AFFIDAVIT OF POSTING

ORDINANCE CB-0-154-91

STATE OF OREGON)
)
COUNTIES OF CLACKAMAS AND WASHINGTON)
)
CITY OF WILSONVILLE)

I, the undersigned, City Recorder of the City of Wilsonville, State of Oregon, being first duly sworn on oath depose and say:

On the 15th day of May, 1991, I caused to be posted copies An Ordinance Relating to the Adoption of the Transportation Master Plan for the City of Wilsonville that has been Prepared by Carl H. Buttke, Adopting the Findings and Conclusions Contained Therein, Approving and Adopting Said Plan, in the following four public and conspicuous places of the City, to wit:

WILSONVILLE CITY HALL

WILSONVILLE POST OFFICE

LOWRIE'S FOOD MARKET

KOPPER KITCHEN

The notice remained posted for more than five (5) consecutive days prior to the time for said public hearing on the 20th day of May, 1991.

Vera A Rojas
VERA A. ROJAS, CMC, City Recorder

Subscribed and sworn to before me
this 28th day of May, 1991.

OFFICIAL SEAL
PAMELA J. MUNSTERMAN
NOTARY PUBLIC - OREGON
COMMISSION NO.001787
MY COMMISSION EXPIRES SEPT. 23, 1994

Pamela J. Munsterman
NOTARY PUBLIC, STATE OF OREGON

My Commission expires: 9/23/94

ORDINANCE NO. 384

AN ORDINANCE RELATING TO THE ADOPTION OF THE TRANSPORTATION MASTER PLAN FOR THE CITY OF WILSONVILLE THAT HAS BEEN PREPARED BY CARL H. BUTTKE, ADOPTING THE FINDINGS AND CONCLUSIONS CONTAINED THEREIN, APPROVING AND ADOPTING SAID PLAN.

WHEREAS, the Wilsonville City Council adopted Resolution No. 803 on December 17, 1990, and, thereby, directed City Staff to initiate an amendment to the Wilsonville Comprehensive Plan and to schedule the necessary land-use hearings; and,

WHEREAS, the Wilsonville Planning Commission scheduled and held a special hearing on February 28, 1991, to review the TRANSPORTATION MASTER PLAN and to provide all interested parties an opportunity to present oral and written testimony to the Planning Commission after notice of the hearing was duly published and posted; and,

WHEREAS, the Planning Commission, designated and acting as the official planning body for the City, adopted Resolution No. 91PC18 which recommends that the City Council formally adopt the TRANSPORTATION MASTER PLAN; and,

WHEREAS, after due notice, a public hearing was held before the City Council on May 20, 1991, at which time the Council considered all evidence and afforded all interested parties an opportunity to present oral and written testimony; and,

WHEREAS, the City Council, having carefully considered the entire record of this proceeding, including the Planning Commission's recommendation and the presentation and report of Mr. Carl H. Buttke, and being fully advised.

NOW, THEREFORE, THE CITY OF WILSONVILLE ORDAINS AS FOLLOWS:

Section 1. DETERMINATIONS AND FINDINGS:

(a) The Wilsonville City Council hereby adopts and incorporates by reference the facts and findings contained in the TRANSPORTATION MASTER PLAN that was prepared for the City by Mr. Carl H. Buttke and is identified as Exhibit A and the Planning Commission's Resolution Recommendations 1 and 2 only, which is identified as Exhibit B. These

Exhibit's, taken together with the public testimony, clearly support a finding that it is necessary to adopt a Transportation Plan that will meet the present and future needs of the citizens and business community of this City.

(b) The City Council finds that the adoption of the TRANSPORTATION MASTER PLAN is needed and necessary to protect the public health, safety, and welfare of the municipality. Additionally, the Council finds that the existing street capacity deficiencies are of an immediate concern to the City and that these issues need to be addressed in an immediate and timely manner.

(c) The Council finds that it is necessary to revise the City's street construction standards to conform to the functional classification street standards that the City adopted by Resolution in 1988. These revisions make the City's standards consistent with the Washington County standards and provide a greater conformance to the generally acceptable criteria used in the Portland metropolitan area.

(d) The City Council finds that the principals of traffic calming as outlined in writing by Mr. Starner's report of May 17, 1991, be taken into consideration.

Section 2. DIRECTIVE TO THE PLANNING DIRECTOR

(a) The City Council directs the Planning Director to amend the Wilsonville Comprehensive Plan Map to reflect the road classifications and locations shown on Figure 20 of the TRANSPORTATION MASTER PLAN. The Director shall also amend the "Pathway Master Plan" to conform to Figure 21-Bikeway Plan.

(b) The City Council directs both the Planning Director and the City Engineer to amend the Comprehensive Plan and any Engineering Standards Manual(s) to reflect the street standards shown in Figure 19 of the TRANSPORTATION MASTER PLAN. This is to be used in conjunction with TABLE 6-STREET STANDARDS. The City Engineer shall develop more detailed construction standards and drawings in compliance with the City's Comprehensive Plan and the Council's directive.

(c) The City Council directs the Planning Director to amend the Comprehensive Plan to reflect the Special Area 11 language as set forth in the Planning Director's memorandum of May 15, 1991.

Section 3. EFFECTIVE DATE OF ORDINANCE

This Ordinance shall be and is declared to be in full force and effect thirty (30) days from the date of final passage and approval.

SUBMITTED to the Wilsonville City Council and read the first time at a regular meeting thereof on the 6th day of May, 1991 and scheduled for second reading at a regular meeting of the Council on the 20th of May 1991 commencing at the hour of 7:30 o'clock p.m. at the City of Wilsonville Community Development Hearings Room.

Vera A Rojas

VERA A. ROJAS, CMC, City Recorder

ENACTED by the Wilsonville City Council at a regular meeting thereof this 20th day of May, 1991 by the following votes: YEAS: 5 NAYS: 0

Pamela Munsterman

PAMELA MUNSTERMAN,
City Recorder Pro-Tem

DATED and signed by the Mayor this 22nd of May, 1991.

Gerald A Krummel

GERALD A. KRUMMEL, Mayor

SUMMARY of Votes:

Mayor Krummel	Aye
Councilor Chandler	Aye
Councilor Carter	Aye
Councilor Lehan	Aye
Councilor Van Eck	Aye

TRANSPORTATION MASTER PLAN
PHASE 1 PLANNING PROCESS

CITY OF WILSONVILLE, OREGON

Wilsonville, Oregon

November 15, 1990

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INTRODUCTION

The City of Wilsonville has commenced on the development of an updated Comprehensive Plan for the area within its Urban Growth Boundary. This Transportation Master Plan for the City constitutes the transportation element of the City's Comprehensive Plan.

GOALS AND OBJECTIVES

The purpose of this Master Plan is to provide a guide to the City to fulfill its goals and objectives for implementation of improved transportation facilities into the 21st century. Goals and objectives related to transportation are found in Wilsonville's Comprehensive Plan in the Public Facilities and Services chapter. These goals and objectives are as follows:

Overall Goal

- Plan for and provide adequate public facilities and services closely tied to the rate of development.

General Objectives

- Urban Development should be allowed only in areas where necessary services can be provided.
- Public facilities should be provided and designed to enhance the health, safety, educational and recreational aspects of urban living.
- Develop a Capital Improvements Program applied to the City's budgeting process to insure orderly, economical provision of services and facilities.
- Require that primary facilities be available or under construction prior to issuance of a Building Permit.

The detailed transportation policies from the current Comprehensive Plan are contained in the Appendix and were utilized for the development of this Transportation Master Plan.

THE PLANNING PROCESS

The planning process followed for the development of the Transportation Master Plan consisted of a systematic flow of technical analyses combined with input and review by the City's Transportation Advisory Commission (TAC) throughout the process. A graphic presentation of the planning process is shown on Figure 1. The TAC consists of representatives of the City's business people, citizens at large, and representatives of the City Council, and City staff. Task force meetings were held monthly throughout the planning process to provide review and guidelines to the consultant.

The following elements of the Master Plan are included in phase 1 of the planning process:

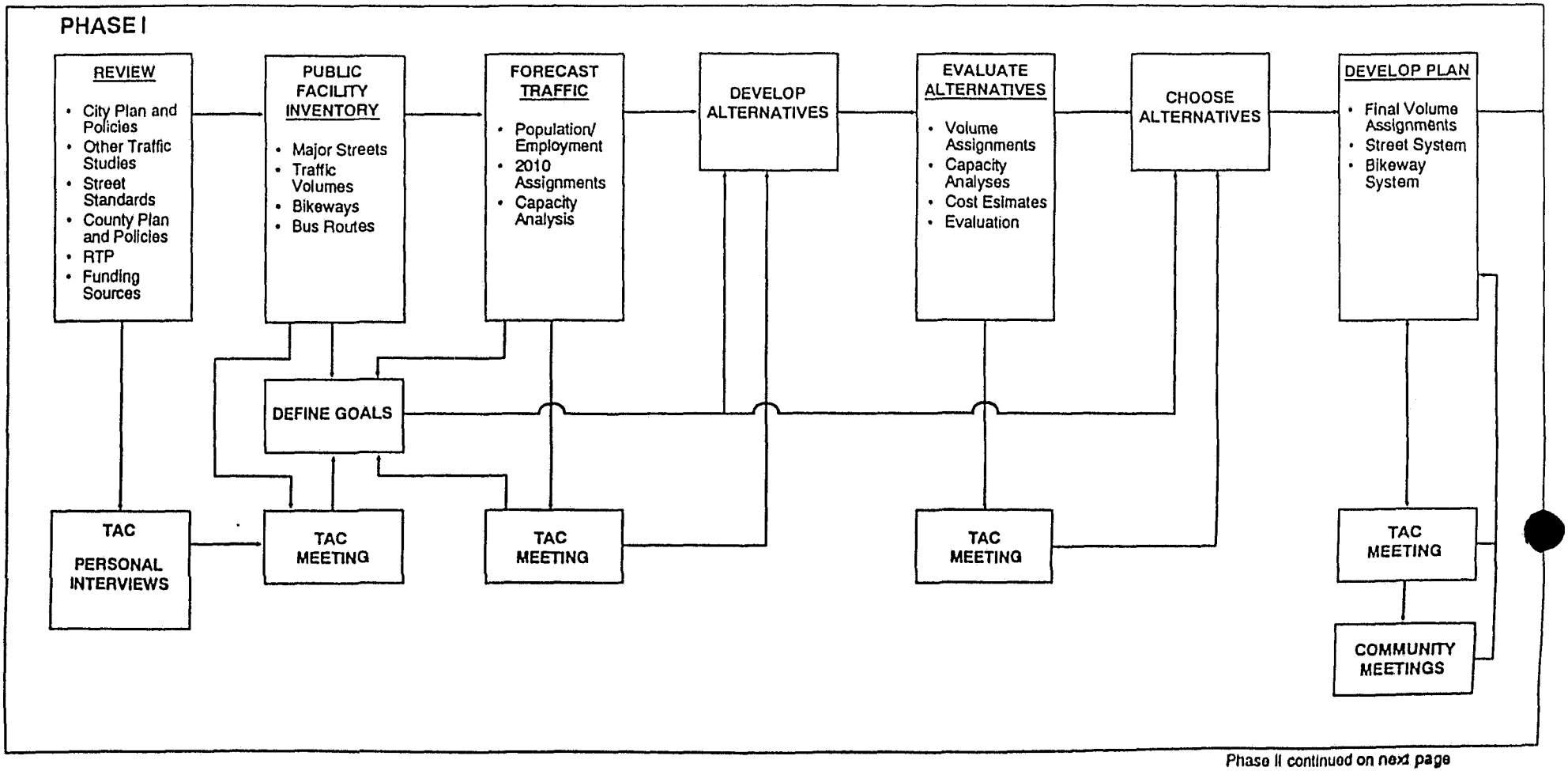
- Street System
- Bikeways
- Public Transportation
- Existing and Forecast Traffic
- Development and Evaluation of System Alternatives

Phase 2 of the planning process will include more extensive detail of short term improvements and the long range plan, and production of a transportation facilities plan.

FIGURE 1

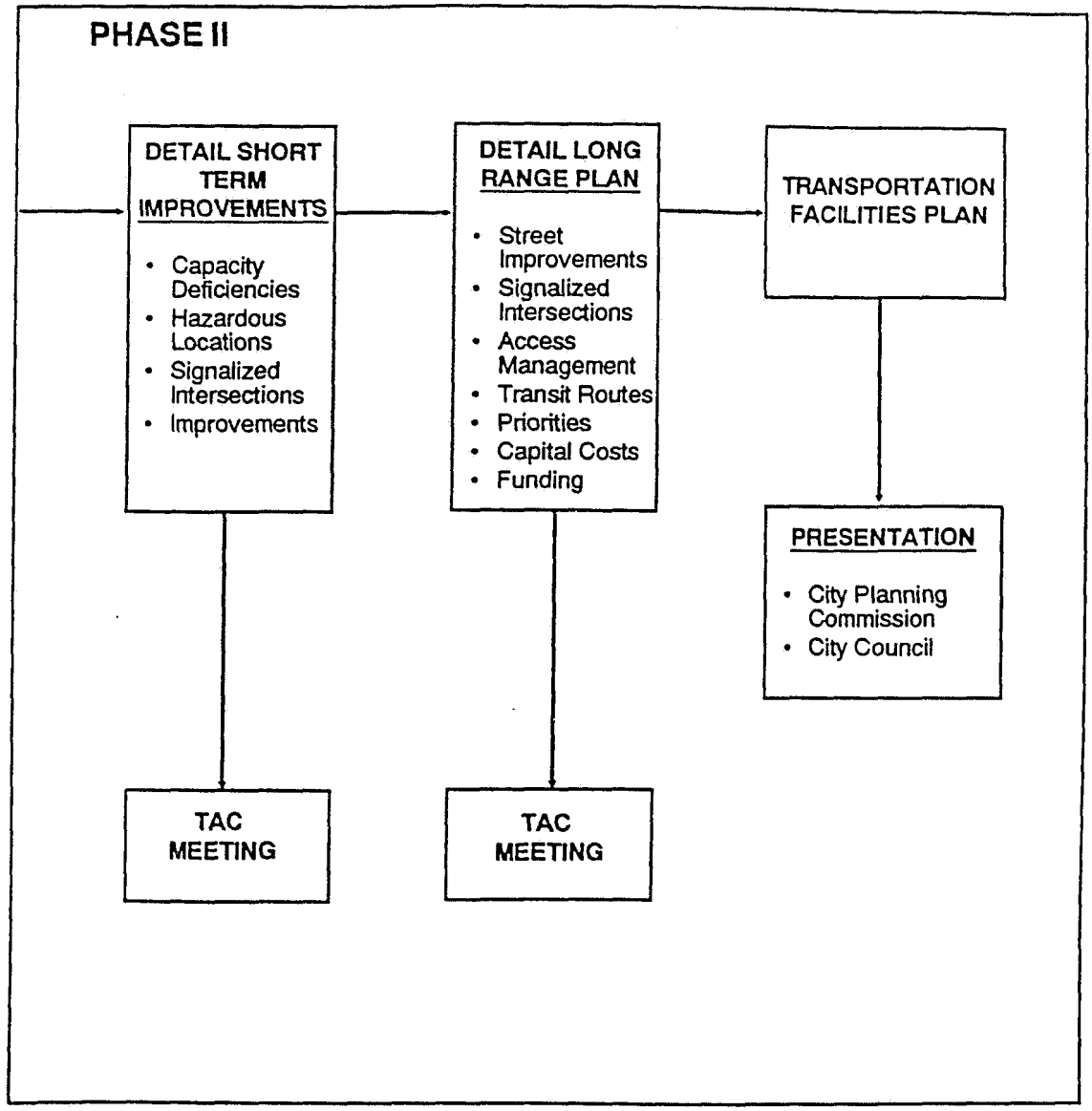
WILSONVILLE TRANSPORTATION PLAN

Planning Process



Phase II continued on next page

Wilsonville Transportation Plan, continued



THE PLANNING AREA

Wilsonville is located in the Portland metropolitan area along Interstate 5, 18 miles south of downtown Portland and 29 miles north of Salem, as shown in Figure 2. The planning area for the Transportation Master Plan is shown on Figure 3 and is bounded on the north by Elligsen Road, the east by Stafford and Wilsonville Roads, the south by Miley Road, and the west by Grahams Ferry Road. The planning area is larger than the Urban Growth Boundary (U.G.B.) and city limits.

EXISTING TRANSPORTATION PLAN

The roadway system in the existing Comprehensive Plan consists of highways, major arterials and collectors. These are shown on Figure 3.

The existing plan calls for the following changes in vehicular circulation:

- Develop a partial interchange between I-5 to the north and Boeckman Road. (refer to Areas of Special Concern - Area 11 in the Appendix A).
- Widen the I-5 off-ramps at the intersections with the City arterial streets.
- Develop Wilsonville Road as a two-lane arterial with continuous left turn lanes except in the vicinity of I-5 and the Civic Center, where it should be widened to four and five lanes.
- Develop Elligsen Road as a two-lane arterial with left-turn lanes at S.W. 65th Avenue and to a four-lane roadway with left-turn lanes in the vicinity of Parkway Avenue.
- Develop Boones Ferry Road as a two-lane arterial with a continuous left-turn lane in the median area.

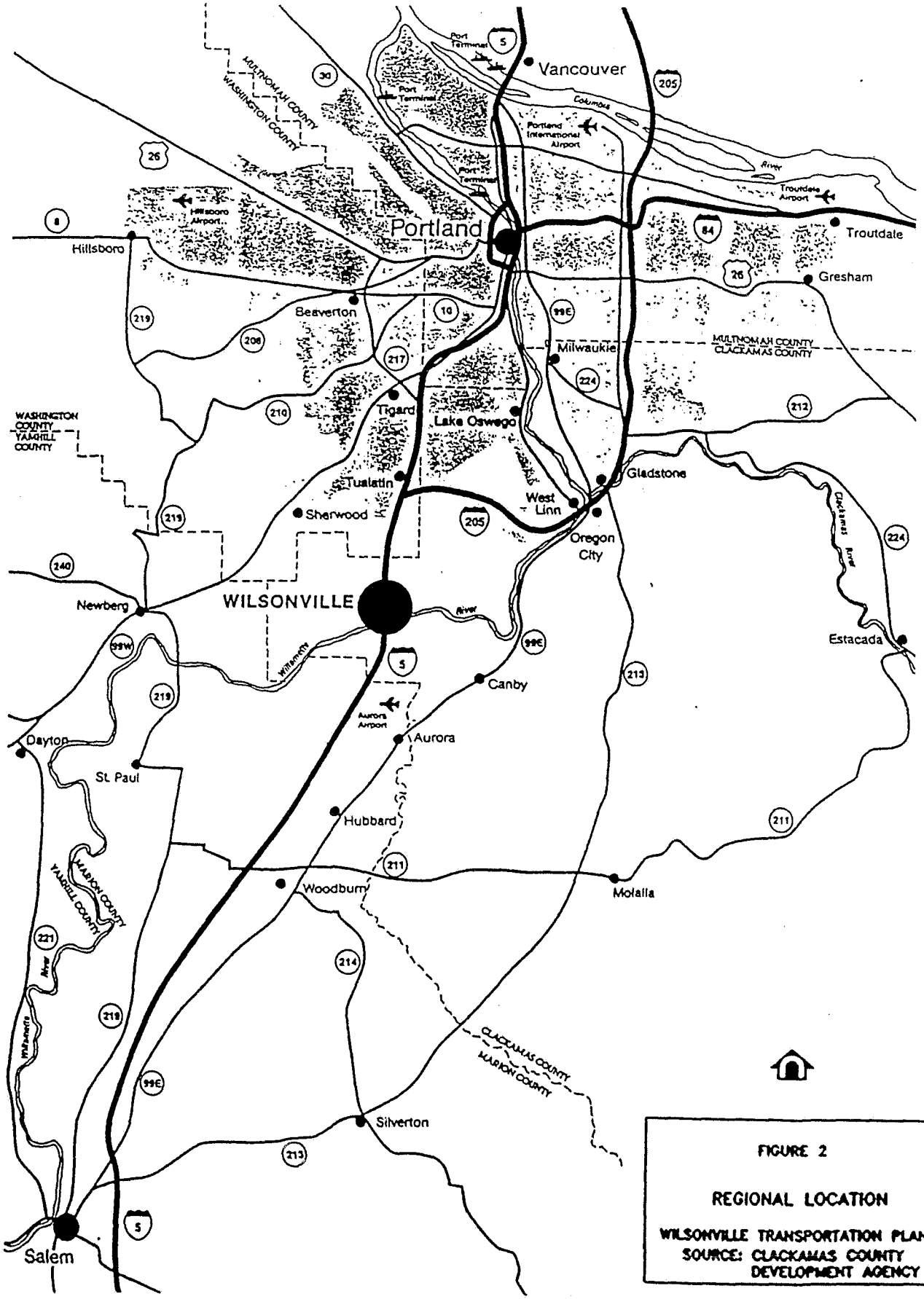


FIGURE 2

REGIONAL LOCATION

WILSONVILLE TRANSPORTATION PLAN
SOURCE: CLACKAMAS COUNTY DEVELOPMENT AGENCY

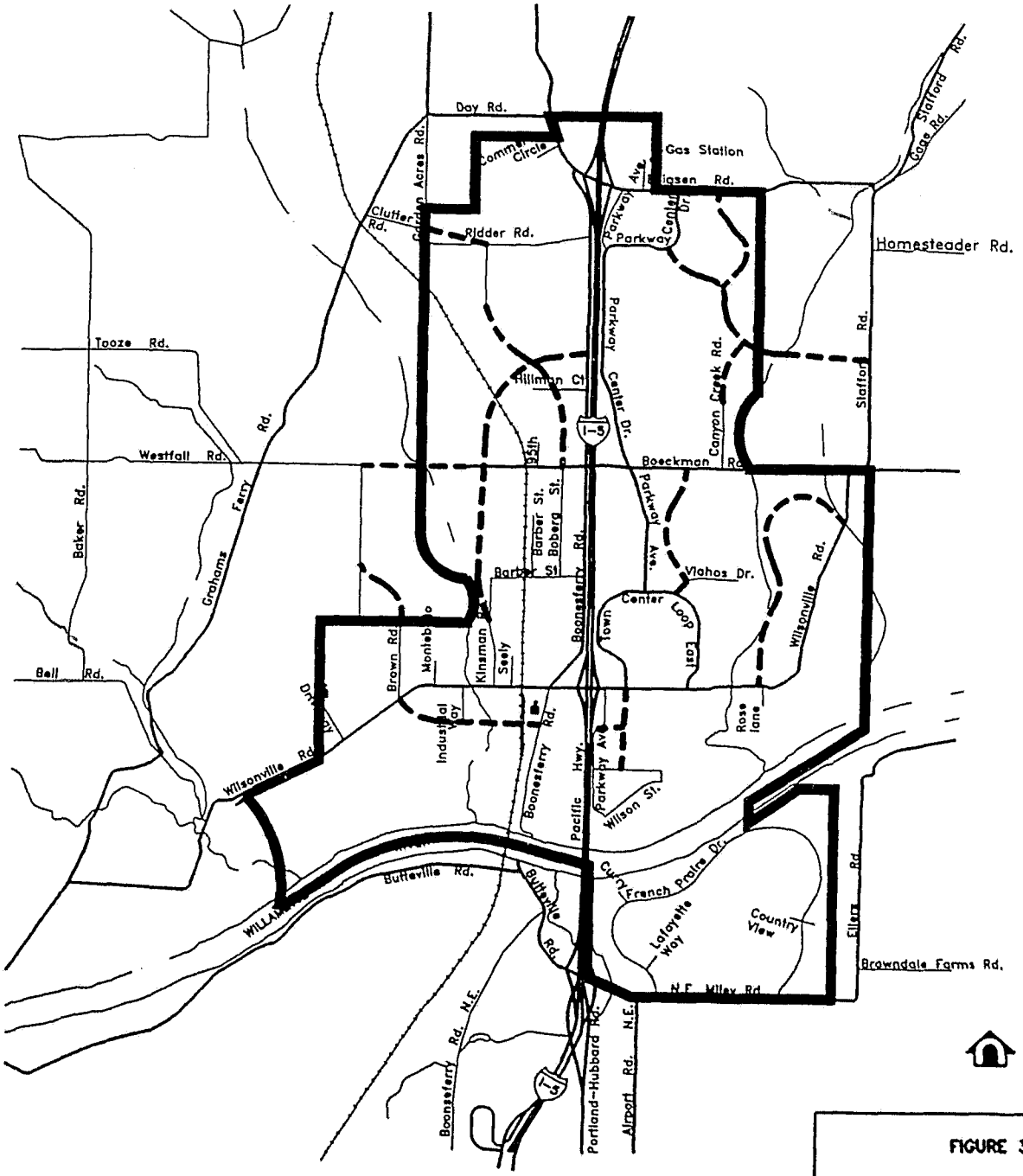


FIGURE 3

EXISTING TRANSPORTATION PLAN AND PLANNING AREA

WILSONVILLE TRANSPORTATION PLAN

- Develop Parkway Avenue as a two-lane arterial with a continuous left-turn lane in the median area.
- Develop Boeckman Road as a two-lane arterial with left-turn lanes at major intersections.
- Widen Eilers Road and Aurora-Boones Ferry Road south of the Willamette River to two lanes with left turn-lanes except in the vicinity of I-5, where it should be five lanes.

Portions of the transportation plan that have been implemented include widening Boeckman Road between Parkway Avenue and Canyon Creek Road.

REGIONAL CONTEXT

Interchange improvements on Interstate 5 within Wilsonville are listed in Metro's Regional Transportation Plan and ODOT's Six Year Highway Improvement Plan. The Stafford Road/I-5 interchange is scheduled for construction in 1993 at an estimated cost of $7,550,000. The Wilsonville Road/I-5 interchange is scheduled for completion of an environmental impact study in 1992, but is not funded for construction.

The Western Bypass Study is exploring solutions to major transportation problems in the southwest Portland metropolitan area. Possible solutions include a western bypass, improvements to existing highway and transit systems, management of the existing system to increase its capacity, and combinations of the above strategies. The study area for the Western Bypass which affects Wilsonville includes the area north of the Willamette River and west of Interstate 5. Citizen and technical advisory committees have been working to define purpose and need, develop transportation strategies, and develop alternatives. This work will lead to the preparation of a Corridor Environmental Impact Statement between May 1991 and February 1992.

CURRENT TRANSPORTATION CONDITIONS

The current transportation conditions on the existing roadway and public transportation systems were measured and examined during the Summer of 1990.

ROADWAYS

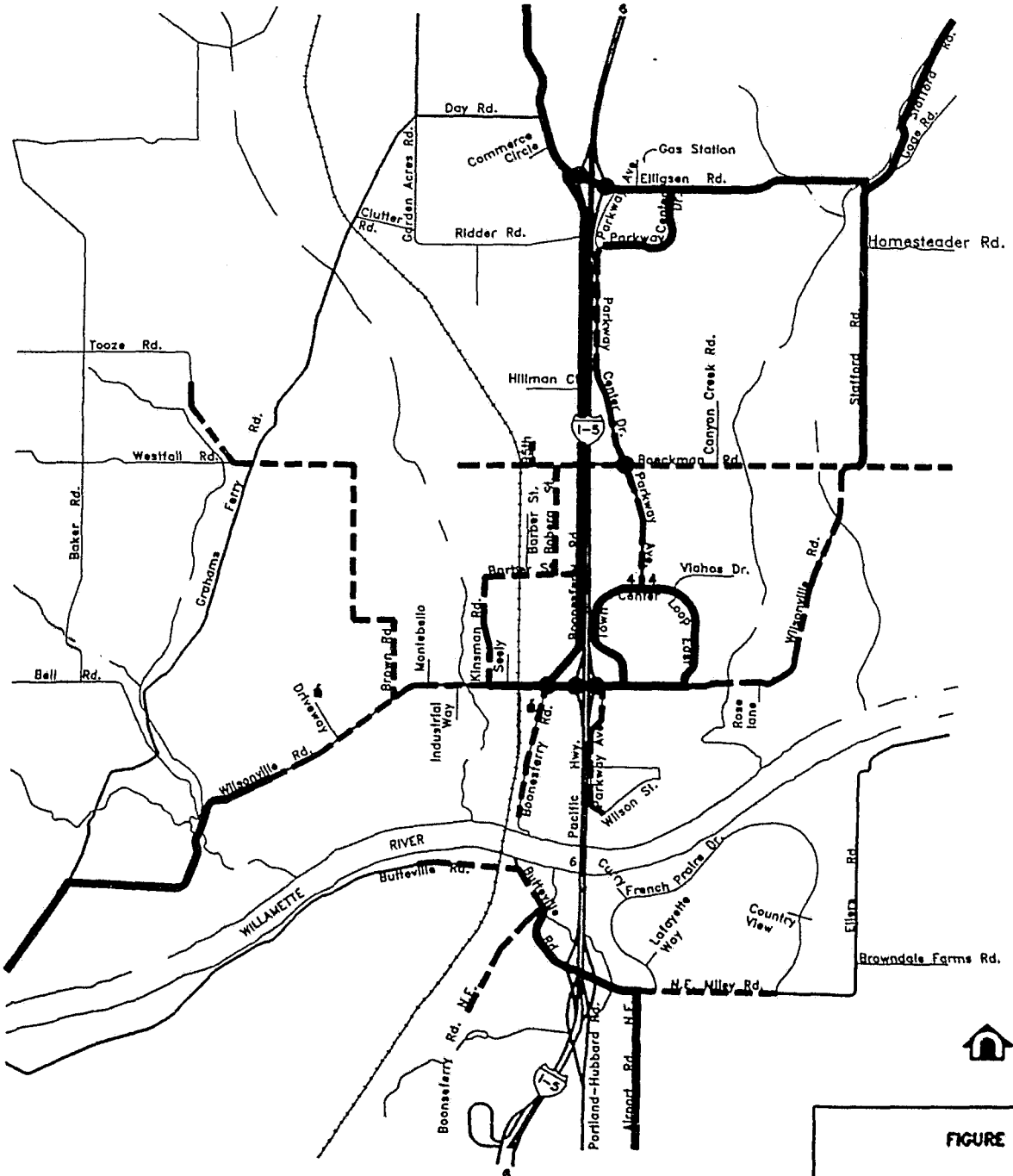
Inventory

An inventory of all arterial and collector streets is shown in Figure 4 and listed in appendix table A-1. The inventory includes the following:

- Number of travel lanes
- Location of Traffic Signals
- Street Classification
- Street Jurisdictions

Interstate 5 is a six-lane freeway passing through the city, with interchanges at Elligsen Road, Wilsonville Road and Eilers Road. Arterials and collectors are generally two-lane roadways with one travel lane in each direction. Portions of Wilsonville, Boones Ferry, Elligsen and Town Center Loop Roads have left-turn lanes in the median areas. Parkway Avenue, from Parkway Center Drive to Elligsen Road, is the only existing one way arterial. Signalized intersections include Wilsonville and Boones Ferry Roads, and Interstate 5 on and off ramps at Elligsen and Wilsonville Roads. The existing arterial and collector roads include the following:

- Elligsen Road
- Boones Ferry Road
- Parkway Avenue
- Boeckman Road



LEGEND

- MAJOR ARTERIAL
- MINOR ARTERIAL
- COLLECTOR
- TRAFFIC SIGNALS
- 6 NO. of TRAVEL LANES (2 ALL OTHER ROADS)

FIGURE 4

STREET INVENTORY

WILSONVILLE TRANSPORTATION PLAN

- Town Center Loop
- Wilsonville Road
- Butteville Road/Miley Road

Interstate 5 is under the jurisdiction of the Oregon Department of Transportation (ODOT). Boones Ferry Road north of the Stafford Interchange is also under ODOT. Clackamas County roads within the planning area include portions of Wilsonville Road, Stafford Road and Boeckman Road. Washington County roads within the planning area include Elligsen Road, Ridder Road, Day Road and Grahams Ferry Road.

Proposed truck routes within the study area described in the existing plan (refer to the appendix). The existing portion of truck routes west of the freeway include Boones Ferry Road, and portions of Ridder Road, Barber Street, Boberg Street, Boeckman Road, Wilsonville Road and Kinsman Road. Truck routes east of the freeway include the Boeckman Overpass, Parkway Avenue from Boeckman Road to Elligsen, Parkway Center Drive and portions of Elligsen Road.

1990 Traffic

Traffic volumes on the major streets within the Wilsonville area were measured during the summer of 1990. Twenty-four hour two-way volumes are shown on Figure 5. The thick bandwidths illustrate the highest existing volumes near the freeway interchanges. Boones Ferry Road is carrying 5,000 to 7,000 vehicles per day west of the freeway. The highest daily volumes are occurring on Wilsonville Road, between Kinsman Road and Town Center Loop East. AM peak hour volumes are shown on Figure 6, and PM peak hour volumes on Figure 7. The volume flow maps further illustrate that the highest volumes occur near the Stafford and Wilsonville interchanges.

The PM peak hour traffic volumes are generally higher than the AM peak hour. Therefore, future testing and evaluation of the street system will be done by forecasting the PM peak hour conditions.

1990 Street Capacity

Highway and traffic engineers have established various standards for measuring traffic capacity of roadways or intersections.[1] Each standard is associated with a particular level of service one wishes to provide. The level-of-service concept requires consideration of factors which include travel speed, delay, frequency of interruptions in traffic flow, relative freedom for traffic maneuvers, driving comfort and convenience and operating cost. Six standards have been established ranging from Level A where traffic flow is relatively free to Level F where the street system is totally saturated or jammed with traffic. Table 1 indicates the level of service criteria for signalized intersections.

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[1]Transportation Research Board, Highway Capacity Manual, Special Report 209. National Research Council, 1985.

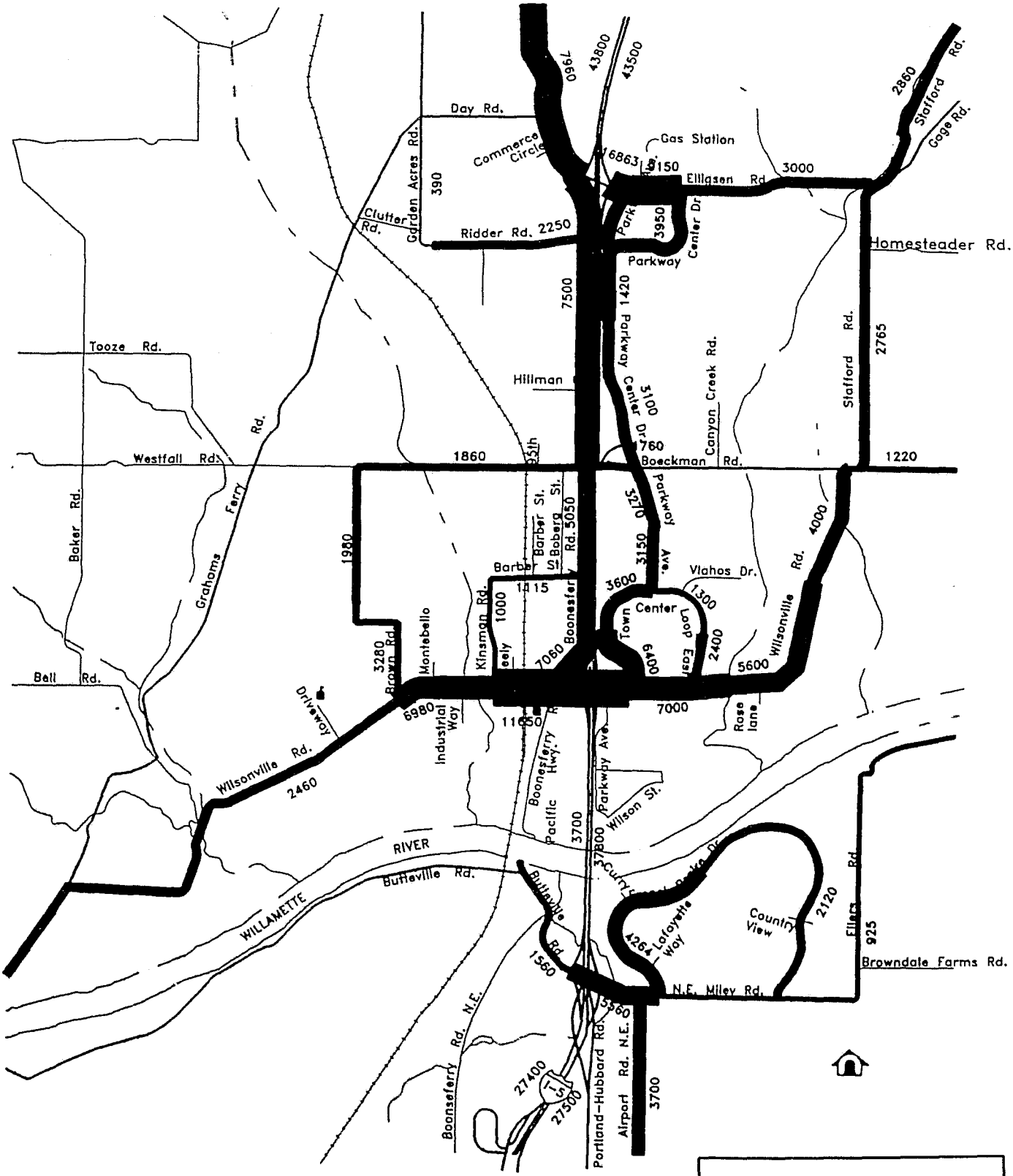


FIGURE 5

24 HOUR VOLUME (2-WAY)
WILSONVILLE TRANSPORTATION PLAN

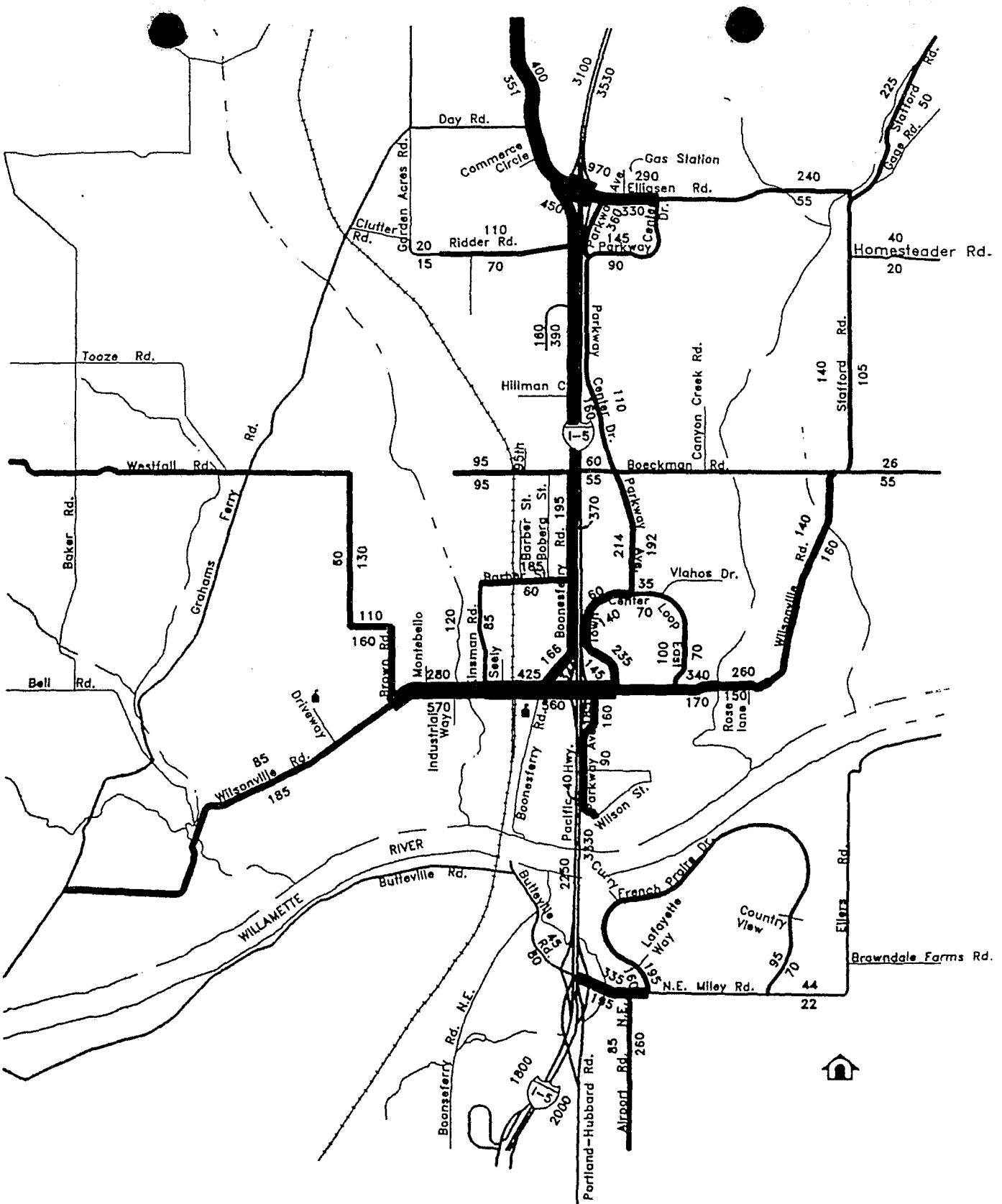


FIGURE 6

1990 AM PEAK HOUR TRAFFIC VOLUMES
WILSONVILLE TRANSPORTATION PLAN

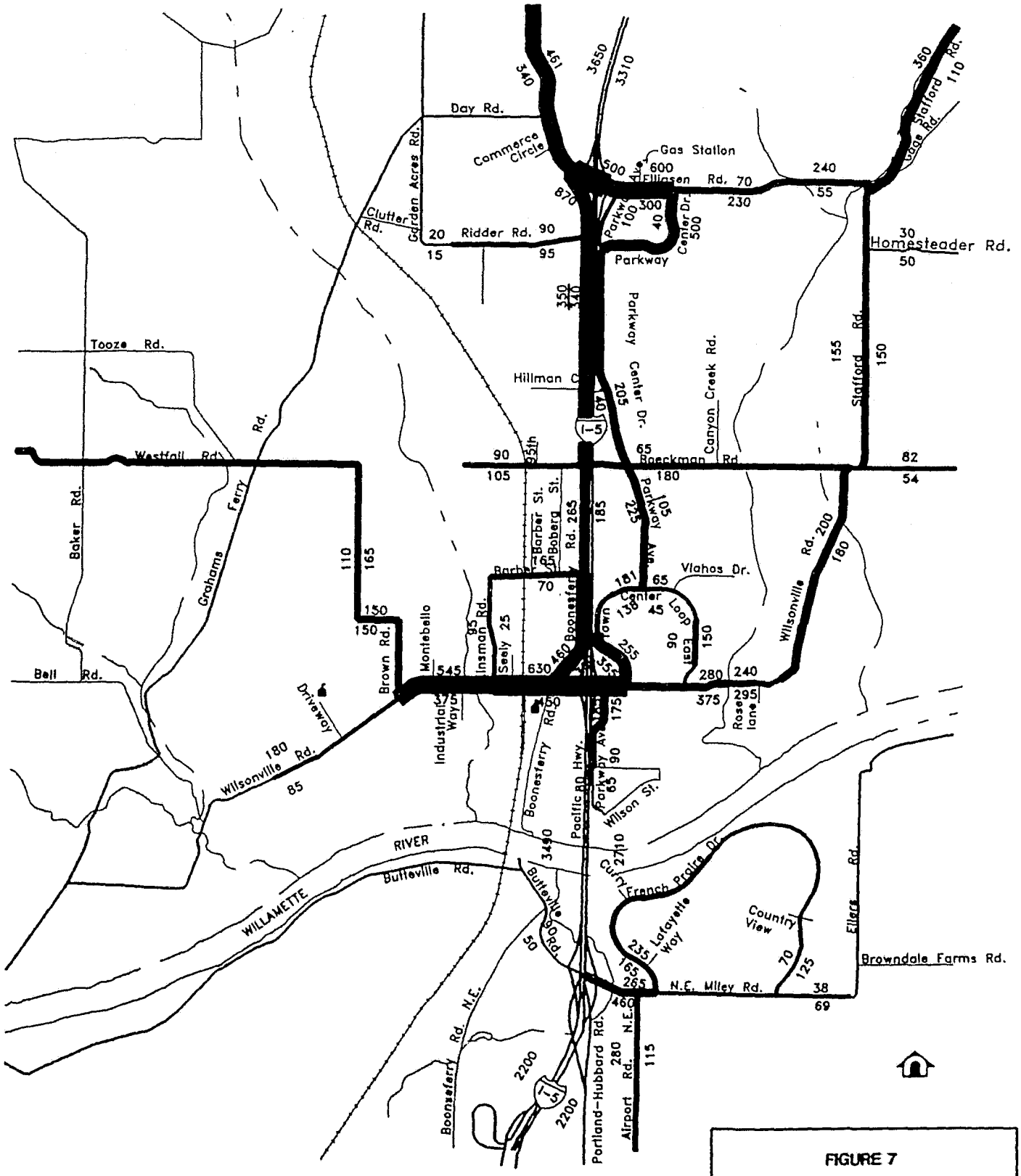


FIGURE 7

1990 PM PEAK HOUR TRAFFIC VOLUMES

WILSONVILLE TRANSPORTATION PLAN

TABLE 1
LEVEL OF SERVICE CRITERIA
For Signalized Intersections

Level of Service	Stopped Delay Per Vehicle in Seconds
A	Under 5.0
B	5.1 to 15.0
C	15.1 to 25.0
D	25.1 to 40.0
E	40.1 to 60.0
F	Over 60.0

Source: Highway Capacity Manual

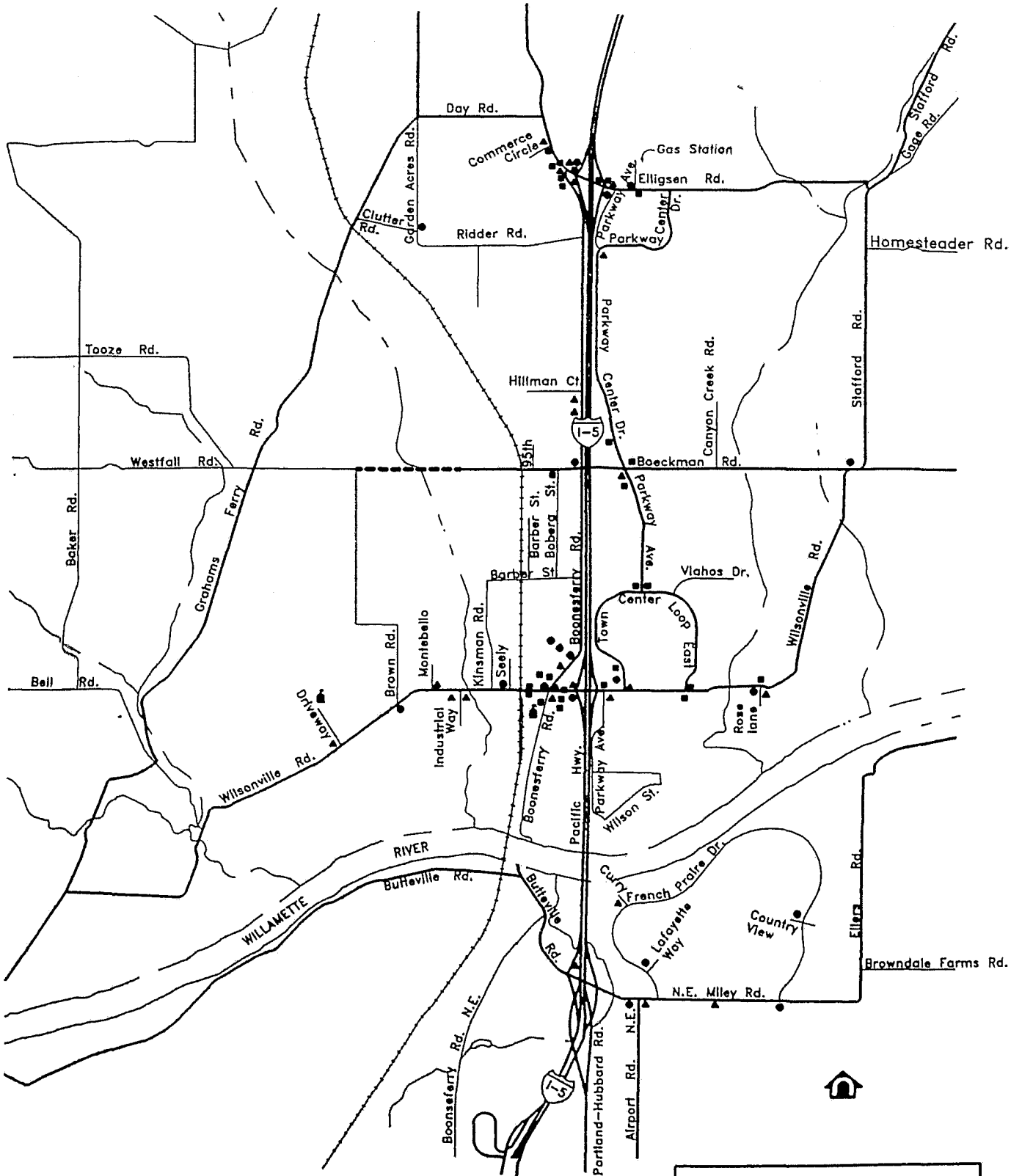
The capacity (between level of service E and F) of each of the major streets was calculated in a generalized way to compare with the PM peak hour traffic to determine locations of capacity deficiencies. Existing street capacity deficiencies occur on Wilsonville Road between Kinsman and Town Center Loop West, and on Elligsen and Boones Ferry Roads near the Stafford/I-5 interchange. A more detailed capacity analysis is necessary when analyzing the operation of individual intersections.

Accident History

An analysis of motor vehicle accidents throughout the City was performed for the years 1987 through 1989. The number of accidents is relatively low, considering the volume of traffic. A probable cause of accidents may be the free right turn from Boones Ferry Road to Wilsonville Road. A more specific analysis of accident records will be carried out in phase 2 of the planning process. Figure 8 shows accident locations cluster west of the freeway interchanges, with the largest cluster occurring near the Wilsonville/Boones Ferry intersection.

BIKEWAYS

There are very few bikeways within the City of Wilsonville. Bike lanes are located on Interstate 5 and provide a crossing of the Willamette River. There is an existing bikeway on the south side of Wilsonville Road from the railroad tracks to the west city limits, and a small section on the south side of Wilsonville Road east of Town Center Loop West. This route is discontinuous and does not meet currently accepted State Bikeway standards as it forces cyclists to ride against the flow of traffic. As Wilsonville Road is brought up to urban standards, the bikeway should be located on both sides of the roadway. Existing bikeways are shown on Figure 9.

