



METROPOLITAN SERVICE DISTRICT
527 S.W. HALL ST., PORTLAND OR. 97201, 503/221-1646

A G E N D A --- REGULAR COUNCIL MEETING

Date: JANUARY 27, 1983
Day: THURSDAY
Time: 7:30 P.M.
Place: COUNCIL CHAMBER

Approx.
Time

Presented By

- | | | |
|------|--|------------|
| 7:30 | CALL TO ORDER | |
| | ROLL CALL | |
| | 1. Appointment to District 2 Vacancy/Oath of Office. | |
| | 2. Introductions. | |
| | 3. Councilor Communications. | |
| | 4. Executive Officer Communications. | |
| | 5. Written Communications to Council on Non-Agenda Items. | |
| | 6. Citizen Communications to Council on Non-Agenda Items. | |
| | 6.1 Request from Robert T. Breihof, Jr., Portland Recycling Refuse Operations, Inc. to address the Council regarding a paper box at St. Johns Landfill. | |
| 8:00 | 7. CONSENT AGENDA | |
| | 7.1 Minutes of the meeting of December 2, 1982. | |
| | <u>Development Committee Recommendation:</u> | |
| | 7.2 Resolution No. 83-381, for the purpose of amending the Functional Classification System and the Federal Aid Urban System (FAUS). | A. Cotugno |
| | <u>Services Committee Recommendation:</u> | |
| | 7.3 Resolution No. 83-387, for the purpose of granting to Marine Drop Box Company a variance from the minimum bond requirement of Resolution No. 81-281. | D. O'Neil |
| | <u>Coordinating Committee Recommendation:</u> | |
| | 7.4 Citizen appointees to serve with Coordinating Committee during FY 1983-84 budget process. | R. Barker |

<u>Approx. Time</u>		<u>Presented By</u>
	8. RESOLUTIONS	
8:05	8.1 <u>Consideration of Resolution No. 83-380, for the purpose of establishing a task force to evaluate the findings of the Diesel Exhaust Study.</u>	R. Brandman
8:15	8.2 <u>Consideration of Resolution No. 83-382, for the purpose of reserving the McLoughlin Boulevard Interstate Transfer funding and establishing a decision process.</u>	A. Cotugno
8:25	8.3 <u>Consideration of Resolution No. 83-383, for the purpose of endorsing the Regional Light Rail Transit (LRT) System Plan scope of work and authorizing funds for relating consulting engineering services.</u>	A. Cotugno
8:40	8.4 <u>Consideration of Resolution No. 83-386, for the purpose of setting terms of service for citizen appointees on the Metro Investment Committee.</u>	C. Chitty/ D. Carlson
8:50	9. Committee Reports	
9:00	ADJOURN	



METROPOLITAN SERVICE DISTRICT
527 S.W. HALL ST., PORTLAND, OR. 97201, 503/221-1646

MEMORANDUM

Date: January 27, 1983
To: Metro Council
From: Rick Gustafson, Executive Officer
Regarding: Report to Council on Management Objectives
for 1983

The purpose of this memo is to share with you my thoughts about management objectives for the Metro administration for calendar year 1983. The objectives listed are in the nature of attitudes and aspirations which are important to the success of the organization. They will be used as the framework by myself and department heads in developing specific program and budget requests in the coming two months. The objectives discussed below are by no means limited to the exclusive domain of the executive side. They are equally relevant to the Council and I share them with you for your consideration and use as you make policy.

The past year, as you know, has been a very trying experience for all of us. Although it has been frustrating, it can also be viewed in a positive vein in that the lessons learned can be used as a realistic base for carrying out the work that has been assigned us.

There has been positive movement. We are well on our way to developing a first rate fiscal management system. We are committed to reach consensus on a solid waste disposal system which will serve this metropolitan area into the next century. The Zoo continues to improve and prosper and we have adopted a Regional Transportation Plan which is being used as a basis for cooperative funding decisions by local, state and federal agencies.

My principal objective for 1983 is to restore a measure of credibility to Metro. It is essential that we be a credible organization if we expect to participate in solving the myriad of governmental problems facing this area. If we are not credible in the eyes of our peers and the citizens whom we serve, we will be replaced by some other governmental mechanism.

But credibility is not something to be sought directly, it comes from the job performed--it is an essential by-product. Consequently, my goals for the management of Metro for 1983 are to:

1. Maintain and enhance the professional competency of Metro;
2. Exhibit patience in dealing with issues and resolving problems;
3. Establish a good, clear working relationship with the Council; and
4. Improve interdepartmental working relationships.

Professional Competency

Metro has good, competent staff members. This past year we have hired a Deputy Executive Officer, Director of Solid Waste, Manager of Accounting and Waste Reduction Coordinator to join our management team. In addition, internal reorganization has caused the appointment from within of a Development Services Director as well as a Data Processing Manager. These managers are functioning within a decentralized system which places a great amount of reliance on their administrative skills. It is my intention to continue the present system and further encourage our managers to develop their program areas--clearly articulating goals and objectives and performance targets for my consideration and ultimately for your review and approval.

It will be the responsibility of the Executive Management Department to provide the coordination necessary to bring forward a cohesive interrelated program for Metro to the extent that is possible given the disparate functions of the organization. Executive Management will also monitor department goals, objectives and work programs to assure that stated performance targets and policies are met or adjusted as conditions warrant.

Just as managers must have the opportunity to perform their function, they should continually provide similar opportunities for their employees. It is crucial that we set a climate for work at Metro which encourages development of the skills and knowledge of all our employees. We must also provide for a proper physical setting, ample materials with which to work and a sense of purpose and direction. It is essential that crisis management atmosphere be diminished, and that our work is directed by the goals and objectives agreed to by the Council and Executive Officer. If we can provide these things, the general level of competence and performance of the organization will rise.

Patience in Dealing with Issues and Solving Problems

In looking at the last four years at Metro, it appears that we were generally in a hurry to find answers or to solve a problem. This most likely occurred as a result of the newness of the organization and the great expectations that we and our supporters had for Metro. One of the most important things we can do at this time is exhibit a great deal of patience in dealing with the issues or problems that confront us. This is true both in terms of providing the services we are currently empowered to provide and in deciding to undertake new responsibilities.

We do not always have to have an immediate answer. We do need to clearly understand the issue at hand and the interrelationship of the issue with citizens, interest groups and governmental units in the community. We must take time to develop good information regarding an issue or problem and measure or weigh any solution against other alternatives or options available. Also, in regard to a decision to undertake a new function, it is important that we understand thoroughly the financial ramifications of such a decision.

Patience will help us overcome the tendency to lurch from one crisis to another. Such erratic functioning carries a heavy cost in time and energy spent and ultimately diminishes the quality of work performed or decision rendered, as the case may be.

I personally pledge to you and the staff to work on exhibiting patience during the next year. We have plenty of work to do and decisions to make in the areas of solid waste, zoo, transportation, development services and criminal justice planning. It is crucial that the work be done thoroughly, professionally and deliberately for us to be effective.

Executive/Council Relationships

The past year's events have caused a healthy examination of the relationship between the Executive Officer and the Council as a whole as well as individual Council members. Such examination hopefully will lead to improvements in attitude and functioning of both the Executive and the Council. It is essential for Metro to be successful that both sides be strong and function well. The staff, as well as the public, must understand that the role of the Council is to formulate policy, provide direction and monitor programs, and that the Executive role is to manage the operation within the resources provided. It is also essential that there be a good working relationship amongst us all.

For my part, I intend to strive for a clear working relationship with the Council. This includes more formal communication between us so that the Council fully understands my position on policy matters which are before the Council.

It also includes an understanding that the Council is ultimately responsible for setting policy for the organization. Consequently, I will do everything possible to ensure that policy issues and the information needed by the Council in its deliberations are presented in an accurate, complete and timely fashion.

While I feel it is important to provide more structure to our relationship, I also recognize the importance of individual contact. It is important that we continue to communicate our ideas and concerns about Metro on a less formal basis. I will take the initiative from time to time to make these contacts and encourage you to reciprocate should the need arise.

Finally, I would encourage you to evaluate your functions and role as the Metro governing body and hope that at some point we could meet jointly to examine our relationship and the direction for Metro in the next several years.

Interdepartmental Work Relationships

One of the most important tasks at hand is to develop a better understanding and good working relationships among the various Metro departments. As you know, our functions are generally unrelated and the points of contact for employees are uneven.

At the hub of our interdepartmental system is the General Fund or central services departments--Finance and Administration, Public Affairs and Executive Management. The major objective of these central departments is to provide good, effective service to the functional departments. We have spent considerable time, money and energy improving our fiscal management service to the functional departments and it has produced good results in the departmental attitudes about Metro. We will continue to do so in all areas.

Communication is another important aspect for developing good interdepartmental relationships. We have instituted over the past several years regular department head meetings and senior staff meetings which serve as an information exchange mechanism for the organization. These meetings will continue and we will look for ways to expand the interdepartmental communications at Metro.

Memorandum
January 27, 1983
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Finally, it is important that all of us understand the nature of Metro so that we can better reconcile our expectations with the reality of our resources and responsibilities. Given the disparate functions of Metro it is highly unlikely that we will be a closely interrelated organization. As such, we will continually experience difficulty identifying fully with one another. Knowing this, we can concentrate on those objectives which are universal--providing the best possible service to the citizens in the region in an efficient and effective manner.

This memo is the first of several discussion papers I would like you to consider. At a later date I will present, for your consideration, a set of program priorities for Metro to be followed by a discussion of some general problems and issues facing the region. I urge you to review this paper and respond with your comments and suggestions. I am anxious to enter into a dialogue with you individually and collectively so that we may jointly provide the services to our constituents that are expected of us.

RG/gl
7559B/D4

PASSO

TO THE METRO COUNCIL

RE: PRROS PAPER DROP BOX AT ST. JOHN'S LANDFILL

The Portland Association of Sanitary Service Operators is very much in favor of the work done by the Metro staff in getting the newspaper box spotted at St. John's for use by the Metro recycling haulers.

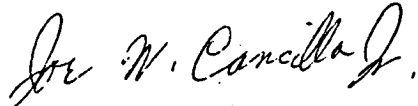
We feel that activities such as this can and will promote recycling within the industry faster than any other activity you can do. You are not only encouraging recycling but also encouraging the haulers to work together.

We hope that the council, the staff, and the haulers can work together in the future to bring about more innovations such as this.

Please feel free to call on PASSO whenever we can be of assistance.

Sincerely,

PORTLAND ASSOCIATION OF
SANITARY SERVICE OPERATORS



Joe W. Cancilla, Jr.
President

JWCJ:s



January 10, 1983

TO THE METRO COUNCIL:

Recently PRROS had a paper box spotted at the St. John's Landfill for the use of our members.

Having this box available makes it very convenient for our members since they no longer have to go out of their way to unload paper before going to the landfill.

We really appreciate the work the Metro Solid Waste staff (and especially Norm Weiting) did in working with PRROS and Genstar to bring this about. This is a very good example of how Metro can assist recycling without spending a lot of money. There are many ways that Metro can work as a catalyst, bringing together good ideas for promoting recycling and they don't have to cost.

PRROS has long advocated recycling in Portland through a cooperative effort between Metro staff, Metro council, and the haulers, working for viable alternatives without spending "taxpayer" money.

The committee formed for this purpose was:
Norm Weiting, Metro Operations Manager
Alex Cross, Dist. Supr. - Genstar
Bob Breihof, President - PRROS
Joe Cancilla, President - PASSO
John Trout, Secy-Treas. - Teamsters #281

Once again, PRROS appreciates the effort of the Solid Waste staff in getting our paperbox spotted at St. John's Landfill.

Sincerely,

PORTLAND RECYCLING REFUSE OPERATORS, INC.


Robert T. Breihof, Jr.
President

RTBJ:s



METROPOLITAN SERVICE DISTRICT
527 S.W. HALL ST., PORTLAND OR. 97201, 503/221-1646

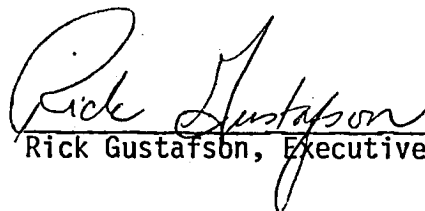
A G E N D A

Date: JANUARY 27, 1983
Day: THURSDAY
Time: 7:30 P.M.
Place: COUNCIL CHAMBER

C O N S E N T A G E N D A

The following business items have been reviewed by the staff and an officer of the Council. In my opinion, these items meet with the Consent List Criteria established by the Rules and Procedures of the Council. The Council is requested to approve the recommendations presented on these items.

- 7.1 Minutes of the meeting of December 2, 1982.
- 7.2 Resolution No. 83-381, for the purpose of amending the Functional Classification System and the Federal Aid Urban System (FAUS).
- 7.3 Resolution No. 83-387, for the purpose of granting to Marine Drop Box Company a variance from the minimum bond requirement of Resolution No. 81-281
- 7.4 Citizen appointees to serve with Coordinating Committee during FY 1983-84 budget process.


Rick Gustafson, Executive Officer

MINUTES OF THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

DECEMBER 2, 1982

Councilors Present: Councilors Banzer, Berkman, Bonner, Deines, Etlinger, Kafoury, Kirkpatrick, Rhodes, Schedeen, and Williamson.

Councilors Absent: Councilors Burton and Oleson (excused)

Staff: Donald Carlson, Andrew Jordan, Ray Barker, and Joe Cortright.

Testifiers: Frank Buehler
Bob Stacey
Demar Batchelor

The meeting was convened at 7:35 p.m. by Presiding Officer Banzer.

1. Introductions.

There were no introductions.

2. Written Communications to Council.

Ray Barker, Council Assistant, explained that a request for Metro to support or partially sponsor a three day conference on Solid Waste had been made by the Friends of the Earth, and that a draft letter in response was before them for their consideration. (Copy of letter and request are appended to the agenda of the meeting.) He added that Metro was under no obligation to support the conference financially.

There was then considerable discussion regarding the proposal and the draft letter. Councilor comments included endorsement of the concept and that it was something Metro should be doing itself, as well as reservations expressed regarding the conference coordinator and the proposal outline for the conference. It was suggested that additional study of the proposal needed to occur before a response was made to the Friends of the Earth and that the letter from the Council needed additional work.

Presiding Officer Banzer referred the matter to the next meeting of the Services Committee for discussion.

3. Citizen Communications to Council on Non-Agenda Items.

There were no citizen communications to Council on non-agenda items.

4. Councilor Communications.

Councilor Berkman reported on the Audit Committee's recommendation to adopt a resolution to establish an Investment Committee. He said the Investment Committee would be comprised of the members of the Audit Committee and three citizens with expertise in fiscal and investment matters, and that their appointment would be made by the Audit Committee Chairman and Presiding Officer with the approval of the Council.

He said the reason the resolution was coming before the Council before going to committee first was to implement the investment policies as soon as possible to realize investment opportunities for Metro's funds.

Resolution No. 82-378, for the purpose of creating a Metro Investment Committee.

Motion: Councilor Berkman moved adoption of Resolution No. 82-378. Councilor Schedeen seconded the motion.

Councilor Deines expressed objection to the process used to get the resolution before them.

Councilor Williamson commented that Coopers & Lybrand had suggested the formation of the committee.

Councilor Kirkpatrick expressed concern about appointing a committee without being able to review a charge to the committee. She also felt that the resolution should have gone through the regular process to allow the Council adequate review and adoption of a charge to the committee.

Councilor Berkman stated that it was his judgment that Metro could make as much as 1½ to 2 percent additional return on its money with other financial vehicles and that a delay could mean the loss of thousands of dollars. He said the Audit Committee was only asking for broad policy authorization to establish the committee at this point.

Councilors Schedeen and Bonner expressed support for the adoption of the resolution.

Councilor Deines clarified that he was not in opposition to the resolution but reiterated that he thought the regular process should have been followed.

Vote: The vote on the motion to adopt Resolution No. 82-378 resulted in:

Ayes: Councilors Banzer, Berkman, Bonner, Deines, Kafoury, Rhodes, Schedeen, and Williamson.

Nays: Councilor Kirkpatrick.

Abstention: None.

Absent: Councilors Etlinger, Burton and Oleson.

Motion carried, Resolution adopted.

5.1 Ordinance No. 82-149, amending the Metro Urban Growth Boundary in Washington County for Contested Case No. 81-10. (First Reading and consideration of exceptions) (Sharp Property)

Motion: Councilor Bonner moved adoption of Ordinance No. 82-149. Councilor Schedeen seconded the motion.

Councilor Bonner presented the Development Committee report and recommendation of approval.

Joe Cortright, Development Services Planner, presented the staff report, as contained in the agenda of the meeting.

Presiding Officer Banzer asked for presentations of exceptions to the staff report. There were none.

Councilor Kafoury noted that the staff report contained a letter from Washington County regarding the Bethany area and its possible removal from the Urban Growth Boundary, and asked what impact that proposal would have on the case before them.

Mr. Cortright responded that until a formal petition was received, it was the staff's view that the Bethany area was a part of the UGB and that the decision on the case before the Council should not be based on a "what if" situation, but rather on Metro's established standards.

General Counsel Jordan advised the Council that whatever was going on with the Bethany area was irrelevant to the case before the Council and should not be considered in making their decision.

The ordinance was passed to second reading on December 21, 1982.

5.2 Ordinance No. 82-148, amending the Urban Growth Boundary in Washington County for Contested Case No. 81-9. (Corner Terrace) (First Reading and consideration of exceptions)

Councilor Bonner presented the Development Committee report and remarked that the Committee had had a difficult time deciding which way to go with the case but was recommending approval.

Motion: Councilor Bonner moved adoption of Ordinance No. 82-148. Councilor Schedeen seconded the motion.

Joe Cortright, Development Services Planner, presented the staff report, as contained in the agenda.

Presiding Officer Banzer stated that two communications regarding the case had been received: Frank Buehler, Route 1, Box 1074, Hillsboro, and Robert E. Stacey, representing Michael McPherson and Gary Sundquist, 400 Dekum Building, 519 S.W. Third Avenue, Portland. (Copies of the letters are appended to the agenda of the meeting.)

Presiding Officer Banzer then asked for presentations of exceptions to the staff report.

Mr. Frank Buehler requested to be heard even though he had not established party status. General Counsel Jordan stated that it was his understanding that Mr. Buehler was out of the country when the Development Committee heard the case and that given the circumstances the Council could find that his evidence could not be presented at the original hearing and give him party status to present exceptions at this time.

Motion and Councilor Bonner moved that Mr. Buehler be allowed to
Vote: testify. Councilor Schedeen seconded the motion.

By voice vote, the motion carried unanimously.

Mr. Frank Buehler, Route 1, Box 1074, Hillsboro, presented a petition in opposition to the trade (appended to the agenda of the meeting). He stated that notification to nearby owners was not adequate and that some of the petition signers lived as close as 200 feet and had not received notification.

Councilor Bonner inquired about the notification process. General Counsel Jordan stated that notification was required only to property within 250 feet of the portion of property that was being added to the Urban Growth Boundary, and not within 250 feet of the entire parcel that was owned by the applicant. He said that was why some nearby owners did not receive notification.

Councilor Bonner requested that the notice rule be reviewed by the Development Committee at some future date.

Councilor Etlinger asked Mr. Buehler if CPO #7 had taken a position on the case. Mr. Buehler responded that the CPO had taken a neutral position.

Mr. Robert Stacey, 400 Dekum Building, 519 S.W. Third Avenue, Portland, representing Mr. Sundquist and Mr. McPherson, testified in opposition to the addition of the Corner Terrace property to the UGB. However, he said, they did not oppose the exclusion of the Malinowski property from the UGB. He said the Corner Terrace property was agricultural land and that the standard applicable to the addition of any agricultural land which is not committed to urban or rural development had not been met by the Corner Terrace property. He said the standard was clear that farmland could not be added to the UGB through a minor amendment, with or without a trade, unless the farmland was needed to solve a severe service or land use inefficiency, and that the applicant had not identified a single negative impact on service or land use efficiency, much less a severe negative impact. He said the staff report and the applicant's submittal contained no finding which addressed the standard. Mr. Stacey said the purpose of the standard was to protect agricultural land along the fringe of the UGB from conversion through a process which

was designed to correct errors or make fine tuning adjustments and was not designed to allow the gradual inclusion of agricultural land.

Councilor Bonner commented that when the Rock Creek campus was established in the area it provided a service which couldn't be overlooked. He also said there were capital improvements existing in the area.

Councilor Kafoury stated she agreed with Mr. Stacey's arguments and that the school in the area did not imply that there was pressure to develop around it. She said schools were allowed in areas zoned for exclusive farm use.

Councilor Etlinger noted that there would be no net reduction in agricultural land if the trade was approved.

Councilor Deines stated that the Development Committee had more or less given their word that they would approve the proposal if a trade was found. He went on to say that if the Council thought the standard was too stringent that maybe they ought to consider revising the ordinance to change the standard, especially if the case before them was approved.

Councilor Kirkpatrick noted for the record that the November 8th minutes of the Development Committee reflected a unanimous vote of the Committee to support the trade.

Mr. Demar Batchelor, 139 E. Lincoln, Hillsboro, representing the applicant for Corner Terrace, stated that he felt Mr. Stacey had missed the mark in some of the conclusions he submitted to the Council. He said that Mr. Stacey had said the applicant had shown no negative impact if the property was not included in the UGB. He said it was their point of view that the service areas were consciously determined by the providers and that those service areas included the subject property. For example, he said, when the Wolf Creek Water District determined what the service area would be for the water line, it included the subject property. He said the same point of view is applied to the fact that Tri-Met services the area. He said there were facilities and services in the immediate area to serve the property and that a compelling case had been made that the full utilization of services would not occur unless the property was permitted to use them. He said the proposal was supported by the Washington County Board of Commissioners, the Washington County staff, that the CPO had taken no position on the matter, and that the Metro staff and Development Committee supported it.

Councilor Kafoury asked Mr. Batchelor to identify the severe negative impacts argued in Section 8, a(4) of the ordinance establishing the standards. Mr. Batchelor stated that the argument they tried to make was that when the water line was put in, the service area, which embraced the subject property, was decided upon, and based on that service area determination an investment of public monies was made on the theory that as the service area was connected, the public monies

would be recaptured. He said if the public bodies did not recapture the money from the land which was to use the services, then the costs were shifted to a smaller area of property, which was a severe negative impact on property within the UGB. He said the same line of argument could be made with Tri-Met. He said Tri-Met was running very expensive equipment right by the property, not just to pick up the Rock Creek campus people, but in hopes of recapturing its investment in equipment by a utilized facility. He said the services and facilities were not there to encourage development but instead because a public body consciously decided what the service area would be before they made the investment.

Councilor Kafoury stated that Mr. Batchelor's argument was not in the material she had read. Mr. Batchelor responded that it was in the record and had been made during the course of the public hearings.

Councilor Williamson asked if the sewer and water lines were in place at the time the UGB was established. Mr. Batchelor responded yes.

The ordinance was then passed to second reading on December 21, 1982.

5.3 Ordinance No. 82-147, approving in part the City of Portland's petition for Locational Adjustment of Metro's Urban Growth Boundary (UGB) for the area known as Schoppe Acres. (Second Reading)

Councilor Bonner presented the Committee report.

Councilor Rhodes asked if everyone in the area agreed to be removed. Mr. Cortright responded that the City of Portland had requested removal of the property and it was his understanding that the City had contacted the property owner and had secured permission and consent to have it removed from the Urban Growth Boundary.

Vote: The vote on the motion to adopt Ordinance No. 82-147 resulted in:

Ayes: Councilors Banzer, Berkman, Bonner, Deines, Etlinger, Kafoury, Kirkpatrick, Rhodes, Schedeen, and Williamson.

Nays: None.

Abstention: None.

Absent: Councilors Burton and Oleson

Motion carried, Ordinance adopted.

