City of Coburg
Transportation System Plan

Prepared for:
City of Coburg

Prepared by:
Lane Council of Governments

September 1999

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Transportation System Plan

Lane Council of Governments
125 E. 8th Avenue
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Transportation Advisory Committee

Name	Organization	Transportation System Plan	Interchange Refinement Study
Jim Anderson, Jr.	Truck-n-Travel	▪	▪
Shirley Bartmess	Basin Tire Service	▪	
Jim Broughton	Citizen-at-Large	▪	▪
Dan Claycomb	Citizen-at-Large	▪	▪
Lynn Francis-Surbaugh	Citizen-at-Large	▪	▪
Bill Gabriel	Pacific Power	▪	
Georgann Koehler	City Council Representative	▪	▪
Linda Kroeger	Citizen-at-Large	▪	▪
Jim Lockard	Citizen-at-Large	▪	▪
Gary Papé	Property Owner	▪	▪
Charles Scharpf	Representing Ms. Stevenson, property owner		▪
Katie Thiel	Citizen-at-Large		▪
Jim Trezona	Citizen-at-Large		▪
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Peter Watt	

Disclaimer

The inclusion of proposed projects and actions in this plan does not obligate or imply obligations of funds by any jurisdiction for project level planning or construction. However, the inclusion of proposed projects and actions does serve as an opportunity for the projects to be included, if appropriate, in documents such as the State Transportation Improvement Program (STIP). Such inclusion is not automatic. It is incumbent on the state, county, city, and general public to take action to encourage and support inclusion into the STIP at the appropriate time.

Projects included in the STIP are required to have funds available so the number of projects that can be included are constrained by funding levels.

Chapter One
Introduction

A. Overview

The City of Coburg (City), in coordination with Lane County and the Oregon Department of Transportation (ODOT), initiated a study of the City's transportation system in March 1996. The purpose of the study is to provide a long-rang policy document and project list that will guide the development of Coburg's transportation system for the next 20 years. The Transportation System Plan (TSP) will be updated every five years. The goals and policies contained in the TSP will become part of Coburg's Comprehensive Plan and Zoning Code, and amendments will be completed to implement these policies.

The TSP will be used as the basis for the development of transportation-related capital improvements. It addresses multiple transportation modes including bicycle, pedestrian, automobile, and public transportation as well as air, rail, and pipeline issues. Refinement plans will supplement the TSP with more detail and specific information on issues, policies, and project locations. These refinement plans and policies should be consistent with the TSP.

B. Plan Context

Long-range comprehensive planning is a positive tool for looking into the future to facilitate the organized growth of an area. Located about five miles north of the Eugene-Springfield urban growth boundary, Coburg's TSP planning process began in 1994. By 1998, total employment climbed to 1,704 while population increased to 790.

In 1991, and later revised in 1995, the Land Conservation and Development Commission (LCDC) adopted the Transportation Planning Rule (TPR) (OAR 660-12-010) to guide regional and local transportation planning. The primary purpose of this rule is to carry out the purposes of LCDC Goal 12: Transportation. The TPR requires cities and counties to develop a plan including the following:

- A road plan for a network of streets;
- A bicycle and pedestrian plan;
- A public transportation plan;
- An air, rail, water, and pipeline plan;
- A transportation finance plan, and
- Policies and ordinances for implementing the transportation system plan.

The purpose of Oregon's Statewide Planning Goal 12: Transportation is "To provide and encourage a safe, convenient and economic transportation system." Goal 12 states:

> "A transportation plan shall
> (1) Consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrian;
> (2) Be based upon an inventory of local, regional and state transportation needs;
> (3) Consider the differences in social consequences that would result from utilizing differing combinations of transportation modes;
> (4) Avoid principal reliance upon any one mode of transportation;
> (5) Minimize adverse social, economic and environmental impacts and costs;
> (6) Conserve energy;
> (7) Meet the needs of the transportation disadvantaged by improving transportation services;
> (8) Facilitate the flow of goods and services so as to strengthen the local and regional economy; and
> (9) Conform with local and regional comprehensive land use plans."

The TSP is intended to meet all of the requirements of the state's TPR, the administrative rule that implements Goal 12. A discussion of the compatibility of the TSP with state law and other plans is included as Appendix H.

C. Planning Assumptions

The focus of the TSP are the transportation systems and issues within Coburg's urban growth boundary (UGB). The planning time frame for the TSP is to the year 2015. During the development of the TSP several factors were recognized that greatly influence transportation planning within the UGB. These factors include the location of adjacent employment areas, potential annexation and development of land within the UGB, county and state transportation facilities within or near the City, and design of existing transportation facilities.

As part of the Transportation System Plan for the Coburg UGB, both population and employment projections were developed. During the development of the plan, considerable employment growth occurred in Coburg. Total employment in 1994 was 638 and the city's population was 760. By 1998, total employment climbed to 1,704 while population increased to 790. Due to the large increase in employment, employment projections were revised and for transportation modeling the base year was updated to 1998.

State law requires that the TSP be consistent with local comprehensive plans and other regional comprehensive plans. The Coburg TSP is consistent with the Coburg Comprehensive Plan and assumes the same planning designations for future land development.

D. Planning Process

Public involvement and citizen review were important components of the TSP process (see Appendix D for a chronology of the TSP planning and citizen involvement process). Extensive public involvement, and input from elected and appointed officials, ensures that the TSP goals reflect the community's values. Development of Coburg's TSP was guided by a Transportation Advisory Committee (TAC). The TAC was initially appointed by the Coburg City Council to address Lane County's Willamette and Pearl Street project. After the public involvement was completed for that project, the group took on the task of developing the draft TSP. TAC members represented a range of interests, including residents, business owners, and property owners. The purposes and objectives of the TAC as described in its by-laws were to:

- Recommend a draft Coburg Transportation Plan to the Citizens Advisory Committee (CAC) for public hearings. The plan will then be presented to the City Council for additional public hearings and eventual adoption. (Note: The CAC has been replaced with a Citizen Involvement Committee, which is not active at this time.)
- Recommend Transportation Ordinance revisions to the City Council, as appropriate.
- Seek grant funding, as appropriate, consistent with the goals, objectives, and priorities of Coburg citizens.
- Recommend to the City Council outside consultants, as appropriate and needed to complete the work of the TAC, and supervise the work of any consultants hired by the City.
- Develop and implement a citizen involvement plan to seek active participation of Coburg citizens, from the beginning of the planning process, in the development of the Transportation Plan and transportation ordinances.
- Coordinate development of the Coburg Transportation Plan with the Oregon Department of Transportation, the Oregon Department of Land Conservation and Development, Lane County Land Management Division, Lane County Public Works, and Lane Transit District.
- Make recommendations regarding transportation to elected and appointed boards and commissions of the city, including the City Council and Planning Commission, CAC and Tree Committee; and coordinate development of the Transportation Plan with these groups.

The TAC met bi-monthly from March 1996 to June 1997. An interested parties mailing list was obtained from the City of Coburg and meeting notices and agendas were sent to this list for every TAC meeting. The TAC drafted transportation goals that guided the development of the plan alternatives; the group also worked with staff to build a preferred concept for the Coburg-Interstate 5 Interchange Refinement Study. Staff conducted a system-wide inventory that provided a basis in determining the transportation system needs. The population, employment, and traffic projections also assisted the TAC to determine these needs. The TAC then worked to build a TSP as the transportation vision for Coburg. The TSP provides a framework for future transportation investments and includes strategies and improvements for roads, transit, bicycle, and pedestrian facilities. As described on the following pages, the TSP was presented at town

hall meetings where staff and the TAC received comments and input from the general public. The TSP reflects the values of the TAC and the comments received.

The Oregon Department of Transportation (ODOT) also conducted a more detailed Interchange Refinement Study at the Coburg-Interstate 5 interchange. The interchange is a facility that warrants more in-depth analysis because of safety, access, and capacity issues. The preferred interchange alternative is incorporated into the TSP as Appendix I.

The TAC held its first open house on October 17, 1996, to introduce the project to the public. At that time an overview of the planning process, the draft issues and goals developed by the TAC, an overview of the interchange refinement study, and a status report on the Lane County Roadway Projects were presented.

A newsletter specific to the draft Transportation System Plan and the Strategic Action Plan was developed and mailed to every household within the UGB in March 1997. This newsletter contained a listing of the proposed high- and medium-priority projects for the roadway, transit, bicycle, and pedestrian systems.

An expanded TAC meeting was conducted on March 20, 1997 to include affected property owners and businesses in the interchange vicinity. The purpose of this expanded TAC meeting was to present the Oregon Department of Transportation's concepts for the interchange. A meeting notification postcard was mailed to property owners near the interchange. Also, the TAC interested parties mailing list was notified of the meeting.

A town hall meeting was held on April 24, 1997. The meeting was divided into two sessions: the first session focused on the draft TSP and the second session focused on the Strategic Action Plan. During session one, draft TSP transportation projects and strategies were presented. Following the draft TSP, a presentation was given on the four interchange concepts, during which the TAC alternative was presented.

In winter 1998, the TAC presented a draft TSP, including a Coburg-Interstate 5 interchange alternative, to the City Council. At that time, the City Council requested that the TAC reconvene to look at additional interchange options and expand the committee to include additional neighborhood and industrial area representatives. In addition, Oregon Department of Transportation and Lane County transportation staff joined the committee as members. The expanded TAC met bi-monthly from July to December 1998. Peter Watt of Lane Council of Governments facilitated the group discussions. The group agreed to make decisions by consensus, and agreed upon the following definition:

> *The goal of the TAC is to make decisions by consensus. A consensus decision is reached when all members can agree on a single option. Consensus is possible when each member feels that regardless of whether the decision is my personal first choice, I can support it publicly, because it was arrived at openly and fairly and it is the best decision that we as a group can reach on the issue before us.*

Members also agreed to the following ground rules:

- The TAC will use a consensus decision-making process. A consensus decision is one reached with no objections.
- The TAC shall use the following levels of consensus:

    1. Wholeheartedly agree
    2. Good idea
    3. Supportive
    4. Reservations, but will stand aside
    5. Serious concerns, but can live with the decision
    6. Cannot participate in decision, will work to block it

- When one or more members are absent from a meeting, the members present will determine if they feel comfortable making a decision or deferring it to a later date.
- Members absent from a meeting in which a consensus decision has been made will have an opportunity to discuss the decision at the next meeting.
- Sufficient time will be provided for the partners to seek advice from constituents, agencies, or other experts, when desired, before a decision is adopted by the council.
- A member may choose to abstain from indicating any level of consensus, but is encouraged to participate in the discussion on the issue. Member abstention will not affect the ability of the TAC to reach consensus.
- When a decision is reached by consensus, members will advocate it to their respective agencies or groups support for the adoption or implementation of the decision. However, if a partner has abstained on the issue, the partner may choose to simply report the council's deliberations on the issue to her/his agency.

Participation

- The TAC will hold regular meetings and follow the provisions of the Open Meetings Law. At least ten five minutes will be set aside at the beginning of each meeting for public comment.
- A majority of the TAC members must be present to hold a meeting.
- TAC members will keep their respective agencies, groups, or interests informed about the work of the TAC and bring concerns of their groups to the TAC.
- Members may designate a representative of their group to serve as an alternate. Designated alternates will be listed on the membership list of the TAC.
- Each member will brief her/his alternate on all issues and proceedings prior to the alternate's attendance at meetings.
- Members will make every effort to attend all TAC meetings themselves; and if they are unable to do so then will notify their alternates.
- Members will notify the project manager or TAC chair if both the partner and his/her alternate will be unable to attend a meeting.
- If the member and his/her alternate are unable to attend a meeting, the member may provide written comments or ask another member or the project manager to represent his/her position on a particular issue.

- If the member and his/her alternate are unable to attend two meetings, he/she must vacate his/her position.
- Members will notify the TAC if he/she chooses to vacate his/her position.

Behavior

- Members will treat each other with respect, will not monopolize meeting time, and will listen to and try to understand one another's views. Members are discouraged from placing blame for past practices.
- Members will search for opportunities to offer creative ideas, develop group solutions, and resolve conflicts.
- Members will strive to adhere to the ground rules and will be responsible for their enforcement.

Amendments

- A TAC member may propose amendments to the ground rules at any time. Amendments will become effective at the time proposed if all TAC members are present and approve. Otherwise, amendments will become effective at the meeting following the proposal upon consensus of all present.

Members also took a site visit at peak afternoon traffic to better understand the traffic patterns at the interchange and nearby streets.

A newsletter was sent to area residents in September 1998 to notify residents of interchange meeting dates and topics, and invited residents to attend meetings or call TAC members to express their concerns. In December 1998, the expanded TAC recommended an interchange alternative to the City Council. The recommendation was based on an earlier concept, Concept 1, but with modifications. The group did not reach consensus since one member could not support the alternative.

From January to March 1999, the TAC met to resolve outstanding TSP issues, including street standards, street layout, transportation goals and policies, and capital projects and priorities. On March 18, 1999, the TAC hosted a community open house to discuss the TSP and Coburg-Interstate 5 Interchange Refinement Study.

E. Organization of the Plan

The TSP is organized into six chapters.

Chapter One: Introduction - This chapter introduces the TSP context, assumptions, and planning process.

Chapter Two: Existing Conditions - This chapter describes the TSP study area. It presents a description and inventory of the existing transportation system including roadway, bicycle, pedestrian, and public transportation, and air, rail, and pipeline elements. The chapter also presents a discussion of natural and cultural features related to these systems.

Chapter Three: Future Conditions and Transportation Need - This chapter presents a detailed discussion of projected population, employment, and transportation volumes. It also describes the projected transportation needs for each of the plan elements.

Chapter Four: Recommended Transportation System Plan - This chapter describes and presents maps of the recommended transportation system plan for each of the transportation elements. It also presents recommended goals and policies to implement the TSP.

Chapter Five: Plan Implementation - This chapter describes the various actions required to implement the TSP. Implementation actions include short, medium, and long-range capital improvement projects; education projects; operations and maintenance projects; ordinance revisions; and other implementation strategies.

Chapter Six: Financing Strategies - This chapter describes existing and potential funding sources to implement the preferred capital improvements and other implementation strategies described above.

Chapter Two
Existing Conditions

A. Introduction

The development of the City of Coburg (City) Transportation System Plan (TSP) began with an assessment and evaluation of the existing transportation system within the Coburg study area. The study area is the entire Coburg urban growth boundary (UGB) as shown on Maps 1-A and 1-B. The Coburg UGB contains about 477 acres. The Interstate 5 interchange is a significant transportation feature in the area. The Coburg-Interstate 5 Interchange Refinement Plan contains much more detailed existing conditions for the interchange area (see Appendix I), including level of service calculations at the ramp terminals and intersection along Pearl Street.

B. Road System

A complete inventory of Coburg's road system was conducted by the City in 1994. All roadway segments within the UGB were evaluated for pavement condition, number of lanes, and surface type. The pavement width and right-of-way width for each segment was also recorded. Other information collected includes the number and location of traffic accidents and average weekday traffic volumes. Information for streets under the County jurisdiction was obtained through the Lane County Public Works Department in 1996. The methodology used to develop the inventory and a spreadsheet containing this information are presented in Appendices A and B.

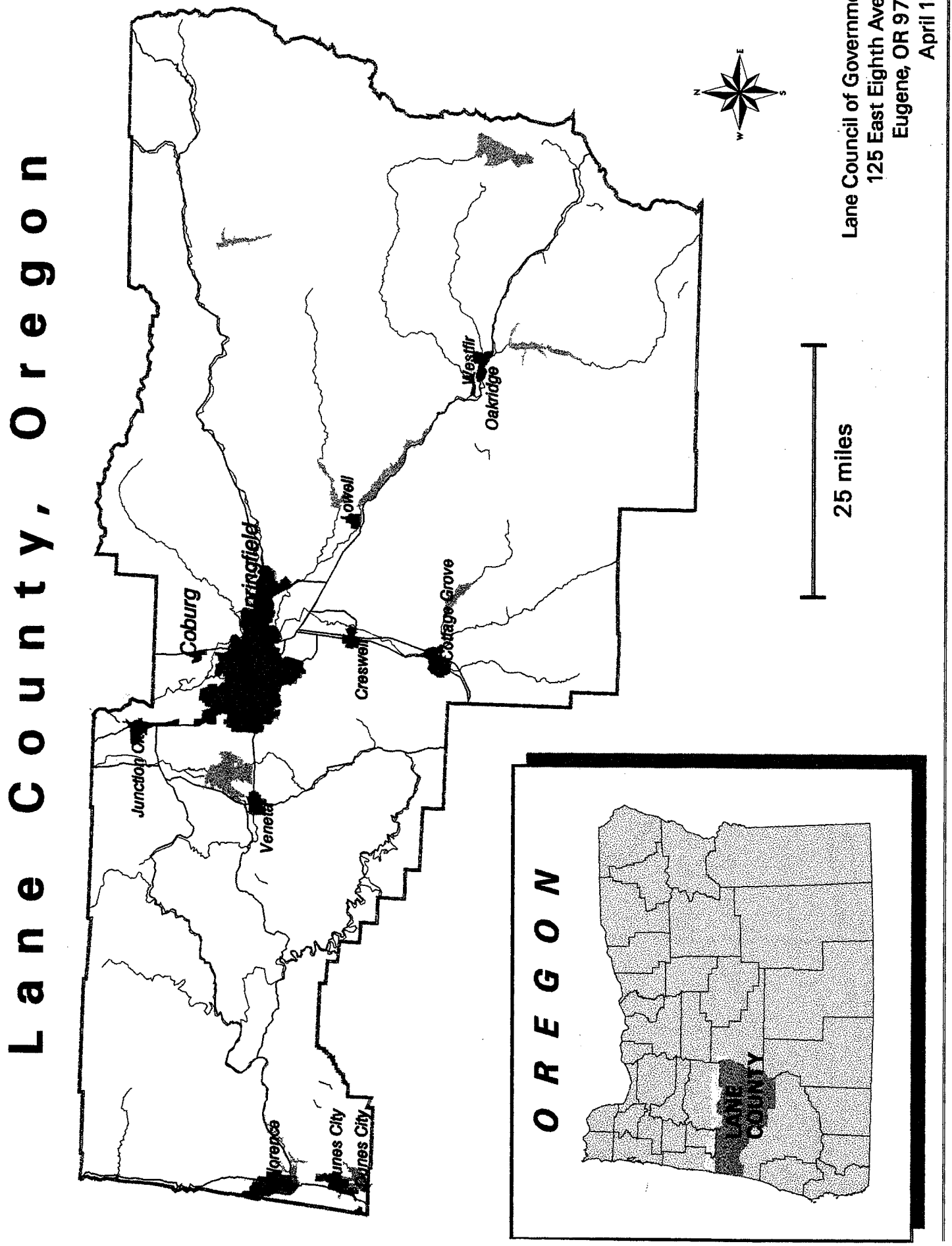
Roadway Condition
Map 2 illustrates the roadway condition within the UGB. In general, most roadways that are paved are either in good or fair condition. Lane County recently improved Willamette Street to include bicycle lanes, sidewalks, and curbs and gutters. This map also shows the location of gravel roadways (portions of Coleman Street and McKenzie Street) and a small segment of unbuilt public right-of-way on Macy Street east of Harrison Street.

Jurisdictional Responsibility
Five streets within the Coburg city limits are under the jurisdiction of Lane County: Willamette Street, Pearl Street, Coburg Industrial Way, Van Duyn Road, and Daray Street (see Map 3). In addition, Coburg Bottom Loop and North Coburg Road are county roads that run along and continue beyond Coburg's UGB. Although there are no state facilities in the Coburg UGB, the Interstate 5 interchange lies directly adjacent to the UGB and significantly impacts local travel behavior and patterns. Interstate 5 is a federally recognized interstate on the National Highway System and is one of the primary transportation routes in Oregon and pacific western states.

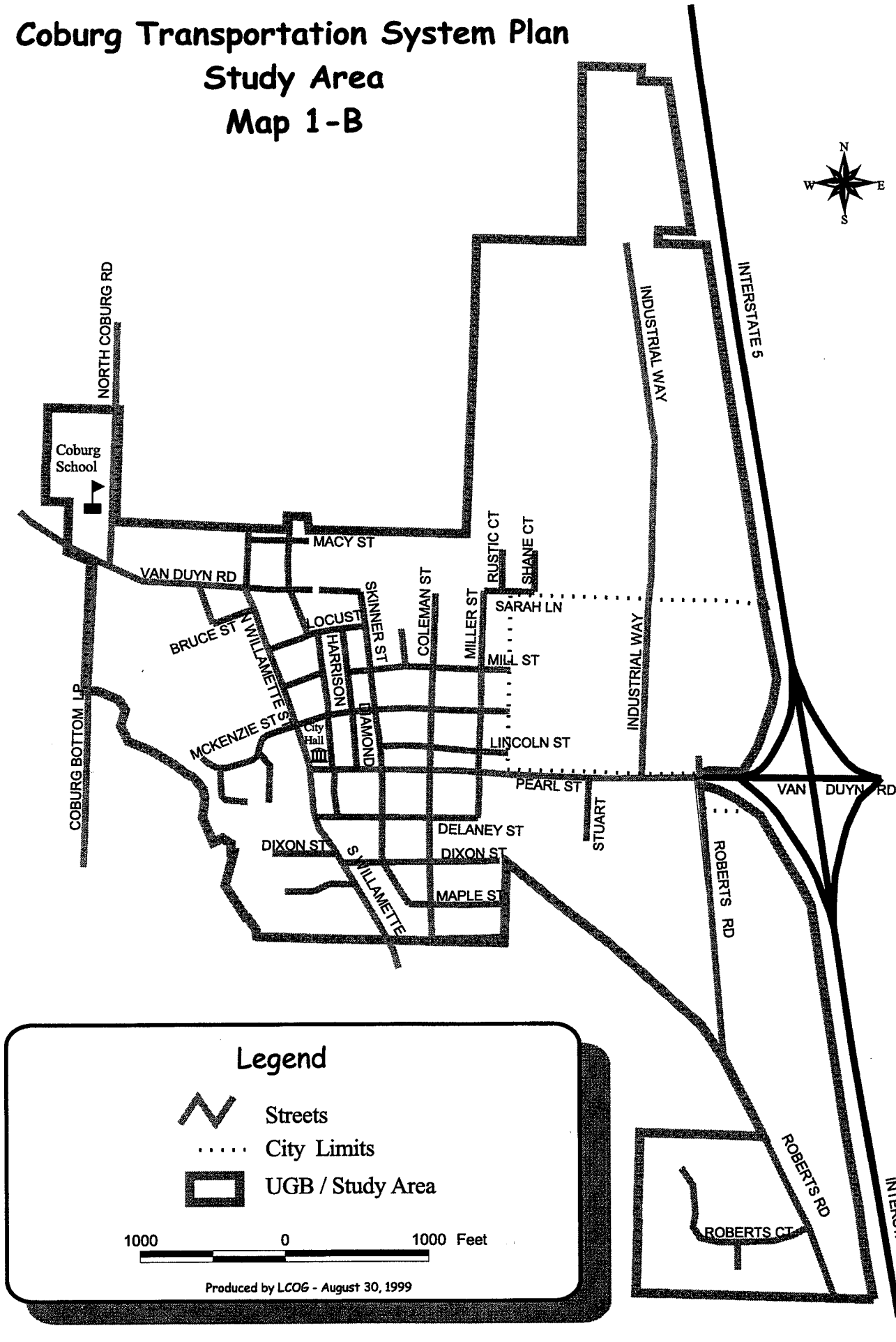
Functional Classifications
The majority of streets in Coburg are city-owned local streets. There are a small number of city-owned collectors, generally following LTD's bus route and Roberts Road in the industrial part of the City. Daray Street, Coburg Bottom Loop, and North Coburg Road are Lane County-owned local streets. Coburg Industrial Way is a Lane County-owned collector. Willamette and Pearl

Streets are Lane County-owned arterials that run through Coburg. Interstate 5 and associated interchange is part of the federal interstate system. See Map 4 for road functional classifications.

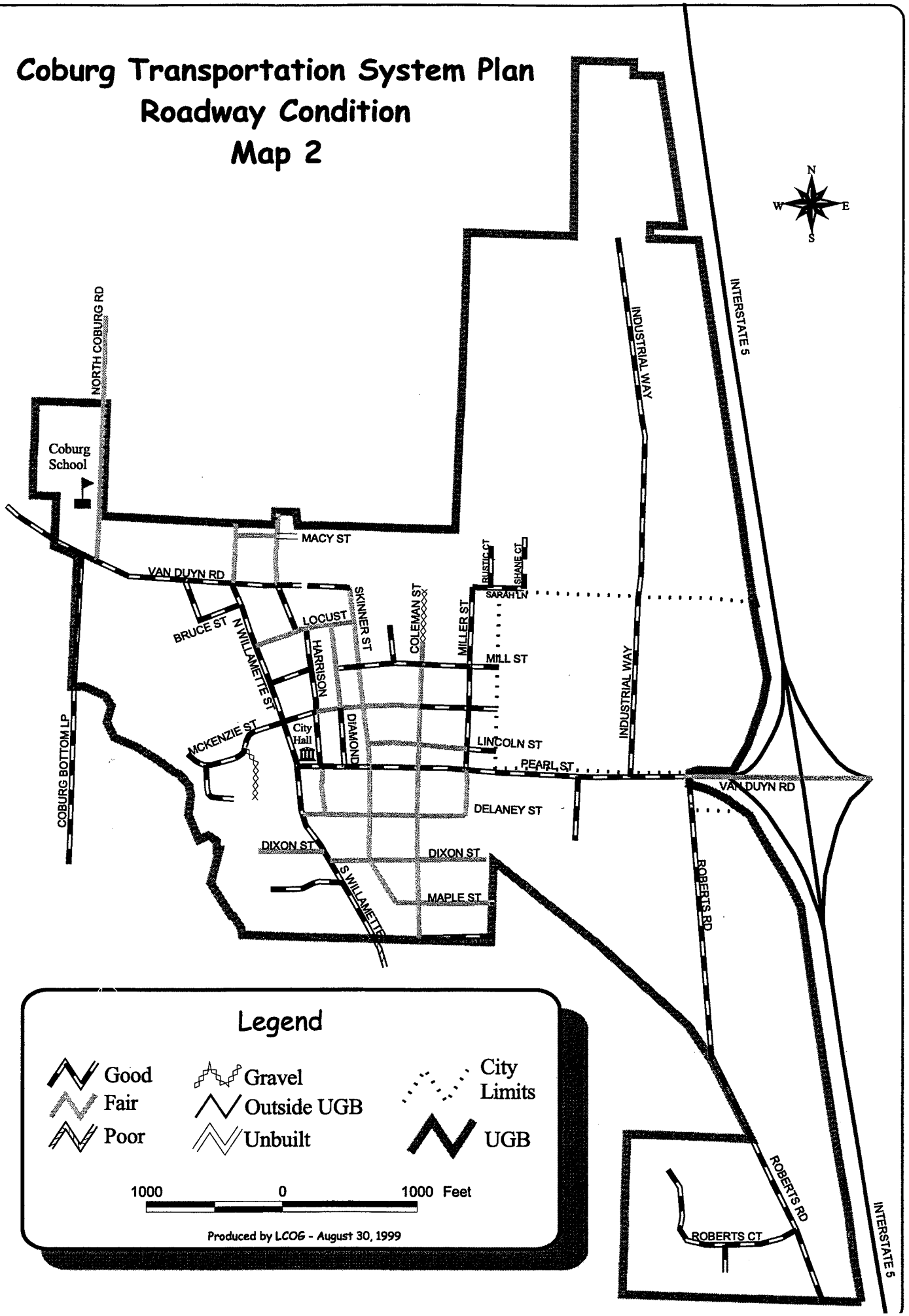
Map 1-A: Vicinity Map



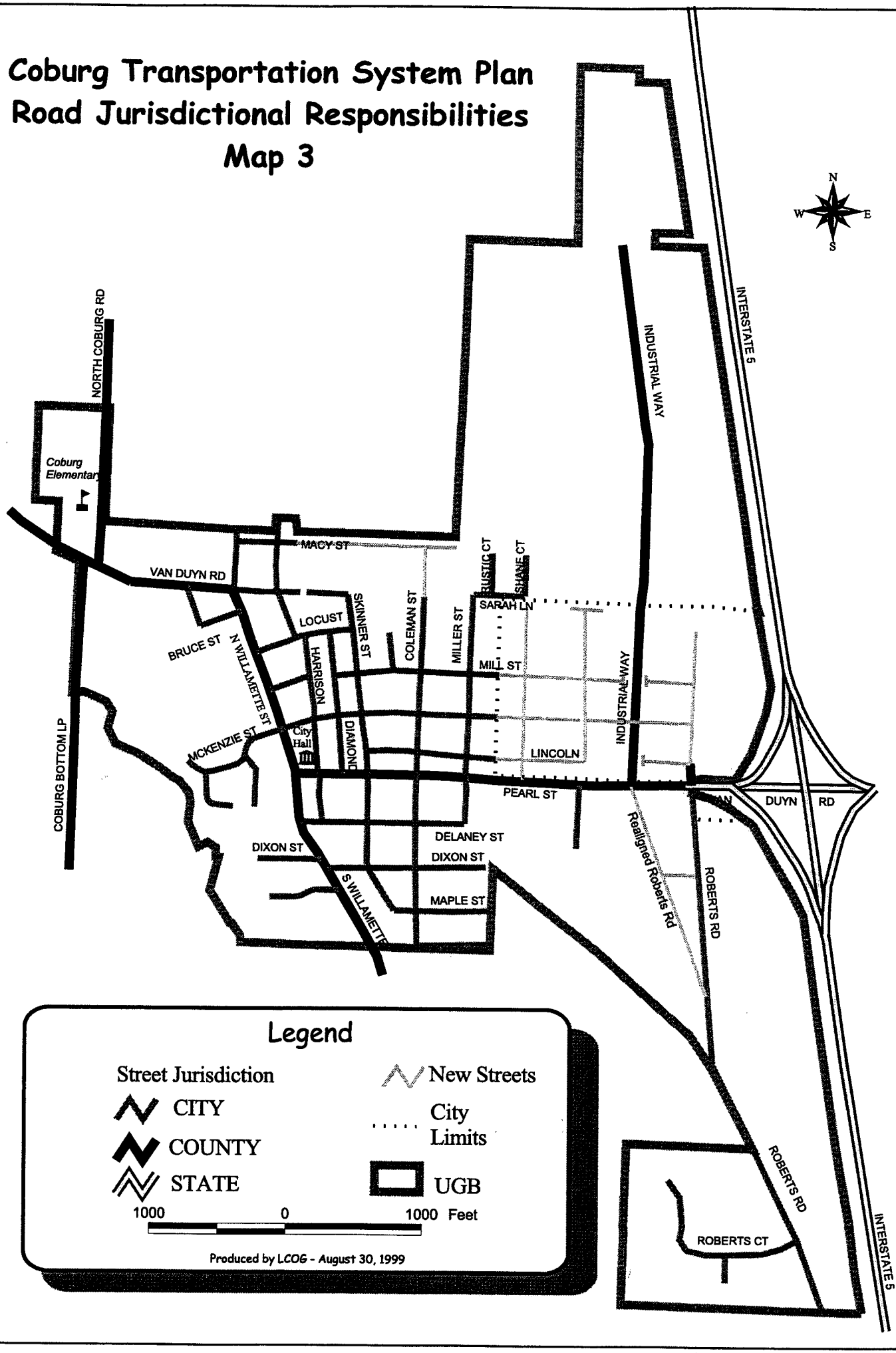
Coburg Transportation System Plan
Study Area
Map 1-B



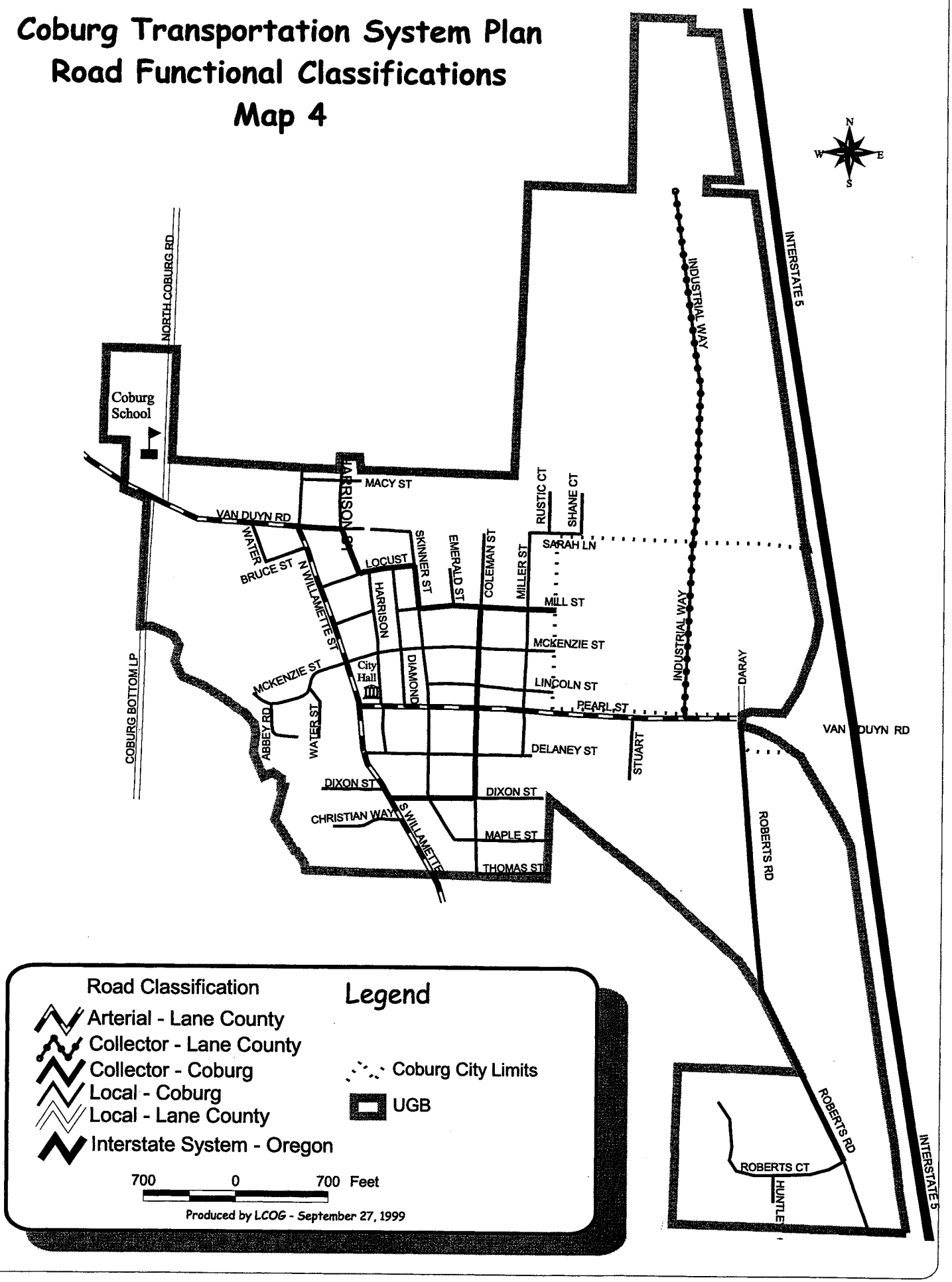
Coburg Transportation System Plan
Roadway Condition
Map 2



Coburg Transportation System Plan
Road Jurisdictional Responsibilities
Map 3



Coburg Transportation System Plan
Road Functional Classifications
Map 4



Traffic Control
The only signalized intersection in Coburg is at the corner of Willamette Street (north-south) and Pearl Street (east-west). This signal was installed in February 1999 and is maintained by Lane County with electrical cost funded by the City. The signal was installed so recently that the Level-of-Service at this intersection has yet to be calculated.

Accidents
The number and location of traffic accidents were tallied for the period January 1991 through September 1995 and are shown on Map 5. The accident data is from ODOT and is based on accident reports submitted to the Division of Motor Vehicles that involve more than $500 in property damage and/or result in an injury. A total of 18 accidents occurred during this period. The majority of these accidents occurred at various unique locations along Willamette and Pearl Streets. However, four separate accidents were recorded at the intersection of Willamette Street and Pearl Street. All reported accidents resulted in non-fatal injuries or property damage. See Appendix I for Coburg Interchange and Interstate 5 accident counts.

Traffic Counts
Traffic counts were obtained from the Lane County Public Works (LCPW) Department from 1994. LCPW conducts routine traffic counts on county facilities. These traffic counts were used for the development of the TSP. The Oregon Department of Transportation (ODOT) conducted additional traffic counts on the interchange and connecting ramps during summer 1996. These counts were used in developing the Coburg-Interstate 5 Interchange Refinement Study alternative. This alternative is a key element in the Coburg TSP (see Appendix I).

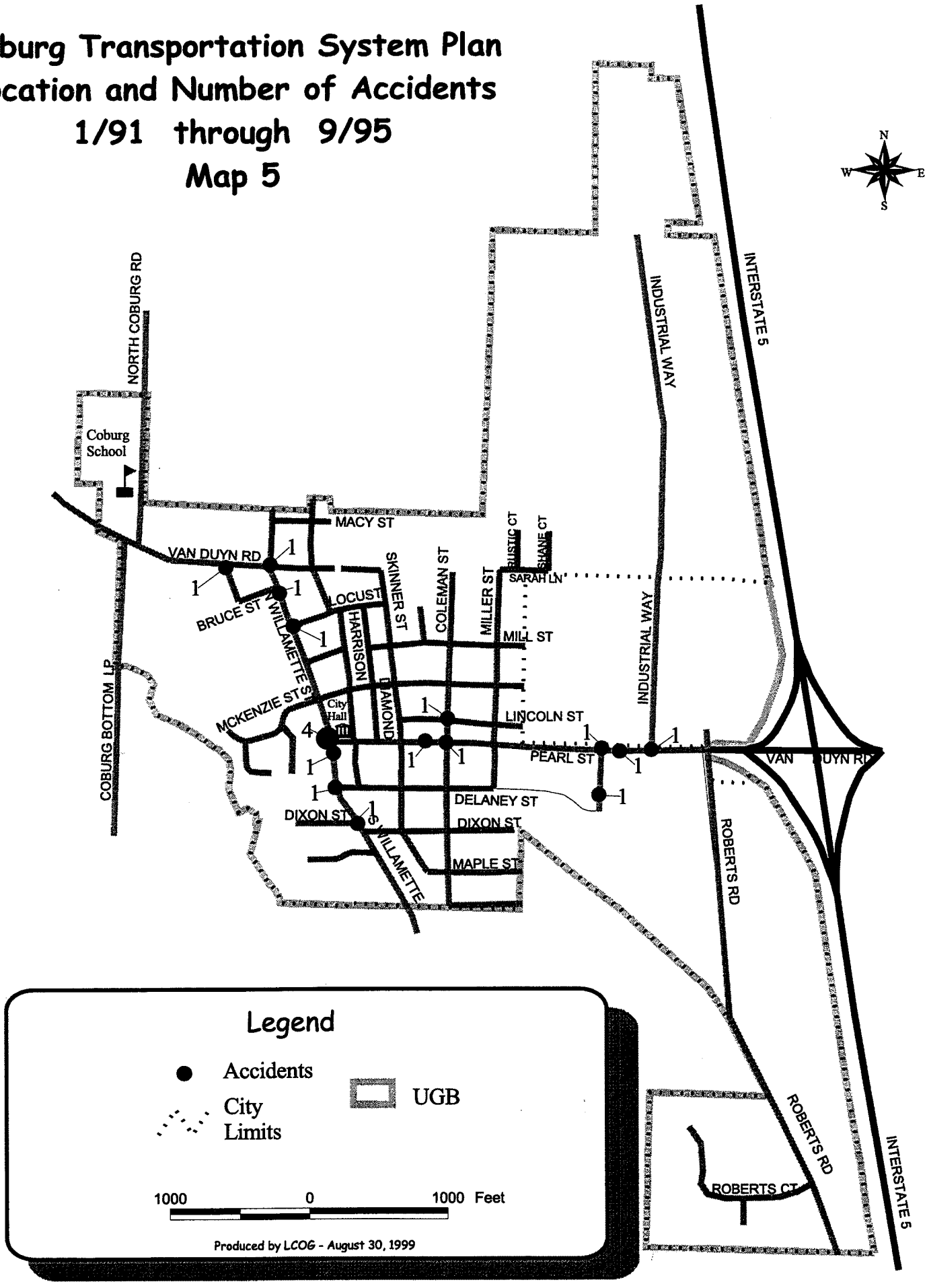
The existing transportation system is dominated by automobile and truck traffic. Alternative modes such as bicycles and pedestrians are present but represent only a small portion of the total trips within the study area. 1998 estimated weekday traffic volumes are presented on Map 6. As shown on this map, the majority of trips enters or leaves Coburg via Willamette and Pearl Streets. Based on 1998 data, the stretch of Willamette from the south city limits to Delaney Street receives 7,156 weekday trips on average. The remaining stretch of Willamette Street north of Delaney Street to Van Duyn Street varies from 6,984 to 7,256 trips.

In addition to the data presented on Map 6, traffic counts were used to project future traffic volumes to the year 2015. These data, including a calculation of roadway capacity, are presented in Chapter 3.

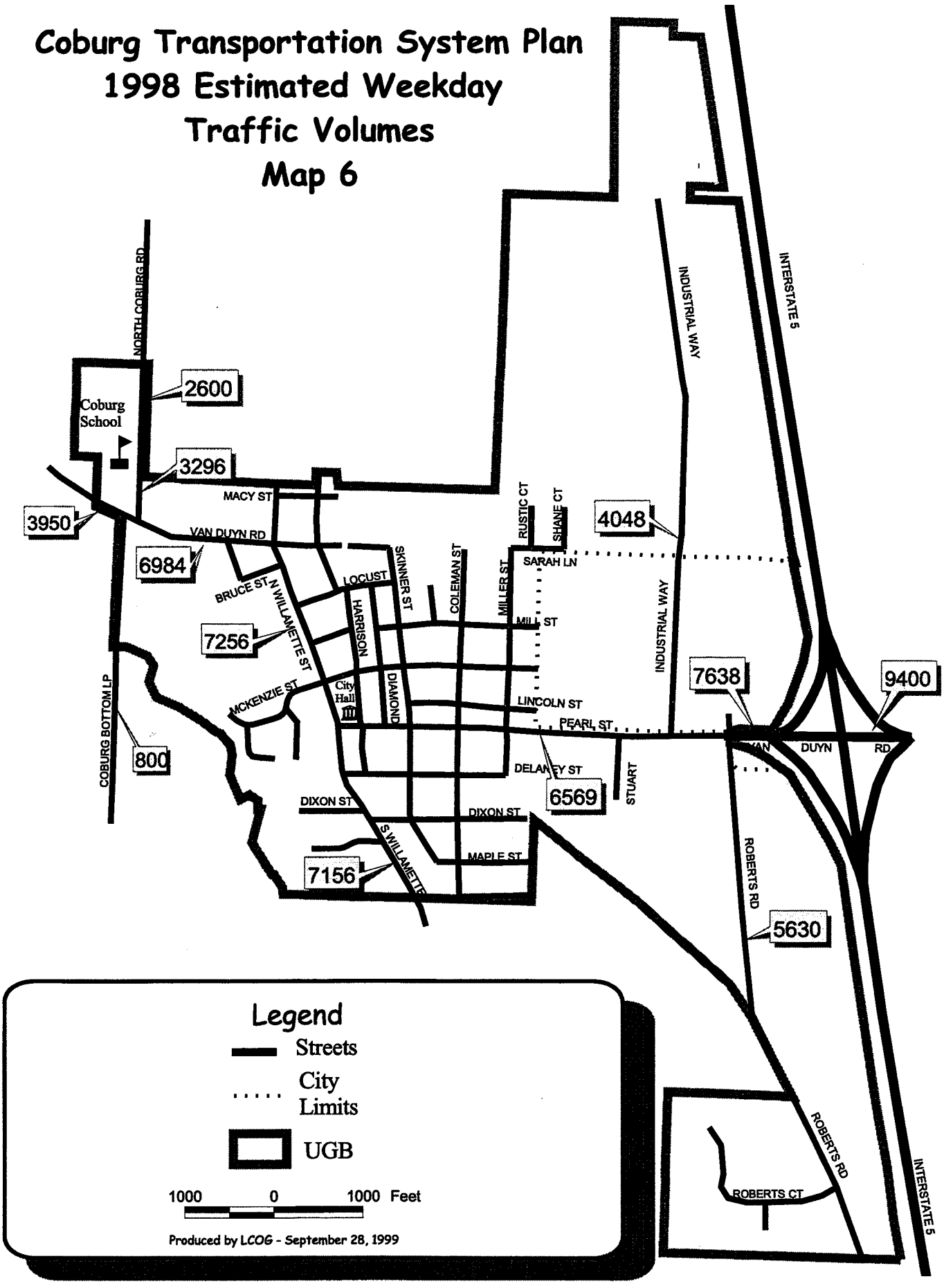
As discussed above, ODOT conducted a refinement plan concurrent with the development of the TSP. As part of the refinement plan, additional data were collected including traffic volumes, accident counts, land use inventories, environmental constraints, and transit/transportation demand management information. Traffic volumes were measured for the interchange ramps and overcrossing for 1996. On the ramp terminals, the highest average daily traffic (ADT) for 1996 occurred on the southbound exit (4,900) and northbound entrance (3,400). The percentage change in daily volumes since 1990 for these terminals was 31.1 and 45.9 percent respectively, although the highest percent change from 1990 to 1996 took place on the southbound entrance ramp; it experienced a 76.5 percent change.

The overcrossing ADT was estimated at 4,900 vehicles for 1996, constituting a 37.7 percent increase since 1990. Along Interstate 5 at this location, the 1995 Average Daily Traffic is 35,300. On local streets, traffic volumes were highest along Van Duyn Road, west of the interchange (Van Duyn becomes Pearl Street just past the southbound ramp). ADT was 9,300 in 1996, which was a 67.4 percent increase since 1990. Along Pearl Street, west of the interchange, the ADT was 8,300 before Coburg Industrial Way and 7,200 ADT at Truck 'N Travel. Truck volumes at the interchange are relatively higher than other interchanges in rural areas along Interstate 5. ADT truck volumes were highest at the northbound and southbound ramp terminals. Of the 1,100 ADT on the southbound ramp 37 percent or 693 vehicles were trucks. At the northbound ramp there are 3,400 ADT and 14 percent of that traffic were trucks. The same is true of the overcrossing, 14% of the ADT are trucks. Additional traffic volume information is presented in Appendix I.

