

FINAL REPORT

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN



Prepared For:



**City of Huntington, Oregon
June 2001**

Prepared By:



**H. LEE & ASSOCIATES
David Evans and Associates, Inc.**

Acknowledgment

This project was funded by a grant from the Transportation and Growth Management Program (TGM), a joint program of the Oregon Department of Transportation and the Department of Land Conservation and Development. TGM grants rely on federal Intermodal Surface Transportation Efficiency Act and Oregon Lottery Funds.

Disclaimer

The contents of this document do not necessarily reflect the views or policies of the State of Oregon.

CITY OF HUNTINGTON

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION.....	1-1
LAND USE AND TRANSPORTATION CONNECTION	1-1
Goal 12.....	1-1
The Transportation Planning Rule.....	1-2
Oregon Transportation Plan	1-2
PLANNING AREA.....	1-3
PLANNING PROCESS.....	1-3
Community Involvement.....	1-3
Goals and Objectives	1-4
Review and Inventory of Existing Plans, Policies, and Public Facilities.....	1-4
Future Transportation System Demands.....	1-4
Transportation System Potential Improvements	1-4
Transportation System Plan	1-5
Funding Options.....	1-5
Recommended Policies and Ordinances	1-5
RELATED DOCUMENTS	1-5
Other Transportation System Plans	1-5
County Inventories and Plans	1-5
State Plans	1-6
CHAPTER 2: GOALS AND OBJECTIVES	2-1
OVERALL TRANSPORTATION GOAL.....	2-1
Goal 1.....	2-1
Goal 2.....	2-1
Goal 3.....	2-2
Goal 4.....	2-2
Goal 5.....	2-3
CHAPTER 3: TRANSPORTATION SYSTEM INVENTORY	3-1
STREET SYSTEM.....	3-1
Street Classification	3-1
Street Layout.....	3-2
State Highways.....	3-3
General Pavement Conditions.....	3-4
Bridges.....	3-6
Identified Needs.....	3-6

PEDESTRIAN SYSTEM.....	3-6
Identified Needs.....	3-6
BIKEWAY SYSTEM	3-7
Identified Needs.....	3-7
PUBLIC TRANSPORTATION	3-7
Identified Needs.....	3-7
RAIL SERVICE	3-7
AIR SERVICE	3-8
PIPELINE SERVICE	3-8
WATER TRANSPORTATION.....	3-8
 CHAPTER 4: CURRENT TRANSPORTATION CONDITIONS.....	 4-1
TRAFFIC VOLUMES	4-1
Average Daily Traffic	4-1
Roadway Capacity.....	4-1
TRANSPORTATION DEMAND MANAGEMENT MEASURES	4-3
Alternative Work Schedules	4-3
Travel Mode Distribution	4-3
SAFETY ANALYSIS	4-5
Historic Accident Summary	4-6
US Highway 30 (<i>Huntington Highway</i>).....	4-7
 CHAPTER 5: TRAVEL FORECASTS	 5-1
LAND USE.....	5-1
Historic Growth	5-2
Projected Growth.....	5-2
TRAFFIC VOLUMES	5-2
Historic	5-2
Future Traffic Volumes	5-3
HIGHWAY SYSTEM CAPACITY.....	5-3
Analysis Results.....	5-4
 CHAPTER 6: TRANSPORTATION IMPROVEMENT OPTION EVALUATION	 6-1
EVALUATION CRITERIA	6-1
EVALUATION OF POTENTIAL TRANSPORTATION IMPROVEMENTS.....	6-1
Improvement Option 1. U.S. 30 And Snake River Road	6-1
Improvement Option 2. Pave Unpaved Streets and Repave Those in Poor Condition	6-4
Improvement Option 3: Connect Downtown Destinations With Sidewalks	6-4
Improvement Option 4: Add a Bikeway on US 30.....	6-5

Improvement Option 5: Multi-Use Path on the Flood Control Dike	6-6
Improvement Option 6. Provide Public Transit Between Huntington and Baker City Or Ontario	6-6
Improvement Option 7. Implement Rideshare Program	6-7
Improvement Option 8. Revise Zoning and Development Codes	6-8

SUMMARY.....	6-8
--------------	-----

CHAPTER 7: STREET STANDARDS, ACCESS MANAGEMENT AND MODAL PLANS.. 7-1

STREET STANDARDS	7-1
Existing Street Standards	7-1
Recommended Street Standards	7-1
ACCESS MANAGEMENT	7-3
Access Management Techniques	7-4
Recommended Access Management Standards for City Streets	7-5
Recommended Access Standards for State Highways	7-5
MODAL PLANS	7-10
Street System Plan	7-10
Pedestrian System Plan	7-11
Bicycle System Plan	7-12
Transportation Demand Management Plan	7-13
Public Transportation Plan	7-13
Rail Service Plan	7-13
Air Service Plan	7-13
Pipeline Service	7-14
Water Transportation.....	7-14
TRANSPORTATION SYSTEM PLAN IMPLEMENTATION PROGRAM	7-14
20-Year Capital Improvement Program.....	7-14

CHAPTER 8: FUNDING OPTIONS AND FINANCIAL PLAN..... 8-1

HISTORICAL STREET IMPROVEMENT FUNDING SOURCES.....	8-1
Transportation Funding in the City of Huntington.....	8-2
Transportation Revenue Outlook in the City of Huntington and Baker County.....	8-3
REVENUE SOURCES	8-5
Property Taxes	8-6
System Development Charges	8-7
State Highway Fund.....	8-7
Local Gas Taxes	8-7
Vehicle Registration Fees.....	8-8
Local Improvement Districts.....	8-8
Grants and Loans	8-8
ODOT Funding Options.....	8-12
FINANCING TOOLS	8-12
General Obligation Bonds	8-13
Limited Tax Bonds	8-13
Bancroft Bonds.....	8-14
FUNDING REQUIREMENTS	8-14

FUNDING REQUIREMENTS	8-14
CHAPTER 9: IMPLEMENTATION OF TRANSPORTATION SYSTEM PLAN	9-1
RECOMMENDED COMPREHENSIVE PLAN AMENDMENTS	9-1
RECOMMENDED ADDITIONS TO THE ZONING ORDINANCE	9-3
RECOMMENDED REVISIONS TO THE SUBDIVISION ORDINANCE.....	9-6

LIST OF TABLES

TABLE 4-1: LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS	4-2
TABLE 4-2: HUNTINGTON DEPARTURE TO WORK DISTRIBUTION.....	4-3
TABLE 4-3: HUNTINGTON JOURNEY TO WORK TRIPS	4-4
TABLE 4-4: HUNTINGTON TRAVEL TIME TO WORK DISTRIBUTION	4-4
TABLE 4-5: HISTORIC ACCIDENT RATES ALONG STATE HIGHWAYS IN HUNTINGTON	4-6
TABLE 4-6: ACCIDENT SUMMARIES FOR HIGHWAYS IN HUNTINGTON.....	4-6
TABLE 5-1: BAKER COUNTY POPULATION TRENDS	5-1
TABLE 5-2: HISTORIC TRAFFIC GROWTH RATES ON STATE HIGHWAYS.....	5-3
TABLE 5-3: FORECAST TRAFFIC VOLUMES AND TOTAL GROWTH ON STATE HIGHWAYS.....	5-3
TABLE 5-4: SUMMARY OF FUTURE OPERATIONS.....	5-4
TABLE 6-1: SUMMARY OF TRANSPORTATION IMPROVEMENTS.....	6-9
TABLE 7-1: RECOMMENDED STREET STANDARDS FOR THE CITY OF HUNTINGTON.....	7-2
TABLE 7-2: RECOMMENDED ACCESS MANAGEMENT STANDARDS FOR CITY STREETS	7-5
TABLE 7-3: 1999 OREGON HIGHWAY PLAN ACCESS MANAGEMENT CLASSIFICATIONS SYSTEM	7-9
TABLE 7-4: PRIORITIZED CAPITAL IMPROVEMENT PROGRAM.....	7-15
TABLE 8-1: SOURCES OF ROAD REVENUES BY JURISDICTION LEVEL	8-1
TABLE 8-2: CITY OF HUNTINGTON TRANSPORTATION-RELATED REVENUES	8-2
TABLE 8-3: CITY OF HUNTINGTON TRANSPORTATION-RELATED EXPENDITURES.....	8-3
TABLE 8-4: ESTIMATED RESOURCES AVAILABLE TO THE CITY OF HUNTINGTON FROM STATE HIGHWAY FUND 1999 DOLLARS	8-5
TABLE 8-5: CAPITAL FUNDING BALANCE WITHOUT STATE/FEDERAL FUNDING	8-14
TABLE 8-6: CAPITAL FUNDING BALANCE WITH STATE AND FEDERAL FUNDING.....	8-15

LIST OF FIGURES

FIGURE 1-1: HUNTINGTON PLANNING AREA	1-4
FIGURE 1-2: CITY OF HUNTINGTON LAND USE PLAN	1-4
FIGURE 3-1: STREET CLASSIFICATION AND JURISDICTION	3-2
FIGURE 3-2: CITY OF HUNTINGTON PAVEMENT CONDITIONS.....	3-6
FIGURE 3-3: PEDESTRIAN SYSTM INVENTORY	3-6
FIGURE 3-4: CITY OF HUNTINGTON BIKE PATH PLANNING	3-8
FIGURE 4-1: 1997 AVERAGE DAILY TRAFFIC	4-2
FIGURE 6-1: PROPOSED TRANSPORTATION IMPROVEMENT OPTIONS.....	6-2
FIGURE 6-2: SNAKE RIVER ROAD INTERSECTION REBUILD OPTION 1	6-4
FIGURE 6-3: SNAKE RIVER ROAD INTERSECTION REBUILD OPTION 2	6-4
FIGURE 7-1: RECOMMENDED CITY OF HUNTINGTON STREET STANDARDS.....	7-2
FIGURE 7-2: RECOMMENDED TRANSPORTATION IMPROVEMENT OPTIONS.....	7-14
FIGURE 8-1: STATE HIGHWAY FUND (IN MILLIONS OF DOLLARS).....	8-4

APPENDICES

APPENDIX A: REVIEW OF EXISTING PLANS AND POLICIES
APPENDIX B: EXISTING STREET INVENTORY
APPENDIX C: SUMMARY OF STATE HIGHWAY ANALYSES
APPENDIX D: POPULATION AND EMPLOYMENT ANALYSIS

CHAPTER 1: INTRODUCTION

The Huntington Transportation System Plan (TSP) guides the management of existing transportation facilities and the design and implementation of future facilities for the next 20 years. This Transportation System Plan constitutes the transportation element of the City's Comprehensive Plan and satisfies the requirements of the Oregon Transportation Planning Rule established by the Department of Land Conservation and Development. It identifies and prioritizes transportation projects for inclusion in the Oregon Department of Transportation's (ODOT's) Statewide Transportation Improvement Program (STIP).

LAND USE AND TRANSPORTATION CONNECTION

The City of Huntington Transportation System Plan (TSP) needs to meet the requirements of Statewide Planning Goal 12 and its implementing division, the Transportation Planning Rule (OAR Chapter 660, Division 12). Goal 12 affects all levels of government, and requires that transportation plans be coordinated among all jurisdictions. For the City of Huntington this would principally include coordination with the Oregon Department of Transportation (ODOT). For example, the City of Huntington plan must be coordinated with statewide transportation plans. The elements of the plans for these jurisdictions which pertain to the City of Huntington are delineated in this chapter.

Goal 12

In the mid-1970s, Oregon adopted 19 Statewide Planning Goals to be implemented in comprehensive plans. The aim of Goal 12, Transportation is "to provide and encourage a safe, convenient, and economic transportation system."

Each community, region, and metropolitan area updated the transportation element of their comprehensive plans according to the following guidelines set forth in Goal 12.

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

The comprehensive plan for the City of Huntington includes land use policies corresponding to the TPR.

The Transportation Planning Rule

The Transportation Planning Rule (TPR) was developed by the Department of Land Conservation and Development (DLCD) and ODOT. It was adopted in April 1991, and has been revised many times since then. The TPR implements Goal 12.

Overview

The Transportation Planning Rule requires that cities, counties, Metropolitan Planning Organizations (MPOs), and state agencies prepare and adopt TSPs. A TSP is "a plan for one or more transportation facilities that are planned, developed, operated, and maintained in a coordinated manner to supply continuity of movement between modes, and within and between geographic and jurisdictional areas."

The ultimate aim of the rule is to encourage a multi-modal transportation network throughout the state that will reduce our reliance on the automobile and ensure that local, state, and regional transportation systems "support a pattern of travel and land use in urban areas which will avoid the air pollution, traffic and livability problems faced by other areas of the country."

The following plan elements are required in order to satisfy the TPR.

1. A street system plan for a network of arterial and collector roadways.
2. Bicycle and pedestrian plans.
3. A public transportation plan.
4. Air, rail, water, and pipeline plans.
5. Policies and land use regulations for implementing the TSP.
6. A transportation financing program.

Oregon Transportation Plan

The Oregon Transportation Plan (OTP) was completed and adopted by the Oregon Transportation Commission in September 1992. Several alternative approaches to developing the transportation plan were evaluated as part of the OTP planning process. The preferred plan presented in the OTP followed the Livability Approach, which "depends heavily on the concept of minimum levels of service within each transportation mode to assure appropriate transportation alternatives to all areas of the state."

PLANNING AREA

The Huntington Transportation System Plan planning area includes the City of Huntington and the area within the city's Urban Growth Boundary (UGB). The planning area is shown on Figure 1-1. Roadways included in the Transportation System Plan fall under the jurisdictions of the City of Huntington, Baker County, and the State of Oregon.

Huntington was named for the early settlers J.B. and J.M. Huntington, and was incorporated in 1891. Huntington had a 1998 population of 580. Huntington's elevation is 2,300 feet above sea level.

Huntington is east of I-84, and the Union Pacific Railroad mainline runs through town and owns one-third of the land in the City. Huntington, like other small cities in Baker County, has a street grid pattern. The grid is perpendicular to the railroad tracks, which is typical of small towns that were platted by the railroad. Huntington has approximately 40 square blocks, and is crossed by the Huntington Highway (US 30). Huntington is in close proximity to the Brownlee Reservoir and sand dunes of Farewell Bend along the Snake River. Many shops cater to the needs of sport anglers who find the nearby reservoir a popular fishing destination.

The Comprehensive Plan land use map of the Huntington Transportation System Plan planning area is shown on Figure 1-2.

PLANNING PROCESS

The Huntington Transportation System Plan was prepared as part of an overall effort in Baker County to prepare TSPs for Baker County and six municipalities: the Cities of Haines, Halfway, Huntington, Richland, Sumpter, and Unity. Each plan was developed through a series of technical analyses combined with systematic input and review by the City, the combined management team, Transportation Advisory Committee (TAC), ODOT, and the public. The TAC consisted of staff, elected and appointed officials, residents, and business people from Baker County, and the its incorporated cities. Key elements of the process include:

- Involving the Huntington community (Chapter 1)
- Defining goals and objectives (Chapter 2)
- Reviewing existing plans and transportation conditions (Chapters 3 and 4; Appendices A and B)
- Developing population, employment, and travel forecasts (Chapter 5)
- Developing and evaluating potential transportation system improvements (Chapter 6)
- Developing the Transportation System Plan (Chapter 7)
- Developing a Financing Plan (Chapter 8)
- Developing recommended policies and ordinances (Chapter 9)

Community Involvement

Community involvement is an integral component in the development of a TSP for the City of Huntington. Since each of the communities needed to address similar transportation and land use issues, a public involvement program involving all the jurisdictions was used. Several different techniques were used to involve each local jurisdiction, ODOT, and the general public.

A combined management team and transportation advisory committee (TAC) provided guidance on technical issues and direction regarding policy issues to the consultant team. Staff members from each local jurisdiction and ODOT served on this committee. This group met five times during the course of the project.

The second part of the community involvement effort consisted of community meetings within Baker County. The first public meeting was held in November 1998 in Baker City. The general public was invited to learn about the TSP planning process and provide input on transportation issues and concerns. A second public meeting was held in May 1999 also in Baker City. The public was notified of the public meetings through public announcements in the City's quarterly newsletter, The Baker City Herald, the Hell's Canyon Journal and Baker City radio stations.

Goals and Objectives

Based on input from the City, the management team/TAC, and the community, goals and objectives were defined for the Transportation System Plan. These goals and objectives were used to make decisions about various potential improvement projects. They are described in Chapter 2.

Review and Inventory of Existing Plans, Policies, and Public Facilities

To begin the planning process, all applicable City of Huntington transportation and land use plans and policies were reviewed and an inventory of public facilities was conducted. The purpose of these efforts was to understand the history of transportation planning in the Huntington area, including the street system improvements planned and implemented in the past, and how the city is currently managing its ongoing development. Existing plans and policies are described in Appendix A of this report.

The inventory of existing facilities catalogs the current transportation system. The results of the inventory are described in Chapter 3, while Chapter 4 describes how the system operates. Appendix B summarizes the inventory of the existing highway and street systems.

Future Transportation System Demands

The Transportation Planning Rule requires the Transportation System Plan to address a 20-year forecasting period. Future traffic volumes for the existing plus committed transportation systems were projected using ODOT's *Level 1 -- Trending Analysis* methodology. The overall travel demand forecasting process is described in Chapter 5.

Transportation System Potential Improvements

Once the travel forecasts were developed, it was possible to evaluate a series of potential transportation system improvements. Transportation demand management measures and potential transportation improvements were developed and analyzed as part of the transportation system analysis. These improvements were developed with the help of the TAC, and they attempt to address the concerns specified in the goals and objectives (Chapter 2). After evaluating the results of the potential improvements analysis, a series of transportation system improvements were selected. These recommended improvements are described in Chapter 6.

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN

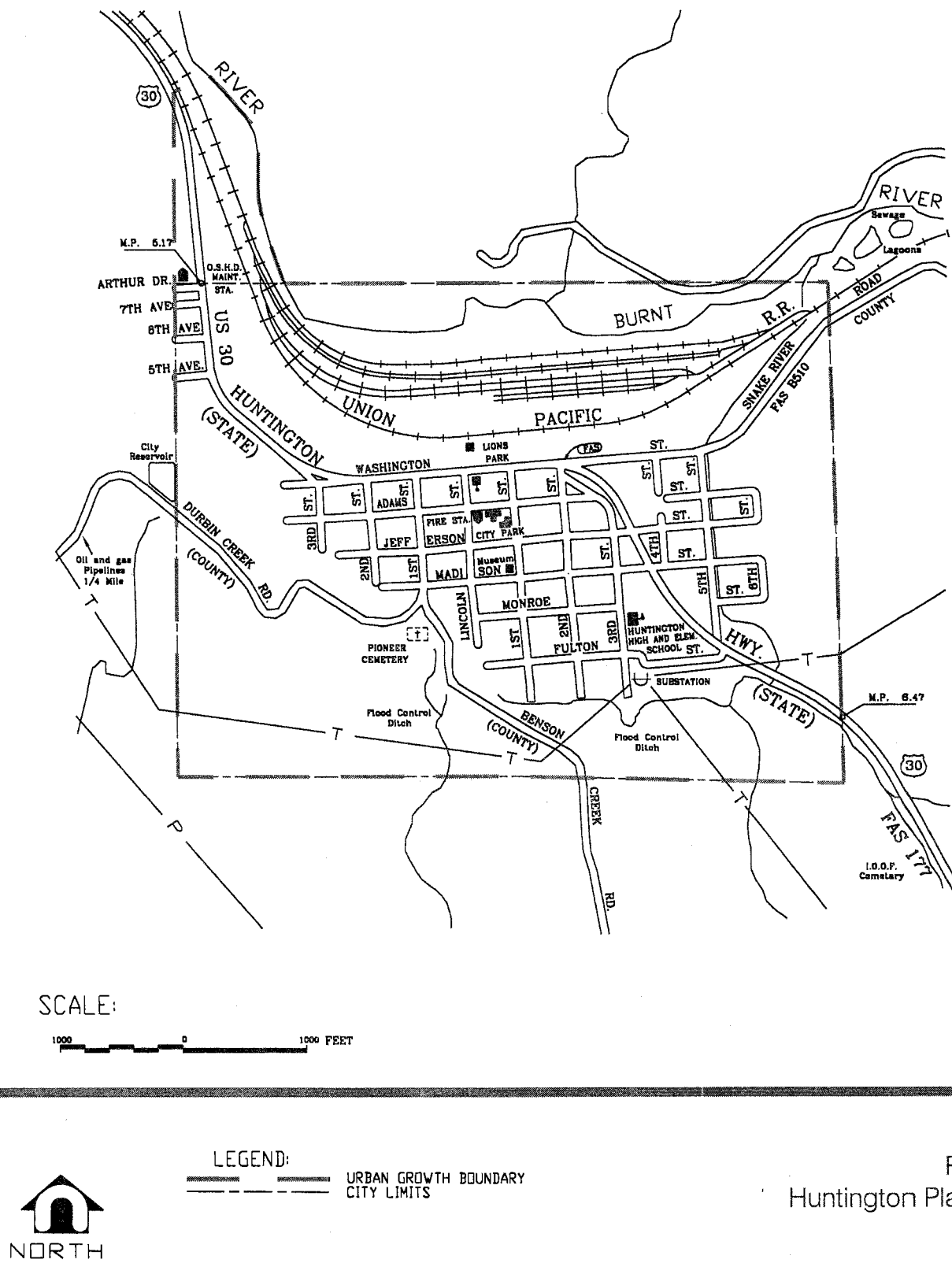
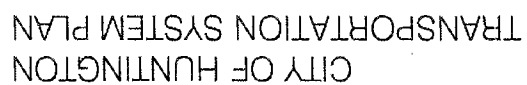


FIGURE 1-1
Huntington Planning Area



Transportation System Plan

The Transportation System Plan addresses each mode of transportation and provides an overall implementation program. The street system plan was developed from the forecasting and potential improvements evaluation described above. The bicycle and pedestrian plans were developed based on current usage, land use patterns, and the requirements set forth by the Transportation Planning Rule. The public transportation, air, water, rail, and pipeline plans were developed based on discussions with the owners and operators of those facilities. Chapter 7 details the plan elements for each mode.

Funding Options

The City of Huntington will need to work with Baker County and ODOT to finance new transportation projects over the 20-year planning period. An overview of funding and financing options that might be available to the community are described in Chapter 8.

Recommended Policies and Ordinances

Suggested Comprehensive Plan policies and zoning and subdivision ordinances are included in Chapter 9. These policies and ordinances are intended to support the TSP and satisfy the requirements of the TPR.

RELATED DOCUMENTS

The City of Huntington TSP addresses the transportation needs in the city. There are several other documents which address specific transportation elements in the Huntington area.

Other Transportation System Plans

The Baker County TSP and TSPs for the other incorporated cities within the county are being prepared simultaneously with the Huntington TSP.

The county TSP addresses the needs of the community outside each city's Urban Growth Boundary (UGB). It provides roadway standards, access management standards, and modal plans. In some cases, an improvement option may be identified in a city TSP which then needs to be addressed in the Baker County TSP as well.

County Inventories and Plans

Three inventories and plans have been prepared for Baker County. These documents are:

- Baker County Special Transportation Plan, 1994
- Baker County Transportation Needs Assessment by ODOT
- Baker County Bicycle and Pedestrian Master Plan, 1996

State Plans

Coordination with the following state plans is required:

- Oregon Transportation Plan
- Oregon Highway Plan
- Oregon Bicycle and Pedestrian Plan

CHAPTER 2: GOALS AND OBJECTIVES

The purpose of the TSP is to provide a guide for the City of Huntington to meet its transportation goals and objectives. The following goals and objectives were developed from information contained in the City's Comprehensive Plan, model goals suggested by DEA, and public concerns as expressed during public meetings. An overall goal was drawn from the plans, along with more specific goals and objectives. Throughout the planning process, each element of the plan was evaluated against these parameters.

OVERALL TRANSPORTATION GOAL

Develop a transportation system that enhances the livability of the City of Huntington, and accommodates growth and development through careful planning and management of existing and future transportation facilities.

Goal 1

Preserve the function, capacity, level of service, and safety of the state highways.

Objectives

- A. Develop access management standards that will meet the requirements of the TPR and also consider the needs of the affected communities.
- B. Develop alternative, parallel routes.
- C. Promote alternative modes of transportation.
- D. Promote transportation demand management programs (i.e., rideshare and park-and-ride).
- E. Promote transportation system management (i.e., signal synchronization, median barriers, etc.).
- F. Develop procedures to minimize impacts to and protect transportation facilities, corridors, or sites during the development review process.

Goal 2

Improve and enhance safety and traffic circulation and preserve the level of service on local street systems.

Objectives

- A. Develop an efficient road network that would maintain a level of service D or better.
- B. Improve and maintain existing roadways.
- C. Ensure planning coordination between the local jurisdictions, the county and the state.

- D. Identify truck routes to reduce truck traffic in urban areas.
- E. Examine the need for speed reduction in specific areas.
- F. Identify local problem spots and recommend solutions.

Goal 3

Identify the 20-year roadway system needs to accommodate developing or undeveloped areas without undermining the rural nature of the city.

Objectives

- A. Continue to develop the road system as the principal mode of transportation both for access to the city and within the city.
- B. Adopt policies and standards that address street connectivity, spacing, and access management.
- C. Improve access into and out of the city for goods and services.
- D. Improve the access on to and off of arterial roadways to encourage growth.

Goal 4

Increase the use of alternative modes of transportation (walking, bicycling, rideshare/carpooling, and transit) through improved access, safety, and service.

Objectives

- A. Provide shoulders on rural collector and arterial roads.
- B. Develop a city bicycle plan.
- C. Promote alternative modes and rideshare/carpool programs through community awareness and education, including working with the public transit provider (currently Community Connection) to improve transit services and access to transit services as community needs are identified.
- D. Encourage development to occur near existing community centers where services are presently available so as to reduce the dependence on automotive transportation.
- E. Plan for future transit service by seeking state support.
- F. Seek Transportation and Growth Management (TGM) grants and other funding for projects evaluating and improving the environment for alternative modes of transportation.
- G. Periodically assess pedestrian and bicycle modes of transportation within the city and develop programs to meet demonstrated needs.

H. Encourage public transportation and bus service as well as freight and passenger rail service.

Goal 5

To provide and encourage a safe, convenient and economic transportation system.

Objectives

- A. Maintain US Highway 30 as the major access route to the City.
- B. Plan street projections and connections to maintain or improve access, traffic patterns, and other safety needs.
- C. Coordinate improvements between the City Council and ODOT.
- D. Consider improvement options to improve safety at the Snake River Road/US 30 intersection.
- E. Support provision of basic mobility services for the elderly and people with special transportation needs.
- F. Seek to reduce travel speeds through the city on US 30 to 30 mph.

CHAPTER 3: TRANSPORTATION SYSTEM INVENTORY

As part of the planning process, David Evans and Associates, Inc. (DEA) conducted an inventory of the existing transportation system in the City of Huntington. This inventory covered the street system as well as the pedestrian, bikeway, public transportation, rail, air, water, and pipeline systems.

STREET SYSTEM

The most common understanding of transportation is of roadways carrying cars and trucks. Most transportation dollars are devoted to building, maintaining, or planning roads to carry automobiles and trucks. The mobility provided by the personal automobile has resulted in a great reliance on this form of transportation. Likewise, the ability of trucks to carry freight to nearly any destination has greatly increased their use.

Encouraging the use of cars and trucks must be balanced against costs, livability factors, the ability to accommodate other modes of transportation, and negative impacts on adjacent land uses; however, the basis of transportation in nearly all American cities is the roadway system. This trend is clearly seen in the existing City of Huntington transportation system, which consists almost entirely of roadway facilities for cars and trucks. Because of the rural nature of the area, the street system will most likely continue to be the basis of the transportation system for at least the 20-year planning period; therefore, the emphasis of this plan is on improving the existing street system for all users.

The existing street system inventory was conducted for all highways, arterial roadways, and collector roadways within the City of Huntington, as well as those in Baker County that are included in the TSP planning area. Inventory elements include:

- street classification and jurisdiction;
- street width and right-of-way;
- number of travel lanes;
- presence of on-street parking, sidewalks, or bikeways;
- speed limits; and
- general pavement conditions.

Figure 3-1 shows the existing roadway functional classification and jurisdiction. Appendix B lists the complete inventory.

Street Classification

Typically, streets are classified as either arterials, collectors, or local streets. The classification system includes city, county, and state roadways.

Arterials

Arterials form the primary roadway network within and through a region. They provide a continuous road system that distributes traffic between cities, neighborhoods, and districts. Generally, arterials are high capacity roadways that carry high traffic volumes entering or leaving the city.

US 30 (Huntington Highway) coincides with Washington St. for 4-1/2 blocks which comprise the City's entire downtown core. Where the route of US 30 varies from the City's street grid, east and west of the downtown core, it is called "Old Oregon Trail Blvd."

Collectors

Collectors serve traffic within commercial, industrial, and residential neighborhood areas. They connect local neighborhoods or districts to the arterial network. Collectors help form part of the grid system; however, they are not intended to function as alternate routes to the arterial system.

Two roadways in the City of Huntington function as collectors: Madison St., and 1st Street East. Both are main thoroughfares in a grid system. Outside of the grid system, two other roadways function as collectors: Snake River Road and Durbin Creek Rd. Snake River Road is a county road which extends 38 miles along the Snake River to the City of Richland. The section of the road in Huntington is paved; however, most of the road between Huntington and Richland is unpaved. A short section of Snake River Road (between US 30 and 4th Street East) is owned by the Union Pacific Railroad and on land given to them by the County. This fact makes improvements to the road difficult as described in Chapter 6. Durbin Creek Rd. is the road to Malheur Reservoir. This road is also paved in and near the City, but is also unpaved in sections.

Local Streets

Local streets provide access to all parcels of land and serve travel over relatively short distances. They are designed to carry the very low traffic volumes associated with the local uses that abut them. Through traffic movements are discouraged on local streets.