5.4 Ordinance No. 82-145, amending the Metro Urban Growth Boundary (UGB) in Washington County for Contested Case No. 81-8. (Cereghino Property) (Second Reading)

Councilor Bonner presented the Committee report.

There was no Council discussion.

Vote: The vote on the motion to adopt Ordinance No. 82-145 resulted in.

Ayes: Councilors Banzer, Berkman, Bonner, Deines, Etlinger, Kirkpatrick, Rhodes, Schedeen, and Williamson.

Nays: Councilor Kafoury

Abstention: None.

Absent: Councilors Burton and Oleson.

Motion carried, Ordinance adopted.

6. Executive Officer's Report.

There was no Executive Officer's Report.

7. Committee Reports.

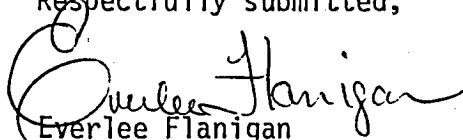
Presiding Officer Banzer reminded Council members of the Legislative Reception to be held on Monday, December 6, 1982 from 5:30 to 7:30; and of the staff Christmas Party on December 11th.

Councilor Etlinger reported on the regional ad hoc jail committee meeting and said the group had unanimously supported an effort of the Association of Oregon Counties to issue a letter to all the County Commissioners in the area stating that the ad hoc committee recommended that Metro be asked to issue revenue bonds to finance a jail.

Councilor Berkman made comments regarding the recent Oregonian articles about him and informed the Council that he would respond to those articles in a public forum the next week. He said he would try to advise each Councilor personally of his decision to resign or not.

There being no further business, the meeting was adjourned at 9:44 p.m.

Respectfully submitted,


Everlee Flanigan
Clerk of the Council

APPROVAL OF RESOLUTION NO. 83-381, FOR THE PURPOSE OF
AMENDING THE FUNCTIONAL CLASSIFICATION SYSTEM AND THE
FEDERAL AID URBAN SYSTEM (FAUS)

Date: January 5, 1983

Presented by: Andy Cotugno

FACTUAL BACKGROUND AND ANALYSIS

Purpose: This action will initiate a request to the Federal Highway Administration to classify and designate under the Federal Aid System selected local streets and route numbers consistent with their use set forth in the City of Portland's Arterial Street Classification Policy (ASCP).

Policy Impact: This action will change the Functional Classification and Federal Aid designation of certain streets in the Central Eastside Industrial District as requested by the City of Portland, thereby allowing the use of federal funds on the affected streets.

This action adds the following local streets as collectors:

1. S.E. Water Avenue - Yamhill Street to Clay Street
2. S.E. Yamhill Street - Water Avenue to Grand Avenue
3. S.E. Taylor Street - Water Avenue to Grand Avenue
4. S.E. Clay Street - Water Avenue to Grand Avenue

Background: City of Portland transportation staff have requested that certain local streets in the Central Eastside Industrial District be functionally classified consistent with the Draft Revised Arterial Street Classification Policy. In accomplishment of this, and in order to be eligible for federal funding for right-of-way and construction of transportation improvements, the noted streets need to be designated under the Federal Aid System as "Urban" routes. Improvements on these streets are necessary to adequately connect the I-5/East Marquam ramp project to Grand Avenue.

In order that the best possible investment be made in this area, it is appropriate to include improvement work on essentially a district-wide basis. This will involve repair and reconstruction of the noted streets, signals, and crossing gates where needed, sidewalks, rail removals where feasible, and reconstruction of Taylor and Yamhill as a one-way couplet.

None of the above street segments are functionally classified or designated. As a consequence, a project improvement specifying these streets would not be eligible for federal funds.

TPAC and JPACT have reviewed this request and recommend approval of the Resolution.

EXECUTIVE OFFICER'S RECOMMENDATION

Adoption of the attached Resolution based on the functions proposed for the noted streets.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On January 10, 1983, the Regional Development Committee unanimously recommended Council adoption of Resolution No. 83-381.

BP/gl
6577B/318
01/14/83

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF AMENDING THE)
FUNCTIONAL CLASSIFICATION SYSTEM)
AND THE FEDERAL AID URBAN SYSTEM)
(FAUS))
RESOLUTION NO. 83-381
Introduced by the Joint
Policy Advisory Committee
on Transportation

WHEREAS, The City of Portland has requested that certain streets in the Central Eastside Industrial District be functionally classified and federally designated; and

WHEREAS, These requested street changes have been brought about to support their utilization by the I-5/East Marquam ramp project and the City of Portland's Draft Revised Arterial Street Classification Policy (ASCP); and

WHEREAS, To be eligible for federal funds, streets undergoing roadway improvements must be functionally classified and federally designated; and

WHEREAS, Staff analysis indicates that the proposed changes are consistent with the functions serving the new traffic circulation patterns associated with the I-5/East Marquam ramp project; now, therefore,

BE IT RESOLVED,

1. That the Metro Council amend the Federal Aid Urban System to incorporate Exhibit "A."

2. That the Metro Council amend the Functional Classification system to add as collectors:

- a. S.E. Water Avenue - Yamhill Street to Clay Street
- b. S.E. Yamhill Street - Water Avenue to Grand Avenue
- c. S.E. Taylor Street - Water Avenue to Grand Avenue
- d. S.E. Clay Street - Water Avenue to Grand Avenue

3. That Federal Aid route numbers be assigned to the added segments in accordance with Exhibit "A."

4. That Metro staff coordinate the amendments with ODOT.

ADOPTED by the Council of the Metropolitan Service District
this _____ day of _____, 1982.

Presiding Officer

BP/gl
6577B/318
01/14/83

CONSIDERATION OF MARINE DROP BOX COMPANY'S
BOND VARIANCE REQUEST

Date: January 13, 1982

Presented by: Dennis O'Neil

FACTUAL BACKGROUND AND ANALYSIS

The Council has granted Marine Drop Box Company a franchise to operate a solid waste processing center. The site receives dunnage and debris from ships for recycling. Approximately 10,000 cubic yards of waste is received at the site each year.

Marine Drop Box is requesting a variance from the \$25,000 minimum performance bond requirement for processing centers and transfer stations set by Resolution No. 81-271. The bond requirement is the estimated cost of Metro cleaning up and operating sites where the operator has abruptly ceased operation and vacated the property. Marine Drop Box's operator, Mr. Miller, argued that since his operation is relatively small and his own semi-annual cleanup costs are only \$1,500 the minimum \$25,000 bond is excessive for his site. He suggested a \$5,000 reclamation bond which would have an annual premium of \$250. A \$25,000 bond would require an annual premium of \$2,525.

Metro's engineering staff has estimated that the approximate cost of cleaning up the site, including Metro's administrative expenses, is apparently \$8,000. The Solid Waste Policy Alternatives Committee recommended that the variance be granted and an \$8,000 bond be established.

EXECUTIVE OFFICER'S RECOMMENDATION

Grant Marine Drop Box's request for a variance from the \$25,000 bond minimum. Establish a \$8,000 minimum bond.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On January 11, 1983, the Regional Services Committee recommended that Marine Drop Box Co. be granted a variance from the \$25,000 minimum bond requirement. The Regional Services Committee recommended that an \$8,000 bond be required.

TA/gl
7248B/327
1/17/83

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF GRANTING) RESOLUTION NO. 83-387
TO MARINE DROP BOX CO. A VARIANCE)
FROM THE MINIMUM BOND REQUIREMENT) Introduced by the
OF RESOLUTION NO. 81-281) Regional Services Committee

WHEREAS, Resolution No. 81-281 requires that the minimum corporate surety bond for franchised processing centers be \$25,000; and

WHEREAS, Marine Drop Box Co. which operates a franchised processing center, has requested a variance from the minimum bond requirement; and

WHEREAS, Metro staff has estimated the costs of cleaning up the site if it closed suddenly to be approximately \$8,000; now, therefore,

BE IT RESOLVED,

That the Council of the Metropolitan Service District grants Marine Drop Box a variance from the minimum bond requirement of Resolution No. 81-281 and requires that Marine Drop Box submit an \$8,000 bond.

ADOPTED by the Council of the Metropolitan Service District
this _____ day of _____, 1983.

Presiding Officer

DO/gl
7545B/327
1/14/83

CITIZEN APPOINTEES TO SERVE WITH THE COUNCIL
COORDINATING COMMITTEE DURING FY 1983-84 BUDGET
PROCESS

Date: January 10, 1983

Presented by: Ray Barker

FACTUAL BACKGROUND AND ANALYSIS

At the September 13, 1982, meeting of the Council Coordinating Committee, a subcommittee was appointed to make recommendations regarding the involvement of citizens in Metro's budget process. Councilors Bonner, Oleson and Schedeen were appointed to the Committee with Councilor Schedeen serving as chairperson.

On October 18, the subcommittee presented its recommendations to the Coordinating Committee. The Coordinating Committee had considerable discussion regarding the involvement of citizens in the budget process, but did not formally submit a recommendation to the Metro Council.

The following recommendations were presented to the Council on November 4, 1982 by Committee Chairman Jack Deines. Most of these recommendations were supported by the majority of the Committee members. The Council adopted all of the recommendations as presented:

1. That all portions of Metro's proposed annual budget be heard before the Coordinating Committee. No hearings on the budget will be held by the Regional Development Committee or Regional Services Committee.
2. That those portions of the budget related to a specific program or department be reviewed by the standing advisory committee responsible for advising that program or department, i.e., SWPAC will review the solid waste budget; TPAC and JPACT will review the transportation budget, etc.
3. That the Local Officials Advisory Committee be notified well in advance of all budget hearings.
4. That a group of citizens, equal to the number of Council members on the Coordinating Committee, be appointed to serve on the Coordinating Committee during the budget process. These citizens shall have the right to vote with the Coordinating Committee members on budget recommendations to the Council.

5. That citizen appointments to the Committee shall be made by the Coordinating Committee from names submitted by members of the Metro Council.
6. That the final recommendations from the Coordinating Committee shall come to the Council when it meets as the Budget Committee (Committee of the Whole) to make final changes and adopt the FY 1983-84 budget.

On November 8, 1982, Jack Deines, Coordinating Committee Chairman, sent a memo to all Councilors requesting them to submit names of citizens to serve with the Coordinating Committee during the budget process.

To date, the names of eight individuals have been received. Brief biographies will be prepared for each individual recommended and will be available for the Coordinating Committee's use on January 17, 1983.

EXECUTIVE OFFICER'S RECOMMENDATION

No recommendation.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On January 17, 1983, the Council Coordinating Committee recommended Council approval of the following individuals to serve with the Committee during the budget process for FY 1983-84:

1. James Bowles
2. Ron Cease
3. Alice Dingler
4. Gary Spanovich
5. Chris Tobkin

In the event one of the above is unable to serve, John Danielson was recommended as an alternate.

RB/gl
7515B/327
1/18/83

CONSIDERATION OF RESOLUTION NO. 83-380 FOR THE
PURPOSE OF ESTABLISHING A TASK FORCE TO
EVALUATE THE FINDINGS OF THE DIESEL EXHAUST
STUDY

Date: December 29, 1982

Presented by: Richard Brandman

FACTUAL BACKGROUND AND ANALYSIS

The use of diesel automobiles has grown substantially in the past few years and is projected to increase through the 1980's. Many of these automobiles are followed by clouds of dense black particulate exhaust. On the average, automobiles with diesel engines emit from 40 to 60 times as many particulates as automobiles with gasoline engines.

Recognizing these facts, Metro and DEQ are conducting a study to evaluate the impacts of the increased use of diesel automobiles in the Portland metropolitan area. (The Unified Work Program was amended in October 1982 by the Metro Council to include the Diesel Exhaust Study.) Major study areas to be analyzed are ambient air quality concentrations, visibility, odor, and health effects.

Staff is proposing that an independent Task Force be formed to review the findings of the study and to make appropriate recommendations for mitigating potential problems to the Metro Council and the Environmental Quality Commission.

Proposed members of the Task Force are:

- . The Chairman of the Air Quality Advisory Committee
- . The Portland City Club
- . The Portland Chamber of Commerce
- . The Oregon Environmental Council
- . The Oregon Automotive Dealers Association
- . The Western Oil and Gas Association
- . A representative of the Medical Community
- . Two citizens to be appointed by Metro
- . Two citizens to be appointed by DEQ

Organizations sitting on the Task Force would appoint a member of their choice to represent them. Two citizen members would be appointed by DEQ. The representative from the medical community and the two remaining citizen members would be jointly appointed by the Presiding Officer of the Metro Council and the Executive Officer.

The charge of the Task Force is 1) to review and evaluate the staff findings of the various environmental impacts associated with the increased use of diesel automobiles in the Portland metropolitan area; and 2) to make a recommendation to the Metro Council and the Director of the Department of Environmental Quality regarding control strategies or mitigation measures which are deemed appropriate to alleviate any impact. (Dependent on the study's findings, the Task Force could recommend anything from doing nothing to proposing legislation to regulate diesel exhaust.)

The analysis of the environmental impacts is scheduled to be completed by July 1983. The evaluation by the Task Force is scheduled for completion by September 1983.

The budget for the Diesel Exhaust Study includes funds to staff the Task Force. No budget adjustments are required.

EXECUTIVE OFFICER'S RECOMMENDATION

Adopt the Resolution establishing a Task Force to evaluate the impacts from the Diesel Exhaust Study.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On January 10, 1983, the Regional Development Committee recommended Council adoption of Resolution No. 83-380 with the amendment that a member of the Diesel Car Club of Oregon be added to the Task Force.

RB/gl
7456B/327
01/14/83

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ESTABLISHING)	RESOLUTION NO. 83-380
A TASK FORCE TO EVALUATE THE)	
FINDINGS OF THE DIESEL EXHAUST)	Introduced by the
STUDY)	Regional Development
)	Committee

WHEREAS, The Metropolitan Service District and the Oregon Department of Environmental Quality are jointly conducting a study to determine the air quality impacts from the increased use of diesel automobiles in the Portland metropolitan area; and

WHEREAS, An independent evaluation of the study's findings is appropriate for an issue of such importance to the citizens of the metropolitan area; now, therefore,

BE IT RESOLVED,

1. The the Metro Council establishes a Task Force to independently evaluate the findings of the Metro/DEQ Diesel Exhaust Study.

2. That said Task Force shall recommend to the Metro Council and the Director of the Department of Environmental Quality any appropriate measures to mitigate identified potential adverse impacts to the environment.

3. That the composition of and appointments to the Task Force shall be as described in the attached Staff Report.

ADOPTED by the Council of the Metropolitan Service District
this _____ day of _____, 1983.

Presiding Officer

Diesel Study Work Plan

1. Locate and Review Literature Regarding Diesel Automobiles.

Review existing literature regarding diesel vehicles and their potential impacts. This is necessary to gain a better understanding of the problem, to be aware of findings made in other regions, and to ensure that this study does not duplicate previous efforts.

2. Estimate Size of Existing Diesel Fleet.

Estimate current number of diesel automobiles in the Portland metropolitan area. Will be accomplished by discussions with the Oregon Department of Motor Vehicles, the Oregon Automotive Dealers Association, and selected automotive dealers.

3. Project Size of Diesel Fleet in 1987 and the Year 2000.

Metro will accomplish this task by looking at past trends and at forecasts of national manufacturers and local automobile dealers. Attempts will be made to forecast a Portland-specific diesel fleet population. Recognizing the uncertainty in making such forecasts, Metro will assume varying scenarios and forecast a probable minimum and maximum diesel population.

4. Estimate VMT from Diesel Vehicles.

VMT estimates for light and heavy duty diesel vehicles will be estimated by running Metro's travel forecasting models for the base year and horizon years. VMT for light duty diesel vehicles will be estimated by applying a percentage (representing the percent that diesels are of the entire fleet) against total light duty vehicle VMT. A factor will be applied to account for the fact that newer vehicles are driven more than older vehicles. VMT estimates from diesel buses will also be made, using information provided by Tri-Met.

5. Determine Composite Light Duty Diesel Exhaust Emission Factors for Portland Diesel Fleet (1980, 1987 and 2000).

Light duty diesel particulate emissions vary according to vehicle type (e.g., GM diesels pollute more than Volkswagen diesels). Diesel sales data will thus be examined to determine the 1980 composite particulate emission factor. Looking at sales trends and projections, we would then assume a mix of diesel vehicles into the future and estimate the Portland-specific light duty diesel particulate emission factors for 1987 and the year 2000. If possible, Mobile 2 will be used to calculate these factors. Metro will use EPA's particulate emission factors for heavy duty vehicles and buses.

Using a methodology similar to that described above, emission factors for fine particulate, elemental carbon, and sulfur oxides will also be calculated.

6. Estimate Emissions from Diesel Vehicles.

Metro will use the emission factors derived in Task 5 to estimate total emissions, by pollutant, for the Portland-Vancouver AQMA for the years 1980, 1987 and 2000. The Metro emissions forecasting model, MYPOLLUT, will be used for this analysis. Metro's travel network will be applied to a 2 kilometer square grid so that emission concentrations may be forecast for specific locations throughout the region.

7. Estimate Particulate Concentrations.

DEQ will use their GRID cell model to determine TSP and fine particulate concentrations resulting from diesel vehicles, as well as background concentrations. The fine particulate and TSP concentrations will be reported by 2 kilometer square grid. (This procedure will allow the diesel's contribution to ambient air quality to be independently analyzed.) Forecasts will be made for both average and worst day concentrations at specific locations (e.g., TSP non-attainment areas) and for each grid cell within the Portland AQMA.

8. Impact Analyses.

Following the estimates of particulate emissions and concentrations, a variety of issues will be examined. These are:

a. Visibility

Using concentration estimates from the GRID model, an algorithm will be developed to estimate visibility impacts. Regional visibility models are not widely available. Thus, DEQ's existing GRID model will need to be adapted to make these predictions.

Estimates from private consultants to do this work are in the range of \$10,000 to \$20,000. Instead, DEQ proposed to do this work in-house. Included in this work will be a literature search, telephone communications, and personal consultations with authorities in the field. The selected algorithms will then be coded into a visibility model by DEQ.

The proposed priorities for visibility modeling are:

- (1) Predicting elemental carbon concentrations from GRID and calculating visibility impacts due to light absorption alone.

- (2) Adding light scattering impacts from predicted carbon concentrations.
- (3) Predicting visibility impacts from all motor vehicle fine particulate.
- (4) If time allows, visibility impacts from sulfate formation will also be analyzed. This will require a chemical conversion algorithm for the conversion of SO₂ to sulfate to be added to the GRID model.

b. Particulate Standard Violations

Concentration projections will be compared to state and federal standards to determine areas which may exceed standards.

c. Odor

It will not be possible to quantitatively estimate the increased odor impacts resulting from the increased use of diesels. However, a literature search will be performed and a qualitative assessment will be made.

d. Health Effects

A literature search of existing health effects data will be performed. The results of the emissions and concentrations forecasts will then be analyzed to determine if projected emissions would pose any health problems. If the results of this analysis are not conclusive, the DEQ health effects advisory committee will be asked to review the data and make their own findings.

9. Task Force.

In conjunction with this study, Metro and DEQ will form a task force composed of business, community, environmental, and government leaders to recommend solutions or mitigation measures to identified problem areas. The task force will meet shortly after the study commences. At the initial meeting, Metro and DEQ will discuss the objectives of the study and outline the role the task force will have. Consensus regarding the assumptions used in the study will also be sought. The task force will then meet periodically as findings are made. If adverse impacts are identified, discussion of the task force would focus on their severity and potential mitigation measures. At the conclusion of the study, the task force will make specific recommendations to Metro and DEQ.

DIESEL STUDY BUDGET

<u>Tasks</u>	<u>Task Budget</u>
1. Literature search	\$ 3,000
2. Estimate size and composition of existing diesel fleet.	1,500
3. Project size and composition of diesel fleet in 1987 and year 2000	2,000
4. Estimate VMT from diesel vehicles - 1980, 1987 and year 2000.	4,500
5. Determine composite emission factors - 1980, 1987 and year 2000.	2,500
6. Estimate emissions - 1980, 1987 and year 2000	5,000
7. Estimate emissions concentrations (DEQ - \$3,000).	1,000
8. Impact Analyses	
A. Visibility (DEQ - \$4,500).	3,000
B. Particulate standard violations.	0
C. Odor	1,279
D. Health effects	2,500
9. Support task force activities; act on recommendations	<u>5,000</u>
	\$31,279

RB:lmk
11-3-82

DIESEL STUDY SCHEDULE

	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
1. Literature Search	_____							
2. Estimate size and composition - existing diesel fleet		_____						
3. Project size and composition - 1987 and year 2000			_____					
4. Estimate diesel VMT - 1980, 1987 and 2000				_____				
5. Determine emission factors				_____				
6. Estimate emissions					_____			
7. Estimate concentrations						_____		
8. a. Visibility							_____	
b. Odor							_____	
c. Health effects								_____
9. Task Force		_____						_____

CONSIDERATION OF RESOLUTION NO. 83-382 FOR THE
PURPOSE OF RESERVING THE MCLOUGHLIN BOULEVARD
INTERSTATE TRANSFER FUNDING AND ESTABLISHING A
DECISION PROCESS

Date: December 6, 1982

Presented by: Andy C. Cotugno

FACTUAL BACKGROUND AND ANALYSIS

Due to the extent of disagreement on the preferred McLoughlin Boulevard highway improvement, this Resolution would establish the process for resolving these issues (as fully described in Attachment "A" to the Resolution). Generally, this Resolution: a) formally establishes that consensus on the scope of a Tacoma improvement will be initiated after Multnomah County completes its evaluation of alternative Tacoma improvements; b) formally recognizes that Metro and Tri-Met should complete further evaluation of the feasibility of LRT in the Milwaukie Corridor and the need for and timing of LRT and Phases II, III and IV of the highway improvements; and c) "freezes" the McLoughlin Boulevard Interstate Transfer funding pending completion and resolution of these issues.

Background:

Metro Resolution No. 79-111 allocated \$20.6 million of Interstate Transfer funding to a McLoughlin Boulevard highway improvement. This Resolution, based upon Staff Report No. 59, established a highway, rideshare and bus improvement program as the most cost-effective method of serving Portland to Milwaukie travel. Resolution No. 80-185 (based upon Staff Report No. 69) adopted the full corridor improvement strategy (including the corridor from Milwaukie to Oregon City) and allocated funding for supportive improvements, including transit stations and neighborhood traffic control devices. In both actions, Light Rail Transit was recognized as a long-range improvement due to insufficient existing ridership and insufficient funding.

During the past three years, ODOT has completed preliminary engineering and prepared an Environmental Impact Statement on three highway alternatives and are recommending construction of a six-lane McLoughlin widening with a Tacoma overpass in the following phases:

Phase I - Tacoma overcrossing and interchange, River Road realignment at Harrison (the "jughandle") and signal intertie;

Phase II - six-lane widening and reconstruction from Ochoco intersection to Highway 224, Highway 224/McLoughlin interchange reconstruction;

Phase III - widened Union/Grand viaduct with connection to I-5/Marquam ramps and restriping south to 17th to include a median reversible lane;

Phase IV - six-lane widening of the remainder from 17th to Ochoco.

Portland, Milwaukie and Clackamas County have all endorsed a first priority improvement at Tacoma, but have reservations about the cost. Milwaukie, in particular, questions the high cost and has asked for further justification. Multnomah County has deferred taking action on the project and has initiated an independent evaluation of alternative lower cost, lower impact Tacoma improvements.

Portland and Clackamas County have endorsed Phases II, III and IV of the improvement in accordance with the ODOT recommended staging plan. Milwaukie does not yet support Phases II, III and IV, but intends to reconsider its position after further consideration of LRT.

