FINAL

Baker County Transportation System Plan

Prepared for

Baker County, Oregon and
Oregon Department of Transportation

Prepared by

H. Lee & Associates

June 30, 2005

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BAKER COUNTY

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TRANSPORTATION SYSTEM PLAN

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H. Lee & Associates
P.O. Box 1849
Vancouver, WA 98668
(360) 567-3002

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INTRODUCTION

Section 1.0
Introduction

The Baker County Transportation System Plan (TSP) addresses the County's anticipated transportation needs through the year 2025. It has been prepared to meet state and federal regulations that require urban areas to conduct long-range planning. Specifically, the TSP was developed in compliance with requirements of the Transportation Equity Act for the 21st Century (TEA-21), Statewide Planning Goal 12, the Transportation Planning Rule (TPR – Oregon Administrative Rule (OAR) Chapter 660, Division 12), and Oregon Highway Plan (1999). The long-range planning is intended to serve as a guide for Baker County in managing their existing transportation facilities and developing future transportation facilities.

1.1. REQUIREMENTS

The TEA-21, Statewide Planning Goal 12, the Transportation Planning Rule, and Oregon Highway Plan (OHP) requirements guiding the development of the Baker County TSP are discussed below.

1.1.1. TEA-21

TEA-21 is federal legislation that was passed in 1998. It specifies requirements for statewide and metropolitan area planning. Although TEA-21 does not specify requirements for areas less than a population of 50,000, it is still relevant to Baker County's TSP planning since it defines how federal aid is dispersed for highway and transit projects. The planning requirements under TEA-21 parallel the requirements under the TPR.

1.1.2. Goal 12

Oregon adopted 19 Statewide Planning Goals in the mid-1970s. These goals were to be implemented in each local jurisdiction's comprehensive plan. Goal 12 of the statewide planning goals related to transportation. The intent of Goal 12 is to "provide and encourage a safe, convenient, and economic transportation system." It provides the following guidelines in creating a transportation element of a local jurisdiction's comprehensive plan:

> "A transportation plan shall (1) consider all modes of transportation including mass transit, air, water, pipeline, rail, highway, bicycle and pedestrians; (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 to local and regional comprehensive land use plans."

1.1.3. Transportation Planning Rule (TPR)

The Transportation Planning Rule (TPR) was developed by the Department of Land Conservation and Development (DLCD) and Oregon Department of Transportation (ODOT). It was adopted originally in April 1991 to implement Goal 12 of the Statewide Planning Goals.

The TPR requires that cities, counties, Metropolitan Planning Organizations (MPOs), and state agencies prepare and adopt transportation system plans. A transportation system plan is defined in the TPR as: "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 TPR encourages multi-modal transportation systems to reduce the dependence on auto traffic.

The transportation system plan elements produced included the following:

- Street system plan for a network of arterials, collectors, and local streets
- Bicycle and pedestrian plan and integrate with the parks plan/dream trails map
- Public transportation plan
- Air, rail, water, and gas pipeline plan
- Policies and land use regulations for implementing the TSP
- Transportation system and demand management plan
- Transportation financing plan

1.1.4. Oregon Highway Plan (1999)

The 1999 Oregon Highway Plan (OHP) was adopted by the Oregon Transportation Commission on March 18, 1999. It applies the general directives specified in the 1992 Oregon Transportation Plan. The general directives of the 1992 Oregon Transportation Plan called for a transportation system marked by modal balance, efficiency, accessibility, environmental responsibility, connectivity among places, connectivity among modes and carriers, safety, and financial stability. The 1999 OHP applies the 1992 Oregon Transportation Plan general directives by emphasizing on:

- Efficient management of the system to increase safety, preserve the system and extend its capacity;
- Increased partnerships, particularly with regional and local governments;
- Links between land use and transportation;
- Access management;

- Links with other transportation modes; and
- Environmental and scenic resources

There are several policies within the 1999 OHP that local jurisdictions are required to be consistent with in their transportation system plans. Specifically, the OHP states:

> "Local and regional jurisdictions must be consistent with Policies 1A, State Highway Classification System; 1B, Land Use and Transportation; 1C, State Highway Freight System; 1D, Scenic Byways; 1F, Highway Mobility Standards; 1G, Major Investments; 2G, Rail and Highway Compatibility; 3A-E, Access Management; 4A, Efficiency of Freight Movement; 4D, Transportation and Demand Management; and the Investment Policy in their local and regional plans when planning for state highway facilities within their jurisdiction."

On January 14, 2004 the Oregon Transportation Commission approved amendments to Policy 1B of the 1999 Oregon Highway Plan. Policy 1B, the land use and transportation policy of the Highway Plan, furthers the goal of efficient management by working with local governments to coordinate land use and transportation planning. The amended policy clarifies the process and requirements for highway segment designations.

Since the original adoption of the Oregon Highway Plan, other amendments have also been made. These amendments include:

- 99-01: Highway Reclassification (9 November 1999)
- 00-02: Expressway Classification (11 May 2000)
- 00-03: Expressway Classifications and Technical Corrections (7 June 2000)
- 00-04: Alternate Mobility Standards for Rogue Valley MPO and Metro (13 December 2000)
- 01-05: Expressway Classifications (11 April 2001)
- 01-06: Conditional Designation of STAs and Designation of UBAs (9 August 2001)
- 02-07: Jurisdictional Transfers (November 2002)
- 03-08: Bypass Policy (16 April 2003)
- 03-09: Amendment of Appendix E: National Highway System Intermodal Connectors (18 June 2003)
- 04-11: Highway Segment Designations (14 January 2004)
- 04-11: Highway Segment Designation Maps (14 January 2004)
- 04-12: Technical Corrections to the Oregon Highway Plan (2 July 2004)
- 04-13: Technical Corrections to the Oregon Highway Plan (20 December 2004)

1.1.5. Other State Plans

In addition to those specific requirements described above, coordination with other specific state plans is also required. These plans include:

- Oregon Bicycle and Pedestrian Plan, ODOT, June14, 1995
- Oregon Rail Plan, ODOT, November 8, 2001
- Oregon's Mobility Needs, Final Report, June 1999
- 1997 Oregon Public Transportation Plan, ODOT
- Freight Moves the Oregon Economy, ODOT, July 1999

1.2. PLANNING AREA

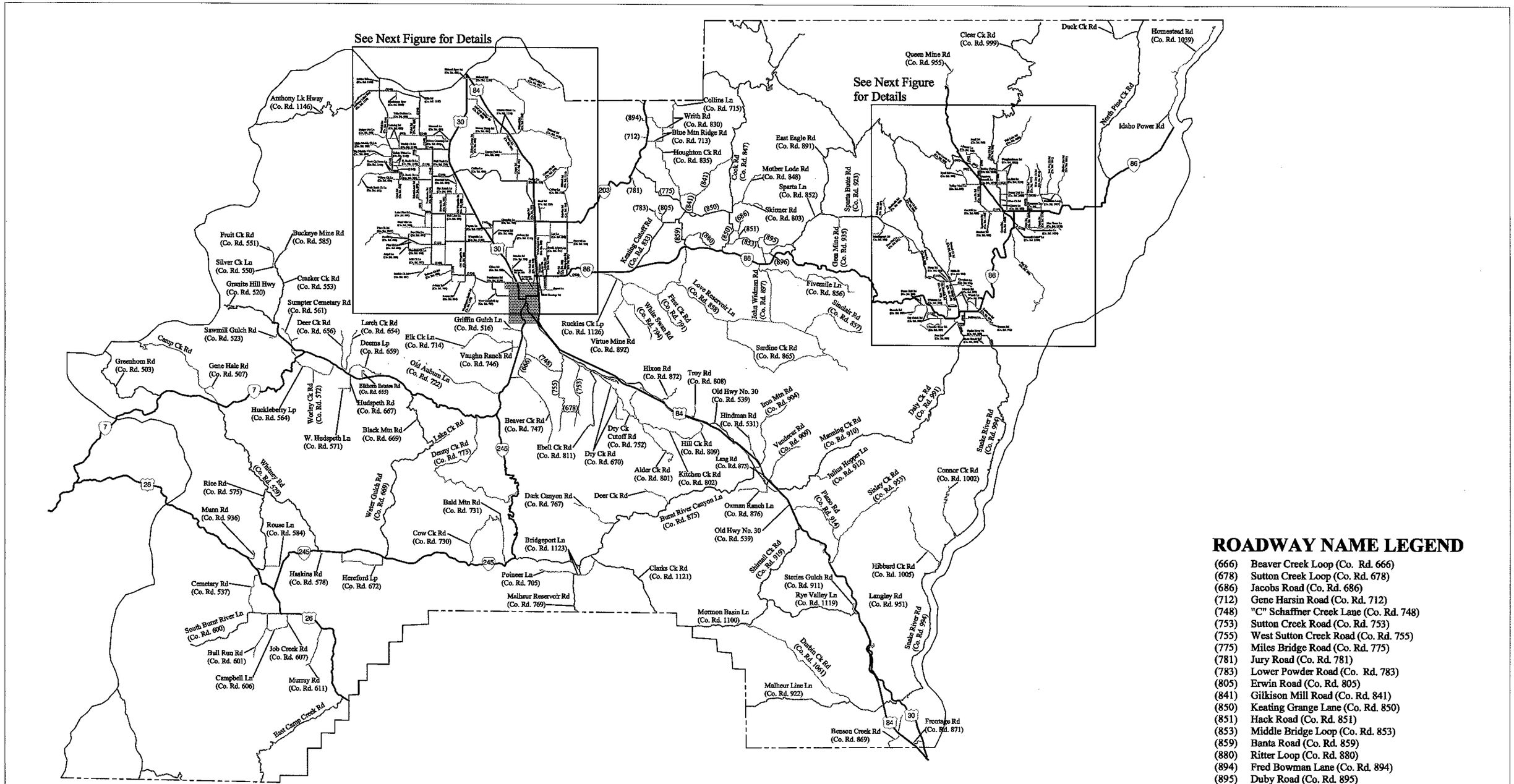
The Baker County Transportation System Plan covers the unincorporated areas of Baker County and the Cities of Haines, Halfway, Huntington, Richland, Sumpter, Greenhorn, Unity and Baker City. The planning area for the Baker County TSP is shown on Figures 1-1a and 1b. Roadways included in the Transportation System Plan fall under several jurisdictions: the individual cities, Baker County, the State of Oregon, the U.S. Forest Service, and the U.S. Bureau of Land Management.

Baker County is located in northeast Oregon. It is 3,085 square miles (1,974,400 acres) in area. The county had a 1997 population of 16,500. Baker City is the county seat and the largest city in the county, with 60 percent of the County's population. The County has approximately 187 miles of paved roads, and 495 miles of gravel roads, and 2278 miles of dirt roads (*Baker County Road Department, 2005*).

Haines, Halfway, Huntington, Richland, Sumpter, Greenhorn, and Unity are the other incorporated cities in Baker County, and combined, have 10 percent of the population. The county is bordered by Union and Wallowa Counties to the north, the Snake River and State of Idaho to the east, Malheur County to the south, and Grant County to the west. Approximately 50 percent of Baker County is federally managed lands. The elevation at Baker City is 3,449 feet and several mountains in the County reach elevations over 9,000 feet. The topography includes the Blue Mountain and Eagle Cap Mountain ranges, the Pine Valley and access to Hells Canyon National Recreation Area, and is described as "high mountain desert" as the area only receives about ten inches of precipitation, including 26 inches of snow per year.

The principal routes through the county are Interstate 84, US Highways 26 and 30, and State Highways 7 and 86. I-84 runs northwest to southeast, bisecting the county. Haines and Huntington access Baker City via US 30 and I-84. Halfway and Richland access Baker City by the east-west running State Highway 86. Sumpter accesses Baker City by east-west running State Highway 7. Unity lies along the east-west running US Highway 26.

Historically, the county relied heavily upon the forestry products, mining, agriculture, and cattle ranching industries for its economic prosperity. Baker County's economy is still dominated by agriculture, wood products, tourism and mining, but diversification into wholesale and retail trade, and services is stabilizing its economy. Baker County also offers a variety of outdoor recreation opportunities including the Anthony Lakes Mountain Ski Resort, the 58-mile long Brownlee Reservoir, bird watching, hunting, and exploration of the mountain ranges lying within and around the County.



ROADWAY NAME LEGEND

(666) Beaver Creek Loop (Co. Rd. 666)
(678) Sutton Creek Loop (Co. Rd. 678)
(686) Jacobs Road (Co. Rd. 686)
(712) Gene Harsin Road (Co. Rd. 712)
(748) "C" Schaffner Creek Lane (Co. Rd. 748)
(753) Sutton Creek Road (Co. Rd. 753)
(755) West Sutton Creek Road (Co. Rd. 755)
(775) Miles Bridge Road (Co. Rd. 775)
(781) Jury Road (Co. Rd. 781)
(783) Lower Powder Road (Co. Rd. 783)
(805) Erwin Road (Co. Rd. 805)
(841) Gilkison Mill Road (Co. Rd. 841)
(850) Keating Grange Lane (Co. Rd. 850)
(851) Hack Road (Co. Rd. 851)
(853) Middle Bridge Loop (Co. Rd. 853)
(859) Banta Road (Co. Rd. 859)
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

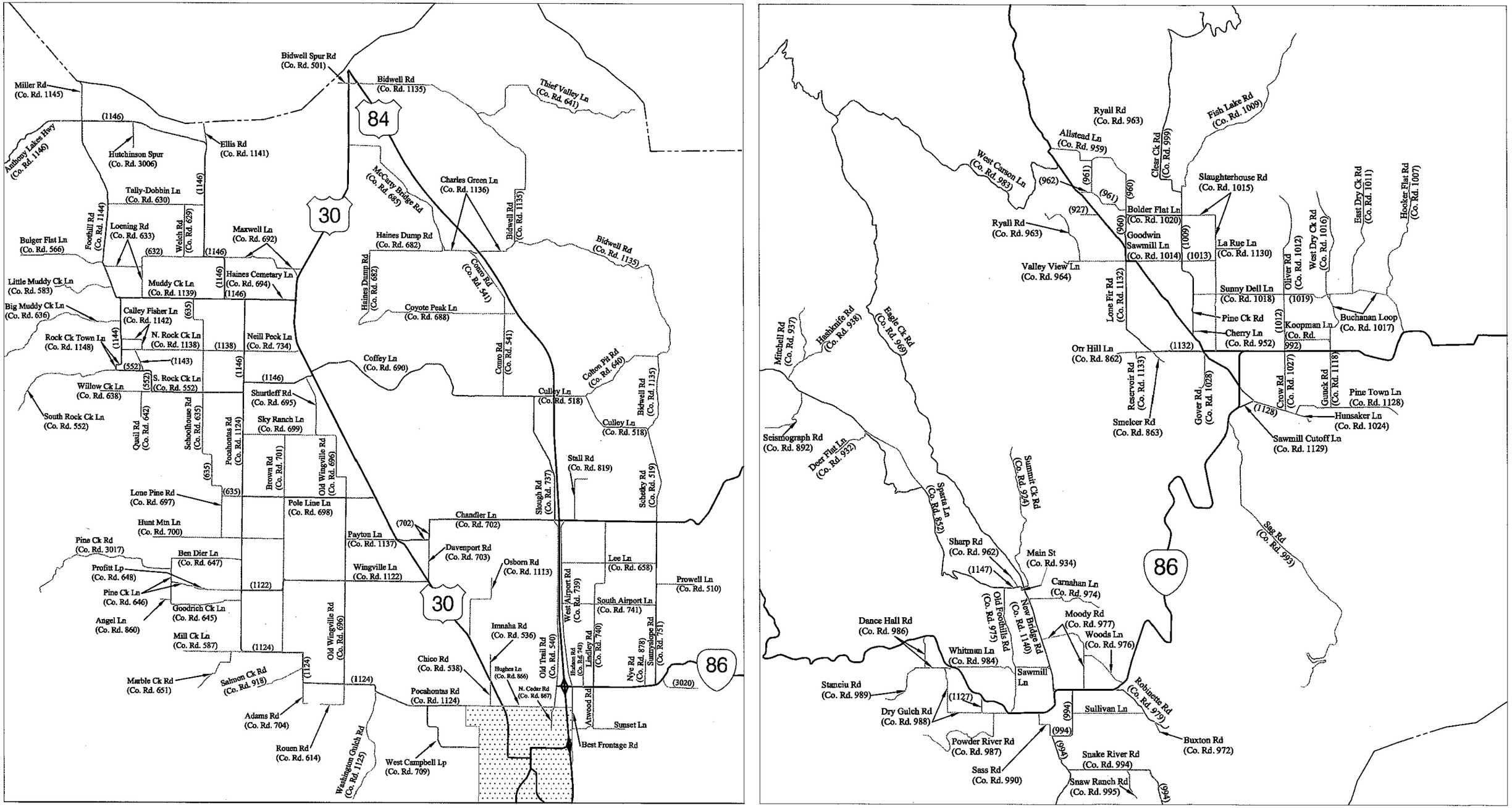
Baker County Transportation System Plan

NOT TO SCALE

LEGEND

State Highway
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
County Road

Figure 1a
Study Area Map



Baker County Transportation System Plan

NOT TO SCALE

LEGEND

- State Highway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- County Road

ROADWAY NAME LEGEND

(632) Mansfield Lane (Co. Rd. 632)
(927) McFadden Lane (Co. Rd. 927)
(960) Steele Hill Road (Co. Rd. 960)
(961) Holbrook Creek Road (Co. Rd. 961)
(962) Holbrook Creek Spur (Co. Rd. 962)
(1013) Bowerman Lane (Co. Rd. 1013)
(1019) Estes Hill Lane (Co. Rd. 1019)
(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Figure 1b
Study Area Map

1.3. PLANNING PROCESS

The transportation system plan (TSP) was developed through a series of technical exercises and input from the public, citizen advisory committee, and technical advisory committee. The key elements of the process to develop the TSP are listed below.

- Define goals and objectives
- Review of existing plans and policies
- Solicit public involvement and input
- Conduct an existing inventory and condition analysis
- Project future traffic volumes
- Define deficiencies and needs
- Develop transportation improvement projects for all modes
- Define transportation facility standards and requirements
- Develop recommended policies and ordinances
- Develop modal plans for each mode of transportation
- Develop a finance plan

1.3.1. Define Transportation Policies and Implementing Strategies

Transportation policies and implementing strategies were developed based on input from Baker County staff and requirements of the TPR. The transportation policies and implementing strategies were used later to guide the development of transportation system plan, to make decisions regarding various transportation improvement projects, developing new standards and requirements, and to provide a direction for making transportation-related decisions for the county.

1.3.2. Review of Existing Plans and Policies

To begin the transportation planning process, all applicable Baker County transportation and land use plans and policies were reviewed. The purpose of this review was to develop an understanding of how Baker County was managing its transportation infrastructure. Also, the plan and policy review also defined where the county is compliant and deficient in meeting the Transportation Planning Rule (TPR) requirements. Where deficiencies exist in meeting the TPR requirements, recommendations will be made that would comply with the TPR requirements.

1.3.3. Solicit Public Involvement and Input

Community involvement is an integral component in the development of a TSP for the County and incorporated cities of Baker County. 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 utilized to involve each local jurisdiction, ODOT, and the general public.

A transportation advisory committee (TAC) provided guidance on technical issues and direction regarding policy issues to the consultant team. Staff members, planning commissioners, a county commissioner, local stakeholders, and ODOT served on this committee. This group met three times during the course of the project.

The second part of the community involvement effort consisted of a public open house, a series community meetings at the cities of Baker County, two joint Planning Commission/County Board of Commissioners workshops, a Planning Commission public hearing, and a Board of Commissioners public hearing. The public was notified of the public meetings through public announcements in the local newspapers and on the local radio stations.

1.3.4 Conduct an Existing Inventory and Condition Analysis

The purpose of the existing inventory and conditions analysis was to catalog all the existing transportation facilities and services to determine its operating condition. This information provides the baseline from which the plan can be developed.

1.3.5. Define Deficiencies and Needs

Based on the existing inventory and conditions analysis, a transportation deficiencies list was developed. The inventory and existing conditions analysis forms the technical basis for the deficiencies list.

The future transportation deficiencies were identified from the future traffic projections to the year 2025. The traffic forecast was used to calculate level of service and volume-to -capacity (v/c) ratios. Based on these results, the locations of future traffic deficiencies were identified. The combination of existing and future deficiencies defines the need to develop improvement alternatives.

1.3.6. Develop Transportation Improvements

Based on the deficiencies and needs list, a transportation improvement plan was developed with alternatives. These improvements and alternatives were developed in conjunction with attempting to meet the transportation policies and strategies. Based on an evaluation process, a preferred alternative was selected and individual improvements were prioritized into high, medium, and low priorities.

1.3.7. Define Transportation Facility Standards and Requirements

Transportation facility standards were developed to guide Baker County in managing its roadways as well as a guideline in developing new infrastructure. These standards include access management requirements, road standards for a variety of street classifications, sidewalk width standard, bicycle facility standards, bicycle parking requirements, access-way requirements, internal pedestrian connection requirements, and block and street spacing requirements. The various standards will be documented in the relevant modal plans.

1.3.8. Develop Recommended Policies and Ordinances

The development of the transportation system within Baker County requires that policies in the Comprehensive Plan support its implementation. Also requirements adopted by ordinance(s) are necessary for transportation facilities to develop with new development. This section evaluates the existing policies, standards, and requirements and makes recommendations to enhance policies, standards, and requirements that would support the further development of the transportation system within Baker County.

1.3.9. Develop a Modal Plan for Each Mode of Transportation

Modal plans for each mode of transportation within Baker County were developed. The modal plans were developed from all of the sections described above. The intent of each modal plan was to develop improvement projects that meet the 2025 year need, establish and update standards and requirements complying with the Transportation Planning Rule, and creating and updating comprehensive plan policies that guide the development of the transportation system within Baker County.

1.3.10. Develop a Finance Plan

A finance plan was developed to identify a strategy to fund all of the transportation improvement projects developed. The finance plan starts with existing transportation funding levels. The existing revenues were then compared with the costs of the proposed improvements. Based on a revenue shortfall for funding future projects, a series of funding options was discussed and a strategy proposed.

1.4. OTHER PLANNING CONSIDERATIONS

Environmental conditions have a potentially significant impact to the development of new transportation infrastructure. TPR requirement OAR 660-012-0035 (3) (c) states that "the transportation system shall minimize adverse economic, social, environmental and energy consequences." In the development of transportation improvements, a cursory look at

environmental impacts was conducted from existing sources and known environmental issues by Baker County staff. The goal in the cursory environmental analysis was to minimize environmental impacts by any proposed transportation improvement.

Another consideration in the development of transportation improvement projects was to be consistent and support the transportation policies and implementing strategies to guide the development of the alternative proposals.

SECTION 2.0
TRANSPORTATION GOALS AND POLICIES

Section 2.0
Transportation Goals and Policies

This section establishes broad policy objectives that provide the context to make transportation investment decisions and to develop the existing and future transportation system within the unincorporated areas of Baker County.

2.1. GOAL 1 – MOBILITY

It is the goal of Baker County to provide a multi-modal transportation system that maximizes the mobility of Baker County residents and businesses.

The policies to be used to implement Goal 1 – Mobility are as follows:

1.1. Establish a transportation system that can accommodate a wide variety of travel modes and minimizes the reliance on any one single mode of travel.

1.2. Properly plan transportation infrastructure to meet the level of service set for each type of facility.

1.3. Maintain a level of service standard of LOS D or better for signalized intersections and a level of service of LOS E at unsignalized intersections if the intersection does not meet the most current Manual of Uniform Traffic Control Devices (MUTCD) signal warrants. If the intersection meets signal warrants, then the level of service standard for the unsignalized intersection shall be LOS D. At least two MUTCD signal warrants shall be met prior to consideration of signalization. A traffic study shall be conducted to analyze the potential installation of a signal that includes average daily traffic counts by hour on all intersection approaches, a signal warrant analysis based on the most recent MUTCD, and any other factors identified by a traffic engineer deemed as a factor for signalization such as poor sight distance, vehicle travel speed, and intersection geometric conditions.

For Oregon Department of Transportation (ODOT) facilities, Baker County shall defer to ODOT mobility standards described in the *1999 Oregon Highway Plan.* Section 4, Existing Conditions and Deficiencies, describes the relevant ODOT mobility standards within the Baker County planning area.

1.4. Develop a local road plan to preserve future rights-of-way for future roads and to maintain adequate local and regional circulation in a manner consistent with Baker County's existing road system.

1.5. Require developments to construct their accesses consistent with the local road plan.

1.6. Develop an access management standard for the local arterial system and direct commercial development access to local roads wherever possible.

1.7. Encourage development to occur near existing community centers where services are presently available to minimize the need for expanding services and to more efficiently utilize existing resources.

1.8. Identify local traffic problems and recommend solutions.

1.9. Review and revise, if necessary, road cross section standards for local, collector, and arterial roads to enhance safety and mobility.

1.10. Develop and adhere to a capital improvement program implementing the improvement recommendations of the TSP as funding is identified.

1.11. All roads should be constructed to meet the minimum standard to accommodate adequate emergency vehicle access.

2.2. GOAL 2 – EFFICIENCY

It is the goal of Baker County to create and maintain a multi-modal transportation system with the greatest efficiency of movement possible for Baker County residents and businesses in terms of travel time, travel distance, and efficient management of the transportation system.

The policies to be used to implement Goal 2– Efficiency are as follows:

2.1. Develop Baker County's transportation system with alternative parallel corridors to reduce reliance on any one corridor and improve local access through a local road plan that preserves future rights-of-way for future roads that develops Baker County's local road system.

2.2. Plan and improve routes to facilitate the movement of goods and services.

2.3. Manage Baker County's resources to improve the transportation system through an up-to-date Capital Improvement Program (CIP) reflecting the transportation needs of the county.

2.3. GOAL 3 – SAFETY

It is the goal of Baker County to maintain and improve transportation system safety.

The policies to be used to implement Goal 3 – Safety are as follows:

3.1. Examine the need for speed reduction in specific areas such as adjacent to local schools.

3.2. Ensure that the multi-modal transportation system within Baker County is structurally and operationally safe.

3.3. Periodically review crash records in an effort to systematically identify and remedy unsafe intersection and roadway locations.

3.4. Develop a traffic calming program to implement in areas with vehicle speeding issues.

3.5. Ensure adequate access for emergency services vehicles throughout Baker County's transportation system.

2.4. GOAL 4 – EQUITY

It is the goal of Baker County to ensure the cost of transportation infrastructure and services are borne by those who benefit from them.

The policies to be used to implement Goal 4 - Equity are as follows:

4.1. System Development Charges (SDCs) may be considered and it should accurately reflect a nexus between the traffic impact of development and the fees assessed to the development.

4.2. Baker County shall seek equitable funding mechanisms to maintain transportation infrastructure and services to an acceptable level.

4.3. Developments shall be responsible for mitigating their direct traffic impacts. These impacts shall be determined through a traffic study requirement to the developer.

4.4. Developments that desire to have "private roads and maintenance" shall still be required to construct the road system in accordance with Baker County road standards established for county and public roads.

4.5. Road districts may be created to bring existing private roads into Baker County's road system as long as those private roads directly connect to a county owned road. Prior to Baker County taking any private road over, the road district must bring the private road up to current Baker County standards. Only after the private road meets the current Baker County road standard may Baker County assume jurisdiction and ownership of the private road. The decision whether to bring a road into county jurisdiction is solely based on the Board of Commissioners.

4.6. For private roads not within a road district and directly connecting to a county owned road, Baker County will assist private property owners in creating a local improvement district (LID) to improve the private roadway to current Baker County standards.

2.5. GOAL 5 – ENVIRONMENTAL

It is the goal of Baker County to limit and mitigate adverse environmental impacts associated with traffic and transportation system development.

The policies to be used to implement Goal 5 – Environmental are as follows:

5.1. Transportation project related environmental impacts shall be identified at the earliest opportunity to ensure compliance with all federal and state environmental standards.

5.2. Transportation project environmental impacts shall be mitigated to state and federal standards as appropriate.

2.6. GOAL 6 – ALTERNATIVE MODES OF TRANSPORTATION

Increase the use of alternative modes of transportation (walking, bicycling, rideshare/carpooling, and transit) through improved access, safety, and service. Increasing the use of alternative transportation modes includes maximizing the level of access to all social, work, and welfare resources for the transportation disadvantaged. Baker County seeks for its transportation disadvantaged citizens the creation of a customer-oriented regionally coordinated public transit system that is efficient, effective, and founded on present and future needs.

The policies to be used to implement Goal 6 – Alternative Modes of Transportation are as follows:

6.1. Develop a countywide pedestrian and bicycle plan.

6.2. Promote alternative modes and rideshare/carpool programs through community awareness and education.

6.3. Coordinate with regional transit service efforts.

6.4. Seek Transportation and Growth Management (TGM) and other funding for projects evaluating and improving the environment for alternative modes of transportation.

6.5. Seek improvements of mass transit services to Baker County.

6.6. Transportation Disadvantaged

a. Continue to support programs for the transportation disadvantaged where such programs are needed and are economically feasible.

b. Increase all citizens' transportation choices.

c. Identify and retain community identity and autonomy.

d. Create a customer-oriented focus in the provision of transportation services.

e. Hold any regional system accountable for levels and quality of service.

f. Enhance public transportation sustainability.

g. Promote regional planning of transportation services.

h. Use innovative technology to maximize efficiency of operation, planning, and administration of public transportation.

i. Promote both inter-community and intra-community transportation services for the transportation disadvantaged.

2.7. GOAL 7 – MAINTAIN MULTI-JURISDICTION COORDINATION

Maintain coordination between the Baker County and the Oregon Department of Transportation (ODOT).

The policies to be used to implement Goal 7 – Maintain Multi-Jurisdictional Coordination are as follows:

7.1. Cooperate with ODOT in the implementation of the Statewide Transportation Improvement Program (STIP).

7.2. Encourage improvement of state highways.

7.3. Work with ODOT in establishing cooperative road improvement programs and schedules.

7.4. Work to establish the right-of-way needed for new roads identified in the TSP.

7.5. Take advantage of federal and state highway funding programs.

7.6. Baker County shall maintain an urban growth boundary (UGB) management agreement with the cities contained within it. This agreement is the basis to manage facilities outside the city limits but within the UGB.

7.7. Jurisdictional transfers between Baker County and the Oregon Department of Transportation (ODOT) shall be conducted through a management agreement between the two agencies. The conditions of a jurisdictional transfer of facilities shall be negotiated on a case by case basis.

7.8. Baker County shall coordinate with all of the cities within it the development and update of its transportation system plan (TSP). Baker County shall also coordinate with the cities contained within it the development of the cities' TSPs. Consistency between Baker County's and all of the cities' TSPs shall be sought.

7.9. For Oregon Department of Transportation facilities, Baker County shall defer to ODOT access management standards described in Division 51 and/or the most recent ODOT adopted access management standards and regulations.

2.8. GOAL 8 – ROADWAY FUNCTIONAL CLASSIFICATION

It is the goal of Baker County to properly plan and maintain its transportation system based on a roadway functional classification system. The road and access standards are based on this roadway functional classification system.

The policies to be used to implement Goal 8 – Roadway Functional Classification are as follows:

8.1. The transportation system plan (TSP) shall classify roadways throughout Baker County's transportation system. Both an arterial and local road classification shall be identified in the TSP.

8.2. The road and access standards shall employ the roadway functional classification system.

8.3. The roadway functional classification system represents a continuum in which through traffic increases and access provisions decrease in the higher

classification categories. The road and access standards shall reflect this principal.

2.9. GOAL 9 – TRANSPORTATION FINANCING

It is the goal of Baker County to seek adequate financial revenues to fund its Capital Improvement Program and maintenance needs.

The policies to be used to implement Goal 9 – Transportation Financing are as follows:

9.1. Baker County shall aggressively seek state and federal funding for relevant transportation projects.

9.2. Baker County shall proactively seek new local and regional funding sources for its Capital Improvement Program.

2.10. GOAL 10 – PEDESTRIAN AND BICYCLE TRAFFIC

It is the goal of Baker County to develop a county-wide network of safe, convenient and attractive bicycle and pedestrian facilities that will link state, county and city systems and enable people in rural residential areas to access and destination within 5 miles of their homes by bike or foot. This goal will focus on the following objectives:

- 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.
- Provide and maintain a network of safe and convenient pedestrian and bicycle access within the county where appropriate taking into account future development.
- Promote bicycle and walking as safe and convenient forms of transportation for all ages and all trip types by promoting bicycle and pedestrian safety education and enforcement programs.
- Increase bicycling and walking in higher populated areas of the county to encourage increased trips by bike or foot.

The policies to be used to implement Goal 10 – Pedestrian and Bicycle Traffic are as follows:

10.1. Give priority to bicycle and pedestrian routes along road and street networks over multi-use paths (separate bikeways) to provide safe, direct and convenient facilities.

10.2. Reserve separated bicycle and pedestrian access would be enhanced and where street connections do not exist or are inappropriate. The Leo Adler Parkway along the Powder River in Baker City is an example of an excellent location for a multi-use path. Connect new residential streets with existing street networks in order to provide more direct and convenient routes for automobiles, pedestrian and bicycle travel.

10.3. Integrate bicycle and pedestrian elements of the Transportation Planning Rule and Goal 12 into local projects.

10.4. Insure that projects integrate bicycle and pedestrian needs into local projects.

10.5. Appoint a Bicycle Coordinator and perpetual Bicycle Advisory Committee to coordinate the efforts of planning, public works, enforcement, and promotional activities as described in this Plan, and to be responsible for monitoring the continuing achievements of the Plan.

10.6. Develop dependable funding sources and actively seek additional sources.

10.7. Provide bicycle facilities along arterial and major collectors where appropriate taking into account future development in urban areas.

10.8. Improving access and mobility for commuter and recreational bicyclists and pedestrians of all ages by removing hazards or barriers.

10.9. Designating and developing bikeways that connect transportation hubs, neighborhoods, schools, commercial, industrial, and recreation centers.

10.10. Provide internal pedestrian circulation in new office parks and commercial developments.

10.11. Provide bicycle-parking facilities as part of new commercial, industrial and institutional developments.

10.12. Provide convenient and secure bicycle parking and commuter facilities at destinations.

10.13. Utilize State Highway Funds set aside by ORS 336.514 to construct, maintain and operate bicycle and pedestrian facilities.

10.14. Adopt design standards and policies that provide safe, convenient and functional bicycle and pedestrian facilities to encourage bicycling and walking.

10.15. Provide uniform signing and marking for bike and pedestrian facilities.

10.16. Identify and adopt management practices for bikeway maintenance and preservation, in a generally smooth, clean, and safe condition.

10.17. Build bicycle safety education programs to improve bicycle skills, observance of traffic laws, and promote overall safety for bicycle and pedestrians of all ages.

10.18. Monitor and analyze bicycle accident data to formulate ways to improve bicycle safety.

10.19. Encourage bike and pedestrian traffic through speed and vehicle reduction, where appropriate.

10.20. Collect and analyze data annually and use the data to focus efforts on increasing bicycle usage and improving the system' safety and efficiency.

10.21. Establish benchmarks to measure progress.

2.11. GOAL 11 – REFINEMENT STUDIES

Refinement studies to the Baker County Transportation System Plan shall be conducted as needed to further develop improvement projects and to specifically study discrete areas with issues needing to be resolved. These refinement studies shall be amendments to the Baker County Transportation System Plan and shall supersede the contents of the TSP. An example of a refinement study is the I-84 Interchange Area Management Plan (IAMP).

SECTION 3.0
EXISTING INVENTORY

Section 3.0
Existing Inventory

3.1. INTRODUCTION

This section of the Baker County Transportation System Plan describes the existing transportation inventory in unincorporated Baker County. The section reviews past plans and studies and inventories the existing transportation conditions. This information will be used as a foundation for identifying short-term transportation improvement needs and developing and evaluating longer-term transportation system alternatives.

3.2. STUDY AREA

Baker County is located in northeast Oregon. It is bordered by Union County and Wallowa County to the north, Idaho State to the east, Malheur County and Grant County to the south, and Grant County to the west. The planning area for the Baker County Transportation System Plan is the unincorporated area within Baker County. This area is defined by Figures 3-1a and 3-1b. Baker County has the following seven incorporated city within its boundaries:

- Baker City
- Haines
- Halfway
- Richland
- Sumpter
- Huntington
- Unity
- Greenhorn

3.3. ROAD CLASSIFICATION

3.3.1 Road Classification System

The roadway functional classifications were obtained from ODOT's Oregon Transportation Map for Baker County. This map is typically coordinated between the State of Oregon and Baker County to coordinate classifications of roadways between jurisdictions. The map was last updated in 2002 and reflects current coordinated roadway classification efforts between ODOT and Baker County. This roadway functional classification is shown in Figures 3-1a and 3-1b.

See Next Figure for Details

See Next Figure for Details

Anthony Lk Hwy (Co. Rd. 1146)
Fruit Ck Rd (Co. Rd. 551)
Buckeye Mine Rd (Co. Rd. 585)
Silver Ck Ln (Co. Rd. 550)
Granite Hill Hwy (Co. Rd. 520)
Cracker Ck Rd (Co. Rd. 553)
Sumpter Cemetery Rd (Co. Rd. 561)
Sawmill Gulch Rd (Co. Rd. 523)
Deer Ck Rd (Co. Rd. 656)
Larch Ck Rd (Co. Rd. 654)
Griffin Gulch Ln (Co. Rd. 516)
Camp Ck Rd
Deems Lp (Co. Rd. 659)
Elk Ck Ln (Co. Rd. 714)
Greenhorn Rd (Co. Rd. 503)
Gene Hale Rd (Co. Rd. 507)
Vaughn Ranch Rd (Co. Rd. 746)
Old Auburn Ln (Co. Rd. 722)
Elkhorn Estates Rd (Co. Rd. 655)
Hudspeth Rd (Co. Rd. 667)
Huckleberry Lp (Co. Rd. 564)
Worley Ck Rd (Co. Rd. 572)
W. Hudspeth Ln (Co. Rd. 571)
Black Mtn Rd (Co. Rd. 669)
Lake Ck Rd
Deanty Ck Rd (Co. Rd. 773)
Whitney Rd (Co. Rd. 539)
Rice Rd (Co. Rd. 575)
Mumm Rd (Co. Rd. 936)
Rouse Ln (Co. Rd. 584)
Water Gulch Rd (Co. Rd. 669)
Bald Mtn Rd (Co. Rd. 731)
Cow Ck Rd (Co. Rd. 730)
Haskins Rd (Co. Rd. 578)
Hereford Lp (Co. Rd. 672)
Cemetary Rd (Co. Rd. 537)
South Burnt River Ln (Co. Rd. 600)
Bull Run Rd (Co. Rd. 601)
Job Creek Rd (Co. Rd. 607)
Campbell Ln (Co. Rd. 606)
Murray Rd (Co. Rd. 611)
East Camp Creek Rd
Beaver Ck Rd (Co. Rd. 747)
Ebell Ck Rd (Co. Rd. 811)
Dry Ck Cutoff Rd (Co. Rd. 752)
Dry Ck Rd (Co. Rd. 670)
Dark Canyon Rd (Co. Rd. 767)
Deer Ck Rd
Bridgeport Ln (Co. Rd. 1123)
Poineer Ln (Co. Rd. 705)
Malheur Reservoir Rd (Co. Rd. 769)
Clarks Ck Rd (Co. Rd. 1121)
Mormon Basin Ln (Co. Rd. 1100)
Malheur Line Ln (Co. Rd. 922)
Benson Creek Rd (Co. Rd. 869)
Ruckles Ck Lp (Co. Rd. 1126)
Virtue Mine Rd (Co. Rd. 892)
Love Reservoir Ln (Co. Rd. 858)
Flint Ck Rd (Co. Rd. 791)
White Swan Rd (Co. Rd. 794)
John Widman Rd (Co. Rd. 897)
Fivemile Ln (Co. Rd. 856)
Sinclair Rd (Co. Rd. 857)
Sardine Ck Rd (Co. Rd. 865)
Hixon Rd (Co. Rd. 872)
Troy Rd (Co. Rd. 808)
Old Hwy No. 30 (Co. Rd. 539)
Iron Mtn Rd (Co. Rd. 904)
Hindmen Rd (Co. Rd. 531)
Vandever Rd (Co. Rd. 909)
Hill Ck Rd (Co. Rd. 809)
Lang Rd (Co. Rd. 873)
Alder Ck Rd (Co. Rd. 801)
Kitchen Ck Rd (Co. Rd. 802)
Burnt River Canyon Ln (Co. Rd. 675)
Oxman Ranch Ln (Co. Rd. 876)
Old Hwy No. 30 (Co. Rd. 539)
Shimmil Ck Rd (Co. Rd. 919)
Stories Gulch Rd (Co. Rd. 911)
Rye Valley Ln (Co. Rd. 1119)
Mormon Basin Ln (Co. Rd. 1100)
Durbin Ck Rd (Co. Rd. 1061)
Collins Ln (Co. Rd. 715)
Writh Rd (Co. Rd. 830)
Blue Mtn Ridge Rd (Co. Rd. 713)
Houghton Ck Rd (Co. Rd. 835)
East Eagle Rd (Co. Rd. 891)
Cook Rd (Co. Rd. 847)
Mother Lode Rd (Co. Rd. 848)
Sparta Ln (Co. Rd. 852)
Skinner Rd (Co. Rd. 803)
Keating Cutoff Rd (Co. Rd. 853)
Sparta Butte Rd (Co. Rd. 923)
Gem Mine Rd (Co. Rd. 955)
Queen Mine Rd (Co. Rd. 955)
Clear Ck Rd (Co. Rd. 999)
Duck Ck Rd
Homestead Rd (Co. Rd. 1039)
North Pine Ck Rd
Idaho Power Rd
Daly Ck Rd (Co. Rd. 991)
Snake River Rd (Co. Rd. 994)
Manning Ck Rd (Co. Rd. 910)
Julius Hopper Ln (Co. Rd. 912)
Sisley Ck Rd (Co. Rd. 953)
Pinto Rd (Co. Rd. 914)
Connor Ck Rd (Co. Rd. 1002)
Hibbard Ck Rd (Co. Rd. 1005)
Lungley Rd (Co. Rd. 951)
Snake River Rd (Co. Rd. 994)
Frontage Rd (Co. Rd. 871)

ROADWAY NAME LEGEND

(666) Beaver Creek Loop (Co. Rd. 666)
(678) Sutton Creek Loop (Co. Rd. 678)
(686) Jacobs Road (Co. Rd. 686)
(712) Gene Harsin Road (Co. Rd. 712)
(748) "C" Schaffner Creek Lane (Co. Rd. 748)
(753) Sutton Creek Road (Co. Rd. 753)
(755) West Sutton Creek Road (Co. Rd. 755)
(775) Miles Bridge Road (Co. Rd. 775)
(781) Jury Road (Co. Rd. 781)
(783) Lower Powder Road (Co. Rd. 783)
(805) Erwin Road (Co. Rd. 805)
(841) Gilkison Mill Road (Co. Rd. 841)
(850) Keating Grange Lane (Co. Rd. 850)
(851) Hack Road (Co. Rd. 851)
(853) Middle Bridge Loop (Co. Rd. 853)
(859) Banta Road (Co. Rd. 859)
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

