EUGENE SPRINGFIELD AREA 2000 TRANSPORTATION PLAN

A PRODUCT OF
EUGENE SPRINGFIELD AREA
TRANSPORTATION STUDY

PROPOSED BY
the Transportation Planning Committee

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* No appointed voting representative of this group currently; Richard Freeman votes for them.

** No appointed voting representative of this group currently.

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INTRODUCTION

INTRODUCTION

This report is the Eugene-Springfield Area 2000 Transportation Plan, prepared by the Lane Council of Governments Transportation Planning Committee and recommended by that body for official adoption. Public review and discussion, evaluation of the alternatives studied by the Committee, and revisions are expected prior to adoption of a final plan by City and County elected officials.

The recommendations and policies contained herein were developed by the Transportation Planning Committee after a thorough evaluation of alternatives, most significantly in the area of future transit system development and major street and highway corridor improvements. The entire Plan and alternatives were developed within the direction set by the "Twelve Principles for Master Plan Development", adopted during 1976 by local elected officials. The alternatives examined by the Committee are presented in the Transportation Plan Technical Report, a series of technical appendices, to be published late in 1977.

The adopted Transportation Plan will set policy and guide transportation system management and development for the metropolitan area between 1978 and the end of the century. It is both desirable and necessary to arrive at an acceptable long-range plan so that short-range decisions affecting transportation and land use may be made with some degree of consistency, even though questions about growth, energy supply and economics make forecasting during that period somewhat

speculative. The implementation of this Plan will lead toward achievement of community goals on transportation and mobility.

The approach taken in making the recommendations of this Plan recognizes the uncertainties surrounding the future and the fiscal constraints of the present; in general, the Plan is one of staged development, calling for preservation and improvement of the existing transportation system rather than major new expansion during the 1978-1990 period. Most major new highway improvements are recommended for construction after 1990, and the recommended future transit system is one that combines maximum flexibility with minimum fixed-facility investment. This tends to reduce the uncertainties of long range planning by limiting the irreversible public commitment during the first ten years of the plan. Through system monitoring and periodic plan review and update, new transportation goals or new directions may be chosen as new knowledge is acquired.

The complete Transportation Plan adopted by local officials should include relevant decisions for each of the eight major plan elements addressed by the Transportation Planning Committee. This Plan and the Technical Report, in combination, are designed to help the public and elected officials make those decisions, and adopt a transportation plan that best meets the goals, objectives and needs of the community. The Transportation Planning Committee recommends this Plan for adoption. Readers should review it and the Technical Report to perform their own evaluation, within the constraints already set by elected officals (see Element I - Overall Policy Direction). However, changes to the policies or projects proposed in this Plan may have impacts on other portions of the Plan or adopted community goals and objectives, and additional technical analysis and testing may be necessary before the full effect of those impacts can be determined.

ORGANIZATION OF THE EUGENE-SPRINGFIELD AREA TRANSPORTATION STUDY*

Lane County, Eugene, Springfield, Lane Transit District and the Oregon Department of Transportation are the major public agencies responsible for developing and operating the transportation systems of the metropolitan area (see Figure 1 for the area covered by the Plan).

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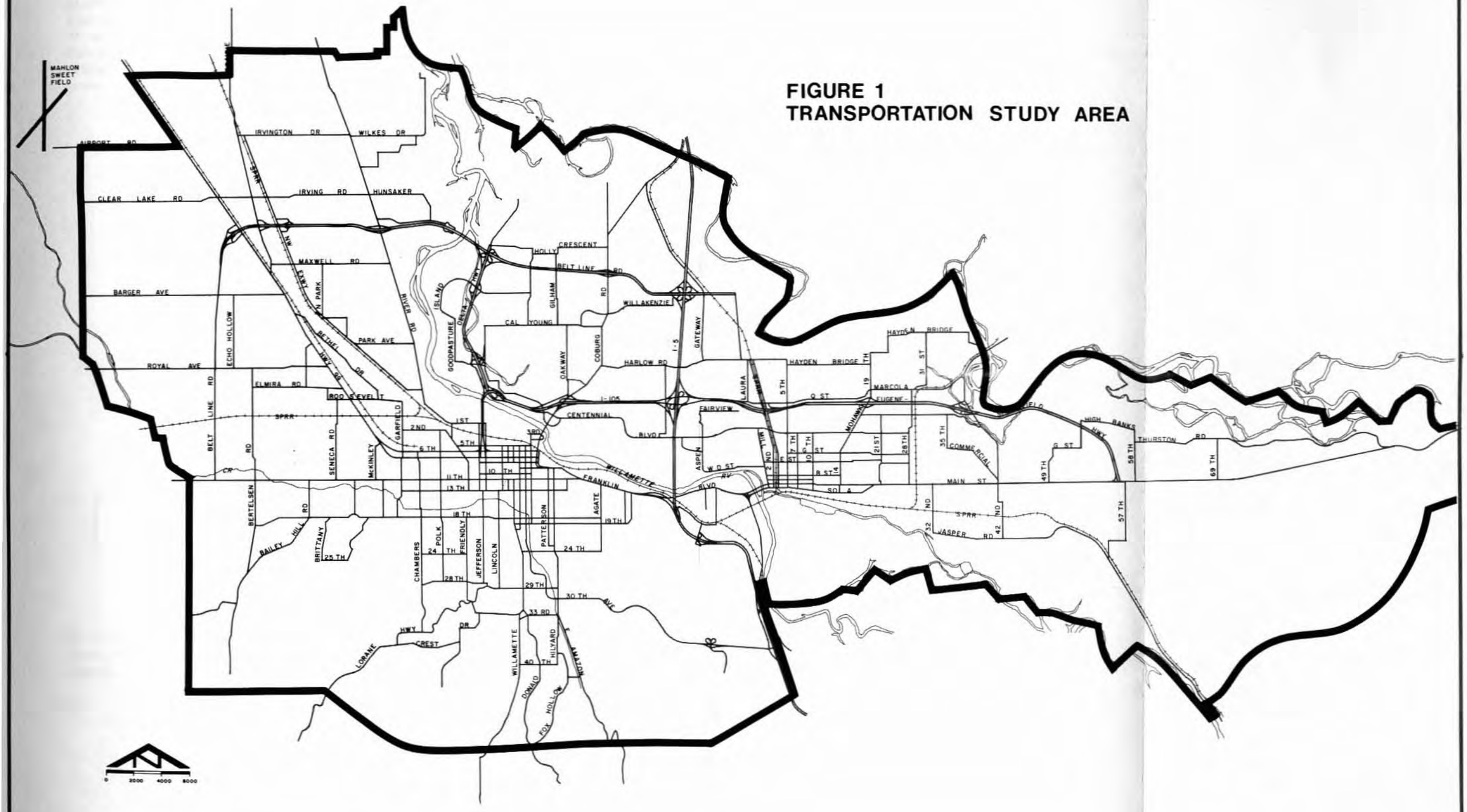
* The formal organization of the transportation study process is in response to the U.S. Department of Transportation requirements. The Federal Aid Highway Act of 1962 and the Urban Mass Transportation Act of 1964 require that in metropolitan areas, all transportation improvements (street construction, bus purchase, etc.) using federal aid must be a product of a continuous, cooperative and comprehensive planning process, and must be a part of an adopted transportation plan.

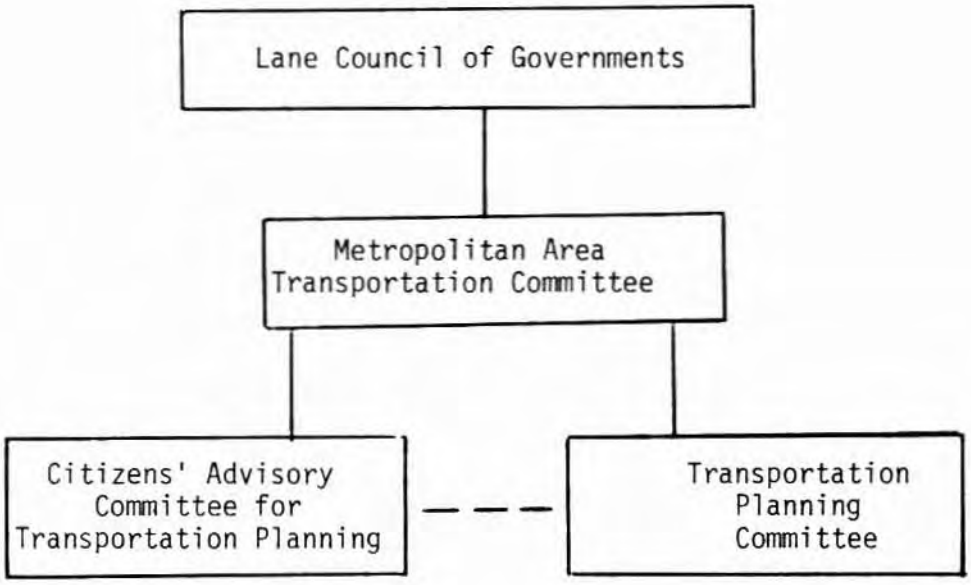
FIGURE 1
TRANSPORTATION STUDY AREA



An organization (Figure 2) has been established through the Lane Council of Governments (L-COG) that allows for a regional cooperative approach to transportation planning. The Lane Council of Governments is a group of local elected officials established for long-range planning through its charter and agreement. Member agencies are listed on the inside of the front cover of this report. Lane Council of Governments has been formally designated by the Governor in accordance with the 1973 Federal Highway Act as being the agency responsible for long-range transportation planning in the Eugene-Springfield area.

FIGURE 2

TRANSPORTATION PLANNING ORGANIZATION
EUGENE-SPRINGFIELD METROPOLITAN AREA



To ensure adequate involvement in the preparation and adoption of transportation plans, Lane Council of Governments has three committees playing important roles in the transportation planning process:

1. The Metropolitan Area Transportation Committee (MATC) serves as the policy committee for the conduct of the transportation

planning process. Its membership, comprised of elected officials or their alternates, set and review policy direction for transportation planning and implementation in the metropolitan area.

2. The Citizens' Advisory Committee (CAC) advises MATC on various transportation planning matters. Additionally, the CAC provides a mechanism for continuous citizen involvement in the transportation planning process. The CAC is comprised of citizens appointed by the L-COG Board of Directors to serve as citizen representatives in a continuous program of direct citizen participation.

3. Transportation Planning Committee (TPC) is comprised of staff from various local agencies, the Oregon Department of Transportation, and the Federal Highway Administration. Together, these personnel perform a technical staff function as a committee of Lane Council of Governments.

The membership of the MATC and TPC is listed in the front of this Plan.

PROCESS

In 1970, after long study, the Lane Council of Governments adopted a 1985 Interim Transportation Plan (often referred to as the E-SATS Plan). This plan has served as the only long-range, areawide transportation plan although it was never formally adopted by the other units of local government. It met state and federal technical requirements for adoption and plan content and, as a result, the area qualified for federally aided street and highway projects. In 1972, the Metropolitan Area General Plan (commonly referred to as the "1990 Plan") was adopted, calling for a review of the Transportation Plan. For that review, and for the development of a new transportation plan, the planning process used allowed elected officials the opportunity to provide policy direction at several points during the plan preparation. The process contained three principal steps. They were:

1. Identification of broad concept alternatives to be investigated in response to the charge of the Metropolitan Area General Plan (1974).
2. Investigation of the concept alternatives and selection of one to guide transportation plan development (1975-1976).
3. Preparation and adoption of a Transportation Plan (1976-1977).

During May of 1974, the Citizens' Advisory Committee held four public meetings in the metropolitan area to listen to suggestions about the kinds of alternatives that should be investigated. The alternatives requested by the public were so broad and varied that the preparation

of a detailed plan for each alternative would have required resources and time far beyond reasonable limits. Therefore, six generalized alternatives were identified in step one that covered a range of ideas that were frequently mentioned at the public meetings and in the committees' meetings that followed. Each alternative concept represented a different course of development for the metropolitan area during the 1975-2000 period.

In September, 1975, the Lane Council of Governments released the "Eugene-Springfield Transportation Alternatives" report, which examined and evaluated the six concept alternatives. After extensive public review and public hearings, the elected officials from Eugene, Springfield and Lane County selected a transportation concept from the "Alternatives" report to be refined to a transportation plan for the metropolitan area (see Element I). In February, 1976, policy direction had been set, and work commenced on the Plan.

This report is the Transportation Planning Committee's recommendations for the Transportation Plan to be adopted by elected officials. Alternatives were evaluated for future transit systems, major street and highway corridor improvements, transportation related policies and parking supply forecasts. Those alternatives are documented in the Transportation Plan Technical Report. Public meetings will be held and testimony heard to provide an additional basis for elected officials to adopt a transportation plan.

After a transportation plan is adopted, a five-year Transportation Improvement Program (TIP) will be developed. The TIP, prepared jointly by local implementing agencies, serves as the link between the long-range plan and implementation. At a minimum, it includes all street and highway projects, bikeways and transit projects that are of regional significance and are proposed for implementation during the five-year period. The entire program is reviewed and updated annually. As projects are advanced to the first year of the program, the agency responsible for implementation will study each improvement in more detail. Impact reports may be written prior to a project's implementation, and, if appropriate, the implementing agency may further study alternatives at the project level and hold hearings as necessary prior to project authorization by the responsible agency. In most cases the areawide plan will provide a framework for the detailed study of a project in the plan. To remain fully eligible for federal transportation funds, the area has until July 1, 1978, to adopt a long-range transportation plan and prepare a new TIP.

Periodically, the areawide long-range plan is reexamined for its appropriateness as long-range policy. When changing conditions or attitudes indicate that the adopted long-range plan is no longer the most desirable areawide policy, the process for the long-range plan

will begin at the point necessary to eliminate the problems uncovered in the reexamination.

RELATIONSHIP TO THE METROPOLITAN AREA GENERAL PLAN

The Metropolitan Area General Plan is an adopted set of comprehensive policies guiding the development of the Eugene-Springfield area. It is often referred to as the "1990 Plan". The Transportation Plan must be consistent with the General Plan. Decisions based on the land use and land development policies of the general plan dictate transportation facility requirements in urban areas.

Development of the Transportation Plan was initiated upon adoption of the Metropolitan Area General Plan in 1972 and the policies of that plan served as the framework for land use, and for population and employment allocation assumptions that are basic to both the recommended Plan and Technical Report. Now, the General Plan is being updated with an expected adoption date approximately one year after that of the Transportation Plan. The two plans must be consistent, and there is the possibility that the General Plan may be significantly changed as a result of the update. If this occurs, the Transportation Plan will be reviewed and evaluated with respect to those changes and revised, if necessary, to maintain consistency.

Conversely, policies and recommendations of the Transportation Plan should be considered during the update of the General Plan. Transportation goals have been set by elected officials, and this plan attempts to set a course for system development that will help achieve those goals. If revisions to the General Plan are required to reach the transportation goals, it should be modified accordingly, or the goals of the Transportation Plan revised.

RESPONSIBILITY FOR PLAN IMPLEMENTATION

Eugene, Springfield and Lane County, after adopting the Transportation Plan, have the responsibility for implementing adopted policies and recommendations contained therein. Public agencies which provide transportation facilities or services, such as Lane Transit District and the Oregon Department of Transportation, will be expected to follow the plan within the financial constraints and within compliance with the comprehensive plan requirements of the Oregon State Land Conservation and Development Commission. Other public agencies, such as school districts and the University of Oregon, and private employers and businesses will be expected to give due consideration where appropriate to the adopted policies and recommendations when making their own policy decisions. The encouragement to consider these policies and recommendations is to come from local general purpose governments.

ELEMENT I

Overall Planning Direction

Overall Planning Direction

GOALS AND OBJECTIVES

The goals and objectives for the Transportation Plan were taken from the Metropolitan Area General Plan (except for the second general goal, which was added by TPC).

General Goals

1. We must provide for a balanced transportation system to give mobility to all citizens.

2. We must treat transportation and land use as being part of an interacting system, viewing the development of a transportation system as a means to accomplish a desired land use pattern.

Specific Goals

1. Future metropolitan area transportation planning must deal with all aspects and forms of transportation - including automobile, trucks, airplanes, railroad, public transit, bicycles, and pedestrians - and should focus on the interrelationship of the various transportation systems.

2. Transportation systems must be designed and located in such a manner that they will effectively interconnect the numerous activity areas of the metropolitan community.

3. Transportation systems should be designed to minimize the impact of transportation noise, land consumption, pollution, and the division or isolation of neighborhoods and properties.

4. Provision must be made to determine future transportation needs through continuing comprehensive transportation studies.

5. Public policies, particularly land use and transportation planning policies, should be directed toward limiting passenger automobile use while simultaneously developing alternative modes of transportation.

Objectives

1. Serve our existing and future arrangement of land uses by an efficient, safe and attractive transportation system.

2. Consider the transportation routes' impact on neighborhoods and the environment, as well as motorists' convenience and safety.

3. Ensure that future route selection will consider indirect, as well as direct, costs of construction.

4. Protect abutting land uses from adverse effects of transportation routes, and the routes from incompatible adjoining developments.

5. Provide for the future requirements of inter-urban rapid transit and emphasize the pressing need for intra-urban public transit.

6. Provide for the future requirements of aviation.

7. Ensure that consideration be given to adequate provision for convenient, pleasant and safe bicycle and pedestrian movement.

8. Provide transportation plan alternatives for community evaluation.

9. Decrease the adverse effects of the automobile.

10. Develop a transportation system which is responsive to:

    A. Changing community needs and conditions; and
    B. Changing transportation technology offering advantages to this community.

TWELVE PRINCIPLES FOR MASTER PLAN DEVELOPMENT

After public review of the "Eugene-Springfield Transportation Alternatives" report, the Eugene Council, Springfield Council, and Lane

County Commissioners set the direction for development of the Transportation Plan by adopting twelve principles to guide planners and engineers in their work.

Although the exact wording of the principles approved by each jurisdiction varied slightly, the interest was the same in each case, and both versions served as policy direction or planning assumptions during Master Plan preparation.

Eugene and Lane County Version

The twelve principles for Master Plan Development are:

1. Goals and Objectives
   Policy: The Transportation Master Plan will be developed within the goals and objectives listed in the "Eugene-Springfield Transportation Alternatives" report. The transportation goals of the Metropolitan Area General Plan are included in that list.

2. Planning Period
   Policy: The Transportation Master Plan will cover a 25-year planning period, with a target date of 2000.

3. Land Use
   Policy: Some elements of the "balanced land use" concept will be incorporated to correspond to specific adjustments aimed at increasing residential densities to a greater extent than continued trends would portend.

   Discussion: For example, increased residential densities for the area, Goodpasture Island, the area immediately west of Skinner's Butte, and the downtown west side Eugene area.

4. Transit Usage
   Policy: As a direct result of the Eugene goal of 15 percent transit usage, the Lane County goal of 10-15 percent transit usage and the Springfield goal of ten percent transit usage,* an areawide average of 14 percent of internal person-trips on transit will be pursued.

   Discussion: The Transportation Master Plan will be based on the above policy guidance from each of the jurisdictions.

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* The Springfield goal was recently changed to five percent by the City Council. This revised goal is not technically compatible with the Eugene and Lane County goal, and invalidates the fourteen percent areawide goal.

5. Per Capita Trip-Making
Policy: Per capita trip-making in the urban area will be maintained at its present level.

Discussion: Although per capita trip-making will not be reduced, the manner in which travel demand is satisfied will change, particularly in Eugene and Lane County. In addition to the shift in trip-making from automobiles to transit discussed in the previous section, Eugene will pursue a goal to move 15 percent of Eugene trips by bicycle, foot, or paratransit.* Lane County will pursue a goal of reducing auto-driver drips by ten percent in its area of jurisdiction by substituting modes similar to those mentioned by Eugene.

6. Modeling
Policy: Only person-trips carried by automobile, truck, or public transit will be evaluated by computer modeling.

Discussion: Because of the lack of base data and the tolerances inherent with transportation systems modeling, it is not practical to model for modes which carry only a small fraction of total trips, particularly when areawide policies regarding those modes are not consistent.

When evaluating the need for street and highway and public transit improvements, however, those trips to be carried by bicycle, foot, and paratransit in Eugene and Lane County will be "modeled" simply by removing them from the street and highway and transit network and considering the subsequent reduction in traffic.

7. Scope of the Plan
Policy: The Transportation Master Plan will address only those issues that can be agreed upon as valid regional concerns by Eugene, Springfield and Lane County.

Discussion: Consensus on areawide goals was reached only for auto and transit modes. Consequently, the Master Plan will address street and highway improvements, transit improvements, and the interface of both with other modes. Bicycle facilities have already been addressed in both the Metropolitan Bikeway Plan and the Eugene Bikeway Plan. Lane County has a sidewalk program for addressing pedestrian needs of the unincorporated metropolitan area. Implementation of remaining subregional goals

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* Paratransit encompasses various types of ride sharing programs, such as carpooling, vanpooling, taxi service, and subscription bus service.

(such as development of a facility plan for pedestrians in Eugene) will be the responsibility of individual jurisdictions. Once any such subregional refinement plans are completed, they may be adopted and incorporated as an integral part of the Transportation Master Plan.

8. Level of Service*
Policy: With respect to traffic volume, streets and highways will be considered for improvement where the volume is projected to reach the Level of Service "E".

Discussion: The impact of this policy will mean generally higher congestion and traffic delays than are experienced currently in the Eugene-Springfield area and less extensive highway construction than if a higher level of service were set as a goal.

9. Master Plan Alternatives
Policy: The Master Plan will, within the constraints of the above policies, examine facility alternatives for major travel corridors.

Discussion: Realistically, available manpower cannot examine alternatives for every proposed street or transit improvement. For major projects, within the limits set by the land use, modal split,** and trip-making decisions already made, alternatives will be presented in the Master Plan.

10. Policy Direction
Policy: The Transportation Master Plan will recommend policies to help implement the plan, attain the goals of the plan, and give direction to refinement studies that would develop such items as ordinances or financial plans. The decision to implement these policies will be the responsibility of the local governmental agencies involved.

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* Level of Service is a qualitative term which denotes operating conditions that may occur on a particular street or highway when it is accommodating a given traffic volume.

** Modal Split refers to the share of person trips within the study area carried by a particular transportation mode, i.e., automobile, transit, bicycle, etc.

Discussion: The goal set for transit ridership, for example, is higher than that experienced in most urban areas in the country today. Simply recommending facility service improvements to the transportation system may not be enough to reach that and other plan goals. Rather than presenting only the traditional capital improvement program, the Transportation Master Plan will also identify policy actions that may be either helpful or necessary in achieving adopted goals.

11. Financing
Policy: The Transportation Master Plan will include a financial element that defines funding sources for plan implementation.

12. Plan Update
Policy: Through the procedures established by the E-SATS planning process, the Transportation Master Plan will be monitored on a continuing basis, and will be subjected to a major plan update or reevaluation, as required, but not less than every five years.

Springfield Version

1. Goals and Objectives
Policy: The Transportation Master Plan will be developed within the goals and objectives listed in the "Eugene-Springfield Transportation Alternatives" report which includes the transportation goals of the Metropolitan Area General Plan which have been adopted by the three local agencies.

2. Planning Period
Policy: The Transportation Master Plan will cover a long-range planning period with a target date of year 2000.

3. Plan Update
Policy: Through the procedures established by the E-SATS planning process, the Transportation Master Plan will be monitored on a continuing basis and will be subjected to a major plan update or reevaluation as required, but no less than every five years, and will be the responsibility of the Transportation Planning Committee (TPC).

4. Land Use
Policy: Some elements of the "balanced land use" concept will be incorporated to correspond to specific adjustments aimed at increasing residential densities to a greater extent than continued trends would portend and as previously approved by the local agencies.

Discussion: For example, increased residential densities for the year 2000 will be assumed in at least the Springfield Main Street area, Goodpasture Island, the area west of Skinner's Butte, and the near-westside Eugene area.

5. Transit Usage
Policy: As a direct result of the Eugene goal of 15 percent transit usage, the Lane County goal of 10-15 percent transit usage, and the Springfield goal of 10 percent transit usage,* an areawide average of 14 percent of internal person-trips on transit will be pursued based on the percentages approved by each agency within that agency's area of responsibility.

6. Per Capita Trip-Making
Policy: Per capita trip-making in the urban area will be maintained at its present level.

Discussion: Although per capita trip-making will not be reduced, the manner in which travel demand is satisfied will change, particularly in Eugene and Lane County. In addition to the shift in trip-making from autos to transit discussed in item five, Eugene will pursue a goal to move 15 percent of Eugene trips by bicycle, foot, or paratransit. Lane County will pursue a goal of reducing auto-driver trips to ten percent in its area of jurisdiction by substituting modes similar to those mentioned by Eugene. Springfield will maintain the existing per capita trip-making rate with ten percent transit.

7. Modeling
Policy: Only person-trips carried by automobile, truck, or public transit will be evaluated by computer modeling.

Discussion: Because of the lack of base data and the tolerances inherent with transportation systems modeling, it is not practical to model for modes which carry only a small fraction of total trips, particularly when areawide policies regarding those modes are not consistent.

When evaluating the need for street and highway and public transit improvements, however, those trips to be carried by bicycle, foot, and paratransit in Eugene and Lane County will be "modeled"

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* The Springfield goal was recently changed to five percent by the City Council. This revised goal is not technically compatible with the Eugene and Lane County goals and invalidates the 14 percent areawide goal.

simply by removing them from the street and highway and transit network considering the subsequent reduction in traffic.

8. Scope of the Plan
Policy: The Transportation Master Plan will address only those issues which can be agreed upon as valid regional concerns by Eugene, Springfield, and Lane County.