Metro and Tri-Met have initiated an examination of the feasibility of LRT in the Milwaukie and Bi-State Corridors as the first step toward development of a region-wide LRT system plan. This will provide the information needed on the economic feasibility of LRT, the need for transit vs. highway capacity over the next 20 years and will provide the basis for initiating a "Phase II Alternatives Analysis" under the federal process for considering a New Rail Start.

TPAC recommended adoption with clarification language to the last "WHEREAS" and with the addition of the April 30 deadline to resolve the scope of the Tacoma Street improvement.

JPACT has reviewed the project and recommends approval of the Resolution.

EXECUTIVE OFFICER'S RECOMMENDATION

Recommend adoption of the Resolution.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On January 10, 1983, the Regional Development Committee unanimously recommended Council adoption of Resolution No. 83-382.

ACC/gl
7316B/327
01/14/83

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF RESERVING THE) RESOLUTION NO.
MCMLOUGHLIN BOULEVARD INTERSTATE)
TRANSFER FUNDING AND ESTABLISHING) Introduced by the Joint
A DECISION PROCESS) Policy Advisory Committee on
Transportation

WHEREAS, Metro "Staff Reports No. 59 and 69" present an evaluation of alternative transportation improvements in the McLoughlin Boulevard corridor between Portland and Milwaukie; and

WHEREAS, Metro Resolution No. 79-111 allocated \$20.6 million of Interstate Transfer funding to a McLoughlin Boulevard highway improvement and established Light Rail Transit as a potential long-range improvement; and

WHEREAS, The Oregon Department of Transportation has completed preliminary engineering and environmental studies for McLoughlin Boulevard and has recommended construction in four phases, as follows:

Phase I - Tacoma overpass, River Road realignment at Harrison, signal intertie.

Phase II - Widening to six lanes from Ochoco to Highway 224 and interchange reconstruction at Highway 224.

Phase III - Widen Union/Grand viaduct.

Phase IV - Six-lane widening from 17th to Ochoco; and

WHEREAS, The Cities of Portland and Milwaukie and Clackamas County have endorsed the Phase I improvement with concerns about minimizing Tacoma overcrossing costs; and

WHEREAS, Multnomah County has initiated an independent effort to evaluate alternative Tacoma improvements; and

WHEREAS, Tri-Met has completed a preliminary evaluation of the "short-range" feasibility of LRT and concluded that the corridor merits further consideration; and

WHEREAS, The city of Milwaukie disagrees with the City of Portland, Clackamas County and ODOT on the merits of Phases II, III and IV, and all parties agree that further consideration of LRT is necessary before initiating any construction beyond Phase I; now, therefore,

BE IT RESOLVED,

1. That the Metro Council "reserves" the McLoughlin Boulevard Interstate Transfer funding pending:

a. Resolution of the scope of the Phase I - Tacoma Street improvement; and

b. Resolution of the need for and timing of LRT and Phases II, III and IV of the highway improvement.

2. That the Metro Council adopts the strategy described in Attachment "A" as the process for resolving these issues.

ADOPTED by the Council of the Metropolitan Service District this _____ day of _____, 1982.

Presiding Officer

ACC/srb
7316B/327
01/05/83

ATTACHMENT "A"

McLoughlin Boulevard Decision Process

1. Defer further decision-making on the preferred "highway" alternative pending completion of the Multnomah County study of alternative Tacoma improvements.
2. After completion of the above study, or no later than April 30, 1983, all affected jurisdictions will re-examine their adopted positions to determine whether an alternative design for Tacoma is preferred.
3. Assuming consensus on Phase I of the McLoughlin Boulevard highway project, JPACT/Metro allocate necessary Interstate Transfer funding to proceed with Phase I right-of-way acquisition and construction.
4. ODOT proceed to write the Final Environmental Impact Statement for the full McLoughlin Boulevard project including the "finalized" Tacoma design in order to allow Phase I to proceed to construction. The ODOT decision to proceed with the FEIS will be with the recognition that: 1) Milwaukie does not yet support Phases II, III and IV (Phase II is within the city limits of Milwaukie); and 2) funding for Phases II, III and IV must be released by JPACT/Metro before final design, right-of-way acquisition and construction can proceed.
5. Metro/Tri-Met will complete LRT studies for the Milwaukie Corridor, I-5 North Corridor and I-205 North Corridor to determine:
 - a. the cost-effectiveness of implementing LRT in the Milwaukie Corridor;
 - b. the interrelationship of LRT construction in the Milwaukie Corridor, I-5 North Corridor and on the Central Eastside;
 - c. the need for and timing of transit vs. highway capacity in the McLoughlin Corridor relative to the growth in travel demand; and
 - d. potential transit and highway financing techniques.
6. After completion of the LRT study:
 - a. All affected jurisdictions will consider their position on the overall highway/transit McLoughlin Boulevard Improvement Strategy and staging plan; JPACT/Metro will amend the RTP accordingly.
 - b. JPACT/Metro will adopt an overall McLoughlin Boulevard highway/transit financing strategy and allocate the Interstate Transfer Reserve accordingly.

- c. The corridor and limits of the next "Phase II Alternatives Analysis/DEIS" for consideration of LRT will be defined and an application for funding will be submitted to UMTA.

ACC/srb
7316B/327
01/05/83

CONSIDERATION OF RESOLUTION NO. 83-383 FOR THE
PURPOSE OF ENDORSING THE REGIONAL LIGHT RAIL
TRANSIT (LRT) SYSTEM PLAN SCOPE OF WORK AND
AUTHORIZING FUNDS FOR RELATED CONSULTING
ENGINEERING SERVICES

Date: December 23, 1982

Presented by: Andy Cotugno

FACTUAL BACKGROUND AND ANALYSIS

The attached resolution would establish the following:

1. An intent and process for defining a Regional LRT System and a conceptual work program, as outlined in the "Regional LRT System Plan Scope of Work" (attached), which:
 - a. Emphasizes determining the economic justification for LRT vs. bus in each corridor and completing "Phase I Alternatives Analysis" for those corridors (Most specific alignment questions would be deferred to the next major phase of study--Alternatives Analysis/DEIS);
 - b. Involves four major study steps over a two- to three-year study period with specific study timing subject to the annual adoption of the Unified Work Program (UWP) and funding availability. The six areas are:
 - 1) Central Area - Preliminary Plan;
 - 2) Eastside Primary Corridors (Milwaukie and Bi-State Corridors);
 - 3) Westside and Southwest Corridors;
 - 4) Clackamas County Corridors;
 - 5) Central Area--Final Plan; and
 - 6) Regional Staging Plan.
2. An intent to form a citizen's committee with a specific charge and membership to be established at a later date; and
3. Allocation of \$250,000 of Interstate Transfer funds to consultant assistance for the Regional LRT System Plan, amending the UWP and the Transportation Improvement Program (TIP) accordingly, and authorizes application for those funds.

The UWP contains funding for Metro and Tri-Met staff to conduct the Long-Range Transitway Plan - Phase I. An overall scope of work

for this effort--to result in a Regional LRT System Plan--has been developed and is shown as Attachment A. The scope of work details tasks necessary for completion of the entire regional effort over the next two to three fiscal years (depending on annual UWP funding availability). Major points of this scope of work have been reviewed previously by TPAC, JPACT, the Regional Development Committee, and the Bi-State Policy Advisory Committee. Funding for Metro and Tri-Met staff for this project will be determined through the annually adopted UWP. To supplement those Metro and Tri-Met staff activities, the scope of work for the Regional LRT System Plan identifies specialized consulting engineering services necessary to develop confident capital cost estimates and engineering feasibility analysis. These consulting engineering services would be oriented toward specific issue areas--where major questions of engineering cost and feasibility exist--and are estimated to require \$250,000 for the entire multi-year effort. Tri-Met, Metro, and consulting engineering resources estimated to be necessary to complete the Regional LRT System Plan are summarized by project phase on Table 1. The detailed resource estimates by engineering issue area are shown on Table 2. Tri-Met would be responsible for directing these consulting services.

The source of funds proposed for the consulting engineering portion of the Regional LRT System Plan is the Interstate Transfer "Regional Reserve" accrued from the escalation on the Metro Systems Planning Allocation authorized in November, 1979 (Resolution No. 79-103). Local match will be provided through Tri-Met by provision of in-kind services devoted to the Regional LRT System Plan.

TPAC recommended adoption with language to clarify that the overall "intent" is adopted to allow grant applications to proceed with details to be further defined.

JPACT reviewed the project and recommended approval of the Resolution.

EXECUTIVE OFFICER'S RECOMMENDATION

Adopt the attached resolution which:

1. Endorses the Regional LRT System Plan Scope of Work as a conceptual framework for defining a Regional LRT Plan; and
2. Authorizes \$250,000 from the Interstate Transfer "Regional Reserve" accrued on the Metro Systems Planning Allocation to fund consulting engineering services for the Regional LRT System Plan;
3. Amends the UWP and the TIP to reflect this authorization; and
4. Authorizes the application for the \$250,000 in Interstate Transfer funds and the execution of related grants and agreements.

COMMITTEE CONSIDERATION AND RECOMMENDATION

On January 10, 1983, the Regional Development Committee unanimously recommended Council adoption of Resolution No. 83-383 with the amendments as proposed by TPAC and incorporated herein.

NM/glb-7447B/327
01/14/83

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF ENDORSING)	RESOLUION NO.
THE REGIONAL LIGHT RAIL TRANSIT)	
(LRT) SYSTEM PLAN SCOPE OF WORK)	Introduced by the Joint
AND AUTHORIZING FUNDS FOR RELATED)	Policy Advisory Committee
CONSULTING ENGINEERING SERVICES)	on Transportation

WHEREAS, Through Ordinance No. 82-135, dated July 1, 1982, the Council of the Metropolitan Service District adopted the Regional Transportation Plan; and

WHEREAS, The Regional Transportation Plan identified a system of regional transitways; and

WHEREAS, The need exists to determine in detail the feasibility of these transitways for light rail service; and

WHEREAS, The adopted FY 1983 Unified Work Program identifies a Long-Range Transitway Plan - Phase I work element to be conducted cooperatively by Metro and Tri-Met; and

WHEREAS, A Scope of Work for the Regional LRT System Plan has been developed which identifies the need for consulting engineering services to supplement Metro and Tri-Met staff; and

WHEREAS, The Scope of Work estimates that these consulting engineering services will require up to \$250,000; and

WHEREAS, Tri-Met has agreed to provide local match for this amount in the form of in-kind services devoted to the Regional LRT System Plan; and

WHEREAS, The Metro Regional Systems Planning Allocation was established by the Council of the Metropolitan Service District

by Resolution No. 79-103, dated November, 1979; and

WHEREAS, Since that time, escalation has been accrued to this Regional Systems Planning Allocation and is available for allocation; now, therefore,

BE IT RESOLVED,

1. That the Metro Council endorses the Regional LRT Scope of Work, Chapter 1, Sections A-G, (dated December 1982) as a conceptual framework for defining a Regional LRT Plan.
2. That the Metro Council authorizes \$250,000 of the Interstate Transfer regional reserve accrued from the escalation on the Metro Systems Planning allocation established in November 1979 be allocated to fund consulting engineering services for the Regional Light Rail Transit System Plan; providing that if the full \$250,000 is not available, authorizes the balance from the Metro Systems Planning allocation.
3. That the Metro Council amends the Unified Work Program and the Transportation Improvement Program to reflect the authorization of \$250,000 of the "Interstate Transfer regional reserve" to fund engineering services for the Regional LRT System Plan. These funds will be appropriated on an annual basis through the Unified Work Program. The FY 83 element is estimated at \$170,000.
4. That this Regional LRT System Plan is consistent with the continuing, cooperative and comprehensive planning process and is hereby given positive A-95 Review action.
5. That the Metro Council authorizes the Metro Executive Officer to apply for, accept and execute grants and agreements as needed to fulfill this resolution.

6. That the TPAC Interagency Coordinating Committee define a study management structure, review the detailed scope of work and return with a recommendation for approval.

ADOPTED by the Council of the Metropolitan Service District
this _____ day of _____, 1983.

Presiding Officer

NM/gl
7447B/327
01/14/83

REGIONAL LRT SYSTEM PLAN SCOPE OF WORK

DECEMBER 1982

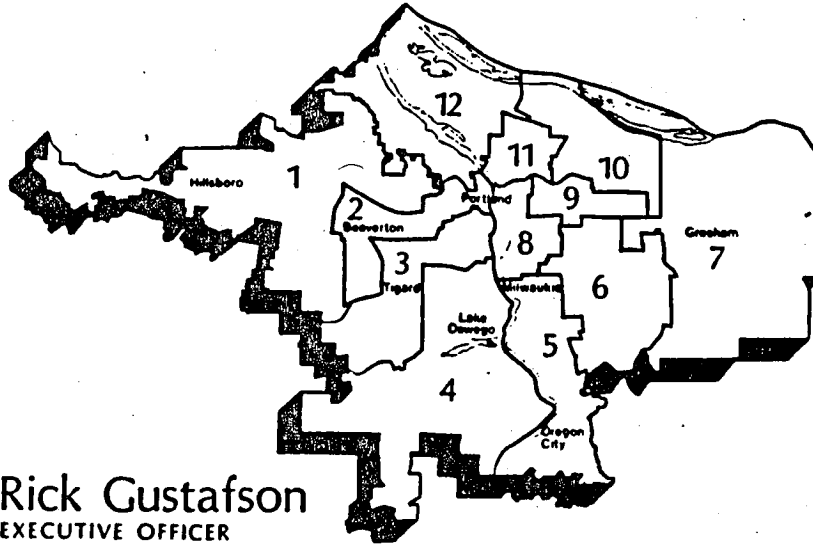


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REGIONAL LIGHT RAIL TRANSIT SYSTEM PLAN

SCOPE OF WORK

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I. THEME AND CONTEXT OF REGIONAL
LONG-RANGE TRANSITWAY STUDIES

REGIONAL LIGHT RAIL TRANSIT SYSTEM PLAN STUDIES

SCOPE OF WORK

I. THEME AND CONTEXT OF REGIONAL LONG-RANGE TRANSITWAY STUDIES

A. Introduction: System vs. Corridor Studies

The Portland metropolitan area has taken a number of actions recognizing light rail transit (LRT) as a viable mode of transportation and an important investment for the region. These include:

- The Banfield LRT to Gresham is under construction.
- Engineering and environmental studies have been completed for an LRT facility to Beaverton.
- The Bi-State Task Force called for consideration of LRT as a means of increasing transit service and ridership between Clark County and Oregon.
- The cities of Milwaukie and Portland and several neighborhood associations have called for consideration of LRT in the McLoughlin Boulevard Corridor.
- I-205 (from Foster Road to the Columbia River) and Airport Way have been constructed with right-of-way reserved for future construction of LRT or a busway.
- Clackamas County has identified potential LRT routes in the McLoughlin Corridor between Milwaukie and Oregon City and in the Clackamas Town Center area.
- Washington County has identified an LRT facility in the vicinity of 185th Avenue as an extension from Beaverton to Hillsboro.
- The City of Portland Arterial Streets Classification Policy identifies "Regional Transitways" in a large number of corridors throughout the region.

This scope of work is intended to: a) present the full decision-making process leading to the ultimate construction of LRT in a particular corridor; and b) to define a comprehensive process to establish which corridors are appropriate for LRT construction and should, therefore, be adopted in an overall "Regional LRT System Plan."

Generally, the LRT studies leading to construction of an LRT facility can be divided into two distinct steps, the first to define which corridors should be included in an overall regional LRT system; and, second, within a particular corridor, to determine the specific alignment and design for the LRT facility. This scope of work is directed at defining the objectives, tasks, products, cost, timing for the first step--to define the overall LRT system. Before initiating work to determine the alignment

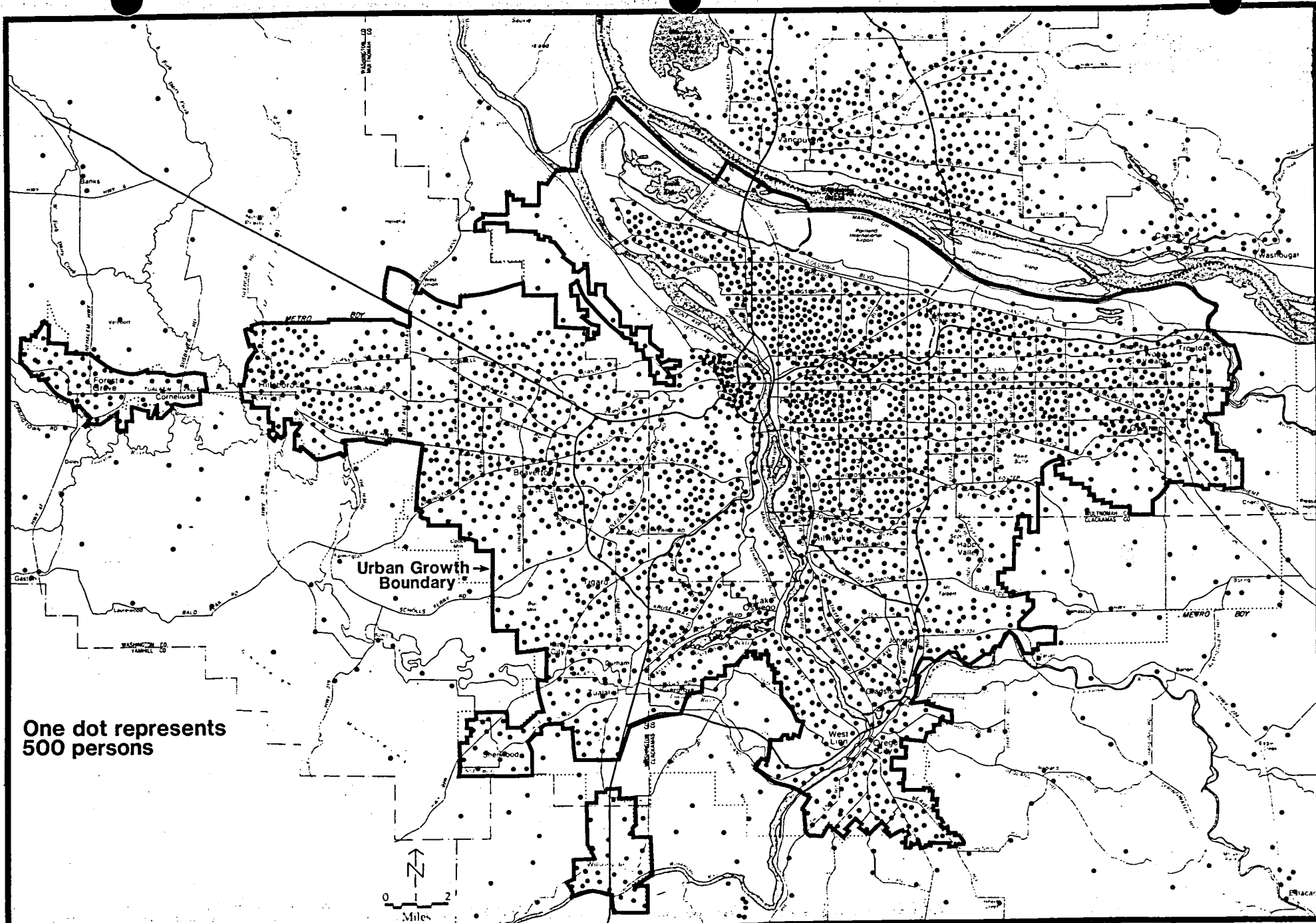
within a corridor, a similar Scope of Work will be prepared.

B. Background - Why LRT?

During the past 20 years, the Portland metropolitan area grew from 822,000 to 1,245,000 persons, or a 51 percent increase, with an 89 percent increase in employment, from 328,000 to 619,000 persons. This trend is expected to continue with population forecasted to increase another 40 percent by the year 2000 (to 1.7 million) and employment to increase another 57 percent (to 970,000). The spatial distribution of this population is shown on Figure 1, while the distribution of employment is shown on Figure 2. The vast majority of this year 2000 development in the four-county area will be within the Portland metropolitan area Urban Growth Boundary (UGB) and Clark County's Urban Services Boundary, as shown on Figure 3. In addition, based upon adopted local comprehensive plans, the development pattern will follow a fairly compact land use pattern.

With this growth throughout the metropolitan area, travel is expected to grow a commensurate 48 percent by the year 2000. Even with planned improvements, the regional highway system will be unable to accommodate that large an increase in travel and a substantial increase in transit usage is essential. Because of this, the Regional Transportation Plan (RTP), adopted July 1, 1982, calls for a major commitment to transit expansion with a 220 percent increase in ridership from 133,000 to 425,000 transit trips per day. In order to realize this ridership increase, the plan calls for a system of "Regional Transit Trunk Routes" to provide fast, reliable service between major subareas of the region. These trunk routes, as shown on Figure 4, would be located in each radial corridor providing high-quality service from downtown Portland to transit stations throughout the region. In addition, trunk service is proposed in the Highway 217 and I-205 circumferential corridors providing interconnections between suburban transit stations.