Baker County Transportation System Plan

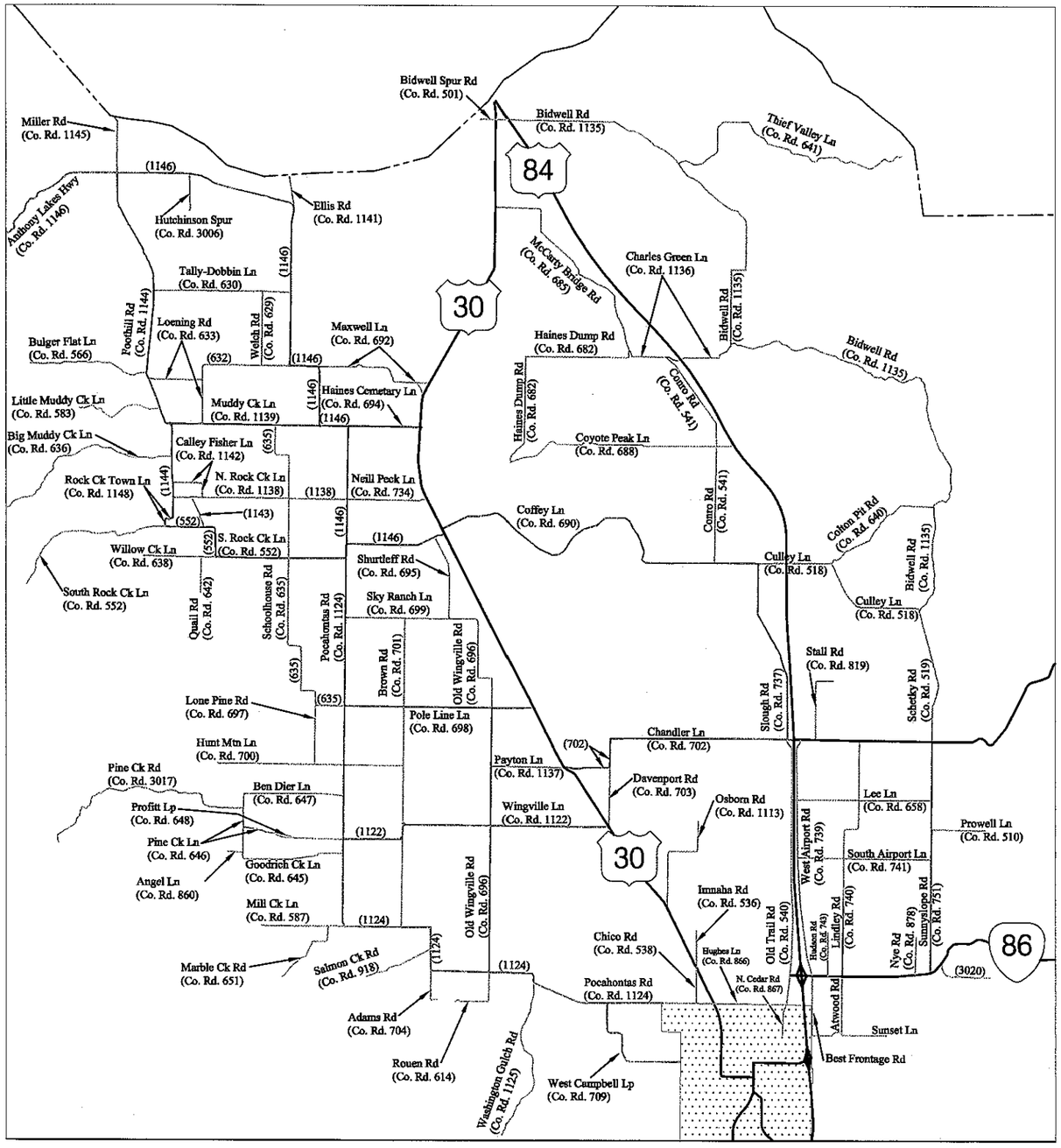
NOT TO SCALE

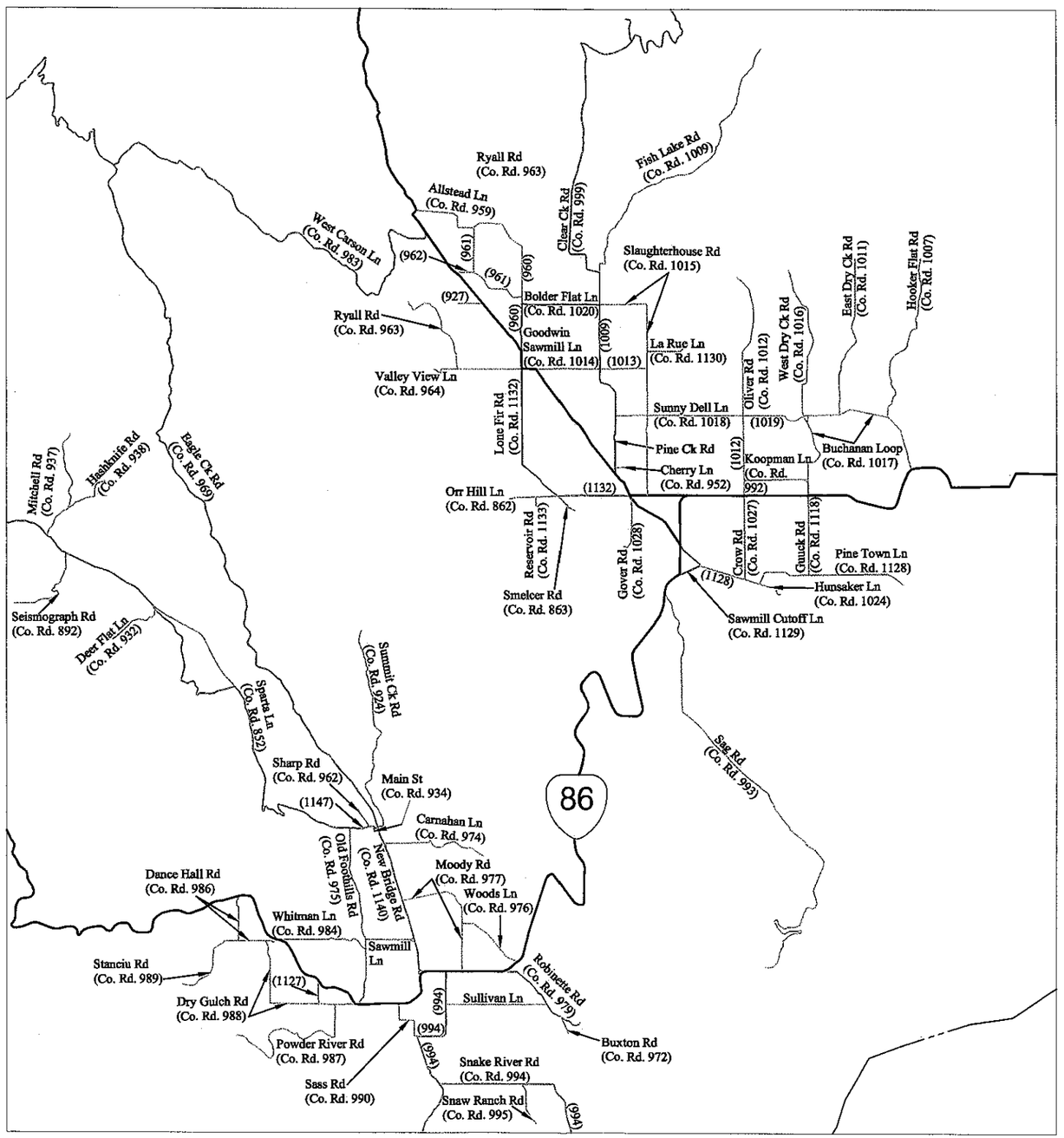
LEGEND

State Highway
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
County Road

Figure 3-1a
Study Area Map and
Existing Roadway Classification

Baker County Transportation System Plan





NOT TO SCALE

LEGEND

- State Highway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- County Road

ROADWAY NAME LEGEND

(632)	Mansfield Lane (Co. Rd. 632)	(1019)	Estes Hill Lane (Co. Rd. 1019)
(927)	McFadden Lane (Co. Rd. 927)	(1127)	Blank Road (Co. Rd. 1127)
(960)	Steele Hill Road (Co. Rd. 960)	(1143)	Stevens Road (Co. Rd. 1143)
(961)	Holbrook Creek Road (Co. Rd. 961)	(1147)	Governor Lane (Co. Rd. 1147)
(962)	Holbrook Creek Spur (Co. Rd. 962)		
(1013)	Bowerman Lane (Co. Rd. 1013)		

Figure 3-1b
Study Area Map and
Existing Roadway Classification

The existing roadway functional classification system is made up of the following five classifications:

- principal arterial,
- minor arterial,
- rural major collector,
- rural minor collector, and
- local road.

Of these five roadway functional classifications, all of them exist in the Baker County study area.

Typically, a principal/minor arterial is designated as a road which carries the highest volume of traffic within the county. It is primarily intended to provide access across the county rather than provide access to abutting properties. A collector road typically provides access between arterials, to abutting properties, and from neighborhoods onto arterials. A local road is intended to solely serve abutting properties. There a three basic types of local roads within Baker County. They are a county maintained road, a public use road not maintained by the county, and a private road or easement.

3.3.2. State Facilities

State highways traversing through Baker County creates the backbone of Baker County's road system. The following twelve state highways exist within Baker County:

- I-84 – Old Oregon Trail, Oregon Highway Number 6
- US 26 – John Day Highway, Oregon Highway Number 66
- Oregon 7 – Whitney Highway, Oregon Highway Number 71
- OR 86 – Baker-Copperfield Highway, Oregon Highway Number 12
- Halfway Spur, Oregon Highway Number 12
- US 30 – La Grande-Baker Highway, Oregon Highway Number 66
- US 30 – Huntington Highway, Oregon Highway Number 6
- OR 203 – Medical Springs, Oregon Highway Number 340
- OR 245 – Dooley Mountain Highway, Oregon Highway Number 415
- Halfway-Cornucopia Highway, Oregon Highway Number 413
- Pine Creek Highway, Oregon Highway Number 414
- Sumpter Highway, Oregon Highway Number 410

The *1999 Oregon Highway Plan*[1] defines a state highway classification system in Policy 1A. The categories of highways defined in Policy 1A are summarized and defined below.

- Interstate Highways (NHS) provide connections to major cities, regions of the state, and other states. A secondary function in urban area is to provide connections for regional trips within the metropolitan area. The Interstate Highways are major freight routes and their objective is

[1] 1999 Oregon Highway Plan, Oregon Department of Transportation, March 1999, pages 37 and 38.

to provide mobility. The management objective is to provide for safe and efficient high-speed continuous-flow operation in urban and rural areas.

- Statewide Highways (NHS) typically provide inter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major recreation areas that are not directly served by Interstate Highways. A secondary function is to provide connections for intra-urban and intra-regional trips. The management objectives is to provide safe and efficient, high-speed, continuous-flow operation. In constrained and urban areas, interruptions to flow should be minimal. Inside Special Transportation Areas (STAs), local access may also be a priority.

- Regional Highways typically provide connections and links to regional centers, Statewide or Interstate Highways, or economic or activity centers of regional significance. The management objective is to provide safe and efficient, high-speed, continuous-flow operation in rural areas and moderate to high-speed operations in urban and urbanizing areas. A secondary function is to serve land uses in the vicinity of these highways. Inside STAs, local access is also a priority. Inside Urban Business Areas, mobility is balanced with local access.

- 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 STAs, local access is a priority. Inside Urban Business Areas, mobility is balanced with local access.

- Local Interest Roads function as local roads or arterials and serve little or no purpose for through traffic mobility. Some are frontage roads; some are not eligible for federal funding. Currently, these roads are District Highways or unclassified and will be identified through a process delineated according to Policy 2C. The management objective is to provide for safe and efficient, low to moderate speed traffic flow and for pedestrian and bicycle movements. Inside STAs, local access is a priority. ODOT will seek opportunities to transfer these roads to local jurisdictions.

I-84 – Old Oregon Trail

Interstate Highway 84 (Old Oregon Trail) is an Interstate Highway. The Old Oregon Trail portion of I-84 begins at the Columbia River Highway terminus in Morrow County winding through Baker City and Ontario before terminating at the Oregon/Idaho border. Interstate 84 is the main east-west highway through eastern Oregon and Baker County although the highway follows a primarily northwest to southeast alignment through the county. Throughout Baker County, Interstate 84 operates as a four-lane freeway with two travel lanes in each direction. The posted speed is 55 mph

for trucks and 65 mph for other passenger vehicles. The route traverses higher elevation areas between Nelson Point (MP 330.5) and Durbin Creek (MP 347.7) which are comprised of numerous curves and moderate grade changes resulting in truck speed reductions to 50 mph. Roadway shoulders on the left side of the highway in each travel direction are generally four to six feet wide and paved. Roadway shoulders on the right side of the highway in each travel direction are generally eight to ten feet wide and paved. Shoulders on both sides maintain their width crossing most bridges.

Within the county, I-84 traverses open pasture lands, mountain passes at elevations of nearly 4,000 feet and expansive plains. The highway's east and west travel lanes are generally separated by a 40 to 60-foot grass median throughout expansive terrain areas and are barrier separated as the highway comes together to wind through mountainous areas. The overall roadway terrain is generally flat.

US 26 – John Day Highway

US Highway 26 (John Day Highway) is a Statewide Highway which traverses east-west through the southwest portion of Baker County. As a Statewide Highway, US 26 serves across-state travel between Ontario and Portland and the coast. The highway winds through diverse and generally rolling terrain from west to east characterized by dense forest areas in Wallowa-Whitman National Forest, open pastures, winding mountainous passes, and vast plateaus, thick with low growing brush. The highway operates as a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout rural areas decreasing to 35 mph through the City of Unity. The route is comprised of numerous curves and moderate grade changes resulting in localized rural speed reductions ranging from 35 to 45 mph. Although the highway traverses moderate grade changes in both directions, there are no passing lanes along the highway within Baker County. The highway is primarily striped for no passing; however there are intermittent shoulder vehicle pullouts in both directions. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and comprised of gravel.

Oregon 7 – Whitney Highway

OR Highway 7 (Whitney Highway) extends east-west through the western-central portion of Baker County. It is a Regional Highway and is also designated a scenic byway. This highway, in conjunction with US 26 provides the connection between Baker City and John Day. Much of the traffic using this highway is comprised of recreational, hunting, and tourist traffic. The highway is also used as a freight route for timber and timber related products to access the rail head. Crossing the Grant County line, the highway is framed by the Wallowa-Whitman National Forest as it winds through a nearly four mile decent from the Tipton Summit. The highway primarily alternates between dense forest areas and open farm lands and is primarily characterized by rolling terrain. The highway operates as a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout rural areas decreasing to 25 mph within Baker City. The route is comprised of numerous curves and moderate grade changes resulting in localized rural speed reductions ranging from 35 to 45 mph. Although the highway traverses moderate grade changes in both directions, there are no passing lanes along the highway

within Baker County. The highway is primarily striped for no passing; however there are intermittent shoulder vehicle pullouts in both directions. There are roadway shoulders on both sides of the highway that are typically four to eight feet wide and partially paved. Most of the highway shoulders appear adequate for bicycle use with intermittent sections that are too narrow or unpaved to adequately support safe bicycle use.

OR 86 – Baker-Copperfield Highway and Halfway Spur

OR Highway 86 (Baker-Copperfield Highway) runs east-west through the central portion of Baker County. It is a District Highway and is also designated a scenic byway. The highway serves Hell's Canyon National Recreation Area, and the Oregon Trail Interpretive Center is located on the highway near Baker City. In conjunction with Forest Service Loop Road #39, this highway forms a popular tourist route to the City of Joseph. Terrain along the highway generally varies between expansive pastures, rolling hills, and steep mountains. The highway operates primarily as a two-lane roadway throughout rural sections of Baker County expanding to five lanes within Baker City. The posted speed in rural areas is 55 mph decreasing to 25 mph through urban areas. The route is comprised of numerous curves and moderate grade changes resulting in localized rural speed reductions ranging from 35 to 45 mph. There is one passing lane for eastbound traffic located at MP 29. The highway is primarily striped for no passing; however there are intermittent shoulder vehicle pullouts in both directions. There are roadway shoulders on both sides of the highway that range from two to ten feet wide that are comprised of partial paving and gravel.

The Halfway Spur connects OR Highway 86 with the town of Halfway. It is also a District Highway. The spur transitions from flat rural farmland near OR Highway 86 to the urban core of Halfway. The spur operates as a two-lane roadway with a posted speed of 55 mph in rural areas decreasing to 20 mph within Halfway. The spur is bordered by sidewalks throughout most the Halfway city limits.

US 30 – La Grande-Baker Highway

US Highway 30 (LaGrande-Baker Highway) is a District Highway which extends north-south through the north-central portion of Baker County. Prior to construction of I-84, this highway was the primary route between Baker City and La Grande. Today, this highway primarily serves farm/ranch and tourism/recreation uses. It also serves the City of Haines, with was bypassed by I-84. The highway primarily traverses flat rural farm lands transitioning through intermittent rolling terrain. The highway has a two-lane roadway throughout rural sections of Baker County with a posted speed of 55 mph decreasing to 25 mph through urban areas including Baker City where the roadway includes as many as five lanes. The route is primarily straight and flat providing good sight distance and is striped to allow vehicle passing along much of the highway. The highway does not have any passing lanes within rural Baker County but does have intermittent vehicle shoulder pull-outs. There are roadway shoulders on both sides of the highway that are typically two to eight feet wide and partially paved. Intermittent sections of the highway are adequate to support bicycle use.

US 30 – Huntington Highway

US Highway 30 (Huntington Highway) is a District Highway and extends north-south through southeast 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 primarily rolling mountain areas leading to the City of Huntington transitioning into primarily open farm lands leading away from Huntington. The highway has a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout rural areas decreasing to 30 mph through the City of Huntington. The route is comprised of some 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.

OR 203 – Medical Springs

OR Highway 203 (Medical Springs Highway) is a District Highway which extends north-south through the north-central portion of Baker County. Crossing the Union County line, the highway winds through expansive rolling prairies before connecting to I-84 near Baker City. The highway has a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout the county. The route is comprised of numerous curves and moderate grade changes resulting in localized rural speed reductions ranging from 30 to 40 mph. There is only one passing lane located at MP 29 for eastbound traffic. Due to the physical topography, much of the roadway is striped for no passing and shoulder vehicle pullouts are limited in both directions. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and partially paved, which could support bicycle use. Intermittent sections of the highway have limited two-foot shoulders precluding safe bicycle use.

OR 245 – Dooley Mountain Highway

OR Highway 245 (Dooley Mountain Highway) is located in the southwest to south-central portion of Baker County. The highway is a District Highway and connects US Highway 26 (John Day Highway) and OR Highway 7 (Whitney Highway). Beginning at the OR Highway 26 connection, the highway extends through open grazing lands characterized as rolling terrain. Drivers are reminded of the rural farm nature of the area reflected in the number of cattle crossing signs lining the highway. Near milepost 18.0 where the highway crosses Indian Creek, the highway transitions to mountainous terrain leading to and from the Dooley Mountain Summit (elevation 5,392 feet). This tree-lined segment of the highway, which winds through the Wallowa Whitman National Forest, is characterized by frequent curves, localized speed reductions between 25 and 45 mph, and moderate grades. The highway has a two-lane roadway throughout Baker County with a posted speed of 55 mph throughout the county. There are no passing lanes along the highway within Baker County. Due to the physical topography, much of the roadway is striped for no passing and shoulder vehicle pullouts are limited in both directions. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and comprised of gravel. Shoulder treatments are not designed for bicycle use.

Halfway-Cornucopia Highway

The Halfway-Cornucopia Highway is a District Highway and extends north-south through northeast Baker County connecting the rural community of Cornucopia and the City of Halfway which is an historic mining community. It serves recreational, tourist, and logging uses. Beginning in Cornucopia, inside the Wallowa Whitman National Forest, the highway operates as a narrow one-lane, two-way, unimproved dirt/gravel roadway. This nearly six-mile unpaved section of the highway is framed by fairly dense forest lands as it winds through mountainous terrain. This section of highway has no posted speed, but roadway conditions and constricting terrain likely limit safe vehicle operations to 20 mph or less. Near milepost six, the highway transitions to a paved roadway and transitions from primarily forested area to more open farm lands. The highway is abutted by intermittent rural residential development. The paved highway section operates as a two-lane roadway with a posted speed of 55 mph throughout rural areas decreasing to 20 mph through the City of Halfway. The route is comprised of numerous curves and moderate grade changes resulting in localized rural speed reductions ranging to 40 mph. Within the City of Halfway, the highway serves as the main street and the center of development. Although the highway traverses moderate grade changes in both directions, there are no passing lanes along the highway within Baker County. Much of the paved highway is striped for no passing; however there are intermittent shoulder vehicle pullouts in both directions. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and comprised of gravel.

Pine Creek Highway

The nearly one-mile Pine Creek Highway runs east-west through the northeast portion of Baker County from the intersection of the Halfway-Cornucopia Highway and Halfway Spur within the City of Halfway to the OR Highway 86 junction located less than one-mile east. It is a District Highway. The highway is straight, flat, and is striped to allow vehicle passing. The highway has a two-lane roadway with a posted speed of 55 mph throughout rural areas decreasing to 25 mph through the City of Halfway. There are roadway shoulders on both sides of the highway that are typically two to six feet wide and comprised of gravel.

Sumpter Highway

The Sumpter Highway extends north-south through the west-central portion of Baker County connecting the city of Sumpter with OR Highway 7 (Whitney Highway). It is a District Highway and is a designated scenic byway. Located within the Wallowa Whitman National Forest area, the nearly four mile highway is framed by forest. The highway operates as a two-lane roadway with a posted speed of 55 mph throughout rural areas decreasing from 45 to 25 mph through the City of Sumpter. Throughout the City of Sumpter, the highway serves as the community's main street and center of retail development as well as the primary access route to Sumpter Valley Dredge State Park and the Sumpter Valley Railroad Restoration (a narrow-gauge recreational railroad). Outside the City of Sumpter, the short highway covers generally rolling terrain and is comprised of numerous curves and moderate grade changes resulting in pavement striping that limits vehicle passing. There are no

passing lanes along the highway. There are roadway shoulders on both sides of the highway that are typically four to six feet wide and comprised of gravel. Throughout the City of Sumpter, shoulders increase to 10 to 15 feet wide accommodating on-street parking.

3.3.3. Non-Highway Principal and Minor Arterials

There are no non-highway principal or minor arterials in Baker County.

3.3.4. Major Rural and Minor Rural Non-Highway Collectors

The remainder of Baker County's non-highway arterial system is made up of major rural and minor rural collectors. The rural major collectors within Baker County are listed below:

- Anthony Lakes Highway (County Road 1146)
- Haines Cemetery Lane (County Road 692)
- South Rock Creek Lane (County Road 552)
- Pocahontas Road (County Road 1124)
- Old Wingville Road (County Road 696)
- Wingville Lane (County Road 1122)
- West Campbell Loop (County Road 709)
- Coffey Lane (County Road 690)
- Slough Road (County Road 737)
- Chandler Lane (County Road 702)
- Lindley Road (County Road 740)
- Sunnyslope Road (County Road 751)
- Granite Hill Highway (County Road 520)
- Bridgeport Lane (County Road 1123)
- Burnt River Canyon Lane (County Road 875)
- Keating Cutoff (County Road 833)
- Old Highway 30 (County Road 539)
- Miles Bridge Road (County Road 775)
- Sparta Lane (County Road 852)
- Sawmill Cutoff Lane (County Road 1129)
- Pine Creek Road
- Fish Lake Road (County Road 1009)
- North Pine Creek Road
- Robinette Road (County Road 979)
- Snake River Road (County Road 994)
- New Bridge Road (County Road 1140)

The roadway characteristics of the non-highway minor arterials are summarized in Appendix A.

The minor rural collectors within Baker County are listed below:

- Foothill Road (County Road 1144)
- Muddy Creek Lane (County Road 1139)
- Pole Line Lane (County Road 698)
- Cracker Creek Road (County Road 553)
- Greenhorn Road (County Road 503)
- Black Mountain Road (County Road 669)
- Water Gulch Road (County Road 669)
- Rice Road (County Road 575)
- South Burnt River Lane (County Road 600)
- East Camp Creek Road
- Clarks Creek Road (County Road 1121)
- Malheur Reservoir Road (County Road 769)
- Bridgeport Lane from Burnt River Road to Pioneer Lane (County Road 1123)
- Ebell Creek Road (County Road 811)
- Banta Road (County Road 859)
- Keating Grange Lane (County Road 850)
- Mother Lode Road (County Road 847)
- East Eagle Road (County Road 891)
- Eagle Creek Road (County Road 969)
- Clear Creek Road (County Road 999)
- Lone Fir Road (County Road 1132)
- Idaho Power Road
- Manning Creek Road (County Road 910)
- Shirttail Creek Road (County Road 919)
- Mormon Basin Lane (County Road 1100)
- Rye Valley Lane (County Road 1119)
- Malheur Line Lane (County Road 922)

The roadway characteristics of the non-highway collectors are summarized in Appendix A.

3.3.5. US Forest Service Roads

The US Forest Service currently has jurisdiction over hundreds of miles of roads in Baker County. Most of them are located in the Malheur and Wallow-Whitman National Forests and are made of gravel. The primary function of these roads is to provide access for logging trucks and recreational vehicles to all the different parts of the forest lands.

The Forest Service is not a public road agency; therefore, responsibilities and liabilities are not the same as those of the county and the state. Road closures in some areas may be imminent with continuing reductions in federal budgets. Priority routes are determined by recreational and commercial uses.

Maintenance Levels

The Forest Service utilizes five different maintenance levels which are operational and objective in nature. These levels are identified as follows:

- Maintenance Level 1 - Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed one year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and to perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate."

- Maintenance Level 2 - Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specified uses. Log haul may occur at this level. Appropriate traffic management strategies are either to (1) discourage or prohibit passenger cars or (2) accept or discourage high clearance vehicles

- Maintenance Level 3 - Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are either "encourage" or "accept". "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.

- Maintenance Level 4 - Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and /or dust abated. The most appropriate traffic management strategy is "encourage". However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.

- Maintenance Level 5 - Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated. The appropriate traffic management strategy is "encourage."

The distinction between Forest Service maintenance levels is not always sharply defined. Some parameters overlap two or more different maintenance levels. Maintenance levels are based on the best overall fit of the parameters for the road in question. In the situations where the parameters do not indicate a definite selection, the desired level of user comfort and convenience is used as the overriding criteria to determine the maintenance level. Forest Service road maintenance includes a variety of work activities. Activities may be either detailed and site specific, or broad and general.

3.3.6. Scenic Byways

The Oregon Transportation Commission (OTC) has designated 16 Scenic Byways in Oregon. Although every state highway has certain scenic attributes, the 16 Scenic Byways in Oregon were selected for their exceptional scenic value. Baker County has five Scenic Byways. The Scenic Byway designation is very important to Baker County for the economic impact to tourism. The five Scenic Byways are described briefly below.

- The ***Elkhorn Scenic Byway*** runs from Baker City to Sumpter along OR 7 and OR 410 (Sumpter Highway). From Sumpter, the Elkhorn Scenic Byway travels along Granite Hill Highway to Grant County. The scenic byway re-enters Baker County from US Forest Service Road 73 and connects to Anthony Lake Highway to Haines. From Haines, the scenic byway travels along US 30 back to Baker City.

- The ***Hells Canyon Scenic Byway*** starts in Baker City and runs along OR 86 to Richland and Halfway and out to the Snake River and Hells Canyon. The scenic byway continues by backtracking to Forest Service Road 39 which goes to the Wallowa Mountains, Eagle Cap Wilderness, and Joseph. At Joseph, the scenic byway connects with OR 82 to Enterprise and the Wallowa-Whitman National Forest Visitors Center. The scenic byway ends further west in La Grande.

- The ***Blue Mountains Scenic Byway*** begins in on I-84 at Heppner Junction and continues through The Lowlands through Cecil, Ione, Lexington, and Heppner along OR 74. Heppner is the gateway to the Blue Mountains and the transition to the Highlands. East of Heppner, the scenic bypass passes descends into an ancient lake basin where the little town of Ukiah is located. After crossing US 395, the Blue Mountain Scenic Byway climbs back into forest to the Bridge Creek Wildlife Areas, the John Day Wilderness Area, and the Strawberry Mountain Wilderness Area. The scenic byway's eastern portal is located at the North Fork John Day Campground and overlaps with the Elkhorn Drive Scenic Byway to I-84. One of three routes can be taken to I-84. Forest Service Road 73 goes east through Anthony Lakes to Haines. I-84 can be also accesses from the south toward Granite and Sumpter via the Granite Hill Highway and OR 7. The third route to I-84 is via Forest Service Road 51 which follows the Grande Ronde River to La Grande.

- The Journey Through Time Scenic Byway begins in the town of Biggs along the Columbia River and heads southward along US 97 to Wasco, Moro, and Shaniko. At Shaniko, the scenic byway heads eastward along OR 218 to Antelope and Fossil. From Fossil, the scenic byway heads along OR 207 and OR 19 to Dayville and US 26. At Dayville, the scenic byway continues eastward along US 26 through John Day and Prairie City to OR 7. The scenic byway ends at the end of OR 7 in Baker City.

- The Grand Tour Scenic Byway begins in La Grande and heads southward along the base of the Blue Mountains via OR 203. The scenic byway turns southward along OR 237 at Union to Medical Springs. At Medical Springs, the scenic byway heads northwestward back to

Union. At Union OR 237 goes northward to Cove and begins the loop back to La Grande via OR 82.

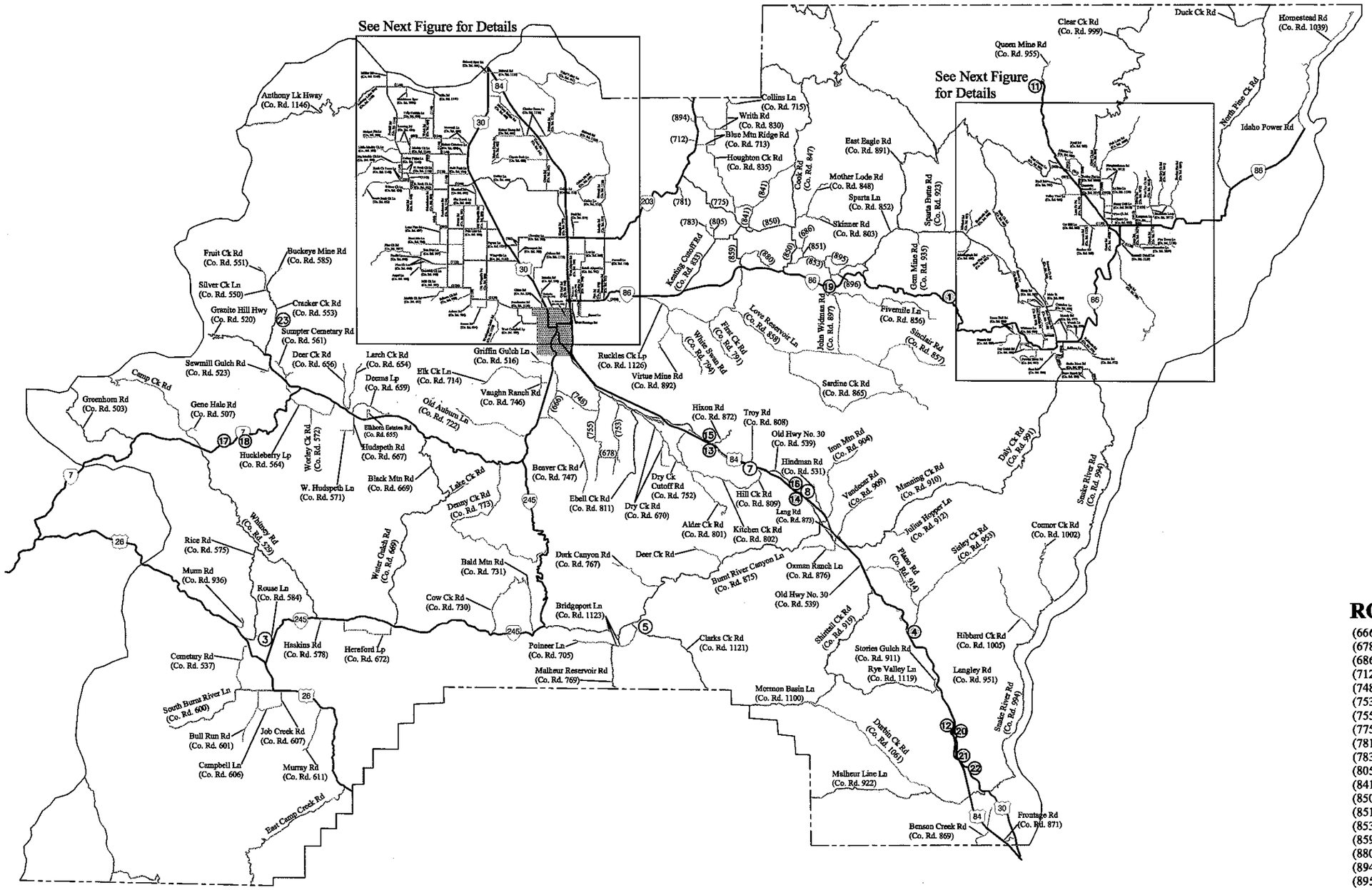
It should be noted that that the Journey Through Time and Hell Canyon Scenic Byways are part of Oregon's All American Roads. All American Roads are part of the National Scenic Byway (NSB) Program that was established under the the Intermodal Surface Transportation Efficiency Act of 1991, and reauthorized in 1998 under the Transportation Equity Act for the 21st Century. The vision of the Federal Highway Administration's National Scenic Byways Program to create a distinctive collection of American roads, their stories and treasured places. The mission of the National Scenic Byway Program is to provide resources to the byway community in creating a unique travel experience and enhanced local quality of life through efforts to preserve, protect, interpret, and promote the intrinsic qualities of designated byways.

3.4. BRIDGES

The Oregon Department of Transportation maintains an up to date inventory and appraisal of Oregon bridges. Part of this inventory involves the evaluation of three mutually exclusive elements of bridges. One element identifies which bridges are structurally deficient. This is determined based on the condition rating for the deck, superstructure, substructure, or culvert and retaining walls. It may also be based on the appraisal rating of the structural condition or waterway adequacy. Another element identifies which bridges are functionally obsolete. This element is determined based on the appraisal rating for the deck geometry, underclearances, approach roadway alignment, structural condition, or waterway adequacy. The third element summarizes the sufficiency ratings for all bridges. The sufficiency rating is a complex formula which takes into account four separate factors to obtain a numeric value rating the ability of a bridge to service demand. The scale ranges from 0 to 100 with higher ratings indicating optimal conditions and lower ratings indicating insufficiency. Bridges with ratings under 55 may be nearing a structurally deficient condition. In more general terms, a rating under 55 may indicate that significant maintenance is needed or that replacement should be planned. The exception to this are bridges that were built to a much older standard that are in good condition but do not meet today's design standards. These types of bridges can rate fairly low and under 55. The important factor here is that there are no structural integrity issues and loading problems that limit the type of vehicle and weight can cross the structure.

There are 281 bridges within the Baker County planning area that are rated by ODOT. Of these 281 bridges, 84 are maintained by Baker County, 6 are maintained by Baker City, and the remaining 191 are maintained by ODOT. The ODOT ratings of each bridge are provided in Appendix B.

Of the 281 bridges rated by ODOT within Baker County, 18 are classified as structurally deficient and 4 are classified as functionally obsolete. Table 3-1 summarizes the structurally deficient and functionally obsolete bridges. Figures 3-2a and 3-2b show the location of these bridges.



ROADWAY NAME LEGEND

(666) Beaver Creek Loop (Co. Rd. 666)
(678) Sutton Creek Loop (Co. Rd. 678)
(686) Jacobs Road (Co. Rd. 686)
(712) Gene Harsin Road (Co. Rd. 712)
(748) "C" Schaffner Creek Lane (Co. Rd. 748)
(753) Sutton Creek Road (Co. Rd. 753)
(755) West Sutton Creek Road (Co. Rd. 755)
(775) Miles Bridge Road (Co. Rd. 775)
(781) Jury Road (Co. Rd. 781)
(783) Lower Powder Road (Co. Rd. 783)
(805) Erwin Road (Co. Rd. 805)
(841) Gilkison Mill Road (Co. Rd. 841)
(850) Keating Grange Lane (Co. Rd. 850)
(851) Hack Road (Co. Rd. 851)
(853) Middle Bridge Loop (Co. Rd. 853)
(859) Banta Road (Co. Rd. 859)
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

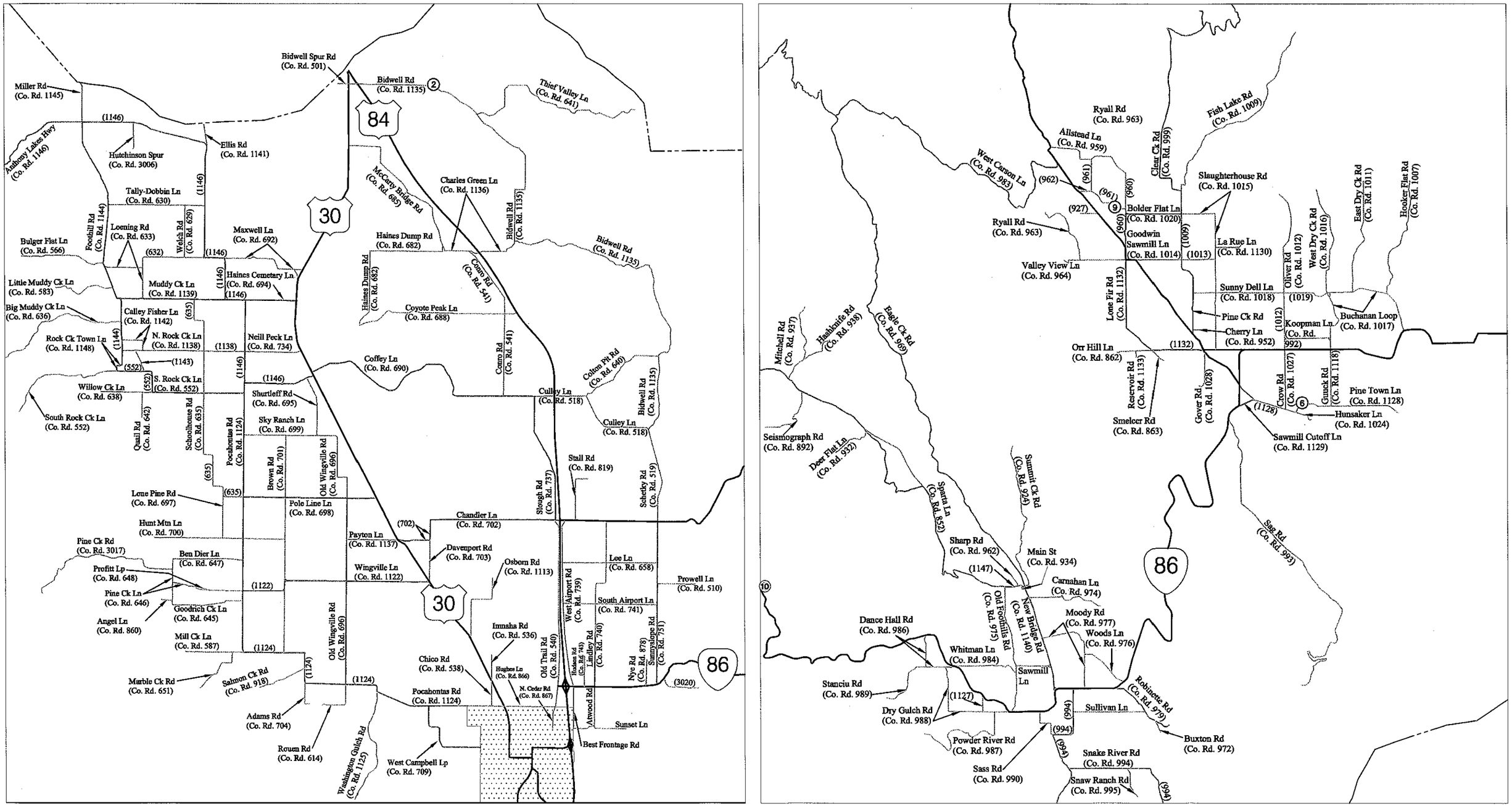
Baker County Transportation System Plan

NOT TO SCALE

LEGEND

State Highway
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
County Road
Baker County Bridges (52)
ODOT Bridges (60)

Figure 3-2a
Structurally Deficient Bridge Locations



Baker County Transportation System Plan

NOT TO SCALE

LEGEND

- State Highway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- County Road

ROADWAY NAME LEGEND

(632) Mansfield Lane (Co. Rd. 632)
(927) McFadden Lane (Co. Rd. 927)
(960) Steele Hill Road (Co. Rd. 960)
(961) Holbrook Creek Road (Co. Rd. 961)
(962) Holbrook Creek Spur (Co. Rd. 962)
(1013) Bowerman Lane (Co. Rd. 1013)
(1019) Estes Hill Lane (Co. Rd. 1019)
(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Baker County Bridges (52)
ODOT Bridges (80)

Figure 3-2b
Structurally Deficient Bridge Locations

Table 3-1. Structurally Deficient or Functionally Obsolete Baker County Bridges

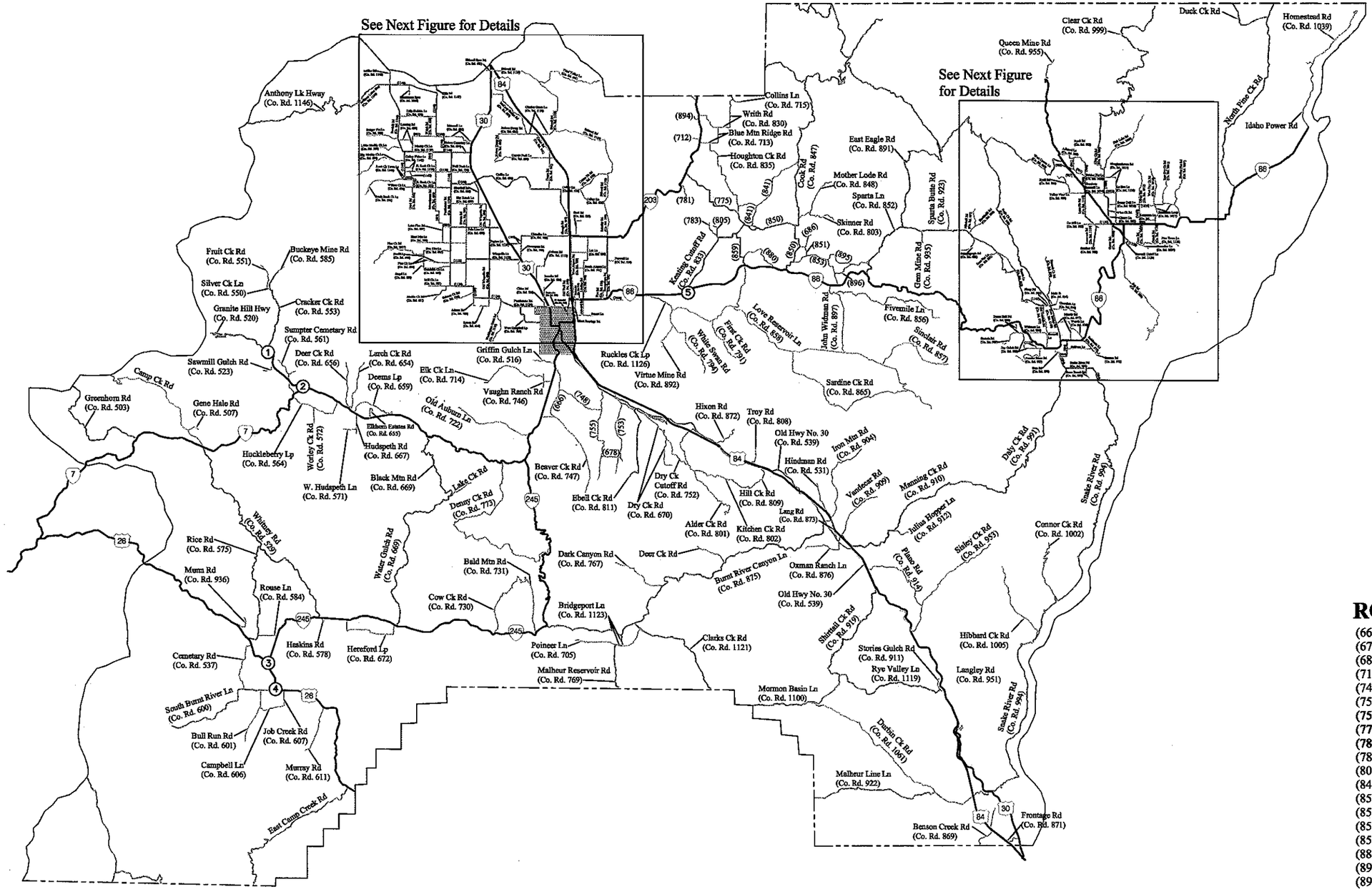
Map No.	Nimbus Number	Road	Waterway/Roadway Crossed	Maintenance Responsibility	ODOT Sufficiency
1	16810	OR 86	Powder River	ODOT	Structurally Deficient
2	01C003	Bidwell Lane (Co. Rd. 1135)	Powder River Overflow	Baker County	Structurally Deficient
3	01C412	Rouse Lane (Co. Rd. 584)	South Fork Burnt River	Baker County	Functionally Obsolete
4	09333	Conn #2 (6)	Burnt River	ODOT	Functionally Obsolete
5	01C408	Clarks Creek Road (Co. Rd. 1121)	Burnt River	Baker County	Structurally Deficient
6	01C830	Pine Town Lane (Co. Rd. 1128A)	Clear Creek	Baker County	Structurally Deficient
7	00704	Old Highway 30 (Co. Rd. 539)	Union Pacific Railroad	Baker County	Structurally Deficient
8	00741	Old Highway 30 (Co. Rd. 539)	Pritchard Creek	Baker County	Structurally Deficient
9	01C802	Holbrook Creek Road (Co. Rd. 961A)	Pine Creek	Baker County	Functionally Obsolete
10	02815	Frontage Road	Maiden Gulch	ODOT	Structurally Deficient
11	06600A	Halfway-Cornucopia Highway	Pine Creek	ODOT	Functionally Obsolete
12	09354	I-84	Lime Interchange	ODOT	Structurally Deficient
13	08279E	I-84 - EB	Pleasant Valley Interchange	ODOT	Structurally Deficient
14	07987A	I-84 - EB	UPRR/Pritchard Creek	ODOT	Structurally Deficient
15	08279W	I-84 - WB	Pleasant Valley Interchange	ODOT	Structurally Deficient
16	07987	I-84 - WB	UPRR/Pritchard Creek	ODOT	Structurally Deficient
17	07316	OR 7	Powder River (Rancheria)	ODOT	Structurally Deficient
18	07431	OR 7	Powder River (Salisbury)	ODOT	Structurally Deficient
19	02807	OR 86	Powder River (Love Bridge)	ODOT	Structurally Deficient
20	01788	US 30 – Huntington Highway	Burnt River (Lime)	ODOT	Structurally Deficient
21	00700	US 30 – Huntington Highway	UPRR/Burnt River	ODOT	Structurally Deficient
22	01789	US 30 – Huntington Highway	Burnt River	ODOT	Structurally Deficient
23	01C227	Cracker Creek Road	Cracker Creek	Baker County	

3.5. INTERSECTION TRAFFIC CONTROL AND LANE CHANNELIZATION

Figures 3-3a and 3-3b show the locations of the study area intersections. Figure 3-4 shows the existing intersection traffic control and lane geometry for each of the study area intersections. All of the study area intersections are stop controlled.