Discussion: Consensus on areawide goals was reached only for auto and transit modes. Consequently, the Master Plan will address street and highway improvements, transit improvements, and the interface of both with other modes. Bicycle facilities have already been addressed in the Metropolitan Bikeway Plan, the Eugene Bikeway Plan, and the Springfield Bikeway Plan. Lane County has a sidewalk program for addressing pedestrian needs of the unincorporated metropolitan area. Implementation of remaining subregional goals (such as development of a facility plan for pedestrians in Eugene or Springfield) will be the responsibility of the individual jurisdictions. Once any such subregional refinement plans are completed, they may be adopted and incorporated as an integral part of the Transportation Master Plan.

9. Level of Service
Policy: With respect to traffic volume, streets and highways will be considered for improvement when the volume is projected to reach Level of Service "E".

Discussion: The impact of this policy will generally mean higher congestion and traffic delays than are experienced currently in the Eugene-Springfield area and less extensive highway construction (than if a higher level of service were set as a goal). Improvements will be the responsibility of the local governing agency involved as conditions warrant.

10. Master Plan Alternatives
Policy: The Master Plan will, within the constraints of the above proposed policies, contain facility alternatives for major travel corridors.

Discussion: Realistically, available manpower cannot examine alternatives for every proposed street or transit improvement. Alternatives for major projects will be presented in the Master Plan.

11. Policy Direction
Policy: The Transportation Master Plan will include proposed policies to help implement the plan, attain the goals of the plan and give direction to refinement studies that would develop such

items as ordinances or financial plans. The decision to implement these policies will be the responsibility of the local governmental agency involved, within the limits set by the proposed policies contained herein.

Discussion: The goal set for transit ridership, for example, is higher than that experienced in most urban areas in the country today. Rather than presenting only the traditional capital improvement program, the Transportation Master Plan will also identify policy actions that may be either helpful or necessary in achieving adopted goals.

12. Financing
Policy: The Transportation Master Plan will include a financial element.

ELEMENT II

Policies

Policies

The Policy Element of the adopted Transportation Plan should answer the following question:

> *What compatible mix of policies, available to local governments, should be implemented to provide the best opportunity to achieve as many transportation goals as possible?*

Policies that maximize the probability for specific transportation goals to be achieved by the year 2000 were considered in the preparation of the Transit Element, the Street and Highway Element, the Parking Element. and the other mode elements of this plan. Those lists could not simply be combined to guide transportation system development, since some actions instrumental in meeting the individual transportation mode goals conflicted with each other. In fact, some of the actions were in conflict with adopted non-transportation goals and policies. Any policy or group of policies that works to the optimum benefit of one mode of transportation often works at counter-purposes to the optimum development or management of other modes.

The policies adopted for implementation in the Transportation Plan must be compatible with each other and must be considered in the context of their impact on the entire transportation system and their relationship to the Metropolitan Area General Plan. This may result

in the sacrifice of the maximum opportunity to achieve one particular modal goal, but should result in policies that encourage the best overall transportation system development and that are as compatible as can be expected with other community goals, objectives and policies.

The following policies, recommended by TPC, are drawn from the discussions in other elements of this report and from recommendations from the Lane Transit District Board, the L-COG Citizens' Advisory Committee for Transportation Planning, the Metropolitan Bicycle Committee and others.

There can be no guarantee that all the transportation goals will be met, but these policies represent what TPC felt is the most logical step (in addition to facility improvements) toward achievement of those goals. The effectiveness of many of the policies will take years to fully evaluate, but careful monitoring and evaluation of the impact of policies after implementation is essential if goals are to be achieved.

RECOMMENDATIONS

Local Government Policies Beyond the Scope of the Transportation Plan

The impact of these general policies is far reaching, extending beyond transportation issues. Consequently, they must be examined within the context of the goals and objectives of the Metropolitan Area General Plan. However, these general policies are necessary to achieve the goals of the Transportation Plan. This Transportation Plan, as well as the alternatives described in the Technical Report, are based upon attainment of the transportation goals which further require implementation of most of these land use policies. If the policies are rejected, significantly modified or not implemented, many of the assumptions and goals upon which the Transportation Plan was built will no longer be valid. Conversely, the greater the degree of implementation of these policies, the greater are the chances of achieving the transportation goals.

Some of these policies are existing policies of the Metropolitan Area General Plan and Lane County General Plan (Goals and Policies and Subarea Plans). Reenforcement of these policies is essential for implementation of the Transportation Plan. Others require amendment of the Metropolitan Area General Plan through the update process to further enhance the possibility the transportation goals will be attained. The adoption of the Transportation Plan does not constitute official adoption of policies 1 through 7. It should, however, constitute an

official commitment to a close examination of these policies during the General Plan update.

1. EFFORTS SHOULD BE MADE TO ENCOURAGE THE GROWTH OF DOWNTOWN EUGENE AND SPRINGFIELD AS STRONGER EMPLOYMENT AND COMMERCIAL CENTERS.

   A. Major new commercial center development should be encouraged to cluster in downtown rather than scatter throughout the metropolitan area.

   B. Governmental offices should be concentrated downtown.

   C. The proposed Civic Auditorium/Cultural Center should be located in downtown Eugene.

   D. The location of the Lane County Fairgounds or other similar traffic attractors should maximize the year-round accessibility to its users via many modes of transportation.

   Discussion: The higher the density of a downtown, and the larger its size, the more it will shift travel from automobile to transit. Major increases in the size and density of downtown Eugene and Springfield will have a strong impact on increasing transit ridership, but will be in conflict with land use policies that would help achieve the street and highway goal and perhaps other non-transportation goals as well. Low density development, or multi-nucleated development often help spread traffic over the entire street network rather than concentrating in a few major corridors. Intense downtown development will make it difficult and costly (if not impossible) to prevent the occurrence of Level of Service "E" in some corridors. Adoption of this policy will require additional study to identify the means to maintain the viability, attractiveness and accessibility of the downtown while moving toward the transit goal.

2. MEDIUM AND HIGH DENSITY RESIDENTIAL DEVELOPMENT SHOULD BE ENCOURAGED IN PROXIMITY (WITHIN ONE MILE) OF DOWNTOWN EUGENE AND SPRINGFIELD.

   Discussion: While overall urban density is a major factor in choosing a future transit system, high residential density in proximity to a downtown of substantial size maximizes the potential for high transit usage in an area. As with the previous policy, this action works at counterpurposes with the street and highway goal, although it should have a positive effect on increasing walk and bicycle trips in the downtown.

3. MEDIUM AND HIGH DENSITY RESIDENTIAL DEVELOPMENT, WHERE OTHERWISE APPROPRIATE, SHOULD BE ENCOURAGED IN PROXIMITY TO TRANSIT TRANSFER STATIONS.

   Discussion: Increased density within three blocks (approximately one-quarter mile) of transfer stations will have a positive effect on transit ridership, but not of the magnitude of increased density near downtown. The impact of this policy should not be dismissed, however, and its adoption might dictate land use modification in the update of the Metropolitan Area General Plan.

4. NEW RETAIL AND OFFICE CENTERS SHOULD BE WITHIN AREAS OF COMMUNITY COMMERCIAL CONCENTRATION DESIGNATED IN THE METROPOLITAN AREA GENERAL PLAN.

   Discussion: This policy recognizes the strong emphasis of the Metropolitan Area General Plan to strengthen the downtown areas of Eugene and Springfield. In other words, primary emphasis would still be placed on encouraging new retail businesses and office facilities to locate in the downtown areas, but some growth in community commercial areas can be expected.

5. MEDIUM AND HIGH DENSITY RESIDENTIAL DEVELOPMENT SHOULD BE ENCOURAGED IN PROXIMITY (APPROXIMATELY ONE-HALF MILE) OF COMMUNITY COMMERCIAL CENTERS DESGINATED IN THE METROPOLITAN AREA GENERAL PLAN.

   Discussion: This land development pattern is not the most beneficial for maximizing increases in transit ridership, but it should provide greater incentives for transit ridership than low density scatteration. In addition, locating new residential development near commercial or employment centers increases the likelihood of meeting the non-motorized trip-making goals.

6. DEVELOPMENT AND REDEVELOPMENT SHOULD BE ENCOURAGED IN DESIGNATED AREAS WHICH ARE RELATIVELY WELL SERVED BY EXISTENT TRANSIT OR WHERE FUTURE TRANSIT SERVICE IMPROVEMENTS ARE PLANNED.

   Discussion: Specific changes in development standards and requirements should be considered for all residential zoning districts within one-quarter mile of high frequency local transit routes. These changes could include: (a) reductions in the minimum lot size, (b) reductions in parking requirements, (c) requirements for developer provision of shelters, pedestrian routes, bus passenger loading areas, bus turnouts and right-of-way dedications The essence of this policy is already contained in the Metropolitan Area General Plan.

7. LANE COUNTY SHOULD MONITOR DEVELOPMENT OUTSIDE THE URBAN SERVICE BOUNDARY, DISCOURAGE STRIP DEVELOPMENT BETWEEN THE URBAN SERVICE BOUNDARY AND THE SATELLITE COMMUNITIES AND URBAN DEVELOPMENT CENTERS, AND ENCOURAGE COMPACT DEVELOPMENT OF THE SATELLITE COMMUNITIES AND URBAN DEVELOPMENT CENTERS.

Discussion: Implementation and enforcement of existing policies of the Lane County General Plan (consisting of Goals and Policies and Sub-area Plans) are important and should provide the means to accomplish this policy.

Transportation Plan Policies

The following policies are recommended for adoption within the Transportation Plan. The adopted policies will be a major basis for the management and implementation of the Transportation Plan as well as a major basis for the evaluation of specific transportation proposals.

System Policies

Operational improvements, traffic management strategies, incentives and disincentives are addressed by these specific transportation related actions. While none have the extremely broad impacts of the land use policies, many certainly imply changes in personal convenience travel habits and life styles.

1. TRAFFIC MANAGEMENT TECHNIQUES SHALL ROUTINELY BE INVESTIGATED AND/OR IMPLEMENTED AS A FIRST ALTERNATIVE TO MAJOR CONSTRUCTION TO PROVIDE ADDITIONAL CAPACITY ON EXISTING STREETS.

   Discussion: The application of good traffic engineering principles can often yield significant gains in the efficiency of street utilization. Techniques include the entire spectrum of traffic engineering practices, but some of the more effective include:
   A. One-way streets
   B. Optimization of signal timing
   C. Reversible lanes
   D. Restricted turning movements
   E. Intersection channelizations
   F. Removal or prohibition of on-street parking
   G. Designation and efficient placement of bus stops

2. PROVISION OF STREET CAPACITY ADEQUATE TO MAINTAIN AN ACCEPTABLE LEVEL OF MOBILITY SHALL BE AN INTEGRAL COMPONENT OF THE METRO-

POLITAN TRANSPORTATION SYSTEM, AND PROJECTS OF THE STREET AND HIGHWAY ELEMENT SHALL SERVE AS A BASIS FOR FUTURE STREET AND HIGHWAY IMPROVEMENTS.

Discussion: Although traffic management techniques may be used to forestall or reduce the need for some highway projects, the fact remains that in many locations, major street and highway improvements will ultimately be required to provide an acceptable level of service for both automobile and transit. Under the assumptions of this study, projects included in the Street and Highway Element should be recognized as necessary in addition to the proper application of traffic management techniques.

3. STRATEGIES DIRECTED AT REDUCING PEAK DEMAND BY SPREADING THAT DEMAND OVER A LONGER TIME PERIOD SHALL BE IMPLEMENTED OR ENCOURAGE

Discussion: Examples include:
A. Staggered work hours
B. Flexible work hours
C. Shortened work week

Work hours or days worked can be shifted from familiar patterns so that employees of cooperating firms distribute demand for transportation facilities over a greater period of time, thereby reducing peak demand. The resulting reduction in peak demand may, in some cases, alleviate or postpone the need for new facilities. These strategies have the greatest potential for impact if implemented by government and businesses located in central Eugene.

4. TRAFFIC MANAGEMENT TECHNIQUES SHALL BE INVESTIGATED AND/OR IMPLEMENTED IN ORDER TO REMOVE OR REDUCE THE IMPACT OF THE AUTOMOBILE ON SELECTED RESIDENTIAL STREETS.

Discussion: Techniques might include:
A. Restricted turning movements
B. Traffic diverters
C. Automobile restricted areas

5. IN AREAS WHERE CONGESTION OCCURS, FACILITY TOLLS AND AREA TOLLS ON VEHICLE LICENSES SHALL BE EVALUATED AND EMPLOYED WHERE APPROPRIATE, TO REDUCE PEAK PERIOD DEMAND OR MAKE MORE EFFICIENT USE OF ALTERNATIVE ROUTES.

Discussion: For example, a system of peak hour congestion tolls could be applied on the Ferry Street Bridge on a trial basis to divert traffic, thus utilizing existing river crossings in a more efficient manner.

6. MASTER ROAD AND STREET PLANS OF THE LOCAL GOVERNMENT AGENCIES SHALL BE UPDATED IN CONFORMANCE WITH THE ADOPTED STREET AND HIGHWAY ELEMENT OF THE TRANSPORTATION PLAN.

Discussion: Transportation policies should be applied with consistency when obtaining road dedications and improvements.

7. ALTHOUGH ADVANCE PLANS FOR TRANSPORTATION IMPROVEMENTS IN URBAN FRINGE AREAS SHALL BE DEVELOPED, ACTUAL CONSTRUCTION SHALL NOT TAKE PLACE UNTIL A DEFINITE NEED IS SHOWN, IN ORDER TO PREVENT THE STIMULATION OF GROWTH IN THESE AREAS.

Discussion: Public investment in transportation facilities should not take place until the private development is imminent and an actual demand for the public facilities and services has been demonstrated.

8. ROAD SYSTEM DESIGN AND LAND DEVELOPMENT PATTERNS SHALL BE ENCOURAGED WHICH MINIMIZE DIRECT ACCESS ONTO EXISTING OR FUTURE COLLECTOR OR ARTERIAL ROADS.

9. ARTERIAL STREETS SHALL HAVE AS THEIR PRIMARY FUNCTION THE MOVEMENT OF PEOPLE AND GOODS. THE STORAGE OF AUTOMOBILES SHALL BE OF SECONDARY IMPORTANCE.

Discussion: Parking removal should be considered as an alternative to physical widening to provide additional street capacity or accommodate alternative modes through bus stops, acceleration lanes, turn lanes, or bike lanes. In the design of new or reconstructed arterial or collector streets or roads, on-street parking should not be provided unless a clear need is shown.

10. TO THE GREATEST EXTENT POSSIBLE, ADVANCE ROAD AND STREET SYSTEM AND TRANSIT ROUTING PLANS SHALL BE FORMULATED AND USED TO GUIDE THE TRANSPORTATION PATTERN OF DEVELOPING AREAS AND REDEVELOPMENT AREAS.

11. WHEN LANE COUNTY DEVELOPS OR IMPROVES ROADS WITHIN THE URBAN SERVICE BOUNDARY BUT OUTSIDE THE CORPORATE LIMITS OF EUGENE AND SPRINGFIELD, STANDARDS SIMILAR TO THOSE OF THE ADJOINING CITY SHALL BE MAINTAINED.

12. ACCESS TO PUBLIC TRANSIT SHALL BE AN IMPORTANT CONSIDERATION OF DEVELOPMENT OR REDEVELOPMENT IN THE URBAN SERVICE AREA.

A. Eugene, Springfield and Lane County shall have the opportunity to review and comment on all transit routes, fre-

quency of service and coverage changes within their respective jurisdictions.

B. The subdivision review process shall include formal review and comment from the staff of the Lane Transit District to ensure that transit service is an important consideration in the subdivision design.

Attainment of the transit goal will be enhanced only through an atmosphere of cooperation between local governments and the Lane Transit District. If the transit service is to be a consideration in development, local government must have the opportunity to comment on potential service changes. Likewise, if Lane Transit District is to provide service to attain the transit goal, it needs assurance that transit is an important consideration in the design of new development or redevelopment.

13. PROVISION OF TRANSIT ROUTES TO AREAS WITH THE POTENTIAL FOR HIGH LEVELS OF TRANSIT USAGE SHALL BE ENCOURAGED.

Discussion: Transit service should be provided to both existing and developing areas if there is the potential for high ridership levels, even though initial service may require higher than average subsidies.

14. PRIORITY TREATMENT FOR TRANSIT VEHICLES SHALL BE USED AT SELECTED INTERSECTIONS AS A MEANS TO HELP ACHIEVE BETTER OPERATING CONDITIO

Discussion: This will permit the opportunity for faster line haul transit travel, but has the potential to increase automobile congestion and delays and decrease vehicular capacity at certain locations.

15. ASSISTANCE AND COOPERATION SHALL BE PROVIDED TO THE LOCAL TRANSIT OPERATOR IN THE LOCATION OF, AND PARKING REMOVAL FOR, BUS STOPS AND TURNOUTS; ASSISTANCE SHALL BE GIVEN IN PROVIDING LOCATIONS FOR PASSENGER WAITING SHELTERS.

16. ACTIVE SIDEWALK CONSTRUCTION AND REPAIR PROGRAMS SHALL BE UNDERTAKEN TO PROVIDE FOR PEDESTRIAN ACCESS TO TRANSIT SERVICE AND FACILITATE PEDESTRIAN MOVEMENT IN GENERAL.

Discussion: Lack of sidewalks can be a strong disincentive to transit ridership, particularly in inclement weather, in hazardous locations and after dark.

17. DEVELOPMENT STRATEGIES FOR EACH OF THE CENTRAL BUSINESS DISTRICTS SHALL INCLUDE THE DESIGNATION OF APPROPRIATE SITES FOR A CENTRAL

LCOG Lane Council of Governments
NORTH PLAZA LEVEL PSB / 125 EIGHTH AVENUE EAST / EUGENE, OREGON 97401 / TELEPHONE (503) 687-4283

TO: All Holders of the Eugene-Springfield Area 2000 Transportation Plan

FROM: L-COG Transportation Planning Committee

SUBJECT: Errata Sheet for the Proposed 2000 Transportation Plan

Please note the following correction to the Plan:

Page 27 Policies 20 and 21 should read:

20. PROGRAMS AND INCENTIVES TO INCREASE AUTOMOBILE OCCUPANCY SHALL BE INVESTIGATED AND, IF POTENTIALLY EFFECTIVE, IMPLEMENTED.

Discussion: Carpooling programs have proven to be effective in other areas. Preferential treatment for carpools, either through reduced parking cost or parking location, could be provided in downtown Eugene and Springfield, Lane Community College, and the University of Oregon as one incentive. Vanpooling and shared-ride taxis probably have limited application in Eugene-Springfield, but their potential should be investigated.

21 MARKETING PROGRAMS, PUBLIC INFORMATION CAMPAIGNS, AND EDUCATIONAL PROGRAMS PROMOTING THE USE OF ALTERNATIVE MEANS OF TRAVEL, ESPECIALLY CARPOOLING AND BICYCLING, SHALL BE IMPLEMENTED.

Discussion: Brochures, maps, phone numbers and any other information valuable in learning how to use alternative modes or how to reduce trip-making should be made available by public agencies. Local school districts particularly should become involved in the above education programs.

OS:GK:T

TRANSIT STATION IN DOWNTOWN EUGENE AND A MAJOR TRANSIT STATION IN DOWNTOWN SPRINGFIELD.

Discussion: Good pedestrian access from both transit stations to each of the respective downtown areas should be a prime consideration in site selection.

18. PARK AND RIDE FACILITIES IN SATELLITE COMMUNITIES, AND COMMUTER TRANSIT SERVICE TO THE METROPOLITAN AREA SHALL BE ENCOURAGED.

19. INCENTIVES FOR INCREASED TRANSIT USE SHALL BE PROVIDED TO EMPLOYEES OF LOCAL GOVERNMENTS; OTHER PUBLIC AGENCIES, BUSINESSES AND INDUSTRY SHALL BE ENCOURAGED TO DO THE SAME.

20. PROGRAMS AND INCENTIVES TO INCREASE AUTOMOBILE OCCUPANCY SHALL BE INVESTIGATED AND, IF POTENTIALLY EFFECTIVE, IMPLEMENTED.

Discussion: Brochures, maps, phone numbers and any other information valuable in learning how to use alternative modes or how to reduce trip-making should be made available by public agencies. Local school districts particularly should become involved in the above education programs.

22. A HIGH PRIORITY SHALL BE PLACED ON COMPLETION OF FACILITIES AND IMPLEMENTATION OF RECOMMENDATIONS IN THE ADOPTED EUGENE-SPRINGFIELD METROPOLITAN BIKEWAY MASTER PLAN.

Discussion: The implementation of the Metropolitan Bikeway Master Plan facilities should continue in order to provide connecting bicycle links between residential areas and points of high trip attractions, such as schools, civic buildings, and commercial, office, and industrial developments.

23. WHERE APPROPRIATE, IMPROVED BICYCLE AND PEDESTRIAN TREATMENT AT SIGNALIZED INTERSECTIONS SHALL CONTINUE TO BE PROVIDED.

Discussion: Because of the conflicts between modes and accident potential at intersections, careful and special consideration should be given to bicycle and pedestrian movements at key intersections. Such special consideration includes bicycle and pedestrian signal activation devices at signalized intersections.

24. CONSTRUCTION AND RECONSTRUCTION OF STREETS AND HIGHWAYS SHALL INCLUDE CONSIDERATION OF PROVISION FOR ACCOMMODATING BICYCLE TRAVEL AND OTHER ALTERNATIVE MODES. OTHER MAJOR URBAN UTILITY CONSTRUCTION SHALL ALSO CONSIDER THE OPPORTUNITY TO PROVIDE ROUTES FOR BICYCLE TRAVEL.

Discussion: Bikeway improvements of the Metropolitan Bikeway Master Plan should be considered in street and highway programming efforts.

25. BIKEWAY CONSIDERATION SHALL BE INCLUDED IN THE REVIEW OF PROJECT PLANS AND NEW DEVELOPMENT PROPOSALS.

Discussion: The process for handling project plans and new development proposals should, as a routine matter, consider impacts upon existing and planned bicycle routes.

26. NEW DEVELOPMENT SHALL BE DESIGNED TO PROVIDE GOOD ACCESS TO THE EXISTING AND PLANNED BIKEWAY SYSTEM, WHERE APPROPRIATE.

Discussion: Many private subdivisions isolate residential and commercial users by not providing a more direct travel link to existing transportation facilities and services. Commercial land use configurations should be arranged to provide opportunities to make shopping trips via the bicycle and pedestrian modes.

27. LOCAL ORDINANCES SHALL SET STANDARDS FOR ADEQUATE BICYCLE PARKING AND LOCKING FACILITIES AT MAJOR COMMUNITY ACTIVITY CENTERS AND MULTI-FAMILY RESIDENTIAL DEVELOPMENTS.

Discussion: Consideration should be given to covered bicycle parking and locking facilities. Community activity centers shall include (a) schools; (b) civic buildings; (c) new commercial, office, or industrial developments; (d) all other new facilities, such as churches and community centers, where large numbers of people are expected to gather; (e) all transit transfer stations; and (f) new apartment developments and planned unit developments.

28. FREE OR LOW COST (TO THE USER) SHORT-TERM PARKING SHALL BE PROVIDED IN THE DOWNTOWN AREAS.

Discussion: To compete with suburban shopping centers, downtown areas must remain attractive to customers and clients in terms of service and convenience.

29. IN GENERAL, SHORT-TERM PARKING SHALL BE LOCATED IN CLOSER PROXIMITY TO THE DOWNTOWN CORES THAN LONG-TERM PARKING.

Discussion: To provide customer convenience, walking distances should be shorter for customers than employees. Persons using long-term parking exhibit behavior patterns which indicate that they will walk greater distances from their automobile to their destination than will persons using short-term parking.

30. ACTION SHALL BE TAKEN TO DISCOURAGE FREE EMPLOYEE PARKING, EITHER ON OR OFF-STREET, IN DOWNTOWN EUGENE AND SPRINGFIELD.

Discussion: Parking charges for long-term parking that exceed transit fare could be one action. Additionally, the provision of employee parking space should not be subsidized by public employers.

31. IN NEIGHBORHOODS ADJACENT TO DOWNTOWN EUGENE, DOWNTOWN SPRINGFIELD, THE UNIVERSITY OF OREGON AND SACRED HEART HOSPITAL, LONG-TERM, ON-STREET PARKING SHALL BE PROHIBITED TO THE EXTENT POSSIBLE FOR ALL MOTORISTS EXCEPT NEIGHBORHOOD RESIDENTS.

Discussion: Enforcement and equitable application of this policy are difficult. Further study is necessary to detail measures to enable residents to park on-street while prohibiting all non-residents from doing so.

32. PRIME PARKING SPACE FOR BOTH SHORT-TERM AND LONG-TERM PARKING SHALL BE PROVIDED FOR COMPACT AUTOMOBILES.

Discussion: Since the area required for parking can be reduced by approximately 15 percent through the use of compact automobile sizes, smaller cars should be given priority treatment. While the number of vehicles requiring parking space may remain the same, the given amount of land or parking structure becomes 15 percent more efficient, thus requiring less total consumption of land or structure.

33. IF ADDITIONAL HOUSING UNITS ARE TO BE BUILT BY THE UNIVERSITY OF OREGON OR THE STATE BOARD OF HIGHER EDUCATION, THEY SHALL BE LOCATED IN PROXIMITY TO THE CAMPUS AREA. IF ADDITIONAL UNITS ARE TO BE ACQUIRED, ACQUISITION IN PROXIMITY TO THE CAMPUS AREA SHALL BE ENCOURAGED.

34. HOME DELIVERY OF GOODS AND SERVICES SHALL BE ENCOURAGED BY LOCAL GOVERNMENTAL AGENCIES THROUGH THE USE OF INCENTIVES.

Discussion: Incentives might include a reduction in business license fees for businesses promoting home delivery service.

35. LOCAL POSITIONS, ISSUES, AND CONCERNS SHALL BE PRESENTED TO THE GOVERNOR FOR CONSIDERATION WHEN MAKING APPOINTMENTS TO THE LANE TRANSIT DISTRICT BOARD OF DIRECTORS.