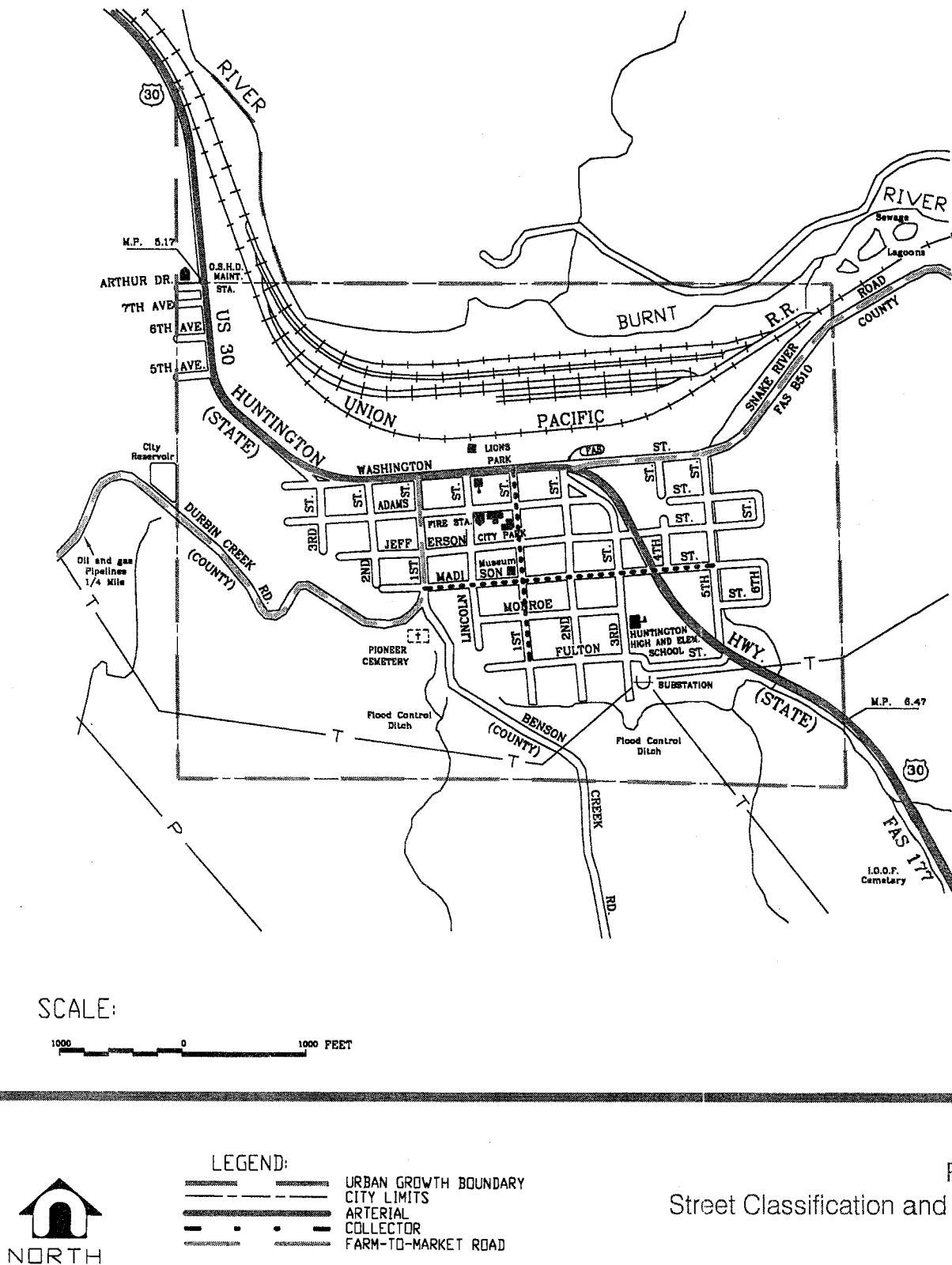
The local streets in the City of Huntington are comprised of all streets not classified as either arterials or collectors. Local streets in Huntington also form part of the grid system.

Street Layout

Huntington's "grid" street system dates from the platting of the town in 1891. Nearly all streets have 80-ft. wide rights-of-way, enclosing city blocks measuring 216 ft. by 300 ft. Three city blocks at the extreme south end of town measure 300ft. by 300 ft. Blocks are generally platted with 16 ft. wide alleys. Exceptions to this are alleys south of Monroe Street which are platted 10 feet. The wide rights-of-way were designed for fire control; nearly all building lots in Huntington are small (50 ft. by 100 ft.), and the wider rights-of-way prevent a fire from spreading beyond one city block. Pavement widths on most City streets vary from 20 to 25 ft. Exceptions to this include:

- 1st St. West between Madison and Adams (scheduled to be paved to 42 ft. width in spring 1999);
- 1st St. West between Adams and Washington (scheduled to be paved to 60 ft. width in spring 1999);
- Lincoln St. between Adams and Washington (paved to 60 ft. width); and
- 1st St. East between Jefferson and Washington (paved to 60 ft. width).

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN



Reference to streets as “north-south” or “east-west” is for convenience only. Huntington’s streets do not run north-south or east-west. Instead, the roads are perpendicular to, or parallel to, the main line of the Union Pacific Railroad. This is typical of towns that were platted immediately after the appearance of railroads in the late 19th century.

The street grid functions well, despite the platting of the town with little reference to topography. Streets platted up the sides of steep slopes have not been built, and a few of those which had no utilities in the right-of-way have been vacated.

State Highways

Discussion of the Huntington street system must include the state highway that traverses the city. Although the City of Huntington has no direct control over state highways, adjacent development and local traffic patterns are heavily influenced by the highway. Huntington is served by one state highway: US 30 (Huntington Highway). US 30 serves as the sole route through the city connecting Huntington to I-84 both to the northwest and to the southeast. US 30 terminates 4 miles northwest of Huntington at I-84 in Lime, Oregon, and 5 miles southeast in Farewell Bend.

The *1999 Oregon Highway Plan* (OHP) classifies the state highway system into five categories: Interstate, Statewide, Regional, and District Highways, and Local Interest Roads. ODOT has established primary and secondary functions for each type of highway and objectives for managing the operations for each one.

US 30 is a District Highway. According to the OHP, District Highways are facilities of county-wide significance and function largely as county and city arterials or collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. The management objective is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements. Inside urban areas, local access is given more priority.

To simplify references to the state highway, a summary of the analysis for Highway 30 is contained in Appendix C.

US Highway 30 (Huntington Highway)

US 30 extends north-south through the extreme southeast corner of Baker County. Prior to construction of I-84, this highway was the primary route between Baker City and Ontario. Today, this highway primarily serves traffic to and from the City of Huntington, which was bypassed by I-84. The highway traverses rolling mountain areas north of Huntington, transitioning into open farm lands south of Huntington. US 30 follows the route of the Oregon Trail from Farewell Bend over Huntington Hill into the Burnt River canyon, following the canyon to Lime. Huntington Hill is steep and difficult to navigate, while the Burnt River canyon is narrow and windy. The highway consists of a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout rural areas, decreasing to 40 mph east of Downtown, 30 mph on five blocks of Washington Street, and 45 mph west of Downtown. The City of Huntington would like to see the speed limit lowered to 30 mph on US 30 within the city limits. Paved surface is less than 24 ft. wide, has no fog lines, and has narrow shoulders. The route has curves resulting in localized rural speed

reductions ranging from 35 to 40 mph and transitions between rolling and flat terrain. There are no passing lanes along the highway within Baker County. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and comprised of gravel.

Reflecting the importance of this highway to the community of Huntington, the City of Huntington has requested that portions of US 30 be designated a "lifeline highway", meaning that ODOT would reopen this highway immediately after road closures caused by landslide, flood, heavy snow, and other emergencies.

General Pavement Conditions

State Highways

ODOT's Pavement Unit surveys the State Highway System on an annual basis. Observed severity levels of certain distress types are used to determine a pavement condition rating score. These scores are used to stratify pavement segments into five condition categories: (1) Very Good, (2) Good, (3) Fair, (4) Poor, and (5) Very Poor. A brief definition of the pavement condition categories used by ODOT for both asphalt and Portland cement concrete pavements is provided below.

- **Very Good** – Asphalt pavements in this category are stable, display no cracking, patching or deformation, and provide excellent riding qualities. Nothing would improve the roadway at this time.

Concrete pavements in this category provide good ride quality, display original surface texture, and show no signs of faulting (vertical displacement of one slab in relation to another). Jointed reinforced pavements display no mid-slab cracks and continuously reinforced pavements may have tight transverse cracks with no evidence of spalling (or chipping away).

- **Good** – Asphalt pavements in this category are stable and may display minor cracking (generally hairline and hard to detect), minor patching, and possibly some minor deformation. These pavements appear dry or light colored, provide good ride quality and display rutting less than ½ inch deep.

Concrete pavements in this category provide good ride quality. Original surface texture is worn in wheel tracks exposing coarse aggregate. Jointed reinforced pavements may display tight mid-slab transverse cracks and continuously reinforced pavements may show evidence of minor spalling. Pavements may have an occasional longitudinal crack but no faulting is evident.

- **Fair** – Asphalt pavements in this category are generally stable displaying minor areas of structural weakness. Cracking is easier to detect, patching is more evident (although not excessive), and deformation is more pronounced and easily noticed. Ride quality is good to acceptable.

Concrete pavements in this category provide good ride quality. Jointed reinforced pavements may display some spalling at cracks and joint edges with longitudinal cracks appearing at less than 20% of the joints. A few areas may require a minor level of repair. Continuously reinforced pavements may show evidence of spalling with longitudinal cracks appearing in the

wheel paths on less than 20% of the rated section. Shoulder joints may show evidence of deterioration and loss of slab support and faulting may be evident.

- **Poor** – Asphalt pavements in this category are marked by areas of instability, structural deficiency, large crack patterns (alligatoring), heavy and numerous patches, and visible deformation. Ride quality ranges from acceptable to poor.

Concrete pavements in this category may continue to provide acceptable ride quality. Both jointed and continually reinforced pavements display cracking patterns with longitudinal cracks connecting joints and transverse cracks occurring more frequently. Occasional punchout (or pothole) repair is evident. Some joints and cracks show loss of base support.

Very Poor – Asphalt pavements in this category are in extremely deteriorated condition marked by numerous areas of instability and structural deficiency. Ride quality is unacceptable. Concrete pavements in this category display a rate of deterioration that is rapidly accelerating.

According to the 1997 ODOT Pavement Condition Report, the section of US 30 through Huntington (MP 5.17 to MP 6.47) is in poor condition.

The Oregon Department of Transportation has established “Fair or Better” (FOB) roadway condition targets in its draft 2000-2003 State Transportation Improvement Plan (STIP). These targets are designed to be achievable goals for the state, regions, and districts. This also recognizes that there are different expected levels for different Level of Importance highways, and reduces the expectation for 100% FOB. FOB standards for different areas are the following:

- Interstate: 90%
- Statewide: 85%
- Regional: 75%
- District: 65%

Other Roadways

The ODOT Pavements Unit published a 1994 report entitled, *Pavement Rating Workshop, Non-National Highway System*. This report thoroughly defines the characteristics that pavements must display to be categorized as Good, Fair, Poor and so on. The report also provides color photographs of roadways that display these characteristics, which aids in field investigation and rating of pavement condition. These established guidelines were employed by DEA in conducting a subjective evaluation of pavement condition for all other roadways in the City of Huntington.

An inventory of pavement conditions on all other roadways (other than the state highway) was conducted in August 1998 by DEA and in April 1999 by the City of Huntington’s Public Works Director and City Recorder. Most of the paved streets in the city were found to be in poor condition. The pavement inventory is shown in Figure 3-2.

Bridges

The Oregon Department of Transportation maintains an up to date inventory and appraisal of Oregon bridges.

There are no bridges in the City of Huntington, but if there were, ODOT would inspect and note them.

Identified Needs

The city's plan for the street system is to pave the streets that currently are not paved and to repave the streets in poor condition. The city has not identified a need to construct any new streets.

The highest priority for repaving is US 30; the heaviest traveled street in the city, which is under State jurisdiction. The highway has pavement in poor condition within the entire city limits (approximately 1.5 miles of roadway).

The second most important roadway to the city is Snake River Road. This road serves mostly tourist and recreational traffic during the summer. Snake River Road is the most direct route between the City of Huntington and the Cities of Richland and Halfway. It is half the distance of driving I-84 and OR 86 between Huntington and Richland, but because of the lower speeds required on gravel roads versus high-speed travel on the interstate system, the travel times are about the same. The City identified that adding new paving and structural improvements to Snake River Road are high priorities.

PEDESTRIAN SYSTEM

The most basic transportation option is walking. Walking is the most popular form of exercise in the United States and can be performed by people of all ages and all income levels. However, it is not often considered as a means of travel. Because pedestrian facilities are generally an afterthought, they are not planned as an essential component of the transportation system.

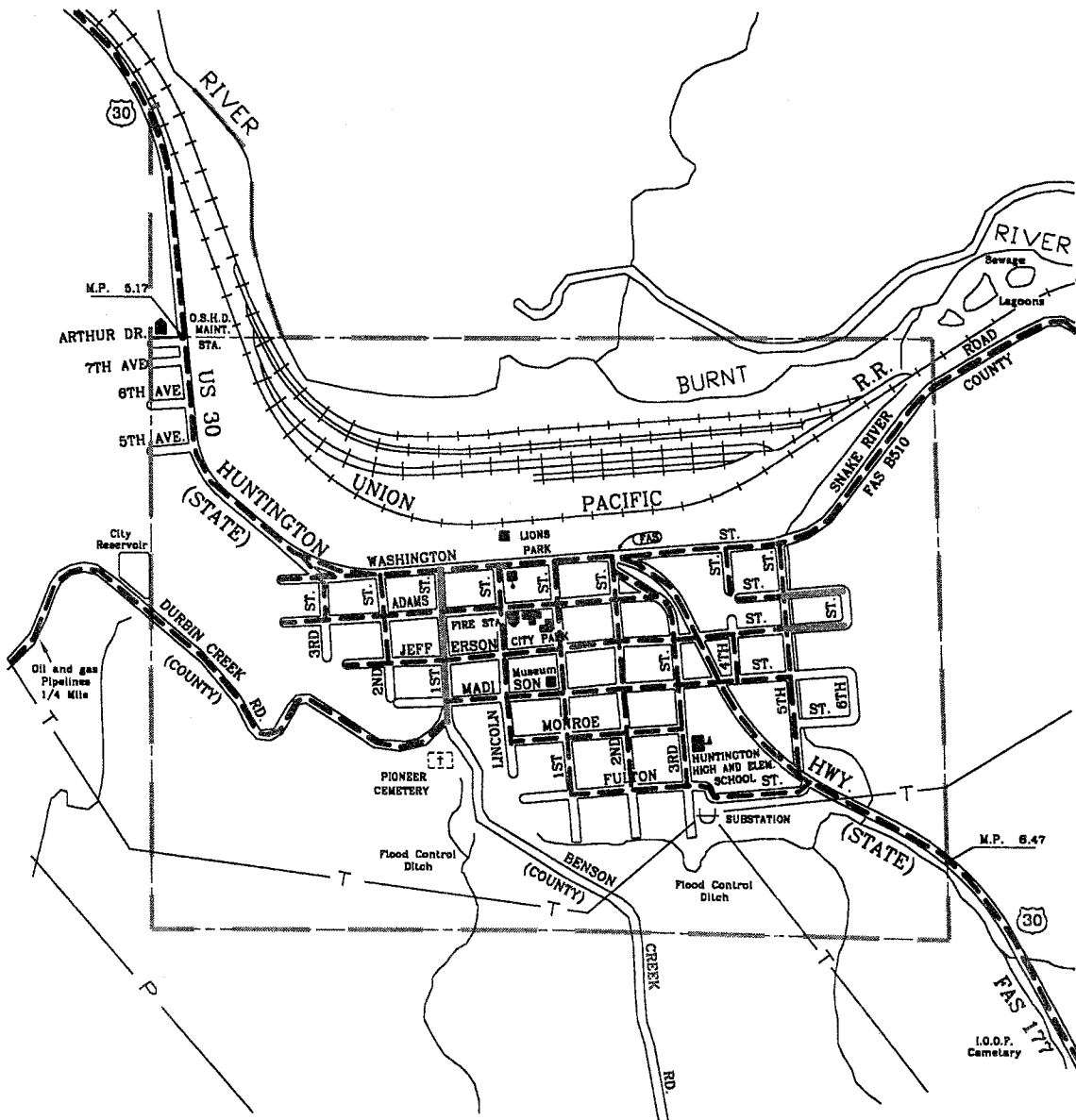
The relatively small size of the City of Huntington enables residents and tourists to walk regularly, weather permitting, to reach a variety of destinations. Where sidewalks do not exist, or in poor repair, pedestrians use the roadway. This creates the potential for hazardous conditions in some areas during times of high traffic.

The pedestrian system in the City of Huntington is somewhat limited. Sidewalks exist on the south side of Washington Street between 2nd Street West and 1st Street East. These sidewalks are generally in good condition. Sidewalks in poor condition exist throughout the City. Pedestrians make the best use of the existing sidewalks and roads during their trips, but pedestrian travel would be easier with improved facilities. The pedestrian system inventory is shown in Figure 3-3.

Identified Needs

Almost every block in Huntington was noted as needing sidewalks or repair to existing sidewalks. In general, sidewalks do not currently connect the city's parks, school, museum, and downtown. These areas are also shown in Figure 3-2 as either "poor or discontinuous sidewalks" or as not having sidewalks at all.

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN



SCALE:

1000 0 1000 FEET



LEGEND:

	URBAN GROWTH BOUNDARY
	CITY LIMITS
	POOR PAVEMENT CONDITION
	ADEQUATE PAVEMENT CONDITION

FIGURE 3-2
Pavement Conditions

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN

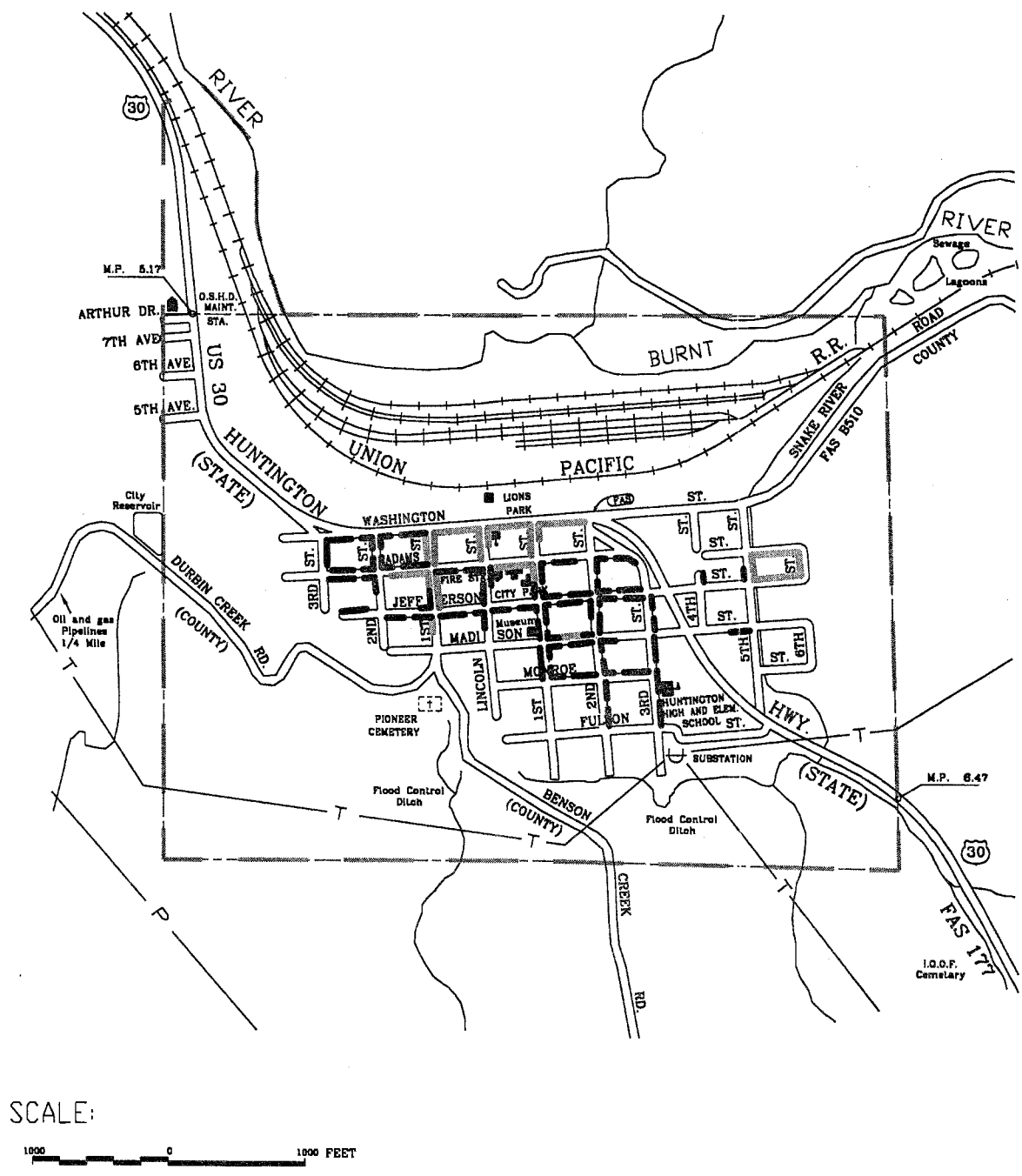


FIGURE 3-3
Pedestrian System Inventory

Generally, sidewalk improvements will be linked to important downtown destinations, the school, parks, museum, and a low-income housing project. Chapter six identifies and prioritizes new sidewalk construction and improvements.

BIKEWAY SYSTEM

Cycling is a very efficient mode of travel. Bicycles take up little space on the road or parked, do not contribute to air or noise pollution, and offer relatively higher speeds than walking. Because of the small size of Huntington, a cyclist can travel to any destination in town within a matter of minutes.

Bicycling should be encouraged to reduce the use of automobiles for short trips in order to reduce some of the negative aspects of urban growth. Noise, air pollution, and traffic congestion could be mitigated if more short trips were taken by bicycle or on foot. Typically, a short trip that would be taken by bicycle is around two miles; on foot, the distance commonly walked is around one half mile.

On low volume roadways, such as many of the local streets, bicyclists and automobiles can safely use the roadway together. On higher volume roadways, particularly the arterial streets, safety for the bicyclists is an important issue.

The City of Huntington has no established bicycle facilities such as bike lanes or multi-use paths. All bicyclists ride on-street with adjacent vehicle traffic.

Another possible impediment to bicycle use is the lack of parking and storage facilities for bikes throughout the City of Huntington.

Identified Needs

The City has identified several routes for bicycle facilities (either bike lanes on existing streets or separate bike paths) which connect city parks with the school and residential areas. These routes lie along US 30, Washington Street, Madison Street, 1st Street East, 5th Street East, and the flood control dike. These needs are shown in Figure 3-4 and described in Chapters 6 and 7.

PUBLIC TRANSPORTATION

Public transportation in Baker County consists of taxicabs, inter-city bus lines, and limited reservation-required para-transit. None of these services are available in the City of Huntington.

Identified Needs

The City of Huntington is currently not served by any of the public transportation services described above. The need for shuttle service between Huntington and Baker City or Ontario was identified.

RAIL SERVICE

Baker County has no passenger rail service. Until May, 1997, AMTRAK service was available in Baker City; however, this line now serves only freight.

Although the Union Pacific Railroad has a large rail switching yard in Huntington, and it was headquartered there before the second world war, Huntington is no longer a shipping point for the railroad. The city has no major employers and doesn't produce enough manufactured goods or agricultural products to make the city an active shipping center.

AIR SERVICE

The City of Huntington does not have its own air service. The closest commercial air service is located at Boise Air Terminal, in Boise, ID, approximately 90 miles southeast of Huntington. Scheduled air service and daily non-stop flights throughout the western United States are available from the Boise Air Terminal.

PIPELINE SERVICE

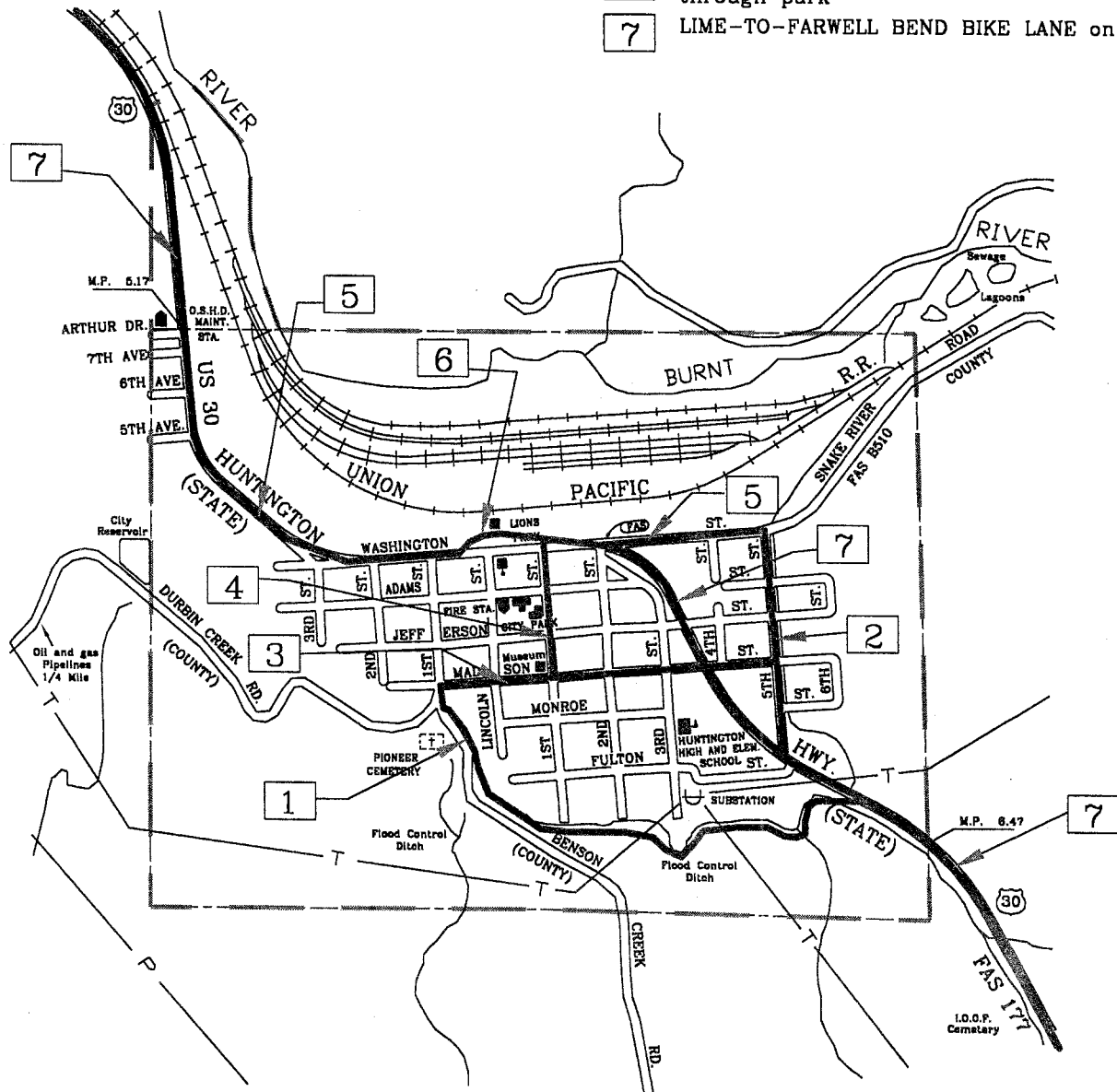
There are two oil pipelines and a natural gas pipeline running roughly north-south parallel to I-84 roughly $\frac{1}{4}$ mile west of Huntington. The natural gas pipeline runs directly through the City's well site; the oil pipelines are a short distance east of that property.

WATER TRANSPORTATION

There are no regular water-related transportation services in Baker County.

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN

- | | |
|--|---|
| <p>1 FLOOD-CONTROL DITCH ACCESS ROAD - Pioneer Cemetery to US 30 at school.</p> <p>2 5TH ST. E. - US 30 to Snake River Rd. (edge of street path)</p> <p>3 MADISON ST. - 5th St. E. to Pioneer Cemetery (edge of street path)</p> | <p>4 1ST ST. E. - Museum to US 30 (edge of street path)</p> <p>5 US 30 - 5th St. E. to old State Hwy. maintenance sheds in Old Town (protected pathway fenced off from north side of hwy.)</p> <p>6 THROUGH LIONS PARK - separate pathway through park</p> <p>7 LIME-TO-FARWELL BEND BIKE LANE on US 30</p> |
|--|---|



SCALE:



LEGEND:

- | | |
|--|-----------------------|
| | URBAN GROWTH BOUNDARY |
| | CITY LIMITS |
| | PLANNED BIKE PATH |



FIGURE 3-4
Bike Path Planning

CHAPTER 4: CURRENT TRANSPORTATION CONDITIONS

As part of the planning process, the current operating conditions for Huntington's transportation system were evaluated. This evaluation focused primarily on street system operating conditions since the automobile is by far the dominant mode of transportation in Huntington. This involved analysis of existing traffic volumes, street capacity, and street safety. Census data was also examined to determine where local residents work and the mode of transportation used to get to work.

TRAFFIC VOLUMES

The 1997 Average Daily Traffic (ADT) volume for the state highway within Huntington was collected by ODOT and summarized in the *1997 ODOT Traffic Volume Tables*. ADT volume is defined as the average amount of two-way traffic recorded on a roadway over a 24-hour period.

Average Daily Traffic

Local Streets

Huntington has not collected or maintained traffic count information along local streets. With a population of 580 people, it is expected that the majority of local streets typically experience ADT volumes below 50 vehicles per day (vpd). The highest traveled local streets would not typically be expected to experience ADT volumes higher than 100 vpd.

County Roads

Typical average daily traffic (ADT) volumes on most county roads in Baker County range from 100 to 400 vehicles per day (vpd). Traffic volumes on local roads are typically very low, generally less than 50 vpd.

State Highways

The 1997 ADT volumes on the state highways in Huntington are shown on Figure 4-1. These volumes are average volumes for the year. Summertime is the season when volumes are highest. ODOT data from the permanent traffic recorder station along I-84 near Huntington indicate summer volumes exceed ADT volumes by 30 percent. The 1997 average daily and estimated peak summer time traffic volumes in Huntington are 620 vpd and 810 vpd, respectively.

Roadway Capacity

Roadway capacity in Huntington is primarily dictated by unsignalized intersection operations. Transportation engineers have established various standards for measuring traffic capacity of intersections. Each standard is associated with a particular level of service (LOS). The LOS concept requires consideration of factors that include travel speed, 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-flowing, to Level F, where the street system is totally saturated with traffic and movement is very difficult.

Table 4-1 presents the level of service criteria for unsignalized intersections. Unsignalized intersection LOS is based on a concept of reserve capacity and was analyzed using the UNSIG10 software application developed by ODOT. Reserve capacity represents the difference between the number of stop-controlled vehicles that can be served within acceptable gaps in the main street traffic stream (potential capacity) and the actual demand for these maneuvers.

TABLE 4-1
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED
INTERSECTIONS

Level of Service	Unsignalized Intersections
	Reserve Capacity (passenger cars/hour)
A	≥ 400
B	300-399
C	200-299
D	100-199
E	0-99
F	Demand exceeds capacity

*Source: Transportation Research Board, Highway Capacity Manual, Special Report 209.
National Research Council, 1985.*

Unsignalized Intersections

Analysis of the street system capacity in Huntington is primarily focused on intersection operations along the state highway through town, where traffic volumes are the greatest. The Huntington Highway (US 30) follows Washington Street through a portion of Huntington. Currently, all intersections along the highway in Huntington are unsignalized and STOP-controlled on the minor approaches, with continuous flow on the highway. The LOS was determined at one of the busiest intersections on Washington Street to determine the worst possible traffic operations.