3.6. A.M. AND P.M. PEAK HOUR TRAFFIC VOLUMES

A.M. and P.M. peak hour turning movement counts at the study area intersections were collected by H. Lee & Associates in October 2004. These traffic counts were adjusted to represent the 30th highest hour traffic volumes. Figure 3-5 shows the 2004 Existing A.M. and P.M. peak hour traffic volumes at the study area intersections.



ROADWAY NAME LEGEND

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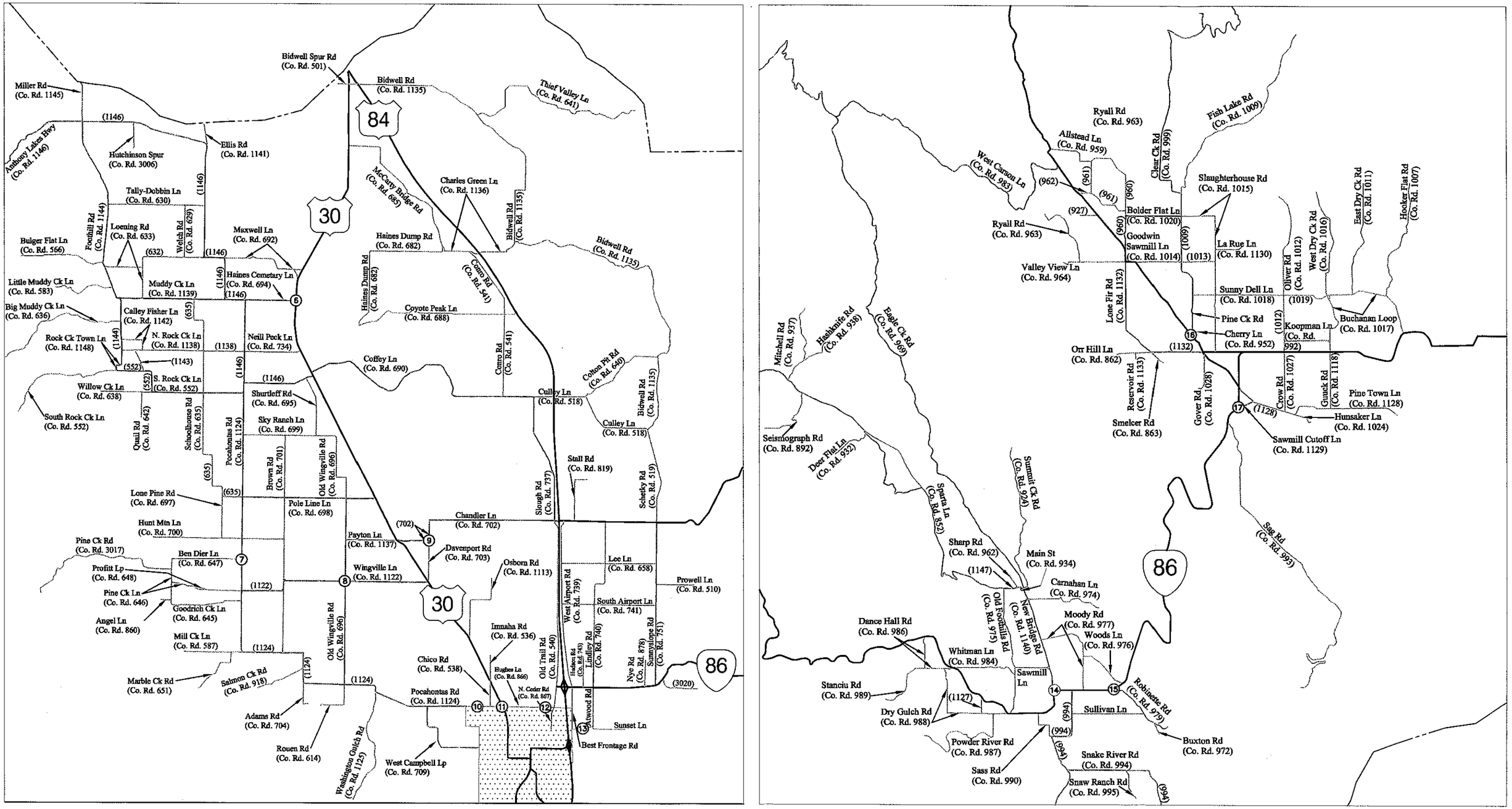
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

NOT TO SCALE

LEGEND
State Highway
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
County Road
Study Area Intersection ①

Baker County Transportation System Plan

Figure 3-3a
Study Area Intersection Locations



Baker County Transportation System Plan

NOT TO SCALE

LEGEND

- State Highway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- County Road

ROADWAY NAME LEGEND

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(927) McFadden Lane (Co. Rd. 927)
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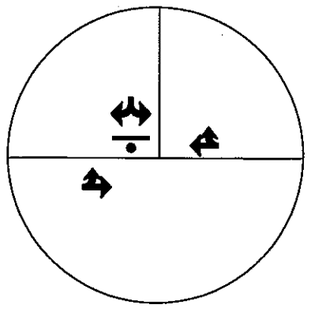
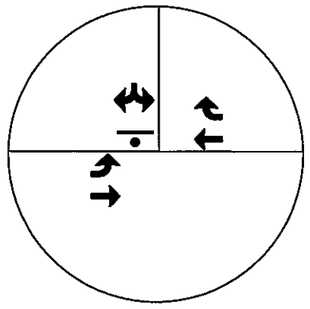
(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Study Area Intersection ①

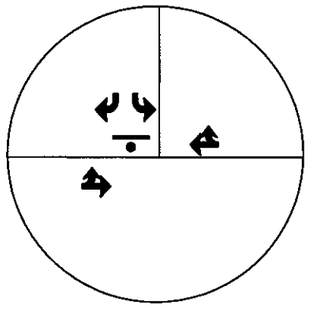
Figure 3-3b
Study Area Intersection Locations



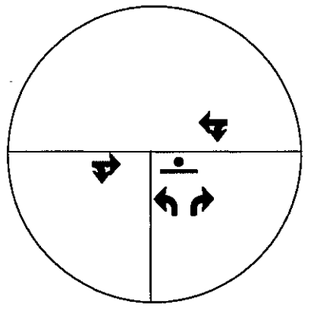
Intersection 1
Granite Hill Hwy/Cracker Creek Rd



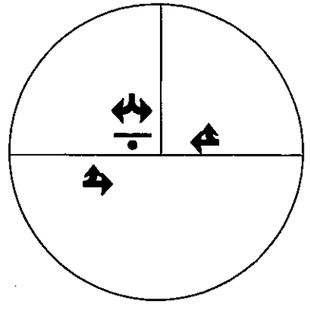
Intersection 2
OR 7/Sumpter Hwy



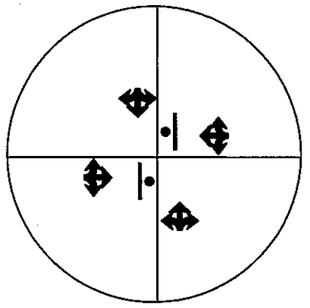
Intersection 3
US 26/OR 245



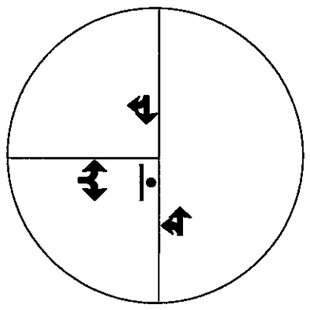
Intersection 4
South Burnt River Lane/US 26



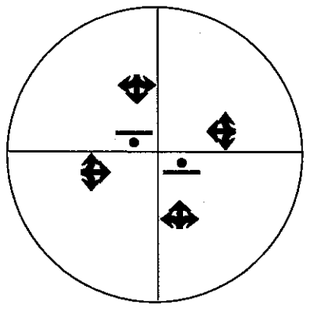
Intersection 5
OR 86/Keating Cutoff Road



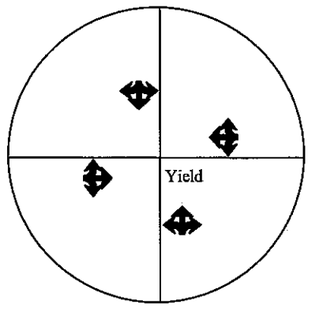
Intersection 6
Anthony Lakes Hwy/US 30



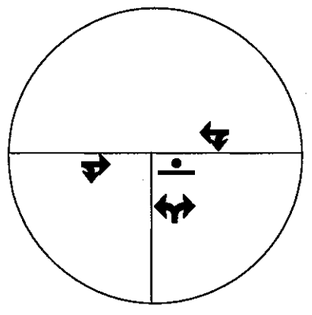
Intersection 7
Ben Dier Ln/Pocahontas Rd



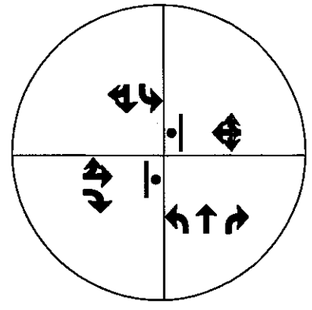
Intersection 8
Wingville Ln/Old Wingville Rd



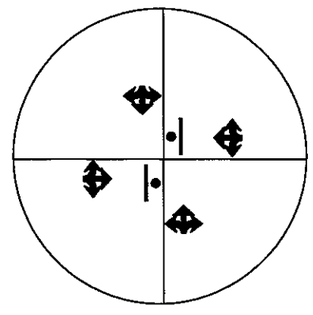
Intersection 9
Chandler Ln/Davenport Rd



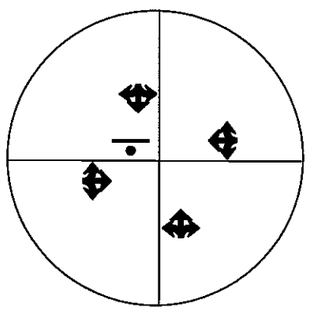
Intersection 10
Pocahontas Rd/23rd St



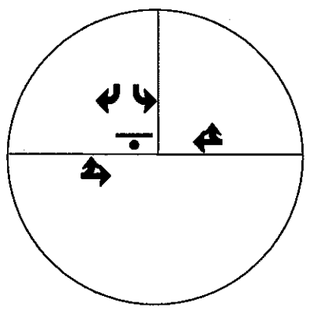
Intersection 11
Hughes Lane/US 30



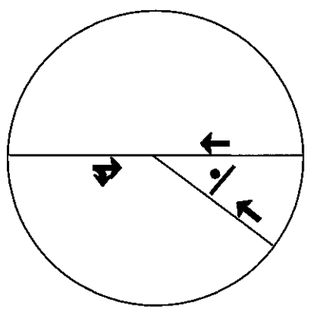
Intersection 12
Hughes Ln/Cedar St



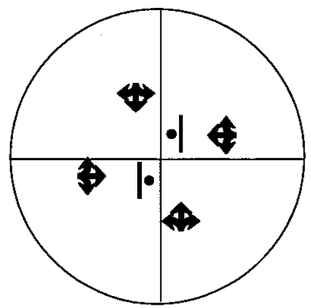
Intersection 13
Atwood Rd/Campbell St



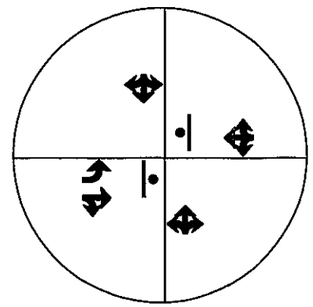
Intersection 14
OR 86/New Bridge Rd



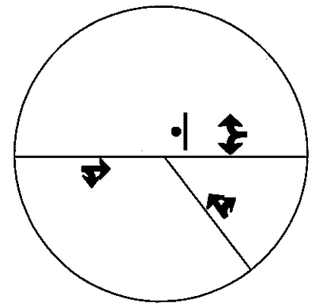
Intersection 15
OR 86/Robinette Rd



Intersection 16
Pine Creek Hwy/Halfway Spur



Intersection 17
Halfway Spur/OR 86



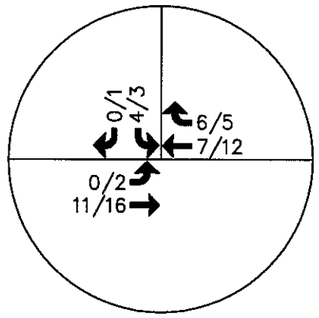
Intersection 18
US 30/Snake River Rd

Baker County Transportation System Plan

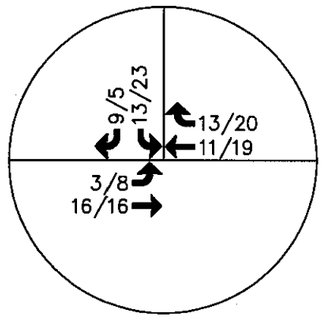
NOT TO SCALE

LEGEND
Lane Usage →
Stop Sign

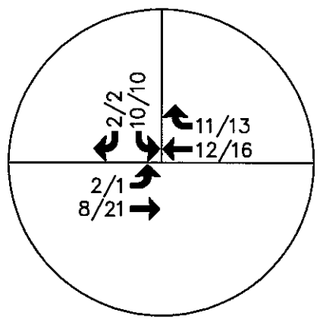
Figure 3-4
Existing Lane Configuration
and Traffic Control



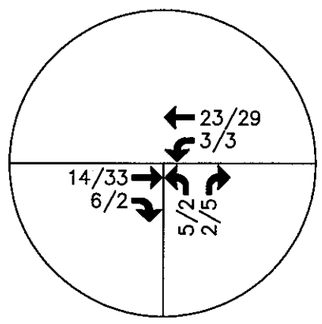
Intersection 1
Granite Hill Hwy/Cracker Creek Rd



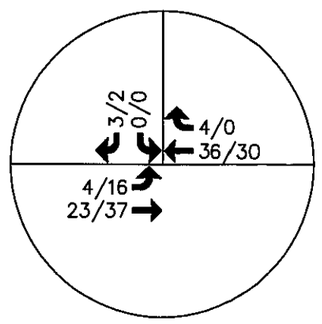
Intersection 2
OR 7/Sumpter Hwy



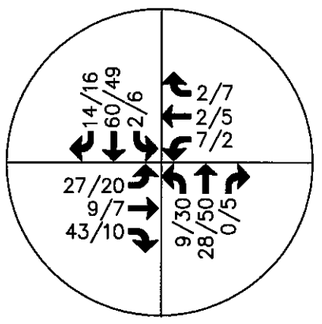
Intersection 3
US 26/OR 245



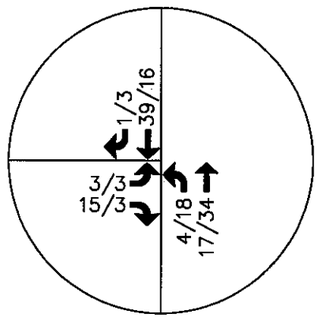
Intersection 4
South Burnt River Lane/US 26



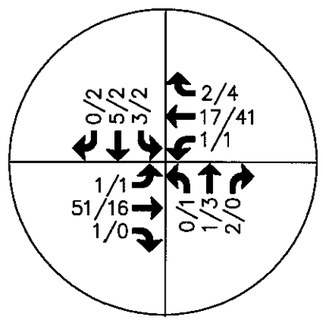
Intersection 5
OR 86/Keating Cutoff Road



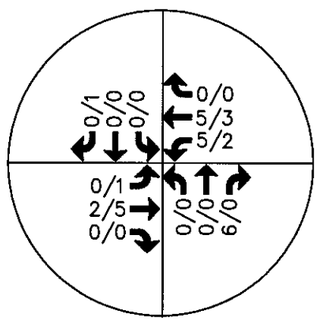
Intersection 6
Anthony Lakes Hwy/US 30



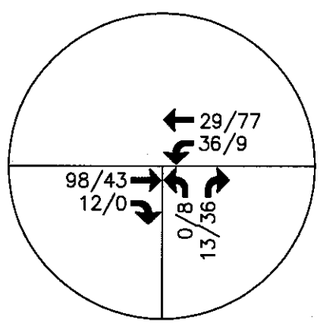
Intersection 7
Ben Dier Ln/Pocahontas Rd



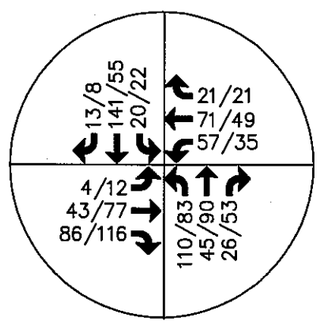
Intersection 8
Wingville Ln/Old Wingville Rd



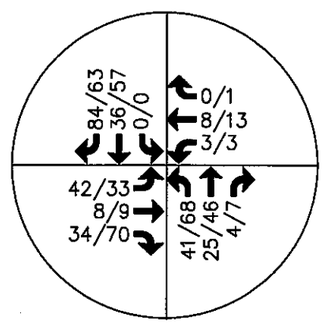
Intersection 9
Chandler Ln/Davenport Rd



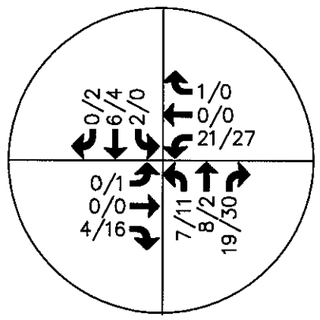
Intersection 10
Pocahontas Rd/23rd St



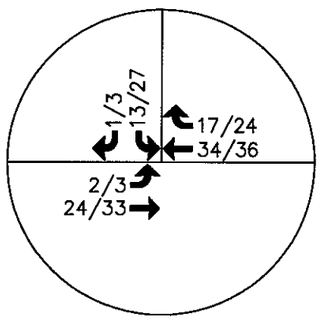
Intersection 11
Hughes Lane/US 30



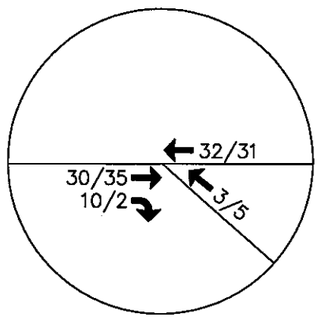
Intersection 12
Hughes Ln/Cedar St



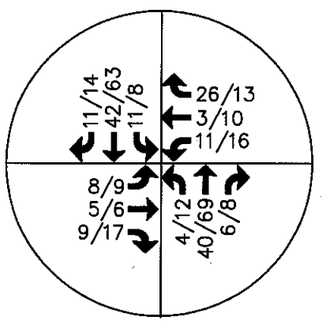
Intersection 13
Atwood Rd/Campbell St



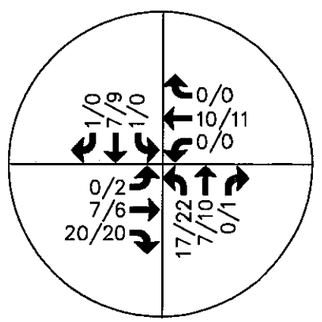
Intersection 14
OR 86/New Bridge Rd



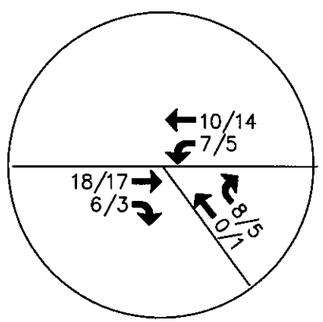
Intersection 15
OR 86/Robinette Rd



Intersection 16
Pine Creek Hwy/Halfway Spur



Intersection 17
Halfway Spur/OR 86



Intersection 18
US 30/Snake River Rd

Baker County Transportation System Plan

NOT TO SCALE

LEGEND
AM/PM Peak Hour Traffic Volume 55/100

Figure 3-5
ExistingWeekday A.M. and P.M.
Peak Hour Traffic Volumes

3.7. PEDESTRIAN AND BICYCLE FACILITIES

In rural areas, it is typical to accommodate pedestrians and bicyclists on roadway shoulders. Many of Baker County's roadways either do not have any shoulders or the shoulders are inadequate to accommodate pedestrians. Bicyclists typically share the roadway with motorists where traffic volumes are low. The typical threshold for shared lanes between motorists and bicyclists is 2,500 daily vehicles per day or less. Most of Baker County's roadways are within the low traffic volume roadway threshold.

3.8. 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.

The Amtrak Pioneer Train originally provided limited passenger services to Baker County. The reason service was discontinued was low ridership and high costs.

The Union Pacific Northwest Mainline traverses Baker County in a north/south direction. Union Pacific is one of the largest railroads in North America, operating in the western two-thirds of the U.S. The entire system serves 23 states, linking every major West Coast and Gulf Coast port. The mix of shipped commodities includes chemicals, coal, food and food products, forest and grain products, metals and minerals, and automobiles.

The Union Pacific Northwest Mainline follows the historic route of the Oregon Trail, moving west from the Blue Mountains along the Columbia River Gorge to Portland. A major classification yard in Hinkle, near Hermiston, and major switching yard in Portland are important operational elements in Oregon. The Union Pacific Northwest Mainline moves approximately 30-40 million tons of commodities per year.

Throughout Baker County, the railroad generally runs parallel to Highway 30 and Interstate I-84. Because this line is a mainline (Class IV line), it is in excellent operating condition with very few deficiencies and need for major improvements. An average of 30 or more trains a day pass through Baker County on the mainline.

Many communities in Baker County grew up along the railroad, but are no longer significant suppliers or receivers of rail commodities. 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. Consequently, rail traffic in Baker County is not originating from, or affected by, the industries operating within Baker County. Very few short lines (Class III line) are operated in Baker County.

ODOT's rail planners identified very few rail shippers and receivers within Baker County. The largest shipper is Ashgrove Cement at Nelson Point. Ashgrove Cement is one of Oregon's largest cement producers. This one shipper produces approximately 25-30 cars per week.

Conflicts between trains and automobiles were not identified as major issues during public involvement process. This is supported by a small number of accidents reported to the ODOT Rail Division from 1984-1994. According to ODOT rail planners, very few accidents have occurred between 1994 and 1999. Most crossings are grade-separated crossings or have gates and lights. Train traffic is traveling at up to 79 mph at crossings. According to the ODOT Rail Division Railroad-Highway Crossing Log, only two accidents involving trains have occurred from 1984-1994 within the County. Most crossings are concentrated in the cities of Haines and Baker City, but there are numerous crossings on the County's rural roads.

3.9. PUBLIC TRANSPORTATION

Public transportation in Baker County consists of taxicabs, inter-city bus lines, and dial-a-ride (demand response).

Baker County is served by Greyhound Route 500 between Portland and Salt Lake City three times daily in each direction. Southbound arrives at approximately 4:25 AM, 7:20 PM, and 9:45 PM, and departs 5:05 AM, 7:50 PM, and 10:50 PM. Northbound arrives at approximately 8:00 AM, 6:30 PM, and 10:20 PM, and departs 8:35 AM, 7:00 PM, and 10:50 PM. The Greyhound station is located in Baker City on Campbell Street.

The public transit provider in Baker County is Community Connection of Northeast, Inc., which has its offices located in Baker City. Delivery of the service is fragile due to being provided by a private, non-profit senior service program. The service has five vehicles:

- 1 six-passenger mini-van, 1999 Dodge Caravan, ADA accessible with ramp, scheduled for replacement in 2011;
- 1 fifteen-passenger small bus, 1995 Ford Econoline, ADA accessible with lift, scheduled for replacement in 2007;
- 1 fourteen-passenger small bus, 2001 Ford El Dorado Aerotech, ADA accessible with lift, scheduled for replacement in 2013;
- 1 twenty-passenger small bus, 2002 Ford El Dorado Aerotech, ADA accessible with lift, scheduled for replacement in 2015;
- 1 fourteen-passenger small bus, 2004 Ford El Dorado Aerotech, ADA accessible with lift, scheduled for replacement in 2017.

Currently, Community Connection is able to utilize the accessible vehicles when called to transport a person in a wheelchair. All of its vehicles are ADA accessible. The buses are housed in a five-bay bus barn located on the CCBC (Community Connection of Baker County) property. The barn was built through a joint effort between Community Connection and Baker County through a grant from

ODOT, with the stipulation that the barn would be used by Community Connection as long as it provided special and public transportation.

Community Connection provides dial-a-ride service to senior, disabled, and the general public primarily within the City of Baker. General public is required to reserve service four hours in advance. In addition to the dial-a-ride service from 7:45 a.m. to 4:15 p.m., they provide regular scheduled pick-ups and drop-offs at area schools and grocery stores.

Community Connection provides intercity service weekly between Haines and Baker City, twice weekly between the Cities of Halfway and Richland, and twice weekly between Halfway/Richland and Baker City. The Cities of Sumpter and Huntington are served "on call". In 1998, Community Connection began a fixed route service in Sumpter during their holiday weekend Flea Market events. These events bring in excess of 3,000 people to the small city, causing traffic and pedestrian congestion. The service was started in an effort to relieve this problem, and encourage visitors to park in appropriate areas and ride the bus into the flea market.

Community Connection runs a seasonal ski bus on Saturdays during the winter. The bus stops at 8:00 a.m. in front of the Geiser Hotel in Baker City to pick up passengers and returns to the same location at 4:00 p.m. The ski bus services the Anthony Lakes ski resort. The cost of the trip is $7.00. There is a 20-person capacity by the bus. The patrons of this service are primarily youth.

Community Connection receives funding from Federal Sections 5311 and 5310 funds, and state Special Transportation Funds. The Special Transportation Funds are received through Baker County. Community Connection also applies through Baker County for vehicle replacement funds to the Public Transit Division Discretionary Grant Program. It also applies for other ODOT grants as needed and when projects are identified.

Seniors, disabled passengers, and unaccompanied youth are charged a bus fare of $1.00; the general public is charged a bus fare of $1.50. Intercity bus fares between Baker City and the outlying towns are $2 each way. Between Halfway and Richland, the bus fare is $1.00 each way. Bus fares are charged at rates determined by Community Connection and are subject to change.

A comparison of Community Connections of Baker County dial-a-ride system (demand response) indicates that overall ridership has leveled out between 2001 and 2004 based on the data shown in Table 3-2. The reason the overall ridership has leveled out is because the capacity of the system has been achieved during the peak hours of operation and during the school year.

Baker County has limited transit service. The rural nature of the county, with low population densities and relatively long distances between destinations, makes the provision of regular scheduled transit difficult. However, the demographics of most Eastern Oregon counties suggest a lower income level and larger aging population than the rest of the state. These two factors may be sufficient to support an increase in demand response services over time. Community Connection should continue to monitor need and apply for grants or other funding as necessary. Also, based on increases in transit use, there appears to be an increasing need for public transportation by all types of riders including senior citizens, disabled passengers, and the general public.

Table 3-2. Community Connections Annual Ridership FY 2001 - FY 2004

Type of Rider	FY 2001	FY 2002	FY 2003	FY 2004
Senior Citizens	11,411	10,457	9,259	8,701
Disabled Passengers	2,075	2,072	2,181	2,508
General Public	11,648	10,062	10,681	10,681
Total	25,134	22,591	22,121	22,121

Source: Community Connections of Baker County. Data collected for Baker and Pine-Eagle and combined for reporting purposes.

Identified Needs

Develop Rideshare Program

The statistics reflect that the most common alternative transportation mode used in Baker County is carpooling. Community Connection will conduct a needs survey to determine if a rideshare program is identified as a need for people traveling to work or school. They may require a transportation planning grant to perform a needs assessment, and to implement the program.

Provide Regular Fixed Route Public Transportation Service Between North Powder And Baker City

There is currently no service between these two locations, other than special transportation of seniors in Haines to the nutrition site in Baker City every Friday provided by Community Connection. This route is open to the general public as well, but not utilized often. It is a certainty that some portions of these people are transportation disadvantaged. This could also be a starting point in providing regular service from Baker City to North Powder and LaGrande, one that is more tailored to school or work commute than is provided by Greyhound.

Provide Shuttle Service Between the Baker City Airport and Baker City

Should a scheduled commercial air service commence, the public bus transportation provider, currently Community Connection, will explore the need to create a link of transportation modes between Baker City and the airport, which lies five miles outside the City.

The existing public transportation services meet the basic requirements of the Oregon Transportation Plan. Connections are possible between the services provided, and the service frequency meets the required daily trip to a larger city.

3.10. AIR TRANSPORTATION

Baker County is served by Baker City Municipal Airport, Eastern Oregon Regional Airport, and Bosie Airport. Baker City Municipal Airport is located outside Baker City. Eastern Oregon Regional Airport is located in Pendleton, approximately 95 miles northwest of Baker City. Most

Baker County residents seeking commercial air service drive out of state to Boise, Idaho since there is more availability of service.

Baker City Municipal Airport is located at an elevation of 3,369 feet above mean Sea Level. The airport is around 4½ miles from downtown Baker City. There are three runways at the airport, described as follows:

- Runways 13-31: asphalt, 5,085 ft. long x 100 ft. wide
- Runways 17-35: asphalt, 4,360 ft. long x 74 ft. wide
- Runways 08-26: asphalt, 4,000 ft. long x 150 ft. wide

The Baker City Municipal Airport provides both VOR-A and VOR/DME instrument approaches, a VASI lighting system on runway 13, and a medium intensity runway lighting system on runway 13-31. There is also a precision approach path indicator (PAPI) on runway 31. There are approximately 20 private, 2 corporate, and 2 city-owned (Baker City) aircraft hangars at the airport. The airport served approximately 10,700 annual operations in 1997. Approximately 35 aircraft are based at the airport.

Baker Aircraft, the Baker City Municipal Airport's fixed base operator offers oil, repairs, jet fuel, charter, and air ambulance, 24 hour fueling, and 4 aircraft. Rental cars are available for surface transportation.

Baker City Municipal Airport is owned and operated by Baker City, and the airport is an essential part of the economy of Baker County. Recommendations for its improvement fall within the scope of this TSP. It is necessary to include the airport when considering future land use proposals for the surrounding land.

The Baker City Municipal Airport currently has no scheduled commercial service. The Eastern Oregon Regional Airport at Pendleton, located 95 miles from Baker City, is the closest commercial airport to serve Baker County. Eastern Oregon Regional Airport at Pendleton is a tower controlled airport with 11,265 annual enplanements. Passenger service includes 5 scheduled flights per day by Horizon Airlines, with flights to Portland and Seattle. The airfield is also home to 67 locally owned fixed-wing aircraft, 22 rotor craft, and 5 other aircraft. Although the Eastern Regional Airport at Pendleton is the closest commercial airport to Baker County, most residents utilize the commercial airport in Boise, Idaho since there is a much greater availability of flights.

3.11. WATER TRANSPORTATION

Baker County has no water transportation services. Barges or boats on the Snake River may occasionally be used to transport building materials or agricultural supplies for short distances. Recreational boating on the Snake River and Brownlee Reservoir is an important component of Baker County's tourist industry.

3.12. PIPELINE FACILITIES

Pipelines provide an efficient method for transporting liquids and gases. The use of pipelines can reduce the number of trucks and rail cars needed to carry gasoline, natural gas, and oil.

Northwest Pipeline Incorporated owns the natural gas pipeline through Baker County and provides natural gas to distribution companies. A distribution company, Cascade Natural Gas Corporation, provides natural gas to the Baker County area. The source of the gas is the southwestern United States, and the Canada pipeline. The distribution line extends from southeast to northwest.

Chevron Pipeline Company owns a line that runs parallel to the Northwest Pipeline Incorporated natural gas line. This pipeline originates in Salt Lake City, Utah, and continues to Spokane, Washington, with a connection in Pasco, Washington. The line carries a variety of finished petroleum products, including gasoline, jet fuel, and diesel fuel. The pipeline has no local access in Baker County.

SECTION 4.0
EXISTING CONDITIONS AND DEFICIENCIES

Section 4.0
Existing Conditions and Deficiencies

4.1. INTRODUCTION

This section of the Baker County Transportation System Plan describes existing transportation conditions and associated deficiencies in the unincorporated areas of Baker County. These conditions and deficiencies will be used as a foundation for identifying short-term transportation improvement needs and developing and evaluating longer-term transportation system alternatives.

4.2. INTERSECTION LEVELS OF SERVICE AND V/C RATIO ANALYSIS

Intersection capacity was measured by the following two methodologies: level of service (LOS) and volume to capacity (v/c) ratio. Level of service to measure the performance at an intersection is the standard practice in the transportation planning and traffic engineering profession. This concept was developed by the Transportation Research Board (TRB). The *2000 Highway Capacity Manual*[1] documents the level of service analysis methodology. The Highway Capacity Manual measures level of service on a scale of LOS A to LOS F. LOS A means that drivers experience no delay or relatively low amounts of delay while traveling through an intersection; while LOS F means that drivers experience a great deal of delay while traveling through an intersection. Typically, most jurisdictions set their level of service standard at LOS D since LOS E denotes that the intersection capacity is being met and LOS F means that conditions beyond the existing intersection capacity are occurring. When LOS F conditions occur, they indicate that it would take motorists multiple signal cycles or a great deal of delay to travel through an intersection. In Section 2, Transportation Goals and Policies, the level of service standard for Baker County has been set at LOS D for signalized intersections and LOS E for unsignalized intersections if the intersection does not meet traffic signal warrants.

The Oregon Department of Transportation bases its traffic operation standards based on volume to capacity (v/c) ratio and not level of service. For ODOT facilities, each type of facility has its own standard. Table 4-1 summarizes the v/c standard by ODOT facility type. The standard documented in Table 4-1 is from the *1999 Oregon Highway Plan.*[2]

The v/c ratio is a measure of the percentage of used capacity on the roadway. A value of 0.00 indicates no traffic on the roadway, and a value of 1.00 indicates that the entire capacity of the roadway is being utilized. The *1999 Oregon Highway Plan* indicates that for interstate highways and statewide, freight route highways on the NHS system, the maximum acceptable v/c is 0.70. Statewide, non-freight route highways and regional highways, the maximum acceptable v/c ratio is 0.75 for unincorporated communities and 0.70 along rural lands.

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[1] *2000 Highway Capacity Manual*; Transportation Research Board, National Research Council; Washington, D.C. 2000.

[2] *1999 Oregon Highway Plan*, Oregon Department of Transportation – Transportation Development Division, Planning Section, March 1999.

Table 4-1
Maximum Volume-to-Capacity Ratios for Peak Hour Operating Conditions Through a Planning Horizon for State Highway Sections Located Outside the Portland Metropolitan Area Urban Growth Boundary

	Land Use Type/Speed Limits					
	Inside Urban Growth Boundary				Outside Urban Growth Boundary	
Highway	STAs	MPO	Non-MPO outside of STAs where non-freeway speed limit <45 mph	Non-MPO where non-freeway speed limit >=45 mph	Unincorporated Communities	Rural Lands
Interstate Highways and Statewide (NHS) Expressways	N/A	0.80	0.70	0.70	0.70	0.70
Statewide (NHS) Freight Routes	0.85	0.80	0.75	0.70	0.70	0.70
Statewide (NHS) Non-Freight Routes and Regional or District Expressways	0.90	0.85	0.80	0.75	0.75	0.70
Regional Highways	0.95	0.85	0.80	0.75	0.75	0.70
District/Local Interest Roads	0.95	0.90	0.85	0.80	0.80	0.75

Source: 1999 Oregon Highway Plan (OHP)
Interstates and Expressways shall not be identified as Special Transportation Areas (STAs)
For the purpose of this mobility policy of volume-to-capacity ratio standards, the peak hour shall be the 30th highest annual hour. This approximates weekday peak hour traffic in larger urban areas.

For district highways and local interest roadways, the maximum acceptable v/c ratio is 0.80 for unincorporated communities and 0.75 along rural lands.

For unsignalized intersections, the *1999 OHP* sets the following standard:

> At unsignalized intersections and road approaches, the volume-to-capacity ratios in Table 4-1 shall not be exceeded for either of the state highway approaches that are not stopped. Approaches at which traffic must stop, or otherwise yield the right-of-way, shall be operated to maintain safe operation of the intersection and all of its approaches and shall not exceed the volume-to-capacity ratios for District/Local Interest Roads standard inside of urban growth boundaries.[3]

For signalized intersections, the *1999 OHP* sets the following standard:

[3] *1999 Oregon Highway Plan*, Oregon Department of Transportation – Transportation Development Division, Planning Section, March 1999, page 68.

At signalized intersections other than crossroads of freeway ramps, the total volume-to-capacity ratio for the intersection considering all critical movements shall not exceed the volume-to-capacity ratios in Table 4-1. Where two state highways of different classifications intersect, the lower of the volume-to-capacity ratios in the table shall apply. Where a state highway intersects with a local road or street, the volume to capacity ratio for the state highway shall apply.[4]

There are no signalized intersections within unincorporated Baker County.

The interchange ramp v/c standard within the *1999 OHP* states:

> ...The primary cause of traffic queuing at freeway off-ramps is inadequate capacity at the intersections of the freeway ramps with the crossroad. These intersections are referred to as ramp terminals. In many instances where ramp terminals connect with another state highway, the volume to capacity standard for the connecting highway will generally be adequate to avoid traffic backups onto the freeway. However, in some instances where the crossroad is another state highway or a local road, the standards will not be sufficient to avoid this problem. Therefore, the maximum volume to capacity ratio for the ramp terminals of interchange ramps shall be the smaller of the values of the volume to capacity ratio for the crossroad, or 0.85.[5]

The 1999 OHP specifies that the v/c ratio mobility standards shall be used for the following:

- Identifying state highway mobility performance expectations for planning and plan implementation.
- Evaluating the impacts on state highways of amendments to transportation plans, acknowledged comprehensive plans and land use regulations pursuant to the Transportation Planning Rule (OAR 660-12-060); and
- Guiding operations decisions such as managing access and traffic control systems to maintain acceptable highway performance.

The levels of service and v/c analysis performed for this study were based on the 30th highest hour design volumes. This is equivalent to the weekday P.M. peak hour in August. August is typically the peak traffic month and the 30th highest hour design volume occurs in this month. The weekday A.M. peak hour was also analyzed based on seasonal adjustments to August. The analysis revealed that traffic operations at the study area intersections in unincorporated Baker County are all acceptable. Table 4-2 summarizes the level of service at the study area intersections.

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[4] *1999 Oregon Highway Plan*, Oregon Department of Transportation – Transportation Development Division, Planning Section, March 1999, page 68.

[5] *1999 Oregon Highway Plan*, Oregon Department of Transportation – Transportation Development Division, Planning Section, March 1999, page 68.

Table 4-2. Existing Levels of Service

Unsignalized Intersection	A.M. Peak Hour LOS	A.M. Peak Hour Average Delay (sec)	A.M. Peak Hour Volume to Capacity Ratio	P.M. Peak Hour LOS	P.M. Peak Hour Average Delay (sec)	P.M. Peak Hour Volume to Capacity Ratio
Pocahontas Rd/23rd St						
Westbound Left	A	4.5	0.05	A	0.8	0.01
Northbound Approach	A	9.5	0.03	A	8.9	0.05
Hughes Ln/US 30						
Eastbound Through-Left	C	20.6	0.23	B	14.5	0.20
Eastbound Right	B	10.2	0.15	A	9.1	0.12
Westbound Approach	F	54.0	0.79	C	15.2	0.24
Northbound Left	A	8.1	0.12	A	7.5	0.06
Southbound Left	A	7.5	0.02	A	7.6	0.02
Hughes Ln/Cedar St						
Eastbound Approach	B	10.5	0.14	B	10.6	0.17
Westbound Approach	B	11.0	0.02	B	11.8	0.04
Northbound Left	A	4.6	0.04	A	4.5	0.05
Southbound Left	A	0.1	0.01	A	0.1	0.01
Campbell St/Best Frontage Rd						
Eastbound Approach	A	6.9	0.01	A	6.7	0.02
Southbound Approach	A	8.7	0.02	A	7.8	0.01
Chandler Ln/Davenport Rd						
Northbound Approach	A	9.1	0.01	A	0.1	0.01
OR 86/Keating Cutoff						
Eastbound Left	A	1.1	0.01	A	2.3	0.01
Southbound Approach	A	8.5	0.01	A	8.5	0.01
US 30/Anthony Lakes Hwy						
Eastbound Approach	A	9.8	0.13	B	10.1	0.06
Westbound Approach	B	10.1	0.02	A	9.5	0.02
Northbound Left	A	1.9	0.01	A	2.7	0.02
Southbound Left	A	0.2	0.01	A	0.7	0.01
Pocahontas Rd/Ben Dier Ln						
Eastbound Approach	A	8.8	0.03	A	8.8	0.01
Southbound Left	A	1.5	0.01	A	2.6	0.01
Old Wingville Rd/Wingville Ln						
Eastbound Left	A	0.01	0.01	A	0.04	0.01
Westbound Left	A	0.04	0.01	A	0.02	0.01
Northbound Approach	A	9.1	0.01	A	9.4	0.01
Southbound Approach	A	9.7	0.02	A	9.0	0.01
OR 7/Sumpter Hwy						
Eastbound Left	A	7.5	0.01	A	7.4	0.01
Southbound Approach	A	8.7	0.02	A	8.9	0.03
Granite Hill Hwy/Cracker Creek Rd						
Eastbound Left	A	0.1	0.01	A	0.8	0.01
Southbound Approach	A	8.6	0.01	A	8.7	0.01

Table 4-2. Existing Levels of Service Continued

Unsignalized Intersection	A.M. Peak Hour LOS	A.M. Peak Hour Average Delay (sec)	A.M. Peak Hour Volume to Capacity Ratio	P.M. Peak Hour LOS	P.M. Peak Hour Average Delay (sec)	P.M. Peak Hour Volume to Capacity Ratio
US 26/South Burnt River Ln						
Eastbound Approach	A	8.7	0.01	A	8.6	0.01
Northbound Left	A	0.9	0.01	A	0.7	0.01
US 26/OR 245						
Westbound Approach	A	8.8	0.02	A	9.0	0.02
Southbound Left	A	1.5	0.01	A	0.3	0.01
Cornucopia Hwy/Pine Creek Hwy						
Eastbound Approach	A	9.5	0.03	A	9.6	0.04
Westbound Approach	A	9.2	0.06	B	10.1	0.06
Northbound Left	A	0.6	0.01	A	0.6	0.01
Southbound Left	A	1.3	0.01	A	0.7	0.01
OR 86/Halfway Spur/Pine Town Rd						
Eastbound Approach	A	8.9	0.04	A	8.8	0.04
Westbound Approach	A	9.6	0.02	A	9.6	0.02
Northbound Left	A	5.4	0.02	A	4.9	0.02
Southbound Left	A	0.8	0.01	A	0.1	0.01
OR 86/Robinette Rd						
Westbound Left	A	0.1	0.01	A	0.1	0.01
Northbound Approach	A	8.9	0.01	A	8.9	0.01
OR 86/New Bridge Road						
Eastbound Left	A	0.6	0.01	A	0.6	0.01
Southbound Approach	A	9.0	0.02	A	9.2	0.04
US 30/Snake River Road						
Eastbound Left	A	0.1	0.01	A	0.1	0.01
Southbound Approach	A	8.7	0.01	A	8.5	0.01

4.3. HIGH CRASH LOCATIONS

Crash data was obtained from the Oregon Department of Transportation for the period between January 1, 2001 and December 31, 2003. The crash data summarized are only reported crashes and there may be other crashes that occurred that was not reported. The data available includes total crashes, crashes by severity (i.e. fatal, injury or property damage only), and crash collision type. The intersection crash data is summarized in Table 4-3 and the mid-block crash data is summarized in Table 4-4. These tables only contain crashes by severity type, crashes per year, and crash rates (crashes per million vehicle miles traveled and crashes per million entering vehicles). Since the crash data is given as an average, the data is shown in fractions of a crash to the nearest hundredth.