Discussion: Under state statute, Lane Transit District Board members are not directly accountable to the local electorate. Members are appointed by the Governor from seven districts com-

prising the transit service area. At present, it is not advisable to move to a locally appointed or elected board, but the current method of appointment is of concern. The Governor should retain the power of appointment, but local governments should provide information and comments to aid in the selection of new board members.

Financial Policies

Key to the implementation of any transportation plan is the ability to provide funds for improvements recommended therein. The outlook for transportation financing in the State of Oregon is not bright over the next decade. Needs are expected to outstrip revenues for both the street and highway, and transit programs. Specific financial recommendations are found in Element VIII - Financial Analysis. The following recommended policies are intended to identify actions to help alleviate the expected funding shortfalls:

36. THE SETTING OF TRANSPORTATION IMPROVEMENT PRIORITIES AND THE FUNDING OF INDIVIDUAL TRANSPORTATION IMPROVEMENTS SHALL BE DONE IN THE CONTEXT OF OVERALL REGIONAL NEEDS AND COMMUNITY GOALS.

    Discussion: Consideration should be given not only to the direct capital or operating costs of a particular project, but to the ability of that project to enhance the livability of the area or help attain the goals of the Metropolitan Area General Plan.

37. EFFORTS TO UTILIZE THE MAXIMUM AVAILABLE TRANSPORTATION FUNDS FROM FEDERAL AND STATE SOURCES SHALL CONTINUE.

    Discussion: This includes not only utilizing all categorical monies available to the area, but agressively competing for discretionary and demonstration grants.

38. EFFORTS TO ENCOURAGE FEDERAL LEGISLATION PERMITTING INCREASED FLEXIBILITY IN THE USE OF INTERSTATE FUNDS SHALL BE SUPPORTED.

    Discussion: A disproportionate amount of the Highway Trust Fund revenues appropriated to Oregon (nearly 60%) are earmarked for use on the Interstate system. Other than I-205 in Portland, Interstate construction work in the state is nearly finished, and nationally, the system is scheduled for completion by 1982. Federal Highway funds now designated for Interstate construction should be permitted for use on streets and highways in other federally designated categories.

39. INCREASED FEDERAL FUNDING FOR URBAN PUBLIC TRANSIT, FROM SOURCES OTHER THAN EXISTING HIGHWAY REVENUES, SHALL BE ENCOURAGED. STAT-

UTORY REQUIREMENTS FOR CONTINUING STATE SUPPORT TO URBANIZED AREA TRANSIT DISTRICTS SHALL BE ENCOURAGED.

Discussion: Funding problems forecast for both highways and transit make it inadvisable to divert existing revenues from the Highway Trust Fund or State Highway Fund. Expenditure of some federal highway monies on public transit projects is already permitted at local discretion. However, if highway revenues are to be required to be allocated for transit purposes, it is preferable to generate new revenue by increasing road user taxes and fees rather than diverting funds from existing inadequate programs.

40. FEDERAL AND STATE LEGISLATION PERMITTING LOCAL CONTROL OVER A GREATER PROPORTION OF TRANSPORTATION FUNDS SHALL BE SUPPORTED.

Discussion: Currently, Federal-Aid Urban and Urban Mass Transportation Administration Section 5 funds are the only significant, automatically allocated, federal categories directly controlled by local governmental officials. Increases in both categories, or addition of other categories, will allow local officials a greater opportunity to respond to local transportation needs and priorities.

41. FEDERAL AND STATE LEGISLATION INCREASING HIGHWAY USER FEES TO BE USED FOR THE CONSTRUCTION, RECONSTRUCTION OR MAINTENANCE OF STREETS AND HIGHWAYS SHALL BE SUPPORTED.

Discussion: Energy conservation measures, such as carpooling, coupled with a shift to smaller, more energy efficient automobiles in the future will almost certainly lead to a slowed rate of increase in gas tax revenues. Some forecasts even predict a drop in revenues by the late 1980's if energy conservation measures are extremely successful. The cost of maintaining and rehabilitating the existing highway system will continue to increase, however, through the rising costs of labor and materials. The gap between highway needs and revenues on the national and state level will grow under the current fee structure. Additional user fees are necessary simply to prevent the existing street and highway network from deteriorating during the study period.

42. EFFORTS SHALL BE MADE TO ENSURE PARTICIPATION BY LOCAL OFFICIALS IN THE DEVELOPMENT OF OREGON DEPARTMENT OF TRANSPORTATION POLICIES, PROGRAMS AND PLANS.

Discussion: Decisions made at the state level have a major impact on the transportation system of Eugene-Springfield. Close liaison should be maintained with the Transportation Commission

to ensure that local officials are heard when policies and decisions affecting the metropolitan area are made.

43. AFTER ADOPTION OF THE TRANSPORTATION PLAN, JURISDICTIONAL CONTROL OF THE ADOPTED STREET AND HIGHWAY NETWORK SHALL BE REVIEWED AND REVISED WHERE APPROPRIATE TO OPTIMIZE THE USE OF AVAILABLE FUNDING.

Discussion: Continuing efforts should be made to transfer control of certain facilities to other governmental jurisdictions where it is logical from a functional and financial standpoint. For example, attempts should be made to designate the ramps from I-105 to Lincoln-Charnelton as part of the Interstate system to make use of FAI funding. Lane County's proposed trade of Belt Line Road to the state in return for River Road will increase its chances for improvement. Other possibilities for jurisdictional realignment based on the functional nature of the facilities will certainly occur.

44. BEFORE INCREASING EITHER LOCAL USER OR NON-USER TAXES FOR HIGHWAY CONSTRUCTION, CONSIDERATION SHALL BE GIVEN TO UTILIZING A GREATER PORTION OF THE STATE HIGHWAY FUND APPORTIONMENT TO FINANCE ONLY HIGHWAY RELATED IMPROVEMENTS.

Discussion: Highway Fund apportionments to local governments are currently utilized by local parks and public safety departments as well as the District Attorney's Office and District Court. As the need for increased highway revenue grows, support of the parks department and public safety departments entirely through the local General Funds could free more road user fees for application to the direct costs of providing an adequate highway system.

45. BEFORE INCREASING EITHER LOCAL USER OR NON-USER TAXES FOR HIGHWAY CONSTRUCTION, CONSIDERATION SHALL BE GIVEN TO UTILIZING A GREATER PORTION OF LANE COUNTY'S CONSTRUCTION FUNDS TO FINANCE HIGHWAY IMPROVEMENTS WITHIN THE METROPOLITAN AREA.

Discussion: In the past, an average of about 20% of Lane County's construction funds have been used in the metropolitan area annually.

46. IMPLEMENTATION OF ADDITIONAL, BROAD BASED, CONTINUING SOURCES OF REVENUE FOR SUPPORT OF PUBLIC TRANSIT IN THE METROPOLITAN AREA SHALL BE SUPPORTED.

Discussion: If the areawide transit goal is to be achieved, continued public subsidy will be required for operation of the Lane Transit District. Even assuming a tenfold ridership increase and

increased productivity of the system, the gap between farebox revenue and operating expenses cannot be covered by increases in the employer payroll tax, the present method of local subsidation. The payroll tax is narrowly based. Alternative sources of revenue, available to the district through its enabling legislation, should be implemented to broaden the base of support and to provide sufficient revenues to implement capital and operating programs responsive to the areawide transit goal.

47. LOCALLY IMPOSED HIGHWAY USER TAXES SHALL BE IMPLEMENTED BEFORE USING ADDITIONAL LOCAL NON-USER TAXES TO FINANCE FUTURE STREET AND HIGHWAY IMPROVEMENTS.

Discussion: There is no question that local government will have to bear an increasing burden in implementing highway improvements at a time when both maintenance costs and construction costs will be increasing at a rate greater than revenue increases. Even reallocation of federal revenues and increases in state revenues will not eliminate the need to generate additional local revenues if the TPC recommended street and highway network is to be implemented.

Another network might require more or less support, but that can be evaluated only after plan adoption.

Increased revenues can be generated from a variety of sources, both user and non-user fees, but at a time of general taxpayer discontent, it appears more equitable to concentrate on user generated fees for the additional highway revenue needed for construction and maintenance. Indirect costs of the automobile, not addressed in this study, will still likely be paid for by property and other non-user taxes.

The possible user fees include locally imposed gasoline sales tax, local registration fees and taxes (requires revision to ORS 481.270(1)), or an ad valorem tax on automobiles. Anything more than a cursory look at these sources is beyond the scope of this study. Additional research (and in some cases legislative groundwork) is necessary before any new revenue source is implemented.

One point is clear - additional local street and highway revenue is needed, and other possible sources should be examined. If the revenue is not forthcoming, the street and highway improvements necessary to prevent the occurrence of Level of Service "E" will not be implemented and congestion will increase signficantly over current levels. Alternative solutions that remain are to put restrictions on highway users and disincentives to automobile travel, both with the end result of decreased mobility.

48. FUTURE OFF-STREET PUBLIC PARKING FACILITIES SHALL BE PAID FOR BY USER FEES, SPECIAL DISTRICTS OR TAX INCREMENT FINANCING, RATHER THAN USING LOCAL GENERAL FUNDS OR FUNDS AVAILABLE FOR OTHER TRANSPORTATION-RELATED NEEDS.

Discussion: Present practices are generally in line with this recommendation, and should be continued to preserve scarce resources for improvements to the street and highway and transit systems.

49. LOCAL GOVERNMENTS SHALL CONTINUE AGRESSIVELY TO SECURE OUTSIDE FUNDING FOR IMPORTANT BICYCLE FACILITIES ON THE METROPOLITAN BIKEWAY MASTER PLAN, ESPECIALLY INDEPENDENT BIKEWAYS OR STRUCTURES WHICH WILL NOT BE COMPLETED AS PART OF THE STREET AND HIGHWAY IMPROVEMENTS IN THE ADOPTED PLAN.

Discussion: Examples of outside funding sources include Bureau of Outdoor Recreation, CETA employment programs, new Federal Highway Administration funding for bikeways (now under consideration), Federal-aid urban funds, and Oregon State Highway Division "one-percent" money.

Future Planning Policies

The following policies shall help direct future transportation planning:

50. FUTURE PLANNING WORK SHALL CONTINUE TO INVESTIGATE THE USE OF NEW TRANSIT ELEMENT TECHNOLOGIES FOR HANDLING TRANSIT PASSENGERS IN HIGH DEMAND CORRIDORS.

51. MONITORING AND EVALUATION OF ALL MODES SHALL BE A CONTINUING PART OF THE TRANSPORTATION PLANNING PROCESS.

Discussion: Where appropriate, the cost of new facilities should include funds for the installation of permanent traffic counters. These traffic counters should also be incorporated into appropriate new bikeway facilities. This traffic counter program and other programs, such as surveys for all modes, should become part of an overall attempt to monitor and evaluate not only user behavior and needs, but the interrelationships between modes.

52. REGULAR RE-EVALUATION OF THE TRANSPORTATION PLAN SHALL INCLUDE:

A. Annual endorsement from the L-COG Board

B. A major review at least every five years

C. A major re-evaluation, if warranted, after adoption of the Metropolitan Area General Plan update.

53. LAND USE ACTIONS TO PROMOTE FIXED FACILITY RAPID-TRANSIT SYSTEMS IN THE EUGENE-SPRINGFIELD METROPOLITAN AREA SHALL BE INVESTIGATED IN THE UPDATED METROPOLITAN AREA GENERAL PLAN. PRIMARY CONSIDERATION SHALL BE GIVEN TO CORRIDORS WHICH:

A. Connect major concentrations of residential population to employment and trip attraction centers.

B. Connect major nodes, such as Valley River Center, downtown Eugene, downtown Springfield and the University of Oregon.

Discussion: The density and demand for a fixed rapid-transit facility may not occur within this area within the year 2000 planning frame. However, current and future land use decisions could be guided to help ensure that the necessary residential and employment concentrations occur which would make such a transportation system feasible in the future. This policy statement is intended to provide a focus for current and future planning activity for land use and for a fixed facility rapid-transit system.

54. TELECOMMUNICATIONS SHALL BE INVESTIGATED, AND IF APPROPRIATE, PROMOTED, AS AN ALTERNATIVE TO TRIP-MAKING.

Discussion: A simple telephone call, for example, can often sustitute for certain kinds of trips.

ELEMENT III

Transit

Transit

The transit element of the adopted Transportation Plan should answer the following questions:

1. *What should be the future role of transit in the metropolitan area? (i.e., What should be the ridership goals used for planning purposes?)*

2. *What service improvements should be made to the existing transit system?*

3. *What should be the future transit system in the metropolitan area?*

4. *What policies available to local government should be implemented to help achieve the transit ridership goals?*

RECOMMENDATIONS

1. Areawide Transit Goal
   The goals of 15 percent transit usage in Eugene, 10 to 15 percent transit usage in Lane County, and 10 percent transit usage in Springfield that were adopted by those bodies should be reaffirmed by Eugene and Lane County and readopted by Springfield to once again form a compatible areawide transit goal.

Discussion: The original transit goals in Eugene, Springfield and Lane County were compatible with an areawide transit goal of 14 percent of internal trips carried by transit by 2000. All the remaining actions that constitute the transit element of the transportation master plan are dependent to one degree or another on a compatible, areawide transit goal. It governs the future transit system estimates, the service improvements and local policy recommendations. Policies and service improvements needed to help reach the goal, however, are more sensitive to the general magnitude of the goal rather than a specific figure. Any action setting a transit ridership goal substantially higher in 2000 than currently exists will likely require policy actions similar to those required for the 14 percent goal. Minor reductions in the goal will not alleviate the need for policy actions or service improvements.

The future transit system needs in this plan are based on the original transit goals. Springfield's March 7, 1977 decision to change its goal to 5 percent transit ridership was analyzed and found not compatible with the Eugene and Lane County goals. That analysis, and a comparison of future system requirements under both Springfield goals, are contained in the Technical Report.

Agreement on local goals that can be logically aggregated to form an areawide goal should serve as the basis for future transit system development.

2. Operational and Service Improvements to the Existing Transit System

The operational and service improvements in Table 1 should be acknowledged as necessary and their implementation by Lane Transit District supported.

Discussion: Operational and service improvements are dependent more on the magnitude of the transit goal than the specific target value. Any goal of a substantially higher percentage of transit ridership than exists today would require essentially the same improvements recommended in Table 1. Consequently, normal improvements to the existing transit system should not be considered an option under the current transit goals. Local commitment to a better level of transit service than now exists is the minimum requirement and the first step toward achieving higher transit ridership. Although Lane Transit District is the lead agency for implementing these improvements, improved transit service as a whole may require financial commitment and cooperation (on items such as parking removal for bus stops) from local general purpose governments.

TABLE 1

Short-Range Transit Service and Operational Improvements

Service Characteristic	Objective	Transit District Improvement	Comments
Transit Travel Time	Bring average transit travel time closer to average auto travel time	1. Increase transit frequency on high demand routes 2. Increase transit coverage in high demand areas	
Cost of Travel by Transit	Bring average direct transit passenger costs below average auto costs	1. Increase transit operating efficiency 2. Adjust fare structure for attraction	Free fare not recommended
Comfort/ Convenience	Improve quality of transit service, increase transit reliability	1. Extend transit operating hours 2. Clean, modern fleet 3. Improve information service 4. Install additional bus stop signs 5. Install waiting shelters 6. Construct new maintenance facilities 7. Construct transit transfer stations	Coordination with local governments for parking removal or dedication of space Requires coordination with local governments for location
Marketing	Provide effective transit marketing and public education programs	1. Increase media and direct marketing programs 2. Increase media's direct education programs	Should be supported by similar local government programs

3. Future Transit System

The bus rapid transit system, supported by local buses, should be implemented as described below in the metropolitan area during the study period.

Discussion: As the term implies, bus rapid transit is the provision of a rapid transit service utilizing conventional or high capacity super-buses (80 seats, as opposed to 50 for standard buses) operating in limited-stop express service, often in priority rights-of-way. The mode of operation might be:

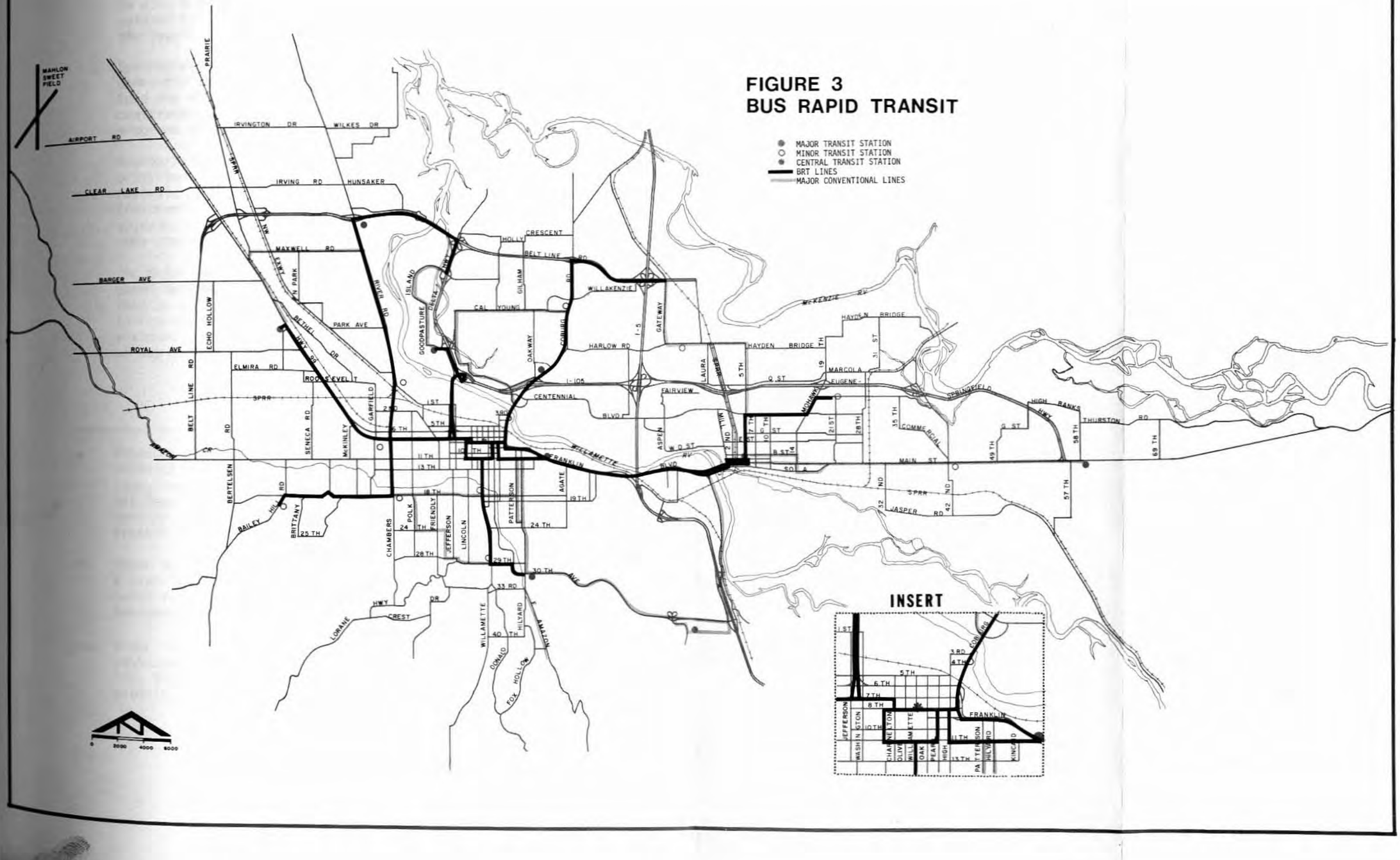
A. Line haul vehicles operating between stations to which passengers arrive by feeder bus, park and ride, bicycle or walking.

B. Line haul vehicles operating through stations to provide both the collection/distribution portion and the line haul portion of the trip.

Urban areas throughout the country currently utilize a wide spectrum of bus priority techniques for bus rapid transit. Of these priority treatments, only exclusive bus lanes on existing arterial streets and traffic signal preemptions by buses have applicability in Eugene-Springfield in the foreseeable future.

The system consists of petroleum-powered buses operating in mixed traffic throughout much of the urban area, but with some form of bus priority treatment provided in six major corridors between transit transfer stations, or nodes (see Figure 3). Service in each of the major corridors will be provided by express and high frequency local routes. In off-peak hours, express buses will travel between the central transfer station in downtown Eugene and transfer stations in each of the corridors. Local bus routes will tie together at the station to provide easy transfers and access to the rest of the metropolitan area. During peak hours, most buses will operate as express routes between transfer stations, then continue through to provide local service to the rest of the area. All routes will operate at 30-minute frequencies in the mid-day and evening periods. Frequency of service during peak periods will generally remain the same as off-peak hours, since the higher capacity buses will be used on bus rapid transit lines to provide seating for peak hour passenger volumes rather than placing more buses in operation at peak times. In addition, the provision of circumferential service between many of the transfer stations will offer better service to trips not oriented to the downtown areas. Forty high capacity vehicles will be needed, out of a total active fleet of 165 buses. The current urban fixed route fleet consists of 52 vehicles. (This does not

FIGURE 3
BUS RAPID TRANSIT



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include dial-a-bus or non-urban vehicles.) One hundred three new vehicles will be needed to replace obsolete vehicles that are expected to be removed from service between 1978 and 2000.

In all, a system of 20 transit transfer stations will be developed by 2000. The central transit station will be built at the Eugene Mall,* while major stations** will be built at downtown Springfield, University of Oregon, Goodpasture Island, Lane Community College, the intersections of River Road and Belt Line Road and of 30th and Hilyard. Minor transit stations*** will be constructed at thirteen other locations (see Figure 3). Current programs of placing bus stop signs and shelters will continue.

Appropriate bus priority techniques include peak hour bus priority lanes and contra-flow lanes that would require parking removal, signing and striping of existing streets, intersection treatments involving devices that give buses priority at traffic signals, and widening of intersections to allow buses to bypass some congested intersections.

The major advantages of bus rapid transit include good travel speed between transfer stations, a low transfer rate, compatibility with the existing land use, the ability to be implemented in response to demand, relatively low irreversible capital investment, and the second lowest operating cost in the year 2000 of any system examined.

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* Although other downtown bus stops and the noncentral business district transit stations will carry an increased share of the load, the Eugene Mall Station is still projected to be of greatest importance to the system. Facilities include a customer service center as well as the other facilities typical of major transit stations.

** Major transit stations typically include all of the facilities of a minor station, plus restrooms and pay phones. Other improvements vary by site, but may include park and ride lots and bus turnarounds to accommodate converging routes.

*** Minor transit stations typically include signed bus stop zones, passenger waiting shelters, route and schedule information signing, lighting, bicycle parking and locking facilities, and accessibility for the physically limited.

Disadvantages include the relatively small influence the system has on land development and possible loss of street capacity in some locations due to bus priority treatment.

The capital improvements, costs and recommended phasing associated with the bus rapid transit system are listed in Table 2.

4. Policies and Actions to Help Achieve the Transit Goal
The policies of Element II should serve as the comprehensive set of actions to guide development of the overall transportation system.

Discussion: Policies which specifically maximize the probability that the transit goal will be achieved were discussed in the preparation of the Transit Element. Policies which favor transit may, in some cases, have adverse impacts on highways or other modes, however. The policies recommended for adoption in the Transportation Plan are compatible with each other to the extent possible, but must be considered in the context of their relationship to the Metropolitan Area General Plan. The recommended goals may sacrifice the maximum opportunity to achieve one particular modal goal, but should encourage the best overall transportation system development and are as compatible as can be expected with other community goals, objectives and policies.

TABLE 2: BUS RAPID TRANSIT CAPITAL IMPROVEMENTS

Phase I: 1978-1990

Improvement Category	Cost (1977 Dollars)
Central Transit Station	
Eugene Mall	$800,000
Major Transit Stations (at $185,000 each)	
River Road and Beltline	
LCC (Park "N" Ride)	
5th and North "B"	
Coburg and Oakway	
11th and Kincaid	
30th and Hilyard	$1,110,000
Minor Transit Stations (at $10,000 each)	
18th and Chambers	
18th and Bailey Hill	
Coburg and Cal Young	
42nd and Main	
21st and Olympic	
29th and Willamette	
18th and Willamette	
Pheasant and Lindale	
8th and Garfield	$90,000
Lane Transit District Maintenance Facility	$2,893,000
Intersection Priority Treatment (at $2,000 per intersection, $1,000 per vehicle)	
134 Intersections	$268,000
Equip 121 Vehicles	121,000
	$389,000
Bus Turnouts and Queue Jumpers (at $40,000 each)	
River Road: 22 bus stops	$880,000
Street Modification and Paving	
Turning radius improvement at 8th and Lincoln	
Alley: 7th-8th between High-Ferry, plus signalization	
Acceleration lane and turning radius improvements on Coburg Road between 8th-E. Broadway	$110,000
Priority Lane Treatments	
Bus Priority Lanes	
11th Avenue: Willamette-Lincoln	
Lincoln: 11th-8th	
Main: 6th-Mill	
11th Avenue: Franklin-High	$8,800

Phase I: 1978-1990 (Continued)	
Improvement Category	Cost (1977 Dollars)
Contra-Flow Priority Lanes 8th Avenue: Jefferson-High Willamette: 20th-11th, east side 18th Avenue: Willamette-Pearl	$65,000
Peak Hour Parking Removal Willamette: 11th-20th, west side 11th Avenue: Pearl-Willamette	$1,200
Vehicles	
Standard Coaches (59)	$4,130,000
High Capacity Coaches (10)	1,710,000
Replacement Coaches (31)	2,170,000
	$8,010,000
Engineering	$944,300
1978-1990 TOTAL CAPITAL OUTLAY:	$15,301,300

Phase II: 1990-2000	
Major Transit Stations (at $185,000 each) Fairfield and Jacobs 58th and Main (Park "N" Ride) Goodpasture Island 7th-8th and Chambers	$740,000
Minor Transit Stations (at $10,000 each) River Road and Railroad Boulevard	$10,000
Intersection Priority Treatment (at $1,000 per vehicle) Equip 44 Vehicles	$44,000
Bus Turnouts and Queue Jumpers (at $40,000 each)	
Franklin Boulevard: 10 bus stops	$400,000
Willamette: 10 bus stops	400,000
	$800,000
Priority Lane Treatments	
Contra-Flow Priority Lanes 7th Avenue-Chambers-Jefferson	$4,000
Vehicles	
Standard Coaches (14)	$ 980,000
High Capacity Coaches (30)	5,130,000
Replacement Coaches (72)	6,020,000
	$12,130,000
Engineering	$239,500
1990-2000 TOTAL CAPITAL OUTLAY:	$13,967,500
TOTAL BUS RAPID TRANSIT CAPITAL OUTLAY, 1978-2000:	$29,268,800

ELEMENT IV

Streets & Highways

Streets & Highways

The street and highway element of the adopted Transportation Plan should answer the following questions:

1. *What level of service should be provided on the street and highway system?*

2. *What improvement projects are required to provide the chosen level of service on the street and highway system?*

3. *What policies available to local governments should be implemented to help achieve the level of service goal?*

4. *What low-capital/non-capital actions or strategies can be employed as short-term measures to forestall more capital intensive solutions to forecasted deficiencies?*

RECOMMENDATIONS

1. Level of Service
   In general, the planning goal to prevent the occurrence of Level of Service "E" on the street and highway system should be retained. In specific instances, however, the decision to implement projects to provide the desired level of service may be influenced by cost or non-transportation considerations. Such

decisions should be made on a case-by-case basis after careful analysis of the ramifications of the resulting traffic congestion.