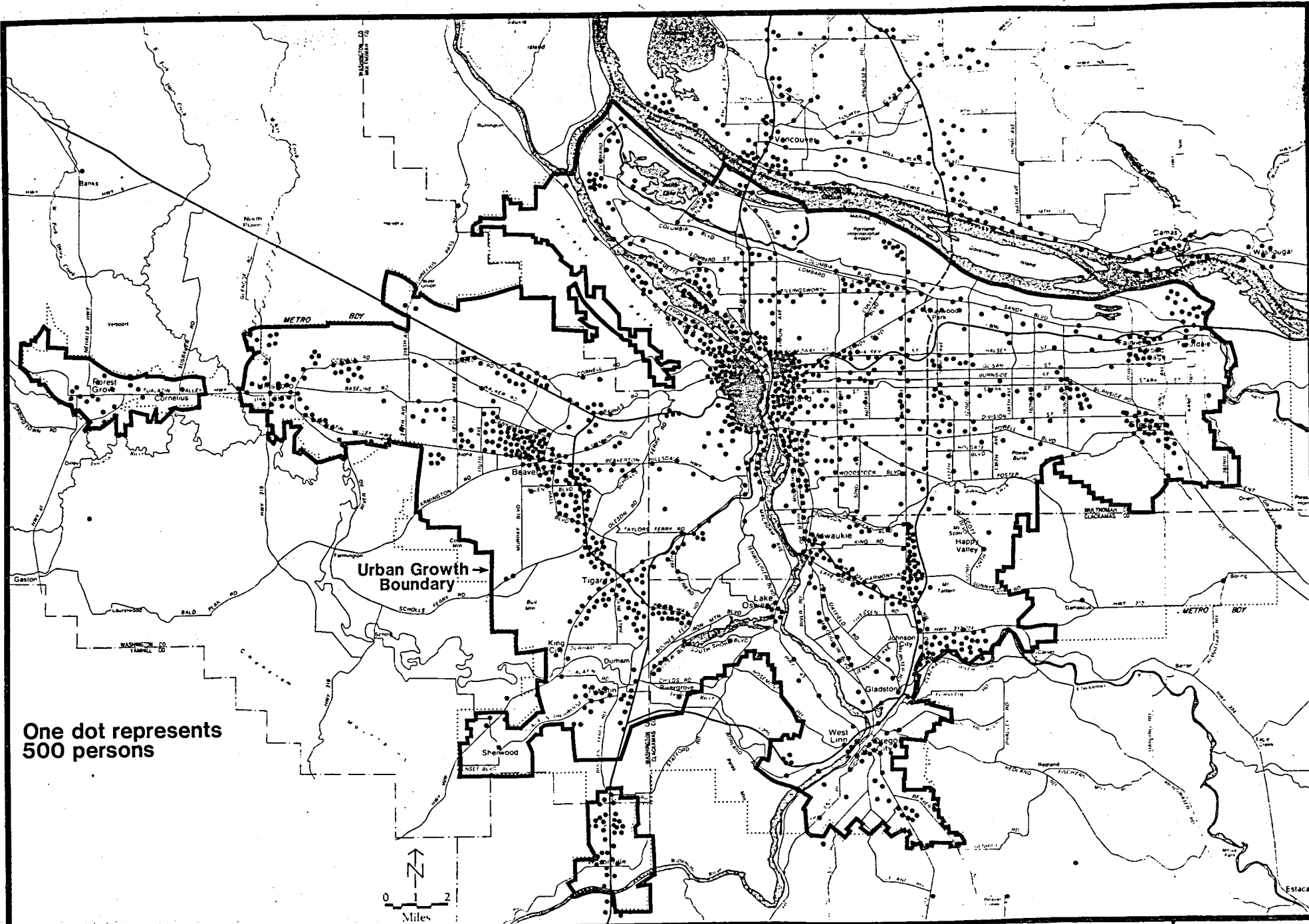
As a result of adoption of the RTP and local comprehensive land use plans, an important interrelationship between land use growth and transit expansion has been established. High density areas exist or are planned in downtown Portland, Beaverton, along Highway 217, Tigard, Milwaukie and around the Clackamas Town Center that are dependent upon major transit expansion to fully develop. The transit system, in turn, has been designed to include transit stations in these areas interconnected with high quality trunk routes. The result is high levels of ridership concentrated in these regional corridors (as shown in Figure 5) and, as such, good candidates for







Regional
Transportation
Plan • July 1982

YEAR 2000 POPULATION

FIG. 1



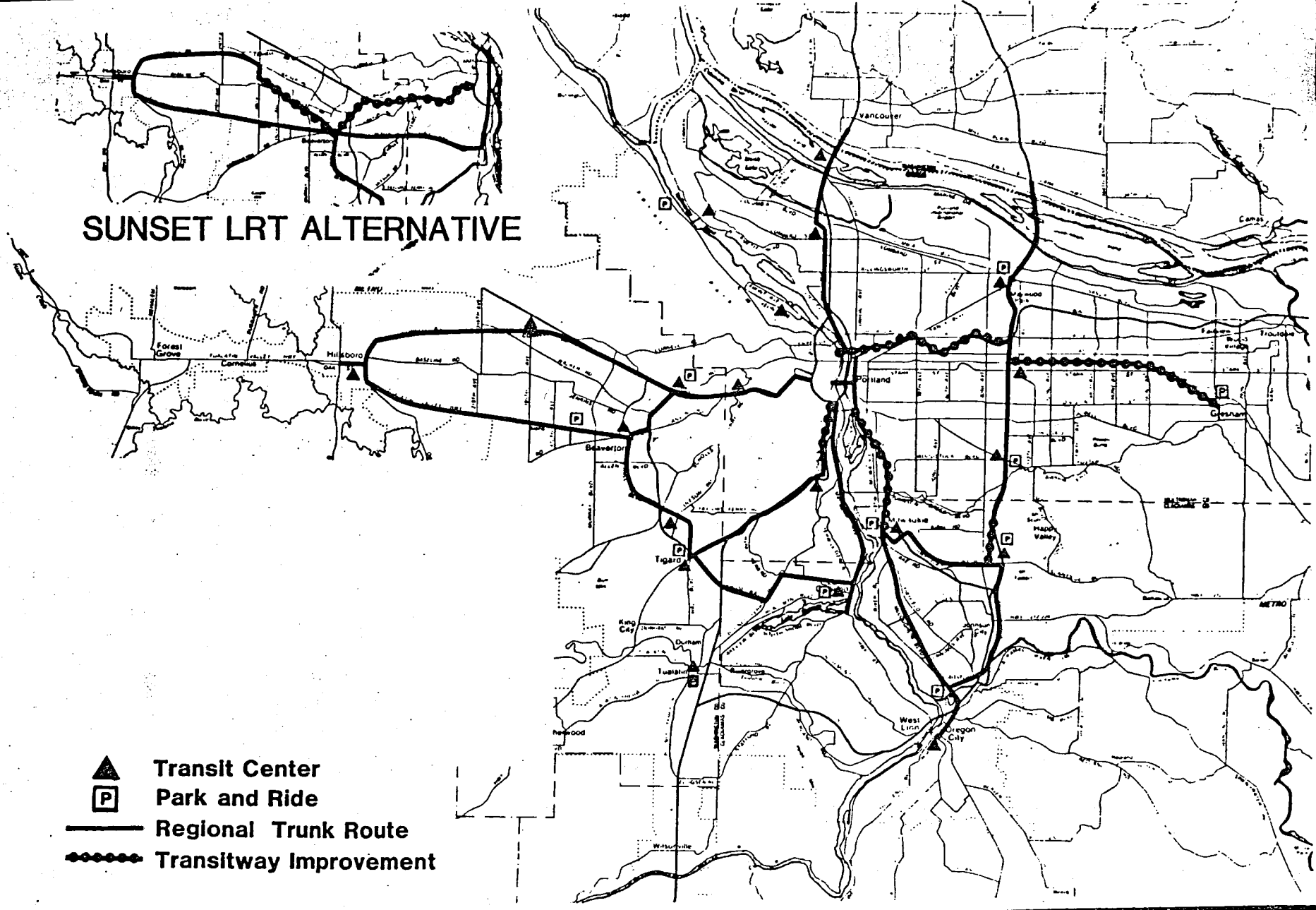
SUNSET LRT ALTERNATIVE

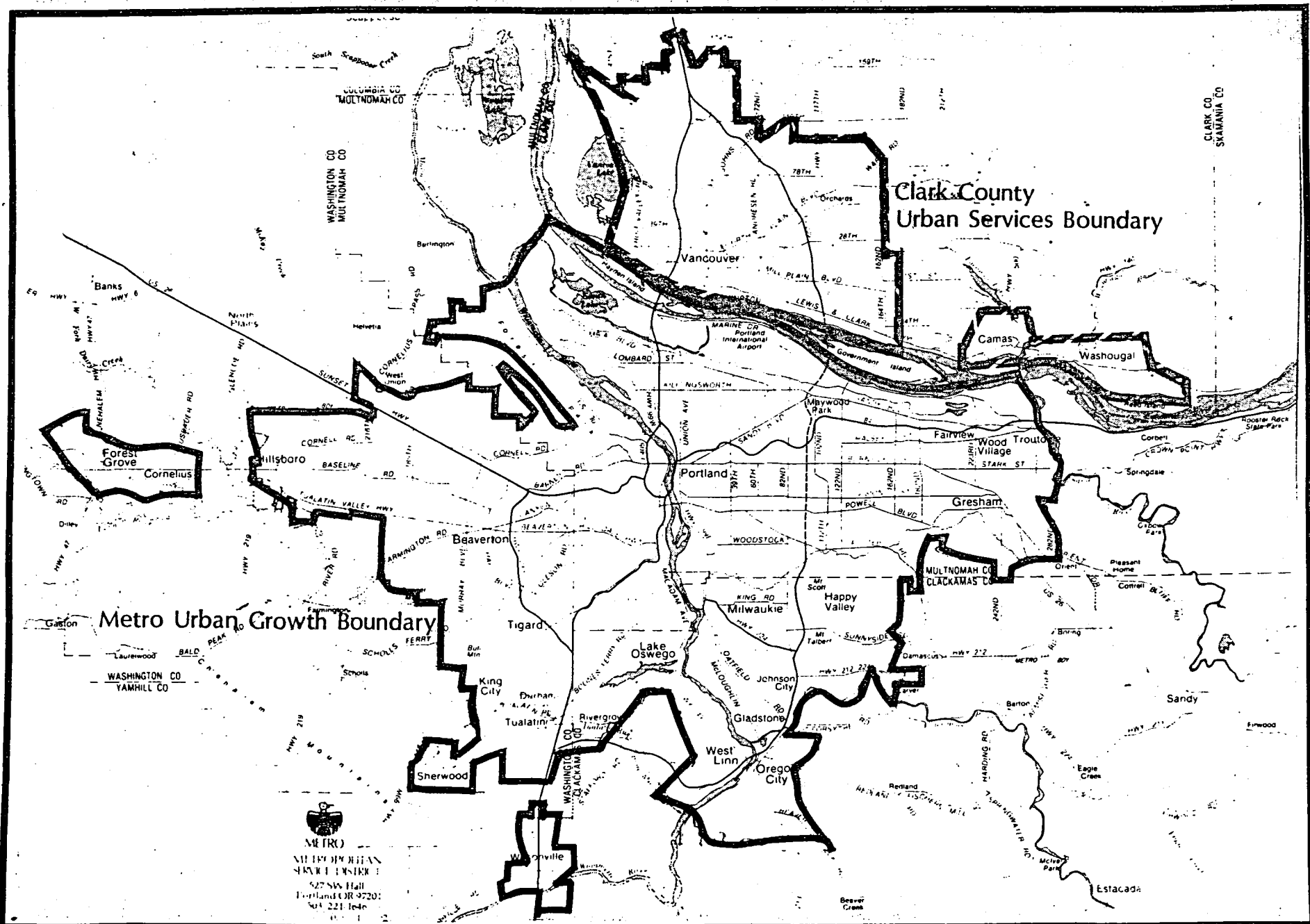
-  Transit Center
-  Park and Ride
-  Regional Trunk Route
-  Transitway Improvement


REGIONAL LRT SYSTEM PLAN
Scope Of Work

Regional Transit Trunk Routes

FIG. 4







METRO

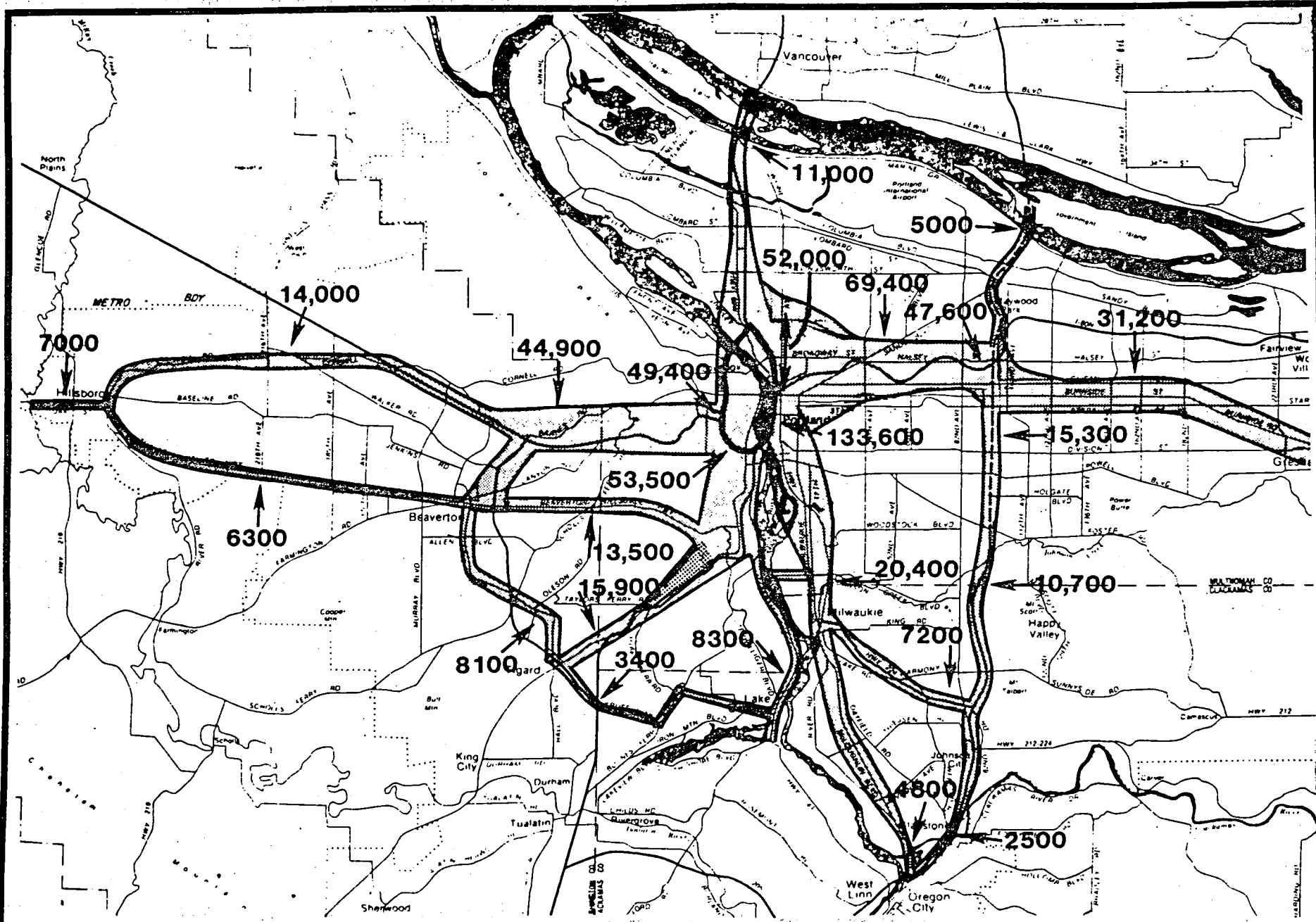
 METROPOLITAN

 SERVICE CENTER

 527 SW Hall

 Portland OR 97201

 503 221 1646



REGIONAL LRT SYSTEM PLAN
Scope Of Work

Major Transit Flows - Recommended Plan

Figure 5

construction of LRT. The Long-Range Regional Transitway System adopted in the RTP, shown on Figure 6, responds to these land use and ridership relationships.

The attractiveness of LRT from the rider's point of view is that transit service is provided in a clearly recognizable location, on a frequent basis, is generally fast with full or partial separation from traffic congestion and generally adheres more reliably to a schedule since congestion does not interfere. The attractiveness from the operator's point of view is that high capacity transit service can be operated more economically than bus service. This is because 310 passengers per two-car train can be carried with one operator rather than 105 passengers per articulated bus or 65 passengers per standard bus. Since personnel costs are 75 percent of the overall cost to operate bus service, use of larger LRT vehicles is a significant opportunity to reduce the cost of providing transit service. Furthermore, since the general public ultimately pays for transit service, savings in operating cost translates into savings for the taxpayer. In summary, LRT is a method of providing high capacity transit service at lower operating cost.

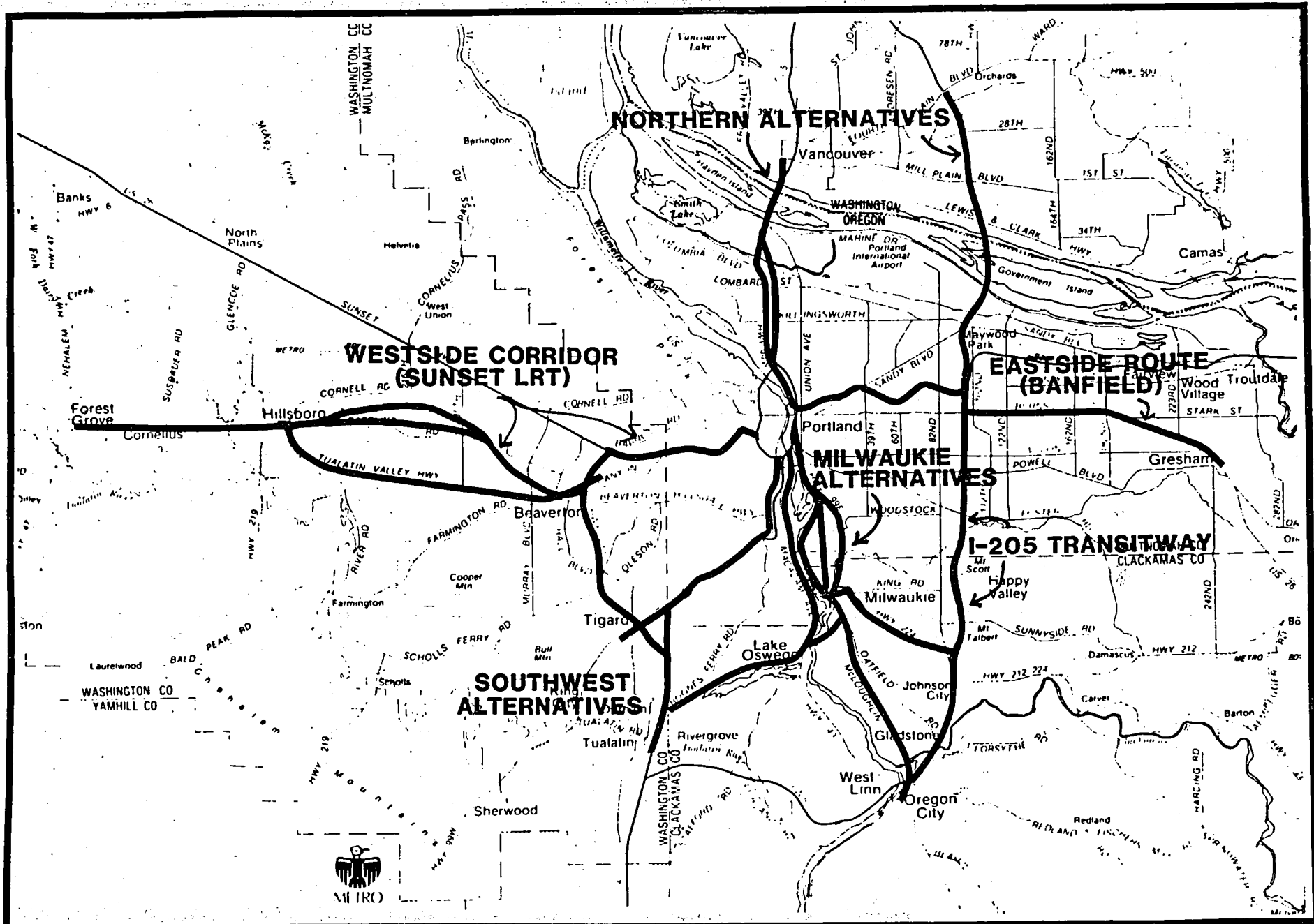
C. LRT Study Issue

Evaluation of the feasibility of LRT generally involves two types of assessment: 1) an economic analysis of costs and 2) an evaluation of the benefits and impacts realized by the community.

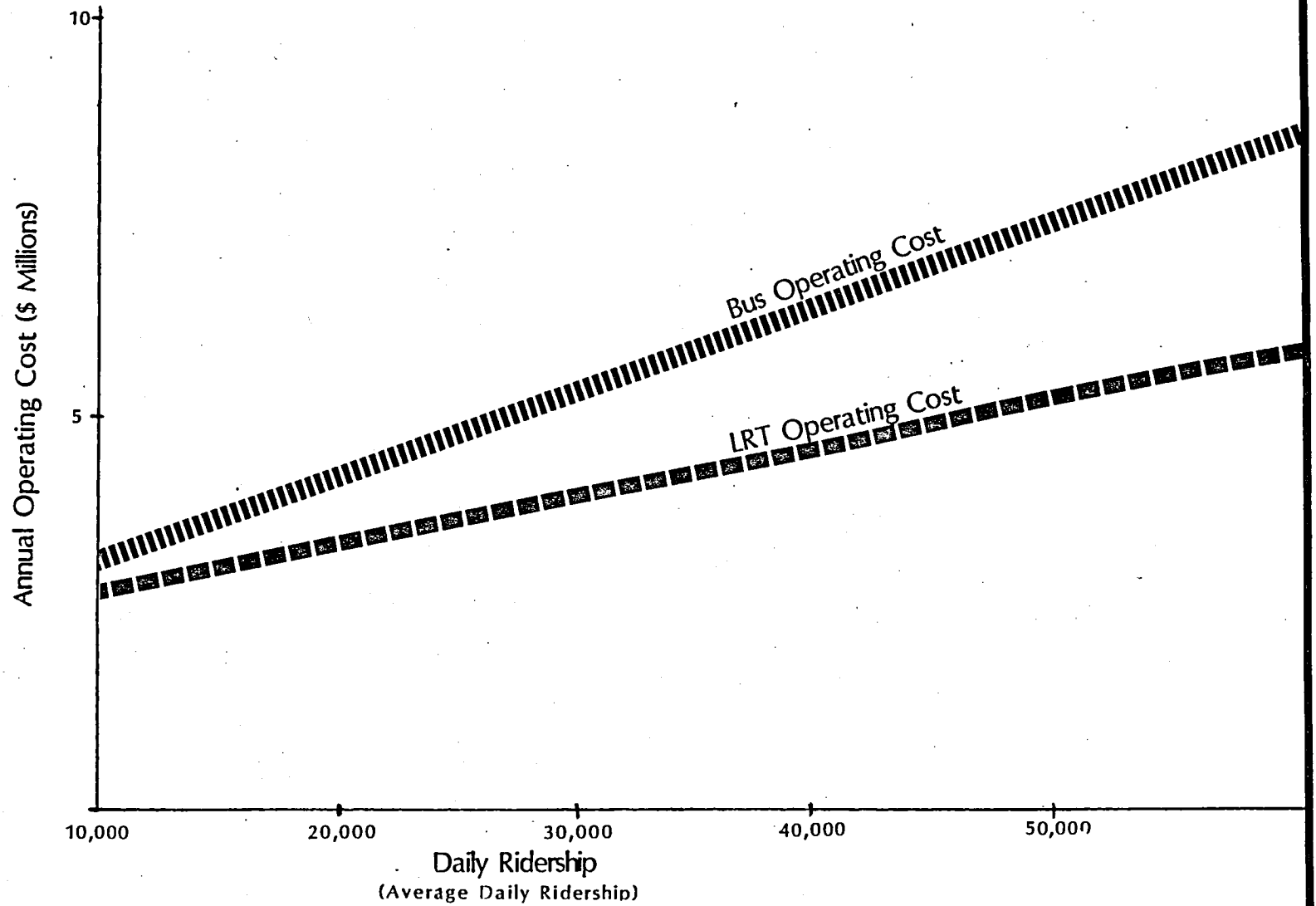
1. Economic Analysis - As shown in Figure 7, an LRT facility costs less to operate than an equivalent capacity bus service. Furthermore, as the number of riders increases, and, with it, the need for more transit capacity, the amount of savings increases dramatically. This savings is significant because these are yearly recurring operating costs and, therefore, the savings are realized as long as the service is provided.

However, LRT clearly costs more to implement initially than bus service due to track and station construction, right-of-way acquisition and vehicle acquisition. Provision of bus service only requires purchasing the buses. As such, the financial question at hand in each of the corridors where LRT is under consideration is:

"Will there be sufficient savings in operating cost by expanding transit capacity with LRT rather than buses to justify the additional expenditure to build LRT?"



- 6 -



To answer this question requires the following analysis for each corridor:

a. Operating Cost:

- 1) Estimate the transit ridership potential for the corridor.
- 2) Define bus and LRT alternatives to effectively serve the ridership with sufficient capacity to carry the number of expected riders.
- 3) Estimate the annual operating subsidy of the bus and LRT alternatives for the corridor.

b. Capital Cost:

- 1) Identify possible LRT routes in each corridor and determine the representative cost for construction and right-of-way acquisition; determine the LRT and feeder bus vehicle requirements to carry expected ridership; and determine vehicle cost for the LRT alternative.
- 2) Determine vehicle requirements for the bus alternative to carry expected ridership and determine vehicle cost.

c. Capital Cost vs. Operating Cost Comparison:

- 1) Convert bus and LRT total capital cost to "annualized" capital cost based upon appropriate interest rates and facility life span.
- 2) Determine "additional" annualized capital cost of LRT above equivalent bus alternative.
- 3) Determine annual operating subsidy "savings" for LRT alternative as compared to bus alternative.
- 4) Compare LRT operating subsidy "savings" to "additional" capital cost; if savings exceed additional capital cost, LRT is economically feasible.