To evaluate intersection crashes, two factors were considered. First, an acceptable intersection crash rate standard is typically 1.00 crashes per million entering vehicles. However, the crashes per year should also be considered as secondary criteria for a high crash location in conjunction with this crash rate standard because the crash rate does not always indicate that there is a crash issue. The crash rate can be skewed by low traffic volumes where one crash is weighted highly in the crash rate formula. Therefore, a secondary measure of five crashes per year was also used in evaluating intersection locations for high crashes. The five crashes per year secondary threshold were used because it is the threshold for one of the traffic signal warrants. If an unsignalized intersection has five or more crashes per year, the Manual on Uniform Traffic Control Devices (MUTCD),[6] allows the intersection for consideration of signalization.

Table 4-3. Intersection Crash Summary

	Severity				Avrage Crashes	Crashes Per Million
Intersection	PDO	Injury	Fatal	Total	Per Year	Entering Vehicles
S. Rock Creek Ln/Rock School Rd	0	1	0	1	0.33	
Hughs Ln/Old Oregon Trail	3	1	0	4	1.33	

The criteria typically used for high mid-block crash locations are the state average. Based on ODOT's most recent statewide crash report,[7] the 2002 average statewide crash rate for non-freeway state facilities is 1.49 crashes per million vehicle miles traveled. The 2002 average statewide crash rate for rural non-freeway state facilities is 0.84 crashes per million vehicle miles traveled. Since the mid-block crash rate can be skewed high by a short mid-block section and low traffic volumes, a secondary measure was also used to evaluate for high mid-block crash locations. As with the intersection crash analysis, five crashes per year was used as a secondary threshold.

[6] Manual on Uniform Traffic Control Devices (MUTCD), U.S. Department of Transportation, Federal Highway Administration, 2003 Edition, page 4C-8

[7] 2002 State Highway Crash Rate Tables, ODOT, Transportation Development Division, 2003.

Table 4-4. Mid-Block Crash Summary

Road	From		To		Severity				Crashes Crashes Per Year	Crashes Per Million Miles Traveled
	Street Name	Mile Post	Street Name	Mile Post	PDO	Injury	Fatal	Total		
Old Hwy 30	Begin		End		0	0	1	1	0.33	
Best Frontage Road	Begin		End		1	0	0	1	0.33	
S. Rock Creek Lane	Begin		End		2	0	0	3	1.00	
Cracker Creek Road	Begin		End		1	0	0	1	0.33	
West Hudspeth Lane	Begin		End		0	1	0	1	0.33	
Murray Road	Begin		End		1	0	0	1	0.33	
Schoolhouse Rd	Begin		End		1	0	0	1	0.33	
Proffit Loop	Begin		End		1	0	0	1	0.33	
Larch Creek Drive	Begin		End		1	0	0	1	0.33	
Hanes Dump Road	Begin		End		1	0	0	1	0.33	
McCarty Bridge Road	Begin		End		1	0	0	1	0.33	
Pole Line Lane	Begin		End		1	0	0	1	0.33	
Hunt Mountain Lane	Begin		End		1	0	0	1	0.33	
Brown Road	Begin		End		1	0	0	1	0.33	
Chandler Lane	Begin		End		1	0	0	1	0.33	
Blue Mountain Ridge Road	Begin		End		1	0	0	1	0.33	
Elk Creek Lane	Begin		End		1	0	0	1	0.33	
Old Auburn Lane	Begin		End		1	0	0	1	0.33	
Schaffner Creek Lane	Begin		End		0	1	0	1	0.33	
Miles Bridge Road	Begin		End		1	0	0	1	0.33	
Ebell Creek Road	Begin		End		1	0	0	1	0.33	
Keating Cutoff Road	Begin		End		1	0	0	1	0.33	
Cook Road	Begin		End		1	0	0	1	0.33	
Sparta Lane	Begin		End		3	0	0	3	1.00	
Burnt River Canyon Lane	Begin		End		1	0	0	1	0.33	
Eagle Creek Road	Begin		End		1	1	0	2	0.67	
Holcomb Road	Begin		End		1	0	0	1	0.33	

Table 4-4. Mid-Block Crash Summary Continued

Road	From		To		Severity				Crashes Crashes Per Year	Crashes Per Million Miles Traveled
	Street Name	Mile Post	Street Name	Mile Post	PDO	Injury	Fatal	Total		
Robinett Road	Begin		End		1	0	0	1	0.33	
1st Street (Richland)	Begin		End		3	2	0	5	1.67	
Hooker Flat Road	Begin		End		1	0	0	1	0.33	
Fish Lake Road	Begin		End		1	0	0	1	0.33	
Slaughter House Road	Begin		End		1	0	0	1	0.33	
Homestead Road	Begin		End		1	0	0	1	0.33	
Durbin Creek Road	Begin		End		1	0	0	1	0.33	
Wingleville Lane	Begin		End		2	1	0	3	1.00	
Pocahontas Road	Begin		End		7	4	0	11	3.67	
Washington Gulch Road	Begin		End		1	0	0	1	0.33	
Ruckles Creek LP	Begin		End		1	1	0	2	0.67	
New Bridge Road	Begin		End		2	0	0	2	0.67	
4th Street (Haines)	Begin		End		12	2	0	14	0.33	
HMSTD	Begin		End		0	0	1	1	0.33	
IDPWR	Begin		End		0	0	1	1	0.33	
OR 26 (John Day)	Begin	211.00	End	222.00	2	2	1	5	1.67	
I-84	Begin	286.50	End	290.00	10	2	0	12	4.00	
	Begin	290.01	End	300.00	31	16	0	47	15.67	
	Begin	300.01	End	310.00	41	9	1	51	17.00	
	Begin	310.01	End	320.00	39	9	2	50	16.67	
	Begin	320.01	End	330.00	29	11	2	42	14.00	
	Begin	330.01	End	340.00	52	12	0	64	21.33	
	Begin	340.01	End	350.01	25	12	0	37	12.33	
	Begin	350.01	End	352.00	3	0	1	4	1.33	

Table 4-4. Mid-Block Crash Summary Continued

Road	From		To		Severity				Crashes Crashes Per Year	Crashes Per Million Miles Traveled
	Street Name	Mile Post	Street Name	Mile Post	PDO	Injury	Fatal	Total		
OR 86	Begin	0.00	End	20.00	7	8	1	16	5.33	
	Begin	20.01	End	40.00	6	5	0	11	3.67	
	Begin	40.01	End	60.00	7	3	0	10	3.33	
	Begin	60.01	End	68.00	1	1	1	3	1.00	
US 30	Begin	36.00	End	49.50	10	5	0	15	5.00	
OR 7	Begin	13.90	End	28.00	5	5	1	11	3.67	
		28.01	End	50.91	12	5	0	17	5.67	

4.4. EXISTING INTERSECTION CAPACITY IMPROVEMENT NEEDS

All of the major study intersections along ODOT highways operate within the maximum v/c ratio standard. All of the study area intersections along county roadways operate at LOS B or better.

4.5. SAFETY IMPROVEMENT NEEDS

The crash data is being further evaluated to determine whether there are any high crash locations that should be mitigated.

4.6 BRIDGES

Based on Section 3, Existing Inventory, the following bridges were identified as structurally deficient:

- OR 86 bridge over the Powder River – Bridge Nimbus Number 16810
- Bidwell Lane bridge over the Powder River Overflow – Bridge Nimbus Number 01C003
- Clarks Creek Road bridge over the Burnt River – Bridge Nimbus Number 01C408
- Pine Town Lane bridge over Clear Creek – Bridge Nimbus Number 01C830
- Old Highway 30 bridge over the Union Pacific Railroad – Bridge Nimbus Number 00704
- Old Highway 30 bridge over Pritchard Creek - Bridge Nimbus Number 00741
- Frontage Road bridge over Maiden Gulch - Bridge Nimbus Number 02815
- I-84 bridge at Lime Interchange - Bridge Nimbus Number 09354
- I-84 EB bridge at Pleasant Valley Interchange - Bridge Nimbus Number 08279E
- I-84 EB bridge over the UPRR and Prichard Creek - Bridge Nimbus Number 07987A
- I-84 WB bridge at Pleasant Valley Interchange - Bridge Nimbus Number 08279W
- I-84 WB bridge over the UPRR and Prichard Creek - Bridge Nimbus Number 07987
- OR 7 bridge over the Powder River (Rancheria) - Bridge Nimbus Number 07316
- OR 7 bridge over the Powder River (Salisbury) - Bridge Nimbus Number 07431
- OR 86 bridge over the Powder River (Love Bridge) - Bridge Nimbus Number 02807
- US 30 bridge over the Burnt River (Lime) - Bridge Nimbus Number 01788
- US 30 bridge over UPRR and Burnt River - Bridge Nimbus Number 00700
- US 30 bridge over the Burnt River - Bridge Nimbus Number 01789

The following bridges were identified as functionally obsolete:

- Rouse Lane bridge over the South Fork Burnt River – Bridge Nimbus Number 01C412
- Conn #2 bridge over the Burnt Rive – Bridge Nimbus Number 09333
- Holbrook Creek Road bridge over Pine Creek – Bridge Nimbus Number 01C802
- Halfway-Cornucopia Highway bridge over Pine Creek - Bridge Nimbus Number 06600A

4.7. PEDESTRIAN AND BICYCLE FACILITIES

There are very limited pedestrian and bicycle facilities within the unincorporated area of Baker County. In most situations, there are no pedestrian facilities. Most of the bicycle facilities are either shared roadway with the motorist or limited shoulders.

Shoulders exist sporadically along both the state highway and county roadway system throughout unincorporated Baker County. Widening shoulders along some of the state highways and county roads should be considered.

SECTION 5.0
2025 TRAVEL DEMAND FORECAST AND FUTURE DEFICIENCIES

Section 5.0
2025 Travel Demand Forecast and Future Deficiencies

5.1. TRAVEL DEMAND FORECAST METHODOLOGY

Based on ODOT's 2001 Transportation System Planning Guidelines[1], there are four approved methodologies to forecast future traffic volumes. These methodologies are described below:

- Level 1 – Trending Forecast
  The trending forecast is based on historical traffic counts in the study area. The methodology requires existing traffic counts as well as 20-year old historical traffic counts to establish a growth rate. This methodology is typically employed in areas where traffic patterns are simple and that have low to moderate growth. It is the simplest methodology used to project future traffic volumes.

- Level 2 – Cumulative Analysis
  The cumulative analysis uses historical trending information as well as an examination of future development. This analysis requires a good understanding of development trends in the study area. Based on the understanding of future development, each area of projected development is assigned a trip making characteristic and those trips are manually assigned to the street network. The cumulative analysis methodology is typically used small cities where traffic patterns are not complex. This methodology is also best employed where significant shifting of traffic is not expected between alternatives since the difference in how the traffic patterns would change is to be done manually.

- Level 3 – Transportation Model
  A transportation model is a very sophisticated methodology in forecasting future traffic volumes. It requires a significant amount of traffic and land use data as well as specialized software. Transportation models are typically developed where there is a need to study complex alternatives that can affect traffic patterns significantly. Transportation models are good to compare alternatives to each other since they effectively show the difference in travel behavior between alternatives. This travel demand forecast methodology is beyond the scope of this study process.

- Level 4 – Regional Transportation Model
  A regional transportation model is developed in a similar manner as the Level 3, Transportation Model except that it involves a larger study area. The study area in a regional model encompasses several urban areas as well as rural areas. It is typically employed at the Metropolitan Planning Organization (MPO) level. This travel demand forecast methodology is beyond the scope of this study process.

[1] 2001 Transportation System Planning Guidelines, Oregon Department of Transportation, Transportation Development Division, May 2001.

5.2. TRAVEL DEMAND FORECAST EMPLOYED FOR BAKER COUNTY STUDY AREA

Several travel demand forecast methodologies were available to project the 2025 traffic volumes for the Baker County Transportation System Plan future year analysis. Of the four methodologies previously discussed, the Level 3 and Level 4 methodologies are well beyond the scope of the transportation system planning process for Baker County. These methodologies involve developing a complex computer model and are typically reserved for areas experiencing urban type of growth. For rural areas such as Baker County, these methodologies are not as appropriate.

The remaining two methodologies to be considered to be employed for the Baker County Transportation System Plan are the Level 1 and Level 2 travel demand forecast methodologies. The Level 2 methodology requires that good information is available regarding existing and future growth patterns. It also is more applicable to apply in areas of higher growth. In areas with sporadic and slow to moderate growth, this methodology tends to create erratic future traffic projections because growth is typically concentrated. To avoid this type of future traffic projection, the Level 1 travel demand forecast methodology was employed. The Level 1 travel demand forecast methodology can be easily employed due to significant historical traffic counts available along the state highways within Baker County.

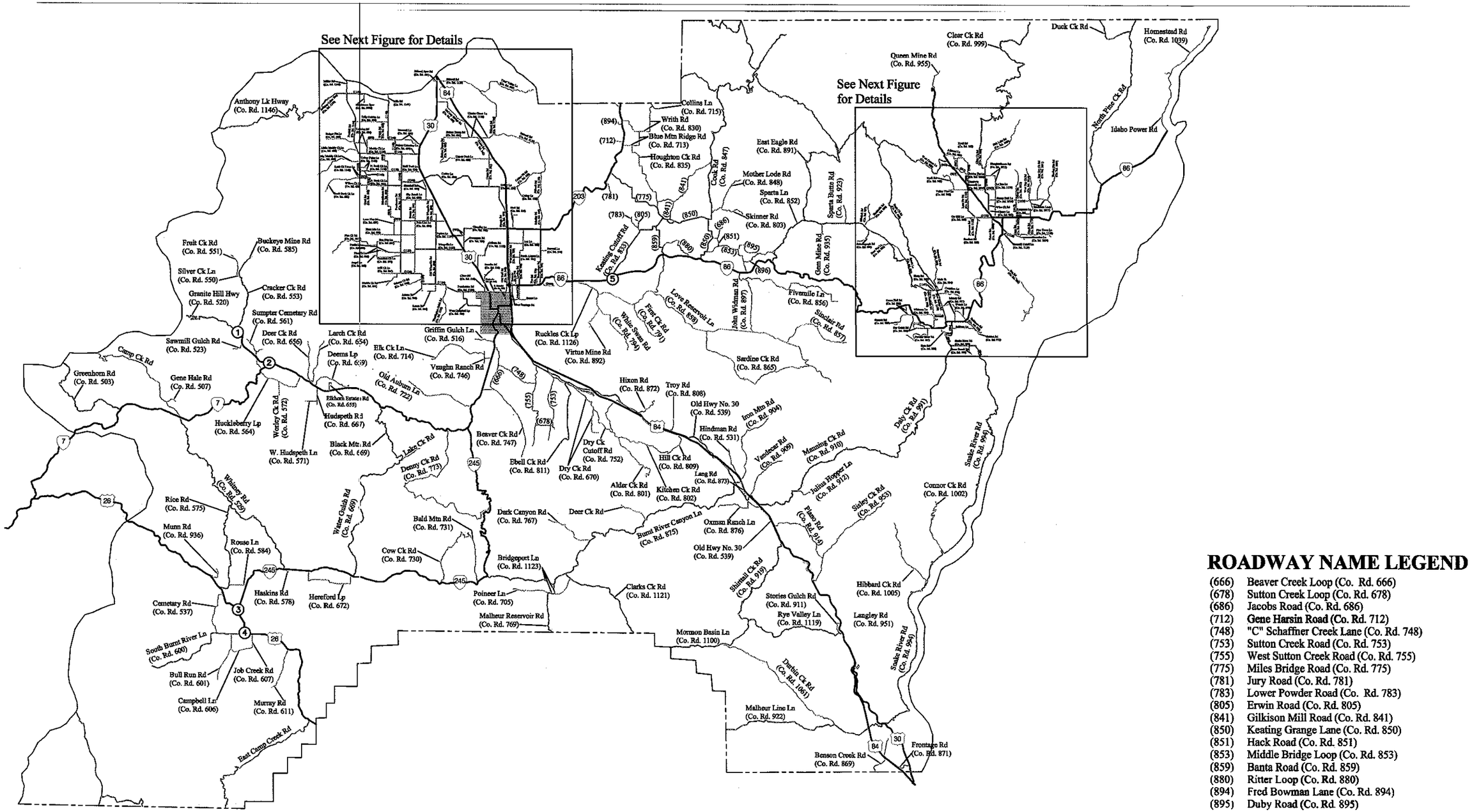
5.3. 2025 TRAFFIC VOLUME PROJECTIONS

5.3.1. Traffic Volumes

The 2025 traffic volumes were forecasted based on annual historical growth factors along the state highways in Baker County. Table 5-1 summarizes the historical traffic counts and annual growth factors used to forecast the 2025 traffic volumes for the study area intersections. The annual historical growth rates were derived from ODOT daily traffic volumes from 1983 and 2003. The locations of the traffic counts listed in Table 5-1 were taken from locations at or near the study area intersections.

Table 5-2 above summarizes the actual annual growth factors applied to each study area intersection. In some cases, multiple traffic counts were used to derive a growth factor. In that case, multiple traffic counts are listed for the particular intersection approach. The average growth between the multiple counts was used to develop the annual historical growth factor. Also, in cases where the annual growth factor was below 1.00%, a nominal annual growth factor of 1.00% was used.

Figure 5-1a and 5-1b show the locations of the study area intersections. The 2025 traffic volumes at the study area intersections are shown in Figure 5-2. Both 2025 A.M. and P.M. peak hour traffic volumes are shown in Figure 5-2.



ROADWAY NAME LEGEND

(666) Beaver Creek Loop (Co. Rd. 666)
(678) Sutton Creek Loop (Co. Rd. 678)
(686) Jacobs Road (Co. Rd. 686)
(712) Gene Harsin Road (Co. Rd. 712)
(748) "C" Schaffner Creek Lane (Co. Rd. 748)
(753) Sutton Creek Road (Co. Rd. 753)
(755) West Sutton Creek Road (Co. Rd. 755)
(775) Miles Bridge Road (Co. Rd. 775)
(781) Jury Road (Co. Rd. 781)
(783) Lower Powder Road (Co. Rd. 783)
(805) Erwin Road (Co. Rd. 805)
(841) Gilkison Mill Road (Co. Rd. 841)
(850) Keating Grange Lane (Co. Rd. 850)
(851) Hack Road (Co. Rd. 851)
(853) Middle Bridge Loop (Co. Rd. 853)
(859) Banta Road (Co. Rd. 859)
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

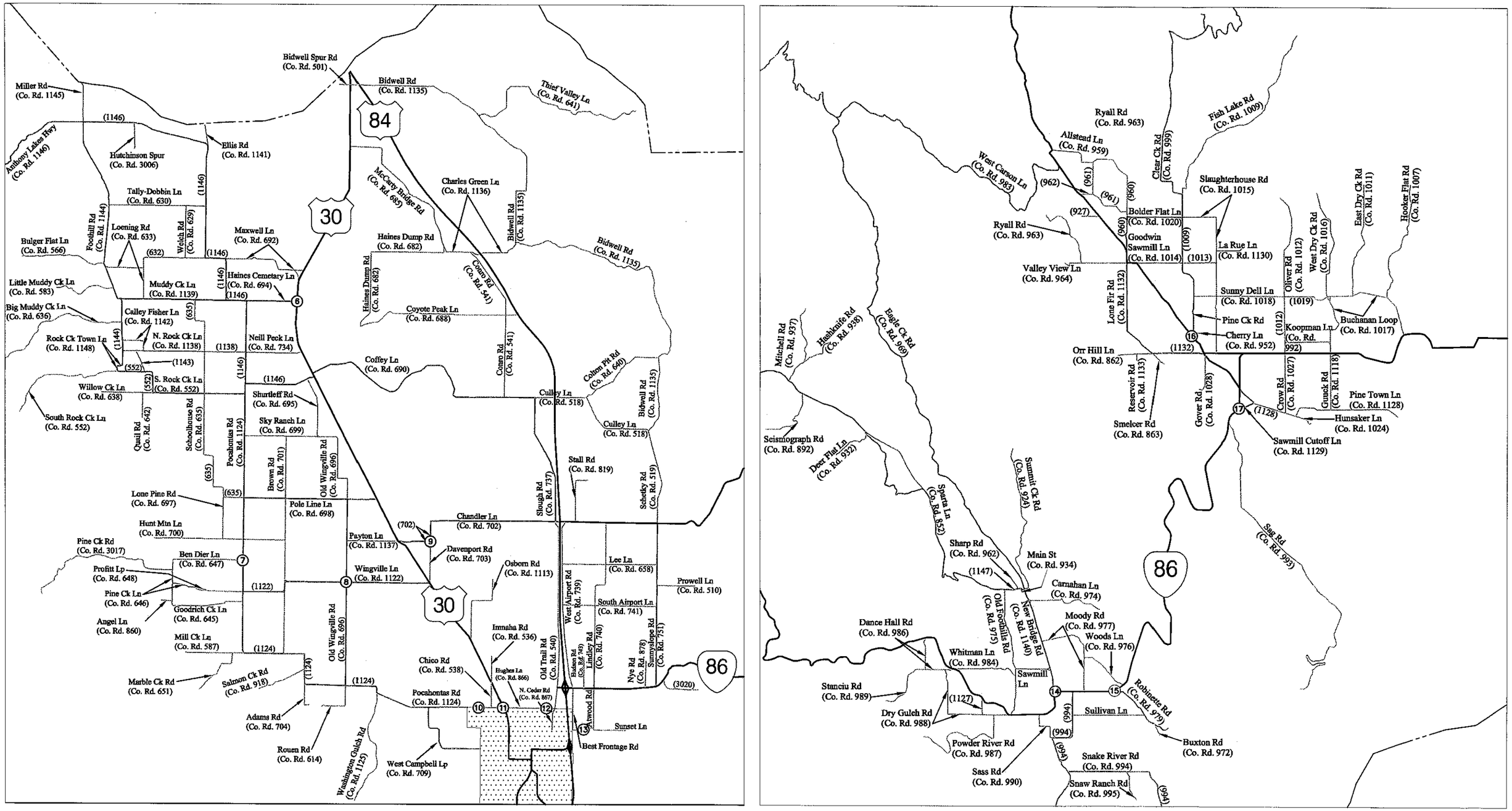
Baker County Transportation System Plan

NOT TO SCALE

LEGEND

State Highway
Principal Arterial
Minor Arterial
Major Collector
Minor Collector
County Road
Study Area Intersection ①

Figure 5-1a
Study Area Intersection Locations



Baker County Transportation System Plan

NOT TO SCALE

LEGEND

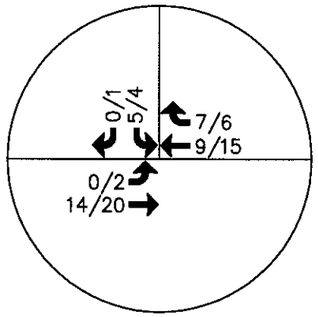
- State Highway
- Principal Arterial
- Minor Arterial
- Major Collector
- Minor Collector
- County Road

ROADWAY NAME LEGEND

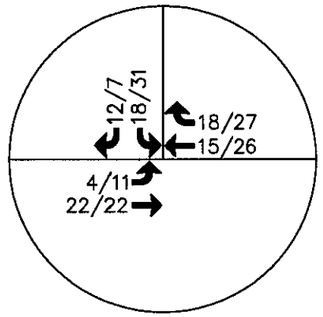
(632) Mansfield Lane (Co. Rd. 632)
(927) McFadden Lane (Co. Rd. 927)
(960) Steele Hill Road (Co. Rd. 960)
(961) Holbrook Creek Road (Co. Rd. 961)
(962) Holbrook Creek Spur (Co. Rd. 962)
(1013) Bowerman Lane (Co. Rd. 1013)
(1019) Estes Hill Lane (Co. Rd. 1019)
(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Study Area Intersection ①

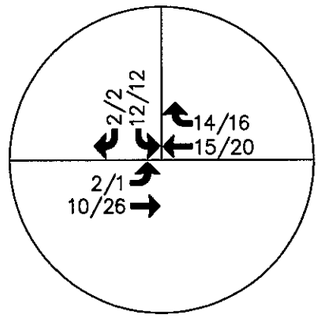
Figure 5-1b
Study Area Intersection Locations



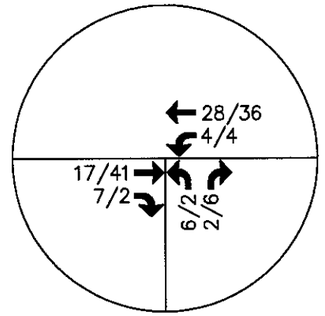
Intersection 1
Granite Hill Hwy/Cracker Creek Rd



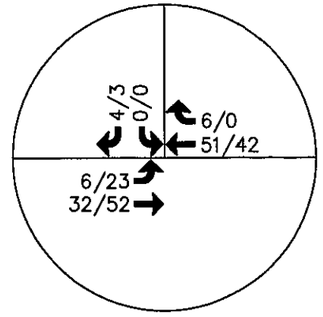
Intersection 2
OR 7/Sumpter Hwy



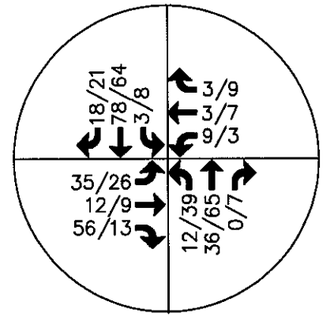
Intersection 3
US 26/OR 245



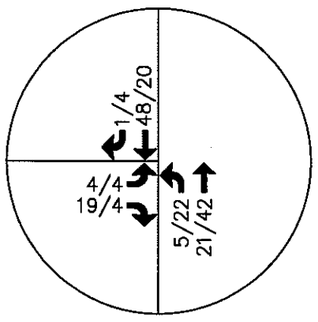
Intersection 4
South Burnt River Lane/US 26



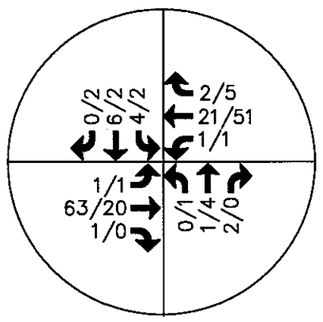
Intersection 5
OR 86/Keating Cutoff Road



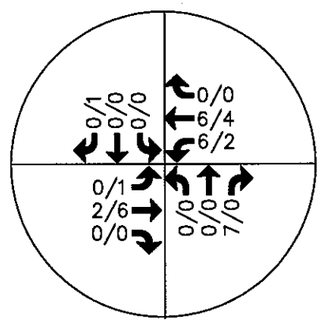
Intersection 6
Anthony Lakes Hwy/US 30



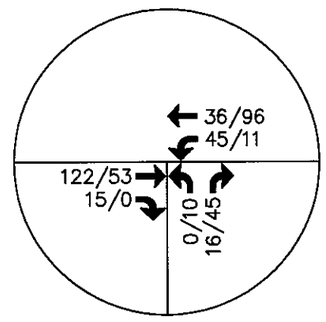
Intersection 7
Ben Dier Ln/Pocahontas Rd



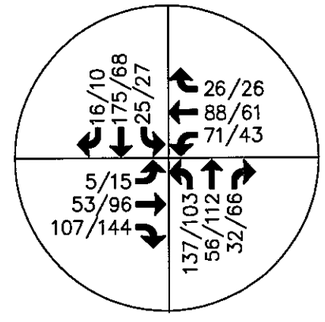
Intersection 8
Wingville Ln/Old Wingville Rd



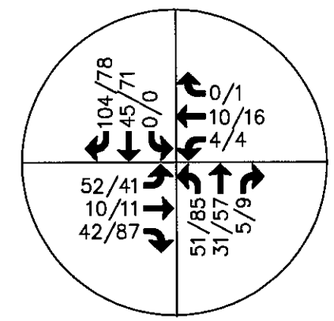
Intersection 9
Chandler Ln/Davenport Rd



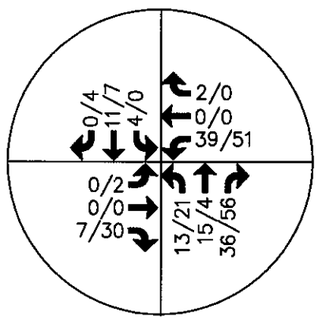
Intersection 10
Pocahontas Rd/23rd St



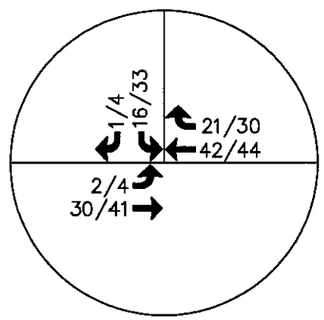
Intersection 11
Hughes Lane/US 30



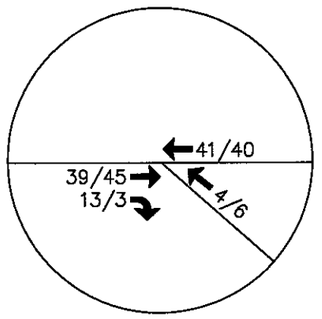
Intersection 12
Hughes Ln/Cedar St



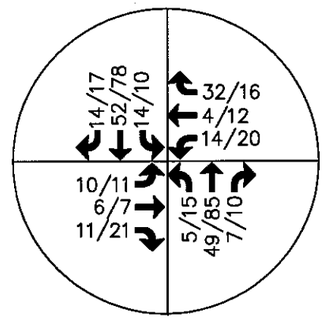
Intersection 13
Atwood Rd/Campbell St



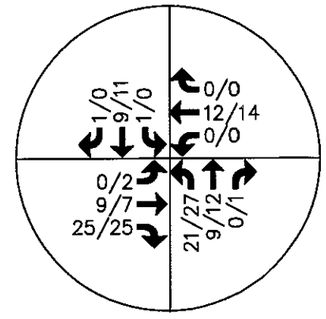
Intersection 14
OR 86/New Bridge Rd



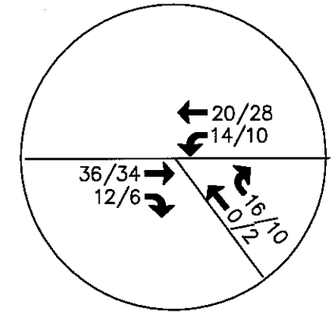
Intersection 15
OR 86/Robinette Rd



Intersection 16
Pine Creek Hwy/Halfway Spur



Intersection 17
Halfway Spur/OR 86



Intersection 18
US 30/Snake River Rd

Baker County Transportation System Plan

NOT TO SCALE

LEGEND
AM/PM Peak Hour 55/100
Traffic Volume

Figure 5-2
2025 Weekday A.M. and P.M.
Peak Hour Traffic Volumes

Table 5-1. Annual Historical Growth Rates Along State Highways in Baker County

State Highway	Count Location	Daily Traffic Volume		Compounded Annual Growth Rate
		1983	2003	
US 30	0.01 Mile North of Pocahontas Road	2,100	2,600	1.10%
US 30	0.01 Mile South of Pocahontas Road	5,200	5,200	0.00%
			Average	0.40%
US 30	0.10 Mile South of Wingville Lane	1,800	2,200	1.01%
US 30	0.01 Mile North of Pocahontas Road	2,100	2,600	1.08%
			Average	1.05%
US 30	0.01 Mile North of Anthony Lakes	1,400	1,800	1.27%
US 30	0.10 Mile South of Wingville Lane	1,800	2,600	1.86%
OR 86	0.10 Mile West of Old Highway 30	4,300	7,800	3.03%
OR 86	0.01 Mile West of Keating Cutoff Road	700	970	1.65%
OR 86	0.02 Mile South of Highway 12 Spur	560	670	0.09%
OR 86	0.03 Mile North of Highway 12 Spur	400	220	<0.00%
			Average	0.00%
OR 86	0.10 Mile West of Hewitt Park Hwy	670	850	1.20%
OR 86	0.10 Mile Northeast of Hewitt Park Hwy	540	690	1.24%
			Average	1.22%
OR 86	0.01 Mile South of New Bridge Road Connection	740	820	0.05%
OR 86	West City Limits of Richland	1,100	1,200	0.04%
			Average	0.04%

Table 5-1. Annual Historical Growth Rates Along State Highways in Baker County Continued

State Highway	Count Location	Daily Traffic Volume		Compounded Annual Growth Rate
		1983	2003	
US 30	0.60 Mile North of North Huntington Interchange	4,350	8,200	3.22%
US 30	Baker-Malheur County Line	4,100	8,000	3.40%
			Average	3.31%
OR 7	0.35 Mile South of Sumpter Highway	350	520	2.00%
OR 7	0.01 Mile East of Sumpter Highway	750	890	0.09%
			Average	1.05%
Sumpter Highway	0.01 Mile North of Auburn Street	640	740	0.07%
US 26	0.01 Mile Northwest of South Fork Road	830	680	<0.00%
US 26	0.01 Mile East of Job Creek Road at Unity	410	410	0.00%
			Average	0.00%
US 26	0.21 Mile West of Highway Dooley Mountain Highway	370	430	0.08%
US 26	0.01 Mile East of Dooley Mountain Highway	590	550	<0.00%
			Average	0.01%

Table 5-2. Annual Growth Factors Applied to Study Area Intersections

Intersection	Approach				Location(s)
	SB	WB	NB	EB	
Pocahontas Rd/23rd St	1.04%	1.04%	1.04%	1.04%	US 30 in the vicinity of Pocahontas Road
Hughes Ln/US 30	1.04%	1.04%	1.04%	1.04%	US 30 in the vicinity of Pocahontas Road
Hughes Ln/Cedar St	1.04%	1.04%	1.04%	1.04%	US 30 in the vicinity of Pocahontas Road
Campbell St/Best Frontage Rd	3.03%	3.03%	3.03%	3.03%	OR 86 0.10 Miles West of Old Highway 30
Chandler Ln/Davenport Rd	1.05%	1.05%	1.05%		US 30 0.10 Miles South of Wingville Lane and 0.01 Miles North of Pocahontas Road
OR 86/Keating Cutoff	1.65%	1.65%	1.65%	1.65%	OR 86 0.01 Miles West of Keating Cutoff Road
US 30/Anthony Lakes Hwy	1.27%	1.27%	1.27%	1.27%	US 30 0.01 Miles North of Anthony Lakes Highway
Pocahontas Rd/Ben Dier Ln	1.04%	1.04%	1.04%	1.04%	US 30 in the vicinity of Pocahontas Road
Old Wingville Rd/Wingville Ln	1.86%	1.86%	1.86%	1.86%	US 30 0.10 Miles South of Wingville Road
OR 7/Sumpter Hwy	1.50%	1.50%	1.50%	1.50%	OR 7 0.35 Miles South of Sumpter Highway and 0.01 Miles East of Sumpter Highway
Granite Hill Hwy/Cracker Creek Rd	1.00%	1.00%	1.00%	1.00%	Sumpter Highway 0.01 Miles North of Auburn Street
US 26/South Burnt River Ln	1.00%	1.00%	1.00%	1.00%	US 26 0.01 Miles Northwest of South Fork Road and 0.01 Miles East of Job Creek Road at Unity
US 26/OR 245	1.00%	1.00%	1.00%	1.00%	US 26 0 in the vicinity of Dooley Mountain Highway
Cornucopia Hwy/Pine Creek Hwy	1.00%	1.00%	1.00%	1.00%	OR 86 in the vicinity of Halfway Spur
OR 86/Halfway Spur/Pine Town Rd	1.00%	1.00%	1.00%	1.00%	OR 86 in the vicinity of Halfway Spur
OR 86/Robinette Rd	1.22%	1.22%	1.22%	1.22%	OR 86 in the vicinity of Hewitt Park Highway
OR 86/New Bridge Road	1.00%	1.00%	1.00%	1.00%	OR 86 0.01 Miles South of New Bridge Road Connection and West of City Line of Richland
US 30/Snake River Road	3.31%	3.31%	3.31%	3.31%	US 30 0.60 Miles North of North Huntington Interchange and Baker-Malheur County Line

5.3.2. 2025 Level of Service and V/C Ratio Analysis

Based on the 2025 traffic volumes, levels of service and volume-to-capacity (v/c) ratios were calculated for the study area intersections. Both the A.M. and P.M. peak hours were analyzed for the 2025 condition. The levels of service and v/c ratio analyses are summarized in Table 5-3.

Of all of the ODOT study area intersections, only the Hughes Lane/US 30 intersection is projected to operate beyond the maximum V/C standard for unsignalized intersections. The westbound approach of the intersection is projected to operate at a v/c ratio of 1.48 in the 2025 A.M. peak hour. This exceeds the v/c ratio standard of 0.85.

Based on a level of service of LOS E or better for unsignalized intersections, all of the Baker County intersections are projected to operate within the acceptable level of service standard.

Table 5-3. Year 2025 Levels of Service

	A.M. Peak Hour			P.M. Peak Hour		
Unsignalized Intersection	LOS	Average Delay (sec)	Volume to Capacity Ratio	LOS	Average Delay (sec)	Volume to Capacity Ratio
Pocahontas Rd/23rd St						
Westbound Left	A	4.7	0.07	A	0.8	0.01
Northbound Approach	A	9.8	0.04	A	9.0	0.06
Hughes Ln/US 30						
Eastbound Through-Left	D	31.5	0.39	C	17.7	0.30
Eastbound Right	B	11.0	0.20	A	9.3	0.16
Westbound Approach	F	>100	1.48	C	20.3	0.37
Northbound Left	A	8.4	0.16	A	7.6	0.07
Southbound Left	A	7.6	0.03	A	7.7	0.02
Hughes Ln/Cedar St						
Eastbound Approach	B	11.3	0.18	B	11.5	0.23
Westbound Approach	B	11.8	0.03	B	13.0	0.05
Northbound Left	A	4.7	0.05	A	4.6	0.07
Southbound Left	A	0.1	0.01	A	0.1	0.01
Campbell St/Best Frontage Rd						
Eastbound Approach	A	7.1	0.01	A	7.0	0.05
Southbound Approach	A	8.9	0.03	A	8.0	0.02
Chandler Ln/Davenport Rd						
Northbound Approach	A	9.1	0.01	A	0.1	0.01
OR 86/Keating Cutoff						
Eastbound Left	A	1.2	0.01	A	2.3	0.02
Southbound Approach	A	8.6	0.01	A	8.5	0.01

Table 5-3. Year 2025 Levels of Service Continued

Unsignalized Intersection	A.M. Peak Hour LOS	A.M. Peak Hour Average Delay (sec)	A.M. Peak Hour Volume to Capacity Ratio	P.M. Peak Hour LOS	P.M. Peak Hour Average Delay (sec)	P.M. Peak Hour Volume to Capacity Ratio
US 30/Anthony Lakes Hwy						
Eastbound Approach	B	10.4	0.18	B	10.7	0.08
Westbound Approach	B	10.7	0.03	A	10.0	0.03
Northbound Left	A	2.0	0.01	A	2.8	0.03
Southbound Left	A	0.2	0.01	A	0.7	0.01
Pocahontas Rd/Ben Dier Ln						
Eastbound Approach	A	8.9	0.03	A	8.8	0.01
Southbound Left	A	1.5	0.01	A	2.6	0.02
Old Wingville Rd/Wingville Ln						
Eastbound Left	A	0.01	0.01	A	0.04	0.01
Westbound Left	A	0.03	0.01	A	0.01	0.01
Northbound Approach	A	9.1	0.01	A	9.5	0.01
Southbound Approach	A	9.7	0.02	A	9.1	0.01
OR 7/Sumpter Hwy						
Eastbound Left	A	7.5	0.01	A	7.4	0.01
Southbound Approach	A	8.8	0.03	A	9.1	0.05
Granite Hill Hwy/Cracker Creek Rd						
Eastbound Left	A	0.1	0.01	A	0.7	0.01
Southbound Approach	A	8.7	0.01	A	8.7	0.01
US 26/South Burnt River Ln						
Eastbound Approach	A	8.8	0.01	A	8.7	0.01
Northbound Left	A	0.9	0.02	A	0.8	0.01
US 26/OR 245						
Westbound Approach	A	8.8	0.02	A	9.1	0.02
Southbound Left	A	1.3	0.01	A	0.3	0.01
Cornucopia Hwy/Pine Creek Hwy						
Eastbound Approach	A	9.8	0.04	A	9.9	0.06
Westbound Approach	A	9.4	0.07	B	10.5	0.08
Northbound Left	A	0.6	0.01	A	1.1	0.01
Southbound Left	A	1.4	0.01	A	0.8	0.01
OR 86/Halfway Spur/Pine Town Rd						
Eastbound Approach	A	9.0	0.05	A	8.9	0.04
Westbound Approach	A	9.7	0.02	A	9.7	0.02
Northbound Left	A	5.3	0.02	A	5.0	0.02
Southbound Left	A	0.7	0.01	A	0.1	0.01
OR 86/Robinette Rd						
Westbound Left	A	0.1	0.01	A	0.1	0.03
Northbound Approach	A	9.1	0.01	A	9.0	0.01
OR 86/New Bridge Road						
Eastbound Left	A	0.5	0.01	A	0.7	0.01
Southbound Approach	A	9.1	0.02	A	9.4	0.05
US 30/Snake River Road						
Eastbound Left	A	0.1	0.01	A	0.1	0.01
Southbound Approach	A	8.7	0.02	A	8.6	0.01

5.4. FUTURE INTERSECTION AND ROADWAY CAPACITY DEFICIENCIES

Based on the level of service and v/c ratio analysis, the following ODOT intersection will need future improvements:

- Hughes Lane/US 30

SECTION 6.0
TRANSPORTATION SYSTEM ALTERNATIVES ANALYSIS

Section 6.0
Transportation System Alternatives Analysis

6.1. ODOT STIP PROJECTS

Oregon's Final 2004-2007 Statewide Transportation Improvement Program (STIP) is the state's transportation preservation and capital improvement program. It covers a four-year period from 2004 to 2007. The STIP includes projects of regional significance and even includes projects in the National Parks, National Forests, and Indian Reservations. Funding sources are from a variety of sources including but not limited to federal, state, and local government transportation funds. It should be noted that the STIP is a project scheduling and funding document. Projects are scheduled and funded based on priorities developed.