The intersection of Washington Street (US 30- Huntington Highway) and Snake River Road was chosen as one of the busiest intersections in the city. Although specific peak hour turning movement counts were not available at the intersection, representative traffic volumes were assumed from average daily traffic (ADT) volumes along the highway.

As stated previously, the 1997 ADT along Washington Street was reported at 620 vpd. To evaluate the expected worst case traffic operations at this intersection, the ADT along Washington Street was increased by 30 percent to reflect an ADT during peak summer conditions reaching 810 vpd. Traffic operations were then analyzed using a peak hour traffic volume of roughly 10 percent of the average and summer ADT volumes, which is typical for most cities. Also, a 60/40 directional split was used to reflect the distribution of traffic on the highway during the peak hour. No traffic data were available on the westbound approach on Snake River Road, therefore an approach volume of 50 vph was assumed.

Under these conservative assumptions, the intersection of Washington Street and Snake River Road operates at LOS A for all movements at the intersection under average and summer peak hour traffic volumes. This indicates that all other lower-volume roads or driveways accessing the highway within Huntington are operating at LOS A as well, representing no capacity issues. This measure does not account for design deficiencies or hazardous conditions, both of which have been used to describe this intersection.

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN

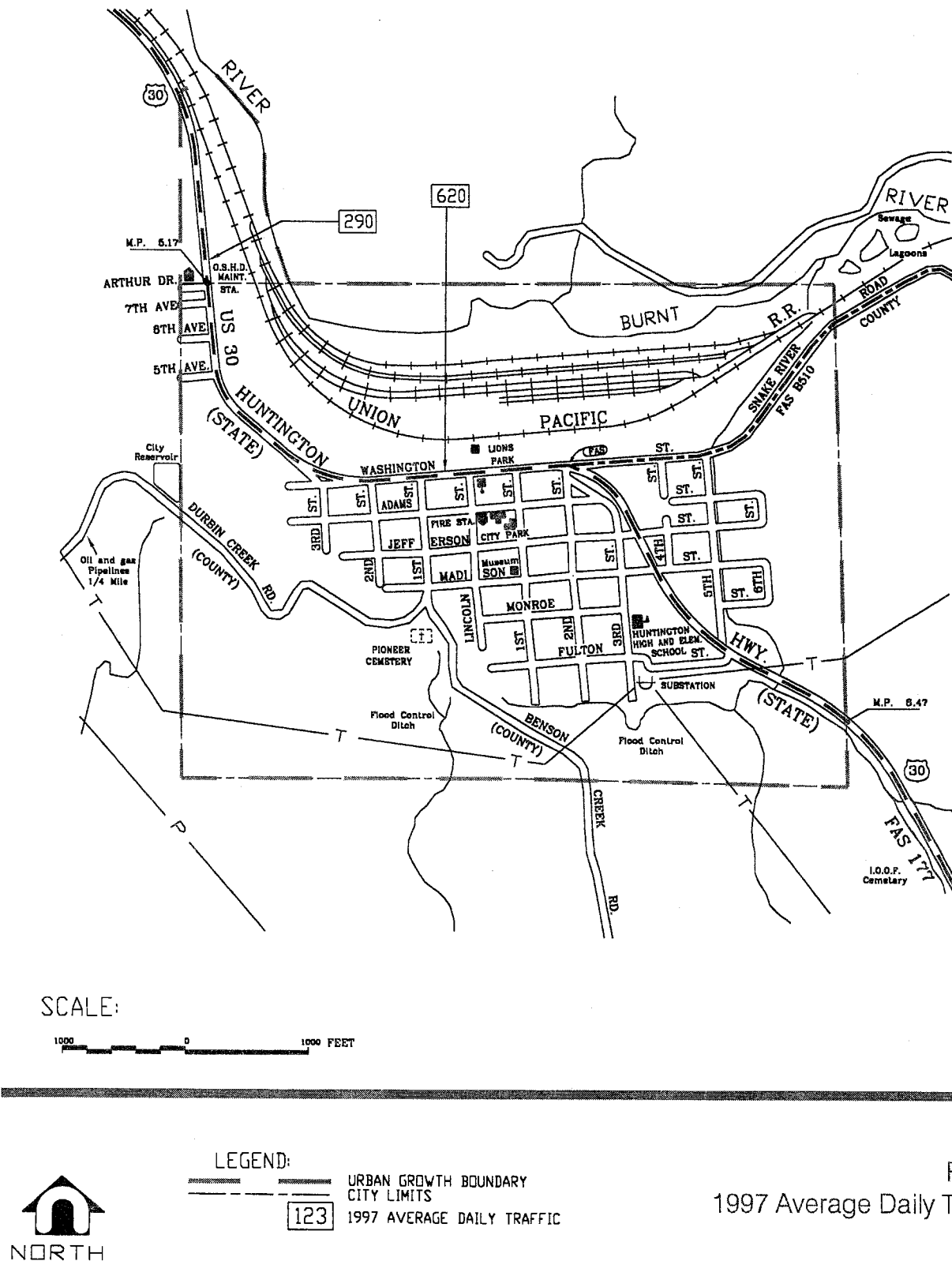


FIGURE 4-1
1997 Average Daily Traffic (ADT)

TRANSPORTATION DEMAND MANAGEMENT MEASURES

Transportation Demand Management (TDM) measures consist of efforts taken to reduce the demand on an area's transportation system. TDM measures include such things as alternative work schedules, carpooling, and telecommuting. Since most residents of Huntington work outside the city, the City has a limited ability to encourage some of these measures.

Alternative Work Schedules

One way to maximize the use of the existing transportation system is to spread peak traffic demand over several hours instead of a single hour. Statistics from the 1990 US Census show the spread of departure to work times in Huntington over a 24-hour period (see Table 4-2). Nearly 29 percent of the total employees depart for work between 6:00 and 7:00 a.m. Another 24 percent depart in either the hour before or the hour after the peak.

TABLE 4-2
HUNTINGTON DEPARTURE TO WORK DISTRIBUTION

Departure Time	1990 Census	
	Trips	Percent
12:00 a.m. to 4:59 a.m.	5	2.5
5:00 a.m. to 5:59 a.m.	12	6.0
6:00 a.m. to 6:59 a.m.	58	28.9
7:00 a.m. to 7:59 a.m.	37	18.4
8:00 a.m. to 8:59 a.m.	24	11.9
9:00 a.m. to 9:59 a.m.	4	2.0
10:00 a.m. to 10:59 a.m.	3	1.5
11:00 a.m. to 11:59 a.m.	0	0.0
12:00 p.m. to 3:59 p.m.	28	1.4
4:00 p.m. to 11:59 p.m.	30	14.9
Work at home	0	0.0
Total (out of home)	201	100.0

Source: US Bureau of Census, 1990 Census.

Assuming an average nine-hour workday, the corresponding afternoon peak can be determined for work trips. Using this methodology, the peak work travel hour would occur between 3:00 and 4:00 p.m.

Travel Mode Distribution

Although the automobile is the primary mode of travel for most residents in Huntington, other modes are used as well. Modal split data are not available for all types of trips; however, the 1990 Census data does include statistics for journey to work trips as shown in Table 4-3 and travel time to work as shown in Table 4-4. The census data reflects the predominance of automobile use.

TABLE 4-3
HUNTINGTON JOURNEY TO WORK TRIPS

Trip Type	1990 Census	
	Trips	Percent
Private Vehicle	186	92.5
<i>Drove Alone</i>	126	62.7
<i>Carpooled</i>	60	29.9
Public Transportation	0	0.0
Motorcycle	0	0.0
Bicycle	0	0.0
Walk	15	7.5
Other	0	0.0
Work at Home	0	0.0
Total (outside home)	201	100.0

Source: US Bureau of Census, 1990 Census.

TABLE 4-4
HUNTINGTON TRAVEL TIME TO WORK DISTRIBUTION

Departure Time	1990 Census	
	Trips	Percent
Less than 5 minutes	9	4.5
5 to 9 minutes	25	12.4
10 to 14 minutes	47	23.4
15 to 19 minutes	24	11.9
20 to 29 minutes	36	17.9
30 to 39 minutes	42	20.9
40 to 59 minutes	15	7.5
60 to 89 minutes	3	1.5
more than 90 minutes	0	0.0
Work at home	0	0.0
Total (outside home)	201	100.0

Source: US Bureau of Census, 1990 Census.

Most Huntington residents travel to work by private vehicle. In 1990, nearly 93 percent of all trips to work were in an auto, van, or truck. Trips in single-occupancy vehicles accounted for 63 percent of all trips and carpooling accounted for 30 percent.

Use of the automobile for commuting is not surprising for people with home-to-work travel times exceeding five minutes, since a five minute automobile trip could cover a number of miles while a five minute walking trip will likely cover about one-quarter to one-half mile. However, while only 4.5 percent of work trips in Huntington took less than five minutes as of 1990, almost eight percent were made by walking, indicating that many residents engaged in walking trips longer than five minutes.

A commonly used threshold for acceptable walking distances is one-quarter mile. At a reasonable walking pace of 240 feet per minute, an average person can walk one-quarter mile in 5.5 minutes. Therefore, the opportunity for increased walking appears to exist in Huntington. However, for walking to occur safely and efficiently, there needs to be acceptable infrastructure (e.g., sidewalks, roadway shoulders) in place to support it. Although Huntington's pedestrian infrastructure is fragmented, the city is one of a few areas of the county where much pedestrian use is expected.

The complete lack of reported bicycle usage as a commute mode was lower than many other primarily rural Oregon counties in 1990. Since the census data do not include trips to school or other non-work activities, overall bicycle usage may be higher. There are no roadways in Huntington with dedicated bicycle lanes on them. The low roadway volumes and speeds experienced in Huntington support shared use of the street system by bicyclists and automobiles. In addition to bicycle travelways, bicycle parking, showers, and locker facilities can help to encourage bicycle commuting.

Pedestrian activity was relatively high (7.5 percent of trips to work) in 1990. Again, census data do not include trips to school or other non-work activities which, if included, would likely show an increased trend in walking trips.

SAFETY ANALYSIS

DEA reviewed accident data within Huntington to identify those locations with potential accident patterns and associated safety concerns. The two sources of accident data reviewed included:

- Accident-specific summaries generated by ODOT's Transportation Development Branch for the three-year period from January 1, 1994 to December 31, 1996, and
- Accident summaries generated from the ODOT Accident Summary Database for locations along State Highways in Huntington. The accidents included must be reported and have a vehicle damage of \$1,000 or more. This may result in an undercount of accidents.

ODOT's Accident Summary Database calculates two useful factors for comparison with statewide statistics based on accident information over the three-year period studied. The first factor is a computed average three-year accident rate, which compares the number of accidents with the average daily traffic (ADT) volume and the length of the roadway segment analyzed. The second factor is the Safety Priority Index System (SPIS) value. This factor evaluates accident frequency, severity and traffic volumes to create an index for prioritizing state highway locations with potential safety concerns.

The Safety Priority Index System (SPIS) value identifies high accident and/or severe accident locations to prioritize where safety money can be spent. The SPIS value is based on three factors: accident frequency, accident rate, and accident severity. The SPIS value weights accidents involving fatalities and severe injuries most heavily. It is therefore possible for a location with one fatal accident to have a higher SPIS value than a location with multiple minor accidents. The SPIS value is also sensitive to traffic levels, recognizing that the opportunity for accidents generally increases as traffic volumes increase. A location with a high SPIS value does not necessarily indicate that a roadway safety problem exists, but it may indicate that further examination of the accident history at this location is warranted.

Historic Accident Summary

Table 4-5 summarizes the three-year historic accident rates along US 30 (Huntington highway) in Huntington and nearby rural highway sections, as well as the Oregon statewide average for all rural and urban non-freeway segments of similar highways from January 1, 1994 to December 31, 1996.

Table 4-6 contains detailed accident information along US 30 in Huntington and along rural highway sections abutting Huntington during this three-year period. The table shows the number of fatalities and injuries, property damage only accidents, the total number of accidents, and the overall accident frequencies and rates for the highway sections reported.

TABLE 4-5
HISTORIC ACCIDENT RATES ALONG STATE HIGHWAYS IN HUNTINGTON
(Accidents per million vehicle-miles traveled)

HIGHWAY	1996	1995	1994
US Highway 30 (<i>Huntington Highway</i>)			
JCT with I-84 (MP 0.00) to Huntington (MP 5.17)	3.88	n/a	4.34
Huntington (MP 5.17 to MP 6.47)	n/a	n/a	3.88
Huntington (MP 6.47) to Malheur County (MP 9.98)	n/a	1.16	1.16
Statewide Average for all Urban/Rural Non-Freeway Sections	3.10/1.19	3.27/1.02	2.79/1.10

Source: 1996 Oregon Department of Transportation Accident Rate Table.

TABLE 4-6
ACCIDENT SUMMARIES FOR HIGHWAYS IN HUNTINGTON
(January 1, 1994 to December 31, 1996)

Location	Fatalities	Injuries	Property Damage Only	Total Accidents	Accident frequency (acc/mi/yr)	Accident Rate (acc/mvm)
US Highway 30 (<i>Huntington Highway</i>)						
I-84 to Huntington	0	1	1	2	0.13	5.05
City of Huntington	0	1	0	1	0.26	0.91
Huntington to Malheur Co.	0	1	1	2	0.19	0.80

ODOT Accident Summary Database (SPIS)

Table 4-5 indicates that the 1994-accident rate within Huntington exceeded the statewide average for all rural non-freeway sections of secondary state highways. This may be misleading without understanding how accident rates are computed.

The accident rate computed by ODOT is based on the ratio of a variety of data. The numerator is calculated by multiplying the number of accidents during the year by 1,000,000. The denominator is calculated by multiplying the roadway section length, the roadway ADT, and the number of days in the year. The ratio of these quantities is the accident rate.

The equation is clearly susceptible to producing high accident rates along short roadway sections with low ADT volumes, as is the case in Huntington. The underlying assumption is that low volume roadways are less prone to experiencing accidents. However, one accident along a low volume roadway does not necessarily indicate that a safety concern exists.

As an example, a two-mile roadway with an ADT of 500 vpd that experiences one accident during the year would result in an accident rate of 2.73 accidents per million vehicle miles (mvm) of travel. Doubling the ADT along this same roadway to 1,000 vpd would lower the accident rate to 1.37 while halving the ADT to 250 vpd would increase the accident rate to nearly 5.5. Although all three scenarios involve only one accident, the accident rate is highly variable.

US Highway 30 (*Huntington Highway*)

There was one reported accident along the urban section of US 30 (Huntington Highway) in Huntington during the three year period analyzed. The accident occurred in 1994 just east of 1st Street during daylight hours and under icy pavement conditions. It involved a vehicle exiting a driveway without yielding the right of way. The accident resulted in one injury.

CHAPTER 5: TRAVEL FORECASTS

The traffic volume forecasts for Baker County and its municipalities are based on historic growth of the state highway system, historic population growth, and projected population growth.

LAND USE

Land use and population growth play an important part in projecting future traffic volumes. Historic trends and their relationship to historic traffic demand are the basis of those projections. The population and employment forecasts summarized below were developed to determine future transportation needs. The amount of growth, and where it occurs, will affect traffic and transportation facilities in the study area. This report is not intended to provide a complete economic forecast or housing analysis, and it should not be used for any purpose other than that for which it is designed.

The population projections for Baker County as a whole are based on historic growth rates and forecasts produced by the State of Oregon Office of Economic Analysis. Factors that will affect the future growth rate of Baker County include employment opportunities, available land area for development, and community efforts to manage growth.

Both historic and projected population for Baker County and select incorporated cities are summarized in Table 5-1. A more detailed description of existing and future land use projections is contained in the Population and Employment Analysis located in Appendix D.

TABLE 5-1
BAKER COUNTY POPULATION TRENDS

	1960 ¹	1970 ¹	1980 ¹	1990 ¹	1997 ¹ Estimate	2020 ² Projected
Baker County*	17,295	14,919	16,134	15,317	16,500	19,893
Incorporated Cities						
Huntington	689	507	539	522	575	670
Baker City	9,986	9,354	9,471	9,140	9,960	11,960
Haines	331	212	341	405	455	670
Halfway	505	317	380	311	360	410
Richland	228	133	181	161	185	230
Sumpter	96	120	133	119	175	220
Unity**	N/A	N/A	115	87	110	118

Sources:

1) Portland State University Center for Population Research and US Census Bureau.

2) State of Oregon Office of Economic Analysis.

*. County population includes the population of all the county's incorporated cities.

**. Unity was incorporated in 1972.

Historic Growth

The population of Baker County and many of the county's incorporated cities actually declined during the 1960s and 1980s, reflecting the general slowdown in the state's economy during these periods. Estimated at 16,500 in 1997, the population of Baker County has grown an average of 0.37% annually since 1970 and over 1% annually since the 1990 Census.

The City of Huntington grew at a rate of 0.47% annually, slightly higher than the rate of growth for the county.

Projected Growth

Baker County is expected to experience population gains for the next 20 years, increasing from 16,500 in 1997 to a projected population of 19,893 by the year 2020. This represents a 0.8% annual increase each year. Like much of rural Oregon, the economy of Baker County remains largely seasonal, with nearly one-quarter of all employment agriculture-based. Therefore, population increases are difficult to predict, and are not likely to be as stable as the forecasts appear to imply.

The State Office of Economic Analysis prepared long-term population projections by county. Based on these projections, preliminary population forecasts for the City of Huntington were developed in five-year increments. The projected population for the City of Huntington in the year 2020 is 670. This represents a 0.67% average annual increase each year.

TRAFFIC VOLUMES

Traffic volume projections are based on historic growth trends for highway volumes and land use and on the future land use projections.

Historic

Before projecting future traffic growth, it is important to examine past growth trends on the Huntington roadway system. Historic data are only available for the state highway system in Huntington; however, these roadways carry far more traffic than any other roads in the city. The Oregon Department of Transportation (ODOT) collects traffic count information on the state highways (rural and urban sections) every year at the same locations. These counts have been conducted along the Huntington Highway.

A historic growth trend along the Huntington Highway within the city was established using the average annual daily traffic (AADT) volume information presented in the ODOT Traffic Volume Tables for the years 1977 through 1997. The AADT volumes were obtained for each of these years at one location, east of East 1st Street. Using a linear regression analysis of the AADT volumes between 1977 and 1997, an average annual growth rate was determined for this location. Table 5-2 provides a summary of the historic average growth rate.

TABLE 5-2
HISTORIC TRAFFIC GROWTH RATES ON STATE HIGHWAYS

<i>Location</i>	<i>Average Annual Growth Rate (1977-1997)</i>	<i>Total Growth (1977-1997)</i>
<i>Huntington Highway</i>		
East of East 1 st Street	0.11%	2.3%

Source: ODOT 1977-1997 Transportation Volume Tables; information compiled by DEA.

During the last 20 years, traffic growth averaged 0.11 percent per year, resulting in a total growth rate of 2.3 percent.

Future Traffic Volumes

Future traffic growth over the next 20 years along the Huntington Highway was assumed to be slightly higher than the 20-year historical growth trend of 2.3% described above. This assumption was made based on a comparison between the historical growth trend along the highway and the projected population increase of 16.5 percent over the next 20 years. The forecast future traffic volumes and total growth from 1997 to 2018 are shown in Table 5-3.

TABLE 5-3
FORECAST TRAFFIC VOLUMES AND TOTAL GROWTH ON STATE HIGHWAYS

<i>Location</i>	<i>1997 ADT Volume (vehicles/day)</i>	<i>2018 ADT Volume (vehicles/day)</i>	<i>Total Growth</i>
<i>Huntington Highway</i>			
East of East 1 st Street	620	650	5.0%

Traffic on the Huntington Highway was assumed to grow by at least 5 percent in total over the next 20 years. This is slightly higher than the historic growth on this highway, which was less than 3 percent over the last 20 years.

Future ADT volumes were also determined for peak summer conditions by increasing the average 2018 ADT by an additional 30 percent along the Huntington Highway. This increase is consistent with the existing conditions analysis for peak summer conditions.

HIGHWAY SYSTEM CAPACITY

For the year 2018, an unsignalized intersection analysis was performed using the overall growth expected on the Huntington Highway, at the same intersection in Huntington for which the existing conditions were analyzed. This analysis included the same assumptions used in the existing conditions analysis for estimating average and summer peak hour traffic volumes.

The results of the unsignalized intersection analyses are shown in Table 5-4. Traffic operations were determined at the intersection using the UNSIG10 software application developed by ODOT for unsignalized intersections.

**TABLE 5-4
SUMMARY OF FUTURE OPERATIONS**

<i>Intersection Location</i>	<i>Direction</i>	<i>Movement</i>	<i>2018 LOS (Average)</i>	<i>2018 LOS (Peak Summer)</i>
<i>Huntington Highway at Snake River Road</i>	Eastbound	Left	A	A
	Westbound	Left, Thru, Right	A	A

Note: The level of service is shown for all evaluated movements of the unsignalized intersection.

Analysis Results

Traffic movement volumes at the intersection of Huntington Highway and Snake River Road are forecast to increase by nearly 5 percent over the 20-year forecast period. The analysis indicates that the intersection is expected to remain operating at an acceptable level of service (LOS A) over the forecast period for both the average and summer peak hour conditions.

CHAPTER 6: TRANSPORTATION IMPROVEMENT OPTION EVALUATION

As required by the Oregon Transportation Planning Rule, transportation improvements were formulated and evaluated for the Huntington TSP. This chapter addresses transportation improvements for all areas within the Huntington UGB. The potential improvements evaluated in this chapter were developed to address the concerns identified in the goals and objectives (Chapter 2), and as a result of the inventory (Chapter 3), evaluation of the operating conditions (Chapter 4) and traffic forecasts (Chapter 5), and meetings with the TAC and the public.

The following list includes all of the potential transportation system improvements considered for the City of Huntington. The transportation system improvements recommended for the Huntington TSP include both state highway and local road projects. The location of each suggested improvement is illustrated in Figure 6-1.

EVALUATION CRITERIA

The evaluation of the recommended transportation improvements was based on a quantitative review of traffic operations, including speed, delay, collision records, and congestion; and a qualitative review of effects on perceived safety and livability. In addition, costs (estimated in 1999 dollars) were factored into the evaluation of each potential transportation improvement. Costs were estimated for construction by using a typical unit cost (such as per linear foot), and do not include purchase of right-of-way, design, or other contingencies. No consideration of potential environmental impacts was included in the evaluation of the improvements, and it is possible that the identification of environmental issues could result in increased costs, project modification, or cancellation.

No quantified capacity or safety issues were identified for Huntington during this study. However, safety, maintenance, and livability related conditions were identified that will require attention over the next 20 years. These were the main factors used to determine and evaluate the transportation improvements discussed below.

The recommendation of whether to include a suggested improvement in the 20-year was based on the potential effectiveness of the suggested improvement relative to its cost or feasibility. If a project was recommended for inclusion in the 20-year plan, it was assigned a priority based on the urgency of the improvement. Priorities are assigned as follows: High = 0-5 years; Medium = 5-10 years; Low = 10-20 years.

The evaluation of each suggested improvement addresses the following five categories: (1) overview, (2) impacts, (3) cost, (4) recommendation, and (5) priority.

EVALUATION OF POTENTIAL TRANSPORTATION IMPROVEMENTS

Improvement Option 1. U.S. 30 And Snake River Road

Overview: The intersection of U.S. 30 (Huntington Highway) and Snake River Road in Huntington was identified as a hazardous location that could benefit from redesign. This complex intersection includes three approaches: Washington Street (U.S. 30) from the west, Snake River Road from the east, and U.S.

30 from the southeast. Note that U.S. 30 is considered a north-south highway, although it is oriented west-southeast at this intersection.

Washington Street to the west of the intersection is about 40 feet in width with parking on both sides and a curb on the south side; there is a park on the north side between the street and the railroad tracks. To the southeast, U.S. 30 is 24 feet wide with gravel shoulders. Snake River Road is 20 feet wide with narrow gravel shoulders. Snake River Road is stop-controlled.

The speed limit on U.S. 30 is 30 mph, changing to 40 mph just south of the intersection. The highway slopes down from the south and turns into Washington Street at an angle of less than 30 degrees. There are no fog lines on the approaches.

Average daily traffic (ADT) in 1997 on U.S. 30 was 290 at the north city limits of Huntington, 620 east of 1st Street, and 690 at the east city limits. Traffic volumes on Snake River Road, a collector street, are unknown but should not exceed 400 ADT during peak periods.

Three conditions at this intersection create potential hazards: lack of paved shoulders, approach angles and sight distance. Given the relatively low traffic volume, certain solutions such as signals and grade separation were not considered.

For roads with an ADT of about 400 to 1000, the ODOT Highway Design Manual recommends a paved shoulder of 6 feet for arterials and 4 feet for collectors. Neither U.S. 30 nor Snake River Road has paved shoulders. Paved shoulders would provide the following benefits:

- Maneuvering space to escape potential crashes.
- Improved sight distance in cut sections.
- Space for pedestrians and bicyclists.
- Structural support for pavement.

Fog lines at the edge of the travel lanes are also recommended; however, this improvement cannot be made until the pavement is widened.

The existing skewed intersection is undesirable because it increases crossing distances (and exposure to advancing traffic), creates difficult turning movements, and has awkward viewing angles. These problems could be addressed by realigning the intersection so it is closer to a right angle.

Sight distances were not measured but appear to be limited by a high berm and utility pole at the south east corner. The following movements could conflict with traffic on northbound U.S. 30:

- Vehicles traveling west to east (Washington Street to Snake River Road).
- Vehicles turning south onto U.S. 30 from westbound Snake River Road.

Any solution recommended can't include any improvement to Snake River Road between US 30 and 4th Street E., because it is not really a public road – it's owned by the railroad. ODOT can make "off-system" improvements that enhance ODOT's highways, but the improvements have to be public roads, not private property. This means that any fix of the US 30/Snake River Road intersection has to take

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN

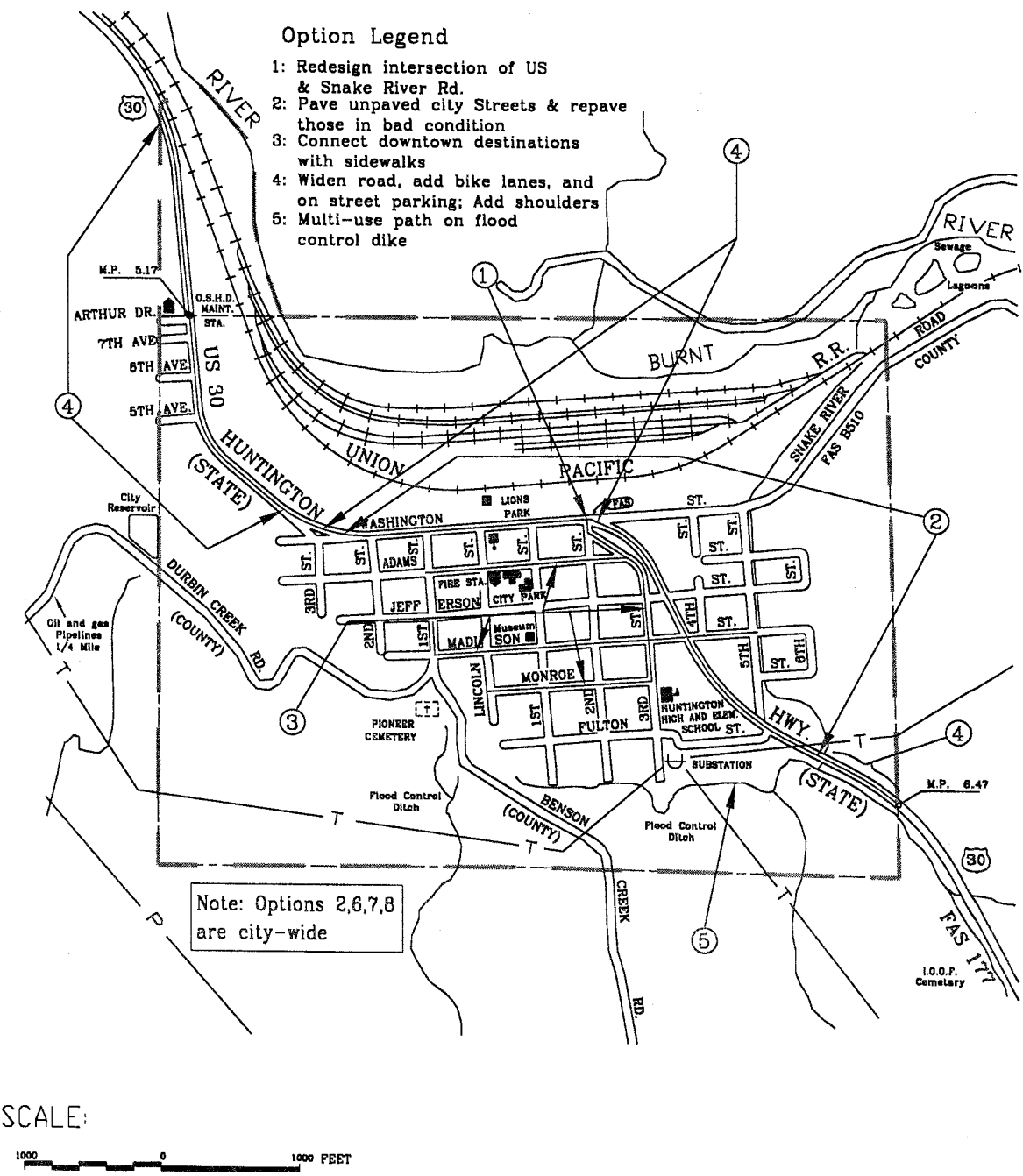


FIGURE 6-1
Proposed Transportation Improvements

place entirely on the US 30 right-of-way (which is quite wide, even though the “built” road is very narrow).

Option 1: Reroute US 30 so that it runs straight north-south along the right-of-way of 3rd Street East (the part that was never built) to Snake River Road, intersecting Snake River Road at a T-intersection. That would justify a stop sign for the downhill (westbound) traffic on US 30. Note that the eastbound traffic on US 30 wouldn’t be impeded – they could have a “right turn permitted without stopping” sign. This makes the turn from US 30 westbound to Snake River Road feasible for RVs and trucks pulling trailers or boats – which it presently is not. Note that this solution entails no land acquisition – the City of Huntington’s right-of-way for 3rd Street East is 80 feet wide – but it will entail a lot of fill work, because all that area is lower than the highway. Redevelopment of the area occupied by the present US 30 right-of-way would free up some land for residential and commercial development, which is also needed. Option 1 is shown in Figure 6-2. This option is considered the long range solution.

Option 2: Widen US 30 to create right-turn to Snake River Road. This addresses the traffic hazard problem caused by westbound traffic on US 30 turning right on Snake River Road, and attempts to fix only that part of the problem. The right turn lane would be built through the unused portions of the US 30 right-of-way as necessary. Option 2 is shown in Figure 6-3. This option is considered the short range solution.