2. Impact and Benefit Analysis - Based upon the analysis described above, an LRT facility should be "economically" feasible to justify construction. If

LRT is not economically feasible--that is, if it is more economical to expand transit service through the use of buses--then construction of LRT should provide other significant benefits to the community to justify the expenditure of public funds. Even if LRT is economically feasible, it should not be built if it produces unacceptable community and environmental impacts. As such, it is necessary to thoroughly evaluate the environmental consequences of building LRT to determine whether there is a net gain for the community or a net loss. This impact and benefit evaluation must consider the following issues:

- air quality and energy consumption;
- noise and vibration;
- displacement and neighborhood intrusion;
- impacts on parks, schools, wildlife, water quality;
- impacts on historic sites;
- economic development impacts;
- impact on transit service quality - travel time; reliability; and
- impact on traffic.

D. Overall Decision Process

The Regional LRT System Plan is being developed as part of the Regional Transportation planning process which is initiated and guided by the RTP and which culminates in actual construction of facilities. The role this LRT system plan plays in the total context of regional transportation planning is described below. Major steps in this hierarchy of planning activities and the decision upon which each one is focused are:

- | | |
|----------|--|
| General | 1. <u>Regional Transportation Plan (RTP):</u>
Composition of Regional Transportation System, designation of transitway corridors; |
| | 2. <u>Regional LRT System Plan:</u> Evaluates potential corridors for inclusion in Regional LRT System; |
| | 3. <u>Alternatives Analysis/Environmental Impact Statement (EIS):</u> Determines LRT alignment, station location, and project impacts; and |
| Specific | 4. <u>Final Corridor Implementation Steps:</u>
Details alignment and station design, secures financing, final engineering and construction. |

Each of the phases of planning and engineering work can be described by the issues upon which they will be focused and the specific decision to be reached from each phase of study. Similarly, the public involvement and regional decision-making will be different and involve different groups for each step in the study sequence.

This general process is described below:

1. REGIONAL TRANSPORTATION PLAN:

Issue: Define the overall regional transportation system, what role transit in general will play in that system, and more specifically, definition of regional transit system routes and corridors and the potential ridership for each.

Decision: What is to be the shape, focus, and nature of a regional transit system, and which corridors will have sufficient ridership to justify considering an LRT investment?

Public Involvement/Decision-Making: Public input is received on the entire plan concept. The RTP has been adopted by Metro.

2. REGIONAL LRT SYSTEM PLAN:

This step in the overall sequence of implementing a regional LRT system can be described in three parts:

- a. A determination as to whether or not the corridor should be included in the overall LRT system (based upon transit economics and other benefits);
- b. A determination as to whether or not the corridor should proceed to the next step of more detailed engineering and environmental analysis; and
- c. A determination of which of the alternatives are most promising and should be evaluated in detail in the next step.

Each of these study phases, and the issues each addresses, are detailed below:

a. Corridor Feasibility

Issues: Should the corridor be included in the overall LRT system and what is the staging of corridors within the region?

Decisions:

- Is LRT economically feasible in the corridor?
- If LRT is not economically feasible, are there other benefits to justify considering LRT?

Are there unacceptable impacts that should prohibit LRT in the corridor?

Public Involvement/Decision-Making: Public input on overriding benefits or impacts of LRT within each corridor will be solicited, and a public hearing on preferences will be held.

Metro will adopt the overall LRT System Plan (amending the RTP). Tri-Met, ODOT and local jurisdictions will endorse and amend their plans as needed.

b. Initiation of Alternatives Analysis

Issue: Is the corridor of sufficient priority to proceed to the engineering and environmental analysis step (the next level of more detailed study)?

Public Involvement/Decision-Making: Public input on decisions by Metro and Tri-Met. ODOT and local jurisdictions endorse, UMTA approval and authorization to proceed to next step.

c. Define Alternatives to be Examined in Detail:

Issue: Of the broad range of alternatives examined thus far, which are the most promising to carry into more detailed corridor level studies?

Decision: Which alternatives can be eliminated as too costly, having too great an impact, or not adequately serving the corridor's ridership?

Added to the list of promising LRT alternatives will be the following bus alternatives (as required by UMTA's alternatives analysis procedures) to ensure adequate consideration of lower capital cost bus alternatives:

- Bus Service Expansion; and
- Bus Service Expansion with priority treatment and/or bus lanes.

Public Involvement/Decision-Making: Public input, Metro/Tri-Met decision, ODOT and local jurisdictions endorse, UMTA approval of alternatives to study.

3. ALTERNATIVES ANALYSIS/ENVIRONMENTAL IMPACT STATEMENT

Issue:

The alternatives analysis/EIS process involves a detailed look at:

- a. determination of basic LRT alignments and station locations;
- b. environmental consequences of project alternatives;
- c. capital and operating costs;

Public input is involved in the detailed design of alternatives and in identifying environmental impacts.

Decision: Based upon a "Draft Environmental Impact Statement" presenting alternatives, the preferred mode of transportation (bus vs. LRT), alignment and stations will be selected.

Public Involvement/Decision-Making: Public input on alternatives to ensure that all impacts and considerations are identified. Public input on preferred alternative at public hearing. Metro/Tri-Met/ODOT/local jurisdictions endorse preferred alternative. UMTA approves preferred alternative, provides a funding commitment ("Letter of Intent") and authorize proceeding to the next step.

4. Final Corridor Implementation Steps:

The final steps in the implementation of an LRT corridor can be described as:

- a. Preliminary Engineering and Final EIS;
- b. Preparation of Final LRT Construction Plans;
- c. Secure Financing for LRT; and
- d. Construction of LRT

Each of these steps are described below:

- a. Preliminary Engineering and Final EIS:

Issue: Detail LRT alignment station design and final identification of impacts of preferred alternative.

Decision-Making: Tri-Met, local jurisdictions endorse, UMTA approval.

b. Secure Financing for LRT:

Issue: Approve a financial plan ensuring and committing funds for construction and initial phases of LRT operation; apply for federal grants.

Decision-Making: Tri-Met, UMTA, and other parties to the financing plan (i.e., legislature, voters), to sign "full-funding contract."

c. Prepare Construction Plans for LRT:

Decision: Local jurisdictions issue building permits.

d. Construct LRT

Issue: Tri-Met authorizes construction contracts.

Decision: Tri-Met.

E. System Planning: Products

Products of the LRT System Analysis include:

1. Adoption of overall regional LRT Plan.
2. Designation of primary vs. secondary corridors.
3. Ranking of primary and secondary corridors, considering:
 - ridership
 - capital cost
 - transit operating efficiency
 - impacts
 - zoning and land use actions of local governments/development impacts and opportunities
4. Adoption of an LRT operations plan and staging plan for LRT improvements in Central Portland (Downtown and the inner-Eastside).
5. Definition and priority of corridor studies to pursue, including Phase II alternatives analysis/EIS or less rigorous corridor refinement studies.
6. Staging plan for bus, LRT and highway improvements for McLoughlin and Southwest Corridors.
7. Definition of highway congestion resolved by transit development in corridors.

8. Definition of needed actions by local jurisdictions--such as right-of-way protection and land use actions in station areas for primary and secondary corridors.







F. System Planning: Geographic Areas

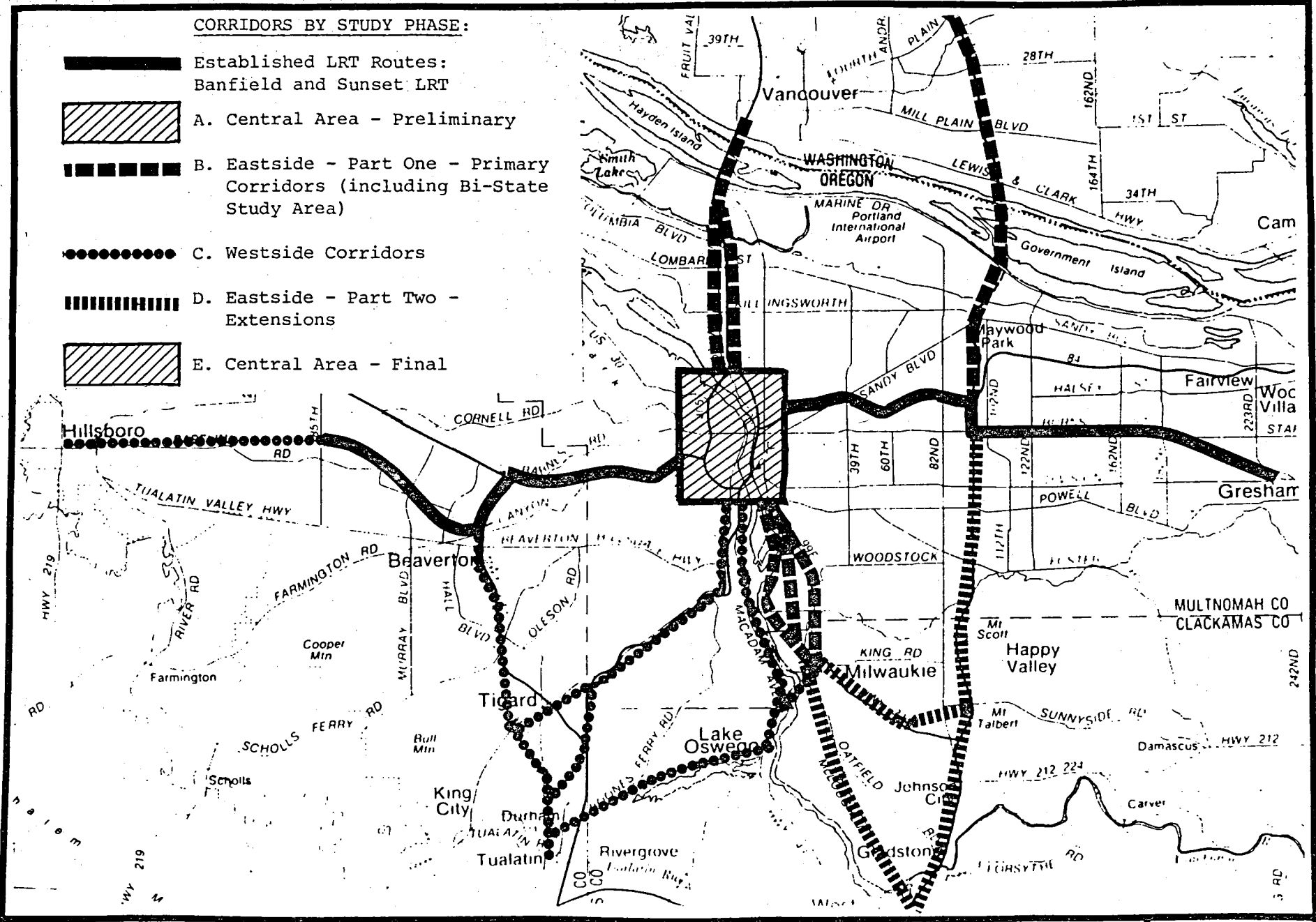
In order to phase work so as to allow use of existing resources as much as possible, the system analysis is being divided into five geographic subareas. These subarea definitions correspond to work phases of the task descriptions which follow in Section III. These subareas are defined to be small enough to allow a manageable and focused study, yet large enough to consider the LRT interrelationships between corridors.

The subareas or phases of the total system analysis are shown on Figure 8, and described below:

1. Central Area - The Central Area includes Downtown Portland and the inner-Eastside. Issues addressed in this area of high intensity of land use and economic activity center around engineering feasibility, traffic impact, and LRT system operation. The Preliminary Central Area analysis is addressed to identify constraints to the overall LRT system imposed by routing the primary corridors into or through this Central area.
2. Eastside - LRT System Plan - Part One - Primary Corridors: The portion of the region including Clark County, Washington, and the metropolitan areas east of the Willamette River will be addressed in two phases. The "Eastside - Part One Analysis" will look at primary routes as follows:
 - a. Portland Central Area to Milwaukie (McLoughlin Corridor);
 - b. Bi-State LRT, to be evaluated in two river crossing corridors (I-5 and I-205);
 - I-5/Interstate Avenue: Assuming a Columbia River LRT crossing on or near the I-5/Interstate Bridge;
 - I-205/Glenn Jackson Bridge: Assuming an LRT river crossing on the I-205 Bridge. The LRT alignment would follow I-205 north from the Gateway station of the Banfield LRT into Clark County, Washington;
 - Central Portland to Hayden Island: This northern corridor analysis will evaluate an Interstate Avenue versus an I-5 LRT alignment (this analysis will be factored into the Bi-State analysis noted above).

CORRIDORS BY STUDY PHASE:

-  Established LRT Routes:
Banfield and Sunset LRT
-  A. Central Area - Preliminary
-  B. Eastside - Part One - Primary
Corridors (including Bi-State
Study Area)
-  C. Westside Corridors
-  D. Eastside - Part Two -
Extensions
-  E. Central Area - Final



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REGIONAL LRT SYSTEM PLAN
Scope Of Work

Geographic Areas & Corridors by Study Phase

Figure 8

3. Westside LRT System Plan: Analyzing corridors and alignments for the region west of the Willamette River, this study phase will evaluate the following:
 - a. The Barbur Corridor, including an I-5 and Barbur Boulevard alignment;
 - b. A Macadam Avenue alignment, serving the Johns Landing/Corbett neighborhoods, and an extension along the Willamette River to Lake Oswego;
 - c. An alignment paralleling Highway 217 from Central Beaverton's Transit Station to the Tigard Transit Station, and south from there to Tualatin;
 - d. A circumferential connection between Tualatin and Lake Oswego (with and without connections across the Willamette River to Milwaukie); and
 - e. Taking off where decisions of the Westside Corridor Project ended, an LRT extension to Hillsboro from the terminus of the Sunset LRT.
4. Eastside LRT System Plan - Part Two - Extensions: This phase of study will evaluate extensions to the primary LRT routes decided upon in "Eastside - Phase I" (#2 above). These extensions are primarily in Clackamas County, and include:
 - a. Extension of Milwaukie Light Rail to:
 - Lake Oswego (across Willamette River);
 - Oregon City; and
 - Clackamas Town Center.
 - b. Extension of LRT South from the Banfield LRT Gateway Station along I-205 to the Clackamas Town Center;
 - c. Extension of LRT from Clackamas Town Center south along I-205 to Oregon City.
5. Central Area - Final: With the same study area as Central Area - Preliminary (#1 above), this phase of study will use the detailed corridor information developed in earlier phases of study to develop a finalized Downtown LRT routing and operations plan.
6. LRT System Staging and Priorities: Based upon the relative cost-effectiveness of LRT in each corridor and the need for transit capacity, the overall priorities and staging plan for the regional system (including the staging of each corridor and additional construction in the Central Portland area) will be defined.

G. System Planning: Schedule and Corridor Status

Corridors to be evaluated as part of LRT System Analysis have all been identified previously in the RTP as shown on Figure 6. The next step for each of these is the determination of economic efficiency or other rationale for including each corridor in the overall regional LRT system. This determination, as part of the Regional LRT System Plan, is scheduled for FY 1983 and FY 1984.

The specific status of each of the corridors considered as part of the overall Regional LRT System is listed below:

• Banfield LRT:

- RTP step complete.
- System Planning step complete.
- Alternatives Analysis/EIS step complete.
- Final Corridor Implementation steps are underway, with completion expected in 1985.

• Westside Corridor:

- RTP step complete.
- System Planning step complete.
- Alternatives Analysis/EIS step nearing completion and selection of a preferred alternative is underway.
- The Final Corridor Implementation step of Final EIS and Preliminary Engineering should begin in fiscal year 1984, pending UMTA funding approval.

• Southern Corridor:

- RTP step complete.
- System Planning step to be completed as part of the Regional LRT System Plan, with completion of this phase in fiscal year 1983.
- If the Southern Corridor were determined to be the next priority corridor in the region, the alternatives analysis and DEIS process could begin in fiscal year 1984, followed by Final EIS and engineering phases.

• I-5/North Corridor:

- RTP step complete.
- This corridor has been initiated into the "System Planning" step (Part of this Regional LRT

Plan). This step is scheduled for fiscal year 1983.

- The alternatives analysis and DEIS process could begin in fiscal year 1984 at the earliest if established by the region as a top priority corridor.

• I-205/North Corridor (Gateway North to Vancouver):

- RTP step complete.
- This corridor has been included in the "System Planning" step (Part of this Regional LRT Plan), which is scheduled for completion in fiscal year 1983.

• I-205/South Corridor (Gateway South to Oregon City):

- RTP step complete.
- This corridor has been included in the "System Planning" step (Part of this Regional LRT Plan) which is scheduled for completion in fiscal year 1984 or 1985.

• Barbur:

- RTP step complete.
- Initiated into the "System Planning" step, (Part of this Regional LRT Plan), scheduled for completion in fiscal year 1984.

• Macadam/Oswego:

- RTP step complete.
- Corridor initiated into the "System Planning" step, Part of this Regional LRT Plan, scheduled for completion in fiscal year 1984.

• West Circumferential:

- RTP step complete.
- Corridor included in the "System Planning" step, Part of this Regional LRT Plan, due to be completed in fiscal year 1984.

• Milwaukie Extensions (Milwaukie to Clackamas Town Center, Oregon City and Lake Oswego):

- RTP step complete.
- These corridors have been included in the "System Planning" step, Part of this Regional LRT Plan, due to be completed in fiscal year 1984 or 1985.

• Central Area:

- RTP identifies suitable streets for LRT.
- Morrison/Yamhill LRT cross-mall is soon to be under construction - System, DEIS, and Final Implementation steps complete.
- The following alignments will be included in the preferred alternative Westside Corridor:
 - Extension of Morrison/Yamhill LRT streets to 18th;
 - Transit Mall LRT alignment connecting to Banfield and Sunset; and
 - Columbia and 18th connections to Mall and cross-mall from Sunset LRT.
- Identification of additional LRT streets needed as part of the six-corridor radial system serving Downtown will be included in the "system planning" step, as part "A" and part "E" of this Regional LRT Plan. (Part A being a preliminary alignment plan, finalized in Part E at the completion of studies for each radial corridor.)

H. System Planning: Organizational Structure

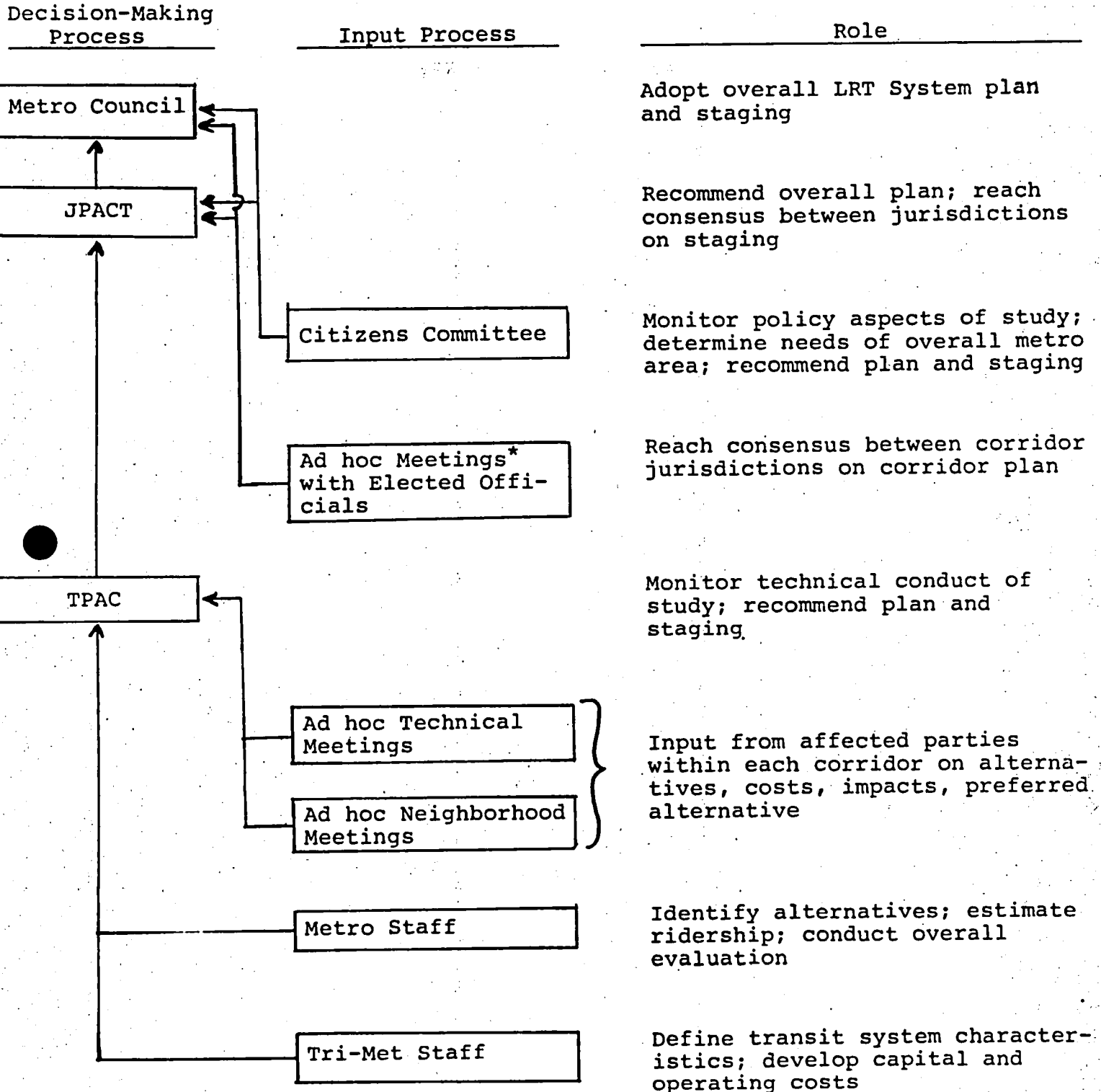
The Regional LRT Study will rely on the organizational structure depicted on Figure 9 to develop and adopt a Regional LRT Plan. This organizational structure is discussed below in four parts: (1) the Regional Decision Process; (2) the Corridor Input Process; (3) the Regionwide Citizens Review Committee; and (4) the Division of Technical Staff Responsibilities.

1. The Regional Decision Process

For the region as a whole, the established Transportation Planning structure sponsored and supported by Metro will be the basis of developing a regional consensus and regional approval of the Regional LRT System Plan. The major bodies involved in this are:

- a. The Metro Council: This elected regional council will provide the final regional approval for the plan, and amend the RTP accordingly.

Figure 9
Regional LRT Studies
 Organizational Structure



*The Bi-State Policy Advisory Committee will provide this forum for alternatives crossing the Columbia River (Interstate Avenue, I-5 and I-205).

- b. Joint Policy Advisory Committee for Transportation (JPACT): JPACT will provide elected official review and adoption of the plan focusing on issues of the overall system and on staging of corridors within the region and their associated improvements in the Central area. JPACT has representation from all cities and counties throughout the region. JPACT will be the primary body used for reaching a regional consensus on LRT plan issues.
- c. Transportation Policy Alternatives Committee (TPAC): TPAC will provide coordination, guidance and monitoring of the technical aspects of the Regional LRT Plan development, and will forward recommendations on the regional system and staging plan to JPACT.

2. The Corridor-Level Input Process

While the Metro Council, JPACT and TPAC will provide the decision process for the Plan as it affects the region as a whole, a smaller group will provide the technical, public and elected official review of issues which affect a specific corridor, such as LRT alignment impacts and the acceptability of one alignment within a corridor over another. These groups are:

- a. Ad Hoc Meetings of Elected Officials: For each particular corridor, the Metro Executive Officer will sponsor meetings with elected officials of affected jurisdictions, so that a forum to reach a consensus on issues within that corridor exists. These ad hoc meetings will be called on an as-needed basis prior to any TPAC/JPACT/Metro decision.

In addition to affected jurisdictions, it is expected that the Tri-Met Board of Directors and the Metro Council be represented at these meetings, so as to forge a consensus between local and regional issues prior to JPACT/Metro Council adoption of the Plan. These are intended to ensure that affected jurisdictions and implementing agencies are comfortable with provisions of the LRT plan, to provide feedback during plan development, and to ease eventual incorporation of the LRT plan into local comprehensive plans and Tri-Met's TDP.