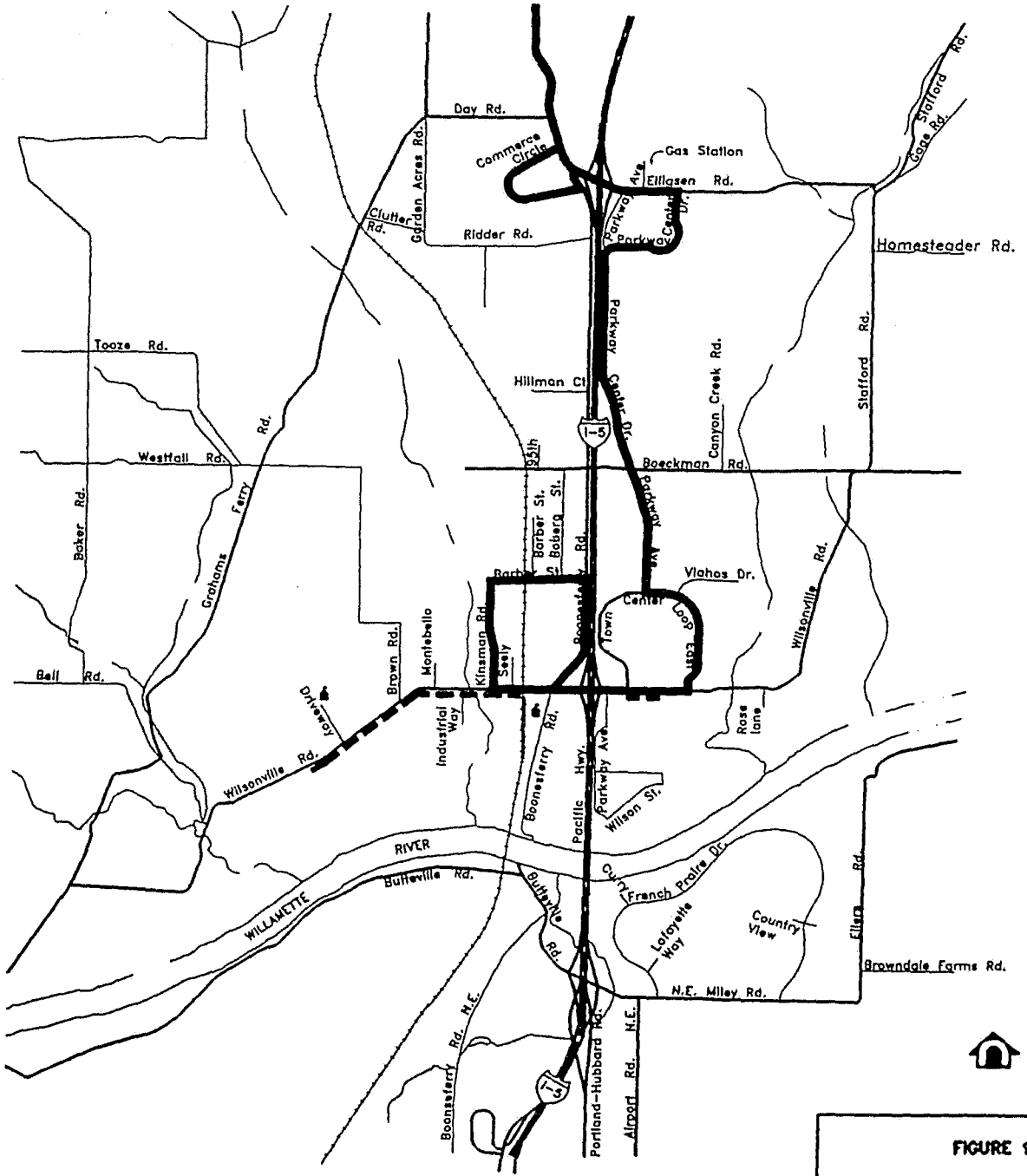


LEGEND

- ● 1987 ACCIDENTS
- ▲ 1988 ACCIDENTS
- ■ 1989 ACCIDENTS

FIGURE 8

ACCIDENT LOCATIONS
WILSONVILLE TRANSPORTATION PLAN



LEGEND

TRIMET LINE 38
WEEKDAY RUSH HOUR SERVICE

EXISTING BIKELANE

FIGURE 9

EXISTING BIKEWAYS AND BUS LINES

WILSONVILLE TRANSPORTATION PLAN

PUBLIC TRANSPORTATION

Public transportation is provided within the City of Wilsonville by Tri-Met and by the Wilsonville Area Rapid Transit (WART). Under an agreement with Tri-Met, the city contracts for peak hour bus service connecting to the Portland metropolitan area. Tri-Met bus line 38 is shown on Figure 9. WART has recently purchased a van and hired a part time driver and is currently concentrating on demand responsive service. WART's goals are to help provide for handicapped, elderly, and teenage user accessibility.

RAIL SERVICE

Burlington Northern Railroad provides freight rail service to the City, on the rail line connecting the Portland metropolitan area with the major cities of the Willamette Valley. There is no passenger rail service within the city. Amtrak service is available in downtown Portland, and provides rail connections to other parts of the country.

AIR SERVICE

The closest major airport is the Portland International Airport, approximately 27 miles north of the City via Interstate 205. The Aurora State Airport is located approximately three miles south of the City. Small executive jet aircraft can land and be serviced at this airport. The Mulino Airport is a Port of Portland Reliever Airport and is located about ten miles east of the City along Highway 213.

TRAVEL FORECASTS

The future traffic pattern throughout the City was defined by estimating the future traffic which would be generated by the existing plus future land use within the planning area, by distributing these trips to destinations throughout the planning area and to points outside the area, and then assigning these trips to the street system. Traffic estimated to pass through the City was added to the assignment. This process was accomplished on a microcomputer using the software TMODEL2[2]. These analyses were made for the PM peak hour of a typical weekday to reflect the critical time period of traffic operations.

The above process was first made for 1990 conditions to calibrate the model for the forecasting procedure. The model was considered calibrated and usable for the forecasting process when it simulated 1990 PM peak hour traffic volumes on the roadway system to be within ten percent of the actual measured traffic.

The City and surrounding area were divided into 50 traffic analysis zones for the process of defining the existing and future land use, estimating trip generation, distributing and assigning vehicle trips. Figure A-1 in the Appendix indicates a map of the traffic analysis zones.

EXISTING AND FUTURE LAND USE

In 1990 approximately 7,280 people live in the Wilsonville planning area and 6,200 people are employed there. The planning area is larger than the incorporated city limits, which has a preliminary 1990 census count of 7,073. Wilsonville's population has more than doubled from the 1980 census count of 2,920, making it one of the fastest growing cities in Oregon.

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[2]TMODEL2, Microcomputer Software by PSI/Metro, 1989.

It is forecast that the population for the planning area will increase to over 15,500 people by the year 2010 and the employment will increase to approximately 18,000. Most of the population is concentrated in the southern half of the city, with most of the growth expected to occur in the area south of Boeckman Road and east of the freeway. The employment centers are concentrated around the freeway interchanges. Most of the employment growth over the next twenty years is expected to occur north of Boeckman Road along the I-5 Corridor. Table 2 below summarizes the growth in population and employment by major land use categories over the next 20 years. Table A-2 in the Appendix summarizes the forecast by traffic analysis zone.

The population estimates and forecasts were developed from data provided by the City and Metro. The forecasts of employment were based upon the amount of vacant land, its zoning and common employment densities per acre of land. However, a build-out percentage was applied to various industrial areas by the year 2010. The Appendix contains a technical memorandum detailing the forecast assumptions.

TABLE 2
POPULATION AND EMPLOYMENT FORECASTS

Land Use	1990	2010
Residential Dwelling Units	3,358	7,461
Retail/Commercial Employment	1,185	1,700
Office/Government Employment	1,113	1,479
Distribution/Warehouse	1,178	2,468
Flex Space	442	2,295
Industrial Employment	2,011	8,686
Other Employment	271	704
Total Population	7,283	15,528
Total Employment	6,200	18,000

TRIP GENERATION

Vehicle trip generation estimates were made for each traffic analysis zone in the planning area on the basis of the type and quantity of residential dwellings and employees. Trip generation rates applied to these land uses were derived from measurements of residential traffic in Wilsonville, from other similar cities in the Portland metropolitan area, and from the Institute of Transportation Engineers report, "*Trip Generation*," (Fourth Edition, 1987). These rates are summarized on Table 3.

These trip rates were refined into four trip origin purposes and four trip destination purposes for the PM peak hour. These four purposes are as follows:

- Home based work - Trips between home and work
- Home based shopping - Trips between home and shopping
- Home based other - Trips between home and other uses
- Non-home based - Trips between other land uses except the home

The amount of traffic generated at each traffic analysis zone was estimated for the PM peak hour by multiplying the number of dwellings or employees by the appropriate origin and destination trip generation rate by trip purpose.

TRIP DISTRIBUTION

The vehicle trips generated at each zone were estimated in terms of trip origins and trip destinations during the PM peak hour. The trip origins were then distributed to all of the trip destinations within the planning area and to the roads leading out of the study area. (Trip origins were also calculated for the roads leading into the area.) The trip distribution was based on a conventional gravity model which, utilizing a micro-computer, distributes trips from one zone to all other zones in direct relationship to the size of the attractions or destinations in each zone and inversely related to the travel time between zones. For example, if two destination zones of equal size were located 10 and 15 minutes from the origin zone, more of the trips from the origin zone would be distributed to the closer destination zone. Likewise, if two destination zones were located equal driving times from the origin zone, more trips would be distributed to the larger destination zone. This procedure was followed for trips originating in all 50 zones and the roads leading into the study area.

Table 3
Trip Generation Rates
Wilsonville Transportation Planning Model

Land Use Number		1	2	3	4	5	6	7	8	9	10
Land Use		Single-Family DU	Multi-Family DU	Retail/ Comm.	Industrial	Dist./ Ware-house	Flex. Zoning	Hotel	Govt. Office	Office	Utility
Units		Trip-s/DU	Trip-s/DU	Trips/ Emp.	Trips/ Emp.	Trips/ Emp.	Trips/ Emp.	Trips/ Emp.	Trips/ Emp.	Trips/ Emp.	Trips/ Emp.
Home-Based Work	Origin	0.03	0.02	0.00	0.37	0.63	0.14	0.00	1.16	0.42	0.30
	Destination	0.38	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Home-Based Shop-ping	Origin	0.10	0.07	1.64	0.00	0.00	0.00	0.22	0.00	0.00	0.00
	Destination	0.19	0.13	0.65	0.00	0.00	0.00	0.12	0.00	0.00	0.00
Home-Based Other	Origin	0.16	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Destination	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Home-Based	Origin	0.07	0.05	0.40	0.09	0.15	0.03	0.05	0.25	0.09	0.07
	Destination	0.08	0.06	1.30	0.08	0.48	0.22	0.24	0.50	0.08	0.10
Total Rates	Origin	0.36	0.25	2.04	0.46	0.78	0.17	0.27	1.41	0.51	0.37
	Destination	0.73	0.52	1.95	0.08	0.48	0.22	0.36	0.50	0.08	0.10

VEHICLE TRIP ASSIGNMENT

The assignments of traffic to the street and highway system were made on the basis of trip generation and distribution from all origin zones and streets leading into the planning area to all destination zones and streets leading out of the area. The assignment procedure utilized a capacity restraint microcomputer model which assigns traffic in increments to the street system and then compares each incremental assignment with the street capacity to determine the fastest route. Utilizing this procedure, the traffic could be assigned to several routes between the origin and destination zones, depending on the congestion on each route. As one route becomes congested, the travel time increases, thus possibly making a previously slower route faster. The result of this assignment procedure is to simulate "real world" motorists' choices on a travel route.

This entire process of estimating trip generation and distributing and assigning the vehicular trips was made for 1990 conditions and compared with actual measurements on the roadway system prior to assigning the year 2010 traffic. The modeling procedure was modified in iterations until the assigned volumes were within approximately ten percent of the actual counts. It is theorized that if the modeling process duplicates the current conditions reasonably well, the same process should then provide a reasonably good estimate of future conditions.

The year 2010 traffic was first assigned to the existing major street to determine which portions of the system will be deficient within the next twenty years. The following section on Alternative Street System Modifications compares the forecast traffic volumes on the existing system and three different build alternatives.

ALTERNATIVE STREET SYSTEM ANALYSIS

Three alternatives were developed and examined to meet the City's goals and the growth in traffic. These were reviewed with the Transportation Advisory Commission throughout the course of this analysis so it could come to a conclusion on which alternative to detail in the Master Plan.

The purpose of the analysis was to compare year 2010 PM peak hour forecast traffic volumes and critical roadway sections based on four alternatives. These alternatives included:

- No Build - Assumes no changes to the existing street system except committed interchange improvements
- Alternative 1 - the street system as designated on the city's current comprehensive plan
- Alternative 2 - a probable new street system, with additional north-south routes and a new east-west route at Wiedemann Road.
- Alternative 3 - a combination of the probable new street system that includes some segments from the current comprehensive plan, and vacates Boones Ferry Road between the Stafford Interchange and Boeckman Overpass

Each of the alternatives assume improvements at the Wilsonville and Stafford interchanges. A five-lane improvement to Boones Ferry Road is assumed north of the Stafford interchange as part of the Regional Transportation Plan.

NO BUILD ALTERNATIVE - EXISTING STREET SYSTEM

Figure 10 shows projected year 2010 PM peak hour traffic volumes. Compared to 1990 traffic counts, the forecast volumes are doubled and in some cases tripled. For example, Boones Ferry Road north of the Boeckman Road overpass increases from 350 to 700 southbound trips, and Parkway Avenue south of Boeckman Road increases from 225 to 790 southbound trips. Traffic increases on Boeckman Road east of Parkway from 250 trips to 1600 trips in both directions.

Most of the Wilsonville street system has an hourly capacity of 700 vehicles per lane. Streets carrying traffic volumes of 700 or more peak hour directional trips are considered to have a volume/capacity ratio of 1.0, or level of service (LOS) F. Figure 11 shows critical roadway sections on the existing street system. Streets that have forecast peak hour volumes greater than ninety percent of capacity (LOS E or F) include:

- Boones Ferry Road - Elligsen to Wilsonville Road
- Parkway Avenue - Wiedemann Road to Town Center Loop
- Parkway Center Drive south of Elligsen Road
- Boeckman Road - Boones Ferry Road to Canyon Creek Road
- Elligsen Road west of Parkway Center Loop
- Ridder Road west of Boones Ferry Road
- Wilsonville Road from Brown Road to I-5
- Miley Road from I-5 to French Prairie Road

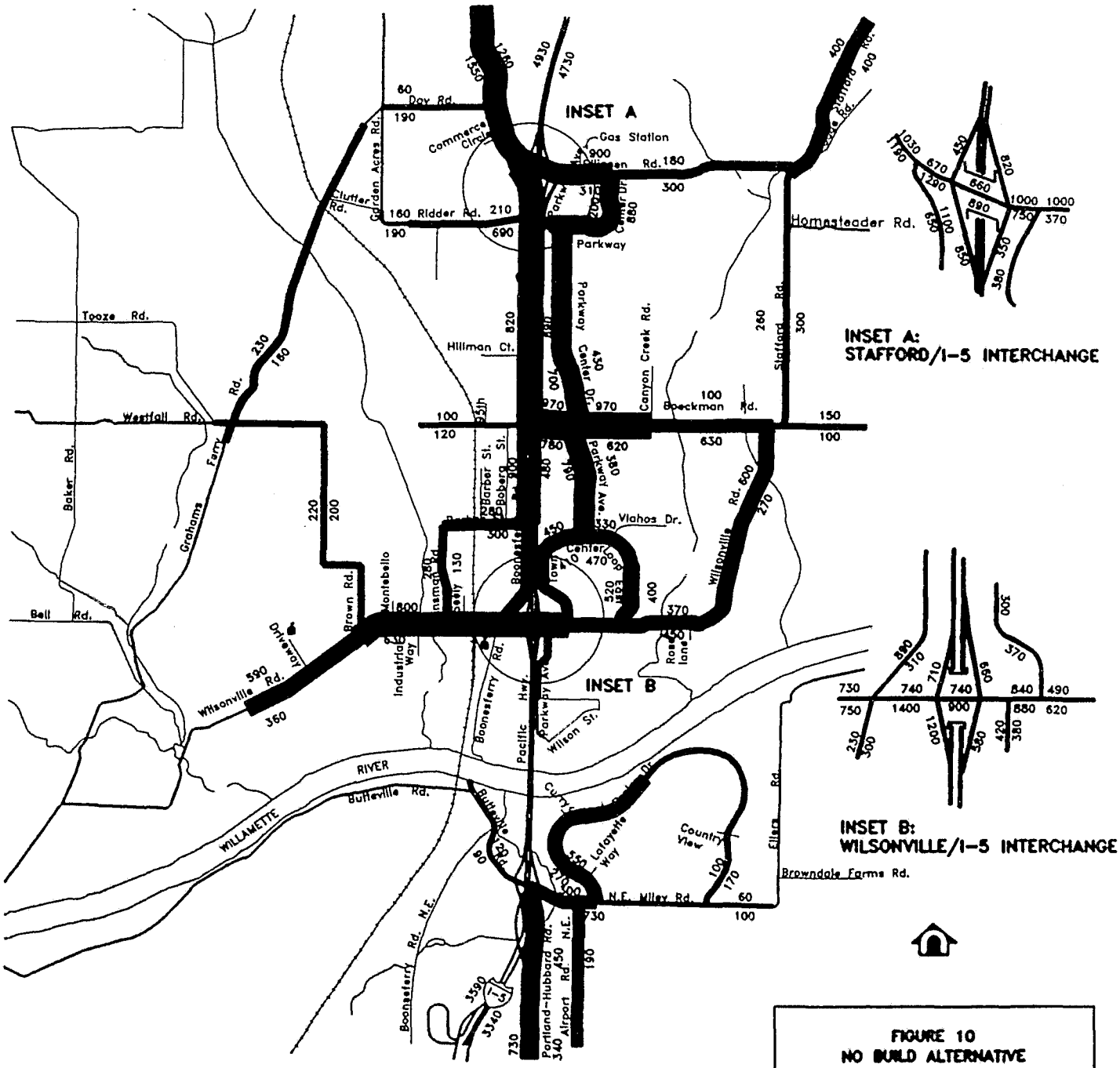
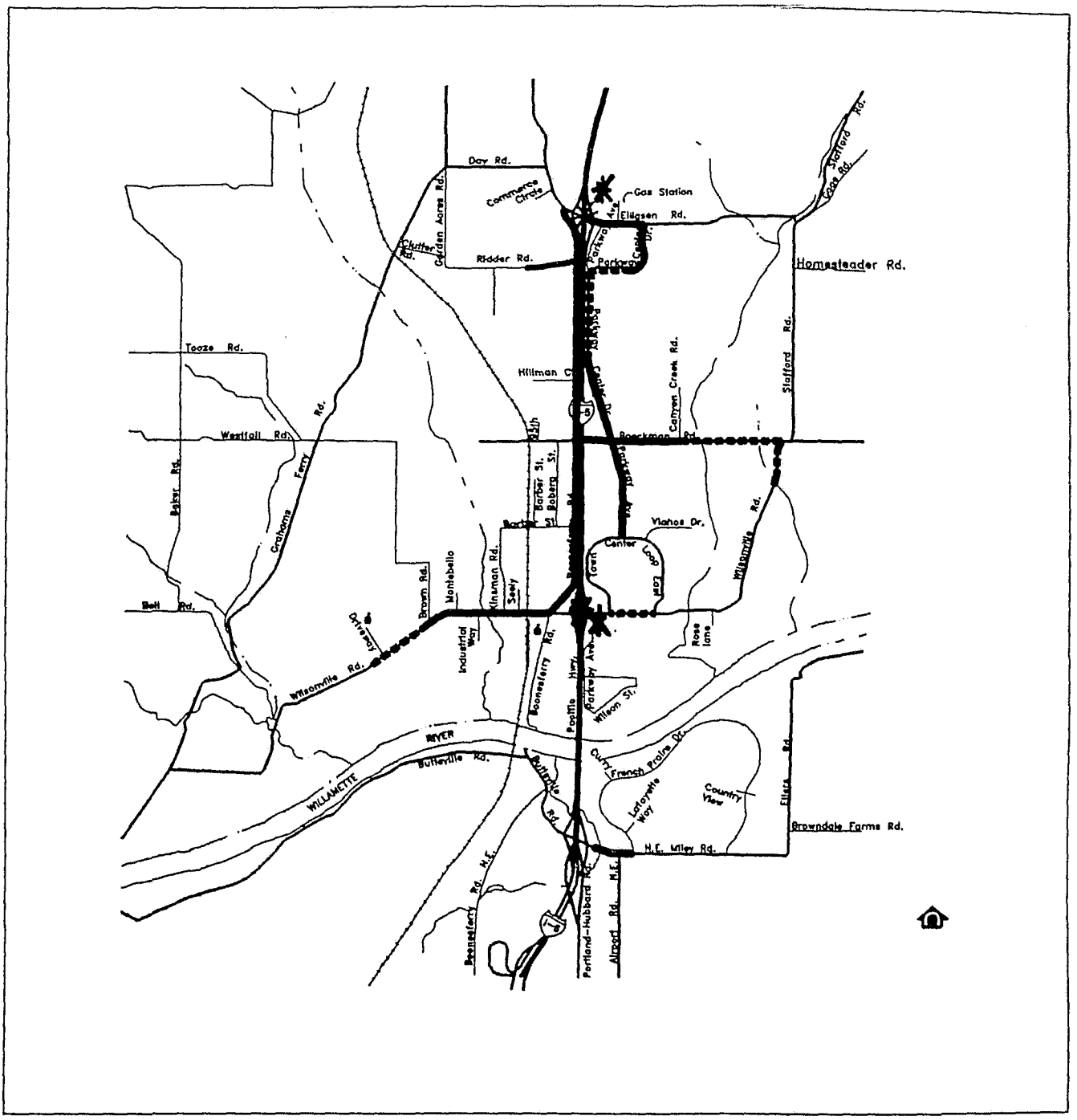


FIGURE 10
NO BUILD ALTERNATIVE
YEAR 2010 FORECAST ON
EXISTING ROAD NETWORK

WILSONVILLE TRANSPORTATION PLAN



LEGEND

- L.O.S. D
- L.O.S. E OR F
- COMMITTED ODOT INTERCHANGE IMPROVEMENTS

FIGURE 11

EXISTING STREET SYSTEM
CRITICAL ROADWAY SECTIONS
2010 P.M. PEAK HOUR

WILSONVILLE TRANSPORTATION PLAN

Roads that are within eighty to ninety percent of capacity (LOS D) are considered acceptable, but are beginning to approach capacity. On the existing streets system, street sections at LOS D include Boeckman Road from Canyon Creek to Stafford/Wilsonville Roads, Wilsonville Road between Town Center Loop and approaching Boeckman Road, and Parkway Avenue from Wiedemann to Parkway Center Drive.

ALTERNATIVE 1 - COMPREHENSIVE PLAN STREET SYSTEM

The street system in the city's comprehensive plan provides for a discontinuous series of north-south routes away from I-5, a parallel street south of Wilsonville Road from Brown Road to Boones Ferry Road. Figure 12 shows that traffic volumes are more balanced east and west of the freeway. Approximately 350 to 500 trips shift to Canyon Creek Road to the east, and 200 to 450 trips shift to Kinsman Road to the west. Traffic on the Boeckman overpass remains heavy, with 1680 PM peak hour trips in both directions.

Figure 13 shows that level of service has improved east of the freeway and on Wilsonville Road west of the freeway. Boones Ferry Road continues operate at LOS E or F at the interchanges and overpass, and the Boeckman Road overpass would also be over capacity. Also the re-balancing of trips to the east puts additional pressure on Wilsonville Road between the Town Center Loop roads, decreasing LOS to E or F.

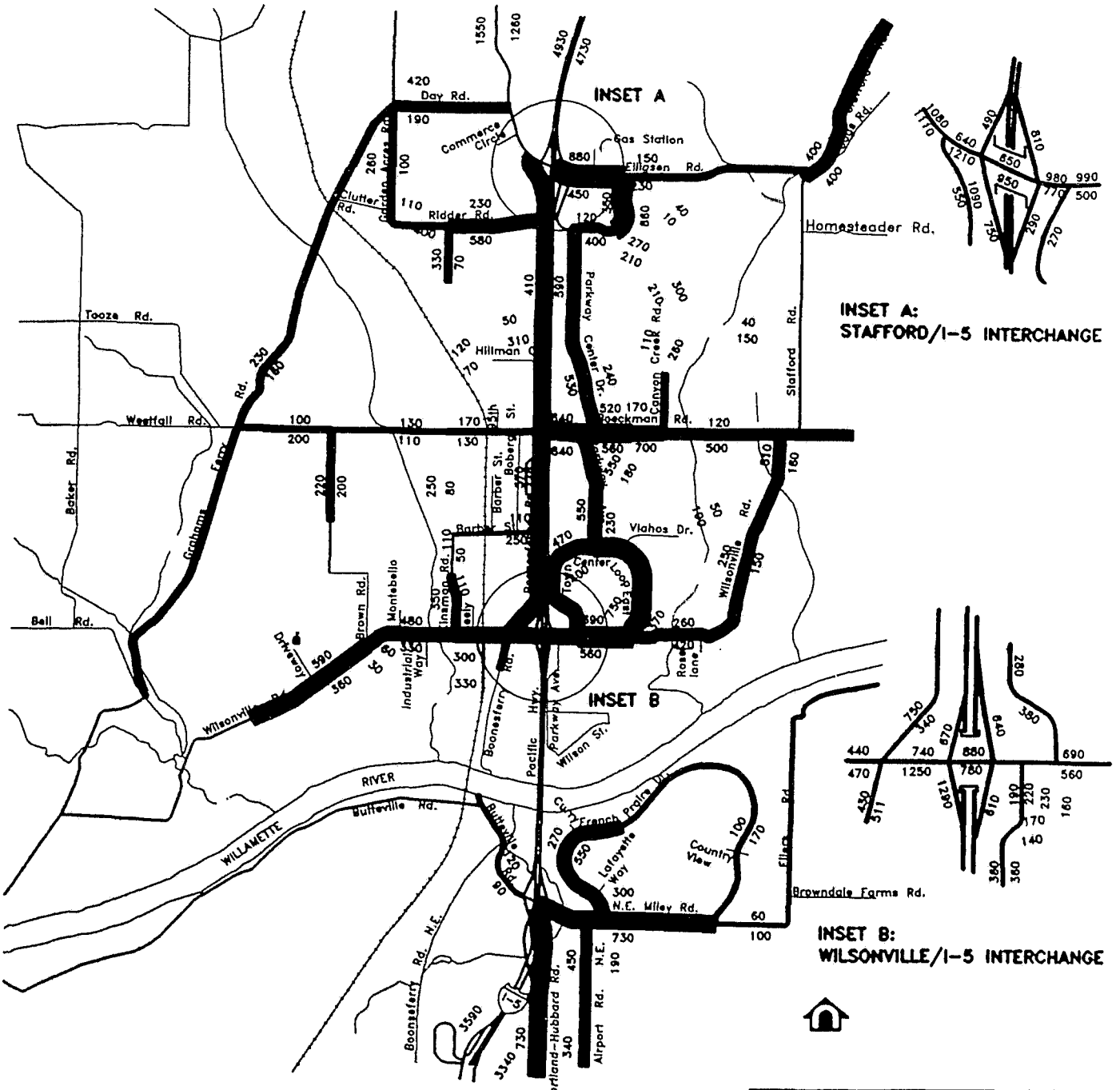
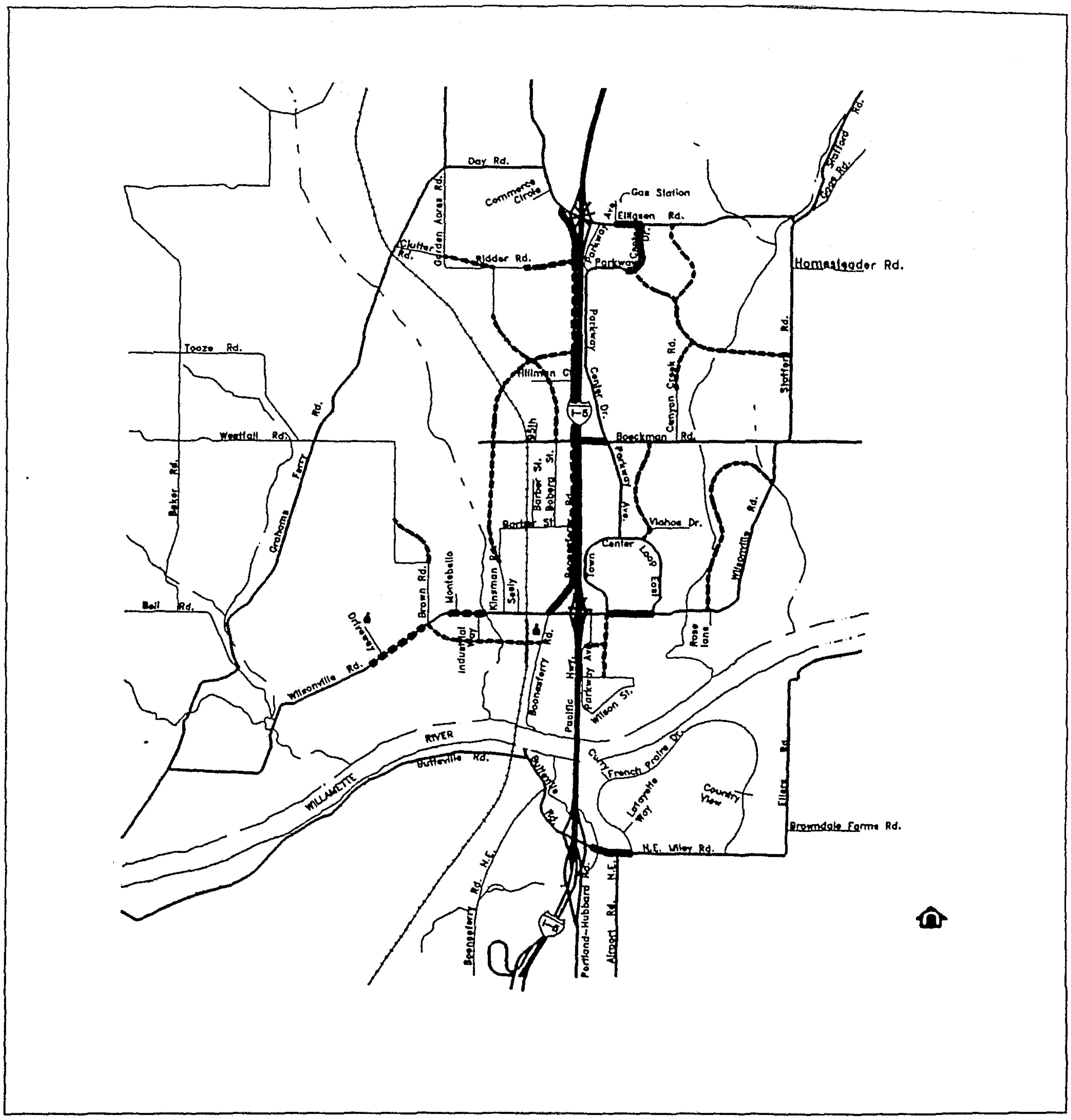


FIGURE 12
ALTERNATIVE 1
EXISTING COMPREHENSIVE PLAN

YEAR 2010 P.M. PEAK HOUR VOLUMES
WILSONVILLE TRANSPORTATION PLAN



LEGEND

■■■■■■■■■■■ L.O.S. D

▬▬▬▬▬▬ L.O.S. E OR F

* COMMITTED ODOT INTERCHANGE IMPROVEMENTS

FIGURE 13

EXISTING COMPREHENSIVE PLAN CRITICAL ROADWAY SECTIONS 2010 P.M. PEAK HOUR

WILSONVILLE TRANSPORTATION PLAN

ALTERNATIVE 2 - PROBABLE NEW STREET SYSTEM

Alternative 2 is a variation of the city's comprehensive plan street system. The probable new street system alternative provides more direct north-south routes and tests an additional east-west overpass at Wiedemann Road with intersections at 95th Avenue, Boones Ferry Road, Parkway Avenue and Canyon Creek Road. Figure 14 shows forecast PM peak hour volumes. The Kinsman Road extension north to Ridder Road captures a larger share of westside trips, from 300 to 500 in the southbound direction. The new overpass at Wiedemann Road shows 1260 trips in both directions, compared to 880 trips on the Boeckman Road overpass. However, the new overpass shifts higher volumes of traffic to Parkway.

Figure 15 shows remaining critical roadway sections with Alternative 2 system improvements. Parkway is at LOS E to F from the Wiedemann overpass to Town Center Loop. Level of service on Wilsonville Road west of the freeway is similar to the existing system, LOS E to F east of Brown. A northerly extension of 95th Avenue improves traffic circulation west of the Stafford interchange.

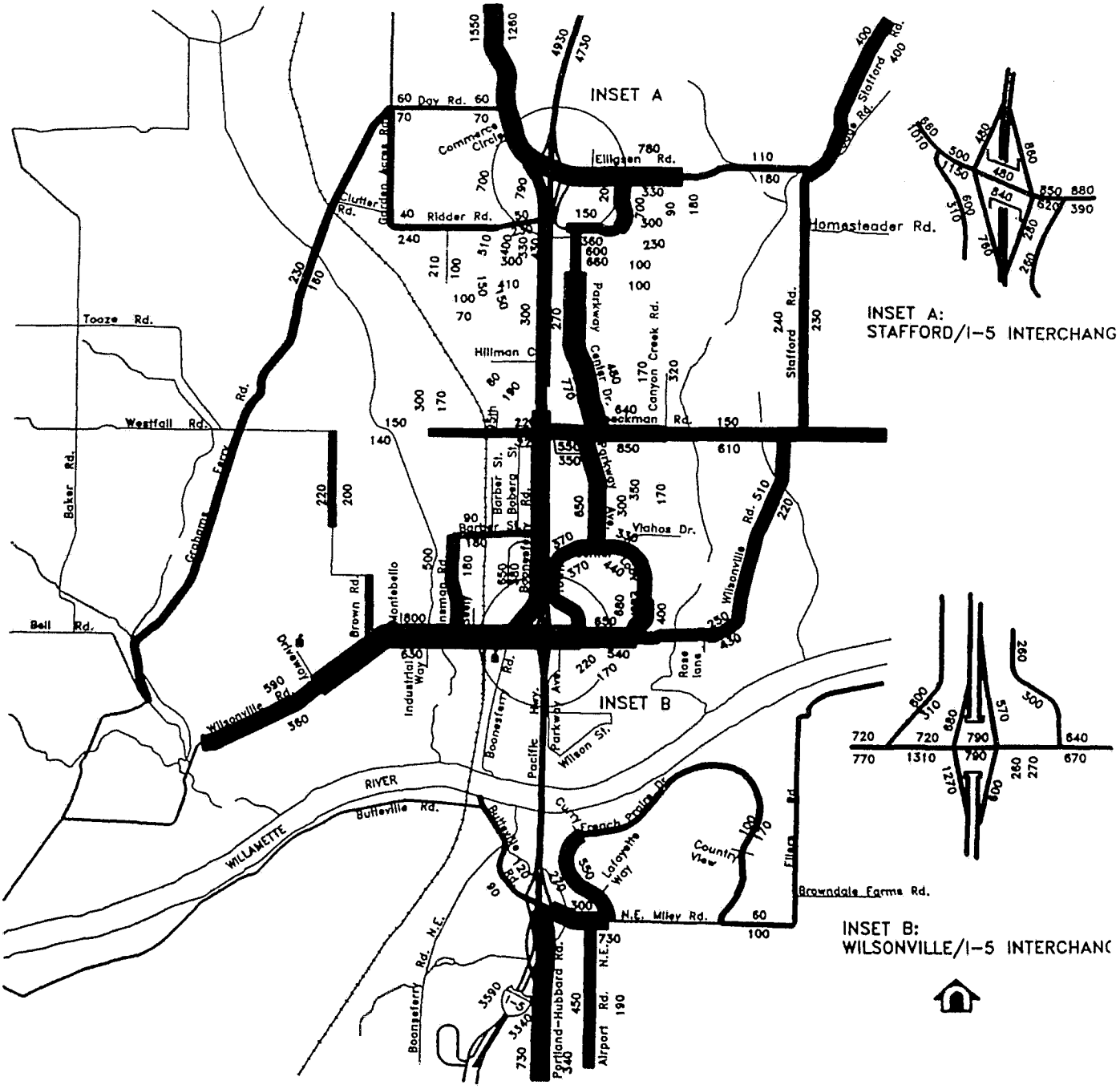
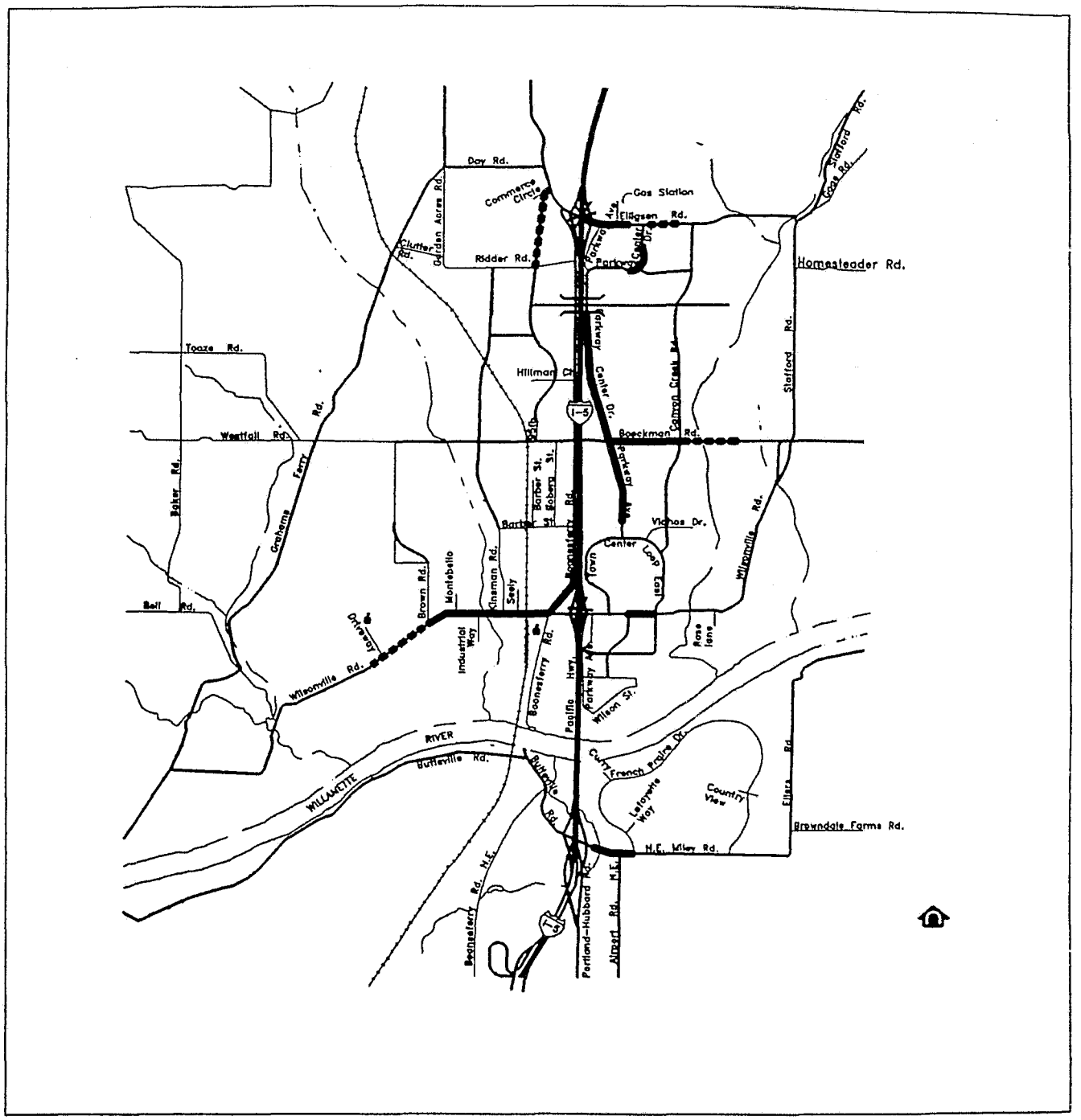


FIGURE 14
ALTERNATIVE 2
PROBABLE NEW STREETS

YEAR 2010 P.M. PEAK HOUR VOLUMES
WILSONVILLE TRANSPORTATION PLAN



LEGEND

L.O.S. D

L.O.S. E OR F

* COMMITTED ODOT INTERCHANGE IMPROVEMENTS

FIGURE 15

PROBABLE NEW STREETS
CRITICAL ROADWAY SECTIONS
2010 P.M. PEAK HOUR

WILSONVILLE TRANSPORTATION PLAN

ALTERNATIVE 3 - COMPREHENSIVE PLAN/NEW STREET COMBINATION

Based on the analysis of three alternative systems, the best features of Alternatives 1 and 2 can be combined in Alternative 3. These improvements include:

- North-south extensions of Kinsman Road, 95th Avenue and Canyon Creek Road as proposed in Alternative 2
- A parallel route south of Wilsonville Road between Kinsman and Boones Ferry as proposed in Alternative 1
- Improved traffic circulation south of the Town Center Loop as the area develops, and as proposed in both build alternatives

In addition, Alternative 3 vacates Boones Ferry Road between the Stafford Interchange and Boeckman Overpass, and limits access at the Wiedemann Overpass to 95th Avenue to the west of the freeway and Canyon Creek Road to the east of the freeway. Figure 16 shows p.m. peak hour volumes, and Figure 17 shows critical roadway sections. There is an improved balance of north/south traffic on the new extensions of 95th Avenue, Kinsman Road and Canyon Creek Road. Remaining road sections with level of service E or F include sections of Elligsen Road and Parkway Center Drive east of the Stafford Interchange, the Boeckman Overpass and Wilsonville Road near Town Center Loop East.

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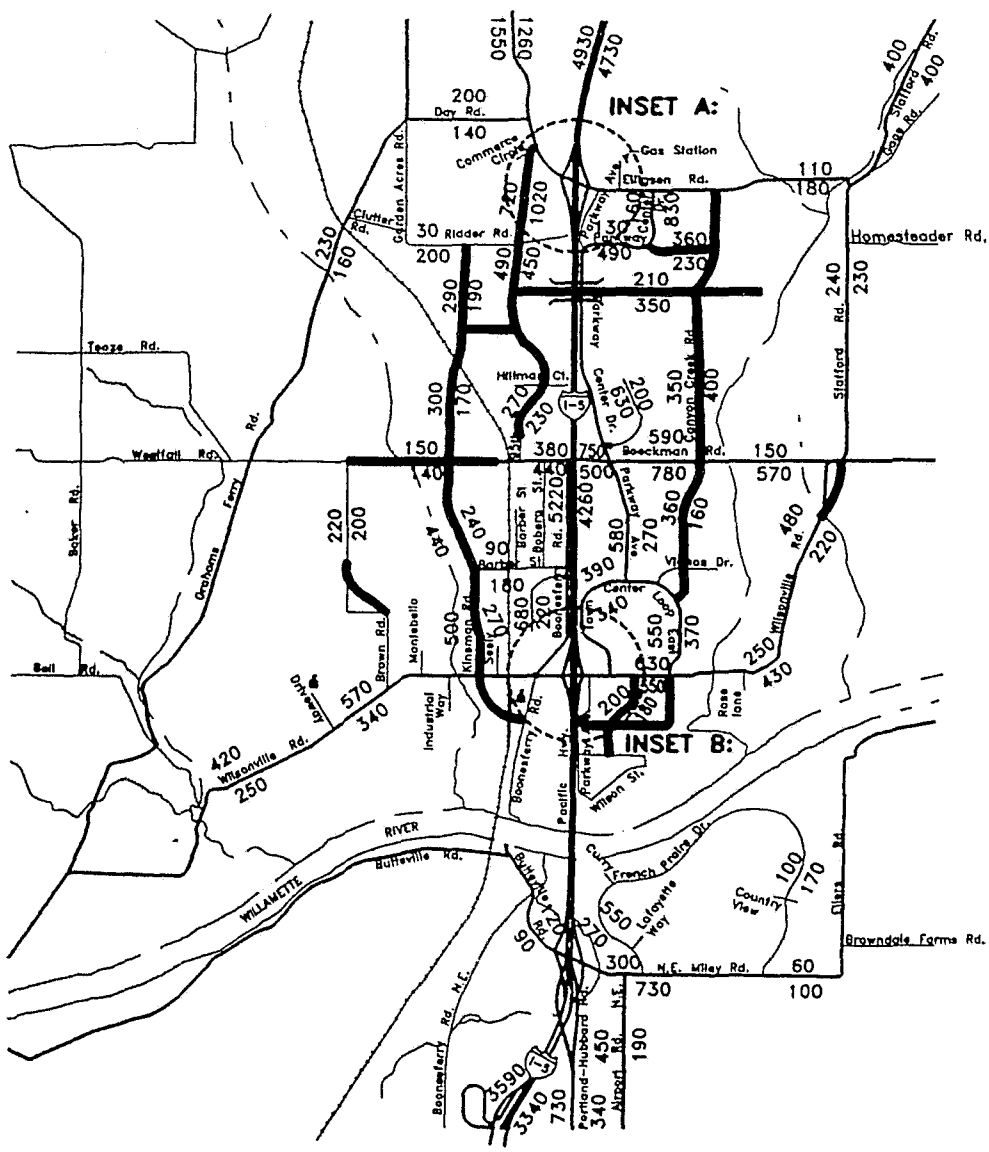
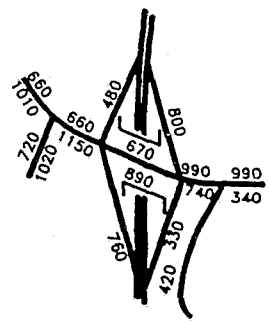
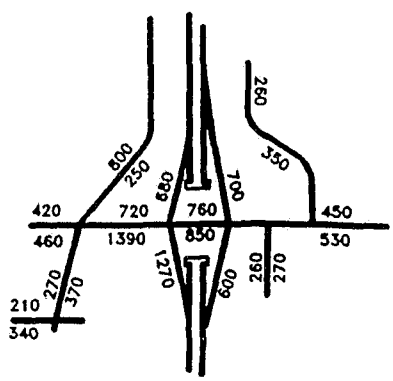




INSET A:
STAFFORD/I-5 INTERCHANGE



INSET B:
WILSONVILLE/I-5 INTERCHAN

LEGEND

570 / 340 — P.M. PEAK HOUR DIRECTIONAL TRAFFIC VOLUMES

PROPOSED ROAD SEGMENTS

FIGURE 16

PROBABLE STREETS/ PLAN COMBINATION YEAR 2010 P.M. PEAK HOUR VOLUMES

WILSONVILLE TRANSPORTATION PLAN

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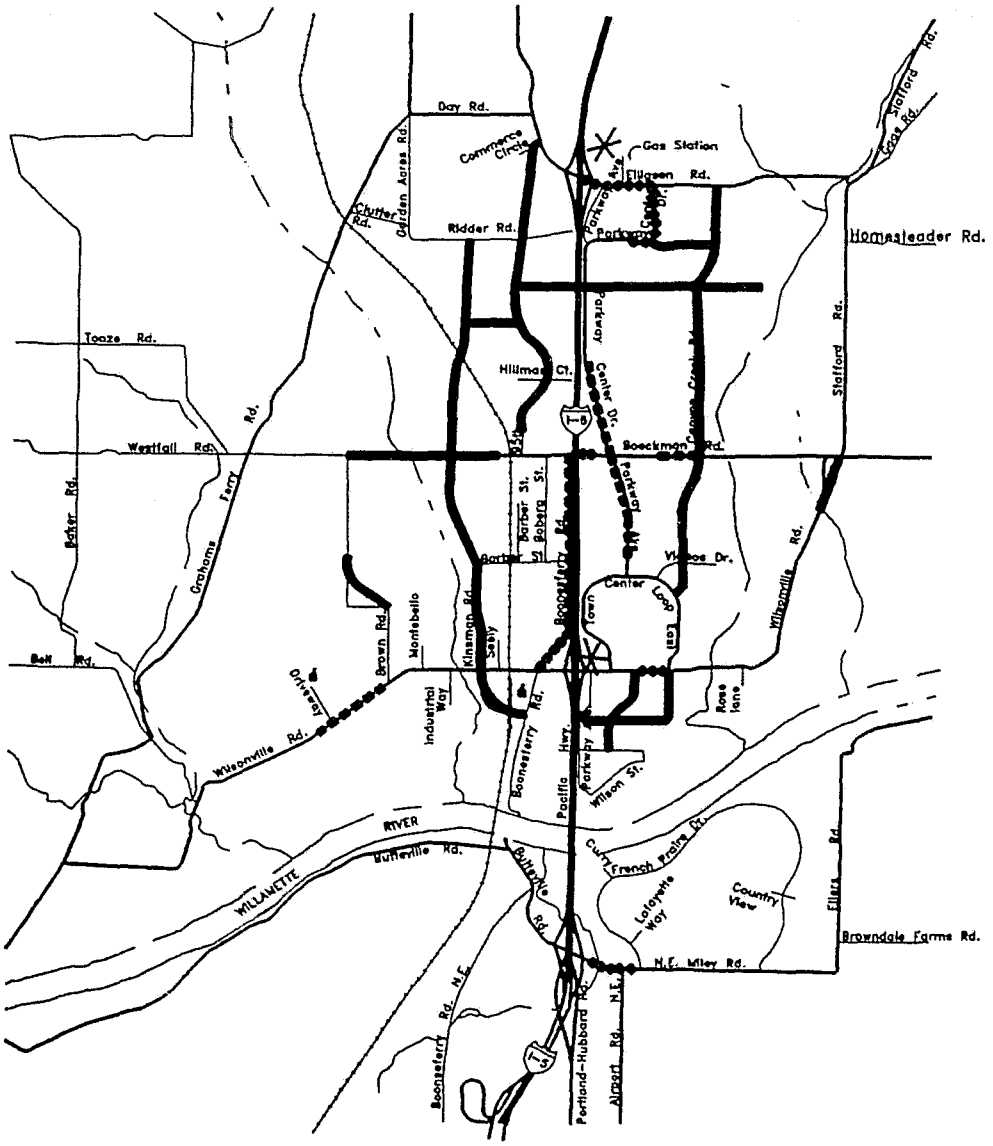


LEGEND

- PROBABLE NEW STREET
- L.O.S. D
- L.O.S. E OR F
- * COMMITTED ODOT INTERCHANGE IMPROVEMENTS

FIGURE 17

PROBABLE STREETS/
PLAN COMBINATION
CRITICAL ROAD SECTIONS
YEAR 2010 P.M. PEAK HOUR

WILSONVILLE TRANSPORTATION PLAN

COMPARISON OF ALTERNATIVES

With the existing system there continue to be congestion problems near the freeway interchanges, the city's major north-south roads (Parkway Avenue and Boones Ferry Road) are at or over capacity, and the city's central east-west road (Boeckman Road) is near or over capacity at the freeway overpass and to the east.

Alternative 1 provides some improvement east of the freeway, and improved circulation west of the Wilsonville interchange. Boones Ferry Road continues to be a problem, and there is a continuing need for additional traffic circulation at the Stafford interchange.

Alternative 2 solves some congestion problems on the west side, but increases congestion on Parkway on the east side. There is a need for additional circulation improvements near the Stafford and Wilsonville interchanges. The Wiedemann Road overpass helps to relieve traffic on the Boeckman overpass and on Boones Ferry Road.

In summary, the existing street system is not capable of handling future traffic without widening existing arterial streets and constructing new north-south routes. Separately, the comprehensive plan street system and the probable new street system solve some of the future capacity problems. Alternative 3 is a proposed street system that incorporates the best features of Alternatives 1 and 2, providing additional circulation at the freeway interchanges, and doing a superior job of accommodating the city's planned growth through the next twenty years.

CONCLUSION

It was concluded by the Transportation Task Force that Alternative 3 be detailed for the Master Plan because it will provide a more balanced transportation system.

COST ESTIMATES

The cost estimates for new road projects that are components of Alternative 3 were prepared on the basis of 1990 costs. These costs include design, construction, right-of-way acquisition, and contingencies. The costs total approximately $28 million and are summarized in Table 4.

In addition to new roads, existing arterials must be widened to urban standards during the next twenty years to accommodate growth within the planning area. Table 5 shows cost estimates for improving the existing road system.