2a. Street and Highway Improvements - Major Travel Corridors
Highway testing identified five major travel corridors that are expected to suffer serious congestion, vehicle overloads and capacity deficiencies by 2000. They are:

- Eugene East-West Corridor
- River Road Corridor
- Eugene Downtown Westside Corridor*
- Ferry Street Bridge/Coburg Road Corridor
- Franklin Boulevard Corridor
- McVay Highway Corridor

Even if the transit goals and alternative mode goals are achieved by 2000, the overloads likely to occur in these corridors will not be significantly reduced. Only the downtown Eugene area shows some evidence that overloads may be significantly reduced if alternative mode goals are met.

The following project combinations will, in most cases, provide the desired level of service in the major travel corridors, and facilities from those combinations should form the backbone of future capital improvement programs.

Eugene East-West Corridor
The additional capacity required in the Eugene East-West Corridor should be provided ultimately by the facilities represented in Figure 4/Table 3. As an interim solution on 6th and 7th Avenues, both streets should be widened to 4 lanes between I-105 and Garfield before the 6th-7th Freeway is built in that section.

Significant advantages of this project combination are the avoidance of major construction on 18th Avenue, decrease in traffic on West 11th and West 13th, improved access to the west Eugene industrial area, and superior service to east-west travel from I-105 to Highway 126.

Significant disadvantages are the loss of commercial land between 6th and 7th Avenues and the capital cost of the 6th-7th Freeway.

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* The Eugene Downtown Westside Corridor did not show serious overloads, but at the direction of the Eugene Council, it was added as the sixth corridor to be studied.

River Road Corridor

The additional capacity required in the River Road Corridor should be provided by the facilities represented in Figure 5/Table 4.

Significant advantages of this project combination include the avoidance of major interchange redesign at River Road and Belt Line, the removal of a major arterial bisecting the Whiteaker neighborhood, and provision of a new railroad overpass.

Significant disadvantages include construction of a new crossing of the Willamette River north of Belt Line Road, and disruption of industrial land at the south end of the corridor by the Chambers/River Road Connector.

Eugene Downtown Westside Corridor

The facilities represented in Figure 6/Table 5 should be implemented to address the problems identified in the Downtown Westside Corridor. Until the Lincoln-Charnelton Couplet is implemented, additional capacity should not be provided on the Washington-Jefferson Couplet, other than improvements of signalization/channelization from 7th to 13th Avenues.

The significant advantages of this project combination are removal of through traffic from Washington-Jefferson, and improved access to the western end of the Eugene central business district. The significant disadvantage is high capital cost of the new I-105 ramps.

Ferry Street Bridge/Coburg Road Corridor

The additional capacity required in the Ferry Street Bridge/Coburg Road Corridor should be provided by the facilities represented in Figure 7/Table 6. Project staging, such as early construction of a third northbound traffic lane from Franklin Boulevard to the bridge, will help carry the expected traffic increases, but increasing congestion is to be expected until additional river crossing capacity is provided. As an interim measure, traffic management techniques and automobile disincentives should be used to control demand or divert traffic to the Washington-Jefferson Bridge.

Significant advantages of this project combination are the addition of capacity at an existing river crossing, rather than creation of a new one, and the small degree of community disruption caused by improvement at the existing location.

The significant disadvantage is the project cost.

FIGURE 4
EUGENE EAST-WEST CORRIDOR

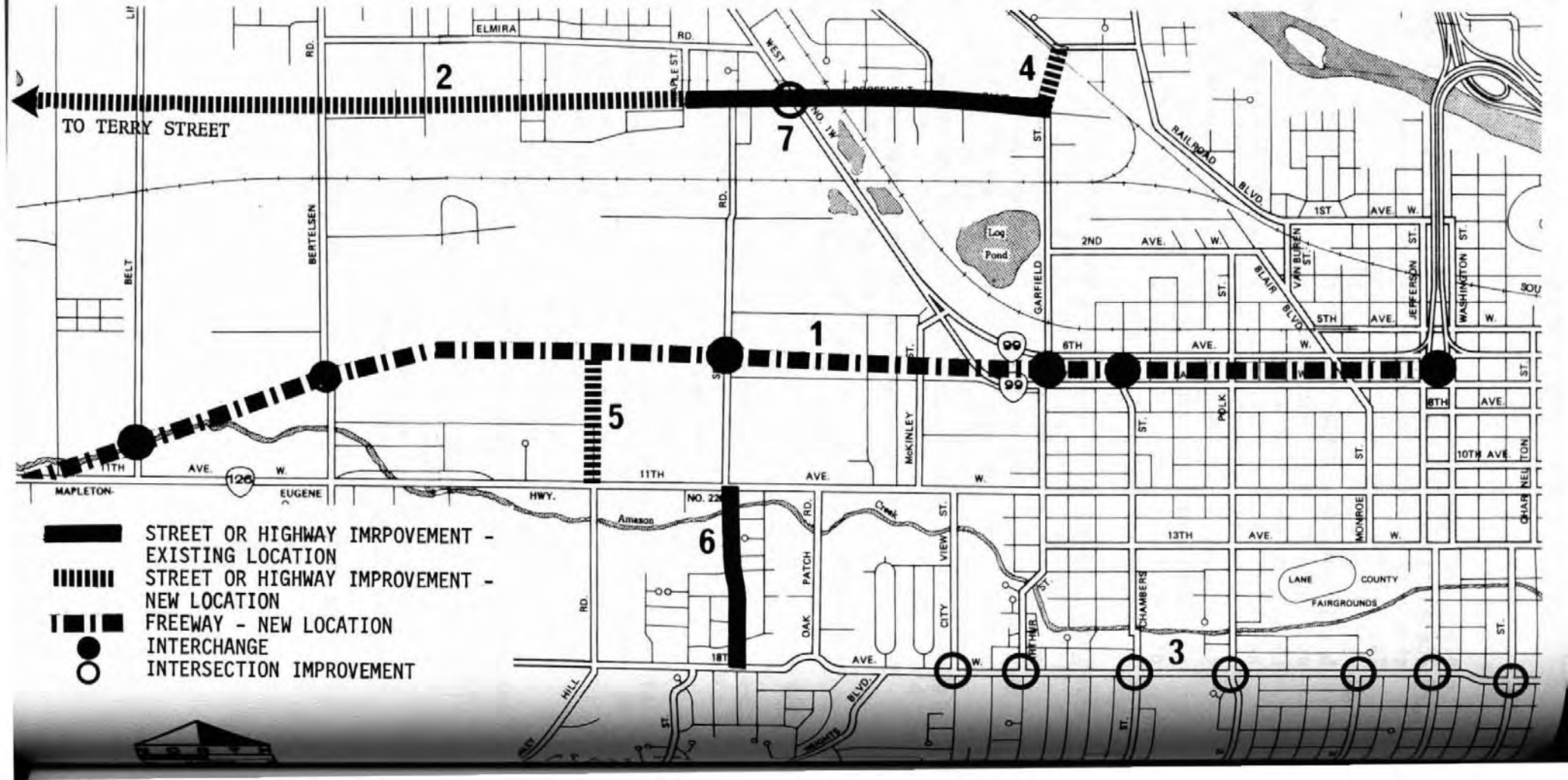


TABLE 3

EUGENE EAST-WEST CORRIDOR

Project	Project Description	Cost* ($000) Right-of-Way	Structures	Grading, Paving and Signals	Total Public Cost
1. 6th - 7th Freeway - I-105 to W. 11th	4 to 6 lane freeway	$13,715	$54,586	$ 6,454	$74,755
2. Roosevelt Truck Route - Garfield to Terry	4 lane arterial	373	-	1,094	1,467
3. W. 18th Ave. at: Lincoln, Jefferson, Friendly, Polk, Chambers, Arthur, City View	Restripe to 4 lanes and major intersection improvements - turn refuges, signalization, channelization, widening, etc.	334	-	1,729	2,063
4. Roosevelt Connector - Roosevelt to N.W. Expressway	2 lane overpass	-	560	460	1,020
5. Bailey Hill Road - W. 11th to 6th - 7th Freeway	2 lane arterial	95	-	102	197
6. Buck Street - W. 18th to W. 11th	2 lane arterial	82	127	168	377
7. Highway 99 & Roosevelt Boulevard	Intersection Improvements	***	***	***	***
	CORRIDOR TOTALS:	$14,599	$55,273	$10,007	$79,879

* 1977 Dollars

** Project No. 1a - Widening 6th and 7th Avenues to four lanes, is recommended as an interim treatment during the 1978-1990 period.

*** Project included as part of Project No. 2, Roosevelt Boulevard and Project No. 30, Highway 99.

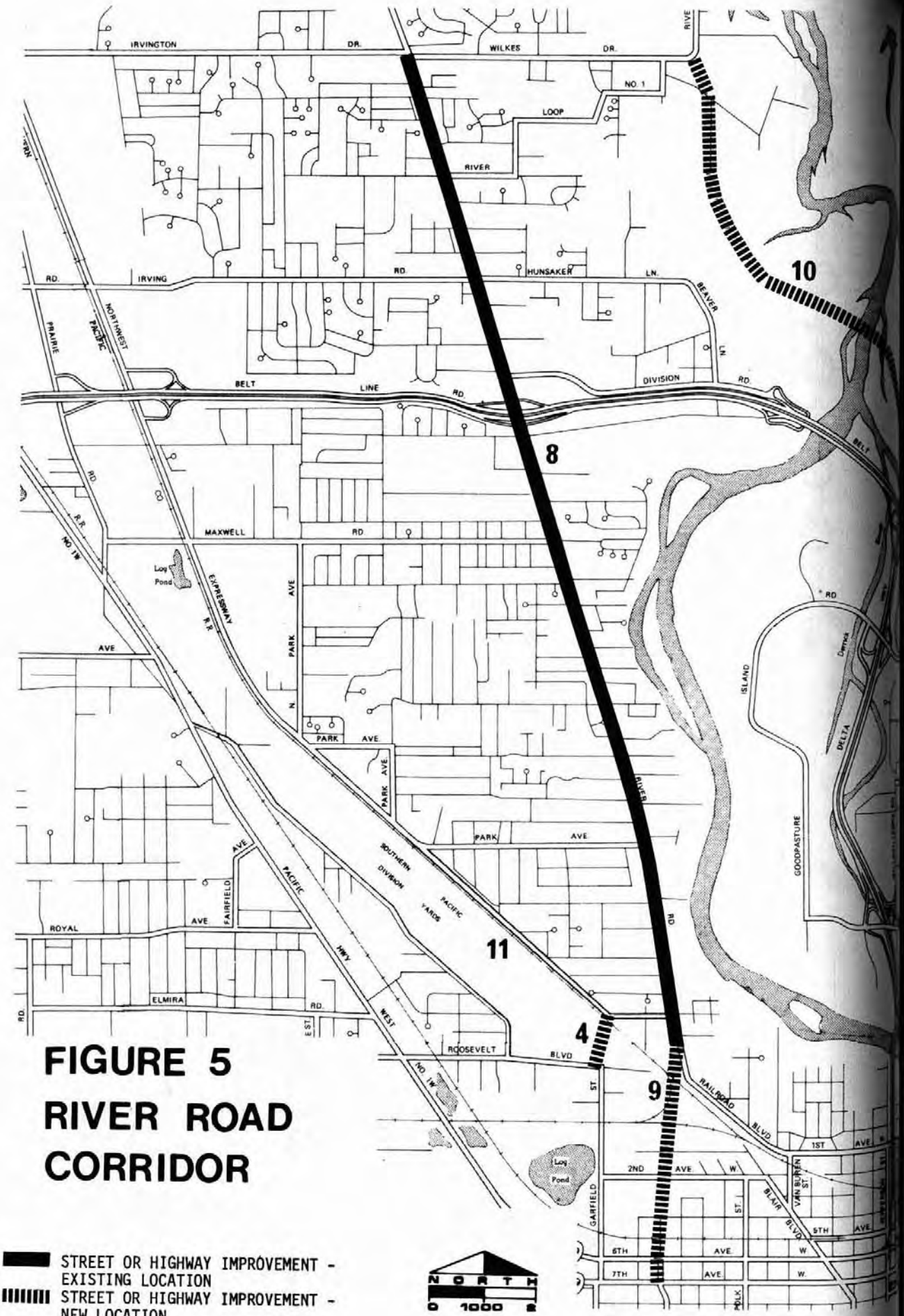


FIGURE 5
RIVER ROAD CORRIDOR

STREET OR HIGHWAY IMPROVEMENT - EXISTING LOCATION

STREET OR HIGHWAY IMPROVEMENT - NEW LOCATION

TABLE 4

RIVER ROAD CORRIDOR

Project	Project Description	Cost* $(000) Right-of-Way	Structures	Grading, Paving And Signals	Total Public Cost
8. River Road - Chambers Connector to Irvington	Widen to 4 lanes (with turn refuges)	$1,000	-	$2,980	$3,980
9. Chambers Connector - River Road to 6th-7th	4 lane arterial	3,043	$2,797	1,941	7,781
10. North Delta Extension - Delta Highway to Wilkes	2 lane arterial	210	4,420	593	5,223
11. **Northwest Expressway - North & South Extensions	2 lane arterial	-0-	-0-	245	245
	CORRIDOR TOTALS:	$4,253	$7,217	$5,759	$17,229

* 1977 Dollars
** Committed Project

FIGURE 6
EUGENE DOWNTOWN WESTSIDE CORRIDOR

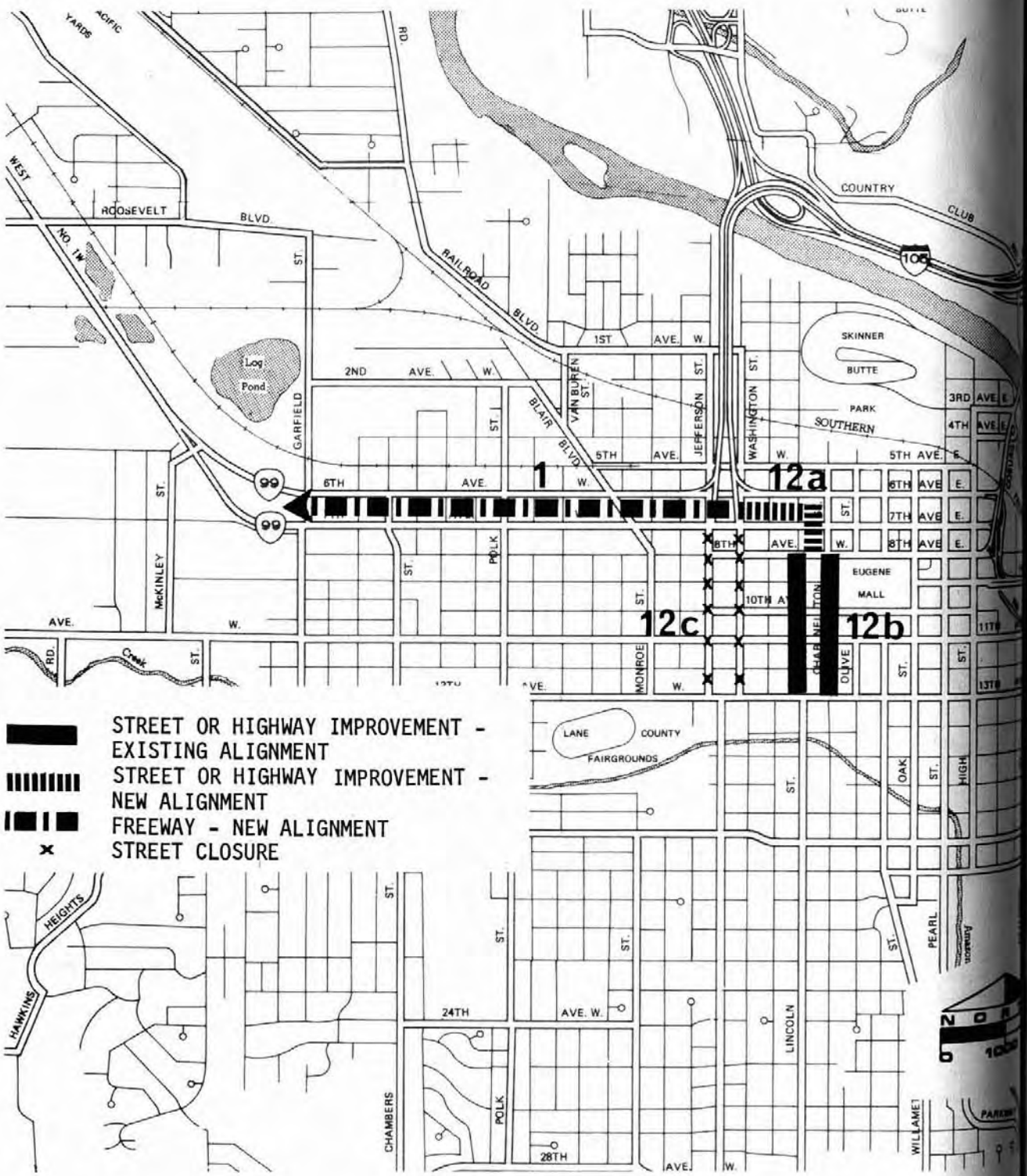


TABLE 5

EUGENE DOWNTOWN WESTSIDE CORRIDOR

Project	Project Description	Cost* $(000) Right-of-Way	Structures	Grading, Paving And Signals	Total Public Cost
12a. I-105 Ramps - I-105 to Lincoln-Charnelton at 8th	New structures to Lincoln-Charnelton couplet	$2,726	$5,086	$123	$7,935
12b. Lincoln-Charnelton couplet	One-way couplet	-	-	331	331
12c. Washington-Jefferson - 7th to 13th	Close to thru traffic	-	-	-	-
	CORRIDOR TOTALS:	$2,726	$5,086	$454	$8,266

* 1977 Dollars

FIGURE 7
FERRY STREET BRIDGE / COBURG ROAD CORRIDOR

STREET OR HIGHWAY IMPROVEMENT - EXISTING ALIGNMENT

STREET OR HIGHWAY IMPROVEMENT - NEW ALIGNMENT

INTERSECTION IMPROVEMENT

NORTH

0 1000 2

TABLE 6

FERRY STREET BRIDGE-COBURG ROAD CORRIDOR

Project	Project Description	Cost* $(000) Right-of-Way	Structures	Grading, Paving and Signals	Total Public Cost
13. Ferry Street Bridge	Provide 6 lanes capacity new bridge or companion structure	-	$4,284	-	$4,284
14. Coburg Road - 8th Avenue to I-105	Widen to 6 lanes	-	1,258	$359	1,617
15. Coburg Road & Oakway Road	Major intersection improvements	50	-	250	300
	CORRIDOR TOTALS:	$50	$5,542	$609	$6,201

* 1977 Dollars

Franklin Boulevard Corridor

Additional capacity in the Franklin Boulevard Corridor should be provided by the intersection improvements represented in Figure 8/Table 7. These intersection improvements will not provide the capacity required to achieve the desired level of service, however. Several locations will likely suffer severe congestion and overloading by 2000, in spite of the improvements.

Significant advantages of this project combination include low capital cost and minor disruption of adjacent land uses.

The primary disadvantage is that the project will not solve the projected problems.

McVay Highway Corridor

The additional capacity required in the McVay Highway Corridor should be provided by the facilities represented in Figure 9/ Table 8.

Significant advantages of this project configuration include improved access from I-5 to the east Springfield industrial area, access to Mt. Pisgah Regional Park, and removal of some through traffic from downtown Springfield.

Significant disadvantages include capital cost, penetration of a new arterial through undeveloped land outside the urban service boundary, and two new river crossings.

2b. Street and Highway Improvements - Non-Corridor Projects

In addition to the significant overloads identified in the major travel corridors, other locations not directly tied to any of the major corridors, are expected to experience overloads and operational problems during the study period. Additional capacity requirements must be met at these locations or they will act as bottlenecks for the rest of the street and highway systems.

Provision of the required level of service is only one consideration, however, and streets are often improved or built for reasons other than increasing capacity. The need to re-route traffic, to provide truck access routes for efficient goods movement, to make safety improvements, and to bring streets up to city standards are logical justifications for street projects.

Recommendations

The non-corridor projects represented in Table 9 should be implemented to meet local requirements with respect to level of

service, street standards, provision of bikeways, truck traffic, etc.

2c. Street and Highway Improvements - Implementation Phasing

The phasing priorities of Tables 11 and 12 should serve as a guide to street and highway programming during preparation of the annual Transportation Improvement Program.

Discussion: A tabulation of the major capital improvements required to provide a street and highway system that meets most community goals for level of service, safety, and other considerations by 2000 is shown on Table 10 and Figure 10.

The street and highway network currently forms the backbone of the surface transportation system in Eugene-Springfield and will continue to do so throughout the study period. The proportion of trips using modes other than the automobile may increase, but an adequate street system will still be essential for the efficient operation of buses, bicycles and paratransit vehicles.

Proper implementation programming of the projects requires setting priorities annually through preparation of the Transportation Improvement Program and consideration of available funding, public attitudes, and so on. The general direction to programming and priority setting can be set through the Transportation Plan, however. Projects recommended for implementation between 1978 and 1990 are, in most cases, improvements to the existing system. Right-of-way acquisition for new facilities should occur during this period to prevent new development or redevelopment from encroaching on the proposed alignment, thereby minimizing future costs and disruption. Most major new facilities should be programmed between 1990 and 2000, partly because of the lead time required to initiate a major new project, but more importantly because current state policy places a higher priority on improvements to the existing system, and because the short-term funding outlook does not include sufficient revenues to embark on a major construction program in Eugene-Springfield between 1978 and 1990.

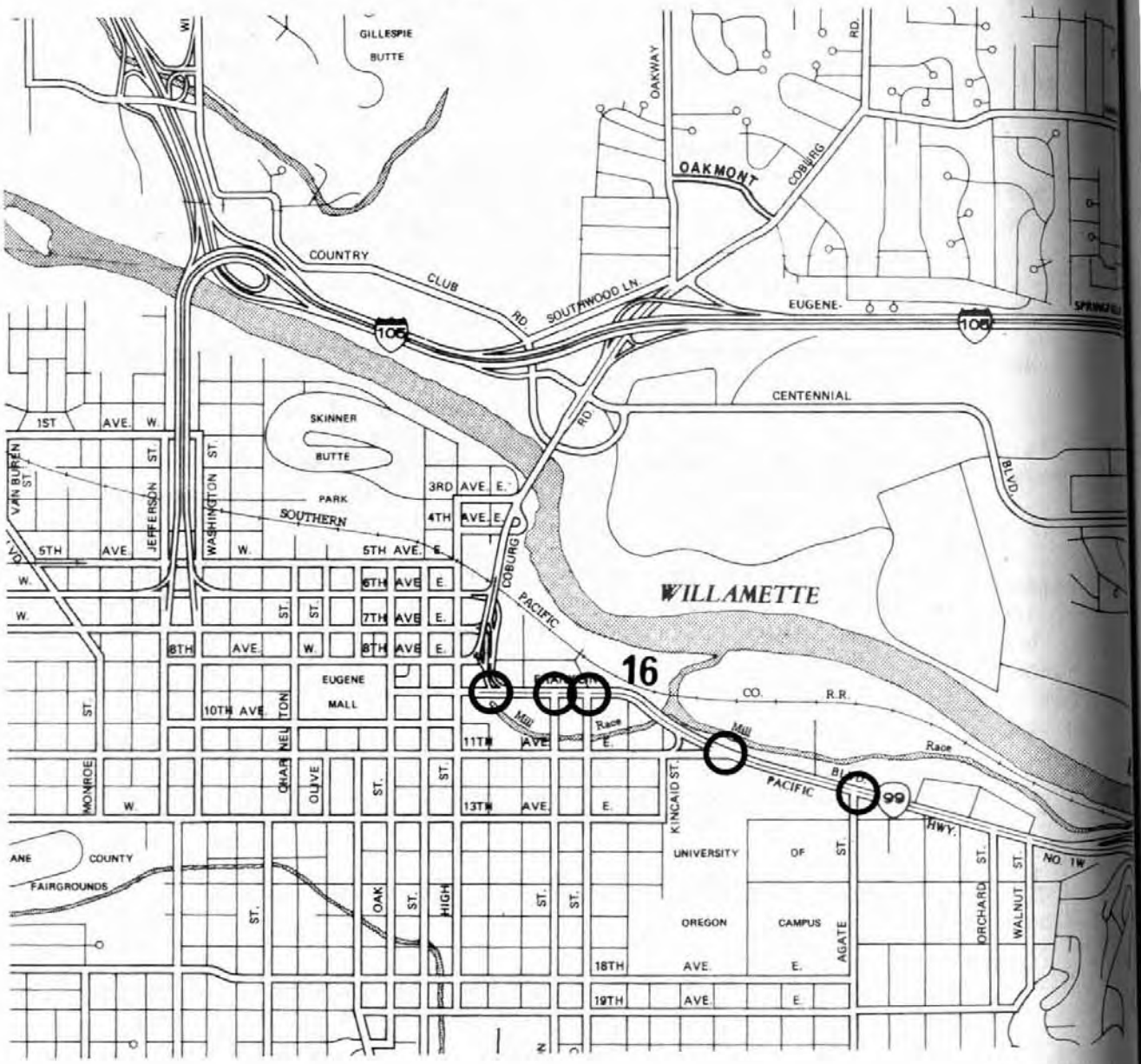
3. Policies and Actions to Help Achieve the Highway Level of Service Goal

Recommendations

The policies of Element II should serve as the comprehensive set of actions to guide development of the overall transportation system.