- b. Ad Hoc Technical Meetings: As with the ad hoc elected official meetings, this group is used to receive input from affected parties within each

corridor on alternatives, costs, impacts, and a preferred alternative, if any. This group will be used to forge a technical consensus on issues within each corridor.

c. Ad Hoc Neighborhood Meetings: Within each corridor, meetings will be held with affected neighborhoods, allowing input of issues and concerns peculiar to that neighborhood.

3. Regional Citizens Committee: To guide and monitor policy aspects of the study, and to provide citizen input on the overall needs of the metropolitan area, a special Citizens Committee for the Regional LRT System Plan is recommended. Representatives on this Committee would be appointed as follows:

Appointing Body:

Number of Positions:

• Tri-Met Board	3 positions
• Metro Council	3 positions
• Metro Executive Officer	3 positions
• JPACT	5 positions (one each for the City of Portland, Multnomah County, Clackamas County, Clark County and Washington County)
Total	14 positions

4. Division of Technical Responsibilities

The Regional LRT System Plan will be undertaken as a cooperative effort of Metro and Tri-Met, with the assistance and support from the Regional Planning Council of Clark County.

Other jurisdictions will be involved in the review of this work through Ad Hoc Corridor meetings and the TPAC and JPACT committees of Metro. The Metro Council will also review and adopt final plan responsibilities.

Areas of responsibility for each of the major contributors--Tri-Met and Metro--are discussed below.

a. Metro Responsibilities

In production of the Regional LRT System Plan, Metro will have prime responsibility in:

- Production of year 2000 travel forecasts, producing summaries of transit ridership for each alternative, traffic volumes, and Origin-Destination data;

- Identification of significant environmental or community impacts;
- Compilation of impact and cost data into overall project evaluation; and
- Public involvement including neighborhood input and citizens committee.

b. Tri-Met Responsibilities

Tri-Met will be responsible for the following:

- Transit network alternative designs as necessary to evaluate various segments proposed as part of the Regional LRT System Plan;
- Development of unit operating cost factors and a standardized methodology for determining cost implications of alternatives;
- Development of unit capital costs for major components of an LRT alignment;
- Conceptual engineering and capital cost estimates for each major alignment evaluated, including supervision and management of possible consultant tasks for specialized engineering skills; and
- Bus and LRT operating analysis as necessary to resolve corridor feasibility issues.

Specific engineering tasks to be completed by Tri-Met staff and reviewed by Banfield LRT project engineers are:

- (1) Subgrade design--planimetric maps, profiles and typical cross-sections;
- (2) Facilities design--track location;
- (3) Station and park and ride design;
- (4) Support facility location and design;
- (5) Construction requirements and capital cost estimates; and
- (6) Infrastructure assessment.

II. SYSTEM PLANNING: OBJECTIVES/ISSUES BY AREA

II. SYSTEM PLANNING: OBJECTIVES/ISSUES BY AREA

The LRT Systems Study is divided into five study phases--each relating specifically to a subarea. Each of these study phases has specific objectives and specific issues which need resolution. For each study phase, the issues and objectives are defined below:

A. Central Area LRT System - Preliminary

This phase of the study will address the ability of Downtown Portland and the inner-Eastside to handle six LRT corridors (the Banfield, Sunset, Barbur, McLoughlin, I-5 North and Macadam). The objectives of the Preliminary Central Area Study are:

- Development of a six-corridor LRT operations plan for Central Portland;
- Identification of approaches to Downtown for each corridor;
- Routing/feasibility and need for inner-Eastside LRT route.

The Central area is the most critical portion of the LRT system since it involves routing each of the radial corridor LRT routes into and through the most dense area in the region. As such, the feasibility of operating LRT in the downtown area is a prerequisite for considering LRT in any additional corridor. However, by necessity, the downtown analysis must be conducted in two steps. Initially, a six corridor system will be examined based upon very preliminary ridership estimates and, therefore, very preliminary train frequencies in the various corridors. This preliminary assessment will establish the degree of difficulty of routing six corridors into and through Downtown and, therefore, whether or not it is reasonable to proceed with LRT feasibility studies in the individual corridors. Later, based upon detailed ridership and operations analysis in each corridor, the final central area operations and staging plan will be established (Section E).

B. Eastside LRT System - Part One - Primary Corridors

The Eastside LRT System Plan will be divided into two parts. Part One considers "Primary" Eastside Corridors including addressing a number of issues directly related to maintaining progress on the McLoughlin Corridor improvements and Bi-State questions. Other issues, such as the feasibility of McLoughlin Corridor LRT extensions south of Milwaukie and the feasibility of I-205 LRT routes not related to the Bi-State question, will be resolved in Part Two. Patronage studies, transit efficiency studies

and capital cost estimates will be developed to answer two basic questions for the Bi-State and Portland to Milwaukie (McLoughlin) corridors:

- Is the corridor economically justified for LRT; and
- What are the most reasonable alignment(s) to consider further within that corridor?

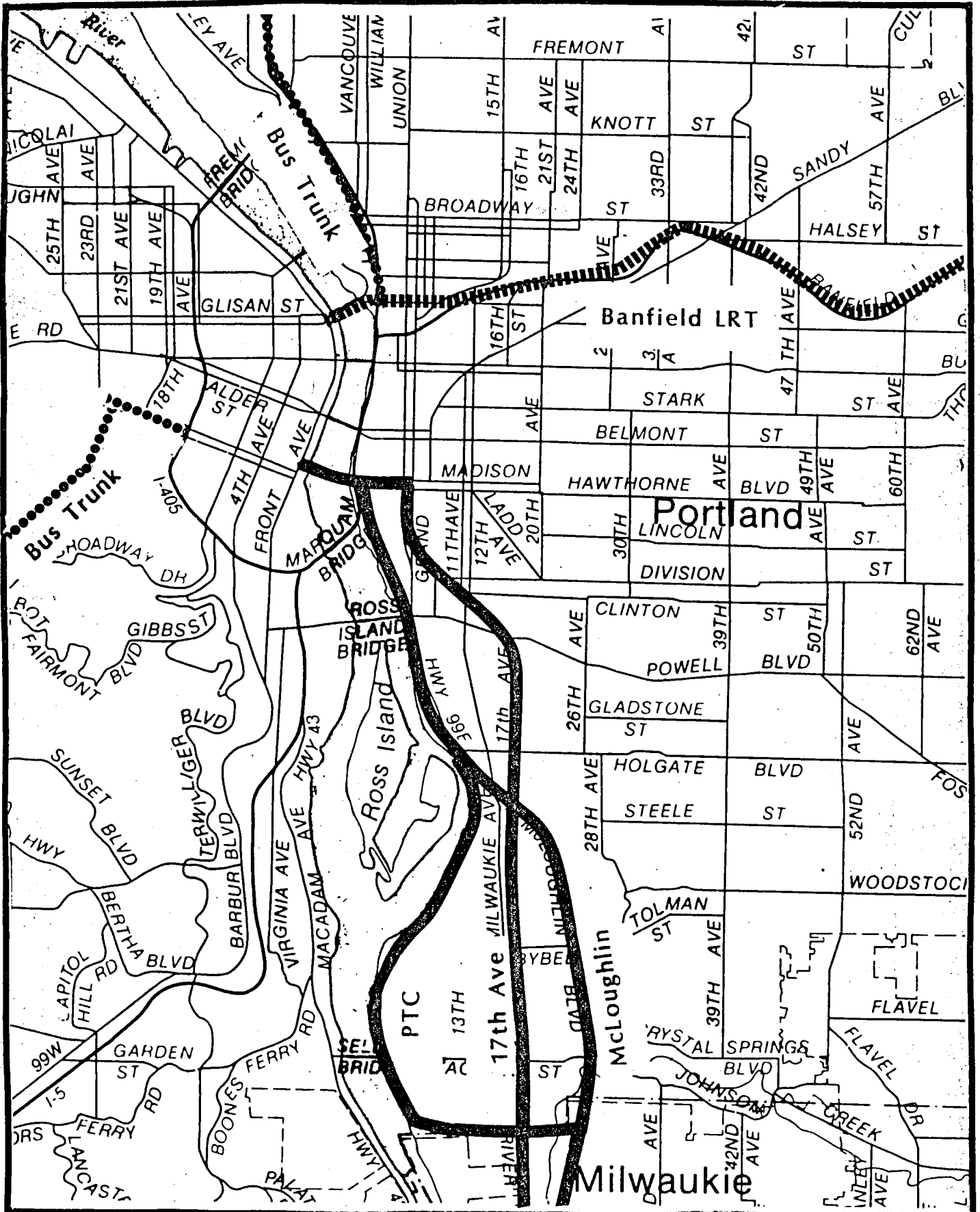
Specific issues to be addressed in these Eastside Part One Studies include:

1. McLoughlin LRT Feasibility and Alignments (see Figure 10):
 - Is LRT economically feasible in the corridor?
 - Which of the three routes shown on Figure 10 should be examined further in design and impact studies if LRT is feasible?
 - Need for connection of LRT to downtown vs. Eastside.
 - Develop a staging plan for both transit and highway improvements planned for the corridor.
2. I-5 vs. Interstate Avenue LRT Assessment: Are both routes between the Coliseum and Hayden Island (illustrated on Figure 11) feasible, or should one be dropped due to unacceptable cost or impact?
3. Relationship between corridors, particularly between I-5 North and McLoughlin Boulevard corridors, with and without Central Eastside Connector as shown on Figure 12.
4. Columbia River Crossing: I-5 or I-205:
 - Economic feasibility and route for Columbia River crossing: I-5 vs. I-205.
 - Economic feasibility of LRT and route for non-river crossing corridor: I-5 to Hayden Island; I-205 to airport.The four major system alternatives to be reviewed are shown on Figure 13.

C. Westside LRT System

Major issues addressed by the Westside LRT systems analysis would be:

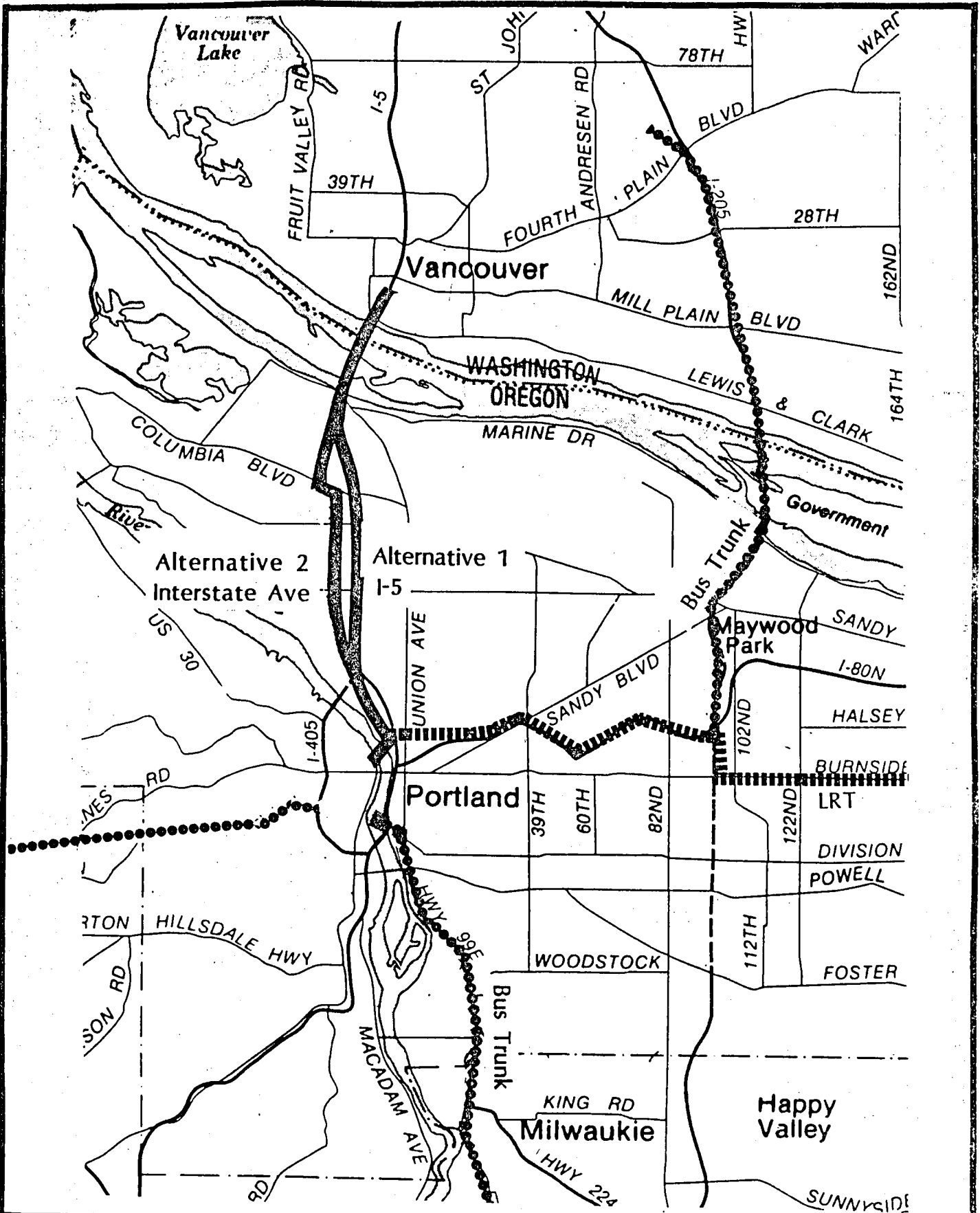
1. Sunset LRT to Hillsboro: Relating to ongoing Westside Corridor decisions, determine the feasibility of LRT extension to Hillsboro.



REGIONAL LRT SYSTEM PLAN
Scope Of Work

McLoughlin Corridor Alternatives

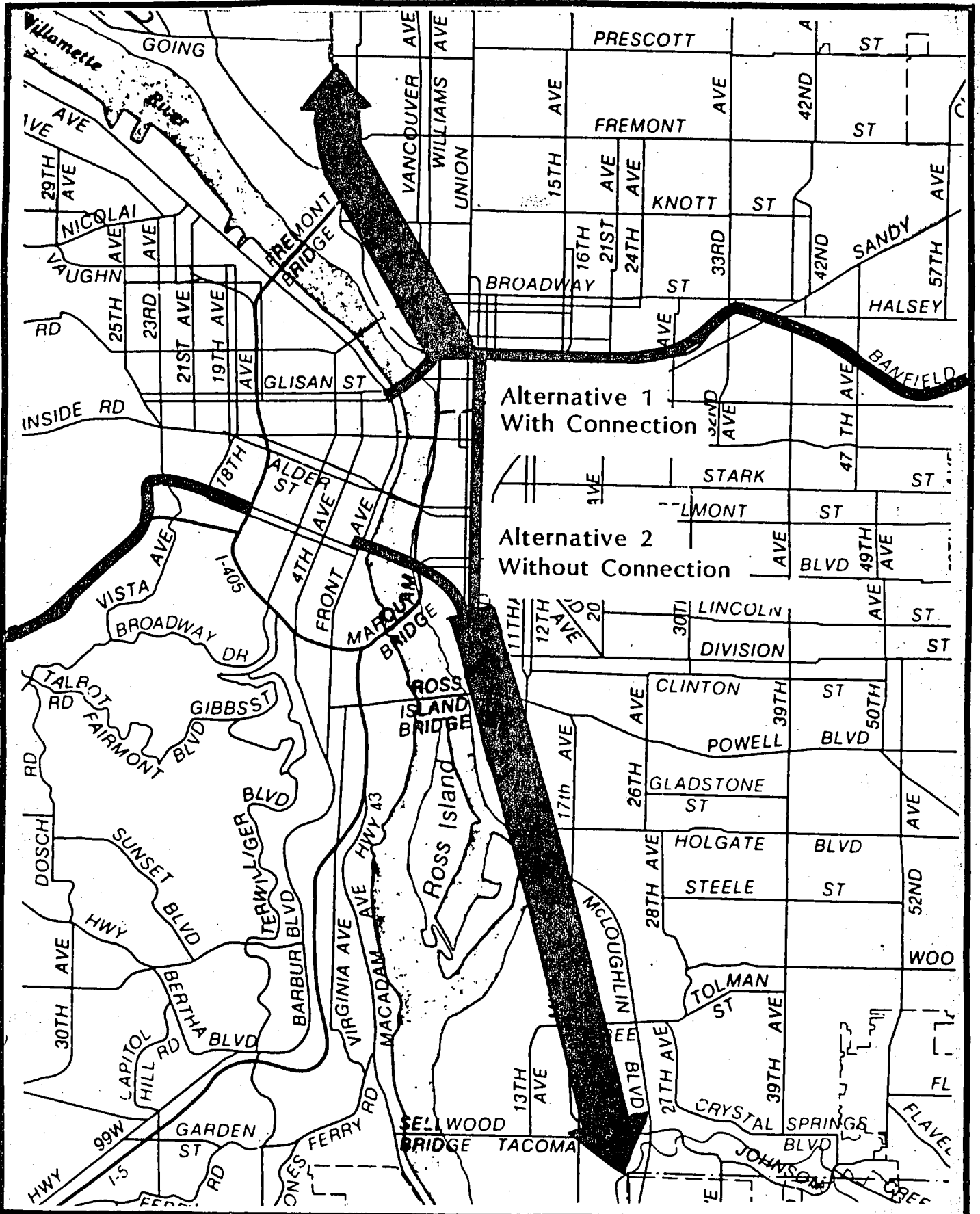
Figure 10



REGIONAL LRT SYSTEM PLAN
Scope Of Work

North Corridor Alternatives

Figure 11



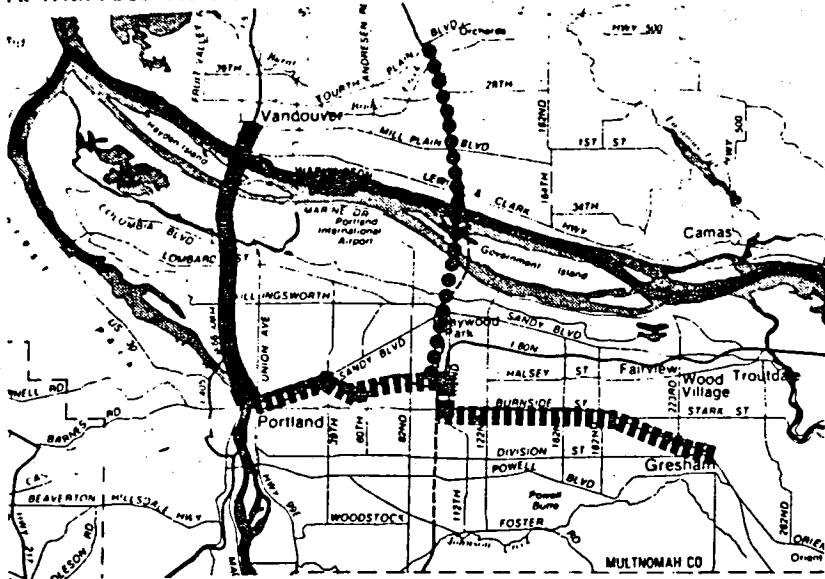
REGIONAL LRT SYSTEM PLAN
Scope Of Work

Inner-East Side Connection

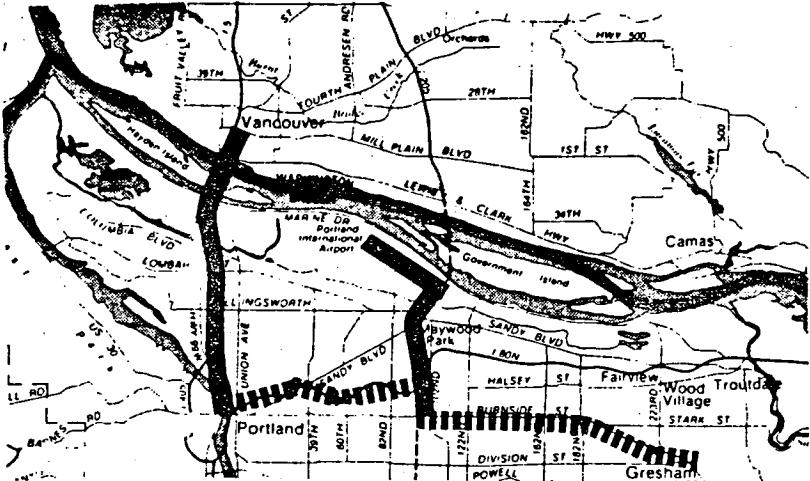
Figure 12

I-5 Corridor Crossing

A. With I-205 Bus Trunk

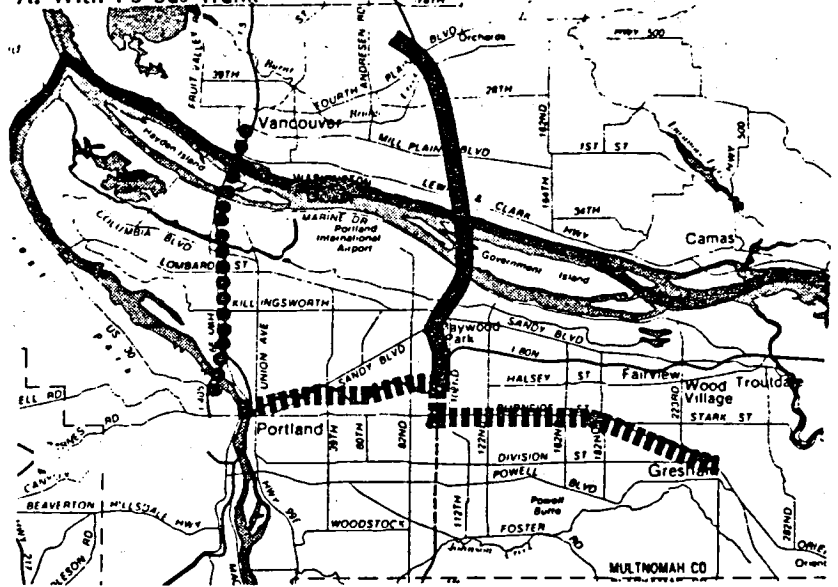


B. With I-205 LRT To PIA

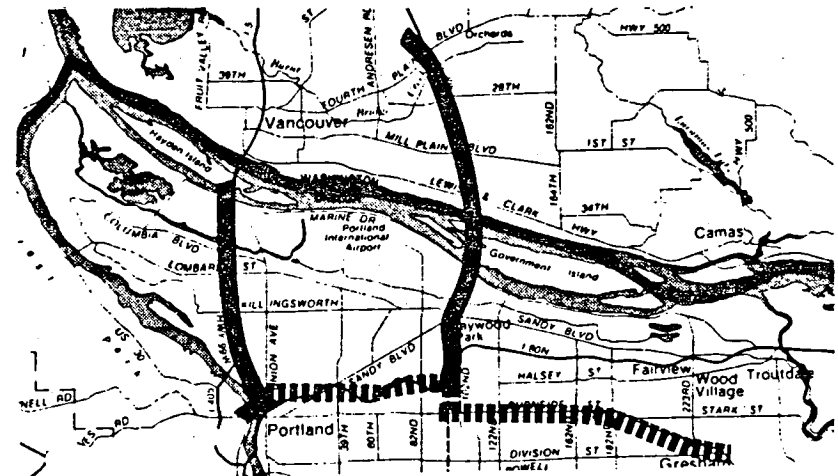


I-205 Corridor Crossing

A. With I-5 Bus Trunk



B. With I-5 LRT To Hayden Island



▬ LRT Routes Evaluated

▬ LRT Lines

●●●●●●●● Bus Trunk

REGIONAL LRT SYSTEM PLAN
Scope Of Work

I-5 & I-205 Alternatives

Figure 13

2. Barbur/I-5 Corridor Feasibility and Alignments, assessing the following alignments and their relationships:
 - Is LRT economically feasible in the corridor;
 - Which routes should be examined further in design and impact studies if LRT is feasible:
 - Barbur/I-5 alignment to Kruse Way and/or Tigard;
 - Barbur alignment to Kruse Way and/or Tigard
 - Is LRT economically feasible in the Macadam Avenue Corridor to Lake Oswego? Effect of this corridor on the Barbur/I-5 route and effect on Milwaukie/Lake Oswego route;
 - Impact of alternatives on 99W congestion through Tigard;
 - Phasing/staging of highway and transit improvements;
3. Circumferential Route Feasibility, by segments and as a package:
 - Beaverton to Tigard (economic feasibility and routing);
 - Tigard to Tualatin (economic feasibility and routing);
 - Tualatin to Lake Oswego (economic feasibility and routing); and
 - Lake Oswego to Milwaukie (economic feasibility and routing).
4. Relationships between corridors: Aimed at determining interrelationship between Hillsboro extension, Beaverton-Tigard connection and Tualatin extension.