TABLE 4

COST ESTIMATES OF PROPOSED NEW ROAD

	PROJECT	Construction Cost	ROW Cost	Total Cost
1.	Canyon Creek Rd. N/S Extension	$4,486,000	$693,000	$5,179,000
2.	95th Avenue North Extension	3,278,000	506,000	3,784,000
3.	Kinsman Road North Extension	3,494,000	539,000	4,033,000
4.	Brown Road Realignment	715,000	108,000	823,000
5.	Wilsonville/Stafford Realign.	647,000	100,000	747,000
6.	Parkway Center Dr. East Extension	690,000	107,000	797,000
7.	Wiedemann Road E/W Extension and Overpass	6,876,000	193,000	7,069,000
8.	E/W Collector 95th - Kinsman	518,000	80,000	598,000
9.	E/W Collector S of W'ville Rd.	820,000	126,000	946,000
10.	Boeckman Road West Extension	1,467,000	226,000	1,693,000
11.	Town Ctr Loop E. S/W Extension	1,180,000	178,000	1,358,000
12.	Town Ctr Loop W. South Extension	786,000	119,000	905,000
	TOTAL:	$24,957,000	$2,975,000	$27,932,000

TABLE 5

COST ESTIMATES OF IMPROVEMENTS TO EXISTING ROAD SYSTEM

	PROJECT	TOTAL COST
A.	Parkway Avenue Parkway Center Dr. to Town Center Loop Widen to 3 Lanes	$ 3,210,000
B.	Boones Ferry Road Boeckman to Wilsonville Road Widen to 3 Lanes	$ 2,153,000
C.	Elligsen Road Parkway Center Dr. to Parkway Ave. Widen to 5 Lanes	$ 668,000
D.	Wilsonville Road Brown Road to Valleyview Drive Widen to 3 Lanes	$ 2,466,000
E.	Wilsonville Road * Brown Road east to I-5 and from Boeckman/65th realignment west to I-5 Improve to Urban Standard	$ 2,947,000
F.	Boeckman Road * Canyon Creek Rd. to 65th/Wilsonville Improve to Urban Standard	$ 1,553,000
	TOTAL:	$12,997,000

* Source of project cost estimate is City of Wilsonville Urban Renewal Ordinance, Plan, and Report

THE MASTER PLAN

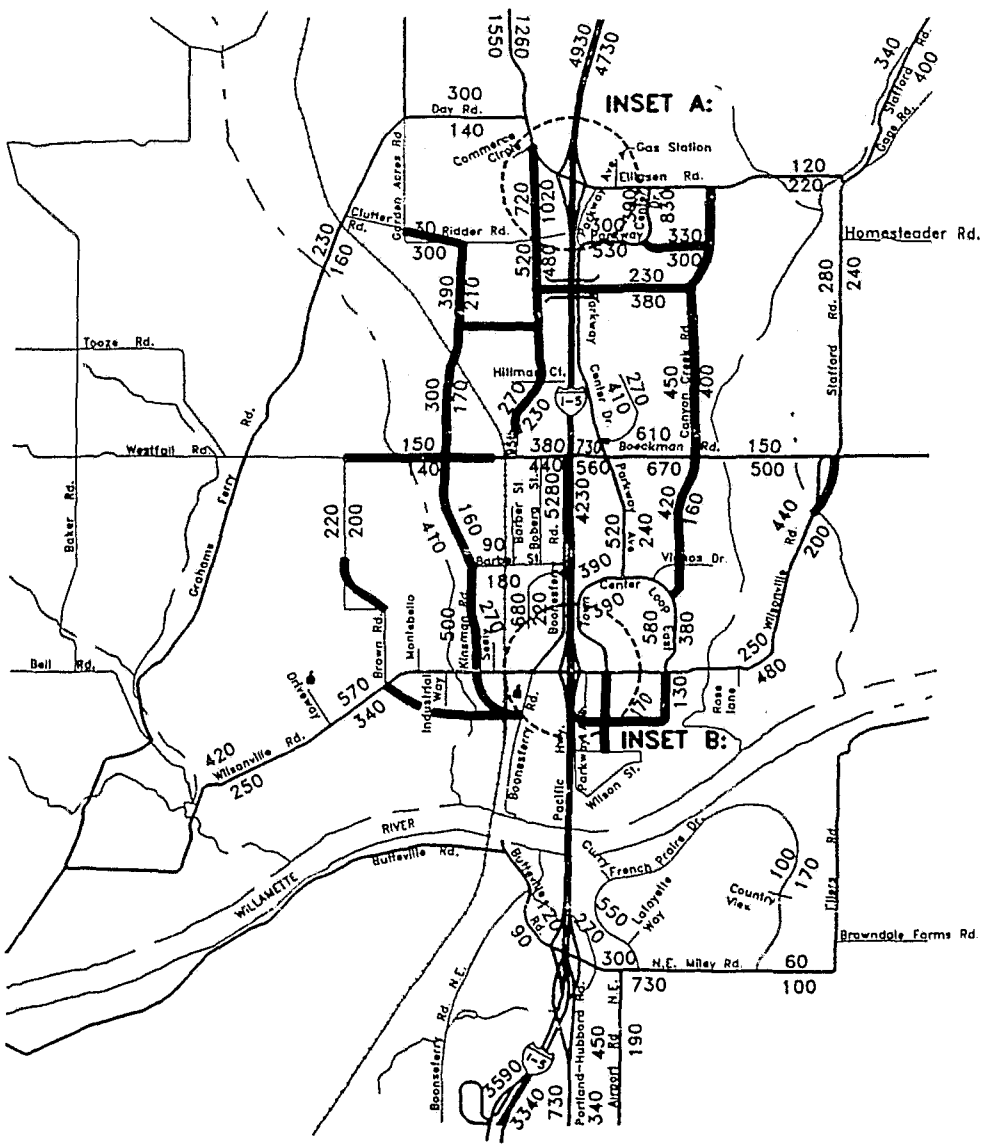
The Transportation Master Plan for phase one of the project includes the functional street classification and street width standards. It also includes the public transportation, bikeway, demand management, rail and air services elements. The phase two report will include street improvements, probable location of traffic signals, a capital improvement program and methods of financing.

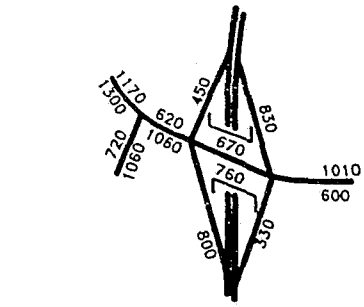
The year 2010 PM peak-hour forecast traffic on the Transportation Master Plan System is shown on Figure 18.

STREET CLASSIFICATION STANDARDS

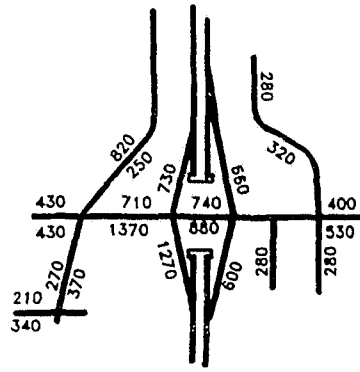
Street standards are a design form which relate to roadway function and operational characteristics such as traffic volume, operating speed, safety and capacity. Street standards are necessary to provide a community with roadways which have been determined through extensive research and experience to be relatively safe, aesthetic and easy to administer when new roadways are planned or constructed. Experience has indicated that the design of a residential street and the subdivision in which it is located will affect the traffic operation, safety and livability on such a street.

Generally, when the average weekday traffic volume exceeds approximately 1,200 vehicles per day on a local residential street, the residents on that street became aware of the traffic and complain to the public works department about increasing traffic, noise and potential accidents. The traffic volume on a local residential street generally averages approximately 400 to 500 vehicles per day. Accident analyses on local residential streets have indicated that the optimum width, curb-to-curb is 32 feet. It has also been observed that when traffic volumes reach approximately 5,000 vehicles per day on residential streets, accidents oriented to driveways become identifiable by location.





INSET A:
STAFFORD/I-5 INTERCHANGE



INSET B:
WILSONVILLE/I-5 INTERCHAN

LEGEND

570 / 340 — P.M. PEAK HOUR DIRECTIONAL TRAFFIC VOLUMES

PROPOSED ROAD SEGMENTS

FIGURE 18

TRANSPORTATION MASTER PLAN
YEAR 2010 PM
PEAK HOUR ASSIGNMENT

WILSONVILLE TRANSPORTATION PLAN

Sidewalks located adjacent to the curb generally contain mailboxes, street light standards and sign poles, thus reducing the effective width of the walk. To maintain a safe and convenient walkway for at least two adults, it is recommended that a five-foot sidewalk be utilized in residential areas.

Therefore, these general observations and analyses have been utilized in the development of the street standards. The development of the street standards have also utilized policies and publications of the profession.[2]

Revisions to the City's street construction standards are recommended in this Transportation Plan Update. These revisions will make the City's standards consistent with Washington County's newer standards. The County's Uniform Road Improvement Design Standards were adopted in 1986, and Wilsonville adopted the same functional classification street standards in 1988. The revised standards are also in greater conformance with generally acceptable criteria used in the Portland metropolitan region Figure 19 shows the recommended street width standards by functional classification. A more detailed summary of street standards cana be found in Table 1 of the City's Road Improvement Design Standards manual.

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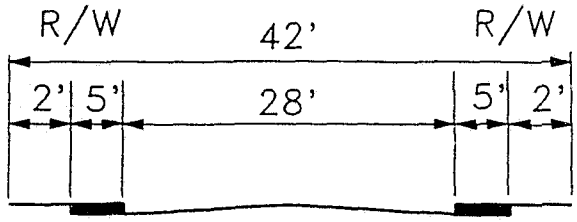
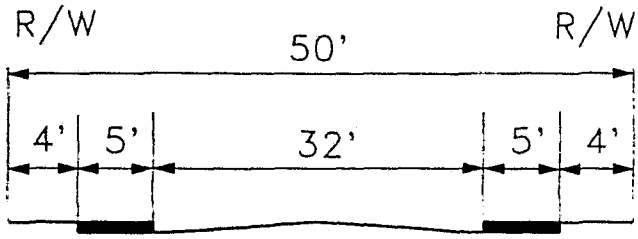
[2]Recommended Guidelines for Subdivision Streets, Institute of Transportation Engineers.

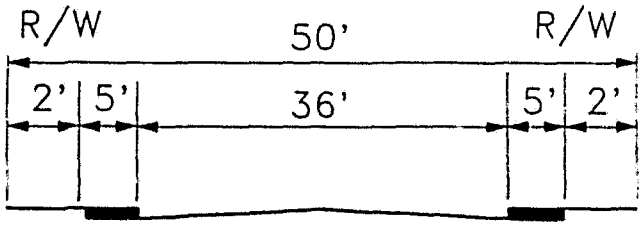
Residential Streets, Objectives, Principles and Design Considerations, the Urban Land Institute, American Society of Civil Engineers and the National Association of Home Builders.



A - CUL - DE - SAC

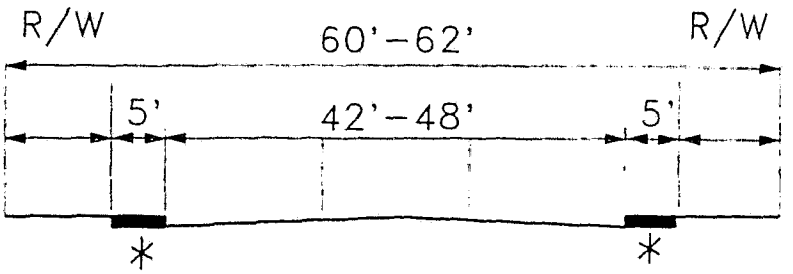


B - LOCAL RESIDENTIAL



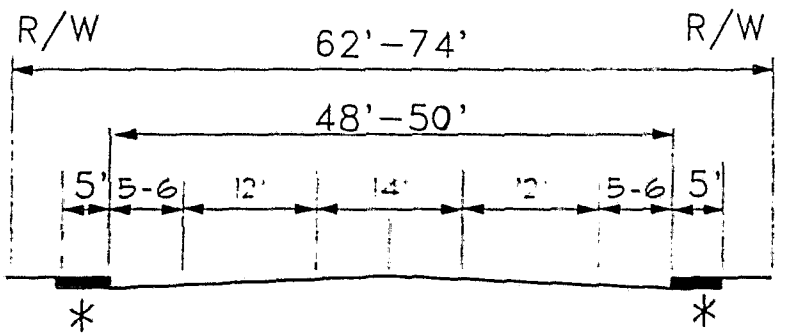
C - MINOR COLLECTOR

FIGURE 19
STREET STANDARDS



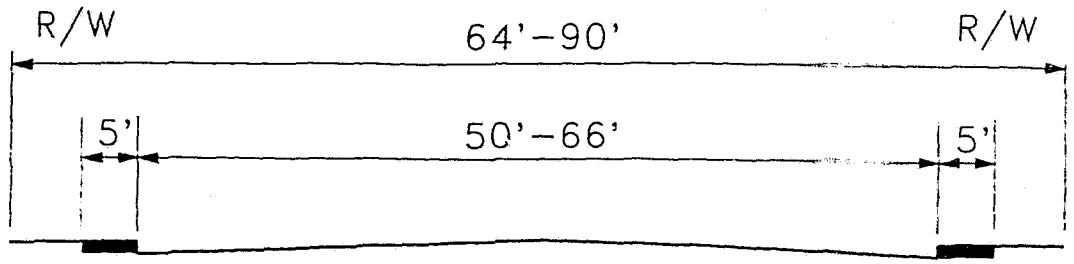
D - MAJOR COLLECTOR
CI COMMERCIAL / INDUSTRIAL

* 8 FOOT SIDEWALK ADJACENT TO CURB IN COMMERCIAL AREAS



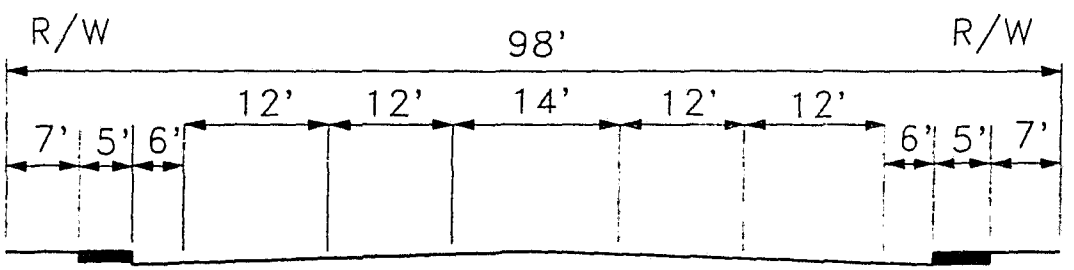
D-1 MAJOR COLLECTOR WITH BIKEWAYS
CI-1 COMMERCIAL INDUSTRIAL W/BIKEWAYS

FIGURE 19
STREET STANDARDS



E - MINOR ARTERIAL

* 8 FOOT SIDEWALK ADJACENT TO CURB IN COMMERCIAL AREAS



F - MAJOR ARTERIAL WITH BIKEWAYS

* 8 FOOT SIDEWALK ADJACENT TO CURB IN COMMERCIAL AREAS

FIGURE 19
STREET STANDARDS

Functional Street Classifications

Cul-de-Sac Streets

Cul-de-Sac Streets are intended to serve the abutting land in residential areas. These streets are to be short in length serving a maximum of 20 single family houses. Because the streets are short and the traffic volumes relatively low, the street width is narrow--allowing for the passage of two lanes of traffic when no vehicles are parked at the curb or one lane of traffic when vehicles are parked at the curb. The street width is 28 feet, curb face-to-curb face within a 42-foot right-of-way, as shown in Section A on Figure 19. On each side of the roadway, a five-foot-wide sidewalk should be located adjacent to the curb. The City should establish a policy of not establishing the use of cul-de-sacs where future connections to other streets are possible, to encourage local street circulation capability.

Local Residential Streets

Local residential streets are intended to serve the abutting land without carrying through traffic. These streets should be designed to carry less than 1,200 vehicles per day. If the forecast volume exceeds 1,200 vehicles per day, as determined in the design stage, the street system configuration should either be changed to reduce the forecast volume or the street should be designed as a collector.

The local residential street would generally extend for only a few blocks to maintain a volume of less than 1,200 vehicles per day. The traffic volume can be estimated by utilizing the vehicular trip rates, the area tributary to each local residential street and the number and type of dwellings in that area.

It has been found through research of accidents on residential streets that a 32-foot roadway is the optimum width for a local residential street because it generally experiences the least number of accidents than similar streets of other widths.

Therefore, the standard for a local residential street is a 32-foot roadway, curb face to curb face within a 46- to 50-foot wide right-of-way, as shown on Figure 19, Section B. Five-foot wide sidewalks are to be provided on each side of the roadway and be located adjacent to the curb.

The 32-foot cross-section will accommodate passage of one lane of moving traffic in each direction with occasional curb parking. On low volume residential streets where curb parking might occur on both side of the street, one lane of traffic will move freely. This condition has been found acceptable in residential areas where curb parking does not extend for great distances. The level of residential inconvenience occasioned by the lack of two moving lanes is remarkably low.

The major disadvantage of a 32-foot wide street is that parking could occur opposite each other for long distances and that campers or recreation vehicle parking aggravates this situation. To reduce this possibility, local residential streets should be designed so they do not extend for more than several blocks or approximately 1500 feet and cannot be extended in the future to function as residential collector streets, and that adequate driveway depth or garage setbacks be required for vehicle parking.

Minor Collector Streets

Minor Collector streets are primarily intended to serve abutting lands and local access needs of neighborhoods, including limited through traffic. Minor Collectors should carry between 1,200 and 3,000 vehicles per day. Developments likely to generate a high volume of traffic should be discouraged from locating on Minor Collectors that also serve residential districts.

Figure 19, Section C shows a profile of 50 feet of right-of-way and 36 feet of paved width for a minor collector street. The 36-foot cross section will allow for parking on both sides of the street. Curb lanes 13 feet wide are adequate for vehicular travel and turning

movements when the intersection curb return radii are at least 25 feet and the abutting driveways designed wide enough to accommodate right turns.

Major Collector Streets/Commercial Industrial Streets

Major Collectors are intended to serve traffic from local streets or minor collectors to arterials and public thoroughfares with a lesser degree of present or future traffic than arterials. Major Collector streets carry from 1,500 to 10,000 vehicle trips per day. These streets also serve as Commercial/Industrial Streets, by providing access to commercial or industrial properties.

The profile range for major collector streets and commercial/industrial streets is shown in Figure 19, Sections D and CI. The profile range for major collector streets and commercial/industrial streets with bike lanes is shown in Section D-1 and Section CI.

In order to match Washington County standards, the major collector street uses a 42-foot roadway curb face-to-curb face within a 60-foot right of way. A major collector with bike lanes has a 74-foot right-of-way and 48- to 50-foot paved width. The collector/industrial street has a 48- to 50-foot paved paved width within a 62- to 64-foot right-of-way.

Five-foot sidewalks should be provided on each side of the roadway adjacent to the curbs. In commercial or business areas, the sidewalks should extend to the property line.

Minor Arterial Streets

Minor Arterial streets are intended to provide for the movement of traffic between areas and across portions of a city or region. As shown on Figure 19, Section E, the minor arterial has a range of 64 to 90 feet of right-of-way and 50 to 66 feet of pavement width. This street profile, which matches Washington County road standards, can serve as a three or five-lane arterial. The 50-foot paved width allows for two twelve-foot travel lanes, two six-foot bike

arterial. The 50-foot paved width allows for two twelve-foot travel lanes, two six-foot bike lanes, and a 14-foot center turn lane. The 66-foot paved width allows for four travel lanes and a center turn lane.

Residential property should not face or be provided with access on arterial streets. In commercial and business areas where heavy pedestrian traffic is expected to occur, the sidewalks should be eight feet wide.

If the arterial street volume is forecast to be less than 15,000 vehicles per day, the 50-foot roadway width curb face-to-curb face should be utilized. For areas where the arterial street volume is forecast to be in excess of 15,000 vehicles per day, then a four-lane plus left-turn lane cross-section should be utilized.

Major Arterial Streets

Major Arterials are intended to serve as primary routes for travel between major urban activity centers. The profile for a major arterial is shown in Figure 19, Section F. To match the Washington County road standards, the Major Arterial is a 74-foot wide roadway, curb fact-to-curb face, which provides for two travel lanes and bike lanes in each direction, plus left-turn lanes at intersections or throughout the roadway. Right-of-way width is 98 feet. The traffic carrying capacity of Section F is approximately 32,000 vehicles per day. In commercial and business areas where heavy pedestrian traffic will occur, the sidewalks should be eight feet wide and adjacent to the curb.

Bike Lanes

In cases where a bikeway is proposed within the street right-of-way, it is recommended that the roadway pavement (between curbs) be widened to provide one five- to six-foot bikeway on each side of the street as shown on the cross sections. In some situations, curb parking may have to be removed to permit a bike lane. Bike lanes on one-way streets should be

located on the right side of the roadway, be one-way, and flow in the same direction as vehicular traffic.

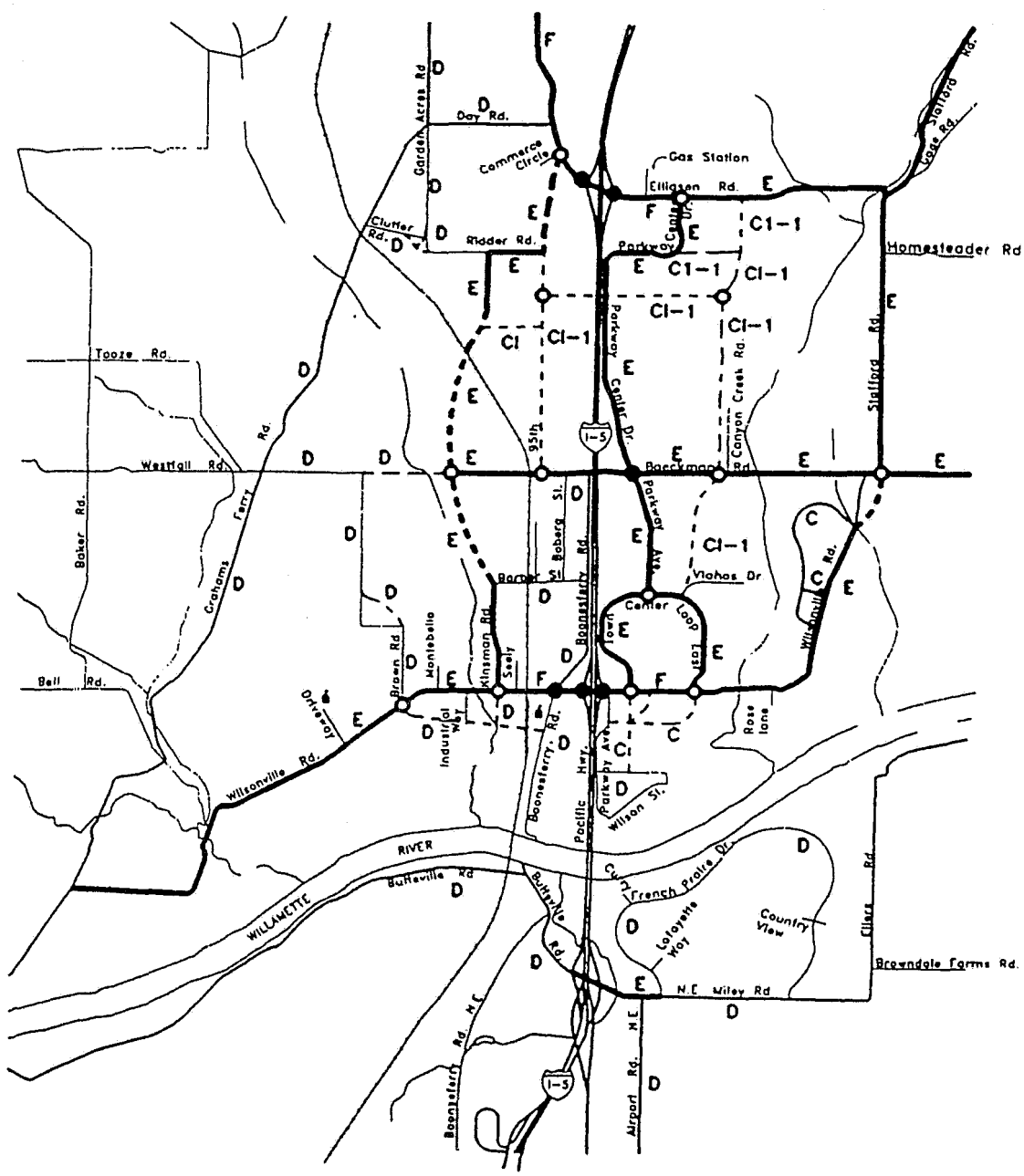
A summary of the basic street standards is shown on Table 7 on the following page. The Transportation Master Plan is shown on Figure 20. It indicates street functional classification and street design standards.

TABLE 6
STREET STANDARDS

Section	Classification	Pavement Width in Feet	Right-of-way Width in Feet	Design Capacity Vehicles per Day
A	Cul-de-Sac	28	42	200
B	Local Residential	32	50	1,200
C	Minor Collector	36	50	1,200-3,000
D	Major Collector	42	60	1,500-
CI	Commercial/Industrial	48	62	10,000
D-1	Major Collector w/ Bike Lanes	50	74	1,500-
CI-1	Commercial/Industrial w/ Bike Lanes	50	64	10,000
E	Minor Arterial (3 to 5 lanes)	50-66	64-90	10,000-32,000
F	Major Arterial (5 lanes w/Bike lanes)	74	98	32,000

Note: Design capacity based on level of service "D", 5 percent commercial vehicles, 10 percent right turns, 10 percent left turns, peak hour factor 95-90 percent, peak hour directional distribution 55 to 60 percent, peak hour 9-12 percent of daily volume and average signal timing for collector and arterial streets.

DRAFT



LEGEND

	EXISTING	PROPOSED
COLLECTOR STREETS	———	- - - - -
ARTERIAL STREETS	———	- - - - -
DESIGN STANDARDS		C TO F
TRAFFIC SIGNALS	●	○

FIGURE 20

TRANSPORTATION MASTER PLAN

CITY OF WILSONVILLE

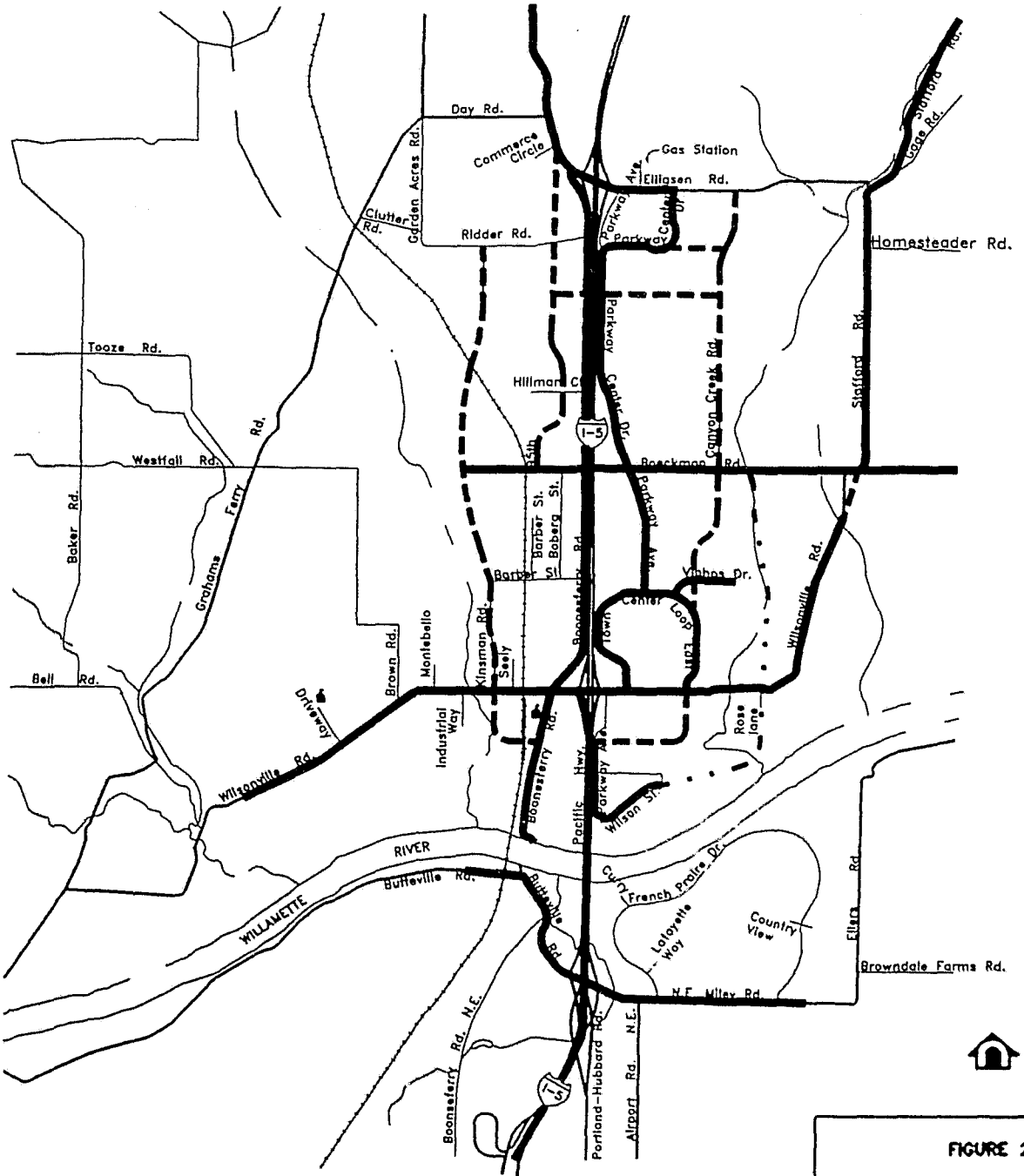
BIKEWAY PLAN

The bikeway plan is shown on Figure 21. Essentially, the plan consists of bike lanes on arterial and collector streets. These bike lanes would be one way and six feet wide, and would be located adjacent to the curb, except where there is curb parking or a right turn lane. Where these conditions occur, the bike lane would be located between the through travel lane and the parking or right-turn lane. The bike lane would be marked in the same direction as the adjacent travel lane. The striping shall be done in conformance with the Manual on Uniform Traffic Control Devices.

Bicycles are legally classified as vehicles which may be ridden on most public roadways in Oregon. Because of this, bicycle facilities should be designed to allow bicyclists to emulate motor vehicle drivers. Shared roadway facilities are common on city street systems. On a shared roadway facility, bicyclists share the normal vehicle lanes with motorists. Where bicycle travel is significant, these roadways are signed as bicycle routes.

PUBLIC TRANSPORTATION

Public Transportation is an important part of a balanced transportation system. The existing Tri-Met peak hour service to Wilsonville focuses on radial trips to and from downtown Portland. However, the fastest growing segment of travel in Wilsonville and the surrounding area is circumferential trips between suburban cities and other activity centers. While these circumferential trips are increasing, only about one to three percent are currently made using public transportation, due to dispersed origin and destination points, availability of automobiles and free parking.



LEGEND

PRIMARY BIKEWAYS FROM EXISTING PLAN

PROPOSED NEW PRIMARY BIKEWAYS

PEDESTRIAN/EQUESTRIAN PATHWAYS

FIGURE 21

BIKEWAY PLAN

WILSONVILLE TRANSPORTATION PLAN

Although Wilsonville has withdrawn from the Tri-Met service district, City should continue to maintain communications with Tri-Met, Metro, Clackamas County and Washington County to improve service and increase ridership.

The Clackamas and Washington County Transportation Plans provide a number of implementing strategies that are also applicable to Wilsonville.
These include:

- Encourage transit ridership through development of a transit system which is fast and comfortable at low cost and through development of land use patterns, development designs and street and pedestrian/bikeway improvements which support transit.
- Provide mobility for people who cannot use or do not have adequate private transportation.
- Develop a transit system which supports residential, commercial and industrial development with minimum investment in new roadway capacity.
- Develop a transit system which meets the City's local needs.
- Explore opportunities for privatization of transit services
- Provide for pedestrian access to existing and proposed transit routes through the land development process and road reconstruction.

RAIL SERVICE

Rail service is a vital transportation link to industry. Its need varies with the economy and the raw material needs and products produced in the industrial community. At present, the rail service is sufficient. However, every effort should be made to maintain this service or even expand it for the existing and future industrial growth in the north and west portions of the City. If existing service is reduced, rail right-of-way could potentially be converted to bicycle and pedestrian use.

AIR SERVICE

The Portland International Airport, the Aurora Airport and the Mulino Airport will continue to serve the City. The Mulino Airport is slated for expansion by the Port of Portland as a major reliever airport. The expanded facility will be able to accommodate small jets and corporate and private aircraft, and is expected to attract users from throughout the region.

TRANSPORTATION DEMAND MANAGEMENT

Through transportation system management, the peak travel demands could be reduced or spread to provide more efficiency in the transportation system, rather than building new or wider roadways. Techniques which have been successful and could be initiated to help alleviate some traffic congestion include carpooling and vanpooling, alternative work schedules, high density development along transit routes, bicycle and pedestrian facilities and programs focused on high density employment areas.

Carpooling and Vanpooling

The City should work with large employers, especially in the growing industrial area to establish a carpool and vanpool program. These programs, especially oriented to workers living in other neighboring cities, would help to reduce the travel and parking requirements and to reduce air pollution. Employers can encourage ride sharing by providing matching services subsidizing vanpools, establishing preferential car and vanpool parking and convenient drop-off sites, and through other promotional incentives.

Alternative Work Schedules

Alternative work schedules (such as flex-time or staggered work hours), especially with large employers, can help spread the peak period traffic volumes over a longer time period, thus providing greater service out of a fixed capacity roadway. Many industrial employers already have work schedules which are earlier than the norm. These different schedules should encouraged with new industries.

Transit and Bicycle/Pedestrian Facilities

Transit and bicycle/pedestrian use can be encouraged by implementing strategies discussed earlier in this plan. In addition, transit can be encouraged with fare subsidies and by providing convenient access to transit stations. Provision of bicycle parking, showers and locker facilities helps to encourage bicycle commuting and walking to work.

High Density Employment Areas

Transportation Demand Management programs work best in areas of high density employment and are most successful when applied to firms with more than 50 employees. Potential target areas for transportation demand management programs in the Wilsonville area include the I-5/Stafford interchange area and the north-central section of the city.

The City can work toward implementation of transportation demand management strategies through coordination with business groups such as the I-5 Corridor Association and Wilsonville Chamber of Commerce, employees and citizens. Successful implementation includes public support, industry involvement, quantifiable goals, and employer/employee incentives.

APPENDIX

- EXISTING TRANSPORTATION PLAN
  City of Wilsonville

- AREA OF SPECIAL CONCERN II
  City of Wilsonville
  Comprehensive Plan

ROADS AND TRANSPORTATION PLAN

Wilsonville's existing road system was established to serve rural development. For this reason, the system is generally inadequate to serve urban level development. Many rights-of-way are not adequate for urban street standards and paved roadway widths on arterials and collectors are too narrow, at 20 to 22 feet. Except for newly constructed road sections, roadways are generally in poor condition primarily due to inadequate structural sections, but partially due to inadequate maintenance.

Wilsonville is bisected by the I-5 Freeway. The Freeway provides excellent north-south transportation linkages to Portland and the southern Willamette Valley. The combination of large acreages of developable land, and excellent rail and Freeway transportation of access present Wilsonville with an undeniable growth potential, particularly in industrial development. While the Freeway is a major growth impetus, it creates certain liabilities for the City.

The existing capacity of the I-5 Freeway north of the Stafford interchange is between 100,000 and 115,000 vehicles per day. The City's transportation analysis indicates that by the year 2000 a traffic volume of 125,900 vehicles per day could be expected, given today's travel patterns and a 30% shift to mass transit. The Transportation Report also identified a structural deficiency for the Wilsonville Road underpass. This design of the underpass will result in a 40% to 120% overcapacity condition on Wilsonville Road, depending on whether a third interchange at Boeckman Road is constructed. The Stafford/Elligsen Road overpass also has some less serious design limitations. Additionally, the existing Freeway on-off ramps are inadequate to handle future traffic volumes as projected. The City recognizes these problems and notes that if travel patterns continue as they are today and appropriate street improvements, including Freeway interchanges, are not made, that substantial growth limitations will result. It also, however, recognizes the potentials for proper planning and land use development to generate certain transportation efficiencies. Therefore, the following policies have been established to promote sound economic growth while providing for an efficient and economical transportation system. The Plan identifies three areas of responsibility in transportation planning.

1. What the City expects to do in providing for efficient transportation.

2. What the City will expect developers and businesses to do in support of efficient transportation.

3. What the City will expect from Federal, State and regional agencies in support of the City's planning efforts.

POLICY 3.3.1:

a. The Street System Master Plan (Map I) has been designed to meet projected year 2000 traffic volumes. It specifies the design standards for each arterial and major collector street. The conceptual location of proposed new major streets are also identified. However, actual alignments may vary from the conceptual alignments based on detailed engineering specifications and design considerations, provided that the intended function of the street is not altered. While local residential streets are considered a part of the Master Street System, they are not shown on the Master Plan. The alignment of local streets shall be evaluated on a project-by-project basis. Other streets not shown on the Plan may also be considered, if determined necessary for safe and convenient traffic circulation.

b. Figure I defines the Functional Street Classification System and specifies the physical design characteristics (right-of-way and pavement width, curbs, sidewalks, etc.) of the various street classifications. Table II and Figure II identify specific proposed exceptions to the design standards.

c. All streets shall be designed and developed in accordance with the Master Plan and street standards, except as the Planning Commission may approve specific modifications through the planned development process. Such modifications shall be made in consideration of existing traffic volumes and the cumulative traffic generation potential of the land uses being developed. At a minimum, all streets must be developed with sufficient pavement width to provide two lanes of traffic, unless designated for one-way traffic flow. However, adequate emergency vehicle access and circulation must be provided.

d. Map II identifies designated truck routes. These streets shall be developed to arterial street construction standards and should be posted as truck routes.

POLICY 3.3.2:

a. All arterial and collector streets shall be dedicated public streets. To insure adequate protection of potential future right-of-way needs, minimum setbacks shall be established adjacent to arterial streets. In addition, to maintain efficient traffic flows, intersections with arterial streets

shall be minimized, and property owners shall be encouraged to consolidate driveways.

b. Through the Planned Development process, local streets may be approved as private streets, provided that adequate emergency access is available and that appropriate deed restrictions, homeowners' association requirements, etc. are established to insure proper maintenance.

POLICY 3.3.3: Minimum street service levels shall be established. Dedication of adequate right-of-way, as established by the Street System Master Plan, or as otherwise approved by the Planning Commission, shall be required prior to actual site development.

If the proposed development would cause an existing street to exceed the minimum service capacity, then appropriate improvements shall be made prior to occupancy of the completed development. Said improvements may be deferred if they are scheduled and funding is confirmed through the City's Capital Improvements Plan for construction within two years of the date of occupancy, provided that such a postponement of improvements would not seriously endanger public health and safety. In such cases, interim improvements shall be required.

POLICY 3.3.4: The City shall periodically review and update its street lighting standards adequate to insure public safety. Energy conservation shall also be considered in setting these standards.

POLICY 3.3.5:

a. The City shall assume the responsibility to plan, schedule and coordinate all street improvements through a Capital Improvements Plan. A priority will be given to eliminating existing deficiencies and in upgrading the structural quality of the existing arterial system.

The City shall also encourage the State (ODOT) and the Counties to acknowledge or adopt the City's Street Standards to insure consistent application of street improvement requirements regardless of the jurisdictional control of the road in question.

b. Individual developments shall be responsible to provide all collector and local streets. Developers and property owners of developing property

shall also collectively assume the responsibility of providing "extra capacity" to the existing street system. To insure development of an adequate street system, the City shall collect a Systems Development Fee as development occurs. Funds collected shall be allocated through the Capital Improvements Plan as needed to provide extra capacity service.

c. Maintenance of the developed street system is a general public obligation. The City shall coordinate routine and necessary maintenance with the appropriate state or county agency.

POLICY 3.3.6: The City shall continue to work in concert with the State, MSD, Clackamas and Washington County and adjacent jurisdictions to develop and implement a regional Transportation Plan that is complementary to and supportive of the City's Plan while addressing regional concerns. The City expects a reciprocal commitment from the other agencies.

This policy recognizes that there is a need for a collective and cooperative commitment from all affected agencies to solve existing and future transportation problems. The City will do its part to minimize transportation conflicts, but it must also have the support of County, regional, State and Federal agencies to effectively implement this Plan.

POLICY 3.3.7: The City shall actively encourage the State to provide improvements to regional transportation facilities which, due to inadequate carrying capacities, frustrate implementation of the City's Transportation Plan.

POLICY 3.3.8: The City recognizes that extensive upgrading of mass transit service to Wilsonville is not likely in the near future, that regional priorities for transit improvements have been placed on the Banfield and Sunset corridors, to better serve existing high demand areas, and that the State Highway Department has expressed concern over maintaining reasonable service levels on the I-5 Freeway.

Therefore, the City shall:

a. Review all land use/development proposals with regard to transportation impacts. All development proposals shall be required to submit a transportation impact analysis.

b. Seek to minimize traffic congestion at the Freeway interchange as well as on local arterial and collector streets.

c. Seek to reduce the number and length of home-to-work trips.

d. Seek a balanced mix of activities which encourage consolidation of automobile oriented trips and encourage design and location of complementary activities that support public transit, ride-share programs, and use of other alternative modes of transportation.

e. Require large developments and high employment and/or traffic generators to design for mass transit and to submit programs to the City indicating how they will reduce transportation impacts. All such proposals shall be subject to review by Tri-Met and ODOT. Maximum parking limits may also be imposed.

f. Seek location of a permanent park and ride station as well as a commitment from Tri-Met to upgrade transit service to the greatest extent possible.

POLICY 3.3.9: The City recognizes the value of the Burlington Northern Railroad to industrial growth in Wilsonville, and will encourage the railroad and Public Utility Commission to maintain quality service and provide needed improvements, rail crossings and signalization, etc.

NOTE: Previous studies conducted by the State have indicated that the median strip of the I-5 Freeway may be adequate to support light rail. In addition, the City Center Master Plan identified a potential linkage to such a transit line.

In addition to Willamette Greenway policies, the City recognizes the use of the Willamette River for both commercial and private recreational travel. The City also recognizes the potential conflict between these uses as well as the safety problems created by heavy usage of the river, particularly during the summer months.

POLICY 3.3.10: The City should work in concert with the appropriate authorities to establish regulations for activities conducted on the Willamette River to insure protection of the public health, safety and general welfare.

Pedestrian, bicycle and equestrian travel is often considered a recreational activity. However, in a small city where people commonly bike, walk and ride horses throughout the City, and with increasing gasoline prices and potential fuel shortages, this form of travel is likely to increase in popularity. For this reason, provisions for pedestrian, bicycle and equestrian travel are addressed as a basic transportation element as well as a recreational element.

POLICY 3.3.11:

a. The Pathway Master Plan (Map III) identifies the general alignment of primary routes for pedestrian, bicycle and equestrian travel. It has been designed to provide connections between residential neighborhoods and major commercial, industrial and recreational activity centers throughout the City. The system has been coordinated with pathways planned in adjacent jurisdictions to allow for regional travel.

b. User safety and convenience and security for both path users and adjacent property owners shall be a primary consideration in determining the actual location and routing of pathways.

c. The City shall establish pathway construction standards to be incorporated into the Public Works Standards.

POLICY 3.3.12:

a. All primary pathways shall be constructed in accordance with the Master Plan, with specific alignments to be approved by the Planning Commission. All major street construction or improvements shall be coordinated with the Pathway Master Plan.

b. The City shall schedule and coordinate all pathway improvements. A priority will be given to completing specific links of the system, thereby avoiding dead-end pathways.

When land is developed which includes a designated pathway, appropriate dedication of right-of-way or easements shall be required. In cases where the proposed development will substantially increase the need for the path, construction may also be required prior to occupancy.

c. The City shall encourage development of secondary pathways internal to individual

developments. Secondary paths shall be designed and provided by private development as new construction occurs and shall be coordinated with the primary pathway system.

POLICY 3.3.13:

a. The street standards indicate that concrete sidewalks are to be developed on both sides of all streets. However, in most cases, a sidewalk will be provided on one side and a combination sidewalk/bike path on the other side. Typically, this will allow for separation of travel modes, although some mixed mode travel is expected to occur.

   All bike paths are to be developed with concrete or asphalt paving. Standard sidewalks will be concrete, while pedestrian/equestrian trails may have a gravel or sawdust surface.

b. The primary bike path system is proposed to be developed with Class I bike paths only, unless physical barriers and interim phasing warrants Class II or III bike paths. Definitions of Class I, II and III bike paths are as follows:

   Class I bikeway - a bikeway completely separated from vehicular traffic and within an independent right-of-way or the right-of-way of another facility. Bikeways separated from vehicles, but shared by both bicycles and pedestrians are included in the classification.

   Class II bikeway - any bikeway which is part of the roadway or shoulder and delineated by pavement markings or barriers such as extruded curb or pavement bumper blocks. Vehicle parking, crossing or turning movements may be permitted within the bikeway.

   Class III bikeway - any bikeway sharing its traffic right-of-way with motor vehicles and designated by signing only.

To accommodate the expected growth in population and employment and the resulting transportation needs, the City's Consulting Transportation Engineer has recommended that a regional transportation plan be implemented consisting of improved regional public transportation service including light rail transit or an express bus system, local bus service serving the residential and employment areas, an improved arterial and collector street network, a bikeway system, development of ride-sharing programs including carpools and vanpools and staggered or flextime work-hour programs.

The proposed street system includes the development of improved access to I-5, arterial streets which surround and pass through the City and collector streets serving the areas within the arterial street system.

POLICY 3.3.14: The following major street system improvements are necessary to support certain levels of development anticipated in this Plan. The City may not be able to finance all of these improvements and some may be financed by entities other than the City

- Develop a partial interchange between I-5 to the north and Boeckman Road see Areas of Special Concern - Area 11).

- Widen the I-5 off-ramps at the intersections with the City arterial streets.

- Develop Wilsonville Road as a two-lane arterial with continuous left turn lanes except in the vicinity of I-5 and the Civic Center, where it should be widened to four and five lanes.

- Develop Elligsen Road as a two-lane arterial with left turn lanes at S. W. 65th Avenue and to a four lane roadway with left turn lanes in the vicinity of Parkway Avenue.

- Develop Boones Ferry Road as a two-lane arterial with a continuous left turn lane in the median area.

- Develop Parkway Avenue as a two-lane arterial with a continuous left turn lane in the median area.

- Develop Boeckman Road as a two-lane arterial with left turn lanes at major intersections.

- Widen Eilers Road and Aurora-Boones Ferry Road south of the Willamette River to two lanes with left turn lanes except in the vicinity of I-5 where it should be five lanes.

POLICY 3.3.15: If adequate regional transportation services,including I-5 interchange modification or additions, and high capacity public transportation cannot be provided, then the City shall reevaluate and reduce the level of development and/or timing of development anticipated by other elements of this Plan. Such reductions shall be consistent with the capacity of the transportation system at the time of re-evaluation.

STREET IMPROVEMENTS

The Street System Master Plan is shown on Figure 2 with Roadway Standards shown in Table I and Figure I. The general concept of the Street Plan is to provide an arterial system which surrounds the City and passes through it in the east-west direction and north-south direction on each side of I-5. Improved access to I-5 is also proposed in this Plan.

Collector streets would provide for internal circulation within the arterial streets.

A detailed description of the recommended street improvements to the existing network is included in the Traffic Engineer's Transportation Report. These improvements are listed for I-5, the arterials and the collector streets.

Immediate Concerns

- Widen Wilsonville Road to three lanes between northbound and southbound I-5 ramps.
- Install safety barriers between I-5 and the adjacent parallel sections of Boones Ferry Road and Parkway Avenue.
- Modify interchange of I-5 and Elligsen Road by widening ramp intersections, stripping and installing traffic signals.

TABLE I

ROADWAY STANDARDS

Section	Classification	Pavement Width in Feet	Right-of-Way Width in Feet	Design Capacity Vehicles Per Day
A	Cul-de-sac street	28	50	200
B	Local resident	32	52	1,200
C	Resident collector	36	60	7,000
D	Collector, industrial and arterial	40	60	10,000 - 18,000
E	Arterial	48	60	15,000 - 20,000
F	Arterial	62*	72	33,000
G	Arterial	70*	94	34,000 - 37,000

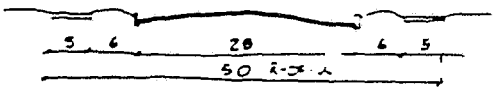
*Includes left turn lane

NOTE: Design capacities based on level of service "D", 5 percent commercial vehicles, 10 percent right turns, 10 percent left turns, peak hour factor 85-90 percent, peak hour directional distribution 55 to 60 percent, peak hour 9-12 percent of daily volume and average signal timing for collector and arterial streets.