US 30 has a huge right-of-way as it goes around this curve, fully five to six times the actual width of the “built” road. Doing this would entail rerouting the “built” part of US 30 closer to the base of the bluff, which tightens the radius of the curve, impairing visibility still further and potentially causing more accidents. US 30 would be wider, would have a shoulder (in the form of the “recycled” old road), and the right-turn lane would get the turning traffic out of the through lanes. This option is shown in Figure 6-2.

Impact: Improving this intersection will increase motorist safety and comfort.

Option 1 will require legal hurdles such as either acquiring property or right-of-way from the railroad or justifying the expenditure of state monies on private property. Option 1 will also require placement of stop signs on Highway 30 where none currently exist. The thrust of current highway improvements is to eliminate delays to through traffic and not to cause unnecessary stops. However, in many small eastern Oregon communities where the state highway functions as a main street, stop signs exist on state highways, especially where a highway turns 90 degrees. Delays for eastbound highway traffic could be minimized by “right turn permitted without stop” control; however, this type of control is being phased out on state highways.

Option 2 will improve the safety of turning movements from northbound Highway 30 to Snake River Road, but will do little to improve the safety and sight distance deficiencies for turns from Snake River Road to the highway.

Recommendation: The preferred option (as indicated by ODOT District 14 Staff) is Option 1, which consists of adding a right turn lane to northbound Highway 30 and not realigning the highway or making improvements to the section of Snake River Road which is on railroad property.

Cost: Assuming that 250 feet of roadway are realigned, at a cost of \$100 per linear foot, this improvement will cost \$25,000.

Priority: High priority project.

Improvement Option 2. Pave Unpaved Streets and Repave Those in Poor Condition

Overview: A number of streets within Huntington have been identified as unpaved or with poor pavement conditions. US 30 was identified as the highest priority for improvement. The highway has pavement in poor condition within the entire city limits. This is approximately 1.5 mile of roadway. There are curbs and sidewalks (south side only) between 3rd St. West to 2nd St. East (approximately 0.4 mile). In addition to US 30, there are around 3.5 miles of paved streets within the Huntington urban area that are in poor pavement condition.

In order to serve pedestrians, bicyclists, and improve highway safety and longevity, 6-foot shoulders should be added to the approximately 1.1 miles of highway outside of the city core (from 3rd St. W to northwest city limits and 5th St. E to southeast city limits).

Impacts: Improving pavement conditions will provide better transportation facilities within and through the City of Huntington. The condition of the pavement will deteriorate at an accelerated rate if improvements are not accomplished. Adding sidewalks and bikeways will also improve transportation conditions for short trips and visitor activities, as well as the overall appearance of the downtown core.

Cost: The estimated cost of repaving the 1.5 miles of highway is estimated to be around \$210,000 (using a unit cost of \$140,000 per mile for repaving a two-lane highway). Adding 6-foot shoulders to the 1.1 miles of highway would add an estimated \$264,000 to the cost (using a unit cost of \$240,000 per mile for constructing six-foot shoulders). Assuming that no reconstruction is needed, the cost to repave 3.5 miles of local roads is estimated to be around \$175,000 (using a unit cost of \$50,000 per mile for repaving). The total cost of this improvement will be around \$650,000. In summary, the cost associated to maintenance is \$210,000 for repaving the highway with the remaining balance of \$439,000 considered new infrastructure costs.

Recommendation: Improving poor pavement conditions, especially on the state highway, is recommended.

Priority: A high to medium priority project.

Improvement Option 3: Connect Downtown Destinations With Sidewalks

Overview: The City of Huntington has completed a detailed inventory of its existing sidewalk system. In order to meet the city's goal of connecting important downtown destinations with good sidewalks, the following priorities should be met:

New Sidewalk Construction:

Madison St., 1st St. West to Lincoln St.: 600 feet

Madison St., 2nd St. East to 5th St. East: 1,200 feet

Adams St., 1st St. West to 2nd St. East (north side only): 900 feet



FIGURE 6-2
US 30/Snake River Road Intersection
Rebuild Option 1 - Long Term Solution

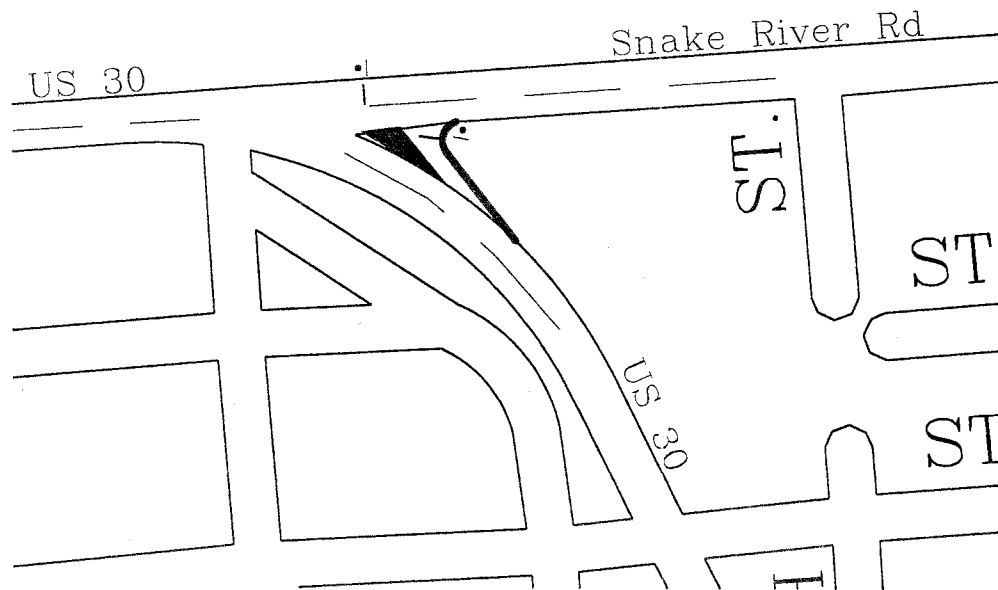


FIGURE 6-2
US 30/Snake River Road Intersection
Rebuild Option 2 - Short Term Solution

1st St. West, Pioneer Cemetery to Jefferson St.: 500 feet

3rd St. East, Highway 30 to Monroe St. (west side only): 600 feet

Improve Existing Sidewalks:

Monroe St., Lincoln St. to 3rd St. East (north side only): 900 feet

Madison St., Lincoln St. to 2nd St. East: 1,050 feet

Adams St., 1st St. West to 3rd St. East (south side only): 1,200 feet

Impacts: Constructing or repairing downtown sidewalks will improve conditions for pedestrians, encourage walking for short trips, and enhance the appearance of downtown Huntington.

Cost: *New Sidewalk Construction:*

Madison St., 1st St. West to Lincoln St.:	\$15,000
Madison St., 2nd St. East to 5th St. East:	\$30,000
Adams St., 1st St. West to 2nd St. East (north side only):	\$22,500
1st St. West, Pioneer Cemetery to Jefferson St.:	\$12,500
<u>3rd St. East, Highway 30 to Monroe St. (west side only):</u>	<u>\$15,000</u>
TOTAL	\$95,000

Improve Existing Sidewalks:

Monroe St., Lincoln St. to 3rd St. East (north side only):	\$22,500
Madison St., Lincoln St. to 2nd St. East:	\$26,250
<u>Adams St., 1st St. West to Highway 30 (south side only):</u>	<u>\$30,000</u>
TOTAL	\$79,000

Recommendation: The sidewalk improvements for Huntington are recommended

Priority: New sidewalks are a high priority project; reconstructing existing sidewalks are a medium priority.

Improvement Option 4: Add a Bikeway on US 30

Overview: The need for bikeways to serve the urban core of Huntington was identified by the TAC. Shoulders should be provided for bicyclists and pedestrians on the approximately 1.1 miles of highway outside of the city core (from 3rd St. West to northwest city limits and 5th St. East to southeast city limits), as identified in the proposal to pave or repave US 30 (Improvement Option 2, above).

Washington St. (US 30 through the center of town) is currently 40 feet wide. This section of the highway is 2,000 feet long, with parallel parking on both sides and a sidewalk on the south side. The posted speed limit is 25 MPH. In order to serve bicyclists, the road should be widened to 48 feet, with 11-foot travel lanes (adequate at the posted speed of 25 MPH), 6-foot bike lanes, and 7-foot on-street parking spaces. On-street parking may not be needed along this entire distance.

Impact: This option would have a beneficial impact on the ability of bicyclists to move safely and comfortably through Huntington. However, widening the roadway could increase the travel speeds of motorists, which could have an adverse impact on the downtown area.

Cost: Adding shoulders along 1.1 miles of highway is estimated to cost around \$264,000 (using a unit cost of \$240,000 per mile to add six-foot shoulders to a state highway). Widening 2,000 feet of highway is estimated to cost around \$59,200 (using a unit cost of \$160,000 per mile to add four-foot shoulders to a state highway). The total cost of this improvement will be \$323,200.

Recommendation: This project is recommended.

Priority: Medium priority project.

Improvement Option 5: Multi-Use Path on the Flood Control Dike

Overview: Constructing a bike path on the separated flood control dike would be an asset to the community of Huntington. The dike is approximately 3,500 feet long. The unimproved road along the flood-control ditch would make a tremendous biking/hiking path. A bike path on this road would extend from the Pioneer Cemetery to US 30 by the school. To turn this into a bike path, the road needs to be leveled, cindered (paving isn't really necessary), and a fence built along the steepest slopes. Before any of that can happen, the City needs easements for use, maintenance, and access to the ditch and road if the City doesn't have them (needed for flood control, anyway).

Bike paths are supposed to connect destination points. This route will connect the Pioneer Cemetery and the school (and US 30 coming from Farewell Bend).

Impact: Properly planned and designed, separated paths are amenities that are generally valued by the community. They can provide both transportation and recreation opportunities. However, to be successful, there must be wide-spread and long-term community support for the path project.

Cost: Assuming that no right-of-way would need to be purchased, a simple paved 10-foot wide trail would cost approximately \$17,500 (using a unit cost of \$5 per linear foot).

Recommendation: The flood control dike path is recommended.

Priority: Low priority project.

Improvement Option 6. Provide Public Transit Between Huntington and Baker City or Ontario

Overview: Public transit is currently being provided by Community Connections of Baker County as an "on-call" service to the City of Huntington. The city has a goal of regular, scheduled transit service.

The cultural and transportation connections in Huntington are more closely tied to Ontario than to Baker City. Huntington is just four miles from the Malheur County line (and a different time zone), and only 15 miles from Ontario. Baker City may be the county seat, but for most people in Huntington, the doctor, dentist, pharmacy, hospital, auto repair shop, grocery store, shopping mall, and (for an increasing

number of people) the *jobs* are in Ontario. Many times it is not possible to get to Baker City by road in the winter. Huntington, unlike everywhere else in Baker County, is part of the Malheur County Educational Service District, Malheur County Ambulance Service Area, and pays taxes to Treasure Valley Community College in Ontario.

Impact: Regular provision of transit would help to reduce the number of single occupant vehicles on the road and provide a reliable and less expensive means of transportation, particularly for the disadvantaged members of the community. Transit is very important to rural populations, particularly those that are aging and have higher poverty rates, such as the City of Huntington.

Cost: Community Connections estimates that they need approximately \$16,000 to replace currently unfunded basic service needs (adjusted from a 1997 estimate) to the County. Based on proportional population, Huntington's contribution to this would be around \$640 per year.

Recommendation: The recommendation that the City financially support Community Connections in Baker City just isn't going to work. Community Connections won't get the ridership from Huntington, and won't get financial support from Huntington, because Community Connections doesn't go anywhere most people in Huntington want to go. The recommendation for Huntington is to participate in a joint venture with the service in Ontario. The cost of this joint venture with service in Malheur County was not estimated.

Priority: High.

Improvement Option 7. Implement Rideshare Program

Overview: Community Connections, the Baker County transit provider, indicates that the most common alternative to the single-occupant vehicle in the county is carpooling. Community Connections plans to conduct a needs survey to determine if a rideshare program would be effective. A rideshare program typically provides a telephone number, database, and staff person to help connect those who would like to carpool.

Impacts: Carpooling could provide a benefit for those who commute regularly between population centers, particularly for disadvantaged residents. A rideshare program could enable people to connect and set up carpools.

Employers can encourage ridersharing through a variety of promotional incentives that include providing matching services subsidizing vanpools, establishing preferential car and vanpool parking, and by providing convenient drop-off sites. The City of Huntington can encourage carpooling and vanpooling by establishing a ridersharing program that allows interested drivers to call a toll-free number to receive information about coordinating ridersharing with other interested parties.

Cost: Carpooling can take advantage of excess parking in retail areas or parking unused during the week, such as at churches. Costs are typically limited to a full-time or part-time rideshare program administrator to update the database, provide public education and advertising, and coordinate park and ride lots. For comparison purposes, a rideshare program located in Central Oregon has an annual operating budget of approximately \$50,000. ODOT participates in this program by providing

approximately 60% of the funding. Because the population base in Baker County area is smaller, it is estimated that a similar rideshare program could be operated for around \$15,000 a year with a part-time staff member. Based on proportional population, Huntington's contribution would be around \$600 a year.

Recommendation: Similar to the recommendation for the provision of public transit, the City of Huntington should pursue rideshare opportunities to destinations in Ontario, rather than to other areas of Baker County.

Priority: High.

Improvement Option 8. Revise Zoning and Development Codes

Overview: One of the goals of the Oregon Transportation Planning Rule is to reduce reliance on the single-occupant automobile in order to lessen the need for widening and building new roads, as well as to decrease air and noise pollution. One way that cities can do this is through modifications to their zoning and development codes to allow mixed use developments and increases in density in certain areas. Such code modifications can encourage a city to develop in such a way that walking and bicycling are more feasible between land uses.

However, such code revisions have proven to be the most effective in larger cities and cities that are rapidly growing. In cities as small as Huntington, these code modifications would not be effective. Because of Huntington's small size, trips inside the city are not influenced by distance. The small size of the city also results in an overall land use pattern that is similar to a mixed commercial and residential development. In addition, the city is not expected to grow rapidly.

Impacts: Because of the city's small size and growth rate, zoning code modifications would not have an impact.

Cost: The cost of producing revised zoning and development ordinances is limited to staff and consultant time. The costs are estimated to be around \$3,000 for a city the size of Huntington.

Recommendation: This improvement is not recommended.

SUMMARY

Table 6-1 summarizes the recommendations for the transportation system based on the evaluation process described in this chapter. Chapter 7 discusses how these improvement improvements fit into the modal plans for Huntington.

TABLE 6-1

SUMMARY OF TRANSPORTATION IMPROVEMENTS

Improvement	Cost	Recommendation	Priority*	Responsibility
1. US 30 & Snake River Road	25,000	Implement	High	State/County
2. Pave and repave streets	\$650,000	Implement	Medium to High	City/County
				State
3. Connect Downtown with sidewalks	\$174,000	Implement	Medium to High	City
4. Add bikeway on US 30	\$323,200	Implement	Medium	State
5. Path on flood control dike	\$17,500	Implement	Low	City
6. Public transit	\$640/year	Implement	High	City
7. Participate in County Rideshare Program	\$600/year	Implement	High	City
8. Revise Zoning and Development Codes	\$3,000	Do not implement	--	--

* High = 0-5 years; Medium = 5-10 years; Low = 10-20 years

CHAPTER 7: STREET STANDARDS, ACCESS MANAGEMENT, AND MODAL PLANS

The purpose of this chapter is to provide a detailed transportation system plan that will achieve the goals and objectives set forth by the Huntington community. This chapter addresses recommended road classification standards and access management measures. Under *Modal Plans*, this chapter addresses improvements or approaches to meet the needs of all transportation modes appropriate for Huntington.

STREET STANDARDS

Existing Street Standards

Street classification standards relate the design of a roadway to its function. The function is determined by operational characteristics such as traffic volume, desired speed, safety, and capacity. Street standards are necessary to provide a community with roadways that are relatively safe, attractive, and easy to maintain. The proposed standards are based on experience, research, and state and local policies.

The City of Huntington has jurisdiction for the design and construction of streets within the city. Baker County is responsible for the roads located outside the city limits and within the Huntington UGB. Although, the County Road Department would like to turn over jurisdiction of county roads inside city UGBs to the cities. ODOT has jurisdiction for the design and construction of state highways within Huntington and Baker County.

Recommended Street Standards

The development of the Huntington TSP provides the City with an opportunity to create street design standards to fit the goals and objectives of the TSP. The following street standards are recommended for all areas within the Huntington UGB.

In urban areas, streets typically include curbs and sidewalks. However, the inclusion of curbs requires some type of storm drainage system. A compromise for more rural communities lacking dry wells or a storm drainage system is to design roads so that runoff is captured in drainage swales. This is particularly appropriate in Central and Eastern Oregon, where soils are typically well-drained. Swales are broad, low points adjacent to the roadway. If pedestrian facilities are needed, these can be provided as a separated, paved walkway.

An option to the drainage swale is a landscaped strip. This is a more aesthetically pleasing design for residential streets. Residential streets not only provide direct auto access to houses, but also provide a visual setting, an entryway for each home, and a meeting place for residents, and a play area for children.

Landscaped strips can accommodate trees. Without trees, a street can appear barren. Trees provide shade, block wind, improve the landscape, and enhance the status of the street and adjacent property values. Trees also function as a traffic calming measure by giving the street the appearance of narrowness and getting drivers to slow down. This effect is best achieved when the trees consist of mature shade trees which provide a canopy over the road, somewhat limiting peripheral vision. Consideration should be given to adjacent street trees if the City of Huntington is interested in becoming a Tree City USA. If this design option is pursued, appropriate species must be selected so that roots do not disturb sidewalks and fallen leaves and/or

fruit do not create slippery conditions. In addition, trees should be planted such that they do not conflict with utility lines, outdoor advertising, traffic signs, and sight distance.

Proposed street design standards are listed in Table 7-1, illustrated in Figure 7-1 and summarized in the following pages. The city was platted with 80-ft. rights-of-way on all streets for fire protection. Although this width is excessive, there was no desire to reduce the street rights-of-way.

TABLE 7-1
RECOMMENDED STREET STANDARDS FOR THE CITY OF HUNTINGTON

Classification	Pavement Width	Right-of-Way	Posted Speed
Local (10-ft travel lanes, 8-ft parking strips, adjacent curbs and sidewalks)	36 ft.	80 ft.	25 mph
Collector (11-ft travel lanes, 19-ft. angle parking, adjacent curbs and sidewalks)	60 ft.	80 ft.	25 mph
Arterial ¹ (includes 11-ft. travel lanes, 3-ft. shoulders – Baker County standard)	28 ft.	60-80 ft.	30 mph
Arterial ² (includes 12-ft. travel lanes, 6-ft bike lanes, 8-ft. parking strips, adjacent curbs and sidewalks)	52 ft.	80 ft.	20-30 mph
Alleys (10-ft. gravel travel lanes)	20 ft	20 ft	10 mph

¹Standard for the non-urbanized area inside the City's UGB (east and west of Washington Street)

²Standard for the urbanized area inside the City's UGB (Washington Street)

Local Streets

Local streets have property access as their main priority and through traffic movement is not encouraged. The design of a local residential street affects its operation, as well as the safety and livability of the area that road serves. Local streets should be designed to carry very small volumes of traffic at relatively slow speeds (15 to 25 mph).

The City of Huntington has a small but well connected grid system of local streets near the downtown area. A well-connected grid system of relatively short blocks minimizes excessive volumes of motor vehicles by providing a series of equal travel options. A grid street pattern also benefits pedestrians and bicyclists. This type of street development should be the pattern that is maintained as the vacant lands within Huntington's urban growth boundary are developed.

The recommended standard for a local street is 36 feet of pavement to accommodate 10-foot travel lanes and 8-foot parking strips. Five-foot sidewalks are recommended adjacent to the pavement edge.

The primary reason for providing sidewalks, or paved walkways separated from the roadway, is to improve pedestrian safety; however, a separate pedestrian system has several qualitative benefits as well. Providing adequate pedestrian facilities increases the livability of a city. When pedestrians can walk on a sidewalk, separated from vehicular street traffic, it makes the walking experience more enjoyable and may encourage walking, rather than driving, for short trips. New sidewalks should be constructed with curb cuts for wheelchairs at every crosswalk to comply with the Americans with Disabilities Act (ADA).

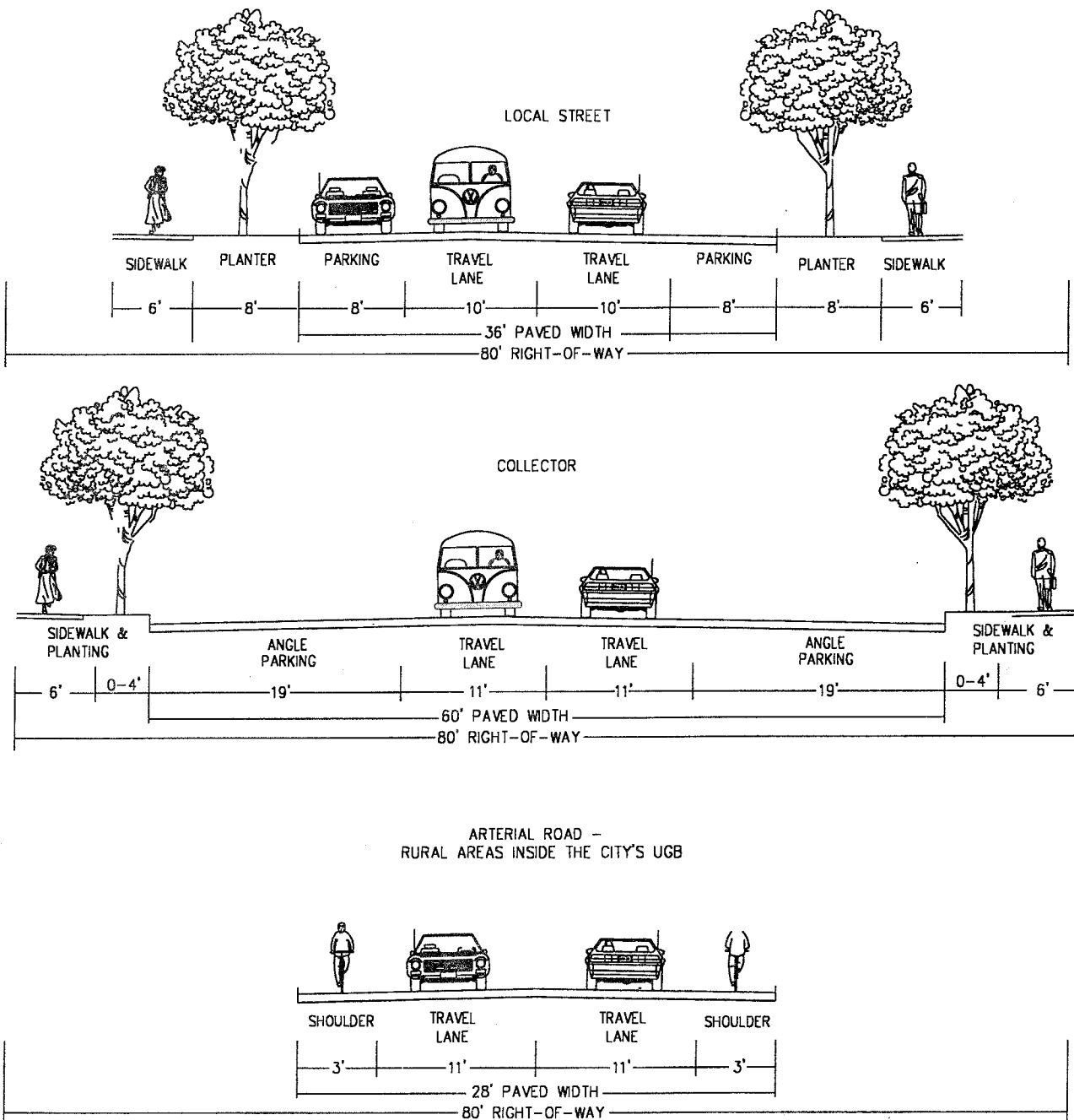


FIGURE 7-1a
Street Standards



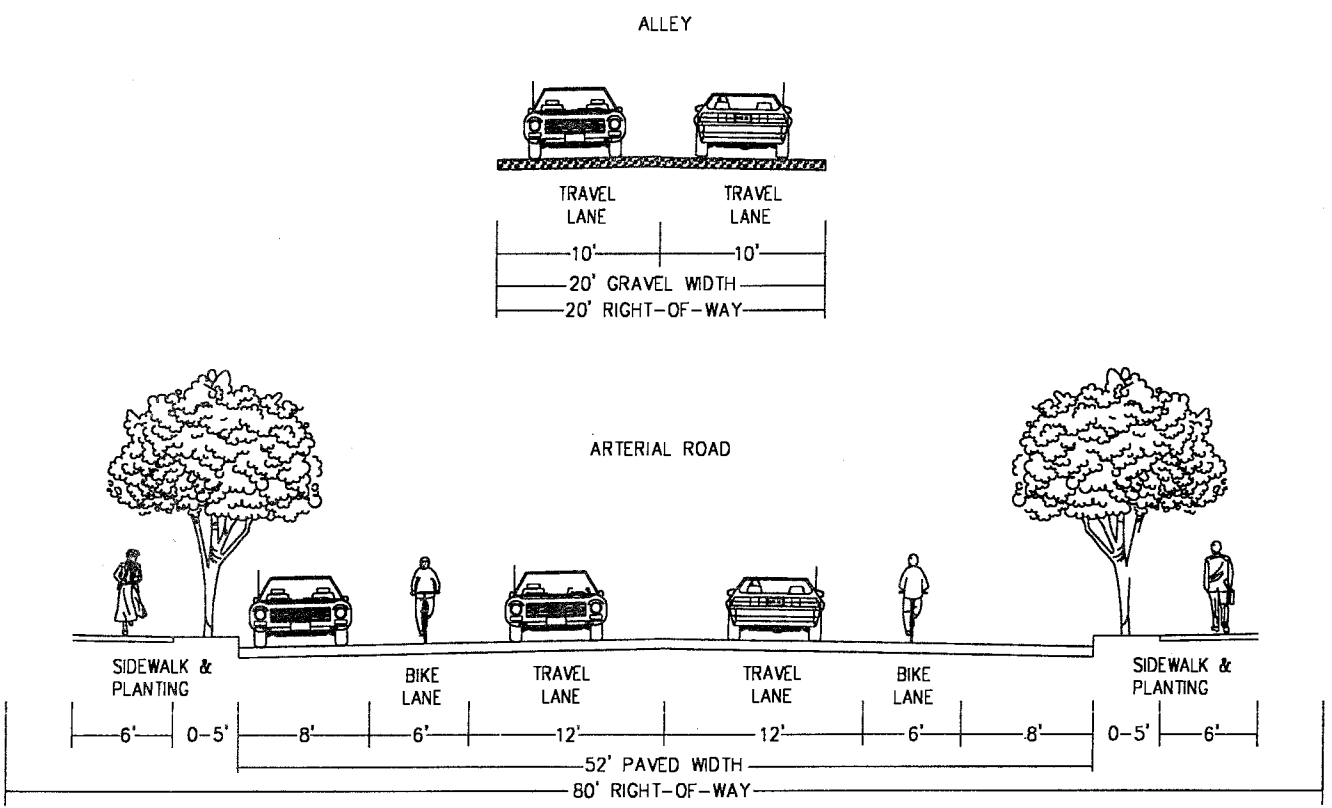


FIGURE 7-1b
Street Standards

Collector Streets

Collector streets connect residential neighborhoods with the arterial system. Property access is generally a higher priority for collectors than arterials and through traffic is served as a lower priority. They are intended to carry local traffic, including limited through traffic, at design speeds of 25 to 35 mph.

Figure 7-1 shows the recommended cross sections for collector streets. The standard consists of two 11-foot wide travel lanes and 19-foot wide parking strips for angle parking. Six-foot sidewalks are recommended with 8 to 10 foot planting strips.

For County collectors, the Baker County standard should be used which are two 11-foot lanes plus 3 foot shoulders for a total pavement width of 28 feet.

The collectors in Huntington are Madison Street, 1st Street East, Snake River Road, and Durbin Creek Road.

Arterial Streets

Arterial streets connect cities and other major traffic generators; they serve both through traffic and trips of moderate length and access is usually controlled. Arterials are higher volume roadways from the combination of local and through traffic.

At the present time, the only arterial in Huntington is the state highway. Depending on adjacent land uses, the recommended speeds for Highway 30 in Huntington are 20 to 30 mph. The 20-year forecast does not predict any need for new arterials within Huntington. Two standards were developed for the arterial. Both consist of two 12-foot travel lanes, 6-foot bike lanes and adjacent curbs and sidewalks. On Washington Street the standard includes 8-foot parking strips for parallel parking.

In downtown, or urban areas, the minimum width for sidewalks is 10 feet. The additional width is required to accommodate higher pedestrian volumes and allow people to walk two or more abreast. Wider sidewalks are also needed in urban areas to accommodate street furniture such as benches, café tables, street lighting, and trees. When designed properly, sidewalks enliven a downtown and encourage leisurely strolling and window shopping in commercial areas. This "Main Street" effect improves business for downtown merchants and provides opportunities for friendly interaction among residents. It may also have an appeal to tourists as an inviting place to stop and walk around.

Multi-use Paths and Public Accessways

Multi-use paths and public accessways are typically used by pedestrians, cyclists, skaters, and joggers. These facilities should be constructed to meet the standards set forth in the Oregon Bicycle and Pedestrian Plan (ODOT, 1995). Paths may be paved or unpaved (constructed with packed gravel or asphalt grindings), if they are smooth and firm enough to meet ADA requirements. The standard width for a multi-use path is 10 to 12 feet. Where a path is parallel and adjacent to a roadway, there should be a 5-foot or greater width separating the path from the edge of the roadway.

ACCESS MANAGEMENT

Access management is an important tool for maintaining a transportation system. Too many access points along arterial streets lead to an increased number of potential conflict points between vehicles entering and

exiting driveways, and through vehicles on the arterial streets. This not only leads to increased vehicle delay and a deterioration in the level of service on the arterial, but also leads to a reduction in safety. Research has shown a direct correlation between the number of access points and collision rates. Experience throughout the United States has also shown that a well-managed access plan for a street system can minimize local cost for transportation improvements needed to provide additional capacity and/or access improvements along unmanaged roadways. Therefore, it is essential that all levels of government maintain the efficiency of existing arterial streets through better access management.

The Transportation Planning Rule (TPR) defines access management as measures regulating access to streets, roads and highways from public roads and private driveways and requires that new connections to arterials and state highways be consistent with designated access management categories. As Huntington continues to develop, the arterial/collector/local street system will become more heavily used and relied upon for a variety of travel needs. As such, it will become increasingly important to manage access on the existing and future arterial/collector street system as new development occurs.

One objective of the Huntington TSP is to develop an access management policy that maintains and enhances the integrity (capacity, safety, and level of service) of the county's streets. Too many access points along a street can contribute to a deterioration of its safety, and on some streets, can interfere with efficient traffic flow.