Coburg Transportation System Plan
Location and Number of Accidents
1/91 through 9/95
Map 5



Coburg Transportation System Plan
1998 Estimated Weekday Traffic Volumes
Map 6



C. Bicycle System

Currently, there are full bicycle facilities on Willamette Street and Van Duyn Road, which are under county jurisdiction. One block of city-owned Diamond Street, from McKenzie to Pearl Street, also has full bicycle facilities. The City had intended to continue this network but received significant community opposition. Full bicycle facilities are defined as full width, unobstructed, and unbroken, paved bike lanes on both sides of the segment, either striped lanes or paved shoulder.

Most bicycle usage on local and collector city streets occurs within the street (see Map 8). Since traffic volumes are relatively low on city streets (see Map 6 for estimated weekday traffic volumes), sharing the roadway among bicyclists, automobiles, and pedestrians roadway is appropriate, although there is room for improvements to the network. Proposed improvements include a network of on-road and multi-use paths. Proposed improvements are discussed in more detail in Chapter 4, Recommended Transportation System Plan and shown on Map 15. There is limited bicycle parking in Coburg, located at the Coburg Market on Willamette Street and Coburg Elementary on North Coburg Road. Coburg is well suited to increased bicycle usage in town with its small size and relatively flat terrain.

D. Pedestrian System

The pedestrian system within the study area is limited to sidewalks. As with bicycles, most pedestrian usage occurs within the street. Since traffic volumes are relatively low on local and collector city streets, the roadway is shared among bicycles, automobiles and pedestrians. During the inventory phase of the project, all sidewalks within the study area were mapped and evaluated for condition. The location of existing sidewalks is presented on Map 7. Rustic Court, Shane Court, and Sarah Lane are new local residential streets that have full sidewalks and recently improved Willamette Street has full sidewalks (see definition below). Van Duyn, from North Coburg Road to Willamette, Dixon, from Willamette to Skinner, and Locust, from Willamette to Harrison have partial sidewalks (see definition below). Coburg's Historic District nomination packet asserts that the City's identity is due in large part to the lack of sidewalks. In the past, the community has rejected the City's proposals to install sidewalks.

Full sidewalks are defined as full, unobstructed, and unbroken sidewalks present on both sides of the roadway. Since Willamette Street has higher volumes and more through traffic, it is logical to have full sidewalks. Partial sidewalks are defined as having sidewalks present, but partial (obstructed or broken on either side and/or missing on one side).

As with bicycle usage, Coburg is well suited to increased pedestrian usage in town with its small size and relatively flat terrain, and this usage will likely continue in the roadway. However, the TAC and city staff believe the City lacks safe pedestrian *crossings* for school children, residents, and visitors. Proposed improvements, such as pedestrian safety projects, are discussed in more detail in Chapter 4, Recommended Transportation System Plan and shown on Map 12.

E. Public Transit

Lane Transit District (LTD) is the sole fixed-route, public mass transit provider operating within Lane County. LTD's service boundaries were originally established in 1971 when the District was formed and includes those communities that participate in paying a business payroll tax, the local funding mechanism used to pay for LTD service operations. LTD has the authority to provide bus service throughout Lane County. Communities located outside the LTD service area that desire LTD fixed-route services can work with LTD and their elected officials to request bus service. This partnership involves the LTD Board, the governing body of the community, and the community residents. Route frequency and locations have developed and changed over the years primarily based on ride volumes, efforts to maximize the use of available resources, and the ability to meet adopted productivity standards.

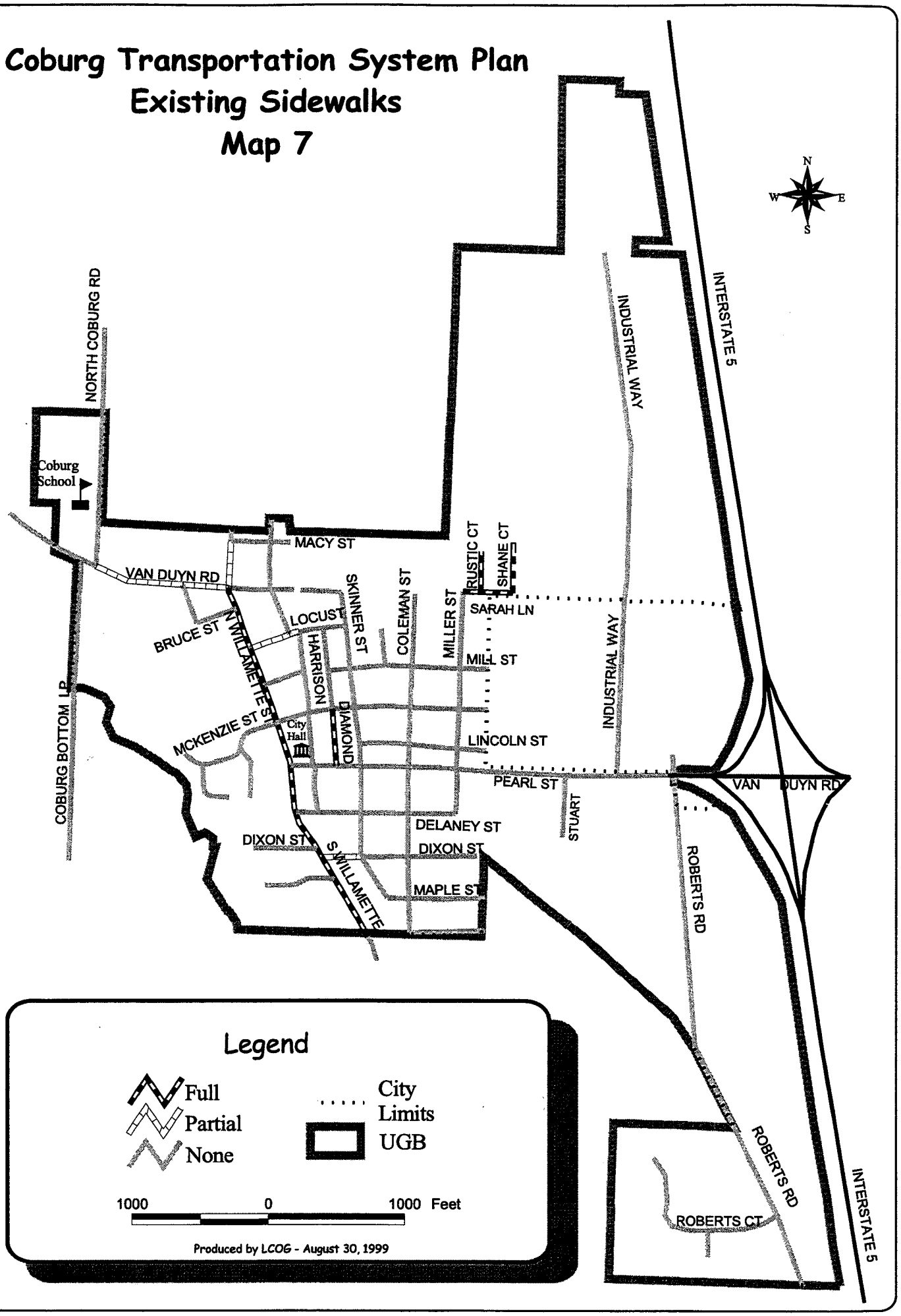
In small communities like Coburg, service is usually designed as *commuter only* due to the relatively low volume of riders. The distance between the community and Eugene-Springfield metropolitan area, as well as low population densities contribute to the higher cost of providing bus service in rural communities.

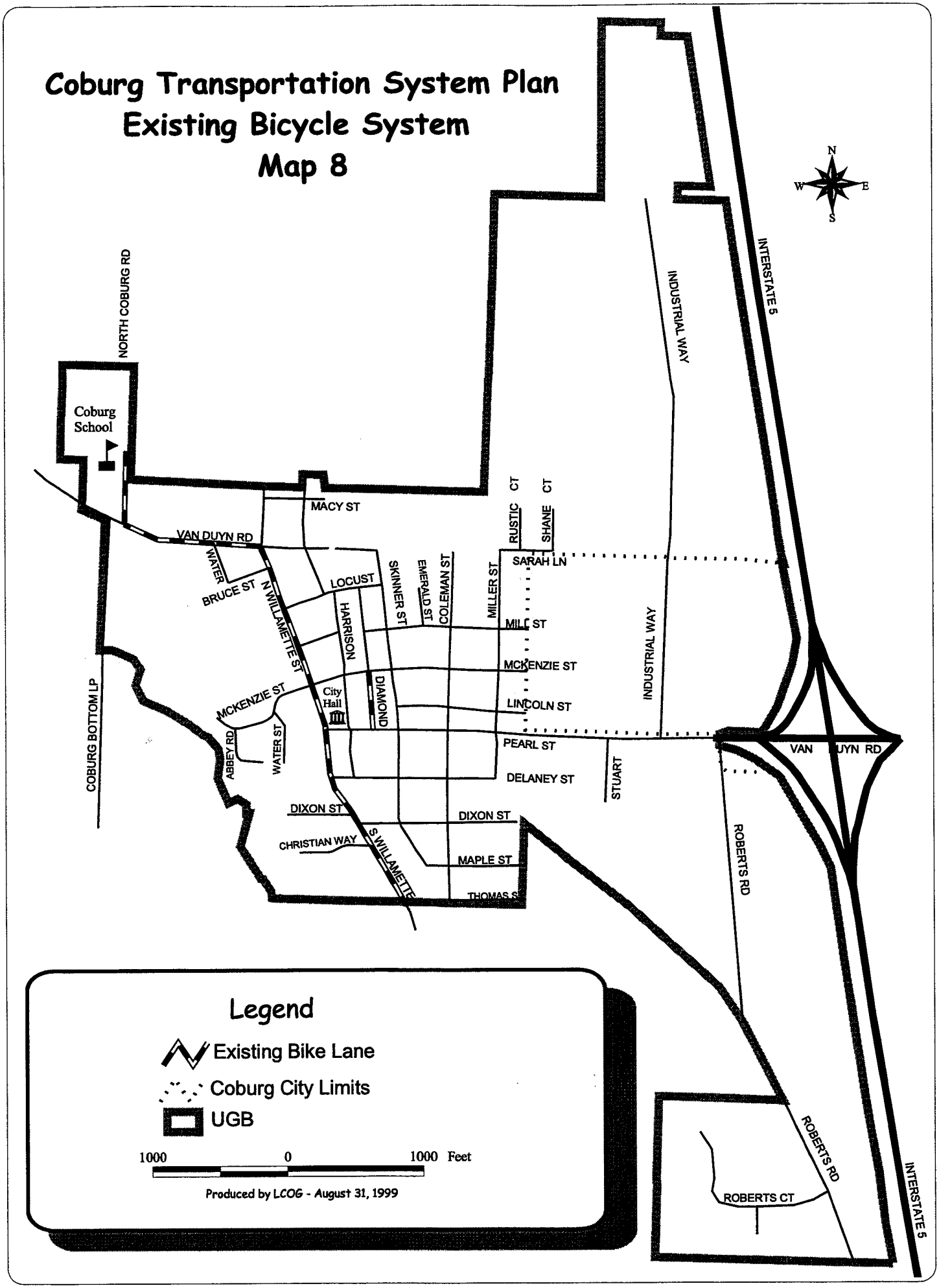
LTD Route #96 services Coburg (refer to Map 9). LTD ridership averages 18 passenger boardings per trip on the six trips made each weekday for a total of 108 boardings per weekday. LTD's productivity standard for rural routes is 20 boardings per round trip; Coburg's route is below that standard. A specific trip on a rural route is considered substandard if it carries fewer than 15 boardings. There is no Saturday service.

Coburg does not have a formal Park-and-Ride location. At present there is free parking with good capacity. There is one covered bus shelter located south of Mill, east of Willamette Street.

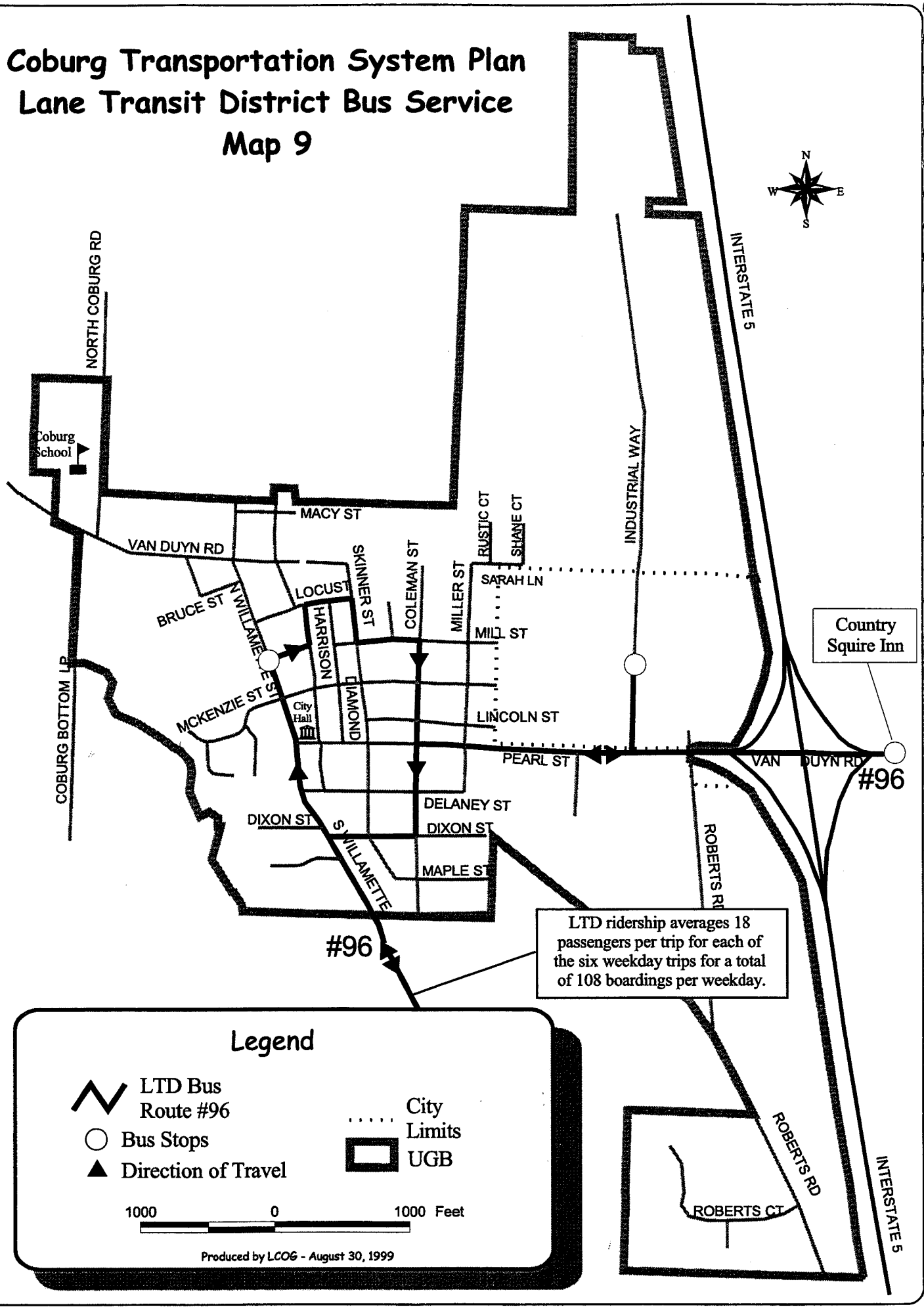
For all of their rural routes, LTD has requests for later service. LTD has also had requests for Saturday service for Coburg.

Coburg Transportation System Plan
Existing Sidewalks
Map 7




Coburg Transportation System Plan
Existing Bicycle System
Map 8
N
W
E
S
NORTH COBURG RD
Coburg School
INTERSTATE 5
INDUSTRIAL WAY
MACY ST
VAN DUYN RD
WATER
BRUCE ST
N WILLAMETTE ST
LOCUST
HARRISON
SKINNER ST
EMERALD ST
COLEMAN ST
MILLER ST
RUSTIC CT
SHANE CT
SARAH LN
MILL ST
MCKENZIE ST
LINCOLN ST
PEARL ST
DELANEY ST
STUART
DIAMOND
City Hall
COBURG BOTTOM LP
ABBEY RD
WATER ST
DIXON ST
CHRISTIAN WAY
S WILLAMETTE
MAPLE ST
THOMAS ST
ROBERTS RD
ROBERTS CT
Legend
Existing Bike Lane
Coburg City Limits
UGB
1000 0 1000 Feet
Produced by LCOG - August 31, 1999

Coburg Transportation System Plan
Lane Transit District Bus Service
Map 9



Paratransit (Demand-Response) Transit Services
Acting on behalf of LTD, Lane Council of Governments (LCOG) oversees and coordinates with providers to operate services funded through the *Special Transportation Fund for the Elderly and Disabled* (STF)(ORS 391.800-391.830). Specialized transportation for elderly and disabled residents of the Coburg area is provided through Ride*Source* Shopper.

Ride*Source* Shopper is a once-a week shopping service. Riders are picked up at their homes and transported as a group to a local store. The driver assists by loading, unloading, and carrying packages. The Ride*Source* Shopper provided rides to nine elderly and riders with disabilities in Coburg, with a total of 536 one-way rides during fiscal year 1995-96. The Ride*Source* Shopper is funded through the STF.

There are deficiencies in the service. There are no volunteer-based services available in Coburg for trips to and from medical appointments for the elderly and persons with disabilities. The Ride*Source* Shopper operates one day each week and only for grocery shopping. Specialized services for the elderly and persons with disabilities do not serve other individuals within the community who also have limited transportation options. These citizens include young people seeking employment or attending social activities, or those living on low incomes.

Inter-City Passenger Bus or Rail Services
There is no inter-city passenger bus that services Coburg.

F. Air, Rail, Water, and Pipelines

The air, rail, water, and pipeline components make up a very small part of the overall transportation system in Coburg.

Air Plan
There is currently no direct air service for goods, passengers and services within the Coburg UGB. Air service for passengers and freight is available at the Mahlon-Sweet Airport, located approximately seven miles east of the study area. This airport provides regularly scheduled service to national destinations with connections to nearby international airports in Portland, San Francisco, and other cities.

Rail Plan
Coburg has no freight or passenger rail activity at this time. The Southern Pacific Railroad formerly owned a right-of-way that ran roughly northwest-southeast, diagonally bisecting the city. Several sections of the right-of-way have been reclaimed for other uses and purchased by private property owners.

The Eugene Station, less than 10 miles from Coburg, provides the nearest passenger rail service, with Amtrak routes running north on the Valley Main Line and south on the Cascade Main Line. These lines account for significant passenger activity due to Amtrak's Coast Starlight train, which has stops in Seattle, Portland, Salem, Albany, and Eugene, as well as connections to

Chemult, Klamath Falls, and points south all the way to Los Angeles. In 1992, 45,742 passengers got on or off at the Eugene Station.

Water Plan
There are no navigable waterways within the Coburg UGB. The confluence of the McKenzie and Willamette Rivers lies approximately two miles southwest.

Pipelines

Natural Gas
Northwest Pipeline Company operates a major regional natural gas transmission line between Portland and Eugene, which passes through the Coburg UGB. The gas is distributed in the Coburg area by Northwest Natural Gas Company. The six-inch, high-pressure main interconnects storage facilities in the state as well as interstate sources.

G. Natural Resource Features

Slope
Because the topography within Coburg is relatively flat, there are no steep slope considerations.

Soils
Soil types can influence development ability because variations in stability and permeability. Unstable soils can shrink or swell, which limits the development of structures on such soil. Permeability can influence the soils' ability to drain, with low permeability soils creating areas of ponding, limiting septic system effectiveness, and increasing flooding potential.

The Coburg Comprehensive Plan identifies significant portions within the UGB as having soil restrictions for development. However, the Comprehensive Plan does not specify how and to what extent these soil restrictions limit development. Transportation Analysis Zones (TAZ) 4, 5, and 6 are impacted by these designated restrictions. About 85 percent of TAZ 5 indicates soil limitations with all of this area being designated for Light Industrial use. Roughly half of TAZ 6 also shows soil limitations for development, which again primarily influences areas designated for Light Industrial development. Most of the Highway Commercial plan designation area located in TAZ 4 shows soil limitations.

Coburg is largely surrounded by Class II soils. To the north of the residential portion of Coburg lies a mix of Class I and II soils. The soil to the west of Coburg, down the bluff from the present residential areas is Class II soil, as is the area south of Coburg, west of Coburg Road. South of the UGB down Roberts Road, the soil between the railroad right-of-way and Interstate 5 is Class IV soil. This Class IV soil extends west of the railroad right-of-way until it nears Muddy Creek, where it is replaced by Class II soil.

Surface Water Drainage
Muddy Creek is the main drainageway that flows through TAZs 4, 5, and 6, generally in a north-south direction. It is unlikely that development will be restricted by this water feature because it has already been altered and channelized to accommodate existing and projected development.

Mill Slough, a slow-moving natural channel, also flows along the western edge of the UGB in TAZ 2.

Coburg is located on the northeastern periphery of a 5 percent flood hazard area and the southern portion of the city is subject to a 1-2 percent flood hazard. Intensive land uses, such as residential developments, are subject to FEMA regulations and City ordinances. Proposals undergo a more extensive review and additional measures must be taken to reduce the risk of flood damage to property in these areas.

According to the FEMA map, the majority of the flood hazard area in Coburg is located along the western edge of TAZ 2. Between 65 and 70 percent of this zone is comprised of designated flood plain, all in planned residential use. Because of the potential increased costs associated with design, construction, and insurance of development in flood prone areas, this area is likely to develop more slowly than other portions of Coburg. A portion of this area (about ten acres) is also desirable as a potential future park site as recommended in the Coburg Comprehensive Plan.

Other identified flood plain areas are located in a narrow band adjacent to Muddy Creek, which extends through TAZs 4, 5, and 6. Because this area is not extensive, it is unlikely that these areas will influence full development potential of the area. However, it may influence the design of roadways and need for specific engineering practices within these areas.

Wetlands

The presence of wetlands may influence the extent of development and/or where it occurs on both an area-wide and a site-specific basis. Development proposals that may impact wetlands are regulated and permitted by the Army Corps of Engineers and the Oregon Division of State Lands. If wetlands are located on property, before development can occur, the boundaries of the wetlands must be clearly delineated; wetland impacts should be avoided if possible; and if impacts do occur, mitigation must replace the values lost by development.

Wetland features for this report are based on the National Wetlands Inventory (NWI). The NWI provides basic data about the general characteristics and extent of wetlands in the nation. The NWI identifies the general boundaries of wetlands; however, in many instances, actual wetland boundaries and features are more extensive than what is identified through this national classification system. A comprehensive local inventory of wetlands in Coburg is scheduled to be completed in late 1999.

Wetland features in Coburg are primarily of a linear type and were described as natural channel features in the previous section. The NWI also indicates the presence of three polygon-shaped wetlands in TAZ 5, and a small area also shown in TAZ 4 and 6. However, although TAZ 6 shows a wetlands area, this area has already been developed and it is not likely that wetlands are still present.

Table 1
Natural Feature/Potential Development Constraints by TAZ

TAZ	Soil/Flood Plain	NWI Wetlands	Water Features
1			
2	65-70% flood plain	Mill Slough	Mill Slough
3			
4	10-15% soil limitation	Muddy Creek One small polygon site	Muddy Creek
5	80-85% soil limitation	Muddy Creek Three polygon sites	Muddy Creek
6	Flood plain adjacent to Muddy Creek	Muddy Creek One polygon site, probably developed	Muddy Creek
7	5% flood plain		

H. Land Use

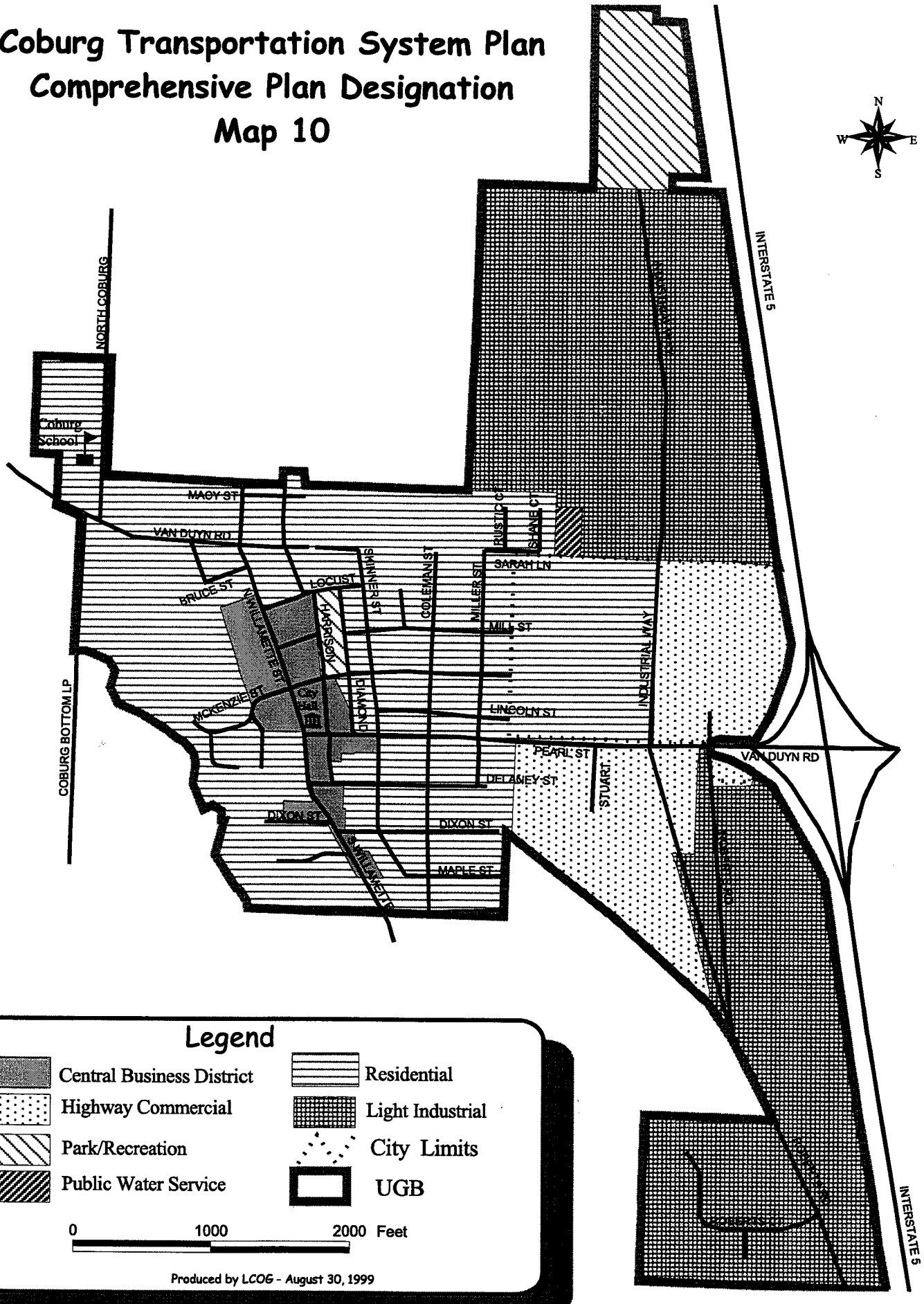
As shown in Table 2, Coburg has approximately 177 acres designated for residential development. Commercially-designated lands located in the city center (Central Business) and along Pearl Street near Interstate 5 (Highway Commercial) total about 76 acres. Coburg has one industrial plan designation, Light Industrial. All of these lands occur along Coburg Industrial Way and Roberts Road. Map 10 shows comprehensive plan designations.

Table 2
Coburg Major Land Uses

Plan Designation	Total Acres
Central Business	14.0
Highway Commercial	62.4
Light Industrial	198.9
Residential	177.4

Source: Draft Buildable Lands Inventory, October 1997

Coburg Transportation System Plan
Comprehensive Plan Designation
Map 10



I. Cultural Features

Parks and Open Space
Coburg has only one community park and an elementary school playground area (totaling about ten acres) for its recreational uses. The Coburg Comprehensive Plan recommends that the City acquire an additional ten acres for a public park site.

The existing park is located on a portion of the former Southern Pacific Railroad right-of-way. Although the Coburg Comprehensive Plan states that there is the desire to extend a greenway belt along its length within the UGB and convert this right-of-way into a pedestrian/bicycle path, development proposals and private property purchases are underway.

To meet the City's desire to retain some open space within the city limits, an agricultural use designation was incorporated into the land use plan map. This area covers a portion of flood plain land within the city limits and zoning ordinance provisions do not preclude the possibility of this land being used as a City park at some time in the future.

Schools
Coburg has only one school, Coburg Elementary School, located in TAZ 1. There are no provisions or recommendations in the Coburg Comprehensive Plan for additional school facilities in the future.

Historical Resources
The City of Coburg desires to preserve and protect identified historic, archaeological, and cultural resources within the city. Coburg was the second city in Oregon to be designated a national historic district. Historical sites should be appropriately accessible, while having their historical significance preserved. The City requires a conditional use or site plan review permit for any alteration or demolition of historical structures.

There are two structures designated by the State as having historical significance in Coburg. These are:

- Jacob Spores house and ferry site, and
- William Van Duyn house (Coburg Inn).

A fire at the Jacob Spores house in September 1996 destroyed most, if not all, of the historical value of the house. Other sites and structures were identified in the Coburg Historical Resource Inventory and are being studied by the Coburg Heritage Committee for recommendation to the City Council for possible protection. These sites include:

- IOOF Hall,
- Grange Hall,
- Allingham House,
- J.C. Goodale - E.M. Jarnigan House,
- Bartholomew House,

- Drury House,
- Diamond House,
- Goodman House,
- Smith House,
- Samuel Matthews House, and
- Pollard House.

Table 3
Cultural Features by TAZ

TAZ	Parks/Open Space	Schools	Historical Resources
1		Elementary School	
2			Three sites
3	Existing Park and Proposed Greenway		Ten sites
4			Two sites
5	Proposed Park		
6	Proposed Greenway		
7	Proposed Greenway		Five sites

Chapter Three
Future Conditions and Transportation Needs

A. Introduction

This chapter describes the projected future conditions for population, housing, employment, and traffic volumes. A discussion of public transportation, bicycle, pedestrian, and roadway needs is also included.

B. Population and Employment

As part of the transportation system plan for the Coburg urban growth boundary (UGB), both population and employment projections were developed. During the development of the plan, considerable employment growth occurred in Coburg. Data from 1994 show a total employment figure of 638 and a city population of 760. By 1998, total employment climbed to 1,704 while population increased to 790. Due to the large increase in employment, employment projections were revised and for transportation modeling the base year was updated to 1998.

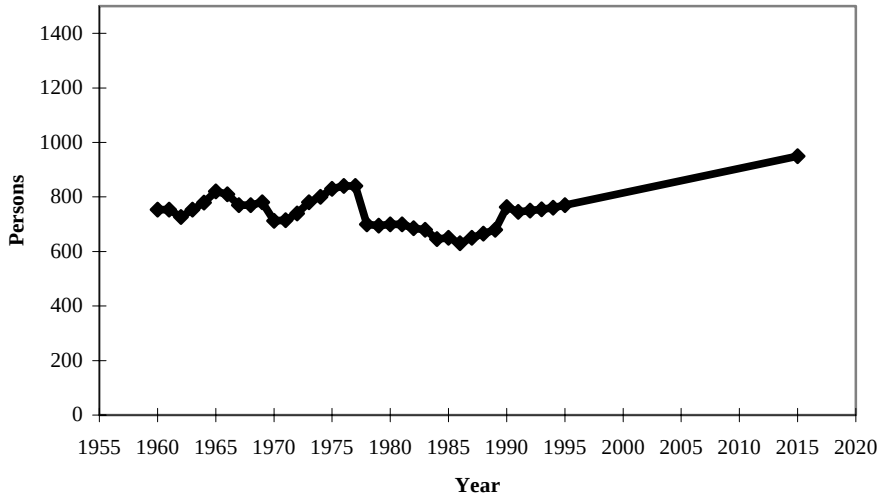
Population Projections

The population projections are used in the development of projected housing units, in this case to 2015. These housing units are used in the transportation modeling process to identify the traffic counts and patterns associated with residential development for the 20-year planning period.

To develop 2015 projected housing units for the Coburg UGB, various assumptions about population growth and residential development were necessary. Following is a description of these assumptions.

Population
In 1996, the population within Coburg's UGB was estimated at 775. Population in the Coburg UGB is projected to reach 950 persons by 2015. This assumes an annual average growth rate of 0.88 percent. This rate is similar to the rate that occurred during the 1980-1990 time period. Figure 1 depicts actual and projected population in Coburg.

Figure 1
Coburg Population
Actual and Projected
1960 - 2015



Number of Households

To determine the number of households that will require housing in 2015, the population must be divided by an assumed average persons per household. Average household size has been declining both nationally and locally over the past 30 years, and is expected to continue to decline, although more gradually. Based on 1990 decennial census data, average household size did decline in Coburg between 1970 and 1980; however, between 1980 and 1990 it did not decline. For this analysis, it is assumed that average household size will decline at a rate similar to the Eugene-Springfield metro area, which will result in an average household size in 2015 of 2.24. This results in a total of 424 households in 2015. In 1990, there were 293 households.

Number and Types of Housing Units

Determining the number of housing units needed in 2015 requires assumptions about the percentage of housing units by housing type. In addition, to ensure a healthy housing market, a 2 percent vacancy rate was assumed for owner units and a 5 percent vacancy rate for renter units. The assumption regarding the owner/renter split by housing type was taken from the 1990 Census.

To develop an assumption on the percentage of housing units by housing type, the Lane County Geographic Information System, the existing Coburg Comprehensive Plan, and local input were reviewed. Based on these assumptions, it is projected that there will be 437 housing units in the Coburg UGB by 2015, an increase of 132 from 1990. This increase is primarily due to increases in single-family, detached units. Table 4 that follows compares existing housing and housing projected for the year 2015.

Table 4

Coburg Housing Units Projections

Housing Type	Percent of Units, 2015	Number of Units, 2015
Single-Family, Detached*	81.0	354
Multi-Family	10.0	44
Manufactured Dwelling in Park	9.0	39
Total	**100.0**	**437**

** Includes manufactured dwelling on individual lots.*

Employment Projections

Projections of employment were also created for 2015. Because of recent growth, the employment projections were modified during the planning process to reflect this increase.

The employment projections are used in the transportation modeling process to verify trip rates and travel patterns associated with commercial and industrial development, in order to anticipate travel behavior over the 20-year planning period.

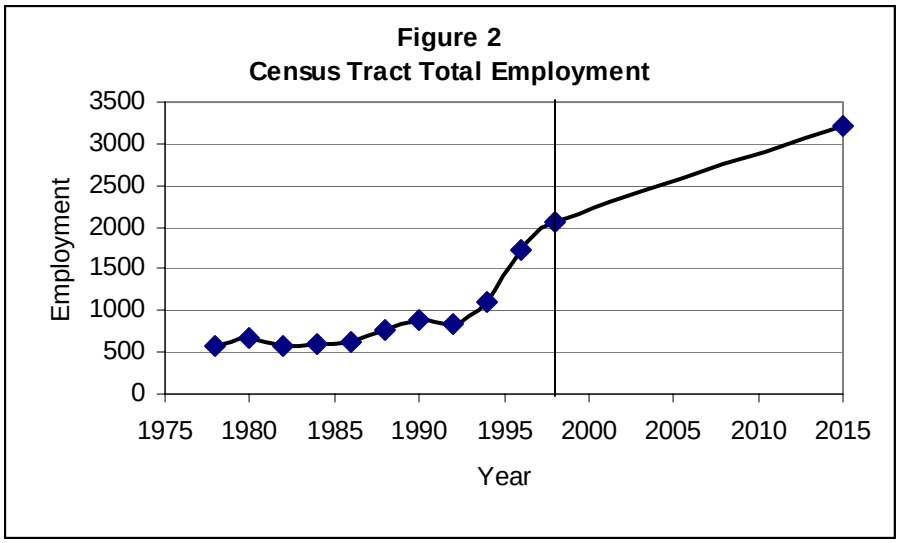
The 2015 employment projections for the Coburg UGB area are largely based on employment projections for Lane County. The County projection was used to develop a projection for Census Tract 3 in which the Coburg UGB resides. The Census Tract projection was then used to estimate a projection for the Coburg UGB area. This methodology was selected because more reliable historical data are available for Census Tract 3 than for the Coburg UGB.

The Data

Annual historical employment data for Lane County, provided by the Oregon Employment Division, was used for this analysis. Biennial historical employment data from 1978-1998 for Census Tract 3 was also used. Although total employment in the Coburg UGB is known for 1994 and 1998, it is not available for any other years.

Census Tract Projection

To develop a projections for the Coburg UGB several factors were considered. The historical data for Lane County and Census Tract 3 were used to develop a trend for Census Tract 3 employment as a percentage of Lane County employment. The extension of the 1978-1998 trend was used along with the Lane County employment projection for 2015 to arrive at a 2015 projection for the Census Tract. The 2015 projection for Census Tract 3 was 3,210 with an increase of 1,155 employees in the 1998 to 2015 period.



The Coburg Urban Growth Boundary Area Projection

In 1998, employment in the Coburg UGB was 1,704 and comprised 83 percent of the total employment in Census Tract 3. Assuming this percent to remain constant, the 2015 Coburg UGB employment projection would be 2,664. However, the percentage has been increasing. In 1994, the percentage was 58 percent. If it is assumed all the growth occurs inside the UGB, the 2015 projection would be 2,859. To arrive at a projection, the estimated amount of buildable commercial and industrial land inside the UGB as of 1999 was also reviewed. It was determined, using local employment density figures, that approximately 1,060 employees could be added. This results in a projection of 2,760, which is the approximate midpoint between the low projection of 2,664 and the high of 2,859. This seems the most reasonable projection for 2015.

Table 5
Employment Projections

Employment by Area Geographic Area	1994	1998	2015	Total New Employees	1998-2015 Average Growth Rate
Lane County	126,300	140100	177,074		1.4%
Census Tract 3	1,097	2,055	3,210	1,155	2.7%
Coburg UGB	638	1,704	2,760	1,056	2.9%

C. Allocation of Housing and Employment

The projected housing and employment numbers were used to anticipate travel volumes and patterns associated with residential, commercial, and industrial development. The Coburg study area was divided into seven Transportation Analysis Zones, or TAZ, (see Map 12) and vacant land by plan designation was calculated for each zone as shown on Map 11. The amount of vacant land by plan designation by TAZ is presented in Table 6 that follows. Projected dwelling

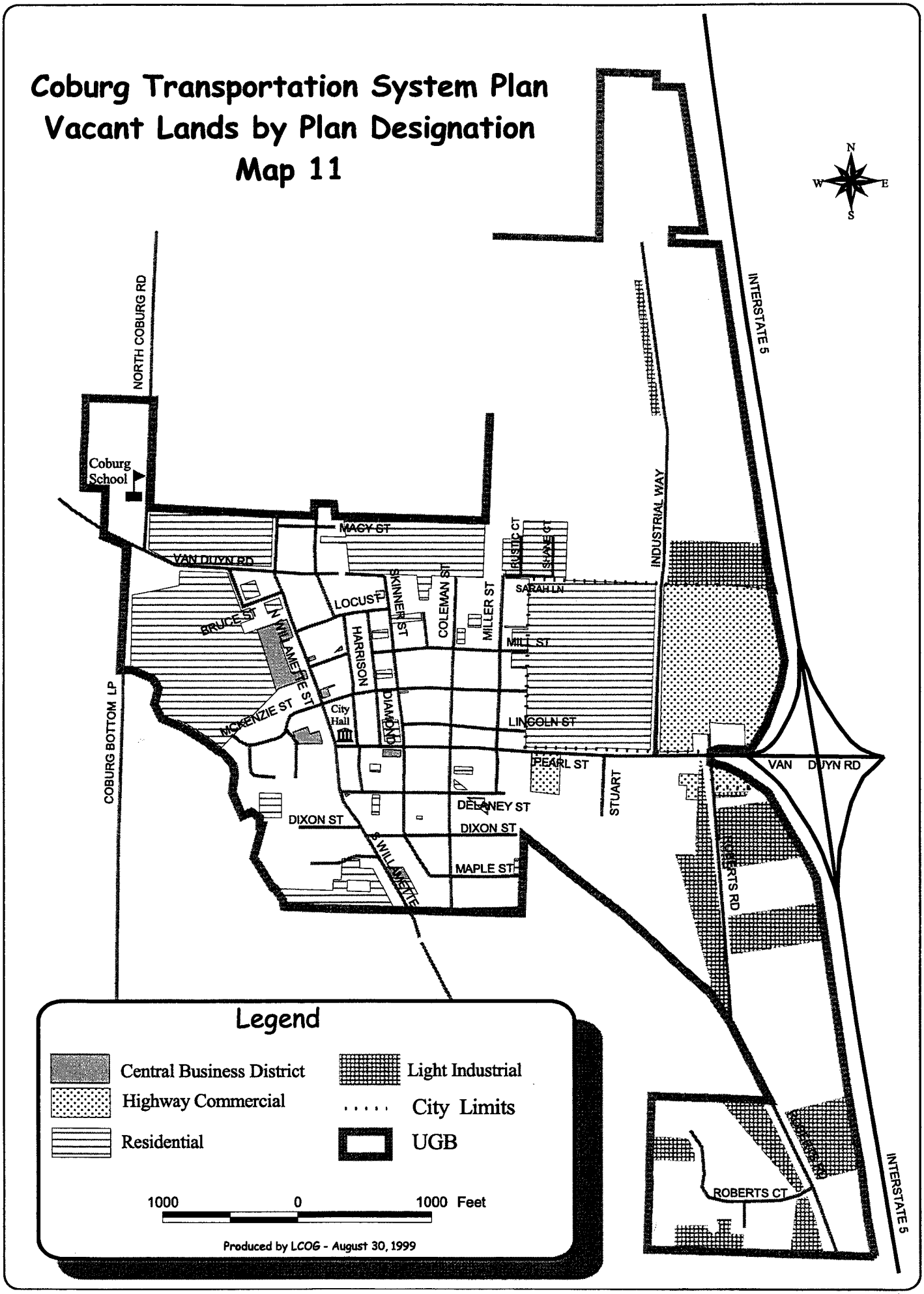
units and employment were allocated evenly to available vacant land. The existing comprehensive plan designations were assumed. The details of the allocation exercise are contained in Appendix C.

Table 6
Vacant Acres by Plan Designation and TAZ

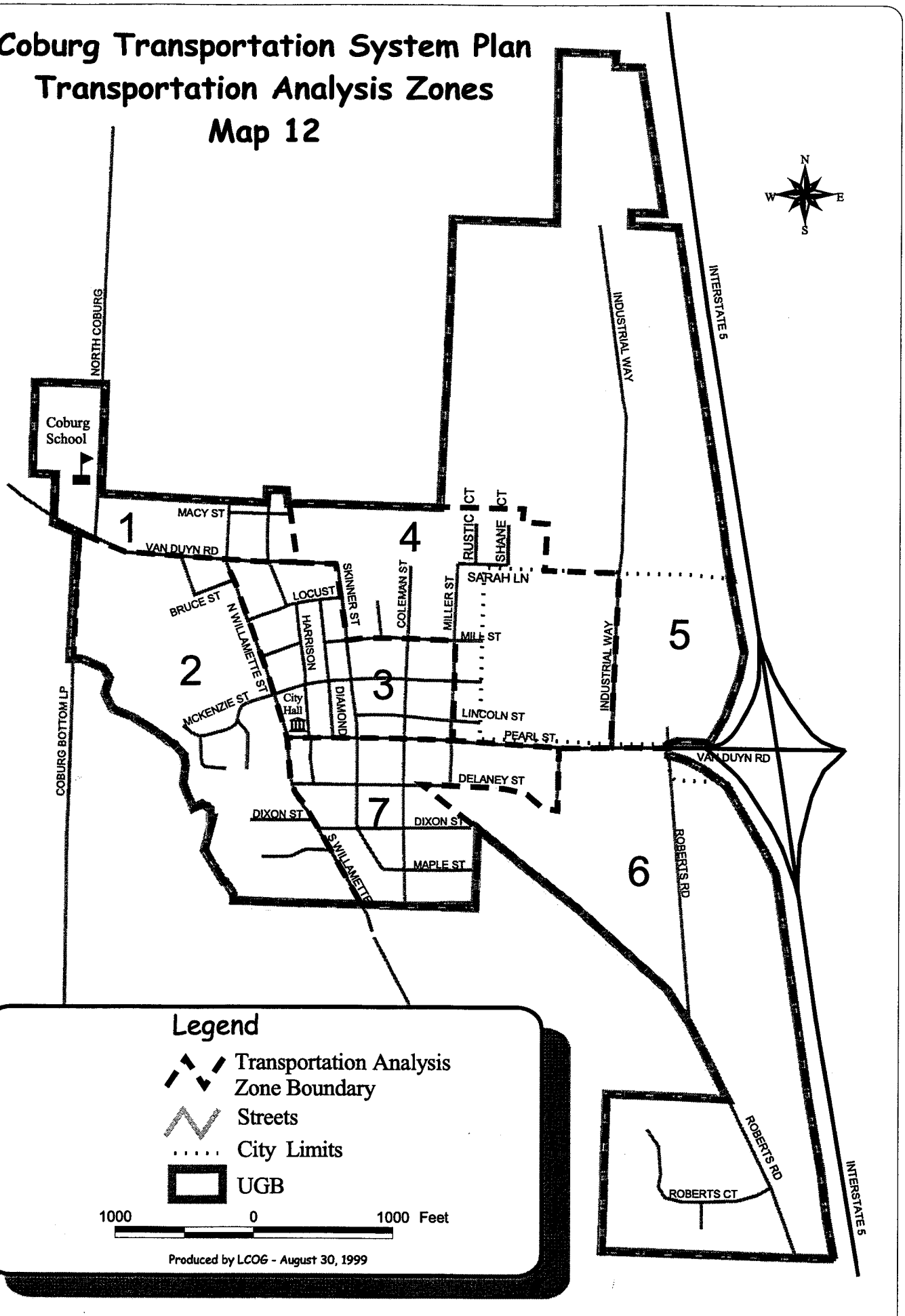
Acres by Development Type	TAZ Number							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**Total Acres**
Residential	0.21	43.41	1.36	37.09	0.00	0.00	1.29	83.36
Commercial	0.00	4.11	0.42	0.00	0.00	0.00	0.49	5.02
Highway Commercial	0.00	0.00	0.00	0.00	24.46	4.73	1.43	30.62
Industrial	0.00	0.00	0.00	0.00	41.39	37.09	0.00	78.48
Utility	0.00	0.00	0.00	0.00	21.01	0.00	0.00	21.01
Total acres	**0.21**	**47.52**	**1.78**	**37.09**	**86.86**	**41.82**	**3.21**	**218.49**

Based on land use data from the geographic information system, approximately 83 acres are vacant and designated for residential use and approximately 135 acres are vacant and designated for employment use. No analysis was done on the adequacy of supply of buildable lands. For the purposes of this study, it was assumed that the vacant acres are enough to house the population and supply employment needs.