FUNCTIONAL STREET CLASSIFICATION STANDARDS

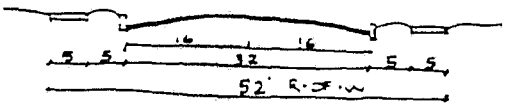
Cul-de-sac

A



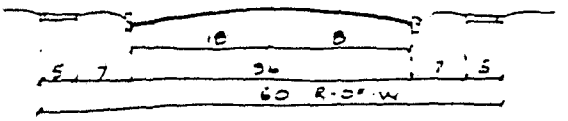
Local Residential

B



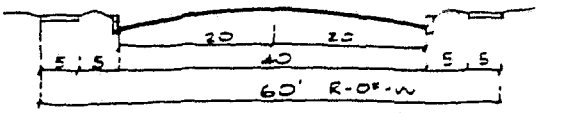
Residential Collector

C



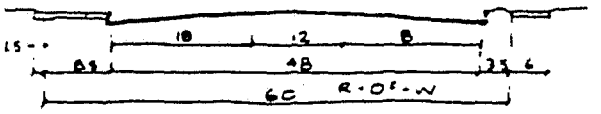
Industrial Collector, and Minor Arterial

D



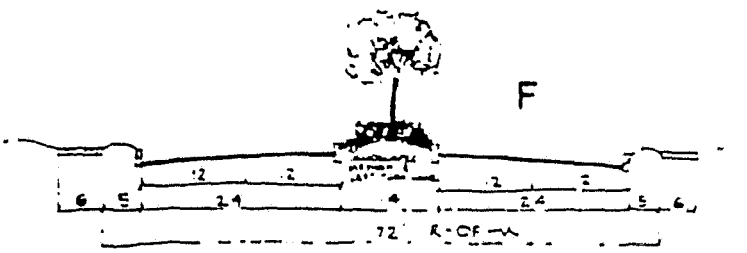
Major Arterial

E

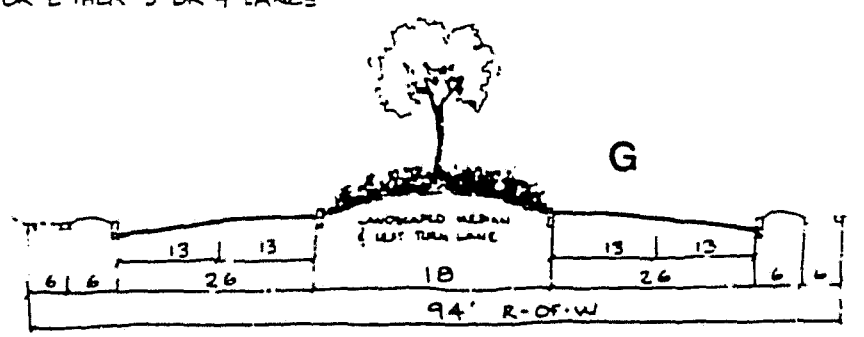


CAN BE STRIPED FOR EITHER 3 OR 4 LANES

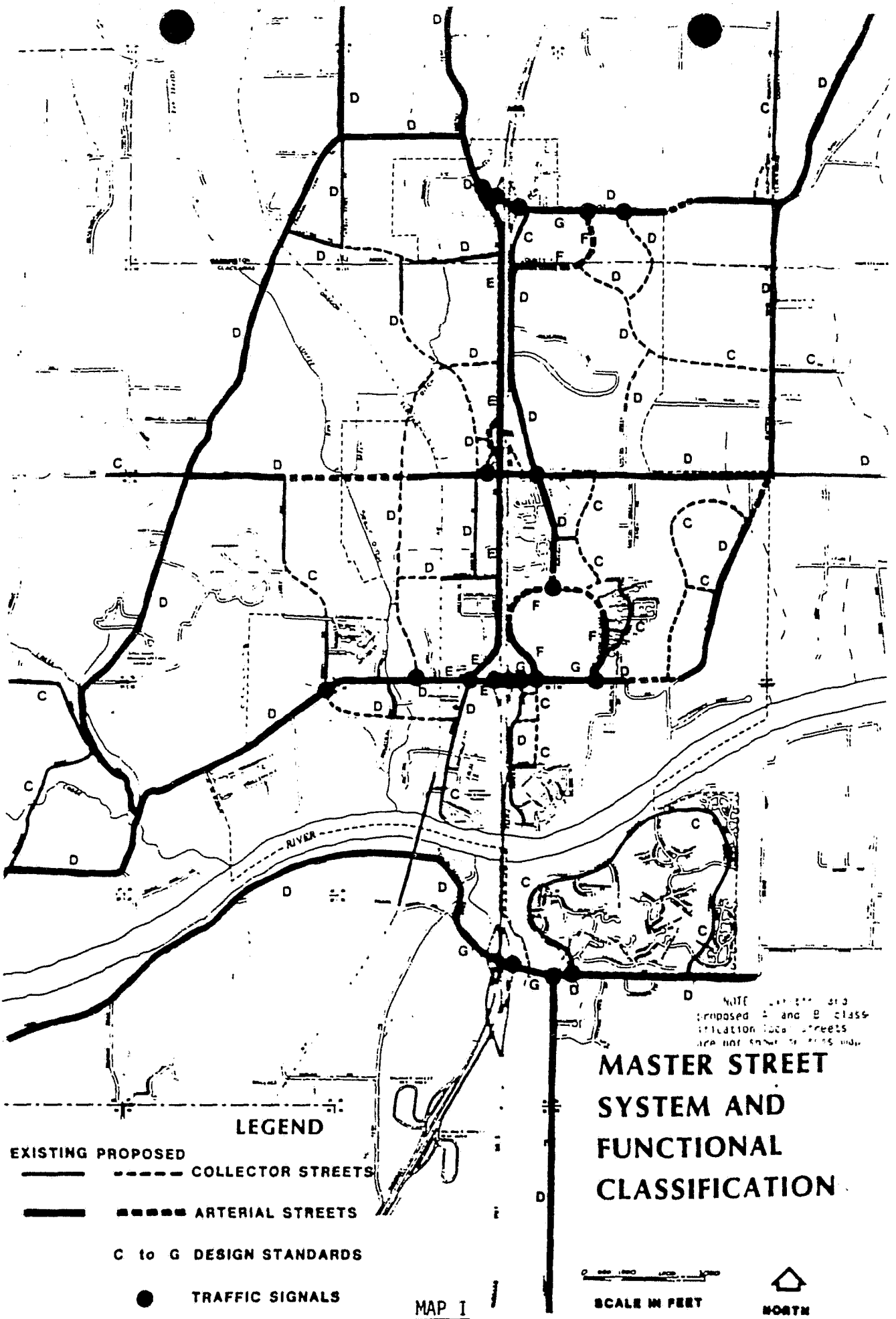
F



G



... in accordance with Primary



MASTER STREET SYSTEM AND FUNCTIONAL CLASSIFICATION

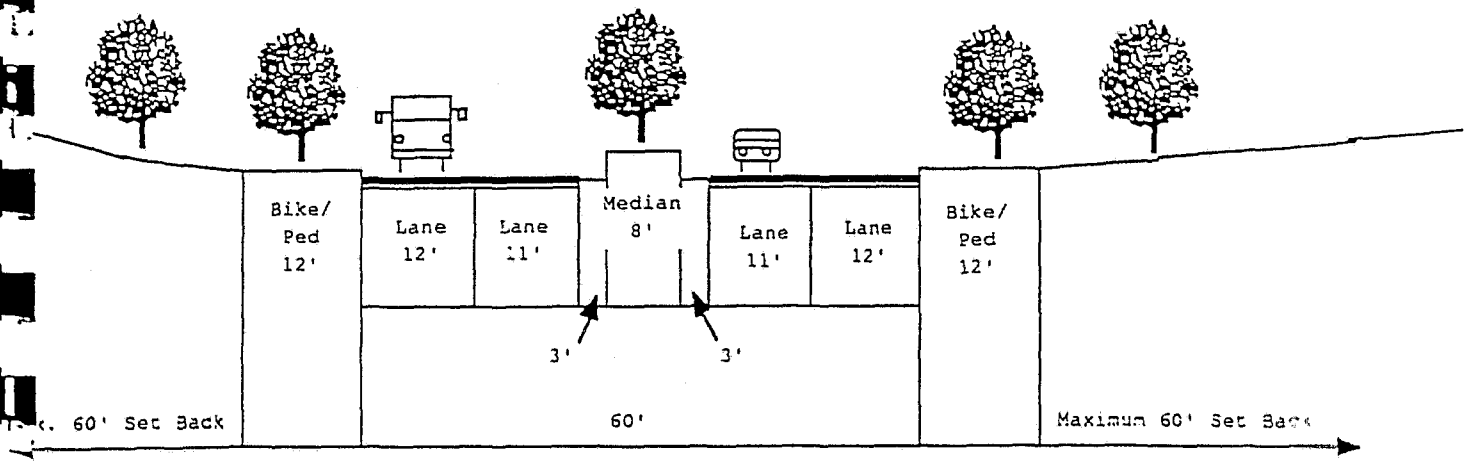
MAP I

TABLE II
CITY OF WILSONVILLE
EXCEPTIONS TO PROPOSED STREET STANDARDS

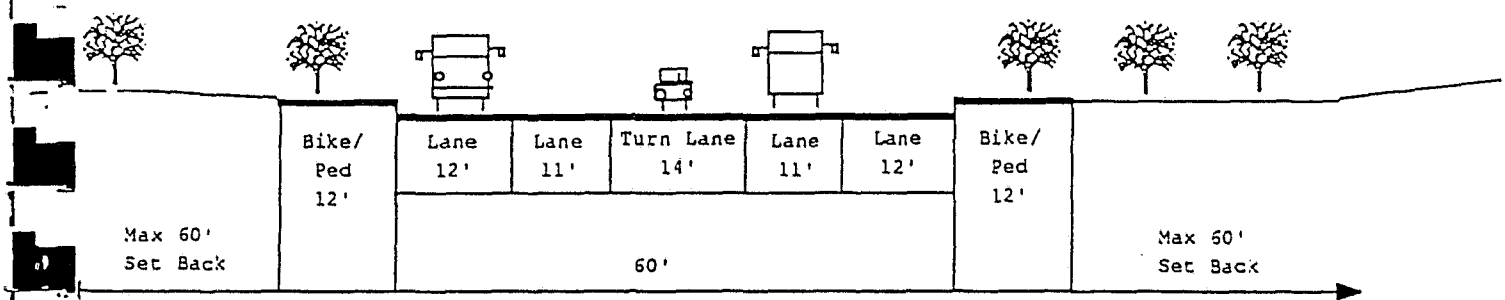
STREET STANDARD	STREET NAME, LOCATION, AND SPECIAL DESIGN STANDARDS	
E.	Boones Ferry Road	-north of Wilsonville 60 foot right-of-way- 48 feet paved including Class II bike path. No sidewalk on east side adjacent to Freeway (GM guardrails adjacent to I-5 should be installed. The proposed Boeckman interchange will require a partial realignment under the off-ramp bridge.
D.	Elligsen Road	-realigned east of realigned Parkway Avenue. Preserve 72 foot right-of -way to develop an F standard in the future.
G	Elligsen Road	-between realigned Parkway Avenue and Boones Ferry Road. Four travel lanes on Freeway overpass. One westbound lane, one left-turn land and two eastbound lanes. Provide 44 feet of pavement on overpass and 52 feet of pavement east and west of overpass.
Q	Parkway Ave	-between realigned Parkway Avenue and Elligsen Road. Only one-way southbound traffic permitted. No sidewalk west side. Does not need full 36 feet of pavement.
D/F.	Parkway Avenue	-between Elligsen Road and Town Center Loop and south of Wilsonville Road 60 foot right-of-way and no sidewalks on west side adjacent to Freeway (see Figure III). GM barriers should be provided where street parallels I-5.
D.	Wilsonville Road	-east of Town Center Loop East. Realign with Stafford Road and bypass "S" curve.
G/F.	Wilsonville Road	-between Freeway and Town Center Loop East, except reduce to three lanes at underpass with two 13 foot travel lanes and one 10 foot left-turn lane (interim design). Plan for five-lane Section F underpass without landscape median.
E.	Wilsonville Road	-between Freeway and Boones Ferry Road. Stripe for four 12 foot travel lanes. Preserve 72 foot right-of-way for future F standard.
E.	Wilsonville Road	-between Kinsman Road and Boones Ferry Road. Preserve 72-foot right-of-way for future F standard.
D.	Wilsonville	-west of Kinsman Road.
C.	65th Avenue	-realign to provide offset from Elligsen Road and Stafford Road intersection.

Proposed Street Section
Parkway Avenue - Parkway Center

Street Standard "F"

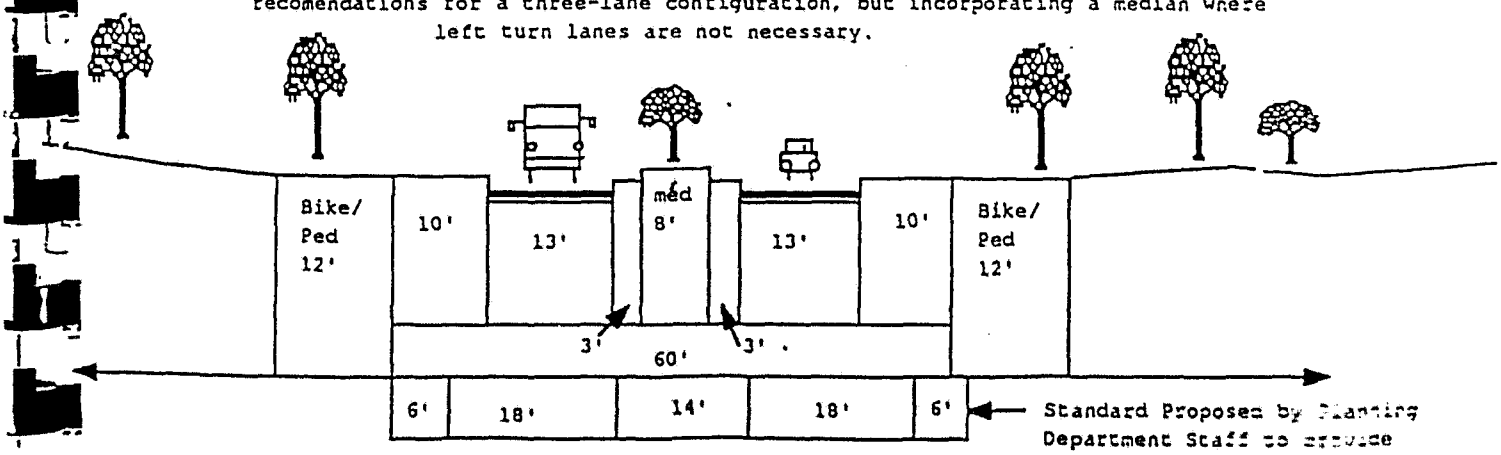


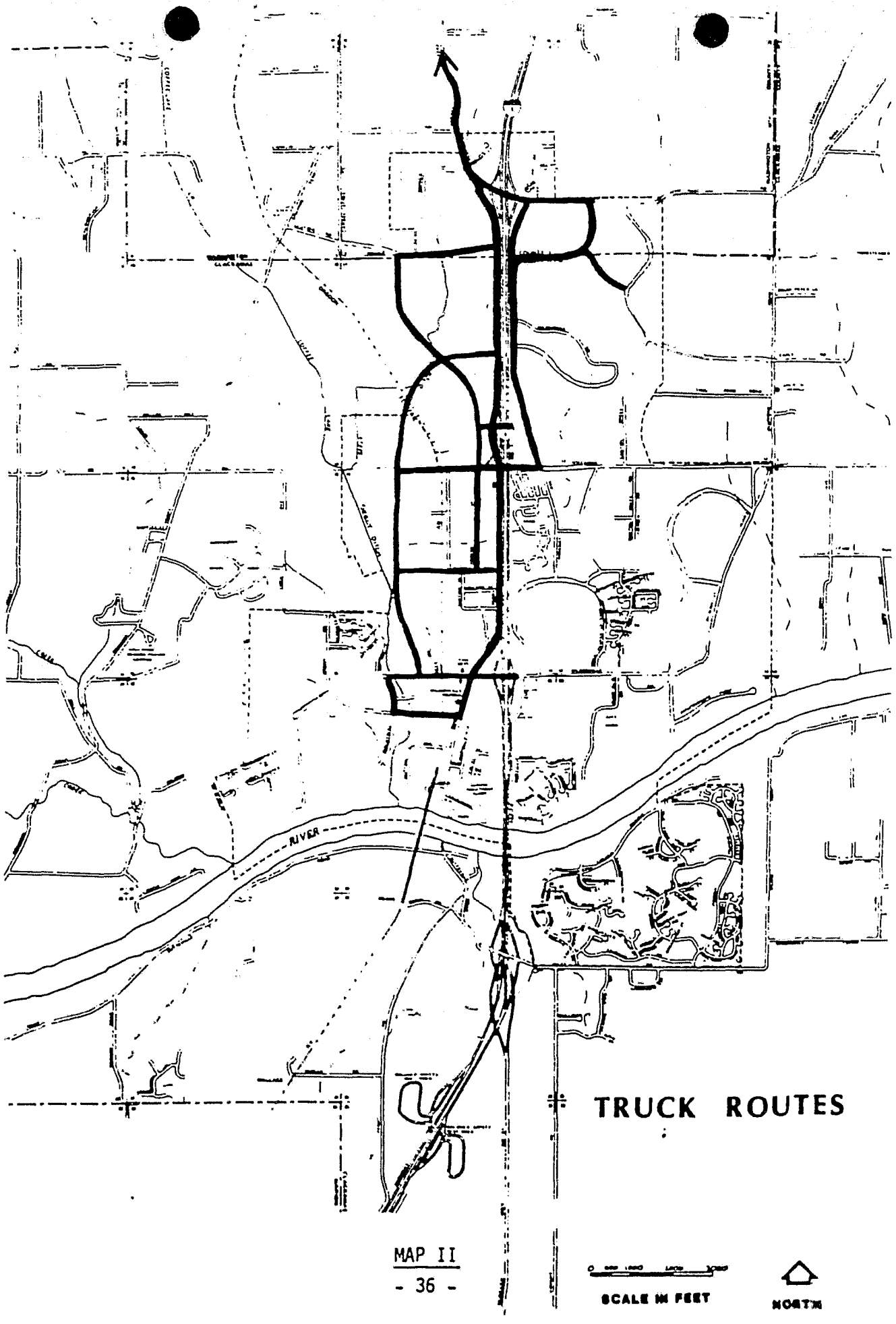
In anticipation of future increases in traffic volumes through this section resulting from development of Parkway Center, Tektronix, Ash Meadows, etc., a future street section is designed to provide for two travel lanes in each direction with a median or center turn lane. Bike-Pedestrian pathways would be placed on easements outside of the 60-foot right-of-way.



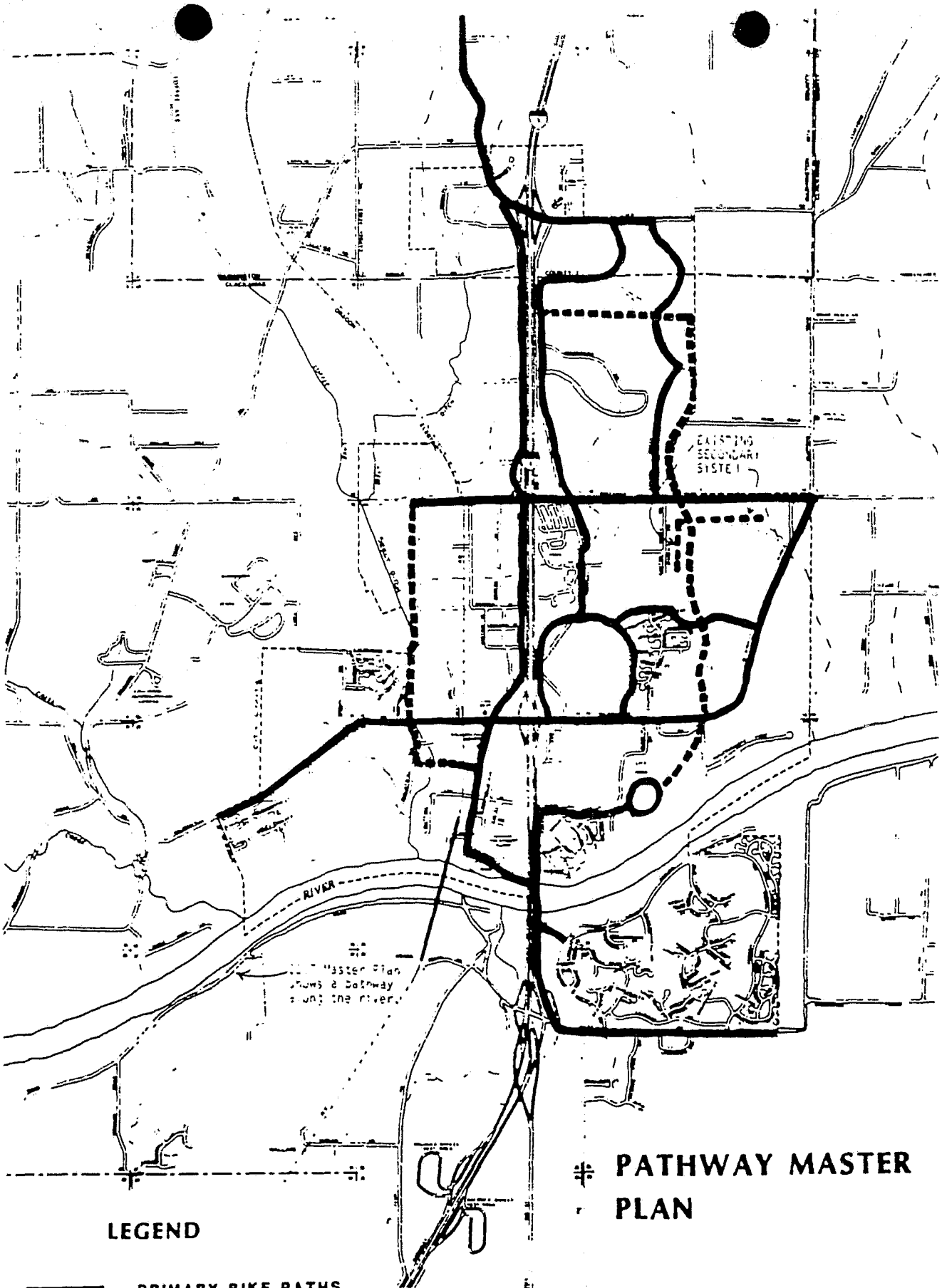
To provide maximum turning radii, the entire median would be eliminated where left turn lanes are needed.

Initial development is proposed with an interim street section based on Buttke's recomendations for a three-lane configuration, but incorporating a median where left turn lanes are not necessary.





MAP II



PATHWAY MASTER PLAN

LEGEND

PRIMARY BIKE PATHS

PEDESTRIAN/EQUESTRIAN PATHWAYS

SCALE IN FEET

NORTH

MAP III

Area 11

The City has long viewed the Boeckman Road crossing of I-5 as a suitable location for construction of an interchange with I-5. However, the City also recognizes that I-5, being an interstate freeway, has state and national functions which may not be totally compatible with local interests. The Oregon Department of Transportation (ODOT) has authority along with the Federal Highway Department for the design, construction and operation of I-5. It is understood that ODOT may proceed to make decisions affecting improvements elsewhere on I-5 that may seriously limit or eliminate the feasibility of the Boeckman Road interchange.

The land around the intersection of Boeckman Road and I-5 depicted as Area 11 has been planned with a transportation system which includes the interchange. However, because the City is still evaluating all aspects of need and feasibility, there is at this time no conclusive evidence that an interchange at this location is or is not needed or feasible. In the event that an interchange is not feasible, the City will need to redesign the local transportation system. Because of the potential for a substantial change in this special concern area, the City will regulate and condition land uses as necessary to accommodate an interchange.

As viewed by the City, the rationale for an interchange at this location is at least threefold. (1) Interchange congestion could be reduced by distributing the number of trips among three rather than two interchanges, (2) traffic associated with development allowed by the Wilsonville Comprehensive Plan in the vicinity of Boeckman Road could be expedited more effectively, (3) options for improving traffic conditions upon other roadways serving the City of Wilsonville could be enhanced. The City recognizes that if item three is verified, then the improvement to I-5 at Boeckman Road may be viewed by ODOT as a local improvement which is inconsistent with the purpose of the interstate freeway. This may be sufficient or additional reason for ODOT to reject the interchange.

Because of these, and perhaps other, benefits to the City, the City Council has chosen to highlight the City's interest in this potential project by including this special section in the Comprehensive Plan. The City will continue to cooperate with other interested parties to conduct feasibility analyses of a Boeckman Road interchange. As appropriate, City consultants, staff, the Planning Commission and City Council will conduct reviews and hold public meetings on the options.

In the event that the City determines, with ODOT's concurrence, the feasibility of the interchange, the City will proceed with a plan amendment to add the Boeckman Road interchange to the public facilities plan map and project list. In the event this project is to be included in the City's plan, the City will prepare amendments necessary to include in the plan the other roadways required to complete the City's transportation network. In this regard, the City realizes that, because a Boeckman Road interchange can only be implemented by ODOT, the City will need to obtain agreement from ODOT demonstrating compliance with state and federal regulations pertaining to the addition of new interchanges before the proposed Boeckman Road interchange can be upgraded in the Comprehensive Plan to a policy and be eligible for inclusion in a future update of the public facilities plan map and project list.

TABLE A-1
1990 MAJOR STREETS INVENTORY
WILSONVILLE TRANSPORTATION PLAN

Street	CLASSIFICATION	STREET WIDTH	NO. OF TRAVEL LANES	DIRECTION OF TRAVEL	PAVEMENT CONDITION
INTERSTATE 5					
Elligsen Rd - Boeckman Rd	Arterial	100	6	2-Way	Good
Boekman Rd - Wilsonville Rd	Arterial	100	6	2-Way	Good
Wilsonville Rd - Miley Rd	Arterial	100	6	2-Way	Good
ADVANCE RD					
Stafford Rd - End	Arterial	20-22	2	2-Way	Fair/Good
AIRPORT RD					
Miley rd - End	Arterial	22	2	2-Way	Fair
Boeckman Rd					
Boones Ferry Rd - End	Arterial	30	2	2-Way	Fair
BOONES FERRY RD					
Boeckman Rd - Ridder Rd	Arterial	24	2	2-Way	Fair
BUTTEVILLE RD					
I-5 - End	Arterial	18	2	2-Way	Fair/Good
DAY RD					
Golden Acres - Boones Ferry Rd	Arterial	24	2	2-Way	Very Good
EILERS RD					
Miley Rd - End	Arterial	22-24	2	2-Way	Good
ELLIGSEN RD					
Parkway Ctr. - Stafford Rd	Arterial	22-24	2	2-Way	Fair
GRAHAMS FERRY RD					
Westfall - Golden Acres	Arterial	22-24	2	2-Way	Fair
Bell Rd - Westfall Rd	Arterial	22	2	2-way	Fair
Bell Rd - Wilsonville Rd	Arterial	18	2	2-Way	Fair/Poor
Wilsonville Rd - End	Arterial	20	2	2-Way	Fair
PARKWAY AVENUE					
Town Center Loop - Boeckman	Arterial	24	2	2-Way	Fair/Poor
Parkway Ctr. Dr - Elligsen Rd	Arterial	28	2	1-Way	Good
PARKWAY CENTER DR					
Boeckman Rd - Parkway Ave	Arterial	28	2	2-Way	Good
Parkway Ave. - Elligsen Rd	Arterial	36	2	2-Way	Good

TABLE A-1
1990 MAJOR STREETS INVENTORY
WILSONVILLE TRANSPORTATION PLAN

Street	CLASSIFICATION	STREET WIDTH	NO. OF TRAVEL LANES	DIRECTION OF TRAVEL	PAVEMENT CONDITION
STAFFORD RD					
Boeckman Rd - Elligsen Rd	Arterial	22	2	2-Way	Fair/Good
TOWN CENTER LOOP WEST					
Wilsonville Rd - Parkway Ave	Arterial	24	2	2-Way	Very Good
TOWN CENTER LOOP EAST					
Parkway Ave - Wilsonville Rd	Arterial	48	2	2-Way	Very Good
WILSONVILLE RD					
Boones Ferry - B.N.R.R Tracks	Arterial	36	3	2-Way	Fair/Poor
B.N.R.R. Tracks - Morley Ln	Arterial	24	2	2-Way	Fair/Poor
Morley Ln - Willamette Way	Arterial	48	2	2-Way	Fair/Poor
Willamette Way - River View Ln	Arterial	22-24	2	2-Way	Good
River View Ln - Grahams Ferry	Arterial	24	2	2-Way	Good
BAKER RD					
Morgan - Tooze Rd	Collector	22	2	2-Way	Fair
Tooze Rd - Westfall Rd	Collector	22	2	2-Way	Fair
Westfall Rd - Bell Rd	Collector	22	2	2-Way	Fair
BARBER STREET					
Kinsman St - B.N.R.R. Tracks	Collector	28	2	2-Way	Good
B.N.R.R. Trracks - Boones Ferry Rd	Collector	36	2	2-Way	Good
BARBER ST (off Barber)					
To Utility Vault Co.	Collector	12	1	2-Way	Very Poor
BELL RD					
Wilsonville Rd - Grahams Ferry	Collector	22	2	2-Way	Poor
Grahams Ferry - Wilsonville Rd	Collector	20-22	2	2-Way	Fair
BOBERG STREET					
Barber St - Boeckman Rd	Collector	36-44	2	2-Way	Very Good
BOONES FERRY RD					
Wilsonville Rd - River	Collector	24	2	2-Way	Very Good
BROWNDALE FARMS RD					
Eilers Rd - End	Collector	18	2	2-Way	Good
BROWN RD					
110TH - Wilsonville	Collector	24-28	2	2-Way	Good

TABLE A-1
1990 MAJOR STREETS INVENTORY
WILSONVILLE TRANSPORTATION PLAN

Street	CLASSIFICATION	STREET WIDTH	NO. OF TRAVEL LANES	DIRECTION OF TRAVEL	PAVEMENT CONDITION
CANYON CREEK ROAD					
Boeckman Rd to End (Closed)	Collector				
CLUTTER ROAD					
Garden Acres Rd - Grahams Ferry Rd	Collector	20	2	2-Way	Poor
FRENCH PRARIE DR					
Miley Rd - Miley Rd	Collector	48	4	2-Way	Good
GAGE DR					
Stafford Rd - End	Collector	22	2	2-Way	Good
GARDEN ACRES RD					
Ridder Rd - Day Rd	Collector	22	2	2-Way	Very Good
KINSMAN RD					
Wilsonville Rd - Barber	Collector	40	2	2-Way	Very Good
MORGAN RD					
Baker Rd - Tonquin Rd	Collector	22	2	2-Way	Fair/Poor
RIDDER RD					
Boones Ferry Rd - City Limits	Collector	44	2	2-Way	Good
City Limits - Garden Acres	Collector	22	2	2-Way	Poor
TOOZIE RD					
Grahams Feray - Baker	Collector	22-24	2	2-Way	Fair
VLAHOS RD					
Town Center Loop - End	Collector	40	2	2-Way	Good
WESTFALL RD					
Baker - Tooze	Collector	20	2	2-Way	Fair/Poor
Tooze - Grahams Ferry	Collector	20	2	2-Way	Fair/Poor
Grahams Ferry - 110th	Collector	20	2	2-Way	Fair/Poor
WILSON ST					
Parkway Avenue - Salmon Lane	Collector	36	2	2-Way	Very Good
TRASK ST					
Parkway Avenue - End	Collector	28	2	2-Way	Very Good

CARL BUTTKE, INC.
CONSULTING TRANSPORTATION ENGINEERS

WILSONVILLE DEMOGRAPHIC ANALYSIS

TECHNICAL MEMORANDUM

2828 Southwest Corbett Avenue
Portland, Oregon 97201-4830
503 223-4728 Fax 503-223-2701

WILSONVILLE DEMOGRAPHIC ANALYSIS

The following information summarizes the methods and assumptions used in estimating and forecasting population and employment in the Wilsonville Study Boundary for the years 1990 and 2010.

POPULATION

1990

The 1990 population of the city of Wilsonville was estimated by using the city's 1989 "Community Development and Land Use Survey" and up-to-date records of built dwelling units. The City's development and land use survey contained lists of built and ready to be built dwelling units by traffic zones.
Totaling the built units in each traffic zone provided an accurate and efficient method of estimating the population. Single and multi-family dwelling unit counts were taken from the 20 traffic zones indicated in the survey and transferred to the 50 traffic zones used in this study. (See Figure A-1)

Once the single and multi-family dwelling unit counts were tallied for each traffic zone, the zone total was multiplied by corresponding single or multi-family average persons per dwelling unit value. For the purposes of this study, the average number of persons in each single-family dwelling unit
was 2.4. The average multi-family value was 1.89 persons per dwelling unit. After multiplying by the single or multi-family occupancy values, totals from the 50 traffic analysis zone are added to express a total population for the study area.

2010

In early discussions with city staff, it was indicated that build-out of available residential land was expected to occur within 5-7 years at the present rate of growth. If the rate of growth slowed substantially, it is still probable that available residential land would be built-out by 2010. Given the probability that full build-out would be reached, all the vacant and ready to be built land indicated in the 1989 "Community Development and Land Use Survey" was determined built at the average density indicated by the Wilsonville Comprehensive Plan or as indicated by the survey.

The additional single and multi-family units calculated for 2010 were added to the 1990 totals to express a dwelling unit grand total for each traffic zone and overall dwelling unit count city wide. The same single and multi-family occupancy values used in 1990 were assumed to be valid for the purposes of this study and were used again to produce the final population figures.

Population Assumptions

Several assumptions were made while estimating and projecting the population of the Wilsonville study area. The accuracy of these assumptions is believed to be relatively high, but some discussion on the effects of inaccurate assumptions is warranted.

The assumption that build-out will occur by 1990 has the most dramatic effect on the precision of the population projections. If growth was to slow substantially and build-out was not achieved by 2010, population could be much lower than the 15,500 residents predicted by that date. However, the opinion of the Wilsonville Community Development Staff that growth will continue at rapid pace and build-out will occur before 2010, and possibly in 5-7 years, is very plausible. Therefore, this study is confident in predicting full build-out of available residential property by 2010.

Another important assumption made by this study was that in response to growth pressure, the city would not annex new land areas to the city to provide additional acreage for residential use. Adding additional land to the existing pool of residentially designated acreage could increase the overall number of available dwelling units. This could result in increased overall population if the new units were occupied. Adding new residential acreage could also effect the rate at which residential acreage in other traffic zones builds-out. Less desirable residential areas may build-out more slowly, thus affecting the trip generation characteristics calculated for that zone. At this time, the city of Wilsonville has not expressed any plans to expand to designate additional acreage outside the study area boundaries for residential development.

The single and multi-family dwelling unit occupation figures used in the 1990 and 2010 projections could also vary from the 2.4 and 1.89 values assigned for each time period. These values correspond to current average family densities for each type of housing unit. These values are not guaranteed to remain consistent with current trends over a long period. From a national standpoint, the numbers of families with single-parent head of households has been increasing numerous years. If this trend was to continue on a localized basis in Wilsonville, the overall family density may drop from the assumed values. Lower family density figures result in increased demand for housing. Usually this demand is directed toward apartments, condominiums or other types of more affordable housing. This shift in demand to higher density housing can in turn effect the distribution and generation of traffic on the street systems.

It was also assumed that the vacancy rate for current and future residential developments will be zero. In reality, the current vacancy rate in Wilsonville varies from 2-5%, which is considered very attractive by residential developers. If employment opportunities continue to grow in the manner they have in recent years and according to the projections made by this study Wilsonville will continue to have a very low residential vacancy rate. Wilsonville is predicted to and probably is now, a net importer of labor from areas outside the city limits. In 2010, the city is predicted to have more jobs than population to fill the positions.

This is the main reason why build-out of the cities available residential property is predicted to occur before the year 2010 and vacancy rates are considered insignificant in our population projections.

EMPLOYMENT

1990

Current employment figures for Wilsonville were gathered for each traffic zone from the 1989 "Community Development and Land Use Survey", City of Wilsonville records on business names and number of employees, discussions with Wilsonville staff and direct conversation with the employers.

As the businesses were located within each of the 50 traffic zones used in this study, the type of business activity was determined, as well as the number of employees. The number of employees for the particular business was entered under one of eight business type categories;

RET/COM - Retail or commercial activities
INDUST. - General, medium and light industrial activities
DIST/WHSE - Distribution and warehousing activities
FLEX - Flex space
HOTEL - Hotel/motel type uses
GOVT. - State, local or federal employees
OFFICE - Medical, dental and office oriented businesses
UTIL. - Utility providers

Once entered into the categories, the specific traffic zone was totaled and added to the totals of the other zones to express a total employment figure for 1990.

2010

The 2010 Wilsonville employment forecast was developed by combining information from the 1989 "Community Development and Land Use Survey", discussions with the city on known future development, and a 1988 Lane Council of Governments (LCOG) survey concerned with industrial land demand.

Discussions with the city revealed information on several planned or partially finished developments that would produce significant employment opportunities. Information on these future developments usually included an estimate of probable employment generation. If anticipated employment figures were not available, square footage of the facility provided a basis by which employment could be estimated.

The 1988 Wilsonville land use survey provided an inventory of vacant industrial and commercial land as well as locations of large, vacant parcels available for development within the study area boundary. From this information, vacant industrial and commercially designated acreage for each traffic analysis zone was established. Once the vacant acreage was established for each traffic zone, an analysis of the present and potential activities within that zone was completed. The purpose of this analysis was to determine what types of developments would locate on the vacant parcels given the present mix of activities, access constraints or opportunities, utilities and size of contiguous parcels. From this analysis, a percentage of the vacant land was assigned to one of the eight activity categories listed earlier.

Once a percentage of the vacant acreage was assigned to a specific activity category within its respective zone, employment could be estimated. Employment ratios on a per acre and square footage basis for both industrial and commercial activities were taken from the "Institute of Transportation Engineers Trip Generation Manual" and "Lane Council of Government's Survey on Industrial Land Demand." The following is a summary of the ratios used from these two sources:

ITE Ratios - Medium/Light Industrial - 1.9 employees per 1,000 square feet of floor-space.

Industrial Park - 2.0 employees per 1,000 square feet of floor-space.

Office - 4.0 employees per 1,000 square feet of floor-space.

Flex Space - 1.9 employees per 1,000 square feet of floor-space.

Distribution/Warehouse - 1.25 employees per 1,000 square feet of floor-space.

Hotel - .56 employees per room.

LCOG Survey - Medium Intensity Industrial - 16.4 employees per acre.

Low Intensity Industrial - 7.6 employees per acre.

Warehouse/Distribution - 10 employees per acre.

The ratio for vacant parcels was chosen on the basis of the predicted activity on the parcel, parcel location, surrounding uses, size of the parcel and access to transportation facilities. Once the ratio was chosen, it was multiplied by either the predicted building square footage or acreage minus 20% of the land area for parking and circulation. Building coverage of vacant parcels ranged from 20-40% of the lot area. The amount of coverage was dependent on the type of predicted activity, parking and maneuvering requirements for that activity, predicted setback and green-space requirements from the city and surrounding activity and potential for conflict through incompatible uses.

Every vacant parcel within each traffic analysis zone was assigned a ratio, calculated and summed to express total number of employees for that zone. Because it is unlikely that 100% of all land available for commercial or industrial development be occupied or built, a 10% vacancy/un-built factor was added to each traffic zone predicted to experience employment growth. If there was no change predicted for that zone or activity within that zone the 10% adjustment was not made. The 50 traffic zone calculations were then added to give a total employment projection for the city in 2010.

Employment Assumptions

Several assumptions were made to simplify the task of estimating and forecasting employment for 1990 and 2010.
The obvious assumption made by reading the last section is that commercial and residential land is also expected to be near full build-out by 2010. Wilsonville has potential for rapid industrial and commercial growth. Location adjacent to Interstate 5 provides excellent access and transportation opportunities. Many medium, light and high-tech industrial firms have located in Wilsonville to take advantage of the easy access to I-5. As these firms located here, they created an economic environment conducive to further development of similar industries. It is this conducive environment, coupled with land, labor and location advantages that will drive business growth in the Wilsonville area.

One assumption made during the 1990 employment estimate was that employers indicated on City of Wilsonville records to have less than 5 employees were considered to be retail/commercial operations. The employees from these small firms were distributed evenly to traffic analysis zones that possessed commercial designations according to the comprehensive plan. This was done to avoid the time consuming practice of looking up each small businesses address in the phone book and locating it within a traffic zone. The majority of these businesses are commercial or service establishments and would not be located outside of commercially designated areas. Allocating these businesses employees evenly to traffic zones containing commercially designated areas saved time, money and still provided an accurate means of tracking current employment.

The grouping of business activities into eight main categories and the use of average employment ratios to calculate jobs within each activity was another important simplification needed to forecast 2010 employment. It is true that there could be many more than eight categories of business activity within Wilsonville, but for the purposes of defining trip generation rates, eight divisions is sufficient. The ITE and LCOG ratios used to estimate employees represent averages for each type of development. More specific ratios could not be used given the general information available on future development within the study area.

1990 Wilsonville Population

TAZ	SFDU	MFDU	TOTAL DU	TOTAL POP.
1	out		0	
2			0	0
3			0	0
4			0	0
5			0	0
6			0	0
7	1		1	2
8			0	0
9			0	0
10	1		1	2
11	3		3	7
12	out		0	
13			0	0
14			0	0
15			0	0
16			0	0
17	5		5	12
18	out		0	
19			0	0
20	9		9	22
21	24		24	58
22	23	85	108	216
23	272		272	653
24	57		57	137
25	9		9	22
26	3		3	7
27			0	0
28	out		0	
29	out		0	
30	28	23	51	111
31	127	121	248	533
32			0	0
33			0	0
34			0	0
35			0	0
36	30		30	72
37			0	0
38	116	134	250	532
39		315	315	595
40	33		33	79
41	13		13	31
42			0	0
43			0	0
44	99	18	117	272
45	113	99	212	458
46			0	0
47	3		3	7
48			0	0
49	226	248	474	1011
50	642	478	1120	2444
Sum	1837	1521	3358	7283

AVG. SFDU DENSITY 2.4
AVG. MFDU DENSITY 1.89

2010 Wilsonville Population

TAZ	SFDU	MFDU	TOTAL DU	TOTAL POP.
1			0	
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	1	400	401	758
8	0	0	0	0
9	0	0	0	0
10	1	0	1	2
11	3	0	3	7
12		0		0
13	0	0	0	0
14	0	0	0	0
15	0	0	0	0
16	0	0	0	0
17	13	0	13	46
18		0		0
19	20	296	316	667
20	198	0	198	475
21	24	270	294	568
22	23	475	498	953
23	272	0	272	653
24	57	0	57	137
25	9	0	9	22
26	3	0	3	7
27	0	0	0	0
28		0		0
29		0		0
30	228	23	251	591
31	127	121	248	533
32	0	0	0	0
33	0	0	0	0
34	0	0	0	0
35	0	0	0	0
36	30	48	78	163
37	0	110	110	208
38	139	134	273	587
39	140	315	455	931
40	63	0	63	151
41	13	380	393	749
42	0	570	570	1077
43	0	0	0	0
44	113	66	179	396
45	127	99	226	492
46	0	0	0	0
47	3	0	3	7
48	0	219	219	414
49	472	248	720	1602
50	713	889	1602	3391
Sum	2798	4663	7461	15528

TAZ	UNDEV. ACRES	DENSITY/ ACRE	# UNITS
1			
2			
3			
4			
5			
6			
7	25	12-20	400
8			
9			
10			
11			
12			
13			
14			
15			
16			
17	14	PA-1	14
18			
19	5	3-5	20
20	34	3-5	136
21	45	5-7	270
22	37	7-12	351
23			
24			
25			
26			
27			
28			
29			
30	42	1-3	84
31			
32			
33			
34			
35			
36	3	12-20	48
37			
38	12	RA-1	12
39	35	3-5	140
40	27	RA-1	27
41	40	7-12	380
42	60	7-12	570
43			
44	5	7-12	48
45	5	RA-1	5
46			
47			
48	23	7-12	219
49	50	3-5	200
50			
SUM			2924

1990 WILSONVILLE EMPLOYMENT FORECAST

TAZ	RET/COM	INDUST.	DIST/WHSE	FLEX	HOTEL	GOVT.	OFFICE	UTIL.	TOTAL
1									0
2	15	189	48	170	80		57		559
3	8	82		114	12		10		226
4	89	36					33		158
5						56			56
6	6								6
7									0
8	161								161
9	119	27	15		30				191
10		34							34
11		112	47						159
12									0
13							166		166
14	18	72	295	158					543
15		914							914
16	62	98							160
17									0
18									0
19									0
20									0
21									0
22									0
23		7							7
24		92					27	34	153
25	11	11							22
26		27							27
27									0
28									0
29						497			497
30						40			40
31									0
32									0
33	6	179					14		199
34		26	751					48	825
35	161						16		177
36	30						7		37
37	65					16			81
38									0
39									0
40									0
41						6			6
42									0
43	129	25	22		50		16		242
44									0
45						6			6
46	240	30			17	72	56		415
47		50							50
48									0
49									0
50	65						18		83
									0
									0
SUM	1185	2011	1178	442	189	693	420	82	6200
									6200

2010 WILSONVILLE EMPLOYMENT FORECAST

TAZ	RET/COM	INDUST.	DIST/WHSE	FLEX	HOTEL	GOVT.	OFFICE	UTIL.	TOTAL
1	0	0	0	0	0	0	0	0	0
2	104	504	48	707	80	0	51	0	1493
3	8	82	0	185	12	0	9	0	296
4	152	32	0	0	72	0	30	63	349
5	0	0	0	0	0	50	0	0	50
6	6	0	0	0	0	0	0	0	6
7	0	104	0	0	0	0	0	0	104
8	161	503	37	0	0	0	0	0	701
9	119	161	113	0	30	0	0	0	423
10	0	290	202	266	0	0	0	0	757
11	0	443	287	144	0	0	0	0	874
12	0	0	0	0	0	0	0	0	0
13	0	59	0	0	0	0	166	0	225
14	18	72	338	995	0	0	254	0	1677
15	0	1213	0	0	0	0	0	0	1213
16	62	3513	0	0	0	0	0	0	3575
17	0	270	0	0	0	0	0	0	270
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	7	0	0	0	0	0	0	7
24	0	290	0	0	0	0	27	64	381
25	11	218	147	0	0	0	0	0	376
26	0	27	342	0	0	0	0	0	369
27	0	86	86	0	0	0	0	0	171
28	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	497	0	0	497
30	0	0	0	0	0	80	0	0	80
31	0	0	0	0	0	0	0	0	0
32	0	215	0	0	0	0	0	0	215
33	6	296	0	0	0	0	14	0	316
34	0	26	847	0	0	0	0	88	961
35	149	0	0	0	0	0	16	0	165
36	441	0	0	0	54	0	7	0	502
37	473	0	0	0	54	32	0	0	559
38	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	6	0	0	6
42	0	0	0	0	0	0	0	0	0
43	263	25	22	0	30	0	16	0	416
44	0	0	0	0	0	0	0	0	0
45	0	104	0	0	0	6	0	0	110
46	319	30	0	0	97	144	56	0	646
47	0	117	0	0	0	0	0	0	117
48	13	0	0	0	0	0	0	0	13
49	0	0	0	0	0	0	0	0	0
50	65	0	0	0	0	0	18	0	83
									0
SUM	2368	8686	2468	2295	489	815	664	215	18000
									18000

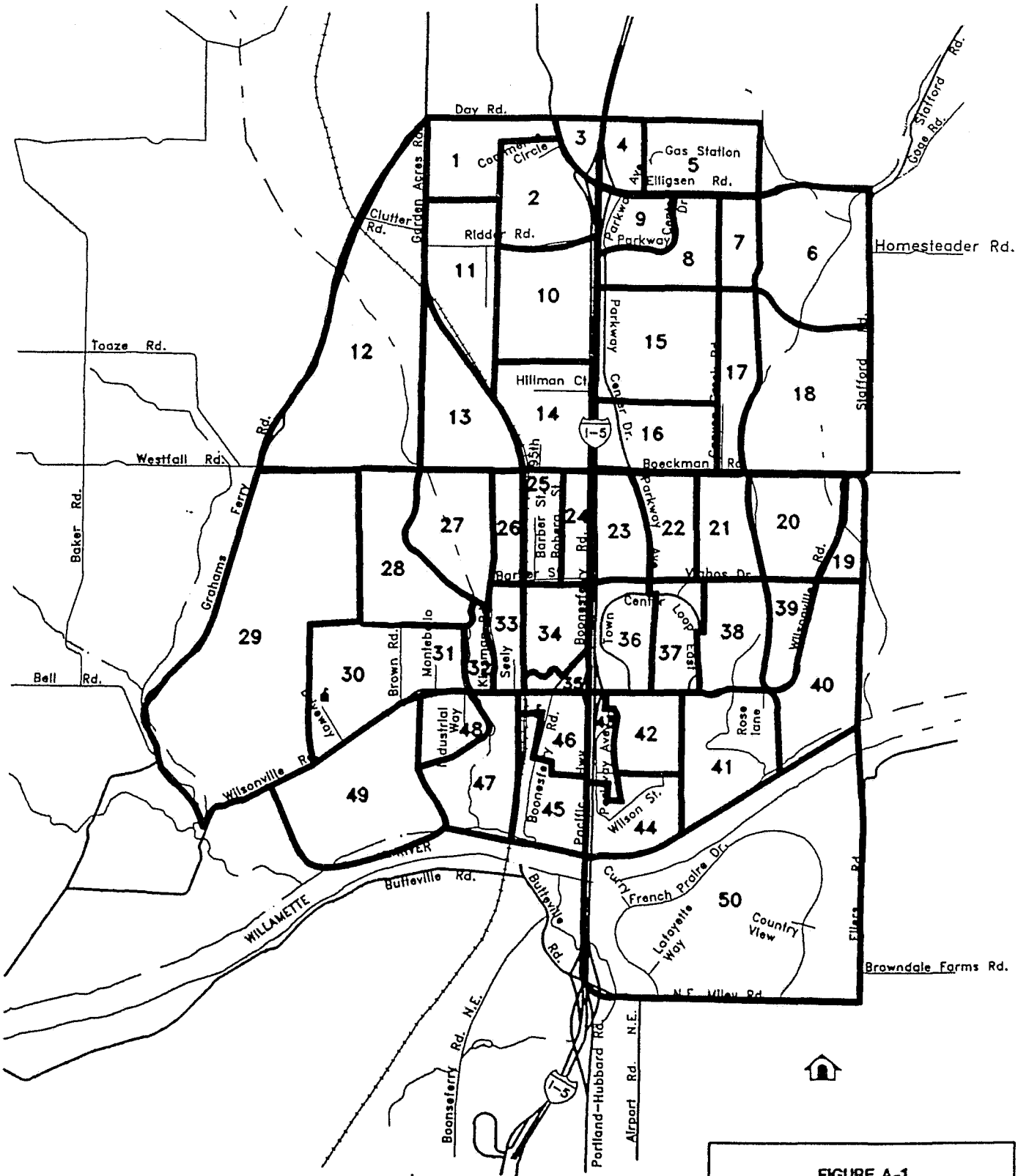


FIGURE A-1

TRANSPORTATION ANALYSIS (TAZ) ZONES

WILSONVILLE TRANSPORTATION PLAN

PLANNING COMMISSION
RESOLUTION NO. 91PC18

A RESOLUTION FORWARDING THE COMMISSION'S RECOMMENDATION THAT THE CITY COUNCIL ADOPT THE TRANSPORTATION MASTER PLAN THAT HAS BEEN PREPARED BY CARL H. BUTTKE

WHEREAS, in March, 1990, the Wilsonville City Council directed the Transportation Advisory Commission to begin development of a Transportation Master Plan for the City; and,

WHEREAS, the City Council accepted the Transportation Commission's recommendation to select the traffic engineering firm of Carl Buttke, Inc. to prepare the Plan; and,

WHEREAS, Carl Buttke and the Transportation Commission have completed the process of inventory of transportation facilities; forecasted future traffic volumes; evaluated alternatives; held public meetings and completed a draft of a proposed Transportation Plan; and,

WHEREAS; the City Council adopted Resolution No. 803 on December 17, 1990, and thereby directed City staff to initiate an amendment of the Wilsonville Comprehensive Plan Map and Text; and,

WHEREAS, the Wilsonville Planning Commission held a public hearing on February 28, 1991, at which time the Commission reviewed the proposed Transportation Plan; considered the alternatives; and gathered public testimony from interested persons; and,

WHEREAS, the Planning Commission continued the hearing on the Transportation Plan to April 8, 1991, to consider additional testimony and to review options that the City Engineer and Planning Staff had been requested to prepare for the Commission.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Wilsonville does hereby adopt the TRANSPORTATION MASTER PLAN, attached hereto as Exhibit A, and forwards a recommendation to the City Council that they approve and adopt the PLAN in accordance with the Commission's recommendations which are as follows:

1. The Commission recommends that the Access Management Guidelines for the Proposed Canyon Creek Road (as outlined in Mr. Buttke's letter of March 15, 1991) be adopted as part of the Transportation Plan.

2. The Commission recommends that "OPTION B" that was developed and presented by the City Engineer for the location of roads upon the Teufel property and the City Park and Library be adopted.

3. The Commission strongly recommends that the Boeckman Interchange be included in and made a part of the Master Transportation Plan. This

RES. NO. 91PC18

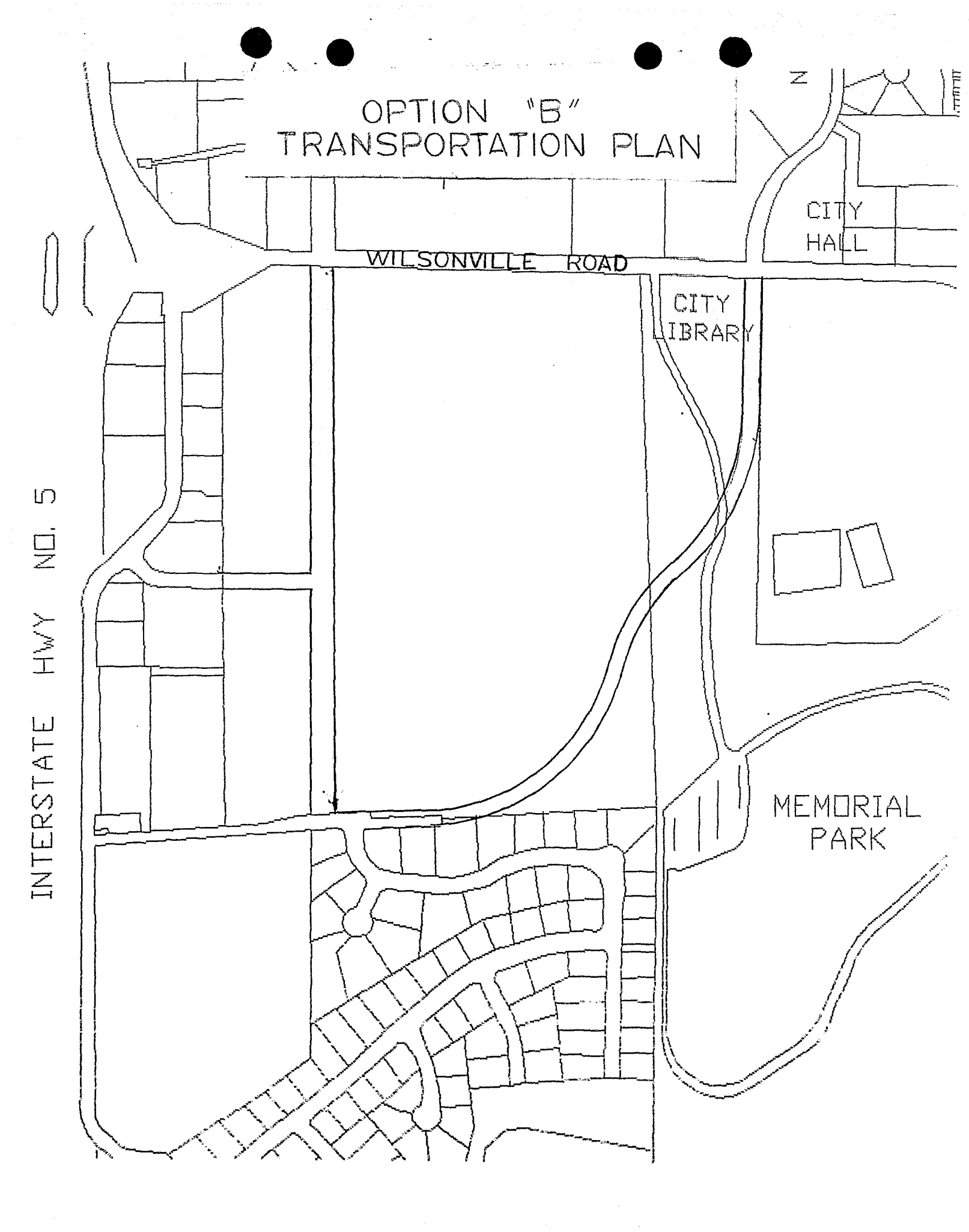
recommendation is forwarded to the City Council in spite of the objections of the Oregon Department of Transportation (ODOT) that were outlined in Leo Huff's letter dated March 29, 1991.