D. Eastside LRT System - Part Two - Extensions

This phase of the Eastside LRT System study will evaluate "secondary" corridors, which are generally extensions or branches of the "primary" corridors evaluated in Phase "B."

Specific objectives of the Eastside LRT System Analysis - Extensions are:

1. Economic feasibility of McLoughlin LRT Extension to Clackamas Town Center and/or Oregon City, and/or Lake Oswego.
2. Economic feasibility of I-205 Corridor: Determine if LRT is justified in corridor, within various segments as noted below (independently and together):
 - Airport to Gateway
 - Gateway to Lents

- Gateway to Clackamas Town Center
- Gateway to Oregon City

3. Interrelationship between McLoughlin Extensions and I-205 corridor.

E. Central Area LRT System Final and Regional Staging Plan

This final phase of the Central Area LRT Study and development of the Regional Staging Plan will use the results of the more detailed corridor studies conducted previously to establish rational regional priorities for LRT corridors and to fine-tune ridership and resulting LRT and bus headways into the Central Area. Based on this, the objectives of this final phase of study are:

- Development of a Regional LRT Staging Plan identifying the priority of each regional corridor and conditions necessary for the development of each;
- Development of staging mechanisms for development of portions of the Central Area LRT Plan tying Central Area improvements to the development of the six individual radial corridors;
- Finalize the Central Area LRT operations plan; and
- Resolve any alignment or engineering issues left unresolved in Part One Studies (Study Phase "A").

III. SPECIFIC STUDY TASKS

III. SPECIFIC STUDY TASKS

Tasks are described and listed in two parts; first, in this section, generalized tasks which are essential to the analysis for each subarea are listed. These tasks are repeated for each major subarea. Tasks specific to each major subarea--such as detailed engineering issues--are addressed in Section IV.

Tasks are detailed for each of the major products which the effort will produce. These are:

- Travel Forecasts: An estimate of the demand for transit and light rail travel in each system alternative, with interactions of the major alternatives for the total Eastside light rail system considered.
- Operating Cost Estimates: Operating costs will be estimated for an expanded bus network, as well as each corridor light rail alternative integrated into that overall system.
- Capital Cost Estimates and Conceptual Engineering: Capital costs will be developed via a sketch engineering effort, limited to the minimum level of detail necessary to accomplish the following:
 - To establish with reasonable confidence capital cost estimates for alignment alternatives (i.e., routing at grade or on structure, and resulting cost);
 - To identify fatal flaws of particular alignments (i.e., turn radius, grade or structural limitations, or major cost differences between alternatives);
 - To identify critical pieces of right-of-way which should be pursued.

Conceptual engineering diagrams will not be produced for the entire length of alignments under consideration.

- Operating Analysis: For critical areas which could affect overall corridor feasibility, determine the operating characteristics of the regional LRT system.
- Generalized Impact Assessment: For each major light rail alignment general environmental impacts, as discernable at the conceptual engineering level, will be identified. Issues such as displacement, noise impacts, land development opportunities, or major impacts on the natural environment will be identified. This will allow significant impacts to be considered in selecting the preferred system.

- Evaluation of Alternatives: Combining the areas of information discussed above, the evaluation process will synthesize this information to reach conclusions of LRT feasibility corridor priorities.

A more detailed list of work tasks follows for each of these major work areas.

A. Travel Forecast Development

1. Develop detailed zone systems, allowing a thorough and complete ridership analysis, for each of the subareas investigated:
 - Bi-State Area Model: Detailing Clark County and North and Northeast Portland between Powell and the Columbia River;
 - the Oregon-Eastside Model: Detailing the Oregon portion of the metropolitan area east of the Willamette River, including Downtown Portland; and
 - the Oregon-Westside Model: Detailing the portion of the metropolitan area west of the Willamette River, including the inner-East employment areas.

For each of these modeling systems, the following tasks will be performed:

1980 Model Calibration

2. Allocate 1980 Population and Employment data by zone.
3. Develop and code 1980 Highway Network.
4. Develop and code 1980 Transit Network
5. Calibrate travel forecasting models to replicate 1980 travel patterns.

Year 2000 Travel Forecasts

6. Allocate Year 2000 Population and Employment data by zone.
7. Develop and code Year 2000 Highway Network.
8. Develop and code Year 2000 Transit Networks for each alternative using the subarea modeling systems.
9. Code each transit network design using UNET. For each of these networks, calculate coverage factors/station area population and employment in each zone affected by LRT station coverage.

10. Produce year 2000 transit and highway travel forecasts for each of the transit network alternatives discussed.

Products

1. Transit line loadings for each alternative;
2. Identification of key market segments of transit ridership (i.e., by major trip purpose and major destinations ridership from existing development vs. ridership from future development);
3. Transit network statistics for each alternative network (as necessary for determining operating cost, i.e., vehicle miles, vehicle hours, etc.);
4. Highway assignments to regionally significant facilities.

B. Operating and Maintenance Cost Estimates

For each transit network simulated, an estimate of operating and maintenance costs for the C-TRAN and Tri-Met systems will be developed via the following tasks:

1. Identify all routing changes between alternatives. The analysis will focus on the marginal changes in operating costs of routes in the corridor under detailed consideration.
2. Develop cost factors (for the year with the most recent and complete operating cost data) enabling calculation of operating costs separately for Tri-Met and C-TRAN (for the Bi-State analysis). Factors are to be on a cost per hour or cost per mile basis.
3. Refine network operating data from UNET as necessary to reflect daily operation, and consistency of operation between modes; size headway to serve demand. This will be performed for the routes which change between alternatives--focusing on the corridor under review.
4. Calculate changes in operating costs for each alternative transit network evaluated.
5. Calculate farebox revenue generated by each alternative.

Products

1. Operating costs for each network alternative and for each transit system, comparing various light rail alternatives to the all-bus alternative.

2. Refined network operations statistics (revenue vehicle miles, hours, etc.) for use in evaluating the efficiency of alternatives.

C. Capital Cost Estimates and Conceptual Engineering

Capital costs for this system-level analysis are to be developed only to discern major differences between alternatives and to provide the basis for comparing capital cost vs. operating cost of the alternatives. The conceptual engineering upon which these cost estimates are based is to be limited to the minimum level of detail to identify general costs and to identify "fatal flaws" of particular alignments. The detailed engineering issues to be evaluated are discussed in Section IV. Major tasks involved in developing capital cost estimates are:

1. Develop unit capital costs for:
 - LRT and bus vehicles;
 - Typical LRT sections:
 - a. on its own ROW;
 - b. in-street sections; and
 - c. on-structure sections; other typical sections as may be needed.
 - Maintenance equipment and facilities (if needed);
 - Real estate (various categories);
 - Stations and station access (elevators, etc., if necessary); and
 - Park and Ride lots.
2. Develop conceptual engineering of alternative alignments--more detailed where questions of feasibility exist. Develop for the length of the alignments evaluated standard sections to be used for each segment, so that full capital cost estimates can be developed. Detailed engineering issues to be reviewed are listed in Section V.
3. Derive fleet requirements (bus and LRT) for each alternative (based on UNET statistics).
4. Develop total capital cost estimates for each of the alternatives.
5. Calculate annualized capital cost.

Products

1. Final fleet requirements (bus and LRT) and cost.
2. Identification of fatal flaws, and preliminary determination of engineering feasibility for LRT alignments.

3. Total and annualized capital costs for each alternative.

D. Operating Analysis

The operating analysis is focused only in locations where specific areas of operating feasibility exist, which is, for the most part, in Central Portland (Downtown and the inner-Eastside). Spot issues of operating feasibility may exist around suburban transit stations and bridge-crossings (analyzing one-track vs. two-track operation). Tasks involved in the operating analysis for areas where questions of operating feasibility exist are:

1. Based on the ridership forecasts, establish headways for each corridor necessary to meet demand.
2. Determine through routing possibilities, minimizing the number of trains in congested areas.
3. Determine the need for redundancy in LRT operations necessary to maintain safe and flexible service.

Products

1. LRT Operations Plan for areas where specific and potentially serious operating feasibility questions exist.
2. Definition of LRT and bus capacity for specific areas where questions of feasibility exist.

E. Generalized Impact Assessment

1. Identify sensitive areas that may be affected by each alignment alternative (such as wetlands, special habitat areas, neighborhoods, etc.) due to proximity, noise, vibration, etc.
2. Determine the approximate number of residences or businesses displaced by each alternative.
3. Assess the traffic impact/benefits of potential transit system expansion.
4. Assess, generally, traffic impact of potential high volume park and ride stations, and at-grade LRT intersections with major streets.
5. Identify areas with significant opportunities for public/private partnership, and for areas with potential for increasing investment through station area development programs.

Products

1. Identification of potential displacement of each alternative.
2. Identification of environmental "fatal flaws."
3. Identification of environmental impacts which any Phase II Alternatives Analysis would focus.

F. Evaluation of System Alternatives

The full evaluation of system alternatives will be undertaken as follows:

1. Develop cost-effectiveness comparison of capital vs. operating cost of bus vs. LRT improvement for various alternative systems and corridors.
2. Compile other pertinent impact and benefit comparison of alternatives.
3. Develop summary evaluation measures--as specified in Task 1.
4. Identify and develop priorities for corridors in which LRT appears justified by the year 2000, and identify those corridors in which future travel demand growth after the year 2000 is likely to justify LRT investment.
5. Coordinate the evaluation of alternatives through appropriate review committees, involved agencies and the public.

Products

1. Cost-effectiveness and impact evaluation.
2. Consensus on highest priority alternatives to be detailed in refined corridor studies.
3. Final report summarizing and documenting results of the study.

G. Community Involvement

While this is not a DEIS level process, the project will conduct public meetings, prepare press releases, and seek the views of interested neighborhoods and interest groups. This effort will include:

1. Public meetings with affected neighborhood associations, Chambers of Commerce, business associations, and local community groups.
2. Preparation of press releases for the regional and local press.
3. Conducting public hearings on project recommendations (for each major phase study).
4. Review of project recommendations by a regional LRT Citizen's Committee.

IV. IDENTIFICATION OF SUBAREA TASKS

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Each of the particular subareas into which the region is divided have specific study objectives and special issues upon which the determination of LRT feasibility is dependent. The specification of these subarea or corridor issues, and the detailed study tasks necessary to address these issues, follow.

A. Central Area (Preliminary - Phase I)

The Central area contains Downtown Portland and the inner-Eastside (west of 11th Avenue).

This phase of the study will address the ability of Downtown Portland and the inner-Eastside to handle six LRT corridors (the Banfield, Sunset, Barbur, McLoughlin, I-5 North and Macadam).

Questions to be answered by this phase of the Central Area Study are:

- Can the Central area accept a six corridor LRT system? If yes, proceed with analysis of individual corridors;
- If no, can the next priority corridor operate without a direct connection to Downtown?
- If no, which corridor(s) should be eliminated from LRT consideration?

After answering these questions, proceed with the Alternatives Analysis/DEIS step for the next priority corridor.

Tasks & Specific Issues

Tasks and specific issues which need to be addressed to accomplish Central area objectives are categorized as (1) Operating Issues; (2) Engineering Feasibility; and (3) Traffic. Each of these areas are detailed below:

Operating Analysis Tasks

- A-1: Determine ridership into Downtown for each corridor.
- A-2: Determine headways for each corridor necessary to meet ridership demands.
- A-3: Determine through routing alternatives and balancing of corridor headways.
- A-4: Determine redundancy needs in Central area operations.

- A-5: Determine LRT capacity limitations (minimum allowable headway) at:
- bridges (Hawthorne, Broadway, Steel)
 - LRT crossings at Columbia and Transit Mall, Morrison-Yamhill and Transit Mall, 1st and Morrison-Yamhill
 - Each Downtown portal.
- A-6: Mall capacity: bus and LRT operation.
- A-7: No-Build capacity (with Banfield) for bus operation.

Engineering Feasibility and Design

Points where questions of engineering feasibility and major capital cost implications have been noted, and are listed below as engineering tasks specific to the Central area.

- A-8: Inner-Eastside Connection: develop general alignment for the inner-Eastside connection, considering connections to the Banfield and Interstate LRT alignments in the North and to alternative South Corridor LRT alignments in the south.
- A-9: Hawthorne Bridge and Water Street Ramp: determine the structural and geometric feasibility for LRT, and develop a cost estimate.
- A-10: Steel Bridge: providing the Willamette River crossing for the Banfield LRT, the feasibility of other connections to or from the LRT tracks needs to be determined, specific concerns are:
- connection with a transit mall alignment via Glisan or Hoyt Streets (impact on Greyhound);
 - turn radii to First Street; and
 - LRT maximum capacity of Steel Bridge and ability to serve both Banfield and I-5 North trains.
- A-11: Broadway Bridge: determine the structural and geometric feasibility of the bridge for LRT, and develop a cost estimate for the crossing.
- A-12: Broadway Bridge and Transit Mall alignment: determine the costs and operating limits of a Broadway Bridge to Transit Mall connection, addressing the following concerns:
- turn radii: 7th to Hoyt (east and west);
 - turns: Hoyt to 12th; and
 - turns: Hoyt to 5th and 6th.

- A-13: Determine the most feasible LRT operating pattern on the Portland Transit Mall, considering the following:
- Capacity limitations of mall alignment as conceptualized in Westside Corridor study;
 - LRT vehicle demand from six radial corridors;
 - Alternative mall routing schemes if needed.
- A-14: Cross-Mall: determine for this, the Banfield LRT's major Downtown routing, the following:
- cost and feasibility of extending the cross-mall west to 18th Street, considering also the turn radii limits; and
 - at 11th Street, determine the connection to the Banfield and turn radii limitations.
- A-15: Water Avenue Alignment: structural and geometric feasibility and cost of bus transfer stations at bridge heads (Hawthorne, Morrison, Burnside) and in Coliseum area.
- A-16: Hawthorne Bridge Connection: determine alignment of Hawthorne Bridge LRT to cross-mall and to Transit Mall (5th and 6th), considering the Sunset LRT Transit Mall connection via Columbia.
- A-17: Barbur Corridor Downtown portal: determine the alignment and routing over I-405, and determine the feasibility of using one of the existing structures (structural and geometric feasibility), and cost of alternative I-405 crossings.
- A-18: 5th and 6th (Transit Mall) and Morrison and Yamhill (cross-Mall): identify headway limitations on each couplet, as well as design, safety, cost implications.

Inner-Eastside

- A-19: PTC/Inner-East connection: determine alignment, cost and feasibility of a railroad viaduct near 6th and Caruthers connecting the PTC and any inner-east routing.
- A-20: Inner-East/Banfield Connection: determine alignment, feasibility and cost of alternative connections bridging the Banfield Freeway to connect with the Banfield LRT near Lloyd Center.
- A-21: Coliseum Area: determine alignment and cost of connecting the Interstate LRT (Interstate Avenue or I-5 alignments) and the southern corridor LRT (PTC,

McLoughlin and 17th Avenue alignments), via the Banfield LRT.

A-22: 7th or 8th and Holliday: determine the alignment and cost of connecting the inner-east line to the Banfield LRT.

LRT/Auto Traffic Conflicts

A-23: Mall (5th and 6th) conflicts with Burnside traffic.

A-24: Cross traffic conflicts at west end of Hawthorne Bridge.

A-25: I-405 bridges at south end of CBD (over I-405).

A-26: Broadway Bridge traffic impacts.

A-27: Hawthorne Bridge traffic impacts.

A-28: Cross-mall crossing of 4th, 5th, 6th and Broadway (LRT volumes above Sunset/Banfield LRT volumes).

B. Eastside LRT System Plan - Part One - Primary Corridors

The Eastside primary system combines a study of the Bi-State LRT feasibility analysis with a feasibility analysis of LRT from Downtown Portland to Milwaukie. The Bi-State analysis will evaluate LRT in the I-5/Interstate Avenue corridor and the I-205 corridor.

- To determine the economic feasibility of LRT in the McLoughlin Corridor.
- To establish the economic feasibility of LRT in the I-5/Interstate Avenue Corridor.
- To identify the most feasible LRT Columbia River crossing to serve Clark County, I-5 or I-205.
- To identify engineering "fatal flaws" allowing the elimination of options and sub-options from further analysis.
- To determine the staging of transit and highway improvements in the McLoughlin Corridor.

Tasks & Specific Issues:

Work tasks and detailed issues to be addressed in this area of study are categorized as: (1) Travel Forecasting; (2) Operating Cost Estimates; (3) Capital Cost Estimates; (4) Generalized Impact Assessment; and (5) Evaluation of Alternatives.

Travel Forecasting

- B-1: Develop and calibrate a detailed model for each of the areas shown on Figures 14 and 15 in accordance with the tasks outlined in Section IV. The Bi-State Modeling system, shown on Figure 15, will evaluate river crossings and service to and within Clark County. The Oregon-Eastside modeling area (Figure 14) will be used to evaluate the Southern Corridor alternatives and the choice of I-5 or Interstate Avenue alignments in the North Corridor.
- B-2: Develop and code year 2000 Transit Networks as listed below:
- All-Bus Service expansion with Banfield LRT;
 - PTC LRT: Milwaukie to Portland CBD;
 - McLoughlin Boulevard LRT;
 - 17th Avenue LRT;
 - I-5 LRT to Vancouver;
 - Interstate Avenue LRT to Vancouver; and
 - Interstate Avenue LRT with PTC LRT and inner-Eastside connector.
- B-3: Produce year 2000 travel forecasts for each of the transit network alternatives listed above.

Operating and Maintenance Cost Estimates

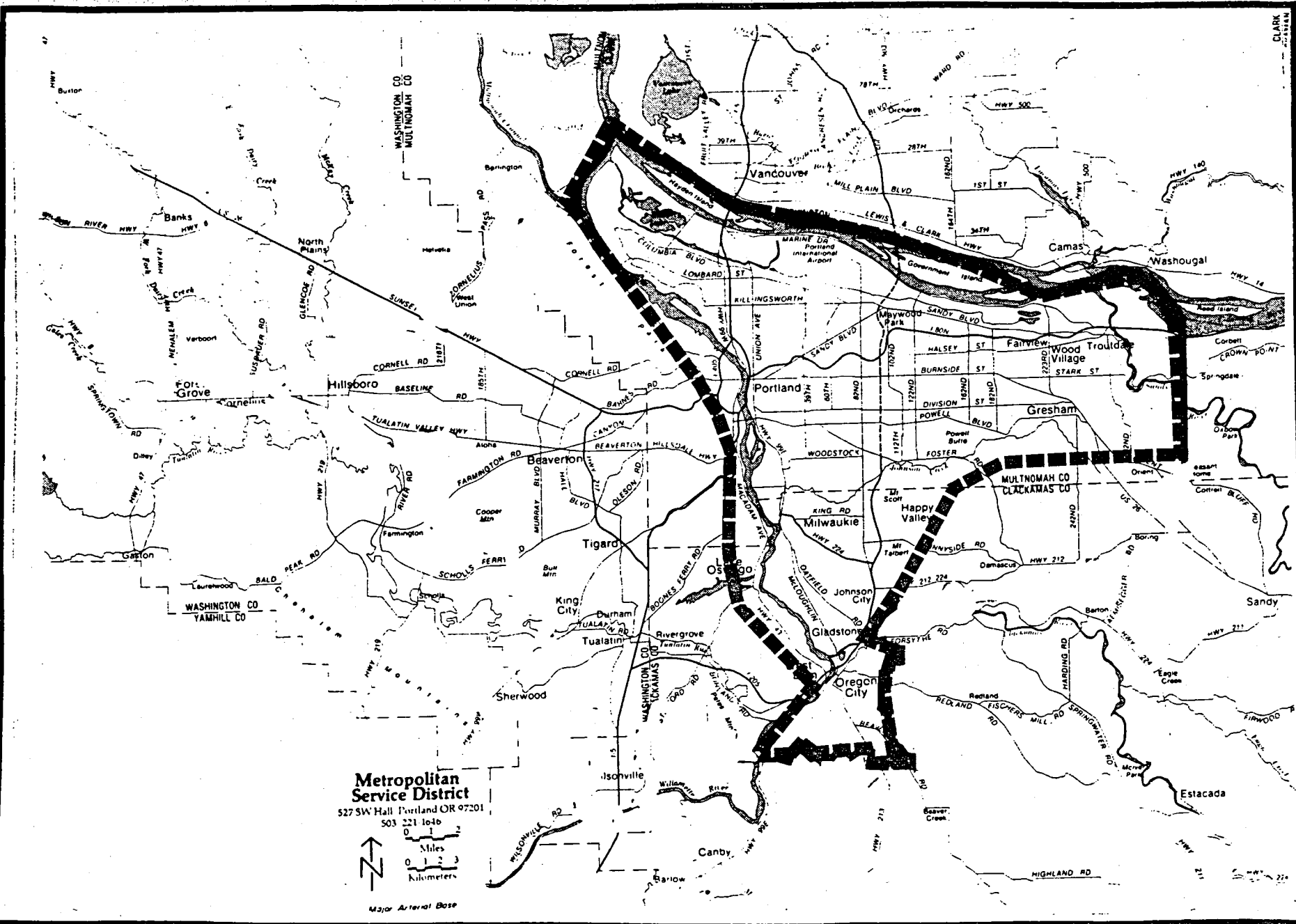
- B-4: Develop changes in network operating statistics and resulting costs by mode for each of the corridors affected by the network alternatives listed above.

Capital Cost Estimates and Conceptual Engineering

Develop refined capital cost estimates and conceptual engineering for the following locations:

General Alignment Issues

- B-5: Milwaukie to Powell: for each of the following alignments, determine a feasible route or routes, standard cross-section, and a cost:
- 17th Avenue alignment;
 - PTC alignment; and
 - McLoughlin alignment.
- B-6: Hayden Island to Broadway Bridge and Interstate Avenue: for the two alternatives below, determine a feasible alignment:
- Interstate Avenue alignment; and
 - I-5 alignment.



REGIONAL LRT SYSTEM PLAN
Scope Of Work

Oregon-Eastside Sub - Area Model

Figure 14

B-7: Hayden Island to Vancouver: determine routing, cross-section, and cost for the following terminus locations:

- Vancouver CBD terminus; and
- Hazel Dell terminus.

Locate an appropriately sized park and ride lot to serve each terminus considered.

B-8: I-205 LRT/Airport Way to Vancouver Mall: determine a feasible alignment for this segment of the I-205 LRT, and locate an appropriately sized park and ride lot to serve this alignment.

I-5/Interstate Avenue Engineering Issues

B-9: Interstate Avenue/I-5: Broadway Bridge to Coliseum: determine alignment and cost.

B-10: Interstate LRT: Denver Avenue at Columbia Boulevard/Railroad structure: determine the feasibility of using the existing Denver Avenue structure for LRT (and cost for conversion) versus the cost and feasibility of a new LRT structure.