(Text continued on page 78)

FIGURE 8
FRANKLIN BOULEVARD CORRIDOR



○ INTERSECTION IMPROVEMENT

NORTH
0 1000

TABLE 7

FRANKLIN BOULEVARD CORRIDOR

Project	Project Description	Cost* $(000) Right-of-Way	Structures	Grading, Paving And Signals	Total Public Cost
16. Franklin Boulevard Intersections	Major intersection** improvements at:				
	Broadway	-	-	52	52
	Patterson Street	98	-	21	119
	Hilyard Street	-	-	-	-
	11th Avenue	-	-	15	15
	Agate Street	-	-	28	28
	CORRIDOR TOTALS:	$98	-	$116	$214

* 1977 Dollars

** Improvements recommended here will not eliminate the overloads on Franklin Boulevard. Additional capacity will be provided, but Levels of Service "E" and "F" will occur in places.

FIGURE 9
McVAY HIGHWAY CORRIDOR

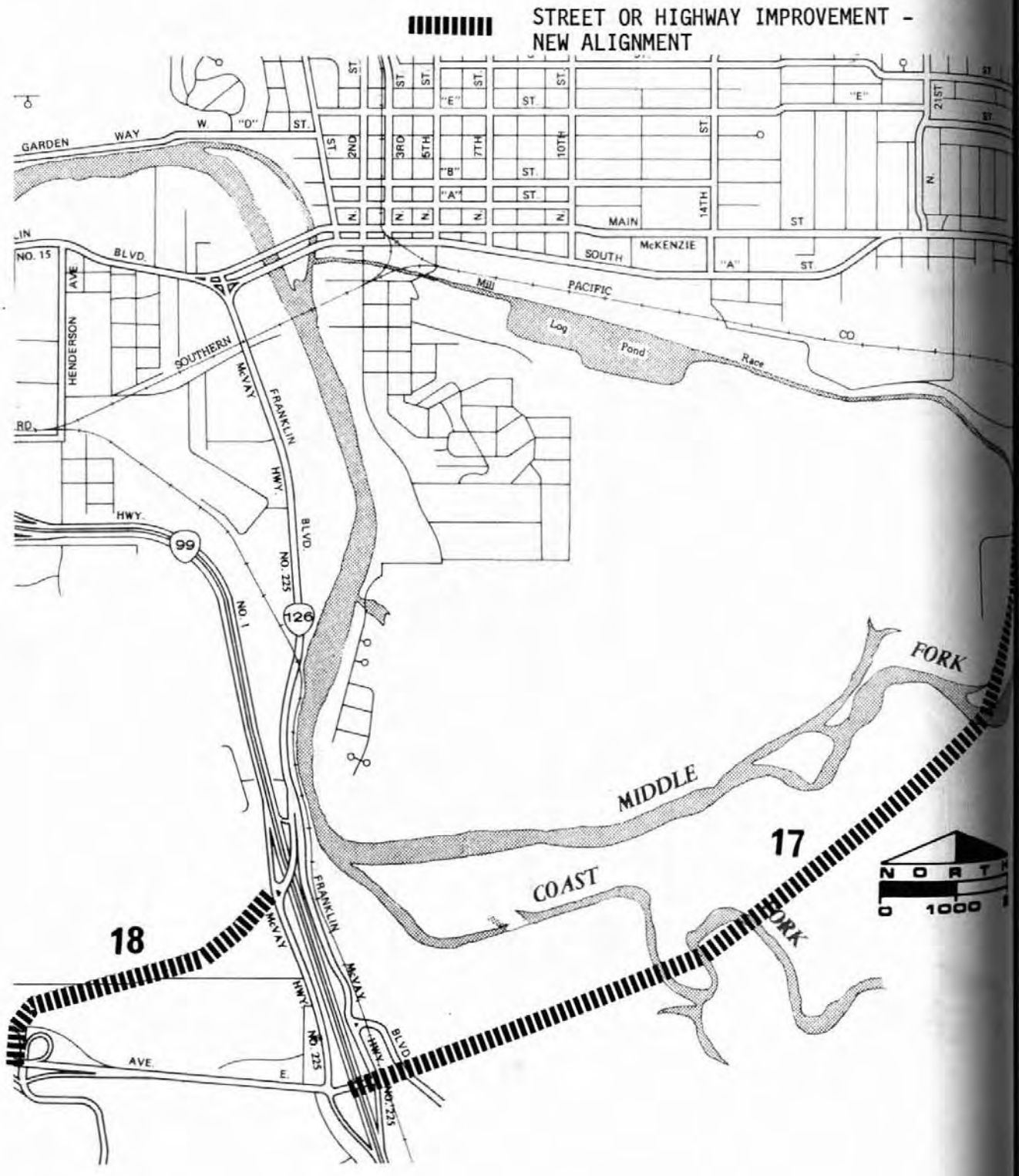


TABLE 8

McVAY HIGHWAY CORRIDOR

Project	Project Description	Cost* $(000) Right-of-Way	Structure	Grading, Paving And Signals	Total Public Cost
17. 30-30 Connector - Main Street to McVay	2 lane arterial	$320	$1,512	$799	$2,631
18. Bloomberg Connector - McVay to 30th	2 lane arterial	10	380	92	482
	CORRIDOR TOTALS:	$330	$1,892	$891	$3,113

* 1977 Dollars

TABLE 9: NON-CORRIDOR STREET AND HIGHWAY PROJECTS

Project*	Description	Project Justification: Existing Problems	Future Overloads	Re-Route Arterial Traffic	Truck Traffic	Construct to City Standards	Implement Bicycle Lanes/Routes	Collector for Future Development
EUGENE								
19. Terry Street-11th Avenue to Barger	2 lane arterial							X
20. Bertelsen-Bailey Hill to 11th Ave.	2 lane arterial		X			X	X	
21. 30th & Hilyard	Intersection improvement and 4 lane arterials	X	X				X	
22. Barger Drive & Belt Line Intersection	Turn refuges		X					
23. Pearl-High Connector	2 lane arterial	X		X			X	
24. Crescent/Green Acres - Coburg Road to Delta Highway	2 lane arterial		X			X		
25. Chambers Street - 6th Avenue to 18th Avenue	Widen/restripe to 4 lanes - Major intersection improvements							
26. Country Club-Centennial to Delta					X	X		
27. Cal Young/Willagillespie - Gilham to Delta					X	X		
28. Elmira Road - Hwy. 99 to Bertelsen					X	X		
29. Willamette Street - Coachman to 52nd					X	X		

TABLE 9: NON-CORRIDOR STREET AND HIGHWAY PROJECTS

Project	Description	Project Justification: Existing Problems	Future Overloads	Re-Route Arterial Traffic	Truck Traffic	Construct to City Standards	Implement Bicycle Lanes/Routes	Collector for Future Development
EUGENE (Continued)								
30. Highway 99 - Roosevelt to Barger Avenue						X	X	
31. Danebo Street- W. 11th Avenue to Royal Avenue					X	X		
32. Fox Hollow Road - 43rd to Donald						X	X	
33. Lorane Highway - 29th to Chambers						X	X	
34. 24th Avenue - Willamette to Amazon Parkway	Intersection Improvements		X					
35. 18th-19th Couplet - Willamette to Hilyard	One-way couplet		X					
36. Hilyard/Patterson - Broadway to 13th	Remove Parking/Restripe to 3 lanes		X					
37. Maple Street - Roosevelt to Elmira						X	X	
38. Eugene CBD Projects								
6th-7th Avenues - High to Washington	Widen to 4 lanes							
W. 11th Ave. - Oak to Charnelton	Remove Parking/Stripe 4 lanes							
E. 13th Ave. - Willamette to High	Remove Parking/Stripe 3 lanes	X	X					
W. 15th Ave. - Lincoln to Willamette	Widen to 4 lanes							
Oak Street - E. 13th to E. 11th	Remove Parking/Stripe 3 lanes							

TABLE 9: NON-CORRIDOR STREET AND HIGHWAY PROJECTS

Project	Description	Project Justification: Existing Problems	Future Overloads	Re-Route Arterial Traffic	Truck Traffic	Construct to City Standards	Implement Bicycle Lanes/Routes	Collector for Future Development
SPRINGFIELD								
39. Q Street - Eugene-Springfield Hwy to 19th Street	4 lane arterial		X			X		
40. Marcola Road - 19th Street to McKenzie River	4 lane arterial					X		
41. N. 42nd St.-Main St. to Marcola Rd.	4 lane arterial				X	X	X	
42. Gateway Boulevard - Harlow to Beltline	4 lane arterial/ turn refuges				X	X		
43. Olympic Street-28th St. to 42nd St.	4 lane arterial				X	X		
44. Centennial Boulevard - 28th St. to 42nd Street	4 lane arterial					X		X
45. Mohawk Boulevard - Centennial Boulevard to Eugene-Springfield Highway	6 lane arterial	X	X					
46. 2nd-3rd Connector - Eugene-Springfield Hwy. & 2nd-3rd	2 lane connector and signal	X						
47. Main Street and Central Business District	Signal improvements		X					

TABLE 10 - STREET AND HIGHWAY NETWORK PROJECTS

Project	Description	Cost in 1977 Dollars $(000) Right-of-Way	Structures	Grading, Paving, & Signals	Assess.	Total Project	Total Public Cost*
EUGENE EAST-WEST CORRIDOR							
1. 6th & 7th Freeway***							
I-105 to Garfield	6 lane freeway	$ 9,691	$36,134	0	-	$45,825	$45,825
Garfield to W. 11th	4 lane freeway	4,024	18,452	$6,454	-	28,930	28,930
	TOTAL:	$13,715	$54,486	$6,454	-	$74,755	$74,755
2. Roosevelt Blvd.							
Garfield to Hwy. 99	2-4 lane arterial	-	-	$ 336	$198	$ 534	$ 336
Highway 99 to Maple	2-4 lane arterial	-	-	98	215	313	98
Maple to Belt Line	2-4 lane arterial	$373	-	568	320	1,261	941
Belt Line to Terry	2-4 lane arterial	-	-	92	254	346	92
	TOTAL:	$373	-	$1,094	$987	$2,454	$1,467
3. W. 18th Avenue Intersections							
Lincoln	Restripe to 4 lanes and		-		-		
Jefferson	major intersection		-		-		
Friendly	improvements: widening,		-		-		
Polk	turn refuges, signal		-		-		
Chambers	revisions		-		-		
Arthur			-		-		
City View			-		-		
	TOTAL:	$334	-	$1,729	-	$2,063	$2,063
4. Roosevelt Overpass							
Roosevelt Blvd. to N.W. Expressway	2 lane overpass	-	$560	$460	-	$1,020	$1,020
5. Bailey Hill Road							
W. 11th Avenue to 6th-7th Freeway	2 lane arterial	$95	-	$102	$197	$394	$197
6. Buck Street							
W. 18th Avenue to W. 11th Avenue	2 lane arterial	$82	$127	$168	$186	$563	$377
7. Highway 99 & Roosevelt Blvd.	Intersection improvements	**	**	**	**	**	**
	CORRIDOR TOTALS:	$14,599	$55,173	$10,007	$1,370	$81,249	79,879

* Total public cost equals total project cost minus assessable costs.
** Project included as part of Project No. 2 and Project No. 30 - Highway 99.
*** Widening 6th & 7th Avenues from I-105 to Garfield to 4 lanes is recommended as an interim project.

TABLE 10 - STREET AND HIGHWAY NETWORK PROJECTS (CONTINUED)

Project	Description	Cost in 1977 Dollars $(000) Right-of-Way	Structures	Grading, Paving, & Signals	Assess.	Total Project	Total Public Cost*
RIVER ROAD CORRIDOR							
8. River Road Chambers Connector to Wilkes Drive	4 lane arterial (with turn refuges & intersection improvements)	$1,000	-	$2,980	-	$3,980	$3,980
9. Chambers Connector River Road to 6th-7th	4 lane arterial	3,043	2,797	1,941	-	7,781	7,781
10. North Delta Extension Delta Highway to Wilkes	2 lane arterial	210	4,420	593	-	5,223	5,223
11. Northwest Expressway North & South Extensions	2 lane arterial	-	-	245	-	245	245
	CORRIDOR TOTALS:	$4,253	$7,217	$5,759	-	$17,229	$17,229
EUGENE DOWNTOWN WESTSIDE CORRIDOR							
12. I-105 Ramps/Lincoln-Charnelton Couplet							
New Ramps - I-105 to Lincoln-Charnelton @ 8th	4 lane structure	$2,726	$5,086	$123	-	$7,935	$7,935
Lincoln-Charnelton Couplet	One-way couplet	-	-	331	-	331	331
Washington-Jefferson - 7th to 13th	Close to thru traffic	-	-	-	-	-	-
	CORRIDOR TOTALS:	$2,726	$5,086	$454	-	$8,266	$8,266

TABLE 10 - STREET AND HIGHWAY NETWORK PROJECTS (CONTINUED)

Project	Description	Cost in 1977 Dollars $(000) Right-of-Way	Structures	Grading, Paving, & Signals	Assess.	Total Project	Total Public Cost*
FERRY STREET BRIDGE/COBURG ROAD CORRIDOR							
13. Ferry Street Bridge	6 lane structure(s)	-	$4,284	-	-	$4,284	$4,284
14. Coburg Road							
Broadway to Ferry St. Bridge	6 lane arterial	-	$1,258	$214	-	$1,472	$1,472
Ferry Street Bridge to I-105	6 lane arterial	-	-	145	-	145	145
15. Coburg Road & Oakway Road	Major intersection improvements	50	-	250	-	300	300
	CORRIDOR TOTALS:	$50	$5,542	$609	-	$6,201	$6,201
FRANKLIN BOUELVARD CORRIDOR*							
16. Franklin Boulevard Intersections							
Broadway	Major intersection	-	0	$52	-	$52	$52
Patterson	improvements	$98	-	21	-	119	119
Hilyard		-	-	-	-	-	-
11th Avenue		-	-	15	-	15	15
Agate		-	-	28	-	28	28
	CORRIDOR TOTALS:	$98	-	$116	-	$214	$214
McVAY HIGHWAY CORRIDOR							
17. 30th-30th Connector							
30th Avenue to Main Street	2 lane arterial	$320	$1,512	$799	-	$2,631	$2,631
18. Bloomberg Connector							
McVay Highway to LCC	2 lane arterial	10	380	92	-	482	482
	CORRIDOR TOTALS:	$330	$1,892	$891	-	$3,113	$3,113

TABLE 10 - STREET AND HIGHWAY NETWORK PROJECTS (CONTINUED)

Project*	Description	Cost in 1977 Dollars $(000) Right-of-Way	Structures	Grading, Paving, & Signals	Assess.	Total Project	Total Public Cost*
OTHER PROJECTS - EUGENE							
19. Terry Street 11th Avenue to Barger	2 lane arterial	-	-	$1,072	$1,068	$2,140	$1,072
20. Bertelsen Bailey Hill to 11th Avenue	2 lane arterial	-	-	752	550	1,302	752
21. 30th & Hilyard Amazon Parkway - 29th to Alder	4 lane arterial	-	-	443	-	443	443
Hilyard - 29th to 34th	4 lane arterial	-	-	346	-	346	346
22. Barger & Beltline	Turn refuges	-	-	199	-	199	199
23. Pearl-High Connector	2 lane arterial	-	-	468	-	468	468
24. Crescent/Green Acres Coburg Road to Delta Hwy.	2 lane arterial	147	-	648	645	1,440	1,072
25. Chambers Street 6th Avenue - 18th	Widen/restripe to 4 lanes - major intersection improvements	68	-	731	-	799	799
26. Country Club - Centennial to Delta		281	-	583	662	1,526	864
27. Cal Young/Willagillespie - Gilham to Delta		287	-	251	349	886	537
28. Elmira Road - Hwy. 99 to Bertelsen		33	-	274	518	824	307

TABLE 10 - STREET AND HIGHWAY NETWORK PROJECTS (CONTINUED)

Project	Description	Cost in 1977 Dollars $(000) Right-of-Way	Structures	Grading, Paving, & Signals	Assess.	Total Project	Total Public Cost*
OTHER PROJECTS - EUGENE (CONTINUED)							
29. Willamette Street - Coachman to 52nd		$171	-	$124	$235	$530	$295
30. Highway 99 - Roosevelt to Barger		100	-	1,138	476	1,714	948
31. Danebo - W. 11th Avenue to Royal		250	-	471	981	1,702	721
32. Fox Hollow - 43rd to Donald		-	-	116	1,009	1,125	116
33. Lorane Highway - 29th to Chambers		-	-	197	1,223	1,420	197
34. 24th Avenue							
24th & Willamette	Intersection improvement	-	-	50	-	50	50
24th & Amazon Parkway	Intersection improvement	-	-	50	-	50	50
35. 18th-19th Couplet - Willamette to Hilyard	One-way couplet	7	-	335	-	362	362
36. Hilyard/Patterson							
Broadway to 13th	Remove parking/ restripe to 3 lanes	-	-	-	-	-	-
37. Maple Street - Roosevelt to Elmira		-	-	51	42	93	51
38. Eugene CBD Projects							
6th-7th Aves.- High to Washington	Widen to 4 lanes						
W. 11th Ave.- Oak to Charnelton	Remove parking/ stripe 4 lanes						
E. 13th Ave.- Willamette to High	Remove parking/ stripe 3 lanes	360	-	770	-	1,130	1,130
W. 13th Ave.- Lincoln to Willamette	Widen to 4 lanes						
Oak Street - E. 13th to E. 11th	Remove parking/ stripe 3 lanes						

TABLE 10 - STREET AND HIGHWAY NETWORK PROJECTS (CONTINUED)

Project	Description	Cost in 1977 Dollars $(000) Right-of-Way	Structures	Grading, Paving, & Signals	Assess.	Total Project	Total Public Cost*
OTHER PROJECTS - SPRINGFIELD							
39. Q Street Eugene-Springfield Highway to 19th Street	4 lane arterial	$90	-	$500	$400	$990	$590
40. Marcola Road - 19th Street to McKenzie River	4 lane arterial	80	-	400	400	880	480
41. N. 42nd Street							
Main to Railroad Tracks	4 lane arterial	70	-	200	200	470	270
Railroad to Marcola Road	4 lane arterial	-	-	400	100	500	400
42. Gateway Boulevard-Harlow to Belt Line	4 lane arterial (with turn lane)	-	-	-	200	200	0
43. Olympic Street - 28th to 42nd	4 lane arterial	-	-	-	500	500	0
44. Centennial Blvd. - 28th to 42nd	4 lane arterial	-	-	200	600	800	200
45. Mohawk Boulevard - Centennial Bvd. to Eugene-Springfield Highway	6 lane arterial	-	-	1,000	-	1,000	1,000
46. 2nd-3rd Connector Eugene-Springfield Highway 2nd & 3rd Streets	2 lane connector and signals	-	-	200	-	200	200
47. Main Street & Central Business District	Signal improvements	-	-	350	-	350	350

FIGURE 10
RECOMMENDED STREET & HIGHWAY NETWORK

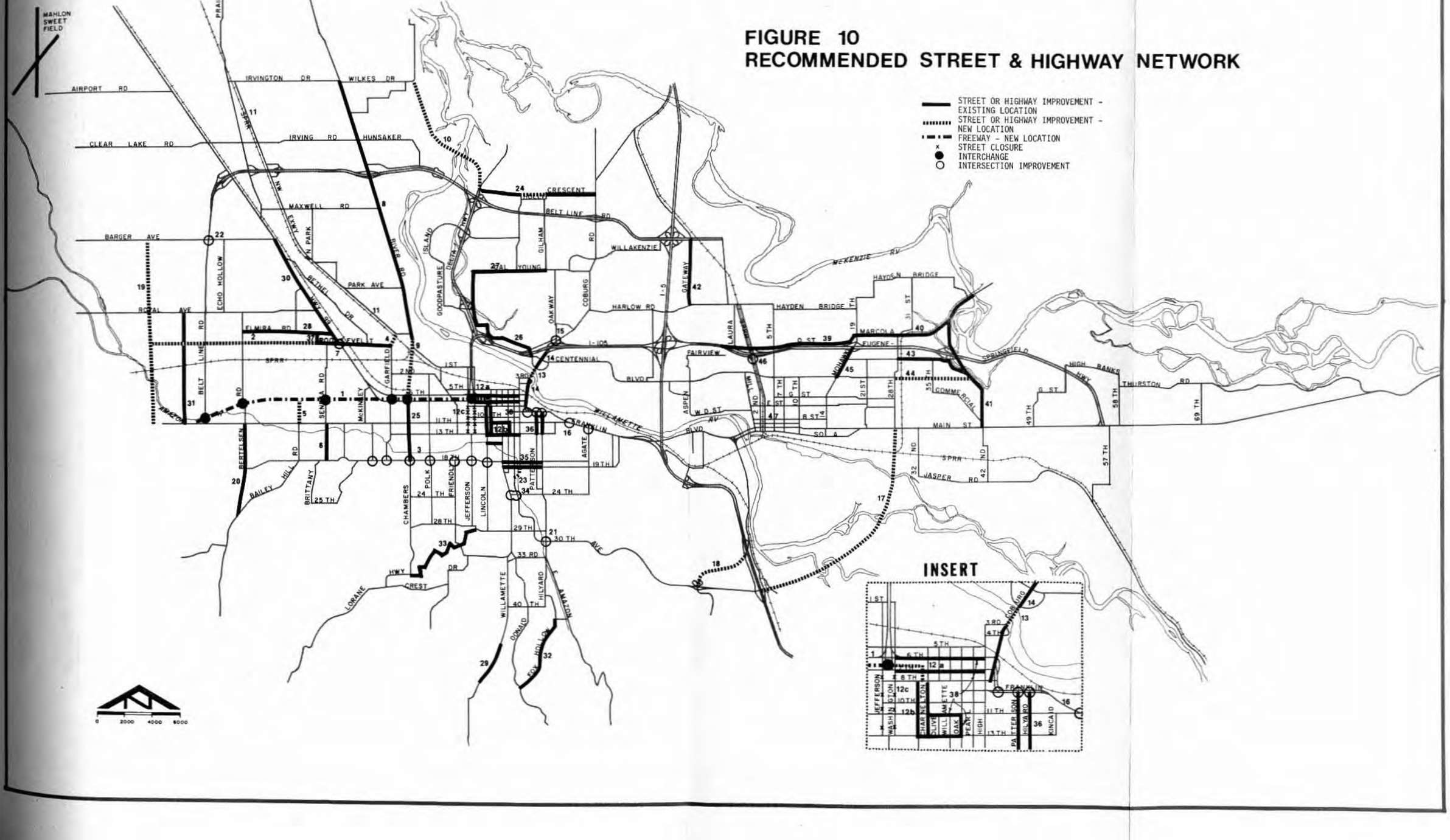


TABLE 11
STREET AND HIGHWAY PROJECTS

PHASE I (1978-1990)

Project	Public Cost 1977 Dollars $(000)
EUGENE EAST-WEST CORRIDOR	
6th-7th Avenues - I-105 to Garfield - Widen to 4 lanes	$ 2,085
6th-7th Freeway - Right-of-way purchase	13,715
Roosevelt Boulevard - Garfield to Belt Line - 2-4 lane arterial	1,375
W. 18th Avenue - All major intersections - improvements	2,063
Roosevelt Overpass - 2 lane structure	1,020
Bailey Hill Road - W. 11th to 6th-7th Freeway - Right-of-way purchase	95
Buck Street - W. 18th to W. 11th - Right-of-way purchase	82
Highway 99 & Roosevelt Boulveard - Intersection improvement	*
CORRIDOR TOTAL:	$20,435
RIVER ROAD CORRIDOR	
River Road - Chambers Connector to Wilkes - Widen to 4 lanes	$3,980
Chambers Connector - Right-of-way purchase	3,043
North Delta Extension - Right-of-way purchase	210
Northwest Expressway - North & South Extensions	245
CORRIDOR TOTAL:	$7,478
EUGENE DOWNTOWN WESTSIDE CORRIDOR	
I-105 Ramps to Lincoln-Charnelton @ 8th - Right-of-way purchase	$2,726
FERRY STREET BRIDGE/COBURG ROAD CORRIDOR	
Coburg Road - 7th Avenue to Bridge - Add northbound lane	$ 736
Coburg Road & Oakway Road - Intersection improvement	300
CORRIDOR TOTAL:	$1,036
FRANKLIN BOULEVARD CORRIDOR	
Franklin Blvd.-Broadway to Walnut-Major intersection improvements	$214

* Project cost included in Roosevelt Boulevard and Highway 99 projects.