Coburg Transportation System Plan
Vacant Lands by Plan Designation
Map 11



Coburg Transportation System Plan
Transportation Analysis Zones
Map 12

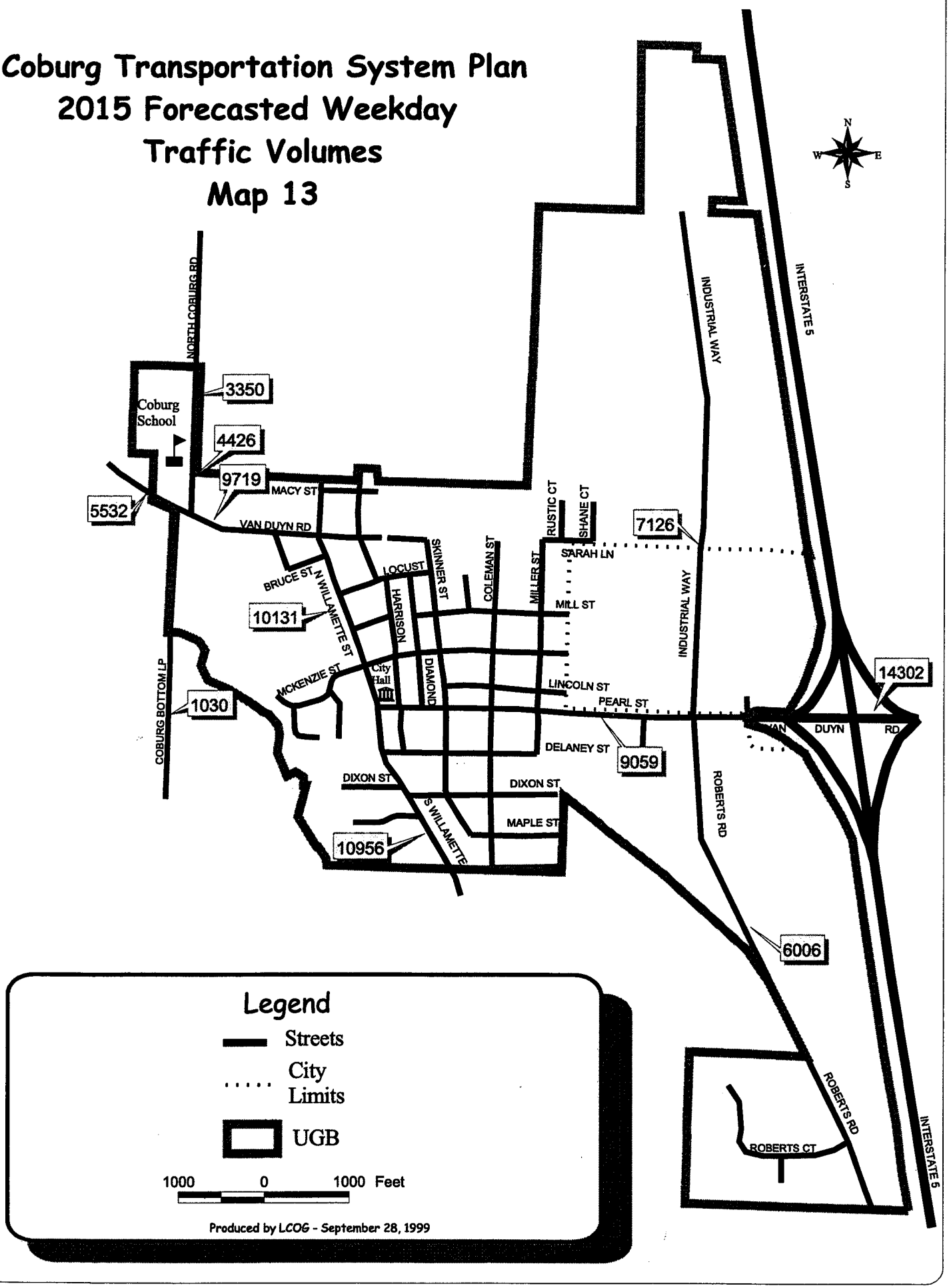


D. Projected Traffic Volumes

An analysis was conducted to project traffic volumes to the year 2015 and to assess future transportation needs in Coburg. The traffic forecasting model (EMME/2) was initially calibrated using 1994 dwelling unit and employment data, in order to replicate 1994 average weekday traffic flows within acceptable tolerances. Then, the new 1998 trip table was produced, and calibration was rechecked using 1998 traffic counts. Next, the 2015 dwelling unit and employment data projections were used to estimate future traffic flows. A more detailed discussion of the technical analysis is found in Appendix C.

As shown on Map 13, the average daily traffic volume is estimated to increase by about 50 percent on Willamette Street, and between 50 and 60 percent on Pearl Street by the year 2015. As a result of this growth, the major intersections at Pearl Street and Willamette Street, and Industrial Way and Pearl Street are expected to be over capacity by 2015. This increase in congestion is based on the assumption that no new projects will be constructed. Congestion growth estimates on the Interstate 5 interchange are discussed in the Interchange Refinement Plan (Appendix I) and in Appendix C.

Coburg Transportation System Plan
2015 Forecasted Weekday Traffic Volumes
Map 13



E. Transportation Issues

The TAC identified several transportation issues relevant to the TSP. The issues listed below are in no particular order.

- Arterials Identification
  It is recognized that Coburg lacks an arterial system that provides alternative routes for the movement of goods, services, and people. Citizens also believe the volume of large trucks through the center of town needs to be addressed.

- Safety
  It is recognized that safety is an important priority that needs to be addressed. Specifically, Willamette and Pearl Streets, the intersection of Roberts and Industrial Way, and pedestrian and bicycle safety were listed as points of primary concern.

- Development of a Bike/Pedestrian Plan
  Citizens are supportive of bicycle and pedestrian facilities. However, it is recognized that no formal plans have been adopted. Citizens are supportive of a connected bike path among the pocket parks and recognize the need to coordinate with the Parks Committee.

- Sidewalk Plan in Selected Areas
  The citizens recognize the need for safe pedestrian facilities on Willamette and Pearl Streets. However, the citizens are adamant that the local residential streets remain without sidewalks.

- Maintenance of Roads
  Citizens are supportive of maintaining the existing street system and understand the impacts of new facilities on maintenance costs.

- Speed Control
  Speed control and enforcement is lacking within Coburg. Citizens believe high speeds by vehicles passing through town are a major contributor to the safety problem. Citizens have identified the need for speed control on Willamette Street and at city gateways or entrances.

- Drainage
  Run-off from transportation facilities contributes to periodic flooding in areas and degradation of the environment, and should be kept to a minimum.

- Streetscapes
  Citizens have expressed a desire to enhance the streetscapes on the major thoroughfares in Coburg. Amenities could include pedestrian benches, street trees, and street lighting. Citizens recognize the necessity to coordinate with the Parks Committee.

- Maintain Rural Atmosphere
  Citizens have expressed a strong desire to preserve the rural character of Coburg. Any long-range planning should reflect this sentiment.

- Continued Transit Improvements
  Citizens realize the importance of providing various transportation choices and desire to continue to work with Lane Transit District (LTD) for improved service. Some improvements for consideration include direct routes to and from major employment centers, covered bus shelters, and the development of Park-and-Ride lots.

- Noise Impacts
  Citizens believe part of maintaining the rural atmosphere is related to noise levels within Coburg. Citizens believe noise impacts from transportation facilities, surrounding businesses, and highway construction should be minimized.

- Coordinate Infrastructure Improvements
  Citizens are supportive of coordinating major infrastructure improvements wherever possible. For example, coordinating sewer, water, electric, and fiber optics with new roadway construction or major roadway improvements.

Chapter Four
Recommended Transportation System Plan

A. Introduction

This chapter contains the City of Coburg's (City) recommended transportation system plan (TSP). The chapter includes proposed transportation system goals and policies, and the proposed street standards. Specific capital improvement projects are discussed in Chapter 5, Plan Implementation.

Development of the Coburg TSP was guided by a series of broad goals. From these goals came the more specific policies and implementation measures. The goals as written may never be fully achieved in their entirety, but provide a target towards which the City can strive. Policies provide the basis for a consistent course of action to move the community towards its goals. The goals and policies will replace transportation-related goals and policies in the Comprehensive Plan. They will have the force of law. The rest of this chapter will be included in the Transportation Element of the Comprehensive Plan and will provide guidance for implementing ordinances in the Coburg Zoning and Subdivision Ordinances.

B. Transportation System Plan Goals and Policies

The transportation goals identified are broad-based statements aimed at resolving the transportation issues identified. The TAC developed the transportation goals and policies through a consensus building process. The goals reflect the values and attitudes of Coburg's citizens and were written to address the issues that were identified through the Community Priorities Survey, the Employee Preference Survey, and the Residential Preference Survey, among other things.

The goals also serve as the guiding framework in forming the transportation strategies and improvements. They describe the ideal objective in broad-based terms and provide decision makers with the visionary description on which to focus efforts. The policies under the goals provide further clarification and direction for decision-makers on how to accomplish the transportation goals. The transportation goals and policies are in random order.

Goal 1: Develop a street network system that evenly distributes traffic throughout the community, lessening traffic impacts on residential streets, and identifying a system of arterials for moving people, goods, and services safely and efficiently.

1.1 Arterials shall be safe, high-volume traffic movers serving as a regional connector. Access to an arterial shall normally be from the collector road system. It shall be protected against strip development and access driveways that will restrict its effectiveness.

1.2 Collector streets shall serve traffic from local streets to the arterial system. Individual accesses, while more frequent than on arterials, shall be managed to minimize degradation of capacity and traffic safety.

1.3 A local street shall provide direct property access and access to collectors and minor arterials. Service to through-traffic movement shall be discouraged.

1.4 Design streets to efficiently and safely accommodate emergency service vehicles.

Goal 2: Take a long-range view in approving street patterns for new development.

2.1 All development proposals, plan amendments, or zone changes shall conform to the adopted Transportation System Plan.

2.2 Protect the function of existing and planned transportation systems as identified in the Transportation System Plan through application of appropriate land use regulations. When making a land use decision, the City shall consider the impact on the existing and planned transportation facilities.

2.3 Consider the potential to establish or maintain accessways, paths, or trails prior to the vacation of any public easement or right-of-way.

2.4 At the time of land development or land division, require the dedication of additional street right-of-way in order to obtain adequate street widths in accordance with all street plans adopted by the City.

Goal 3: Improve the aesthetics of streets and streetscapes, especially at city entranceways such as Interstate 5 interchange area. Aesthetic improvements may address: street design, trees, lighting, utility lines, sidewalks, park strips, noise abatement, etc.

3.1 Improve major thorough-fares with beautification and scenic amenities, coordinating with other agencies and jurisdictions as necessary.

3.2 Identify and improve City gateways and entranceways with beautification and scenic amenities, coordinating with other agencies and jurisdictions as necessary.

Goal 4: Continue to pursue improvements to the public transportation system (LTD) from Eugene to Coburg, to the industrial area and throughout the City (e.g., park-and-ride facilities, covered shelters).

4.1 Allow changes in the frequency of transit services that are consistent with the Transportation System Plan without land use review.

4.2 Design streets identified as future transit routes safely and efficiently to accommodate transit vehicles, thus encouraging the use of public transit as a transportation mode.

4.3 Pursue and develop transportation demand management (TDM) program policies and strategies.

Goal 5: Establish a safe bicycle and pedestrian system that provides for connections and minimizes conflict to and from the local school and other significant activity areas, provides for connections between pocket parks, and provides a sidewalk plan in selected areas such as on Willamette and Pearl Streets.

5.1 Design streets to meet the needs of pedestrians and bicyclists. This may or may not include sidewalks or bicycle lanes.

5.2 Plan and develop a network of streets, accessways, and other improvements, including bikeways, sidewalks, and safe street crossings, that promote safe and convenient bicycle and pedestrian circulation within the community.

5.3 Connect bikeways and pedestrian accessways to local and regional travel routes.

5.4 Design and construct bikeways and pedestrian accessways to minimize potential conflicts between transportation modes. Design and construction of such facilities shall follow the guidelines established by the *Oregon Bicycle and Pedestrian Plan*.

5.5 Align and interconnect new streets to reduce travel distance, promote the use of alternative modes, efficiently provide utilities and emergency services, and evenly disperse traffic.

5.6 Provide street system connections to and from activity centers such as schools, commercial areas, parks, and employment centers.

5.7 Consideration shall be given to maintain reasonable access to existing businesses and residents in the construction and development of new facilities.

Goal 6: Protect the groundwater, storm run-off, and surface water when any road construction or improvements are made.

6.1 Where appropriate, utilize the street system and its infrastructure as an opportunity to convey and treat stormwater runoff.

6.2 Roadway construction projects, while being sensitive to the protection of groundwater, shall conform to regulatory requirements and standards.

Goal 7: Review and modify, if necessary, the existing alternative transportation route plan (e.g., for when special events and traffic accidents occur).

Goal 8: Develop standards for new development to address all of these goals.

8.1 In areas of new development, investigate the existing and future opportunities for bicycle and pedestrian accessways. Many existing accessways such as user trails established by school children distinguish areas of need and should be incorporated into the transportation system.

8.2 Design new streets to meet the needs of pedestrians and encourage walking as a transportation mode.

8.3 Make provisions for new industrial and commercial developments to be transit-friendly.

Goal 9: Retain the historical flavor within the historical district and maintain the rural character of the town (e.g., street trees, old fashioned street lights, no sidewalks in new residential areas, narrow residential streets).

9.1 Local street layout shall encourage efficient lot layout and shall not create excessive travel lengths.

9.2 Consider traffic-calming devices as a buffer between diverse land uses when designing and laying out local streets.

9.3 Extend, provide connectivity to, and continue the grid pattern where appropriate in local street design and layout.

9.4 Plant large scale, high-canopy street trees on local streets to create attractive and healthy neighborhood environments. Minimize damage to street trees resulting from utility line placement and repair, and from new home construction.

9.5 A developer may install sidewalks in new residential areas if need can shown.

Goal 10: Provide for the continued maintenance and improvements to existing streets.

10.1 Continue to make maintenance and repair of existing streets a priority.

10.2 The maintenance and repair of existing bikeways and pedestrian accessways (including sidewalks) shall be given the same priority as the maintenance and repair of motor vehicle facilities.

Goal 11: Improve drainage systems in general, preferably through natural systems where feasible and appropriate.

11.1 Street designs shall be responsive to topography and shall minimize impacts on natural resources such as streams, wetlands, and wildlife corridors.

Goal 12: Develop a speed control plan that establishes speed zones for bicycle and pedestrian destination areas and outlines a range of improvements for controlling speed (e.g., narrow street widths, speed humps, traffic circles).

12.1 Incorporate traffic-calming techniques to reduce speeds in areas identified as destinations for bicyclists and pedestrians.

Goal 13: Improve the Coburg-Interstate 5 Interchange safety and transportation operations.

13.1 The City shall adopt and coordinate with ODOT and Lane County to implement the ODOT Coburg-Interstate 5 Interchange Refinement Plan, which includes but is not limited to:

- A preferred interchange alternative,
- An interchange access management plan,
- A recommended TDM program that shall be fully implemented before any interchange reconstruction, and
- An assumption that current City and County comprehensive land use designations at and near the interchange are constant for the next 20 years.

C. Proposed Street Plan

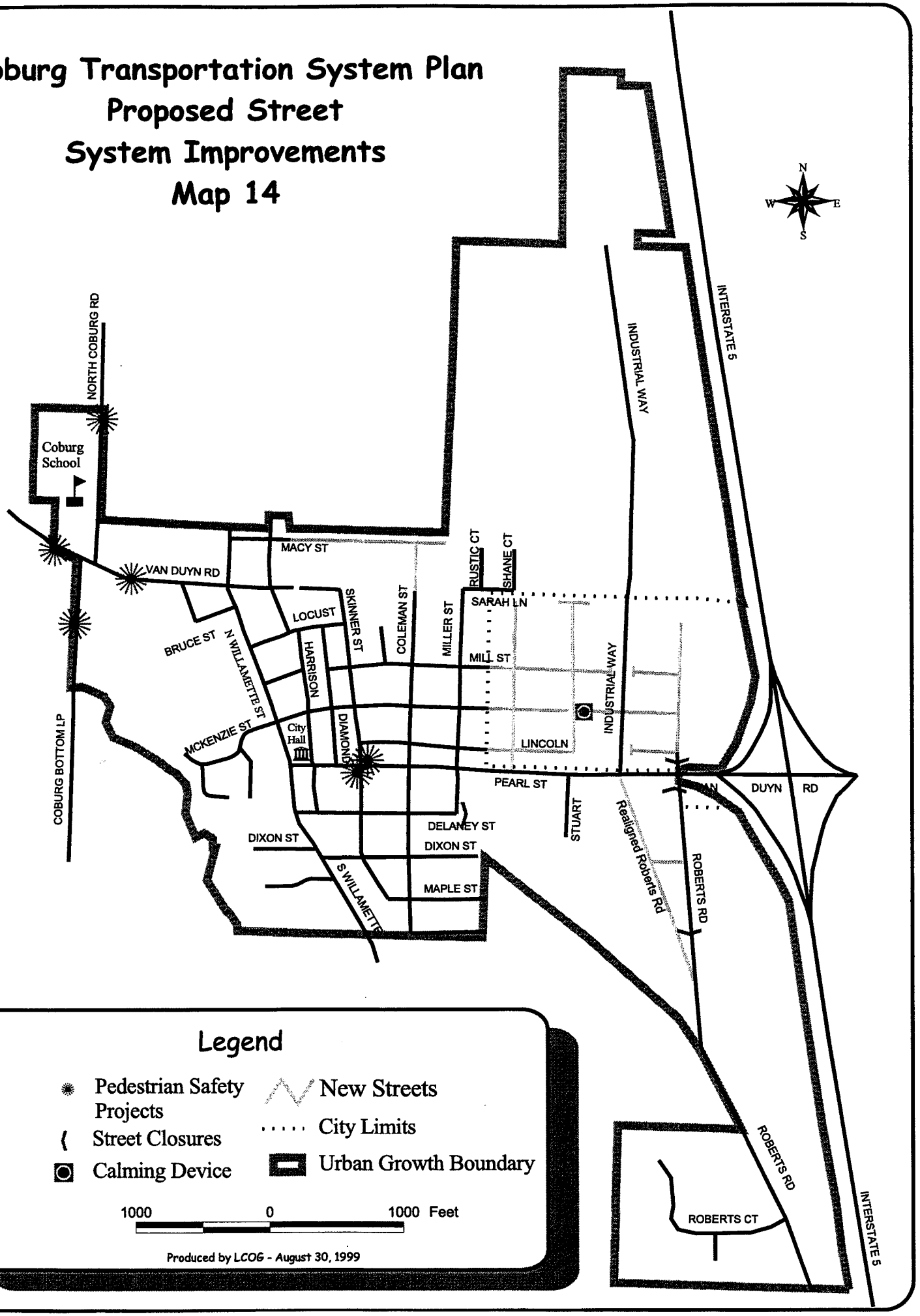
A series of new local streets were identified as part of the future street network. These proposed streets are located in the vacant land east and north of town. (Refer to Map 11, Vacant Lands by Plan Designation.) The proposed street plan shows the general location of future street alignments and roadway improvements and is meant to serve as a guide as undeveloped parcels develop within the community. The exact location of future streets will be determined at the time of development. In general, the proposed street plan strives to continue the existing grid system, and successfully interface existing residential and historic properties without significantly increasing cut-through traffic in residential neighborhoods. In developing the street layout, the TAC recognized the importance of providing connectivity throughout the community; these new streets connect areas of potential growth to the existing community.

Map 14 shows future street alignments in the two residential areas:

- The area extending east-west from Mill, McKenzie, and Lincoln Streets and two new north-south connectors; and
- New residential extensions of Coleman and Macy Streets are shown in northwest Coburg. Skinner Street would be extended for bicycles and pedestrians only based on compatibility with and limitations of the existing 30-foot right-of-way.

New streets are also proposed on Highway Commercial-designated land east of Industrial Way. Due to its proximity to Interstate 5 and ODOT access management guidelines, access to these streets would be from Industrial Way only. The location of these streets will need to refined over time as development occurs. Street closures, realignment, and improvements on Pearl Street, Roberts Road and Stuart Way are detailed in the Coburg-Interstate 5 Interchange Refinement Plan and in Chapter 5, Plan Implementation.

Coburg Transportation System Plan
Proposed Street System Improvements
Map 14



D. Proposed Street Standards

The proposed new street standards intend to keep new residential and central business development compatible with existing residential neighborhoods and the existing historic city center. In these areas, street trees are required but sidewalks, and curbs and gutters may be constructed only if need can be shown. Private property owners would maintain the street trees.

Since new highway commercial and light industrial development is geographically separate from the historic residential and commercial city center, sidewalks, bicycle lanes, curb and gutters, and street trees are required to improve the appearance of the area. and promote alternative modes for commuters and other users of these areas. Table 7 that follows lists proposed street standards. These standards apply to new construction only. Proposed street standards are illustrated in Figures 3 and 4 that follow.

New Local Streets
New streets would be constructed as development occurs. Proposed streets are generally shown on Map 14. It is the responsibility of the developer to *construct* new streets within their projects. The City is responsible for *maintaining* local streets.

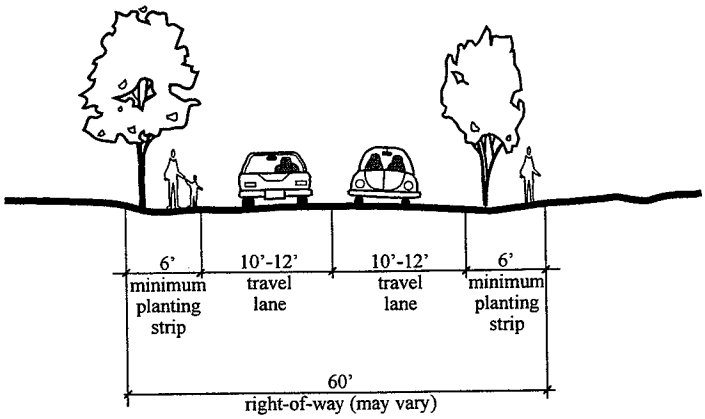
Table 7
Proposed Street Standards (New Construction Only)

Street Type	Sidewalks, Curb and Gutter	Bicycle Lanes	Street Trees
Residential	Optional, need must be shown	Optional, need must be shown	**Required**
Central Business	Optional, need must be shown	Optional, need must be shown	**Required**
Highway Commercial and Light Industrial	**Required**	**Required**	**Required**

Figure 3

Residential and Central Business Street Standards

Required Planting Strip



Optional* Curb and Gutter, and Sidewalks

Required Planting Strip

**(Need must be shown)*

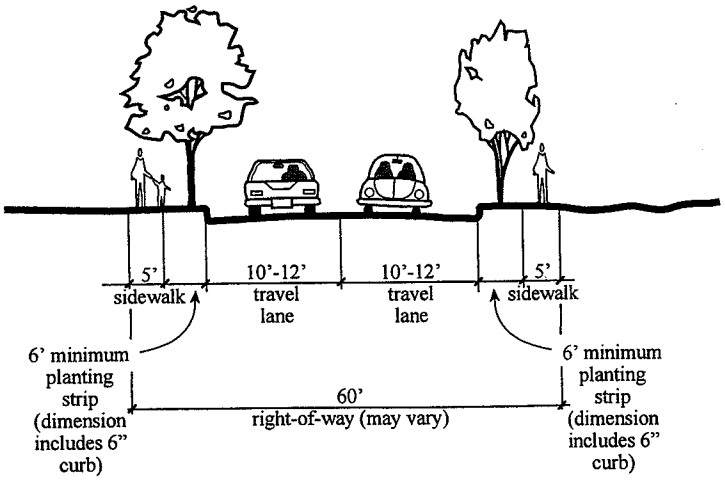
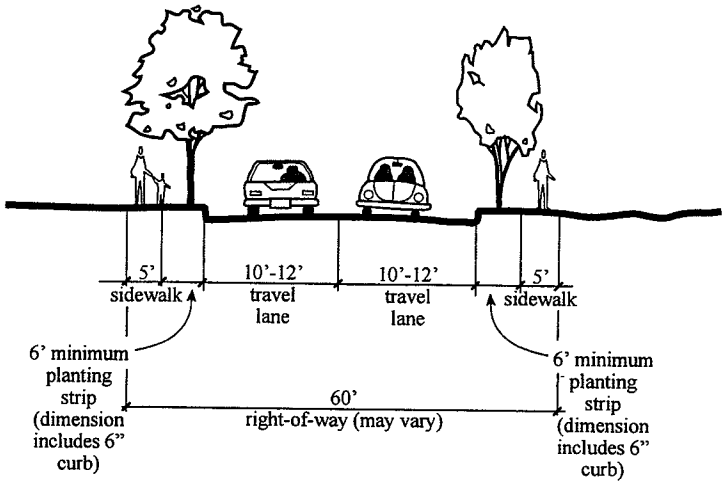


Figure 4

Light Industrial and Highway Commercial Street Standards

Required Curb and Gutter, Sidewalks, and Planting Strip



E. Coburg-Interstate 5 Interchange Refinement Plan Summary

The development of the Coburg-Interstate 5 Interchange Refinement Plan (Refinement Plan) was conducted simultaneously and integrated with the Coburg TSP. A refinement plan is a detailed analysis of a facility or specific section of a corridor. Guiding policies during the Refinement Plan include:

- The Oregon Transportation Plan
- The Oregon Highway Plan
- The Coburg Comprehensive Plan
- The Transportation Planning Rule
- The Bypass and Major Improvement Planning Policy
- The Willamette Valley Transportation Strategy
- The Federal Register Vol. 55, Additional Interchanges to the Interstate System
- The State Agency Coordinating Agreement
- The draft Interchange Access Management Policy

The Refinement Plan contains detailed information about issues, as well as short-term (Immediate Opportunity Funds) and long-term solutions to the Interstate 5 off-ramp issues. General interchange issues include an obsolete interchange structure, heavy vehicle (truck)-oriented land uses in the interchange vicinity, vacant developable commercial and industrial land in the interchange vicinity, the desire to improve safety and operations of interchange, and lessen impacts of transportation improvements to local residents. The Refinement Plan, including details of the interchange alternative, is contained in Appendix I.

The TAC originally reviewed five design concepts for the interchange. A later expanded TAC reviewed these five concepts but also thought of nine other ideas. Based upon further analysis, evaluation, and recommendations from the TAC and ODOT, Concept 1, with modifications, was forwarded as the preferred alternative.

The preferred alternative will involve widening the interchange structure to three lanes of traffic with shoulders for bicyclists and sidewalks for pedestrians; improving the east and west ramp terminals, and when warranted, installing signals; moving accesses further from the east ramp terminal; and providing access to parcels and land uses on the north side of Pearl Street from Industrial Way.

Pearl Street will be improved to a five lane urban standard road as part of the upcoming County project, including sidewalks, shoulders/bike lanes, four lanes for traffic, and a median lane treatment that could include left turn lanes, painted medians, or raised medians. These improvements extend from the point where Lane County's 1999 improvements to Pearl Street/Willamette Street terminate. Direct access from Pearl Street to the Truck and Travel is assumed.

As part of the interchange improvements, Roberts Road access to Pearl Street will be closed and realigned to intersect with the existing Industrial Way. This intersection will be signalized.

Stuart Way will be realigned to the west from its present location to provide more vehicle storage near the Industrial Way/Roberts Road intersection. Noise mitigation will be investigated concurrent with the construction of the realignment. (The realignment of Stuart Way will not be constructed until the final phase of the improvements and only if a traffic analysis determines that the realignment is necessary. Alternatively, the traffic analysis may support a city decision to vacate the street.)

F. Proposed Bicycle and Pedestrian System

The bicycle and pedestrian elements have been combined. It is recognized that projects meant to enhance one of these systems will also contribute to the enhancement of the other system. The proposed bicycle system and pedestrian improvements are illustrated on Map 15. The map shows the locations of the proposed on-street and off-street bicycle routes and sidewalk improvements. Multi-use bicycle paths are proposed to create a networked system for commuters and recreational bicyclists.

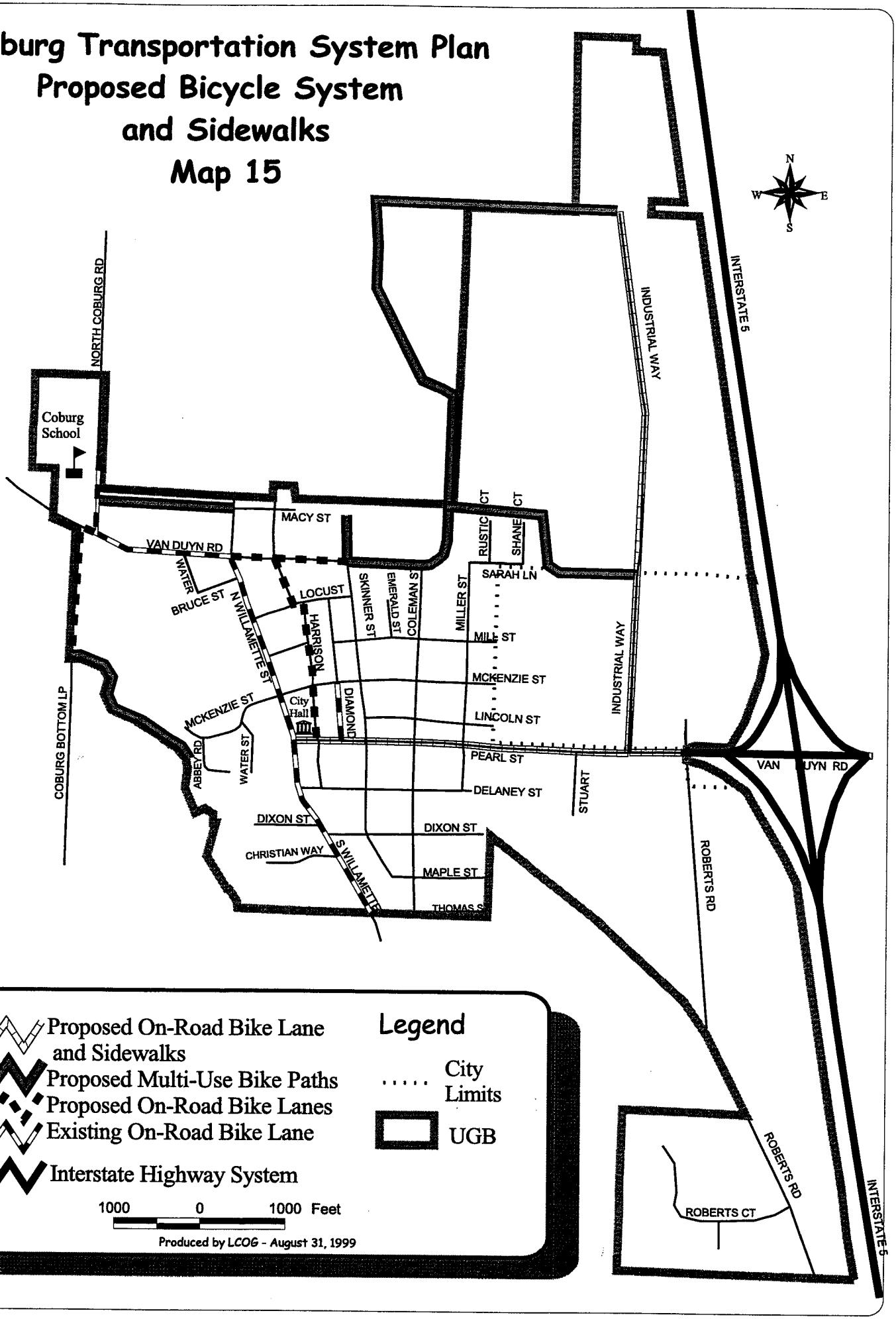
The TAC recognized that since Coburg is a small city, it is acceptable and even desirable in the historic residential areas of Coburg to have pedestrians and bicyclists share the roadway, believing that this will slow vehicular traffic. Similarly, many of the older, existing downtown and residential neighborhoods in Coburg do not have sidewalks or bicycle lanes, and have successfully shared the roadway. The TAC has proposed that sidewalks, and curbs and gutters be installed in new residential and central business development *only* if need can be shown. The geographically separate highway commercial and light industrial districts are required to install sidewalk, and curbs and gutters.

A system of multi-use bicycle paths has been proposed to connect different segments of the community and facilitate recreational and commuter bicycling. The system would connect Coburg Industrial Way to Van Duyn Road towards downtown and connect the existing terminus of Coburg Industrial Way with the northwest perimeter of the UGB to Van Duyn Road. Another segment would connect North Coburg Road with Macy Street towards Coburg Elementary. The final segment would eventually connect Coburg Bottom Loop with McKenzie Street. These paths are proposed as a short-range capital improvement project in Chapter 5, Plan Implementation.

G. Street Trees

Part of Coburg's character as a small town can be attributed to its mature and prominent street trees. In order to preserve this character, improve the community's appearance, increase shade, and reduce airborne pollutants, all new residential, central business, highway commercial, and industrial development is required to plant street trees. A list of acceptable street trees has been prepared by the Coburg Public Works Department and is already in use.

Coburg Transportation System Plan
Proposed Bicycle System and Sidewalks
Map 15



Chapter Five
Plan Implementation

A. Introduction

Implementation of the City of Coburg (City) Transportation System Plan (TSP) will require a combination of capital improvements, education, maintenance, ordinance amendments, and other implementation strategies. Certain projects will also require further study. Plan implementation also involves both site-specific improvements and system-wide enhancements. This chapter identifies proposed projects, ordinances, and strategies to implement the goals and policies of the TSP. Projects are grouped according to the following:

Capital Improvement Projects
- Short-range projects
- Medium-range projects
- Long-range projects

Educational Projects
- Short-range projects

Maintenance
- Short-range projects

Further Studies

Proposed timing and priority of projects are as follows: short range (one to five years), medium range (six to ten years), and long range (more than ten years). Potential funding sources and financing mechanisms for these projects are discussed in Chapter Six. A summary of all proposed projects is presented in Table 8. Cost assumptions used to calculate project costs are included in Appendix F.

B. Capital Improvement Projects

Short-Range Projects

The following projects are short-range projects that are expected to be completed within the next five years. Projects are presented in no particular order. Implementation of these projects will be refined during the project design phase and will depend on identifying and securing funding. The project lead for each is identified for each project based on jurisdictional responsibility.

1. Pearl Street
Project lead: Lane County

Pearl Street is a county road that connects Willamette Street and Interstate 5. The western half of the 0.62 mile minor arterial passes through Coburg's Historic District, a residential neighborhood interspersed with a number of specialty shops. Modernization of this segment, west of Miller Street, was authorized as part of Lane County's Willamette Street project. Plans call for it to be improved to urban standards, which include two 11-feet wide travel

lanes, two 5-feet wide bicycle lanes, curbs, gutters, and storm drainage, with 8-feet wide planting strips and 5-feet wide sidewalks on both sides. This phase of the Pearl Street modernization project will begin the transition to a four-lane section just west of Miller Street. Construction is scheduled to begin in 1999.

East of Miller Street, Pearl Street serves a number of highway commercial uses. On the south side of the street, a service station, truck stop and restaurant have direct frontage, and two intersecting streets—Roberts Way and Stuart Way—provide access to a variety of other businesses located further to the south. On the north side of Pearl Street, Coburg Industrial Way provides access to a number of offices and manufacturing plants. Another service station and restaurant are located between Industrial Way and Interstate 5, however most of the frontage along the north side of Pearl Street is vacant. In order to accommodate the existing businesses, and those that will eventually occupy the vacant sites, Lane County proposes to modernize this segment of Pearl Street as a four-lane road with a center median. A traffic signal may also be installed at the intersection if signal warrants are met. Details of the project have yet to be approved, however the preliminary design concept will be based on urban road design standards. One of the major issues will be how this project will be phased in relation to reconstruction of the Interstate 5 interchange. Lane County will initiate the Project Development process in the fall of 1999 with a public hearing by the Roads Advisory Committee. Construction is scheduled for 2001.

2. Coburg Industrial Way
Project lead: Lane County

Coburg Industrial Way is a county road that leads north from Pearl Street to the Coburg Industrial Park. It is 42-feet wide, with curbs but no sidewalks. As part of the Pearl Street modernization project, the approach to the intersection may be widened or reconfigured to better accommodate turning movements. Sidewalks are also needed on at least one side of Coburg Industrial Way, and a traffic signal will be installed at the Pearl Street intersection if warranted. Details of this project, such as installation of bicycle lanes, will be presented to the Roads Advisory Committee along with the Pearl Street design concept in the fall of 1999.

3. Diamond and Van Duyn Streets Bicycle Routes
Project lead: City of Coburg

A connecting on-street bike path through Coburg would promote biking in the community and help connect the major activity areas of the community. A series of off-street and on-street bike paths identified make a viable, connected bicycle system that could serve as an alternative mode of travel in the Coburg community. The on-street portions, such as Diamond Street, a portion of Van Duyn Street, and Coburg Industrial Way will be signed as a bike route and would connect with off-street paths with access to northeast Coburg.

4. **Pedestrian Safety Projects:**
   Project lead: City of Coburg
   Flashing warning lights are desired for Coburg Road North, Van Duyn Street, and Coburg Bottom Loop near Coburg Elementary School to heighten motorists' awareness and slow down vehicles, promote crossing safety, assist in the connection of segments on the school children's travel routes, and create a continuous safe route through the city to the school.

   The flashing warning lights will supplement existing school zone and crossing signage. The project proposes the addition of four warning lights near two intersections: one warning light on each approach of a four-way intersection nearest the school, and Van Duyn Street/North Coburg Road/Coburg Bottom Loop. Three of the warning lights would be mounted overhead with an appropriate sign on cantilevered mast arm poles designed to be compatible with the historic character of Coburg. The warning light and sign on Coburg Bottom Loop would be post mounted because traffic has lower volume and speed on that approach.

   Lane County would continue to maintain right-of-way and new flashing warning lights on North Coburg Road, Van Duyn Street, and Coburg Bottom Loop, and would issue a facility permit for installation of the projects. In addition, any improvements will be subject to state-wide standards and criteria and may be subject to action by the Lane County Board of Commissioners. Funding for the project has not been identified.

5. **General Street Lighting**
   Project lead: City of Coburg

   Street lighting throughout the community contributes to the safety of all travelers. Street lighting should be sensitive to maintaining the rural atmosphere and level of brightness. Decorative ornamental street lighting should be targeted in the historic district. The City of Coburg has the financial responsibility for utilities, while Pacific Power provides service and maintenance for the city, and Emerald People's Utility District provides service and maintenance on Industrial Way. Travel corridors for lighting and the type of lighting need to be identified.

6. **Covered Bus Shelters**
   Project lead: City of Coburg in cooperation with Lane Transit District

   An incentive to using public transportation is to provide comfortable boarding areas. Protection from inclement weather could be used to attract new riders and increase transit ridership levels. Further analysis should be completed to identify appropriate locations and desired style of shelter.

7. **On- and Off-Street Bike Paths**
   Project lead: City of Coburg

   A connecting bike path through Coburg would promote biking in the community and connect the major activity areas of the community. A series of identified off-street and on-street bike

paths make a viable, connected bicycle system that could serve as an alternative mode of travel in the Coburg community.

Off-street portions of the bike path are conceptual in nature and the proposed alignments are in the general area where a path could be located for various reasons, including existing easements. Although the city would likely be the agency responsible for implementation, different agencies may be responsible for implementing certain segments of the bike path. Necessary right-of-way would have to be obtained.

8. Bicycle Racks
Project lead: City of Coburg

Bicycle parking racks in the industrial, highway commercial, and central business district are likely to encourage more bicycle trips within the Coburg community.

Medium-Range Projects

The following projects are the medium-range projects expected to be completed within the next six to ten years. Projects are presented in no particular order. The priority and timing of these projects will be evaluated when evaluation of the TSP occurs in three to five years. Implementation of these projects will be refined during the project design phase and will depend on identifying and securing funding. The project lead for each is identified for each project based on jurisdictional responsibility.

1. Interstate 5 Interchange
Project lead: Oregon Department of Transportation

The Coburg-Interstate 5 Interchange will be significantly improved. The structure or bridge will be rebuilt to modern standards that include widening to three lanes of traffic with shoulders for bicyclists and sidewalks for pedestrians. The profile grade will also be improved. The east and west ramp terminals will be improved and remain in their present location, and when warranted, signals will be installed.

On the east side of the interchange, accesses will be moved further away from the ramp terminal. On the west side, accesses to parcels and land uses on the north side of Pearl Street will be from Industrial Way.

Pearl Street will be improved to a five lane urban standard road (upcoming County project). This will include sidewalks, shoulders/bike lanes, four lanes for traffic, and a median lane treatment that could include left turn lanes, painted medians, or raised medians. These improvements will extend from the point where Lane County's 1999 improvements to Pearl Street/Willamette Street terminate. Direct access from Pearl Street to the Truck and Travel is assumed.

Any proposals for Stuart Way, such as realignment or street vacation, will be addressed by the City.

Probable Implementation Phasing and Costs

Phase 1: 2000 to 2005

- Improve the interchange northbound exit ramp and ramp terminal using State Immediate Opportunity funds
- Improve Pearl Street to urban standards as per the Lane County project
- Install traffic signal at intersection of Industrial Way and Pearl Street
- Assumption that Roberts Road and Stuart Way remain open for existing locations

Responsible Agencies:	Lane County Public Works for Pearl Street improvements; ODOT for northbound ramp improvements	
Estimated Costs:	Pearl Street Improvements	$750,000 [County]
	Northbound ramp	$500,000 [ODOT]

Phase 2: 2005 to 2010

- Realign Roberts Road to Industrial Way to create four-leg intersection (see description below)
- Shift access to campground parcel from Stuart Way to Roberts Road
- Stuart Way dead-ends at Pearl Street

Responsible Agencies:	ODOT and City of Coburg for realignment of Roberts Road and access to campground parcel	
Estimated Cost:	Roberts Road	$1,173,500

Phase 3: 2008 to 2015

- Rebuild and improve interchange
- Conduct necessary traffic analysis to determine alignment of Stuart Way to the west along Pearl Street

Responsible Agencies:	ODOT for interchange	
	City of Coburg for Stuart Way	
Estimated Costs:	Interchange	$5,000,000
	Stuart Way	$350,000

2. Roberts Road Realignment

Project Lead: ODOT and City of Coburg

Roberts Road access to Pearl Street will be closed and realigned to intersect with the existing Industrial Way. The Roberts Road/Industrial Way intersection will be signalized. At the time Roberts Road is realigned, access to the campground parcel located near the south end of the Truck and Travel will shift from Stuart Way to the realigned Roberts Road. See phasing above.

3. **Pedestrian Safety Project at Skinner and Pearl Streets**
   Project Lead: City of Coburg

   Consistent with the *Safe Routes Study*, a crossing on Pearl Street at Skinner Street is needed to connect the residential areas, the primary activity areas, and travel corridors. The type of crossing would be similar to crossings near Coburg Elementary and would include a flashing warning light for eastbound and westbound traffic. The lights would be mounted overhead with an appropriate sign on cantilevered mast arm poles designed to be compatible with the historic character of Coburg.

   Lane County is the responsible for right-of-way on Pearl Street and would have to issue a facility permit for any work on Pearl Street. Funding for the project has not been identified.

4. **Traffic Calming**
   Project Lead: City of Coburg

   Traffic calming is a design or combination of measures on local streets intended to slow down and/or reduce motor vehicle traffic. Examples of traffic-calming designs include, but are not limited to, traffic circles, modern roundabouts, speed humps and tables, raised crosswalks, chicanes, chokers, curb bulbs, or full-street closures. Two locations are identified on Map 14. Criteria for implementing traffic-calming designs may need to be developed.

5. **Bicycle Park-and-Ride Lots**
   Project lead: City of Coburg

   This strategy is similar to the automobile Park-and-Ride lot. The intent of this strategy is to develop a program where citizens could have access to bicycles for cycling within the community. The bicycles would then be returned to the facility for the next person to use to move throughout the area.

6. **Charter/Shuttle for Special Events**
   Project lead: City of Coburg

   An intra-city shuttle during special events like Coburg's Golden Years or the Antique Fair. A charter/shuttle could help reduce automobile traffic by designating a no-car zone or area with the charter/shuttle for people. LTD currently provides transit service to Coburg and could be contracted on an as-needed basis for this type of service.

7. **Group Bus Pass Programs**
   Project lead: City of Coburg in cooperation with Lane Transit District

   Large employers or large group associations can offer employees or members discount transit passes as an incentive for using transit.

Long-Range Projects

1. **Bike Commute Day/Week**
   Project lead: City of Coburg

   Bike commute day/week programs are successful in other communities in getting people to try other modes of transportation, specifically bicycling. The intent behind the program is that once a person tries bicycling to work for a short period of time, they may find it simple and convenient and continue to commute by bicycle.

