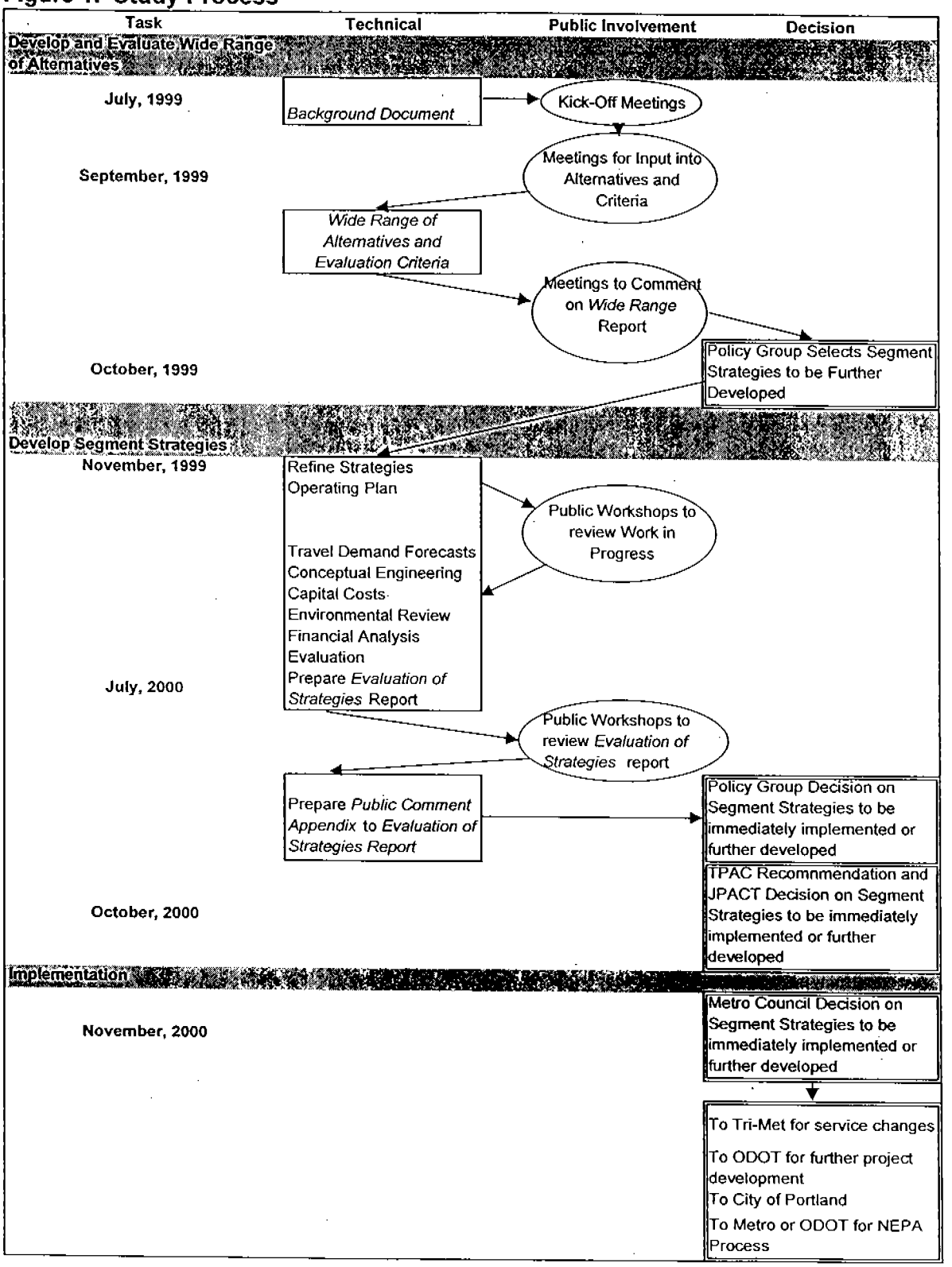


Figure 2. Study Organization

Figure 2. SOUTH CORRIDOR TRANSIT OPTIONS STUDY ORGANIZATION