The following STIP project types exist:

- Pavement Preservation Program
- Bridge Preservation Program
- Modernization Program
- Safety Program
- Operations Program
- Congestion Mitigation and Air Quality Improvement
- Transportation Enhancement Program
- Public Transportation Programs
- Statewide (Bucketed) Programs including those projects characterized by Special Programs projects

In addition to the project types listed above, STIP projects are also funded by a special program enacted by the 2001, 2002, and 2003 Oregon Transportation Investment Act (OTIA). In 2001 and 2002, the passing of OTIA allowed the Oregon Department of Transportation to sell bonds which brought $500 million into the State Highway Fund. The following year, 2003, OTIA III was passed by the Oregon State Legislature. OTIA III allowed ODOT to sell bonds to bring an additional $2.5 billion into the State Highway Fund. The money generated by OTIA has been dedicated to modernization, bridge, and pavement preservation projects.

Based on a review of the 2004-2007 STIP, the following type of STIP projects are currently programmed within unincorporated Baker County:

- Pavement Preservation
- Operations Program
- Bridge Preservation Program
- Jurisdictional Exchange
- Statewide (Bucketed) Programs including those projects characterized by Special Programs projects

6.1.1. Pavement Preservation Projects

The purpose of ODOT's pavement preservation project is to keep highways in the best condition at the lowest lifecycle cost. This purpose focuses on taking preventative measures to add useful life to a road before the pavement reaches poor condition. By implementing a preventative pavement preservation program rather than allowing poor pavement condition before any improvements, 75 to 80 percent savings can be achieved. Four pavement preservation projects are identified in the 2004-2007 STIP. These projects are described below:

- OR 7 from Salisbury Junction to Baker City Pavement Preservation – This project involves pavement preservation along OR 7 from Milepost 41.85 to Milepost 50.42. The total project cost is $642,000. It is scheduled for construction in 2005.

- US 26 from Middle Fork Burnt River to Malheur County Line – This project involves pavement preservation along US 26 from Milepost 204.89 to Milepost 222.91. The total project cost is $4,385,000. It is scheduled for construction in 2005.

- US 26 from Grant County Line to Forest Service Boundary – This project involves pavement preservation along US 26 from Milepost 199.30 to Milepost 204.89. The total project cost is $1,100,000. It is scheduled for construction in 2006.

- OR 7 from Campbell Avenue to I-84 – This project involves pavement preservation along OR 7 from Milepost 0.24 to Milepost 1.56. The total project cost is $621,000. It is scheduled for construction in 2006.

In addition to the 2004-2007 STIP pavement preservation projects listed above, ODOT has plans for additional pavement preservation projects in Baker County. These projects are listed below:

- OR 86 – Oxbow to Baker County – scheduled for 2005
- OR 86 – City of Richland – scheduled for 2006
- OR 203, chip seal – scheduled for 2006
- US 30 from Haines to Baker City, oil and chip seal – scheduled for 2006
- Pleasant Valley – scheduled for 2008
- OR 7, chip seal – scheduled for 2008
- Lime Station – scheduled for 2009

6.1.2. Bridge Preservation Projects

Bridge replacement and rehabilitation is a critical component in the STIP to maintain an adequate transportation infrastructure. Although the life expectancy of a bridge is typically between 50 and 80 years, significant changes have occurred that require extensive bridge rehabilitation and/or replacement. These changes include significant increase in traffic volumes, especially

truck traffic; heavier truck loads; longer truck loads which affect geometric standards as well as heavier truck weight loads; and higher speeds. All of these changes require upgrades to design standards. Many of the current bridges in operation were not built to current design standards that address the changes to truck freight movement.

A recent report that was made available to the Oregon House Interim Transportation Committee identified the funds needed to address the states bridge replacement and rehabilitation needs. This study identified approximately $3.1 billion needed to address all of the state's bridge work. In comparison, the 2004-2007 STIP allocates $342 million for bridges and OTIA III makes available $1.3 billion. This is still far short of the need.

A bridge replacement and rehabilitation project is developed through the use of the Bridge Management System (BMS) and twelve deficiency parameters. Based on the BMS and deficiency parameters, three bridge projects were funded in Baker County by the 2004-2007 STIP that have yet to be constructed. These projects are described below:

- I-84: Pleasant Valley Interchange Bridges (Bridge #8279W and #8279E) - This project involves replacing Bridges #8279W and #8279E along I-84. The project is scheduled for construction in 2005. The total cost of the project is $11,939,000.

- US 30/I-84 Burnt River Bridges (Bridges #01788, #01789, and #01786) - This project involves replacing Bridges #01788, #01789, and #01786 along US 30. The project is scheduled for construction in 2007. The total cost of the project is $3,360,000.

- OR 86: Powder River Bridge (Bridge #02807) - This project involves replacing Bridge #02807 along OR 86. The project is scheduled for construction in 2007. The total cost of the project is $1,744,000.

6.1.3. Special Programs

There are no Special Programs projects funded in Baker County in the 2004-2007 STIP.

6.1.4. Operations Program

An operations project improves the efficiency of the transportation system through the replacement of aging operational infrastructure and the deployment of projects and new technology to meet increased system demand. The Oregon Transportation Commission (OTC) has approved approximately $84 million for the funding of operations projects in the 2004-2007 STIP. The Operations Program includes the following four categories of projects: 1) slides and rockfalls; 2) intelligent transportation systems (ITS); 3) signs, signals, and illumination; and 4) transportation demand management. The following operations project is funded by the 2004-2007 STIP in Baker County:

- OR 7: Whitney Highway (Black Mountain Road) Rockfall – This project involves correcting rockfall along OR 7 from Milepost 34.50 to Milepost 34.70. The total project cost is $59,000.

- Burnt River Canyon Safety Improvements – scheduled for completion in 2008

6.1.5. OTIA III

OTIA III will fund replacing the following two local bridges:

- Cracker Creek Bridge (Bridge #01C227)
- Burnt River Bridge (Bridge #01C408)

OTIA III will fund replacing the following 10 ODOT bridges:

- Powder River, Highway 71 at Milepost 41.66 (Bridge #07316)
- Powder River, Highway 71 at Milepost 42.77 (Bridge #07431)
- Pritchard Creek at UPRR, Highway 6 WB (Bridge #07987)
- Highway 6 over Lime Interchange Conn (Bridge #09354)
- Burnt River (Dixie Creek), Highway 6 (Bridge #01786A)
- Pritchard Creek & UPRR, Highway 6 EB (Bridge #07987A)
- Highway 6 EB over Conn & UPRR - Ecina Interchange (Bridge #08302E)
- Highway 6 WB over Conn & UPRR - Ecina Interchange (Bridge #08302E)
- Highway 6 EB over Alder Creek Road (Bridge #08423E)
- Highway 6 WB over Alder Creek Road (Bridge #08423W)

6.2. INTERSECTION IMPROVEMENT AT HUGHES LANE/US 30

Based on the 2025 traffic volumes, levels of service, and v/c ratio analyses, the Hughes Lane/US 30 intersection is projected to operate below an acceptable level or service and/or v/c ratio by the Year 2025. The westbound movement is projected to operate with a 1.48 v/c ratio in the 2025 A.M. peak hour. This intersection should be monitored by ODOT and Baker County periodically to determine when a traffic signal should be installed. The Hughes Lane/US 30 intersection should meet multiple signal warrants prior to the intersection being considered for signalization.

Based on information from Baker County and ODOT, truck traffic has a difficult time turning at the Hughes Lane/US 30 intersection due to deficient turning radii. Baker County should work with ODOT to develop an improvement project that improves the turning radii for truck traffic at the Hughes Lane/US 30 intersection.

The Hughes Lane/US 30 intersection is along an emergency route to the hospital and forest service. It is along a very important travel corridor for Baker City and Baker County. Therefore, any intersection improvements should be developed with it importance in mind.

6.3. SAFETY IMPROVEMENTS

In analyzing the crash information, many of the accidents were related to hitting wildlife. Baker County should work with the Oregon Department of Transportation (ODOT) in developing ways to reduce crashes related to hitting wildlife. Clearing the right-of-way vegetation may help improve visibility for the motorist to see wildlife.

6.4. BAKER COUNTY ROAD DEPARTMENT PROJECTS

Baker County has developed a list of modernization, freight, and roadway connectivity projects. The modernization projects are intended to upgrade existing gravel roadways that carry a significant amount of Baker County traffic. These gravel roads carry traffic volumes equivalent to those roadways that are classified as major collectors and that are paved. The roadway connectivity projects are intended to improve mobility, provide additional access, and reduce the dependence of the state highway for locally oriented trips. These projects are described below and are not prioritized:

1. Chico Road (County Road #538, project length is 0.61 miles). The road is a critical freight route in the Baker County transportation system, however is structurally deficient to properly function as such. The road is in need of major reconstruction. It should be upgraded to major collector paved status. Estimated cost is $200,000.

2. Chandler Lane (County Road #702, project length is 0.72 miles). The road is a local paved road. The project would be from the bridge over Powder River east to the I-84/Highway 203 interchange. This section is substandard and in need of major reconstruction. Raising the road grade at the bridge is needed to provide increased sight distance. Numerous public safety issues have occurred at this site. Estimated cost is $200,000.

3. Shurtleff Road (County Road #695) and Old Wingville Road (County Road #696, total project length is 1.78 miles). Project location is from the end of pavement at the north end of Old Wingville Road to Shurtleff Road and continuing north to the Haines city limits. The roads are currently local gravel roads and should be brought to collector paved status. Estimated cost is $225,000.

4. Brown Road (County Road #701, project length is 1 mile). The project would be from the intersection of Wingville Lane north to the intersection of Lower Hunt Mountain Road. One half of this section is local paved and the other half is gravel road. This section needs to be brought up to collector paved status. Estimated cost is $150,000.

5. Hunt Mountain Lane (County Road #700, project length is 1 mile). The project would be from the Pocahontas intersection eastward to the Brown Road intersection. The road is currently a local gravel road and should be brought to collector paved status. Estimated cost is $125,000.

6. Robinette Road (County Road #979, project length is 1.75 miles). The road accesses Hewitt and Holcomb Parks which are two major recreational areas in Baker County. The road consists of varying widths. It needs to be brought to major collector paved status. Estimated cost is $350,000.

7. Haines Cemetery Lane (County Road #694, project length is 1.25 miles). The road is a connector. Currently 0.25 miles of the roadway is paved. The road should be paved in its entirety and upgraded to a collector paved status. Estimated cost is $150,000.

8. Huckleberry Loop (County Road #564, project length is 1 miles). The west end between Highway 7 and Sumpter Highway 410 serves as a collector and connector. This section needs to be upgraded to collector paved status. Estimated cost is $100,000.

9. Miles Bridge Road (County Road #775, project length is 5.8 miles). The road connects Highway 203 with Keating Grange Lane. Currently, it consists of 3.3 miles of pavement and 2.5 miles of gravel. The road needs to be pavement in its entirety and brought to collector paved status. Estimated cost is $375,000.

10. Unity District (County Road District #5, project includes 13 approaches). Pave all gravel road approaches that connect to paved County or State roads. Operational and safety improvements would result. Estimated cost is $130,000.

11. Clear Creek Road (County Road #999, length of project is 1.71 miles). Project location is from the intersection of Fish Lake Road northwesterly to the end of the county jurisdiction. The road receives large amounts of traffic from recreational and timber resource purposes. The road is currently a local gravel road and has become a difficult maintenance problem. The road needs to be upgraded to local paved status. Estimated cost is $225,000.

12. Old Auburn Lane (County Road #722, length of project is 5.26 miles). The road is currently a local gravel road. The road is an access to the national forest and a wildlife feeding area. The road needs to be upgraded to a local paved road. Estimated cost is $750,000.

13. Hunt Mountain Lane (County Road #700, length of project is 0.50 miles). The project location is from the Pocahontas Road intersection westward to the Lone Pine Road intersection. The road is currently a local gravel road and should be brought to collector paved status. Estimated cost is $60,000.

14. Pine Town Lane (County Road #1128, project length is 1.5 miles). Currently, the pavement on the east end does not terminate at an intersection. The pavement should be extended to the east 1.5 miles. The extension would accommodate truck traffic from Baker County's rock source at the Dead Cow pit. Estimated cost is $150,000.

15. Pine Creek Lane (County Road #646, project length is 0.40 miles). West of the Ben Dier Lane intersection, Pine Creek Lane is a local gravel road. This section of roadway to the intersection of Upper Spring Creek private road needs to be reconstructed to a collector paved status. Estimated cost is $187,500.

16. Pole Line Lane (County Road #698, project length is 3.20 miles). From the intersection of Pocahontas Road east to Highway 30, it is currently a gravel collector road. It is a FAS route and also a farm to market road. It should be brought to a collector paved status. Estimated cost is $350,000.

6.5. OTHER IMPROVEMENT PROJECTS

Other improvements that were developed as part of the previous transportation system planning process are described below.

Other Improvement 1. Add Passing Lane or Paved Slow Vehicle Turnout on Highway 86 Between Richland and Baker City

Overview: This section of Highway 86 is approximately 40 miles long and traverses mountainous terrain. The highway currently has only one passing lane in the west-bound direction. Average daily traffic (ADT) volumes are less than 2,000 vehicles per day. The highway operates at LOS A today and is expected to continue to operate at LOS A throughout the 20-year planning period.

The need for a additional passing lanes or slow vehicle turnouts was identified during the public involvement process. The road is perceived to serve high levels of truck and recreational vehicle traffic because it provides access to the national forest, Brownlee Reservoir, and Hells Canyon National Recreation Area. A review of the data collected at ODOT's automatic traffic recorder west of Richland indicated that vehicles with 3 or more axles comprise less than 5 percent of the total traffic.

Impact: Passing lanes and slow vehicle turnouts provide increased levels of safety, capacity, and motorist comfort. In some cases, the installation of passing lanes or turnouts may require additional right-of-way.

Cost: The cost to construct two ½-mile passing lanes (one in each direction) is estimated at approximately $1,000,000. Turnouts are less expensive to construct because they are shorter. The estimated cost to construct a 500-foot turnout is $250,000.

Recommendation: Construct one paved slow vehicle turnout in each direction at a location to be determined by ODOT.

Priority: Low priority. Due to the relatively low traffic volumes for a two-lane highway, the highway currently operates at level of service A and is expected to continue to operate at level of

service A throughout the 20-year planning period. Providing one slow vehicle turnout in each direction will reduce delays during peak summer periods when recreational traffic is highest.

Other Improvement 2: Add Passing Lane or Paved Slow Vehicle Turnout on Highway 7 Between Baker City and Sumpter

Overview: This section of Highway 7 is approximately 25 miles long and traverses mountainous terrain. There are currently no passing or slow vehicle turnouts on this section of roadway. Average daily traffic (ADT) volumes are less than 2,000 vehicles per day. The highway operates at LOS A today and is expected to operate at LOS B at the end of the 20-year planning period.

The need for a additional passing lanes or slow vehicle turnouts was identified during the public involvement process. Approximately 10 percent of the total traffic consists of heavy vehicles (3 axles or more).

Impact: Passing lanes and slow vehicle turnouts provide increased levels of safety, capacity, and motorist comfort. In some cases, the installation of passing lanes or turnouts may require additional right-of-way.

Cost: The cost to construct two ½-mile passing lanes (one in each direction) is estimated at approximately $1,000,000. Turnouts are less expensive to construct because they are shorter. The estimated cost to construct a 500-foot turnout is $250,000.

Recommendation: Construct one paved slow vehicle turnout in each direction at a location to be determined by ODOT.

Priority: Low priority. Due to the relatively low traffic volumes for a two-lane highway, the highway currently operates at LOS A and is expected to operate at LOS B at the end of the 20-year planning period. Providing one slow vehicle turnout in each direction will reduce delays when truck traffic is heavy.

Other Improvement 3. Construct a Connection Between I-84 and OR 7 South of Baker City

Overview: During a public meeting, a "southeast connector" between I-84 and OR 7 was discussed. This project has already been implemented in the Baker City Transportation System Plan and is only in the Baker County Transportation Plan for information purposes.

Impact: This project could potentially reduce some out-of-direction travel. However, volumes are low on both highways in this area, so the benefits would be minimal. In addition, the roadway would cross through an area zoned as resource land by Baker County, and would require a state land use goal exception to implement.

Recommendation: This project is part of the Baker City Transportation Plan and is in the Baker County Transportation System Plan for information purposes only.

Priority: None.

Other Improvement 4. Reroute OR 7

Overview: During the first public meeting, the concept of rerouting OR 7 was discussed. The concept for the new route is reportedly one that has been discussed for many years.

Impact: The existing OR 7 route is relatively winding and is subject to snow and ice because of its elevation. The suggested route would be largely at a lower elevation with greater southern exposure, which could reduce snow and ice problems. It would avoid the narrow canyon and would be approximately 5½ miles shorter than the present highway.

Cost: The construction of the new highway segment would be around $80 million.

Recommendation: The concept of rerouting OR 7 has merit since it is a critical freight connection between the mills in Grant County and the rail head and interstate system in Baker County. However, since the overall traffic on OR 7 is projected to remain relatively low and no significant collision problems exist, the realignment of OR 7 is likely beyond the planning period of this document. Since OR 7 provides a valuable freight connection between Grant County and Baker County, the issue of rerouting OR 7 should be revisited periodically.

Other Improvement 5. Provide Additional Public Transit Service

Overview: Community Connections, the transit provider for Baker County, has identified a general shortfall in meeting the county's transit needs. Ridership continues to increase showing a demand for more public transportation. The additional public transportation is needed for the elderly, transportation disadvantaged, as well as the general public. Also, additional inter-city transportation is needed for individuals in the outlying areas to travel to and from Baker City.

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.

Cost: Community Connections estimates that they need approximately $16,000 to replace currently unfunded basic service needs (adjusted from a 1997 estimate).

Recommendation: Transit is very important to rural populations, particularly those that are aging and have higher poverty rates, such as Baker County. A regional effort is on-going to create a regionally coordinated transit system that can act as a brokerage for all available transportation providers in the regional area. In the short term, additional incremental funding

should be sought to expand existing inter-city bus service. In the long term, a sustainable source of income should be sought to significantly increase service as well as the current fleet of vehicles.

Priority: High.

Other Improvement 6. 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.

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.

Recommendation: It is recommended that the county and cities participate together in studying and establishing a rideshare program through Community Connections.

Priority: High.

Other Improvement 7. Create a Public Transportation Around School Buses to Provide Service between Sumpter and Baker City and Baker City and Richland

Overview: There have been local discussions to utilize existing school buses and routes to provide public transit service between Sumpter and Baker City and Baker City and Richland.

Impacts: Impacts would be minimal since this proposal utilizes an existing transportation service.

Cost: The cost of implementing this concept should be minimal since this proposal utilizes an existing transportation service.

Recommendation: It is recommended that the county and cities participate together in studying and establishing this program.

Priority: High.

SECTION 7.0
TRANSPORTATION MODAL PLANS

Section 7.0
Transportation Modal Plans

7.1. ROAD PLAN

7.1.1. Transportation System Plan (TSP) Requirements

OAR 660-12-020 Elements of Transportation System Plans

(2) (b) A road plan for a system of arterials and collectors and standards for the layout of local roads and other important non-collector road connections. Functional classifications of roads in regional and local TSPs shall be consistent with functional adjacent jurisdictions. The standards for the layout of local roads shall provide for safe and convenient bike and pedestrian circulation necessary to carry out OAR 660-12-045(3)(b). New connections to arterials and state highways shall be consistent with designated access management categories. The intent of this requirement is to provide guidance on the spacing of future extensions and connections along existing and future roads, which are needed to provide reasonably direct routes for bicycle and pedestrian travel. The standards for the layout of local roads shall address:

(A) Extensions of existing roads;
(B) Connections to existing or planned roads, including arterials and collectors; and
(C) Connections to neighborhood destinations.

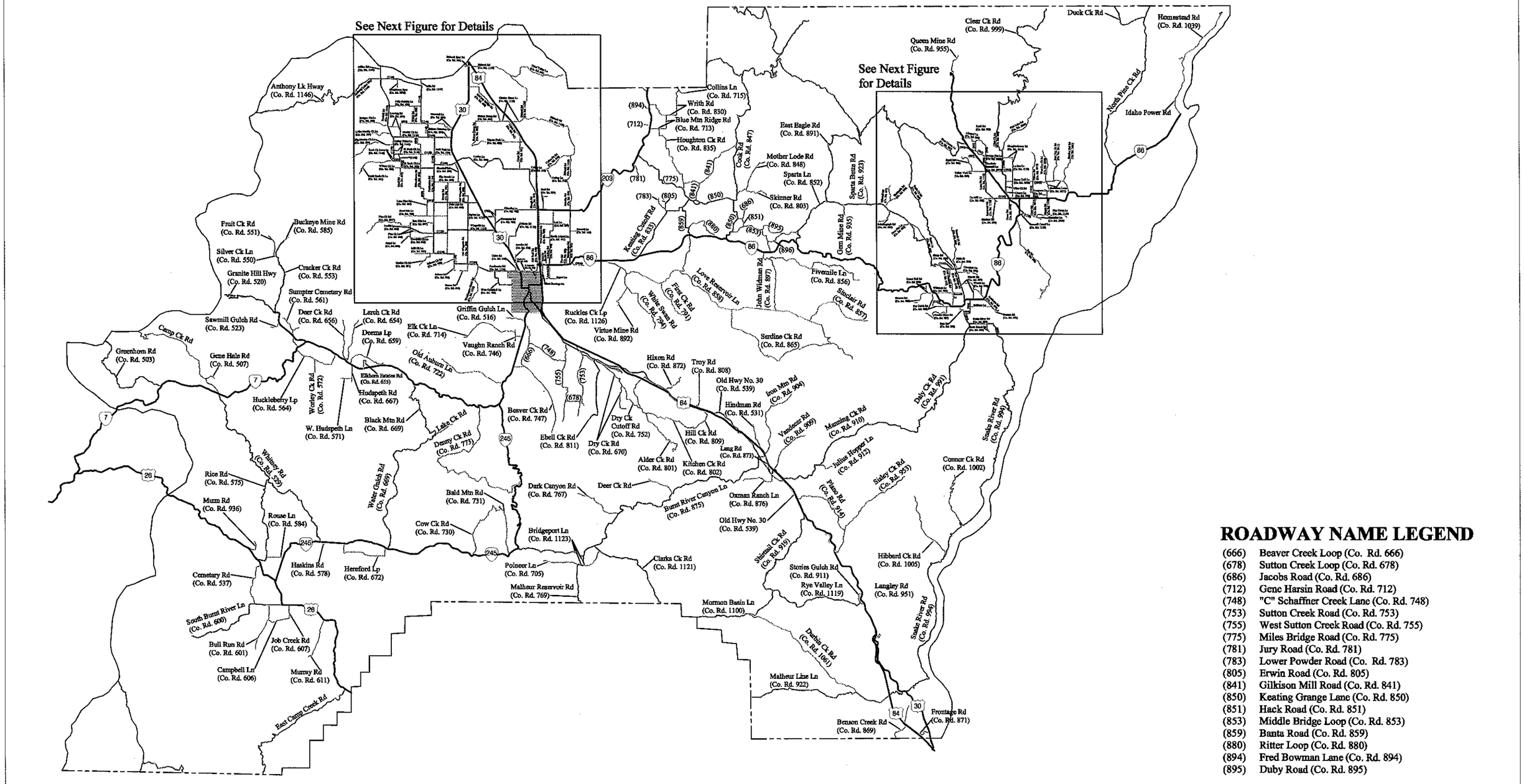
7.1.2. Functional Classification

The existing Baker County roadways are classified by the following classifications:

- arterial
- collector
- local road
- private
- RS2477

The future roadway network classification has been simplified. The principal and minor arterials have been combined into one arterial classification. The rural and major collector designations have been combined into one collector designation. The local road designation is for county maintained roads only. Other local roads not maintained by the county are private roads, public use roads, and RS2477 roads. Figures 7-1a and 7-1b show the functional classifications for Baker County roadways with the new classification system of arterials, collectors, and local roads.

The state highway system within Baker County has its own roadway functional classification system. The state highway roadway classification system is defined in Section 3.3.2.



ROADWAY NAME LEGEND

(666) Beaver Creek Loop (Co. Rd. 666)
(678) Sutton Creek Loop (Co. Rd. 678)
(686) Jacobs Road (Co. Rd. 686)
(712) Gene Harsin Road (Co. Rd. 712)
(748) "C" Schaffner Creek Lane (Co. Rd. 748)
(753) Sutton Creek Road (Co. Rd. 753)
(755) West Sutton Creek Road (Co. Rd. 755)
(775) Miles Bridge Road (Co. Rd. 775)
(781) Jury Road (Co. Rd. 781)
(783) Lower Powder Road (Co. Rd. 783)
(805) Erwin Road (Co. Rd. 805)
(841) Gilkison Mill Road (Co. Rd. 841)
(850) Keating Grange Lane (Co. Rd. 850)
(851) Hack Road (Co. Rd. 851)
(853) Middle Bridge Loop (Co. Rd. 853)
(859) Banta Road (Co. Rd. 859)
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

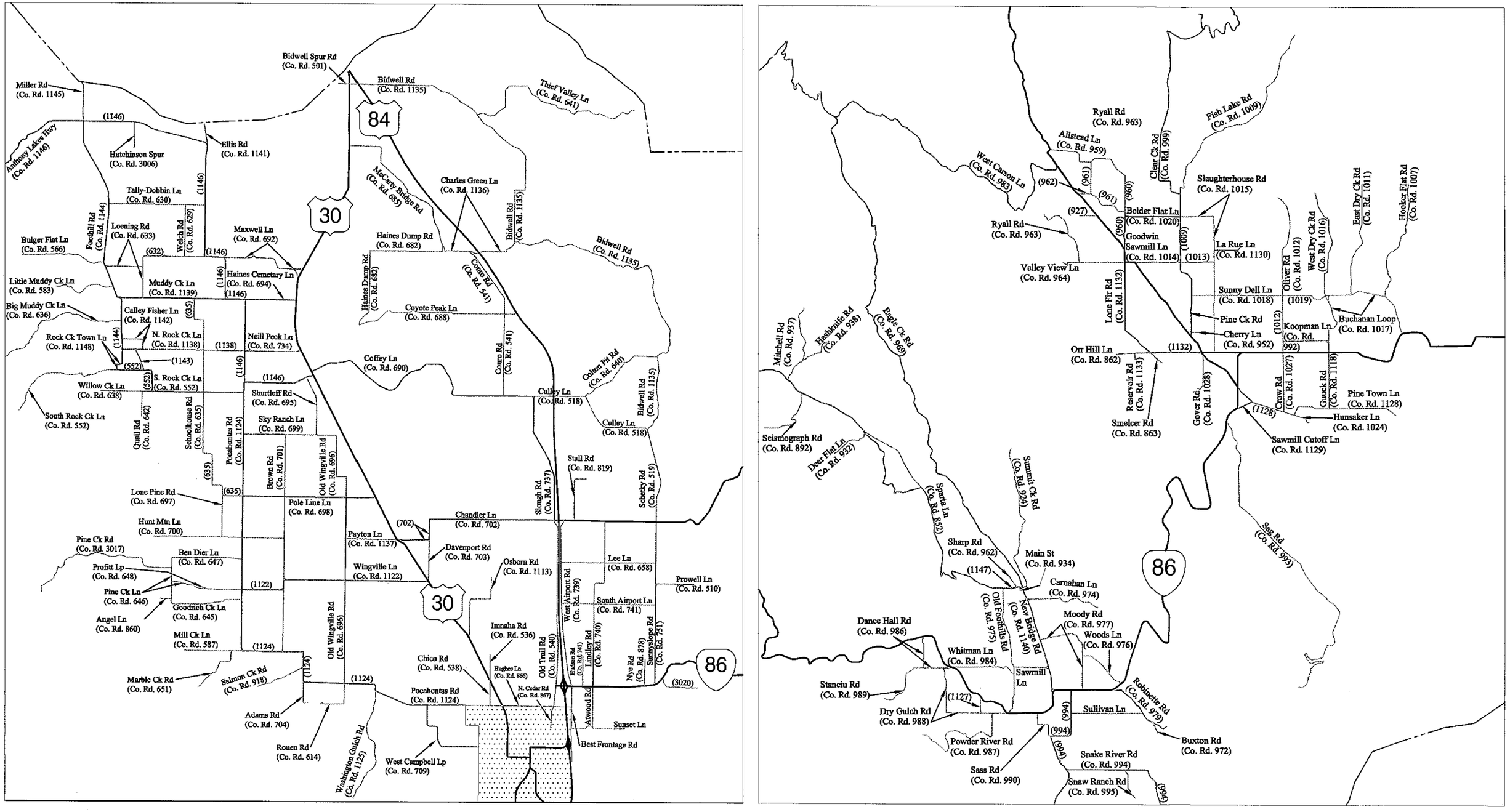
Baker County Transportation System Plan

NOT TO SCALE

LEGEND
State Highway
Arterial
Collector
County Road

Figure 7-1a
Future Roadway Classification

Baker County Transportation System Plan



NOT TO SCALE

LEGEND

State Highway

Arterial

Collector

County Road

ROADWAY NAME LEGEND

(632) Mansfield Lane (Co. Rd. 632)
(927) McFadden Lane (Co. Rd. 927)
(960) Steele Hill Road (Co. Rd. 960)
(961) Holbrook Creek Road (Co. Rd. 961)
(962) Holbrook Creek Spur (Co. Rd. 962)
(1013) Bowerman Lane (Co. Rd. 1013)
(1019) Estes Hill Lane (Co. Rd. 1019)
(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Figure 7-1b
Future Roadway Classification

7.1.3. Road Design Standards

Road classification standards relate the design of a roadway to its function. The function is determined by operational characteristics such as traffic volume, operating speed, safety, and capacity. Road standards are necessary to provide a community with roadways which are relatively safe, aesthetic, and easy to administer when new roadways are planned or constructed. They are based on experience, and policies and publications of the profession.

The typical road cross sections by roadway classification are depicted in the following figures:

- Figure 7-2. Paved Multi-Use Collector Road- 32 foot paved surface, 1 foot gravel shoulder
- Figure 7-3. Paved Collector Road – 28 foot paved surface, 2 foot gravel shoulder
- Figure 7-4. Local and Collector Gravel Roads – 28 foot gravel surface
- Figure 7-5. Local Gravel Road Upgrade to Local Paved Road – 24 foot paved surface, 2 foot gravel shoulder
- Figure 7-6. Paved Local Road – 22 foot paved surface, 3 foot gravel shoulder
- Figure 7-7. Public Use Road – 22 foot gravel surface
- Figure 7-8. RS2477 Road – 14 foot gravel surface
- Figure 7-9. Private Road – 14 foot gravel surface
- Figure 7-10. Cul de Sac – 45 foot radius, gravel surface

The road and access management design standards for ODOT facilities can be referenced in the 1999 Oregon Highway Plan and Highway Design Manual. Appendix C contains the ODOT access management design standards that can be found in the 1999 Oregon Highway Plan.

7.1.4 Access Management

Access management is an important tool for maintaining a transportation system. The lack of a prudent access management plan can result in excessive numbers of accesses along arterial roads. Too many access points can diminish the function of an arterial mainly due to delays and safety hazards created by turning movements. Traditionally, the response to this situation is to add lanes to the roadway. The roadway improvements stimulate more business activity and traffic demands. This trend often continues in cyclical fashion and requires significant capital investment. With tightening local, state, and federal funding, there are no longer financial resources to continue this trend. Therefore, the prudent solution is to better manage the roadway through access management to preserve the capacity of the road and balance the need for local access.

The number of access points to a roadway can be restricted and managed by following the techniques described below:

- Restricting spacing between access points (driveways) based on the type of development and speed along the arterial

- Providing access via the lowest classified road
- Constructing frontage roads to separate local traffic from through traffic
- Providing service drives to prevent spillover of vehicle queues onto the adjoining roadways
- Providing of acceleration, deceleration, and right turn only lanes
- Installing median barriers to control conflicts associated with left turn movements
- Installing side barriers to the property along the arterial to restrict access width to a minimum

Access management is hierarchical, ranging from complete access control on freeways to increasing use of roads for access purposes, parking and loading at the local and collector level. Table 7-1 describes recommended general access management guidelines by roadway functional classification.

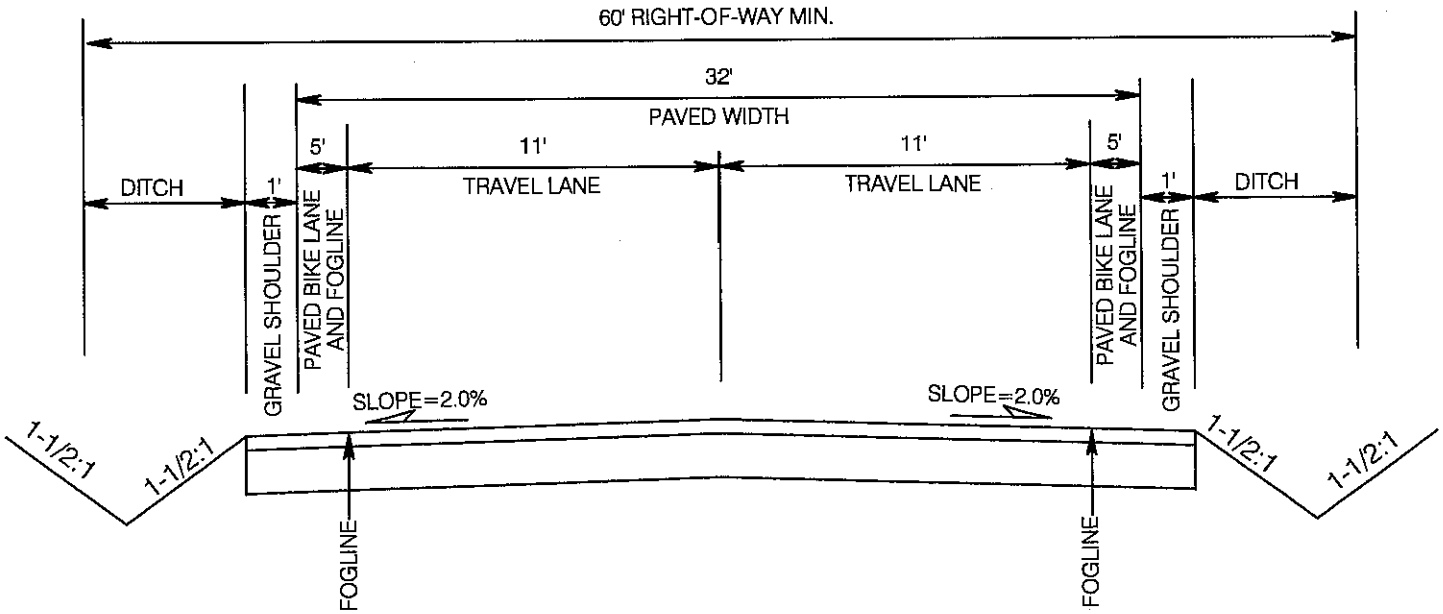
These access management restrictions are generally not intended to eliminate existing intersections or driveways. Rather, they should be applied as new development occurs. Over time, as land is developed and redeveloped, the access to roadways will meet these guidelines. However, where there is a recognized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

Table 7-1. Access Management Standards

Classification	Minimum Posted Speed	Minimum Spacing Between Driveways[1]	Minimum Spacing Between Intersections	Adjacent Land Use
Arterial	55 mph	1200 feet	1 mile	Undeveloped or agricultural land between major population centers
Collector	25-55 mph	300 feet	¼ mile to ½ mile	Undeveloped or agricultural land between and through cities or rural service centers
Local	25 mph	50 feet	220 feet	Residential

[1] Desirable design spacing for new or reconstructed roads. Existing spacing will vary.



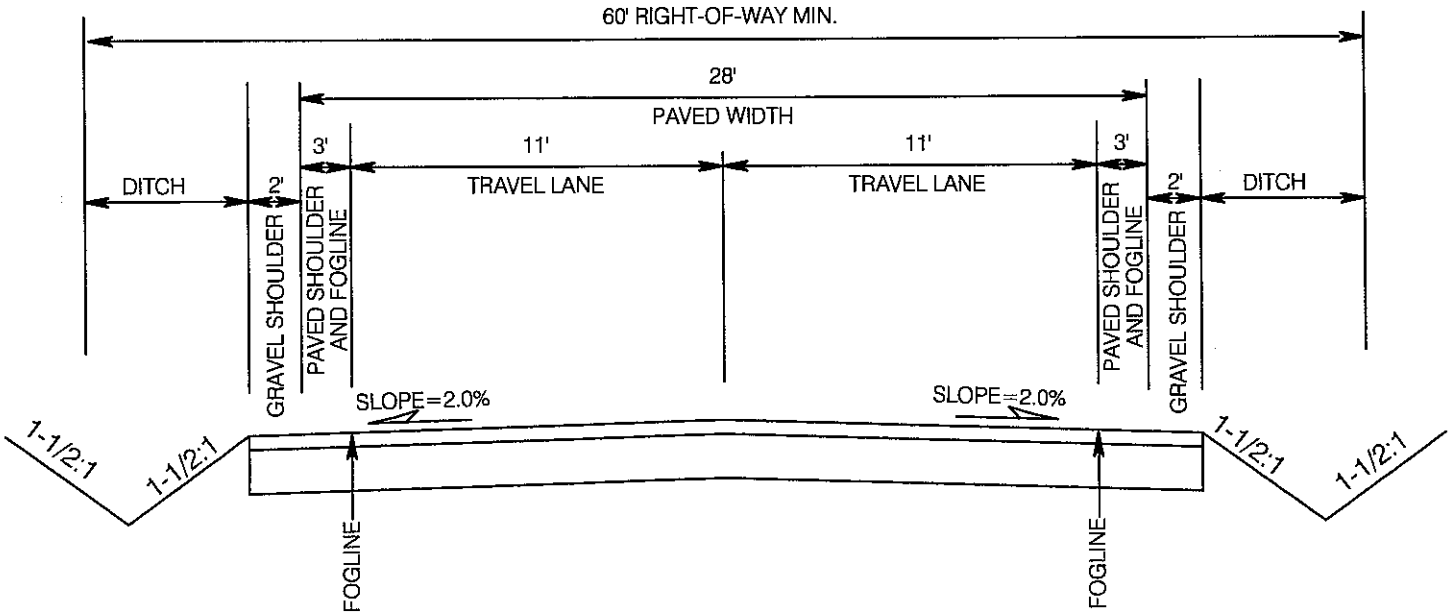
PAVED MULTI-USE COLLECTOR ROAD

NTS

Baker County Transportation System Plan

NOT TO SCALE

Figure 7-2
Typical Roadway Cross Section Standards
Paved Multi-Use Collector Road - 34 feet



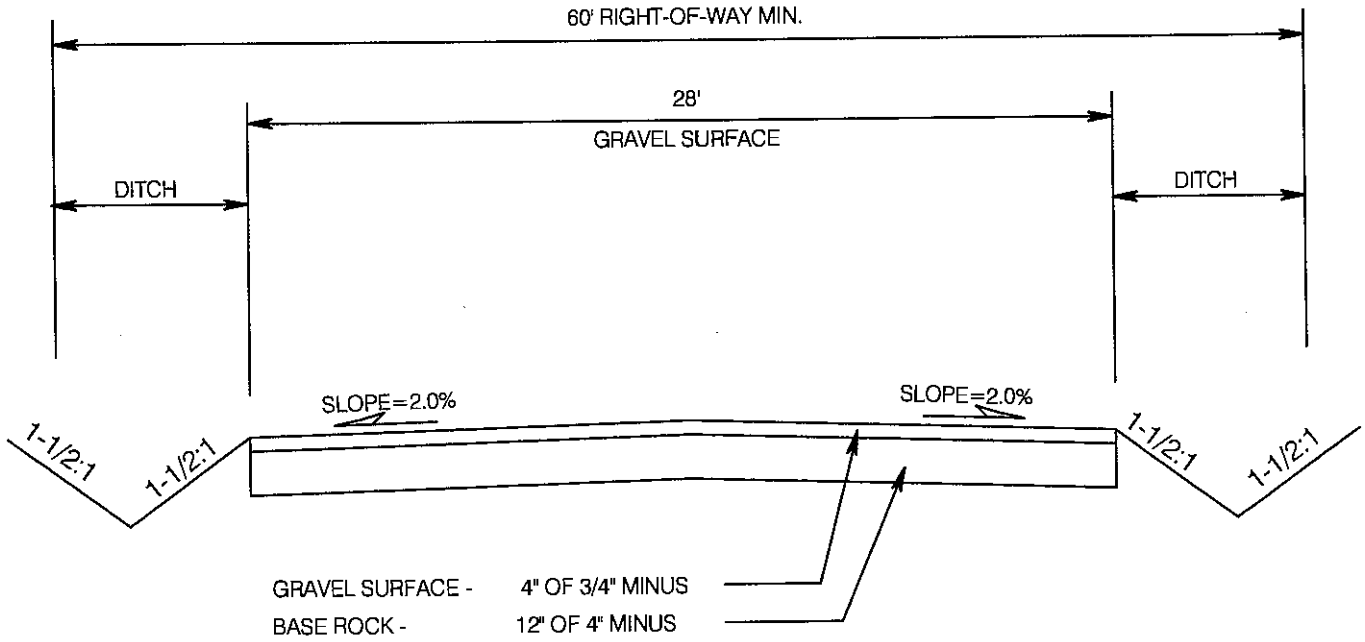
PAVED COLLECTOR ROAD

NTS

Baker County Transportation System Plan

NOT TO SCALE

Figure 7-3
Typical Roadway Cross Section Standards
Paved Collector Road - 28 feet

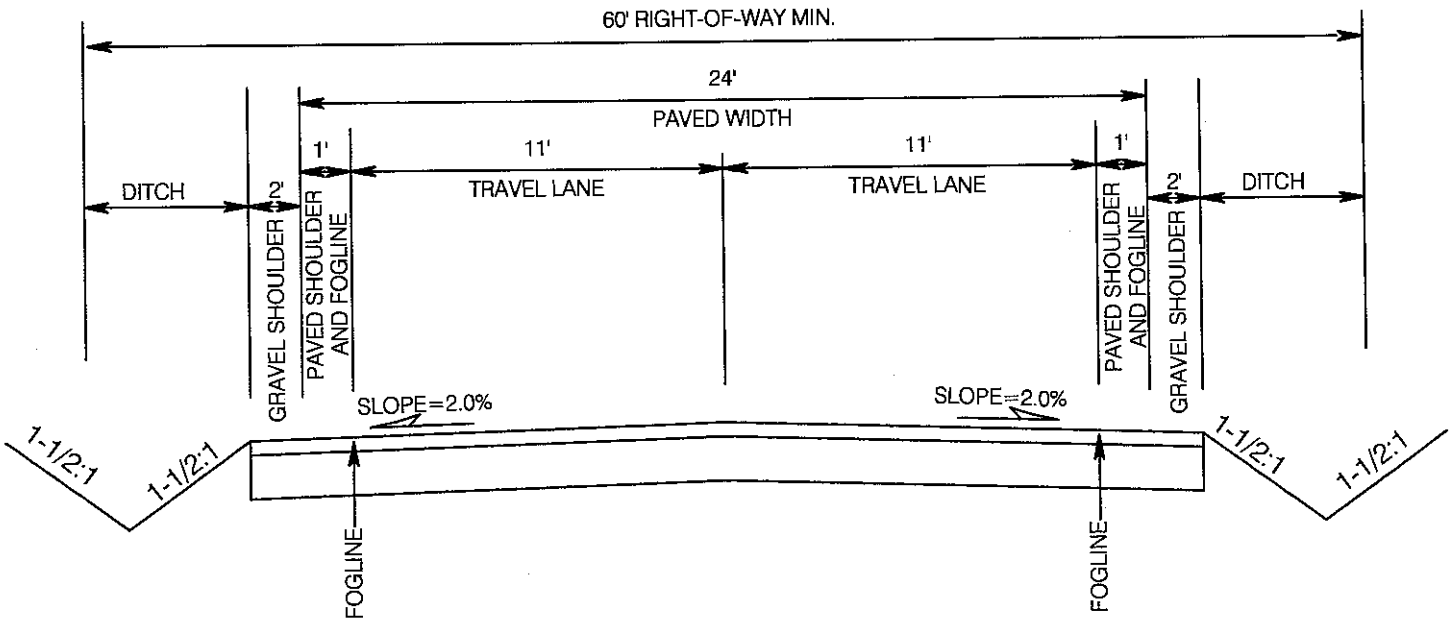


LOCAL AND COLLECTOR GRAVEL ROADS

NTS

NOT TO SCALE

Figure 7-4
Typical Roadway Cross Section Standards
Local and Collector Gravel Roads - 28 feet