2. **Adopt a Bike Path**
   Project lead: City of Coburg

   After the bike path is constructed in Coburg, an adopt-a-bike-path program would assist in maintaining the path.

3. **Intra-City Shuttle**
   Project lead: City of Coburg

   An intra-city shuttle would consist of a small-scale transit system. A smaller vehicle would make regular loops throughout the community.

4. **Park-and-Ride Lots**
   Project lead: City of Coburg in cooperation with Lane Transit District

   Park-and-Ride lots are facilities where individual drivers can meet to carpool or catch a bus to another destination. Currently there are no formal Park-and-Ride facilities in Coburg.

5. **Park-and-Ride Lot at Periphery with Shuttle Loop**
   Project lead: City of Coburg

   This strategy combines the strategies of the intra-city shuttle and the Park-and-Ride lot. Individual drivers coming to or already in Coburg can leave their vehicles in a designated spot and ride the intra-city shuttle. This will assist in reducing vehicular traffic within Coburg.

6. **Smaller Buses**
   Project lead: City of Coburg in cooperation with Lane Transit District

   Smaller buses in the Coburg community would be able to maneuver the narrow local streets better than the larger vehicles. This flexibility in bus routing would allow service to be more responsive to changing or increasing demand for service.

7. **Increased Transit Convenience**
   Project lead: City of Coburg in cooperation with Lane Transit District

   The intent behind this strategy is to continually make changes in routing, frequency, number of transfers, and wait times to make transit more convenient for the users. By making transit more convenient, more riders will be attracted to this mode of travel.

8. **Retail Shops at Transit Stop/Stations**
   Project lead: City of Coburg in cooperation with Lane Transit District

   In addition to making improvements in transit and providing incentives, another transit attractor is to provide general retail and services at the transit stops.

C. Educational Projects

Short-Range Projects

1. **Bicycle Education**
   Project lead: City of Coburg

   This strategy focuses on increasing general knowledge of bicycling. The intent is to increase the safety of bicycling, reduce conflicts with vehicles, and generate support for bicycling. Bicycle education would include programs for law enforcement, minimize conflicts with vehicles, and promote bicycle usage. Any plan would need to coordinate with existing programs.

2. **Transportation Demand Management Programs**
   Project lead: City of Coburg in cooperation with ODOT, Lane Transit District, and major Coburg employers.

   Transportation Demand Management (TDM) programs are a range of programs aimed at reducing the demand for single occupant vehicular travel. The Transportation Planning Rule defines demand management as "actions which are designed to change travel behavior in order to improve performance of transportation facilities and to reduce need for additional road capacity." TDM programs include, but are not limited to, car and van-pool program, bus incentives like passes or discounts, and staggered work hours. TDM programs are typically directed towards businesses to reduce the number of work trips. The Lane Transit District's *Commuter Solutions Program* offers transportation options for employers and their employees such as discounted group bus passes, car and van-pools, and guaranteed ride home programs. Further actions to implement TDM strategies include:

   - Identify businesses and programs best suited for TDM in Coburg
   - Determine suitable TDM programs
   - Determine criteria for implementing TDM programs, if necessary

3. **Employer Incentives**

Project lead: City of Coburg

Employer incentives incorporate a range of programs designed to provide flexibility to employees to facilitate using other modes of travel for the work trip. Employer incentives, other than TDM programs, that could help increase bicycle usage include providing bike racks at the work site, providing showers and locker rooms, allowing a transportation allowance, and/or charging employees for parking automobiles.

4. **Marketing/Education/Advertisement Programs for Alternative Modes**
   Project lead: City of Coburg

   As improvements to encourage alternative modes are being developed, a program should be set in place to create community awareness. This program will educate the general public on the various transportation alternatives. Also incorporated in the program should be a business-outreach segment where local businesses are contacted to ease the implementation of employer incentives and TDM programs. Businesses and programs best suited for Coburg would need to be identified and any plans should coordinate with existing programs.

D. Maintenance Projects

Short-Range Projects

1. **General Operation and Maintenance Needs**
   Project lead: City of Coburg

   Operations and maintenance needs are ongoing projects necessary to maintain the smooth operation and function of the transportation system. Projects that fall under this category include repaving streets when necessary, general maintenance and upkeep of the sidewalks and bike paths, and mowing and trimming on all City-owned property.

E. Further Studies

Street Extensions and Layout

The TAC identified the desire to align new streets with certain existing streets, particularly in the northwest and east, to reduce out of direction travel and maintain the City grid system. The streets are shown on Map 14 and are discussed in more detail in Chapter 4 under Proposed Street Plan. The exact location of these streets will need to be refined over time as development occurs.

Southern and Northern Connectors

The community identified southern and northern connectors as potential projects. The two main arterials in Coburg are Willamette and Pearl Streets and large amounts of vehicular and large truck traffic traverse these streets in order to reach the industrial area. Willamette and Pearl Streets also serve as the main streets for Coburg and are the primary connectors to commercial and residential areas. These connectors may divert the growing number of truck traffic and

through traffic away from the primary residential area, however impacts to other residential neighborhoods have not been investigated.

A potential alignment for the southern connector could be a new limited access facility that extends from Roberts Road to the south, runs along the former Southern Pacific railroad right-of-way, and connects to Coburg Road at a southern point, perhaps McKenzie View Drive. The new road would extend beyond the Coburg UGB into unincorporated Lane County. No specific routes for the northern connector were determined. Map 16 shows general locations of both a southern and northern connector.

Section 660-12-065 of the Oregon Transportation Planning Rule specified the kinds of transportation improvement projects that can be built in rural areas. New roads cannot be constructed across land designated for agricultural use, unless an exception is justified. The process for obtaining an exception is cited in Subsection 660-12-070(4). It requires the local jurisdiction to demonstrate that there is a transportation need that cannot be accommodated through alternative modes of travel, traffic management measures, or improvements to existing transportation facilities. The local jurisdiction must also identify other design solutions and conduct an assessment of each alternative on neighboring farm land.

The TAC believes that a more detailed planning study is required before either of these could become a viable project and that these studies should address issues such as community support, examination of alternative routes, impacts of full implementation of TDM programs, and adequately addressing the goal exception requirements. The planning study should also examine the viability of the proposed alignment, identify any other viable alignments, determine the size of the necessary facility, list constraints, and identify costs and potential funding. Citizen involvement should be a factor in the research of alignments.

F. Ordinance Revisions

Zoning and Subdivision ordinance revisions and code amendments are an essential key to the successful implementation of the TSP. A detailed review of the existing ordinances is required to identify where inconsistencies may exist or where ordinances are lacking. The following text contains draft amendments to the zoning and subdivision ordinances.

Coburg Zoning Ordinance

ARTICLE VII. DISTRICT REGULATIONS

A. Residential District (R)
   6. Off-Street Parking

      (a) The number of off-street vehicular parking spaces required shall not be less than two (2) spaces for single family dwellings and 1-1/2 spaces per unit in multi-family dwellings.
      (b) Every residential use of two or more multi-family dwelling units shall provide at least one sheltered bicycle parking space for each unit. Sheltered bicycle parking

spaces may be in a conveniently located garage or storage unit, or under an eave, independent structure, or similar cover.

See ARTICLE VIII for off-street vehicular parking and bicycle parking for non-residential buildings and uses.

B. Central Business District (C-1)
   7. Yard Regulations
      f. Parking and Loading Space

      (1) Off-street vehicular parking shall be permanently provided on the site or within 400-feet thereof at the following ratio:

         (a) One vehicular parking space for each 400 square feet of retail floor space, and
         (b) One vehicular parking space for each 800 square feet of other floor space, and
         (c) One vehicular parking space for each employee operating on the site, and
         (d) One vehicular parking space for each vehicle operating from the site.
         (e) A minimum of one bicycle parking space for every seven motor vehicle spaces. At least ten percent of all bicycle parking spaces shall be sheltered. Bicycle parking provided in outdoor areas shall be located near the building entrance, similar to vehicle parking spaces, unless existing development on-site precludes that option. Fractions shall be rounded to the nearest whole number.

      (4) See ARTICLE VIII for other parking requirements.

   8. Street Standards – New development shall conform to the City's Street Standards, as adopted in the Transportation System Plan and set forth in ARTICLE VIII.

C. Highway Commercial District (C-2)
   2. Uses and Structures
      j. Parking and Loading Space

      (1) Off-street vehicular parking shall be permanently provided on the site or within 400-feet thereof at the following ratio:

         (a) One vehicular parking space for each 400 square feet of retail floor space, and
         (b) One vehicular parking space for each 800 square feet of other floor space, and
         (c) One vehicular parking space for each employee operating on the site, and
         (d) One vehicular parking space for each vehicle operating from the site.
         (e) A minimum of one bicycle parking space for every seven motor vehicle spaces. At least ten percent of all bicycle parking spaces shall be sheltered. Bicycle parking provided in outdoor areas shall be located near the building entrance, similar to vehicle parking spaces, unless existing development on-site precludes that option. Fractions shall be rounded to the nearest whole number.

      (4) See ARTICLE VIII for other parking requirements.

m. Street Standards – New development shall conform to the City's Street Standards, as adopted in the Transportation System Plan and set forth in ARTICLE VIII.

D. Light Industrial District (L-1)

9. Parking and Loading Space

a. Off-street vehicular parking shall be permanently provided on the site or within 400-feet thereof at the following ratio:

(1) A minimum of five vehicular parking spaces for visitors shall be provided on each building site, and
(2) One vehicular parking space for each employee operating on or from the site, and
(3) A minimum of one bicycle parking space for every seven motor vehicle spaces. At least ten percent of all bicycle parking spaces shall be sheltered. Bicycle parking provided in outdoor areas shall be located near the building entrance, similar to vehicle parking spaces, unless existing development on-site precludes that option. Fractions shall be rounded to the nearest whole number.

b. Vehicular parking and loading space must be reviewed and approved by the Planning Commission.

10. Street Standards – New development shall conform to the City's Street Standards, as adopted in the Transportation System Plan and set forth in ARTICLE VIII.

G. Mobile Home Planned Unit Development District

2. Regulations

g. The total number of vehicle and bicycle parking spaces in the park, exclusive of parking provided for the exclusive use of the manager or employees of the park, shall equal not less than two vehicle parking spaces per mobile home unit and not less than one bicycle parking space per mobile home unit. Vehicle parking spaces shall be paved with asphalt, concrete or similar material. Bicycle parking spaces shall provide a convenient place to lock a bicycle and shall be at least six feet long, two feet wide, and seven feet height. Bicycle parking shall not interfere with pedestrian circulation.

3. MH-PUD Application Submittal Requirements

(7) Proposed bicycle, pedestrian and drainage ways; and

ARTICLE VIII. SUPPLEMENTARY DISTRICT REGULATIONS

A. Access Management And Vision Control Regulations

1. Visibility at Intersections and Access from Driveways

a. On a corner lot in any district nothing shall be erected, placed, planted or allowed to grow in such a manner as materially to impede vision between a height of 2-1/2 and 10 feet above the center line grades of the intersecting streets in the area bounded by the street right-of-way lines of such corner lots and a line joining points along said street right-of-way lines, 20 feet from the point of the intersection.
b. Residential driveways shall be located to optimize intersection operation and, where possible, to provide access from the street with the lowest functional classification. For example, if a house is located on the corner of a local street and a collector, the driveway shall provide access from the local street if the driveway can be located a sufficient distance from the intersection.

2. Structures and Properties to Have Access

Every building hereafter erected or moved shall be on a lot adjacent to a public street or with access to an approved private street, and all structures shall be so located on lots as to provide safe and convenient access for servicing, fire protection and required off-street parking. Properties that abut only collector or arterial streets should share access with neighboring properties where feasible.

B. Parking Regulations

2. Off-Street Parking Requirements

a. Parking Area Design

(2) Groups of three or more parking spaces, except those in conjunction with single-family or two-family dwellings on a single lot, shall be served by a service drive so that no backward movements or other maneuvering of a vehicle within a street, other than an alley, shall be required. Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety in traffic access and egress and maximum safety for pedestrians, bicycles, and vehicular traffic on the site.

b. Parking Space Required

The number of off-street parking spaces required shall be no less than as set forth in (1) - (3) following. Space requirements by type of use for off-street parking are listed in (4), (5), and (6) below. Fractional space requirements shall be counted as a whole space. When square feet are specified, the area measured shall be the gross floor area of the building primary to the use but shall exclude any space within a building used for off-street parking, loading, or service functions not primary to the use. When the requirements are based on the number of employees, the number counted shall be those working on the premises during the largest shift at peak season. A reduction in the number of required spaces is allowed if evidence is provided to show that a reduced amount of parking is sufficient and will not cause any detrimental impacts to on-street parking or other parking areas. For example, an employer working with LTD to provide bus

passes to employees or who offers van pools may need fewer parking spaces for employees:

(1) All institutional, commercial, and industrial uses shall provide no less than five vehicular parking spaces for visitors.
(2) All uses shall provide vehicular parking spaces for each employee working on or from the site, as determined by the maximum number of employees during any single hour of a day.
(3) All uses shall provide one vehicular parking space for each vehicle operating on or from the site.

5. Bicycle Parking
   a. Bicycle parking requirements shall apply to all developments that require a site plan or amended site plan for new development, changes of use, and building expansions and remodels that require a building permit, as follows:

      1. Multi-Family Residences. Every residential use of two or more multi-family dwelling units shall provide at least one sheltered bicycle parking space for each unit. Sheltered bicycle parking areas may be in a conveniently located garage or storage unit, or under an eave, independent structure, or similar cover.
      2. Non-Residential Parking. There shall be a minimum of one bicycle space for every seven motor vehicle spaces. At least ten percent of all bicycle parking spaces shall be sheltered. Bicycle parking provided in outdoor areas shall be located near the building entrance, similar to vehicle parking spaces, unless existing development on site precludes that option. Fractions shall be rounded to the nearest whole number.

   b. Bicycle Parking Facilities Design Standards

      1. Bicycle parking facilities shall either be stationary racks which accommodate bicyclist's locks securing the frame and both wheels, or lockable rooms or enclosures in which the bicycle is stored.
      2. Bicycle parking spaces shall provide a convenient place to lock a bicycle and shall be at least six feet long, two feet wide, and seven feet high. Upright bicycle storage structures are exempted from the parking space length standard.
      3. A 5-foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking.
      4. Bicycle racks or lockers shall be anchored to the surface or to a structure.
      5. Covered bicycle parking facilities may be located within a building or structure, under a building eave, stairway, entrance, or similar area, or under a special structure to cover the parking. The cover shall leave a minimum 7-foot overhead clearance and shall extend over the entire parking space. If a bicycle storage area is provided within a building, a sign shall be placed at the area indicating that it is for bicycle parking only.
      6. Bicycle parking shall not interfere with pedestrian circulation.

6. Vehicular Parking Area Improvements

   All public or private vehicular parking areas, which contain four or more parking spaces, and outdoor vehicle sales area, shall be improved according to the following:

   a. All vehicular parking areas shall have a durable, dust-free surfacing of asphaltic concrete, Portland cement concrete, or other approved materials as specified by the Planning Commission.
   b. All vehicular parking areas, except those in conjunction with a single family or two family dwelling, shall be graded so as not to drain storm water over the public sidewalk or onto any abutting public or private property.
   c. All vehicular parking areas, except those required in conjunction with a single-family or two-family dwelling, shall provide a substantial bumper or curb stop which will prevent cars from encroachment on abutting private or public property.
   d. All vehicular parking areas shall be enclosed along any interior property which abuts any residential district, with a 70 percent opaque, site-obscuring fence, wall or hedge not less than 3-feet nor more than 6-feet in height, but adhering to the visual clearance and front and interior yard requirements established for the district in which it is located. If the fence, wall or hedge is not located on the property line, said area between the fence, wall or hedge and the property line shall be landscaped with lawn or low-growing evergreen ground cover. All vegetation in this area shall be adequately maintained by a permanent irrigation system, and said fence, wall or hedge shall be maintained in good condition. Screening or planting shall be of such size as to provide the required degree of screening within 24-hours after installation. Adequate provisions shall be maintained to protect wall, fences, or plant materials from being damaged by vehicles using said parking areas.
   e. Any lights provided to illuminate any public or private parking area or vehicular sales area shall be so arranged as to reflect the light away from any abutting or adjacent residential district or use.
   f. All vehicular parking spaces shall be appropriately and substantially marked.

C. Pedestrian Access and Circulation

1. Internal pedestrian circulation shall be provided within new commercial, office, and multi-family residential developments through the clustering of buildings, construction of hard surface walkways, landscaping or similar techniques.
2. Pedestrian access to transit facilities shall be provided from new commercial, employment, and multi-family residential development while existing developments shall provide safe and accessible pedestrian access to transit facilities when a site changes uses or is retrofitted.
3. Internal pedestrian and bicycle systems shall connect with external existing and planned systems, including local and regional travel routes and activity centers such as schools, commercial areas, parks and employment centers.

E. Street Standards

Zoning District	Sidewalks, Curbs and Gutters	Bicycle Lanes	Street Trees
Residential (R-1)	Optional, if need can be shown	Optional	Required
Central Business (C-1)	Optional, if need can be shown	Optional	Required
Highway Commercial (C-2)	Required	Required	Required
Light Industrial (L-1)	Required	Required	Required
Park, Recreation Open Space (PRO)	Not Specified	Not Specified	Not Specified

F. Exception to Height Regulations

ARTICLE IX. SPECIAL DISTRICTS

3. Application for Site Review Permit
   g. Eight copies of drawings clearly showing the following, when appropriate:

      (3) Approximate heights, materials, and finishes of existing and proposed enclosures, walls, and fences.
      (5) Approximate location, arrangement and dimensions of streets, driveways, access points, trails, bikeways, sidewalks and other pedestrian pathways, off-street vehicular parking and loading areas.
      (9) Architectural sketches or drawings to clearly establish the scale, character and relationship of buildings, streets, ways, parking places, garages and open spaces.

4. Criteria for Site Review Evaluation

   The Planning Commission shall consider the following minimum criteria as applicable in evaluating site review applications, to ensure that the purpose and requirements of this section are met:

   g. That, based on anticipated traffic generation, adequate additional transportation improvements must be provided by the development in order to promote traffic safety and reduce traffic congestion, including but not limited to right-of-way and road improvements. Consistent with the Transportation System Plan, consideration shall be given to the need and feasibility of widening and improving abutting streets and also to the necessity for such additional requirements as lighting, traffic-calming techniques, sidewalks and other pedestrian ways, bikeways, and turn and deceleration/acceleration lanes.
   h. That there is a safe and efficient circulation pattern within the boundaries of the development. Consideration shall include the layout of the site with respect to the

location and dimensions of vehicular, bicycle, and pedestrian entrances, exits, drives, walkways, buildings and other related facilities.

i. That there are adequate off-street vehicular and bicycle parking facilities and loading-unloading facilities provided in a safe, efficient and pleasant manner. Consideration shall include the layout of the parking and loading-unloading facilities and their surfacing, lighting and landscaping.

ARTICLE X. ADMINISTRATION AND ENFORCEMENT

C. Conditional Use Permits

3. Criteria

A Conditional Use Permit may be granted only if substantive and probative evidence establishing specific findings of fact have been made that said Conditional Use Permit conforms to all of the following criteria:

a. Conformity with the Coburg Comprehensive Plan, and with the City of Coburg Transportation System Plan.

4. Conditions

f. Require adequate off-street vehicular and bicycle parking and loading/unloading facilities.

k. Require adequate additional right-of-way and road improvements to promote safety of vehicles, bicycles, and pedestrians.

p. Additional conditions which may be necessary to implement policies of the Coburg Comprehensive Plan and the City of Coburg Transportation System Plan.

H. Vacation Procedures and Criteria

2. Vacation Criteria

c. Consistent with the City of Coburg Transportation System Plan, consider the potential to establish or maintain accessways, paths, or trails prior to vacation of any public easement or right-of-way, in addition to effect on access, traffic circulation, and emergency service protection.

Coburg Subdivision Ordinance

SECTION III. MAJOR PARTITION AND SUBDIVISION TENTATIVE PLAN PROCEDURE

B. <u>The following procedure shall be followed</u> for all tentative plan submissions except as specified below for certain major partitions. In the case of such exceptions the procedure prescribed in section V shall be followed.

2. Subdivision and Major Partition Tentative Plan Requirements
   d. Existing Conditions

      (7) Existing bike paths and pedestrian ways, including unofficially established user trails.

   e. Proposed Plan of Subdivision or Major Partition. The following information shall be included on the tentative plan of a subdivision.

      (10) Proposals for coordinating sewer, water, electric and fiber optics installations with new roadway construction or major roadway improvements.

      (11) The location and width of proposed bicycle and pedestrian ways.

      (12) Proposals for other improvements.

SECTION IV. MAJOR PARTITION AND SUBDIVISION PLAT PROCEDURE

B. Information on Plat

2. The exact location and width of streets, pedestrian and bicycle ways, and easements intercepting the boundary of the tract.
3. Tract, block and lot boundary lines, bicycle and pedestrian way locations and widths and street right-of-way and center lines, with dimensions, bearings or deflection angles, radii, arcs, points of curvature and tangent bearings. Normal high water lines for any creek or other body of water. Trace boundaries and street bearings shall be shown to the nearest 30 seconds with basis of bearings. Distances shall be shown to the nearest 0.01 feet. No ditto marks shall be used.

SECTION V. MAJOR PARTITIONING PROCEDURE

A major partition authorized by Section III B.1 shall be approved under the following procedure:

A. There shall be submitted to the City Recorder 12 copies of a tentative plan 8-1/2 x 11 inches, or 18 x 24 inches in size with the following information:

4. For land adjacent to and within the tract to be partitioned, the locations, names and existing widths of streets; location, use, names if appropriate, and widths of other bicycle and pedestrian ways; location, width and purpose of other existing easements; and location and size of sewer and water lines and drainage ways; and location of power poles, and the location of wells, septic tanks and drainfields.
6. Parcel layout, showing size and relationship to existing or proposed streets, bicycle and pedestrian ways and utility easements.

SECTION VI. IMPROVEMENT GUARANTEE

A. Agreement for Improvements

Before final Planning Commission approval of a subdivision plat or partition map, the land divider shall either install required improvements and repair existing streets, bicycle and pedestrian ways and other public facilities damaged in the development of the property or execute and file with the city an agreement between the land divider and the city, specifying the period within which required improvements and repairs shall be completed and providing that, if the work is not completed within the period specified, the city may complete the work and recover the full cost and expense, together with court costs and attorney fees necessary to collect said amounts from the land divider. The agreement shall also provide for reimbursement of the city for the cost of inspection by the city which shall not exceed 10 percent of the improvements to be installed.

SECTION VII. DESIGN STANDARDS

A. Principles of Acceptability

A land division, whether by a subdivision, creation of a street, or a partitioning, shall conform to any development plans, shall take into consideration any preliminary plans made in anticipation thereof, and shall conform to the design standards established by these regulations. The standards are presented as minimum requirements. All land divisions shall be evaluated in terms of efficiency in the use of land; protection of natural features; and compatibility with the rural nature of the **C**ity of Coburg, and consistency with the goals and policies of Coburg's Comprehensive Plan and City of Coburg Transportation System Plan.

B. Streets

1. General

The function**,** location, width and grade of streets shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the streets. The street system shall assure an adequate and safe traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. Where location is not shown on the street plan or in a development plan, the arrangement of streets shall:

a. Be interconnected and provide for continuation or appropriate extension of the grid pattern to surrounding properties. Cul-de-sacs shall be allowed only when one or more of the following conditions exist:

(1) Physical or topographic conditions make a street connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided.
(2) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or
(3) Where streets would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of the date of adoption of the City of Coburg Transportation System Plan, which preclude a required street connection.

Where cul-de-sacs are planned, multi-use paths connecting the end of the cul-de-sac to other streets or neighborhoods shall be provided if feasible.

c. Street designs shall be responsive to topography and shall minimize impacts on natural resources such as streams, wetlands and wildlife corridors.

2. Standard Right-of-Way and Street Width

The width of streets shall be adequate to fulfill city specifications as provided for in this Ordinance, and unless otherwise indicated on a development plan or approved by the Planning Commission, streets shall have:

The Planning Commission, in consultation with Coburg Rural Fire Protection District and Lane Transit District, may approve alternate street right-of-ways and paving widths when the benefits of standard right-of-way or paving width are outweighed by the benefits of feasible alternatives. Alternatives to street design may include things like narrower or

varying street widths, medians, and bulb-outs at intersections. Prior to allowing modification of street standards, the Planning Commission shall consider:

(a) emergency vehicle access and provision of emergency services:
(b) discouragement of through-traffic movement on local streets
(c) aesthetics of streets and streetscapes
(d) pedestrian and bicycle safety and convenience
(e) maintenance of Coburg's historical flavor within the historical district and of Coburg's rural characteristics
(f) location of proposed street relative to other streets (block length and connectivity)
(g) encouragement of transit service
(h) adequate rights-of-way or easements for public utilities
(i) existing development that limits paving and right-of-way widths
(j) topography, environmental impacts and drainage systems

C. Blocks

2. Size

No block shall be longer than 600-feet in length between street corner lines in residential zones. The recommended minimum length of blocks along an arterial street in non-residential zones is 1200 feet. ….

D. Building Sites

1. Size and Shape

f. Pedestrian and Bicycle Ways

(1) Sidewalks shall have a minimum paving width of five feet.

SECTION VIII. IMPROVEMENTS

C. Improvements in Subdivisions

5. Sidewalks and Pedestrian Ways – Sidewalks and pedestrian ways shall be installed on both sides of-Willamette and Pearl Streets, in new highway commercial and light industrial development areas, and in any special pedestrian way within the subdivision except that in the case of special type industrial districts, the Planning Commission may approve a subdivision without sidewalks if alternative pedestrian routes are available. With the exception of Willamette and Pearl Streets, sidewalks shall not be installed along public streets in residential and central business district areas, as designated in the Coburg Comprehensive Plan, unless the developer can show special need for sidewalks in such location.

6. Bicycle Routes –

a. On-road bicycle lanes shall be installed or, if currently existing, shall be maintained along Industrial Way, Pearl Street, Van Duyn Road, Harrison, Diamond and Coburg Road as delineated in the Coburg Transportation System Plan, Map 13. On other roads in residential and central business district areas, bicycle lanes are optional. In

new highway commercial and light industrial areas, bicycle lanes are required to promote alternative modes of transportation. In addition, if appropriate to the extension of a system of bicycle routes, existing or planned, the Planning Commission may require the installation of separate bicycle paths.

b. Bicycle facilities shall be designed for both internal circulation and to provide linkages to regional travel. Bicycle ways shall be designed to meet the needs of pedestrians and cyclists in order to promote safe and convenient bicycle and pedestrian circulation in the community.

9. Street Trees -- In accordance with the street standards set forth in the Coburg Transportation System Plan, street trees are required for all new development. Street trees shall be of the type and in the intervals described in the City of Coburg Public Works Department Recommended list of street trees. Street trees shall be installed in the required planting strip at the rate of one tree for each 35-feet lineal feet of street frontage.

Coburg Transportation System Plan
Future Study Areas
(Alignments to be determined)
Map 16

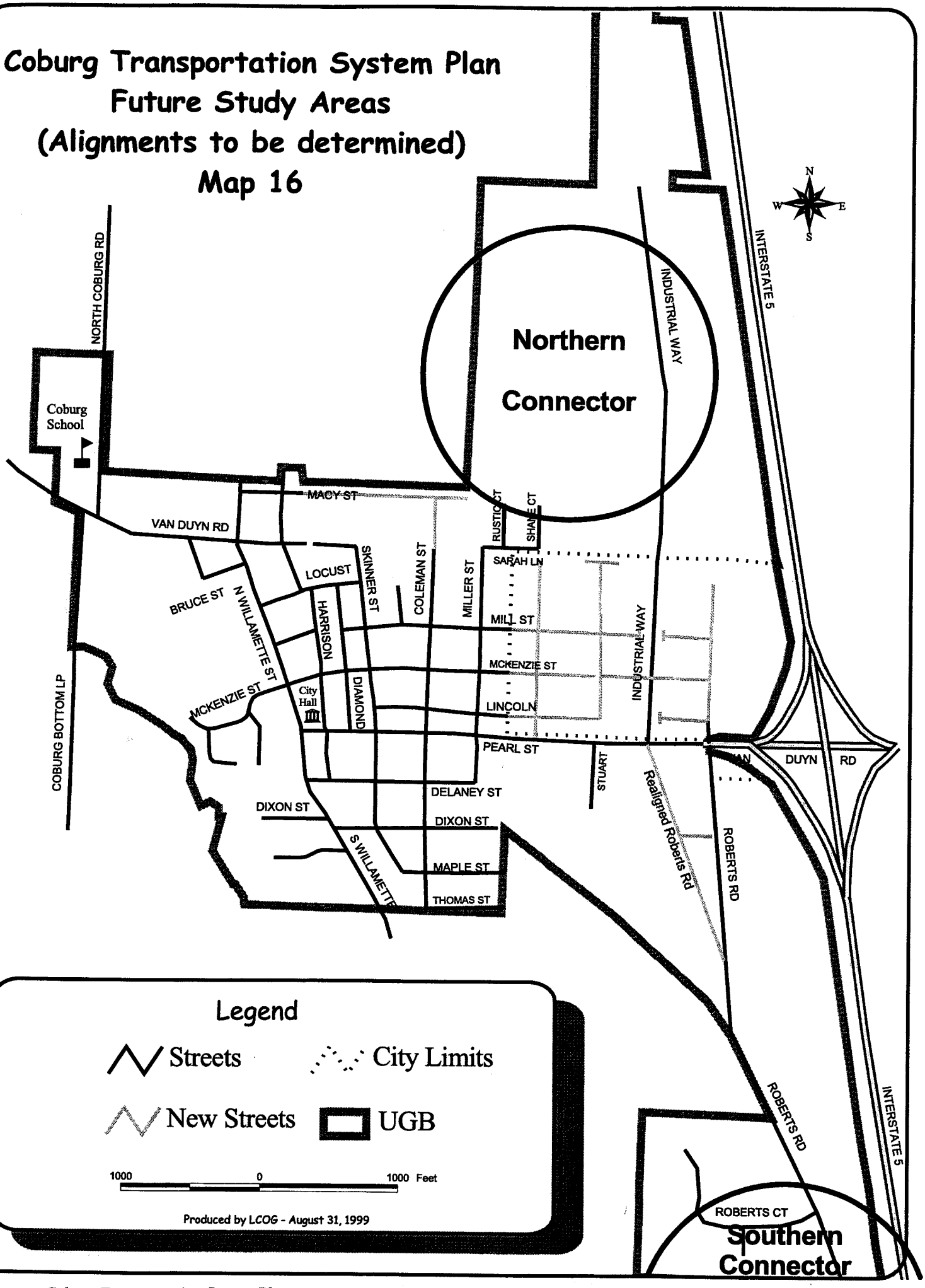


Table 8
Coburg Transportation System Plan - Projects Summary

Project Number	Name	From	To	Length	Project Elements				Project Lead	Estimated Cost
					Paving	Sidewalks	Bike Lanes	Other		
Capital Short Range Projects, 1 to 5 Years										
	Pearl Street (residential section)	Willamette Street	East of Miller St	0.39 mi	x	x	x	land-scaping	Lane County	$700,000
	Pearl Street (commercial-industrial section)	East of Miller	Industrial Way	0.23 mi	x	x	x	land-scaping	Lane County	$750,000
	Coburg Industrial Way	Coburg Industrial Wy intersection approach	Pearl Street	n.a.	x	x	x	traffic signal	Lane County	
	Diamond and Van Duyn Streets Bicycle Routes			n.a.			x (route)		City of Coburg	$25,000
	Pedestrian Safety Projects			n.a.				signs and warning lights	City of Coburg	
	General Street Lighting			n.a.				street lighting	City of Coburg	
	Covered Bus Shelters			n.a.				covered bus shelters	City of Coburg in cooperation with Lane Transit District	
	Off-Street Bike Paths			n.a.				bike paths	City of Coburg	
	Bicycle Racks			n.a.				bike racks	City of Coburg	
Capital Medium Range Projects, 5 to 10 Years										
	Interstate 5 interchange	Industrial Way	Northbound Ramp	.50 mi	x	x	x	traffic signals	ODOT	$6,200,000
	Roberts Road Realignment				x				City of Coburg	$350,000
	Pedestrian Safety Project at Skinner and Pearl Streets			n.a.				pedestrian crossing	City of Coburg	
	Traffic Calming			n.a.				traffic calming measures	City of Coburg	
	Bicycle Park-and Ride Lots			n.a.				bicycle access program	City of Coburg	
	Charter/Shuttle for Special Events			n.a.				inter-city shuttle	City of Coburg	
	Group Bus Pass Programs			n.a.				transit program	City of Coburg in cooperation with LTD	

Project Number	Name	From	To	Length	Project Elements				Project Lead	Estimated Cost
					Paving	Sidewalks	Bike Lanes	Other		
Capital Long Range Projects, 10 to 15 Years										
	Bike Commute Day/Week			n.a.				bicycle program	City of Coburg	
	Adopt a Bike Path			n.a.				bicycle path maint. Program	City of Coburg	
	Intra-City Shuttle			n.a.				inter-city shuttle	City of Coburg	
	Park-and-Ride Lots			n.a.				park-and-ride facilities	City of Coburg in cooperation with LTD	
	Park-and-Ride Lot at Periphery with Shuttle Loop			n.a.				intra-city shuttle	City of Coburg	
	Smaller Buses			n.a.				buses	City of Coburg in cooperation with LTD	
	Increased Transit Convenience			n.a.				transit logistical improve-ments	City of Coburg in cooperation with LTD	
	Retail Shops at Transit Stop/Stations			n.a.				incentives program	City of Coburg in cooperation with LTD	
Educational Projects										
	Short Range									
	Bicycle Education			n.a.				safety program	City of Coburg	
	Transportation Demand Management Programs			n.a.				TDM program	City of Coburg	
	Employer Incentives			n.a.				incentive program	City of Coburg	
	Marketing/Education/Advertisement Programs for Alternative Modes			n.a.				Awareness Program	City of Coburg	
Operations and Maintenance Projects										
	Short Range									
	General Operation/Maintenance Needs			n.a.				O & M	City of Coburg	

Chapter Six
Financing Strategies

A. Introduction

Financing for transportation system improvements comes from a variety of sources. Below is a description of the possible sources used to finance the transportation systems within the Coburg UGB.

B. Federal Funding Sources

Some federal funding programs are administered by the state. These programs are listed below.

Transportation Equity Act for the 21st Century
Funding through the Transportation Equity Act for the 21st Century (TEA-21) is targeted to improvements that demonstrate beneficial impacts towards implementing a region's transportation system plan; enhancing the multi-modal nature of the transportation system; and meeting local land use, economic, and environmental goals. Funding categories created by TEA-21 are intended to provide more discretion in allocating federal transportation funds to projects ranging from highway improvements to transit improvements, management systems, and non-vehicular modes such as bicycle and pedestrian improvements. The TEA-21 funding programs include: National Highway System, Interstate Program, Surface Transportation Program, and National Scenic Byways Program.

Highway Enhancement System
This Federal Highway Administration program provides funding for safety improvements on public roads.

National Highway System
Provides funding for a variety of activities on any highway currently designated as a principal arterial.

Surface Transportation Program
Funding for transportation enhancement activities is provided under the Surface Transportation Program (STP) of TEA-21. These enhancement activities include the provision of facilities for pedestrians and bicycles. Ten percent of each state's share of STP funds are to be set aside for transportation enhancements. These funds are dispersed through ODOT's regional offices. The project must be included in the State Transportation Improvement Program (STIP) to receive STP funds. The STP is the most flexible of the funding programs and can fund improvements on any highway except those with a functional classification of local street or rural minor collector. These roads are now collectively referred to as federal-aid routes. Transit capital improvement projects are also eligible for funding through this category. Each eligible city is suballocated a portion of the State's STP funds. The project sponsor must request inclusion of the project in the annual STIP.

Transportation Enhancement Program
The state is required to set aside a portion of its STP funds for projects that will enhance the cultural and environmental values of the state's transportation system. Projects need to demonstrate a link to the intermodal transportation system. This program funds enhancements that include mitigation of water pollution due to highway runoff, landscaping or other scenic beautification, bicycle/pedestrian projects, historic preservation, acquisition of scenic easements and scenic or historic sites, archaeological planning and research, and preservation of abandoned railway corridors.

Highway Bridge Replacement and Rehabilitation Program
This program provides funding for the replacement and rehabilitation of structures regardless of functional classification. A portion of the Highway Bridge Replacement and Rehabilitation Program is allocated for the improvement of structures under the jurisdiction of cities and counties. Bridges under local jurisdiction are added to the program based on a selection process agreed upon by ODOT, the League of Oregon Cities, and the Association of Oregon Counties. A technical ranking system, based on sufficiency rating, cost factor, and the load capacity is applied to proposed projects, and those ranking highest state-wide receive top priority funding.

Timber Receipts
The U.S. Forest Service (USFS) shares revenue from timber receipts with counties in Oregon. Lane County shares revenue with its cities through a county/city road partnership agreement. The USFS revenues have permitted Lane County to make significant capital improvements to its road system. The share of forest revenues is no longer directly tied to the level of timber harvests. Funds from this source are declining. Timber receipts are guaranteed for a ten-year period ending in fiscal year 2004. Beginning with the average timber sales between fiscal year 1987 and 1991, the guaranteed minimum will decline at a rate of 3 percent per year for each of those ten years. The actual payment will be the greater of the actual harvest receipts or the guaranteed minimum. After 2004, the payments will be based on actual timber receipts.

The County/City Partnership Payments are only established through fiscal year 1998. For fiscal year 1998, $4,000,000 was distributed to the cities based on a road mileage formula. These agreements expire this year with the payments being made in November. There is no guarantee that these payments will continue or at what level they will exist. A budgeting projection shows the pool of funds decreasing from $4,000,000 in fiscal year 1998 to $3,000,000 in fiscal year 1999 and then to $2,500,000 in fiscal year 2000 through 2002. The actual dollar amounts paid to each city will depend on changes in road mileage.

Community Development Block Grants
Community Development Block Grants (CDBG) are administered by the Department of Housing and Urban Development and disbursed through the state. Although CDBG funds could be used for transportation projects in eligible cities, these funds typically are used for other types of infrastructure projects.

Land and Water Conservation Fund
This grant program is administered by ODOT. Funds are derived under Public Law 88-578 from the National Park Service and U.S. Department of the Interior. Grants are available for the acquisition of land and the development of public outdoor recreation facilities. Grants are limited to 50 percent of the total project cost and the cities and counties are responsible for the remaining project cost. Bicycle/pedestrian paths have been funded under this program in instances where they were shown as needed in connection with outdoor recreation activities.

C. State Funding Sources

Oregon Department of Transportation

State Highway Fund
The State of Oregon collects gas tax revenues, vehicle registration fees, and weight mile taxes on freight carriers. ODOT, through the Department of Revenue, receives these revenues and disburses a portion of them to individual cities and counties based on their percentage of state-wide population. The Oregon constitution limits the use of these funds to capital projects within right-of-ways. Cities may use funds for local street, bike lane and sidewalk upgrades, maintenance, and new construction. A reasonable amount of this fund (at least one percent) must be spent on bicycle and pedestrian facilities.

ODOT administers two annual grant programs for bicycle and pedestrian projects using Highway Fund money. This grant program funds projects that cost up to $100,000 and may require a 20 percent local match. One program is for bicycle and pedestrian projects within road right-of-ways of local streets or for bicycle maps. The second program is for small-scale urban pedestrian and bicycle improvements on state highways.

ODOT combines federal funds with State Gasoline Tax Revenues to support capital projects in the STIP. The STIP is the state document that lists projects in the coming years, the associated fund, and the source of those funds. The STIP is a project prioritization and scheduling document developed through various planning processes that involved local and regional governments and transportation agencies. Aeronautics, rail, public transit, bicycle/pedestrian and highway projects are included. Public meetings are held throughout the state prior to adoption by the Oregon Transportation Commission (OTC). The adopted STIP lists projects by ODOT's regions. These regional offices are responsible for administration and disbursement of the funds.

Access Management Program
Approximately $500,000 is set aside each year to address access management issues, including the evaluation of existing approach roads to state highways. Over the years, many accesses to state highways have become unsafe due to higher speeds and increased traffic volumes. The program will identify those locations, determine necessary mitigation, prioritize improvements, and correct problems.

Local Government Fund Exchange
This program helps local governments make the most effective use of limited transportation funding. To reduce their administrative burden, local governments can agree to develop their projects with state funds, which are easier to administer, while the state uses the local governments' federal funds for state projects. This program allows flexibility in spending.

Community Transportation Program
The Community Transportation Program provides money to fund public and special needs transportation in small cities and communities throughout the state. The program is financed by a combination of state, federal, and local matching funds. The program is a unified project application, review, and selection process for discretionary funds. These funds are made available under the Federal Transit Act, Elderly Persons with Disabilities Program, the Non-Urbanized Area Formula Program, and the Special Transportation Fund (STF).

Special Transportation Fund (STF)
The STF (ORS 391.800-391.830) revenues are collected through the state cigarette tax and are distributed based on a formula that takes into consideration the elderly population in poverty. The funds that come into Lane County are then allocated to the rural districts based on population and service needs according to the STF Advisory Committee. The STF is the only dedicated revenue source in the State of Oregon for specialized transportation for the elderly and persons with disabilities.

This funding source has declined over the years due to the reduction in the amount of cigarette tax collected. There is awareness that new sources of revenue are needed. Acting on behalf of LTD, LCOG oversees and coordinates with providers to operate services funded through STF.

Oregon Economic Development Department

Special Public Works Funds
The State of Oregon, using lottery proceeds passed through the Oregon Economic Development Department (OEDD), has provided grants and loans to local government to construct, improve, and repair public infrastructure in support of local economic development and job creation. The application of this funding source for transportation improvements is limited. Funds for rail projects are also available through the OEDD. Projects must compete with other public works projects submitted by local and state agencies. As of 1996, OEDD had administered approximately $4.5 million in lottery funds to develop three rail projects.

Immediate Opportunity Fund
ODOT funds the Immediate Opportunity Fund through an annual $5 million allotment from the State Motor Vehicle Fund. OEDD administers the fund. The funds are set aside to provide OEDD the opportunity to respond quickly to transportation improvements that demonstrate a significant benefit to economic development and job creation. The program has been expanded recently to include alternate modes that reduce vehicle miles traveled, and for new technologies that improve commerce or safety. The maximum amount available for a single project is $500,000. A key factor in determining eligibility for funds is whether an immediate commitment of funds is required to influence the location, relocation, or retention of a firm in Oregon.

Funding is reserved for cases where an actual transportation problem exists, and where a location decision hinges on immediate commitment of road construction resources.

D. Lane County Funding Sources

Lane County Road Fund
This is a set of funds collected from the County's share of the state motor vehicle fund and federal timber receipts. They are limited to use within street right-of-ways. These funds can be used for restoration and upgrading of Willamette Street, Pearl Street, North Coburg Road, and Coburg Industrial Way, which are the only County roads within Coburg.

Economic Development Assistance Program
The Economic Development Assistance Program (EDAP) is funded through loans from the County Road Fund. Funds may be used to improve the marketability of *for sale* industrial properties or to improve access to existing industrial businesses. The goal of EDAP is to create family-wage jobs that directly benefit local communities. The future of this funding source is in question due to the County's diminishing share of federal timber receipts.

Payroll Tax
LTD typically funds its services through an employer payroll tax.

E. City Funding Sources

City Transportation Fund
This is a set of funds from the City's share of the state motor vehicle fund and the federal timber receipts allocated through Lane County. (See previous sections for more description of these funding sources.)

System Development Charges
System Development Charges (SDCs) could be collected as vacant parcels of land are developed or redeveloped. This charge would be based on the development's impact on the overall transportation system. Transportation SDCs are based on the land use type, the size of the development (number of dwelling units or number of acres), the number of trips per unit of development (derived from the Institute of Transportation Engineers' Manual), and the fee/trip rate. These funds may also be used for financing alternative modes projects. Coburg could create a SDC based on this transportation plan. The costs of setting up a SDC can be covered in the charge itself.

Debt Financing
General obligation bonds: Bonds are sold by the municipal government to fund public infrastructure and other improvements, and are repaid with property tax revenue. Voters must approve general obligation bond sales.

Revenue bonds: Bonds are sold by the City and repaid from an enterprise fund that has steady revenue from sources such as a water or sewer fund. The bonds are typically sold to fund

improvements in the system that is producing the revenue. They are a common means to fund large, high-cost capital improvements that have a long, useful life.

User Fees
In general, the users pay based on their use of, or impact on, the system.

Local gas tax: The City or County could implement a local gas tax, in addition to the existing revenues from the state gas tax. Several cities and counties in Oregon have a local gas tax. Given the current anti-tax atmosphere, it may be difficult to get voter approval on a local gas tax.

Local vehicle registration fee: Counties can implement a local vehicle registration fee. A portion of the County fee would be allocated to cities in Lane County. The fee would provide a stable and reasonable funding source, but is unlikely to receive local support.

Street utility fee: Similar to a water or sewer utility fee, a fee would be assessed in the city for use of streets. Implementing a street utility fee would require voter approval and political support would likely be low.

Special Assessments
Assessments pay for on-site or adjacent public improvements. The property owners who directly benefit from the improvement pay the assessments.

Local improvement district: The property owners who will benefit from the improvements pay an assessment of the project cost.

Agreement for improvements: It does not always make sense for a land divider or property owner to install the required improvements (including streets and sidewalks) at the time of development. If that is the case, s/he executes and files with the city an agreement to pay for future improvements.

F. Private Developers

The majority of local streets and sidewalks are paid for at the time of development by the developer who includes the cost in the sale price of the homes or properties. This will also apply to bikeways, bicycle parking, and transit facilities. In this way, the benefiting users are paying for the cost of the system installation. The city then is responsible for maintaining improvements within the public right-of-way.