TABLE 11

STREET AND HIGHWAY PROJECTS

PHASE I (1978-1990), Continued Project	Public Cost 1977 Dollars $(000)
McVAY HIGHWAY CORRIDOR	
30th-30th Connector - Right-of-way purchase	$320
Bloomberg Connector - 2 lane arterial	482
CORRIDOR TOTAL:	$802
NON-CORRIDOR PROJECTS - EUGENE	
Bertelsen Road - Bailey Hill to W. 11th Avenue	$ 752
30th & Hilyard - Widening and intersection improvement	789
Barger & Belt Line - Intersection improvement	199
Crescent/Green Acres - Coburg Road to Delta Highway	1,072
Country Club Road - Centennial to Delta	864
Cal Young/Willagillespie - Gilham to Delta	537
Elmira Road - Highway 99 to Bertelsen	307
Willamette - Coachman to 52nd	295
Highway 99 - Roosevelt to Barger	948
Danebo Avenue - W. 11th to Royal Avenue	721
Fox Hollow - 43rd to Donald	116
Lorane Highway - 29th to Chambers	197
24th Ave. - Willamette/Amazon Parkway - Intersection improvements	100
18th-19th Couplet - Willamette to Hilyard	362
Maple Street - Roosevelt to Elmira	51
Eugene Central Business District Projects	1,130
EUGENE NON-CORRIDOR TOTAL:	$8,440
NON-CORRIDOR PROJECTS - SPRINGFIELD	
Q Street - Eugene-Springfield Highway to 19th	$ 590
42nd Street - Main Street to Railroad	270
Gateway Boulevard - Harlow to Belt Line	0
Olympic Street - 28th to 42nd	0
2nd-3rd Connector - Eugene-Springfield Highway @ 2nd-3rd	200
Centennial Blvd - 28th to 42nd	200
SPRINGFIELD NON-CORRIDOR TOTAL:	$1,260
1978-1990 TOTAL **	$42,391

** Right-of-way purchase may extend beyond 1990.

TABLE 12
STREET AND HIGHWAY PROJECTS

PHASE II (1990-2000) Project	Public Cost 1977 Dollars $(000)
EUGENE EAST-WEST CORRIDOR	
6th-7th Freeway - Construction	$61,040
Roosevelt Boulevard - Belt Line to Terry	92
Bailey Hill Road - W. 11th to 6th-7th Freeway - Construction	102
Buck Street - W. 18th to W. 11th - Construction	295
RIVER ROAD CORRIDOR	
Chambers Connector - Construction	$4,738
North Delta Extension - Construction	5,013
EUGENE DOWNTOWN WESTSIDE CORRIDOR	
I-105 Ramps to Lincoln & Charnelton @ 8th - Construction	$5,209
Lincoln-Charnelton Couplet - 8th to 13th	331
FERRY STREET BRIDGE/COBURG ROAD CORRIDOR	
Coburg Road - Bridge to 8th Avenue - Add southbound lane	$ 736
Ferry Street Bridge - New 3 lane structure	4,284
Coburg Road - I-105 to Bridge - Add north & southbound lanes	145
McVAY HIGHWAY CORRIDOR	
30th-30th Connector - Construction	$2,311
NON-CORRIDOR PROJECTS - EUGENE	
Terry Street - W. 11th to Barger	$1,072
Pearl-High Connector	468
Chambers Street - 6th Avenue to 18th Avenue	799
NON-CORRIDOR PROJECTS - SPRINGFIELD	
Marcola Road - 19th to McKenzie River	480
42nd Street - Railroad to Marcola Road	400
Mohawk Boulevard - Widen to 6 lanes, ramp improvements	1,000
Main Street - Central Business District signal improvements	350
1990-2000 TOTAL:	$88,932
1978-2000 TOTAL:	$131,323

Policies which specifically maximize the probability that Level of Service "E" will be prevented, without radically altering mobility or accessibility, were discussed in the preparation of the Street and Highway Element. Some of these policies, however, conflict with policies that may help maximize the likelihood that the transit goal will be met. The policies recommended for adoption in the Transportation Plan are compatible with each other to the extent possible, but must be considered in the context of their relationship to the Metropolitan Area General Plan. The recommended goals may sacrifice the maximum opportunity to achieve one particular modal goal, but should encourage the best overall transportation system development and are as compatible as can be expected with other goals, objectives and policies for a livable community.

4. Low and Non-Capital Strategies

Recommendation
Following adoption of the Transportation Plan, a comprehensive Transportation Systems Management Program (TSM) should be developed that outlines low and non-capital strategies that will help solve or alleviate future traffic problems.

The program should be submitted for public review and adoption by elected officials.

Discussion: In reality, this plan contains many TSM actions itself. Any policies or projects that use low cost means of achieving greater efficiency on the existing transportation system are TSM strategies. These policies and projects will form the foundation for the Eugene-Springfield area Transportation Systems Management program. Since the long-range direction set by the Transportation Plan will influence short-range, low cost transportation actions, and since federal regulations require preparation and adoption of a TSM, a separate report should be compiled after Plan adoption.

ELEMENT V

Other Modes

Other Modes

BICYCLE

The Bicycle sub-element of the Transportation Plan should answer the following questions:

1. *What facilities are required to provide a system of safe, convenient, and attractive bikeways that will function as an integral part of the overall transportation system?*

2. *What actions and facilities are required to provide adequate physical support facilities and support service programs for bicycle transportation?*

Although Lane County, Eugene and Springfield have not adopted an area-wide goal for bicycle usage, in 1975 they did adopt the Metropolitan Bikeway Master Plan. The plan included policies and recommendations intended to promote bicycling, and a facility plan which calls for completion of approximately 175 miles of bikeways throughout the metropolitan area by 1990. The Metropolitan Bicycle Committee is conducting an update of the bikeway plan concurrently with preparation of the Transportation Plan.

RECOMMENDATIONS

- The Metropolitan Bikeway Master Plan, including any revisions yet to be adopted, should serve as the bicycle sub-element of the Transportation Plan.

  Discussion: Several policies of Element II pertain to bicycling and the provision of bikeways, but the Bikeway Master Plan examines policies and facility requirements in much greater detail than is possible in this document. The most positive method of achieving bicycle ridership goals or simply increasing bicycle usage is the implementation of the Metropolitan Bikeway Master Plan.

- Any conflicts between the bikeway plan and the proposed street and highway element should be resolved prior to adopting both a revised Bikeway Master Plan and the Transportation Plan.

  Discussion: A large percentage of the bikeway mileage in the Bikeway Master Plan is on the existing or proposed street network, and implementation of the street and highway projects of Element IV will include construction of nearly all on-street bikeways by 1990. Major exceptions are:

  Project No. 435* - Lawrence/Lincoln Couplet, 5th Avenue to 18th Avenue -

  The Downtown Westside corridor treatment will change the character of Lincoln Street from 5th to 15th after 1990 and make it a more heavily travelled arterial, causing it to be less desirable as a bicycle route. Washington-Jefferson is a possible alternative route.

  Project No. 480 - 18th Avenue, Bailey Hill Road to Agate Street -

  Increased traffic on 18th Avenue will require a four lane facility between City View and Willamette. Lack of right-of-way will preclude on-street bike lanes. Since 18th Avenue is a major bicycle commuter route, an alternative route must be found.

  The one-way couplet proposed on 18th and 19th between Willamette and Hilyard will require revision to the bikeway plan.

  Project No. 704 - 30th Avenue Extension, 30th Avenue to 30th Street -

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* Metropolitan Bikeway Master Plan project number.

The 30th-30th Connector is not proposed for construction until after 1990, while the bikeway is programmed before 1990.

Project No. 100 - Roosevelt Bikeway - Garfield Street to Greenway Bridge -

The Roosevelt Overpass shown in the Street and Highway Element will accommodate both vehicle and bicycle traffic, but on a slightly different alignment than the bikeway plan presumes.

- Timing of street improvements and bikeways should be coordinated to insure that:

  A. On-street bikeways are completed in a timely fashion; and
  B. Major bikeway projects, such as overpasses or bridges, can take advantage of the cost savings resulting from a joint highway/bikeway project.

PARATRANSIT*

The City of Eugene has adopted a specific goal to accommodate future trips within the city by paratransit. In pursuit of that goal, Eugene staff prepared a technical report which detailed actions applicable only to the City of Eugene. Since Lane County's transportation goals include reducing auto-driver trips by substituting modes similar to those specified by Eugene (bicycling, paratransit and walking), this sub-element treats only actions that can be considered appropriate for the area as a whole.

The paratransit sub-element of the adopted Transportation Plan should answer the following questions:

1. *What programs and incentives should be implemented to promote carpooling and other forms of paratransit?*

2. *What actions should be taken to reduce institutional barriers to paratransit?*

Various regulations and institutional barriers have inhibited development of paratransit:

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* Paratransit emcompasses various types of ride sharing programs, such as carpooling, vanpooling, taxi service and subscription

- Federal policy favors giving private industry full opportunity to participate in paratransit operations, but the Labor Protective Provision of Section 13(C) of the National Mass Transportation Act is a formidable deterent to use of federal subsidies.

- It is unclear whether paratransit is regarded as falling within the term "mass transit" as used in Oregon Transit District enabling legislation, ORS 267 - which leaves undetermined LTD's responsibilities in the area of paratransit.

- At present, no governmental agency has undertaken the continuing coordination and implementation of paratransit services.

- At present, the Eugene City Code prohibits: 1) shared rides in taxi cabs; and 2) "cruising" (taxis driving about town in search of customers instead of being restricted to a central waiting area).

- Paratransit operators have encountered increasing difficulty in securing insurance coverage at reasonable rates and this problem is projected to become more acute.

RECOMMENDATIONS

- Eugene and Lane County should implement a carpool program. There are about 1,500 city/county employees working in Eugene's downtown area. This number is sufficient to justify a carpool program. Actions to facilitate carpooling should include:

  Assignment of staff to coordinate a city/county carpool program, probably through the use of a computer matching service.

  Provision of preferential parking spaces for carpools.

  Investigation of the provision of city and county sedans and passenger vans, not committed to other uses during commuting hours, as carpool vehicles.

  Consideration of the use of Federal Aid Urban funds as one source of funding to support the project in Fiscal Year 1979.

- Following establishment of the city/county program, carpooling should be extended to other major employers in the area. The following major employment centers are primary candidates of carpool-vanpool projects:

University of Oregon
Sacred Heart Hospital
Eugene central business district

- The Eugene City Council should take the following actions to reduce institutional barriers:

  Amend its taxi cab rate structure to permit shared rides, at the option of the first passenger, within a designated area to be determined in cooperation with the cab companies. A flat fare per passenger could be charged to offer cab operators incentive to pick up extra passengers. This would serve both to protect their revenues, and reduce individual rider costs compared with the exclusive ride.

  Consider amending the City Code to allow taxi cab cruising.

  Introduce legislation to amend ORS 267 to enable transit districts to contract for services.

- Policies promoting increased auto occupancy and encouraging paratransit are contained in Element II (Policies), and should be implemented as part of the comprehensive set of actions to guide development of the overall transportation system.

PEDESTRIAN

The pedestrian sub-element of the adopted Transportation Plan should answer the following question:

> *What actions should be taken to enhance pedestrian travel, both as a separate mode of transportation and as a "feeder" system for most other modes?*

Pedestrian facilities include malls, sidewalks, pedestrian bridges, and pedestrian/bicycle paths. These facilities are important in serving several types of trips, as well as providing access to other modes of transportation, such as transit.

Lane County and the cities of Eugene and Springfield have ordinances and programs directed at providing pedestrian facilities, especially sidewalks. However, a more active role will be needed to provide better and more extensive facilities in order to achieve the adopted transportation planning goals.

RECOMMENDATIONS

- A commitment should be made to the development of sidewalk programs in established neighborhoods.

- Neighborhood participation in the planning of sidewalks, bicycle/pedestrian paths and other pedestrian places in their areas should be encouraged.

- Priority attention should be given to the completion of short gaps in otherwise existing sidewalk systems.

- All pedestrian facilities should be designed to provide reasonable access for physically handicapped persons.

- Primary consideration should be given to ease of pedestrian circulation in all downtown Eugene and Springfield development and redevelopment. Examples of these considerations include mall extensions, sidewalk widening, and pedestrian/vehicle grade separation.

- Capital improvement programs should be developed in conjuction with neighborhood refinement plans for building sidewalks (or alternative facilities) in areas of greatest need.

- Policies relating to pedestrian facilities are contained in Element II (Policies) and should be implemented as a part of the comprehensive set of actions to guide development of the overall transportation system.

ELEMENT VI

Parking

Parking

The parking element of the adopted Transportation Plan should answer the following questions:

1. *What level of service should be provided for the automobile user when parking in major activity centers?*

2. *What amount of parking, consistent with other transportation goals, needs to be provided in major activity centers to meet forecasted demands?*

3. *What parking management policies should be implemented to promote more efficient use of available parking space and to address associated parking problems?*

RECOMMENDATIONS

1. Level of Service*
   The minimum acceptable level of service should be provided for the auto user when parking in or near major activity centers.

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* Three levels of service are generally identified for providing parking supply. From the highest level of service to lowest, they are: desirable, tolerable, and minimum.

The minimum acceptable level of service is characterized by an adequate supply to meet most customer and employee parking needs. Some difficulty may occur in finding a parking place, but space is available within a reasonable distance of the destination. Since parking space will be at a premium, employee parking must be carefully managed to insure that accessibility is maintained for shoppers, customers, and clientele.

2. Parking Supply

The parking forecasts are based on the transit, paratransit, bicycle and pedestrian goals as well as the population and employment assumptions for the major activity centers. The minimum level forecasts and needs are:

	2000 Forecasted Space Requirements (minimum)	Existing Supply	2000 Remaining Needs
Eugene Downtown	15,000	8,300	6,700 spaces
Springfield Downtown	4,400	2,250	2,150 spaces
U. of O.	10,000	2,000*	8,000 spaces
Sacred Heart	2,300	1,070*	1,230 spaces

Eugene, Springfield, the University of Oregon, and Sacred Heart should develop a long-range implementation and financing schedule to provide the minimum level of parking required by the year 2000.

As one of the most critical areas of parking need, the University of Oregon should take positive action to enact the parking policies of the Campus Transportation Plan which call for the provision by the U. of O. of off-street parking, at cost, for both students and employees. As a phased program of on-street parking removal occurs in the neighborhoods surrounding the campus (as per policy #31 of Element II), the City of Eugene and the University of Oregon should cooperate in monitoring the effects of demand changes upon other parking facilities.

3. Policies

Policies that will help achieve greater efficiency in the use of available parking space, and address existing parking problems, such as on-street parking near downtown Eugene and the U of O, are contained in Element II (Policies), and should be implemented as part of the comprehensive set of actions to guide development of the overall transportation system.

* Includes off-street parking only.

ELEMENT VII

Intercity Transit

Intercity Transit

Ideally, an intercity transit element should consider future intercity rail and bus ridership forecasts. The level of future ridership is subject to external factors well beyond the influence of local governments, however, and forecasting must be performed on a statewide, or at least valleywide, basis rather than through a metropolitan transportation study. The Oregon Department of Transportation currently has no official forecasts for intercity travel. Consequently, from the perspective of this study, an intercity transit element is limited to the consideration of terminals and terminal locations.

The intercity transit element of the adopted Transportation Plan should answer the following question:

> *Where should future intercity transit terminals in the metropolitan area be located?*

Actions to encourage the growth of intracity transit in the metropolitan area are perhaps the most positive steps that can be taken currently by local officials to promote travel by intercity surface transit. Intercity transit in the Willamette Valley will be enhanced by provision of better collection and distribution systems at major cities in the Valley. As better local transit service is provided in western Oregon, a natural byproduct should be an increase in intercity transit travel to and from Eugene-Springfield. The importance of

terminal locations should not be overlooked, though, and locations should be consistent with community goals and objectives.

Downtown Eugene locations for a rail terminal and a combined intercity bus terminal best fit the goals of increasing local transit ridership and strengthening the downtown area. The benefits in passenger comfort and convenience of a combined intercity and intracity bus terminal are desirable, but site problems and logistics may be prohibitive. Further study is necessary to assess fully the feasibility of such a decision.

RECOMMENDATIONS

1. The Oregon Department of Transportation should coordinate its intercity transit planning with urban area transportation studies, so that future statewide plans and policies are developed with due consideration to local adopted goals and policies.

2. The main Eugene-Springfield rail station should remain at, or in close proximity to, its current location. The location of minor stations should be planned in cooperation with Oregon Department of Transportation and state implementation of a Willamette Valley Rail Rapid Transit Service.

3. Intercity bus terminals should be located in proximity to downtown Eugene.

   To facilitate that action, private intercity operators should be encouraged either to remain at their current location or to relocate, if need is shown to another area of the downtown in a shared facility. If relocation is to occur, the Eugene Renewal Agency should investigate the availability of sites near the mall.

4. The feasibility of a combined intercity and intracity bus terminal near the downtown mall should be investigated by Lane Transit District and the Eugene Renewal Agency in consultation with Greyhound and Trailways.

ELEMENT VIII

Financial Analysis

Financial Analysis

This element is a very brief introduction to the current major sources of funds for transit and highways, and an overview of the transportation funding problems to be expected in the future. Transportation needs are based on the recommendations of this plan. Detailed revenue projections were made for six years from FY78 to FY83, but because of the uncertainties involved with long-range financial analysis, only very general assumptions were used to extend revenues from FY84 through FY00. The purpose of this element is not to arrive at actual expenditures and revenue needs, but to determine the general nature of the future expenditure-revenue pattern of this plan.

Analysis concentrates on transit and highways, primarily because of the magnitude of the problems being considered. Funding of lesser modes such as bikeways, paratransit, etc., is almost insignificant by comparison and can best be examined by individual jurisdictions through refinement studies.

TRANSIT

The revenues available to implement the bus rapid transit system are derived from three primary sources: Federal Aid assistance, farebox revenue and local funds.

Federal Aid assistance from the Urban Mass Transportation Administration (UMTA) falls into two categories - capital assistance and

operating assistance. Section 3 grants are administered on a national level by UMTA funds and must be used for capital expenditures, such as bus purchase, shelters, maintenance facilities, and so on. Eighty percent of the capital expenditure is covered by federal money, while the remaining twenty percent is supplied by local sources. Lane Transit District has used Section 3 funds to assist in all new equipment purchases in the past, and it was assumed that the district would continue to be successful in obtaining all section 3 grants needed for future capital purchases.

Section 5 grants are allocated to urban areas on a formula basis and may be used to subsidize operating expenses as well as to purchase equipment. The purpose of this program is to supplement increases in service and is not, however, to replace the local support for the transit system operation. How the funds are used is determined by local officials. The Section 5 monies must be matched equally with local funds. Lane Transit will receive approximately $690,000 during FY77-78. Allocation of Section 5 funds for FY78 through FY80 have been determined by UMTA, and, after adjustment for inflation, will be slightly lower than the FY78 level. Section 5 allocations available from FY81 through Fiscal Year 2000 were assumed to increase at a three percent annual rate.

Federal Aid Urban (FAU) funds are drawn from the Highway Trust fund and allocated on a formula basis to urban areas in the state for use on either highway or transit capital expenditures. Projects are designated by local elected officials. Under current legislation, approximately $700,000 per year will be available to the urban area through FY78-79. It was assumed that 25% of this fund will be used annually for transit expenditures and that the FY77-78 funding level will be extended through Fiscal Year 2000.

State financial assistance to transit in the Eugene-Springfield area is limited at present. For highway projects, it is state policy to fund one-half the local match required for FAU funding. This practice has not been extended to FAU transit projects, but for the revenue forecasts, it was assumed that the state will, in the future, supply one half the required local match (11 percent of the project total) for transit as well as highways. No other state aid was assumed through the study period.

Local funding currently includes farebox revenues and the employer payroll tax revenues. The average fare was assumed to remain at current levels through the study period and it was assumed that ridership will increase at a constant rate between 1978 and 2000 when the transit goal is to be attained.

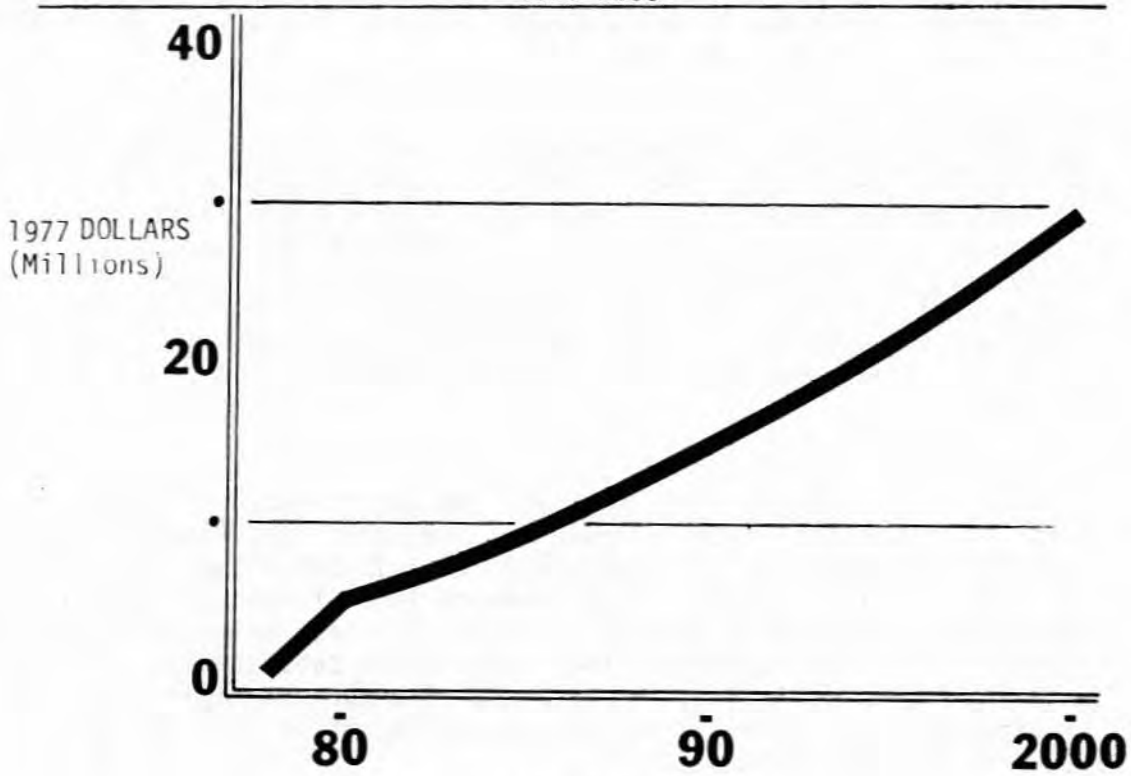
The employer payroll tax is used by Lane Transit District to provide

the remainder of revenues necessary to finance operating deficit. Currently, the District is not imposing the tax at its maximum rate of .0060 of the wages paid by employers subject to the tax. Assuming that no additional revenue sources are forthcoming, it will be necessary to levy the payroll tax at its maximum allowable rate from FY 85 through the study period. The metropolitan area employer payroll tax base was assumed to increase at approximately a 3 percent annual rate.

Forecasted Needs

The Bus Rapid Transit system recommended in this plan was used as an indicator of future transit revenue needs. Facilities and equipment required for that system are shown in Table 2. Figure 11 illustrates the cumulative capital cost of the system (including bus replacement, which is normally considered an operational cost) between 1978 and 2000. A unit cost was used for transit station estimates, but the actual cost of each will vary depending upon its location. The purchase price of buses in the future will depend upon such factors as

FIGURE 11
BUS RAPID TRANSIT SYSTEM
CUMULATIVE CAPITAL EXPENDITURES
1978-2000



federally mandated safety and accessibility features. Both are likely to drive the relative cost of buses upward. For needs estimates current bus acquisition costs were used. All cost estimates are in constant 1977 dollars and no allowance was made to account for inflation. The cost estimates should be considered only a gross approximation of future capital expenditures. Detailed examination of the actual cost requirements will occur in the five year Transit Development Program (TDP) updated annually by Lane Transit District. The TDP is then incorporated into the overall Transportation Improvement Program.

Projected total cost for the capital needs of the Bus Rapid Transit System is approximately $29 million between 1978 and 2000. Annual capital costs are based upon system expansion that occurs at a rate sufficient to accommodate uniform ridership increases until the transit goal is reached, plus replacement of obsolete buses. In reality, capital expenditures may not occur at such a uniform rate, however.

Unlike operation of the automobile, the great majority of all transit operating costs are supported by public funds. Annual operating costs are expected to increase from about $4 million in FY78 to over $13 million in Fiscal Year 2000. Figure 12 illustrates the increase in annual operating costs as the transit system expands and moves from the current conventional local bus system to the full bus rapid transit system at the end of the century. As with the capital estimates, no allowance was made for inflation.

Revenue Forecasts

Detailed revenue projections were performed for FY78 through FY83. Assumptions were stated above for each revenue source available under current policy. FY78-FY83 revenue trends were extended to 2000, although the basis for doing so is somewhat speculative. No allowance was made for inflation in the projections, and revenues are in constant 1977 dollars. Total revenue projections for FY78-FY83 and FY84-FY90 are compared to costs for the same period in Table 13. Farebox revenues and federal operating subsidy projections are illustrated in Figure 12.

Needs vs. Revenues

A comparison of needs, both capital, and operational, of the bus rapid transit system with expected revenues indicates that farebox revenue and federal operating assistance will not support either the existing or future transit system. Some means of local financial support will be needed, even with a tenfold ridership increase between 1978 and 2000. Figure 13 illustrates the annual local subsidy required to operate the system during that period. The current major sources of revenue for the transit district are sufficient to meet the operating subsidy through the mid-1980's.