ADOPTED by the Planning Commission of the City of Wilsonville at a special meeting thereof, the 8th day of April, 1991, and filed with the Planning Secretary this same day.

Chairman, Planning Commission

Attest:

Judee Emison, Planning Secretary


OPTION "B"
TRANSPORTATION PLAN
N
CITY
HALL
WILSONVILLE ROAD
CITY
IBRARY
INTERSTATE HWY NO. 5
MEMORIAL
PARK

CARL BUTTKE, INC
CONSULTING TRANSPORTATION ENGINEERS

10

March 15, 1991 WILX0005

Mr. Dick Drinkwater
City Engineer
City of Wilsonville
P.O. Box 220
Wilsonville, Oregon 97070

RE: WILSONVILLE TRANSPORTATION PLAN UPDATE - ACCESS MANAGEMENT GUIDELINES FOR PROPOSED CANYON CREEK ROAD

Dear Dick:

At the February 28th Wilsonville Planning Commission meeting and the March 1st meeting between Carl Buttke, Ken Rust of Public Financial Management (PFM), and City Staff, questions were raised regarding access to the proposed Canyon Creek Road between Town Center Loop Road and Boeckman Road.

Access would be allowed on this road segment. The desirable minimum access design spacing would be 100 feet. This access standard would be the same for both major collector and commercial/industrial road classifications.

The attached table describes access management guidelines that will be included in the final report. Note that these are desirable guidelines for future projects and that existing spacing may vary.

Jim Long and I have discussed the following steps in completing the Final Transportation Master Plan report. Next week, we will be integrating Phase II of the planning process, including the Funding Options and Financial Plan by PFM, into a final report format. We are also upgrading the figures from the Phase I Draft Report.

We will submit a final draft to City Staff for your review during the week of March 25th. Once the report has been reviewed by City Staff, we will submit seven copies for the Transportation Advisory Committee to review prior to the April 18th TAC meeting. After this review we will submit 50 copies of the final report to the City.

2828 Southwest Corbett Avenue
Portland, Oregon 97201-4830
503-223-4728 Fax 503-223-2701
A Carl E. Evans and Associates, Inc. Company

If you have any questions about the proposed access guidelines or our next steps in completing the report, please call me.

Sincerely,

CARL BUTTKE, INC.

Bill Barber
Transportation Planner

WDB:aep

cc: Jim Long, Assistant City Engineer

Attachment

ACCESS MANAGEMENT GUIDELINES

Access Standards			General Characteristics		
Functional Classification	Posted Speed	Minimum Access Spacing[1]	Spacing	Average Trip Length	Appropriate Adjacent Land Uses
Major Arterial	35-50	1,000 ft.	1-2 miles	over 1 mile	- community/neighborhood commercial near major intersections - industrial/offices/low volume retail and buffered medium or higher density residential between intersections
Minor Arterial	35-50	600 ft.	1 mile	over 1 mile	- light industry/offices and buffered medium or low density residential - neighborhood commercial near some major intersections
Major Collector/ Commercial-Industrial	25-40	100 ft.	1/2 mile	under 1 mile	- buffered low or medium density residential - compatible neighborhood commercial at some intersections
Minor Collector	25-35	50 ft.	1/4 mile	under 1/2 mile	- primarily lower density residential
Local Street	25	access to each lot permitted	300-500	under 1/4 mile	- primarily low density residential

[1] Desirable design spacing (existing spacing will vary)

Source: Washington County Department of Land Use and Transportation

MOTION FROM PLANNING COMMISSION MEETING OF APRIL 8, 1991:

Wilsonville Transportation Master Plan

Public hearing was continued for ~~three~~ five items: an alternate proposal prepared for the Teufel property; Canyon Creek Road North, Boeckman interchange, the Library and Wilsonville Road extension near Boeckman Road area.

Mike Williams moved to adopt the Wilsonville Transportation Master Plan, as presented by Mr. Buttke at the March Planning Commission meeting, and as revised by the presentation which Dick Drinkwater presented at the April meeting in terms of Canyon Creek Road North; the Teufel orchard and Day Dream Ranch Option B; and that in terms of the recommendation regarding the Boeckman Creek interchange, it is the Commission's unanimous recommendation that it should be included in the Wilsonville Transportation Master Plan, ODOT's objections notwithstanding. Arland Andersen seconded the motion which passed 7-0.

H. Jean Breck
7065 S.W. Molalla Bend Rd.
Wilsonville, Oregon 97070

I would like to commend the City and Mr. Carl H. Butke, in particular, for the very fine report on the Transportation Master Plan.

Figure 20 (in front of page 56) shows a draft of an East-West collector street through Wilsonville Memorial Park. This street provides a second exit from the properties to the West. In 1986 Wilsonville Memorial Park was one of three sites recommended to the City for our new library. Part of its appeal were the trees and the quiet beauty of the natural setting. At that time we were advised that the present entrance to the park should be changed for reasons of safety and that a new road would be extended from the present entrance to the library to the existing road into the park. This seemed adviseable to everyone concerned.

Our library is being well received. We are experiencing steady growth.The setting in the park is appreciated.

In the goals and objectives for the Wilsonville Comprehensive Plan, the second general objective reads, "Public facilities should be provided and designed to enhance the health, safety, educational and recreational aspects of urban living." The library is an educational and recreational facility. Its location should be protected. As Wilsonville Memorial Park is developed, use will increase, vehicular traffic will increase. Basically the road into the park is the road out except for emergencies and some maintenance. The library was planned so that it could be expanded when growth and the citizens wanted it. The library too, will generate more traffic.

The members of the Library Board of Trustees prefer to see the proposed East-West collector street in Wilsonville Memorial Park removed from the Transportation Master Plan. We would like this to be a matter of the public record of this hearing.

Respectfully submitted,

H. Jean Breck
February 28, 1991

Oregon

DEPARTMENT OF
TRANSPORTATION

Highway Division
Region 1

March 29, 1991

FILE CODE:

Wayne Sorensen, Planning Director
City of Wilsonville
PO Box 220
Wilsonville, Oregon 97070

I attended the Wilsonville Planning Commission hearing in February on the Transportation Master Plan Phase 1 Planning Process prepared by Carl Buttke. I testified that ODOT had reviewed proposed plan, found that it meets the goal of providing a good transportation system in Wilsonville and recommended adoption.

The proposed plan does not include an interchange at Boeckman Road; however, after the public hearing was closed the Commission instructed the consultant to add the interchange.

Wilsonville City Ordinance No. 335 of 1988 included the area around the Boeckman Road/I-5 area as an "area of special concern" with the following wording:

> The land around Boeckman Road and I-5 depicted as Area 11 (in the Transportation Plan) has been planned with a transportation system that includes the interchange. However, because the City is still evaluating all aspects of need and feasibility, there is at this time no conclusive evidence that an interchange at this location is or is not needed or feasible. In the event that the interchange is not feasible, the City will need to redesign the local transportation system.

The proposed plan answers all of the concerns raised in the previous plan (Area 11). The proposed plan provides the evaluation, the conclusive evidence that the interchange is not needed, and a transportation design that accommodates the land use plan in Wilsonville including the Boeckman Road vicinity.

The Oregon Department of Transportation has indicated to the City on many occasions that an interchange at Boeckman Road is inconsistent with Federal Highway Administration and ODOT policy and is, therefore, not feasible.

9002 SE McLoughlin
Milwaukie, OR 97222
(503) 653-3090
FAX 653-3267

ODOT recommends adoption of the plan as it stands, without reference to an interchange at Boeckman Road.

I intend to reiterate these conclusions and recommendations at the City Council hearings leading to the adoption of the plan.

Sincerely

Leo M. Huff, AICP
Planning Representative

City of
WILSONVILLE
in OREGON

30000 SW Town Center Loop E • PO Box 220
Wilsonville, OR 97070
(503) 682-1011

April 26, 1991

Pat Vandell
Dept. of Land Use and Transportation
155 North First Avenue
Hillsboro, Oregon 97124

SUBJECT: Transportation Master Plan for Wilsonville

Dear Pat:

This letter is in response to our telephone conversation this week. I am sending you copies of Mr. Warner's letter of April 15; Table 5 - Street Standards (pg. 53) of the Transportation Plan; Figure 20 - Transportation Master Plan (pg. 54); page 61 which describes the "collectors" located in Washington County; and, finally, a copy each of "Plan A" and "Plan B" which describe the potential realignments of Ridder and Clutter Streets. Mr. Kohlhoff, City Attorney, has written a separate letter to Mr. Warner addressing the road improvements in the vicinity of the proposed solid waste transfer station.

We have not yet received final copies of the TRANSPORTATION MASTER PLAN that contain both Phase I & II. The City will provide you with a copy as soon as Mr. Buttke provides them to us. The Plan that will be adopted is the one depicted in the copy if the Transportation Plan that was initially provided to you. Figure 20 (attached) has been revised to read a little better than the map provided in your copy of the Transportation Plan; but, it is the same map.

City staff will recommend that the alignment of Ridder and Clutter Streets not be changed from our current Comprehensive Plan (Plan A) unless, and until, Washington County amends its Plan. We will include Plan B as a preferred alternative.

The schedule of hearings before the City Council will be as follows:

May 6, 1991--7:30 pm at the Annex Hearings Room--1st Reading of the Ordinance to Adopt the Transportation Plan and set Hearing Date

May 20, 1991--7:30 pm at the Annex Hearings Room--2nd Reading and Public Hearing

The Annex Hearings Room is located at 8445 SW Elligsen Road which is about 3 blocks east of the North Wilsonville (Stafford) Interchange. Please call if you have any additional concerns or questions regarding the Transportation Plan.

Sincerely,

Wayne

Wayne C. Sorensen
Planning Director

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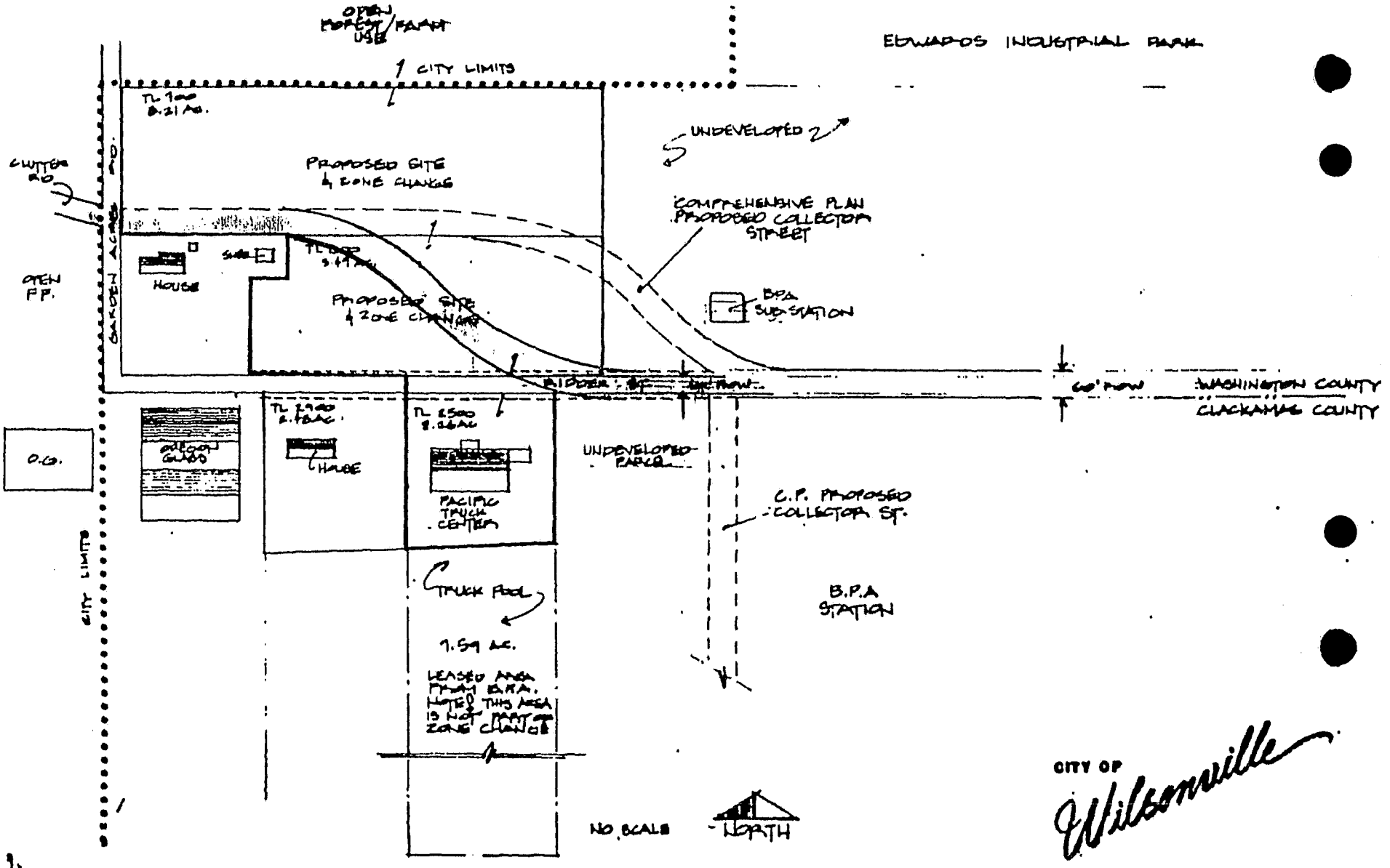
Sincerely,

Wayne

Wayne C. Sorensen
Planning Director

Plan "A"


OPEN FOREST/FARM USE
CITY LIMITS
EDWARDS INDUSTRIAL PARK
TL 1100 0.21 AC.
UNDEVELOPED
CLUTTER RD.
PROPOSED SITE & ZONE CHANGE
COMPREHENSIVE PLAN PROPOSED COLLECTOR STREET
GARDEN ACRES RD.
OPEN F.P.
HOUSE
BPA SUB STATION
PROPOSED SITE & ZONE CHANGE
RIDDER RD.
60' ROW
WASHINGTON COUNTY
CLACKAMAS COUNTY
TL 2400 2.18AC.
TL 2500 8.06AC.
O.C.
HOUSE
UNDEVELOPED PARCEL
C.P. PROPOSED COLLECTOR ST.
PACIFIC TRUCK CENTER
CITY LIMITS
TRUCK POOL
B.P.A STATION
7.59 AC.
LEASED AREA FROM B.P.A. NOTE: THIS AREA IS NOT PART OF ZONE CHANGE
NO SCALE
NORTH
CITY OF Wilsonville

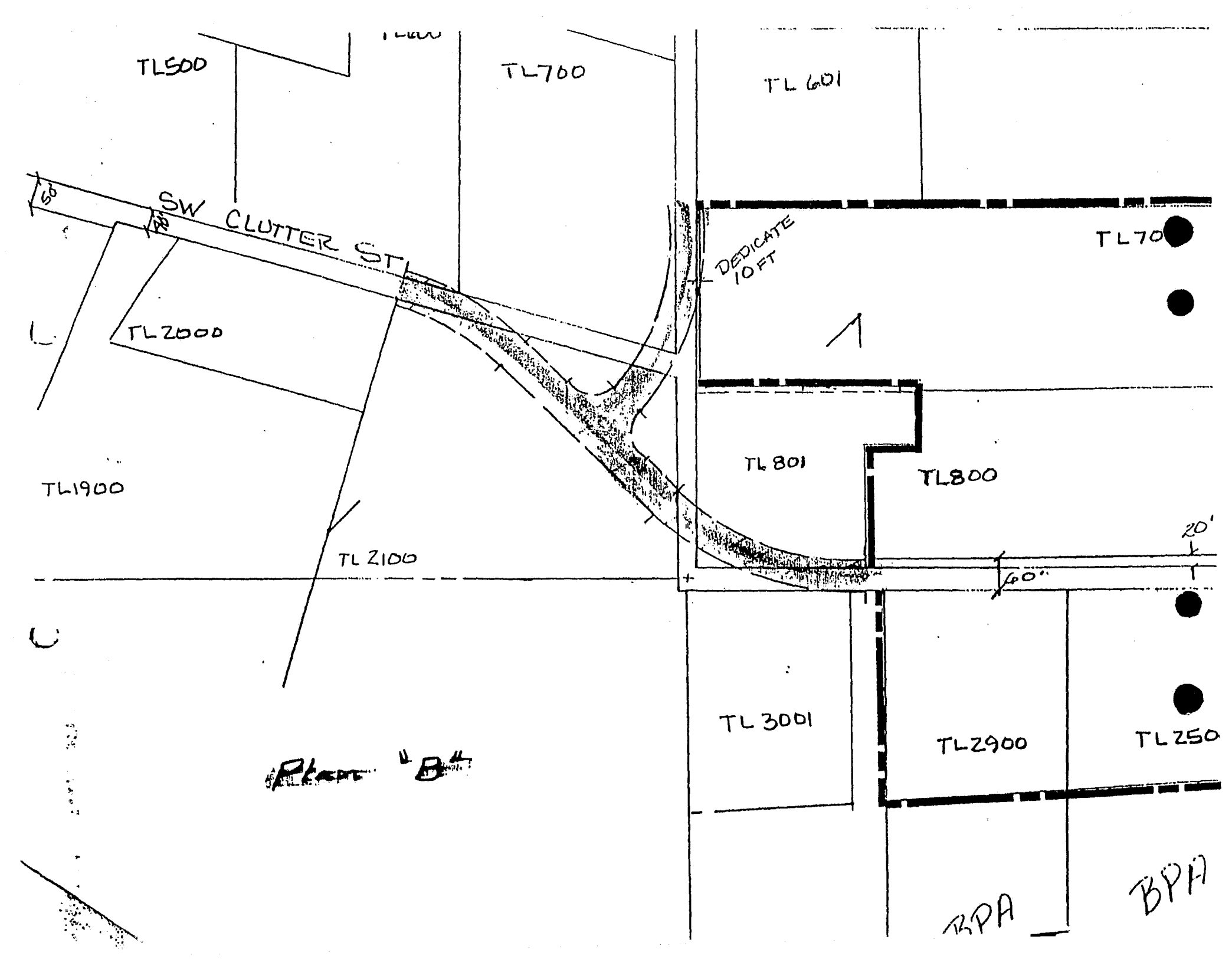
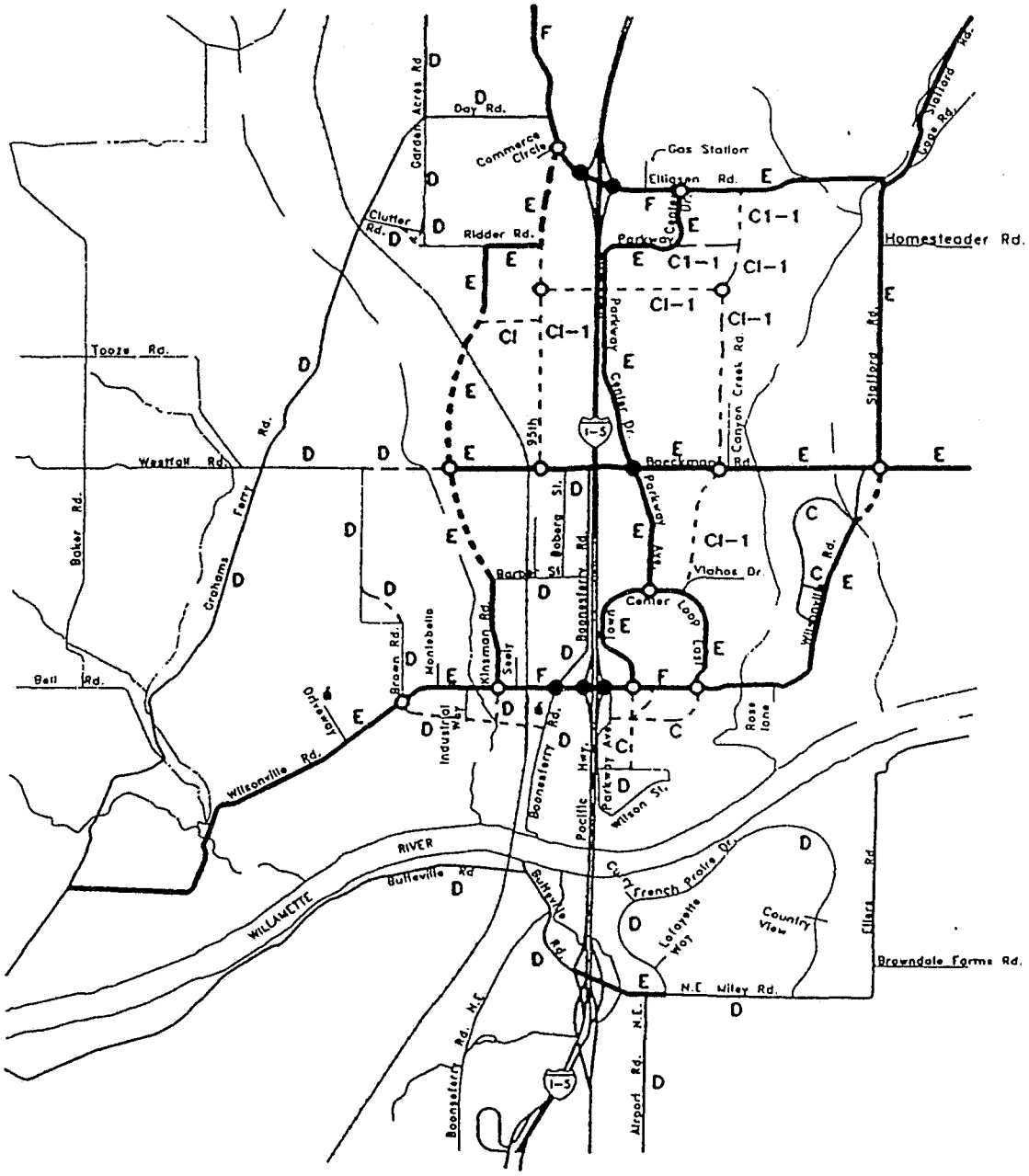

TL500
TL700
TL 601
50
SW CLUTTER ST
DEDICATE
10 FT
TL70
TL2000
TL1900
TL 801
TL800
20'
TL 2100
60'
TL 3001
TL2900
TL250
Plat "B"
BPA
BPA

TABLE 5
STREET STANDARDS

Section	Classification	Pavement Width in Feet	Right-of-way Width in Feet	Design Capacity Vehicles per Day
A	Cul-de-Sac	28	42	200
B	Local Residential	32	50	1,200
C	Minor Collector	36	50	1,200-3,000
D	Major Collector	42	60	1,500-
CI	Commercial/Industrial	48	62	10,000
D-1	Major Collector w/ Bike Lanes	50	74	1,500-
CI-1	Commercial/Industrial w/ Bike Lanes	50	64	10,000
E	Minor Arterial (3 to 5 lanes)	50-66	64-90	10,000-32,000
F	Major Arterial (5 lanes w/Bike lanes)	74	98	32,000

Note: Design capacity based on level of service "D", 5 percent commercial vehicles, 10 percent right turns, 10 percent left turns, peak hour factor 95-90 percent, peak hour directional distribution 55 to 60 percent, peak hour 9-12 percent of daily volume and average signal timing for collector and arterial streets.

DRAFT



LEGEND

	EXISTING	PROPOSED
COLLECTOR STREETS	———	- - - - -
ARTERIAL STREETS	———	- - - - -
DESIGN STANDARDS		C TO F
TRAFFIC SIGNALS	●	○

FIGURE 20

TRANSPORTATION MASTER PLAN

CITY OF WILSONVILLE

Town Center Loop West (Wilsonville Road to Trask Road). Extend as a two lane minor collector, design standard C, to provide additional access for the Daydream residential area.

Burns Drive. Extend from Parkway Center to Canyon Creek Road as a two lane commercial-industrial street, design standard D-1.

Boones Ferry Road. Vacate Boones Ferry Road from the I-5 ramps south to Ridder Road as part of ODOT's I-5/Stafford interchange project. Reclassify Boones Ferry Road as a minor collector, design standard C, from Ridder Road south to Boeckman Road. Widen to three lanes from Boeckman Road to Wilsonville Road, using major collector design standard D. The Boones Ferry Road and Boeckman Road intersection would be improved to facilitate truck traffic turning movements.

Ridder Road. Realign intersection at Garden Acres Road and Clutter Road; construct to major collector design standard D. Widen to three lanes from Garden Acres Road to Boones Ferry Road, major collector design standard D.

Wilsonville Meadows Residential Collectors. Construct at minor collector design standard C to provide circulation from neighborhood to Wilsonville Road.

Grahams Ferry Road. This major collector road is west of the Wilsonville urban growth boundary and under jurisdiction of Washington County. It is recommended that this road be brought up to standards recommended in the county transportation plan.

WASHINGTON
COUNTY,
OREGON

February 26, 1991

Wayne Sorensen, Planning Director
City of Wilsonville
30000 S.W. Town Center Loop East
Wilsonville, OR 97070

Dear Wayne,

The Washington County Planning Division staff have reviewed the City's Transportation Master Plan, and we have the following general comments:

1. The classifications of some of the County roads shown in Figure 4 - Street Inventory (p. 10) do not agree with the functional classification of those roads as adopted by the Washington County Transportation Plan. In the Inventory Day, Clutter, Ridder and the major collector section of Garden Acres Road are shown as local roads whereas in the County Transportation Plan they are classified as major collectors. In the Inventory Elligsen is a major arterial, in the County Transportation Plan it is a minor arterial. The classifications shown in the Inventory do not in some cases match the classifications indicated in Table A-1, 1990 Major Streets Inventory.

2. In the list of Washington County roads within the Wilsonville Planning area (p.11), Clutter Road was omitted.

3. The list of proposed truck routes (p. 11, Appendix Map III) includes Ridder Road, a County road. Ridder Road is not considered a truck route in the Washington County Transportation Plan.

4. There are a number of differences between County road standards and the City's road standards as indicated in Figure 19; e.g., County standard for a minor arterial is for 90' of R.O.W. The City's Plan should make it clear that where the City is approving development on County roads that the County's standards will apply.

5. It is not clear if the existing Transportation Plan policies included in the Appendix are there for information, or if they will be adopted as part of the new Transportation Master Plan. If they are not part of the "new plan," will the City have a set of transportation policies elsewhere in the comprehensive plan?

Department of Land Use and Transportation, Planning Division
155 North First Avenue
Hillsboro, Oregon 97124
Phone: 503 648-8761
FAX #: 503 693-4412

6. Since there are City/County functional classification differences on County roads, please let me know if it is the City's intent that the County should amend its Transportation Plan, or if the differences represent an oversight.

Thanks for the opportunity to review the Plan document. Please let me know if you need any additional information to clarify these points.

Sincerely,

Mark Brown
Principal Planner

MB:lt <mb-2-91> p4-5

Wayne Sorensen

WASHINGTON
COUNTY,
OREGON

April 15, 1991

Mike Kohlhoff, City Attorney
City of Wilsonville
P.O. Box 220
Wilsonville, OR 97070

Subject: **PROPOSED MASTER PLAN FOR SOLID WASTE TRANSFER STATION AND ROAD IMPROVEMENTS IN THE VICINITY**

As you know, Washington County staff has been working on several issues in the Wilsonville area regarding: 1) Future County road improvements and traffic management/circulation issues 2) Traffic circulation and management during construction of the Stafford Interchange, and 3) Reviewing the impacts of the proposed Solid Waste Transfer Station. Mike Maloney, Operations Manager, and Brent Curtis, Planning Manager, have both recently written comments and suggestions to the City regarding these issues. This letter is to provide additional background and clarification for each of these issues and to assist the City in its decisions regarding them.

1) Future County Road Improvements/Circulation Issues - The County is planning a number of repair projects in the Wilsonville area in the coming year. Included in these plans are pavement overlays to Grahams Ferry Road, Day Road, Clutter Street and Ridder Street. The work on Ridder Street may not be required if Ridder is reconstructed as a condition of approval for the solid waste transfer station. In addition to the overlays, the County will also be making minor improvements to the intersections of Grahams Ferry with both Clutter Street and Day Road.

   In addition, the County is investigating local traffic issues including traffic speeds, truck traffic, including overweight trucks on the County Roads, and traffic infiltrating on local streets. The County will be asking the State Speed Control Board to perform a speed study on Day Road to determine the appropriate speed to post. Currently no signs are posted on Day Road, indicating that it is "basic rule". The County will also step up enforcement of truck regulations, including truck routing and weight enforcement. Finally, the County is investigating modifications to Garden Acres Road (including, potentially, a culdesac at the north end) to prevent infiltration onto this local street and to improve the safety at the intersection with Day and Grahams Ferry Roads.

155 North First Avenue
Department of Land Use And Transportation, Administration
Hillsboro, Oregon 97124
Phone: 503/648-8761
FAX: 503/693-4412

2) Traffic Management During Stafford Interchange Construction - Another major issue the County has been working on in the area is the traffic circulation impacts due to the construction of the Stafford Interchange on I-5 at Boones Ferry/Elligsen Roads. The Oregon Department of Transportation (ODOT) design calls for removal of Boones Ferry Road along I-5 near the interchange, and construction of a new street, 95th Avenue, further to the west.

It has been suggested that 95th Avenue be constructed before the interchange construction begins, to mitigate the impacts of construction on traffic circulation and to prevent the need for traffic to travel west on Ridder/Clutter to access Grahams Ferry Road and avoid the interchange altogether. This is a good idea, and one which should be pursued with ODOT. Unfortunately, the ODOT project development has not proceeded to a point to actually begin construction immediately as some have suggested. ODOT is currently working on evaluating the environmental impacts and mitigation for the interchange project, and is not expected to have environmental approval, and a decision to build the project until early 1992. Final design can then begin, along with preparation to acquire right-of-way. Right-of-way is currently scheduled to begin in early 1993, with construction currently scheduled to begin in late 1994.

Washington County will continue discussions with ODOT, to determine the timing of the construction of 95th Avenue. At the very minimum, it seems reasonable that ODOT could place the construction and signalization of 95th Avenue into the first stage of the interchange project, before the major traffic disruption of the interchange construction and closure of Boones Ferry Road. This could be an important part of the construction traffic management plans for ODOT. There may also be a way for ODOT to provide the funds to the City in advance of the interchange project, and the City could construct 95th Avenue.

Based on discussions with you and your staff on April 12, it appears that the link of 95th Avenue from the end of the current improvements north of Ridder continuing north to Commerce Circle will be constructed through the actions of several of the major landowners on the vicinity, and that project also includes construction of 95th south to Boeckman Road. Still needed is installation of a signal at the intersection of Boones Ferry Road and Commerce Circle. Funding could come in the form of grants and/or loans from ODOT and the Oregon Economic Development Department (EDD) through both the Immediate Opportunity Fund and the Special Public Works Fund. Additional funds may be available from United Disposal Service (UDS) and from the Countywide Traffic Impact Fee (TIF) program.

Another potential source of funds is some level of County participation - either in the improvements to Ridder Street (using the funds which may have been expended to overlay Ridder Street) or to signalize Boones Ferry/Commerce Circle, if it can be shown that there is direct value to the County in terms of reduced future maintenance costs or deferred costs due to the traffic relief to County roads.

With regards to the TIF, the revenues collected in Wilsonville should all be spent improving roadway capacity in Wilsonville (only within Washington County). While 95th Avenue is not currently on the list of TIF eligible projects, it can easily be added, since it will meet all the criteria. The City should send a letter to the County formally requesting 95th be added to the Base Report, indicating the Functional Classification and including a description of the ultimate improvement - number of lanes, etc. (Bear in mind that if 95th is a TIF eligible facility, then the group financing the improvements will also be entitled to credits for the eligible costs of that portion in Washington County.

My staff made a preliminary estimate of the TIF amount for the UDS development and it may be as much as $200-$270,000. The use proposed - solid waste transfer station - is not in the list of land uses in the ordinance, so similar uses were considered in estimating the fee. Uses considered were light industrial and warehousing. The applicant may also present information on actual trip generation from a similar use. If that data is consistent with the information in the applicant's traffic report, and is accepted by the City, the TIF could be as little as $65,000. UDS could receive credit against that amount for any funds spent constructing 95th Avenue or Ridder Street (in excess of 28 feet) if they are added to the TIF Base Report.

Another suggestion made recently is to temporarily close Garden Acres Road between Ridder and Clutter Streets. The intent here is to prevent any diverted traffic from the City and resulting from the interchange construction activity from detouring onto Clutter, Grahams Ferry and Day Roads. This idea is not necessarily appropriate, considering the classification and intended function of these major collectors. They may, in fact, be a necessary part of the construction traffic management (detour) plans for ODOT. The County certainly would hope that 95th Avenue is constructed and provides the route for access and circulation during the interchange construction, and will work with the City, ODOT and other parties to ensure that that occurs. If that does not occur, and if the traffic projected to use Clutter/Grahams Ferry was considered excessive, the County may reconsider the temporary closure of the Clutter/Ridder connection as a last resort.

The County is concerned, however, that such a closure could establish a precedent for similar requested closures in other areas of the County, and it runs counter to the Transportation Plan policies. Issues of emergency access are also raised when parts of the transportation system are severed in this manner.

3) Review Of Impacts Of Solid Waste Transfer Station - The County's major concern at this time is the potential realignment of Ridder Street with Clutter Street. Other specific issues with the development will be addressed when the application for development review and access to County

Roads is reviewed. Ridder Street is an east-west major collector in the County's Transportation Plan. It connects with Garden Acres Road, which connects with Clutter Street to form an east-west collector connection between Grahams Ferry and Boones Ferry Roads. Wilsonville also has identified this route as an industrial collector street, connecting industrial areas both in the City and in rural Washington County. Current traffic volumes are low, particularly on Clutter Road, outside the City. Future traffic volumes have not really been predicted with any confidence for these rural roads because of their proximity to the Urban Growth Boundary (UGB) and the level of detail available in the Metro traffic model. Proximity to the UGB will probably tend to keep the future volumes low, although increasing growth in Sherwood, Tualatin and Wilsonville can be expected to raise the volumes somewhat from their current levels.

In the absence of higher projected traffic volumes, Washington County doesn't place a high priority on a major realignment of Ridder and Clutter Streets. Certainly the classification as a major collector and the fact that it is an industrial area with associated truck traffic would indicate the desirability to realign the two intersections with Garden Acres to provide a smoother and safer flow of traffic on this route. The conceptual alignment shown on the Wilsonville Plan is certainly an alternative which would provide an excellent connection if that is what the City desires. The conceptual alignment shown on the (UDS) application would also provide an adequate alignment from a traffic engineering standpoint; however, placing the realignment in the rural area may make the eventual improvement unlikely - given the rural land use issues, location outside the City's jurisdiction and the lack of a compelling reason for the rural property owners to construct such a realignment.

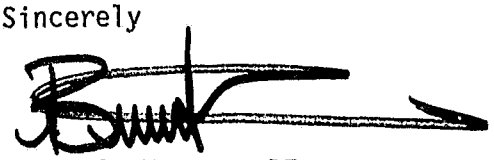
A more reasonable scenario, which retains more developable area, may be to design a realignment which rounds the two corners primarily inside the City, partly on the UDS site and partly on Tax Lot 801. This concept has been discussed with the UDS consultant team and they are investigating its feasibility. The concept could be implemented if and when Tax Lot 801 eventually redevelops. The primary concern of the County is that if the City desires this realignment to occur, they must not approve a site design for UDS which would preclude the eventual realignment in the urban area.

The County doesn't intend to show the realignment on its Transportation Plan in the rural area. To do so would require a detailed discussion of the Statewide Planning Goals. As discussed with you and your staff, this issue may be resolved if the City does eventually expand the UGB and City Limits to include some of the industrial areas outside the UGB west of Wilsonville. Application for UGB expansion and annexation must be initiated by the City, through the Metro process. For these reasons, it would be inadvisable to include any future expansion of the City's area of interest in the Urban Planning Area Agreement with the County at this time. Also, a separate intergovernmental agreement to cover either that

expansion or the road realignment in the rural area would not be appropriate. It would have the same effect as the UPAA, and therefore would raise the same rural land use issues.

Washington County will continue to work with the City of Wilsonville to resolve these and other issues of transportation and circulation in the area. Please let me know if you need any additional information or assistance on these issues.

Sincerely



Bruce A. Warner, PE
Director

c Wayne Sorensen
Dick Drinkwater
Steve Larrance
Mike McKeever
Ben Altman
Wayne Kittelson
Mike Maloney
Brent Curtis

Drive J: (FEMPSWTS)

City of
WILSONVILLE
In OREGON
30000 SW Town Center Loop E • PO Box 220
Wilsonville, OR 97070
(503) 682-1011

April 24, 1991

Mr. Bruce Warner, P.E.
Director, Washington County
Department of Land Use and Transportation
155 N. First Ave.
Hillsboro, OR 97124

Re: Vicinity Road Improvements for Solid Waste Transfer Station Master Plan

Dear Bruce:

Thank you for your letter of April 15, 1991 which both outlines issues and provides clarifications of Washington County's view of them applicable to the proposed master plan for a solid waste transfer station.

The work of Washington County Commissioner Larrance and members of the Washington County staff has been both herculean in effort and very much appreciated by your fellow compatriots here in Wilsonville. Likewise, I believe you can understand and appreciate our staff's work in regards to siting a transfer station which will be a part of Washington County Solid Waste Plan for up to 175,000 tons when all our residential population lives in Clackamas County.

Our staff was, therefore, disappointed to see from your letter that there was no alternative other than annexation for future provision for an appropriate industrial collector link outside the Urban Growth Boundary between a very large rural industrial belt in the county and the City's northern industrial belt. The preferred location (see Plan B attached) in the county had been outlined by the City in the past and understood to have been concurred with by Washington County. It was again brought forth at our April 12, 1991 meeting. This appears to be a seminal issue. Since at best there are only two small properties with a 5-acre farm zone designation between these two major industrial areas, this gives the impression the current land use constraints dictate that obvious future consequences cannot be appropriately planned even if outside the Urban Growth Boundary. We had been in hopes of being able to have both governmental bodies recognize this alignment link as a preferred alternative with the proposed rounding of the Ridder-Garden Acres and Garden Acres intersection as a possible interim solution based on only early impacts of the transfer station.

Therefore, our staff is faced with the choice of either realigning the Ridder to Clutter extension from the current Comprehensive Plan designation affecting the existing site to another property owner's site, or leave it as currently outlined. (Plan A is current outlined alternative within U.B.G.). Given the likely scenarios of condemnation litigation by realigning of the site, staff will have no choice but to follow Washington County's lead and to leave the alignment as is (Plan A) and await for the appropriate time to pass for annexation to become a reality.

This assumes that you do not foresee Metro's current planning proposals as providing any flexibility. Of course, the property owner may be able to trade lands in order to provide a preferred linkage solution. Otherwise, the bifurcation of the site by the current alignment may impose severe development restrictions for the feasibility of the proposed master plan.

I regret that we cannot be more creative in our solutions, but I do fully appreciate the constraints under which we all work.

Very truly yours,

Michael E. Kohlhoff
Interim City Manager

mek:pjm

pc Wayne Sorensen
Dick Drinkwater
Steve Larrance
Mike McKeever
Ben Altman
Wayne Kittelson
Mike Maloney
Brent Curtis

Attachments

14

James J. Graffy
Randon C. Miller-Graffy
27650 S.W. Canyon Creek Road
Wilsonville, Oregon, 97070
May 13, 1991

Wilsonville City Council
City Hall
30000 SW Town Center Loop E.
PO Box 220
Wilsonville, Oregon, 97070

Ladies and Gentlemen of the Council:

I am writing you with regard to pending city ordinances which would "improve" the Wilsonville street commonly referred to as Canyon Creek Road North. Presently this road is a single lane gravel lane which serves the residences of Maves, Spring, Graffy, Keister, and Madrid which span four generation from newborns to an octogenarian. This road is adequate for these residences and the improvements which are rumored will not enhance but rather be a detriment to the livability of all of these homes.

Our understanding is that the improvements would establish Canyon Creek Road North as a three lane feeder of the same construction type as was done for Boeckman in front of the new Mentor Graphics facility. This road would serve to link the Parkway Loop to south Wilsonville to replace the Parkway frontage road so that it could be reduced to limited access for the businesses now served on Parkway. It does not make sense to me to divert traffic from a business district through a residential area. Such a road would dramatically change what is now secluded home sites which are quiet and safe for the children which play on these properties and also for the wildlife which the forest like setting harbors. This road is located between two day care centers, the one at Faith Baptist Church and the future center on the Mentor Graphics campus. A 40 MPH or even 35 MPH would be unsafe for these children as well as the residents.

Recently the Post Office agreed with the residents of Canyon Creek Road North to have their mail boxes moved from Boeckman Road to the front of the residences on Canyon Creek. The reason given was that it was unsafe for these residences to get their mail on Boeckman. The proposed improvements would just put the property owners back into the same unsafe situation.

The intersection of Canyon Creek Road North and Boeckman Road was recently rebuilt to improve sight distance. The improvement did little to improve the safety of the corner. Making this a major intersection in the city and increasing the number of vehicles using the intersection will only further degrade a poor situation.

We can understand the need for improved streets to serve the residences and businesses of Wilsonville. There are now large undeveloped parcels of land between Canyon Creek Road North and Elligsen Road which will eventually be developed and need roads. I propose that this area be served by coming south from Parkway Loop as presently planned, but then cut over to Parkway just north of Tektronix using the Wiedemann Road right of way. This road has no businesses or residences to disturb. This would also leave Canyon Creek Road North alone and not disturb the present quality of life. Should a link be desired from Boeckman to Wiedemann Roads for access to utility rights of way or for fire protection, a two lane 25 MPH residential grade street would serve adequately.

We moved to Wilsonville for the rural lifestyle which, at the time, it exemplified. This was a quiet, safe, pollution free environment with teaming wildlife and friendly neighbors. This road improvement symbolizes just the opposite by increasing noise, pollution, and reducing the safety and viability of wildlife habitat, while segregating neighbors with a high speed concrete ribbon. Please <u>think</u> before improving the business atmosphere of Wilsonville at the expense of the residences who also pay taxes and are the only ones to vote.

I am beginning to get the impression the new Wilsonville attitude is "If it ain't big business or high density housing, it don't belong in Wilsonville."

Sincerely

James J. Graffy

Randon C. Miller-Graffy

PLANNING MEMORANDUM

City of
WILSONVILLE
in OREGON

30000 SW Town Center Loop E • PO Box 220
Wilsonville, OR 97070
(503) 682-1011

DATE: May 15, 1991

TO: Honorable Mayor and City Council

FROM: Wayne C. Sorensen, Planning Director

SUBJECT: TRANSPORTATION MASTER PLAN--91PC18

The Wilsonville Planning Commission adopted Resolution No. 91PC18 on April 8, 1991. The Planning Commission recommended that the Transportation Plan be adopted; however, the Commission also recommended that Boeckman Interchange be included and made a part of the Transportation Plan. The Transportation Plan, as proposed, does not include the Boeckman Interchange. Boeckman Interchange is identified in the Comprehensive Plan as "Area of Special Concern--Area 11". All references in the Comprehensive Plan that refer to a Boeckman Interchange also refer to Area 11. "Area of Special Concern--Area 11" sets forth the interest and policies of the City of Wilsonville and the Oregon Department of Transportation regarding the feasibility of an interchange at Boeckman Road and Interstate 5 and, additionally, identifies the procedures the City would need to go through in order to put the Boeckman Interchange back on the public facilities plan map and project list. At the current time, the Transportation Planning Rule (adopted on April 26, 1991) and the Federal Highway's Interstate Access Policy do not support or favor including a new interchange on the City's Transportation Master Plan. The Oregon Dept. of Transportation (ODOT) is very concerned about the implications contained in the Planning Commission's recommendation and this is expressed in the letter submitted to the City that was written by Mr. Huff.

Mr. Kohlhoff and myself met with Leo Huff, ODOT, and Jim Sitzman, DLCD, on May 14th to discuss a resolution to this issue. This is a very important item because the State will be conducting

an Environmental Impact Analysis for the North Wilsonville/Stafford Interchange and the Wilsonville Interchange. In order to perform the Environmental Impact Analysis, the State needs to know the exact status of the Boeckman Interchange. Delaying the Environmental Impact Analysis could very well affect the construction schedule and timing of the proposed interchange improvements at the North Wilsonville/Stafford Interchange currently scheduled for 1994.

A resolution to this issue would be as follows:

1. The City Council would adopt the Transportation Master Plan as proposed by Mr. Buttke along with the recommended changes suggested by the Planning Commission, except for Boeckman Interchange. The State would agree to support the Plan and would agree to keep "Area of Special Concern--Area 11" in the Comprehensive Plan text as agreed to in 1987.

2. The second paragraph of "Area of Special Concern--Area 11" would be modified to read:

   The land between Wilsonville and the North Wilsonville-Stafford Road Interchanges was planned initially with a transportation system which included an interchange at Boeckman Road. The City is still evaluating all aspects of need; there is not, therefore, any conclusive evidence that an interchange at Boeckman Road will or will not be needed for the long term. Because of the potential for a substantial change in this special concern area, the City will continue to evaluate all future options.

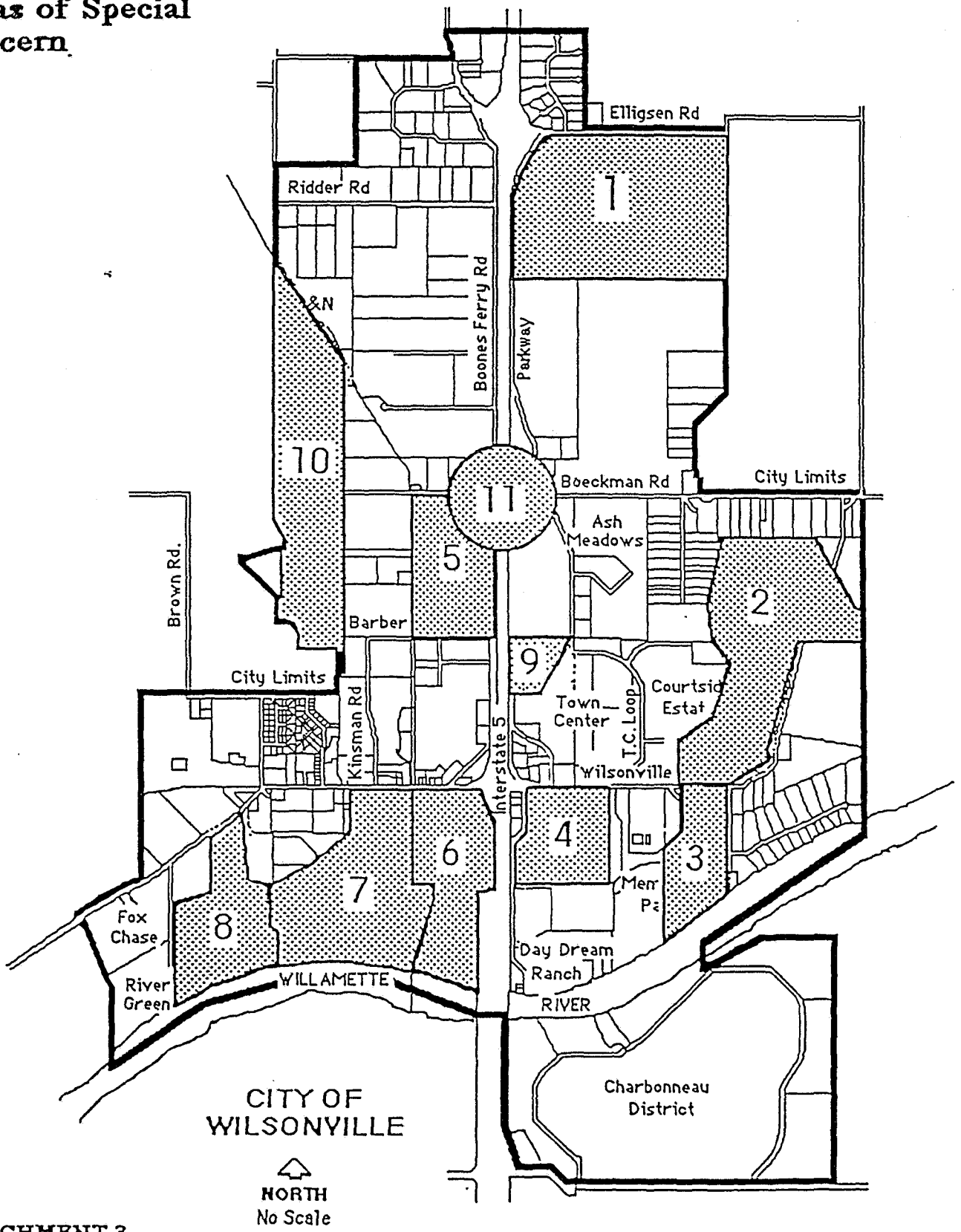
   The existing language reads:

   The land around the intersection of Boeckman Road and I-5 depicted as Area 11 has been planned with a transportation system which includes the interchange. However, because the City is still evaluating all aspects of need and feasibility, there is at this time no conclusive evidence that an interchange at this location is or is not needed or feasible. In the event that an interchange is not feasible, the City will need to redesign the local transportation system. Because of the potential for a substantial change in this special concern area, the City will regulate and condition land uses as necessary to accommodate an interchange.

This language would be deleted and replaced with the paragraph in **bold** above.

The changes outlined above preserves the "Area of Special Concern--Area 11" and complies with the agreements between ODOT and the City of Wilsonville reached during the Periodic Review process. This agreement will allow the Department of Transportation to proceed with the Environmental Impact Analysis and meet the current schedule for beginning construction of the North Wilsonville/Stafford Interchange in 1994. For the Council's information, I have attached a map of the "Areas of Special Concern" that we currently list in the Comprehensive Plan.

Areas of Special Concern



ATTACHMENT 3
PAGE 1 OF 1
ORDINANCE NO.
88-0-104-88

Legend

Areas of Special Concern

City of
WILSONVILLE
in OREGON
30000 SW Town Center Loop E • PO Box 220
Wilsonville, OR 97070
(503) 682-1011

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Wilsonville City Council has scheduled the first reading of an Ordinance relating to the adoption of the TRANSPORTATION MASTER PLAN for the City of Wilsonville for Monday, May 6, 1991 at 7:30 p.m. at the City Hall Annex, 8445 SW Elligsen Road, Wilsonville, Washington and Clackamas Counties, Oregon, or to such other place or time to which the Council may adjourn. The City Council will set the second reading of the ordinance and public hearing at that time.

The application, initiated by the City of Wilsonville, requests the adoption of a TRANSPORTATION MASTER PLAN that was prepared by Carl H. Buttke. The Master Plan amends the Comprehensive Plan map, adopts new road/street standards, and addresses other transportation alternatives. This amendment, if adopted, applies to the entire urban area and the immediate area adjacent to the Urban Growth Boundary.

Applicable criteria for this review is set forth in Section One of the Wilsonville Comprehensive Plan (Plan Amendments). Copies of the criteria and the TRANSPORTATION MASTER PLAN are available for review at the Planning Department located at 8445 SW Elligsen Road. All testimony and evidence shall be directed to the applicable criteria or the person providing testimony shall state which other criteria they believe applies to this application. Personal copies may be provided at a cost of ten cents per page.

Inquiries should be directed to Wayne Sorensen, Planning Director, at 682-4960 or Vera Rojas, City Recorder, at 682-1011. Public testimony, oral and written, will be accepted at the hearing. Written statements are encouraged and may be submitted to the City Recorder prior to the hearing date.

EXCERPT FROM SPECIAL PLANNING COMMISSION MEETING OF FEBRUARY 28, 1991:

Jim Long, Design and Survey Technician in the City's Engineering Department, gave an overview of the City's Transportation Plan. He stated that in 1988 the City Council revised what was the Traffic Safety Committee to the Transportation Advisory Commission. Council gave the Commission two items to work on. One was establishing the Transit System and the second was to develop a Transportation Plan for the City.

Carl Buttke — Thank you, Jim. With me tonight is Bill Barber, who is Project Manager on developing the Plan for you and has done a majority of the work. What I'd like to do is go through the process that we used in developing the plan and discuss some of the overview of it and then Bill Barber will get into some of the details of the plan with you.