Appendix A
TSP Inventory Database Methodology

Appendix A
TSP Inventory Database Methodology

Methodology

Gathering the information for the inventory involved going to Coburg and looking at all of the streets and sidewalks in the city to update the 1994 inventory. This information was recorded on large paper maps. The information was then entered into a database linked to ArcView, a program that can create maps based on that information. In some cases, the information was not entered into the database and is only available on the paper maps. The inventory tables are based on the following terms and explanations. The actual site inventory was performed by Coburg City staff while the analysis and generation of tables and maps were performed by Lane Council of Governments' (LCOG) staff.

Name

Name of a road for which there are one or more segments in the study area. Each record refers to attributes of a single segment, where a segment is a stretch of road or road right-of-way that typically ends where intersected by another street or significant boundary or break-point (e.g., the UGB). Multiple segments have the same name, so a segment's *unique* name is a combination of "name" + "from" + "to", such as: "6TH ST *from* A ST *to* B ST". Where no name was known, the code "unknown" was entered.

From

The name of the street (or one of the streets) that touches the west or north end of the segment. "From" and "to" are arbitrary for most non-grid streets. If the street does not continue beyond the *from* point, a code of "START" was entered. Where no name was known, the code "unknown" was entered.

To

The name of the street (or one of the streets) that touches the east or south end of the segment. "From" and "To" are arbitrary for most non-grid streets. If the street does not continue beyond the *to* point, a code of "END" was entered. Where no name was known, the code "unknown" was entered.

Length

The length of the roadway segment in feet—derived from ARC/INFO calculations, ArcView estimates, or field measurements. Populated (i.e., 456.783) decimal places indicate the source was ARC/INFO; whole numbers indicate ArcView estimates or field measurements.

No. of Lanes

Presumed to be "2" in most cases, and presumably two-way unless otherwise noted. Odd numbers of lanes indicate the presence of an additional center-turning refuge lane. Gravel roads were given a number of lanes of "1". Unused rights-of-way were given a number of lanes of "0".

Roadway Width

The width of the paved portion of the segment (the "roadway") in feet. If unpaved, gravel, or nonexistent, a "0" is shown. Variation was not identified below the level of the segment, so variation in width has been averaged to the nearest whole number.

Roadway Condition

The condition of the paved portion or "roadway" of the segment. The basic categories are based on ODOT standards. Special codes were used to identify other segment conditions. Varying conditions were not identified below the segment level. The following is a key to all codes used in this field *(the POOR, FAIR and GOOD categories were adapted from ODOT definitions):*

Code	Meaning
Poor	Paved roadway. Areas of instability, marked evidence of structural deficiency, large crack patterns (alligatoring), heavy and numerous patches, and/or deformation very noticeable. Riding quality ranges from acceptable to poor.
Fair	Paved roadway Generally stable, with minor areas of structural weakness evident. Cracking easy to detect; patched but not excessively. Deformation is more pronounced and easily noticed. Good riding quality.
Good	Paved roadway. Stable, may have minor cracking, generally hairline and hard to detect. Minor patching and some minor deformation may be evident. Very good riding surface.
Gravel	Segment has gravel surface instead of paved roadway.
Unbuilt	Segment roadway is inaccessible, unsurfaced (pavement or gravel), or altogether absent, but right-of-way is not vacated.
Removed	Segment of paved roadway was removed, but right-of-way is not vacated.
Outside UGB	Segment is outside the study area, but has been included for mapping purposes.

Jurisdiction

The ownership of the right-of-way (and roadway) for the segment. All streets in the Coburg city limits are under the jurisdiction of the City of Coburg with the exception of three streets. These three streets, Willamette Street, Pearl Street and Coburg Industrial Way, are under the

jurisdiction of Lane County. Although there are no state facilities in the Coburg UGB, the I-5 Interchange lies directly adjacent to the UGB and impacts travel behavior and patterns.

Sidewalks

Presence of sidewalks along the segment. Codes used are as follows:

Code	Meaning
Full	Full, unobstructed, and unbroken sidewalks present on both sides of the roadway.
Partial	Sidewalks present, but partial (obstructed or broken on either side and/or missing on one side).
None	No sidewalks present along existing, adequate roadway.
NA	No sidewalks present due to lack of adequate roadway (road condition is gravel, unbuilt, or removed).

Bike Lanes

Presence of bike lanes or shoulders along the segment. Codes used are as follows:

Code	Meaning
Full	Full width, unobstructed, and unbroken, paved bike lanes on both sides of the segment, either striped lanes or paved shoulder.
Partial	Bike lanes present, but partial (obstructed or broken on either side and/or missing on one side).
None	No bike lanes present along existing, adequate roadway.
NA	No bike lanes present due to lack of adequate roadway (road condition is gravel, unbuilt, or removed).

Right-of-Way (width)

Width, in feet, of the right-of-way associated with a particular road segment. Variation was captured by a range, such as 30-60 feet.

Appendix B
Existing Roadway Conditions Database

Appendix B
Existing Roadway Conditions Database
October 1997

Name	From	To	Length	Functional	Lanes	Road Width	Roadway Condition	Level of Service	Jurisdiction	Sidewalks	Bike Lanes	Right - Of -Way
W MCKENZIE ST	START	ABBEY RD	159.766		2	27	GOOD		CITY	NONE	NONE	60'
ABBEY RD	MCKENZIE ST	END	413.819		2	28	GOOD		CITY	NONE	NONE	70'
COBURG RD	UGB-EAST	COBURG BOTTOM L	230.000		2	30	GOOD		CITY/COUNTY	NONE	NONE	unknown
COBURG BOTTOM L	COBURG RD	UGB-WEST	980.000		2	26	GOOD		COUNTY	NONE	NONE	unknown
COBURG RD	unknown	UGB-SOUTH	170.361		2	36	POOR		CITY/COUNTY	NONE	NONE	unknown
COBURG RD	COBURG BOTTOM L	NORTH COBURG RD	119.922		2	30	GOOD		CITY/COUNTY	NONE	NONE	unknown
E VAN DUYN ST	N WILLAMETTE ST	HARRISON ST	327.060		2	20	GOOD		CITY	NONE	NONE	60'
COBURG RD	WATER ST	N WILLAMETTE ST	351.395		2	44	GOOD		CITY/COUNTY	PARTIAL	NONE	unknown
N WILLAMETTE ST	MCKENZIE ST	PEARL ST	348.015		2	36	POOR		CITY/COUNTY	NONE	NONE	unknown
N WILLAMETTE ST	MACY ST	E VAN DUYN ST	362.254		1	18	FAIR		CITY	PARTIAL	NONE	60'
N WILLAMETTE ST	UGB-NORTH	MACY ST	84.590		1	18	FAIR		CITY	NONE	NONE	60'
N WILLAMETTE ST	E VAN DUYN ST	BRUCE ST	172.455		2	44	GOOD		CITY/COUNTY	PARTIAL	NONE	unknown
N WILLAMETTE ST	BRUCE ST	LOCUST ST	329.854		2	44	GOOD		CITY/COUNTY	PARTIAL	NONE	unknown
N WILLAMETTE ST	LOCUST ST	MILL ST	301.127		2	44	GOOD		CITY/COUNTY	PARTIAL	NONE	unknown
N WILLAMETTE ST	MILL ST	MCKENZIE ST	306.058		2	36	POOR		CITY/COUNTY	PARTIAL	NONE	unknown
S WILLAMETTE ST	PEARL ST	DELANEY ST	361.050		2	36	POOR		CITY/COUNTY	NONE	NONE	unknown
S WILLAMETTE ST	CHRISTIAN WAY	UGB-SOUTH	509.000		2	36	POOR		CITY/COUNTY	NONE	NONE	unknown
S WILLAMETTE ST	DIXON ST	CHRISTIAN WAY	191.579		2	36	POOR		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	INDUSTRIAL WAY	ROBERTS RD	387.512		2	45	GOOD		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	STUART	INDUSTRIAL WAY	389.753		2	45	GOOD		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	WILLAMETTE ST	HARRISON ST	181.253		2	26	GOOD		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	COLEMAN ST	MILLER ST	360.141		2	26	GOOD		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	MILLER ST	STUART	841.210		2	26	GOOD		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	SKINNER ST	COLEMAN ST	361.167		2	26	GOOD		CITY/COUNTY	NONE	NONE	unknown
PEARL ST	ROBERTS RD	INTERSTATE 5	889.664		2	24	FAIR		COUNTY	NONE	NONE	unknown
VAN DUYN RD	INTERSTATE 5	OUT OF UGB EAST	518.898		2	24	FAIR		CITY/COUNTY	NONE	NONE	unknown
S WILLAMETTE ST	DELANEY ST	DIXON ST	327.098		2	36	POOR		CITY/COUNTY	PARTIAL	NONE	unknown
S WILLAMETTE ST	DIXON ST	DIXON ST	77.505		2	36	POOR		CITY/COUNTY	NONE	NONE	unknown
DIXON ST	START	S WILLAMETTE ST	484.461		1	16	FAIR		CITY	NONE	NONE	40'
CHRISTIAN WAY	START	S WILLAMETTE ST	540.711		2	26	GOOD		CITY	NONE	NONE	50'
DELANEY ST	MILLER ST	STUART	866.363		1	17	FAIR		CITY	NONE	NONE	60'

Name	From	To	Length	Functional	Lanes	Road Width	Roadway Condition	Level of Service	Jurisdiction	Sidewalks	Bike Lanes	Right - Of -Way
DELANEY ST	COLEMAN ST	MILLER ST	360.765		1	17	FAIR		CITY	NONE	NONE	60'
DELANEY ST	SKINNER ST	COLEMAN ST	354.139		1	17	FAIR		CITY	NONE	NONE	60'
DELANEY ST	HARRISON ST	SKINNER ST	329.518		2	20	FAIR		CITY	NONE	NONE	60'
DELANEY ST	S WILLAMETTE ST	HARRISON ST	168.888		2	20	FAIR		CITY	NONE	NONE	60'
DIXON ST	SKINNER ST	COLEMAN ST	344.518		2	20	FAIR		CITY	NONE	NONE	60'
DIXON ST	S WILLAMETTE ST	SKINNER ST	308.141		2	20	FAIR		CITY	PARTIAL	NONE	60'
DIXON ST	COLEMAN ST	END	521.026		2	20	FAIR		CITY	NONE	NONE	60'
MAPLE ST	SKINNER ST	COLEMAN ST	161.276		1	17	FAIR		CITY	NONE	NONE	60'
MAPLE ST	COLEMAN ST	END	574.774		1	16	FAIR		CITY	NONE	NONE	60'
THOMAS ST	COLEMAN ST	END	567.493		1	17	GOOD		CITY	NONE	NONE	60'
SKINNER ST	MILL ST	MCKENZIE ST	303.191		1	13	FAIR		CITY	NONE	NONE	30'
SKINNER ST	MCKENZIE ST	LINCOLN ST	280.201		1	18	FAIR		CITY	NONE	NONE	30'
SKINNER ST	LINCOLN ST	PEARL ST	174.096		1	18	FAIR		CITY	NONE	NONE	30'
SKINNER ST	PEARL ST	DELANEY ST	360.698		1	17	FAIR		CITY	NONE	NONE	30'
SKINNER ST	DELANEY ST	DIXON ST	340.871		1	17	FAIR		CITY	NONE	NONE	30'
SKINNER ST	DIXON ST	MAPLE ST	369.067		1	17	FAIR		CITY	NONE	NONE	30'
SKINNER ST	LOCUST ST	MILL ST	334.435		1	13	FAIR		CITY	NONE	NONE	30'
SKINNER ST	E VAN DUYN ST	LOCUST ST	261.621		1	13	FAIR		CITY	NONE	NONE	30'
HARRISON ST	PEARL ST	DELANEY ST	363.105		2	21	FAIR		CITY	NONE	NONE	60'
HARRISON ST	MCKENZIE ST	PEARL ST	414.894		2	22	GOOD		CITY	NONE	NONE	50'
HARRISON ST	E VAN DUYN ST	LOCUST ST	372.308		2	20	GOOD		CITY	NONE	NONE	60'
HARRISON ST	MACY ST	E VAN DUYN ST	371.989		1	17	FAIR		CITY	NONE	NONE	60'
HARRISON ST	UGB-NORTH	MACY ST	173.414		1	17	FAIR		CITY	NONE	NONE	60'
HARRISON ST	MILL ST	MCKENZIE ST	326.187		2	22	GOOD		CITY	NONE	NONE	50'
HARRISON ST	LOCUST ST	MILL ST	304.794		2	22	GOOD		CITY	NONE	NONE	50'
LOCUST ST	N WILLAMETTE ST	HARRISON ST	318.284		2	21	FAIR		CITY	PARTIAL	NONE	50'-60'
LOCUST ST	HARRISON ST	HARRISON ST	75.896		2	21	FAIR		CITY	PARTIAL	NONE	50'-60'
MACY ST	N WILLAMETTE ST	HARRISON ST	302.345		1	17	FAIR		CITY	NONE	NONE	60'
MACY ST	HARRISON ST	END	152.173		0	0	UNBUILT		CITY	NONE	NONE	60'
COLEMAN ST	DELANEY ST	DIXON ST	332.198		1	17	FAIR		CITY	NONE	NONE	60'
COLEMAN ST	PEARL ST	DELANEY ST	358.935		1	17	FAIR		CITY	NONE	NONE	60'
COLEMAN ST	LINCOLN ST	PEARL ST	174.552		1	18	FAIR		CITY	NONE	NONE	60'
COLEMAN ST	MCKENZIE ST	LINCOLN ST	286.140		1	18	FAIR		CITY	NONE	NONE	60'
COLEMAN ST	MILL ST	MCKENZIE ST	315.845		1	18	FAIR		CITY	NONE	NONE	60'
COLEMAN ST	START	MILL ST	167.016		1	12	FAIR		CITY	NONE	NONE	60'
COLEMAN ST	MAPLE ST	THOMAS ST	259.291		1	17	FAIR		CITY	NONE	NONE	60'

Name	From	To	Length	Functional	Lanes	Road Width	Roadway Condition	Level of Service	Jurisdiction	Sidewalks	Bike Lanes	Right - Of -Way
COLEMAN ST	DIXON ST	MAPLE ST	321.826		1	17	FAIR		CITY	NONE	NONE	60'
EMERALD ST	START	MILL ST	285.452		2	20	GOOD		CITY	NONE	NONE	30'
MILLER ST	PEARL ST	DELANEY ST	346.779		2	20	FAIR		CITY	NONE	NONE	60'
MILLER ST	LINCOLN ST	PEARL ST	156.478		2	20	GOOD		CITY	NONE	NONE	60'
MILLER ST	MCKENZIE ST	LINCOLN ST	307.247		2	20	GOOD		CITY	NONE	NONE	60'
MILLER ST	START	MILL ST	559.370		1	18	GOOD		CITY	NONE	NONE	60'
MILLER ST	MILL ST	MCKENZIE ST	313.135		2	20	GOOD		CITY	NONE	NONE	60'
STUART	PEARL ST	DELANEY ST	478.512		2	20	GOOD		CITY	NONE	NONE	60'
MILL ST	MILLER ST	END	219.529		2	22	GOOD		CITY	NONE	NONE	60'
MILL ST	COLEMAN ST	MILLER ST	359.734		2	22	GOOD		CITY	NONE	NONE	60'
MILL ST	EMERALD ST	COLEMAN ST	203.607		2	22	GOOD		CITY	NONE	NONE	60'
MILL ST	SKINNER ST	EMERALD ST	266.235		2	22	GOOD		CITY	NONE	NONE	60'
MILL ST	N WILLAMETTE ST	HARRISON ST	320.311		2	22	GOOD		CITY	NONE	NONE	60'
MCKENZIE ST	N WILLAMETTE ST	HARRISON ST	251.807		2	20	GOOD		CITY	NONE	NONE	60'
MCKENZIE ST	COLEMAN ST	MILLER ST	367.393		2	20	GOOD		CITY	NONE	NONE	60'
MCKENZIE ST	MILLER ST	END	216.837		2	20	GOOD		CITY	NONE	NONE	60'
LINCOLN ST	MILLER ST	END	220.253		2	20	GOOD		CITY	NONE	NONE	60'
LINCOLN ST	COLEMAN ST	MILLER ST	362.523		1	18	FAIR		CITY	NONE	NONE	60'
LINCOLN ST	SKINNER ST	COLEMAN ST	376.867		1	18	FAIR		CITY	NONE	NONE	60'
NORTH COBURG RD	UGB-NORTH	COBURG RD	1158.000		2	30	FAIR		COUNTY	NONE	NONE	unknown
INDUSTRIAL WAY	START	PEARL ST	4053.846		2	42	GOOD		COUNTY	NONE	NONE	unknown
INTERSTATE 5	VAN DUYN RD	OUT OF AREA SOU	4092.682		4	80	OUTSIDE UGB		STATE	NA	NONE	0
INTERSTATE 5	OUT OF AREA NOR	VAN DUYN RD	5903.386		4	80	OUTSIDE UGB		STATE	NA	NONE	0
WATER ST	VAN DUYN RD	BRUCE ST	315.864		2	0			CITY	NONE	NONE	unknown
BRUCE ST	WATER ST	N WILLAMETTE ST	322.881		2	0			CITY	NONE	NONE	unknown
MCKENZIE ST	HARRISON ST	DIAMOND ST	182.438		2	20	FAIR		CITY	NONE	NONE	30'-60'
MCKENZIE ST	DIAMOND ST	SKINNER ST	170.817		2	20	FAIR		CITY	NONE	NONE	30'-60'
PEARL ST	HARRISON ST	DIAMOND ST	170.403		2	26	GOOD		CITY/COUNTY	NONE	NONE	0
PEARL ST	DIAMOND ST	SKINNER ST	184.978		2	26	GOOD		CITY/COUNTY	NONE	NONE	0
LOCUST ST	HARRISON ST	DIAMOND ST	186.553		2	20	FAIR		CITY	NONE	NONE	60'
LOCUST ST	DIAMOND ST	SKINNER ST	171.521		1	15	FAIR		CITY	NONE	NONE	30'
DIAMOND ST	LOCUST ST	MCKENZIE ST	630.694		1	19	FAIR		CITY	NONE	NONE	60'
DIAMOND ST	MCKENZIE ST	PEARL ST	440.517		1	18	GOOD		CITY	FULL	FULL	60'
COLEMAN ST	END	PAVEMENT	420.000		1	0	GRAVEL		CITY	NONE	NONE	60'
MILL ST	DIAMOND ST	SKINNER ST	169.000		2	22	GOOD		CITY	NONE	NONE	60'
E VAN DUYN ST	OLD S.P.R.R. R-	SKINNER ST	310.000		1	9	GOOD		CITY	NONE	NONE	30'

Name	From	To	Length	Functional	Lanes	Road Width	Roadway Condition	Level of Service	Jurisdiction	Sidewalks	Bike Lanes	Right - Of -Way
E VAN DUYN ST	HARRISON ST	OLD S.P.R.R. R-	170.000		2	20	GOOD		CITY	NONE	NONE	60'
ROBERTS COURT	START	HUNTLEY CT	846.000		2	22	GOOD		CITY	NONE	NONE	60'
ROBERTS COURT	HUNTLEY CT	ROBERTS RD	564.000		2	22	GOOD		CITY	NONE	NONE	60'
HUNTLEY CT	ROBERTS COURT	END	195.000		2	22	GOOD		CITY	NONE	NONE	60'
ROBERTS RD	PEARL ST	ROBERTS CT	3540.000		2	22	GOOD		CITY	NONE	NONE	60'
ROBERTS RD	ROBERTS CT	UGB-SOUTH	575.000		2	22	GOOD		CITY	NONE	NONE	60'
VAN DUYN RD	N COBURG RD	WATER ST	690.000		2	44	GOOD		CITY/COUNTY	PARTIAL	NONE	0
WATER ST	W MCKENZIE ST	END	420.000		1	0	GRAVEL		CITY	NONE	NONE	60'
W MCKENZIE ST	N WILLAMETTE ST	ABBEY RD	380.000		2	27	GOOD		CITY	NONE	NONE	60'
W MCKENZIE ST	WATER ST	ABBEY RD	330.000		2	27	GOOD		CITY	NONE	NONE	60'
MCKENZIE ST	SKINNER ST	COLEMAN ST	425.000		1	16	FAIR		CITY	NONE	NONE	60'

Appendix C
Coburg Travel Forecasting Model

Appendix C
Coburg Travel Forecasting Model

Overview

A computerized travel model was developed to estimate traffic growth and to assess future transportation needs in Coburg. A base-year model was calibrated, using 1998 dwelling unit and employment data, in order to replicate 1998 average weekday traffic flows within acceptable tolerances. Next, the 2015 dwelling unit and employment data projections were used to estimate future traffic flows. (See Map 11, 2015 Average Weekday Traffic Volumes)

The Coburg area was divided into seven traffic analysis zones (TAZ's), and each of five roads leading into and out of Coburg was also given a zone number. First, the number of vehicle trips produced and attracted to each zone was determined on the average weekday. Then the distribution of those trips or the flow of trips between zones was determined. Next, the trips were assigned to a model network that represents Coburg's arterial roadway system. Finally, the projected traffic flows, road capacities, and intersection levels of service were analyzed to determine the city's future transportation system needs.

Dwelling Units and Employment

Base Year (1998) and Future Year (2015) dwelling unit totals are as follows:

Coburg - 1998 Dwelling Units								**TYPE**
HOME TYPE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**TOTALS**
SINGLE FAMILY*	21	70	76	59	0	12	86	324
DUPLEX	2	6	2	0	0	0	2	12
MULTI-FAMILY	0	9	12	0	0	0	6	27
MOBILE HOME (PAR	0	31	0	0	0	0	0	31
TAZ TOTALS	23	116	90	59	0	12	94	394

*includes Mobile Home on individual lot

Coburg - 2015 Dwelling Units								**TYPE**
HOME TYPE	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**TOTALS**
SINGLE FAMILY*	26	75	76	79	0	12	86	354
DUPLEX	2	6	5	0	0	0	2	15
MULTI-FAMILY	0	9	12	0	0	0	8	29
MOBILE HOME (PAR	0	39	0	0	0	0	0	39
TAZ TOTALS	28	129	93	79	0	12	96	437

*includes Mobile Home on individual lot

Base Year (1998) and Future Year (2015) employment totals are as follows:

Coburg - 1998 Employment

	TAZ							SECTOR
EMPL SECTOR	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**TOTALS**
AGRICULTURE	0	0	0	0	0	27	0	27
CONSTRUCTION	0	8	0	0	0	53	0	61
FOOD PRODUCTS	0	4	0	0	0	0	0	4
WOOD PRODUCTS	0	0	0	0	0	9	0	9
DURABLE MFG	0	0	0	0	963	0	0	963
TRANS/COM/UTIL	0	0	0	0	0	33	0	33
WHOLESALE	0	0	0	0	132	87	3	222
RETAIL	0	3	11	0	0	198	0	212
FIN/INSUR/R.E.	0	0	0	0	0	6	59	65
SERVICES	2	2	0	0	14	50	2	70
EDUCATION	22	0	0	0	0	0	0	22
GOVERNMENT	1	0	4	0	0	0	11	16
TAZ TOTALS	25	17	15	0	1109	463	75	1704

Coburg - 2015 Employment

	TAZ							SECTOR
EMPL SECTOR	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**TOTALS**
AGRICULTURE	0	0	0	0	0	0	0	0
CONSTRUCTION	3	11	3	0	0	53	0	70
FOOD PRODUCTS	0	4	0	0	0	0	0	4
WOOD PRODUCTS	0	0	0	0	0	9	0	9
DURABLE MFG	0	0	0	0	1913	54	0	1967
TRANS/COM/UTIL	0	0	0	0	0	35	0	35
WHOLESALE	0	0	0	0	132	90	3	225
RETAIL	15	18	11	0	0	206	0	250
FIN/INSUR/R.E.	0	0	5	0	0	6	59	70
SERVICES	5	5	0	0	14	54	2	80
EDUCATION	25	0	0	0	0	0	0	25
GOVERNMENT	1	0	13	0	0	0	11	25
TAZ TOTALS	50	40	35	4	2064	513	82	2760

COBURG UGB Employment Projection Modification*				
Industrial Sector	**1994 Employment**	**1998 Employment**	**Intial 2015 Projection**	**Modified 2015 Projection**
Agriculture	20	27	0	0
Manufacturing	229	976	810	1,980
Construction	51	61	84	70
FIRE	109	65	193	70
TCU	0	33	0	35
Retail	17	212	28	250
Wholesale	130	222	214	225
Services	50	70	226	80
Education	15	22	25	25
Government	17	16	28	25
TOTAL	638	1,704	1,608	2,760

**** Due to large increase in employment between 1994 and 1998***

Vehicle Trip Rates

Residential vehicle trip rates were derived from nation-wide studies published by the Institute of Transportation Engineers (ITE) in *Trip Generation, Fifth Ed.* 1991. Non-residential trip rates were based on a combination of ITE rates and the trip attraction rates obtained from Lane Council of Governments' 1994 Travel Survey, which included the entire central Lane County area. These trip rates were adjusted upward during the calibration process, where flows into and out from each area are compared to recent traffic counts on nearby streets. Final trip rates were as follows:

Residential Trip Rates

	Single-Family	Duplex	Multi-Family	Mobile Home
ITE	9.55	8.01	6.47	4.81
Adjusted	14.325	12.015	9.705	7.215

Non-Residential Trip Rates

	Agr	Min	Con	Man	Food	LBRWD	OTHDR	OTHND
ITE	2.92	2.92	2.92	2.32	2.92	2.31	2.32	2.32
Adjusted	4.38	4.38	4.38	3.48	4.38	3.465	3.48	3.48

	Whol	RTLTD	FIRE	Serv	Ed	Gov	Trans
ITE	4.4	17.62	5.32	11.38	17.66	12	3.19
Adjusted	6.6	26.43	7.98	17.07	26.49	18	4.785

Agr	Agriculture
Min	Mining
Con	Construction
Man	Manufacturing
Food	Food industries
LBRWD	Lumber and wood products
OTHDR	Other durable manufacturing
OTHND	Other non-durable manufacturing
Whol	Wholesale
RTLTD	Retail trade
FIRE	Finance, Insurance, and Real Estate
Serv	Service Industries
Ed	Education
Gov	Government
Trans	Transportation

Trip Distribution

Four primary data sources were used to develop the estimated traffic flows between zones for the year 1994. The 1990 Census Transportation Planning Package (CTPP) provided work-trip origin and destination data for both workers who live in Coburg and employees who work there. The 1995 *Coburg Travel Preference Survey* served as a valuable supplement to the CTPP, providing finer geographic specificity, as well as data on other work-related trips and travel routes. The 1994 *Coburg Traffic Study* by Lane County Public Works was the most comprehensive data source for trip distribution. It provided origin and destination data for both autos and trucks for each direction at five Coburg locations, and it documented the distribution of traffic at each of five key intersections. Finally, the *1994 Household Activity and Travel Behavior Survey* provided travel data for a few Coburg households, as well as for a few other central Lane County households making trips to Coburg. Because of the extremely small sample size, however, the household survey data was used, for the most part, to supplement the other data sources.

For the year 1998 and 2015, no significant changes in local accessibility were assumed for Coburg, thus the 1998 and 2015 distributions employed the 1994 matrix as a *seed matrix*. This matrix was *fitted* to the 1998 and 2015 vehicle trip ends, which were calculated by applying the trip rates to the new dwelling units and employment, by a process known as iterative proportional fitting. The calibrated 1998 trip distribution matrix and resulting 2015 trip distribution matrix is presented below.

Estimated 1998 Average Weekday Vehicle Trips

Origin Zone \ Destination Zone	1	2	3	4	5	6	7	8	9	10	11	12	sum
1	11	51	40	27	31	16	27	99	22	53	60	42	480
2	51	15	12	11	84	58	24	251	13	27	36	181	763
3	40	12	9	8	63	46	19	203	15	39	45	251	750
4	27	11	8	7	52	27	11	82	11	13	23	150	423
5	31	84	63	52	180	265	39	330	39	76	86	988	2231
6	16	58	46	27	265	50	21	289	37	111	182	1772	2875
7	27	24	19	11	39	21	8	293	19	48	72	436	1018
8	99	251	203	82	330	289	293	0	79	1158	482	334	3600
9	22	13	15	11	39	37	19	79	0	75	18	72	400
10	53	27	39	13	76	111	48	1158	75	0	97	277	1975
11	60	36	45	23	86	182	72	482	18	97	0	198	1300
12	42	181	251	150	988	1772	437	334	72	277	198	0	4700
sum	480	763	750	423	2231	2875	1018	3600	400	1975	1300	4700	20515

Forecasted 2015 Average Weekday Vehicle Trips

Origin Zone \ Destination Zone	1	2	3	4	5	6	7	8	9	10	11	12	sum
1	18	67	46	36	54	16	26	185	31	74	83	86	723
2	67	15	10	11	113	44	18	359	14	29	37	279	995
3	46	10	7	7	74	30	12	255	14	36	42	342	875
4	36	11	7	8	70	21	8	119	12	14	25	235	566
5	54	113	74	70	321	264	38	629	55	107	120	2040	3884
6	16	44	30	21	264	28	11	308	30	88	143	2049	3031
7	26	18	12	8	38	11	5	307	15	37	56	495	1028
8	185	359	255	119	629	308	307	0	120	1739	722	736	5478
9	31	14	14	12	55	30	15	120	0	84	20	118	515
10	74	29	36	14	107	88	37	1739	84	0	107	450	2766
11	83	37	42	25	120	143	56	722	20	107	0	321	1675
12	86	279	342	235	2040	2049	495	736	118	450	321	0	7151
sum	723	995	875	566	3884	3031	1028	5478	515	2766	1675	7151	28687

Trip Assignments

The 1998 Estimated Weekday Traffic Volumes and 2015 Forecasted Weekday Traffic Volumes (based on 1994 data) are presented on Maps 5 and 11, respectively.

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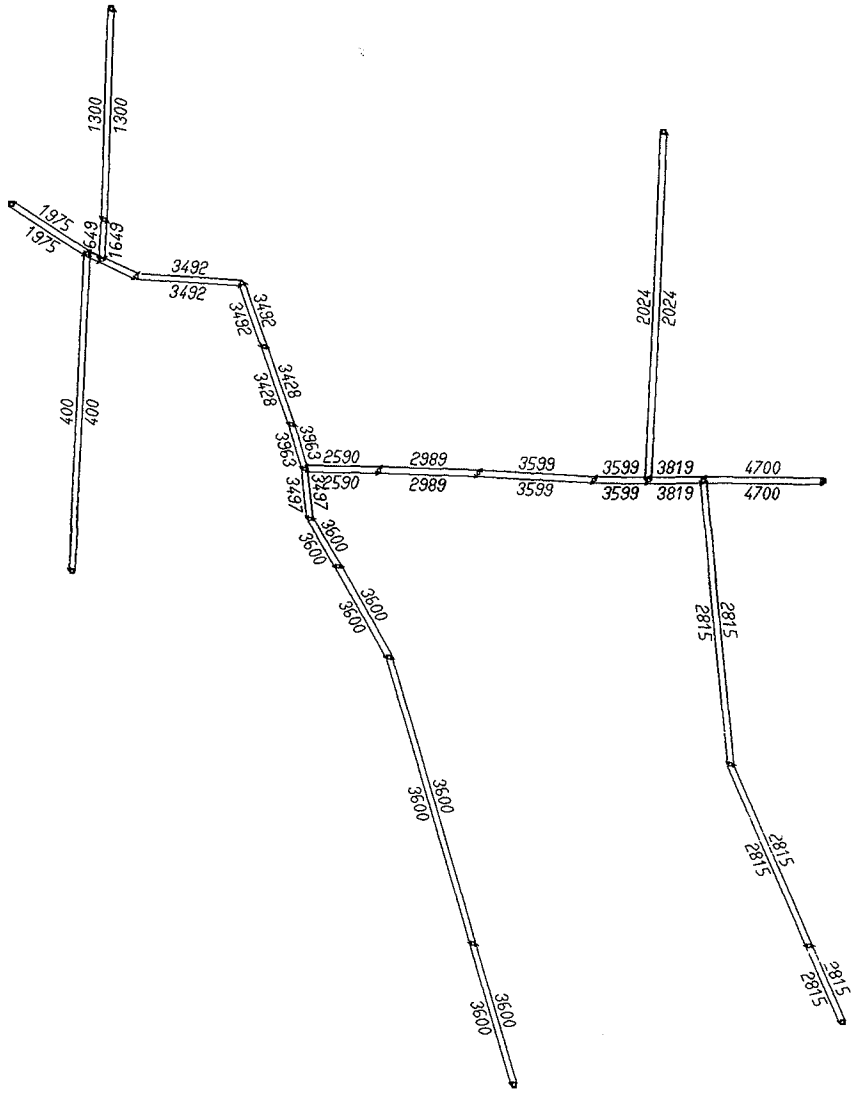

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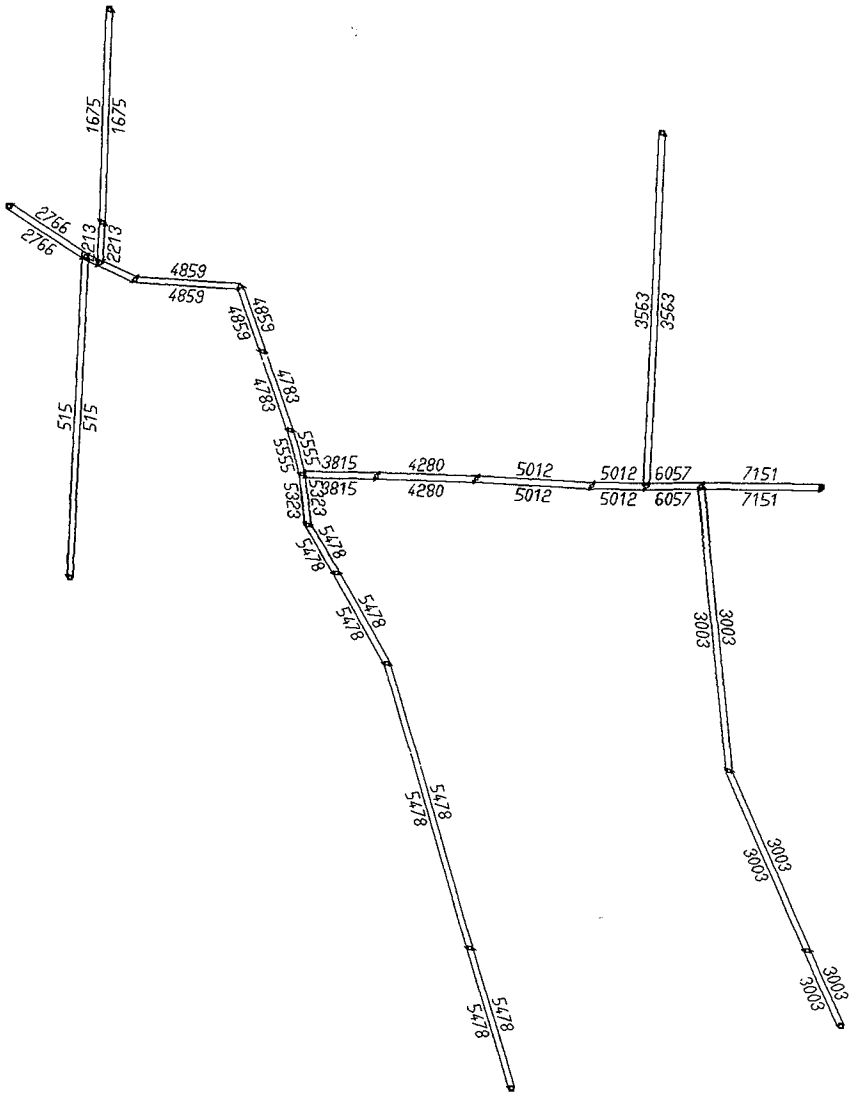

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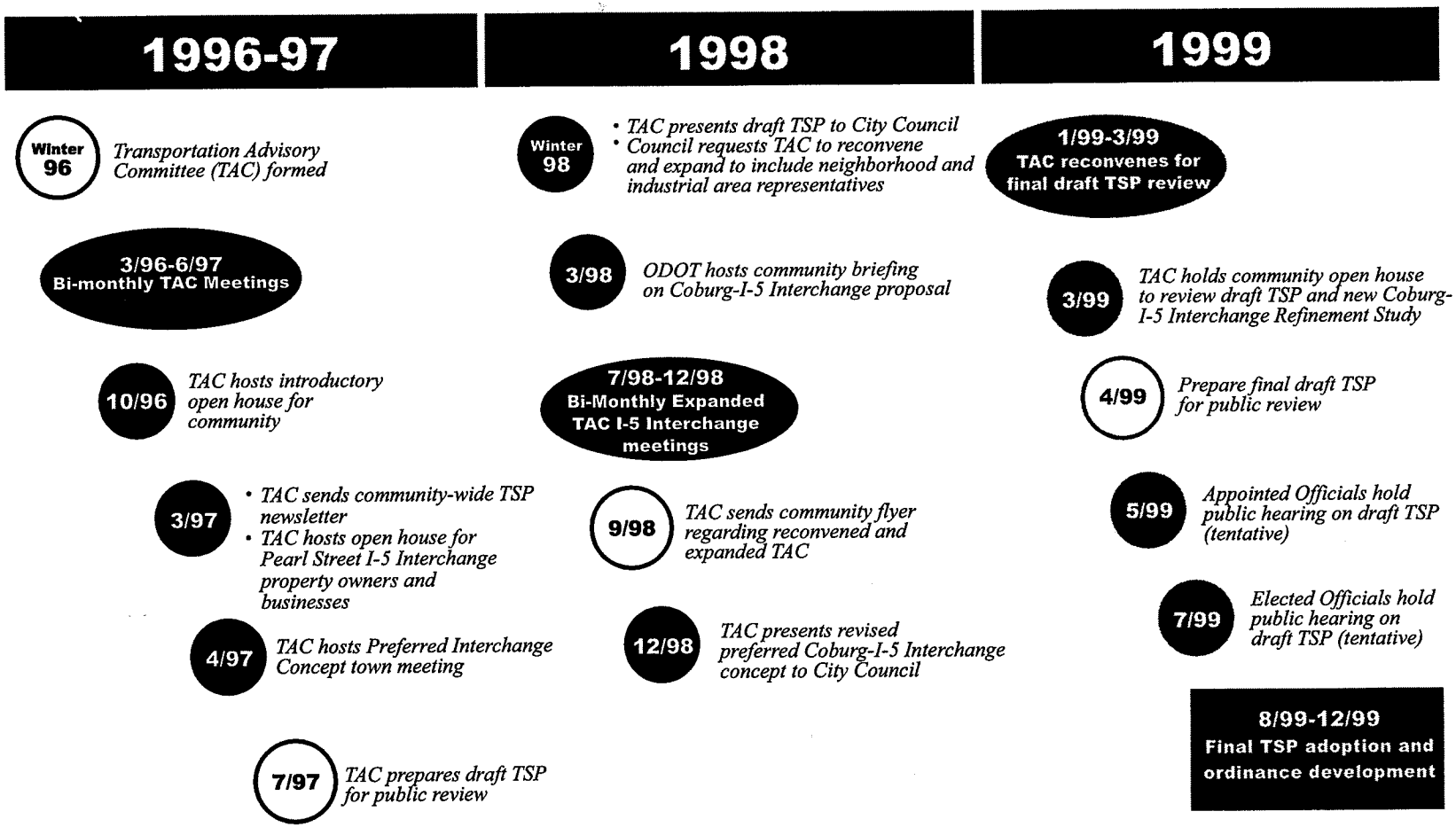
Appendix D
Coburg Transportation System Plan Chronology

Coburg Transportation System Plan Chronology



Prepared by LCOG
March 1999

Appendix E

Other Identified Needs

Appendix E
Other Identified Needs

Background
In addition to technical needs, the TAC identified a broad range of transportation modal needs. These needs are useful in recognizing what people feel is missing from their transportation system. The following is a categorized list of these needs.

Bicycle Needs
- More lighting on streets and bicycles
- Bike paths
  - Irrigation ditch
  - Through town
- Scenic bike path
  - Out to the mint fields (along Muddy Creek)
  - Sanctuary
- Develop a network around town
- Bicycle signage
- Employer incentives
- Bike commute day/week
- Bike rally at schools (bike rodeo)
  - Registration
  - Safety education
  - ID
  - Electrical safety
  - Helmet giveaways
  - Riding clubs
- Riding clubs
- Bicycle education programs
- Adopt a bike path
- Bicycle parking/racks
- Bicycle Park-and-Ride lots
- Involve Cub Scouts, Brownies, etc
  - Bike programs
  - Bike rodeo
- Business involvement
  - Sponsorship

Pedestrian Needs
- Pedestrian bridge
- Pedestrian/bike path along irrigation ditch
- Pedestrian pre-emption signals
- Caution lights at crosswalks
- Sidewalks on Willamette and Pearl

- Different surface materials for crosswalks

Public Transportation Needs

- Group pass program
- Formal Park-and-Ride lots
  - In-bound
  - Out-bound
- Higher/more frequency routes
- Charter/shuttles for special events
  - Extra service charges
- Shuttle around town
- Smaller buses
- Park-and-Ride at the periphery with a shuttle (loop)
- Focus on businesses
- Employer incentives
  - For example, flexible work hours to make transit connections
- Code changes to encourage transit
  - For example, parking standard reductions if providing transit incentives
- Marketing/education/advertising programs
- Convenience
  - Direct routes from other areas to employment area
  - Increased frequency
  - Limit/eliminate number of transfers
  - Limit wait times for transfers
- More covered shelters
  - Code enforcement
- Retail shops at transit stops/stations

Roadway Needs

- Park-and-Ride Lots
- Stronger transportation demand management (TDM) programs
- Public education on alternative modes
  - Impacts on environment
  - Future growth
- Fuel tax
- Increase bicycle use
- Signal at industrial way
- Southern connector
  - South along Roberts, then west over to Coburg Road
- Traffic calming
- County roadway options presented (November 1994)
- Bike lanes on bridge
- Park-and-Ride in town with a shuttle to golf course
- Improve ramps (flatten) to accommodate trucks/large vehicles

- Bridge lighting
- Overlay/reconstruction needs identified
  - Maple Street
  - N. Coleman
- Extension of Van Duyn East
- Speed humps

Appendix F
Capital Project Cost Assumptions

Appendix F
Capital Project Cost Assumptions

Facility Type	Unit	Construction Cost*
Curb	per linear foot	$3.00
Curb and gutter	per linear foot	$7.00
Sidewalk -five feet wide	per linear foot	$9.00
Curb, gutter and sidewalk	per linear foot	$15.00
Curb, gutter and sidewalks two sides	per linear foot	$29.00
Bike lane striping and sidewalks	per linear foot	$16.00
28-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$28.00
30-foot street paving (3-inch A.C) with exc. and rock	per linear foot	$30.00
32-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$32.00
36-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$36.00
40-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$40.00
42-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$42.00
42-foot street paving and bike striping, sidewalks	per linear foot	$81.00
44-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$44.00
46-foot street paving (3-inch A.C.) with exc. and rock	per linear foot	$46.00
46-foot street paving and bike striping, sidewalks	per linear foot	$85.00
Multi-use path 10-ft wide, 3-inch asphalt	per linear foot	$12.00
Multi-use path 10-ft wide, 4-inch concrete	per linear foot	$14.00
Shoulder bike lane, 4 feet wide to highway standards	per linear foot	$6.00
Shoulder bike lane and striped bike lanes (both sides)	per linear foot	$14.00
Bicycle Lane Striping	per linear foot	$5.00
Bicycle Lane Striping both sides	per linear foot	$10.00
Bicycle stencil	per stencil	$90.00
Bicycle sign	per sign	$100.00

* A 40 percent contingency cost will be added to each subtotal cost to account for engineering fees, inflation, and unforeseen circumstances. Estimates do not include right-of-way acquisition costs

Appendix G
Glossary of Terms

Appendix G
Glossary of Terms

Access Control (Control of Access, or Controlled Access) - The regulated limitation of access. Achieved through the regulation of public access rights to and from properties abutting highway facilities. These regulations are categorized as Full Control of Access, Partial Control of Access, Access Management, and Driveway and Approach regulations.

- **Full Control of Access:** Preference is given to through traffic by providing access connections only with selected public roads and by prohibiting crossings at-grade and direct private driveway connections.
- **Partial Control of Access:** Preference is given to through traffic to a degree that, in addition to access connections with selected public roads, there may be some crossing at-grade and some private driveway connections. Full or Partial Control of Access is generally accomplished by legally obtaining access from the abutting property owners (usually at the time of purchase of right-of-way) or by the use of frontage roads.
- **Access Management:** Involves providing (or managing) access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. Access Management views the highway and its surrounding activities as part of a single "system." Individual parts of the "system" include the activity center and its circulation systems, access to and from the center, the availability of public transportation, and the roads serving the center. All parts are important and interact with each other. The goal is to coordinate the planning and design of each center to preserve the capacity of the overall system, and to allow efficient access to and from the activities.
- **Driveway and Approach Regulations:** These may be applied even though no control of access is obtained. Each abutting property is permitted access to the street or highway; however, the location, number, and geometrics of the access points may be governed by the regulations.

The principal advantages of control of access are the preservation or upgrading of service and safety of the roadway facility/facilities.

Accessibility - The opportunity to easily reach a given destination within a certain time frame without being impeded by physical or economic barriers.

Alternative Modes of Transportation - Forms of transportation that provide transportation alternatives to the use of single occupant automobiles. Examples include rail, transit, carpools, bicycles, and walking.

Alternative Work Hours - Work policies such as flex-time and staggered work hours and compressed work weeks that allow employees to meet transit, carpool, or vanpool schedules or to avoid commuting during peak hours traffic periods.

Americans with Disabilities Act (ADA) - Federal civil rights legislation for persons with disabilities, signed into law in 1990, that prohibits discrimination specifically in the areas of employment, public accommodation, public services, telecommunications and transportation. Transportation requirements include the provision of "comparable paratransit service" that is equivalent to general public fixed-route service for persons who are unable to use regular bus service due to a disability.

Arterial - Arterials are intended to serve as a primary route for travel within and between community areas. Access to an arterial is normally from the collector or local road system rather than to serve property directly. Individual access should be managed on arterials to minimize degradation to capacity and traffic safety. Sidewalks and bike lanes are normally provided on an arterial.

Average Daily Traffic (ADT) - The average number of vehicles passing a specified point in a typical 24-hour time frame. A measure of traffic volume.