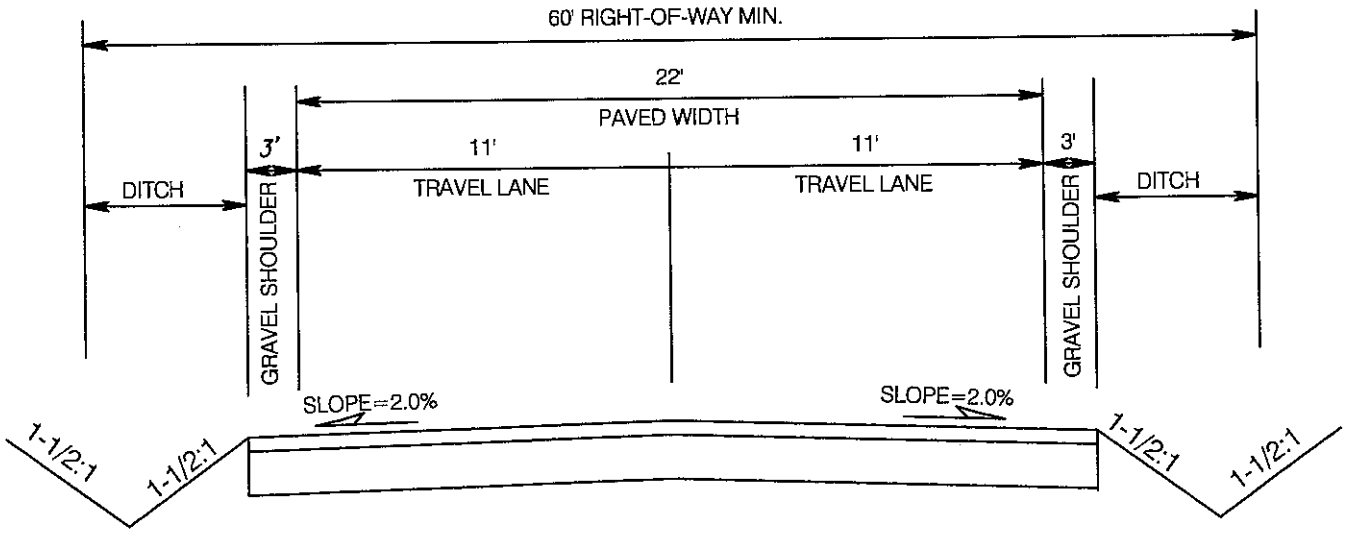
LOCAL GRAVEL ROAD UPGRADE TO LOCAL PAVED ROAD STANDARD

NTS

Baker County Transportation System Plan

NOT TO SCALE

Figure 7-5
Typical Roadway Cross Section Standards
Local Gravel Road Upgrade to Local Paved Road Standard - 24 feet

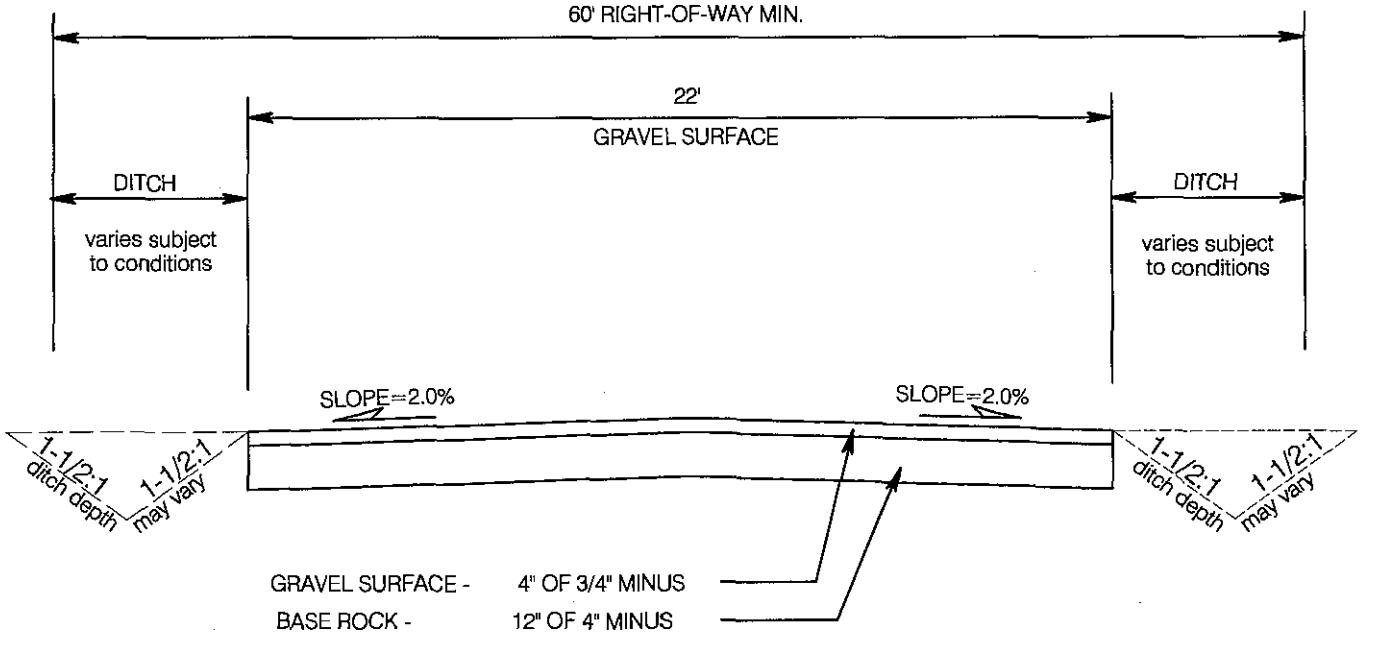


PAVED LOCAL ROAD
NTS

Baker County Transportation System Plan

NOT TO SCALE

Figure 7-6
Typical Roadway Cross Section Standards
Paved Local Road - 22 feet

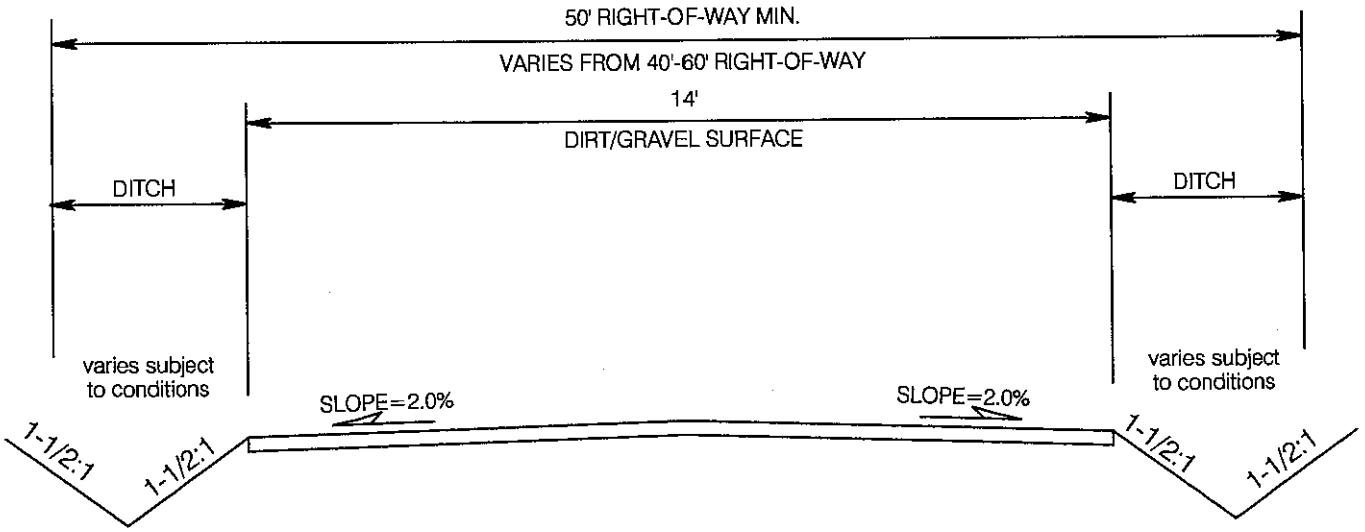


NOTE - COUNTY NOT REQUIRED TO MAINTAIN TO ANY STANDARD.

PUBLIC USE ROAD
WHEN NAMED UNDER RURAL ADDRESSING CRITERIA
ORDINANCE 94-05

NOT TO SCALE

Figure 7-7
Typical Roadway Cross Section Standards
Public Use Road When Named
Under Rural Addressing Criteria - 22 feet



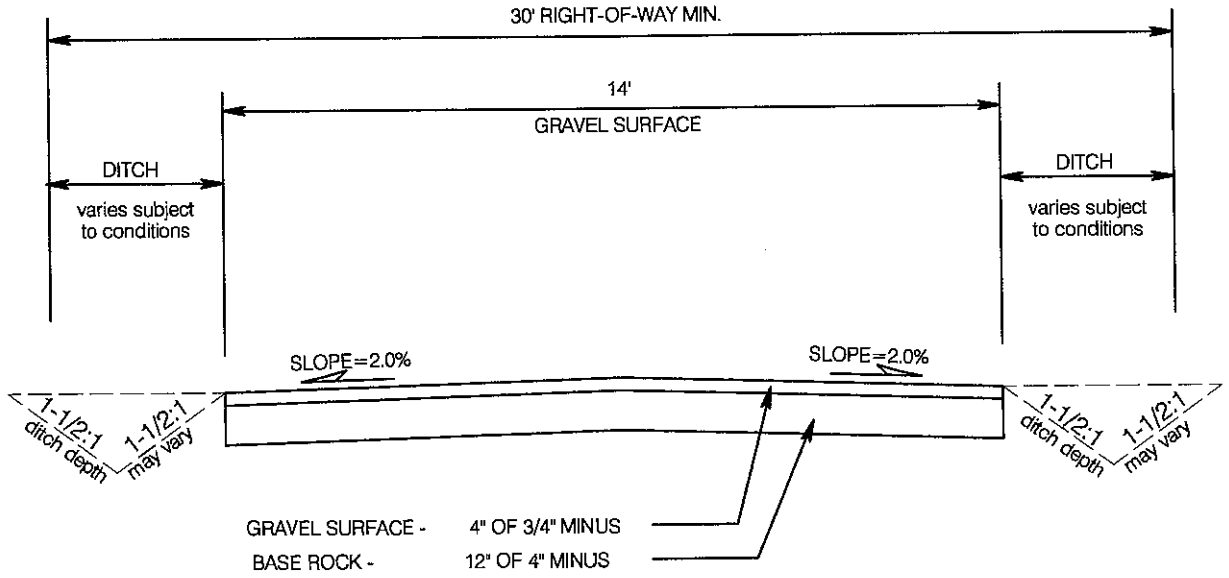
NOTE - COUNTY NOT REQUIRED TO MAINTAIN TO ANY STANDARD.

LOCAL ACCESS DIRT/GRAVEL ROAD UNDER BAKER COUNTY JURISDICTION RS2477

NTS

NOT TO SCALE

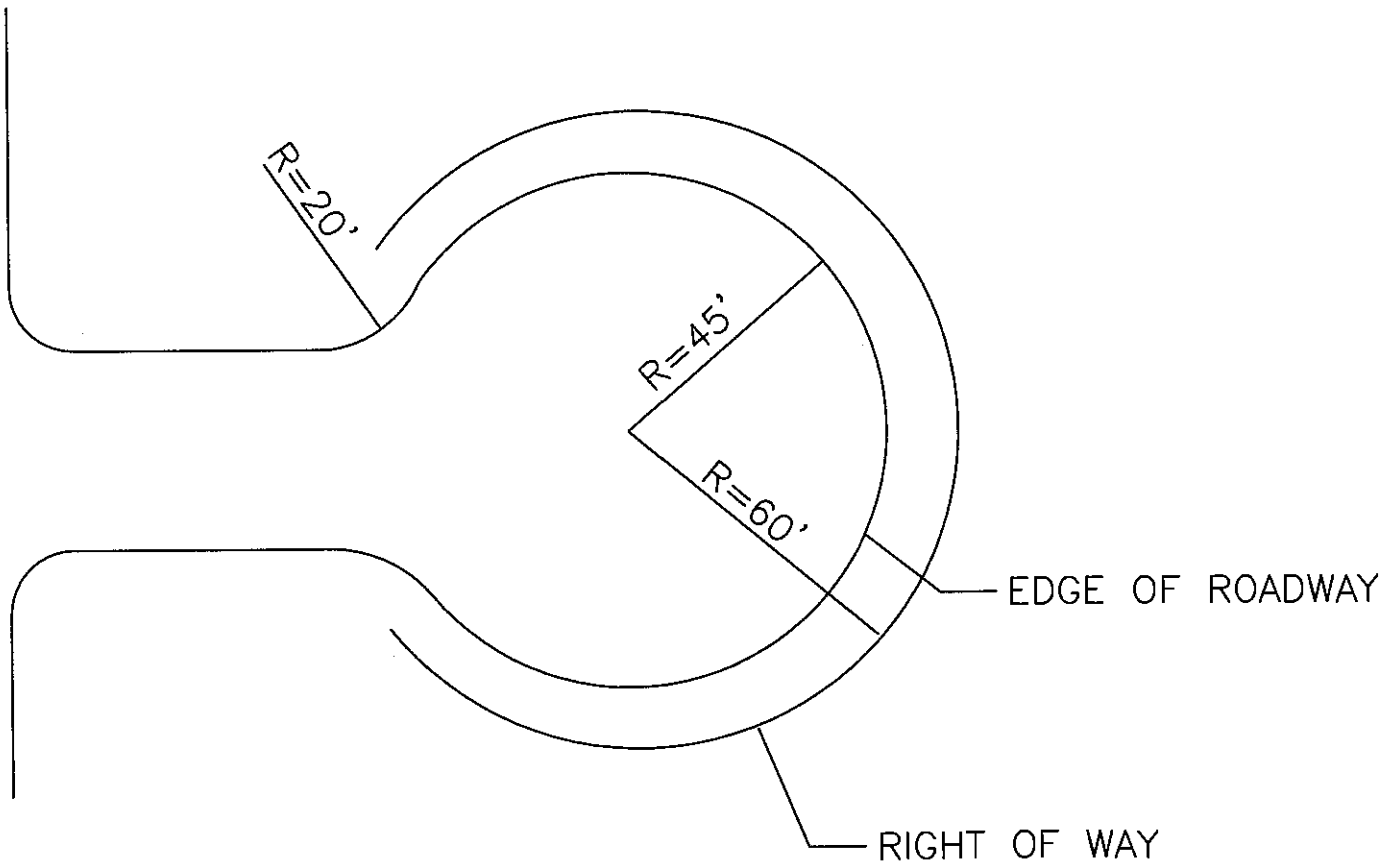
Figure 7-8
Typical Roadway Cross Section Standards
Local Access Dirt/Gravel Road - RS2477 - 14 feet



PRIVATE ROAD FOR RESIDENTIAL USE
GRAVEL ROAD

NOT TO SCALE

Figure 7-9
Typical Roadway Cross Section Standards
Private Road for Residential Use - 14 feet



Baker County Transportation System Plan

NOT TO SCALE

Figure 7-10
Cul De Sac Cross Section Standards

7.1.5. Local Road Network Plan

The purpose of the Local Road Network Plan is to identify future right-of-way that Baker County will need in order to have and maintain, as much as possible, a balanced road network in accordance with the Oregon Transportation Rule. The plan designates:

1) where existing collector/arterials will be extended or new ones will be added;
2) where new local access roads and/or pedestrian ways will be located to provide better connection between existing roads (grid infill); and
3) where new local access roads will be located to provide adequate connection to significant local destinations for both automobiles and pedestrians.
4) Where rural residential development may occur, local roads will be carried through the full extent of the property and terminate with an emergency turnaround.

Locations for the right-of-way and improvements are designated based on review of the existing road grid, potential buildability of existing zoning, existing parcel boundary locations, physical constraints (such as steep slopes and floodways that might preclude economical road construction) and access management guidelines for access onto major arterials. Based on the criteria the following areas and their surrounding were evaluated for potential roadway extension projects:

- Halfway
- Richland
- Keating Valley
- Durkee
- Huntington
- Dooley Mountain
- Unity
- Sumpter Valley
- West Baker Valley
- East Baker Valley
- Sparta
- Greenhorn

The projects identified in Table 7-2 were identified as potential concerns because of circulation and access issues.

Table 7-2. Local Road Network Plan Improvement Projects

Project Description	Priority	Cost
1. Rhody Road to Sawmill Gulch Road	1-5 years	$20,000
2. Stices Gulch Road to Top of Dooley Mountain (OR 245)	1-5 years	$285,000
3. Greenridge Drive to Aburn Street	1-5 years	$10,000
4. Water Gulch Road to Top of Dooley Mountain (OR 245) via 11 Road (Skyline Road)	1-5 years	$6,800,000
5. Rice Road to Whitney Road (all-weather road)	10-15 years	$192,500
6. Deer Creek Drive to Deems Loop	5-10 years	$35,000
7. Goodrich Creek Road to Spring Creek Rec	5-10 years	$35,000

7.1.6. Road Improvements

The road improvements identified in Section 6 are summarized in Table 7-3. The location of these road improvement projects are shown in Figures 7-11a and 7-11b.

Table 7-3
Roadway Capital Improvement List and Cost

ODOT STIP Projects	Cost
1. OR 7 from Salisbury Junction to Baker City Pavement Preservation	$642,000
2. US 26 from Middle Fork Burnt River to Malheur County Line	$4,385,000
3. US 26 from Grant County Line to Forest Service Boundary	$1,100,000
4. OR 7 from Campbell Avenue to I-84	$621,000
5. I-84: Pleasant Valley Interchange Bridges (Bridge #8279W and #8279E)	$11,939,000
6. US 30/I-84 Burnt River Bridges (Bridges #01788, #01789, and #01786)	$3,360,000
7. OR 86: Powder River Bridge (Bridge #02807)	$1,744,000
ODOT Intersection Improvement	
8. Hughes Lane/US 30 - Signalization	$200,000

Table 7-3
Roadway Capital Improvement List and Cost Continued

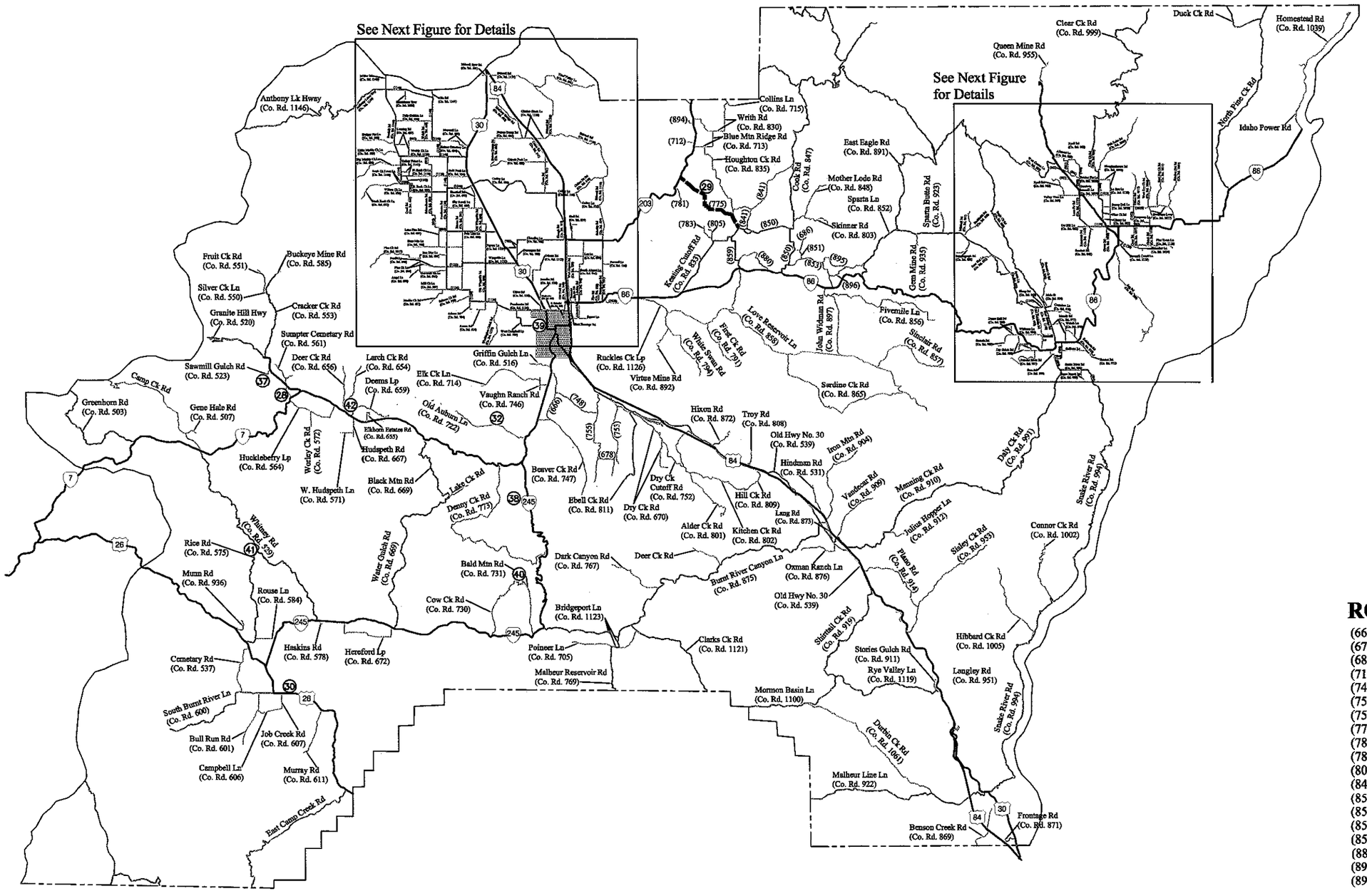
OTIA 3 Projects	Cost
9. Cracker Creek Bridge (Bridge #01C227)	$683,000
10. Burnt River Bridge (Bridge #01C408)	$618,000
11. Powder River, Highway 71 at Milepost 41.66 (Bridge #07316)	$1,060,000
12. Powder River, Highway 71 at Milepost 42.77 (Bridge #07431)	$1,010,000
13. Pritchard Creek at UPRR, Highway 6 WB (Bridge #07987)	$2,103,000
14. Highway 6 over Lime Interchange Conn (Bridge #09354)	$10,009,000
15. Burnt River (Dixie Creek), Highway 6 (Bridge #01786A)	$783,000
16. Pritchard Creek & UPRR, Highway 6 EB (Bridge #07987A)	$2,084,000
17. Highway 6 EB over Conn & UPRR - Ecina Interchange (Bridge #08302E)	$1,233,600
18. Highway 6 WB over Conn & UPRR - Ecina Interchange (Bridge #08302E)	$1,264,200
19. Highway 6 EB over Alder Creek Road (Bridge #08423E)	$978,000
20. Highway 6 WB over Alder Creek Road (Bridge #08423W)	$978,000
Baker County Road Department Projects	
21. Chico Road (County Road #538, project length is 0.61 miles)	$200,000
22. Chandler Lane (County Road #702, project length is 0.72 miles)	$200,000
23. Shurtleff Road (County Road #695) and Old Wingville Road (County Road #696, total project length is 1.78 miles).	$225,000
24. Brown Road (County Road #701, project length is 1 mile)	$150,000
25. Hunt Mountain Lane (County Road #700, project length is 1 mile).	$125,000
26. Robinette Road (County Road #979, project length is 1.75 miles)	$350,000

Table 7-3
Roadway Capital Improvement List and Cost Continued

Baker County Road Department Projects Continued	Cost
27. Haines Cemetery Lane (County Road #694, project length is 1.25 miles)	$150,000
28. Huckleberry Loop (County Road #564, project length is 1 miles)	$100,000
29. Miles Bridge Road (County Road #775, project length is 5.8 miles).	$375,000
30. Unity District (County Road District #5, project includes 13 approaches)	$130,000
31. Clear Creek Road (County Road #999, length of project is 1.71 miles).	$225,000
32. Old Auburn Lane (County Road #722, length of project is 5.26 miles)	$750,000
33. Hunt Mountain Lane (County Road #700, length of project is 0.50 miles)	$60,000
34. Pine Town Lane (County Road #1128, project length is 1.5 miles)	$150,000
35. Pine Creek Lane (County Road #646, project length is 0.40 miles)	$187,500
36. Pole Line Lane (County Road #698, project length is 3.20 miles)	$350,000
Other Improvements	
Other Improvement 6. Provide A/dditional Public Transit Service	$16,000/yr
Other Improvement 7. Implement Rideshare Program	$15,000/yr
Other Improvement 8. School Bus/Transit	----
Local Road Network Plan Improvement Projects	
37. Rhody Road to Sawmill Gulch Road	$20,000
38. Stices Gulch Road to Top of Dooley Mountain (OR 245)	$285,000
39. Greenridge Drive to Auburn Street	$10,000

Table 7-3
Roadway Capital Improvement List and Cost Continued

Local Road Network Plan Improvement Projects Continued	Cost
40. Water Gulch Road to Top of Dooley Mountain (OR 245) via 11 Road (Skyline Road)	$6,800,000
41. Rice Road to Whitney Road (all-weather road)	$192,500
42. Deer Creek Drive to Deems Loop	$35,000
43. Goodrich Creek Road to Spring Creek Rec	$35,000
Grand Total	$57,899,800



ROADWAY NAME LEGEND

(666) Beaver Creek Loop (Co. Rd. 666)
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(895) Duby Road (Co. Rd. 895)

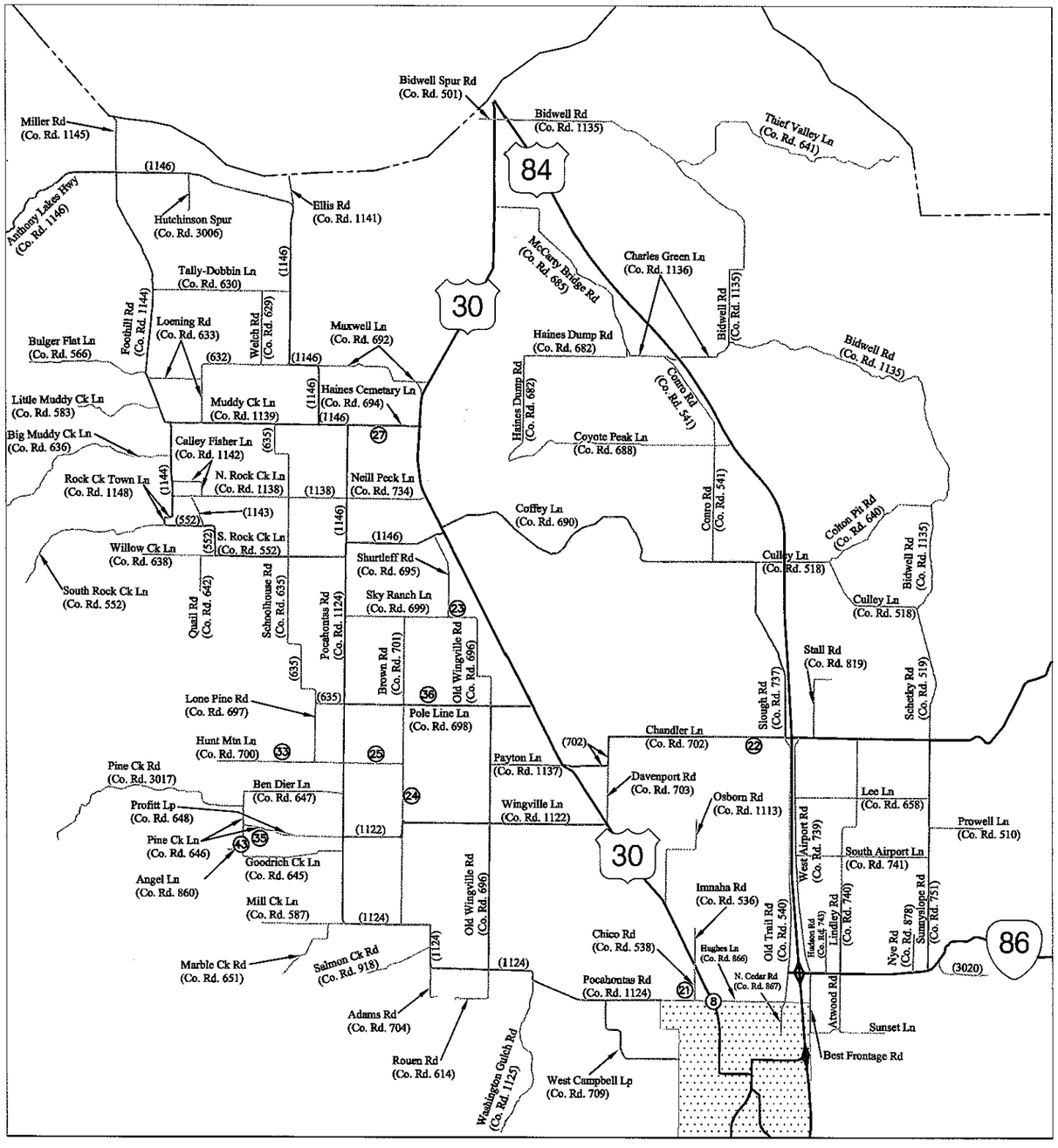
Baker County Transportation System Plan

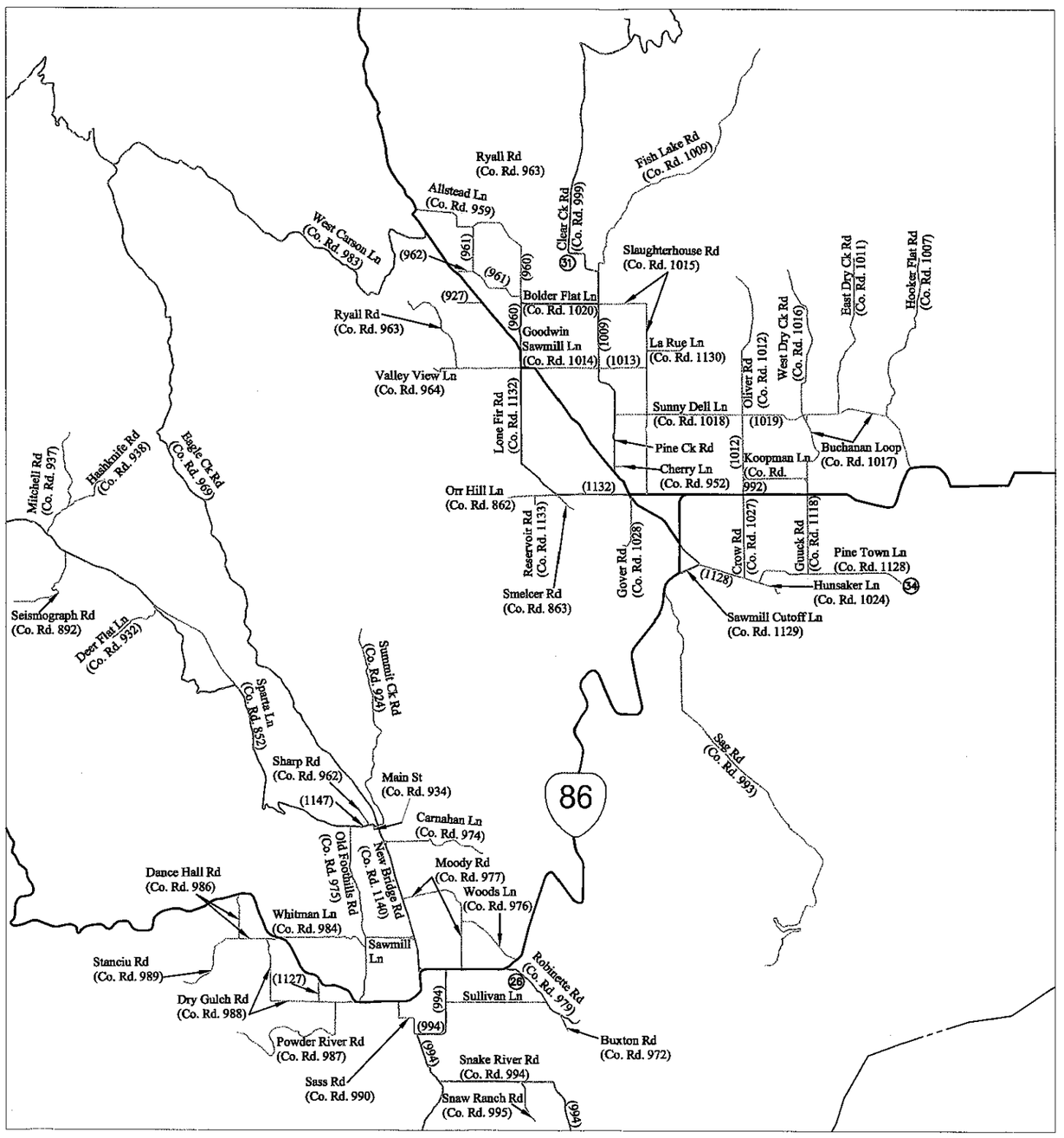
LEGEND
State Highway
Arterial
Collector
County Road
Road Improvement Project Location ①

NOT TO SCALE

Figure 7-11a
Road Improvement Project Location Map

Baker County Transportation System Plan





NOT TO SCALE

LEGEND

State Highway
Arterial
Collector
County Road
Road Improvement Project Location ①

ROADWAY NAME LEGEND

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(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Figure 7-11b
Road Improvement Project Location Map

7.2. PEDESTRIAN AND BICYCLE SYSTEM PLAN

7.2.1. TPR Requirements

OAR 660-12-020 Elements of Transportation System Plans

(2) (d) A bicycle and pedestrian plan for a network of bicycle and pedestrian routes throughout the planning area. The network and list of facility improvements shall be consistent with the requirements of ORS 366.514.

OAS 660-12-045 Implementation of the Transportation System Plan

(6) In developing a bicycle and pedestrian circulation plan as required by 660-12-020(2)(d), local governments shall identify improvements to facilitate bicycle and pedestrian trips to meet local travel needs in developed areas. Appropriate improvements should provide for more direct, convenient and safer bicycle or pedestrian travel within and between residential areas and neighborhood activity centers (i.e. schools, shopping, transit stops). Specific measures include, for example, constructing walkways between cul-de-sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses.

7.2.2. Non-Motorized Facility Standards

There are many types of non-motorized facilities. These facilities include but are not limited to:

- Shared roadway
- Shoulder bikeway
- Bike Lane
- Multi-use path
- Sidewalk

Baker County shall use the standards for non-motorized facilities that are contained in the Oregon Bicycle and Pedestrian Plan, ODOT, June 14, 1995.

7.2.3. Non-Motorized Improvements

Baker County has used the following five factors to select its bikeway route improvements:

1. Bicycle Traffic Generators

   An estimate range of 3 to 6 miles covers most recreational and pragmatic bicycle trips, and these can be identified with a specific traffic generator. Generators include:

a. Schools
b. Parks and recreational facilities
c. Community activity centers
d. Employment connections
e. Shopping and commercial centers
f. Transportation hubs/transfer stations

NOTE: For all types of trips in urban areas of up to 5 miles, the bicycle and motor vehicle require about the same traffic time.

2. Scenic and Recreational Amenities

The value of a bikeway, as an amenity is enhanced by close proximity and connection to parks or other scenic and recreational attractions. All else being equal, the most varied and attractive routes will be used the most. Baker County offers varied and superlative scenery.

3. Terrain

Bicyclists will avoid steep grades. Studies indicate that if gradients exceed 5 percent there will be a sharp drop in the length of uphill grade that bicyclists will tolerate.

4. Width of Bikeways

Factors to consider when determining widths for bikeways must include:

a. The spatial dimensions of bicyclist and bicycle
b. Maneuvering space required for balancing
c. Additional clearances required to avoid obstacles

Designers should assume that in almost all cases two-way travel will occur on bicycle paths, regardless of design intentions, appropriate widths should be provided (Harris and Dines, 1988)

5. Negative Factors

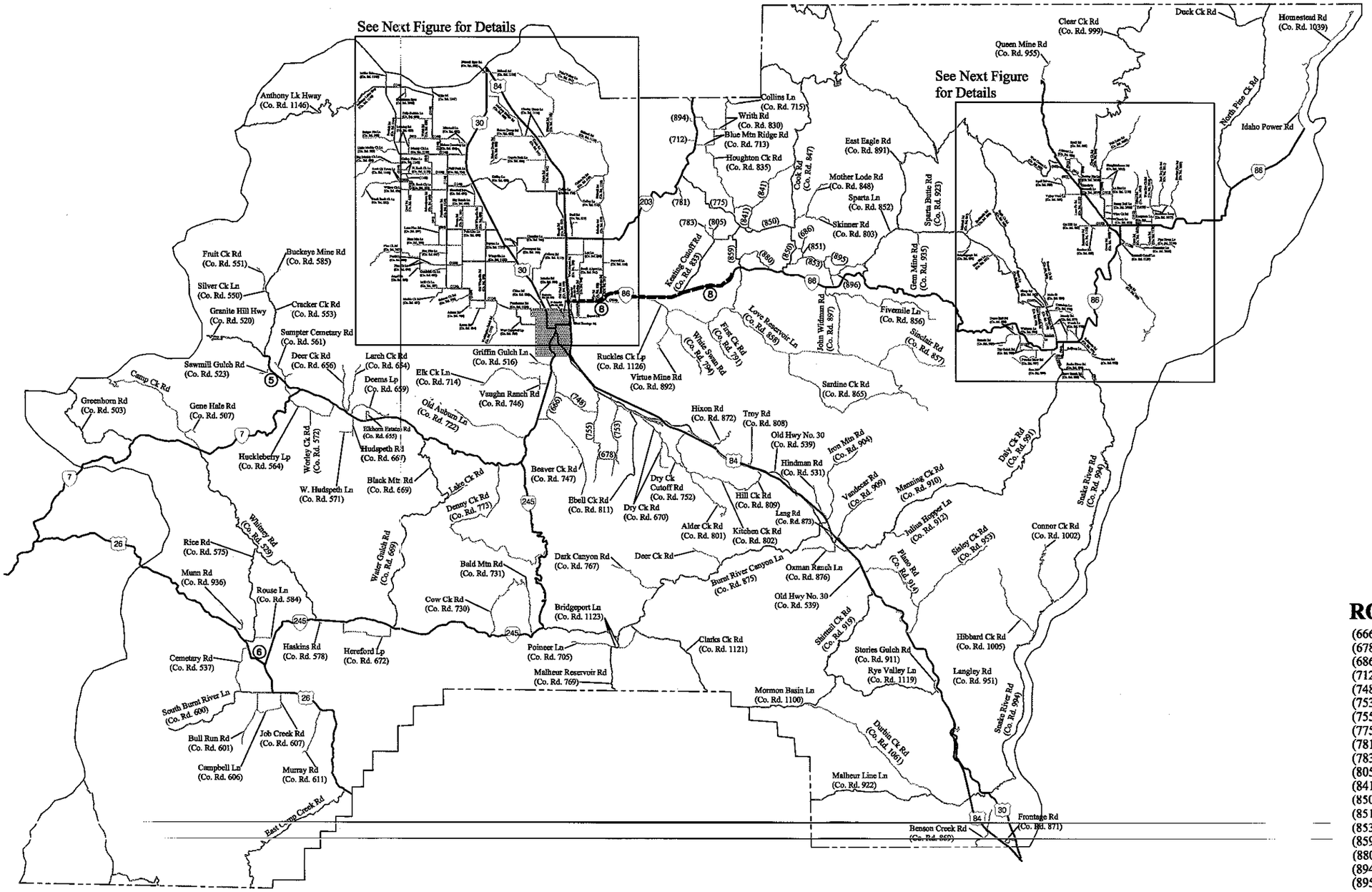
Factors that negatively influence the selection of a route for a bikeway include elevated embankments, freeways and their interchanges, busy arterials, and areas with frequent periods of adverse weather conditions (Harris and Dines, 1988).

Table 7-4 contains a list of bicycle and pedestrian projects developed by Baker County.

Figures 7-12a and 7-12b show the locations of the bicycle and pedestrian improvement projects.

Table 7-4
Bicycle and Pedestrian Capital Improvement List and Cost

Project Description	Priority	Cost
1. US 30 – City of Haines Main Street – extend multi-use path through the city	1-5 years	$157,500
2. US 30 from Pocahontas Road to Chico Road – construct shared path on both sides of the roadway	1-5 years	$315,000
3. OR 413 from north end of Halfway to school - extend multi-use path	1-5 years	$315,000
4. Hewitt Park Road (County Road 979) between Hewitt and Holcomb Parks – construct shared path on both sides of the roadway	1-10 yrs	$315,000
5. OR 410 – City of Sumpter Main Street – extend multi-use path through the city	1-5 years	$315,000
6. US 26 – City of Unity Main Street – extend multi-use path through the city	1-10 years	$315,000
7. Pocahontas Road (County Road 1124) – Baker City to Anthony Lakes Highway – construct shared path on both sides of the roadway	5-20 years	$7,875,000
8. OR 86 – I-84 to Interpretive Center – construct shared path on sides of the roadway	5-20 years	$1,890,000



ROADWAY NAME LEGEND

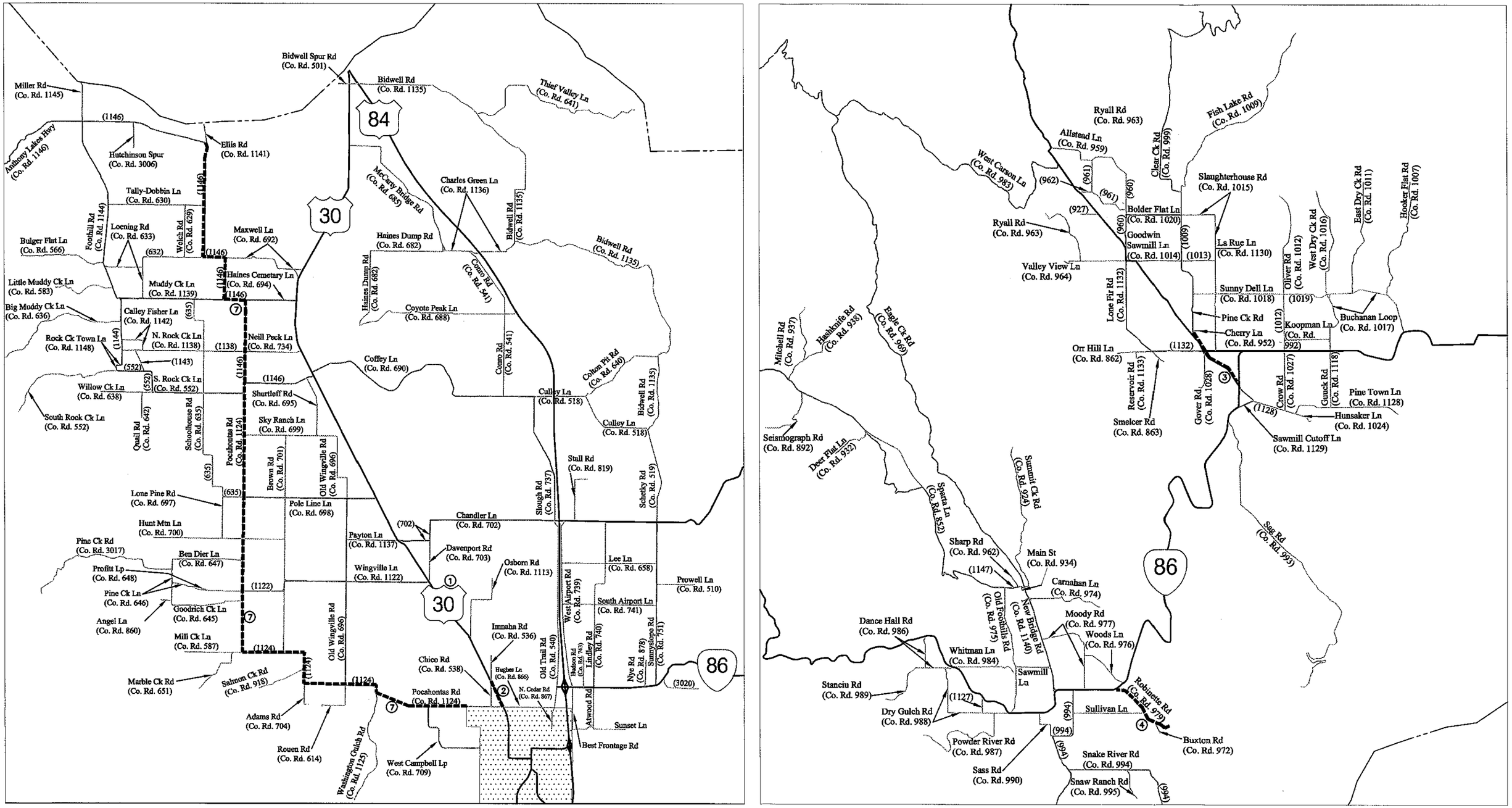
(666) Beaver Creek Loop (Co. Rd. 666)
(678) Sutton Creek Loop (Co. Rd. 678)
(686) Jacobs Road (Co. Rd. 686)
(712) Gene Harsin Road (Co. Rd. 712)
(748) "C" Schaffner Creek Lane (Co. Rd. 748)
(753) Sutton Creek Road (Co. Rd. 753)
(755) West Sutton Creek Road (Co. Rd. 755)
(775) Miles Bridge Road (Co. Rd. 775)
(781) Jury Road (Co. Rd. 781)
(783) Lower Powder Road (Co. Rd. 783)
(805) Erwin Road (Co. Rd. 805)
(841) Gilkison Mill Road (Co. Rd. 841)
(850) **Keating Grange Lane (Co. Rd. 850)**
(851) **Hack Road (Co. Rd. 851)**
(853) **Middle Bridge Loop (Co. Rd. 853)**
(859) Banta Road (Co. Rd. 859)
(880) Ritter Loop (Co. Rd. 880)
(894) Fred Bowman Lane (Co. Rd. 894)
(895) Duby Road (Co. Rd. 895)

NOT TO SCALE

LEGEND
State Highway
Arterial
Collector
County Road
Bike/Ped Improvement Project Location ①

Baker County Transportation System Plan

Figure 7-12a
Bike/Ped Improvement Project Location Map



Baker County Transportation System Plan

LEGEND

NOT TO SCALE

State Highway
Arterial
Collector
County Road
Bike/Ped Improvement Project Location ①

ROADWAY NAME LEGEND

(632) Mansfield Lane (Co. Rd. 632)
(927) McFadden Lane (Co. Rd. 927)
(960) Steele Hill Road (Co. Rd. 960)
(961) Holbrook Creek Road (Co. Rd. 961)
(962) Holbrook Creek Spur (Co. Rd. 962)
(1013) Bowerman Lane (Co. Rd. 1013)
(1019) Estes Hill Lane (Co. Rd. 1019)
(1127) Blank Road (Co. Rd. 1127)
(1143) Stevens Road (Co. Rd. 1143)
(1147) Governor Lane (Co. Rd. 1147)

Figure 7-12b
Bike/Ped Improvement Project Location Map

7.3. PUBLIC TRANSPORTATION PLAN

7.3.1. Transportation Planning Rule (TPR) Requirements

OAR 660-12-020 Elements of Transportation System Plans

(2) (c) A public transportation plan which:

(A) Describes public transportation services for the transportation disadvantaged and identifies service inadequacies.