This chart shows the basic process that we used in developing the plan and its shown on page 3 of the report. The project will be divided up into two phases and what we're talking about tonight is the first phase, which is the development of the overall Plan. The second phase, which we're just in the process of completing right now, that is, the staff and the Transportation Advisory Commission, is the detailing of the Plan - getting into some of the details of the intersection design or configuration and implementation, cost estimates and funding. I can briefly review the process. It's basically a seven-step process, all of which is involved with needing and reviewing our work with the Transportation Advisory Commission. Getting their feedback and then going back and continuing on with our work or at certain key points, like when we're looking at alternatives. We showed them different alternatives and will get their consensus or recommendation on the selected alternatives and go into detailing.

The first element of the process was basically a review to come up to speed and read the various documents that were prepared for the City by other consultants and your Comp Plan. So we start from what you've been doing in the past and not overlooking

any of the past traffic analyses or anything that relates to transportation that you've been doing since the first requirement was prepared. So we started our meetings with the Transportation Advisory Commission. As we were doing the review and into the next month of work we spent inventorying the street system, making traffic counters, machine counts on the various streets. Some of the various counters that we have can differentiate between trucks and automobiles, so we are able to measure on some of the more key roadways truck (unintelligible), and actually by axle type, versus the number of automobiles on the street system. Also, we inventoried, and I looked at your bikeway plan and bus routes, and what was evolving with your bus operation at that time.

The next task, which is a very major task, is the forecasting of traffic for the next twenty years, and that was done by first of all estimating the population and employment for the City for twenty years. In doing that, we did a survey of existing employment and population within the City and looked at proposals or zone change requests, or whatever development projects you had which would indicate what possible employment there would be by types of employment over the next twenty years.

We also compared that with the forecast made by Metro in their original transportation planning and the forecast that we came up with and finally used was slightly higher than Metro's for the year 2000. Because the projections we're using really looked at full development of the City, and we thought for just about a 10% increase in population and employment, we could be looking at full development in the City rather than almost full development. And in that way you're assured that the recommendations, as you implement them, are addressing the full potential of the City on the street system, rather than, say, addressing 90% of the potential, and then having to go back and revise that some other time.

The population in 1990 for the planning area, which is basically the Urban Growth Boundary, is about 7300 people, and is forecast in twenty years to go up to about 15,500, which is roughly a little over doubling in population. The employment last year was

about 6200 people and that's forecast to nearly triple in the next twenty years to about 18,000 people.

What that means for transportation is one of two things. You could be bringing more people into the City to work from outside the City, or more people in the City will be working in the City rather than driving out. Basically, both of those phenomena will occur more in the future. More people will stay in the City than what you have for working than what is here today because the employment base is so much smaller and because in the future as you have more employment, people from neighboring communities will commute into the City. With the employment and population forecast, we then converted back into trips on the street system by using a computer model which basically simulates the amount of traffic, the amount of road (unintelligible) for either current conditions or some arising, whichever time period we'd like to test. In this case, it is a 20-year forecast. In developing that computer model, we first set it up to simulate current traffic and when we received or are able to project or forecast volumes, or calculate volumes, on the street system, they are within about 10% of what we measured, then we feel confident that the model is working properly and will give us good results when we forecast up to the twenty years. Then we use the year 2010 forecast to come up with a population employment forecast from all the traffic assigned to the street system and then compare those volumes with a capacity of the street system in the year 2010. And then identify deficiencies in the street system in the year 2010. We reviewed that with the Transportation Advisory Commission and then developed alternatives and reviewed those alternatives with the Commission. Upon testing the alternatives we came up with the best option for circulation for the next 20 years and then detailed that into the final plan. We went through the evaluation of looking at the volumes capacity, deficiencies and processes for doing the different alternatives before we finally chose an alternative.

The Plan you have today addresses the street system requirements, a bikeway system and then we get into a second phase of

work which we are just completing. We get into street improvements, (unintelligible) intersection access management transit development, priorities of implementation, capital costs and funding mechanism to actually implement the recommendations of the Plan. With that I'd like to introduce Bill Barber, who will get into the details of the Plan with you.

Bill Barber

Thanks, Carl. The first question that comes to mind is, if you have an existing Transportation Plan, why change it? The immediate answer would be, if you look at the City's population growth over the last ten years, I think some of you have probably heard that the City of Wilsonville is the fastest growing City in the State in terms of percentage. So we have to look at the idea that a plan is kind of a changing animal, I guess you would say. Carl worked on a plan for the City ten years ago. There has been this phenomenal growth during the 1980s and as Carl was saying, we're looking at another doubling of population forecast in the next twenty years. So it's a good time to take a look at what kind of a plan is going to work to carry the City into the twenty-first century. Areas in the Plan I'm going to kind of highlight are looking at the development of alternatives. I'm going to go through that briefly, kind of describe what we did and some of the pros and cons of each alternative. I'm going to spend some time talking about some of the issues that the Master Plan had and once I've done that, I think I'd like to open it up to question and answer for Mr. Buttke and I.

I think for starters, I want to point out the City's existing street system. As you know, we've got kind of an hour-glass type of shape with the City. We've got I-5 right down the middle and the two major north-to-south roads in the City, right now are Boones Ferry Road on the west and Parkway Avenue on the east. Those two north-to-south roads are carrying most of the traffic. So what we have is a lot of the traffic circulation congestion areas in the City are right along this I-5 corridor. Another problem with the existing system is that both the I-5 Wilsonville interchange and the I-5 Stafford interchange have existing congestion problems and both are under study by the Oregon Department of Transportation . The third area where we are seeing congestion in the City is along the east-

west routes on Wilsonville Road in the area of the interchange and Elligsen and Boones Ferry Road. So what we did, and again we are talking about this develop alternatives part of the process, what we wanted to look at in comparing our system's alternative was to first look twenty years in the future with this projected population growth and employment growth and see what would happen if we had the existing system we had now just with committed improvements. By committed improvements I mean the improvements to both the interchanges at Wilsonville Road and at Stafford Road. So that was our first modeling attempt - we looked at this existing system - new interchanges and what we found was more of the same problems that we are seeing now. We say these two north-to-south roads becoming really congested. They're narrow, two-lane roads right now without any kind of improvement or any kind of addition to the system. We found that both of these roads are over capacity. We also found capacity problems along Boeckman Road and while the interchange improvement helped right in the vicinity of the interchange, we also found that as we got away from the interchange at Wilsonville and on Elligsen, that we started seeing congestion problems. So we were able to see real early on in the process that if we didn't make any improvements with the projected growth, that we'd be seeing increased congestion in the City.

The second system that we wanted to look at in our modeling effort was to look at the City's existing Transportation Plan that was develped about ten years ago. Can everybody see this okay? This is Figure 3 in the Report. What this graph is illustrating is it's showing the City's Urban Growth Boundary, City Limits, in the thick dark line. The dashed lines on the map are illustrating proposed new roads that are in the City's existing Transportation Plan. So our next step in looking at this alternative's analysis was to take the City's existing plan and look at these forecasts, population and employment numbers, and to see if the City's existing Plan would handle forecasting of it.

What we found in looking at the City's existing plan was kind of a lack of north-to-south continuity on both sides of the Freeway. There's a new link east of Parkway with an offset

intersection here. So it's taking some of the pressure off of Parkway Avenue, but it's not a continuous link. There's also a couple of new links that are proposed west of the Freeway, and as you can see, one starts from Kinsman and goes to the north, crosses over to Boones Ferry. The other starts at Boeckman and kind of winds over and up to Ridder Road. So, although we're showing some additional roads, we're not really showing a more direct north-to-south link that we need. What we found in looking at the traffic volumes on this network was that we didn't have as much a problem over here on Parkway Center. We still did have quite a bit of problem on the west side of the Freeway, however, because of this continuousness. We also still have quite a bit of traffic on Boones Ferry Road. We had a pretty substantial amount of traffic on Boeckman Road.

This is the third system we've looked at in our alternative analysis and what eventually developed into the Master Plan Map is what I have upon the board right now. I think the major difference, as you can see, is Figure 20.

Wayne Sorensen — Figure 20 - it's toward the back.

Helen Burns — It looks like number 4.

Chairman Williams — Well, they say it's 20. The first one to find it yell the page.

Lew Hendershott — I've got it. Right here, page 56.

Barber — Then when using the Master Plan Map, because it's illustrating not only the recommended network, but also some of the design standards and traffic facilities, etc. But the major difference is in the Master Plan Map and the network we compared were looking at a more continuous, north-to-south road west of the Freeway. This would be Kinsman Road that you would be able to go all the way from Wilsonville Road up to Ridder. It also would punch 95th through on up to Commerce Circle. On the east side of the Freeway we're looking at Canyon Creek as being a kind of a continuous north-to-south road that would go from the Town Center Loop all the way up to Elligsen. A third major component of the new Transportation Plan map would be a new overpass at what would be Wiedemann Road that would connect at Canyon Creek Road and

95th, so it would offer some additional east-to-west traffic circulation up in the industrial part of the City. Those are the major new roads on the Plan map and we did find that by having more direct north-to-south connections on either side of the Freeway and also this additional overpass, there was a better balancing of the traffic throughout the City that we didn't have this hour-glass problem that the City would be experiencing without additional circulation east and west of the Freeway.

Some of the other things that I would point out on the Master Plan map and this is kind of the key thing that we're looking at tonight. The Master Plan map is showing the arterial streets in the darker band with, and then the collector streets in the lighter band with. These letters on the map are design standards. I will get to those in just a second. It takes the various arterial streets and collector streets and kind of gives a standard of the amount of right-of-way and street width for each road. Then finally, we've taken a kind of first step in looking at where we think the traffic signals may be in the future. The existing traffic signals are the circles that are filled in. The traffic signals that would be recommended once they met an engineering line are in the open, kind of doughnut-like circles. So we do have some additional traffic signals at key places.

I'll go ahead a little bit here and run through the street standards and then put the Master Plan back up (on overhead projector). These are the street standards along with the functional classification of the road and starting at the top with the item no. A and going down through F. It's kind of a hierarchial kind of a classification - that the top classification here, that the cul-de-sacs and residential would be streets where everybody would have access. As you get further down into the arterial-type streets, the function of these streets is more of through traffic, so you would have less access and more traffic, where up at the top of the list in your local residential areas you would have just local traffic and (unintelligible). Going down the list, we have local residential and cul-de-sac streets to serve the local neighborhoods. The next step in the hierarchy would be the collector roads, standards C and D, minor collector roads are the bridge between the local residential

streets and the more commercial streets and are designed to carry about 1200 to 3000 trips a day. The major collector roads are still carrying a mix of local traffic and through traffic, but they are carrying more of a range of 1500 to about 10,000 trips. We also have a designation called commercial/industrial which is very prevalent in the northern part of the City. It's more geared to the areas around the Stafford I-5 interchange. And finally we're looking at a couple of different standards for minor arterial roads. Our standard E would be a choice of either a three-or-five lane minor arterial road. It would be carrying between 10,000 and 30,000 trips a day. The major arterial road would be a five-lane type of road and would be a road such as Wilsonville Road in the vicinity of the Freeway and Elligsen Road also in the vicinity of the Freeway.

Of the three alternatives, this was the alternative that we felt worked best in terms of comparing the traffic in the City. We think that some of the best components of it are that it's taking traffic away from Parkway Avenue and Boones Ferry Road. In fact, Boones Ferry Road would have to be relocated because of the I-5 Stafford interchange improvement, so the north-to-south connection would be Commerce Circle. Boones Ferry could still act for local access along the Freeway, but it would not be the major road. 95th and Kinsman would be the major roads on the west side.

I'll wrap up my presentation at this point and open it up to any questions and we can take it from there.

Chairman Williams Okay, I take it that one of the things we were wrestling with with the old street plan, I guess that's what we called it. We said that the location of these was pretty elastic, that is, they could move.

Barber That would be correct with these also. And one of the things you're proposing, at least at this time, is that the Canyon Creek Road north and south, have an intersection whereas in the last plan it was offset. I guess I just wonder, since I live in that area, I just wonder why the change, what happened in ten years that would require that intersection to not be offset. Two-part question, well it may be more than two parts. From Boeckman Road south where the Canyon Creek Road south extension is shown is all residential. It's residential to the west. It's planned residential to the west at this time. And

it's also residential to the east, so I guess I don't understand the designation as a commercial industrial with the bike path, which would prohibit, at least to some extent, access. This seems to me would severely impact the ability of anybody to develop their either single-family or whatever and have any sort of access in and out. I guess so the third part of it is even if it is designated commercial industrial, would there be access for a driveway for properties alone? You can start with any one of the three.

Barber — The C-1 section or the -

Chairman Williams — Yes, I think that's the 50-foot pavement width - 64 feet of right-of-way.

Barber — That's a pavement width that can vary between 22 and 48 feet. It can be 48 to 50 feet with a bikeway. Basically, it's a three-lane roadway. One lane in each direction with a left turn plus bikeways. There wouldn't be any curb parking because the bikeways would be alongside the curb. But that does not preclude access. Now with this type of roadway, you don't want really residential driveways every 50 or 100 feet. Because then the roadway will be real - you'll start to have driveway accidents related to -

Chairman Williams — Right, but I guess my question is, if it's cutting through a residential area, why not? What happens to the access for those people within those residential areas?

Lew Hendershott — Mike, doesn't that go through the Mentor Graphics property which is being changed to industrial?

Chairman Williams — Well, there's a Comprehensive Plan change amendment to make it industrial in the northerly portion of it, but that still doesn't take care of the residential property to the south and west, as well as to the east.

Buttke — If I can, maybe I can help, or maybe I can muddle it up. I think what's proposed even though this Wilsonville Road is of a higher classification than what we're talking about down here, Mike, is a collector-type street that takes - in other words, Wilsonville Road goes through the Randall project. There's residential on both sides. It is a road that has feeder roads into it, collect the traffic and move it on through. This is a very similar situation. There is not access denied. There are points of access. In other words, you don't

allow points of driveways as you do on the internal streets in here that pick up the single-family traffic and bring them out to Wilsonville road. You can allow driveways there. But on the major roads which is what Mr. Buttke is showing, you bring it through the residential neighborhood and collect the traffic with minor roads onto it and carry it on to the -

Chairman Williams — I guess my question is more personal as it relates to my piece of property which is no surprise. And since you have put the sewer right down my back property line. I presume the street, although we say they are elastic, it's probably going to go where the sewer is. So would I have access from the rear of my property onto that street?

Barber — No, that's not the intention.

Chairman Williams — Wait a minute. It's the intention not to have access or the intention to have access?

Barber — The intention not to have access from the rear of the lots because you have access on the front of your -

Chairman Williams — What happens if I divide the lots which I'm allowed to do?

Buttke — Do you want to put that exhibit up? The one that shows what it looks like.

Helen Burns — It looks like you may not realize that those are the largest lots that houses can go on in the City. Not quite, but almost.

Barber — I think it's kind of unfair for Carl because he doesn't know where you live. I happen to know where you live so maybe I can help a little in answering that. A lot of the lots that are in that area that you live in, Mike, are quite wide. I don't remember - what, 250 feet or something like that in width. And the development potential that would probably occur on there if I recall the zone correctly, is what - 0 to 1 per acre, so the impact of collecting what divisions that your neighborhood may do, would probably be able to be handled on this road.

Chairman Williams — I just want to have it clear that if that ever happens, I don't want to be whipsawed at five years from now and have them say, 'Well, here was the plan, you were present, you didn't object, there's no access'.

Barber — Well, I don't think you would need a driveway every lot. We have done some conceptual plans looking at that and it appears to me that the way that breaks out, it will work very well.

Chairman Williams — Okay, I'm going to get off the personal thing now.

Burns — It's not personal with me and I'd like to see this further expanded without running it through all that residential .

Chairman Williams — And I guess the other question is - why don't we have the offset intersection on Boeckman with Canyon Creek Road north? I guess I'm a little chagrined now, because if I would have known that was coming when Mentor Graphics came in, we would have required Canyon Creek north to be moved further to the west so that you have a good intersection rather than one that you kind of sneak up on and turn.

Buttke — Here's the existing plan - Canyon Creek here and another connection over here. Canyon Creek does not go through this - there's no continuous roadway north and south. Under this configuration, a majority of traffic will use Parkway. With this configuration, we're getting the traffic away from Parkway and will be north-south through here spreading the traffic out (looking at map) to where it can function properly, you really want that to be a continuous street. So that's why there are no longer two intersections. There's one intersection on the roadway (unintelligible) with Canyon Creek to the north. By having them all set, you just have traffic onto Boeckman and one could have a lot of congestion between these two points if this is going to function as a north-south roadway. With this kind of configuration, it wouldn't function that way because it's really not set up as a continuous roadway.

Chairman Williams — Let me speak to that as a driver and not as an engineer. It seems to me if you had a 90 degree intersection, it works infinitely better than an intersection where you may approach it at a weak angle. The only point of reference I have is the Parkway-Boeckman intersection now where if you're going on Boeckman Road west and you turn on Parkway northerly, that's a tough turn to make because the road is kinda - so it seems to me if you followed your plan to the logical conclusion, why would you not take Canyon Creek Road north and just run it directly south rather than sliding it over to the west.

Buttke	Continue north here and then slide it over -
Chairman Williams	No, straight south there. Well, then you're taking all the traffic right through the residential neighborhood.
Hendershott	You're taking it right off the backs of your houses.
Buttke	Rather than bringing the traffic right through the neighborhood itself, the neighborhood is basically preserved and the traffic goes around the backside.
Sorensen	Part of that was plans for the Ash property showed a collector street on the Ash property and so we kept it on the property that was already committed to that roadway.
Chairman Williams	Because I remember the collector and the Ash was interior to Ash.
Sorensen	It was an interior slightly west of what is shown here. You are correct about that. There's a collector street though that would have been built by the Ash development.
Chairman Williams	So what happens is, for the people that live in my neighborhood, whereas they thought that Ash Meadows was going to develop with large single-family homes along their east property line, but for that development, now we have a collector street.
Burns	That was why we required that they use those large lot areas on the east - so that we would have that quiet area to buffer to the large ones.
Arland Andersen	Progress is wonderful. You've got to take it in stride.
Hendershott	Of course, Mike, there would be no reason at all why that Boeckman Creek south couldn't be moved over, leaving room for a lot between your back property line and the street or for a frontage road say. Because that north-south road there is quite important in the overall plan and it is very possible to move the intersection slightly to the west where it could be a straight-across intersection. It would take a corner off of Mentor Graphics which - they aren't here to defend themselves I don't think.
Marv Wagner	Oh yes they are.
Hendershott	As far as those of us on the Transportation Commission are concerned is that the intersection is much better where it can be a crossover intersection and signalized, rather than an offset intersection, which is very much a traffic hazard.

Chairman Williams — Okay, well, that's one of the areas. Are there any questions regarding any other areas - we've got to move along here.

Marian Wiedemann — I've got a question too. In the old plan, there was this catty-corner roadway from Ridder Road to Clutter Road. In the new one, I don't see any road through there, which is just dandy.

Buttke — It's shown differently. It's shown right through here. It's just the alignment that's changed. It's not as pronounced.

Wiedemann — Oh, it goes to Garden Acre Road and then cuts over.

Buttke — Well, it cuts over on both sides of Garden Acre Road, but not as extreme as what's shown on the previous plan. It does the same thing, it's just not quite as extreme.

Wiedemann — But, I took it then that the bulk of the traffic that might go to Grahams Ferry Road or Garden Acre Road would take this new Kinsman Road (unintelligible) off new Ridder Road and gets to the Stafford overpass, right?

Buttke — Yes, most of the traffic is going to be coming over to this area that - in fact, it's outside of the current Urban Growth Boundary and these roads - Ridder, Garden Acre and Clutter - are all Washington County roads and I may need a little elaboration from the staff. One of the issues with this intersection, I think it's a joint Washington County and Wilsonville project, is just having a better intersection alignment here. These are all roads that are carrying very low volumes today and we really don't anticipate them carrying very high - they are going to be carrying similar volumes in the future.

Wiedemann — With the garbage collection station in there, there will be plenty of traffic.

Sorensen — That's a potential site for one of the transfer stations that Metro is trying to site. We haven't got any traffic generation for that site - I don't know how much of a volume of traffic one of those transfer stations would generate.

Wiedemann — A huge amount if it's anything like the Oregon City station which it would be. It would be the same kind of thing.

Buttke — That would be why there would have to be a special impact-type study, which is kind of beyond the kind of work we do. We look more at the whole system and actually I'd recommend on this one to really track a more detailed study.

Weldon Sloan — Point of clarification here. South of Wilsonville Road, immediately east of the Freeway, Parkway Avenue, Wilson Street, and like Mike, I have a slight selfish interest here. You go from a D to a C, am I reading something backwards here? Does that relate to Parkway Avenue?

Buttke — Yes, this is the collector road from Parkway Avenue. This would be carrying the commercial -

Sloan — This is a little vague, but as those C streets are developed, they would become the Ds. The C immediately north of that D would become a D I would think.

Buttke — Yes, the idea with these. There is a southerly street and then kind of a east and west street and the idea for this is it would be a minor collector networked to carry the residential traffic that goes out from the Day Dream escape area and also as this area develops, to carry it out onto Wilsonville Road. So, the D major collector road which is, I guess, the existing -

Sloan — Right now it's Parkway, but it would become the one that's designated as C there, I would think.

Barber — I think that you would still, under your plan, look at Parkway as a D. The reason that he has the C designation on where it extends from this street here out of Day Dream Ranch is because of the steep grade and the very curvilinear route. You still are going to have a lot of traffic that will leave Wilsonville and come up Parkway and then come back in front of the -

Sloan — That's a difficult area because anyone who stops at the Kopper Kitchen for coffee and then tries to get back out knows the problem that we who live down in that area have.

Barber — That's also with the Freeway improvement. Because of the spacing, it would need to be right-in and right-out.

Sloan — Actually, (unintelligible)

Chairman Williams — Let me ask you a question on that south of Wilsonville Road of the two Town Center Loops. I can understand having the collectors come in from the south side of the signals, but have you proposed another street to come in from the south between the two Loops?

Barber — Okay, this would be and it's kind of leaving an option open in our discussions with City staff and with the Transportation Advisory

Commission. There's been a lot of interest in how you connect up here onto Wilsonville Road.

Chairman Williams — I have a lot of interest to see if you put that middle road in, how would you ever turn left? You could do it and die, I suppose.

Barber — We did take a look at that. One of the reasons that this came up was that there was some question on whether there would be enough storage for people who were making left turns from Wilsonville onto Town Center Loop. So in the Master Plan Map, we left both what would be a four-approach intersection and we left an option open for instead of having a four-approach to have an offset. What we've found is that both of those were from a traffic capacity standpoint and from a storage standpoint and in our discussions with the City, the feeling is to leave this open as the area develops and to not preclude either one of those options. That's the reason that that is in there.

Chairman Williams — Unfortunately, what ends up is when you put the dash line on the map.

Long — Well, I think the traffic volume was a very major thing that the group looked at in there and not knowing exactly what the total impact of Wilsonville Road will be in conjunction with the Freeway interchange and if the impact is such that it affects that four-way intersection at Town Center Loop West, we need an alternative possibility for it. Otherwise, you have another Day Dream Ranch block occurring just four or five years after you've solved the problem so to speak. So it's needing an alternatiave there that allows us the possibility to work with the developer and at the same time analyze the volumes that you're going to have when that development occurs.

Hendershott — I would probably argue more vigorously than anybody else against having that even shown on the map. When we were looking at the Town Center development, we turned down a good development in there because we wouldn't give them a crossover street at that location. We gave them a right-in and right-out only. We would be silly to come across and put the other half of the street in directly across the street from where they wanted it and not have a crossover there when all you're doing is giving access to two pieces of private

property. You aren't giving access to anybody else. So you've got your accesses at Town Center Loop West and Town Center Loop East. You've got two good left-turn accesses off Wilsonville Road and I don't see any reason for that center one being in there. In fact, I thought that he had taken it out.

Chairman Williams — To speed things up since it's a public hearing, I'd like to get some testimony from the people in the audience. We could sit here and have the Commissioners comment all night and probably will anyway. So what I'll do at this point is open it up to the public and part of the deal is you have to come up to the table and sit down and give your name and address so when the archeologists uncover this 100 years from now, they'll have a road map.

Jean Breck — You've been discussing that (unintelligible) that's dear to the heart of the Library Board. My name is Jean Breck and I live at 7065 S.W. Molalla Bend Road, Wilsonville. I would like to commend the City staff and Mr. Carl H. Buttke, in particular, for the very fine report on the Transportation Master Plan. In Figure 20 which I believe is the one that's on the overhead, there is an east-west collector street through Wilsonville Memorial Park. This is one you've been mentioning. This street provides a second exit from the properties to the west. In 1986, Wilsonville Memorial Park was one of three sites recommended to the City for our new Library. Part of its appeal were the trees and quiet beauty of the natural setting. At that time we were advised that the present entrance to the park should be changed for reasons of safety and that a new road would be extended from the present entrance to the Library which is opposite Town Center Loop East and that a new road would be extended from the present entrance to the Library to the existing road into the park and in the proposal for that, there was a very pleasant road moving from the Library with the slope down the hill and tying into the old road or the existing road to Memorial Park. This seemed advisable to everyone concerned. Our Library is being well received. It's a winner! We are experiencing steady growth and the setting of the park is appreciated by many of the readers. There are actuallly people who do not live in beautiful lovely surroundings and some of those come to the Library, check out their books and then

they go sit in the Reading Room and actually just sit and look out at the park. And it's a very pleasant (unintelligible).

In the goals and objectives for the Wilsonville Comprehensive Plan, the second general objective reads: "Public facilities should be provided and designed to enhance the health, safety, educational and recreational aspects of urban living." The Library does this. It is an educational, recreational facility. And the members of the Library Board feel it should be protected. As Wilsonville Memorial Park is developed, (unintelligible) will increase, vehicular traffic will increase. Basically, the road into the park is the road out except for emergencies and some maintenance. The Library was planned so that it could be expanded when growth and citizens wanted it. The Library too, then, would generate more traffic. Members of the Board were really quite concerned when they saw this collector road and they asked me to come tonight and make this statement. The members of the Library Board of Trustees prefer to see the proposed east-west collector street in Wilsonville Memorial Park removed from the Transportation Master Plan. We would like this to be a matter of the public record of this hearing. Now we recognize that there are concerns other than Library users which are sizable. The general welfare of the whole community is important, but we would like to have this done if it's at all possible.

Hendershott — Jean, do you realize that the present Memorial Park exit is one of the more dangerous intersections you could have in the City the way it's set up.

Beck — Well, it's not going to be there, is it? Isn't it gong to be down there opposite Town Center East Loop?

Hendershott — No, that's what this does.

Beck — Yes, right. That's why we moved the location of the Library from the east side of that location to the west side just to fit in with the Transportation Plan. What I'm concerned about is this collector street right here. It goes straight across the park. See, originally, when we took the site, the plan was to have this entrance here come down here a ways and then we hand it over to the (unintelligible) and now what we're saying is the fact that the new access from Day Dream Ranch and other developments in what we now call the

(unintelligible) that those people want another exit besides the new one that they're going to be given. They want two and that will make this an east-west collector.

Sloan — I'd like to correct you - I don't think that was inspired by the people in Day Dream Ranch..

Beck — You don't?

Sloan — I do not.

Beck — I understood that they wanted two exits, but I could be wrong. I'm not from Day Dream Ranch and I can't speak to that.

Sloan — Well, I am.

Beck — That's good to know.

Chairman Williams — Thank you. Is there anyone else who wants to speak?

Vern Lenz — I'm Vern Lenz and I represent the Teufel family and they are the owners of the holly orchards. What I passed out to you are three maps. The first one shows the Comprehensive Plan layout (unintelligible) which is up here. The second one shows the current, the new Transportation Plan alternate 3, as I understand it and the third one is a proposal that we have concocted which we presented to the City Council during the Urban Renewal hearings because we understood at that time that there was a very strong push to bring access through the Teufel property down to Trask Street roughly as shown on the Comprehensive Plan map. The Teufels are still harvesting holly off this property. They themselves are not going to develop it. They may sell it to someone who will in the future. For now, however, they would just as soon not have any roads through their property or have any roads indicated. Clearly, from the Transportation Master Plan, there is some confusion about where these access points should be, where they should go, etc. Now I think it's clear there needs to be some internal access in the Tuefel property to Wilsonville Road at some point in time when it develops and that, I believe, is something that should be negotiated with the developer at the time the development takes place and not thrown on a map at this point and locked in. What I'm proposing on the third map here would take off roughly from the east end or thereabouts of Trask Street at the southerly edge of the Teufel property, swing through the southeasterly corner of the property, above the road

there are tall Fir trees in that corner. It would be to the north end west of that road into the Park property, then intersect the new access road that we just talked about. Now certainly there's concerns on the part of the Library Board about a collector street - the traffic that that would carry. However, the route to get on that road is winding and the collector itself - the right-of-way would be 50 feet. Certainly, its not going to carry a huge amount of traffic, but it would offer a workable alternative to venting Day Dream Ranch and Parkway without cutting through the orchard completely. Actually, you would have to acquire much less right-of-way to do this. He already owns a good chunk of it.

Williams — Vern, take a look at page 2, which is the Transportation Plan, Alternative 3. I don't know what - that doesn't seem to conform with the Figure 20 that we've been working with.

Lenz — Well, I took this out of the Transportation Plan this afternoon. I don't have a copy of it. I came out and looked at it.

Williams — I just looked at - the second page says the Transportation Plan Alternative 3 which doesn't show a street directly south of Town Center Loop West. But you've got one coming in the middle.

Lenz — Let me see if I can find this. It may not be -

Williams — I just wondered where you got it from. So I guess what you're saying is you don't mind the east-west collector street parallel to Wilsonville Road. You just want it moved south to Trask.

Lenz — For now, certainly. At some point when the property develops, why then that can be worked out internally as to where that should go. I don't find it in here. I stopped this afternoon.

Barber — I can provide some help there. It's Figure 15. It would be page 36 and the explanation is in going through the alternatives process, we looked at - like I had in an earlier alternative, we have, in fact, on the existing plan (unintelligible) the road coming straight up to Town Center Loop West and for the purposes of comparison, for this part of the alternatives analysis, we shifted the road over so it was in between -

Williams — That was like Alternative 2 I thought.

Barber — Let's see, this is - oh, that's right, this is Alternative 2.

Lenz — I'm incorrect.

Williams — I guess the thing that bothers me more than anything else is I can't imagine putting a street in like that where it isn't opposite from one of the Town Center Loops.

Lenz — Yes, I'm not proposing that that happens. Clearly, it should be at the signaled intersection.

Williams — But see, you're not even proposing an intersection at Town Center Loop West South.

Lenz — Not at this time. My understanding is that the problems inherent with coming out onto Wilsonville Road and Town Center Loop West from the south are - they probably have to do with the stacking room on Wilsonville Road heading west. Right turns are no problem then apparently and the northbound traffic is no problem, but the stacking room between that intersection and the access to the Freeway northbound is very short. So it seems to me that to move that point of access further east would greatly relieve that situation.

Sloan — That isn't where the traffic stacks. It doesn't stack going north through the field, it stacks going straight through, that's why you can't get out onto Wilsonville Road from the south.

Lenz — Anyway, the major concern by the Teufels is that the property be essentially left alone for now. (Unintelligible) offering this as an alternate. I would appreciate your consideration.

Williams — We're great at that line, we've had a lot of practice.

Sorensen — Could we have your name and address again for the record, please.

Lenz — Vern Lenz, 8665 S.W. Canyon Lane, No. 31, Portland, 97225.

Sorensen — Thank you very much.

Lenz — Thank you.

Williams — Okay, is there anyone else who wants to testify?

Leo Huff — My name is Leo Huff and I'm a Planning representative for Region 1, Oregon Department of Transportation. My office is at 9002 S.E. McLoughlin, Milwaukie, 97222. I like the Plan. I think Carl and Bill have done a good job. It has addressed our concern that the City grows. I mean it doesn't seem like that long ago we were talking about 2,000 to 3,000 people and now we're almost 8,000 and certainly in a position to fulfill those projections of 15,000. Our concern was that there be some good local circulation so that the freeway didn't have to carry the whole burden for particularly north-

south travel in Wilsonville. This Plan, I think, does a good job in providing that needed local circulation. I think if you look at some of your neighbors to the north - Beaverton and Tigard - that didn't do a good job of providing local circulation are now suffering for it. I think you have a really good opportunity here to provide something that if you can carry through on the Plan, that I think you'll really be glad you did ten to fifteen years down the road.

The other comment that I got from some of the staff was in the old Plan you talk about Park and Ride, finding a location for a Park and Ride. I still think you should put some energy and effort into that. There's more and more probability that there's going to be some money to do things like that.

Hendershott — How about your gravel pit? Your gravel storage area? Would you donate it?

Huff — Not yet.

Hendershott — We'd be happy to have a Park and Ride right there.

Sorensen — Does a Park and Ride need to be site specific or can it be generalized in terms of a policy?

Huff — You can start with policy. I think that sometime down the road you would want to adopt a site specific one when it comes to that.

Sorensen — I think Mr. Huff's comments are well taken in that we donated, or not donated, we are using a part of the City parking lot right now for Tri-Met for a Park and Ride. We've seen over the last couple of years our parking lot is always full because of the people who utilize the Tri-Met bus system. When we went to our private bus system, and we didn't have a direct connection to the Tualatin Park and Ride, our parking lot was empty because it was just easier for our ridership to go to Tualatin and catch the bus there. Now that Tri-Met is again servicing Wilsonville, we are seeing a big increase in our ridership. Our patrons are again using the bus system and I think in the future this is going to be an important component part of the overall transportation program. And I think at the State level, isn't it one of the transportation planning rules, and you're probably

very familiar with this, Leo, there is some mandate for a metropolitan region to increase ridership, both in carpools and to provide alternative transportation such as bikes and pedestrians and bus.

Huff — Yes, I think every city is going to have to deal with that down the road here so to speak when that rule is adopted. I'm not really sure how that is going to sort out, but as I see it now, the State is going to have some money to put into Park and Rides too.

Hendershott — The Transportation Committee will be very happy to hear that because our next project is to find the site and plan a Park and Ride and get it approved.

Williams — Leo, stay there because I want to ask Bill a question on the - I didn't see anything in the Plan as to whether or not this assumes access to I-5 from the Boeckman Road overpass.

Huff — That's a good question. In all the analysis we did, we were assuming no Boeckman interchange. We're assuming a Boeckman overpass, but in all of the systems that we looked at, in our talks with the City and also in looking at past studies over the 80s, we have seen a number of studies that have been done looking at a Boeckman interchange. I think the issue is really, it's kind of been a (unintelligible) as to whether that would ever really happen or not. So our of our goals in developing that systems plan for the City was to develop a plan that relied on the interchange improvements that are programmed by ODOT - the I-5/Wilsonville, and the I-5/Stafford and it would work without Boeckman. It's probably also in the existing Comprehensive Plan that Boeckman is an Area of Special Concern and Wayne might want to go into it a little more, but I think it's written in a way that if, in the future, the need would exist that this would be something that the City and the State would continue to work on. So my recommendation would be to continue that as an Area of Concern in the Plan, but it's not part of the system.

Williams — The answer is no. Now the other one is that you are proposing an additional overpass on Wiedemann Road and I guess I wondered who has jurisdiction to say whether or not we could do that. I mean - well, first of all, what's ODOT's position, if you know, as to whether or not you could put an overpass at Wiedemann Road, which is sort of equidistant between Boeckman Road and Stafford

Road. And I guess the other question I have is what's the timing of the improvements to Stafford Road and Wilsonville Road. I assume they are in some sort of a six-year plan. Have they been funded? And how far can they get kicked back? Or are we just dreaming?

Huff — I don't think we'd have any problem with an overcrossing at Wiedemann Road. I don't see how that is inconsistent with any of our policies. As far as the timing of Wilsonville and Stafford Road interchanges, we're in the EIS process and I believe that Wilsonville Road, at least, is in the six-year plan.

Dick Drinkwater — Maybe I can help you out. We have been in a series of continued meetings with the ODOT staff. The Stafford Road project is going forward with final (unintelligible) and is a funded project. The Wilsonville Road is going through the environmental assessment stage and is not a funded project. Now both designs that the State is proposing for both interchanges do not preclude in the future an option of looking at Boeckman, so that is the position that we've come to. The State feels that the operational integrity of I-5 would be damaged by a Boeckman interchange. What has happened is that is set aside now and we will go on - our transportation modeling study works with these figures, but it does not preclude looking at that in the future.

Williams — Okay, thanks, Dick. Does anybody have any other questions for Leo so he can get off the hot seat? Okay, thanks.

Wiedemann — I wish that two or three people from ODOT would come to Wilsonville and stay here for about a week. They'd vote for a Boeckman overpass.

Burns — I'm going to go ahead and say it then after all. I'm sitting here cooling off. I have been concerned all along about as this has gone on tonight about the intake and output of information into this study. Obviously minutes of the Planning Commission were not looked at or you would have seen repeated references to the absolute need because of traffic safety with the trucks to get them on and off Boeckman and not to have an overpass over Wiedemann. There has been no documentation of any need. We don't need Wiedemann. We need Boeckman.

Long — Can I address that? We've had considerable contact with ODOT through the process and one of the inclusions in that is redesigning the Elligsen intersection, as well as a lot of influence in the Wilsonville interchange also. The Elligsen interchange - one of the things - the additions that we were able to get attached to that is acceleration lanes that continue up and over the hill area which would eliminate the trucking problem that there is pulling out to the north and then going on to the freeway over it. And what that does is that it allows the cars to get around them and by them and allows you to get out in a much easier flowing method. There has been a lot of thought that in both of those interchanges and one of our biggest questions has been how are those trucks going to get into and out of town. We have continually asked the State people that and they have been very gracious to work with us and they have even changed their designs to accommodate those (unintelligible) that we have identified. So it has been something that has been addressed.

One of our very first criteria - we did not set out to eliminate the (unintelligible) We realize it was one of the things that City Council was interested in and the Planning Commission was interested in, but our thought was what happens if it does not occur as the State has continually backed up against it. And so our thought has always been to design a system that will function and will function properly without Boeckman should the Highway Department never give us the option to do that. And so that was the criteria we went from the very first time we started on the program.

Williams — I think that what Helen is addressing is some of the frustration the Planning Commission deals with in terms of there isn't a whole hell of a lot we can do about the Stafford interchange and the Wilsonville interchange, but simply the magnitude of the truck traffic in town going from, well especially on the west side, getting to either one of those.

Long — And that really was part of the Wiedemann overpass was a route to get over and so that those trucks can get around and get keyed to that interchange with a better access on the freeway without having to (unintelligible) and impact the intersection (unintelligible).

Williams — Okay. Is there anyone else who would like to testify?

Bob Dant

My name is Bob Dant, 6900 Montgomery Way. The Comprehensive Plan is pretty near to my heart and one item especially which involves the extension of Town Center Loop West (unintelligible). In the confusion that's arisen and continued to arise until there's some kind of a definite plan put in place that can remain for some time that doesn't continually get attacked. I like what Lew said which is that really the - why would you want to have the east side of I-5 at Wilsonville Road look like the west side? Why have another intersection between two loop roads when the two loop roads were drawn and designed and built in accordance with the same consultant who gave us this plan the last time. I would request that the Day Dream escape be aligned with Town Center Loop West to conform to the current Comprehensive Plan as has been (unintelligible) by landowners who have invested millions of dollars in infrastructure and buildings in accordance with that plan. I think to align that to put in another intersection between the two loops would unravel the Town Center Loop theory which is set in concrete and sitting out there. I think in the minds of you folks and lots of people before you and after you, there is a theory that it will only work if made to work. At a City Council meeting last fall, there was some discussion again about the Wilsonville interchange with the ODOT people. And there was some dialogue with two people from ODOT whose names I forgot. I think one of them was Jim Boyd. The issue that was brought up at that time was whether or not ODOT felt, and they were looking at the Wilsonville Road interchange, that the Town Center Loop West might be too close to I-5 and that would require another access to be put east of Town Center Loop West. There were several questions by Mayor Ludlow at the time - but no, it's not too close to I-5 - it works fine. I again have trouble - I think that there is to this day continued confusion about where to put this alignment from Day Dream Ranch if you allow another dotted line to go in there. That's been there - in the words of our (unintelligible) this evening, from the traffic capacity standpoint and the storage standpoint, Town Center Loop West aligned to the south to Day Dream Ranch works. But in discussions with the City, it was left as an open issue. Don't leave it an open issue. Just simply

close it. I would maintain that it's those discussions with City staff which creates the confusion and there need not be any. If you center that access to the south, at Wilsonville Road, I will bet that there will be a major intersection put there to completely violate what County was shown and there will be a major interchange between the two loop roads which will service the shopping center and again violate the plan at the Town Center Loop. That will provide a front door to that Thriftway-Payless center which, again, was all designed to be taken in from the sides, which works perfectly well - to give an example, of the Safeway and G.I.Joe's in Tualatin. There is no turn lane into the center of that project, its access is from the sides.

The growth seems to be an issue from the comments earlier made by the consultants on how much we've grown out. We have the largest growth rate in the State and all this. I'd submit that the population has grown a lot of late, but with no growth in the first five years of the 80s, I'll bet we're right where we planned to be. I don't find it startling that we're 7300 people in 1991. So I would submit that the volumes that we're dealing with in traffic were expected and planned, again by the same people some ten years ago. And again, we went through the plan, myself included, in 1975 and 1980 and 1985 and here it is 1991. I guess there were some comments earlier about it being a fluid plan. But major investments are made based on that plan. When you table it, it seems to me you are tampering with people's investments and their expectations. So I would ask again that there not be another dotted line. That there simply be the alignment directly south of Town Center Loop West and Town Center Loop East and make it two complete intersections - this as suggested. They should be lighted at some point that they are warranted. The issue about accessing through the park to the east from Trask to align to the east is a very good question. To me it seems that (unintelligible) to be maintained ought to be maintained. I'd submit that we (unintelligible) when we used to have a larger open space and I think that what we have we better preserve. We're fortunate to have that great big park. I don't have a solution for the east-west access, although perhaps there may not be any. Perhaps

Trask will just simply go up to Town Center Loop West. I've (unintelligible) I've studied it, I've made lots of meetings and seen lots of thoughts (unintelligible) on this issue. But there may need to be some east access over to Town Center Loop East. I know that we used to plan 600 units of housing on the Teufel piece with the Day Dream Ranch buildout, there would be need for another ventilation point. Again, we don't need another intersection on Wilsonville Road between those two loops. Why have a curb cut and traffic light every 300 feet on Wilsonville Road? We really need to preserve the integrity of Wilsonville Road while we can. This is all designed to be a five-lane road with no access between those two roads. Really the problem we have on Wilsonville Road today at the intersection we have down there is the (unintelligible) that we have on I-5. We're feeding through a two-lane, three-lane really in the works, a lot of traffic and it's really that east-west traffic that's got the problem. Any questions?

Williams — Is there anyone else that would like to speak?

Ben Altman — Ben Altman, 8445 S.W. Curry Drive, Wilsonville. I represent United Disposal. We've been before the Commission on the preliminary master planning for the Transfer Station up on Ridder Road and related to that, we would certainly support the adjustment in the dotted line on the map which moves that realignment of Ridder and Clutter further east or further west. We've run into some real design problems with that in terms of trying to design a road through there and maintain appropriate sight distance and access geometry and so on. We are just completing a detailed traffic analysis for the transfer station working with Kittelson and Associates. The urban-level traffic is all from east of Garden Acres Road. There aren't peak-hour volumes on Clutter and Garden Acres - there are like two and three vehicles per hour. So it doesn't make sense to make the realignment to the east of Garden Acres. So we would certainly support that. For general, not necessarily related to United, I support and understand the need for improved north-south circulation as shown on the Master Plan. I maintain a concern for, as the Commission has, about the truck volumes and how they access the area. I've talked to ODOT several times on my own about the

Boeckman interchange and how they are involved in earlier studies on that and I realize that that's still down the road and I don't think you have to decide that and if we maintain it as an Area of Concern, that makes sense. Although in the process of looking at that, and talking with ODOT, I suggested an alternative to that that actually could function like a Boeckman interchange only not create additional access at that point and that would be to create frontage links between the two existing interchanges with braided ramps. They would be very similar, if you remember the split diamond configuration that was proposed originally by ODOT between Barber Street and Wilsonville Road where you have the off ramps and then frontage links and then on and off ramps at the other end. Basically, you could design a system using the Stafford interchange and Wilsonville Road and Boones Ferry Road and additional right-of-ways that are already there on the freeway. The possibility for that is to carry the volumes that you have that are going north and south and particularly under the industrial area that would never leave the vicinity of the interchange until it gets to where they want to go. You could have frontage lanes that would be separated, in other words, you'd come off the freeway, but go straight through the interchange and come off, say, at Wilsonville Road and then have - you could either go off of Wilsonville Road or go straight through on up to and have an access off of Boeckman and (unintelligible) and similar coming south.

Wiedemann That would be simply truck traffic?

Altman Well, anybody could go through that. It's just that what it would do would be eliminate. This design works well in terms of general circulation for the industrial areas and the residential areas. But it also forces every one of those trucks to go through two or three signals to get to where they want to go. And right through the middle of town. It seems to make sense to me if the truck wants to get to Wilsonville Business Center, the idea of Boeckman is you get them there as quick as possible and spend as little time on local streets as possible. I think it's worth considering and I did look at that with ODOT and there's actually, counting Boones Ferry Road and the existing right-of-way on the freeway, there is actually

enough width to do that. They hadn't really looked at it very hard, but they weren't necessarily opposed to that either as a consideration. Related to that, for the north, the one concern I have is that the Stafford interchange, the current design would require, to make that function, it would require a braided ramp with a tunnel under the interchange to get to that frontage link for what is now Boones Ferry Road which is an expensive option. If you look at the difference in being able to come off to the freeway and straight to Boones Ferry Road, rather than going through a signalized, and actually two signalized intersections, it makes a big difference down the road. There ought to be some consideration given to that, not necessarily as part of this Master Plan decision, but as part of future consideration.

Sorensen — I think it's important to note though, if I understand it correctly in the split data concept just to be specific, all your traffic that would be routed on your southbound link that would be on the west side would be one-way traffic and all the traffic on -

Altman — Kind of one-way legs on each side of the freeway that are separated from the travel lane on the freeway by (unintelligible). So you come off the freeway and there would be slip ramps, you could have slip ramps at various points to back onto the freeway, but basically your access points would be at the north and the south like they are now, but you could access the local roads at various points.

Burns — You could access them from that slip ramp down off the freeway.

Altman — Yes, and what happens with that system is one of the concerns you recall that ODOT always had with the Boeckman design was the cross weave problem of access and egress off the ramps where you have, say, from the north, you've got people coming on, going southbound and then immediately down the road people are trying to get off at Boeckman and what this concept does is move that weave maneuver to the frontage lane. It gets it out of the freeway. And it also maintains the volume capacity, the lane capacity of the freeway which is ODOT's primary concern and a legitimate one. But it's worth, I think, considering and there is -

Burns — You say you have talked to them about it?

Altman — Right. I have given them a sketch drawing and they filed it somewhere I'm sure.

Sorensen — Did you have a chnace to introduce this concept to the Traffic Advisory Commission?

Altman — I gave it to - a copy of that concept to Bill Pratt because I couldn't make the meeting. I had conflicts with the various meetings that were scheduled. I don't know what happened to it from that point. I did talk to Jim Long about it.

Drinkwater — In some of our meetings with the State Highway Department, particularly Jim McClure, that very item that you are discussing has come up as something in concept just discussion-wise that he felt would be worth looking at in the future.

Altman — Yes, and the other piece is the current design, preliminary design anyway, for the Wilsonville interchange would not, other than the suburban diamond, compressed diamond, doesn't work well for that, but the one they are proposing for the Wilsonville interchange would function well.

Hendershott — I don't think, Ben, that that plan would interfere with the acceptance of this proposed plan here, but would be supplementary to it. So for tonight's consideration on this plan, it doesn't need to be (unintelligible) consideration as part of this.

Altman — (Unintelligible) relative to considering that under the Area of Special Concern on the Boeckman access issue as an alternative.

Huff — We did take an early look at that concept and it's a little more difficult than what you just heard because (unintelligible) you have to be out away from the freeway by about 100 feet. Your (unintelligible) is going to move in and you're going to wipe out most of the residential - You come in with the frontage road up in this area. The frontage road will probably be at least 100 feet away from where Parkway is now to get the ramp to merge in there. The same thing has to happen down on this side. It's not something that is even feasible. There's a whole lot of engineering and the City to move to make it function that way. I gave up on that concept because I don't see it (unintelligible).

Williams — Well, the consensus then is either it won't work or its supplemental and we don't have to decide it tonight. Is there anyone else who wants to speak?

Dawn Pavitt — My name is Dawn Pavitt. I'm representing Mentor Graphics. We're at 8005 S.W. Boeckman Road. I have (unintelligible) but I don't have a letter with it. First of all, I wanted to commend staff on this report because I think given this is the Transportation Plan, it's really very readable. I have read a few and I found it easy to get through. One thing I would suggest is that the map be of such a scale that we don't guess in the future as to where this dotted line really is.

Williams — You mean to pin them down? That takes all the fun out of it.

Pavitt — It doesn't have to be an assessor's map, but I was thinking if it was a larger scale, at least when you get a better inkling of where the proposed routes really are. And as Bob Dant said, a lot of investments are made on these dotted lines, both personal and companies.

My second point was in reference to Mr. Hendershott's note and that's that the Planning Commission did give up the conditions and Council approved it, but when you dedicate 37-1/2 feet for Canyon Creek North which we've done. If Canyon Creek North were to bisect our campus at this point, it would make pretty serious problems for us. That's all I really wanted to say. I think we need to look closer at the alignment of Canyon Creek South which has equal concerns to us as everyone in the neighborhood. I'm not really sure how you want to look at that - maybe have a special meeting or something, but I think there are a lot of people in the area that aren't quite sure where it's going to go. I personally signed off on the alignment for Canyon Creek North on the map that Dick showed me quite a while ago. So I had a pretty good feel for where Canyon Creek North was supposed to be. Canyon Creek South - the alignment has sort of jelled over the last year, I think in Dick's mind and he has had a line that I've seen a few months ago, but I don't know how public all that is.

Williams — I guess part of the problem was - is when Mentor came in, there wasn't any consideration given as to whether or not Canyon Creek North and South were going to intersect or whether it was going to

be offset. In fact, what we were dealing with was that the existing Comprehensive Plan that said that they were offset.

Pavitt — Yes, we were surprised it was too. We never realized that that was going to be the - at least while I was there - we never realized it was going to be the major road from north to south. It may have been someone else at Mentor Graphics who was part of that conversation, but I certainly didn't know. That may be a very valid thing to do.

Sorensen — This is prior to Mrs. Pavitt being on staff.

Williams — But it's not prior to me. I've been here -

Sorensen — We definitely, in our prior discussions with Mentor Graphics personnel and at some of the higher City staff levels, it was certainly pointed out that the intersection should be moved to the west a little further than where it is currently located. Their Master Plan

Williams — You mean on Canyon Creek Road North?

Sorensen — Right. And Mentor Graphics, again before Dawn was here, argued against that and their Master Plan was adopted by the City Council and fixed the location in its present location. I think that's why we are showing the alignment.

Williams — Well, I don't think anybody disputes that. All we're saying is if we wanted to connect Canyon Creek Road North and South, it should have been done then. I mean instead of trying to come here and cobble it together so that somebody thinks it works.

Pavitt — Well, what I was thinking was maybe we need to do it in another session. I don't really know if you have some fixed plans that you have to look at. (Unintelligible) and Comp Plan amendment. When this (unintelligible) of a Comp Plan amendment, but to me it requires some discussion.

Williams — Is there anyone else who wants to speak? I'll close the public hearing. I guess the one comment I have is I feel sorry for Bill and Carl, because you guys come in and I think the Plan, you know, looks awfully good to me. I mean the numbers seem right. When we did the first one, I thought we were looking at a population buildout in the year 2000 of about 16,000 people and we're about halfway there. It seems like, the first one worked, I have no qualms but that this won't work. What you guys get caught up in is everybody that comes in here is sight specific. And everybody has

their own concerns as to various pieces of property, myself included. But all in all, I think the staff and the consultants, Mr. Buttke and Bill and his group ought to be commended. I see there's a couple of issues and I think I know, I've got some sort of an idea of what the consensus is and let's take those -

The first one I have is if you take a look at the Town Center Loop East and West, the issue is whether or not you have access to the south somewhere between those two intersections and I would submit that the consensus as I see it is that the answer is no.