Balanced Transportation System - A system that provides a range of transportation options and takes advantage of the inherent efficiencies of each mode.

Capacity - The maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions; usually expressed as vehicles per hour or persons per hour.

Capital Improvement Program (CIP) - A plan for future capital infrastructure and program expenditures which identifies each capital project, its anticipated start and completion, and allocates existing funds and known revenue sources for a given period of time.

Comprehensive Plan - An official document adopted by a local government in which are set forth the general, long-range policies on how the community's future development should occur. A local comprehensive plan must be in compliance with state land use planning goals.

Congestion - A condition under which the number of vehicles using a facility is great enough to cause reduced speeds and increased travel times. Congestion is measured as the percent of capacity that is being used.

Low Congestion	=	Less than 71 % of capacity
Moderate Congestion	=	Between 71% and 86% of capacity
High Congestion	=	Greater than 86% of capacity

Connectivity - A term used to describe the qualities of easy access and appropriate connections between all parts of the transportation system, providing for ease of transfer between different modes of travel, such as rail to bus or bicycle to walking.

Cul-de-sac - A local street, usually only a few hundred feet in length and closed at one end, designed to serve the interior of a subdivision or large tract of land.

Design Standards - Those conditions that should be met when a new road is constructed, or when a deficient section is improved, including all relevant geometric and structural features required to provide some desired level of service over the life of the project, generally 20 years beyond project implementation.

Density - The average number of families, persons, or housing units per unit of land; usually density is expressed *"per acre*"

Development Patterns - The overall development characteristics of an area, such as the built form of a city, town, district or neighborhood. For example, the development pattern in a downtown business district has different qualities and characteristics in terms of land use, architecture, street pattern and density than does an out-lying residential neighborhood.

Discontinuous Street - A street that is disconnected from other parts of the same street by land features, buildings, cross streets, etc. Cul-de-sacs or dead end streets are also discontinuous streets.

Environmental Impact Statement (EIS) - Document that studies all likely impacts that will result from major federally assisted programs. Impacts include those on the natural environment, as well as impacts on the economy and society, and those on the built environment of historical and aesthetic significance.

Environmental Protection Agency - The federal agency charged with protecting the environment. EPA is the source agency of air quality control regulations affecting transportation.

Express Bus Service - Bus services with limited stops, primarily at transfer points and activity centers, and higher average speeds. Often provided only during peak periods, and using freeways and high-occupancy vehicle facilities where available.

Floor Area Ratio (FAR) - A ratio comparing the amount of floor space to the total land area of a development site. Specified ratios are often required for commercial and industrial development projects, and are used in urban zoning ordinances to regulate the dimensions of multistory buildings.

Frequency of Service - The number of transit vehicles in a given time period passing by any given point on a route.

Goal 12 - One of 19 state-wide planning standards that makeup the state land use planning program. Goal 12 relates to transportation, and reads: "To provide and encourage a safe, convenient and economic transportation system." See Transportation Planning Rule.

Goals - A desired result or purpose. In planning, a goal is a broad statement of philosophy that describes the hopes of the people of the community for the future of the community. A goal may never be completely attainable but it is used as a point towards which to strive.

Group Bus Pass Programs - Programs designed for large groups or organizations to allow bulk purchases of transit passes for all members of the group at a significant cost savings.

Guaranteed Ride Home - Program to guarantee that an alternative modes employee will be provided a ride home in an emergency.

Household Characteristics - Used in the statistical study of human populations. Includes a variety of household attributes, such as number of family members, age, income, number of vehicles, and method of travel to work. The U.S. Census gathers household characteristics of the U S. population.

Impervious Surface - Surfaces which prohibit water from soaking into the ground. Concrete, asphalt, and rooftops are the most common urban impervious surfaces.

Infill Development - Development consisting of either (1) construction on one or more lots in an area which is mostly developed, or (2) new construction between two existing structures.

Infrastructure - The system of essential public services, utilities, and public and community facilities, e.g. water, sewerage, power, roads, schools, health facilities, necessary for the functioning of urban development.

In-migration - The number of persons moving into a geographic area within a given period of time. A component of an area's total population growth.

Interchange - A grade separated system of interconnecting roadways that provides for the movement of traffic between two or more roadways or highways on different levels.

Intermodal - Connecting individual modes of transportation and/or accommodating transfers between such modes.

Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 - The 1991 federal transportation funding legislation that provides for a new direction in transportation planning, with emphasis on protecting the environment and reducing congestion, relying on the most efficient transportation mode and providing increased flexibility to state and local governments on the use of federal funds.

Intersection - The general area where two or more highways join or cross, including the roadway and roadside facilities for traffic movements within it.

Interstate Highway System - That system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States, as well as routes of continental importance in Canada and Mexico.

Land Conservation and Development Commission (LCDC) - A 17-member commission established by Senate Bill 100 in 1973 to develop and administer Oregon's statewide planning goals.

Land Use - The way specific portions of land or the structures on them are used; for example commercial, residential, retail, industrial, and open space.

Land Use Decision - A final decision or determination made by a local government or special district that concerns the adoption, amendment, or application of: the goals, a comprehensive plan provision, a land use regulation, or a new land use regulation.

Land Use Board of Appeals (LUBA) - A board established by the state legislature in 1979 to hear and decide on contested land-use cases.

Level of Service - A measure of how well the transportation facility (street, intersection, sidewalk, bikeway, etc.) provides service. More congestion means a lower level of service. Congestion is measured as the percent of capacity that is being used.

A - Free flow conditions: 32% of capacity
B - Reasonably free flow conditions: 51% of capacity
C - Operation stable: 71 % of capacity
D - Lower speed range of stable flow : 86% of capacity
E - Unstable flow: 100% of capacity
F - Forced flow, stop and go operation: +100% of capacity

Local Street - Comprises all streets that are not collectors or arterials. It serves primarily to provide direct access to abutting land and access to the higher order systems. It offers the lowest level of mobility and usually contains no bus routes.

Local Street System - Comprises all facilities not in one of the higher order systems.

- Permits direct access to abutting properties and connections to the higher order systems.
- It offers the lowest level of mobility and usually contains no bus routes.

National Highway System (NHS): A classification of roads authorized by ISTEA comprised of Interstate Highways and roads designated as important for interstate travel, national defense, intermodal connections, and international commerce. Federal funds are designated for projects on the NHS system. Highway 126 is part of the NHS.

Mixed Use - A development having a mixture of uses which may include office space, commercial activity, residential uses, parks and public places, and supporting public facilities and services. The development is designed so that the need to travel from one activity to another is minimized.

Mobility - Being able to move easily from place to place.

Modal Split (or Mode Share) - The proportion of total persons using a particular mode of travel.

Mode - A method of travel, such as automobile, transit, pedestrian, bicycle, or paratransit.

Multimodal - Involving several types of transportation, such as a trip using both rail and bus.

Non-Point Sources - Causes of water pollution that are not associated with point sources. Non-point sources include agricultural fertilizer or pesticide runoff, and sediment runoff from construction. Non-point sources of pollution may enter a sewer system and become a point source, such as urban runoff.

Oregon Transportation Plan (OTP) - The comprehensive, long-range plan for a multimodal transportation system for the state which encompasses economic efficiency, orderly economic development, safety and environmental quality.

Paratransit - Alternative known as *special or specialized* transportation that often includes flexibly scheduled and routed transportation services that use low-capacity vehicles, such as vans, to operate within normal urban transit corridors or rural areas. Services usually cater to the needs of persons for whom standard mass transit services would serve with difficulty or not at all. Common patrons are the elderly and persons with disabilities.

Park-and-ride - An access mode to transit and other high-occupancy vehicle modes in which patrons drive private automobiles or ride bicycles to a transit station, stop, or carpool/vanpool waiting area and park the vehicle in the area provided for that purpose (park-and-ride lots, park-and-pool lots, commuter parking lots, bicycle rack or locker).

Pedestrian Pathway - Pathway designed for pedestrian travel.

Policy - Statement adopted as part of the Plan to provide a specific course of action moving the community towards attainment of its goals. Due to budget constraints and other activities, all policies cannot be implemented at the same time. Generally, those with metropolitan-wide implications should receive priority consideration.

Retrofit - To change or upgrade an existing structure or system to meet new needs or requirements. For example, structurally strengthening an existing bridge, or upgrading a home's electrical and plumbing system to accommodate a solar water heater.

Ridesharing - Sharing of one vehicle by two or more commuters. While the concept of ridesharing applies primarily to carpools and vanpools, it is sometimes applied to transit as well. Commuters are matched with others having similar commute trip origins, destinations, and schedules.

Right-of-Way - Public space legally established for the use of pedestrians, vehicles or utilities. Right-of-way typically includes the street, sidewalk and buffer strip areas.

Sight Distance - The length of roadway ahead visible to the driver. The minimum sight distance available on a roadway should be sufficiently long enough to enable a vehicle traveling at or near the design speed to stop before reaching a stationary object in its path.

Site Design - The aspects of overall design relating to the form and function of a specific site. Site design deals with the configuration of elements on a particular site, usually for a specific project or purpose. These would include grading plans, building siting, and landscape planting plans.

Statewide Transportation Improvement Plan (STIP) - The STIP outlines the state-wide construction project schedule for the Oregon Department of Transportation (ODOT) and Metropolitan Planning Organizations. The STIP is not a planning document. It is a project prioritization and scheduling document.

Stormwater (Urban Runoff) - Rain that travels over land surfaces and drains into the street gutters or storm sewer pipes and is discharged into a ditch, channel, stream, or river. As stormwater travels over the land, it accumulates pollutants from roofs, yards, driveways, streets and industrial and commercial land uses.

Strip Commercial Development - A linear pattern of commercial development along a major street or highway, usually configured for the convenience of automobile travel.

Subdivision Street Pattern - Typically refers to a limited access, usually curvilinear street pattern, with a relatively high number of cul-de-sacs, designed to serve a low-density residential subdivision development. Other than at limited access points, this type of street pattern usually does not connect with other adjacent subdivision developments or to existing street patterns.

Telecommuting - A method of either working at home or at an off-site work station with computer facilities that link to the work site.

Traffic Calming - An integrated traffic planning approach that seeks to maximize mobility while creating a more livable city by reducing the undesirable side effects of that mobility.

Traffic Flow Improvements - Projects that are designed to enhance or improve the movement of vehicles on existing facilities such as freeways or streets. Some examples include ramp metering and signal timing improvements.

Transit Amenities - Items that support buses and bus riders. They include items such as bus stops, bus pads, turn-arounds, shelters, and benches.

Transportation Corridor - Major or high volume routes for moving people, goods and services from one point to another. They may serve many transportation modes or be for a single mode such as an air corridor.

Transportation Demand Management (TDM) - *Demand-based* techniques that are designed to change travel behavior in order to improve performance of transportation facilities and to reduce the need for additional road capacity. Methods include the use of alternative modes, ride-sharing and vanpool programs and trip-reduction ordinances.

Transportation Disadvantaged - Persons who must rely on public transit or paratransit services for most of their transportation. Typically refers to individuals without access to personal vehicle.

Transportation Needs - Estimates of the movement of people and goods consistent with an acknowledged comprehensive plan and the requirements of the Transportation Rule. Needs are typically based on projections of future travel demand resulting from a continuation of current trends as modified by policy objectives, including those expressed in Statewide Planning Goal 12 and the Transportation Rule, especially those for avoiding principal reliance on any one mode of transportation.

Transportation Planning Rule (TPR) - A state planning administrative rule, adopted by the Land Conservation and Development Commission in 1991 and amended in 1995, to implement state land use planning Goal 12, Transportation. The TPR requires metropolitan areas to show measurable progress towards reducing dependence on automobiles.

Transportation System Improvements (TSI) - TSI focuses on the supply side of transportation. TSI strategies include the full range of system improvements from improving the capacity and efficiency of the existing system to the construction or expansion of a new facility. TSI strategies are not limited to improvements for the automobile but also incorporates system improvements, expansion, and construction for transit, bicycles, and pedestrians.

Transportation System Management - Techniques for increasing the efficiency, safety, capacity or level of service of the existing transportation system without increasing its size. Examples include traffic signal improvements, traffic control devices including installing medians and parking removal, channelization, access management, ramp metering, and restriping for high-occupancy vehicle lanes.

Travel Mode - Means of transportation used, such as automobile, bus, bicycle, or by foot.

Trip Reduction Ordinances - Regulations which require developers or employers to participate in efforts to reduce automobile demand.

Urban Design - Urban design deals with the forms, functions, materials and activities of cities, and the use and management of urban settlements or their significant parts, such as neighborhoods or districts.

Urban Growth Boundary (UGB) - A site-specific line in the Comprehensive Plan that separates existing and future urban development from rural lands. Urban levels and densities of

development, complete with urban levels of services, are planned within the UGB. A requirement of the state land use planning program.

Urban Facilities and Services - Those public facilities and services important to urban development. They are primarily planned for by local government and are provided within the current urban service area.

User Group - People with common characteristics in terms of how they use the transportation system. These characteristics include attitudes toward transportation choice, trip making patterns, and other shared travel behaviors. For example, retired persons, university students, and working parents can be considered different user groups.

Vanpool - Commuting in a seven to 15 passenger van, with driving undertaken by commuters. Some portion of the van's ownership and operating cost is usually paid for by the riders on a monthly basis. The van may be privately owned, employer-sponsored with the company owning and maintaining the vehicle, or it may be provided through a private company that leases vehicles. Fares may be charged, or the cost may be divided as agreed by the passengers.

Vehicle Capacity - The number of motor vehicles a highway or road is designed to carry over a given period of time at a given level-of-service.

Vehicle Miles of Travel (VMT) - The sum of distances traveled by all motor vehicles in a specified region. A requirement of the state Transportation Planning Rule is reducing vehicle miles traveled per capita.

Wetlands - Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Appendix H

Compatibility With State Transportation Planning Rule and Other Plans

Appendix H
Compatibility With State Transportation Planning Rule and Other Plans

Transportation Planning Rule Requirements/Recommendations	Coburg Transportation System Plan
Public and Interagency Involvement	
• Establish Advisory Committees	An Transportation Advisory Committee (TAC) was established to provide project guidance. A list of the TAC membership is included on the inside cover of the TSP.
• Develop Information Material	Materials including reports, tables, and maps were prepared for public and agency review of the various TSP components. The *Tri-County News* periodically wrote stories on the plan. Informational packets were also prepared and made available to the general public attending meetings.
• Schedule Meetings and Public Hearings	The TAC met from March 1996 through 1999. The TAC presented the draft TSP (winter 1998) and revised preferred Couburg-I-5 Interchange concept (December 1998) to the City Council. Public hearings on the draft TSP were held on May and August 1999.
• Develop Other Methods to Involve the Community	Three public open houses and two town meetings were held to allow the public to review and provide input on various aspects of the plan. Newsletters and flyers were also distributed.
• Coordinate the Plan With Other Agencies	The TSP was coordinated closely with the City of Coburg, Oregon Department of Transportation (ODOT), and Lane County. Members of these organizations frequently attended most TAC meetings. The plan was also sent to the Department of Conservation and Development and Lane Transit District, who provided written comments. Concurrently with the TSP, ODOT developed a Refinement Plan for the Coburg I-5 Interchange.

Transportation Planning Rule Requirements/Recommendations	Coburg Transportation System Plan
Review Existing Plans, Policies, and Standards	
• Review and Evaluate Existing Comprehensive Plan and state and federal plans	The Coburg Comprehensive Plan (1982) was reviewed and evaluated as part of the TSP Development. The following other plans were reviewed: The Oregon Transportation Plan, Oregon Highway Plan, Oregon Bicycle and Pedestrian Plan, Oregon Rail Passenger Policy and Plan and Oregon Rail Freight Plan, and American with Disabilities Act.
• Analyze Existing Land Uses and Vacant Lands	Existing land uses and vacant lands within the TSP study area were updated. Maps and associated data were produced and analyzed by Transportation Analysis Zone.
• Review Population and Employment Forecasts	Population and employment data were updated and new forecasts developed. Housing by development type and employment by sector were allocated to vacant lands. These data were used in the Coburg TSP modeling effort.
• Review Existing Ordinances and Zoning, Subdivision, and Engineering Standards	The Coburg Zoning Code and Subdivision Ordinance were reviewed for consistency with the TPR. Street standards and other engineering standards will be analyzed for consistency with new TSP policies.
• Review Significant Transportation Studies	No significant transportation studies have been conducted in the Coburg area.
• Review Existing Capital Improvements and/or Public/Facilities Plans	The City does not currently have a transportation-related capital improvements program or public facilities plan.

Transportation Planning Rule Requirements/Recommendations	Coburg Transportation System Plan
Inventory Existing Transportation System	
• Street system (number of lanes, lane widths, traffic volumes, level of service, traffic signal location and jurisdiction, pavement conditions, functional classification and jurisdiction, truck routes, access points, and safety issues.)	A complete inventory of Coburg's existing street network is included in Chapter Two and Appendices A and B of the TSP document.
• Bicycle Ways (type, location, width, condition, ownership/jurisdiction).	Chapter Two of the TSP describes the existing bicycle system. Currently, there are designated bicycle facilities along Willamette Street in the City.
• Pedestrian Ways (location, width, condition, ownership/jurisdiction).	Chapter Two and Appendices A and B describe the existing pedestrian system.
• Public Transportation Services (transit, intercity bus, passenger rail, special transit services).	A summary of existing public transportation service is provided in Chapter Two.
• Air Transportation	A discussion of air transportation services is included in Chapter Two. There is currently no direct air service within the Coburg UGB.
• Freight Rail Transportation	A summary of freight rail transportation services is provided in Chapter Two. Coburg has no freight or passenger rail activity at this time.
• Water Transportation	There are no navigable waterways in the planning area.
• Pipeline Transportation	A summary of pipeline transportation services is provided in Chapter Two.
• Environmental Constraints	A discussion of natural features including slope, soils, surface water drainage, and wetlands is included in Chapter Two. A discussion of cultural features including parks and open space, schools, and historical features is also included in Chapter Two.
• Existing Population and Employment	Existing and projected population and employment is included in Chapter Three of the TSP.

Transportation Planning Rule Requirements/Recommendations	Coburg Transportation System Plan
Determine Transportation Needs	
• Population and Employment Forecasts	Population and employment forecasts are included in Chapter Three. Coburg was divided into 7 transportation analysis zones (TAZ). Housing and employment data were allocated by TAZ and projected to the year 2015. An EMME/2 model was developed to forecast future vehicle trips. The results of the model are included in Chapter Three and Appendices C.
• Determine Transportation Capacity Needs	An analysis was conducted to project traffic volumes to the year 2015. The model was calibrated using existing traffic counts. The model projected future trip rates and origin and destination information. This information is included in Chapter Three and Appendix C.
• Other Roadway Needs (safety, bridges, reconstruction, operation/maintenance)	The I-5 Interchange Refinement Plan, conducted concurrently with the TSP analyzed the Coburg Interchange. Other roadway needs are described in the Chapter Three of the TSP.
• Freight Transportation Needs	The proposed TSP will provide for adequate freight movement by highway.
• Public Transportation Needs (special transportation needs, general public transit needs)	The proposed TSP identifies public transportation needs in Chapter Three.
• Bikeway and Pedestrian Needs	Bikeway and pedestrian system needs are described in Chapter Three.

Transportation Planning Rule Requirements/Recommendations	Coburg Transportation System Plan
Develop and Evaluate Alternatives	
• Evaluate and Develop Transportation Goals	Goals were established as part of the TSP development contained in Chapter 4.
• Establish Evaluation Criteria	The established goals formed the basis for evaluating projects. These are present in Chapter 4.
• Develop and Evaluate Alternatives (no-build system, transportation system management, transportation demand management, transit feasibility, improvements to roadway system, land use alternatives, and combination alternatives).	Chapter 3, Future Conditions and Transportation Needs generally identified the need for future projects. Project alternatives were developed and are presented as a final alternative (Chapter 4) and capital projects list Chapter 5. This includes the Coburg I-5 Interchange Refinement Plan.
• Select Recommended Alternative	The preferred plan alternative is contained in Chapters 4 and 5. The TAC reviewed and prioritized projects into high, medium, and low priorities. Project lists were also reviewed by the public at open houses.
Produce a Transportation System Plan	
• Transportation Goals, Objectives, and Policies	Transportation goals and policies are contained Chapter 4.
• Street Plan Element (function street classification and design standards, proposed facility improvements, access management plan, truck plan safety improvements)	All of these elements are contained in Chapter 4 of the TSP. The Coburg I-5 Interchange Refinement Plan is also included.
• Public Transportation Element	A transit plan including the possible of future transit service areas is contained in Chapter 4.
• Bikeway Element	The bikeway plan is contained in Chapter 4.
• Pedestrian System Element	The pedestrian system plan is contained in Chapter 4.
• Air, Rail, Water, and Pipeline	These elements are addressed in the needs section in Chapter 3 and plan goals and policies in Chapter 4.

Transportation Planning Rule Requirements/Recommendations	Coburg Transportation System Plan
Plan Review and Coordination	
• Consistent with ODOT, Lane County, and other applicable plans	Representatives from ODOT and Lane County attended most TAC meetings. In addition, the draft plan was reviewed by the Department of Land Conservation and Development and Lane Transit District.
Adoption	
• Is it Adopted?	A joint public hearing of the Coburg Planning Commission, Lane County Planning Commission, and Lane County Roads Advisory Committee was held on May 12, 1999. The Coburg City Council and Lane County Board of Commissioners held a public hearing on September 7, 1999. Adoption of the TSP will occur after the hearings.
Implementation	
• Ordinances (facilities, services, and improvements; land use or subdivision regulations)	Implementing Ordinances will be developed following adoption of the TSP.
• Transportation Financing/Capital Improvements Program	Capital projects are contained in Chapter 5. Financing strategies are identified in Chapter 6 of the TSP.

Coburg Comprehensive Plan

The Coburg Transportation System Plan (TSP) is consistent with the Coburg Comprehensive Plan. The TSP is adopted as an amendment to the Comprehensive Plan and the TSP goals and policies replace transportation-related goals and policies contained in the Comprehensive Plan. The remainder of the TSP, including appendices, is adopted as background information to the Comprehensive Plan. The Coburg Comprehensive Plan Diagram will also be amended to reflect amendments contained in the TSP.

Appendix I
Coburg-Interstate 5 Interchange Refinement Plan

Coburg/Interstate 5 Interchange Refinement Plan

Oregon Department of Transportation

October 1999

Coburg/Interstate 5 Interchange
Refinement Plan

Oregon Department of Transportation

Prepared by:
Lane Council of Governments
125 E. 8th Avenue
Eugene, Oregon 97401
(541) 862-4283

Coburg/Interstate 5 Interchange Refinement Plan

The Coburg/I-5 Interchange Refinement Plan was created in close consultation with the Coburg Transportation Advisory Committee (TAC) during their work on the Coburg Transportation System Plan (TSP). The TAC reviewed and commented on every aspect of the Refinement Plan.

It is a tremendous effort by citizens to donate their time and effort to formulate public policy. Night meetings and the constant review of transportation information are a time consuming and tedious process and a personal sacrifice. The persistent and diligent work by the Coburg TAC is acknowledged and greatly appreciated by Oregon Department of Transportation (ODOT). This refinement plan is a reflection of the TAC and its success will be measured by the acceptance of the citizens of Coburg.

Coburg Transportation Advisory Committee

Jim Anderson	Truck and Travel
Jim Broughton	Resident
Lyn Francis Surbaugh	Resident
Linda Kroeger	Resident
Jack Harris	Coburg Public Works
Georgann Koehler	Coburg City Council
Dan Claycomb	Resident
Jim Lockard	Resident
Charles Scharpf	Representing Ms. Stevenson
Jim Trezona	Resident
Mike Warner	Marathon Coach
Ron Wykoff	Resident
Katie Theil	Resident
Gary Pape	Property Owner
Harvey Hoglund	Lane County Public Works
Megan Banks	Lane Council of Government (Staff)
Peter Watt	Lane Council of Government (Staff)

ODOT Technical Team

Gerry Juster	Preliminary Design, ODOT
Scott McCanna	Preliminary Design, ODOT
Brian Dunn	Traffic Analysis, ODOT
Tony Martin	Traffic Analysis, ODOT
Nick Arnis	Region 2 Planning, ODOT, Project Manager

The inclusion of proposed projects and actions in this plan does not obligate or imply obligations of funds by any jurisdiction for project level planning or construction.

However, the inclusion of proposed projects and actions does serve as an opportunity for the projects to be included, if appropriate, in documents such as the State Transportation Improvement Program (STIP). Such inclusion is not automatic. It is incumbent on the state, county, city, and general public to take action to encourage and support inclusion into the STIP at the appropriate time.

Projects included in the STIP are required to have funds available so the numbers of projects that can be included are constrained by funding levels.

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Appendices
(Available upon request from
ODOT, Region 2 Planning (541) 726-2548)

Executive Summary

The basis for creating a Coburg/Interstate 5 Interchange Refinement Plan stems from the need and requirement to conduct a Coburg Transportation System Plan (TSP). A refinement plan is a detailed planning effort that includes public participation in the in design concept analysis. The interchange required a more in-depth analysis than allowed in the general TSP planning process. This refinement plan is adopted as part of the Coburg TSP. Region 2 Corridor Planning funds were available for this work. The interchange plan directly coordinated with the Coburg Transportation Advisory Committee (TAC) during its work on the TSP.

Preferred Alternative

Through expert analysis, TAC review and recommendations, and public participation, a recommended alternative was chosen to advance for local and state adoption. A total of 14 design concepts were created and reviewed by the Oregon Department of Transportation (ODOT), Lane County, City of Coburg, the TAC, and the general public. **Concept 1 is recommended as the preferred alternative** (Figure 1).

Intent and Need

The intent is to create a long-range plan for the interchange and surrounding transportation system and land uses with public participation. The plan guides investment and program decisions for the City of Coburg, Lane County, and ODOT. The plan includes design concepts and a preferred concept. The concepts are detailed preliminary analyses of traffic patterns, land use projections, and geometric designs.

In Concept 1, the interchange structure is rebuilt and local street improvements enhance the safety and operations of the interchange terminals. The bridge is rebuilt to modern standards that include a wider structure with shoulders, bike lanes, sidewalks, and traffic signals. The ramp terminals are significantly improved. Exit lanes from I-5 to and from the interchange are longer, wider, and will increase capacity for vehicles.

Policy implementation includes Transportation Demand Management (TDM) and access management policies and guidelines at the interchange terminals in the short and long term. Access management and TDM policies and strategies are adopted in the Coburg TSP. Concept 1 is eligible for inclusion in the ODOT Statewide Transportation Improvement Program (STIP).

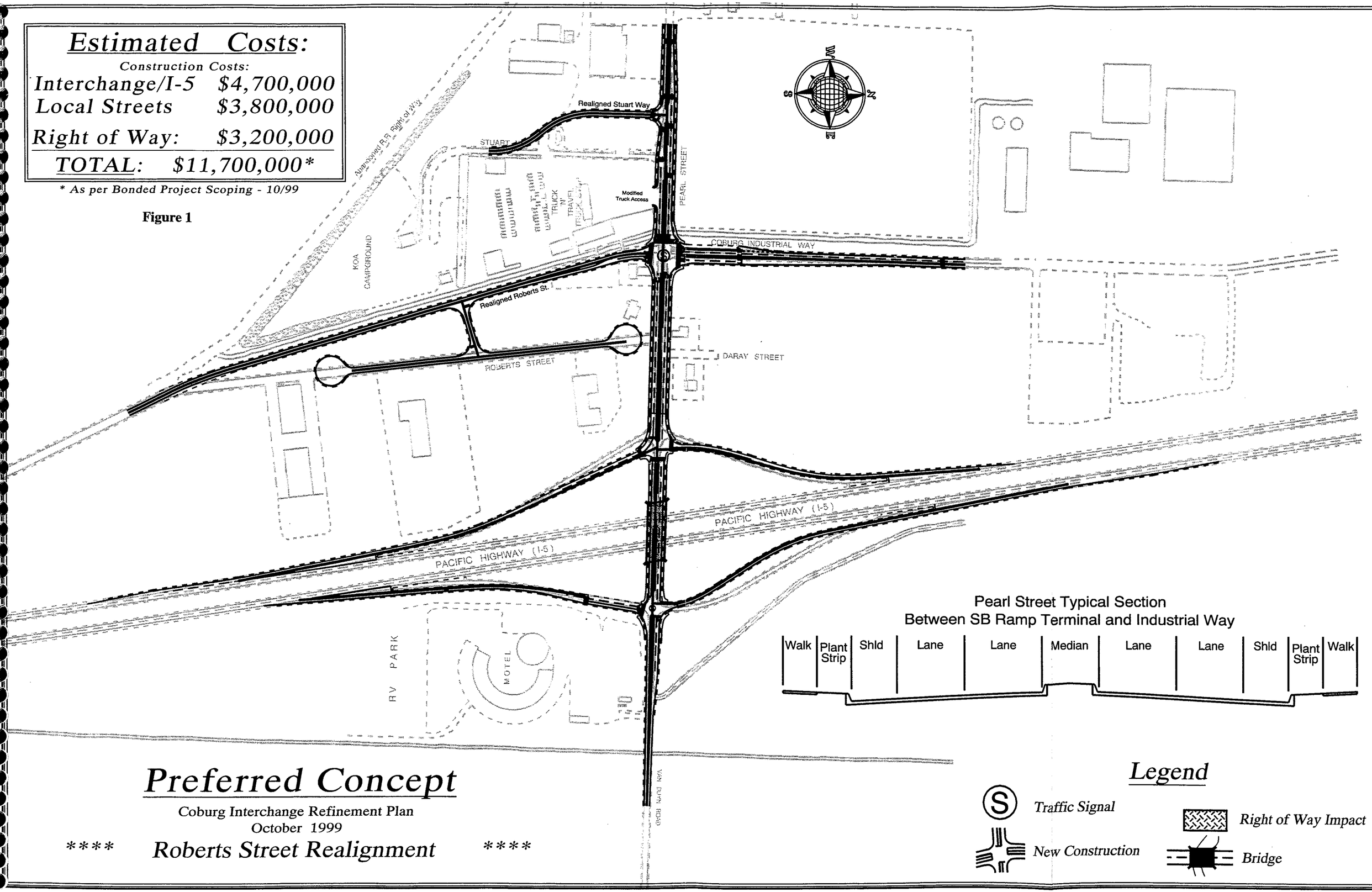
Estimated Costs:

Construction Costs:

Interchange/I-5	*$4,700,000*
Local Streets	*$3,800,000*
Right of Way:	*$3,200,000*
TOTAL:	*$11,700,000**

** As per Bonded Project Scoping - 10/99*

Figure 1



Pearl Street Typical Section
Between SB Ramp Terminal and Industrial Way

Preferred Concept

Coburg Interchange Refinement Plan
October 1999

**** *Roberts Street Realignment* ****

Legend

- *Traffic Signal*
- *New Construction*
- *Right of Way Impact*
- *Bridge*

ODOT technical staff, the TAC, and citizen input analyzed and determined the needs and issues for the interchange and surrounding street pattern.

General issues raised focused on:

An obsolete structure

The interchange was built between 1958 and 1959 and is narrow, lacks bike lanes and sidewalks, and was designed to accommodate low volumes of traffic and rural land uses.

Heavy vehicle (truck)-oriented land uses in the area

Land use around the interchange is dominated by industrial and commercial uses that are primarily truck oriented. The percentage of trucks using the interchange is one of the highest along Interstate 5 given the size of the urban area and mix of traffic.

The area is not fully developed

There are large tracts of vacant commercial and industrial parcels near the interchange that, if developed at existing land designations, will severely degrade the safety, operations, mobility, and access at the interchange

A desire to improve the safety and operations

Morning or AM traffic backs up at the southbound ramp terminal onto I-5. During the PM peak, traffic congests the county road leading to the interchange. Local street patterns near the ramp terminals are offset and pose future operation issues.

Lessen impacts of transportation improvements to local residents

Citizens of Coburg neighborhoods want to retain the historic scale and pattern of the town. This includes, but is not limited to, reducing noise and air pollution, and protecting the function of local streets and collectors for local trips. Future growth issues and the proximity of neighborhoods to the commercial and industrial areas are a concern.

The desire is for ODOT, the City of Coburg, and Lane County to implement the preferred alternative. Interchange reconstruction is based on the urgency to improve the function and safety of the interchange. An overriding principle throughout the Refinement Plan is the absolute need to manage and protect any public investment made for the reconstruction or improvement of the interchange, and balance the needs of local neighborhoods with commercial and industrial uses. Examples to manage and protect this investment include access management, TDM, and local system improvements near the ramp terminals.

Public Involvement

An important aspect of this plan concerns the input and recommendations from the TAC and general public. **The Refinement Plan will not be implemented unless it is adopted locally; therefore public participation is critical.** The TAC acted as the Coburg advisory group to review all aspects of the plan. ODOT staff acted as the plan manager and provided technical information that included formation of design concepts. The TAC was instrumental in reviewing and recommending changes to the design concepts and other technical transportation information.

In addition, elements of the refinement plan were reviewed and commented on during four public open houses. One of these open houses was devoted entirely to potentially impacted property and business owners at and near the interchange. The open houses were well attended and provided valuable information regarding interchange and local street ideas in the design concepts.

ODOT and the original TAC recommended a preferred alternative that was questioned and not entirely endorsed by the public at the final open house. A facilitation process was initiated and new members were added to the TAC. After three months of review, analysis, and evaluation, the new TAC recommended design Concept 1. ODOT and Lane County staff, as well as TAC members, endorsed Concept 1. Although the TAC recommended Concept 1, one member could not endorse the concept publicly.

Methodology and Design Concept Process

A preferred concept was created by general facts, issues, and findings, and forming reasoned needs and alternatives. A primary method for the plan was to synthesize the wide range of interchange issues and problems and develop options and solutions for a preferred alternative. Traffic counts, accident data, land use inventories, environmental constraints, and transit/TDM information was gathered. Also, the ODOT technical team, TAC, and Coburg citizens produced an analysis of the real and perceived issues and problems with the interchange.

Information contained in the Coburg TSP such as the traffic modeling output, land use scenarios, and growth estimates were utilized in the development of the interchange plan. The EMME/2 transportation model at the Lane Council of Governments (LCOG) was used to model current and projected traffic volumes in Coburg.

ODOT and the first TAC created and analyzed five design concepts including a no build idea. After the TAC added new members and began a facilitation exercise with ODOT, nine additional interchange design ideas were created, reviewed, and analyzed. Traffic analysis and geometric plots were created. A traffic analysis was conducted on only two of the nine ideas submitted by the revised TAC. It was found that most of these concepts did not meet ODOT design standards or objectives.

Implementation Measures and Strategies

The refinement plan is a long- and short-range plan. In the long-term, ODOT will attempt to program funding for the interchange reconstruction in Concept 1. This may include improvements for local street connections such as Roberts Street. Funding for large new projects are limited and ODOT seeks local and regional input about what to fund.

Short-range, the adopted refinement plan should be used to guide land use development and transportation system decisions at and near the interchange. This development should be in accordance with the alignment and geometry outlined in the preferred Concept 1—development should not negatively impact the future preferred design geometry and traffic operations. Local streets near the interchange are developed to accommodate commercial and industrial growth but are consistent with the Oregon Highway Plan street and driveway location guidelines near interchange ramps. Development of vacant commercial and industrial parcels near the interchange ramps must not negatively impact the interchange safety and operations. Development of these vacant parcels should seek access off local streets whenever possible. ODOT, the City of Coburg, and Lane County must protect and manage the future design and traffic operations in Concept 1.

ODOT will work with the City of Coburg to improve local street connections near the interchange ramps and will strive to implement access management and TDM plans. ODOT will also coordinate and collaborate with the City of Coburg and Lane County regarding significant land use proposals that impact the existing operations and safety at the interchange.

Transportation Advisory Committee Concerns

The TAC requested that all efforts are made to retain accesses to the Truck and Travel parcels. At the time of the interchange project implementation, traffic studies should be conducted to evaluate the location of Stuart Way to Pearl Street. In addition, Lane County should monitor the traffic operations at the Truck and Travel and Stuart Way in the interim.

Another concern from the TAC was noise pollution. Also at the time of implementing the interchange project, the TAC requests that another noise analysis be conducted to evaluate possible noise impacts to the residential neighborhoods.

Local and State Adoption

Acceptance and adoption of this plan is the first step towards funding and actual construction. The City of Coburg and Lane County must adopt the Interchange Refinement Plan in their transportation system plans (TSP). Adoption at the local level ensures public and official support for the preferred alternative. The TSP is then submitted to the State as an amendment to the City and County comprehensive plans.

Lane County Pearl Street Project

It will be very important for ODOT, Lane County, and the City of Coburg to work together on the upcoming Pearl Street project. In the Lane County Capital Improvement Program, 98-02, a Pearl Street project is listed to reconstruct existing roadway within the Coburg urban growth boundary (UGB) to include a 3- and 5-lane design with urban improvements. This project will cost a total of $1,133,000 and is scheduled for fiscal year 2000. A Lane County Project along Pearl Street is an opportunity to improve traffic safety and operations and will begin the first phase of the interchange plan.

ODOT and City of Coburg Funding

An adopted interchange plan should begin the process for garnering STIP funding for Concept 1, the preferred alternative. This concept competes with other projects in the area and state for funds. New projects or modernization projects such as the Coburg interchange are limited; consequently, it is important that local and county residents and officials provide information to ODOT about project desires. At the ODOT level, this interchange proposal is listed with other projects needs during the programming of funds. ODOT conducts STIP hearings and public participation regarding project funding.

The City of Coburg should implement a System Development Charge (SDC) policy that assists with street improvements related to development in Coburg. This policy should begin to offset the costs of street improvements from developments in the commercial and industrial areas. The SDC funds could pay for the construction of local streets identified in Concept 1.

Probable Phasing and Costs

Coburg Interchange Refinement Plan Preferred Concept

Phase 1 2000 to 2005

- Improve the interchange northbound exit ramp and ramp terminal using State Immediate Opportunity funds (IOF)
- Improve Pearl Street to urban standards as per the Lane County project
- Install traffic signal at intersection of Industrial Way and Pearl Street
- Assumption that Roberts Street and Stuart Way remain open for existing locations

Responsible Agencies:	Lane County Public Works for Pearl Street improvements ODOT for northbound ramp improvements	
Estimated Costs:	Pearl Street Improvements	$1,135,000
	Northbound ramp	$500,000

Phase 2 2005 to 2010

- Realign Roberts Street to Industrial Way to create four-leg intersection
- Shift access to campground parcel from Stuart Way to Roberts Street
- Stuart Way dead-ends at Pearl St.

Responsible Agencies:	ODOT and City of Coburg for realignment of Roberts and access to campground parcel	
Estimated Cost:	Roberts Street	$1,173,500

Phase 3 2008 to 2015

- Rebuild and improve interchange
- Conduct necessary traffic analysis to determine alignment of Stuart Way to the west along Pearl St.

Responsible Agencies:	ODOT for interchange City of Coburg for Stuart Way	
Estimated Costs:	Interchange and I-5	$6,000,000
	Stuart Way	$350,000

Coburg Interchange Refinement Plan
Cost Estimate Summary Sheet
Preferred Concept (Concept 1)

SUMMARY OF ALL WORK	
SECTION	ROADWORK
I-5	$1,552,600
PEARL ST.	$1,291,400
ROBERTS ST.	$1,173,500
STUART WAY	$330,000
COBURG INDUSTRIAL WAY	$221,700
ROADWORK TOTAL	$4,569,200

SECTION	STRUCTURES
I-5	$3,483,000
STRUCTURE TOTAL	$3,483,000

GRAND TOTAL
$8,052,200

SECTION: I-5	
DESCRIPTION OF WORK	ROADWORK
All ramps	$1,152,600
Signals - 2 each	$400,000
ROADWORK TOTAL	$1,552,600

DESCRIPTION OF WORK	STRUCTURES
I-5 O'xing	$3,483,000
STRUCTURE TOTAL	$3,483,000

SECTION TOTAL
$5,035,600

SECTION: PEARL ST.	
DESCRIPTION OF WORK	Cost
5-Lane section	$628,100
3-Lane section	$463,300
Signal	$200,000
TOTAL	$1,291,400

SECTION: STUART WAY	
DESCRIPTION OF WORK	Cost
Realigned section to the west	$330,000
TOTAL	$330,000

SECTION: ROBERTS ST.	
DESCRIPTION OF WORK	Cost
Realigned section to the west	$1,089,000
Connector - existing Roberts to realigned Roberts	$84,500
TOTAL	$1,173,500

SECTION: COBURG INDUSTRIAL WAY	
DESCRIPTION OF WORK	Cost
Widen existing	$118,800
Pavement overlay of existing roadway	$102,900
TOTAL	$221,700

refinement costs.xls

Introduction

Background Information

This document is one in a series of transportation plans commissioned by the Oregon Department of Transportation (ODOT) for the purpose of studying major highways within the state. The Coburg/I-5 Interchange Refinement Plan was conducted as a part of the Coburg Transportation System Plan (TSP). In part, a system plan for Coburg was initiated in response to the rapid development of commercial and industrial lands near the I-5 interchange.

The City Coburg is located within five miles of the Eugene-Springfield UGB along Interstate 5. Oregon's Transportation Planning Rule (TPR) and the federal 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and the current federal legislation, Transportation Equity Act (TEA-21), require this level of planning for transportation facilities.

A refinement plan for this interchange is one of several planning efforts occurring along I-5 in the Willamette Valley. Efforts are underway to conduct similar types of interchange plans in the Eugene-Springfield area and other sections of the I-5 corridor in Oregon.

Study Area and History

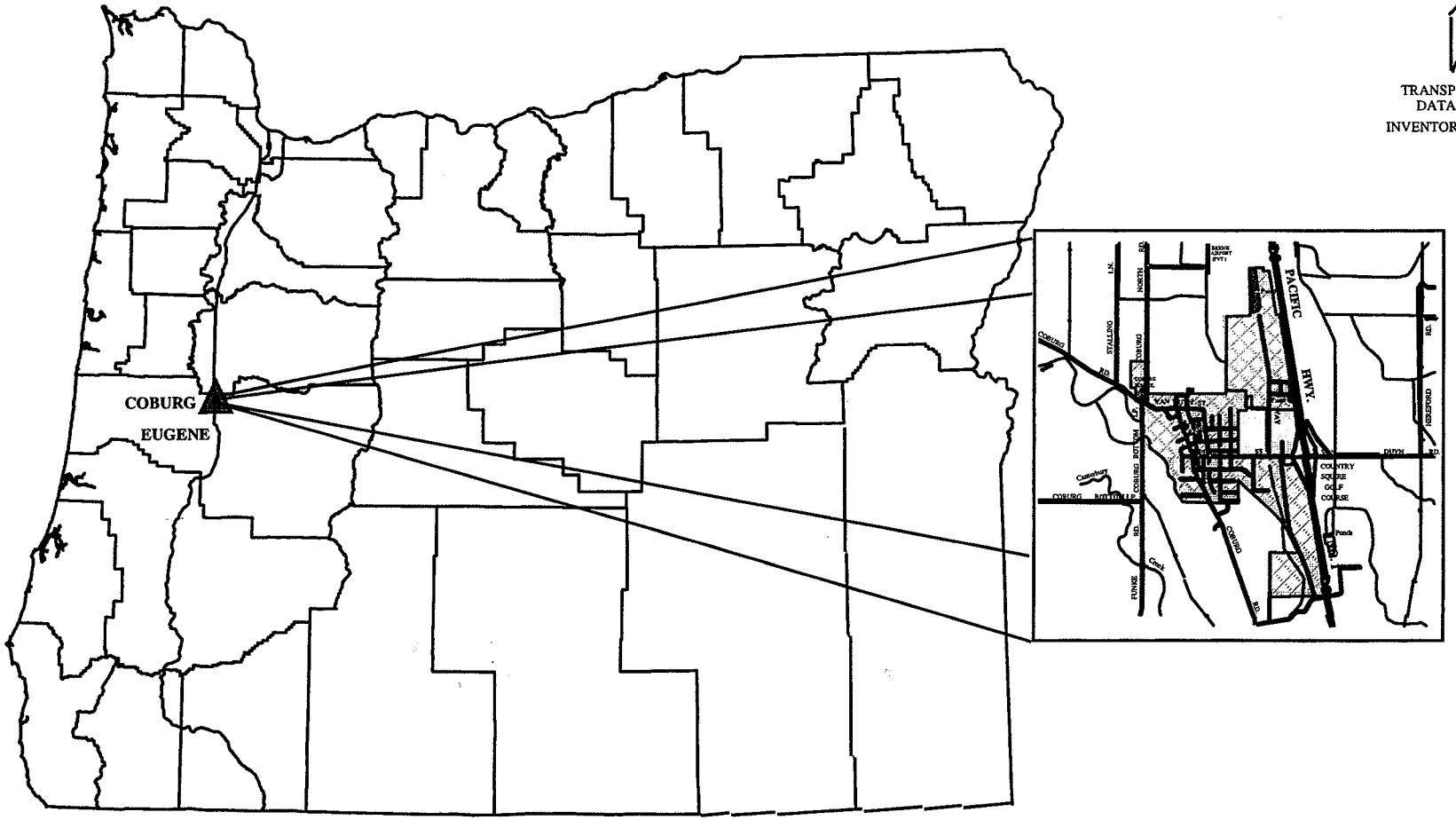
The Coburg/I-5 interchange is located at MP 199.15 along Interstate 5, on the eastern edge of the Coburg City limits and UGB (Figure 2). The area lying to the east of Interstate 5 is in Lane County.

There are two general study areas for this refinement plan: the outer study area and the primary study area (Figure 3). The outer area was created to assess large tracts outside the immediate interchange area. For instance, were there transportation systems or facilities near Coburg impacting the interchange study? Also, were there land uses or potential areas of growth significantly influencing the plan? Based on local transportation knowledge and expertise, the outer and primary study areas were formed. The primary area was intended to provide the range for development of the design concepts.