TABLE 13

BUS RAPID TRANSIT SYSTEM
Revenue Projections, 1978-1990

Source of Funds	Funding Assumptions	Total Revenues FY78-FY83 $(000)*	Total Revenues FY84-FY90 $(000)*
UMTA Section 3	LTD receives 80% funding on all UMTA Section 3 grant applications	$ 6,080	$ 3,639
UMTA Section 5	Allocations increase proportionately with population increase	3,856	5,345
Federal Aid Urban (FAU)	25% of metropolitan FAU funds used for transit capital expenditures	1,233**	1,225
State FAU Match	State provides 1/2 of 22% FAU match	174**	173
Farebox Revenue	25 cent revenue per person trip, ridership increases linearly toward 14% goal	9,878	26,274
TOTAL REVENUES:		$21,221	$36,656
OPERATING AND CAPITAL COSTS:		$41,926	$72,199
LOCAL PUBLIC SUBSIDY REQUIRED:		$20,705	$35,525
EMPLOYER PAYROLL TAX REVENUES:***		$20,827	$33,081
DEFICIT:		-0-	$2,462

* 1977 Dollars
** Includes carryover funds from FY77.
*** Payroll tax levied at maximum allowable rate FY84 through FY90.

FIGURE 12
BUS RAPID TRANSIT SYSTEM
ANNUAL OPERATING EXPENDITURES
(1978-2000)

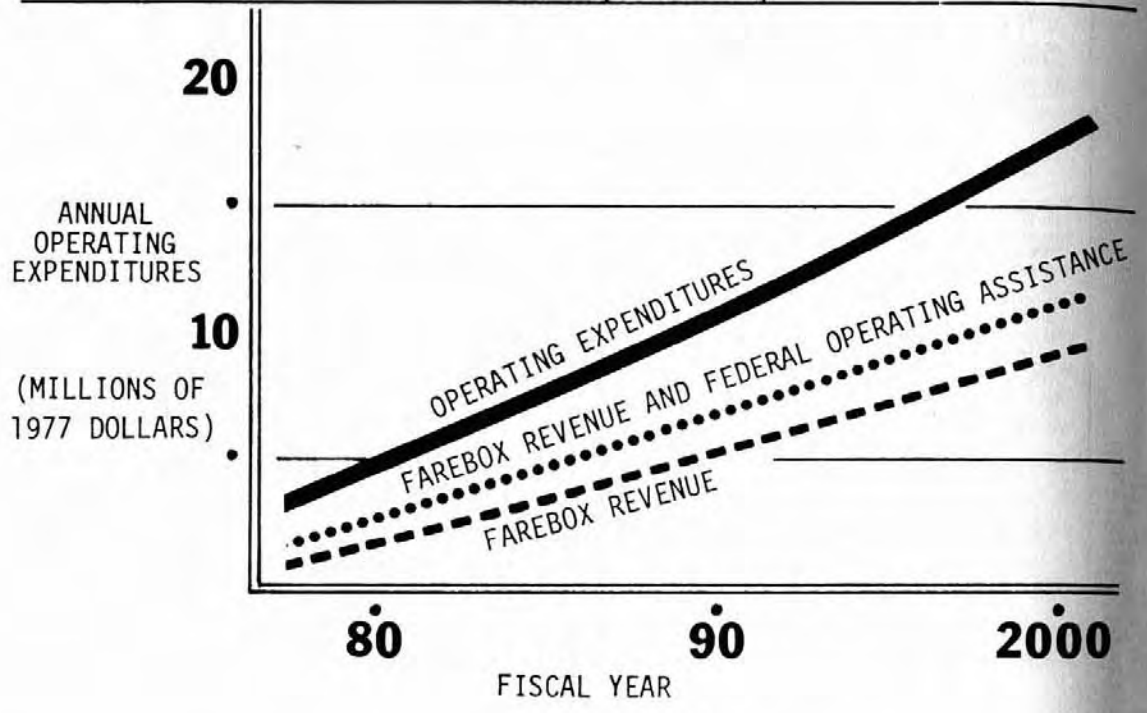
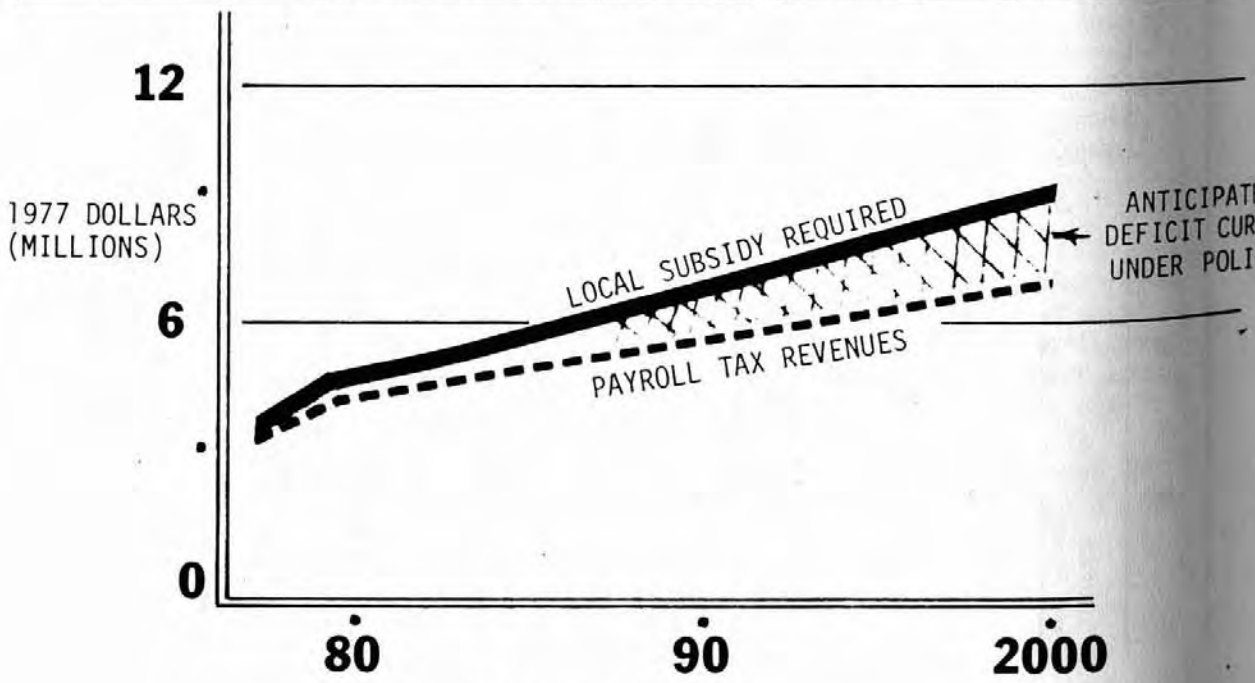


FIGURE 13
BUS RAPID TRANSIT SYSTEM
ANNUAL LOCAL SUBSIDY REQUIRED VERSUS PAYROLL TAX REVENUES
1978-2000



If the transit system is to be capable of accommodating the ridership in future years, however, alternative sources of revenue must be found to meet projected operating costs and to provide local share for capital improvements early in the 1980's. Even assuming a growth in the employer payroll tax base, the payroll tax will be insufficient to provide the required local subsidy. Actions to balance expenditures and revenues fall into four categories:

1. Decrease expenditures by reducing the service provided. This was not considered an option, since service reduction will preclude the attainment of the adopted transit goals.

2. Increase revenues by increasing fares. This was not considered an option either, since significant increases in fare levels nearly always lead to a decrease in ridership and a net decrease in revenues. Large fare increases run counter to the actions required to achieve the transit goal.

3. Increase revenues by increasing federal and state support. State and federal legislation to provide additional funding for capital and operational expenditures will help decrease the expected funding shortfall, but neither source can be expected to eliminate the need for increased local subsidy. Active local support for such legislation represents the action available to local governments in this area of funding.

4. Increase revenues by increasing local support.

Several options for additional revenue sources exist. A special advisory committee to the Lane Transit District Board recently identified an income tax, levied on individuals and corporations, an ad valoreum tax on automobiles, payments in lieu of the employers payroll tax, and local general purpose government financial support programs as potential revenue supplements to the payroll tax. The Transit District Board has supported implementation of the income tax and is preparing to present the issue to the voters in 1978.

STREETS AND HIGHWAYS

The revenues available to implement the recommended street and highway projects are derived from three primary sources: Federal Aid assistance, state assistance and local funds.

Federal Highway Trust fund monies that could potentially be used in the Eugene-Springfield area include the Federal Aid Interstate (FAI), Federal Aid Primary (FAP) and Federal Aid Urban (FAU) categories. The area is technically eligible for FAI funds, but the interstate system

(I-5 and I-105) in Eugene-Springfield is completed. The only likelihood for funds from this source would be through the designation of a facility, such as the new on-off ramps to Lincoln-Charnelton (project number 12) as an extension of the interstate system. Such a designation will be difficult to accomplish, and consequently, no interstate construction funds were assumed for the revenue projections.

Federal Aid Primary Funds are available for use on state highways in the area, but the amount available statewide is extremely small under current federal legislation. Within the state, the use of FAP funds is controlled by the Transportation Commission, and projects must be programmed in the state Six Year Construction Program to be eligible for funding. No projects in the study area are programmed for FAP funds through 1982, and for the revenue projections, none were assumed through FY83.

Federal Aid Urban (FAU) funds are allocated on a formula basis to urban areas in the state. They may be used for projects designated by local officials for arterial streets or for transit capital expenditure, including bus purchases, transfer stations, and shelters. Although a continuation of this category and the level of funding available depends upon future legislation, it is likely that the fund and its modal flexibility will continue. Under current legislation, approximately $700,000 per year will be available to the urban area through FY79. That level was assumed to continue through FY83, but 25 percent of the total was assumed to be earmarked by local officials for transit expenditures rather than street and highway construction.

State assistance to Eugene-Springfield comes in the form of matching funds for Federal Aid programs, transfers of highway user revenues (gasoline tax, license fees, etc), and state bond monies. The Transportation Commission currently uses state revenues to provide the entire local match required for FAI projects and one-half the local match required for FAP and FAU projects. Since no FAI and FAP funds were assumed for 1978-1983, obviously no state funds can be expected in these categories, either. Although lack of sufficient revenue may prevent the state from continuing its matching policy in the future, it was assumed that the current policy would prevail through FY83 and the state would provide one-half of the local match requirement (11% of the project total) for Federal Aid urban projects.

A $150 million state bond program authorized by the 1973 legislature was intended to provide $13 million over a six year period to make state highway improvements in Lane County. Only one bond issue was sold, however, reducing Lane County's expected share to approximately $2.5 million. Much of this has been expended, and locally established priorities indicated that most of the remaining money was to be used

outside the metropolitan area. Only Highway 99 (project no. 30) will benefit from this funding source.

Cities and counties are allocated by state constitutional provision, a share of the highway user fees collected by the state. These funds are transferred from the State Highway Fund to local jurisdictions for expenditure on highway related items. Projection of the transfers available to the metropolitan area under current legislation has been made by the Oregon Department of Transportation through FY83. Not all funds are used by local governments for highway construction, however. In Eugene and Springfield, approximately 25 percent is used annually for construction, while the rest goes to various other purposes including street maintenance, parks, police, courts and administration. Lane County uses its transfer monies similarly, as well as for highway construction outside the metropolitan area. It was assumed that through FY83, only 25 percent of the transfer would be used for construction by Eugene and Springfield and only 10 percent would be used by Lane County for construction within the study area.

Local revenue for street construction includes parking taxes, parking citations, bond issues, systems development charges, and property assessments. General fund and revenue sharing monies are also used occasionally. The purpose of development charges and street assessment, however, is to improve streets, curbs and sidewalks to urban standards and, with few exceptions, these projects do not eliminate capacity problems. Hence, assessment was not considered as a revenue source. It was assumed that local assessment policies will not change and that the funds for assessable projects will be available when needed. Currently, locally generated construction funds are generally small and between FY78 and FY83 were projected to remain the same as, or show slight increases over, 1977 levels.

In addition to the above sources, federal forest timber sales receipts are paid to Lane County to offset property taxes that would be received if the lands were in private ownership. State law currently allocates 75 percent of the receipts for roads and 25 percent for schools. A recent legislative attempt to increase the proportion earmarked for schools failed and through FY83, it was assumed the highway/school ratio would remain unchanged. The timber revenues projected are those funds available for street and highway use, and it was assumed that 10 percent of the county total would be available for construction within the metropolitan area. Revenue levels from FY78 to FY83 were projected to increase slightly over the FY74 through FY77 levels.

Forecasted Needs

The street and highway network recommended in this plan is used as an indicator of future highway revenue needs. Projects from that network

are recommended for implementation in two phases: 1978 to 1990, and 1990 to 2000. The phases and approximate project costs are shown in Tables 11 and 12.

The cost of a street or highway improvement is very difficult to estimate without specific knowledge of the location and design features of the facility. There can be an extreme variation between the unit construction costs from one project to another depending on location, design standards, terrain, or assessed value of new right-of-way. The time required for making detailed construction estimates for each facility is prohibitive in systems plans such as this. Each implementing agency made preliminary cost estimates of projects within its jurisdiction by reviewing the approximate alignment and right-of-way requirements and applying unit construction costs, based on recent experience, to each project. The actual cost of a specific project can be calculated only after detailed study when construction is imminent. Actual construction costs may vary significantly from the costs shown here. All cost estimates are in constant 1977 dollars and no allowance was made to account for inflation.

Projected total cost for arterial street and highway construction, excluding assessable costs, between 1978 and 2000 is approximately $132 million. Of that total, $43 million is needed to implement projects recommended for 1978 to 1990, and $89 million is needed between 1990 and 2000. The completed system should prevent the occurrence of Level of Service "E" in most locations by 2000. In some instances, however, Level of Service "E" is likely to occur or be exceeded before the project required to relieve the congestion is constructed.

For the costs versus revenue analysis, implementation at the uniform rates of $3.6 million annually between 1978 and 1990, and $8.9 million annually between 1990 and 2000, were assumed. In reality, annual construction expenditures will vary, depending upon the projects implemented.

Only the capital needs supported by public expenditure are examined. Automobile operating costs actually constitute a large portion of the total transportation systems cost, and the viability of the automotive mode is in large part dependent on the ability and willingness of individuals to finance the ownership and operation of an automobile. It is not practical or particularly meaningful to project private costs as a part of this plan, though.

Likewise, future street maintenance cost is difficult to estimate and is not examined specifically. Allowance was made for maintenance

expenditures by assuming that the same proportion of available highway revenues used for maintenance in the mid-seventies will be earmarked for the same purpose through FY83.

Revenue Projections

Detailed street and highway revenue projections were made for FY78 through FY83. It is extremely speculative to predict revenues beyond that time because of the unknowns involved. In the past, highway revenues have generally kept pace with expenditures because the constant growth in automobile travel increased user fee revenues. Most recently, though, construction costs have spiraled dramatically upward, while revenues, for several reasons, have increased at a slower rate. The revenue projections in Table 14 are generally conservative for the 1978-1983 period, reflecting the recent trends in slower revenue growth. Some forecasts predict that because of energy conservation measures such as carpooling and the shift to smaller, more energy efficient vehicles, highway gasoline tax revenues may actually decline during the late 1980's. For simplicity and comparison with long-range needs, however, the revenue projections for FY83 were extended on an annual basis through FY90 and then through Fiscal Year 2000. Consequently, the revenues available for highway construction beyond 1983 should not be considered a projection, but rather a guess at the approximate magnitude of funding a availability.

No allowance was made for inflation in any of the projections. Between 1978 and 1983, nearly $100 million that potentially could be used for highway related purposes should be available to Lane County, Eugene, and Springfield. However, not all revenues are used for highway construction and not all revenues received by Lane County are used in the metropolitan area. Under current policies, less than 20 percent, about $18 million, will be available for highway construction projects. The remainder is assumed to be used for parks, street maintenance, police, courts, administration and transit capital expenses, or to be used outside the Eugene-Springfield area.

If FY83 revenue levels are extended through 1990, approximately $37 million would be available for highway construction during the FY78-FY90 period.

Needs Versus Revenues

Figure 14 shows a comparison of cumulative construction costs (assuming uniform annual expenditures for 1978-1990, and 1990-2000) and cumulative revenues available under current policy and legislation for street and highway construction. The relatively small funding shortfall expected for the 1978-1990 period reflects the emphasis on smaller projects and preservation and upgrading of the existing highway system

TABLE 14: STREET AND HIGHWAY CONSTRUCTION FUNDING FY78 - FY83

Recipient of Funds	Source of Funds	Funding Assumptions	Total Highway Funds FY78 - FY83 $(000)	Total Construction Fund Metro Area FY78 - FY83 $(000)
METRO AREA	Federal Aid Interstate (FAI)	None Available FY78 - FY83	0	0
	Federal Aid Primary (FAP)	None Available FY78 - FY83	0	0
	Federal Aid Urban (FAU)	FY77 Level Continues	4,786*	3,718**
METRO AREA	State FAI Match	None Available	0	0
	State FAP Match	None Available	0	0
	State FAU Match	State Continues 11% match	516*	347**
LANE COUNTY	State Highway Fund	O-DOT Projections	25,088	2,509/
	Federal Forest Timber Revenues	5% Annual Increase from FY74, 75, 76 Average	46,154	4,615/
	Miscellaneous Local Sources	Slight Annual Increase from FY77	5,893	589/
EUGENE	State Highway Fund	O-DOT Projections	9,988	2,386//
	State Bond Funds	No Additional Sales	290	290
	Local Bond Funds	No Additional Approvals	825	825
SPRINGFIELD	State Highway Fund	O-DOT Projections	3,682	921//
	Federal Revenue Sharing	10% Annual Increases from FY77	1,813	1,813
	Miscellaneous Local Sources	10% Annual Increases from FY77	540	540

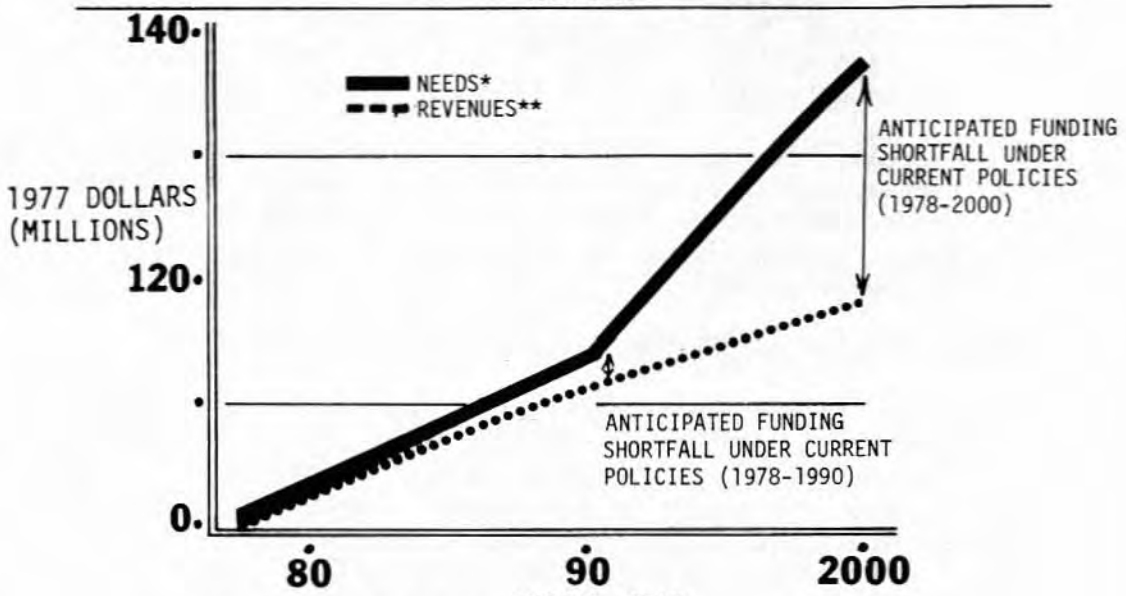
* Includes carryover from FY77.

** Remainder after 25% of available funds used for transit.

/ Remainder after 90% of available funds used for construction outside metro area, parks, police, courts and administration.

// Remainder after 75% of available funds used for maintenance, police, parks, courts and administration.

FIGURE 14
CUMULATIVE CAPITAL COSTS
VERSUS CUMULATIVE AVAILABLE CONSTRUCTION REVENUES
1978-2000



* 0% inflation rate.
** 1983 revenue level extended annually through FY00.

during that time. Construction of most major projects is recommended to occur after 1990, and, not surprisingly, the funding deficit for that period is expected to be substantial. If inflation were considered in the projections, the differential between expenditures and revenues would be greater. Actions to balance expenditures and revenues fall into four categories:

1. Reduce expenditures by foregoing implementation of projects required to provide the desired level of service and accepting the resultant delays, congestion and disruption. This approach was not considered an option because of the planning direction received from elected officials.

2. Increase revenues available for highway construction by revising policies and legislation governing the use of revenues received for highway purposes. Actions might include funding local parks programs, police departments or courts entirely from sources other than highway revenues.

3. Increase revenues by increasing highway user fees. Several measures passed by the state legislature will provide additional

revenues to both state and local government. None will provide sufficient revenues to significantly reduce the long-term shortfall anticipated either at the state or local levels, however, and two of the measures must receive voter approval before they can take effect. Locally imposed fees could include an ad valorem tax on automobiles, or an increase in the gasoline tax.

4. Increase revenues by increasing the non-highway revenues used for highway construction. Application of general fund monies, bond sales supported by property tax, or revenues from newly imposed taxes, such as local sales tax, toward highway construction will increase the pool of money available for that purpose.

CONCLUSIONS AND RECOMMENDATIONS

The problem of funding transportation improvements, or even maintaining the existing system, is more than local in scope. The problem of allocation of scarce resources to pay for needed improvements is increasing at all levels of government. The entire state is faced with a number of critical questions regarding transportation financing. Oregon Department of Transportation forecasts for the next decade, particularly with respect to the highway program, paint a bleak picture without a substantial increase in highway user taxes. Because of the upward inflationary spiral of labor and material costs and a slowing rate of increase in user taxes, the gap between needs and revenues at the state level is expected to become worse during that period. State highway revenues are expected to be insufficient to both match available federal aid and adequately maintain state highways. Recently adopted state policy places primary emphasis on maintaining and rehabilitating the existing state highway system rather than expanding it through new construction.

If recent trends continue and state forecasts prove to be accurate, substantial subsidies to local highway programs from the state highway fund may be jeopardized. Oregon statutes provide for direct assistance to cities and counties in the form of transfers from the State Highway Fund. Unless there is a change in the statutes, this assistance will continue, but the ability of the state to provide match funds for local federal aid projects may be threatened.

Public transit is not without its share of financial problems. It should be an accepted fact that, if public transit is to play a significant role in the Eugene-Springfield transportation system, it will require subsidization just as do other public services and other components of the system. State funds to assist local transit districts can be provided by the legislature through the General Fund, but as yet no state requirements exist for providing that support on a continuing basis.

No magical solution to either the highway or the transit funding problem can be expected at the federal level. Greater flexibility in the use of federal highway funds and increases in the federal operating subsidies for public transit may help slightly, but both sources provide only a relatively small percentage of the transportation budgets of the local governmental agencies and the Lane Transit District. The options available to local government with regard to federal funds are essentially limited to political support through the congressional delegation for legislation that will provide more revenue or generally improve the transportation financing picture.

The opportunity for local government impact on legislation and policies at the state level is much greater than at the federal level. Support through the local legislative delegation, as well as the League of Oregon Cities and Association of Oregon Counties for favorable legislation, and close coordination with the Transportation Commission on policy matters comprises the bulk of the policy actions available to local governments.

Local funding presents the opportunity for some direct action by local governments, but even then there are cases where the action is limited to the support of ballot measures placed before the electorate. Without a doubt, local funding will have to play a greater role in implementation of transportation improvements in the next decade. This burden must be added to the increasing demands for facilities and services being placed on local governments, and transportation priorities must be considered in relation to all other local public needs.

The recommended street and highway network and the bus rapid transit system were used as indicators of future transportation needs (the provision of parking and implementation of the Metropolitan Bikeway Master Plan and other alternative mode recommendations will require additional funds - primarily from local sources). If this plan is to be implemented, additional funds will be needed beyond what is currently expected.

Projection of transportation revenues beyond the late 1980's is of little value because of the unknowns involved. Consequently, the policies and recommended actions are intended to address the intermediate funding shortfalls of both the highway program and the transit program. Financial policies, based on the findings of this element, are included in a separate section of Element II - Policies for adoption. Several measures dealing with transportation financing will be placed before the electorate during 1978. Discussion of the merits of each during the plan hearing and adoption process is timely, and the outcome of the vote on each measure will have an extremely significant impact on the implementation of the Transportation Plan.

The following recommendations are not for adoption as a part of the plan, but should be adopted by local governments prior to May, 1978 to help ensure passage of each measure.

1. Passage at the May, 1978 primary election of the ballot measure authorizing a two cent per gallon increase in the state gasoline tax should be publicly supported.

   Discussion: HB 2140 authorized an increase in the state tax on a gallon of gas from seven to nine cents, effective June 1, 1978. New state revenue generated by the increase must be spent only for road rehabilitation, reconstruction, modernization, and maintenance. This restriction does not apply to revenues apportioned to local governments, however. Estimates indicate $37 million would be added to the Highway Fund during the 1977-79 biennium. Additional funds would then be available for transfer to Eugene, Springfield and Lane County during that period.

   A provision in the bill stipulates that it will face a vote of the people at the May, 1978 primary election. Approval by the voters is essential if the existing highway system is to be adequately maintained. Support from governmental units throughout the state may help insure its passage.

2. Passage at the November, 1978 general election of the ballot measure authorizing an increase in automobile registration fees and ton-mile tax should be supported.