B-11: Interstate LRT at the Slough Bridge: determine the cost and feasibility of the following Slough crossing alternatives:

- cost and feasibility of reusing existing I-5/Slough Bridge structure for LRT (cost);
- cost of a new structure; and
- structural and geometric feasibility of LRT sharing the new Slough Bridge.

B-12: Interstate LRT at the Columbia River: determine the cost and feasibility of the following Columbia River crossing alternatives:

- building a structure between the east and west Interstate Bridge structures, and the necessary approaches; and
- building a new structure to accommodate LRT.

B-13: Interstate LRT Stations North of Columbia Boulevard: determine alignment, feasibility, and cost necessary to accommodate stations at Marine Drive, and/or Delta Park and Hayden Island.

B-14: I-5 LRT: determine the feasibility and cost of the I-5 LRT from Hayden Island to the Fremont Bridge, identifying routing alternatives (median vs. side), structures to be rebuilt, etc.

I-205 LRT Engineering Issues

- B-15: Glenn Jackson Bridge: determine the cost and feasibility (structural and geometric) of using the I-205 Columbia River Bridge for LRT.
- B-16: I-205 to Airport Way Connection: determine the cost and feasibility of a structure connecting the I-205 transitway with the reserved LRT right-of-way in the median of Airport Way.
- B-17: I-205 at Banfield Freeway: determine the cost and feasibility of a structure over the Banfield Freeway to the Gateway area.
- B-18: Vancouver Mall terminus: determine the alignment from the I-205 median to Vancouver Mall area, including the cost and feasibility of required structure(s).
- B-19: I-205/Banfield LRT junction: determine the alignment and cost of this junction.

South Corridor Engineering Issues

- B-20: PTC/Ross Island Bridge station: Determine the cost and feasibility of a transfer station between LRT on the PTC right-of-way and buses on the Ross Island Bridge.
- B-21: McLoughlin LRT: determine the limitations, cost and route implications likely due to rail conflicts in routing through the Brooklyn rail yards.
- B-22: Locate an appropriately sized park and ride lot south of Milwaukie.
- B-23: Cost and structural limitations of Johnson Creek Bridges (3).
- B-24: Need to reconstruct Milwaukie Avenue overpass.

Impact Assessment

- B-25: Neighborhood impacts of 17th Avenue alignment within Sellwood area (division of Sellwood neighborhood).
- B-26: Impacts on Westmoreland Park of McLoughlin Boulevard alignment and possible transfer station at Bybee Boulevard.

- B-27: Impact on schools in central Milwaukie area (Milwaukie Jr. and Sr. High Schools, three public or private elementary schools).
- B-28: Impact on Willamette Greenway by development of the PTC right-of-way.
- B-29: Impact of the PTC alignment on wildlife habitat areas.
- B-30: Impact of the inner-east connection route on business access.
- B-31: Impact of Interstate Avenue LRT on schools bordering the avenue (three).
- B-32: Impact of Interstate Avenue LRT on business and residential access on the avenue.
- B-33: Impacts of Interstate Avenue or I-5 LRT on habitat areas in the Columbia Slough and/or Columbia River areas.

C. Westside LRT System Plan

The Westside analysis will address in detail possible LRT alignments for the portion of the region west of the Willamette River. The timing of this analysis will allow decisions of the Westside Corridor project to become the basis for further LRT decisions west of the Sunset LRT terminus to Hillsboro and branches to Tigard.

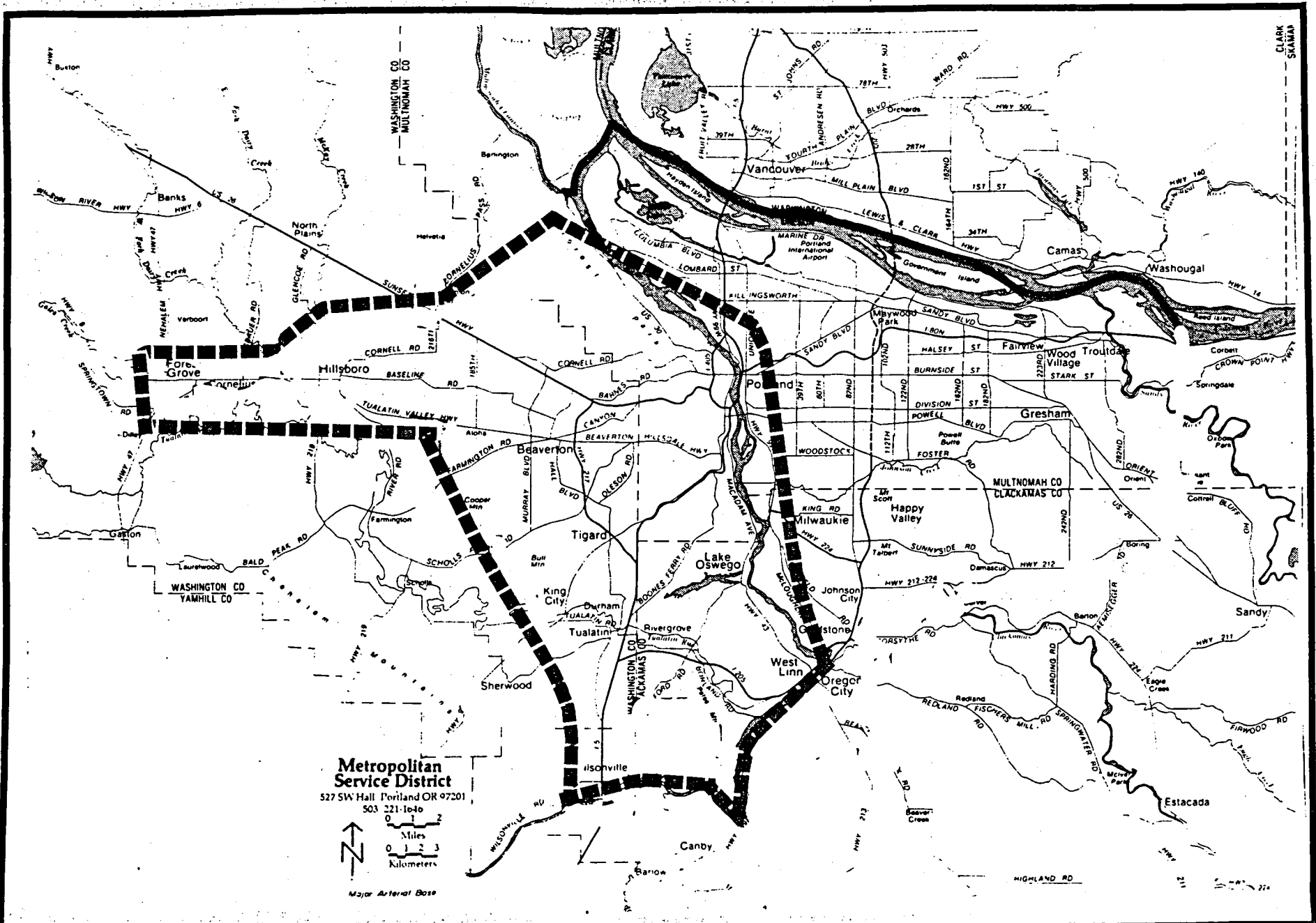
The Westside analysis will consider the feasibility of LRT in the Southwest Corridor (Barbur and I-5), along Macadam Avenue to Lake Oswego, and circumferential connections between these radial corridors and the Sunset Light Rail alignment.

Tasks & Specific Issues:

Work tasks and detailed issues to be addressed in the Westside Area LRT systems study are categorized as:
 (1) Travel Forecasting; (2) Operating Cost Estimates;
 (3) Capital Cost Estimates; and (4) Impact Assessment.

Travel Forecasting

- C-1: Develop and calibrate a detailed subarea model for the area shown on Figure 16, in accordance with the tasks outlined in Section IV.
- C-2: Develop and code year 2000 transit networks to evaluate each of the LRT segments discussed above (specific network concepts have not yet been developed).



- C-3: Produce year 2000 travel forecasts for each of the transit network alternatives listed which will be developed to address the issues listed above.

Operating and Maintenance Cost Estimates:

- C-4: Develop changes in network operating statistics and resulting costs by mode for each of the networks evaluated.

General Alignment Issues

- C-5: Barbur/I-5 South: determine a routing, standard cross-section, and cost for each of the alternative alignments:

- Barbur Boulevard;
- I-5; and
- to Tigard terminus/to Kruse Way terminus.

- C-6: Beaverton to Tigard: determine alignment, cross-section, and cost.

- C-7: Tigard to Tualatin: determine alignment, cross-section, and cost.

- C-8: Lake Oswego Connections: determine routing, cross-section, and cost for the following connections to the Lake Oswego transit center:

- Macadam via rail right-of-way;
- Milwaukie via rail bridge; and
- Tigard via rail right-of-way.

- C-9: Sunset Light Rail extension to Hillsboro: determine route cross-section and cost for candidate extensions to Hillsboro.

Barbur LRT Engineering Issues

- C-10: Barbur at Front Street ramps: cost and feasibility considerations of alignments at Front Street interchange.

- C-11: Barbur at Hamilton: cost and feasibility of alternative LRT alignments.

- C-12: Barbur at Beaverton-Hillsdale Interchange: cost and feasibility of alternative LRT alignments, need for and cost of rebuilding interchange.

- C-13: Barbur South of Beaverton-Hillsdale: cost and feasibility of widening or replacing timber structure over gulch.

- C-14: Marquam Hill Tunnel: Evaluate the feasibility of a tunnel through Marquam Hill from the southern end of Downtown to Barbur Boulevard south of Hamilton, and the feasibility of that tunnel providing a station for the Marquam Hill Medical Complex (University of Oregon Health Sciences Center, VA Hospital and Shriners Hospital).
- C-15: Barbur at Terwilliger: cost and feasibility of alignment options with the development of Burlingame transit station.
- C-16: Barbur Boulevard Structures/Terwilliger to Tigard: determine the structural and geometric feasibility of LRT on, and/or the need to widen or replace the Barbur Boulevard structures at:
- Multnomah Boulevard;
 - Spring Garden;
 - Tryon Creek/26th Way;
 - Capital Highway (and connection to Barbur Park and Ride);
 - I-5; and
 - Highway 217 (for Tigard terminus option).
- C-17: Locate an appropriately sized park and ride lot on Barbur south of Tigard.

West-Circumferential Engineering Issues

- C-18: Central Beaverton: alignment, feasibility, and cost of connection with Sunset Light Rail at the Beaverton Transit Station.
- C-19: Central Tigard: alignment, feasibility and cost of connection with Barbur Light Rail at Tigard Station.
- C-20: Washington Square: alignment and cost of routing to serve Washington Square transfer station (across Highway 217 from Railroad ROW).
- C-21: Lake Oswego to Milwaukie Railroad Bridge: geometric and structural feasibility for LRT, and cost for any necessary upgrade.

Impact Assessment

- C-22: Impacts on slope stability and vegetation of Barbur alignment (south of Beaverton-Hillsdale Highway).
- C-23: Impacts on business and neighborhood access along Barbur Boulevard.

- C-24: Impacts of Macadam route to Lake Oswego on neighborhoods surrounding route.
- C-25: Impacts of Macadam route on vegetation and habitat areas along Willamette Greenway.

D. LRT System Plan - Part Two - Exentions

Addressing the same general area as that discussed in Part "B" of this scope of work, this study subdivision will address the remaining Eastside LRT routing alignments, and consider the feasibility of extensions to the primary routes addressed in Part "B."

Objectives and Issues Addressed:

- Determine the feasibility of Milwaukie LRT Extensions to Clackamas Town Center, Oregon City, and Lake Oswego.
- Determine the feasibility of I-205 Corridor: Determine if LRT is justified in corridor, within various segments as noted below (independently and together):
 - Airport to Gateway
 - Gateway to Lents
 - Gateway to Clackamas Town Center
 - Gateway to Oregon City

Specific Tasks and Issues:

Detailed tasks specific to this subarea analysis are listed below.

Travel Forecasting

- D-1: Apply the subarea model calibrated in Task B-1 to the alignment alternatives noted.
- D-2: Develop and code year 2000 Transit Networks addressing the alignments listed above.
- D-3: Produce year 2000 travel forecasts for each of the transit network alternatives listed above.

Operating and Maintenance Cost Estimates

- D-4: Develop changes in network operating statistics and resulting costs for each network evaluated.

Capital Cost Estimates and Conceptual Engineering

Alignment Issues

- D-5: I-205 South: determine LRT routing cross-section, and cost from Lents south to the Clackamas Town Center, and from the Clackamas Town Center south to Oregon City.
- D-6: Milwaukie to CTC: determine LRT routing, cross-section, and cost from the Milwaukie Transit Station to the Clackamas Town Center.

Engineering Issues

- D-7: Milwaukie East Across Highway 224: Alignment east from Milwaukie Transit Station crossing Highway 224.
- D-8: Milwaukie South: Alignment design and cost from the Milwaukie Transit Station south to the proposed Lake Oswego and Oregon City extensions (including the junction of these two routes).
- D-9: Clackamas Town Center Area: Design cost and routing in the Town Center area; including its junction with the I-205 LRT.

Impact Assessment

- D-10: Impact of LRT alignments on business access in the Clackamas Town Center area, and in Central Milwaukie.

E. Final and Regional Staging Plan

Completing the work begun in Part "A," this phase of work will incorporate results of each of the detailed corridor analyses into the Downtown analysis. From these detailed corridor studies, updated bus and LRT headway information and ridership by Downtown portal will be developed.

Also, based on the detailed corridor analysis, a staging plan prioritizing each major regional corridor will be developed.

Objectives:

- Finalize Downtown LRT operations plan.
- Develop staging plan for all regional LRT corridors and the Central Area.

TASKS AND SPECIFIC ISSUES

Operating Analysis Tasks

- E-1: Refine headways of LRT alignments into Downtown based on subarea studies.

E-2: Refine estimates of bus volumes in Downtown in addition to LRT volumes.

E-3: Refine through-routing schemes and necessary redundancy in Central area operations.

Staging Plan

E-4: Develop a staging plan for regional corridors based on the cost-effectiveness of each corridor, their contribution to the regional system, their ease of implementation, and supporting land use actions by local governments.

E-5: Based on assessment of the most feasible corridors, develop a plan staging for Central area LRT improvements, specifying the improvements in the Central area necessary with development of each radial corridor.

Engineering Feasibility and Design

E-6: Resolve any major outstanding engineering design issues left unresolved from the preliminary Central area analysis.

Auto Traffic Conflicts

E-7: Resolve any outstanding traffic issues left unresolved from the preliminary analysis.

V. BUDGET AND RESPONSIBILITIES

A. Schedule for Study Phases

The full Regional LRT System Plan will be divided into five phases--each scheduled as follows over fiscal years 1983 and 1984 (depending upon funding availability):

- Central Area LRT System--Preliminary 1983
- Eastside Primary and Bi-State 1983
- Westside 1984
- Eastside Secondary 1984 or 1985
- Final Central Area and Regional Staging 1984 or 1985

B. Funding Summary

The funding of both Metro and Tri-Met staff will be provided by on-going revenues for Transportation Planning--through the Unified Work Program (UWP). As such, the specific schedule for completion of the study phases is subject to annual funding availability. Funding for the Engineering Consulting tasks will be provided by a supplemental Interstate Transfer grant. The overall summary of funding for the entire plan effort--over the next two to three fiscal years--is shown on Table 1.

Specialized consulting engineering services will be required to address many of the issues identified, primarily utilizing three specialties: (1) traffic engineering; (2) soils engineering; and (3) structural engineering. Funding estimated to be necessary for supplemental consulting assistance in solving the major engineering issues identified with each corridor is summarized by issue area or task on Table 1, and by study phase on Table 2.

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TABLE 1
FUNDING SUMMARY

	METRO	TRI-MET	CONSULTANT	TOTAL
I. Central Area--Preliminary (FY 1983)	\$ 10,000	\$ 50,000	\$ 70,000	\$130,000
II. Eastside Primary & Bi-State (FY 1983)	170,000	25,000	100,000	295,000
III. Westside (FY 1984)	153,000	25,000	65,000	243,000
IV. Eastside Secondary (FY 1984 or 1985)	70,000	25,000	15,000	110,000
V. Central Area-Final & Regional Staging Plan (FY 1984 or 1985)	20,000	25,000	0	45,000
TOTAL	\$423,000	\$150,000	\$250,000	\$823,000

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V. BUDGET AND RESPONSIBILITIES

TABLE 2

SUMMARY OF ENGINEERING CONSULTANT TASKS AND RESOURCES REQUIRED

Related Task(s) Number	Engineering Issue	Traffic Engineer	Structural Engineer	Soils Engineer	Person Days	Budget
<u>Central Area:</u>						
A-23, A-28	Downtown Traffic	X			53	\$16,000
A-16	Hawthorne Bridge & Approaches	X	X		13	4,000
A-10	Steel Bridge & Approaches	X	X		7	2,000
A-11	Broadway Bridge & Approaches	X	X		40	12,000
A-17	5th & 6th Avenue Viaducts over I-405	X			13	4,000
A-8	Inner-Eastside Traffic		X		40	12,000
A-19	6th & Caruthers LRT Bridge over Railroad		X		10	3,000
A-20	6th Avenue LRT Bridge over Banfield		X	X	10	3,000
A-9, A-15	Hawthorne Bridge Station		X		10	3,000
A-15	Morrison Bridge Station		X		10	3,000
A-15	Burnside Bridge Station		X		10	3,000
A-15, A-21	LRT Structure from Water Street to Coliseum		X		10	3,000
A-20	Grand Avenue Viaducts over Banfield		X		7	2,000
	Central Area Total				233	\$70,000
<u>Eastside - Part One - Primary Corridors:</u>						
B-5	Milwaukie Corridor Traffic	X			33	\$ 10,000
B-20	Ross Island Bridge Station		X		10	3,000
B-23	Johnson Creek Bridges (3)		X		10	3,000
B-21	Powell Boulevard Railroad Overpass		X		7	2,000
B-5	Access: Milwaukie T.C. to PTC		X	X	10	3,000
B-24	Milwaukie Avenue Overpass		X		7	2,000
B-6	Interstate Corridor Traffic	X			33	10,000
B-10	Denver Avenue Overpass at Columbia		X		10	3,000
B-10	Denver Avenue Bridge at Columbia Slough		X	X	10	3,000
B-11	LRT Bridge at Oregon Slough	X	X	X	27	8,000
B-12	Approaches to Interstate Bridge	X	X	X	33	10,000
B-12	Interstate Bridge	X	X	X	50	15,000
B-14	I-5 from Slough Bridge to Interstate and Greeley	X	X	X	50	15,000
B-17	LRT Structure over Banfield at Gateway (I-205)		X		10	3,000
B-16	Columbia Boulevard Station: I-205 LRT	X	X		10	3,000
B-16	LRT Access Structure to Airport Way		X		10	3,000
B-15	Glen Jackson Bridge		X		3	1,000
B-18	LRT Access Structure to Vancouver Mall		X		10	3,000
	Eastside Total				333	\$100,000

TABLE 2
(continued)

Related Task (#) Number	Engineering Issue	Traffic Engineer	Structural Engineer	Soils Engineer	Person Days	Budget
<u>Westside</u>						
C-5	Barbur Corridor and Tigard Traffic	X			33	\$10,000
C-10	Front Avenue Structures		X		13	4,000
C-16	Barbur Boulevard Structures		X	X	23	7,000
C-14	Marquam Hill Tunnel			X	33	10,000
C-5	Marquam Hill Traffic	X			17	5,000
C-8	Portland to Lake Oswego LRT	X	X	X	17	5,000
C-9	Sunset to Hillsboro LRT	X	X	X	20	6,000
C-8	Milwaukie to Lake Oswego LRT		X		13	4,000
C-6	Beaverton to Tigard LRT	X	X	X	13	4,000
C-7	Tigard to Tualatin LRT	X	X	X	10	3,000
C-8	Lake Oswego to Tualatin LRT		X		7	2,000
C-5	I-5 from Burlingame to Kruse Way	X	X	X	17	5,000
	Westside Total				216	\$65,000
<u>Eastside - Part Two - Extensions</u>						
D-8	Milwaukie to Oregon City LRT	X	X	X	27	\$ 8,000
D-6	Milwaukie to Clackamas Town Center LRT	X	X	X	10	3,000
D-5	Gateway to Clackamas Town Center LRT	X	X		7	2,000
D-5	Clackamas Town Center to Oregon City LRT	X	X		7	2,000
	Eastside Extensions Total				51	\$15,000
	Engineering Consultant Total				833	\$250,000

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12/28/82

CONSIDERATION OF RESOLUTION NO. 83-386, FOR THE PURPOSE
OF SETTING TERMS OF SERVICE FOR CITIZEN APPOINTEES ON
THE METRO INVESTMENT COMMITTEE

Date: January 18, 1983

Presented by: Chum Chitty/
Don Carlson

FACTUAL BACKGROUND AND ANALYSIS

On December 2, 1982, the Metro Council adopted Resolution No. 82-378 which established a Metro Investment Committee. On January 6, 1983, the Council adopted Resolution No. 83-379 which approved the appointment of Susan McGrath, Rebecca Marshall and Dave Smith as citizen members of the Metro Investment Committee. At that Council meeting, Councilor Van Bergen suggested that the terms of service be staggered so that at no time there would be more than one new citizen member serving on the Committee. Resolution No. 83-379 was adopted with the stipulation that staff would return with a resolution setting forth the terms of service. The following resolution has been prepared to meet that request.

Another suggestion at the Council meeting of January 6th was that the Committee develop a purpose and charge for itself. At its first meeting, held January 10, 1983, the Investment Committee discussed and formulated the following purpose and charge: 1) to review Metro's existing investment practices and develop an investment policy for Council consideration and approval, to be used by staff for investing Metro's surplus funds; and 2) to monitor and report to Council on investment activity pursuant to the established policy.

The Investment Committee has scheduled its second meeting for January 24th and will proceed with the development of a Metro Investment Policy.

EXECUTIVE OFFICER'S RECOMMENDATION

No Recommendation

COMMITTEE CONSIDERATION AND RECOMMENDATION

The Investment Committee has not reviewed the attached resolution but did approve the initial terms of service as outlined in the resolution.

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF SETTING TERMS) RESOLUTION NO. 83-386
OF SERVICE FOR CITIZEN APPOINTEES)
ON THE METRO INVESTMENT COMMITTEE) INTRODUCED BY COUNCIL

WHEREAS, the Metro Council adopted Resolution No. 82-378 creating an Investment Committee consisting of members of the Audit Committee and three citizens of the community who are expert in fiscal and investment matters; and

WHEREAS, the Metro Council adopted Resolution No. 83-379 appointing Susan McGrath, Rebecca Marshall, and Dave Smith as citizen members of the Investment Committee, with the stipulation that each citizen member be assigned a specific term of service; now, therefore,

BE IT RESOLVED,

1. That the term of service for citizens appointed to the Investment Committee be for three years; and

2. That the initial citizen appointees to the Investment Committee be assigned the terms of service as follows: Susan McGrath, one year; Dave Smith, two years; and Rebecca Marshall, three years; and

3. The Presiding Officer and Chairman of the Audit Committee shall, subject to the approval of the Council, annually appoint a citizen of the community expert in fiscal and investment matters to serve on the Investment Committee.

ADOPTED by the Council of the Metropolitan Service District
this _____ day of _____, 1983.

Presiding Officer

PLEASE SIGN BELOW IF YOU PLAN TO TESTIFY AT THIS MEETING.

Date _____ Meeting Title _____

Name

Robert T. Breinhof JR

~~Bob Swan~~

Affiliation/Address

PRRS PO BOX 66398 ^{PART} ONE

~~LEAGUE WOM. UNITED~~