Coburg/I-5 Interchange 1997

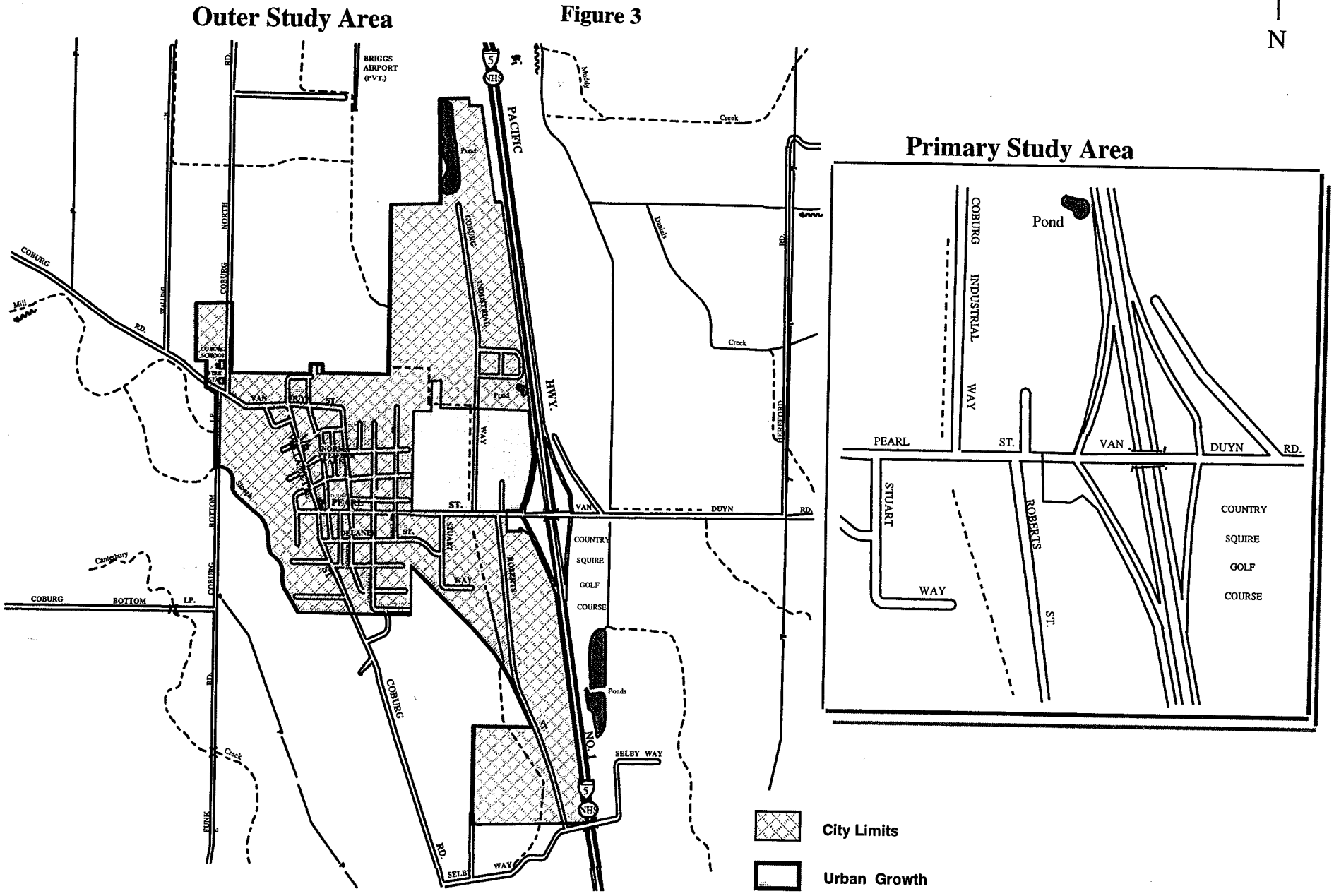
Figure 2

TRANSPORTATION
DATA SECTION
INVENTORY & MAPPING



Coburg/I-5 Interchange Study Area

Figure 3



Chronology of the Construction Projects at the Interchange

1958 Grading and paving I-5

1959 Overcrossing structure
Between 1958 and 1959 the interchange was built.

1962 Improvements to I-5

1975 New guardrails
Slopes in median and roadway shoulders were flattened
Minor drainage improvements
Protection to the bridge column embankment
Concrete shoulder barrier under the Van Duyn Road overcrossing structure
New signs

1996 Resurfacing of I-5
Improvements to turning radii at ramp terminals and replacement of guardrail
Raising of overcrossing structure to maintain 5.2 m vertical clearance requirements.

Planning Framework, Process, and Policies

There are three types of corridor planning in ODOT. One is general planning for an entire corridor, which identifies the priority and timing for basic transportation improvements such as a passing lane in a future year. The general plan is usually all that is necessary for small cities and rural areas.

Larger cities generally require a different level of effort, known as system planning. The system plan contains a greater amount of detail. It may suggest the widening of a local street feeding into a state road, addition of turn lanes, or rerouting other city streets that have an impact on the corridor.

For most corridors, the system plan and the general plan will meet all the planning requirements. In some cases, however, a third corridor plan, called the refinement plan, is necessary. The refinement plan is normally an outgrowth of general and/or system plans. In this case, the Coburg/I-5 Refinement Plan is an outgrowth of the Coburg TSP. A refinement plan is a detailed analysis of a facility or specific section of a corridor. Depending on the level of information needed, refinement plans conduct an in-depth analysis of transportation issues, offer a range of concepts or alternatives, and select a preferred solution.

Guiding policies during the planning process were:

- The Oregon Transportation Plan
- The Oregon Highway Plan
- The Coburg Comprehensive Plan
- The Transportation Planning Rule
- The Bypass and Major Improvement Planning Policy
- The Willamette Valley Transportation Strategy
- The Federal Register Vol. 55, Additional Interchanges to the Interstate System
- The State Agency Coordinating Agreement
- The draft Interchange Access Management Policy

Public participation underlies all scope of work elements. The Coburg Transportation Advisory Committee (TAC) for its transportation system plan acted as the City committee responsible for review and comment on all sections of the Refinement Plan. At major milestones in the course of the study, public open houses were held to review and comment on the plan. Public acceptance of the refinement plan is critical for adopting the plan at the local and state levels.

ODOT decided to perform the technical work in-house. Engineers from Preliminary Design, Traffic Planning and Analysis, and the ODOT Region 2 Planner for the Eugene-Springfield area formed the technical team and were the primary contributors for conducting the analysis for the plan. The Region 2 Planner acted as project manager for the plan. The Lane Council of Governments (LCOG) provided assistance during the public involvement phases of the work.

Development of the plan began in late spring 1996 with meetings between ODOT, the City of Coburg, and LCOG. The Coburg TAC began meeting in summer 1996 to begin work on the Coburg TSP. A draft Coburg TSP and Coburg/I-5 Refinement Plan were submitted for public review in August 1997 and was sent back to a revised TAC group for further work.

Initiation of work began when the ODOT technical team created a draft scope of work for review and comment by the Coburg TAC. The scope of work was also reviewed by ODOT planning managers in Region 2 and covered:

1. Definition of project goal and objectives and TSP coordination;
2. Definition of issues, assumptions, inventory and conditions;
3. Base case analysis;
4. Definition of a range of plan alternatives;
5. Selection of a preferred alternative;
6. Final recommendations; and
7. Implementation.

Inventory and Conditions

This section describes the existing conditions of the interchange and surrounding area. Besides the transportation systems and facilities, this section also focuses on land uses and environmental conditions. Sections of analysis cover: land use and community profile, roads and streets, the interchange, traffic volumes, transit, transportation demand management (TDM), pedestrians and bicycles, accidents, access, and land uses and environmental conditions (current designations, vacant parcels, and environmental constraints.)

Land Use and Community Profile

Rural Development Initiatives Inc. conducted a community assessment in 1995. As of 1994, there were 760 people living in Coburg. Between 1980 and 1990, the population increased by 64 people. In 1989, the median income of households was about $21,000, which was below the state-wide median of $27,000. About 18 percent of the residents were below the poverty level. Employment for Coburg and the surrounding area centers on managerial and professional occupations and farming and operation positions. There is a high percentage of college graduates in Coburg, about 27 percent. Of the employed residents, it was estimated that less than 24 percent of the residents work in Coburg.

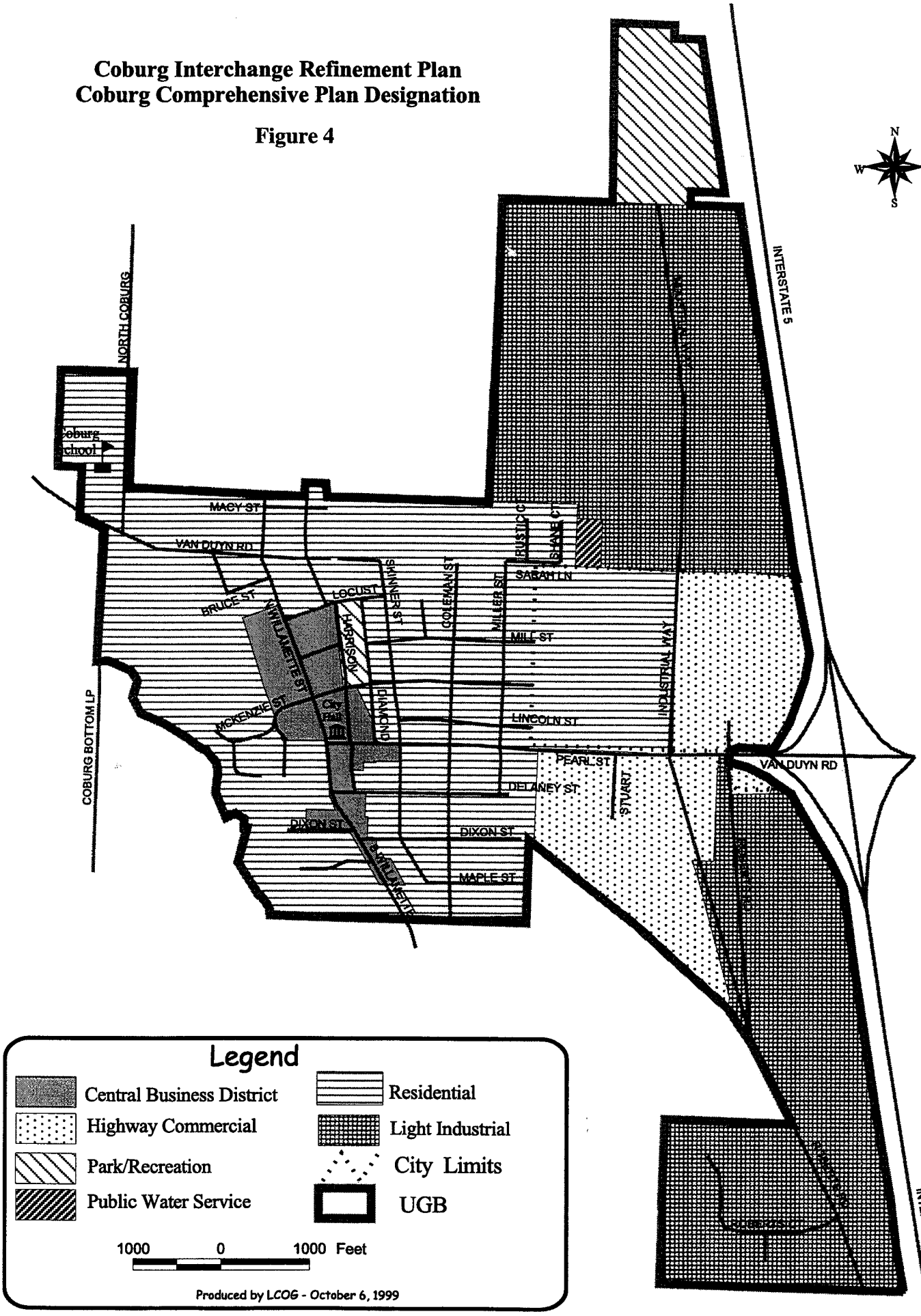
The City of Coburg UGB (Figure 4) extends to the West side of the interchange. Lane County zoning and comprehensive plan designations occur on the East side. Coburg has attracted a substantial amount of large to medium industrial- and manufacturing-based businesses. The City had an enterprise zone for a short time and then repealed the status. The largest employers in Coburg are two coach manufacturers: Monaco Coach Corp. (about 420-450 employees) and Marathon Coach Inc. (about 300 employees). The Truck and Travel business along Pearl Street also attracts a large amount of truck traffic from I-5, and numerous businesses that sell or repair heavy equipment are located in the industrial park near the interchange.

There is a relatively large amount of zoned, vacant commercial and industrial land within the Coburg UGB. The vacant parcels for both zonings are located along I-5 near the interchange and off Roberts Street and Industrial Way (Figure 5). To the north of Pearl Street along Industrial Way, there are 25 acres of vacant Highway Commercial zoning and 40 acres of Industrial zoning. To the south of Pearl Street, along Roberts Road there exists about 37 acres of vacant Industrial zoning. To the east, in the County zoned commercial area that encompasses a hotel and RV park, a large amount of underutilized land exists near the east ramp.

In 1990, there were 305 residential housing units. Of those, 212 were single-family, 58 were mobile homes, and 35 were multi-family units. Vacant housing acres are primarily located in two places: between Industrial Way and the existing town and on the western edge of the UGB. Abutting Industrial Way to the west, there are about 43 vacant housing acres; on the western edge, there are about 37 vacant parcels.

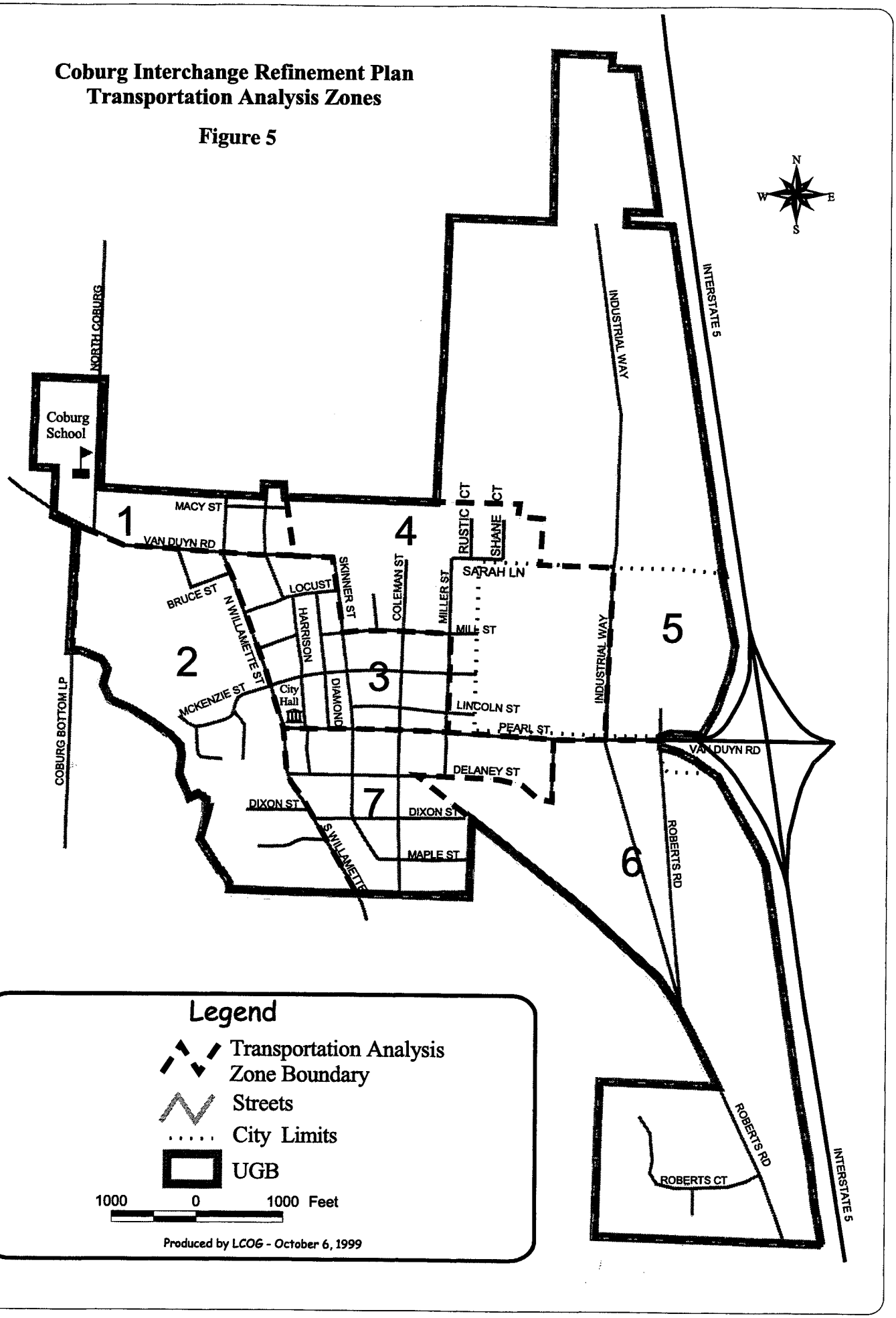
Coburg Interchange Refinement Plan
Coburg Comprehensive Plan Designation

Figure 4



Coburg Interchange Refinement Plan
Transportation Analysis Zones

Figure 5



Potential Development Impact Areas (PDIA) sites were identified to the east of the interchange along Van Duyn near the base of the Coburg Hills. Also, Lane County transportation planning assessed the present and possible future development in the area. A number of new homes are being built but are contained on 10- to 20-acre parcels. Landowners in the area are submitting proposals for marginal land status and the County estimates that only 50 new homes could be built in the area due to water access constraints.

Local Roads and Interchange (Figure 6)

The interchange is located at Milepoint 199.15 on Interstate 5 in Lane County. Interstate 5 is classified in the Oregon Highway Plan (OHP) as an Interstate Highway Level of Importance (LOI). In addition, the OHP lists I-5 as a category 1, a full control access treatment in the Access Management Classification System. I-5 is also a federally recognized Interstate on the National Highway System (NHS). In essence, I-5 is one of the primary transportation routes in the state and pacific western states.

The interchange is a standard diamond configuration. It serves as a connection to Coburg and outlying rural areas and offers limited highway services for the general traveling public. I-5 provides the trucking sector with an array of services and access to a growing manufacturing center and heavy equipment sales. The structure or bridge of the interchange was recently (1996) raised as part of an I-5 preservation project. The raising met height requirements for overpasses on the interstate.

The local street system connecting to the east and west ramp terminals is under the jurisdiction of Lane County. Van Duyn road connects to the east ramp and serves a rural area along the Coburg Hills. Van Duyn is classified as a Rural Local Road and has two 3.6 m lanes and 0.6 m shoulders. The County road leading to the west terminal is Pearl Street. This road leads into Coburg and serves a mixture of local residents and industrial and commercial uses, including a large number of trucks. Pearl Street is classified as a County Minor Arterial. The Lane County TSP will review all street classifications and may recommend a higher classification for Van Duyn.

To the east along Van Duyn, there are numerous road approaches that are continuous and undefined within 150 m of the east ramp terminal. There are no connecting roads near the interchange along this section of Van Duyn. On Pearl Street to the west, there are also local access points within 150 m of the interchange ramp. In addition, local street connections to Pearl Street are not aligned north to south (Roberts Street, Daray Street, Industrial Way, and Stuart Way), and Roberts Street is about 70 m near the west interchange ramp.

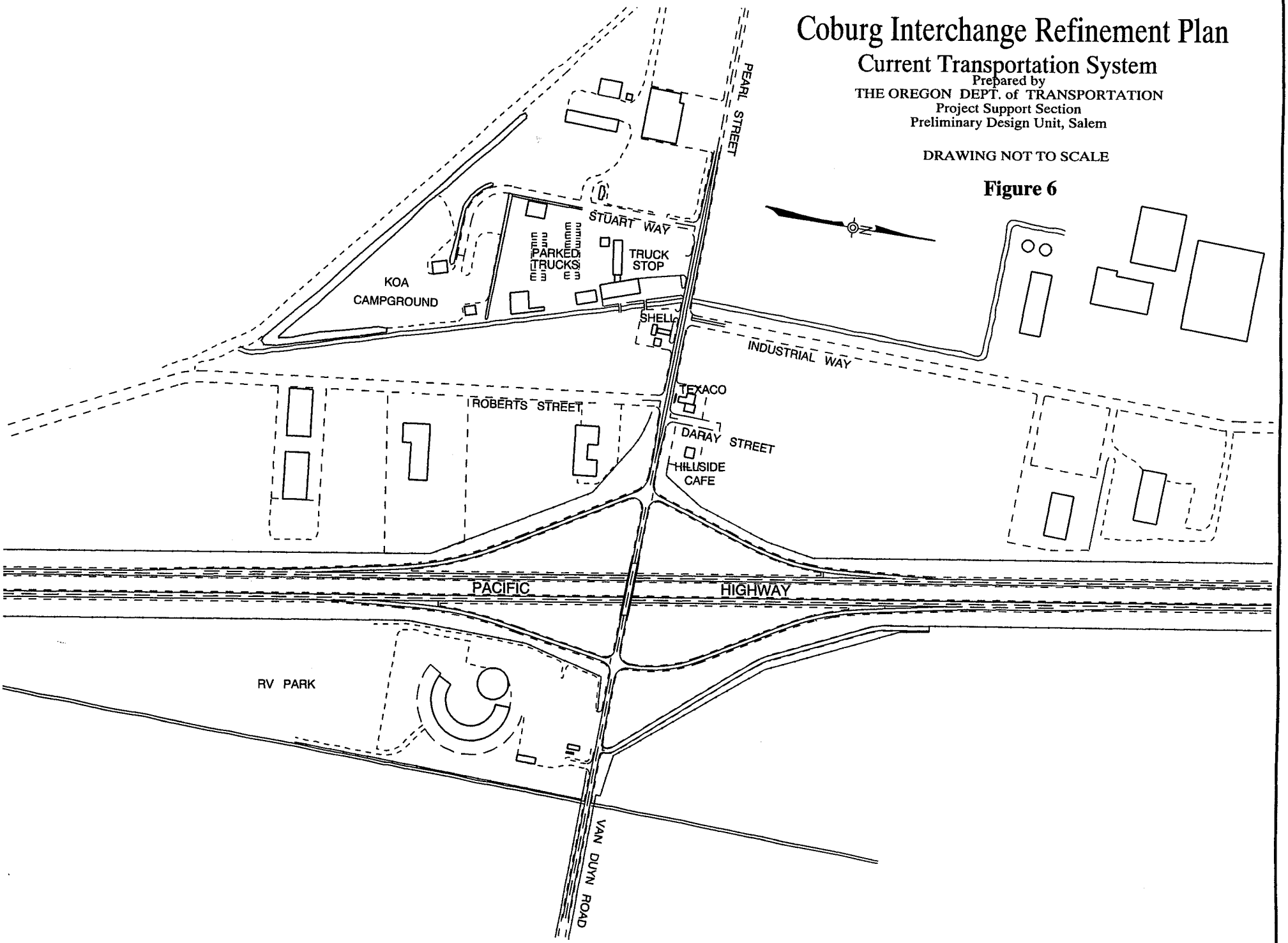
Coburg Interchange Refinement Plan

Current Transportation System

Prepared by
THE OREGON DEPT. of TRANSPORTATION
Project Support Section
Preliminary Design Unit, Salem

DRAWING NOT TO SCALE

Figure 6



Traffic Volumes

Base Traffic

The base year (1996), Average Daily Traffic (ADT) and both PM and AM Peak Hour Volumes (PHV) were determined using manual classification counts and hose counts collected in the vicinity (Appendix D)

The traffic volumes used were not adjusted seasonally because the type of traffic destined for the Coburg industrial area from the freeway is commuter-type traffic. This type of traffic is not subject to the large seasonal variations that can arise from a tourist destination. The daily volume of trucks that use the interchange to access the truck stop is assumed to be consistent throughout the year. The truck percentages factored from the manual counts are daily percentages and are assumed to remain constant throughout the 20-year analysis period.

Traffic Analysis Methodologies

The levels of service (LOS) for the ramp terminals and intersections along Pearl Street were analyzed using SIGCAP2, an ODOT computerized program based on critical movement analysis. The signalized intersection LOS is a quantitative measure of the ratio between the existing or projected volumes to the capacity of the roadway at a given location. This ratio is known as Volume to Capacity (V/C). The V/C ratios are broken down into six levels and each is given a letter designation, from A through F, for identification purposes. The LOS designation of "A" represents the best LOS while "F" represents the worst for signalized LOS designation.

The peak hour volumes at unsignalized intersections were analyzed using UNSIG10. This is an ODOT computerized program that uses reserve capacity of a lane to determine a LOS. The reserve capacity is equal to the capacity of a lane at an unsignalized intersection minus the demand volume for that lane. The reserve capacities are also broken into six levels and each is given a letter designation, from A through F. "A" represents the best while "F" is the worst. The LOS designation for unsignalized intersections generally applies only to the left turning vehicle from the minor street or from the mainline. Through traffic on the mainline does not necessarily operate at the designated unsignalized LOS.

The storage lengths required at the signalized intersections are provided by SIGCAP2 and are consistent with the methodologies used in ODOT.

Signal warrant analysis, or when a traffic signal is needed, was also calculated. These warrants deal primarily with high volumes on the intersecting minor street, and high volumes on the major street. Meeting preliminary signal warrants does not guarantee that a signal will be installed. If warrants are met, the ODOT Traffic Management Section will make the final decision on the installation of a signal on the State Highway System.

Current Traffic Volumes and Levels of Service

Traffic volumes were measured for the interchange ramps and overcrossing for 1996. Breakdown of the traffic volumes was done for ADT and for the PM Peak Hour (Figure 7). Also, a 1996 truck ADT was performed because large amounts of truck traffic frequent the interchange.

On the ramp terminals, the highest ADT for 1996 occurred on the southbound exit (4,900) and northbound entrance (3,400). The percentage change in daily volumes since 1990 for these terminals was 31.1 percent and 45.9 percent, respectively. However, the highest percentage change from 1990 to 1996 took place on the southbound entrance ramp; it experienced a 76.5 percent change.

The overcrossing ADT was estimated at 4,900 vehicles for 1996, constituting a 37.7 percent increase since 1990. Along I-5 at this location, the 1995 Average Daily Traffic is 35,300.

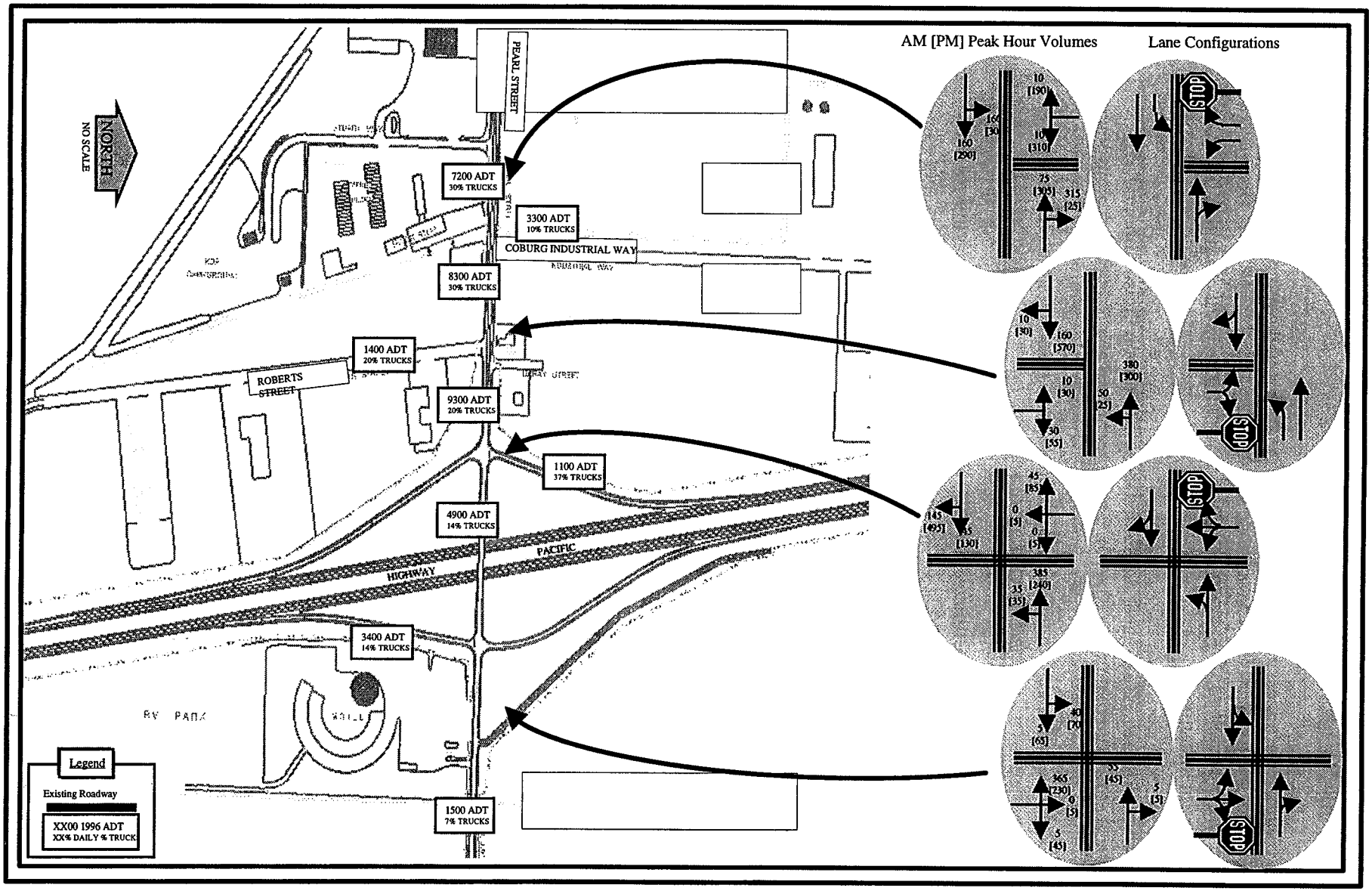
For the PM peak volumes (Figure 7) and LOS (Table 1) during 1996, the southbound exit and northbound exit ramps experience the highest volume at 495 (LOS A) and 280 (LOS C), respectively. The overcrossing had 360 vehicles during the PM peak.

The AM peak on the northbound ramp is a concern. A typical AM peak is from 7-8 a.m., although two major employers near the interchange (Marathon and Monaco) actually begin their shifts before 7 a.m. Traffic was documented as backing up to Interstate 5 between 6a.m. and 7a.m. AM volumes at the northbound ramp were 370 (LOS C).

On local streets, traffic volumes for the ADT and PM peak were highest along Van Duyn Road, west of the interchange (Van Duyn becomes Pearl Street just past the southbound ramp). ADT was 9,300 in 1996, which was a 67.4 percent increase since 1990. At the PM peak there were 1,010 at the intersection of Roberts Street and Pearl Street. Again, the LOS at the southbound ramp terminal in 1996 was A.

Along Pearl Street., west of the interchange, the ADT was 8,300 before Coburg Industrial Way and 7,200 ADT at the truck stop. The PM peak LOS at Coburg Industrial Way is D while the AM peak was C.

Truck volumes at the interchange are relatively higher than other interchanges in rural areas along Interstate 5. ADT truck volumes were highest at the northbound and southbound ramp terminals. Of the 1,100 ADT on the southbound ramp, 37 percent or 693 vehicles were trucks. At the northbound ramp there are 3,400 ADT and 14 percent of that traffic were trucks. The same is true of the overcrossing; 14 percent of the ADT are trucks.



Oregon Department of Transportation TPAU Transportation Planning Analysis Unit

No Build **- 1996 ADT, AM/PM Peak Hour Volumes and Lane Configurations**

FILE: COBURG.PPT

DATE: 07/10/97

Figure 7

Table 1: Unsignalized Level of Service

Intersection	No-Build			
	1996		2015	
	AM	PM	AM	PM
Northbound Ramp Terminal @ Pearl Street	C	B	F	F
Southbound Ramp Terminal @ Pearl Street	A	A	D	F
Robert Street @ Pearl Street	A	C	D	F
Coburg Industrial Way @ Pearl Street	C	D	F	F

A Merge/Diverge analysis (Table 2) was conducted of the interchange. This analysis evaluated how vehicles enter and exit the ramps from the interchange to Interstate 5. In 1996, the LOS for the on-ramps indicate a LOS A.

Table 2: Merge/Diverge Level of Service

	Build & No-Build			
	1996		2015	
	AM	PM	AM	PM
Northbound Exit Ramp (off-ramp)	A*	A	A	A
Northbound Entrance Ramp (on-ramp)	A*	A	A*	A
Southbound Exit Ramp (off-ramp)	A*	A	A*	A
Southbound Entrance Ramp (on-ramp)	A*	A	A*	B

*Estimated because volumes are less than the corresponding PM volumes.

Accidents

From January 1991 to June 1997, there were ten total accidents on the interchange or along Interstate 5 at the interchange (Figure 8). There were no fatalities in this time period and no major crashes that caused severe personal injury. From the data, four of the crashes were sideswipe/overtaking accidents and three involved non-collisions with vehicles. One accident took place on the overcrossing.

It appears most of the accidents occurred while vehicles were weaving to enter or exit the interchange ramps. The interchange and Interstate 5 at this location is not on the State Priority Index Sites (SPIS). The accidents per million vehicle miles from MP 195.80 (North city limits of Eugene/Springfield to Coburg interchange) were .32 (1991), .32 (1992), .26 (1993), .09 (1994), and .16 (1995). The average for Interstate 5 in 1995 was 0.32.

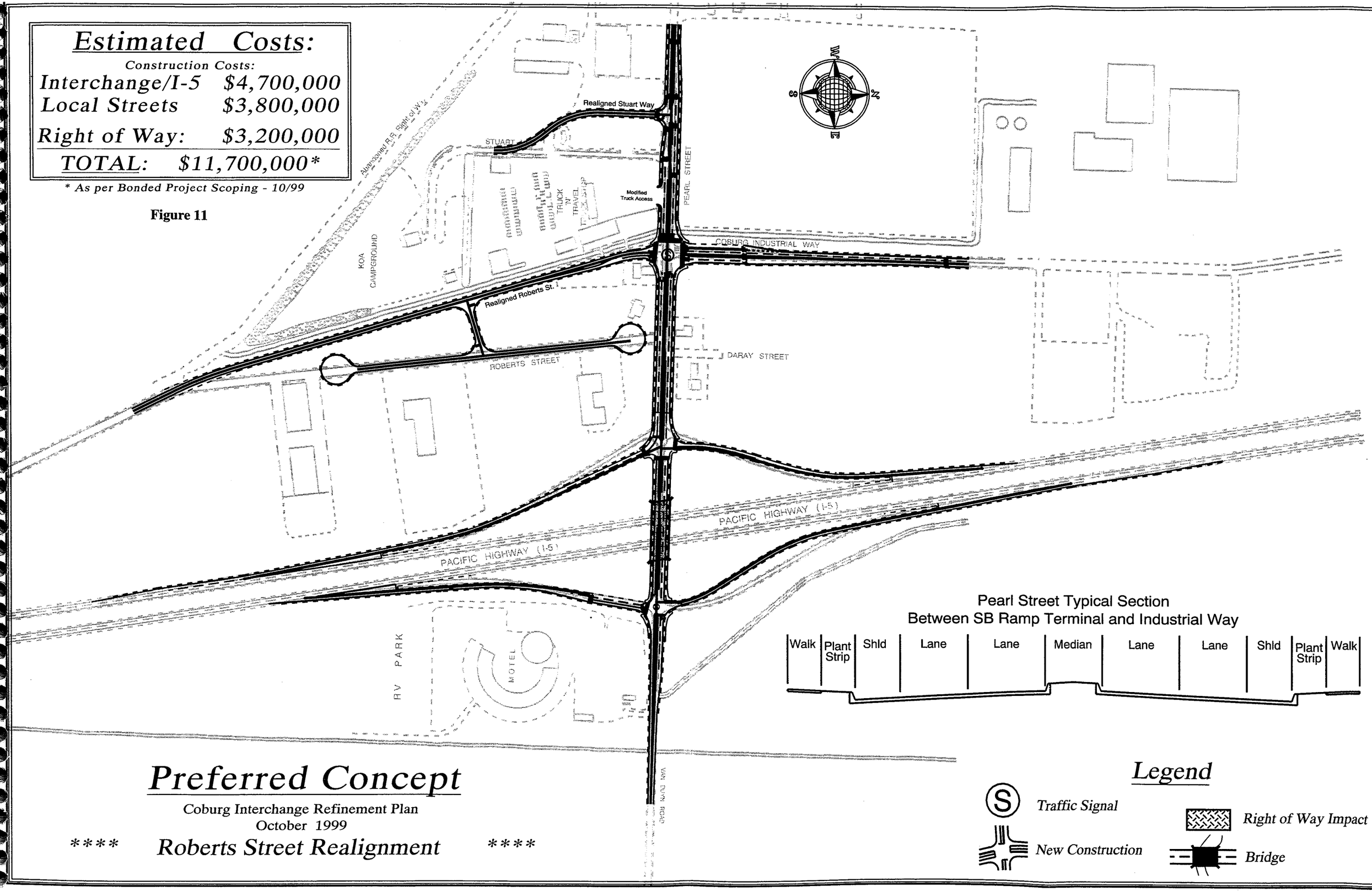
Estimated Costs:

Construction Costs:

Interchange/I-5	*$4,700,000*
Local Streets	*$3,800,000*
Right of Way:	*$3,200,000*
TOTAL:	*$11,700,000**

** As per Bonded Project Scoping - 10/99*

Figure 11



Pearl Street Typical Section
Between SB Ramp Terminal and Industrial Way

Preferred Concept

Coburg Interchange Refinement Plan
October 1999

**** *Roberts Street Realignment* ****

Legend

- *Traffic Signal*
- *New Construction*
- *Right of Way Impact*
- *Bridge*

Roads and Local Access

Currently, there are no access management policies or programs in the City of Coburg. In addition, Lane County has no specific access management policies near the interchange or along the County streets. The OHP has guidelines for access management. There are access control lines along the interchange right of way and along I-5. A Draft Highway Plan contains an access management policy for interchanges with standards and guidelines for location of accesses and local roads near interchanges. These guidelines will affect local streets near the ramp terminals. Many of the ideas contained in the Draft Highway Plan were utilized during the creation of the design concepts.

Location of local streets and County roads near the interchange pose numerous problems and issues for the efficient and safe operation of the facility (Daray and Roberts). Also, many commercial accesses or driveways near the east and west ramp terminals are too close for the present, and consequently the future, operation of the interchange.

The alignment of local streets along Pearl Street is an issue for Lane County and City of Coburg; many intersecting streets along Pearl Street are offset. Daray, Roberts, Industrial Way, and Stuart Way are not aligned with each other, which causes traffic operation and safety issues. The intersections of Daray and Roberts with Pearl Street are currently within the minimum access distance from an interchange ramp terminal and are not consistent with the Draft Highway Plan access policies.

The driveways at the Texaco station and entrance to the Hillside Cafe on the west side are open ended and lack a definite entrance from Pearl Street. In their present location, these driveways are too close to the west ramp terminal of the interchange. East of the interchange, a hotel and small businesses exist. Driveways east of the interchange along Van Duyn also lack definition and are too close to the east ramp terminal.

Transit

Lane Transit District (LTD) operates a transit line to Coburg. The #96 line begins in Eugene and follows Coburg Road to Coburg. There are three AM and PM times to board the bus in Coburg; about 80 weekday boardings were recorded by LTD. One of the Coburg routes has met an LTD productivity requirement for increased convenience, although more routes would need to also meet this requirement for service to improve.

Transportation Demand Management

There is no TDM program in the City of Coburg. Voluntary TDM or informal demand management programs may exist in some businesses in Coburg, but a formal program is not in use at this time. The City of Coburg and existing motor coach manufactures implement a staggered shift to alleviate the traffic congestion on Pearl Street and the northbound interchange ramp. Observations at the northbound ramp during the AM peak indicate that traffic back ups onto Interstate 5.

Bicycles and Pedestrians

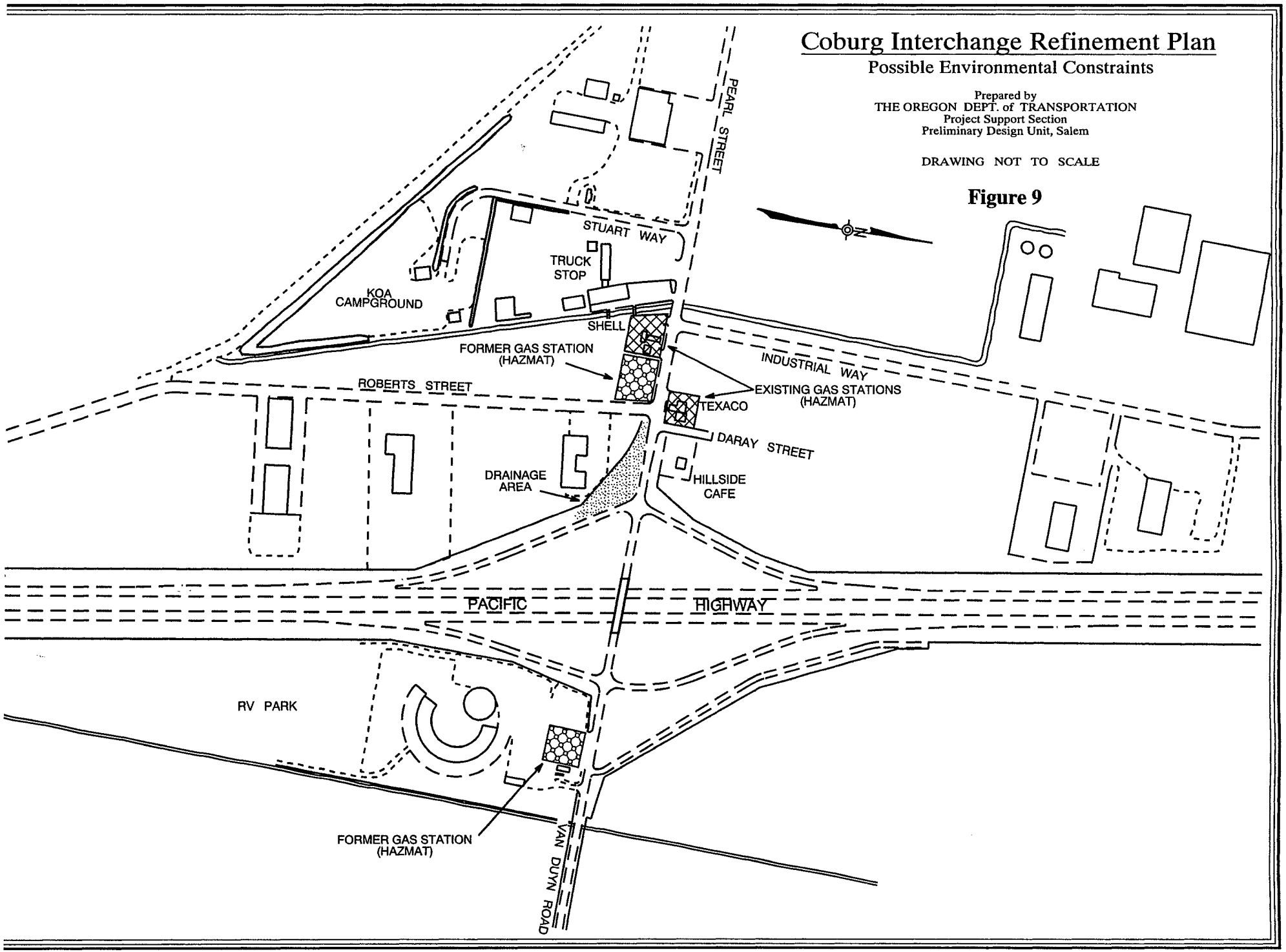
Bicycle and pedestrian facilities at the interchange are virtually non-existent. The ramps and overcrossing are narrow while the shoulders are sub-standard for biking and walking. While the manual counts were ostensibly for vehicle traffic, pedestrian and bicyclists were also counted. In a two-day period, there were no pedestrians counted that used the interchange. For the 48-hour count period, 39 bike trips were counted that used the interchange. Most of these accessed the interchange from west to east or east to west on the overcrossing. There is a small, but growing, rural housing area east of the interchange.

Environmental Conditions

The ODOT Environmental Section conducted a general environmental assessment (Figure 9). The analysis was intended to provide a rough overview of the area around the interchange. Natural and built environments were reviewed for critical habitat and potential *show stoppers*. There were no environmental issues at this time that constitutes a significant problem for future interchange designs.

Two small streams exist near the interchange, one to the east and another to the west of the potential project area. The City also reports that a fair amount of runoff collects in the southwest corner of the west ramp. No sites were identified that contain historic structures, parks, or environmental overlays.

The area also contains a number of potential hazardous material sites due to previous gas stations or existing stations. It was determined that these sites could be mitigated if they were impacted by any future interchange project.


Coburg Interchange Refinement Plan
Possible Environmental Constraints
Prepared by
THE OREGON DEPT. of TRANSPORTATION
Project Support Section
Preliminary Design Unit, Salem
DRAWING NOT TO SCALE
Figure 9
PEARL STREET
STUART WAY
TRUCK STOP
KOA CAMPGROUND
SHELL
FORMER GAS STATION (HAZMAT)
ROBERTS STREET
INDUSTRIAL WAY
EXISTING GAS STATIONS (HAZMAT)
TEXACO
DARAY STREET
DRAINAGE AREA
HILLSIDE CAFE
PACIFIC HIGHWAY
RV PARK
FORMER GAS STATION (HAZMAT)
VAN DUYN ROAD

Transportation Forecasts

Methodology

Future year traffic projections are typically performed through the use of cumulative analysis, historical growth trends, or transportation models. The method used in an area depends on the type and availability of information. At the time of this analysis the best available information was a transportation model of the City of Coburg, historical growth trends on the freeway, and Lane County zoning information.

LCOG has developed an EMME/2 transportation model for the City of Coburg. The model uses population and employment information within the Coburg UGB and Lane County to determine base (1995) and future (2015) ADT volumes. Future traffic volumes within the model area were developed using LCOG's EMME/2 model of Coburg. The County and ODOT used this model in conjunction with traffic counts at and near the interchange. Current year model numbers were calibrated using recent count data.