Then the question is taking Town Center Loop West, whether or not one of the escapes from Day Dream Ranch ought to align with Town Center Loop West. I'm well aware of the Teufels - I mean, I've seen Vern at more hearings and he says the same thing. And he makes the same arguments. I would submit that a consensus, as I see it, would be that one of the accesses from Day Dream Ranch be on Town Center Loop West - that those align.

Sloan — You know, we keep referring to this as Day Dream Ranch west, but I think that the traffic flow certainly is much, much greater which everyone realizes than that which originates in Day Dream Ranch. I guess that is just a tagloop you put on that. But all the commercial establishments along there -

Sorensen — There's a lot of traffic generation from that little commercial -

Williams — And then I think the Plan ought to recognize that there ought to be an east-west collector south of Wilsonville Road below the Town Center which will in some way connect with Town Center Loop East and at the same time, that ought to protect the integrity of the library so that it goes as far south as is possible and it ought to protect Teufel. I mean if it doesn't need to bisect their property, and I don't know that we can decide tonight where that ought to go.

Hendershott — You've got the choice of either Holly or Trask.

Burns — He was suggesting Trask.

Sloan — I think that it wouldn't be used that much if you extended Trask personally. I think that's kind of a little -

Wiedemann — You hit Day Dream and -

Williams — I was thinking if you put it down that far and then moved it northward, the only thing which you'd be destroying, I guess,

would be that panhandle to the park and you would come up on the east side of the library. If you did that and didn't curve right around the library, at least you would protect the library to some extent.

Andersen — That would also be the park entrance though too, wouldn't it?

Hendershott — The park entrance would have to tie into that.

Williams — Right, I envision some sort of a T intersection where it's either Trask goes across or Holly goes across and the north-south - then the lines for Town Center Loop East would intersect there. I gues that the thing that is open is whether or not that goes east - west of Holly or whether it goes east - west of Trask.

Hendershott — Couldn't we leave both alternatives in the plan?

Sloan — I think Holly would be more practical and would attract more traffic than the Trask extension would.

Burns — But how? It cuts right across their property.

Andersen — It cuts right through the middle. Trask is better.

Williams — Well, I guess my only concern is - I guess that's an issue we have to decide.

Sloan — That street, in my mind, doesn't have a real high priority. It's ultimately to be desired but I'm not sure how high the priority is on that.

Williams — I guess the other issue I have down is what do we do about the freeways. At one end of the spectrum we have someone saying 'don't worry about it because it will never be built' and at the other end, the testimony is, 'well, it's supplemental, so you don't have to decide it', unless we want to put some general language in there that the Commission is concerned about the operation of the freeway is (unintelligible) and relieving the truck traffic and maybe getting something done with it. I don't see that there's anything that we can do tonight that's going to change anything.

Burns — If this isn't looked at again for ten years, we're going to not even have a dotted line across there. I honestly feel that we have a tremendous responsibility to do everything we can to try and remove some of these trucks because everything of Nike's comes in trucks. We've got that huge strip of all the Hillman out there. Payless does everything with trucks and they're right there. Maybe the gentleman from ODOT doesn't quite know how close that Boeckman is and

that all of the trucks are right around Boeckman and they have got to go north and south a mile each way to get to the freeway.

Wiedemann — If they had to slow down to 5 mph, it wouldn't hurt them a bit to get (unintelligible) that area.

Sloan — And I'd like to say something on behalf of the truckers since that's what I are. A trucker, trucking company - my company doesn't particularly serve this area heavily. A trucking company wants to get its trucks on and off that freeway as quickly as possible, to go through as few intersections as possible because we're very concerned with safety. We work closely with the ODOT people. If I identified our company, they'd recognize it as one of the safest companies in the state. But we want to get on and off the freeway with the least possible exposure on City streets and as a resident of Wilsonville, I sure subscribe to that too. So I think we ought to put all pressure possible, wherever and whenever possible and forever to get that Boeckman interchange.

Wiedemann — I don't think we should take no for an answer on that one. I really don't. The squeaky wheel gets the grease. There's no doubt about it. If we make enough noise and whine enough, we'll get -

Sloan — And I think if the City wanted some assistance from the Oregon Trucking Association even, and they have a bit of an ear of ODOT -

Sorensen — We've had very good community support and really aside from the Boeckman issue, ODOT personnel have worked very well with the City. Certainly, our major corporate structure has lobbied the state extensively on Nike and Mentor Graphics and Hillman for Boeckman and I think leaving it in as an Area of Special Concern preserves the option.

Burns — I think we need to be stronger than that. It has been an Area of Special Concern as long as I have been on this Planning Commission.

Sorensen — No, it has been an Area of Special Concern since 1987 when we made it that.

Burns — Well, it has been a concern with us, maybe it's the first time that you recorded it somewhere.

Sorensen — Well, that's true. That's the first time we put it in the Comprehensive Plan.

Williams — One of the suggestions that may come out of this is maybe to have the transportation people come up with an alternative forum. You've got one, two and three - how about (unintelligible) and see what happens. So then we adopt four that takes three and adds it to them. I mean that's just a suggestion. Okay, so that's the fourth one I had. The fifth one is mine - and that's the alignment of Canyon Creek Road north and south. In the previous Comprehensive Plan it shows a offset intersection and I suppose I've got mixed feelings. Number one, if you have an intersection of Canyon Creek North and South and apparently the road alignment has been determined because of the sewer that goes down, what happens to the people that live east of Canyon Creek Road? They have traded the current Comprehensive Plan designation for Ash Meadows which was residential with large lot single-family on the east to a collector street with some question as to whether or not you even have any access, say, from the east side of my property. So it seems to me if you're going to put a big street in there, I should have the option to divide my property in half and have access to that street. Because what I'm trading is a rural-type setting with large lot subdivisions on the west or stick with the current Comprehensive Plan and run the street up through where Ash Meadows - where it was suggested before, or where it was shown on the Comprehensive Plan before.

Hendershott — Why don't you put a large lot right up against your east line? You would have no access out of there anyway.

Williams — Well, no, but then nobody shoots at my horses from cars. So, all I'm saying is if they go ahead and put in the commercial-industrial collector, it seems to me that those people ought to be able to have access off that. Otherwise, you're trapping an extremely large lot -

Hendershott — How many lots are there?

Williams — 19 - well, there's only 10 on the west. I mean, that's my concern. Why would I - if I'm able to develop my property under the Comprehensive Plan and split it and have one unit per acre, then you're saying well, you can go ahead and do that, but you can't get out onto our street.

Andersen — I don't think you ought to worry about it because I looked on page 42 - Canyon Creek can (unintelligible) to $5,479,000 and with Urban Renewal dead, I don't think they're going to be able to do that one. That's not a big priority item, so just keep your horses breathing. I don't think they're going to bother you for a long time.

Williams — Anyway, that's my concern then and I guess I have - I don't think we can change the alignment of Canyon Creek North along Mentor Graphics and that seems to be fixed. You know, they went into this project with that in mind and I don't think it would be really fair to change it on them now, although it would have been nice to know.

Burns — Yes, it would have for all of us.

Williams — Does anybody else have any concerns?

Marv Wagner — Yes. I, too, am site specific. Wilsonville Road and Boeckman intersection. That dotted line goes right smack dab through my 24-acre filbert farm. I'm even in worse shape than the chairman here. It takes out my house. As staff knows, we've been talking and working on this for, what, two years now, something like that. You guys have been listening to me three years. But I feel I would be remiss also by not at least speaking up and mentioning my concern over that. I understand the reasoning. I'm still not totally convinced that there might not be another way.

Sorensen — If I may interject just one thing. We've been working with Mr. Wagner on this for quite a long time. He's in the process of annexing his property to the City now. That alignment is not a new alignment though. That alignment -

Wagner — That's been there. I still don't like it.

Sloan — Why can't it be done just north of Boeckman Road? It's just as practical as south of Boeckman Road.

Sorensen — We looked at that - there's some real difficulties when you try to work between jurisdictions and do road improvements between the County and the City. It's much easier to do the road improvement when all the land is in the City quite frankly.

Williams — What they're saying - what I guess the comment was - why take Marv's, why not go through, what is it, Pitinger or Piliger?

Sloan — Well, it seems like an unfair tradeoff, but it's a much smaller piece of property that he has there too and really wouldn't be affecting farm land -

Sorensen — We went to great lengths at Metro to prove it was unproductable farm land in order to bring it into the City.

Hendershott — Any dotted line that is on this is going through somebody's property.

Wagner — Well, like I say, I don't expect us to spend time here. I'm aware of it. I have been aware of it for a long time now and I just felt I needed to bring it up. I am concerned about it just like Mike is concerned about his.

Williams — Well, the real problem, and I guess it goes to what Dawn says - if you've got a big blown-up map that shows where the dots were so that people would know exactly how it affected you, I suspect we'd have more people here tonight than we do. And that goes back to the old comment about, well, you know, these things are elastic, we'll kind of move them. We made major elastic movements with the road system on the west side of the freeway when Hillman went in, only partially because we had a big developer that can develop a lot of it and it seemed to work with their plan.

Wiedemann — Well, we didn't get any work done on Ridder Road because that road was projected through the other property, so the trucking company was not required to do anything. They offered to do it. So we drove over rocks for three or four years in the condition it was in because that road was proposed on the plan and now, it has been changed so it's not going to be there.

Hendershott — If you're going to make your road specific, you'd have to have engineered drawings on every section of the area. You couldn't do it with drawings like this.

Wagner — Well, as it was mentioned, you've got -

Hendershott — Make them elastic -

Andersen — Well, emphasize the fact that this is a proposed -

Williams — At least with some of these - I think they're not that elastic. Wayne, what's our time line? I mean, do we have to decide this tonight?

Sorensen — You are making a recommendation, not a final decision. Your recommendation goes to the City Council. We have set it up for

March 18 and April 1. If you hold it over - you can hold it over and continue it until your next meeting. That's fine. All we'll do is delay the hearing at the City Council and that doesn't bother me at all. The critical part was for the Planning Commission to hold the first hearing in the month of February. Now that you have held the hearing, you can continue for a hearing.

Williams — Well, it seems to me the way this is coming down is that it - with the exception of where the east - west collector is south of Wilsonville Road and south of Town Center, that seems to be open. The Boeckman Road interchange doesn't seem to be open. The consensus of the Planning Commission is that ought to be part of the plan. There's a continuing question as to the alignment of Canyon Creek South and I guess where it comes in on Town Center Loop. Was it behind the Thriftway there?

Wagner — Does it come in right beside the Sundial apartments to the west?

Williams — And the church, right?

Hendershott — No, further south.

Williams — Then there's been a question raised as to the Wilsonville Road and Boeckman intersection on the east. I think what I'd - my preference would be is if we are going to make a recommendation to City Council, I'd like to see the consultant's report take into account those items that there's a consensus on and I suspect that - my feeling is, if we had the vote today, it would go out with those changes. But maybe if we had a chance to clean it up, require you to put in the Boeckman Road and give some consideration to Canyon Creek Road and Wilsonville Road/Boeckman interchange, and have it come back at the next meeting and go for it.

Hendershott — You would eliminate the third access to Wilsonville Road opposite Town Center?

Williams — Yes, that was number one.

Hendershott — And realign - well, I'm just reiterating so we'll know exactly where we are - and you would realign the access to Town Center East - realign the road to connect with Town Center East.

Williams — And maybe the consultants can tell us how far south that ought to be - does it make sense to do Holly? Does it make sense to go Trask? Or is there some other alternative?

Hendershott	I'm in favor of (unintelligible) having some alternative relief on both Holly and Trask as alternate routes and then when development comes in that area, make the decision as to which one we settle on.
Sorensen	Am I to understand then that you want to bring this item - close the public hearing and bring the item back to the Planning Commission with your suggestions in some sort of written form before you send the resolution to the City Council? You're still making a recommendation.
Williams	I'm not making a recommendation until I see what it looks like when it comes back.
Sorensen	You want to see the written one, okay.
Drinkwater	Could I just take a moment on the map and make sure that I understand the Planning Commission. What you want is this option eliminated, correct? The one in the middle. This option goes straight down - the one you want to hold. Town Center Loop West straight south to where it connects.
Williams	And we want them to tell us where the east - west collector ought to go.
Drinkwater	And then the east - west collector whether it's down on Trask Street or up on Holly.
Williams	So that it protects the library when it connects.
Drinkwater	So that it protects the library. And further, maybe detail on this alignment for you to look at at the next meeting?
Williams	Well, I would like to know whether or not, for my own perspective, whether it abuts on my property. If it does, if I have access, if it doesn't, where it goes.
Drinkwater	And then show the Boeckman interchange.
Williams	And then some consideration to the Wilsonville Road - Boeckman Road intersection on the east.
Sloan	Maybe instead of running that dotted line as far south since it does take out all of Wagner's property, keep the present alignment and cut the corner up north.
Drinkwater	I know we've looked at that alignment with Mr. Wagner a couple of times.
Williams	And the real concern with the Boeckman interchange is how we get the truck traffic out of town. That's the frustration we've been

dealing with. Because what happens is on the west side of the freeway, if you ever have to go south on Boones Ferry and turn on Wilsonville Road, you're just dead, with all the trucks.

Sorensen — And now, if I understand you correctly, Mike. You want the interchange at Boeckman to be shown as shown on the current Comprehensive Plan.

Williams — We show an interchange there now, right?

Andersen — Yes.

Wagner — I believe they said it was not considered in this one here.

Long — When I said it was not considered, we had realized the process it had gone through by the City Council by this group with the Boeckman thing. They've gone through (unintelligible) When we did not consider it, it was getting something that would function if the Highway Department said absolutely no, it would never -

Williams — Has it gotten to the point where it's not only no, but hell no?

Burns — No one is ever going to take it seriously unless a body in the City goes on record as saying it has to be done.

Long — That's right. That's what it will take.

Burns — The only other thing I would like to ask if it was ever considered - and then I would like to make a suggestion forever when we get into this. When we go through any process like this again, that not only do you intake information from everywhere, but that you meet and you go to the people who live in the community and get some feedback from them as you're going along. Then we don't all get surprised.

Sorensen — How many meetings have you held, Jim?

Long — We've had six public meetings and a lot of those nobody was there.

Burns — Then that was your plan. The first I knew about it going somewhere was when we had citizens who were concerned about something that was going in over in the Town Center and we wanted to move a road up so that there wouldn't be that much traffic. And then I find out that there was supposedly. we couldn't move their access to that neighborhood because there was going to be this great big feeder street going past them. None of us had ever heard about this great big feeder street over there.

Sorensen — One of the things that I think is happening. As much liberty as we've had with the roads in our Comprehensive Plan in the past, particularly with 95th Street and some of the road alignments, I think the way the case law has evolved in the land use area, the proposed plan you're looking at isn't nearly as elastic as we thought it was.

Burns — Try ever going through residential areas. People planned on their being residential and not having large collector streets and I really think that needs to be shared at various stages along the way. And then the other thing I wanted to ask about is up north - isn't the north end approaching Elligsen going through a pretty good stand of trees up there and some wetlands?

Sorensen — In fact, we're working with Burns-Western still at the City Council level and it's going to come back to the Planning Commission. Mr. Williams was at the City Council testifying on behalf of the Planning Commission regarding the wetlands and the trees up there. The City Council's response to that is you will see that back at the Planning Commission level again. Yesterday Mr. Drinkwater was out on the site with a representative of DSL to inspect the wetlands. There were also people from Burns-Western there and you will see the alignment in a lot more detail probably shortly.

Burns — Like before this thing leaves here? When they come back, then maybe we can talk about that?

Williams — I guess the concern would be that if we go ahead and propose this street plan and the development that comes in as something different from that, you know, where Elligsen and Canyon Creek Road North connect. I mean we've got to make sure that we're not at cross purposes.

Sorensen — The City Council's direction is to preserve the wetlands and go through the DSL permitting process and save the trees. We were told by the City Council that the Planning Commission would be offered the opportunity to go out and walk there for the final alignment.

Burns — Are we going to know where the road is going to go?

Sorensen — You bet you will. It will be center lined and brushed and cleared.

Burns — But before we make a recommendation to the City Council on this road?

Sorensen — You can hold it up that long if you want. I don't think it's going to be decided by the next meeting.

Williams — The issue is if, let's see, if whatever gets to the City Council first wins. If this plan gets to the City Council and this sets the street alignments for the Comprehensive Plan and they come in afterwards and the alignment is something different from this, they lose.

Sorensen — Who?

Williams — The developer. Because we have always - before they have been signed off on the plan, we've already set in stone what the alignment of the streets is supposed to be and their plan is something different than that. I think that's pretty clear. That's another thing to sort out between - by the time their application gets up to the City Council for consideration, the City Council has adopted a plan which says this is what the street alignment is going to be. What happens if their plan is a street alignment something different from this?

Sorensen — Completely different? Let's say it's more than 100 feet off, would you get to the point like - I don't think you can do that.

Williams — Well, all I'm saying is let's just make sure the differences aren't that great. I mean, if they're going to come in with some sort of a plan that differs from this, shouldn't we know now? Otherwise, we're just making an issue for ourselves that we wouldn't have to decide. I guess that's the point.

Sorensen — Burns-Western is very aware of this plan. They are much more troubled by the trees and the wetlands than they are by what we're proposing in the plan.

Richard Litts — Excuse me, can you also ask that a little work be done on Boeckman Creek south, where it actually does come into Town Center Loop East. Where the dotted line is on this map, actually there's no relationship to the three things that I've seen it coming in to.

Williams — Let me ask you to do one thing. You have to give your name and address for the record.

Litts — Richard Litts, 7854 S.W. Champion Court.

Williams	So we want to know, like Dawn said, let's put up a map and see whose property really gets run over. Where it intersects with Vlahos Drive or Town Center Loop East.
Drinkwater	I'll just put this in red as to what I think -
Litts	Also, Courtside Drive isn't listed on this new map and it is on the old map. It was listed as a C designation on the old map which allowed 7000 cars to go on it and now I notice a C designation only allows 1300 to 3000. Will the C designation be reduced? Do you understand what I'm asking?
Williams	I think I understand the question. It seems -
Andersen	This designation we've had before is different than the Cs and Ds and As that we have on this one. This one (unintelligible) traffic they anticipate on those roads and they use the alphabet to do it. The other designation was a designation for traffic allowable. This is set by the City as a C. This one is only a matter of putting A, B, C, D instead of 1, 2, 3, 4, 5, 6 to show the greatest streets and what they anticipate.
Drinkwater	If I can answer your question. I think I know exactly what. Because of the planning actions that the Planning Commission took with regard to the Sundial and the Courtside property, the designation that was on the old Comprehensive Plan wasn't followed through by what Sundial did with the right-in and the right-out and the offset intersection. So consequently, the level of service anticipated in the Courtside area doesn't show up on the revised Transportation -
Sorensen	You're a local residential.
Williams	So what do we have to do. We just have to have this brought back to us at the next meeting?
Burns	I second the motion.
Williams	It's been moved and seconded to have the Transportation Plan come back with the items of concern that have been set forth. All those in favor?
Burns	Aye
Hendershott	Aye
Andersen	Aye
Sloan	Aye

Wiedemann	Aye
Wagner	Aye
Williams	Aye.

COMMUNITY DEVELOPMENT DEPARTMENT
MEMORANDUM

DATE: MAY 17, 1991

TO: HONORABLE MAYOR & CITY COUNCILORS

FROM: STEVE STARNER
COMMUNITY DEVELOPMENT DIRECTOR

RE: "TRAFFIC CALMING" ANALYSIS

Introduction

As described in the Preface of the "Traffic Calming" document, the basis for the transportation crisis in the Brisbane, Australia neighborhoods stemmed from the following:

* No regional, long-term plan; piece-meal planning; outdated, paternalistic planning; and lack of creative, forward thinking.

* As car ownership rose and the city spread out, motorists discovered their own "short-cuts" or cross links. These routes were "rat-runs" - a zig-zag course along residential streets that were never designed to carry the extra load of through traffic...

* The families living on these streets were never asked if they wanted their residential streets turned into a major through-route; nor was this decision part of some overall regional plan. It was an ad-hoc decision and the ramifications were never properly considered...

* CONSEQUENT PLANNING DECISIONS funnelled traffic onto this "legitimized rat-run".

* In March, 1976, the Brisbane City Council published the "Map of Numbered Traffic Routes". In it, the BCC "legitimized" this north-south rat-run by giving it a name... Route 20. They even erected signs to show people how to find their way along it"

In contrast to the situation presented above, the City of Wilsonville has a lengthy history of planning which also has included extensive citizen involvement. The local residents elected to control their destiny by incorporating and in October, 1968, Wilsonville became a city. Wishing to preserve the natural qualities of the area, and provide for efficient land use as development occurred, the newly formed city almost immediately hired a planning consulting firm to develop a general Land Use Plan for the city. Following a year of

analysis and review, including many public workshops and lengthy public hearings, attended by hundreds of citizens, the General Plan was completed in October, 1971, and subsequently adopted (by motion) by the city council.

Within the context of the Comprehensive Plan, specifically regarding transportation, the city has adopted the following policy objectives:

a. Review all land use/development proposals with regard to transportation impacts. All development proposals shall be required to submit a transportation impact analysis.

b. Seek to minimize traffic congestion at the freeway interchange as well as on local arterial and collector streets.

c. Seek to reduce the number and length of home-to-work trips.

d. Seek a balanced mix of activities which encourage consolidation of automobile oriented trips and encourage design and location of complementary activities that support public transit, ride-share programs, and use of other alternative modes of transportation.

e. Require large developments and high employment and/or traffic generators to design for mass transit and to submit programs to the city indicating how they will reduce transportation impacts. All such proposals shall be subject to review by Tri-Met and ODOT. Maximum parking limits may also be imposed.

f. Seek location of a permanent park and ride station as well as a commitment from Tri-Met to upgrade transit service to the greatest extent possible.

However, due to changes in economic and social circumstances as well as adoption of new statewide planning legislation, the city is required to periodically review its Plan and revise the Plan if necessary. Hence the current effort underway to review and update the Wilsonville Transportation Master Plan and attempt to identify solutions before problems arise.

Myths of Traffic Planning

1. "Traffic projections are important in deciding what roads are needed." It is a convention for transportation studies to forecast future traffic by projecting current trends, population growth and present travel habits, then use these projections to decide what roads are needed for the future. This approach assumes the present is ideal and that present travel habits are worth projecting into the future.

2. "Planners are not responsible for how much people want to use their cars." Present travel habits are the results of choices and policy decisions by past and present government and councils. The volume of traffic in a city is not something like rainfall that has to be accepted.

3. "Predicted traffic growth must be provided for." New roads generate new traffic for the following reasons:

   a. New destinations are possible.
   b. Trip frequency increases because access is easier.
   c. People take jobs further from home.
   d. Trip time favors private car versus public transportation.
   e. Public transportation service deteriorates due to lack of use.
   f. The city spreads out and requires people to travel longer distances.

4. "Bigger roads are safer roads." Accidents per mile may decrease but accidents per trip remain much the same. Straighter, wider roads encourage greater speed and encourage the driver to take greater risks.

5. "Bigger roads increase people's mobility." The measure of mobility is being able to achieve many destinations - not just to travel further, faster.

6. "Bigger roads advantage more people than they disadvantage." Roads provide mobility for those with access to cars. The poor, the elderly, the handicapped, the disadvantaged and children rely on walking, cycling, public transportation or shared rides. For residents, heavy traffic on streets effects quality of life by reducing time spent gardening and relaxing outdoors and increasing crime, noise and pollution. Local business suffers as local trade becomes widely distributed. City services are more expensive as distribution increases and parks and natural features are often sacrificed.

7. "It is not the job of traffic planners to look at wider social, political and environmental trends." Planning which reacts to the past will leave the city ill-equipped to handle the changes of the future. Changes such as world climate and shrinking oil supplies may leave us with an infrastructure which will only serve as a monument to our lack of foresight.

8. "Planning should be left to the experts." The community must have an opportunity to say a firm "yes" or "no" to the trends established by current policies.

These eight myths, presented by the Citizens Against Route Twenty (C.A.R.T.), are intended to establish the need for a new approach to transportation planning. An example of a new approach has been named "traffic calming".

Traffic Calming

A. Principals.
Roads should not function solely as a traffic corridor, but should also function for social interaction, walking, cycling and playing. Residents are entitled to a quality of life which includes an equal share of mobility, less noise, less pollution and safety. The efficiency of existing transportation should be maximized before new infrastructure is built.

B. Techniques.
By design, force traffic to travel slower. Increase incentives to use public transportation and discourage the use of private motor vehicles. Increase travel efficiency by consolidating destinations and influencing consumer choices.

C. Results.

* Noise and pollution reduced by up to 50%.

* The top speed of traffic down by 50% (even though speed is dropped by 50%, journey times only increase by 11% because there is less stop-start driving.)

* Less heavy traffic and less rat-running.

* Smaller roads to move the same number of people. The extra space created by closing lanes or narrowing existing lanes is transformed into tree-lined avenues, bike-ways or walk-ways, mini-parks or squares.

* Greater safety for drivers, pedestrians, cyclists and children playing in the street.

* For those unfortunate enough to be involved in an accident, 43-60% less chance of being killed or seriously injured.

* 30% to 50 % less traffic on the roads in peak hour.

* Greater choice of travel methods for everyone - particularly for those who don't have access to a car.

* Increased vitality of community life.

* Less stop-start driving.

* Enhancement of neighborhoods with an increase in greenery and a decrease in the visual intrusiveness of the roads and parked cars and a decrease in the number of traffic lights and signs.

<u>Examples of Traffic Calming Success</u>

1. Germany - 1979 closed streets to create pedestrian malls.

2. Dutch, 1975 - used trees, planted areas, playing equipment, built in seating and parking areas to create traffic obstacles in residential streets.

3. Germany, 1981 - physically controlled speed in traffic calmed areas using a combination of the following:

   a. deliberate narrowing of roads (space saved used for bikeways, parking, bus bays and landscaping).

b. pinch points or "gateways" using strong vertical features such as trees.

c. creation of sharp bends, usually by creation of parking bays no longer than 50 meters on alternating sides of the road.

d. the raising of the carriageway to the same level as the footpath to form "speed tables" particularly at intersections or at bends.

e. the elimination of defined priorities at junctions in favor of the general priority from the right.

f. use of paved strips across the road.

4. Pleasanton, California - by ordinance, required developers and employers to reduce peak hour single occupant trips by 45 per cent over four years.

5. Silver Spring, Maryland - used discounts for transit and rail passes and parking discounts for car/van pool vehicles as commuter incentives.

6. North Virginia - using high-occupancy vehicle lanes on a major freeway to encourage pooling.

7. Singapore - introduced a pass system for limiting the number of vehicles entering the central portion of the city during certain hours.

8. Ottawa, Canada - using variable work hours and dedicated bus lanes to increase public transportation patronage.

9. Stockholm, Sweden - using weight limits to restrict truck movements during the night.

Suggestions for Implementation

A. National, State and City-wide
* Establish goals to reduce vehicle miles per person and provide a funding incentive for states and cities that comply with the goals.
* Use an education campaign to show the benefits of traffic restraint, and encourage people to think about the trips they make.
* Utilize independent bodies to conduct environmental and social impact studies.

B. Regional
* Provide transit lanes for buses and car poolers.
* Electronically monitor traffic levels and meter on-ramp traffic to reduce congestion.
* Allow transit to bypass meters to enhance the perception of public transportation travel time.

C. Local

* Reduce residential speed limits to approximately 18 mph.
* Use weight limits to restrict industrial traffic in residential areas.
* Install bikeways which are connected to activity centers.
* Pedestrianize shopping centers.

Traffic Calming and the proposed Wilsonville Transportation Master Plan.
As presented, the proposed Master Plan contains the following traffic calming elements:

1. Pedestrians
   Sidewalks are to be incorporated into every street section standard.

2. Bikeway Plan
   The bikeway plan consists of bike lanes on arterial and collector streets. These bike lanes would be one way and six feet wide, and would be located adjacent to the curb, except where there is curb parking or a right turn lane. Where these conditions occur, the bike lane would be located between the through travel lane and the parking or right-turn-lane. The striping shall be done in conformance with the Manual on Uniform Traffic Control Devices.

   Bicycles are legally classified as vehicles which may be ridden on most public roadways in Oregon. Because of this, bicycle facilities should be designed to allow bicyclists to emulate motor vehicle drivers. Shared roadway facilities are common on city street systems. On a shared roadway facility, bicyclists share the normal vehicle lanes with motorists. Where bicycle travel is significant, these roadways are signed as bicycle routes.

3. Public Transportation
   a. Encourage transit ridership through development of a transit system which is fast and comfortable at low cost and through development of land use patterns, development designs and street and pedestrian/bikeway improvements which support transit.

   b. Provide mobility for people who cannot use or do not have adequate private transportation.

   c. Develop a transit system which supports residential, commercial and industrial development with minimum investment in new roadway capacity.

   d. Develop a transit system which meets the city's local needs.

   e. Explore opportunities for privatization of transit services.

   f. Provide for pedestrian access to existing and proposed transit routes through the land development process and road reconstruction.

In addition, transit can be encouraged with fare subsidies and by providing convenient access to transit stations. Provision of bicycle parking, showers and locker facilities helps to encourage bicycle commuting and walking to work.

4. Alternative Work Schedules
Alternative work schedules (such as flex-time or staggered work hours), especially with large employers, can help spread the peak period traffic volumes over a longer time period, thus providing greater service out of a fixed capacity roadway. Many industrial employers already have work schedules which are earlier than the norm. These different schedules should be encouraged with the new industries.

5. Carpooling and Vanpooling
The city should work with large employers, especially in the growing industrial area to establish a carpool and vanpool program. These programs, especially oriented to workers living in other neighboring cities, would help to reduce the travel and parking requirements and to reduce air pollution. Employers can encourage ride sharing by providing matching services, subsidizing vanpools, establishing preferential car and vanpool parking and convenient drop-off sites, and through other promotional incentives.

Additionally, as a member of the Portland Metropolitan area, the city must implement transportation elements which, 1) will result in a 20 per cent reduction in vehicle miles travelled (VMT) per capita over the next 30 years, 2) will achieve a 10 per cent reduction in the number of parking spaces per capita, and 3) will require all major developments to either provide a transit stop or a connection to a transit stop. These objectives have been established by LCDC as a component of the statewide Transportation Planning Rule, adopted April 26, 1991. At five year intervals, LCDC will evaluate the results of efforts to achieve the reduction in VMT and the effectiveness of the standard in achieving the overall objective of reducing reliance on the automobile.

(a footnote comment: Traffic engineering standards vary from nation to nation. In the United States, transportation design standards generally preclude the use of sight line obstructions, speed bumps, neck-downs, tight roundabouts and speed tables to control vehicle speed.)

Summary and Conclusion

A rising tide raises all boats. Without any annexations or extensions of the urban growth boundary, the City of Wilsonville will continue to increase in population. The city has been planned to increase in population and accommodate new growth until ultimate build-out is achieved. As one component of the general plan, the Transportation Master Plan provides a blueprint for the modification or addition of traffic facilities designed to handle new vehicles which will be added to the transportation system within the city. Adopting a master plan is responsible and relatively easy. The hard part is knowing when and how to implement the plan without falling prey to the "myths" of transportation planning.

The decision process associated with plan implementation includes several factors:

1. Have the existing transportation facilities and resources been managed with maximum efficiency?

2. Has a funding mechanism been established to finance transportation improvements?

3. Will the development of facilities designed to support alternative forms of transportation postpone the need for a new major roadway?

A great deal of creative energy and genuine community consultation will be required to respond to these factors thoroughly.

"Traffic Calming" serves to illustrate the consequences of no community transportation planning or poor quality planning. It serves as a stimulus for creative thought when considerations for transportation improvements are underway. Finally, "Traffic Calming" underscores the double-edged effect that transportation has on the overall quality of life for community residents and the environment.

ss:md

pc: Inter-Office Communications - CD

Oregon

DEPARTMENT OF
TRANSPORTATION

Highway Division
Region 1

FILE CODE:

May 16, 1991

Mayor Jerry Krummel
City of Wilsonville
PO Box 220
Wilsonville, Oregon 97070

Subject: Transportation Master Plan

ODOT has reviewed the Transportation Master Plan, Phase One Planning Process, prepared by Carl Buttke. We believe the plan is a good one and support approval as presented.

I met with Mr. Kohlhoff and Mr. Sorensen of your staff and Mr. Sitzman of DLCD concerning the Transportation Master Plan. Some possible wording for an amendment to Area 11 text in the Comprehensive Plan was developed at that meeting. We can support adoption of that wording in the context of the Transportation Master Plan as presented by Mr. Buttke.

To fill out the record of the ODOT objection to the addition of "recommendation 3", of Planning Commission Resolution 91PC18 (A resolution forwarding the Commission's recommendation that the City Council adopt the Transportation Master Plan that has been prepared by Carl H. Buttke), I wish to add the document: "Oregon Department of Transportation Analysis and Policies Regarding An Interchange On I-5 At Boeckman Road, Wilsonville".

Thank You for the opportunity to comment.

Sincerely,

Leo M. Huff, AICP
Planning Representative

9002 SE McLoughlin
Milwaukie, OR 97222
(503) 653-3090
FAX (503) 653-3267

OREGON DEPARTMENT OF TRANSPORTATION
ANALYSIS AND POLICIES REGARDING AN INTERCHANGE ON I-5 AT BOECKMAN ROAD, WILSONVILLE

Prepared by:
Leo M. Huff, AICP
Planning Representative
ODOT Region One
9002 SE McLoughlin Blvd.
Milwaukie, Oregon 97222

OREGON DEPARTMENT OF TRANSPORTATION
ANALYSIS AND POLICIES REGARDING AN INTERCHANGE ON I-5 AT BOECKMAN ROAD, WILSONVILLE

SUMMARY

The Oregon Department of Transportation (ODOT) is responsible for the construction, operation, and maintenance of the Federal Aid Interstate System in Oregon. Because of the investment the public has made in the interstate system and its importance to the economy of the region, state, and nation; standards for approval of a new interchange are the most rigorous of any access allowed to the state highway system.

For a number of years the City of Wilsonville has taken a position that an interchange should added to Interstate 5 (I-5) at Boeckman Road.

ODOT has examined the potential for an interchange at Boeckman Road and has concluded that it would not be consistent with State and Federal policy for the following reasons:

-The state and national importance of I-5 takes precedence over local access; therefore, the demonstration of need should be compelling.

-The existing interchanges in the city at Wilsonville Road, North Wilsonville/Stafford Road and Charbonneau provide adequate access to the freeway. ODOT has committed to upgrade Wilsonville and North Wilsonville Interchanges so that access will continue to be adequate.

-An interchange at Boeckman Road would mainly serve the land use in the vicinity of the interchange.

-Because of the proximity of Boeckman Road to the other interchanges in Wilsonville, an interchange at that location would deteriorate the operation and safety of the interstate and would be costly compared to any benefits revceived.

-The local street system can be upgraded to provide local circulation without having to rely on the interstate for that purpose.

THE NATIONAL AND STATEWIDE IMPORTANCE OF I- 5

National Importance

Interstate 5 is the nation's principal north-south interstate freeway on the west coast. Title 23 (USC) describes the National System of Interstate and Defense Highways as "so located as to connect by routes as direct as practicable the principal metropolitan areas, cities and industrial centers, to serve the national defense and, to the greatest extent possible, connect at suitable border points with routes of continental importance in the Dominion of Canada and the Republic of Mexico."

The function of the Interstate System is to serve through trips entering and leaving urban areas as well as the majority of movements by-passing these areas. The system serves the major centers of activity, the highest traffic volume corridors and the longest trips.

Access to the Interstate System is essentially restricted to arterial roads that serve local communities. The system is not designed for direct access to abutting land uses. Nor is the system intended to serve as a local street. These are the functions of local collectors and arterial roads.

Actions affecting the federal Interstate System, must be proposed by the State and approved by the Federal Highway Administrator. New interchanges must be approved by the Secretary of the U.S. Department of Transportation. (See Attachment One)

Statewide Importance

I-5 is the highest volume highway in the state of Oregon. The facility is the principal north-south road connecting the Portland Metropolitan Area to the rest of Oregon and to the other Pacific states.

Total traffic volumes of over 100,000 vehicles per day on some sections of I-5 in Oregon illustrates its economic importance to the region and state. The route carries about 62,000 trips per day in the Wilsonville section. Approximately 66 percent of these trips are through trips.

Truck usage of I-5 varies from a minimum of 3000 trucks per day in the southern region of the state to almost 9000 per day in the Portland area. This is several times more than any other cross-state route.

Oregon is expected to have a population of over 3 million by 2000, up from 2.7 million currently. The increased population will place that much more demand on the system statewide.

The Portland region is the air, marine, truck and rail distribution center of Oregon and Southwest Washington. In Portland more than 100 local regional and national interstate truck lines serve local commerce. Approximately 11,500 jobs are in warehousing and distribution and another 50,000 jobs in wholesale trade. These jobs are all directly related to a good intercity highway system.

The Portland Metropolitan area has a population of 1,291,000 and employment of 614,000. The population is expected to grow to 1,740,000 and employment to grow to 910,000 by the year 2005. Again this increase will place ever greater demands on the Interstate System.

The federal and state investments in the I-5 corridor to support the economy of Oregon and the region have been substantial. Over one-half billion dollars have been expended on I-5 in the Portland area. Additionally about $540 million was spent to construct I-205 to serve as a by-pass supplementing the capacity of the corridor.

Because of the importance of I-5 the process for obtaining Federal and State Approval for a new interchange is rigorous. The addition of an interchange must be approved by the Oregon Transportation Commission and ultimately, as previously stated, by U.S. Secretary of Transportation.

The criteria for Federal approval of a new interchange is essentially the same as those of the Oregon Department of Transportation. The principal elements include:

- Demonstration of a compelling public need for the additional access to the freeway that cannot be met in an alternative way.

- Demonstration that freeway interchange spacing is not so close as to either unnecessarily increase the cost of the system or interfere with the free flow and safety of traffic on the interstate system.

- Evidence that frontage roads or other generally parallel facilities do not exist or cannot be developed that can be used to access the interstate system by already existing interchanges.

THE ADEQUACY OF ACCESS TO I-5 IN WILSONVILLE

There is no indication that the number of freeway accesses in Wilsonville is inadequate.

Wilsonville has a population of about 6,000. The population is projected to grow to about 12,000 in 20 years. Employment is approximately 5,500 and is projected to grow to about 14,000 in 20 years.

The frequency of freeway access to the community at Wilsonville is good. The Charbonneau District, south of the Willamette River, has interchange access via the Charbonneau Interchange. This area has about 2000 people or about one third population of the city. The Wilsonville and Stafford Interchanges serve the remaining 4,000 population.

Several cities along Interstate 5 that are much larger than Wilsonville have fewer interchanges serving their communities. Ashland, Medford, Grants Pass and Albany have only two interchanges each. Salem, an urban area of about 100,000 is served by five interchanges with an average spacing of three miles. Currently, no city along I-5 with a population similar to Wilsonville's has more than one interchange

On I-84, Ontario and LaGrande have only have two interchanges and each have several times the population of Wilsonville.

The "Sunset Corridor", where 35-40 thousand people are employed in high technology industries, is served by five interchanges on the Sunset Freeway. Even though the Sunset Highway is non-interstate and the standards are lower, the distance between the interchanges averages 1.75 miles.

Committed Improvements To Existing Interchanges

The Wilsonville Road and North Wilsonville/Stafford Interchanges provide good community access to and from the interstate freeway. However, in order to accommodate current and future growth, these two interchanges will need some improvements. The Department is in the process of developing those improvements. The Department is preparing to invest approximately $25 million on those improvements.

A BOECKMAN INTERCHANGE WOULD ONLY BENEFIT A SMALL AREA

A map of Wilsonville shows that only about 400 acres, out of 3600 acres inside the UGB, is more than one mile from a freeway interchange. No land is more than 1.25 miles from an interchange. (See Attachment Two)

A Boeckman Road Interchange would benefit about 500 acres of land in the city by reducing the distance to the freeway somewhat. However, the average total trip length to and from these properties would not be reduced an appreciable amount because there are Boones Ferry Road and Parkway Avenue which serve as frontage roads parallel to the freeway.

Analysis of estimated travel times from areas north and south of Wilsonville indicates that construction of Boeckman Road Interchange would not result in significant (less than 30 seconds) reductions in travel times to facilities such as the Payless distribution Center, the Coca Cola distribution center, Tektronix, or the Parkway Shopping Center.

Travel times for trips to and from the vicinity of the proposed interchange, such as Nike, could be reduced by 30 to 60 seconds.

Because the estimated average freeway trip length to and from the city of Wilsonville is 20 minutes, a time savings of a minute or less, is considered insignificant.

INTERCHANGE SPACING WITH A BOECKMAN ROAD INTERCHANGE WOULD BE SUBSTANDARD

According the 1987 Estimate of the Cost of Completion of the Interstate System (USDOT, Federal Highway Administration IAW Title 203 US Code):

> "It is important that interchanges be so located to properly discharge and receive traffic from other Interstate and Federal-aid system routes, or major arterial highways or streets. It is equally important that they not be spaced so closely as to either unnecessarily increase the cost of the system or interfere with the free flow and safely of traffic on the Interstate System.
>
> Interchanges within in urban areas should not be spaced closer than an average of two miles, in suburban sections an average of not closer than 4 miles and in rural sections an average of not closer than 8 miles. In urban areas, the minimum distance between adjacent interchanges should not be less than 1 mile and in rural areas not less than 3 miles."

A Boeckman Road Interchange would be one mile north of the Wilsonville Road Interchange and 1.17 miles south of the Stafford Interchange. These distances are close to the absolute minimum allowable; however, minimum distances can only be applied if conditions are appropriate. The spacing of interchanges in a specific area is determined by the traffic volumes on the freeway, existing and projected volumes using the off and on ramps, and whether or not there is enough spacing for safe maneuvering of vehicles.

When volumes on the freeway are high, as they are in Wilsonville, interchanges must be adequately spaced in order to provide safe weave distances for entering and exiting traffic without reducing the free flow capacity of the freeway

I-5 through Wilsonville was designed handle up to 4500 vehicles per hour each direction during the design hour and still maintain free flow conditions. Year 2015 traffic forecasts show over 5000 vehicles each direction during the design hour of travel. Four lanes each direction will be required on the freeway at that time.

If Stafford Interchange is linked to the proposed Westside Bypass, ramp volumes will be relatively high. Maintaining free flow conditions on the freeway will require an auxiliary lane to provide for entering and exiting traffic at Wilsonville Road and Stafford Interchanges.

Adding an interchange at Boeckman Road, between the two existing interchanges, would result in additional weave conflicts for entering and exiting traffic. This increased weave conflict will interfere with through traffic and increase accident hazards. Maintaining free flow conditions on the freeway, in that case, would require a sixth lane (another auxiliary lane) from south of the Willamette River all the way to I-205.

REDUCING THE INTERCHANGE SPACING PROBLEM WOULD BE COSTLY

Building an interchange at Boeckman Road would require more than simply adding ramps to the existing overcrossing. Because of Interstate design standards the existing structure would have to be replaced with one of adequate span and width. Several acres of land would be needed for construction of the interchange.

In addition, new lanes would have to be added to the freeway to mitigate the traffic flow problems caused by the new interchange. Auxiliary lanes in addition to those already needed without Boeckman Road Interchange, would have to be added to both sides of the freeway from the Willamette River to the I-205 Interchange in Tualatin.

Boeckman Road Interchange would cost about $5-10 million. Additional auxiliary lanes would add an extra $6 million to the cost of the interchange.

An interchange at Boeckman Road would not reduce the costs of the projects at Wilsonville or Stafford Roads as some people have asserted. The reason is that, although a new interchange would somewhat reduce the traffic using the

existing interchanges, it would't be enough reduce the number of lanes needed on the crossings or the magnitude of ramp improvements needed to maintain a reasonable level of service. (See Attachment Three)

LOCAL TRANSPORTATION SYSTEM

The Transportation Master Plan developed by Carl Buttke identifies a workable traffic circulation system for the City of Wilsonville. The plan does not include an interchange at Boeckman Road thereby demonstrating that a local system can be provided without having to rely on the interstate for local circulation.

STATEWIDE GOAL CONSISTENCY

A proposed interchange must be added to the Comprehensive Plan and must, therefore, be consistent with Statewide Goals and Guidelines. ODOT believes an interchange at Boeckman could not meet the test of consistency without adequately addressing the following issues:

Goal 2
"Cities and counties are expected to take into account regional, state, and national needs".

ODOT has adequately documented that an interchange at Boeckman Road would have negative impacts to state and national interests

Goal 2 (ORS 197.015 (5))
"A plan is coordinated when the needs of all levels of governments, semi-public and private agencies, and the citizens of Oregon have been considered and accommodated as much as possible."

On many occasions ODOT has identified for the City of Wilsonville the state transportation needs as they relate to the Boeckman Road issue. ODOT and Carl Buttke have identified ways to reconcile statewide needs and those of the City without the interchange. A City comprehensive plan that includes a Boeckman Road interchange would, therefore, remain "uncoordinated" with the plans and programs of ODOT.

Goal 11
"To plan and develop a timely, orderly, and efficient arrangement of public facilities and services".

An interchange at Boeckman Road would be, in the opinion of ODOT, an inefficient use of transportation resources. It would be costly to implement, serve a limited area, and adversely impact the capacity of the freeway which is a resource of statewide importance.

Goal 12
"Plans for new or for the improvement of major transportation facilities should identify the positive and negative impacts on ....(4) existing transportation systems".

The City would have to adequately identify the negative impacts the proposed interchange would have on the Interstate System. ODOT believes that, if this were accomplished in a credible manner, there would not be adequate findings for the addition of the interchange to the comprehensive plan.

Goal 12
"A transportation plan shall... be based on an inventory of local regional and state transportation needs".

The City would have to identify the national and statewide significance of I-5 and weigh the impact a Boeckman Road Interchange would have on the ability of ODOT to meet statewide transportation needs. ODOT believes that, if this were accomplished in a credible manner, there would not be adequate findings for the addition of the interchange to the comprehensive plan.

Goal 12
"A transportation plan shall... minimize adverse social economic, environmental impacts and costs".

The inclusion of a Boeckman Road Interchange in the Wilsonville Plan would not be a cost effective way to meet the transportation needs of the city because those needs can be adequately met with improvements to existing interchanges and local street improvements.

Goal 12
"A transportation plan shall ...facilitate the flow of goods and services so as to strengthen the local and regional economy".

The inclusion of a Boeckman road Interchange would hamper rather than facilitate the flow of goods and services because the capacity of the freeway will be reduced.

Goal 12
"Transportation systems should be, to the fullest extent possible, planned to utilize existing facilities and rights-of-way...."

An interchange at Boeckman road would be a new facility and would require the aquisition of right-of-way.

ATTACHMENT ONE

Comments from Federal Highway Administration Oregon Region Office regarding the potential addition of an interchange at Boeckman Road. Included are the Federal Regulations regarding the addition of interchanges to the Interstate system.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
THE OREGON DIVISION
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, Oregon 97301

April 22, 1991
IN REPLY REFER TO
HA.6-OR/711.11

Mr. Theodore A. Spence
Plan and Program Manager
Oregon State Highway Division
Region 1
9002 S.E. Mc Loughlin Blvd.
Milwaukie, OR 97222

Dear Mr. Spence:

Wilsonville Transportation Plan - Boeckman Interchange

Thank you for allowing us to comment on the City of Wilsonville's Transportation Plan. Since the plan includes revisions to two existing interchanges on Interstate 5, the Stafford Road and Wilsonville Interchanges, and discusses the possible addition of a third, the Boeckman Interchange, it is appropriate to point out FHWA's new Interstate access policy requirements.

Under FHWA's Interstate access policy, which was published in the Federal Register on October 22, 1990, any new or revised access point to the Interstate must be approved by our Washington, D.C. Headquarters office.

Six elements must be addressed prior to consideration of any access point revision to the Interstate system, three of which may not be supported by a new interchange at Boeckman Road. A copy of the policy is enclosed and the three elements are discussed below.

1. It must be demonstrated "that the existing interchanges and/or local roads in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design-year traffic demands...".

   The purpose of this section is to assure the Interstate facility does not become part of the local circulation system. The freeway is primarily included to serve regional and interstate traffic and not local traffic. Improvements to the local road system should be a cause, not an effect, of changing access to the Interstate.

2. "The proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility...".

   In April 1987, ODOT conducted an analysis to determine the feasibility of constructing an interchange at Boeckman Road on I-5. The conclusion was this interchange would "deteriorate the freeway's operation". If the City

of Wilsonville chooses to continue feasibility analyses of the interchange, they must address the issues in the 1987 study and conduct an analysis to show no adverse impact to the Interstate's safety and operation.

3. "The proposal considers and is consistent with local and regional land use transportation plans." A comprehensive interstate network study should be addressed in the plan.

   The Transportation Master Plan acknowledges both the Stafford and Wilsonville interchanges, but not the Boeckman interchange. The discussion in the Appendix under "Area 11" states "there is at this time no conclusive evidence that (the Boeckman) interchange is or is not needed or feasible". This determination should be made with consideration to regional traffic needs, operation of I-5, impacts of the Stafford/Wilsonville interchanges, in addition to the operation of local roads. Either acknowledge the interchange in the plan or discard it.

As a final note, both Stafford and Wilsonville I/C's will need a revised access point justification statement which addresses the six points of the Interstate Access Policy. ODOT has acknowledged the urgency of the Stafford interchange and is preparing such a report.

Sincerely yours,

Fred P. Patron

Fred P. Patron
Division Transportation Planner

Enclosure
Federal Register

Federal Highway Administration

[FHWA Docket No. 89-23]

Additional Interchanges to the Interstate System

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of policy statement.

SUMMARY: This document issues a statement of FHWA policy and guidance for the justification and documentation needed for requests to add access (interchanges and ramps) to the existing Interstate System. Due to the numerous requests by States for additional access to the Interstate System, the FHWA is clarifying its policy and emphasizing the need for justification in areas such as safety, traffic operations and coordination with land use.

EFFECTIVE DATES: The effective date of this policy is October 22, 1990.

FOR FURTHER INFORMATION CONTACT: Seppo I. Sillan, Office of Engineering, (202) 366-0312, or Michael J. Laska, Office of the Chief Counsel, (202) 366-1383. Office hours are from 7:30 a.m. to 4 p.m. et., Monday through Friday, except legal holidays.

SUPPLEMENTARY INFORMATION:

Background

Section 111 of title 23, U.S.C., provides that all agreements between the Secretary and the State highway department for the construction of projects on the Interstate System shall contain a clause providing that the State will not add any points of access to, or exit from, the project in addition to those approved by the Secretary in the plans for such project, without the prior approval of the Secretary. This agreement provision is contained in 23 CFR part 630, subpart C, appendix A. The Secretary has delegated the authority to administer 23 U.S.C. 111 to the Federal Highway Administrator pursuant to 49 CFR 1.48(b)(10).

It has always been the policy of FHWA to maintain adequate control of access to the Interstate System to ensure safe and efficien traffic operations. The guidance for justifying and documenting the need for additional access to existing sections of the Interstate System has traditionally been included in the Interstate Cost Estimate (ICE) manuals that are periodically issued by FHWA pursuant to 23 U.S.C. 104(b)(5) and available to the public. The guidance generally required the documentation of public benefits or needs before additional interchanges or ramps could be added to the Interstate System. In July of 1987, the FHWA, by memorandum to Regional Federal Highway Administrators, restated and emphasized the justification criteria contained in the ICE manual.

Discussion of Comments.

In response to the notice of proposed policy statement published at 54 FR 47161 on November 9, 1989, the FHWA received 33 comments: 24 from State transportation agencies (representing 20 different states), 5 metropolitan or regionan planning agencies, 2 non-profit interest groups, and 2 private individuals. The majority of comments supported the policy. Specific suggestions varied from recommending more detailed instruction and guidance, including specific design criteria, to recommendations for even more flexibility than is being proposed. A section-by-section discussion of the comments follows. *Regional Traffic Needs (Section 1.)* Comments on this section were relatively few and ranged from suggested editorial changes and clarifications to adding provisions to indicate whether area-wide or corridor analysis is expected.