   Discussion: HB 3261, which passed in the closing hours of the 1977 legislative session, called for an increase in the registration fee of passenger cars from $10. to $20. per year. The bill also provides for an increase in the weight mile tax, since registration fees for trucks were not increased by the bill. Estimates indicate the bill will add $44 million to the Highway Fund, and provide some additional funds to Eugene, Springfield, and Lane County during the FY77-79 biennium.

   No stipulation was made in the bill to refer it to the voters, but initiative petitions are now being circulated in an attempt to place the issue on the May, 1978 ballot, and it appears possible the petition drive will be successful.

3. Passage of the ballot measure at the May, 1978 primary election authorizing use of a personal income tax, imposed for the Lane Transit District service area as a source of revenue to support local public transit should be supported. If the income measure is defeated at the polls, other sources of local subsidy will be required.

Discussion: Direct financial support from local governments, either in the form of payments in lieu of the payroll tax or allocations from the General Fund, appear at this point nearly the only workable alternatives. Regardless of the source, if additional local subsidy is not forthcoming in future years, development of the transit system will be hampered, and serious consideration should be given to revising downward both the transit ridership goals and the role transit will play in the future transportation system.

Appendices

Appendix A

AIR QUALITY ANALYSIS

Federal Highway Administration (FHWA) regulations require consideration of air quality when adopting transportation plans or programs. One of the most familiar methods of judging air quality is to assess impacts in terms of federal ambient air quality standards which have been adopted by the Oregon Environmental Quality Commission (EQC).

The purpose of this analysis is to identify some of the air quality impacts of the plan and to indicate how facilities and policies contained in the plan can help improve air quality. External factors affecting mobile source emissions are also discussed briefly.

AIR QUALITY STANDARDS

Ambient air quality standards exist for seven major pollutants. These air quality standards are expressed as maximum allowable concentrations at the point of a receptor. Two major problems complicate analysis of certain pollutants in this metropolitan area; first, forecasting air pollution concentrations is less than an exact science and, second, for several pollutants little historical data exists regarding the performance of the Eugene-Springfield area with respect to appropriate air quality standards.

The Oregon Department of Environmental Quality (DEQ) and the Lane Regional Air Pollution Authority (L-RAPA) are currently conducting the first phase of the Eugene-Springfield area Air Quality Maintenance Area Study which will ultimately result in an air quality plan for this area. Such a plan has been dictated by the U.S. Environmental Protection Agency (EPA) because this area is expected to continue to violate the particulate concentration standards through 1985. The process used in preparing the air quality plan will result in development of more specific projections of air pollutant concentrations than will be made for the Transportation Plan.

Preliminary studies by L-RAPA indicated that the ambient air quality standards for carbon monoxide and for particulates were being violated in some metropolitan locations during some meteorological conditions. Overall, there was a substantial degree of compliance with the carbon monoxide standards, and therefore, Eugene-Springfield will not be required to develop a plan for the attainment of those standards. However, the L-RAPA studies indicated that a plan for the attainment of the particulate standards will be required to be prepared and adopted by July, 1978. A plan for the maintenance of air quality that meets federal particulate standards will be prepared by L-RAPA following further study after the adoption of the attainment plan.

Specific Pollutants

1. Total Suspended Particulates (TSP)
   Vehicles generate particulate matter in three ways: from engine exhaust, rubber from tire wear, and road dust recirculated by vehicular movement. In total, motor vehicles currently are responsible for about 10.5% of total particulate emissions in the metropolitan area. The Air Quality Maintenance Study currently being conducted for this area should provide new information regarding transportation contributions to the particulate problem. Attainment and maintenance of particulate standards are best approached through monitoring and regulation of major emission sources. The usefulness of auto inspection or regulation programs for control of particulates would be minimal under present circumstances.

2. Carbon Monoxide (CO)
   Two ambient air standards exist for carbon monoxide. Violations occur if:

   A. The 8-hour average CO concentration exceeds a specified limit more than once a year; or
   B. The one-hour average CO concentration exceeds a specified limit more than once per year.

A modeling procedure was developed to determine if traffic volumes in the future will be high enough to violate the CO standards. 1985 traffic volumes were assigned to the recommended street network and checked for potential violations. Forecasted traffic volumes should not be high enough, under current emission standards, to cause a violation of the one-hour CO standard anywhere in the metropolitan area between 1977 and 1985 (no emission forecasts were made beyond 1985).

The likelihood of either standard being violated is strongly influenced by the meteorological conditons present.

Under "worst case" meteorological conditions, the traffic volumes at several locations have the potential to violate the 8 hour CO standard; however, this does not mean that violations will occur, only that they are likely to occur if weather conditions are right. Cool, still, autumn mornings, before warming causes air circulation patterns that stimulate mixing in the lower atmosphere, are conditons under which the 8-hour CO violation could occur. Potential violations include:

Facility	Location	Distance (Miles)
6-7th freeway	Jefferson St. to Chambers St.	0.8
W. 6th Avenue	Oak Street to Charnelton St.	
W. 6th Avenue	Lincoln St. to Jefferson St.	0.5
E. 7th Avenue	High St. to Coburg Rd. (1 block)	0.05
River Road	Northwest Expressway to Railroad Blvd. (1 block)	0.1
I-105	Delta Highway to W. 6th Ave.	0.85
Franklin Blvd.	W. 11th to Onyx Street	1.0
Coburg Rd/Broadway	Oakway Rd. to Hilyard St.	1.6
TOTAL:		4.90

The modeling procedure used was very general in nature and should be used only as an indicator of possible problem areas, not a tool to define the exact location of every violation. Meteorological variables make such forecasting very difficult. As an illustration, the model showed that current traffic volumes should not be high enough to cause violations of the 8-hour standard, yet several locations have experienced violations.

A comparison of the total CO emissions forecast for 1985 with the amount produced in 1970 (Figure 15) illustrates that a significant reduction can be expected if automobile emission controls meeting federal guidelines are implemented and maintained. Although a reduction in total CO emission can be expected by 1985, a few locations will still have the potential to violate 8-hour CO standards.

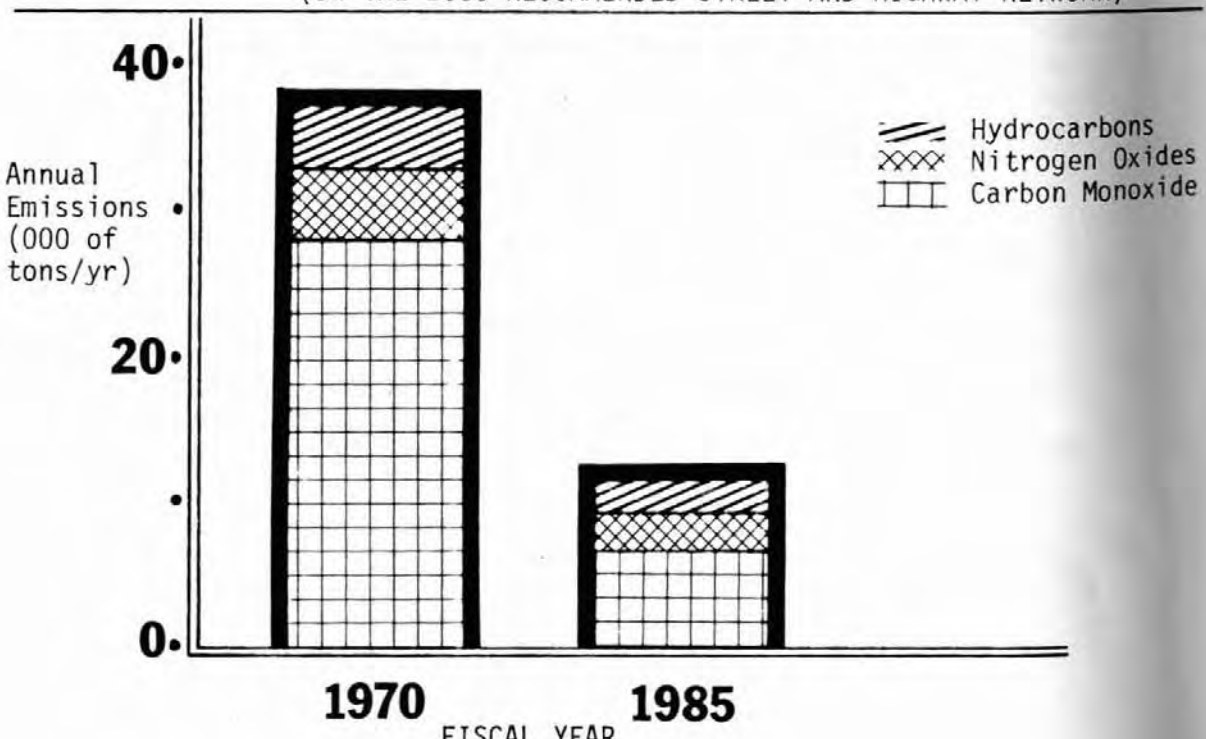
3. Oxides of Nitrogen and Hydrocarbons

Oxides of nitrogen and reactive hydrocarbons have a role in the formation of smog, and when present in adequate concentrations, they react in sunlight to produce oxidants which can negatively impact human respiratory functions and health. The concentrations of oxides of nitrogen and hydrocarbons themselves are usually not a serious threat to human health as are the concentrations of photochemical by-products. For this reason, it is more useful to examine the total emissions of these two pollutants within the metropolitan area rather than to examine concentrations at specific locations.

In general, if restrictions on automobile emissions are enacted, the volume of emissions of these two pollutants is forecasted to be reduced substantially by 1985. Figure 15 compares 1970 and 1985 total volumes for oxides of nitrogen and hydrocarbons.

FIGURE 15

COMPARISON OF VEHICULAR EMISSIONS
OF THREE AIR POLLUTANTS FOR 1970 AND 1985
(ON THE 2000 RECOMMENDED STREET AND HIGHWAY NETWORK)



Other Pollutants

Ambient air quality standards also exist for three other pollutants - oxides of sulphur, lead, and oxidants. The most recent information from L-RAPA indicates that sulphur dioxide and oxidant concentration levels are low even though the metropolitan area did have one oxidant alert during the summer of 1977. The metropolitan area is considered to be in compliance with standards for both oxides of sulphur and oxidants. Lack of specific historical data for lead and lack of forecasting methods for all three pollutants prevent examination of future concentrations in conjunction with preparation of the Transportation Plan.

LOCAL ACTIONS AFFECTING TRANSPORTATION-RELATED AIR QUALITY

The Transportation Plan contains many policies, facilities, and transit operating improvements which have the potential for improving air quality or minimizing the negative impacts of transportation upon air quality. These activities are related to the major headings listed below. The purpose of this section is to show how various elements of the plan relate to air quality.

1. Improving Urban Mobility

   A. Providing Alternatives to the Automobile

      - The Bus Rapid Transit system will substantially increase transit capacity.

      - The future transit system recommendations and specific facility improvements will help attract increased transit ridership.

      - Policies and recommendations of the plan are directed toward increasing auto occupancy through carpooling and promoting paratransit usage.

      - The plan contains recommendations and policies directed at providing bicycle and pedestrian facilities to promote use of those modes.

   B. Improving Vehicular Flow

      - The street and highway improvements and policies will reduce severe congestion on the street network.

- The plan contains facilities and policies which emphasize and place a high priority on initiating traffic management and low-cost improvements.

- The plan contains policies directed toward reducing peak-hour traffic volumes by allowing for flexibility in scheduling work hours.

C. Reducing Travel Demand

- The plan encourages improving communications as a substitute for certain types of trips.

- The plan recommends land use changes which have the potential for decreasing vehicular travel demand by increasing residential opportunities near the central business districts and near the non-central business district employment centers.

External Factors Affecting Transportation-Related Air Quality

The greatest potential for reducing transportation related contributions to air pollution is the reduction of emissions at the source, the vehicle engine. Legislation establishing vehicular emission standards and research leading either to introduction of cleaner engine designs or non-petroleum-based fuels can have an impact on reducing vehicular emissions. The bulk of such legislation and research is national in scope.

Appendix B

APPENDIX B. SUMMARY OF ALTERNATIVES

INTRODUCTION

Alternatives for land use, per capita trip-making and transit usage were examined in the "Eugene-Springfield Transportation Alternatives" report, published by L-COG in 1975. Decisions were made by local elected officials on these parameters, as well as the population forecast to be used, and the Transportation Plan was developed within these constraints. Once these decisions were set, the alternatives that could be examined were limited to policy choices to help achieve transportation goals and facility and system options consistent with adopted goals.

In preparing the Plan, the Transportation Planning Committee reviewed alternative policies, alternative transit systems, facility alternatives for six major street and highway corridors and alternative parking need forecasts. Policies to help achieve transportation goals were reviewed, but not all policies were compatible or effective. The list of possible policies was condensed into one comprehensive, compatible set included in Element II of this plan. The transit, highway and parking alternatives are described and evaluated in detail in the Eugene-Springfield Area 2000 Transportation Plan Technical Report, to be published in December, 1977. An environmental overview of the recommended plan is also included in that report.

The purpose of this section is to very briefly identify the transit system and street and highway corridor alternatives evaluated by TPC in preparing the plan. The actual evaluation is covered in the Technical Report.

TRANSIT

System Alternatives

Five future transit systems were examined. They are:

1. Conventional local bus (base system)
2. Bus rapid transit supported by local buses
3. Trolley coach system supported by local buses
4. Light rail transit supported by local buses
5. Shuttle loop transit supported by local buses

The alternative systems were selected to display a wide range of approaches to providing urban transit service. They can be grouped into two major categories - all bus systems operating in mixed traffic on the street and highway system, and combined bus and other technology systems operating both on exclusive rights-of-way and on the street system. The conventional local bus system is essentially an expansion of the present-day system to include more buses; bus rapid transit uses existing and new larger vehicles on the street system, but provides some bus priority treatment; trolley coaches use new vehicles and power lines on existing streets; light rail transit uses train-type vehicles with tracks and overhead wires on existing streets, exclusive rights-of-way or a combination of the two; shuttle loop transit uses automated, unmanned vehicles on elevated structures or exclusive rights-of-way.

Alternative technologies were evaluated in the major transit corridors, and for each system a network of routes and fixed facilities was designed and its service features and costs estimated. Local bus service supports each alternative technology by providing the collection/distribution function for trips in the major corridors, and all service in neighborhoods which are not served by certain alternative modes.

Each system was designed and evaluated as a complete system, each providing a comparable level of service in terms of area of coverage and network density. This provides a consistent basis by which to compare and evaluate the different transit systems, even though completion of some systems may extend beyond 2000. Major features of the systems are listed below.

TRANSIT SYSTEM ALTERNATIVES

-SUMMARY-

Future System	Capital Cost 1978-2000 ($000)*	Annual Operating Cost, Year 2000 ($000)*	Conventional Buses Required	Other Transit Vehicles Required	Separate Right-of-way?
Conventional Local Bus (Base System)	$27,710	$19,895	208	0	NO
Bus Rapid Transit Supported By Local Buses	29,268	18,018	125	40	NO
Trolley Coach Supported by Local Buses	37,086	19,639	169	53	NO
Light Rail Transit Supported by Local Buses	91,456	19,820	171	26	YES
Shuttle Loop Transit Supported By Local Buses	253,231	17,693	176	43	YES

* 1977 Dollars.

Note: Figures do not include non-urban service or dial-a-bus.

Areawide Transit Goal

Each system was designed to have the ability to carry 14 percent of the total internal person trips in the metropolitan area by 2000. This reflects the original goals of 15 percent of the trips in Eugene, 10 percent of the trips in Springfield and 10 percent of the trips in Lane County assigned to transit. Reasons for using the 10 percent goal in Springfield are included in the Technical Report. However, analysis of the change in the Springfield transit goal indicates that if 5 percent rather than 10 percent of the trips in Springfield were carried by the bus rapid transit system, in the year 2000:

A. Transit service in Springfield would generally be less extensive and less convenient than elsewhere in the metropolitan area.

B. A net reduction of eight vehicles would be possible.

C. 1978-2000 capital costs would be reduced by $560,000.

D. 2000 annual operating costs would be reduced by $234,000.

E. Springfield traffic and traffic volumes on major facilities between Eugene and Springfield would be slightly higher than forecast in this plan.

System Planning

A decision to implement bus rapid transit does not inalterably commit the area to that system. The establishment of the future transit system will be an evolutionary process. Through periodic plan updates and by monitoring transit patronage, traffic congestion, fuel availability, new development and other factors that affect transit usage, new goals or new directions may be chosen as new evidence is acquired. This course of action allows the transit system to evolve in response to both local and national conditions.

STREETS AND HIGHWAYS

Corridor Alternatives

The highway testing procedure consisted of determining where capacity deficiencies would develop on the existing street network with 2000 traffic, and then systematically adding new facilities or capacity increases until the future traffic could be handled without reaching Level of Service "E". Alternative project combinations for six travel corridors were examined. Alternative #1 in each corridor was an attempt to provide the necessary capacity by improving only existing

facilities. Subsequent alternatives then intoduced new facilities in combination with capacity increases. The alternatives evaluated in the Technical Report are listed below. The costs shown are preliminary estimates and can be used only as a general indication of the magnitude of the projects in question.

Alternative #1

Project	Project Description	Cost ($000)
6th & 7th Avenues - I-105 to Garfield	Widen to 4 lanes	$2,085
West 11th Avenue - Bailey Hill to Belt Line	Widen to 4 lanes	Completed 1977
18th Avenue - Bailey Hill to City View	Remove parking, restripe to 4 lanes*	0
18th Avenue - City View to Willamette	Widen to 5 lanes*	2,670
Highway 99 - Roosevelt to Barger	Widen to 6 lanes* (with turn refuges)	1,714
Highway 99 at McKinley and Roosevelt	Major intersection improvements	600
ALTERNATIVE #1 TOTAL COST:		$7,069

Alternative #2

Project	Project Description	Cost ($000)
6th & 7th Avenues - I-105 to Garfield	Widen 4 lanes	$2,085
6th & 7th Extension - Garfield to W. 11th at Danebo	4 lane arterial	24,353
18th Avenue - Willamette to Jefferson	Widen to 5 lanes*	761
18th Avenue - Jefferson to City View	Widen to 4 lanes* (with turn refuges)	2,384
Roosevelt Boulevard - Garfield to Terry	4 lane arterial	1,467
Roosevelt Connector - Roosevelt to N.W. Expressway	2 lane overpass	1,020
Highway 99 & Roosevelt Boulevard	Intersection improvements	**
ALTERNATIVE #2 TOTAL COST:		$32,070

Alternative #3
(Recommended by TPC)

Project	Project Description	Cost ($000)
6th-7th Freeway - I-105 to W. 11th at Danebo	4 to 6 lane freeway	$74,755
Roosevelt Boulevard - Garfield to Terry	4 lane arterial	1,467
W. 18th Avenue at: Lincoln, Jefferson, Friendly, Polk, Chambers, Arthur, City View	Restripe to 4 lanes and major intersection improvements: turn refuges, signalization, channelization, widening, etc.	2,063
Rooselvet Connector - Roosevelt to N.W. Expressway	2 lane overpass	1,020
Bailey Hill Road - W. 11th to 6th-7th Freeway	2 lane arterial	197
Buck Street - W. 18th Avenue to W. 11th Avenue	2 lane arterial	377
Highway 99 & Roosevelt Boulevard	Intersection improvements	**
ALTERNATIVE #3 TOTAL COST:		$79,879

Alternative #4

Project	Project Description	Cost ($000)
Roosevelt Freeway - Pearl to Highway 126 at Oak Hill	4 to 6 lane freeway (4 lane arterial east of I-105)	$92,627
Amazon Parkway - High to W. 11th at Bertelsen	2 lane arterial	10,081
ALTERNATIVE #4 TOTAL COST:		$102,708

* Project does not include bike lanes.
** Project costs included in Roosevelt Boulevard and Non-Corridor Project #30, Highway 99.

RIVER ROAD CORRIDOR

Alternative #1

Project	Project Description	Cost ($000)
River Road - Railroad Blvd. to Wilkes Drive	Widen to 4 lanes (with turn refuges and intersection improvements)	$3,980
Railroad/Van Buren/Blair - River Road to 7th	Widen to 4 lanes*	1,459
River Road/Belt Line Interchange	Interchange/intersection improvement	***
Northwest Expressway - North and South Extensions**	2 lane arterial	245
ALTERNATIVE #1 TOTAL COST:****		$5,684

Alternative #2
(Recommended by TPC)

Project	Project Description	Cost ($000)
River Road - Chambers Connector to Wilkes Drive	Widen to 4 lanes (with turn refuges and intersection improvements)	$3,980
Chambers Connector - River Road to 6th-7th	4 lane arterial	7,781
North Delta Extension - Delta Highway to Wilkes	2 lane arterial	5,223
Northwest Expressway - North & South Extensions**	2 lane arterial	245
ALTERNATIVE #2 TOTAL COST:		$17,229

Alternative #3

Project	Project Description	Cost ($000)
River Road - Chambers Connector to Wilkes Drive	Widen to 4 lanes (with turn refuges and intersection improvements)	$3,980
Chambers Connector - River Road to 6th-7th	4 lane arterial	7,781
North Delta Extension - Delta Highway to Wilkes	2 lane arterial	5,223
Park Avenue Bridge - River Road to Delta	2 lane arterial	2,138
Northwest Expressway - North & South Extension**	2 lane arterial	245
ALTERNATIVE #3 TOTAL COST:		$19,367

Alternative #4

Project	Project Description	Cost ($000)
River Road - Garfield Connector to Wilkes Drive	Widen to 4 lanes (with turn refuges)	$3,980
Garfield Connector - River Road to Garfield	4 lane arterial	*****
North Delta Extension - Delta Highway to Wilkes	2 lane arterial	5,223
Northwest Expressway - North & South Extension**	2 lane arterial	245
ALTERNATIVE #4 TOTAL COST:		$9,448

* Project does not include bike lanes.
** Committed project.
*** Major interchange redesign and reconstruction are necessary to prevent the occurrence of Level of Service "E". Additional study is required to determine the project feasibility.
**** Does not include cost of River Road/Belt Line Interchange redesign.
*****Constructed as part of the Roosevelt Freeway.

EUGENE DOWNTOWN WESTSIDE CORRIDOR

Alternative #1

Project	Project Description	Cost ($000)
Washington/Jefferson - 7th to 11th	Remove parking, restripe to 3 lanes	0
11th Avenue at Washington/Jefferson	Remove parking, restripe to 3 lanes	0
13th Avenue & Jefferson	Major intersection revision	$842
ALTERNATIVE #1 TOTAL COST:		$842

Alternative #2
(Recommended by TPC)

Project	Project Description	Cost ($000)
I-105 Ramps - I-105 to Lincoln-Charnelton Couplet	New structure to Lincoln-Charnelton Couplet	$7,935
Lincoln-Charneltton Couplet	One-way couplet	331
Washington-Jefferson - 7th to 13th	Close to through traffic	0
ALTERNATIVE #2 TOTAL COST:		$8,266

Alternative #3

Project	Project Description	Cost ($000)
Washington-Jefferson - 7th to 13th	Close to through traffic	0
A. Lincoln Boulevard - I-105 to 11th	4 lane structure	$14,367
B. Lincoln Boulevard - I-105 to 8th & Lincoln	4 lane structure	8,239
8th to 13th	Widen Lincoln to 4 lanes	2,500
ALTERNATIVE #3A TOTAL COST:		$14,367
ALTERNATIVE #3B TOTAL COST:		$10,739

FERRY STREET BRIDGE - COBURG ROAD CORRIDOR

Alternative #1
(Recommended by TPC)

Project	Project Description	Cost ($000)
Ferry Street Bridge	Provide 6 lane capacity new bridge or companion structure	$4,284
Coburg Road - 8th Avenue to I-105	Widen to 6 lanes	1,617
Coburg Road & Oakway Road	Major intersection Improvements	300
ALTERNATIVE #1 TOTAL COST:		$6,201

Alternative #2

Project	Project Description	Cost ($000)
Ferry Street Bridge	Provide 6 lane capacity new bridge or companion structure	$4,284
Coburg Road - 8th Avenue to I-105	Widen to 6 lanes	1,617
Coburg Road & Oakway Road	Major intersection Improvements	300
I-5 & Franklin	New freeway ramps	2,238
ALTERNATIVE #2 TOTAL COST:		$6,201

* Alternative reliever project not recommended by TPC.
** Excludes cost of I-5 ramps.

FRANKLIN BOULEVARD CORRIDOR

Alternative #1*
(Recommended by TPC)

Project	Project Description	Cost ($000)
Franklin Boulevard Intersections	Major intersection improvements at:	
	Broadway	$52
	Patterson Street	119
	Hilyard Street	-
	11th Avenue	15
	Agate Street	28
ALTERNATIVE #1 TOTAL COST:		$214

Alternative #2

Project	Project Description	Cost $(000)
Franklin Bypass - Walnut to 6th-7th	4 lane freeway	$14,969
ALTERNATIVE #2 TOTAL COST:		$14,969

* Improvements of this alternative will not eliminate overloads on Franklin Boulevard. Additional capacity will be provided, but Levels of Service "E" and "F" will occur in places.

McVAY HIGHWAY CORRIDOR

Alternative #1

Project	Project Description	Cost ($000)
South "A" & 5th Street	Signal improvements	$50
South "A" & 3rd Street	Signal improvements	50
McVay & Franklin Boulevard (at Springfield Bridge)	Major intersection improvements/overpass	600
McVay & 30th Avenue	Major intersection/interchange improvements	100
ALTERNATIVE #1 TOTAL COST:		$800

Alternative #2

Project	Project Description	Cost ($000)
30th-30th Connector - Main Street to McVay Highway	2 lane arterial	$2,631
ALTERNATIVE #2 TOTAL COST:		$2,631

Alternative #3
(Recommended by TPC)

Project	Project Description	Cost ($000)
30th-30th Connector - Main Street to McVay Highway	2 lane arterial	$2,631
Bloomberg Connector - McVay to 30th	2 lane arterial	482
ALTERNATIVE #3 TOTAL COST:		$3,113