Model information was used to develop an adjustment factor to account for 20-year growth by transportation link-area. These growth factors ranged from 1.12 on Roberts Street to 2.54 on Coburg Industrial Way. The traffic volumes entering and exiting the Coburg Industrial Way area were adjusted by the 2.54 growth factor because the industrial area is the critical traffic producer and has the greatest potential for significant growth (40+ acres zoned industrial and highway commercial). The remainder of the traffic in the analysis area was adjusted with the corresponding growth factors.

Historical growth trends were used to project the future traffic volumes on the freeway. These volumes were used to analyze potential problems at the freeway ramp merge/diverge points.

Lane County estimated the development potential for the area east of the interchange based on the current zoning and the potential for re-zone. This information was used to distribute additional trips to the roadway network

Land Use

Housing and Population

Population growth in the Coburg UGB is estimated to reach 950 by the year 2015. The assumption is for an annual growth rate of 0.65 percent and closely resembles the rate from 1980 to 1995. The number of households in 1990 was 293 and in 2015 this is projected to be about 373. It was calculated that there are 2.41 people per household. Also in 2015, roughly 80 percent of the dwelling units will be single-family, detached and about 10 percent will be multi-family units with the remaining manufactured dwellings.

The residential areas lying outside Coburg are not assumed to grow at substantial rates given agricultural zoning and comprehensive planning designations.

Employment

Employment projections for Coburg are based on Lane County estimates from 1978 to 1994 in Census Tract 3. The employment growth rate will grow at a rate of 1.8 percent from 1995 to 2015. The projected rate changed significantly in the 1990s due to the location of the Monaco and Marathon coach manufacturers. 1995 employment is estimated at 1,133 inside the UGB. In 2015, 1,607 employees are expected to be in the UGB; this is an increase of 474 employees. The largest vacant parcels of employment-based zoning are in Highway Commercial and Industrial zones near the interchange, or in TAZs 5 and 6 (Figure 5). In TAZ 6, it is estimated that there are approximately 250 new employees and in TAZ 5 about 750 new employees.

Traffic

Traffic forecasts were conducted and analyzed by ODOT and Lane County Public Works. LOS, signal warrants, storage distances, and PM and AM traffic projections were used to determine 20-year forecasts. LCOG's EMME/2 model provided the initial future traffic output. The model basically measures employment and population growth and projects that growth as trips on the transportation system.

Traffic analysis is represented in the Concepts and Preferred Alternative section.

Transportation Demand Management

It is difficult to forecast demand management for this interchange area. The potential for certain demand management techniques exists in the commercial and industrial zones in Coburg. Currently there are no such techniques in operation; therefore no empirical data exists to suggest future impacts. The future year design concepts assumed staggered work shifts of major employers that results in a reduction of 25 percent during the peak travel times. The reduction amounted to roughly a one to one half level of service improvement at major intersections.

Transit

Transit projections are not available. Service to Coburg depends in part on demand along the route in Eugene. A demand management program in Coburg could also include ideas to increase bus riders from the manufacturing companies.

Transportation Issues

ODOT, the Coburg TAC, and the general public submitted comments regarding transportation issues at and near the interchange during the initial phases of the refinement plan and TSP. An ODOT issues paper was prepared, reviewed, and added onto by the Coburg TAC and general public at an October 17, 1996 open house. When the TAC membership was revised in response to the first interchange preferred alternative, further issues were created. The following is a complete issues list taken from the original TAC and the revised TAC (includes ODOT and County issues).

Design and Geometry

1. Sight Distance
   The sight distances are substandard.
   - ⇨ The view motorists have of oncoming vehicles from the ramp terminals is substandard. The line of sight for motorist is slightly more than half of the desired distance.
   - ⇨ Some guardrails restrict the motorist's line of sight at the ramp terminals. Even though some of this is not in the direct line of sight it is very distracting to motorists, particularly those unfamiliar with the area.

2. Grades
   Van Duyn Road approaches I-5 on the West Side at +5.5% and +5.3% on the East Side of I-5. These grades can contribute to:
   - ⇨ Increased turnover potential for trucks tipping over onto the northbound on-ramp. Trucks must slow down to almost a crawl to make left turns onto the on-ramp to reduce the risk of tipping over. The slow down of trucks has a domino effect as it slows down all other vehicles at the interchange. This becomes a problem during peak periods such as morning and evening rush hour.
   - ⇨ The grade limits the line of sight for motorists waiting to make left turns at the ramp terminals. By limiting the line of sight, motorists are more apt to hurry or misjudge turning movements. For large trucks they must crawl up the grade as they turn, which slows or delays trailing vehicles.
   - ⇨ Discomfort for motorists driving through the interchange at the posted speed. The grade change at the posted speed is not what a motorist expects to see. The up and down affect creates for an uncomfortable ride.

3. Bridge on Van Duyn Road
   The bridge on Van Duyn Road that crosses I-5 is very narrow.
   - ⇨ The narrow width of the bridge restricts the visibility of motorists at the ramp terminal. In addition, traffic on Van Duyn Road seems to be restricted by the narrow width on the bridge, especially if it must cross the bridge at the same time with an opposing truck.

- ⇨ The narrow width does not encourage pedestrian and bicycle use. Cyclists will not ride in the shoulder because the narrow width does not provide a safe location to ride. For pedestrians to cross from the west to east side and vice versa, they must walk on the roadway shoulders or behind the guardrail until they reach the bridge. At that point, they will likely walk on the concrete, which is very narrow.
- ⇨ The shoulders on the bridge are narrow and do not provide a buffer for motorists.

4. Account for character of traffic in the Coburg area and the urban design and character of Coburg
   - ⇨ The existing interchange has served its original intended purpose well. However, redesign of the interchange may require a different configuration to accommodate the anticipated need.
   - ⇨ Traffic patterns change with time. Employment centers and services change the travel patterns at interchanges. With so much vacant property around the interchange, travel patterns will continue to change.
   - ⇨ Account for the desires of Coburg residents and the urban design of Coburg.

Traffic Backup on the Northbound off Ramp

The northbound off-ramp backs up to I-5 during the morning rush—6:45-7:00 a.m.

- ⇨ The most concentrated use of the interchange occurs during the morning commute between 6 a.m. and 8 a.m. In a recent traffic count, the northbound off-ramp reported 700 vehicles turning left towards Coburg during the morning commute period. Ten percent of this count was large trucks. A small amount of large trucks during the commute period can affect the overall operation of the interchange.

Access

The location and number of access points to Van Duyn Road/Pearl Street create safety and operational problems. Specific access issues include:

- ⇒ The access points on either side of the interchange are too close to the ramps. Good spacing of access points give motorists, trucks, bicycles and pedestrians time to react to other activities.
  - a) North/south streets along Pearl Street are not aligned near the interchange.
  - b) In the southern part of the industrial area there is no consistent east to west connectivity.
  - c) There are many access points along Pearl St and this creates problems for trucks and traffic management.
  - d) Access points on the East Side of the interchange are too close to the ramp terminal.

⇒ Property owners are concerned about access to their sites
   a) Maintain access to existing businesses
   b) Provide access to vacant properties

Trucks

The interchange area attracts a large number of trucks. They need to be accommodated so that the safety and operation of all transportation system users is not compromised. Trucks are bigger than ever before and require more room to turn, park, start, and stop.

- ⇨ It is difficult for trucks to maneuver the interchange and make left turns along Pearl Street.
- ⇨ There is a heavy amount of truck traffic at the interchange.
- ⇨ There are many truck-related services near the interchange and this increases the traffic problems.
- ⇨ Reduce impacts of truck traffic near residential areas.

Land Uses and Neighborhoods

There is a large amount of vacant commercial land at and near the interchange zoned Commercial and Industrial and there are significant growth issues in Coburg such as how and why Coburg should expand its transportation system and the impacts of this expansion on neighborhoods and historic Coburg.

- ⇨ The area has potential to accommodate more industrial uses.
- ⇨ The east side of the interchange could develop at any time and directly impact the interchange (possible County Comprehensive Plan amendments)
- ⇨ Current land uses are generating increased traffic on the interchange, especially during the a.m. peak.
- ⇨ The Pearl Street area will continue to develop and generate single occupant vehicles.
- ⇨ Heavy industrial and truck-related business would continue to locate in the area and impact the interchange.
- ⇨ Fire safety must be accommodated
- ⇨ There is a concern about growth and how the interchange will impact the quality of life in the area.
- ⇨ Maintain Coburg's historic scale, pattern, and quality of life.
- ⇨ Provide safe school crossings.
- ⇨ There are environmental issues such as air and noise pollution and aesthetics.
- ⇨ There is a need to preserve the public investment in the transportation system and facilities.

Concepts and Preferred Alternative

Introduction

Outline

Design concepts are the first level of facility planning and design. Concepts are not final designs nor are they automatically included in the Statewide Transportation Improvement Program (STIP). The purpose of design concepts is to reasonably create and evaluate a set of ideas for the facility for the long and short term.

The first TAC reviewed five design concepts. A revised TAC reviewed these five concepts also but thought of nine additional ideas. The ideas also included one each from ODOT and Lane County Public Works. In general, the concepts submitted by the citizens in the TAC did not meet ODOT design standards as described in the objectives and criteria. The new idea submitted by ODOT likewise did not meet the objective for meeting the City of Coburg historic scale and pattern and impacts to neighborhoods. Upon further edits, analysis and evaluation, the TAC decided to accept the original design Concept 1 with modifications.

(Design ideas and evaluations are found in Appendix E, which also contains ideas from the first TAC and the revised TAC facilitation.)

Public Participation

ODOT planners and engineers, Lane County Public Works, the TAC, and Coburg citizens created the design concepts. First steps in this process were to create a function and role statement about the interchange using existing state and federal policies while incorporating local and regional uses, issues, and perceptions of the interchange. Second, ODOT and the TAC created a methodology to guide the formation of concepts and to evaluate the concepts.

ODOT and the TAC recommended to the public a preferred concept that was reviewed by Coburg citizens. A facilitation process occurred to reformulate the Coburg TAC and reevaluate the design concepts. After three months of intensive meetings, the TAC chose design Concept 1. Results of the facilitation, including Concept 1 decision, were presented to the Coburg City Council.

Methodology

Issues, existing conditions, forecasts, and citizen input formed the basis for creating, evaluating, and selecting a design concept. Existing conditions were projected 20 years and form the basis for the future traffic assumptions: signal warrants, weave analysis,

storage distances, and demand management programs. In addition, a policy assumption is also made that is included with each design concept and the preferred design Concept 1.

To guide the design of the concepts, a Function and Role of the Interchange statement, design goal, objectives, and criteria were created. Concepts were judged by these standards. Each concept is described below according to its advantages, disadvantages, traffic analysis, and why it was not chosen as the alternative.

Function and Role, Goal, Objectives, and Design Criteria

Function and Role of the Interchange

It is important to establish the role and desired function of the interchange before stating the goal and objectives for the various alternatives. There are state-wide design standards and policies for interchanges along Interstate 5. These standards and policies about interchanges act as a guide when formulating goals, objectives, and criteria during the alternatives phase of the refinement plan. The Oregon Transportation Plan (OTP), OHP, and the Willamette Valley Strategy have broad policies regarding interchanges along Interstate-5. The Federal Highway Administration also has specific policies concerning the creation of new interchanges and modifying existing interchanges along the interstate system. ODOT also relies on the Highway Design Manual and a draft discussion paper *Interchange Access Management Policy*. There are also Oregon Transportation Commission policies that outline interchange placement, spacing, and management. The existing land use and transportation system also heavily influences the operation and function of interchanges, such as business locations, street patterns, and traffic operations.

The purpose for interchanges along Interstate 5 is to provide an access to the highest LOI roadway. This access must also be designed for the highest level of safety and mobility. Traffic using the interchange should be regional in nature and local trips should be encouraged to use the local street system, transit, or other alternatives. Interchanges should tie into significant local street systems that serve a large area and not merely a specific neighborhood or land use. There should be a road hierarchy developed that routes traffic from smaller facilities to larger facilities. Intersections near the interchange will operate at a high level of service while accesses around the interchange are highly regulated. Local streets should also be spaced at a safe and efficient distance from the interchanges.

It is recognized that land uses around the interchanges may significantly impact operations and safety. Therefore, local governments must plan and implement land use patterns that protect the operation of the interchange and provide options for people to use other modes of travel or choose to travel along local streets. The interchange should also meet the needs of pedestrians, bicycles, and transit whenever possible. It is paramount that any major investment in an interchange redesign be protected for the life of the investment.

The Coburg/I-5 interchange is an access from the Interstate to a rural town within 5 miles of the Eugene-Springfield UGB. The land uses in the immediate area generate a substantial amount of truck and industrial traffic. In addition, regional employers have located near the interchange, thereby attracting high levels of commuter traffic during the peak hours. The interchange is also a major entrance to the historic town of Coburg. There are many land uses near the ramp terminals and local streets are not necessarily aligned. Pearl Street (Lane County) operates as a collector. Its construction, however,

resembles a typical rural country road—as it has no sidewalks, bike lanes, or shared shoulders.

The role and function of this interchange should follow closely the policies and standards for Interstate 5 interchanges in the Willamette Valley. Every effort should be made to coordinate with the City of Coburg in its TSP to provide a safe and efficient transportation system for all modes while designing a rational street pattern near the interchange. It should be very clear that any interchange alternative chosen by the City of Coburg and ODOT is linked to the outcome of the Coburg TSP.

Goal

- Improve the safety and operations of the Coburg/Interstate 5 interchange.

Objectives

- Conform to the policies and performance guidelines of the TPR, OTP, OHP, and the Oregon Bicycle and Pedestrian Plan.
- Coordinate the alternative with the Lane County project on Pearl Street.
- Coordinate the alternative with the goals and objectives of the Coburg TSP.
- Create an alternative that achieves the aesthetic goals for maintaining the historic scale and pattern of Coburg.
- Create an alternative that minimizes impacts to residential areas.
- Develop a multi-modal alternative that provides safe and convenient access and mobility.
- Create an alternative that is fiscally constrained.
- Create an alternative that will be built in phases. Phasing should address safety hazards first.
- Develop an access management plan with the Coburg TSP for streets near the interchange.
- Optimize the design, location, and operation of the Industrial Way/Roberts intersection with Pearl Street.
- Develop a demand management plan for the industrial areas in Coburg.
- Coordinate with the City of Coburg, local businesses, and landowners to realign the streets on Pearl Street.

Criteria

1) Achieve LOS B on Mainline, LOS C for ramp terminals, and LOS D* along Pearl Street from the interchange to Industrial Way.
2) Project could be built in phases and phases should be funded.
3) Concept should accommodate all users of facility (trucks, autos, transit, bikes, pedestrians).
4) Concept will meet City's visual (aesthetic) objectives.
5) Concepts are consistent with Lane County and City of Coburg *Pearl Street Project.*

* This level of service depends on Lane County LOS objective.

Traffic Analysis Assumptions for the Concepts

Preliminary signal warrants

Preliminary signal warrants were met at three intersections in the study area: Coburg Industrial Way, the southbound ramp terminal, and the northbound ramp terminal. Table 3 shows the intersection and the year projected for meeting the signal warrant. (Linear growth is assumed between the base and future analysis years.) The intersection build analysis assumes a signal will be installed by 2015 where warrants are met.

Table 3: Signal Warrants

Intersection	Warrant 1			Warrant 2		
	1996	2015	Met	1996	2015	Met
Northbound Ramp Terminal @ Pearl Street	No	Yes*	2008	No	No	----
Southbound Ramp Terminal @ Pearl Street	No	Yes*	2012	No	Yes*	2001
Robert Street @ Pearl Street	No	No	----	No	No	----
Coburg Industrial Way @ Pearl Street	No	Yes*	2002	No	Yes*	2004

*Meeting a preliminary signal warrant is *not* a mandate to install a signal; it is a guideline to alert staff to the possibility of a signal being needed at a certain location.

Warrant 1 deals primarily with high volumes on the intersecting minor street.

Warrant 2 analyzes high volumes on the major-street and the delays and hazards to vehicles on the minor-street trying to either access or cross the major-street.

Storage Distances

Vehicle storage is a critical issue around the Coburg Industrial Way/Pearl Street intersection. The distance that vehicles will back up during the stopped phase at a signalized intersection determines the queue. There must be adequate space available to accommodate all of these vehicles during the peak hour. The interaction between this intersection and the southbound ramp terminal, Stuart Street, and the truck stop is important when considering the operation of the transportation system. Each concept has a storage distance table. The distances are in meters.

A free right-turn from Pearl Street to Coburg Industrial Way was also examined in the analysis. Allowing the yield or free right turn improves the operation by removing a significant number of vehicles from the signal timing but only in the AM peak.

Transportation Demand Management
TDM measures were employed to achieve an acceptable LOS at some of the intersections in the analysis area. The TDM strategy that was assumed staggered the shift start and end time for the employers along Coburg Industrial Way and reduced the peak periods by 25 percent.

A TDM policy should occur in the Coburg TSP.

Access Management Policies
It is very important to manage and protect the investment of an interchange. To ensure that the ramp terminals operate at acceptable levels of service and that these terminals are not congested shortly after a project is implemented, it is necessary to implement access management policies in the TSP and Coburg land use code. The interchange preferred concept incorporates access control lines that are consistent with existing 1996 OHP standards and ODOT guidelines for access management at interchange terminals.

The management of access points, driveways, and local streets along Pearl Street and Van Duyn is critical for any future interchange project. In order for the ramp terminals and signalized intersections to function and operate at safe and acceptable levels of traffic flow for all modes, the access points must be managed. For instance, it is very important for the traffic operations at the southbound ramp to manage the access points of the vacant parcels north of Pearl Street /Van Duyn.

Placement of new driveways or local streets must be in accordance with an adopted interchange concept; this protects a future alignment. At the time of an interchange project, accesses will also be evaluated for their impacts to the project.

No Build Concept and Concept 1: Preferred Concept

The No Build Concept is listed here for comparison purposes and future forecasts. The complete set of design concepts and evaluations/reviews are found in Appendix E.

No Build Concept

Description

This concept is the existing structure. The assumption is that no changes will occur to the interchange in the next 20 years except for minor safety and maintenance. There are no County projects on Pearl Street. Pearl Street is a two-lane roadway from the east side of I-5 over the structure to just beyond the south-bound ramp terminal. A substandard center turn lane begins west of the southbound ramp terminal. The full width three-lane section continues from approximately Roberts Street to Stuart Way, where it tapers back to two lanes. Large vehicles such as trucks will turn from the ramps and cross into the opposing lane to complete the turn because of inadequate turning radii. The center turn lane remains inadequate to allow large trucks to turn safely and they will sometimes block the through lane while waiting to turn into the truck stop.

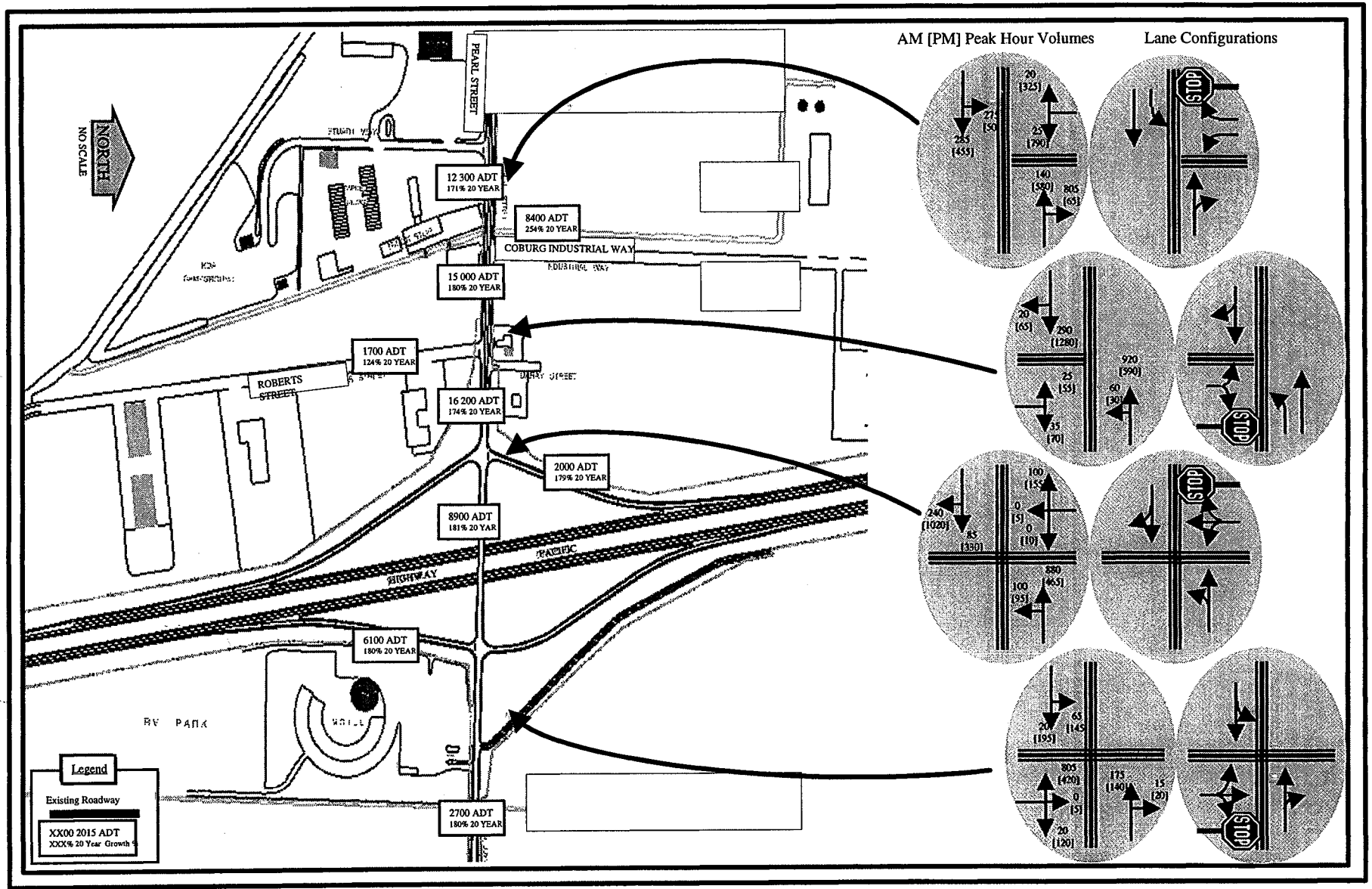
The morning commute traffic from Eugene frequently will back up onto the ramp reaching the freeway and the evening commute traffic from Coburg Industrial Way will have difficulty finding gaps in the traffic on Pearl Street to reach the freeway. Presently, about 30 percent of the daily vehicles traveling on Pearl Street are trucks. The steep grade of 5.5 percent on the over crossing and poor turning radii at the ramp terminals will continue to create numerous operation issues such as impaired sight distances, which will cause substantial slow-downs and safety concerns for all traffic.

Traffic Analysis

Traffic volumes increase on the ramp terminals and along Pearl Street by the 2015 (Figure 10). At the interchange ramps and bridge structure, traffic volumes increase by 180 percent. These same increases, about 180 percent, also show up along Pearl Street although the highest increase is shown on Industrial Way at a 250 percent increase.

The results of the no-build analysis for LOS at the ramp terminals and the intersections along Pearl Street for the base year 1996 and the future year 2015 are shown in Table 4.

Although the northbound ramp terminal shows a LOS "C" in the AM peak, it is known that morning peak traffic will back up on the ramp to the freeway. Several reasons for this are; poor sight distance and steep grade over the existing structure, the commute traffic occurs in a 15-minute period, and ramp traffic turning left must wait for opposing traffic.



Oregon Department of Transportation

TPAU Transportation Planning Analysis Unit

No Build **- 2015 ADT, AM/PM Peal Hour Volumes and Lane Configurations**

FILE : COBURG.PPT

DATE : 07/10/97

Figure 10

Table 4: No Build 2015 Level of Service

Intersection	No-Build			
	1996		2015	
	AM	PM	AM	PM
Northbound Ramp Terminal @ Pearl Street	C	B	F	F
Southbound Ramp Terminal @ Pearl Street	A	A	D	F
Robert Street @ Pearl Street	A	C	D	F
Coburg Industrial Way @ Pearl Street	C	D	F	F

Interstate 5 is the major roadway in this vicinity and the ramps must function properly to ensure a well-operating system. Table 5 shows the LOS results of the freeway on-ramp merge and off-ramp diverge analysis using the HCM methodology.

Table 5: No Build Merge/Diverge Level of Service

	Build & No-Build			
	1996		2015	
	AM	PM	AM	PM
Northbound Exit Ramp (off-ramp)	A*	A	A	A
Northbound Entrance Ramp (on-ramp)	A*	A	A*	A
Southbound Exit Ramp (off-ramp)	A*	A	A*	A
Southbound Entrance Ramp (on-ramp)	A*	A	A*	B

*Estimated because volumes are less than the corresponding PM volumes.

Advantages

- Costs are kept low as opposed to rebuilding the structure.
- No impacts to parcel access or site with improvement of Pearl Street.
- There is no controversy or issue real or perceived with a new design.

Disadvantages

- Transportation safety for all modes of travel will decrease.
- Traffic will continue to stack up on the northbound ramp onto I-5 in the AM peak causing serious safety problems.
- Traffic operations at the ramp terminals and local street intersections will degrade during peak travel times.
- The interchange will not function to serve the regional and local transportation needs in the future.
- Travel costs will rise significantly.
- Highway traffic and future business may avoid congested interchange.

Reasons not selected

- Safety and operations would significantly decrease.
- Growth in the industrial and residential areas in Coburg would increase the safety and operational issues at the interchange.
- Substantial travel costs would occur to area residents and property owners.
- The open house results, TAC, Lane County Public Works, and ODOT did not support the concept. The public recognizes the need to improve the safety and operations at the interchange.

Concept 1: Preferred Concept

Description (Figure 11)

The Interchange
The interchange is significantly improved. The structure or bridge is rebuilt to modern standards that include widening to three lanes of traffic with shoulders for bicyclists and sidewalks for pedestrians; the profile grade is also improved.

The east and west ramp terminals are improved and remain in their present location and, when warranted, signals are installed.

Access Changes
On the East side of the interchange, accesses are moved further away from the ramp terminal. On the West side, accesses to parcels and land uses on the north side of Pearl Street, are from Industrial Way.

Pearl Street Improvements
Pearl Street is improved to a five-lane urban standard road (upcoming County project). This includes sidewalks, shoulders/bike lanes, four lanes for traffic, and a median lane treatment that could include left turn lanes, painted medians, or raised medians. These improvements extend from the point where Lane County's 1999 improvements to Pearl Street/Willamette Street terminate. Direct access from Pearl Street to the Truck and Travel is assumed.

Roberts Street
Roberts Street access to Pearl Street. is closed and realigned to intersect with the existing Industrial Way. The Roberts/Industrial Way intersection is signalized. At this time Roberts Street is realigned; access to the campground parcel located near the south end of the Truck and Travel will shift from Stuart Way to the realigned Roberts Street.

Stuart Way
Stuart Way is realigned to the west from its present location to provide more vehicle storage near the Industrial Way/Roberts intersection. The realigned Stuart Way terminates short of the existing campground parcel. Concurrent with the construction of the realignment, noise mitigation will be investigated. (The realignment of Stuart Way will

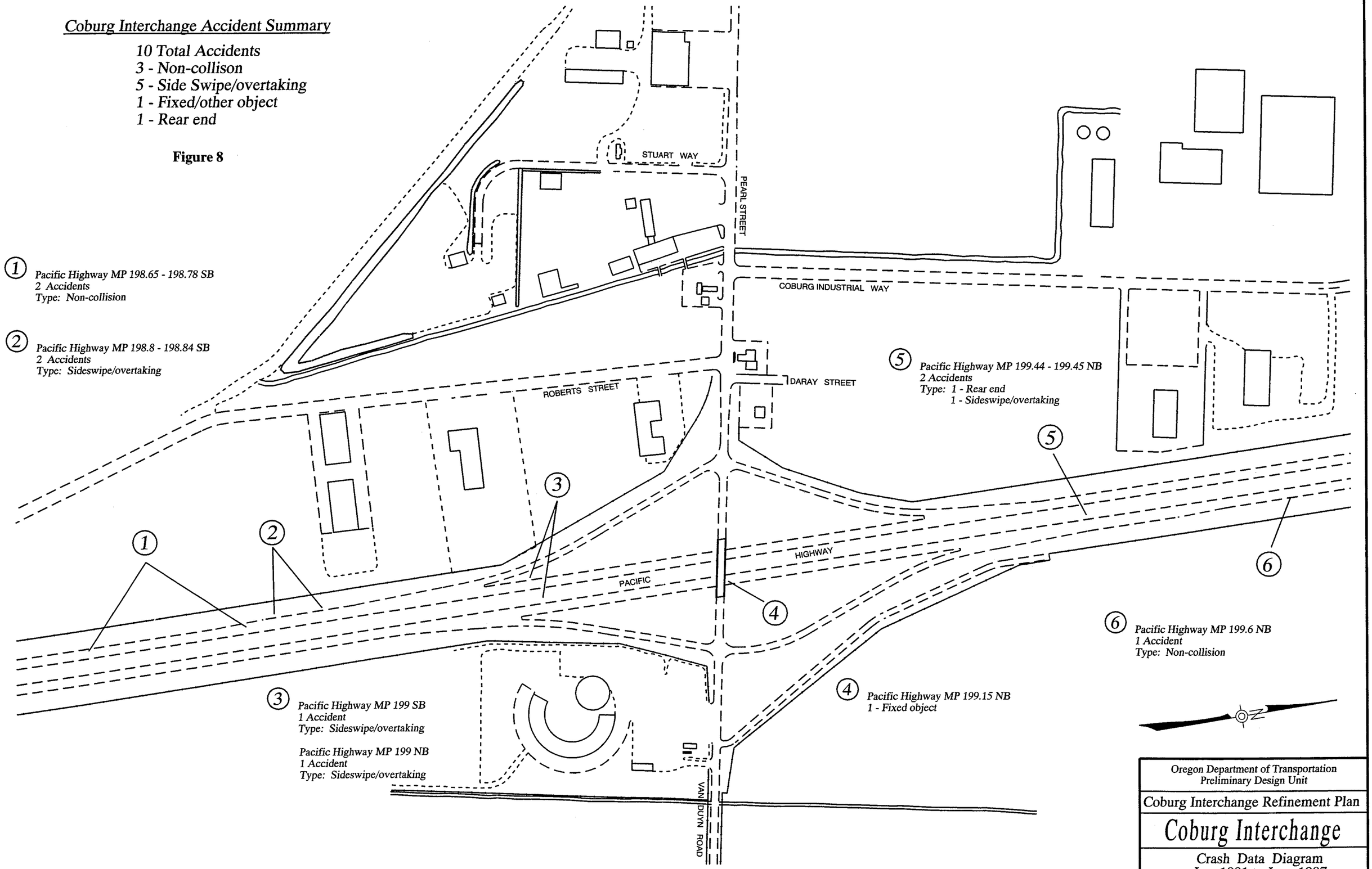
not be constructed until the final phase of the improvements and only if a traffic analysis determines that the realignment is necessary. Alternatively, the traffic analysis may support a city decision to vacate the street.)

Traffic Analysis (Figure 12)
The analysis reviewed signalized LOS, peak hour volumes, storage distance requirements, and possible improvements with demand management techniques.

Coburg Interchange Accident Summary

10 Total Accidents
3 - Non-collison
5 - Side Swipe/overtaking
1 - Fixed/other object
1 - Rear end

Figure 8



(1) *Pacific Highway MP 198.65 - 198.78 SB*
2 Accidents
Type: Non-collision

(2) *Pacific Highway MP 198.8 - 198.84 SB*
2 Accidents
Type: Sideswipe/overtaking

(3) *Pacific Highway MP 199 SB*
1 Accident
Type: Sideswipe/overtaking

Pacific Highway MP 199 NB
1 Accident
Type: Sideswipe/overtaking

(4) *Pacific Highway MP 199.15 NB*
1 - Fixed object

(5) *Pacific Highway MP 199.44 - 199.45 NB*
2 Accidents
Type: 1 - Rear end
1 - Sideswipe/overtaking

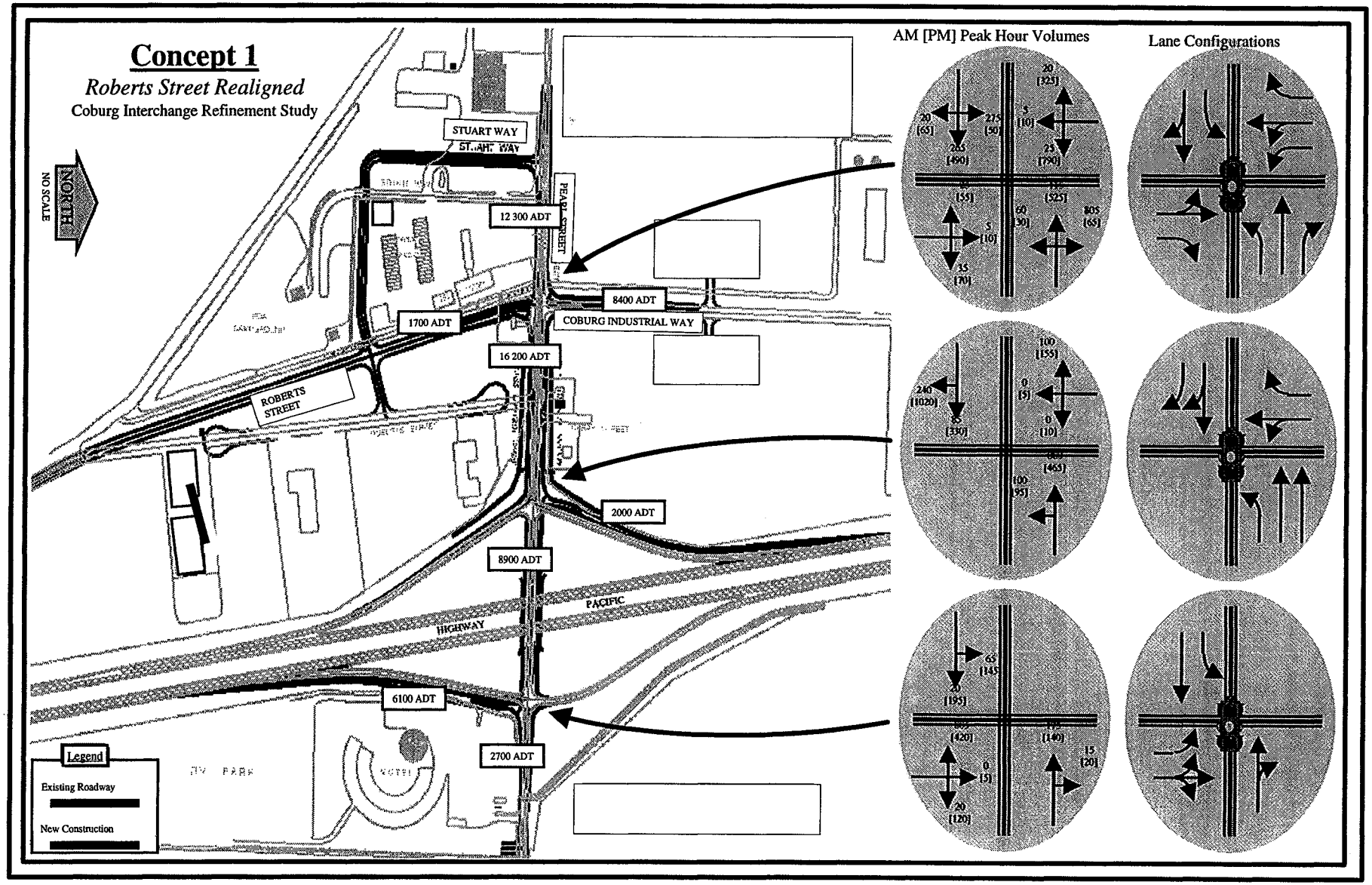
(6) *Pacific Highway MP 199.6 NB*
1 Accident
Type: Non-collision

Oregon Department of Transportation
Preliminary Design Unit

Coburg Interchange Refinement Plan

Coburg Interchange

Crash Data Diagram
Jan. 1991 to June 1997



Oregon Department of Transportation TPAU Transportation Planning Analysis Unit

Concept 1 **- 2015 ADT, AM/PM Peak Hour Volumes and Lane Configurations**	FILE: COBURG.PPT DATE: 07/10/97	Figure 12

Table 6 shows the signalized LOS for each of the intersections for the design year (2015) for both AM and PM peak periods.

Table 6 : Signalized Level of Service (Concept 1)

Intersection	Build 2015 AM	Build 2015 PM
Northbound Ramp Terminal @ Pearl Street	B	A
Southbound Ramp Terminal @ Pearl Street	A	C-D
25% PHV reduction (TDM)	n/a	C
Robert Street/Coburg Industrial Way @ Pearl Street	E	D-E
25% PHV reduction (TDM)	D	D
Free right turn from Pearl Street to Coburg Industrial Way	B	D-E

Table 7: Storage Distance Requirements at Roberts Street/Industrial Way Intersection (Concept 1)

Approach	Left	Through	Right	Available
South	36	36	34	N/A
North	155	155	113	N/A
West	30	190	190	140 To Stuart Way 50 To Truck Stop Entrance
East	20	165	10	200 To Ramp Intersection

Possible Future Issue with Traffic on Pearl Street with Concept 1

There are possible long-term traffic issues with this concept. Because of the location of the truck stop entrance in Concept 1, trucks would have to turn left just beyond the signal at Industrial Way. When vehicles are queued at the signal, a truck would have to wait in the westbound travel lane until the eastbound traffic clears the lane to enter the truck stop. This would cause a back up of westbound traffic possibly through the southbound ramp terminal. Also the eastbound traffic queue would block Stuart Way so vehicles could not turn left or right. This issue is listed in the disadvantage section that follows. Future traffic analysis should be conducted to monitor the access to the current Truck and Travel.

Concept 1

Advantages

- Significant safety and operational improvements made to the ramps and ramp terminals
- Minimizes the need for additional right of way in the interchange area
- Moves access to Commercial parcels and Frontage Road on East Side. Improves safety at new access points and satisfies Interchange Access Control policy requirements.

- Combines the existing offset intersection of Roberts Way and Coburg Industrial Way into one intersection
- Realignment of Roberts/Industrial intersection away from southbound ramp Terminal improves access control from the southbound ramp terminal
  - Added separation would also benefit the operation of ramp signals (when they are warranted)
- Minimizes impacts to the undeveloped properties north of Van Duyn Road, on either side of Industrial Way
- Minimizes impacts to the Muddy Creek canal
- Accommodates Interstate Design Vehicle (75' single trailer truck) circulation to, within, and out of the truck stop
- The concept is accepted by the Coburg TAC and satisfies the design goal, objectives, and criteria

Disadvantages

- Spacing between Roberts intersection and Stuart Way intersection provides only minimum storage lengths for left-turn movements from the median to parcels south along Pearl Street.
- Stuart Way realignment would bisect existing business' parcel.
- Improved profile grade on Van Duyn Road could impact businesses near ramp terminals and may require additional travel to access parcels.
- Realignment of Roberts/Industrial Way intersection, although further from the Southbound Ramp Terminal, is still not ¼ mile from the terminal and may need a design exception when funding becomes available and an environmental impact analysis is created.

Reasons for Preferred Concept Selection:

The concept meets or exceeds the design goal, objectives, and criteria.

- The concept was selected by the TAC as the only one they could all agree and support (one member could not accept the concept publicly).
- The concept reduces traffic impacts such as noise pollution and traffic on local streets and retains character of historic Coburg.
- The concept meets the minimum interchange access and design standards and policies in ODOT and the Federal Highway Administration.
- The concept significantly improves safety and operations for all modes of traffic by rebuilding the interchange bridge and ramp terminals, placing a signal at Industrial Way, and bringing Pearl Street up to urban standards.
- The concept improves the interchange access and mobility for all modes of traffic.
- The concept improves the access points near the interchange ramps and realigns local streets along Pearl Street.
- The concept calls for implementing a demand management program for large employers.

- The concept calls for implementing an access management policy for parcels near the interchange ramps.
- The concept is fiscally viable and implemented in phases.

Probable Phasing and Costs

Phase 1 2000 to 2005

- Improve the interchange northbound exit ramp and ramp terminal using State Immediate Opportunity funds
- Improve Pearl Street to urban standards as per the Lane County project
- Install traffic signal at intersection of Industrial Way and Pearl Street
- Assumption that Roberts Street and Stuart Way remain open for existing locations

Responsible Agencies:	Lane County Public Works for Pearl Street improvements ODOT for northbound ramp improvements	
Estimated Costs:	Pearl Street Improvements	$1,135,000
	Northbound ramp	$500,000

Phase 2 2005 to 2010

- Realign Roberts Street to Industrial Way to create four-leg intersection
- Shift access to campground parcel from Stuart Way to Roberts Street
- Stuart Way dead-ends at Pearl Street.

Responsible Agencies:	ODOT and City of Coburg for realignment of Roberts and access to campground parcel	
Estimated Cost:	Roberts Street	$1,173,500

Phase 3 2008 to 2015

- Rebuild and improve interchange
- Conduct necessary traffic analysis to determine alignment of Stuart Way to the west along Pearl St.

Responsible Agencies:	ODOT for interchange City of Coburg for Stuart Way	
Estimated Costs:	Interchange	$5,000,000
	Stuart Way	$350,000

Public Involvement

Transportation Advisory Committee
The Coburg TAC meet for over a year to review, refine, and comment on the refinement plan. All ODOT proposals, including designs and policy proposals were submitted to the TAC for review, comment, and edits. It was clearly established in the early phases of the refinement plan that the TAC was responsible for recommending an alternative for the interchange.

The TAC met regularly and at least for the later part of the project, twice a month. On June 19, 1997, the TAC voted to recommend Concept 2-A as the preferred alternative for the refinement plan. Of the five people on the TAC, one opposed the concept and four supported the idea.

The member in opposition cited a lack of information about the impacts and wanted more separation between Industrial Way and Stuart Way and the residential areas.

One member who voted in favor of the project did so if the noise and pollution of the realigned Stuart Way were mitigated.

Before Concept 2-A was recommended, ODOT and the Truck and Travel representatives met on the site (Pearl Street) with Lane County staff to discuss local street access. ODOT presented some options for a Stuart Way/Industrial Way alignment and possible driveways along Pearl Street Another concept was devised and called Concept 2-A, which aligned Stuart and Industrial Way further to the west.

After the June 19, 1997, meeting, the TAC recommended that Concept 2-A be forwarded as the preferred alternative for the refinement plan. ODOT staff agreed.

Open Houses
There were four open houses to discuss the TSP and interchange refinement plan:

- Coburg TSP Open House
  October 17, 1996, 6 p.m.
  Coburg City Hall

The purpose of this open house was to introduce the goals and objectives of the refinement plan and to ask for comments from the public about transportation issues at and near the interchange. Nine people attended the open house. ODOT gave a presentation about how a refinement plan is conducted, existing issues concerning the interchange, and a general outline of a current preservation project on I-5 and the interchange. There were two comments: one about the current interchange project and why ODOT could not do more work now and the other comment was about how to fund a larger reconstruction of the interchange.

- Voice Your Opinion on the I-5 Interchange
  March 20, 1997
  6-7:30 p.m.
  Coburg City Hall

This meeting was set up specifically for property owners and businesses along Pearl Street and near the interchange. The event was at the request of the TAC because the invited people would be directly impacted by a future interchange project. Postcards were sent to about 50 addresses.

At the meeting, ODOT presented four design concepts. Comment forms were distributed asking for input for each design and to select a preferred concept. Thirteen people signed the sign-up sheet although about 20 people were counted at one point during the meeting. ODOT set up two workstations to present the design concepts and to interact with the public.

Nine comment forms were submitted to ODOT. Four people preferred Concept 2, three people liked Concept 4, one person liked Concept 1 and one person voted for Concept 1 and 3.

Based on the results of this open house and further analysis, the TAC recommended concept 2 at its April 17, 1997 meeting. The TAC requested that ODOT send personal letters to the Hillside Grill and Texaco Station property and business owners and explain the refinement plan and the recommended concept 2. ODOT sent the letters to these parties on May 29, 1997. There were no responses from the property or business owners.

- Town Meeting to Focus on Coburg Transportation System Plan, I-5/Coburg Interchange Refinement Study, and Strategic Plan
  April 24, 1997 6:30 p.m.
  City Hall

The preferred concept was presented at the town meeting. Over 60 people attended. ODOT and the TAC created a question form about the TSP and the Refinement Plan, Specifically, this form asked if people supported Concept 2. Of the four responses submitted, three people chose Concept 3 and only one chose Concept 2.

The TAC reviewed the results at their May 22, 1997, TAC meeting. The TAC and ODOT remained in agreement that Concept 2 was the most appropriate design. The TAC requested that ODOT discuss access issues with Truck and Travel regarding Concept 2 and report back to them before recommending Concept 2.

- Oregon Department of Transportation Briefing
  I-5 Interchange Refinement Plan
  Includes Proposed Realignment of Stuart and Industrial Way
  March 4, 1998
  Coburg City Hall
  7 p.m. to 9 p.m.

Based on the comments and concerns from the TAC and Coburg citizens, ODOT held a briefing with residents of Coburg about the interchange ideas. About 25 people signed in although there were about 50 people in the audience. Most, if not all, of the people in attendance opposed the preferred Concept 2-A submitted by the TAC and ODOT.

The primary concern was the location of a realigned Stuart Way with a realigned Industrial Way to create a new signalized intersection. Most people thought noise and traffic would impact the local neighborhoods.

Facilitation Process

Given the local concern and reluctance to accept Concept 2-A, ODOT initiated a facilitation process. LCOG was hired to facilitate discussion at the TAC level to resolve differences between ODOT and local citizens about an interchange idea. The TAC added new members (City Council approved new members) and ground rules were set to find a concept that all sides could publicly endorse. ODOT and Lane County Public Works became formal members of the TAC. TAC members, Lane County, and ODOT presented new ideas about the interchange and Pearl Street.

After much discussion (approximately four months), review, and evaluation, the TAC selected Concept 1 as the preferred concept. One TAC member had an issue with Concept 1 and indicated that he could not support the concept publicly such as in front of the Planning Commission or City Council.