(B) Describes intercity bus and passenger rail service and identifies the location of terminals.

(C) For areas within an urban growth boundary which have public transit service, identifies existing and planned transit trunk routes, exclusive transit ways, terminals and major transfer stations, major transit stops, and park-and-ride stations. Designation of stop or station locations may allow for minor adjustments in the location of stops to provide for efficient transit or traffic operation or to provide convenient pedestrian access to adjacent or nearby uses.

(D) For areas within an urban area containing a population of greater than 25,000 persons, not currently served by transit, evaluates the feasibility of developing a public transit system at build out. Where a transit system is determined to be feasible, the plan shall meet the requirements of subsection 2(c)(C) of this section.

7.3.2. Types of Public Transportation and Recommended Services

Public transportation may include the following services and facilities:

- Intra- and inter-city fixed route systems: deviated fixed-route scheduled bus, rail, light rail, and park-and-ride express services.
- Demand response services which primarily serve the disabled, elderly, or other transportation disadvantaged individuals.
- Rideshare/Transportation Demand Management program: carpool, vanpool, bus pool matching services; preferential parking programs; and reduced parking fees.
- Other: taxi services, privately owned inter-city bus lines or shuttle services.

The best mix of services in any community or planning area will depend on the needs of the service population, spatial distribution of the service population, economic factors, and the existing transportation system and policies.

The Oregon Public Transportation Plan (ODOT, 1997) described a preferred state of public transportation in 2015 to respond to state and federal goals, which established targets for service

types and frequencies relevant to Baker County. The plan identifies minimum levels of public transportation services that provide a range of services intended to keep pace with Oregon's changing and increasing public transportation needs. Minimum level of service recommendations were given by types of services, size of community, and distance from other major intermodal centers (only Portland in Oregon) or urban central cities. Since Baker County is considered a rural area, only the most limited type of public transportation service is recommended.

7.3.3. Transportation Demand Management

Transportation Demand Management (TDM) is a technique applied to peak travel times to help reduce the use of the transportation network system. The most appropriate TDM measure for Baker County would be to institute a carpooling program, especially for travel between the incorporated cities and Baker City. It is estimated that a carpooling rideshare program for the Baker County area would cost about $15,000 per year. This would pay for a part-time staff member, signage, advertising, compilation of a rider database, and coordination of park and ride lots.

The County 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.

7.4. AIR, RAIL, WATER AND PIPELINE PLAN

7.4.1. TPR Requirements

OAR 660-12-020 Elements of Transportation System Plans

(2) (e) An air, rail, water and pipeline transportation plan which identifies where public use airports, mainline and branchline railroads and railroad facilities, port facilities, and major regional pipelines and terminals are located or planned within the planning area. For airports, the planning are shall include all areas within airport imaginary surfaces and other areas covered by state or federal regulations.

7.4.2. Air Service

The *Baker City Municipal Airport Master Plan Update* (Centurywest Engineering, 1995) included a number of capital improvement projects, listed in Table 7-5. These projects are proposed to be paid for by a combination of Federal Aviation Administration and Baker City funding.

Table 7-5
Baker City Municipal Airport Capital Improvement Projects

PROJECT	COST
Fiscal Years 2000-2004[1]	
Overlay runway 13-31	$508,500
Construct gravel access road of west side of terminal	$18,000
Construct taxilane for large sites east side of terminal	$21,400
Construct taxilane for T-hangar site	$14,600
Construct taxilane for future hangar sites	$17, 500
TOTAL 1999-2004	**$580,000**
Fiscal Years 2004-2015[2]	
Overlay runway 17-35	$326,700
Overlay 13-31 parallel taxiway and install lighting	$302,400
Install REIL on runway end 31	$5,000
Expand terminal area roadway	$35,100
Construct taxilane and connection to runway end 35	$23,670
Acquire 2 residential parcels on west side of airport	$150,000
TOTAL 2004-2015	**$842,870**

Source: Baker City Municipal Airport Master Plan Update (Centurywest Engineering, 1995)

[1] For the purposes of this TSP, 2000-2004 projects were considered high priority

[2] For the purposes of this TSP, 2004-2015 projects were considered medium to low priority

7.4.3. 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.

The Amtrak Pioneer Train originally provided limited passenger services to Baker County. According to ODOT's rail planners, the cost to restore service could cost as much as $8-10 million/year. The reason service was discontinued was low ridership and high costs. This is not unique to Baker County, as the vast majority of passenger service originates in the Portland metropolitan area. Less populated areas rely upon long distance passengers and freight to subsidize their access to rail service. If indirect subsidies become available (such as long distance passenger service between more populated regions or an Amtrak Priority Package Train with limited passenger service), passenger service may become a reality in Baker County. As passenger rail is developed in other parts of Oregon, an extension of service to the east may be considered within the 20 year planning period.

The Union Pacific Northwest Mainline traverses Baker County in a north/south direction. Union Pacific is one of the largest railroads in North America, operating in the western two-thirds of the U.S. The entire system serves 23 states, linking every major West Coast and Gulf Coast port. The mix of shipped commodities includes chemicals, coal, food and food products, forest and grain products, metals and minerals, and automobiles.

The Union Pacific Northwest Mainline follows the historic route of the Oregon Trail, moving west from the Blue Mountains along the Columbia River Gorge to Portland. A major classification yard in Hinkle, near Hermiston, and major switching yard in Portland are important operational elements in Oregon. The Union Pacific Northwest Mainline moves approximately 30-40 million tons of commodities per year.

Throughout Baker County, the railroad generally runs parallel to Highway 30 and Interstate I-84. Because this line is a mainline (Class IV line), it is in excellent operating condition with very few deficiencies and need for major improvements. An average of 30 or more trains a day pass through Baker County on the mainline. Reflecting the importance of this line, the number of trains per day is expected to increase in the future by 2% to 4% per year.

Many communities in Baker County grew up along the railroad, but are no longer significant suppliers or receivers of rail commodities. 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. Consequently, rail traffic in Baker County is not originating from, or affected by, the industries operating within Baker County. Very few short lines (Class III line) are operated in Baker County.

Conflicts between trains and automobiles were not identified as major issues during public involvement process. This is supported by a small number of accidents reported to the ODOT Rail Division from 1984-1994. According to ODOT rail planners, very few accidents have occurred between 1994 and 1999. Most crossings are grade-separated crossings or have gates

and lights. Train traffic is traveling at up to 79 mph at crossings. According to the ODOT Rail Division Railroad-Highway Crossing Log, only two accidents involving trains have occurred from 1984-1994 within the County. Most crossings are concentrated in the cities of Haines and Baker City, but there are numerous crossings on the County's rural roads.

Union Pacific is currently building improvements through the Blue Mountains and at Hinkle. As a result, there may be increased rail use through Baker County. A higher level of rail service may result in the need for additional safety features at some at-grade crossings. A variety of solutions are available, such as gates, grade-separated facilities, and closure. Safety education for pedestrians and motorists should also be implemented in areas with increased train frequency.

The 1992 Oregon Transportation Plan (page 91) identifies the Baker City/La Grande area as a potential rail/truck intermodal freight facility. A feasibility study conducted for such a facility in Union County showed that freight volumes were most likely insufficient to support an intermodal center. This conclusion probably holds true for Baker County, which has similar freight volumes. If freight volumes significantly increase as a result of Union Pacific improvements, the concept of an intermodal center in the Baker/Union County area should be revisited.

Encouraging the increased use of rail for freight transport could lessen the need to construct and reconstruct new highways in the area.

7.4.4. Water Transportation Service

There are no water transportation services within the planning area of Baker County.

7.4.5. Pipeline Service

In general, the existing demand for natural gas service in Baker County is being met, and no expansions of this service are planned. The City of Haines is exploring a natural gas connection.

SECTION 8.0
FINANCE PLAN

Section 8.0
Finance Plan

8.1. TRANSPORTATION IMPROVEMENT REVENUE NEEDS

As part of the requirement of the Transportation Planning Rule (TPR) for TSPs, a financing plan for the recommended improvements was developed. The cost of the roadway transportation projects proposed under this TSP is shown in Table 8-1. Table 8-2 shows the cost of the non-motorized transportation projects proposed in this TSP.

As shown in Table 8-1, the projects proposed in the roadway transportation improvements have a total cost of $57,899,800. To fully implement the roadway improvement program, an average of $2,894,990 per year would need to be expended each year from 2005 through the year 2025.

The total cost of the bicycle and pedestrian capital improvement projects is $11,497,500 as shown in Table 8-2. It would take an average of $574,875 per year from 2005 to 2025 to fully implement the non-motorized transportation improvement projects.

The total cost of all of the transportation improvement projects, including both roadway and non-motorized improvement projects, is $69,397,300. To fully implement the roadway improvement program, an average of $3,469,865 per year would need to be expended each year from 2005 through the year 2025.

8.2. TRANSPORTATION REVENUE OUTLOOK

Almost all of Baker County's dedicated revenues allocated to streets are for maintenance. New sources of funding would need to be developed by the county to actually fund a capital improvement plan. The county should consider a system development charge to help fund the capital improvements identified in the transportation system plan. Another potential source of revenue may be a local gas tax.

8.3. REVENUE SOURCES AND FINANCING OPTIONS

Several possible funding sources exist to implement the recommended transportation improvements. The following pages describe the funding sources that may be available.

LOCAL SOURCES

The following options are available on the local level to raise funds for transportation improvements:

Table 8-1
Roadway Capital Improvement List and Cost

ODOT STIP Projects	Cost
1. OR 7 from Salisbury Junction to Baker City Pavement Preservation	$642,000
2. US 26 from Middle Fork Burnt River to Malheur County Line	$4,385,000
3. US 26 from Grant County Line to Forest Service Boundary	$1,100,000
4. OR 7 from Campbell Avenue to I-84	$621,000
5. I-84: Pleasant Valley Interchange Bridges (Bridge #8279W and #8279E)	$11,939,000
6. US 30/I-84 Burnt River Bridges (Bridges #01788, #01789, and #01786)	$3,360,000
7. OR 86: Powder River Bridge (Bridge #02807)	$1,744,000
ODOT Intersection Improvement	
8. Hughes Lane/US 30 - Signalization	$200,000
OTIA 3 Projects	
9. Cracker Creek Bridge (Bridge #01C227)	$683,000
10. Burnt River Bridge (Bridge #01C408)	$618,000
11. Powder River, Highway 71 at Milepost 41.66 (Bridge #07316)	$1,060,000
12. Powder River, Highway 71 at Milepost 42.77 (Bridge #07431)	$1,010,000
13. Pritchard Creek at UPRR, Highway 6 WB (Bridge #07987)	$2,103,000
14. Highway 6 over Lime Interchange Conn (Bridge #09354)	$10,009,000
15. Burnt River (Dixie Creek), Highway 6 (Bridge #01786A)	$783,000
16. Pritchard Creek & UPRR, Highway 6 EB (Bridge #07987A)	$2,084,000
17. Highway 6 EB over Conn & UPRR - Ecina Interchange (Bridge #08302E)	$1,233,600

Table 8-1
Roadway Capital Improvement List and Cost Continued

OTIA 3 Projects Continued	Cost
18. Highway 6 WB over Conn & UPRR - Ecina Interchange (Bridge #08302E)	$1,264,200
19. Highway 6 EB over Alder Creek Road (Bridge #08423E)	$978,000
20. Highway 6 WB over Alder Creek Road (Bridge #08423W)	$978,000
Baker County Road Department Projects	
21. Chico Road (County Road #538, project length is 0.61 miles)	$200,000
22. Chandler Lane (County Road #702, project length is 0.72 miles)	$200,000
23. Shurtleff Road (County Road #695) and Old Wingville Road (County Road #696, total project length is 1.78 miles).	$225,000
24. Brown Road (County Road #701, project length is 1 mile)	$150,000
25. Hunt Mountain Lane (County Road #700, project length is 1 mile).	$125,000
26. Robinette Road (County Road #979, project length is 1.75 miles)	$350,000
27. Haines Cemetery Lane (County Road #694, project length is 1.25 miles)	$150,000
28. Huckleberry Loop (County Road #564, project length is 1 miles)	$100,000
29. Miles Bridge Road (County Road #775, project length is 5.8 miles).	$375,000
30. Unity District (County Road District #5, project includes 13 approaches)	$130,000
31. Clear Creek Road (County Road #999, length of project is 1.71 miles).	$225,000
32. Old Auburn Lane (County Road #722, length of project is 5.26 miles)	$750,000
33. Hunt Mountain Lane (County Road #700, length of project is 0.50 miles)	$60,000

Table 8-1
Roadway Capital Improvement List and Cost Continued

Baker County Road Department Projects Continued	**Cost**
34. Pine Town Lane (County Road #1128, project length is 1.5 miles)	$150,000
35. Pine Creek Lane (County Road #646, project length is 0.40 miles)	$187,500
36. Pole Line Lane (County Road #698, project length is 3.20 miles)	$350,000
Other Improvements	
Other Improvement 6. Provide A/dditional Public Transit Service	$16,000/yr
Other Improvement 7. Implement Rideshare Program	$15,000/yr
Other Improvement 8. School Bus/Transit	----
Local Road Network Plan Improvement Projects	
37. Rhody Road to Sawmill Gulch Road	$20,000
38. Stices Gulch Road to Top of Dooley Mountain (OR 245)	$285,000
39. Greenridge Drive to Auburn Street	$10,000
40. Water Gulch Road to Top of Dooley Mountain (OR 245) via 11 Road (Skyline Road)	$6,800,000
41. Rice Road to Whitney Road (all-weather road)	$192,500
42. Deer Creek Drive to Deems Loop	$35,000
43. Goodrich Creek Road to Spring Creek Rec.	$35,000
Grand Total	$57,899,800

Table 8-2
Bicycle and Pedestrian Capital Improvement List and Cost

Project Description	Priority	Cost
1. US 30 – City of Haines Main Street – extend multi-use path through the city	1-5 years	$157,500
2. US 30 from Pocahontas Road to Chico Road – construct shared path on both sides of the roadway	1-5 years	$315,000
3. OR 413 from north end of Halfway to school - extend multi-use path	1-5 years	$315,000
4. Hewitt Park Road (County Road 979) between Hewitt and Holcomb Parks – construct shared path on both sides of the roadway	1-10 yrs	$315,000
5. OR 410 – City of Sumpter Main Street – extend multi-use path through the city	1-5 years	$315,000
6. US 26 – City of Unity Main Street – extend multi-use path through the city	1-10 years	$315,000
7. Pocahontas Road (County Road 1124) – Baker City to Anthony Lakes Highway – construct shared path on both sides of the roadway	5-20 years	$7,875,000
8. OR 86 – I-84 to Interpretive Center – construct shared path on sides of the roadway	5-20 years	$1,890,000
	Grand Total	$11,497,500

Local Option Gasoline Tax

Revenues raised from a local option gasoline tax could be used by the County to fund recommended transportation improvements. The monies collected from a local gas tax could generate enough monies to at least generate local matching money for grants.

Property Taxes

Local property taxes can be used to fund transportation system improvements. A specific allocation of property taxes to transportation improvements could be identified or set at a fixed and predictable level to provide a longer-term stable and predictable source of revenue. This would be important in implementing larger, longer-term projects with a high capital cost. Voter approval is necessary for the use of property taxes to fund roadway improvements and the uncertainty of this approval affects the attractiveness of this revenue choice. Another major disadvantage of using property taxes to support transportation improvements includes the inequity of this tax when compared with the users of the system (a user tax such as the tax on gasoline is more equitable in that persons who drive and use the street system pay for it rather than persons who own property). Additionally, the use of property taxes to fund transportation improvements would be restricted by the limitations of Measure 5.

Debt Funding

The County could issue municipal bonds to finance improvements. This approach would spread the cost of improvements over the life of the bonds and lower the annual expenses during construction years. If revenue bonds are issued, voter approval might not be necessary, but an identified revenue source (i.e., property taxes) would need to be identified to satisfy the bond underwriter. General obligation bonds would require voter approval. Both bonding approaches would be limited by the restrictions of Measure 5 and the bonding capacity of the local agencies.

System Development Charges

Oregon law enables communities to fund growth-related transportation improvements by imposing system development charges. These charges apply to newly developed property and can be used to recover the costs of past or future roadway improvement projects necessitated by growth. They may not be used to fund transportation improvements to serve existing residents. Therefore, while it is relatively easy to estimate the system development charges which would be needed to build improvements associated with growth, these charges will not be sufficient to meet all of the infrastructure needs identified in this plan.

System development charges (SDCs) are considered by many to be an equitable method of funding as they provide for many of the improvements needed because of growth in the community. On the other hand, growth in non-local traffic or traffic attributable to existing residents may also fuel the need for improvements which the system development charges are used to fund. Revenue from SDCs is generally not stable or predictable over time as it is received only when development occurs. During times of economic downturn, this revenue source may taper off entirely. This makes it difficult to rely on this source of funds for larger, multi-phased or multi-year projects.

It is required by state law for SDCs to finance those transportation improvements that are tied to local growth needs and, if the anticipated growth does not occur when expected or at all, both the improvement costs and the development charge revenue will not be needed.

Local Improvement Districts

Local improvement districts, known as LIDs, could be formed to finance public transportation improvements. LIDs may be formed by either the County or property owners. Their use and benefit are usually restricted to a specific area. The cost of a project with an LID in place is distributed to each property owner according to the benefit that property receives. With transportation improvements, that benefit may be measured by trips generated by each property. Or, in the example of a sidewalk improvement, the cost could be equitably divided by lineal feet of sidewalk along property frontages. The cost distributed becomes an assessment or lien against the property. It can be paid in cash or through assessment financing.

NON-LOCAL FUNDING SOURCES

State Gasoline Tax

Gas tax revenues received from the state are used by all counties and cities to fund road construction and maintenance. The revenue share to cities is divided through an allocation formula related to population. The state gas tax received by Baker County will not sufficiently fund the improvements identified in the TSP and may not even cover maintenance needs.

Grants and Loans

Most grant and loan programs available through the state are related to economic development and not specifically for construction of new streets. Programs such as the Oregon Special Public Works Fund provides grant and load assistance for construction of public infrastructure that support commercial and industrial development that results in permanent job creation or retention. Another grant program is the Immediate Opportunity Fund (IOP). Again, this grant is tied to local and regional economic development efforts.

ODOT FUNDING OPTIONS

The State of Oregon provides funding for all highway-related transportation projects through the Statewide Transportation Improvement Program (STIP) administered by ODOT. The STIP outlines the schedule for ODOT projects throughout the state. Projects within the STIP are identified for a four-year funding cycle. In developing this funding program, ODOT must verify that the identified projects comply with the OHP, ODOT modal plans, corridor plans, local comprehensive plans, and TEA-21 planning requirements. The STIP must fulfill TEA-21 planning requirements. Specific transportation projects are prioritized based on a review of the TEA-21 planning requirements and the different state plans. ODOT consults with local jurisdictions before highway related projects are added to the STIP.

ODOT has the option of making some highway improvements as part of their ongoing maintenance program.

APPENDIX

APPENDIX A

Major Streets Inventory

Baker County Transportation System Plan

Street	Jurisdiction	Level of Importance[3]	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	Direction of Travel	On-Street Parking	Shoulders Width (feet)	Shoulders Side	Shoulders Paving	Bikeway[1]	Bike Lanes	Truck Route	1998 Pavement Condition[2]	sidewalks	Curbs	Curb cuts at intersections	Comments
Interstate 84 (Old Oregon Trail)																			
Southbound																			
MP 286.20 (Union Co.) to MP 306.53 (S. Baker Int.)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Good	No	No	NA	
MP 306.53 to MP 313.25 (Encina)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Very Good	No	No	NA	
MP 313.25 to MP 327.30 (Durkee)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	*Poor*	No	No	NA	
MP 327.30 to MP 342.12 (Lime)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Very Good	No	No	NA	
MP 342.12 to MP 342.52 (Lime section-Dist 13)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Good	No	No	NA	
MP 342.52 to MP 345.56 (Lime section-Dist 14)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Fair	No	No	NA	
MP 345.56 to MP 352.00 (Malheur Co.)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Good	No	No	NA	
Northbound																			
MP 352.00 (Malheur Co.) to MP 342.52	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Good	No	No	NA	
MP 342.52 to MP 329.22 (Bubbs Ranch)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Very Good	No	No	NA	
MP 329.22 to 327.30 (Durkee)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Good	No	No	NA	
MP 327.30 to MP 313.25 (Encina)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	*Poor*	No	No	NA	
MP 313.25 to MP 306.53 (S. Baker Int.)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Very Good	No	No	NA	
MP 306.53 to MP 286.20 (Union Co.)	State	Interstate	65/55		24	2	Southbound	No	4-6, 8-10	Left, right	Paved	No	No	Yes	Good	No	No	NA	
Note: Posted speed for trucks is 55 mph and 65 mph for other passenger vehicles.																			
US Highway 26 (John Day Highway)																			
MP 199.61 (Grant Co.) to MP 203.00	State	Statewide	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	*Poor*	No	No	NA	
MP 203.00 to MP 212.02 (Unity)	State	Statewide	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	*Poor*	No	No	NA	
MP 212.02 to MP 212.96	State	Statewide	35		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	*Poor*	No	No	NA	
MP 212.96 to MP 222.90 (Malheur Co.)	State	Statewide	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	*Poor*	No	No	NA	
OR Highway 86 (Baker-Copperfield Highway)																			
MP 0.00 (Baker City) to MP 0.21	State	District	25		60	4	Two-way	Both Sides	No	NA	NA	No	Both Sides	Yes	Good	Both Sides	Both Sides	No	5-15 foot sidewalks
MP 0.21 to MP 0.36	State	District	25		60	3	Two-way	Both Sides	No	NA	NA	Bike Lanes	Both Sides	Yes	Good	Both Sides	Both Sides	No	5-foot directional bike lanes
MP 0.36 to MP 0.71	State	District	30		60	3	Two-way	Both Sides	No	NA	NA	Bike Lanes	Both Sides	Yes	Good	Both Sides	Both Sides	No	5-foot directional bike lanes
MP 0.71 to MP 0.93	State	District	35		60	3	Two-way	Both Sides	No	NA	NA	Bike Lanes	Both Sides	Yes	Good	Both Sides	Both Sides	No	5-foot directional bike lanes
MP 0.93 to MP 0.98	State	District	35		60	3	Two-way	Both Sides	No	NA	NA	No	No	Yes	Good	Both Sides	Both Sides	No	
MP 0.98 to MP 1.03	State	District	35		60	5	Two-way	Both Sides	No	NA	NA	No	No	Yes	Good	Both Sides	Both Sides	No	
MP 1.03 to MP 1.15	State	District	35		60	5	Two-way	No	No	NA	NA	No	No	Yes	Good	Both Sides	Both Sides	No	
MP 1.15 to MP 1.42 (off-ramp)	State	District	45		12	1	One-way	No	2-4	Both Sides	Paved	No	No	Yes	Good	No	No	NA	
MP 1.42 to MP 2.17 (common with I-84)	State	District	65/55		24	2	Two-way	No	6-8,8-10	South, North	Paved	No	No	Yes	Good	No	No	NA	
MP 2.17 to MP 1.42 (common with I-84)	State	District	65/55		24	2	Two-way	No	6-8,8-10	South, North	Paved	No	No	Yes	Good	No	No	NA	
MP 2.17 to MP 2.55	State	District	55		24	2	Two-way	No	6-8	Both Sides	Paved	No	No	Yes	Good	No	No	NA	
MP 2.55 to MP 2.76 (Keating cut-off)	State	District	55		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Good	No	No	NA	
MP 2.76 to MP 20.00	State	District	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Good	No	No	NA	
MP 20.00 to MP 29.02	State	District	55		24	2	Two-way	No	2-4	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 29.02 to MP 31.30	State	District	55		24	2	Two-way	No	4-6	Both Sides	Paved	No	No	Yes	Fair	No	No	NA	
MP 31.30 to MP 41.02 (Richland)	State	District	55		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Fair	No	No	NA	
MP 41.02 to MP 41.35	State	District	25		24	2	Two-way	No	4-6,6-8	South, North	Gravel	No	No	Yes	Fair	No	No	NA	
MP 41.35 to MP 42.00	State	District	25		42	2	Two-way	North Side	No	NA	NA	No	No	Yes	Fair	North Side	North Side	No	
MP 42.00 to MP 42.20	State	District	25		42	2	Two-way	Both Sides	No	NA	NA	No	No	Yes	Fair	Both sides	Both Sides	No	
MP 42.20 to MP 42.30	State	District	25		42	2	Two-way	Both Sides	No	NA	NA	No	No	Yes	Fair	North Side	North Side	No	
MP 42.30 to MP 42.35	State	District	40		36	2	Two-way	No	No	NA	NA	No	No	Yes	Fair	North Side	North Side	No	
MP 42.35 to MP 42.54	State	District	40		36	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Fair	No	No	No	
MP 42.54 to MP 50.00	State	District	55		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Fair	No	No	No	
MP 50.00 to MP 59.00	State	District	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	No	
MP 59.00 to MP 70.80 (OR/ID border)	State	District	55		24	2	Two-way	No	2-4	Both Sides	Partial	No	No	Yes	Fair	No	No	No	
OR Highway 86 (Halfway Spur)																			
MP Y53.55 (OR Hwy 86) to MP Y54.40 (Halfway)	State	District	55		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Good	No	No	NA	
MP Y54.40 (Halfway) to MP Y54.47	State	District	25		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Good	No	No	NA	
MP Y54.47 to MP Y54.60	State	District	20		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Good	No	No	No	
MP Y54.60 to MP Y54.70 (end)	State	District	20		36	2	Two-way	Both Sides	No	NA	NA	No	No	Yes	Good	Both Sides	No	No	
OR Highway 203 (Medical Springs Highway)																			
MP 22.90 (Union Co.) to MP 33.40 (Summit)	State	District	55		24	2	Two-way	No	6-8	Both Sides	Gravel	No	No	Yes	Good	No	No	NA	
MP 33.40 to MP 38.40	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Fair	No	No	NA	
MP 38.40 to MP 38.69	State	District	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 38.69 to MP 38.94 (I-84 junction on-ramp)	State	District	40		12	1	One-way	No	4-6	Both Sides	Paved	No	No	Yes	Fair	No	No	NA	

APPENDIX A

Major Streets Inventory

Baker County Transportation System Plan

Street	Jurisdiction	Level of Importance[3]	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	Direction of Travel	Shoulders: On-Street Parking	Shoulders: Width (feet)	Shoulders: Side	Shoulders: Paving	Bikeway[1]	Bike Lanes	Truck Route	1998 Pavement Condition[2]	sidewalks	Curbs	Curb cuts at intersections	Comments
US Highway 30 (LaGrande-Baker Highway)																			
MP 32.86 (Union Co.) to MP 33.18	State	District	55		24	2	Two-way	No	6-8	Both Sides	Paved	No	No	Yes	Good	No	No	NA	
MP 33.18 to MP 40.26 (Haines)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 40.26 to MP 40.41	State	District	45		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 40.41 to MP 40.60	State	District	25		60	2	Two-way	Both Sides	No	NA	NA	No	No	Yes	Fair	West Side	West Side	NA	
MP 40.60 to MP 40.67	State	District	25		32	2	Two-way	Both Sides	28	East Side	Gravel	No	No	Yes	Fair	West Side	West Side	NA	
MP 40.67 to MP 40.83	State	District	25		24	2	Two-way	Both Sides	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 40.83 to MP 41.10	State	District	45		24	2	Two-way	Both Sides	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 41.10 to MP 45.87	State	District	55		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 45.87 to MP 46.45	State	District	55		24	2	Two-way	No	2-4	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 46.45 to MP 49.54	State	District	55		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 49.54 to MP 49.82	State	District	40		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 49.82 to MP 49.97 (North Baker)	State	District	35		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 49.97 to MP 50.05	State	District	35		60	2	Two-way	No	No	NA	NA	No	No	Yes	Fair	No	Both Sides	NA	
MP 50.05 to MP 50.46	State	District	35		60	4	Two-way	No	No	NA	NA	No	No	Yes	Good	No	Both Sides	NA	
MP 50.46 to MP 50.74	State	District	30		60	4	Two-way	No	No	NA	NA	No	No	Yes	Good	No	Both Sides	NA	
MP 50.74 to MP 51.72	State	District	30		60	4	Two-way	Both Sides	No	NA	NA	No	No	Yes	Good	Both Sides	Both Sides	NA	
MP 51.72 to MP 52.06	State	District	25		60	4	Two-way	Both Sides	No	NA	NA	No	No	Yes	Very Good	Both Sides	Both Sides	NA	
MP 52.06 to MP 52.25	State	District	25		40	4	Two-way	Both Sides	No	NA	NA	No	No	Yes	Fair	Both Sides	Both Sides	NA	
MP 52.25 to MP 52.70	State	District	35		40	4	Two-way	Both Sides	No	NA	NA	No	No	Yes	Fair	Both Sides	Both Sides	NA	
MP 52.70 to MP 52.77	State	District	35		40	4	Two-way	No	No	NA	NA	No	No	Yes	Fair	No	Both Sides	NA	
MP 52.77 to MP 53.16	State	District	55		40	4	Two-way	No	No	NA	NA	No	No	Yes	Fair	No	Both Sides	NA	
MP 53.16 to MP 53.90 (Bridge St. - SCL)	State	District	55		24	4	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Fair	No	No	NA	
MP 53.90 to MP 54.46 (I-84 junction)	State	District	55		24	4	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Good	No	No	NA	
OR Highway 7 (Whitney Highway)																			
MP 7.56 (Grant Co.) to MP 11.30	State	Region	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Very Good	No	No	NA	
MP 11.30 (N. Fork Burnt River) to MP 25.58	State	Region	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 25.58 (Sumpter jct.) to MP 35.38	State	Region	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Very Good	No	No	NA	
MP 35.38 to MP 37.90	State	Region	55		24	2	Two-way	No	2	Both Sides	Gravel	No	No	Yes	Very Good	No	No	NA	
MP 37.90 to MP 41.76	State	Region	55		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Fair	No	No	NA	
MP 41.76 to MP 49.35 (Baker City)	State	Region	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 49.35 to MP 49.50	State	Region	40		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 49.50 to MP 50.27	State	Region	40		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 50.27 to MP 50.49	State	Region	25		24	2	Two-way	No	6-8	Both Sides	Partial	No	No	Yes	Fair	No	No	NA	
MP 50.49 to MP 50.60	State	Region	25		24	2	Two-way	No	No	NA	NA	No	No	Yes	Poor	No	Both Sides	NA	
MP 50.49 to MP 50.60 (end)	State	Region	25		40	2	Two-way	No	No	NA	NA	No	No	Yes	Poor	Both Sides	Both Sides	NA	Sidewalks setback 5-10 feet
OR Highway 245 (Dooley Mountain Highway)																			
MP 0.00 (US Hwy 26 jct.) to MP 3.48	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 3.48 to MP 5.00	State	District	55		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 5.00 to MP 8.50 (Mud Springs Gulch)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 8.50 to MP 10.50 (Hereford)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Fair	No	No	NA	
MP 10.50 to MP 23.32 (Mill Cr. Road)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 23.32 to MP 29.10 (Salisbury)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Under Const.	No	No	NA	
MP 29.10 to MP 36.62 (OR Hwy 7 jct.)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Good	No	No	NA	
US Highway 30 (Huntington Highway)																			
MP 0.00 (I-84 jct.) to MP 0.30	State	District	55		12	1	One-way	No	4-6	Both Sides	Paved	No	No	Yes	Poor	No	No	NA	
MP 0.30 to MP 0.50	State	District	55		24	2	Two-way	No	4-6	Both Sides	Partial	No	No	Yes	Poor	No	No	NA	
MP 0.50 to MP 3.00	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 3.00 to MP 5.00 (Huntington)	State	District	55		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 5.00 to MP 5.39	State	District	45		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 5.39 to MP 5.50	State	District	45		24	2	Two-way	No	2	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 5.50 to MP 5.60	State	District	30		24	2	Two-way	No	2	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 5.60 to MP 5.67	State	District	30		32	2	Two-way	Both Sides	12	East Side	Gravel	No	No	Yes	Poor	West Side	No	NA	
MP 5.67 to MP 5.86	State	District	30		32	2	Two-way	Both Sides	12	East Side	Gravel	No	No	Yes	Poor	West Side	West Side	NA	
MP 5.86 to MP 6.30	State	District	30		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 6.30 to MP 6.42	State	District	40		24	2	Two-way	No	2-4	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 6.42 to MP 8.38	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	
MP 8.38 to MP 9.98 (Malheur Co.)	State	District	55		24	2	Two-way	No	2	Both Sides	Gravel	No	No	Yes	Poor	No	No	NA	

APPENDIX A

Major Streets Inventory
Baker County Transportation System Plan

Street	Jurisdiction	Level of Importance[3]	Speed Limit (mph)	ROW Width (feet)	Street Width (feet)	No. of Travel Lanes	Direction of Travel	On-Street Parking	Shoulders Width (feet)	Shoulders Side	Shoulders Paving	Bikeway[1]	Bike Lanes	Truck Route	1998 Pavement Condition[2]	sidewalks	Curbs	Curb cuts at intersections	Comments
Sumpter Highway																			
MP 0.00 (Sumpter city limits) to MP 0.29	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	Yes	Very Good	No	No	NA	
MP 0.29 to MP 0.88	State	District	25		24	2	Two-way	Both Sides	10-15	Both Sides	Gravel	No	No	Yes	Very Good	No	No	NA	
MP 0.88 to MP 0.92	State	District	25		24	2	Two-way	Both Sides	4-6	Both Sides	Gravel	No	No	Yes	Very Good	No	No	NA	
MP 0.92 to MP 1.19	State	District	45		24	2	Two-way	Both Sides	4-6	Both Sides	Gravel	No	No	Yes	Very Good	No	No	NA	
MP 1.19 to MP 3.71 (OR Hwy 7 jct.)	State	District	55		24	2	Two-way	Both Sides	4-6	Both Sides	Gravel	No	No	Yes	Very Good	No	No	NA	
Halfway Cornucopia Highway																			
MP 0.00 to MP 0.50	State	District	20[4]		16	2	Two-way	No	No	NA	NA	No	No	No	Gravel[2]	No	No	NA	
MP 0.50 to MP 4.50	State	District	20[4]		16	2	Two-way	No	0-2	Both Sides	Gravel	No	No	No	Gravel[2]	No	No	NA	
MP 4.50 to MP 5.43 (begin pavement)	State	District	20[4]		16	2	Two-way	No	2-4	Both Sides	Gravel	No	No	No	Gravel[2]	No	No	NA	
MP 5.43 to MP 6.13	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	No	Good	No	No	NA	
MP 6.13 to MP 6.33	State	District	55		24	2	Two-way	No	4,10	West, East	Gravel	No	No	No	Good	No	No	NA	
MP 6.33 to MP 10.61 (Halfway)	State	District	55		24	2	Two-way	No	4-6	Both Sides	Gravel	No	No	No	Good	No	No	NA	
MP 10.61 to MP 11.25	State	District	25		24	2	Two-way	Both Sides	6-8	Both Sides	Gravel	No	No	No	Good	No	No	NA	
MP 11.25 to MP 11.30	State	District	25		36	2	Two-way	Both Sides	10-12	Both Sides	Paved	No	No	No	Good	East side	East side	No	
MP 11.30 to MP 11.34	State	District	20		42	2	Two-way	Both Sides	No	NA	NA	No	No	No	Good	East side	East side	No	
MP 11.34 to MP 11.45 (Highway end)	State	District	20		42	2	Two-way	Both Sides	No	NA	NA	No	No	No	Good	Both Sides	Both Sides	No	
Pine Creek Highway																			
MP 0.00 (Halfway) to MP 0.17	State	District	25		24	2	Two-way	Both Sides	6, 12	North, South	Gravel	No	No	No	Good	No	No	NA	
MP 0.17 to MP 0.26	State	District	55		24	2	Two-way	Both Sides	6, 12	North, South	Gravel	No	No	No	Good	No	No	NA	
MP 0.26 to MP 0.91 (Highway end)	State	District	55		24	2	Two-way	Both Sides	2-4	Both Sides	Gravel	No	No	No	Good	No	No	NA	

LEGEND/NOTES

Note 1: The three bikeway design treatments for bicycle facilities on roadways outlined in the 1995 Oregon Bicycle and Pedestrian Plan are: (1) shared roadway, (2) shoulder bikeway, and (3) bike lanes.

Note 2: Pavement condition information for arterials is from the 1997 ODOT Pavement Condition Report. No condition rating given to gravel roads.

Note 3: From Appendix A of the 1991 Oregon Highway Plan.

Note 4: No posted speed limit, however this narrow unimproved dirt/gravel road would likely no support speeds over 20 mph.