The intent of this section is to require the States to demonstrate that an access point is needed for regional traffic needs and not only to solve local system needs or problems. The interstate facility should not be allowed to become part of the local circulation system but should be maintained as the main regional and interstate highway it was intended to be. The analysis that is required should extend to the highways in the corridor and appropriate nearby highways and streets only, not the entire "urban area" as was interpreted by one commenter.

his section has been slightly in order to rify its intent.

Some suggestions were made to require a benefit/cost analysis in determining acceptability of a new or revised access proposal. Such analysis can be a valuable input to the decision-making process and would assist the State Highway Agencies in determining priorities. However, such analysis should not be the sole, or even a major, determinant in justifying an access request or a proposed design configuration (especially for single or isolated ramps and partial interchanges versus full interchanges). Therefore, a benefit/cost analysis will not be required. *Reasonable Alternative (Section 2).* Comments on this section expressed concern that the term "all feasible" is too broad and would cause difficulties in interpretation. Several comments addressed the need for examples to clarify the intent of this policy section. One commenter interpreted the requirement as asking for the detailed design to be completed at the access request time.

This section has been revised to more clearly state that the intent of this requirement is to assure that all reasonable alternatives, including provements to existing local roads streets in lieu of new access, have been fully considered. No detailed design is expected in most instances, especially in rural areas. Generally, sufficient information on recommended configuration of the interchange necessary for an operational analysis, including expected number of lanes and weaving distances, is all the design detail that is needed. However, in some cases, especially in urban areas, it may be necessary to provide more detailed design information in order to assure that the Interstate facility with the new access point will work as intended. *Operational Analysis (Section 3.)* Comments on this section suggested that a specific time period for analysis be stated; that only significant impacts be considered; and that mainline Interstate beyond the adjacent interchanges be analyzed.

The purpose of this section is to assure that sufficient operational analyses are made to determine the impact of the added access on the Interstate operation. It is anticipated that the 1985 Transportation Research Board (TRB), Special Report 209, "Highway Capacity Manual" (HCM) analysis procedures will normally be d. This document is listed in 23 CFR 5 as a guide and a reference. Regardless of the analysis method used in the proposal, the FHWA will use the HCM in its review and therefore the data submitted must be sufficient for and compatible with those procedures. At a minimum, the operational impact on the mainline Interstate between the proposed new access and the adjacent existing interchanges on either side should be analyzed. Preferably, the analysis should be extended as far along the mainline and include as many existing interchanges as is necessary to establish the extent and scope of the impacts. This could be critical in urban areas with many relatively closely spaced interchanges.

Sufficient analysis of the crossroad and even some of the parallel facilities, as appropriate, must be made to assure that if the new access is approved, the local roads are adequate to handle the new traffic loads. A twenty-year design period should be used.

This section has been revised to clearly indicate that significant impacts should be the focus of analysis. Language has been added or revised to indicate that an analysis of the adjacent sections of the Interstate shall extend at least to the next interchange in each direction and beyond, if necessary.

Because it is included in other sections, the part of this section dealing with required analysis of crossroads and other local facilities to handle the traffic in lieu of a new interchange has been eliminated. That analysis however, is still required, and is part of the justification of need required in section 1 and the alternatives analysis required by section 2 of this policy.

Suggestions were made to specify in the policy the required design period. For Interstate projects, a twenty-year design period is already required by section 109(b) of title 23, U.S.C., and is incorporated in the American Association of State Highway and Transportation Officials (AASHTO) publication, "A Policy on Design Standards—Interstate System." This document is incorporated at 23 CFR 625.4(a)(2). Therefore, there is no need to include that, or any other specific design criteria in this policy statement.

Access Connections and Design (Section 4.) Most of the comments on this section dealt with the requirement that all new access points must provide for all movements; partial interchanges will not be allowed. The FHWA intent is that, except in the most extreme circumstances, all interchanges should provide for all movements. However, it is recognized that circumstances may exist when initial construction of only part of an interchange might be appropriate. Where such circumstances exist, commitments, possibly even purchase of necessary right-of-way during the initial project stage for future completion, must be made. Special purpose access for HOV's, for transit vehicles, or into park and ride lots should be treated as special cases and the movements to be provided decided on a case-by-case basis.

Other comments dealt with design standards. Concern was expressed that, as written, the requirement to meet current standards would require full construction plans at the time of access point request and that exceptions could not be granted. There is no intent to require any more design work than is necessary to determine the impacts and appropriateness of the proposed interchange (see discussion for section 2). The design exception process provided by 23 CFR 625.3(f) is still available and not negated or in any way modified by this policy.

Several other commenters suggested that specific design criteria be included, especially for spacing. Spacing guidelines such as contained in the ICE manuals and in the AASHTO publication, "A Policy on Geometric Design of Highways and Streets" (Green Book), should be considered as good guidance and followed to the maximum extent possible. However, since design features, such as ramp braiding or collector distributor roads, can be used to minimize the adverse operational impacts of close spacing, the policy will not specify any design details or spacing requirements.

Also, no specific design criteria need to be included in this policy statement because they are contained in the AASHTO Interstate Standards and the Green Book. Both documents are incorporated by reference at 23 CFR 625.4(a) as policy for Federal-aid projects and, in the case of the Interstate Standards, as a standard for design of all projects on the Interstate System regardless of the funding source.

Transportation and Land Use Plans (Section 5.) Most of the comments on this section were the result of confusion and non-comprehension because of some missing words in the published draft policy. This has been corrected. Other comments dealt with the role of Metropolitan Planning Organizations (MPO's) and the scope of studies required, i.e., system wide or corridor studies.

The intent of this requirement is to cause sufficient review and coordination so as not to have piece-meal consideration of added access and to avoid as much as possible future conflict with other, possibly more needed, access. The request should include

discussion as to how the current proposal fits into the overall plans for the area, and if it is an addition to the current plans, how it fits in and affects the current plans. Added access requests do not have to be included in official transportation plans or approved by MPO's or similar organizations prior to submittal. All such coordination may be completed after access approval and as part of the normal project development process. The expectation here is that any proposal is considered in view of currently known plans for transportation facilities and/or land use planning. This is especially important when several new interchanges are anticipated.

Request Coordination (Section 8.) Commenters on this section expressed concern as to States' ability to have any control over developers or to be able to phase or stage the transportation improvement with the private development. The intent of this requirement is not to try to control developers and their plans through the State Highway Agencies, which have no such direct powers. However, it is incumbent upon the State Highway Agencies to assure that the highway facilities are developed in an orderly and coordinated manner to serve the public. Therefore, where private development is clearly the driving force behind the need for added access, it is only reasonable that the State Highway Agency and the developer work closely together in order to develop the access to achieve mutual benefits with minimal adverse impact on the Interstate travelers. Stage construction could be used where extensive private development is not expected to be completed for several years. The developer might be required to have certain parts of the local circulation system ready before ramps can be constructed or opened to traffic. In some heavily congested areas the developer might be required to provide ride sharing incentives or even assist in providing transit facilities. The intent is to accomplish any coordination that might be possible, even if it is only to know what each is doing and when.

Coordination or cooperation would be very appropriate where a developer has agreed to fund or perhaps even construct access at the same time the State is either planning or is already in the process of improving that particular section of the Interstate route. It is only reasonable that the two activities be coordinated and compatibility assured. Much of this would probably be accomplished under section 5 requirements. However, this separate policy section is being kept in order to emphasize this particular issue since more and more private involvement in transportation improvements will be happening in the future.

Implementation

One of the main concerns of commenters in reference to implementation was that if the contents and format of justification documents and supporting data are not specified by the FHWA Washington office, inconsistency will occur. Other comments expressed concern over possible conflicts of opinion in deciding whether all feasible alternatives are considered, whether rural or urban conditions prevail, and whether local roads can or cannot be improved. Also, questions were raised in regard to timing of the requests in regards to the environmental and public participation process and the application of the policy to ongoing projects.

The purpose of having the States and local Division offices jointly develop the detailed implementation procedures is to provide the maximum amount of flexibility to meet local conditions and procedures. By not imposing detailed national guidelines beyond the overall policy statement, existing available data, reports and procedures can be used. The FHWA does recognize that without nationally imposed specific guidelines and requirements for format, content and methods of analysis, some differences may occur. However, non-uniformity between the States will most likely be a minor problem in comparison with the problems that would be created by rigid rules applicable nationwide under all circumstances and conditions. Therefore, the FHWA is not proposing to change the method of implementation proposed in the November 9, 1989, Notice of proposed policy.

In response to the comments on: (1) Timing of access requests in relation to environmental and public participation procedures; and (2) Application of the policy to revised or deleted access points, a new section on APPLICATION has been added to the policy statement.

The revised policy statement is as follows:

Policy

It is in the national interest to maintain the Interstate System to provide the highest level of service in terms of safety and mobility. Adequate control of access is critical to providing such service. Therefore, new or revised access points to the existing Interstate System will be considered for approval only if:

1. It is demonstrated that the existing interchanges and/or local roads and streets in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design-year traffic demands while at the same time providing the access intended by the proposal.

2. All reasonable alternatives for design options, location and transportation system management type improvements (such as ramp metering, mass transit, and HOV facilities) have been assessed and provided for if currently justified, or provisions are included for accommodating such facilities if a future need is identified.

3. The proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility based on an analysis of current and future traffic. The operational analysis for existing conditions shall, particularly in urbanized areas, include an analysis of sections of Interstate to and including at least the first adjacent existing or proposed interchange on either side. Crossroads and other roads and streets shall be included in the analysis to the extent necessary to assure their ability to collect and distribute traffic to and from the interchange with new or revised access point.

4. The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" for special purpose access for transit vehicles, for HOV's, or into park and ride lots may be considered on a case-by-case basis. The proposed access will be designed to meet or exceed current standards for Federal-aid projects on the Interstate System.

5. The proposal considers and is consistent with local and regional land use and transportation plans. In areas where the potential exists for future multiple interchange additions, all requests for new or revised access are supported by a comprehensive Interstate network study with recommendations that address all proposed and desired access within the context of a long-term plan.

6. The request for a new or revised access generated by new or expanded development demonstrates appropriate coordination between the development and related or otherwise required transportation system improvements.

Application

This policy is applicable to new or revised access points to existing Interstate facilities regardless of the funding of the original construction or regardless of the funding for the new

access points. This includes routes incorporated under the provisions of 23 U.S.C. 139(a) or 139(b). It does not include toll roads incorporated into the Interstate System under the provisions of 23 U.S.C. 129(b), except sections on which Federal funds have been expended.

For the purpose of applying this policy, each entrance or exit point, including "locked gate" access, to the mainline is considered to be an access point. For example, a diamond interchange configuration has four access points.

Generally, revised access is considered to be a change in the interchange configuration even though the number of actual points of access may not change; for example, replacing one of the direct ramps of a diamond interchange with a loop, or changing a cloverleaf interchange into a fully directional interchange is considered as revised access for the purpose of applying this policy.

All FHWA approvals for added or revised access is conditioned upon the State complying with all applicable Federal rules and regulations. The FHWA approval constitutes a Federal action, and as such, requires that National Environmental Policy Act (NEPA) procedures are followed. The NEPA procedures will be accomplished as part of the normal project development process and as a condition of the access approval. Compliance with the NEPA procedures need not precede the determination of engineering acceptability and feasibility as prescribed by this policy statement. This policy in no way alters the current NEPA implementing procedures as contained in 23 CFR 771.

Although the justification and documentation procedures described in this policy can be applied to access requests for non-Interstate freeways or other access controlled highways, it is not required. However, applicable Federal rules and regulations, including NEPA procedures, must be followed.

Implementation

The FHWA Division Office will ensure that all requests for new or revised access submitted by the State Highway Agency for FHWA consideration contain sufficient information to allow the FHWA to independently evaluate the request and ensure that all pertinent factors and alternatives have been appropriately considered. The extent and format of the required justification and documentation should be developed jointly by the State Highway Agency and the FHWA to accommodate the operations of both the State and the FHWA, including a reasonable transition period. The extent and format of justification should also be consistent with the complexity and expected impact of the proposals; for example, information in support of isolated rural interchanges may not need to be as extensive as for a complex or potentially controversial interchange in an urban area. No specific documentation format or content is prescribed by this policy.

Policy Statement Impact

The FHWA has determined that this document does not contain a major rule under Executive Order 12291 or a significant action under the Department of Transportation's regulatory policies and procedures. Interested parties were given an opportunity to comment on the proposal because of the interest in maintaining the highest level of service in terms of safety and mobility in the Interstate System.

The policy statement summarizes and clarifies FHWA policy and guidance for the justification and documentation needed for requests to add or revise access to the existing Interstate System. Specifically, the policy statement emphasizes the need for clear and convincing justification based on adequate information in areas such as safety and traffic operations. The policy statement will not impose any additional reporting or recordkeeping requirements on the States. To assure that adequate information and analysis is provided with each request for additional access, the extent and contents of the currently required documentation may need to be modified. These modifications can simply be incorporated into the States' existing additional interchange request policy. Therefore, a full regulatory evaluation is not required. For the above reasons, and under the criteria of the Regulatory Flexibility Act, the FHWA hereby certifies that this action will not have a significant economic impact on a substantial number of small entities.

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 12612, and it has been determined that this policy statement does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

(Catalog of Federal Domestic Assistance Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental review of Federal programs and activities apply to this program.)

Authority: 23 U.S.C. 315; 49 CFR 1.48.

Issued on: October 12, 1990.

T. D. Larson,

Administrator.

[FR Doc. 90-24697 Filed 10-19-90; 8:45 am]

BILLING CODE 4910-22-M

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To Fred Patron	From Leo Huff
Co. FHWA	Co. ODOT Reg 1
Dept.	Phone # 653-3242
Fax # 399-5838	Fax #

Oregon

DEPARTMENT OF TRANSPORTATION

Highway Division

Region 1

FILE CODE:

May 2, 1991

Fred Patron, Division Transportation Planner
Federal Highway Administration
Oregon Division
Equitable Center, Suite 100
530 Center St. NE
Salem, Oregon 97301

Re: Wilsonville Transportation Plan-Boeckman Interchange

Thank you for your letter regarding the Boeckman Interchange. The first two points are exactly what we need to tell the City. I think, however, that we could use some clarification on point three before we enter it into the record.

The City has had a proposal for an interchange at Boeckman Road in their transportation plan for some time. In 1988, when they proposed elevating the idea to the level of a project, we objected. As a compromise, until they could update the transportation plan, we agreed to the wording in "Area 11".

The Draft Transportation Master Plan you have reviewed is the plan update that supposedly addressed "Area 11". It shows a plan for a local circulation system for the city that will work and Boeckman is not in it.

However, the Planning Commission, without findings, has recommended that the interchange be put back in the plan update. The City Council will hold a hearing and possibly adopt the plan update on May 20th.

With this in mind, in the discussion of element (3.) of your letter, I would have gone on to say that the interchange cannot meet the requirements necessary to add it to the plan because it cannot meet the requirements of elements (1.) and (2.). It cannot meet element (1.) because the consultant has demonstrated "that the existing interchanges and/or local roads in the corridor can provide the necessary access and be improved to accommodate the design year traffic demands". It cannot meet element (2.) because in 1987 ODOT demonstrated that the interchange "would deteriorate the freeway operation".

Thank you for your help.

Sincerely

Leo M. Huff, AICP
Planning Representative

9002 SE McLoughlin
Milwaukie, OR 97222
(503) 653-3090
FAX (503) 653-3267

cc 5/13/91
Don Adams
Lee Hoff

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
THE OREGON DIVISION
The Equitable Center, Suite 100
530 Center Street, N.E.
Salem, Oregon 97301

May 9, 1991
IN REPLY REFER TO
HPR-OR/711.11

Mr. Theodore A. Spence, Plan and Program Manager
Oregon State Highway Division, Region 1
9002 S.E. Mc Loughlin Blvd.
Milwaukie, OR 97222

Dear Mr. Spence:

Wilsonville Transportation Plan - Boeckman Interchange

In response to questions from you and your staff, the following is offered as clarification to our April 22, 1991 letter on the Draft Wilsonville Transportation Plan.

Our letter discussed FHWA's recently published Interstate access policy and noted that three of the six elements of that policy may not be supported by a proposed interchange at Boeckman Road. The elements in question are:

1. It must be demonstrated "that the existing interchanges and/or local roads in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design-year traffic demands..."

2. "The proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility..." and

3. "The proposal considers and is consistent with local and regional land use transportation plans."

It is our discussion of element (3) that needs further clarification. Our letter stated that Wilsonville's Transportation Master Plan should either acknowledge the Boeckman Interchange or the concept should be discarded. However, acknowledgement of the interchange would require prior findings that it would be consistent with elements (1) and (2). Since consultant and ODOT studies indicate that neither element would be met, we see no grounds for including the Boeckman Interchange in the Master Plan. Our statement should not be interpreted as encouragement for further study of the issue.

HIGHWAY DIV., REGION 1

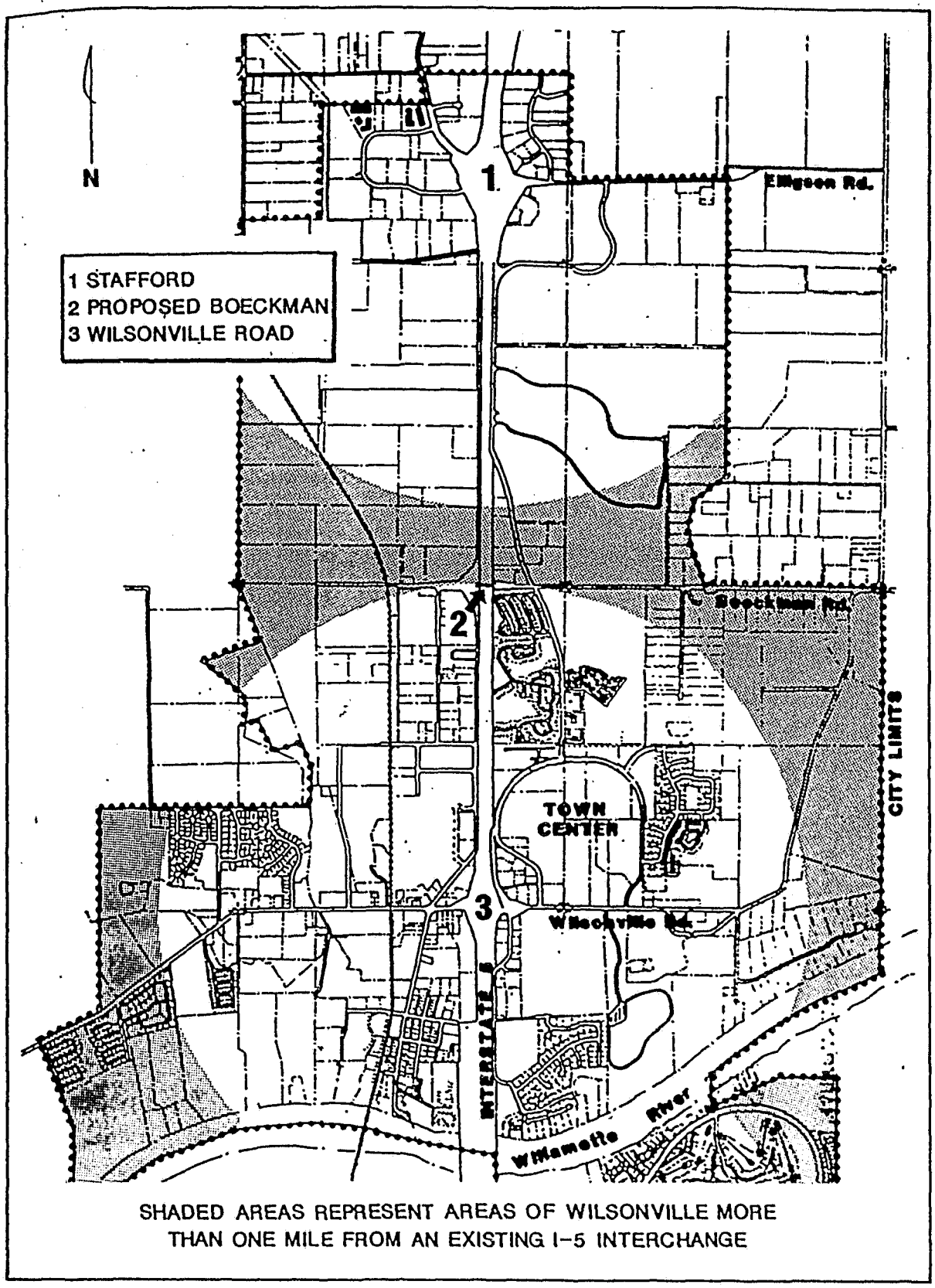
Region Eng____	Traf Oper____	Proj Dev Mgr____
Asst.Reg.Eng____	Traf Anlys____	Proj.Qual Assur____
Cons Eng____	MAY 10 1991	Env/Teams Mgr____
Public Aff____		Safety Off____
Plan & Prog ✓	Fed Aid Mgr____	Geology Mgr____
Adm Serv Mgr____	Reg Stf Asst____	Assur Spec____
Training____	Other____	

Sincerely yours,

Fred P. Patron
Division Transportation Planner

ATTACHMENT TWO

Map of Wilsonville indicating the distance of land beyond one mile from freeway interchanges



SHADED AREAS REPRESENT AREAS OF WILSONVILLE MORE THAN ONE MILE FROM AN EXISTING I-5 INTERCHANGE

ATTACHMENT THREE

1987 Report prepared by Tom Schwab, Transportation Analysis Engineer, ODOT Region One.

WILSONVILLE STUDY
BOECKMAN ROAD INTERCHANGE ON I-5
April 19, 1987

At the request of the City of Wilsonville, the Oregon Department of Transportation has conducted an analysis to determine the feasibility of constructing an interchange on I-5 at Boeckman Road in the City of Wilsonville. At the present time, the City of Wilsonville is served by three interchanges to I-5. The Charbonneau Interchange to the south of the Willamette River serves that area of Wilsonville south of the Willamette River. This interchange provides the major ingress and egress for the Charbonneau area. The commercial office and industrial lands in Wilsonville are located north of the Willamette River and served by the Wilsonville and Stafford interchanges. The Wilsonville Interchange is located on I-5 directly north of the Willamette River. The Stafford Interchange (Elligsen Rd.) is located 2 miles north of the Wilsonville Interchange. A major freeway spur I-205 intersects I-5 two miles north of the Stafford Interchange.

LAND USE

The current plan for Wilsonville shows the proposed land-use in Wilsonville consists of primarily commercial-retail development around the Wilsonville Interchange and north and east of the Wilsonville Interchange. The remainder of the land east of I-5 up through the Elligsen Road Intersection is designated for commercial office use with some residential developments planned for the area. The land to the west of I-5 and north of Wilsonville Road is planned for industrial/warehouse use.

The existing population estimates for Wilsonville show 3,200 people residing in that portion of Wilsonville north of the Willamette River. At the present time, there are approximately 5,100 people employed in the city of Wilsonville. A 2015 year population/employment forecast has been made for the City of Wilsonville. This forecast indicates that by the year 2015, 11,700 people will live in the city of Wilsonville north of the Willamette River with the total buildout population to be 20,500. The forecast employment for the city of Wilsonville is found to be 16,700 employees by the year 2015, with a buildout employment of 29,200 employees.

The analysis made for the Wilsonville Interchange assumes the 2015 design year traffic generated from the forecast population/employment. The forecast travel was generated from the Metropolitan Service District Traffic Assignment Model which has been developed for a 2005 year population and employment data. The population/employment forecast assumed in the Metro Model was verified with the data supplied by the City of Wilsonville. It was found that the Metro Model was in excellent agreement with the Wilsonville forecast. The 2015 year population/employment forecast data was developed by the City of Wilsonville in January 1987. The change in vehicle trip generation, distribution and assignment was made using the 2015 year population and employment forecast developed by the City of Wilsonville. This change in vehicle trips estimated for the 2005 to 2015 year were added to the base 2005 traffic assignments. These travel forecasts represent the current adopted Land Use Plan for the City of Wilsonville.

An analysis of the interchange access needs was developed based upon these traffic forecasts. This report will present the findings from the analysis of the traffic forecast prepared for the study area.

FORECAST TRAFFIC ASSIGNMENT

The forecast traffic generated from the proposed development in the City of Wilsonville was assigned to the two existing interchanges, plus the suggested Boeckman Road Interchange. The background network assumed the construction of the Westside Bypass route with the primary access to and from the south being made through the Stafford Interchange. The traffic assignment is a result of the trip desires to and from I-5 and on I-5 proper. This unconstrained assignment presumes that adequate capacity would be available at the interchanges and on I-5 and on the local street system.

The results of this assignment with the assumed Boeckman Road Interchange are shown on the attached Figure 2. As shown by Figure 2, traffic volumes on I-5 are approaching and in some cases, slightly exceeding, 5,000 vehicles per hour in the peak direction. Generally, it is found that a maximum of 1,500 to 1,600 vehicles per hour per lane can be carried on a given segment of freeway while maintaining an acceptable level of service. With these assigned forecast traffic

volumes, it is concluded that four lanes would be required in each direction on the freeway between I-205 and the Aurora/Hubbard Highway to achieve the design standards required of this freeway.

In designing a new freeway or redesigning an existing freeway, a maximum volume of traffic that would provide a service level "C", is defined as maintaining a 50 M.P.H. travel speed. Also, freedom to maneuver such as lane changes would become restrictive although not intolerable.

In addition to the basic freeway section, several additional checks must be made along the freeway to determine how well the freeway will operate. These check points include the ramp entrance or merge points, and the ramp exits or diverge points.

Assuming a basic eight-lane (four lanes each way) freeway section, it is found that an unacceptable level of service would occur at nearly all entrance points to the freeway between the Stafford and Wilsonville interchanges. The calculated level of service is shown on Figure 3. An "E" level of service is encountered at the southbound Stafford Interchange entrance ramp. A less-than acceptable level of service also is encountered at the southbound Boeckman on-ramp merge. This poor level of service is the result of the heavy on-ramp traffic attempting to merge into lane one of the freeway.

This condition is similar to that found on I-5 during the AM peak period at the Multnomah Boulevard northbound on-ramp. Traffic in lane one begins to slow and sometimes comes to a complete stop with an immediate impact to the adjacent lanes resulting in a complete breakdown of the freeway. Experience in freeway operation in the Portland area and other metropolitan areas shows that this condition results in over 50% loss in thru-put volume on the freeway.

ADDITIONAL IMPROVEMENTS REQUIRED

An analysis was made of what additional improvements would be required on the freeway to provide an acceptable level of service on the freeway proper. Normally, auxiliary lanes added to the freeway between the interchange on-ramps and off-ramps would be a measure to reduce the congestion encountered in lane one as a result of a merge situation. This strategy will provide improved merging

operation but usually results in a poorer weave operation because of added lane changes required.

Figure 4 shows the calculated results of adding an auxiliary lane in only the southbound direction between Stafford Interchange and Boeckman Road and between Boeckman Road and Wilsonville Road. The results of this analysis suggests that an acceptable level of service can be achieved at the merge and diverge points on the freeway.

Analysis of the weaving volumes between the on-ramps and off-ramps was also made with the results showing an acceptable level of service between the Stafford Interchange and Boeckman Road Interchange. The segment between the Boeckman Road and Wilson Road interchanges is approaching an unacceptable level of service with the forecast traffic volumes.

The freeway in a northbound direction of travel was assumed to contain four travel lanes approaching the Wilsonville Interchange. It was found that travel in the northbound direction would operate at an acceptable level of service assuming loop ramps constructed at Wilsonville Road Interchange. Additional analysis shows that a drop lane on the freeway would be required at the Boeckman Road Interchange in order to provide an acceptable level of service. This drop lane is not acceptable in modern design standards and is similar to the drop lane northbound north of the Willamette River which has been a source of a number of complaints from residents of Wilsonville. The lane configuration shown in Figure 4, does not satisfy the northbound freeway needs.

TOTAL RAMP IMPROVEMENT REQUIRED

This unacceptable level of operation in the northbound direction could be mitigated by the addition of an auxiliary lane between the Wilsonville Road and Boeckman Road interchanges as shown by Figure 5. Analysis of that segment of roadway between the Boeckman Road and Stafford Interchange shows the merge and weave through the section approaching unacceptable level of service. The level of service on the freeway at the Boeckman Road merge point could be improved with the addition of an auxiliary lane between Boeckman Road and Stafford Interchange. The addition of the auxiliary lane would not improve the weave operation through this section; in fact, a slight deterioration in the weave level of service will result.

INTERCHANGE OPERATION

Analysis of the expected operation at the interchange locations with and without the construction of the Boeckman Road Interchange was also made. The results of this analysis concluded that the basic roadway sections required at Stafford and Wilsonville Road interchanges are the same with or without a Boeckman Road Interchange.

The section required on Wilsonville Road would be to construct two lanes in each direction with a median lane for left turns plus right turn lanes at the ramp terminals. The cross section required on Stafford Interchange would consist of two lanes each way with right-turn lanes approaching the ramp terminals. As stated earlier, the analysis indicates that the same section would be required with or without the Boeckman Interchange.

CONCLUSIONS

The results of this analysis would indicate that the freeway could be designed to accept the additional Boeckman Road Interchange into approximately the forecast year assuming the existing Comprehensive Land-Use Plan. With several segments of the freeway approaching an unacceptable level of service and recognizing that new interchanges are growth inducing, it is questionable whether a reasonable level of service could be achieved by the design year. In addition, the number of lanes required on the freeway, which consists of four lanes plus an auxiliary lane, or five-lane cross-section through fairly short segments, will cause a high number of lane changes to occur in this short section. The number of lane changes will result in further deterioration of the freeway. In addition to the major freeway improvements required to serve the suggested Boeckman Road Interchange, major improvements would be required on the Boeckman Road overcrossing structure and to Boeckman Road proper.

It is concluded from this analysis that the addition of a Boeckman Road Interchange would deteriorate the freeway operation with a resultant effect of decreased mobility to all users of the system including the Wilsonville area, rather than improved mobility. Analysis shows that the forecast travel demand for Wilsonville can be satisfied through the existing Wilsonville Road Interchange and the Stafford Road Interchange. Calculations show that some additional

capacity will be available for additional development in the Wilsonville area. It is recommended that the Boeckman Road Interchange not be constructed and that the Oregon Department of Transportation and the local governments pursue the upgrading of the Wilsonville and Stafford interchanges.

TS/ds
4/15/87

FIGURE 1

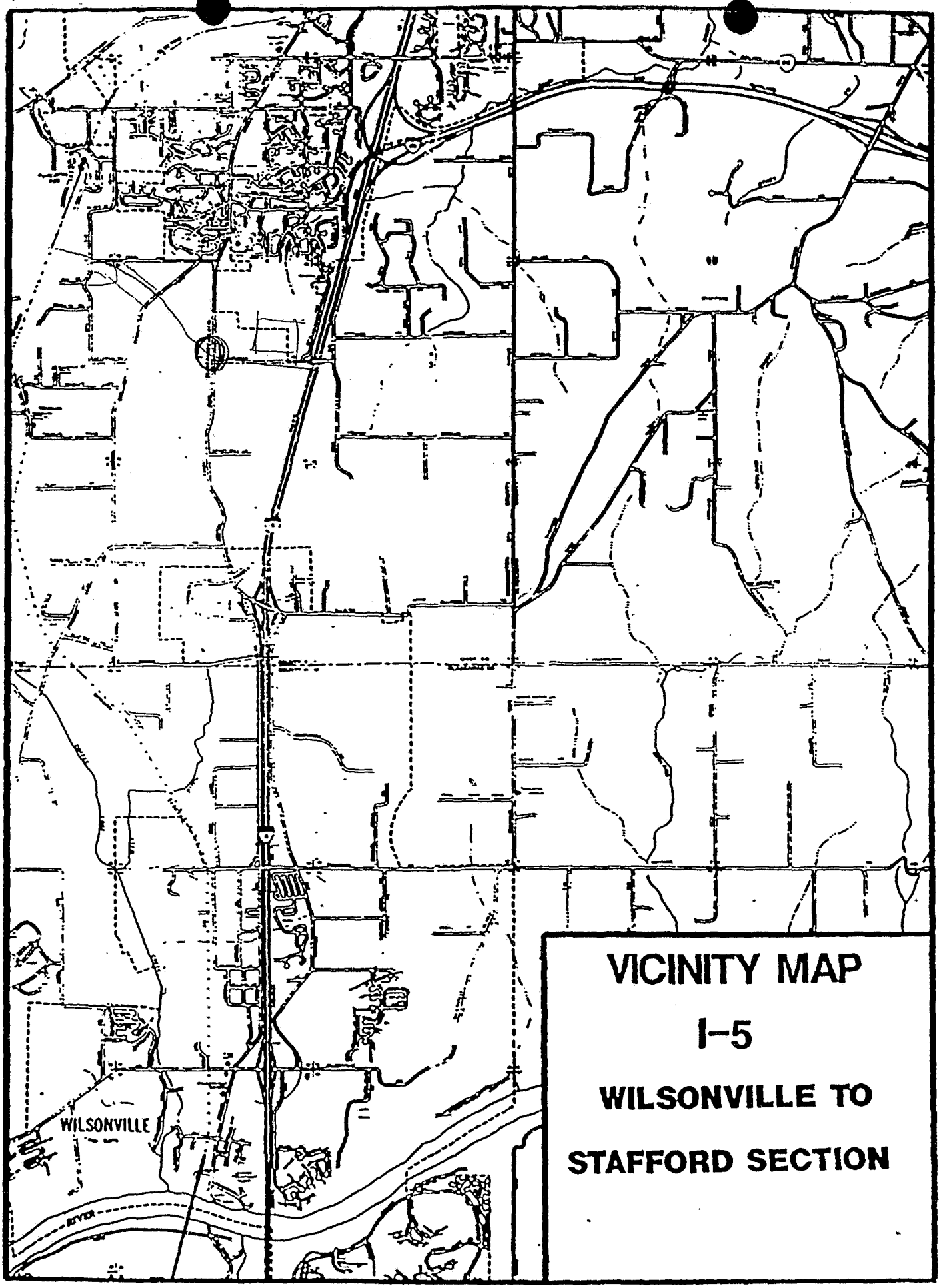

WILSONVILLE
VICINITY MAP
I-5
WILSONVILLE TO
STAFFORD SECTION

FIGURE 2

YEAR 2015 AM(PM) PEAK HOUR TRAFFIC VOLUMES

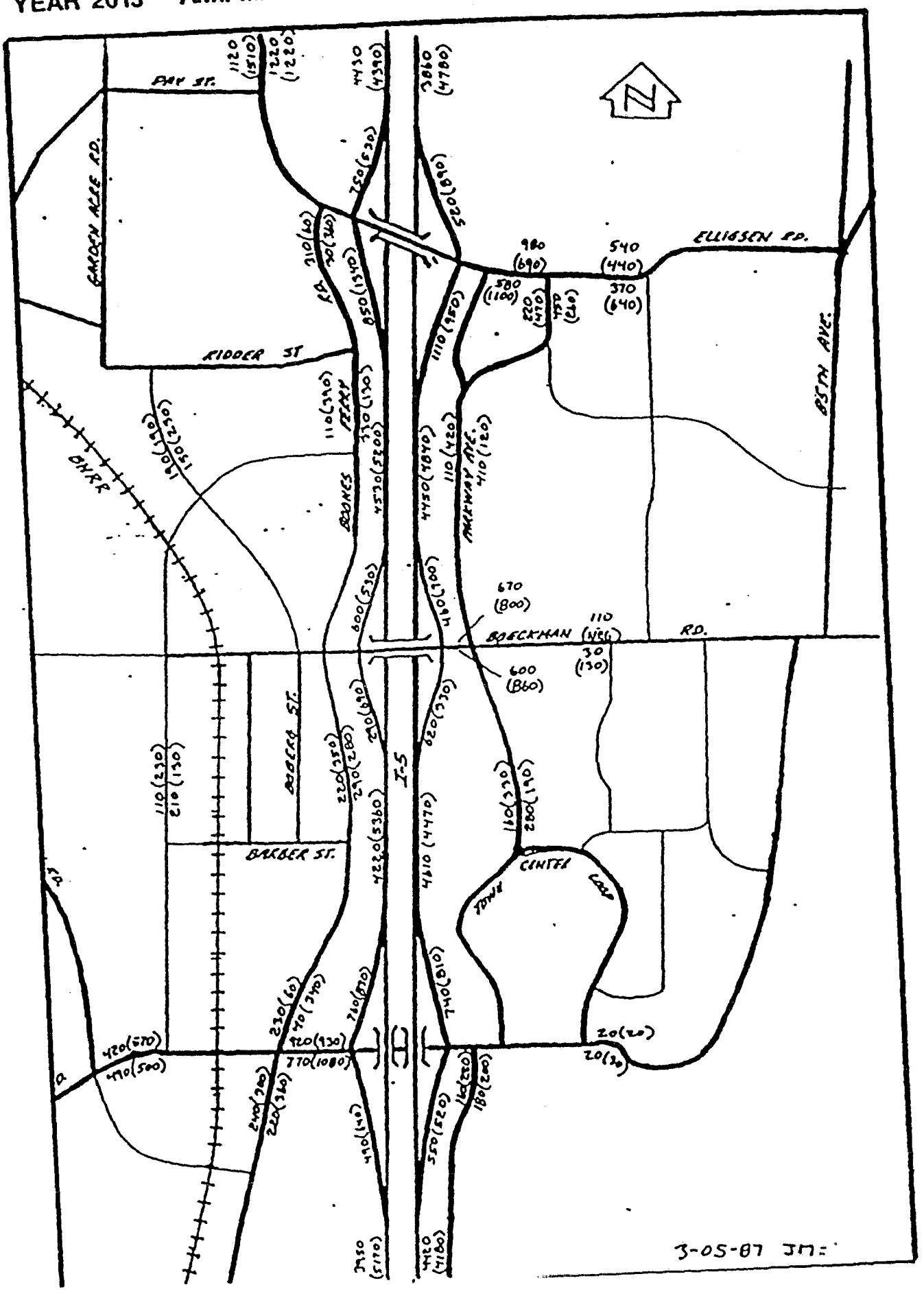


FIGURE 3

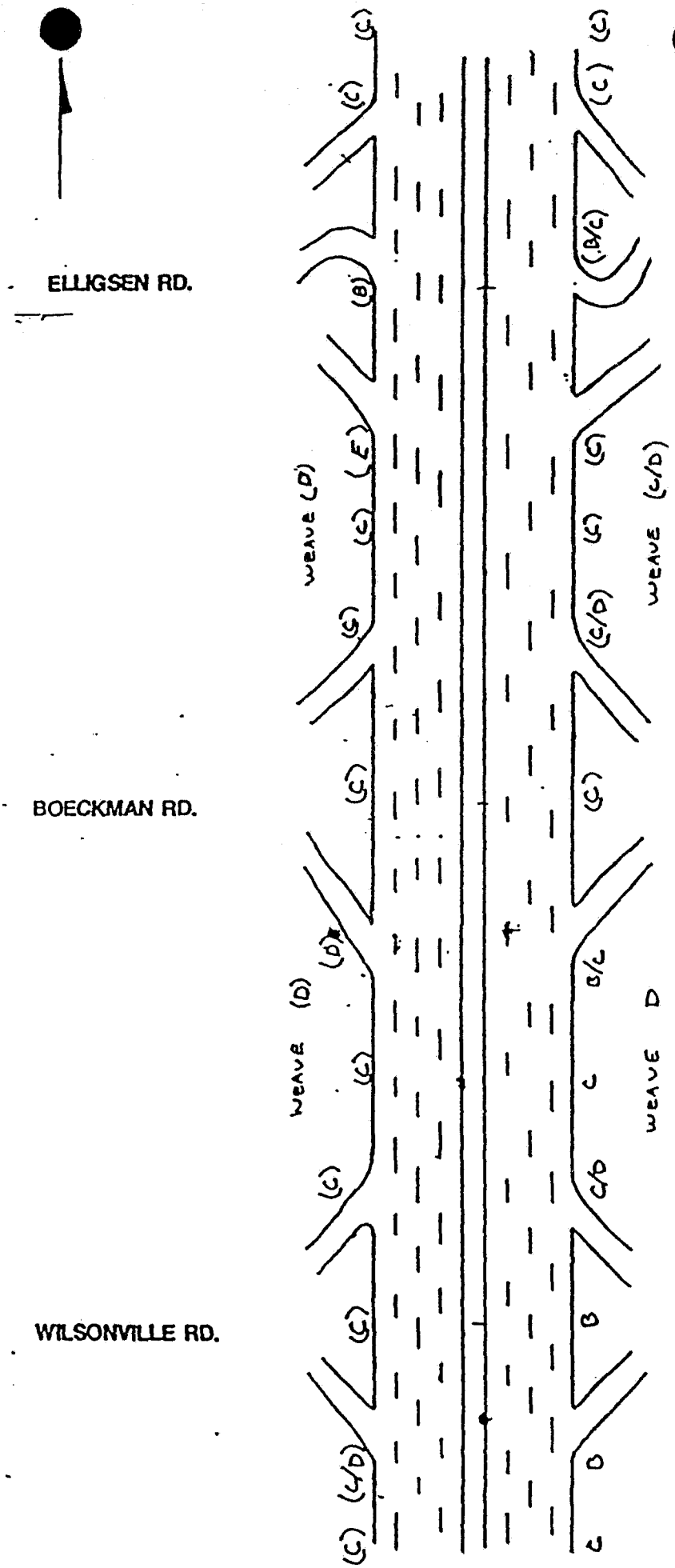

ELLIGSEN RD.
BOECKMAN RD.
WILSONVILLE RD.
WEAVE (D)
WEAVE (D)
WEAVE (C/D)
WEAVE D

FIGURE 4

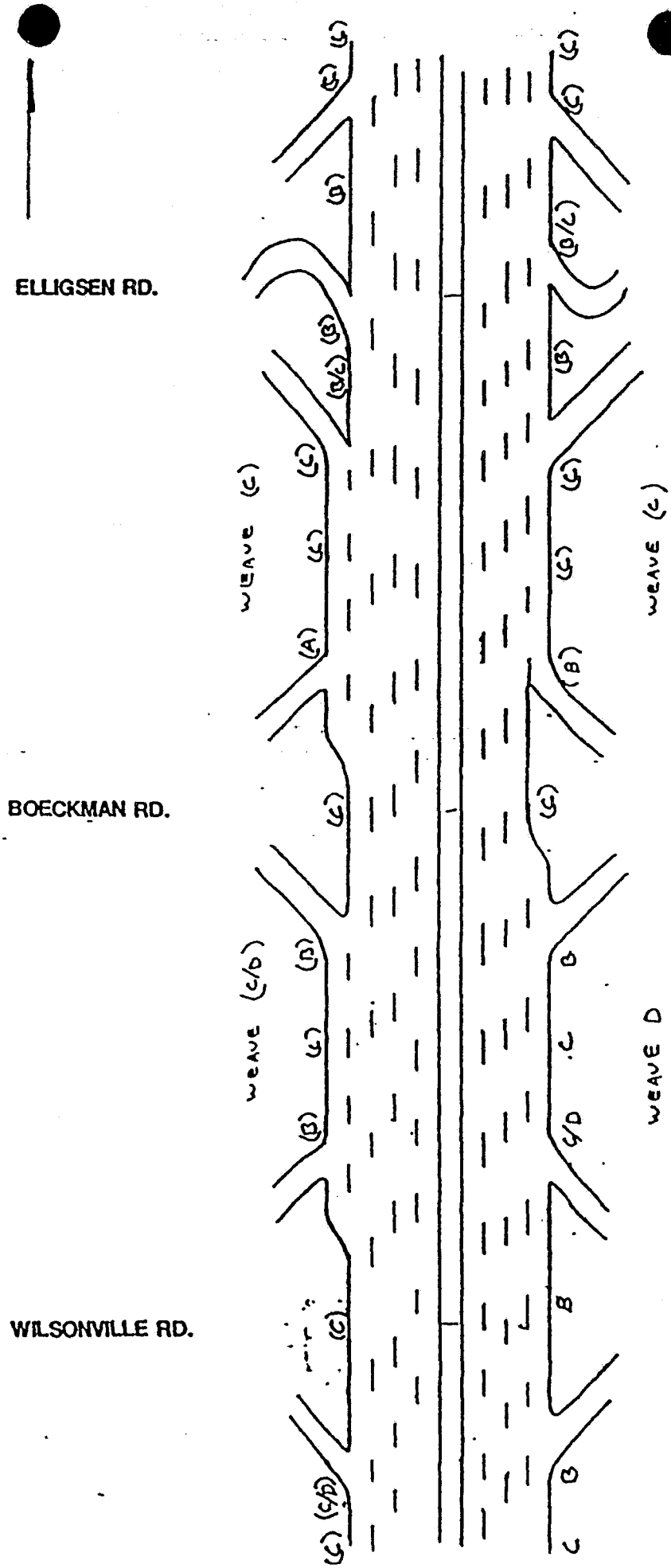

ELLIGSEN RD.
BOECKMAN RD.
WILSONVILLE RD.
WEAVE (C)
WEAVE (C/D)
WEAVE (C)
WEAVE D

FIGURE 5

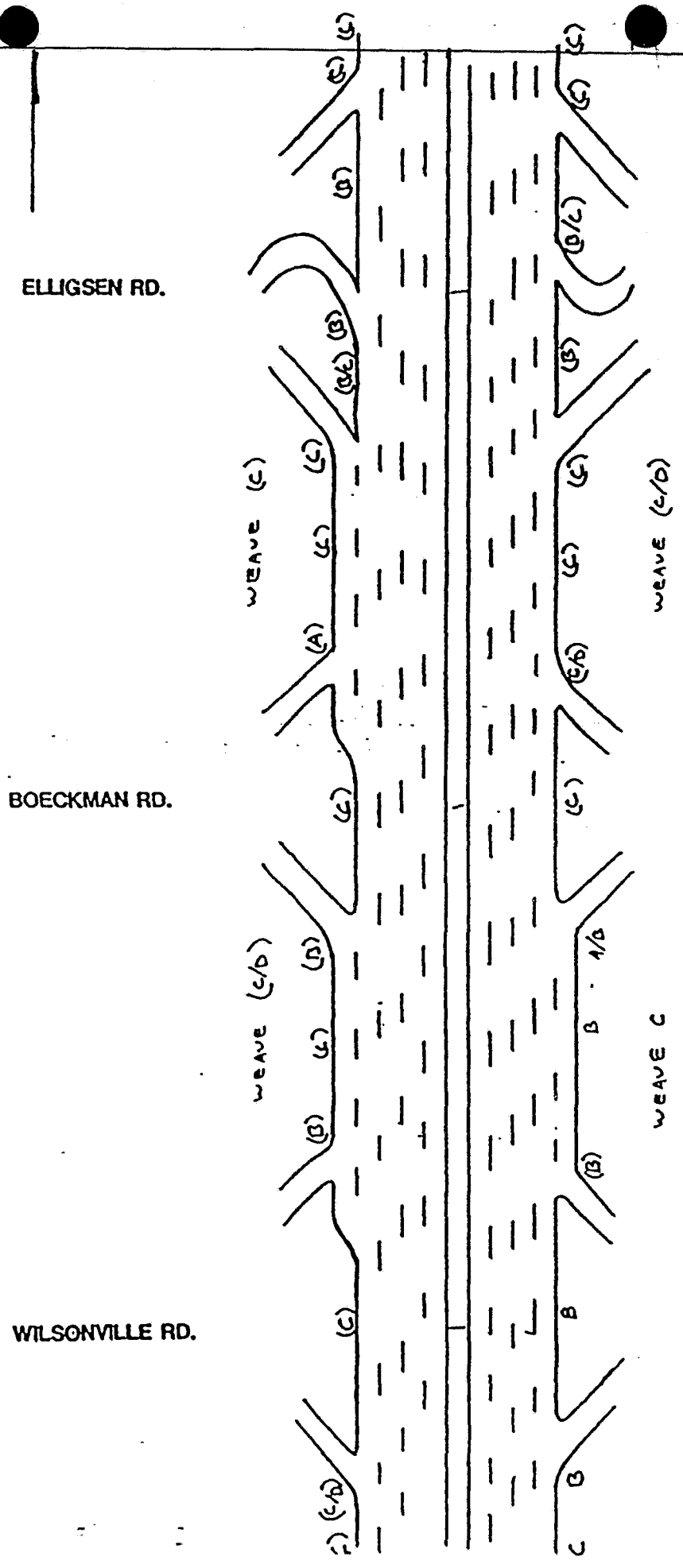
Oregon

DEPARTMENT OF TRANSPORTATION

Highway Division

Region 1

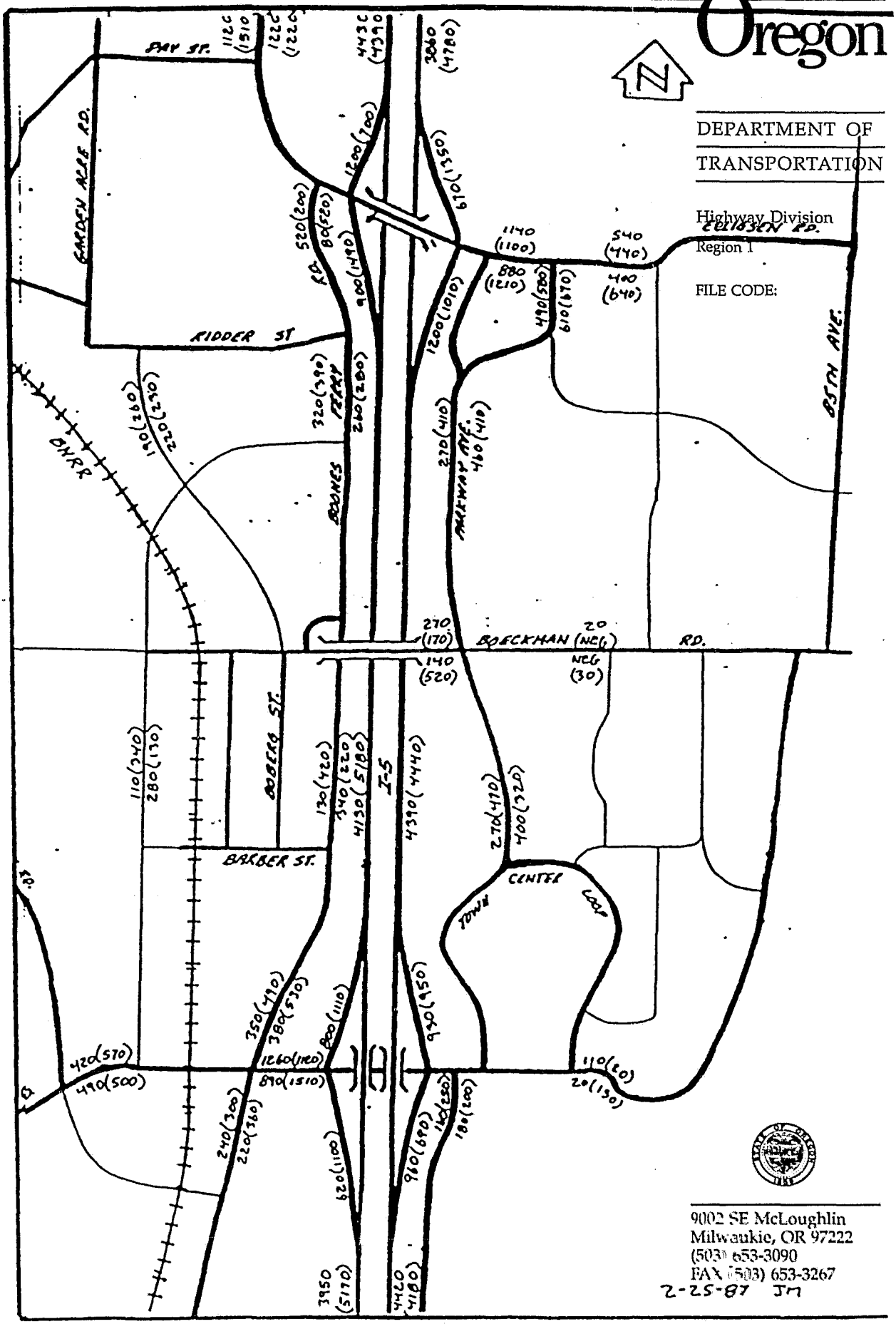
FILE CODE:



9002 SE McLoughlin
Milwaukie, OR 97222
(503) 653-3090
FAX (503) 653-3267

734-1650 (Rev. 3-91)

YEAR 2015 AM(PM) PEAK HOUR TRAFFIC VOLUMES



734-1850 (Rev. 3-91)