Access Management Techniques

The number of access points to an arterial can be restricted through the following techniques:

- Restricting spacing between access points (driveways) based on the type of development and the speed along the an arterial.
- Sharing of access points between adjacent properties.
- Providing access via collector or local streets where possible.
- Constructing frontage roads to separate local traffic from through traffic.
- Providing service drives to prevent spill-over of vehicle queues onto the adjoining streets.
- Providing acceleration, deceleration, and right turn only lanes.
- Based on ODOT design and safer operational priorities, offsetting driveways to produce T-intersections to minimize the number of conflict points between traffic using the driveways and through traffic.
- Installing median barriers to control conflicts associated with left turn movements and cross traffic.
- Installing side barriers to the property along the arterial to restrict access width to a minimum.
- Developing and adopting local ordinances that require inter-parcel circulation.
- Developing long-term signal system plan for the state roadways consistent with ODOT priorities for optimum signal progression performance.

Recommended Access Management Standards for City Streets

Access management standards can vary from total access control on freeways to the use of local and minor collector streets for access purposes, parking and loading. Table 7-2 shows recommended access management guidelines on city streets by functional classification. The only arterial in the City of Huntington is the State Highway; its access management standards are described in the following section.

TABLE 7-2

RECOMMENDED ACCESS MANAGEMENT STANDARDS FOR CITY STREETS

Classification	Public Street	Private Driveway
Arterial	See State Highway Standards	See State Highway Standards
Collector	500 feet	200 feet
Local	200 feet	Access to Each Lot

Note: Typical standard for county arterials and collector roadways is 28 feet of pavement with two 11-foot travel lanes and 3-foot shoulders. Some county collectors may be gravel.

It should be noted that existing developments and accesses on the transportation network will not be affected by the recommended access management techniques until either a land use action is proposed, a safety or capacity deficiency is identified that requires specific mitigation, a specific access management strategy/plan is developed, redevelopment of existing properties along the roadway, or a major construction project is begun on the street.

Application

These access management restrictions are generally not intended to eliminate existing intersections or driveways. Rather, they should be applied as new development occurs. Over time, as land is developed and redeveloped, the access to roadways will meet these guidelines. However, where there is a recognized problem, such as an unusual number of collisions, these techniques and standards can be applied to retrofit existing roadways.

To summarize, access management strategies consist of managing the number of access points and providing traffic and facility improvements. The solution is a balanced, comprehensive program that provides reasonable access while maintaining the safety and efficiency of traffic movement.

Recommended Access Standards for State Highways

Access management is important to promoting safe and efficient travel for both local and long distance users along State Highways. The 1999 *Oregon Highway Plan (OHP)* specifies an access management classification system for state facilities. Future developments on state highways (zone changes, comprehensive plan amendments, redevelopment, and/or new development) will be required to meet the 1999 OHP State Classification System and Access Management policies and standards. Although the City of Huntington may designate state highways as arterial roadways within its transportation system, the access management categories for these facilities should follow the guidelines of the Oregon Highway Plan.

US Highway 30 (Huntington Highway) is the only state highway in the City of Huntington. It is classified as a District Highway in the Oregon Highway Plan. District Highways are facilities of county-wide significance and function largely as county and city arterials or collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. The management objective is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements. Inside urban areas, local access is given more priority.

Special Transportation Area

A Special Transportation Area (STA) is a designation that may be applied to a state highway, when a downtown, business district or community center straddles the state highway within a community's urban growth boundary. STAs can include central business districts but they do not apply to whole cities or strip development areas along individual highway corridors.

The primary objective of a STA is to provide access to community activities, businesses and residences, and to accommodate pedestrian, and bicycle movements along and across the highway in a compact central business district. A STA designation will allow reduced mobility standards, accommodate existing public street spacing and compact-development patterns, and enhance opportunities to provide improvements for pedestrians and bicyclists in the downtown area. Inclusion in a STA allows for redevelopment with exception to the proposed access management standards.

Access management in STAs corresponds to the existing city block for public road connections and discourages private driveways. However, where driveways are allowed and land use patterns permit, the minimum spacing for driveways is 175 feet or mid-block if the current city block spacing is less than 350 feet. In addition, the need for local street connections may outweigh the consideration of maintaining highway mobility within a STA.

In Huntington, the area along US 30 between 2nd Street W. (milepost 5.61) and 1st Street E. (milepost 5.82) exemplifies the design features of a historic downtown. Within this segment, buildings are spaced close together, parking is on street, and the posted speed limit is 30 m.p.h. The compact development pattern qualifies this area for a STA highway segment designation.

Upon adoption of the TSP by the Huntington Council and a finding of compliance with the Oregon Highway Plan, the City of Huntington and ODOT Region 5 may jointly designate the segments along US 30 between 2nd Street W. (milepost 5.61) and 1st Street E. (milepost 5.82) as an STA through a Memorandum of Understanding (MOU). The MOU will incorporate by reference the TSP and the following STA Management Plan provisions.

Special Transportation Area Management Plan

The Huntington STA is located on the portion of US 30 between 2nd Street W. (milepost 5.61) and 1st Street (milepost 5.82) is located completely within the urban growth boundary and city limits of the City of Huntington.

The primary objective of the Huntington STA is to provide access to community activities, businesses and residences, and to accommodate pedestrian, and bicycle movements along and across the highway in the city's central business district.

The designation of a STA in Huntington is intended to accommodate the existing public street spacing and compact development pattern. Specific access management conditions for the Huntington STA on US 30 include:

- a) Minimum spacing for public road connections at the current city block spacing of 200 to 300 feet.
- b) Public road connections are preferred over private driveways. Private driveways are discouraged in an STA.
- c) Where land use patterns permit, ODOT will work with the City and property owners to identify appropriate access to adjacent property owners within the STA.
- d) Where a right to access exists, access will be allowed to property at less than the designated spacing standard only if the property does not have reasonable alternative. If possible, other options should be considered, such as joint access.
- e) Where a right to access exists, the number of driveways to a single property shall be limited to one. ODOT will work with the City and property owners if additional driveways are necessary to accommodate and service the traffic to the property, and will not interfere with driver expectancy and the safety of through traffic on the highway.
- f) Driveways shall be located where they do not create undue interference or hazard to the free movement of normal highway or pedestrian traffic. Locations in areas of restricted sight distance or at points that interfere with the placement and proper functioning of traffic control signs, lighting or other devices that affect traffic operation will not be permitted.
- g) If a property is landlocked (no reasonable alternative exists) because a driveway cannot be safely constructed and operated and all other alternatives have been explored and rejected, ODOT might be required to purchase the property. However, if a hardship is self-inflicted, such as by partitioning or subdividing a property, ODOT has no responsibility for purchasing the property.

Today, traffic on the state highway operates at LOS A or better, which correlates to a maximum volume to capacity (v/c) ratio of well below the 0.85 standard set by the 1999 Oregon Highway Plan. Increase in traffic volumes over the 20 year projection period will not impact the level-of-service (LOS) or meet the maximum volume to capacity ratio of 0.85 for US 30 within the city's urban growth boundary.

To maintain highway mobility through a STA in Huntington, land use development decisions (within the urban growth boundary) shall not cause traffic flow to exceed a volume to capacity ratio of 0.85. The posted speed limit in the STA is currently and will remain at 30 miles per hour as allowed by state statute in a business district. Curb (parallel or perpendicular) parking is permitted in the STA, provided minimum sight distance requirements are met for all public road connections and private driveways. Parking in this area is adequate at this time. No signals or traffic control devices currently exist in this area. No changes are contemplated.

The designation of a STA in Huntington further identifies the need to accommodate pedestrian, and bicycle movements along and across the highway in the compact central business district. The recommended urban arterial standard within the STA consists of a 80-foot right-of-way with a paved width of 52 feet that includes two 12-foot travel lanes, 6-foot bike lanes, 8-foot parking lanes, and curbs. Within the right-of-way there is also a 5-foot planting strip and 6-foot sidewalks.

Another essential component to accommodate pedestrians in a STA is street crossings.

There are no specific crosswalk enhancements or safety improvements recommended within the STA at this time. Future improvements and modifications to the highway within the STA and within the curb line, or if no regular established curb, to the r/w utilized for highway purposes will be made in accordance with the Oregon Highway Design Manual and with ODOT approval.

Existing maintenance and operational strategies along US 30 will be employed within the STA, consistent with Oregon Revised Statute 373.020, as follows:

ODOT shall be responsible for the ongoing maintenance of: a) the roadway surface between curbs, or if no regular established curb, to that portion of right-of-way utilized for highway purposes b) painting centerline stripe, c) designated school crosswalk delineation, directional and regulatory signs except those signs described as the City's responsibility and d) plowing snow one blade-width of centerline stripe provided there are no conflicts with utilities.

City shall be responsible for the on going maintenance of: a) storm sewer system, b) sidewalks, c) landscaping, d) luminaries, e) U-turn signs, parking signs, and street name signs, f) painting parking-stripes and other pavement delineation not described as ODOT's responsibility, and g) snow removal from parking strip.

Future improvements and modifications to the highway within the STA will include maintenance and operational strategies with ODOT and City approval.

Application Outside the STA Boundary

The existing *legal* driveway connections, traffic intersection spacing and other accesses to the state highway system are not required to meet the spacing standards of the assigned category immediately upon adoption of this access management plan. However, existing permitted connections not conforming to the design goals and objectives of the roadway classification will be upgraded as circumstances permit and during redevelopment. At any time, an approach road may need to be modified due to a safety problem or a capacity issue that exists or becomes apparent. By statute, ODOT is required to ensure the all safety and capacity issues are addressed.

A conditional access permit may be issued by ODOT and the County for a single connection to a property that cannot be accessed in a manner that is consistent with the spacing standards (shown in Table 7-3). These conditions typically apply to properties that either have no reasonable access or cannot obtain reasonable alternative access to the public road system. The permit should carry a condition that the access may be closed at such time that reasonable access becomes available to a local public street. In addition, approval of a conditional permit might require ODOT-approved turning movement design standards to ensure safety and managed access. Under special circumstances, ODOT may be required to purchase property in order to prevent safety conflicts.

TABLE 7-3

1999 OREGON HIGHWAY PLAN ACCESS MANAGEMENT CLASSIFICATION SYSTEM

District Highways		
Posted Speed	Rural Spacing Standards	Urban Spacing Standards
≥ 55 mph	700 feet	700 feet
50 mph	550 feet	550 feet
40 & 45 mph	500 feet	500 feet
30 & 35 mph	400 feet	400 feet
≤ 25 mph	400 feet	400 feet

Application

The existing *legal* driveway connections, traffic intersection spacing and other accesses to the state highway system are not required to meet the spacing standards of the assigned category immediately upon adoption of this access management plan. However, existing permitted connections not conforming to the design goals and objectives of the roadway classification will be upgraded as circumstances permit and during redevelopment. At any time, an approach road may need to be modified due to a safety problem or a capacity issue that exists or becomes apparent. By statute, ODOT is required to ensure the all safety and capacity issues are addressed.

A conditional access permit may be issued by ODOT and the County for a single connection to a property that cannot be accessed in a manner that is consistent with the spacing standards (shown in Table 7-3). These conditions typically apply to properties that either have no reasonable access or cannot obtain reasonable alternative access to the public road system. The permit should carry a condition that the access may be closed at such time that reasonable access becomes available to a local public street. In addition, approval of a conditional permit might require ODOT-approved turning movement design standards to ensure safety and managed access. Under special circumstances, ODOT may be required to purchase property in order to prevent safety conflicts.

Access Control Rights

Historically, owners of property abutting public roadways have enjoyed a common law abutter's right of access to the roadway. However, in order to provide for a transportation system that would accommodate changing public needs, legislation has been passed to modify rights of access. Oregon Revised Statutes specify that the right of access can be purchased or condemned as deemed necessary for right-of-way. ODOT has purchased access control rights from many properties along state highways.

Once the state has acquired access rights to a property, road approach permits can only be issued at locations on the property where the right of access has been reserved. A reservation of access gives the property owner the right to apply for a permit of access to the state highway only at specific locations and they must be clearly identified in the deed where the property owner sold the right-of-way to the state. If the owner wants to gain additional access rights to the highway, they must apply for a grant of access.

There may be local street connections shown in this TSP that will require modifying the existing access rights or gaining additional access rights to the state highway system. Review of this TSP by ODOT does not imply tacit approval to modify or grant additional access rights. This must be accomplished by applying to ODOT from such modification or grant.

An "Indenture of Access" is used to modify existing access rights such as moving or widening the reservation or lifting other restrictions that may have been placed on it. A "Grant of Access" is required to gain an additional access point to the highway, and, depending on circumstances, may require payment to the state for the market value of the grant. Application for both the Indenture and Grant of Access is made to the local ODOT District Office.

To summarize, access management strategies consist of managing the number of access points and providing traffic and facility improvements. The solution is a balanced, comprehensive program that provides reasonable access while maintaining the safety and efficiency of traffic movement.

MODAL PLANS

A number of transportation improvements were suggested for the City of Huntington during the inventory, forecasting, and public involvement phases of this TSP. Each of these improvements was analyzed, recommended or not recommended, and assigned a priority in Chapter 6. The following modal plans reflect the findings of Chapter 6.

The modal plans consider the transportation system needs for the City of Huntington over the next 20 years, assuming the growth projections discussed in Chapter 5. The timing for individual improvements will be guided by changes in land use patterns and population growth. This TSP should be reviewed every several years to adjust specific projects and implementation schedules to these changes.

Street System Plan

The street system plan outlines a series of improvement options that are recommended for construction within Huntington during the next 20 years. Each of these options have been discussed in Chapter 6. (Improvement Options Evaluation).

The Transportation Advisory Committee evaluated and ranked the transportation improvement options alternatives dealing with the street system. A total of seven improvements were selected and prioritized. The ranking was based on local knowledge of the Huntington area, traffic circulation and traffic safety concerns, and cost of the improvements.

The recommended street system improvements include realigning the intersection of Highway 30 and Snake River Road, paving the unpaved streets, and repaving the streets which have poor pavement conditions.

In addition, the City of Huntington indicated an interest in Lifeline Route designation on the Huntington Highway (US Highway 30). The recently adopted 1999 Oregon Highway Plan supplements the state highway classification system with special purpose classifications such as Lifeline Routes. This is in

recognition that special expectations and demands are placed on portions of the highway system which serve as a lifeline or emergency route. It is the policy of the State of Oregon to provide a secure lifeline network of streets, highways, and bridges to facilitate emergency services response and to support rapid economic recovery after a disaster. ODOT will work with local governments to further define and map a network of lifeline routes. The lifeline network will focus on serving those communities which are particularly susceptible to isolation by virtue of their limited highway access.

Pedestrian System Plan

The pedestrian system should provide direct and safe access to all areas of the city and to every land use. Properly configured, the system encourages walking and enables neighbors to know each other and to enjoy their community. The recommended system for Huntington, which lacks a storm drainage system, consists of separated paved walkways.

Every paved street within the urban area of Huntington should have walkways on both sides of the roadway meeting the requirements set forth in the street standards. Pedestrian facilities should be provided between all buildings and abutting streets and adjacent neighborhoods (Ordinances specifying these requirements are included in Chapter 9). Walkways should be added as new streets are constructed and existing streets reconstructed. Walkways and other pedestrian facilities may also be added as stand-alone projects as discussed below.

To meet the city's goal of connecting important downtown destinations with good sidewalks, the following new sidewalk projects and improvements to existing sidewalks were identified:

New Sidewalk Construction:

Madison St., 1st St. West to Lincoln St.: 600 feet

Madison St., 2nd St. East to 5th St. East: 1,200 feet

Adams St., 1st St. West to 2nd St. East (north side only): 900 feet

1st St. West, Pioneer Cemetery to Jefferson St.: 500 feet

3rd St. East, Highway 30 to Monroe St. (west side only): 600 feet

Improve Existing Sidewalks:

Monroe St., Lincoln St. to 3rd St. East (north side only): 900 feet

Madison St., Lincoln St. to 2nd St. East: 1,050 feet

Adams St., 1st St. West to 3rd St. East (south side only): 1,200 feet

New sidewalks are a high priority project; reconstructing existing sidewalks are a medium priority.

Bicycle System Plan

The bicycle system plan aims to provide direct and safe access to all areas of the city. Properly configured, the system encourages bicycling and enables people of average skill to reach most destinations comfortably. Local streets in Huntington accommodate cyclists because traffic volumes and speeds are low except on US 30.

Every arterial street should include bikeways, typically bike lanes in urban areas and shoulders in more rural areas. All bikeways should meet the requirements set forth in the street standards and in the Oregon Bicycle and Pedestrian Plan. For example, bike lanes should be one-way, marked in the same direction as the adjacent travel lane.

Four-foot wide shoulders are adequate on collectors. Six-foot shoulders should be included on arterials.

Functional bikeways depend on regular maintenance. Sweeping, surface repair, restriping, and control of vegetation are essential to useful, attractive and enduring facilities. Regular maintenance is often the easiest and most cost-effective means of enhancing the bikeway system. Construction projects should consider a long-term commitment to maintenance for bikeways.

Bikeways should be added as new streets are constructed and existing streets reconstructed. Bikeways and other bicycle facilities may also be constructed as stand-alone projects where the need exists, such as on Highway 30. The bicycle system plan for Huntington consists of the following:

- The unimproved road along the flood-control ditch would make a tremendous biking/hiking path. A bike path on this road would extend from the Pioneer Cemetery to US 30 by the school. To turn this into a bike path, the road needs to be leveled, cindered (paving isn't really necessary), and a fence built along the steepest slopes. Before any of that can happen, the City needs easements for use, maintenance, and access to the ditch and road if the City doesn't have them (needed for flood control anyway).
- Fifth Street E. parallels the flood control ditch from US 30 to Snake River Road. This is a City street; all that's necessary here is curbing and guttering, paving curb to curb, and striping a bike lane. (having this "on the list" allows us to apply for bike path grants that will help pay for curbing, guttering, and paving we needed anyway.)
- Madison Street from 5th Street E. to the Pioneer Cemetery. Madison Street is planned for paving full-width, which allows room for a bike lane.
- First Street E. from the Museum to downtown is the link between Pioneer Cemetery and the parks (and US 30). The portions that have already been paved are paved full-width, and it goes right by the parks and Museum.
- US 30 going to Old Town really needs a protected bicycle and pedestrian pathway. A wider-paved road with a dedicated path on one side, separated from the road by a fence was suggested from the west side of Lions Park to the state sheds – ideally, on the railroad side of the highway, because it's undeveloped. Also from the east side of Lions Park along Washington Street to 5th Street E. (and the bike lane coming down the hill).
- Through Lions Park, a path along the back (north) side of the park, next to the hedge, so there isn't a conflict between bikers and walkers and the people double-parking on the highway on that block.

- US 30, Lime-to-Farewell-Bend edge-of-the-highway has a planned bike path. Bike paths are supposed to connect destination points. The above connect the Pioneer Cemetery, the school, the City Park and Lions Park, the Museum, the Historical Triangle on the way to Old Town, and Old Town itself.

Transportation Demand Management Plan

As discussed in Chapter 6, TDM is a technique applied to peak travel times to help reduce the use of the transportation network system. A variety of methods are utilized in combination to yield a more efficient transportation system that does not rely upon building new or wider roads to accommodate traffic growth. The most appropriate TDM measure for the City of Huntington would be to institute a rideshare program, especially for travel between Huntington and Ontario.

The City should also encourage Employee Vanpools and investigate opportunities for park-n-ride and rideshare options. Partnering opportunities should be pursued with other agencies and organizations to determine potential locations for park-n-ride facilities. Possible locations for park-n-ride facilities include church parking lots which tend to be underutilized on weekdays and public resources such as certain ODOT rights-of-way.

Public Transportation Plan

Public transportation in Huntington consists primarily of a demand response system for local trips. This includes taxicab service and a senior citizen and special needs transport service. Public transportation for regional and long distance trips is provided by commercial bus service. Transit should be improved as discussed in Chapter 6.

Rail Service Plan

Baker County has no passenger rail service. Until May, 1997, AMTRAK service was available in Baker City; however, this line now serves only freight.

Most train traffic passing through Baker County is long-haul (750 miles or more) traffic originating from Portland or Seattle on its way east to major cities such as Chicago. Rail traffic in Baker County is not originating from, or affected by, the industries operating within Baker County.

Although the Union Pacific Railroad has a large rail switching yard in Huntington, and it was headquartered there before the second world war, Huntington is no longer a shipping point for the railroad. The city has no major employers and doesn't produce enough manufactured goods or agricultural products to make the city an active shipping center.

There are no railroad crossings anywhere in the City limits. This renders one-third of the land in the City north of the railroad tracks inaccessible from the rest of town. However, the railroad owns most of this area, and there are no plans to change this situation.

Air Service Plan

The City of Huntington has no airport. Development of a municipal airport is under discussion.

Pipeline Service

Currently, there is no local access to the pipelines that traverse Baker County and there are no future connections planned to the City of Huntington.

Water Transportation

Huntington has no water transportation services.

TRANSPORTATION SYSTEM PLAN IMPLEMENTATION PROGRAM

Implementation of the Huntington Transportation System Plan will require both changes to the Comprehensive Plan and zoning code and preparation of a 20-year Capital Improvement Plan. These actions will enable Huntington to address both existing and emerging transportation issues throughout the city in a timely and cost-effective manner. This implementation program is geared towards providing Huntington with the tools to amend the comprehensive plan and zoning ordinance to conform with the Oregon Transportation Planning Rule and to fund and schedule transportation system improvements.

One part of the implementation program is the formulation of a 20-year Capital Improvement Plan (CIP). The purpose of the CIP is to detail what transportation system improvements will be needed as Huntington grows and provide a process to fund and schedule the identified transportation system improvements. It is expected that Transportation System Plan Capital Improvement Plan can be integrated into the existing City CIP and the ODOT STIP. This integration is important since the Transportation System Plan proposes that both governmental agencies will fund some of the transportation improvement projects.

Model policy and ordinance language that conforms with the requirements of the Transportation Planning Rule is included in Chapter 9. The proposed ordinance amendments will require approval by the City Council.

20-Year Capital Improvement Program

The CIP is shown with the following priorities:

- High Priority (next 0 to 5 years)
- Medium Priority (5 to 10 years)
- Low Priority (10 to 20 years)

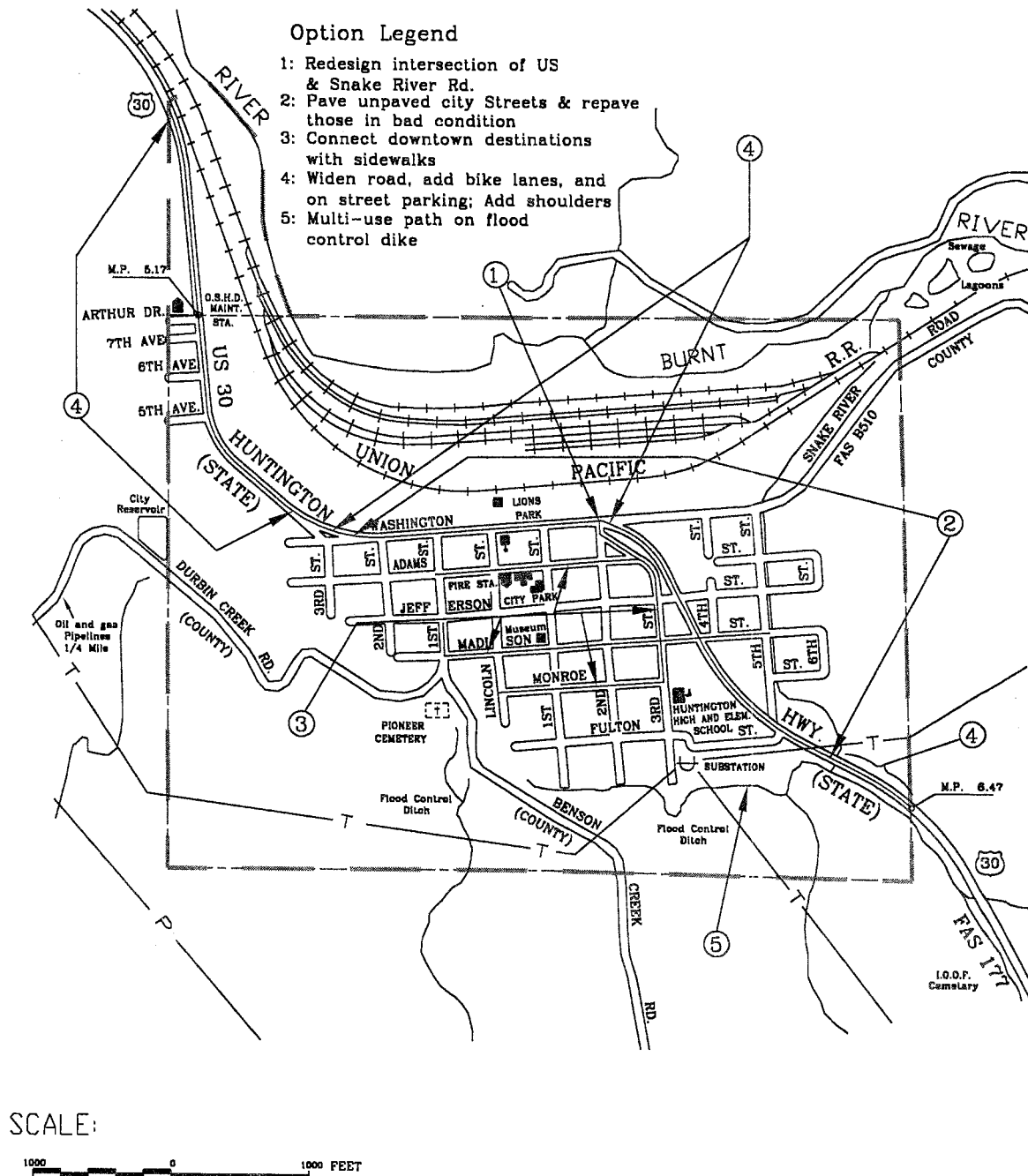
These priorities are based on current need, the relationship between transportation service needs, and the expected growth of the City. The following schedule indicates priorities and may be modified to reflect the availability of finances or the actual growth in population and employment.

The CIP is summarized in Table 7-4. Recommended transportation improvement options are shown in Figure 7-2.

The cost of each project as listed in the CIP is shown in 1999 dollars. These costs include design, construction, and some contingency costs. They are preliminary estimates and do not include right-of-way acquisition, water or sewer facilities, or detailed intersection design.

The City of Huntington has identified five capital projects in its CIP with an estimated cost of \$1,189,700.

CITY OF HUNTINGTON TRANSPORTATION SYSTEM PLAN



LEGEND:

——— URBAN GROWTH BOUNDARY

——— CITY LIMITS

FIGURE 7-2
Recommended Transportation
Improvement Options

In addition, two other improvements to the transportation system were identified: provision of public transit between Huntington and Ontario and participation in a rideshare program.

TABLE 7-4
PRIORITIZED CAPITAL IMPROVEMENT PROGRAM

Project Description ⁽¹⁾	Priority ⁽²⁾	Cost (\$)	Responsibility
1. Snake River Rd and Highway 30 intersection	High	\$25,000	State/County
2. Pave Unpaved Streets and Repave Those in Poor Condition	Medium to High	\$650,000	City/County/State
3. Connect Downtown Destinations With Sidewalks	Medium to High	\$174,000	City
4. Bikeway on US 30	Medium	\$323,200	State
5. Multi-Use Path on the Flood Control Dike	Low	\$17,500	City
Total		\$1,189,700	

(1) See Chapter 6 for a detailed description.

(2) High = 0-5 years; Medium = 5-10 years; Low = 10-20 years

It should be noted that the identified needs do not have identified funding and, therefore, are not committed and are subject to the City's and ODOT's abilities to meet these needs financially.

CHAPTER 8: FUNDING OPTIONS AND FINANCIAL PLAN

The Transportation Planning Rule requires Transportation System Plans to include an evaluation of the funding environment for recommended improvements. This evaluation must include a listing of all recommended transportation improvement projects, estimated costs to implement those improvements, and a review of potential funding mechanisms. Huntington's TSP identifies 5 specific capital improvement projects over the next 20 years. This section of this TSP provides an overview of some funding and financing options that may be available to the City of Huntington and Baker County to fund these improvements.

Pressures from increasing growth throughout much of Oregon have created an environment of planned improvements that remain unfunded. Huntington will need to work with Baker County and ODOT to finance the proposed new transportation projects over the 20-year planning horizon. The actual timing of these projects will be determined by the ability to fund them. This TSP assumes Huntington will grow at an average annual rate of 0.7 percent over the next 20 years. If population growth exceeds this rate, the improvements may need to be accelerated. Slower than expected growth will relax the improvement schedule.

HISTORICAL STREET IMPROVEMENT FUNDING SOURCES

In Oregon, state, county, and city jurisdictions work together to coordinate transportation improvements. Table 8-1 shows the distribution of road revenues for the different levels of government within the state by jurisdiction level. Although these numbers were collected and tallied in 1991, ODOT estimates that these figures accurately represent the current revenue structure for transportation-related needs.

TABLE 8-1
SOURCES OF ROAD REVENUES BY JURISDICTION LEVEL

Revenue Source	Jurisdiction Level			Statewide
	State	County	City	Total
State Road Trust	58%	38%	41%	48%
Local	0%	22%	55%	17%
Federal Road	34%	40%	4%	30%
Other	9%	0%	0%	4%

Source: ODOT 1993 Oregon Road Finance Study.

At the state level, nearly half (48 percent in Fiscal Year 1991) of all road-related revenues are attributable to the State Highway Fund, whose sources of revenue include fuel taxes, weight-mile taxes on trucks, and vehicle registration fees. As shown in the table, the State Road Trust is a considerable source of revenue for all levels of government. Federal sources (generally the Federal Highway Trust account and Federal Forest Revenues) comprise another 30 percent of all road-related revenue. Federal Forest Revenues account for a declining percentage and will soon disappear. The remaining sources of road-related revenues are generated locally, including property taxes, LIDs, bonds, traffic impact fees, road user taxes, general fund transfers, receipts from other local governments, and other sources.

As a state, Oregon generates 94 percent of its highway revenues from user fees, compared to an average of 78 percent among all states. This fee system, including fuel taxes, weight distance charges, and registration fees, is regarded as equitable because it places the greatest financial burden upon those who create the greatest need for

road maintenance and improvements. Unlike many states that have indexed user fees to inflation, Oregon has static road-revenue sources. For example, rather than assessing fuel taxes as a **percentage** of price per gallon, Oregon's fuel tax is a fixed amount (currently 24 cents) per gallon.

Transportation Funding in the City of Huntington

The City of Huntington receives road-related revenues from the state highway fund (labeled "State Gas Taxes" in Table 8-2), transfers and interest in the working fund balance. In the 1998-99 budget year, the City expected to also receive funds from grants and payments from a sidewalk project. The State Highway Fund accounts for an average of nearly one-half of the City's annual revenues, as shown in Table 8-4. Gas taxes, which are distributed to cities and counties on a population-allocation formula, are not expected to increase in future years. Due to issues relating to Ballot Measure 50 (discussed in additional detail later), the City of Huntington does not expect to be able to continue the transfers from the General Fund to the Street Fund.

TABLE 8-2
CITY OF HUNTINGTON TRANSPORTATION-RELATED REVENUES

	1995-1996 Actual	1996-1997 Actual	1997-1998 Budget	1998-1999 Budget
Beginning Fund Balance	\$3,278	\$8,672	\$16,000	
Resources				
Interest	\$2,854	\$3,324	\$2,500	\$3,000
State Gas Taxes	\$25,813	\$25,166	\$25,500	\$26,300
Baker County Video Lottery	\$3,000			
Transfers	\$10,000	\$15,000	\$10,000	\$30,000
Grants				\$25,000
Sidewalk Project Payments				\$2,000
Equipment Rental/Sale				\$180
Misc Revenue				\$570
	\$44,945	\$52,162	\$54,000	\$87,050

Source: City of Huntington.

Like most other Oregon cities, the City of Huntington accounts for its expenditures in its Street Fund in four broad categories: personal services, materials and services, capital outlay and interfund transfers. The first two categories, personal services and materials and services, capture the costs related primarily related to road maintenance and operations. Capital Outlay is generally the cost of system improvements. For the last several years, the City of Huntington has been able to apply an average of approximately 30 percent of its annual expenditures to capital outlay purposes, as shown in Table 8-3.

TABLE 8-3
CITY OF HUNTINGTON TRANSPORTATION-RELATED EXPENDITURES

	1995-1996	1996-1997	1997-1998	1998-1999
	Actual	Actual	Budget	Budget
Personal Services	\$15,552	\$18,756	\$20,500	\$14,200
Materials and Services	\$10,643	\$13,119	\$11,500	\$13,200
Capital Outlay	\$12,175	\$9,870	\$17,000	\$50,000
Transfers				\$3,000
Contingency			\$5,000	\$6,650
	\$38,370	\$41,745	\$54,000	\$87,050

Source: City of Huntington.

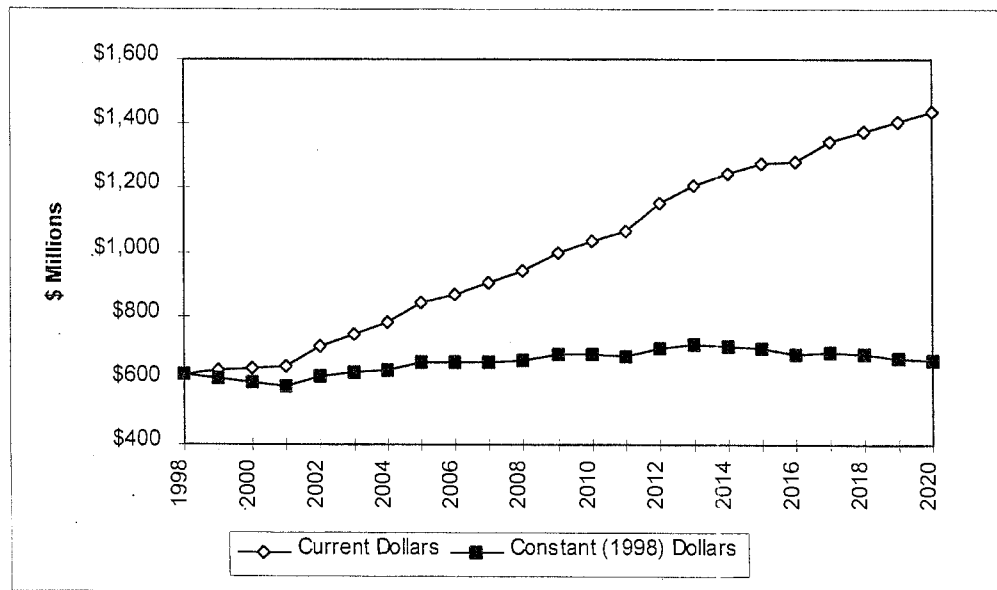
Transportation Revenue Outlook in the City of Huntington and Baker County

ODOT's policy section recommends certain assumptions in the preparation of transportation plans. In its Financial Assumptions document prepared in May 1998, ODOT projected the revenue of the State Highway Fund through year 2020. The estimates are based on not only the political climate, but also the economic structure and conditions, population and demographics, and patterns of land use. The latter is particularly important for state-imposed fees because of the goals in place under Oregon's TPR requiring a ten-percent reduction in per-capita vehicle miles of travel (VMT) in MPO planning areas by year 2015, and a 20-percent reduction by year 2025. This requirement will affect the 20-year revenue forecast from the fuel tax. ODOT recommends the following assumptions:

- Fuel tax will increase 1 cent per gallon per year (beginning in year 2002), with an additional 1 cent per gallon every fourth year;
- Vehicle registration fees would be increased by \$10 per year in 2002, and by \$15 per year in year 2012;
- Revenues will fall halfway between the revenue-level generated without TPR and the revenue level if TPR goals were fully met; and
- The revenues will be shared among the state, counties, and cities on a "50-30-20 percent" basis rather than the previous "60.05-24.38-15.17 percent" basis;
- Inflation occurs at an average annual rate of 3.6 percent

Figure 8-1 shows the forecast in both current-dollar and inflation-deflated constant (1998) dollars. As highlighted by the constant-dollar data, the highway fund is expected to increase more slowly than inflation early in the planning horizon until fuel-tax and vehicle-registration fee increases occur in year 2002, then increase somewhat faster than inflation through year 2015, then (again) more slowly than inflation.

FIGURE 8-1: STATE HIGHWAY FUND (IN MILLIONS OF DOLLARS)



Source: ODOT Financial Assumptions.

As the State Highway Fund is expected to remain a significant source of funding for the City of Huntington's street operations, the county is highly susceptible to changes in the State Highway Fund. In recent years, the State Highway Fund has supplied nearly one-half of the City of Huntington's total street fund revenue.

In order to analyze the County's ability to fund the recommended improvements from current sources, DEA applied the following assumptions:

- The State Highway Fund will continue to account for the bulk of the City's Street Fund;
- Interest and other local sources continue to provide stable but miniscule revenue streams; and
- The proportion of revenues available for capital expenditures for street improvements will be a small, and declining, proportion of overall street expenditures.

Applying these assumptions to the estimated level of the State Highway Fund resources, as recommended by ODOT, resources available to the City of Huntington for all operations, maintenance, and capital outlay purposes are estimated at between \$23,000 and \$29,000 annually (in current 1999 dollars), as shown Table 8-4.

TABLE 8-4
ESTIMATED RESOURCES AVAILABLE TO THE CITY OF HUNTINGTON
FROM STATE HIGHWAY FUND, 1999 DOLLARS

Year	Total Estimated Resources from State Highway Fund	Estimated Funds Available for Capital Outlay
1999	\$25,000	\$12,700
2000	\$24,000	\$12,500
2001	\$23,000	\$12,200
2002	\$25,000	\$12,900
2003	\$25,000	\$13,100
2004	\$25,000	\$13,200
2005	\$27,000	\$13,800
2006	\$26,000	\$13,700
2007	\$27,000	\$13,800
2008	\$27,000	\$13,800
2009	\$27,000	\$14,200
2010	\$27,000	\$14,200
2011	\$27,000	\$14,200
2012	\$28,000	\$14,700
2013	\$29,000	\$15,000
2014	\$29,000	\$14,800
2015	\$28,000	\$14,700
2016	\$27,000	\$14,300
2017	\$28,000	\$14,400
2018	\$27,000	\$14,200
2019	\$27,000	\$14,100

The amount actually received from the State Highway Fund will depend on a number of factors, including:

- the actual revenue generated by state gasoline taxes, vehicle registration fees, and other sources; and
- the population growth in the City of Huntington (since the distribution of state highway funds is based on an allocation formula which includes population).

The capital improvement money had historically been General Fund (property tax) money, which has been out by one-third since 1990 and is scheduled to decline further under Ballot Measure 50.

REVENUE SOURCES

In order to finance the recommended transportation system improvements requiring expenditure of capital resources, it may be necessary to consider a range of funding sources. Although the property tax has traditionally served as the primary revenue source for local governments, property tax revenue goes into general fund operations, and is typically not available for street improvements or maintenance. Despite this limitation, the use of alternative revenue funding has been a trend throughout Oregon as the full implementation of Measures 5 and 50 has significantly reduced property tax revenues. The alternative revenue

sources described in this section may not all be appropriate in Huntington. However, this overview is provided to illustrate the range of options currently available to finance transportation improvements during the next 20 years.

Property Taxes

Property taxes have historically been the primary revenue source for local governments. However, property tax revenue goes into general fund operations, and is not typically available for street improvements or maintenance. The dependence of local governments on this revenue source is partly due to the fact that property taxes are easy to implement and enforce. Property taxes are based on real property (i.e., land and buildings) which have a predictable value and appreciation to base taxes upon. This contrasts with income or sales taxes which can fluctuate with economic trends or unforeseen events.

Property taxes can be levied through: 1) tax base levies, 2) serial levies, and 3) bond levies. The most common method uses tax base levies which do not expire and are allowed to increase by six percent per annum. Serial levies are limited by amount and time they can be imposed. Bond levies are for specific projects and are limited by time based on the debt load of the local government or the project.

The historic dependence on property taxes is changing with the passage of Ballot Measure 5 in the early 1990s. Ballot Measure 5 limits the property tax rate for purposes other than payment of certain voter-approved general obligation indebtedness. Under full implementation, the tax rate for all local taxing authorities is limited to \$15 per \$1,000 of assessed valuation. As a group, all non-school taxing authorities are limited to \$10 per \$1,000 of assessed valuation. All tax base, serial, and special levies are subject to the tax rate limitation. Ballot Measure 5 requires that all non-school taxing districts' property tax rate be reduced if together they exceed \$10 per \$1,000 per assessed valuation by the county. If the non-debt tax rate exceeds the constitutional limit of \$10 per \$1,000 of assessed valuation, then all of the taxing districts' tax rates are reduced on a proportional basis. The proportional reduction in the tax rate is commonly referred to as compression of the tax rate.

Measure 47, an initiative petition, was passed by Oregon voters in November 1996. It is a constitutional amendment that reduces and limits property taxes and limits local revenues and replacement fees. The measure limits 1997-98 property taxes to the lesser of the 1995-96 tax minus 10 percent, or the 1994-95 tax. It limits future annual property tax increases to three percent, with exceptions. Local governments' lost revenue may be replaced only with state income tax, unless voters approve replacement fees or charges. Tax levy approvals in certain elections require 50 percent voter participation.

The state legislature created Measure 50, which retains the tax relief of Measure 47 but clarifies some legal issues. This revised tax measure was approved by voters in May 1997.

The League of Oregon Cities (LOC) estimated that direct revenue losses to local governments, including school districts, will total \$467 million in fiscal year 1998, \$553 million in 1999, and increase thereafter. The actual revenue losses to local governments will depend on actions of the Oregon Legislature. LOC also estimates that the state will have revenue gains of \$23 million in 1998, \$27 million in 1999, and increase thereafter because of increased personal and corporate tax receipts due to lower property tax deduction.

Measure 50 adds another layer of restrictions to those which govern the adoption of tax bases and levies outside the tax base, as well as Measure 5's tax rate limits for schools and non-schools and tax rate exceptions for voter

approved debt. Each new levy and the imposition of a property tax must be tested against a longer series of criteria before the collectible tax amount on a parcel of property can be determined.

Approximately \$10,000 of the general fund revenues are transferred to the street fund each year for general operations and maintenance.

According to City staff, the City of Huntington has the second-highest tax rate in Oregon, resulting from general obligation bonds issued to rebuild the City's water and sewer systems; these bonds will not be paid off until year 2020.

System Development Charges

System Development Charges (SDCs) are becoming increasingly popular for funding public works infrastructure needed for new local development. Generally, the purpose of a systems development charge is to allocate portions of the costs associated with capital improvements on the developments which increase demands on transportation, sewer or other infrastructure systems.

Local governments have the legal authority to charge property owners and/or developers fees for improving local public works infrastructure to meet the projected demand resulting from their developments. Charges are most often targeted toward improving community water, sewer, or transportation systems. In order to collect SDCs, cities and counties must have specific infrastructure plans in place that comply with state guidelines.

Typically, an SDC is collected when new building permits are issued. Transportation SDCs are based on trip generation of the proposed development. Residential calculations would be based on the assumption that a typical household will generate a given number of vehicle trips per day. Nonresidential use calculations are based on employee ratios for the type of business or industrial uses. SDC revenues would help fund the construction of transportation facilities necessitated by new development. Although SDCs have been mostly used in the fast-growing communities of the Willamette Valley, they are being explored by several eastern Oregon communities.

In Huntington, where there is little new construction, SDCs are not a practical means of funding transportation improvements.

State Highway Fund

Gas tax revenues received from the State of Oregon are used by all counties and cities to fund street and road construction and maintenance. In Oregon, the state collects gas taxes, vehicle registration fees, overweight/overheight fines and weight/mile taxes and returns a portion of the revenues to cities and counties through an allocation formula. The revenue share to cities is divided among all incorporated cities based on population. Like other Oregon cities, the City of Huntington uses its State Gas Tax allocation to fund street construction and maintenance.

Local Gas Taxes

The Oregon Constitution permits counties and incorporated cities to levy additional local gas taxes with the stipulation that the money generated from the taxes will be dedicated to street-related improvements and maintenance within the jurisdiction. At present, only a few local governments (including the cities of

Woodburn and The Dalles and Multnomah and Washington Counties) levy a local gas tax. However, a local gas tax would not be feasible in the City of Huntington without a gas station in the city. Also, with relatively few jurisdictions exercising this tax, an increase in the cost differential between gas purchased in Huntington and gas purchased in neighboring communities may encourage drivers to seek less expensive fuel elsewhere. With no gas stations in Huntington, a local gas tax is currently not an option.

Vehicle Registration Fees

The Oregon Vehicle Registration Fee is allocated to the state, counties and cities for road funding. Oregon counties are granted authority to impose a vehicle registration fee covering the entire county. The Oregon Revised Statutes would allow Baker County to impose a biannual registration fee for all passenger cars licensed within the county. Although both counties and special districts have this legal authority, vehicle registration fees have not been imposed by local jurisdictions. In order for a local vehicle registration fee program to be viable in Baker County, all the incorporated cities and the county would need to formulate an agreement which would detail how the fees would be spent on future street construction and maintenance.

Local Improvement Districts

The Oregon Revised Statutes allow local governments to form Local Improvement Districts (LIDs) to construct public improvements. LIDs are most often used by cities to construct localized projects such as streets, sidewalks or bikeways. The statutes allow formation of a district by either the city government or property owners. Cities that use LIDs are required to have a local LID ordinance that provides a process for district formation and payback provisions. Through the LID process, the cost of local improvements are generally spread out among a group of property owners within a specified area. The cost can be allocated based on property frontage or other methods such as trip generation. The types of allocation methods are only limited by the Local Improvement Ordinance. The cost of LID participation is considered an assessment against the property which is a lien equivalent to a tax lien. Individual property owners typically have the option of paying the assessment in cash or applying for assessment financing through the city. Since the passage of Ballot Measure 5, cities have most often funded local improvement districts through the sale of special assessment bonds.

Huntington enacted an LID “enabling” ordinance last year, replacing the practice of “Bancrofting” sidewalk improvements that was abolished by Ballot Measure 5, and set up its first LID, in which abutting property owners are responsible for the portion of sidewalk, curb and gutter, and street improvements along First Street W. that aren’t covered by the Small Cities Allotment grant. The City still had to provide the cash for the work, because of the inability to float bonds. Therefore, the ability of the City to do improvements via LID is dependent on the supply of cash, which is declining.

Grants and Loans

There are a variety of grant and loan programs available, most with specific requirements related to economic development or specific transportation issues, rather than for the general construction of new streets. Many programs require a match from the local jurisdiction as a condition of approval. Because grant and loan programs are subject to change as well as statewide competition, they should not be considered a secure long-term funding source for Huntington. Most of the programs available for transportation projects are funded and administered through ODOT and/or the Oregon Economic Development Department (OEDD). Some programs which may be appropriate for the Huntington are described below.

Bike-Pedestrian Grants

By law (ORS 366.514), all road street or highway construction or reconstruction projects must include facilities for pedestrians and bicyclists, with some exceptions. ODOT's Bike and Pedestrian Program administers two programs to assist in the development of walking and bicycling improvements: local grants, and Small-Scale Urban Projects. Cities and counties with projects on local streets are eligible for local grant funds. An 80 percent state/20 percent local match ratio is required. Eligible projects include curb extensions, pedestrian crossings and intersection improvements, widening shoulders and restriping existing roads for bike lanes. Projects on urban state highways with little or no right-of-way taking and few environmental impacts are eligible for Small-Scale Urban Project Funds. Both programs are limited to projects costing up to \$100,000. Projects which cost more than \$100,000, require ROW acquisition, or generate environmental impacts should be submitted to ODOT for inclusion in the STIP.

The contact person for the Bike and Pedestrian Program is Michael Ronkin, who can be reached at 986-3555.

Highway Bridge Rehabilitation or Replacement Program

With no bridges in the City of Huntington, this program would not apply to the City.

Transportation Safety Grant Program

Managed by ODOT's Transportation Safety Section (TSS), this program's objective is to reduce the number of transportation-related accidents and fatalities by coordinating a number of statewide programs. These funds are intended to be used as seed money, funding a program for three years. Eligible programs include those relating to impaired driving, occupant protection, youth, pedestrians, speed, enforcement, and bicycle and motorcycle safety. Every year, TSS produces a Highway Safety Plan that identifies the major safety programs, suggests countermeasures, and lists successful projects selected for funding, rather than granting funds through an application process.

The contact person for the Transportation Safety Grant Program is Troy Costales, who can be reached at 986-4192.

Highway Bridge Rehabilitation or Replacement Program

With no bridges in the City of Huntington, this program would not apply to the City.

Special Transportation Fund

The Special Transportation Fund (STF) awards funds to maintain, develop, and improve transportation services for people with disabilities and people over 60 years of age. Financed by a two-cent tax on each pack of cigarettes sold in the state, the annual distribution of funds is approximately \$5 million. Three-quarters of these funds are distributed to mass transit districts, transportation districts, and, where no such districts exist, to counties, on a per-capita formula. The remaining funds are distributed on a discretionary basis. The funds that come into Baker County are then allocated to the special transportation providers who make application to the STF Advisory Committee. The STF is the only dedicated revenue source in the State of Oregon for specialized transportation for the elderly and disabled. This funding source has been declining over the years due to the reduction in the amount of cigarette tax collected. There is awareness that new sources of revenue are needed.

In order for the City of Huntington to participate in this sort of program, the City needs some provision of disabled/senior transport, something the city currently lacks.

The contact person for the Special Transportation Fund is Gary Whitney, who can be reached at 986-3885.

Special Small City Allotment Program

The Special Small City Allotment Program (SCA) is restricted to cities with populations under 5,000 residents. Unlike some other grant programs, no locally funded match is required for participation. Grant amounts are limited to \$25,000 and must be earmarked for surface projects (drainage, curbs, sidewalks, etc.). However, the program does allow jurisdictions to use the grants to leverage local funds on non-surface projects if the grant is used specifically to repair the affected area. Criteria for the \$1 million in total annual grant funds include traffic volume, the five-year rate of population growth, surface wear of the road, and the time passed since the last SCA grant allocation to a particular jurisdiction.

The contact person for the Special City Allotment Program is Michael Augden, who can be reached at 986-3893.

Immediate Opportunity Grant Program

The Oregon Economic Development Department (OEDD) and ODOT collaborate to administer a grant program designed to assist local and regional economic development efforts. The program is funded to a level of approximately \$7 million per year through state gas tax revenues. The following are primary factors in determining eligible projects:

- Improvement of public roads;
- Inclusion of an economic development-related project of regional significance;
- Creation or retention of primary employment; and
- Ability to provide local funds (50/50) to match grant.

The maximum amount of any grant under the program is \$500,000. Local governments which have received grants under the program include Washington County, Multnomah County, Douglas County, the City of Hermiston, Port of St. Helens, and the City of Newport.

The contact person for Immediate Opportunity Fund programs is Mark Ford, who can be reached at 986-3463.

Oregon Special Public Works Fund

The Special Public Works Fund (SPWF) program was created by the 1995 State Legislature as one of several programs for the distribution of funds from the Oregon Lottery to economic development projects in communities throughout the State. The program provides grant and loan assistance to eligible municipalities primarily for the construction of public infrastructure which supports commercial and industrial development and results in permanent job creation or job retention. To be awarded funds, each infrastructure project must support businesses wishing to locate, expand, or remain in Oregon. SPWF awards can be used for

improvement, expansion, and new construction of public sewage treatment plants, water supply works, public roads, and transportation facilities.

While SPWF program assistance is provided in the form of both loans and grants, the program emphasizes loans in order to assure that funds will return to the State over time for reinvestment in local economic development infrastructure projects. Jurisdictions that have received SPWF funding for projects that include some type of transportation-related improvement include the Cities of Baker City, Bend, Cornelius, Forest Grove, Madras, Portland, Redmond, Reedsport, Toledo, Wilsonville, Woodburn, and Douglas County.

The contact person for the Oregon Special Public Works Fund is Betty Pongracz, who can be reached at 986-0136.

Oregon Transportation Infrastructure Bank

The Oregon Transportation Infrastructure Bank (OTIB) program is a revolving loan fund administered by ODOT to provide loans to local jurisdictions, including cities, counties, special districts, transit districts, tribal governments, ports, and state agencies. Eligible projects include construction of federal-aid highways, bridges, roads, streets, bikeways, pedestrian accesses, and right-of-way costs. Capital outlays such as buses, light-rail cars and lines, maintenance yards, and passenger facilities are also eligible. Given the limitations of Huntington's bondability (discussed later in this chapter), the City will have difficulty taking advantage of the Infrastructure Bank.

The contact person for the Oregon Transportation Infrastructure Bank is John Fink, who can be reached at 986-3922.

Community Transportation Program (CTP)

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

FTA Section 5311 Funds:

These are Federal Transit Act funds specifically for non-urbanized areas of 50,000 population or less. The funds are allocated based on a formula of population, matching local funds, and amount of rides, then distributed to local government and quasi-government entities who apply. In Baker County, Community Connection has been, and continues to act as the public transit provider contractor who receives these funds for operation, through Baker County.

Job Access and Reverse Commute Grants Program

These are Federal Transit Act funds. These funds are provided to establish a regional approach to job access. There are two major goals of this program. The first is to provide transit in urban, suburban and rural areas.

The second is to provide Welfare to Work clients and low income workers with access to employment opportunities.

ODOT Funding Options

The State of Oregon provides funding for all highway related transportation projects through the Statewide Transportation Improvement Program (STIP) administered by the Oregon Department of Transportation. The STIP outlines the schedule for ODOT projects throughout the state. The STIP, which identifies projects for a three-year funding cycle, is updated on an annual basis. In developing this funding program, ODOT must verify that the identified projects comply with the Oregon Transportation Plan (OTP), ODOT Modal Plans, Corridor Plans, local comprehensive plans, and TEA-21 Planning Requirements. The STIP must fulfill planning requirements for a staged, multi-year, statewide, intermodal program of transportation projects. Specific transportation projects are prioritized based on a review of the planning requirements and the different state plans. ODOT consults with local jurisdictions before highway related projects are added to the STIP.

The highway-related projects identified in Huntington's TSP will be considered for future inclusion on the STIP. The timing of including specific projects will be determined by ODOT based on an analysis of all the project needs within Region 5. The City of Huntington, Baker County, and ODOT will need to communicate on an annual basis to review the status of the STIP and the prioritization of individual projects within the project area. Ongoing communication will be important for the city, county, and ODOT to coordinate the construction of both local and state transportation projects.

ODOT also has the option of carrying out some highway improvements as part of its ongoing highway maintenance program. Types of road construction projects that can be included within the ODOT maintenance programs are intersection realignments, additional turn lanes, and striping for bike lanes. Maintenance related construction projects are usually conducted by ODOT field crews using state equipment. The maintenance crews do not have the staff or specialized road equipment needed for large construction projects.

An ODOT funding technique that will likely have future application to Huntington's TSP is the use of state and federal transportation dollars for off-system improvements. Until the passage and implementation of ISTEA, state and federal funds were limited to transportation improvements within highway corridors. ODOT now has the authority and ability to fund transportation projects that are located outside the boundaries of the highway corridors. The criteria for determining what off-system improvements can be funded has not yet been clearly established. It is expected that this new funding technique will be used to finance local system improvements that reduce traffic on state highways or reduce the number of access points for future development along state highways.

FINANCING TOOLS

In addition to funding options, the recommended improvements listed in this plan may benefit from a variety of financing options. Although often used interchangeably, the words financing and funding are not the same. Funding is the actual generation of revenue by which a jurisdiction pays for improvements. Some examples of funding include the sources discussed above: property taxes, SDCs, fuel taxes, vehicle registration fees, LIDs, and various grant programs. In contrast, financing refers to the collecting of funds through debt obligations.

There are a number of debt financing options available to the City of Huntington. The use of debt to finance capital improvements must be balanced with the ability to make future debt service payments and to deal with the impact on its overall debt capacity and underlying credit rating. Again, debt financing should be viewed not as a source of funding, but as a time shifting of funds. The use of debt to finance these transportation-system improvements is appropriate since the benefits from the transportation improvements will extend over a period of years. If such improvements were to be tax financed immediately, a large short-term increase in the tax rate would be required. By utilizing debt financing, local governments spread the burden of the costs of these improvements to more of the people who are likely to benefit from the improvements and lower immediate payments.

According to City staff, the City auditor has advised the city that an “unfunded actuarial liability” imposed by the Public Employees Retirement System will prevent the City of issuing bonds for some time. This limitation will have implications on the applicability of these financing options to the City of Huntington.

General Obligation Bonds

General obligation (GO) bonds are voter-approved bond issues which represent the least expensive borrowing mechanism available to municipalities. GO bonds are typically supported by a separate property tax levy specifically approved for the purposes of retiring debt. The levy does not terminate until all debt is paid off. The property tax levy is distributed equally throughout the taxing jurisdiction according to assessed value of property. General obligation debts are typically used to make public improvement projects that will benefit the entire community.

State statutes require that the general obligation indebtedness of a city not exceed three percent of the real market value of all taxable property in the city. Since general obligation bonds would be issued subsequent to voter approval, they would not be restricted to the limitations set forth in Ballot Measures 5, 47, and 50. Although each new bond must be voter approved, Measure 47 and 50 provisions are not applicable to outstanding bonds, unissued voter-approved bonds, or refunding bonds.

According to City staff, the City of Huntington has the second-highest tax rate in Oregon, resulting from general obligation bonds issued to rebuild the City’s water and sewer systems; these bonds will not be paid off until year 2020.

Limited Tax Bonds

Limited tax general obligation bonds (LTGOs) are similar to general obligation bonds in that they represent an obligation of the municipality. However, a municipality’s obligation is limited to its current revenue sources and is not secured by the public entity’s ability to raise taxes. As a result, LTGOs do not require voter approval. However, since the LTGOs are not secured by the full taxing power of the issuer, the limited tax bond represents a higher borrowing cost than general obligation bonds. The municipality must pledge to levy the maximum amount under constitutional and statutory limits, but not the unlimited taxing authority pledged with GO bonds. Because LTGOs are not voter approved, they are subject to the limitations of Ballot Measures 5, 47, and 50.

Bancroft Bonds

Under Oregon Statute, municipalities are allowed to issue Bancroft bonds which pledge the city's full faith and credit to assessment bonds. The bonds become general obligations of the city but are paid with assessments. Historically, these bonds provided cities with the ability to pledge their full faith and credit in order to obtain a lower borrowing cost without requiring voter approval. However, since Bancroft bonds are not voter approved, taxes levied to pay debt service on them are subject to the limitations of Ballot Measures 5, 47, and 50. As a result, since 1991, Bancroft bonds have not been used by municipalities that were required to compress their tax rates.

FUNDING REQUIREMENTS

Huntington's TSP identifies capital improvements and transit and rideshare programs recommended during the next 20 years to address safety and access problems and to expand the transportation system to support a growing population and economy. This TSP identifies 5 capital improvement projects, classified into three implementation phases:

- High Priority: to be implemented within 5 years;
- Medium Priority: to be implemented between 5 and 10 years; and
- Low Priority: to be implemented between years 10 and 20.

Estimated costs by the identified capital projects by implementation phase were presented previously in Chapter 7 in Table 7-4. One capital project is classified as a high-priority project, with implementation to occur within 5 years. At this time, no cost estimate has been provided for this project to address the intersection of Snake River Road and Highway 30. Two projects have been identified as projects which are classified between high and medium priority. These projects include paving unpaved streets and repairing those streets in poor condition (with an estimated cost of \$650,000), and connecting downtown destinations with sidewalks (estimated to cost \$174,000). Based on the estimated costs for implementing these projects, the City of Huntington will face a severe funding deficit in attempting to implement this TSP, as shown in Table 8-5.

TABLE 8-5
CAPITAL FUNDING BALANCE WITHOUT STATE/FEDERAL FUNDING

	Available	Needed	Surplus (Deficit)	Cumulative Surplus (Deficit)
High Priority	\$63,400	\$849,000	(\$785,600)	(\$785,600)
Medium Priority	\$68,300	\$323,200	(\$254,900)	(\$1,040,500)
Low Priority	\$158,800	\$17,500	(\$141,300)	(\$899,200)

Based on this preliminary analysis, further analysis of several state and federal grant programs is recommended. Several of the identified projects may be eligible for state and federal grant funding, as described earlier in this chapter. For example, the paving project may be eligible for state and federal modernization funds. In addition, the sidewalk project may be eligible for bike and pedestrian funding. The final two capital improvement projects, a medium-priority project to add a bikeway on US 30 and a low-priority project to add a multi-use path on the flood control dike, may also be eligible for bike and pedestrian funding. The City of Huntington may be able to secure state and federal matches totaling up to 90 percent of a project's cost, for

eligible projects. Table 8-6 shows the funding balance if the City is able to secure alternative funding for the high- and medium-priority projects.

TABLE 8-6
CAPITAL FUNDING BALANCE WITH STATE AND FEDERAL FUNDING

	Available	Needed	Surplus (Deficit)	Cumulative Surplus (Deficit)
High Priority	\$63,400	\$84,900	(\$21,500)	(\$21,500)
Medium Priority	\$68,300	\$32,300	\$36,000	\$14,500
Low Priority	\$158,800	\$1,750	\$157,050	\$171,550

Because the high priority needs do not have identified funding, they are not committed and are subject to the City's and ODOT's abilities to meet these needs financially.

The City of Huntington will need to further analyze the applicability of such state and federal funding sources, and continue to work with Baker County and ODOT in order to fully implement this TSP.

CHAPTER 9: IMPLEMENTATION OF TRANSPORTATION SYSTEM PLAN

Implementation of the Huntington Transportation System Plan will require both changes to the city comprehensive plan and zoning code and preparation of a 20-year Capital Improvement Plan. These actions will enable Huntington to address both existing and emerging transportation issues throughout the urban area in a timely and cost-effective manner. This implementation program is geared towards providing Huntington with the tools to amend the comprehensive plan and zoning ordinance to conform with the Oregon Transportation Planning Rule and to fund and schedule transportation system improvements. It is recommended that the City of Huntington take the following actions to adopt and implement the TSP.

1. Amend findings and policies of the Huntington Comprehensive Plan as detailed in this chapter.
2. Amend the Huntington Zoning Ordinance as detailed in this chapter.
3. Amend the Huntington Subdivision Ordinance as detailed in this chapter.
4. Incorporate the prioritized capital improvement plan, detailed in Chapter 8, into the existing Huntington Capital Improvement and Public Facilities Plans.

RECOMMENDED COMPREHENSIVE PLAN AMENDMENTS

Revise the Findings, Policies, and Conclusions of Chapter 12 (Transportation) with the following:

(Note: the following recommended revisions are generic and have not yet been edited to fit specifically into the Huntington Comprehensive Plan.)

Finding: The Transportation Planning Rule (660-12-045(3)) requires that urban areas plan for bicycling and walking as part of the overall transportation system.

Policy: The City of Huntington shall provide safe and convenient pedestrian and bicycle circulation through the following actions:

- Development of a network of streets, accessways, and other improvements, including bikeways, walkways, and safe street crossings to promote safe and convenient bicycle and pedestrian circulation within the community.
- Streets and accessways shall be provided to provide direct and convenient access to major activity centers, including downtown, schools, shopping areas, and community centers (ORS 660-12-045(3)(b)).
- Bikeways shall be included on all new arterials and major collectors within the Urban Growth Boundary (ORS 660-12-045(3)(b)(B)).
- Walkways shall be included on all new streets within the Urban Growth Boundary (ORS 660-12-045(3)(b)(A)).
- Retrofit existing streets with walkways on a prioritized schedule as shown in the Transportation System Plan.

- Bikeways and walkways shall be designed and constructed following the guidelines of the Oregon Bicycle and Pedestrian Plan.
- Bicycle parking facilities be provided at all new residential multifamily developments of four units or more, commercial, industrial, recreational, and institutional facilities.

Finding: Section 660-12-045(1) of the Transportation Planning Rule requires that cities and counties amend their land use regulations to conform with the jurisdiction's adopted Transportation System Plan. This section of the Transportation Planning Rule is intended to clarify the approval process for transportation-related projects. The approval process for different types of projects should be clear.

Policy: The City of Huntington will provide a clear and objective process for the approval of transportation projects.

Policy: The Huntington Transportation System Plan is an element of the City of Huntington Comprehensive Plan. As such, it identifies the general location of transportation improvements and allows the following actions without land use review:

- Changes in the specific alignment of proposed public road and highway projects are permitted without plan amendment if the new alignment falls within a transportation corridor identified in the Transportation System Plan.
- Operation, maintenance, repair, and preservation of existing transportation facilities, except where specifically regulated.
- Dedication of right-of-way, authorization of construction and the construction of facilities and improvements, for improvements designated in the Transportation System Plan, the classification of the roadway and approved road standards.
- Changes in the frequency of transit, rail and airport services that are consistent with the Transportation System Plan.

Policy: Draft Environmental Impact Statements (EIS) or Environmental Assessments (EA) will serve as the documentation for State projects that require local land use review, if local review is required in the following circumstances:

- Where the project is consistent with the Transportation System Plan, formal review of the draft EIS or EA and concurrent or subsequent compliance with applicable development standards or conditions;
- Where the project is not consistent with the Transportation System Plan, formal review of the draft EIS or EA and concurrent completion of necessary goal exceptions or plan amendments.

Finding: Section 60-12-045(2) of the Transportation Planning Rule requires that jurisdictions protect future operation of transportation corridors. In addition, the proposed function of a future roadway and other transportation facilities, such as airports, must be protected from incompatible land uses.

Policy: The City of Huntington will protect the operation of existing and future transportation facilities as identified in the Transportation System Plan through the use of one or more of the following actions:

- Consider the impact of all land use decisions on existing or planned transportation facilities.

- Protect the function of existing or planned transportation corridors through appropriate land use regulations.
- Consider the potential to establish or maintain accessways, paths, or trails prior to the vacation of any public easement or right-of-way.
- Preserve right-of-way for planned transportation facilities through exactions, voluntary dedication, or setbacks.

Finding: Section 660-12-045(2)(d) of the Transportation Planning Rule requires that jurisdictions develop a process for the coordinated review of land use decisions affecting transportation facilities.

Policy: The City of Huntington will provide coordinated review of land use decisions affecting transportation through the use of one or more of the following actions:

- Coordinate with ODOT to implement the highway improvements listed in the STIP that are consistent with the Transportation System Plan and comprehensive plan.
- Consider the findings of ODOT's draft Environmental Impact Statements and Environmental Assessments as integral parts of the land use decision-making procedures.

RECOMMENDED ADDITIONS TO THE ZONING ORDINANCE

Add the following to Article 2 (Zoning Regulations):

Section 2.040. Definitions.

“Accessway.” A walkway that provides pedestrian and bicycle passage either between streets or from a street to a building or other destination such as a school, park, or transit stop. Accessways generally include a walkway and additional land on either side of the walkway, often in the form of an easement or right-of-way, to provide clearance and separation between the walkway and adjacent uses. Accessways through parking lots are generally physically separated from adjacent vehicle parking or parallel vehicle traffic by curbs or similar devices and include landscaping, trees, and lighting. Where accessways cross driveways, they are generally raised, paved, or marked in a manner that provides convenient access for pedestrians.

“Bicycle.” A vehicle designed to operate on the ground on wheels, propelled solely by human power, upon which any person or persons may ride, and with two tandem wheels at least 14 inches in diameter. An adult tricycle is considered a bicycle.

“Bicycle facilities.” A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities and all bikeways.

“Bikeway.” Any road, path, or way that is some manner specifically open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are shared with other transportation modes. The five types of bikeways are:

- 1) “Multi-use path.” A paved 10 to 12-foot wide way that is physically separated from motorized vehicular traffic; typically shared with pedestrians, skaters, and other non-motorized users.

- 2) "Bike lane." A 4 to 6-foot wide portion of the roadway that has been designated by permanent striping and pavement markings for the exclusive use of bicycles.
- 3) "Shoulder bikeway." The paved shoulder of a roadway that is 4 feet or wider; typically shared with pedestrians in rural areas.
- 4) "Shared roadway." A travel lane that is shared by bicyclists and motor vehicles.
- 5) "Trail." An unpaved path that accommodates all-terrain bicycles; typically shared with pedestrians.

Parcel." A division of land comprised of one or more lots in contiguous ownership.

"Pedestrian facilities." A general term denoting improvements and provisions made to accommodate or encourage walking, including walkways, accessways, crosswalks, ramps, paths, and trails.

"Reasonable access." The minimum number of access connections, direct or indirect, necessary to provide safe access to and from the roadway, as consistent with the purpose and intent of this ordinance and any applicable plans and policies of the city of Huntington.

"Reasonably direct." A route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.

"Safe and convenient." Routes that are reasonably free from hazards, and provide a reasonably direct route of travel between destinations, considering that the optimum travel distance is one-half mile for pedestrians and three miles for bicyclists.

"Stub-out (stub-street)." A portion of a street or cross access drive used as an extension to an abutting property that may be developed in the future.

"Walkway." A hard-surfaced area intended and suitable for pedestrians, including walkways and the surfaced portions of accessways.

Insert the following into Article 9 (Off-Street Parking)

Section 9.020. Bicycle parking.

- 1) A minimum of 2 bicycle parking spaces per new commercial, business, or industrial use shall be required, except as noted in Section 9.020(2), below.
- 2) The following Special Minimum Standards shall be considered as supplemental requirements for the number of required bicycle parking spaces.
 - a) Multi-Family Residences. Every residential use of four (4) or more dwelling units shall provide at least one sheltered bicycle parking space for each unit. Sheltered bicycle parking spaces may be located within a garage, storage shed, basement, utility room or similar area. In those instances in which the residential complex has no garage or other easily accessible storage unit, the required bicycle parking spaces shall be sheltered under an eave, overhang, an independent structure, or similar cover.
 - b) Parking Lots. All public and commercial parking lots and parking structures shall provide a minimum of one bicycle parking space for every 10 motor vehicle parking spaces.

- c) Schools. Elementary and middle schools, both private and public, shall provide one bicycle parking space for every 10 students and employees. High schools shall provide one bicycle parking space for every 5 students and employees. All spaces shall be sheltered under an eave, overhang, independent structure, or similar cover.
- d) Downtown. In downtown, bicycle parking for customers shall be provided on the sidewalk but out of the pedestrian area at a rate of at least one space per use.

Insert the following after existing Article 9:

Article 10. Transportation Improvements.

SECTION 10.010. Uses Permitted Outright. Except where otherwise specifically regulated by this ordinance, the following improvements are permitted outright:

- 1) Normal operation, maintenance, repair, and preservation activities of existing transportation facilities.
- 2) Installation of culverts, pathways, medians, fencing, guardrails, lighting, and similar types of improvements within the existing right-of-way.
- 3) Projects specifically identified in the Transportation System Plan as not requiring further land use regulation.
- 4) Landscaping as part of a transportation facility.
- 5) Emergency measures necessary for the safety and protection of property
- 6) Acquisition of right-of-way for public roads, highways, and other transportation improvements designated in the Transportation System Plan except for those that are located in exclusive farm use or forest zones.
- 7) Construction of a street or road as part of an approved subdivision or land partition consistent with the applicable land division ordinance.

SECTION 10.020. Transportation Uses Subject to Approval

- 1) Construction, reconstruction, or widening of highways, roads, bridges or other transportation projects that are: (1) not improvements designated in the Transportation System Plan or (2) not designed and constructed as part of a subdivision or planned development subject to conditional use permit review, which shall comply with the Transportation System Plan and applicable standards, and shall address the following criteria. For State projects that require an Environmental Impact Statement (EIS) or EA (Environmental Assessment), the draft EIS or EA shall be reviewed and used as the basis for findings to comply with the following criteria:
 - a) The project is designed to be compatible with existing land use patterns, including noise, safety, and zoning.
 - b) The project is designed to minimize unavoidable environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities.

- c) The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features.
 - d) Project includes provision for bicycle and pedestrian circulation as consistent with the comprehensive plan and other requirements of this ordinance.
- 2) If review under this Section indicates that the use or activity is inconsistent with the Transportation System Plan, the procedure for a plan amendment shall be undertaken prior to or in conjunction with the conditional permit review.

Insert the following into existing Article 13 (Amendments):

SECTION 13.030: Amendments Affecting Transportation Facilities.

- 1) A land use regulation significantly affects a transportation facility if it:
 - a) Changes the functional classification of an existing or planned transportation facility;
 - b) Changes standards implementing a functional classification system;
 - c) Allows types or levels of land use that would result in levels of travel or access that are inconsistent with the functional classification of a transportation facility; or
 - d) Would reduce the level of service of the facility below the minimum acceptable level identified in the Transportation System Plan.
- 2) Land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the function, capacity, and level of service of the facility identified in the Transportation System Plan. This shall be accomplished by one of the following:
 - a) Limiting allowed land uses to be consistent with the planned function of the transportation facility;
 - b) Amending the Transportation System Plan to ensure that existing, improved, or new transportation facilities are adequate to support the proposed land uses consistent with the requirement of the Transportation Planning Rule; or,
 - c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes.

RECOMMENDED REVISIONS TO THE SUBDIVISION ORDINANCE

Add the following language:

Section 2.010. Definitions.

“Access.” A way or means of approach to provide pedestrian, bicycle, or motor vehicular entrance or exit to a property.

“Access connection.” Any driveway, street, turnout or other means of providing for the movement of vehicles to or from the public roadway system.

“Access management.” The process of providing and managing access to land development while preserving the regional flow of traffic in terms of safety, capacity, and speed.

“Accessway.” A walkway that provides pedestrian and bicycle passage either between streets or from a street to a building or other destination such as a school, park, or transit stop. Accessways generally include a walkway and additional land on either side of the walkway, often in the form of an easement or right-of-way, to provide clearance and separation between the walkway and adjacent uses. Accessways through parking lots are generally physically separated from adjacent vehicle parking or parallel vehicle traffic by curbs or similar devices and include landscaping, trees, and lighting. Where accessways cross driveways, they are generally raised, paved, or marked in a manner that provides convenient access for pedestrians.

“Bicycle.” A vehicle designed to operate on the ground on wheels, propelled solely by human power, upon which any person or persons may ride, and with two tandem wheels at least 14 inches in diameter. An adult tricycle is considered a bicycle.

“Bicycle facilities.” A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities and all bikeways.

“Bikeway.” Any road, path, or way that is some manner specifically open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are shared with other transportation modes. The five types of bikeways are:

- 1) “Multi-use path.” A paved 10 to 12-foot wide way that is physically separated from motorized vehicular traffic; typically shared with pedestrians, skaters, and other non-motorized users.
- 2) “Bike lane.” A 4 to 6-foot wide portion of the roadway that has been designated by permanent striping and pavement markings for the exclusive use of bicycles.
- 3) “Shoulder bikeway.” The paved shoulder of a roadway that is 4 feet or wider; typically shared with pedestrians in rural areas.
- 4) “Shared roadway.” A travel lane that is shared by bicyclists and motor vehicles.
- 5) “Trail.” An unpaved path that accommodates all-terrain bicycles; typically shared with pedestrians.

“Cross access.” A service drive providing vehicular access between two or more contiguous sites so the driver need not enter the public street system.

“Easement.” A grant of one or more property rights by a property owner to or for use by the public, or another person or entity.

“Frontage road.” A public or private drive which generally parallels a public street between the right-of-way and the front building setback line. The frontage road provides access to private properties while separating them from the arterial street.

“Functional classification.” A system used to group public roadways into classes according to their purpose in moving vehicles and providing access.

“Joint access.” A driveway connecting two or more contiguous sites to the public street system.

“Lot, flag.” A lot not meeting minimum frontage requirements and where access to the public road is by a narrow, private right-of-way line.

“Parcel.” A division of land comprised of one or more lots in contiguous ownership.

“Pedestrian facilities.” A general term denoting improvements and provisions made to accommodate or encourage walking, including walkways, accessways, crosswalks, ramps, paths, and trails.

“Reasonable access.” The minimum number of access connections, direct or indirect, necessary to provide safe access to and from the roadway, as consistent with the purpose and intent of this ordinance and any applicable plans and policies of the city of Huntington.

“Reasonably direct.” A route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for likely users.

“Safe and convenient.” Routes that are reasonably free from hazards, and provide a reasonably direct route of travel between destinations, considering that the optimum travel distance is one-half mile for pedestrians and three miles for bicyclists.

“Stub-out (stub-street).” A portion of a street or cross access drive used as an extension to an abutting property that may be developed in the future.

“Walkway.” A hard-surfaced area intended and suitable for pedestrians, including walkways and the surfaced portions of accessways.

Add a new Section 4.010 Access Management and Street Connectivity

(1) Purpose. The purpose of this ordinance is to manage access to land development while preserving the movement of people and goods in terms of safety, capacity, functional classification, and level of service as categorized in the Transportation System Plan. This ordinance shall apply to all arterials and collectors within City of Huntington and to all properties that abut these roadways.

(2) Joint Use Driveways and Cross Access.

- i) Adjacent commercial or office properties classified as major traffic generators (i.e. shopping plazas, office parks), shall provide a cross access drive and pedestrian access to allow circulation between sites.
- ii) A system of joint use driveways and cross access easements shall be established wherever feasible and shall incorporate the following:
 - 1) A continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the access management classification system and standards.
 - 2) A design speed of 10 mph and a maximum width of 22 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;
 - 3) Stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross-access via a service drive;
 - 4) A unified access and circulation system plan for coordinated or shared parking areas.

- 5) Shared parking areas shall be permitted a reduction in required parking spaces if peak demands do not occur at the same time periods.

iii) Pursuant to this section, property owners shall:

- 1) Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;
- 2) Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the City of Huntington and pre-existing driveways will be closed and eliminated after construction of the joint-use driveway;
- 3) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners.
- 4) The City of Huntington may modify or waive the requirements of this section where the characteristics or layout of abutting properties would make the development of a unified or shared access and circulation system impractical.

(3) Access Connection and Driveway Design. Driveways shall meet the following standards:

- i) If the driveway is a one way in or one way out drive, then the driveway shall be a minimum width of 10 feet and shall have appropriate signage designating the driveway as a one way connection.
- ii) For two-way access, each lane shall have a minimum width of 10 feet and a maximum width of 12 feet.
 - 1) Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view. Construction of driveways along acceleration or deceleration lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts.
 - 2) The length of driveways shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation.

(4) Nonconforming Access Features. Legal access connections in place as of (date of adoption) that do not conform with the standards herein are considered nonconforming features and shall be brought into compliance with applicable standards under the following conditions:

- i) When new access connection permits are requested;
- ii) Change in use or enlargements or improvements that will increase trip generation.

(5) Reverse Frontage

- i) Lots that front on more than one street shall be required to locate motor vehicle accesses on the street with the lower functional classification.
- ii) When a residential subdivision is proposed that would abut an arterial, it shall be designed to provide through lots along the arterial with access from a frontage road or interior local road. Access rights of these lots to the arterial shall be dedicated to the City of Huntington and recorded with the deed.

A berm or buffer yard may be required at the rear of through lots to buffer residences from traffic on the arterial. The berm or buffer yard shall not be located with the public right-of-way.

(6) Flag Lot Standards

- i) Flag lots shall not be permitted when the result would be to increase the number of properties requiring direct and individual access connections to the State Highway System or other arterials.
- ii) Flag lots may be permitted for residential development when necessary to achieve planning objectives, such as reducing direct access to roadways, providing internal platted lots with access to a residential street, or preserving natural or historic resources, under the following conditions:
 - 1) Flag lot driveways shall be separated by at least twice the minimum frontage requirement of that zoning district.
 - 2) The flag driveway shall have a minimum width of 10 feet and maximum width of 20 feet.
 - 3) In no instance shall flag lots constitute more than 10 percent of the total number of building sites in a recorded or unrecorded plat, or three lots or more, whichever is greater.
 - 4) The lot area occupied by the flag driveway shall not be counted as part of the required minimum lot area of that zoning district.
 - 5) No more than one flag lot shall be permitted per private right-of-way or access easement.

(7) Lot Width-to-Depth Ratios. To provide for proper site design and prevent the creation of irregularly shaped parcels, the depth of any lot or parcel shall not exceed 3 times its width (or 4 times its width in rural areas) unless there is a topographical or environmental constraint or an existing man-made feature such as a railroad line.

(8) Shared Access. Subdivisions with frontage on the state highway system shall be designed into shared access points to and from the highway. Normally a maximum of two accesses shall be allowed regardless of the number of lots or businesses served.

- i) If access off of a secondary street is possible, then access should not be allowed onto the state highway. If access off of a secondary street becomes available, then conversion to that access is encouraged, along with closing the state highway access.
- ii) New direct accesses to individual one and two family dwellings shall be prohibited on all state highways except district-level state highways.

(9) Connectivity. The street system of proposed subdivisions shall be designed to connect with existing, proposed, and planned streets outside of the subdivision as provided in this Section.

- i) Wherever a proposed development abuts unplatted land or a future development phase of the same development, street stubs shall be provided to provide access to abutting properties or to logically extend the street system into the surrounding area. All street stubs shall be provided with a temporary turn-around unless specifically exempted by the City Engineer and the restoration and extension of the street shall be the responsibility of any future developer of the abutting land.
- ii) Minor collector and local residential streets shall connect with surrounding streets to permit the convenient movement of traffic between residential neighborhoods or facilitate emergency access and

evacuation. Connections shall be designed to avoid or minimize through traffic on local streets. Appropriate design, such as narrow streets, traffic control such as four-way stops, and traffic calming measures are the preferred means of discouraging through traffic.

(10) Pedestrian and Bicycle Circulation.

- i) On-site facilities shall be provided that accommodate safe and convenient pedestrian and bicycle access within new subdivisions, multi-family developments, planned development, shopping centers, and commercial districts, and connecting to adjacent streets. Residential developments shall include streets with walkways and accessways. Pedestrian circulation through parking lots shall be provided.
- ii) Bikeways shall be required along arterials. Walkways shall be required along arterials, collectors, and local streets.

(12) Cul-de-Sacs and Accessways.

- i) Cul-de-sacs or permanent dead-end streets may be used as part of a development plan; however, through streets are encouraged except where topographical, environmental, or existing adjacent land use constraints make connecting streets infeasible. Where cul-de-sacs are planned, accessways shall be provided connecting the ends of cul-de-sacs to each other, to other streets, or to neighborhood activity centers.
- ii) Accessways for pedestrians and bicyclists shall be 10 feet wide and located within a 20-foot-wide right-of-way or easement. If the streets within the subdivision are lighted, the accessways shall also be lighted. Stairs or switchback paths may be used where grades are steep.

Add a new Section 4.020 Traffic Impact Studies

- 1) Purpose: An applicant shall submit a traffic impact study when a proposed land use action affects a transportation facility. The following vehicle trip generation thresholds shall determine the level and scope of transportation analysis required for a new or expanded development:
 - i) Transportation Impact Study: If a proposed development will generate 400 or more daily trip ends*, then a Transportation Impact Study (TIS) shall be required. The requirements of a TIS shall be established by ODOT and the County or City Planning Department.
 - ii) Transportation Site Review: If a proposed development will generate 100 or more daily trip ends but less than 400 daily trip ends, then a Transportation Site Review shall be required. The requirements of a TSR shall be established by ODOT and the County or City Planning Department.
 - iii) Projects that generate less than 100 daily trip ends may also be required to provide traffic analysis when, in the opinion of ODOT and the County Planning Department, a capacity problem and/or safety concern is caused and/or is adversely impacted by the development. ODOT and the County or City Planning Department shall determine the scope of this special analysis.

* Trip ends as defined by the Institute of Transportation Engineers (ITE), Trip Generation Manual, 6th Edition (or subsequent document updates), or trip generation studies of comparable uses prepared by an engineer.

Revise Section 4.020 (Standards for Land Divisions) as follows:

- (1) Each lot or parcel created shall have direct access to an existing road or street.

APPENDIX A

Review of Existing Plans and Policies

Appendix A: Summary of Existing Plans

Comprehensive Land Use Plan Huntington, Oregon

Approved July 28, 1987.

Transportation Goal: To provide and encourage a safe, convenient and economic transportation system.

A. Policies:

1. Oregon Highway 30 will be the major access rout to the City.
2. Street projections and connections will be planned to maintain or improve access, traffic patterns, and other safety needs.
3. The City Council will coordinate improvements with ODOT.

B. Recommendations: The city should consider locating a through street in the south part of town, south of the school property, to connect to the state highway west of town; if such through street is found to be feasible, construction of various segments thereof would take place as land development takes place.

Baker County Comprehensive Land Use Plan

Adopted March 9, 1983, and acknowledged April 24, 1986.

The stated Transportation Goal is: to provide and encourage a safe, convenient, and economic transportation system. The findings state that mass transit, rail, bus, pipelines, and airplanes are economic alternative modes of transportation, but that the private automobile will be "the most practical mode of intracounty transportation, in the foreseeable future". The findings also state that bicycle and pedestrian modes are not practical year around outside boundaries of cities.

Baker County Bicycle and Pedestrian Master Plan

August 5, 1996

This plan identifies and directs opportunities for improving bicycle and pedestrian facilities to insure that new development considers the needs of non-vehicular modes of transportation, and provides safe, convenient, and direct bicycle and pedestrian access. Goals and objectives include the following:

1. Integrate bicycle and pedestrian facility planning and development into all transportation planning, design, construction, and maintenance activities of ODOT, Baker County, and the County's seven incorporated cities. This integration will be accomplished by developing a contiguous bikeway system connecting municipalities, neighborhoods, businesses, schools, parks, rural communities, rural areas, scenic routes, and recreation areas.
2. Install appropriate sings for direction and speed along bikeway corridors.
3. Promote bicycling and walking to make a noticeable reduction in motorized traffic.
4. Create a bikeway map identifying bikeway and destination opportunities.

5. Continue to educate non-motorized users and motorists about safety and use of the bikeway system.

The plan inventories the roadways within the county and its incorporated cities, summarizes the design and condition of existing bicycle and pedestrian facilities, and recommends options for protecting and improving bicycle and pedestrian access, safety, and connectivity. Baker County bikeway and walkway plan policies and design standards, and implementation strategies are also included as part of this plan. Specific projects for some of the incorporated cities were identified and prioritized by this plan. No specific projects are suggested for the City of Huntington by this plan.

Baker County Special Transportation Plan

April 1994

The goals of the Baker County Special Transportation Plan are as follows:

Provide transportation services for the special needs population (elderly, disabled, and economically disadvantaged) of Baker County.

Obtain baseline information by surveying providers and the public.

Obtain greater transportation efficiency.

- Coordinating and integrating existing systems and resources.
- Seeking new resources where feasible.

TRANSPORTATION PLANNING RULE COMPLIANCE SUMMARY FOR THE CITY OF HUNTINGTON

June 1999

660-12-045 Subsection	Comprehensive Plan	Zoning Ordinance	Comments
(1) Each local government shall amend its land use regulations to implement the TSP.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(2) Ordinance provisions to protect transportation facilities, corridors, and sites.	N/A	No provision	See Chapter 9 for recommended additions to appropriate sections of Huntington Zoning Code.
(a) Access control.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(b) Protect future road and transit operation.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(c) Airport protection.	N/A	N/A	There is no airport in Huntington
(d) Coordinated land use decision and transportation review.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(e) Conditions for development to minimize transportation impacts.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(f) Agency notice regarding land use or land division, private access.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(g) Plan/zone amendments consistent with TSP.	N/A	No provision	See Chapter 9 for recommended additions to appropriate sections of Huntington Zoning Code.
660-12-045 Subsection			
(3) Ordinance provisions to provide safe and convenient pedestrian, bicycle, and vehicular circulation.	No provision	Partial compliance	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(a) Bicycle parking.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(b) On-site facilities for pedestrian and bike access, sidewalks and bike lanes along streets, and minimize cul-de-sac use.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(c) Off-site improvements shall include pedestrian and bicycle facilities.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(d) Safe and convenient means minimal hazards, reasonably direct, and 1/4-1/2 mi. for pedestrian trips.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
(e) Internal pedestrian circulation within office parks and commercial developments.	No provision	No provision	See Chapter 9 for recommended additions to Chapter 12 of Huntington Comprehensive Plan and appropriate sections of Huntington Zoning Code.
660-12-045 Subsection			
(4) Ordinances to support transit.	N/A	N/A	Not required for Huntington.
(a) Improvements to support transit use: bus	N/A	N/A	Not required for Huntington.

stops, pullouts, shelters, street design, parking restrictions, etc.			
(b) Retail, office, and institutional development near transit shall provide connecting walkways in all cases and transit amenities at "major" transit stops.	N/A	N/A	Not required for Huntington.
(c) Optional pedestrian districts to implement (4)(b).	N/A	N/A	Not required for Huntington.
(d) Carpool/vanpool employee parking.	N/A	N/A	Not required for Huntington.
(e) Existing development shall be allowed to convert some parking into transit-oriented uses.	N/A	N/A	Not required for Huntington.
(f) New streets shall accommodate transit service and pedestrian access.	N/A	N/A	Not required for Huntington.
(g) Supporting land uses and densities shall be provided along existing/planned transit routes.	N/A	N/A	Not required for Huntington.
660-12-045 Subsection			
(5) Ordinances to reduce automobile reliance.	N/A	N/A	Not required for Huntington.
(a) Transit-oriented developments along transit routes.	N/A	N/A	Not required for Huntington.
(b) Demand management program in TSP.	N/A	N/A	Not required for Huntington.
(c) Parking plan to reduce per capita parking by 10%, implement the TSP, and maximum parking standards.	N/A	N/A	Not required for Huntington.
(d) Alternative to (5)(c) the city may adopt a variety of techniques to reduce parking requirements.	N/A	N/A	Not required for Huntington.
(e) Require major industrial, institutional, and commercial developments to provide a bus stop or connection.	N/A	N/A	Not required for Huntington.
660-12-045 Subsection			
(6) Bicycle and pedestrian circulation plan shall identify necessary improvements such as walkways, connections between destinations, etc.	N/A	No provision	See Chapter 9 for recommended additions to appropriate sections of Huntington Zoning Code.
(7) Street standards for local streets and accessways shall minimize right-of-way and pavement width consistent with operational needs.	N/A	No provision	See Chapter 9 for recommended additions to appropriate sections of Huntington Zoning Code.

APPENDIX B

Existing Street Inventory

APPENDIX B
1998 Major Streets Inventory
City of Huntington Transportation System Plan

Street	Jurisdiction	Classification	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	On-Street Parking	Bikeway	Pavement Condition	Sidewalks	Curbs
Huntington Highway (US 30)											
Northwest City Limits to Washington St.	State	Arterial	45 mph	60 ft.	24 ft.	2	none	none	poor	none	none
Dead end east to 3rd St. West	State	Arterial	30 mph	80 ft.	24 ft.	2	yes	none	none	none	none
3rd St. West to 2nd St. West	State	Arterial	30 mph	80 ft.	24 ft.	2	yes	none	none	broken	south side only
2nd St. West to 1st. St. West	State	Arterial	30 mph	80 ft.	24 ft.	2	yes	none	poor	south side, broken	south side only
1st St. West to Lincoln	State	Arterial	30 mph	80 ft.	24 ft.	2	yes	none	poor	south side	south side only
Lincoln to 1st St. East	State	Arterial	30 mph	80 ft.	24 ft.	2	yes	none	poor	south side	south side only
1st St. East to 2nd St. East	State	Arterial	30 mph	80 ft.	24 ft.	2	yes	none	poor	south side	south side only
Southeast City Limits to Washington St.	State	Arterial	40 mph	60 ft.	24 ft.	2	none	none	poor	none	none
Arthur Drive (Authur Drive is alley)	City	Local	25 mph	16 ft.	16 ft.	2	none	none	gravel	none	none
7th Avenue West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none
6th Avenue West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none
5th Avenue West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none
Washington Street											
2nd St. East to 4th St. East	Railroad	Farm to Market	25 mph	none	20 ft.	2	none	none	poor	none	none
4th St. East to 5th St. East	City	Farm to Market	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Snake River Road											
5th St. East to City Limits	County	Farm to Market	25 mph	60 ft.	20 ft.	2	none	none	poor	none	none

APPENDIX B
1998 Major Streets Inventory
City of Huntington Transportation System Plan

Street	Jurisdiction	Classification	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	On-Street Parking	Bikeway	Pavement Condition	Sidewalks	Curbs
Adams Street											
3rd St. West to 2nd St. West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
2nd St. West to 1st. St. West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
1st St. West to Lincoln	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	south side, broken	none
Lincoln to 1st St. East	City	Local	25 mph	80 ft.	20 ft.	2	south	none	poor	poor	south
1st St. East to 2nd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	south side, broken	none
2nd St. East to US 30	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	south side, broken	none
Dead end east of US 30 to 4th St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Dead end top of cliff east to 5th St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
5th St. East around loop back to 6th St. East	City	Local	25 mph	80 ft.	12ft.	1	south half	none	south half paved	yes, on south half	yes, on south half
Jefferson Street											
Dead end to 2nd St. West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	north side, broken	none
2nd St. West to 1st. St. West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
1st St. West to Lincoln	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Lincoln to 1st St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
1st St. East to 2nd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
2nd St. East to 3rd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
3rd St. East to 4th St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
4th St. East to 5th St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
5th St. East to 6th St. East	City	Local	25 mph	80 ft.	20 ft.	1	south	none	new	new north half	yes, on north half

APPENDIX B
1998 Major Streets Inventory
City of Huntington Transportation System Plan

Street	Jurisdiction	Classification	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	On-Street Parking	Bikeway	Pavement Condition	Sidewalks	Curbs
Madison Street											
Dead end to 1st. St. West	City	Local	25 mph	80 ft.	20 ft.	2	none	none	partially gravelled	none	none
1st St. West to Lincoln	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Lincoln to 1st St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
1st St. East to 2nd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
2nd St. East to 3rd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
3rd St. East to 4th St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
4th St. East to 5th St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	south side, broken	none
5th St. East to 6th St. East (all except last 1/2 block)	City	Local	25 mph	80 ft.	20 ft.	1	none	none	dirt	none	none
Monroe Street											
Lincoln to 1st St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	north side, broken	none
1st St. East to 2nd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	north side, broken	none
2nd St. East to 3rd St. East	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	north side, broken	none
5th St. East to 6th St. East (all except last 1/2 block)	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Fulton Street											
Dead end to 1st St. East	City	Local	25 mph	70 ft.	20 ft.	2	none	none	gravel	none	none
1st St. East to 3rd St. East	City	Local	25 mph	70 ft.	20 ft.	2	none	none	poor	none	none
3rd St. East to Huntington Hwy.	School District	Local	25 mph	50 ft.	20 ft.	2	none	none	poor	south side, broken	none
3rd Street West											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	east side, broken	none
Adams St. to dead end	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none

APPENDIX B

1998 Major Streets Inventory City of Huntington Transportation System Plan

Street	Jurisdiction	Classification	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	On-Street Parking	Bikeway	Pavement Condition	Sidewalks	Curbs
1st Street West											
Washington St. to Adams St.	City	Local	25 mph	60 ft.	60 ft.	2	none	none	new	new	yes
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	42 ft.	2	none	none	new	new	yes
Jefferson St. to Madison St.	City	Local	25 mph	80 ft.	42 ft.	2	none	none	new	new	yes
2nd Street West											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	20 ft.	2	yes	none	poor	broken	none
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Jefferson St. to dead end	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	west side, broken	none
Benson Creek Road											
Madison St. south to City Limits	County	Local	25 mph	60 ft.	< 20 ft.	1	none	none	dirt	none	none
Durbin Creek Road											
City Limits east to Madison St.	County	Local	25 mph	60 ft.	20 ft.	2	none	none	poor	none	none
Lincoln Street											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	60 ft.	2	yes	none	poor	both sides good	yes
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	20 ft.	2	yes	none	poor	broken	none
Jefferson St. to Madison St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Madison St. to Monroe St.	City	Local	25 mph	80 ft.	20 ft.	2	yes	none	poor	broken	none
1st Street East											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	60 ft.	2	yes	none	poor	both sides good	none
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Jefferson St. to Madison St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Madison St. to Monroe St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Monroe St. to Fulton St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Fulton St. to dead end	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none

APPENDIX B
1998 Major Streets Inventory
City of Huntington Transportation System Plan

Street	Jurisdiction	Classification	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	On-Street Parking	Bikeway	Pavement Condition	Sidewalks	Curbs
2nd Street East											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	east side, broken	none
Jefferson St. to Madison St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Madison St. to Monroe St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Monroe St. to Fulton St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
3rd Street East											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Jefferson St. to Madison St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	broken	none
Madison St. to Monroe St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	east side, broken	none
Monroe St. to Fulton St.	City	Local	25 mph	80 ft.	20 ft.	2	yes	none	poor	east side, broken	none
Fulton St. to dead end	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none
4th Street East											
Washington St. south to base of cliff	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none
Jefferson to top of cliff	City	Local	25 mph	80 ft.	20 ft.	2	none	none	gravel	none	none
Madison to Jefferson	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
5th Street East											
Washington St. to Adams St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Adams St. to Jefferson St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	west side, broken	none
Jefferson St. to Madison St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Madison St. to Monroe St.	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
Monroe St. to US 30	City	Local	25 mph	80 ft.	20 ft.	2	none	none	poor	none	none
6th Street East											
Adams to Jefferson	City	Local	25 mph	80 ft.	20 ft.	1	none	none	dirt	none	none
Madison to Monroe	City	Local	25 mph	80 ft.	20 ft.	1	none	none	poor	none	none

APPENDIX C

Summary of State Highway Analyses

**TECHNICAL MEMORANDUM
SUMMARY OF THE US HIGHWAY 30 (HUNTINGTON HIGHWAY) ANALYSIS
CITY OF HUNTINGTON TSP**

The Huntington Transportation System Plan (TSP) guides the management of existing transportation facilities and the design and implementation of future facilities for the next 20 years. US Highway 30 (Huntington Highway) is a part of that transportation system. This technical memorandum summarizes the elements of the TSP that pertain to it.

INVENTORY

Huntington is served by one state highway: US 30 (Huntington Highway). US 30 serves as the sole route through the city connecting Huntington to I-84 both to the northwest and to the southeast. US 30 terminates 4 miles northwest of Huntington at I-84 in Lime, Oregon, and 5 miles southeast in Farewell Bend.

The *1999 Oregon Highway Plan* (OHP) classifies the state highway system into five categories: Interstate, Statewide, Regional, and District Highways, and Local Interest Roads. US 30 is a District Highway.

US 30 extends north-south through the extreme southeast corner of Baker County. Prior to construction of I-84, this highway was the primary route between Baker City and Ontario. Today, this highway primarily serves traffic to and from the City of Huntington, which was bypassed by I-84. The highway traverses rolling mountain areas north of Huntington, transitioning into open farm lands south of Huntington. US 30 follows the route of the Oregon Trail from Farewell Bend over Huntington Hill into the Burnt River canyon, following the canyon to Lime. Huntington Hill is steep and difficult to navigate, while the Burnt River canyon is narrow and windy. The highway consists of a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout rural areas, decreasing to 40 mph east of Downtown, 30 mph on five blocks of Washington Street, and 45 mph west of Downtown.. Paved surface is less than 24 ft. wide, has no fog lines, and has narrow shoulders. The route has curves resulting in localized rural speed reductions ranging from 35 to 40 mph and transitions between rolling and flat terrain. There are no passing lanes along the highway within Baker County. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and comprised of gravel.

Reflecting the importance of this highway to the community of Huntington, the City of Huntington has requested that portions of US 30 be designated a "lifeline highway", meaning that ODOT would reopen this highway immediately after road closures caused by landslide, flood, heavy snow, and other emergencies.

General Pavement Conditions

According to the 1997 ODOT Pavement Condition Report, the section of US 30 through Huntington (MP 5.17 to MP 6.47) is in poor condition.

Bridges

There are no bridges in the City of Huntington, and thus, there are none listed on the state inventory as being structurally deficient, functionally obsolete, or having a sufficiency rating below 55.

Identified Needs

The city plans to repave the streets in poor condition. The highest priority for repaving is US 30; the heaviest traveled street in the city, which is under State jurisdiction. The highway has pavement in poor condition within the entire city limits (approximately 1.5 miles of roadway).

CURRENT TRANSPORTATION CONDITIONS

As part of the planning process, the current operating conditions for US 30 were evaluated.

1997 Traffic Volumes

The 1997 Average Daily Traffic (ADT) volume for the state highway within Huntington was collected by ODOT and summarized in the *1997 ODOT Traffic Volume Tables*. ADT volume is defined as the average amount of two-way traffic recorded on a roadway over a 24-hour period.

Average Daily Traffic

The 1997 ADT volumes on the state highways in Huntington are average volumes for the year. Summertime is the season when volumes are highest. ODOT data from the permanent traffic recorder station along I-84 near Huntington indicate summer volumes exceed ADT volumes by 30 percent. The 1997 average daily and estimated peak summer time traffic volumes in Huntington are 620 vpd and 810 vpd, respectively.

Roadway Capacity

Roadway capacity in Huntington is primarily dictated by unsignalized intersection operations. Transportation engineers have established various standards for measuring traffic capacity of intersections. Each standard is associated with a particular level of service (LOS). The LOS concept requires consideration of factors that include travel speed, 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-flowing, to Level F, where the street system is totally saturated with traffic and movement is very difficult.

Table C-1 presents the level of service criteria for unsignalized intersections. Unsignalized intersection LOS is based on a concept of reserve capacity and was analyzed using the UNSIG10 software application developed by ODOT. Reserve capacity represents the difference between the number of stop-controlled vehicles that can be served within acceptable gaps in the main street traffic stream (potential capacity) and the actual demand for these maneuvers.

TABLE C-1
LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED
INTERSECTIONS

Level of Service	Unsignalized Intersections
	Reserve Capacity (passenger cars/hour)
A	≥ 400
B	300-399
C	200-299
D	100-199
E	0-99
F	Demand exceeds capacity

Source: Transportation Research Board, Highway Capacity Manual, Special Report 209. National Research Council, 1985.

Unsignalized Intersections

Analysis of the street system capacity in Huntington is primarily focused on intersection operations along the state highway through town, where traffic volumes are the greatest. The Huntington Highway (US 30) follows Washington Street through a portion of Huntington. Currently, all intersections along the highway in Huntington are unsignalized and STOP-controlled on the minor approaches, with continuous flow on the highway. The LOS was determined at one of the busiest intersections on Washington Street to determine the worst possible traffic operations.

The intersection of Washington Street (US 30- Huntington Highway) and Snake River Road was chosen as one of the busiest intersections in the city. Although specific peak hour turning movement counts were not available at the intersection, representative traffic volumes were assumed from average daily traffic (ADT) volumes along the highway.

As stated previously, the 1997 ADT along Washington Street was reported at 620 vpd. To evaluate the expected worst case traffic operations at this intersection, the ADT along Washington Street was increased by 30 percent to reflect an ADT during peak summer conditions reaching 810 vpd. Traffic operations were then analyzed using a peak hour traffic volume of roughly 10 percent of the average and summer ADT volumes, which is typical for most cities. Also, a 60/40 directional split was used to reflect the distribution of traffic on the highway during the peak hour. No traffic data were available on the westbound approach on Snake River Road, therefore an approach volume of 50 vph was assumed.

Under these conservative assumptions, the intersection of Washington Street and Snake River Road operates at LOS A for all movements at the intersection under average and summer peak hour traffic volumes. This indicates that all other lower-volume roads or driveways accessing the highway within Huntington are operating at LOS A as well, representing no capacity issues. This measure does not account for design deficiencies or hazardous conditions, both of which have been used to describe this intersection.

Historic Accident Summary

Table C-2 summarizes the three-year historic accident rates along US 30 (Huntington highway) in Huntington and nearby rural highway sections, as well as the Oregon statewide average for all rural and urban non-freeway segments of similar highways from January 1, 1994 to December 31, 1996.

Table C-3 contains detailed accident information along US 30 in Huntington and along rural highway sections abutting Huntington during this three-year period. The table shows the number of fatalities and injuries, property damage only accidents, the total number of accidents, and the overall accident frequencies and rates for the highway sections reported.

TABLE C-2
HISTORIC ACCIDENT RATES ALONG STATE HIGHWAYS IN HUNTINGTON
(Accidents per million vehicle-miles traveled)

HIGHWAY	1996	1995	1994
US Highway 30 (<i>Huntington Highway</i>)			
JCT with I-84 (MP 0.00) to Huntington (MP 5.17)	3.88	n/a	4.34
Huntington (MP 5.17 to MP 6.47)	n/a	n/a	3.88
Huntington (MP 6.47) to Malheur County (MP 9.98)	n/a	1.16	1.16
Statewide Average for all Urban/Rural Non-Freeway Sections	3.10/1.19	3.27/1.02	2.79/1.10

Source: 1996 Oregon Department of Transportation Accident Rate Table.

TABLE C-3
ACCIDENT SUMMARIES FOR HIGHWAYS IN HUNTINGTON
(January 1, 1994 to December 31, 1996)

Location	Fatalities	Injuries	Property Damage Only	Total Accidents	Accident frequency (acc/mi/yr)	Accident Rate (acc/mvm)
US Highway 30 (<i>Huntington Highway</i>)						
I-84 to Huntington	0	1	1	2	0.13	5.05
City of Huntington	0	1	0	1	0.26	0.91
Huntington to Malheur Co.	0	1	1	2	0.19	0.80
<i>ODOT Accident Summary Database (SPIS)</i>						

Table C-2 indicates that the 1994-accident rate within Huntington exceeded the statewide average for all rural non-freeway sections of secondary state highways. This may be misleading without understanding how accident rates are computed.

The accident rate computed by ODOT is based on the ratio of a variety of data. The numerator is calculated by multiplying the number of accidents during the year by 1,000,000. The denominator is calculated by multiplying the roadway section length, the roadway ADT, and the number of days in the year. The ratio of these quantities is the accident rate.

The equation is clearly susceptible to producing high accident rates along short roadway sections with low ADT volumes, as is the case in Huntington. The underlying assumption is that low volume roadways are less prone to experiencing accidents. However, one accident along a low volume roadway does not necessarily indicate that a safety concern exists.

As an example, a two-mile roadway with an ADT of 500 vpd that experiences one accident during the year would result in an accident rate of 2.73 accidents per million vehicle miles (mvm) of travel. Doubling the ADT along this same roadway to 1,000 vpd would lower the accident rate to 1.37 while halving the ADT to 250 vpd would increase the accident rate to nearly 5.5. Although all three scenarios involve only one accident, the accident rate is highly variable.

There was one reported accident along the urban section of US 30 (*Huntington Highway*) in Huntington during the three year period analyzed. The accident occurred in 1994 just east of 1st Street during daylight

hours and under icy pavement conditions. It involved a vehicle exiting a driveway without yielding the right of way. The accident resulted in one injury.

TRAVEL FORECASTS

Traffic volume projections are based on historic growth trends for highway volumes and land use and on the future land use projections.

Historic Traffic Volumes

Before projecting future traffic growth, it is important to examine past growth trends on the Huntington roadway system. Historic data are only available for the state highway system in Huntington; however, these roadways carry far more traffic than any other roads in the city. The Oregon Department of Transportation (ODOT) collects traffic count information on the state highways (rural and urban sections) every year at the same locations. These counts have been conducted along the Huntington Highway.

A historic growth trend along the Huntington Highway within the city was established using the average annual daily traffic (AADT) volume information presented in the ODOT Traffic Volume Tables for the years 1977 through 1997. The AADT volumes were obtained for each of these years at one location, east of East 1st Street. Using a linear regression analysis of the AADT volumes between 1977 and 1997, an average annual growth rate was determined for this location. Table C-4 provides a summary of the historic average growth rate.

TABLE C-4
HISTORIC TRAFFIC GROWTH RATES ON STATE HIGHWAYS

<i>Location</i>	<i>Average Annual Growth Rate (1977-1997)</i>	<i>Total Growth (1977-1997)</i>
<i>Huntington Highway</i>		
East of East 1 st Street	0.11%	2.3%
Source: ODOT 1977-1997 Transportation Volume Tables; information compiled by DEA.		

During the last 20 years, traffic growth averaged 0.11 percent per year, resulting in a total growth rate of 2.3 percent.

Future Traffic Volumes

Future traffic growth over the next 20 years along the Huntington Highway was assumed to be slightly higher than the 20-year historical growth trend of 2.3% described above. This assumption was made based on a comparison between the historical growth trend along the highway and the projected population increase of 16.5 percent over the next 20 years. The forecast future traffic volumes and total growth from 1997 to 2018 are shown in Table C-5.

TABLE C-5
FORECAST TRAFFIC VOLUMES AND TOTAL GROWTH ON STATE HIGHWAYS

<i>Location</i>	1997 ADT Volume (vehicles/day)	2018 ADT Volume (vehicles/day)	Total Growth
<i>Huntington Highway</i> East of East 1 st Street	620	650	5.0%

Traffic on the Huntington Highway was assumed to grow by at least 5 percent in total over the next 20 years. This is slightly higher than the historic growth on this highway, which was less than 3 percent over the last 20 years.

Future ADT volumes were also determined for peak summer conditions by increasing the average 2018 ADT by an additional 30 percent along the Huntington Highway. This increase is consistent with the existing conditions analysis for peak summer conditions.

HIGHWAY SYSTEM CAPACITY

For the year 2018, an unsignalized intersection analysis was performed using the overall growth expected on the Huntington Highway, at the same intersection in Huntington for which the existing conditions were analyzed. This analysis included the same assumptions used in the existing conditions analysis for estimating average and summer peak hour traffic volumes.

The results of the unsignalized intersection analyses are shown in Table C-6. Traffic operations were determined at the intersection using the UNSIG10 software application developed by ODOT for unsignalized intersections.

TABLE C-6
SUMMARY OF FUTURE OPERATIONS

<i>Intersection Location</i>	<i>Direction</i>	<i>Movement</i>	2018 LOS (Average)	2018 LOS (Peak Summer)
<i>Huntington Highway at Snake River Road</i>	Eastbound	Left	A	A
	Westbound	Left, Thru, Right	A	A

Note: The level of service is shown for all evaluated movements of the unsignalized intersection.

Analysis Results

Traffic movement volumes at the intersection of Huntington Highway and Snake River Road are forecast to increase by nearly 5 percent over the 20-year forecast period. The analysis indicates that the intersection is expected to remain operating at an acceptable level of service (LOS A) over the forecast period for both the average and summer peak hour conditions.

ACCESS MANAGEMENT

Recommended Access Standards for State Highways

Access management is important to promoting safe and efficient travel for both local and long distance users along State Highways. The 1999 *Oregon Highway Plan (OHP)* specifies an access management classification system for state facilities. Future developments on state highways (zone changes, comprehensive plan amendments, redevelopment, and/or new development) will be required to meet the 1999 OHP State Classification System and Access Management policies and standards. Although the City of Huntington may designate state highways as arterial roadways within its transportation system, the access management categories for these facilities should follow the guidelines of the Oregon Highway Plan.

US Highway 30 (Huntington Highway) is the only state highway in the City of Huntington. It is classified as a District Highway in the Oregon Highway Plan. District Highways are facilities of county-wide significance and function largely as county and city arterials or collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. The management objective is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements. Inside urban areas, local access is given more priority. Inside Urban Business Areas, mobility is balanced with local access.

The access management guidelines for District Highways are shown in Table C-7.

TABLE C-7

1999 OREGON HIGHWAY PLAN ACCESS MANAGEMENT CLASSIFICATION SYSTEM

District Highways		
Posted Speed	Rural Spacing Standards	Urban Spacing Standards
≥ 55 mph	700 feet	700 feet
50 mph	550 feet	550 feet
40 & 45 mph	500 feet	500 feet
30 & 35 mph	400 feet	400 feet
≤ 25 mph	400 feet	400 feet

HIGHWAY PLAN

The highway system plan outlines a series of improvement options that are recommended for construction within Huntington during the next 20 years. Each of these options have been discussed in Chapter 6. (Improvement Options Evaluation).

The recommended highway system improvements include realigning the intersection of Highway 30 and Snake River Road and repaving the highway.

In addition, the City of Huntington indicated an interest in Lifeline Route designation on the Huntington Highway (US Highway 30). The recently adopted 1999 Oregon Highway Plan supplements the state highway classification system with special purpose classifications such as Lifeline Routes. This is in recognition that special expectations and demands are placed on portions of the highway system which serve as a lifeline or emergency route. It is the policy of the State of Oregon to provide a secure lifeline network of streets, highways, and bridges to facilitate emergency services response and to support rapid economic recovery after a disaster. ODOT will work with local governments to further define and map a network of lifeline routes. The lifeline network will focus on serving those communities which are particularly susceptible to isolation by virtue of their limited highway access.

BICYCLE SYSTEM PLAN

Bikeways and other bicycle facilities may also be constructed as stand-alone projects where the need exists, such as on Highway 30.

APPENDIX D

Population and Employment Analysis

METHODOLOGY AND DATA SOURCES

Population estimates and projections were developed from historical data as reported by the Census Bureau. Portland State University's Center for Population Research and Census (PSU CPRC) develops annual population estimates for cities and counties for the purpose of allocating certain state tax revenues to cities and counties. In January of 1997, the State of Oregon Office of Economic Analysis (OEA) developed long-term (through year 2040) state population forecasts, disaggregated by county, for state planning purposes. OEA also developed county-level employment forecasts based on covered employment payrolls as reported by the Oregon Employment Department.

The Office of Economic Analysis used business-cycle trends (as reflected by the Employment Department's employment forecasts) as the primary driver of population and employment for the short term. For the long term, the forecasts shift to a population-driven model, which emphasizes demographics of the resident population, including age and gender of the population, with assumptions regarding life expectancy, fertility rate, and immigration.

DEA used a methodology based on OEA's county-distribution methodology in developing forecasts for each of the small jurisdictions included in the Baker County Transportation System Plans.¹ DEA calculated a weighted average growth rate for each jurisdiction (weighting recent growth more heavily than past growth) and combined this average growth rate with the projected county-wide growth rate. This methodology assumes convergence of growth rates because of the physical constraints of any area to sustain growth rates beyond the state or county average for long periods of time. These constraints include availability of land and housing, congestion, and other infrastructure limitations. The forecasts were then modified to reflect more recent official estimates and local knowledge.

These population and employment forecasts were developed to determine future transportation needs. The amount of growth, and where it occurs, will affect traffic and transportation facilities in the study area. This report is not intended to provide a complete economic forecast or housing analysis, and it should not be used for any purpose other than that for which it is designed.

HISTORICAL GROWTH

Interestingly, population levels in most of Eastern Oregon are close to, or actually lower than, those experienced earlier in the century. Counties included in this phenomenon include Harney, Union, Wallowa, Grant, Gilliam, and Baker counties. The population of Baker County actually declined during the 1960s and 1980s, reflecting the general slowdown in the state's economy during these periods. Estimated at 16,500 in 1997, the population of Baker County has grown an average of over 1 percent annually, recovering from the declining trend of earlier decades. The historical populations of Baker County, its incorporated cities, and the sum of the rural area are shown below in Table 1.

¹ As part of the Baker City Transportation plan, prepared in 1996 by David Evans and Associates, Inc., Baker City's population was forecast to grow at an annual rate of 0.8 percent annually. This planning effort does not change the growth assumption applied to Baker City.

Table 1
Historic Population Growth, 1960 to 1997
Baker County and its incorporated Cities

	1960	1970	1980	1990	1997	1970 to 1997 Change	
						Number	Annual Average
Baker County*	17,295	14,919	16,134	15,317	16,500	1,581	0.37%
Baker City	9,986	9,354	9,471	9,140	9,960	606	0.23%
Haines	331	212	341	405	455	243	2.87%
Halfway	505	317	380	311	360	43	0.47%
Huntington	689	507	539	522	575	68	0.47%
Richland	228	133	181	161	185	52	1.23%
Sumpter	96	120	133	119	175	55	1.41%
Unity**	N/A	N/A	115	87	110	N/A	N/A
Unincorporated county	5,460	4,276	4,974	4,572	4,677	401	0.33%
State of Oregon	1,768,687	2,091,533	2,633,156	2,842,321	3,217,000	1,125,467	1.61%

* County population includes the population of all the county's incorporated cities.

** Unity was incorporated in 1972.

Source: U.S. Census Bureau (1960, 1970, 1980, and 1990 Censuses); and Portland State University Center for Population Research and Census (1997 estimates)

As shown in Table 1, the cities of Baker County grew at rates somewhat faster than the county's overall rate of growth. Baker City (the largest of the cities in Baker County, and a city not included in this transportation planning effort) grew at a rate slightly slower than the rate of growth for the county overall. Of all the cities included in the transportation planning effort, Haines grew the fastest, more than doubling its 1970 base-year population count of 212 to an estimated 455 in 1997. As a county, Baker County experienced an actual population loss between 1960 and 1970. Since 1970, the county has grown at an average rate of 0.37 percent. With a current estimate of 16,500 persons, the population of the county is still smaller than its 1960 population count of 17,295.

POPULATION AND EMPLOYMENT FORECASTS

Baker County is expected to experience small population gains for the next 20 years. Like much of Eastern Oregon, the economy of Baker County remains largely seasonally, with nearly one-quarter of all employment agriculture-based. Therefore, the population increases are difficult to predict, and are not likely to be as stable as the forecasts appear to imply. Population and employment as forecast by the State of Oregon Office of Economic Analysis are shown in Table 2.

Table 2
Population and Employment Forecast, 1997 to Year 2020
Baker County and State of Oregon

							1997 to 2020 Change	
	1997	2000	2005	2010	2015	2020	Number	Annual Average
Baker County								
Population	16,500	17,349	18,001	18,635	19,267	19,893	3,393	0.82%
Non-Agr. Empl.	5,150	5,568	5,828	6,007	6,085	6,155	1,005	0.78%
State of Oregon								
Population	3,217,000	3,406,000	3,631,000	3,857,000	4,091,000	4,326,000	1,109,000	1.30%
Non-Agr. Empl.	1,524,900	1,601,718	1,718,659	1,814,276	1,882,653	1,947,702	422,802	1.07%

Source: Portland State University Center for Population Research and Census (1997 population estimates); State of Oregon Employment Department (1997 employment estimates); and State Of Oregon Office of Economic Analysis (forecasts).

Although the OEA forecasts suggest that Baker County is expected to grow more slowly than the State of Oregon average, the difference between the county growth rate and the state growth rate is expected to decline over time. The estimated average population growth rate for Baker County between 1970 and 1997 was 0.37 percent; for the 1997 to year 2020 period, the estimated population growth rate for Baker County is expected to accelerate, averaging 0.82 percent annually. On the other hand, the State of Oregon's average annual population growth rate is expected to slow somewhat, from 1.61 percent (for years 1970 to 1997) to 1.30 percent (for years 1997 to year 2020). Because of the larger population base, this growth rate yields an increase of over 1.1 million between years 1997 and 2020, compared to an increase of roughly the same number between 1970 and 1997.

Baker City's population was forecast to grow at an annual rate of 0.8 percent annually in its Transportation System Plan, prepared by DEA in 1996. This planning effort does not change the growth assumptions for Baker City. Based on the OEA projections, population forecasts for the jurisdictions of Haines, Halfway, Huntington, Richland, Sumpter, and Unity are shown in five-year increments in Table 3.

Table 3
Population Forecast, 1997 to Year 2020
Baker County and its Incorporated Cities

	1997						Change 1997-2020	
		2000	2005	2010	2015	2020	Number	CAARG
Baker County	16,500	17,349	18,001	18,635	19,267	19,893	3,393	0.8%
Baker City	9,960	10,200	10,610	11,040	11,490	11,960	2,000	0.8%
Haines	455	480	530	580	620	670	215	1.7%
Halfway	360	370	380	390	400	410	50	0.6%
Huntington	575	590	610	630	650	670	95	0.7%
Richland	185	190	200	210	220	230	45	1.0%
Sumpter	175	180	190	200	210	220	45	1.0%
Unity*	110	111	112	114	116	118	8	0.3%
Sum of Incorporated Cities	11,820	12,120	12,630	13,160	13,710	14,280	2,460	0.8%
Unincorporated Baker County	4,680	5,230	5,370	5,480	5,560	5,610	930	0.8%

Source: Portland State University Center for Population Research and Census (1997 population estimates); and State Of Oregon Office of Economic Analysis (county forecasts); and David Evans and Associates, Inc. (disaggregation of county forecast to cities).

Reflecting its stronger rate of growth historically, the City of Haines is likely to continue growing at a rate slightly faster than other jurisdictions in Baker County. However, this rate of growth is expected to slow somewhat, tempered by the population growth forecast for the county overall. Again, the population forecast for Baker City was not a part of this transportation planning effort but was instead taken from the 1996 Baker City Transportation System Plan.

POPULATIONS WITH SPECIFIC TRANSPORTATION NEEDS

Certain populations have been identified as having more intensive transportation needs than the general population. These populations include people under the legal driving age, those under the poverty level, and those with mobility limitations.

As stated above, the Portland State University Center for Population Research and Census estimates the Baker County population at 16,500 in 1997. The Center further estimates that 4,124 of those people, or about one-quarter of the population, are under the age of 18. Because the purpose of this analysis is to determine the number of people with specific transportation needs, DEA used PSU's age disaggregation to estimate that 3,460, or about 22 percent of the population, are under the age of 16, the legal driving age in Baker County.

According to the 1990 Census, 14.3 percent of the 15,317 persons living in Baker County 16 and older were below the poverty level. Poverty statistics are based on a threshold of nutritionally-adequate food plans by the Department of Agriculture for the specific size of the family unit in question. The distribution of the population below poverty level shows that a larger proportion of younger persons than older persons are affected by this indicator, as shown in Table 4.

Table 4
Poverty Status, Baker County, 1990 Census

	Number Below Poverty Level	Total Population	Percent of Total Population Below Poverty
11 and under	489	2,655	18.4%
12 to 17	225	1,333	16.9%
18 and older	1,475	11,329	13.0%
Total	2,189	15,317	14.3%

Source: U.S. Census Bureau.

The Census Bureau reports that 4.7 percent of the population in Baker County had a mobility limitation in 1990. Persons were identified as having a mobility limitation if they had a health condition (physical and/or mental) that lasted for six or more months and which made it difficult to go outside the home alone. A temporary health problem, such as a broken bone that was expected to heal normally, was not considered a health condition.

Using the proportion of the population with a mobility limitation and below the poverty level² in 1990, DEA estimated the number of people with specific transportation needs in 1997. The following table shows that nearly 40 percent of the population may have specific transportation needs. (There is likely to be some overlap between the 4.7 percent of the population with mobility limitations and the 13.2 percent below the poverty level; therefore, the sum of the figures may overstate the proportion of the population with specific transportation needs.)

Table 5
Estimated Population with Specific Transportation Needs
1997, Baker County

	Percent of Total Population	Estimated Number
Persons between the ages of 5 and 15	21.7%	3,580
Persons 16 and older under the Poverty Level	13.2%	1,700
Persons 16 and older with Mobility Limitations	4.7%	600
Total Specific Transportation Needs Populations	39.5%	5,880

Planning for the overall transportation system will need to consider the special needs of these populations.

² DEA used the Census Bureau's age disaggregation to estimate that 13.2 percent of the population 16 and older was under the poverty level in 1990.