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
01C08A	Baker County	1123 BRIDGEPORT LN	BURNT R	Slab	0.27	NotDef	1/1/1972	97
01C09A	Baker County	1123 BRIDGEPORT LN	BURNT R	Slab	0.36	NotDef	1/1/1972	97
01C806	Baker County	-960 NON-FA	PINE CREEK	Tee Beam	0.36	NotDef	1/1/1978	76.5
04T02	Baker City	AUBURN AVE	POWDER RIVER	Stringer/Multi-beam or Girde	1.12	NotDef	1/1/1958	93.8
16810	ODOT	BAKER-COPPERFIELDH	POWDER RIVER HOLEINWALL	Stringer/Multi-beam or Girde	30.1	StrDef	1/1/1987	60.5
16811	ODOT	BAKER-COPPERFIELDH	POWDER RIVER HOLEINWALL	Stringer/Multi-beam or Girde	31.86	NotDef	1/1/1987	78.4
00661	Baker County	BIDWELL ROAD	N POWDER R (BIDWELL LANE	Truss - Thru	15.79	NotDef	1/1/1929	64.8
16395	Baker City	BROADWAY AVE O.S.	POWDER R(BROADWAY AVE)	Slab	0.12	NotDef	1/1/1981	98
01C004	Baker County	C1135-BIDWELL LN	POWDER R (BIDWELL LANE)	Stringer/Multi-beam or Girde	13.42	NotDef	1/1/1975	83.9
01C003	Baker County	C1135-BIDWELL LN	OVERFLOW (POWDER RIVER)	Stringer/Multi-beam or Girde	13.47	StrDef	1/1/1966	61.4
01C033	Baker County	C1144/FOOTHILL RD	ROCK CREEK	Stringer/Multi-beam or Girde	0.05	NotDef	1/1/1991	89.7
02171A	Baker County	C-3004 NON-FA	BURNT R	Slab	0.33	NotDef	1/1/1970	95
16798	Baker County	C-521 NON-FA	POWDER RIVER	Stringer/Multi-beam or Girde	0.23	NotDef	1/1/1985	99
01C228	Baker County	C-523 NON-FA	POWDER R(SAWMILL GUL RD)	Stringer/Multi-beam or Girde	0.19	NotDef	1/1/1973	96.9
01C404	Baker County	C-529 NON-FA	N FK BURNT RIVER	Stringer/Multi-beam or Girde	6.76	NotDef	1/1/1962	86
16970	Baker County	C-529 NON-FA	N FK BURNT R(N FK BNT RD	Slab	1.69	NotDef	1/1/1987	93
01C506	Baker County	C-531 NON-FA	PRITCHARD CRK(HINDMAN RD	Slab	1.26	NotDef	1/1/1966	96
01C414	Baker County	C-537 NON-FA	S FK BURNT R(CEMETARY RD	Stringer/Multi-beam or Girde	2.84	NotDef	1/1/1959	87.1
01C218	Baker County	C-550 NON-FA	CRACKER CREEK	Stringer/Multi-beam or Girde	0.02	NotDef	1/1/1964	84
01C042	Baker County	C-552 NON-FA	ROCK CR (S ROCK CR RD)	Stringer/Multi-beam or Girde	4.71	NA	1/1/1966	93.6
01C227	Baker County	C-553 NON-FA	CRACKER CRK/CRACKER CR R	Stringer/Multi-beam or Girde	2.15	NotDef	1/1/1998	88.7
01C226	Baker County	C-553 NON-FA	CRACKER CRK/CRACKER CR R	Stringer/Multi-beam or Girde	3.66	NotDef	1/1/1965	89.7
01C224	Baker County	C-553 NON-FA	CRACKER CR(CRACKER CR RD	Stringer/Multi-beam or Girde	3.78	NotDef	1/1/1967	84.2
01C222	Baker County	C-553 NON-FA	CRACKER CR(CRACKER CR RD	Stringer/Multi-beam or Girde	4.52	NotDef	1/1/1967	95.2
01C220	Baker County	C-553 NON-FA	CRACKER CR(CRACKER CR RD	Stringer/Multi-beam or Girde	4.71	NotDef	1/1/1964	78.9
01C216	Baker County	C-553 NON-FA	CRACKER CR(CRACKER CR RD	Stringer/Multi-beam or Girde	5.11	NotDef	1/1/1964	85.9
01C215	Baker County	C-553 NON-FA	CRACKER CR(CRACKER CR RD	Stringer/Multi-beam or Girde	6	NotDef	1/1/1981	85
01C234	Baker County	C-564 NON-FA	POWDER RIVER	Slab	0.52	NotDef	1/1/1973	97
16801	Baker County	C-575 NON-FA	N FK BURNT R (RICE ROAD)	Slab	0.07	NotDef	1/1/1986	98
01C412	Baker County	C-584 NON-FA	S FK BURNT R (ROUSE RD)	Stringer/Multi-beam or Girde	0.46	FunObs	1/1/1979	77.9
01C031	Baker County	C635-ROCK CR SCL	ROCK CR (ROCK CR SCL LN)	Stringer/Multi-beam or Girde	1.86	NotDef	1/1/1959	59.1
01C210	Baker County	C-659 NON-FA	DEER CREEK	Stringer/Multi-beam or Girde	1.53	NotDef	1/1/1975	97
01C232	Baker County	C-667 NON-FA	POWDER RIVER	Stringer/Multi-beam or Girde	0.66	NotDef	1/1/1967	93.8
09749	Baker County	C-672 NON-FA	BURNT R	Slab	0.46	NotDef	1/1/1968	93.9

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
01C18A	Baker County	C672/HEREFORD LOOP	BURNT RIVER	Slab	4.13	NotDef	1/1/1992	99
16716	Baker County	C-685 NON-FA	POWDER R (MCCARTY BR RD)	Slab	2.7	NotDef	1/1/1984	98
09571	Baker County	C-690 NON-FA	POWDER R (COFFEE RD)	Slab	0.62	NotDef	1/1/1966	96.1
01C040	Baker County	C-734 NON-FA	SAND CRK (NEIL-PECK RD)	Culvert	1.06	NA	1/1/1994	79.2
01C206	Baker County	C-773 NON-FA	POWDER R (DENNY CRK RD)	Stringer/Multi-beam or Girde	0.08	NotDef	1/1/1969	67.9
16290	Baker County	C-853 NON-FA	POWDER RIVER	Box Beam or Girders - Multi	4.71	NotDef	1/1/1976	97.9
01C510	Baker County	C-876 NON-FA	BURNT R	Slab	0.39	NotDef	1/1/1962	95.7
01C902	Baker County	C-895 NON-FA	GOOSE CRK (DUBY RD)	Stringer/Multi-beam or Girde	0.44	NA	1/1/1960	69.8
01C512	Baker County	C-910 NON-FA	INTERMITT STM(MANNING RD	Stringer/Multi-beam or Girde	2.03	NA	1/1/1961	60.6
01C514	Baker County	C-919 NON-FA	BURNT R (SHIRTAIL CRK RD	Slab	0.05	NotDef	1/1/1971	96
16362	Baker County	C-980 NON-FA	EAGLE CR (SAWMILL LANE)	Stringer/Multi-beam or Girde	0.33	NotDef	1/1/1978	98
01C800	Baker County	C-999 NON-FA	CLEAR CREEK	Stringer/Multi-beam or Girde	0.65	NotDef	1/1/1971	96
01786	ODOT	CONN # 3 (6)	BURNT RIVER(DIXIE CONN)	Stringer/Multi-beam or Girde	340.59	NotDef	1/1/1934	70.3
09333	ODOT	CONN #2 (6)	BURNT R(WEATHERBY) R/W	Slab	335.71	FunObs	1/1/1972	93
09820	ODOT	CONN #2 (6)	UPRR (DIXIE INTERCHANGE)	Stringer/Multi-beam or Girde	340.36	NotDef	1/1/1971	92.2
15466A	Baker County	COUNTY RD 1009	CLEAR CREEK	Tee Beam	1.88	NotDef	1/1/1976	84.4
01C820	Baker County	COUNTY RD 1012	EAST PINE CREEK	Stringer/Multi-beam or Girde	0.62	NotDef	1/1/1969	80.8
01C808	Baker County	COUNTY RD 1014	PINE CREEK	Slab	0.34	NotDef	1/1/1966	92
01C810	Baker County	COUNTY RD 1014A	CLEAR CRK (BOWERMAN RD)	Tee Beam	1.05	NotDef	1/1/1977	85.4
18501	Baker County	COUNTY RD 1015	PINE CR (SLAUGHTER RD)	Slab	0.19	NotDef	1/1/1963	84.4
09436	Baker County	COUNTY RD 1015	CLEAR CR (SLAUGHTER RD)	Slab	1.02	NotDef	1/1/1965	81.8
01C814	Baker County	COUNTY RD 1015	E PINE CR (SLAUGHTER RD)	Stringer/Multi-beam or Girde	2.21	NotDef	1/1/1963	73.8
01C812	Baker County	COUNTY RD 1015	E PINE CR (SLAUGHTER RD)	Stringer/Multi-beam or Girde	3.23	NotDef	1/1/1962	95.7
01C804	Baker County	COUNTY RD 1015	CLEAR CREEK	Stringer/Multi-beam or Girde	4.06	NotDef	1/1/1963	91.9
01C818	Baker County	COUNTY RD 1018	CLEAR CREEK	Stringer/Multi-beam or Girde	0.31	NotDef	1/1/1965	77.5
01C816	Baker County	COUNTY RD 1018	EAST PINE CREEK	Stringer/Multi-beam or Girde	1.11	NotDef	1/1/1968	73.8
16690	Baker County	COUNTY RD 1020	PINE CREEK	Slab	0.73	NotDef	1/1/1984	89.3
01C824	Baker County	COUNTY RD 1027	CLEAR CREEK	Stringer/Multi-beam or Girde	0.06	NotDef	1/1/1970	97
16757	Baker County	COUNTY RD 1027	PINE CREEK	Slab	1.22	NotDef	1/1/1986	98
01C524	Baker County	COUNTY RD 1100	DIXIE CREEK	Stringer/Multi-beam or Girde	0.32	NotDef	1/1/1963	73.9
01C408	Baker County	COUNTY RD 1121	BURNT R (CLARKS CREEK RD	Stringer/Multi-beam or Girde	0.06	StrDef	1/1/1965	50
01C046	Baker County	COUNTY RD 1122	PINE CREEK	Culvert	3.45	NotDef	1/1/1968	89.2
01C047	Baker County	COUNTY RD 1122	PINE CREEK	Culvert	3.56	NotDef	1/1/1968	91.2
01C828	Baker County	COUNTY RD 1128	EAST PINE CREEK	Stringer/Multi-beam or Girde	0.18	NotDef	1/1/1958	96

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
08959	Baker County	COUNTY RD 1128	PINE CREEK	Slab	1.98	NotDef	1/1/1961	85.4
02933A	Baker County	COUNTY RD 1128	SAG CR (PINE TOWN ROAD)	Slab	3.15	NotDef	1/1/1981	96
01C830	Baker County	COUNTY RD 1128A	CLEAR CREEK	Stringer/Multi-beam or Girde	0.79	StrDef	1/1/1940	60.5
09322	Baker County	COUNTY RD 1140	EAGLE CREEK	Stringer/Multi-beam or Girde	2.7	NotDef	1/1/1964	91.3
01798A	Baker County	COUNTY RD 1146	N POWDER R (ANTHONY L RD	Slab	12.61	NotDef	1/1/1978	87.5
09932	Baker County	COUNTY RD 3004	BURNT R	Slab	0.06	NotDef	1/1/1970	97
01409	Baker County	COUNTY RD 539	ALDER CR (OLD US 30	Tee Beam	2.72	NotDef	1/1/1929	75.4
00704	Baker County	COUNTY RD 539	UPRR	Tee Beam	18.03	StrDef	1/1/1922	48.6
00741	Baker County	COUNTY RD 539	PRITCHARD CR(OLD US 30)	Truss - Thru	21.69	StrDef	1/1/1922	25.2
16691	Baker County	COUNTY RD 666	POWDER RIVER	Slab	0.14	NotDef	1/1/1985	88.9
07759A	Baker County	COUNTY RD 702	POWDER R (CHANDLER LN)	Stringer/Multi-beam or Girde	0.72	NotDef	1/1/1953	77.3
09803	ODOT	COUNTY RD 712	I-84 (HWY 006)	Box Beam or Girders - Multi	295.67	NotDef	1/1/1972	98
09802	ODOT	COUNTY RD 714	I-84 (HWY 006)	Box Beam or Girders - Multi	291.65	NotDef	1/1/1972	97.9
16393	Baker County	COUNTY RD 747	POWDER R (BEAVER CR RD)	Slab	0.14	NotDef	1/1/1981	85.2
08980	Baker County	COUNTY RD 833	POWDER R(KEATING CUT-OFF	Stringer/Multi-beam or Girde	6.45	NotDef	1/1/1962	73.3
09570	Baker County	COUNTY RD 866	POWDER R (HUGHES LN)	Box Beam or Girders - Multi	0.7	NotDef	1/1/1966	94.4
01C802	Baker County	COUNTY RD 961A	PINE CR (HOLBROOK CR RD)	Stringer/Multi-beam or Girde	0.06	FunObs	1/1/1958	83.5
15468A	Baker County	COUNTY RD 994	EAGLE CR (SNAKE RIVER RD	Stringer/Multi-beam or Girde	1.28	NotDef	1/1/1959	71.7
15469A	Baker County	COUNTY RD 994	POWDER R (SNAKE RIVER RD	Stringer/Multi-beam or Girde	2.03	NotDef	1/1/1959	69
16326	Baker County	COUNTY RD 994	BURNT R/UPRR(SNAKE R RD)	Tee Beam	40.03	NotDef	1/1/1980	89.2
09394	ODOT	DIXIE CREEK ROAD	I-84 (HWY 006)	Box Beam or Girders - Multi	340.42	NotDef	1/1/1971	99
09125	ODOT	DURBIN CR RD	I-84 (HWY 006)	Stringer/Multi-beam or Girde	347.84	NotDef	1/1/1967	95
04T03	Baker City	ESTES ST	POWDER RIVER	Stringer/Multi-beam or Girde	1.73	NotDef	1/1/1973	63.9
01C03	Baker County	FISH LAKE ROAD	PINE CREEK	Stringer/Multi-beam or Girde	0.62	NotDef	1/1/1971	96.9
02815	ODOT	FRONTAGE ROAD	MAIDEN GULCH	Stringer/Multi-beam or Girde	31.08	StrDef	1/1/1942	34.8
18461	ODOT	HWY 410	CRACKER CREEK (SUMPTER)	Slab	0.3	NotDef	1/1/1998	89.6
06600A	ODOT	HWY 413	PINE CR.(CORNUCOPIA BR.)	Stringer/Multi-beam or Girde	0.41	FunObs	1/1/1990	81.2
06598A	ODOT	HWY 413	PINE CREEK(CARSON BR)	Slab	5.73	NotDef	1/1/1973	98
02836A	ODOT	HWY 414	PINE CREEK(HALFWAY)	Slab	0.44	NotDef	1/1/1960	90
09732	ODOT	I-84 (HWY 006)	HOT CREEK	Culvert	286.73	NA	1/1/1972	82
0P397	ODOT	I-84 (HWY 006)	CATTLEPASS & DRAINAGE	Culvert	290.25	NA	1/1/1972	82.1
13481	ODOT	I-84 (HWY 006)	BAKER VALLEY IRRIG DITCH	Culvert	295.34	NA	1/1/1972	82.1
10231	ODOT	I-84 (HWY 006)	GEDDES-NAVERLY DITCH	Culvert	301.2	NA	1/1/1972	82
09805	ODOT	I-84 (HWY 006)	SMITH DITCH	Culvert	304.77	NA	1/1/1972	78.5

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
09516	ODOT	I-84 (HWY 006)	SOUTH BAKER INTERCHANGE	Box Beam or Girders - Multi	306.53	NotDef	1/1/1972	98
08822	ODOT	I-84 (HWY 006)	CATTLE & EQUIPMENT PASS	Slab	309.22	NA	1/1/1964	69
08823	ODOT	I-84 (HWY 006)	CATTLE & EQUIPMENT PASS	Slab	309.85	NA	1/1/1964	69.4
0P329	ODOT	I-84 (HWY 006)	DRY GULCH	Culvert	310.82	NA	1/1/1964	73.7
0P330	ODOT	I-84 (HWY 006)	QUARTZ CREEK	Culvert	311.52	NA	1/1/1964	72.7
08824A	ODOT	I-84 (HWY 006)	PRIVATE ROAD	Slab	311.83	NA	1/1/1964	69.3
08825	ODOT	I-84 (HWY 006)	CATTLEPASS	Culvert	312.51	NA	1/1/1964	72.7
08299	ODOT	I-84 (HWY 006)	DOGTOWN CREEK	Culvert	314.51	NA	1/1/1964	72.9
0M351	ODOT	I-84 (HWY 006)	ALDER CREEK(FIRST XING)	Culvert	316.58	NA	1/1/1964	83
08826	ODOT	I-84 (HWY 006)	CATTLE & EQUIPMENT PASS	Slab	316.9	NA	1/1/1964	69
08653	ODOT	I-84 (HWY 006)	CATTLEPASS & DRAINAGE	Culvert	318.66	NA	1/1/1964	72.8
08654	ODOT	I-84 (HWY 006)	ALDER CREEK(3RD XING)	Culvert	318.76	NA	1/1/1964	72
08655	ODOT	I-84 (HWY 006)	ALDER CREEK(4TH XING)	Culvert	318.95	NA	1/1/1964	83
08656	ODOT	I-84 (HWY 006)	CREEK	Culvert	319.12	NA	1/1/1964	72.8
02755A	ODOT	I-84 (HWY 006)	ALDER CREEK(5TH XING)	Culvert	319.64	NA	1/1/1941	59.9
0P331	ODOT	I-84 (HWY 006)	KITCHEN CREEK	Culvert	319.74	NA	1/1/1964	72.8
0M353	ODOT	I-84 (HWY 006)	ALDER CREEK(6TH XING)	Culvert	319.93	NA	1/1/1964	59.9
08659	ODOT	I-84 (HWY 006)	TROY'S EQUIPMENT PASS	Culvert	319.96	NA	1/1/1964	68.2
08698	ODOT	I-84 (HWY 006)	CATTLEPASS & DRAINAGE	Culvert	321.59	NA	1/1/1964	72
08963	ODOT	I-84 (HWY 006)	ALDER CREEK(8TH XING)	Culvert	322.99	NotDef	1/1/1964	83
09191	ODOT	I-84 (HWY 006)	UNITY CREEK	Culvert	323.25	NA	1/1/1964	83
0M354	ODOT	I-84 (HWY 006)	DURKEE CREEK	Culvert	327.34	NA	1/1/1966	83
0P332	ODOT	I-84 (HWY 006)	DRY GULCH	Culvert	328.47	NA	1/1/1966	83
0M416	ODOT	I-84 (HWY 006)	MANNING CREEK	Culvert	329.85	NA	1/1/1972	72
0M413	ODOT	I-84 (HWY 006)	SWAYZE CREEK	Culvert	330.56	NA	1/1/1972	72
0M414	ODOT	I-84 (HWY 006)	SPOUT CREEK	Culvert	334.43	NA	1/1/1972	83
0M415	ODOT	I-84 (HWY 006)	SISLEY CREEK	Culvert	335.48	NA	1/1/1972	83
09332	ODOT	I-84 (HWY 006)	WEATHERBY INTERCHANGE	Stringer/Multi-beam or Girde	335.76	NotDef	1/1/1972	98
01781A	ODOT	I-84 (HWY 006)	BURNT RIVER(RR TUNNEL)	Stringer/Multi-beam or Girde	337.27	NotDef	1/1/1971	84.6
02203A	ODOT	I-84 (HWY 006)	BURNT RIVER(JORDAN CR)	Stringer/Multi-beam or Girde	337.63	NotDef	1/1/1971	84.6
09375	ODOT	I-84 (HWY 006)	JORDAN CR(LOOKOUT MTN)IN	Slab	338.11	NotDef	1/1/1971	96
09952	ODOT	I-84 (HWY 006)	CHIMNEY CREEK	Culvert	338.6	NA	1/1/1972	69.6
01783A	ODOT	I-84 (HWY 006)	BURNT RIVER(CHIMNEY CR)	Stringer/Multi-beam or Girde	338.99	NotDef	1/1/1971	84.6
01934A	ODOT	I-84 (HWY 006)	STORIES GULCH	Culvert	339.63	NA	1/1/1934	69.6

Appendix B
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Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
01786A	ODOT	I-84 (HWY 006)	BURNT RIVER(DIXIE CR)	Stringer/Multi-beam or Girde	340.58	NotDef	1/1/1971	80.6
01787A	ODOT	I-84 (HWY 006)	BURNT RIVER(JETT CR)	Stringer/Multi-beam or Girde	341.86	NotDef	1/1/1971	80
09354	ODOT	I-84 (HWY 006)	LIME INTERCHANGE	Box Beam or Girders - Multi	342.91	StrDef	1/1/1969	50.2
0M379	ODOT	I-84 (HWY 006)	GOODMAN CREEK	Culvert	344.45	NA	1/1/1969	79.7
0P333	ODOT	I-84 (HWY 006)	CAVANAUGH CREEK	Culvert	345.83	NA	1/1/1966	83
09123	ODOT	I-84 (HWY 006)	NORTH HUNTINGTON INTERCH	Stringer/Multi-beam or Girde	345.83	NotDef	1/1/1967	95
0P334	ODOT	I-84 (HWY 006)	DRY GULCH	Culvert	346.47	NA	1/1/1966	82.1
09224	ODOT	I-84 (HWY 006)	DURBIN CREEK	Culvert	347.77	NA	1/1/1966	83
0M380	ODOT	I-84 (HWY 006)	BENSON CREEK	Culvert	351.83	NA	1/1/1966	75.1
09801A	ODOT	I-84 (HWY 006) EB	POWDER RIVER	Stringer/Multi-beam or Girde	289.17	NotDef	1/1/1972	91.9
09507A	ODOT	I-84 (HWY 006) EB	BALDOCK SLOUGH	Slab	296.78	NotDef	1/1/1972	96.6
09515A	ODOT	I-84 (HWY 006) EB	CAMPBELL ST INTERCHANGE	Box Beam or Girders - Multi	304.13	NotDef	1/1/1972	97
08302E	ODOT	I-84 (HWY 006) EB	ENCINA INTERCHANGE	Stringer/Multi-beam or Girde	313.65	NotDef	1/1/1964	85
08423E	ODOT	I-84 (HWY 006) EB	ALDER CR RD	Stringer/Multi-beam or Girde	315.29	NotDef	1/1/1964	93.7
08279E	ODOT	I-84 (HWY 006) EB	PLEASANT VALLEY INTCH	Stringer/Multi-beam or Girde	317.46	StrDef	1/1/1964	57.3
08941E	ODOT	I-84 (HWY 006) EB	HILL CR	Stringer/Multi-beam or Girde	321.23	NotDef	1/1/1964	83.6
07987A	ODOT	I-84 (HWY 006) EB	UPRR/PRITCHARD CR	Stringer/Multi-beam or Girde	325.34	StrDef	1/1/1966	63.4
09475A	ODOT	I-84 (HWY 006) EB	HOOKER RANCH RD	Stringer/Multi-beam or Girde	326.24	NotDef	1/1/1966	92.6
09044A	ODOT	I-84 (HWY 006) EB	DURKEE INT EB	Stringer/Multi-beam or Girde	327.43	NotDef	1/1/1966	93
08528A	ODOT	I-84 (HWY 006) EB	NELSON POINT INT EB	Stringer/Multi-beam or Girde	330.67	NotDef	1/1/1972	97.6
09121A	ODOT	I-84 (HWY 006) EB	BENSON CREEK RD	Slab	350.2	NotDef	1/1/1967	82.3
09801	ODOT	I-84 (HWY 006) WB	POWDER RIVER	Stringer/Multi-beam or Girde	289.17	NotDef	1/1/1972	96.6
09507	ODOT	I-84 (HWY 006) WB	BALDOCK SLOUGH	Slab	296.78	NotDef	1/1/1972	96.6
09515	ODOT	I-84 (HWY 006) WB	CAMPBELL ST INTERCHANGE	Box Beam or Girders - Multi	304.13	NotDef	1/1/1972	97
08302W	ODOT	I-84 (HWY 006) WB	ENCINA INTERCHANGE	Stringer/Multi-beam or Girde	313.65	NotDef	1/1/1964	87
08423W	ODOT	I-84 (HWY 006) WB	ALDER CR RD	Stringer/Multi-beam or Girde	315.29	NotDef	1/1/1964	93.6
08279W	ODOT	I-84 (HWY 006) WB	PLEASANT VALLEY INTCH	Stringer/Multi-beam or Girde	317.44	StrDef	1/1/1964	55
08941W	ODOT	I-84 (HWY 006) WB	HILL CR	Stringer/Multi-beam or Girde	321.24	NotDef	1/1/1964	83.6
07987	ODOT	I-84 (HWY 006) WB	UPRR/PRITCHARD CR	Stringer/Multi-beam or Girde	325.31	StrDef	1/1/1966	63.4
09475	ODOT	I-84 (HWY 006) WB	HOOKER RANCH RD	Stringer/Multi-beam or Girde	326.24	NotDef	1/1/1966	92.6
09044	ODOT	I-84 (HWY 006) WB	DURKEE INT WB	Stringer/Multi-beam or Girde	327.43	NotDef	1/1/1966	93
08528	ODOT	I-84 (HWY 006) WB	NELSON POINT INT WB	Stringer/Multi-beam or Girde	330.67	NotDef	1/1/1972	97.6
09121	ODOT	I-84 (HWY 006) WB	BENSON CREEK RD	Slab	350.2	NotDef	1/1/1967	94.5
01C212	Baker County	LARCH CREEK RD.	DEER CREEK	Stringer/Multi-beam or Girde	1.87	NotDef	1/1/1975	96

Appendix B

ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
04T06	Baker City	MADISON AVE	POWDER RIVER MADISON AVE	Stringer/Multi-beam or Girde	0	NotDef	1/1/1925	84.3
016843	Baker City	MYRTLE STREET	POWDER RIVER	Slab	0.09	NotDef	1/1/1987	99.9
02891A	ODOT	OR 203 (HWY 340)	BIG CREEK	Slab	23.58	NotDef	1/1/1976	94.8
02892	ODOT	OR 203 (HWY 340)	CATTLEPASS & DRAINAGE	Culvert	23.69	NA	1/1/1961	99.6
02893	ODOT	OR 203 (HWY 340)	CATTLEPASS	Culvert	24.87	NA	1/1/1953	99.6
02894	ODOT	OR 203 (HWY 340)	CATTLEPASS	Culvert	26.06	NA	1/1/1956	99.4
02896	ODOT	OR 203 (HWY 340)	EMILY DITCH	Culvert	28.47	NA	1/1/1936	99.6
18656	ODOT	OR 203 (HWY 340)	ERWIN DITCH	Culvert	28.8	NA	1/1/1980	96.4
02314A	ODOT	OR 203 (HWY 340)	POWDER RIVER (MILES) BR.	Box Beam or Girders - Multi	28.82	NotDef	1/1/1986	95.4
18655	ODOT	OR 203 (HWY 340)	DUNCAN DITCH	Culvert	28.84	NA	1/1/1980	96.4
02897A	ODOT	OR 203 (HWY 340)	BASCHE IRRIGATION DITCH	Slab	28.92	NotDef	1/1/1972	93.4
02898A	ODOT	OR 203 (HWY 340)	SALT CREEK	Culvert	31.13	NA	1/1/1977	96.4
09511	ODOT	OR 203 (HWY 340)	I-84 (HWY 006)	Stringer/Multi-beam or Girde	38.59	NotDef	1/1/1972	100
02859	ODOT	OR 245 (HWY 415)	CATTLEPASS	Culvert	1.43	NA	1/1/1947	81.7
02861	ODOT	OR 245 (HWY 415)	BURNT RIVER (UNITY DAM)	Stringer/Multi-beam or Girde	3.42	NotDef	1/1/1937	86.7
18651	ODOT	OR 245 (HWY 415)	MEADOW CREEK	Culvert	5.56	NA	1/1/1955	93.7
18307	ODOT	OR 245 (HWY 415)	BEAVERDAM CREEK	Culvert	7.15	NA	1/1/1997	99.9
02866	ODOT	OR 245 (HWY 415)	CREEK	Slab	8.67	NA	1/1/1957	95.9
18306	ODOT	OR 245 (HWY 415)	WATER GULCH (HEREFORD)	Culvert	10.48	NA	1/1/1997	99.9
02869	ODOT	OR 245 (HWY 415)	BIG CREEK	Slab	12.53	NotDef	1/1/1965	90.7
18652	ODOT	OR 245 (HWY 415)	BROWN'S GULCH	Culvert	14.13	NA	1/1/1955	93.7
18305	ODOT	OR 245 (HWY 415)	BRANNAN GULCH	Culvert	14.88	NA	1/1/1997	88.1
18653	ODOT	OR 245 (HWY 415)	RAIL GULCH	Culvert	16.88	NA	1/1/1955	93.7
18180	ODOT	OR 245 (HWY 415)	PINE CREEK	Culvert	17.12	NA	1/1/1994	93.7
02877	ODOT	OR 245 (HWY 415)	INDIAN CREEK	Culvert	17.78	NA	1/1/1955	82.5
02878	ODOT	OR 245 (HWY 415)	DRY GULCH	Culvert	18.4	NA	1/1/1964	93.7
02879	ODOT	OR 245 (HWY 415)	IRRIGATION DITCH	Culvert	19.91	NA	1/1/1926	93.7
02880	ODOT	OR 245 (HWY 415)	IRRIGATION DITCH	Culvert	20.06	NA	1/1/1926	93.7
02882	ODOT	OR 245 (HWY 415)	CATTLEPASS & DRAINAGE	Culvert	21.19	NA	1/1/1947	93.7
02924A	ODOT	OR 7 (HWY 012)	POWDER RIVER(CAMPBELL ST	Slab	0.33	NotDef	1/1/1972	98.8
0P449	ODOT	OR 7 (HWY 071)	NORTH FK BURNT R(TIPTON)	Culvert	11.01	NA	1/1/1972	79.7
0P450	ODOT	OR 7 (HWY 071)	CAMP CREEK (WHITNEY)	Culvert	15.76	NA	1/1/1972	91.3
16066	ODOT	OR 7 (HWY 071)	POWDER R. (HUCKLEBERRY)	Slab	24.69	NotDef	1/1/1973	89.9
09385	ODOT	OR 7 (HWY 071)	DEER CREEK	Slab	30.54	NotDef	1/1/1965	71.2

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
02901	ODOT	OR 7 (HWY 071)	CALIFORNIA GULCH	Culvert	35.99	NA	1/1/1959	95
0P390	ODOT	OR 7 (HWY 071)	WEBFOOT CREEK	Culvert	37.96	NA	1/1/1959	87.5
0P391	ODOT	OR 7 (HWY 071)	POKER GULCH	Culvert	38.61	NA	1/1/1959	95
07316	ODOT	OR 7 (HWY 071)	POWDER RIVER (RANCHERIA)	Stringer/Multi-beam or Girde	41.19	StrDef	1/1/1950	12.8
0P364	ODOT	OR 7 (HWY 071)	CATTLEPASS & DRAINAGE	Culvert	42.19	NA	1/1/1952	84.6
07431	ODOT	OR 7 (HWY 071)	POWDER RIVER (SALISBURY)	Stringer/Multi-beam or Girde	42.31	StrDef	1/1/1952	11.8
02884A	ODOT	OR 7 (HWY 071)	BLUE CANYON CREEK	Culvert	43.58	NA	1/1/1952	82.3
02885A	ODOT	OR 7 (HWY 071)	JUNIPER GULCH	Culvert	45.42	NA	1/1/1952	83.1
02886A	ODOT	OR 7 (HWY 071)	TIMBER GULCH	Culvert	46.03	NA	1/1/1952	83.1
02889A	ODOT	OR 7 (HWY 071)	GRIFFIN CREEK	Culvert	48.59	NA	1/1/1952	80.8
02890	ODOT	OR 7 (HWY 071)	SETTLERS SLOUGH	Culvert	50.47	NA	1/1/1951	100
09804	ODOT	OR 86 (HWY 012)	I-84 (HWY 006)	Stringer/Multi-beam or Girde	2.67	NotDef	1/1/1972	100
02925A	ODOT	OR 86 (HWY 012)	IRRIGATION DITCH	Culvert	4.79	NA	1/1/1919	87.5
17411	ODOT	OR 86 (HWY 012)	RUCKLES CREEK	Culvert	14.32	NotDef	1/1/1994	97
02804A	ODOT	OR 86 (HWY 012)	RITTER CREEK	Culvert	18.01	NA	1/1/1976	99.5
02806	ODOT	OR 86 (HWY 012)	CATTLEPASS & DRAINAGE	Culvert	19.37	NA	1/1/1948	89.9
02807	ODOT	OR 86 (HWY 012)	POWDER RIVER (LOVE BR)	Stringer/Multi-beam or Girde	20.75	StrDef	1/1/1947	10
02808	ODOT	OR 86 (HWY 012)	GOOSE CREEK	Culvert	21.15	NotDef	1/1/1947	89.9
02810	ODOT	OR 86 (HWY 012)	CRYSTAL PALACE GULCH	Culvert	26.76	NA	1/1/1949	98.9
02811	ODOT	OR 86 (HWY 012)	CORRAL GULCH	Culvert	26.82	NA	1/1/1949	89.9
02812	ODOT	OR 86 (HWY 012)	PITTSBURG GULCH	Culvert	28.19	NA	1/1/1954	99
07886	ODOT	OR 86 (HWY 012)	DRY GULCH	Culvert	29.11	NA	1/1/1994	89.5
02813	ODOT	OR 86 (HWY 012)	MURRY GULCH	Culvert	29.44	NA	1/1/1954	89.5
0P353	ODOT	OR 86 (HWY 012)	CATTLEPASS	Culvert	34.34	NA	1/1/1955	99
0P354	ODOT	OR 86 (HWY 012)	CATTLEPASS	Culvert	37.39	NA	1/1/1955	99
0P355	ODOT	OR 86 (HWY 012)	CATTLEPASS	Culvert	38.03	NA	1/1/1957	98.7
0P356	ODOT	OR 86 (HWY 012)	CATTLEPASS & DRAINAGE	Culvert	38.92	NA	1/1/1957	99
0P357	ODOT	OR 86 (HWY 012)	CATTLEPASS & DRAINAGE	Culvert	39.08	NA	1/1/1957	98.7
02819	ODOT	OR 86 (HWY 012)	IRRIGATION DITCH	Culvert	39.66	NA	1/1/1925	98.7
0P358	ODOT	OR 86 (HWY 012)	CATTLEPASS & DRAINAGE	Culvert	39.77	NA	1/1/1957	98.7
01121A	ODOT	OR 86 (HWY 012)	LITTLE EAGLE CR	Culvert	40.19	NA	1/1/1969	98.2
01122A	ODOT	OR 86 (HWY 012)	EAGLE CR (RICHLAND)	Truss - Thru	40.64	NotDef	1/1/1925	60.6
18793	ODOT	OR 86 (HWY 012)	CATTLEPASS & DRAINAGE	Culvert	40.69	NA	5/3/2001	94.1
0P359	ODOT	OR 86 (HWY 012)	CATTLEPASS & DRAINAGE	Culvert	40.8	NA	1/1/1957	98.7

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
0P360	ODOT	OR 86 (HWY 012)	IMMIGRANT GULCH	Culvert	44.67	NA	1/1/1957	88.9
0P361	ODOT	OR 86 (HWY 012)	ROAD GULCH	Culvert	52.13	NA	1/1/1958	93.4
08405	ODOT	OR 86 (HWY 012)	PINE CREEK	Stringer/Multi-beam or Girde	53.91	NotDef	1/1/1958	68.4
02837	ODOT	OR 86 (HWY 012)	MELHORN SLOUGH	Culvert	54.58	NA	1/1/1958	99.8
17346	ODOT	OR 86 (HWY 012)	CLEAR CREEK	Slab	55.03	NotDef	1/1/1993	76.8
0M364	ODOT	OR 86 (HWY 012)	EAST PINE CREEK	Culvert	55.86	NotDef	1/1/1958	80
02842A	ODOT	OR 86 (HWY 012)	WEST FORK OF DRY CREEK	Slab	56.47	NotDef	1/1/1987	87.4
0P437	ODOT	OR 86 (HWY 012)	EAST FORK DRY CREEK	Culvert	56.83	NA	1/1/1957	100
0P363	ODOT	OR 86 (HWY 012)	FISH CREEK	Culvert	63.22	NA	1/1/1957	90.5
16032	ODOT	OR 86 (HWY 012)	NORTH PINE CREEK	Stringer/Multi-beam or Girde	63.65	NotDef	1/1/1958	69.5
08979	ODOT	OR 86 (HWY 012)	SNAKE RIVER(OXBOW)	Stringer/Multi-beam or Girde	70.8	NotDef	1/1/1961	80.7
18629	ODOT	OR 86 (HWY 012) SP	MINING CHANNEL IRRG DITC	Culvert	53.55	NA	8/19/1999	100
00704A	ODOT	OXMAN	I-84 (HWY 006)	Stringer/Multi-beam or Girde	323.4	NotDef	1/1/1966	91.1
19803	Baker County	RYE VALLEY LANE	DIXIE CREEK	Slab	0.25	NotDef	11/6/2003	99.9
01C032	Baker County	STEVENS ROAD	ROCK CREEK	Stringer/Multi-beam or Girde	0.39	NotDef	1/1/1957	80
02773A	ODOT	US 26 (HWY 005)	HWY005 S FK BURNT RIVER	Slab	209.17	NotDef	1/1/1986	92.5
02774	ODOT	US 26 (HWY 005)	IRRIGATION DITCH	Culvert	209.4	NA	1/1/1924	99.8
02776A	ODOT	US 26 (HWY 005)	JOB CREEK	Culvert	211.57	NA	1/1/1974	89.6
02778A	ODOT	US 26 (HWY 005)	WEST CAMP CREEK	Slab	216.74	NotDef	1/1/1979	91.5
02780A	ODOT	US 26 (HWY 005)	EAST CAMP CREEK	Culvert	219.21	NA	1/1/1986	92.5
02473A	ODOT	US 30 (HWY 066)	IRRIGATION DITCH	Culvert	33.28	NA	1/1/1921	98.5
02473C	ODOT	US 30 (HWY 066)	IRRIGATION DITCH	Culvert	33.57	NA	1/1/1921	99.4
02473H	ODOT	US 30 (HWY 066)	DRAINAGE DITCH	Culvert	35.22	NA	1/1/1921	99.4
02784B	ODOT	US 30 (HWY 066)	MUDDY CREEK	Slab	38.59	NotDef	1/1/1978	96.5
02785	ODOT	US 30 (HWY 066)	IRRIGATION DITCH	Culvert	39.1	NA	1/1/1921	99.3
02786A	ODOT	US 30 (HWY 066)	SAND CREEK	Slab	39.82	NotDef	1/1/1962	96.5
02787	ODOT	US 30 (HWY 066)	FISH CREEK	Culvert	40.13	NA	1/1/1921	99.9
02440	ODOT	US 30 (HWY 066)	ROCK CREEK	Culvert	40.48	NA	1/1/1940	94.4
02788	ODOT	US 30 (HWY 066)	WILLOW CREEK	Culvert	41.37	NA	1/1/1920	94.4
02789	ODOT	US 30 (HWY 066)	WILLIAMS CREEK	Culvert	42	NA	1/1/1920	82.6
02790	ODOT	US 30 (HWY 066)	DRAINAGE DITCH	Culvert	45.08	NA	1/1/1920	94.4
02791	ODOT	US 30 (HWY 066)	SALMON CREEK	Culvert	45.22	NA	1/1/1920	94.4
00493	ODOT	US 30 (HWY 066)	OLD SETTLERS SLOUGH	Culvert	45.75	NotDef	1/1/1920	71.1
02792	ODOT	US 30 (HWY 066)	DRAINAGE DITCH	Culvert	46.12	NA	1/1/1920	93.1

BAKER COUNTY
BRIDGES AND LAREGE CULVERTS UNDER 20 FEET

Road Number	Bridge Number	Road Name	Milepost	Waterway	Structure Type
775	AC2105	Miles Bridge Road	0.05	Erwin Ditch	RCBC
775	AC2107	Miles Bridge Road	2.31	Erwin Ditch	RCBC
775	AC2109	Miles Bridge Road	3.37	Erwin Ditch	Steel Bridge
791	AC2111	First Creek Road	0.05	Ruckles Creek	5' CMP
801	AB4113	Alder Creek Road	0.34	Dogtown Creek	20' x 20' Steel Bridge
803	AB4115	Skinner Road	0.58	Balm Creek	Wood Bridge
809	AB4117	Hill Creek Road	0.03	Alder Creek	Wood Bridge
811	AC4119	Ebell Creek Road	4.5	Ebell Creek	Multi-plate
833	AC2121	Keating Cutoff Roa	4.2	Basche Ditch	RCBC
833	AC2123	Keating Cutoff Roa	4.63	Duncan Ditch	RCBC
833	AC2125	Keating Cutoff Roa	5.43	Perkins Ditch	RCBC
848	AB2127	Mother Lode Road	0.22	Clover Creek	Steel Bridge
851	AB2129	Hack Road	0.67	Balm Creek	Steel Bridge
853	AB2131	Middle Bridge Loop	4.03		Steel Bridge
853	AB2133	Middle Bridge Loop	5.02	Perkins Ditch	Steel Bridge
858	AC2135	Love Reservoir Lane	3.98		Wood Box Culvert
858	AC2137	Love Reservoir Lane	6.78		Wood Box Culvert
858	AC2139	Love Reservoir Lane	7.13		Wood Box Culvert
858	AC2141	Love Reservoir Lane	12.51	East Fork Love Creek	Wood Box Culvert
858	AC2143	Love Reservoir Lane	12.96	East Fork Love Creek	Wood Box Culvert
858	AC2145	Love Reservoir Lane	13.13		Wood Box Culvert
858	AC2147	Love Reservoir Lane	14.03		Wood Box Culvert
859	AC2149	Banta Road	1.5	Basche Ditch	RCBC
859	AC2151	Banta Road	1.62	Duncan Ditch	RCBC
862	AB3153	Orr Hill Lane	0.79	Posey Valley Ditch	Steel Bridge
875	AC5155	Burnt River Canyon Lane	14.78	Dark Canyon Creek	Wood Box Culvert
895	AC2157	Duby Road	0.44	Goose Creek	Steel/Wood Bridge
896	AC2159	Hutton Lane	0.21	Goose Creek	Multi-plate
897	AC2161	John Widman Road	0.82		
897	AB2163	John Widman Road	3.25	Love Ditch	Steel Bridge
910	AB4169	Manning Creek Road	2.03	Crandall Creek	Steel Bridge
910	AB4171	Manning Creek Road	4.89	Manning Creek	Steel Bridge
910	AC4173	Manning Creek Road			
914	AC4175	Plano Road	0.13	Swayze Creek	12' x 6' RCBC
914	AC4179	Plano Road	5.2	Pearce Creek	
922	AC4181	Malheur Line Line	1.76	Durbin Creek	Multi-plate
922	AC4183	Malheur Line Line	4.34	Durbin Creek	
924	AB3185	Summit Creek Road	0.14	Newt Young Ditch	Wood Bridge
963	AB3187	Ryall Road	0.71	Posey Valley Ditch	20' x 10' Steel Bridge
964	AB3189	Valley View Lane	1.27	Posey Valley Ditch	20' x 10' Steel Bridge
969	AC3191	Eagle Creek Road	0.26	Newt Young Ditch	RCBC
969	AC3193	Eagle Creek Road	0.47	Newt Young Ditch	RCBC
969	AC3193	Eagle Creek Road	0.85	Barnard Creek	
969	AC3195	Eagle Creek Road	1.17	Newt Young Ditch	RCBC
974	AC3197	Carnahan Lane	0.46	Newt Young Ditch	
975	AB3199	Old Foothill Road	0.09	Howell Ditch	Steel Bridge
979	AC3201	Robinette Road	0.2		RCBC
979	AC3203	Robinette Road	1.35	Immigrant Gulch	
979	AC3205	Robinette Road	1.15		15' x 5' Arch CMP
987	AC3207	Powder River Road	1.2	Dry Gulch	
992	AC3209	Koopman Lane	0.25	Bear Wallow Slough	Arch Multi-plate
992	AC3211	Koopman Lane	0.85	East Pine Creek	Arch Multi-plate

Appendix B
ODOT Bridge Inventory and Ratings

Bridge Number	Maintenance Responsibility	FACILITY_ITEM_7	FEAT_INTER_ITEM_6A	Structure Type	post	SUFF	origin_date	SR
02793A	ODOT	US 30 (HWY 066)	POWDER RIVER(BRIDGE ST)	Stringer/Multi-beam or Girde	52.13	NotDef	1/1/1933	70.7
01788	ODOT	US 30 (HWY 449)	BURNT RIVER (LIME)	Stringer/Multi-beam or Girde	0.46	StrDef	1/1/1934	48.9
00700	ODOT	US 30 (HWY 449)	UPRR & BURNT RIVER	Truss - Thru	2.75	StrDef	1/1/1922	38.8
01793	ODOT	US 30 (HWY 449)	CAVANOUGH CREEK	Culvert	3.13	NA	1/1/1933	100
01789	ODOT	US 30 (HWY 449)	BURNT RIVER	Stringer/Multi-beam or Girde	3.9	StrDef	1/1/1933	41.2
17444	ODOT	US 30 (HWY 449)	BURNT RIVER (DURBIN)	Stringer/Multi-beam or Girde	4.56	NotDef	1/1/1995	99.9
17448	ODOT	US 30 (HWY 449)	DURBIN CREEK	Culvert	4.63	NA	1/1/1995	99.9
04T07	Baker City	VALLEY AVE.	POWDER RIVER/VALLEY AVE	Stringer/Multi-beam or Girde	0	NotDef	1/1/1925	83.1
04T01	Baker City	WASHINGTON ST	POWDER RIVER	Stringer/Multi-beam or Girde	0.35	NotDef	1/1/1974	64.7

BAKER COUNTY
BRIDGES AND LAREGE CULVERTS UNDER 20 FEET

Road Number	Bridge Number	Road Name	Milepost	Waterway	Structure Type
503	AC6001	Greenhorn Road	0.69	Geiser Creek	
503	AC6011	Greenhorn Road	5.51	N. Fork Burnt River	
520	AC6005	Granite Hill Highway	2.27	McCulley Fork Creek	RCBC
507	AB6007	Gene Hale Road	1.8	Camp Creek	Steel Bridge
529	AC6009	Whitney Road	0.67	Camp Creek	9' Multi-plate
529	AC6011	Whitney Road	0.87	Dry Creek	6' Multi-plate
529	AC6013	Whitney Road	6.29	Sheep Creek	5' CMP
529	AC6015	Whitney Road	9.05	China Creek	5' CMP
531	AC4165	Hindman Road	0.24	Alder Creek	6' CMP
531	AC4167	Hindman Road	0.25	Pritchard Creek	Steel Bridge
539	AC6017	Old Highway 30	4.62		5' x 5' RCBC
539	AC6019	Old Highway 30	5.42	Quartz Creek	12' x 5' RCBC
539	AC6021	Old Highway 30	13.06	Cattle Pass	10' x 10' RCBC
539	AC6023	Old Highway 30	13.14	South Alder Creek	8' x 8' RCBC
539	AC6025	Old Highway 30	13.37	South Alder Creek	8' x 8' RCBC
539	AC6027	Old Highway 30	13.52		6' x 6' RCBC
539	AC6029	Old Highway 30	14.04	South Alder Creek	8' x 8' RCBC
539	AC6031	Old Highway 30	14.15	Kitchen Creek	5' CMP
539	AC6033	Old Highway 30	14.36	Alder Creek	12' x 8' RCBC
539	AC4035	Old Highway 30	15.29	Low Creek	5' x 5' RCBC
539	AC4037	Old Highway 30	17.85	Unity Creek	RCBC
539	AC4039	Old Highway 30	18.17	Cattle Pass	8' x 6' RCBC
539	AC4041	Old Highway 30	21.03		RCBC
539	AC4043	Old Highway 30	22.19		RCBC
539	AC4045	Old Highway 30	23.35		RCBC
539	AC4047	Old Highway 30	24.59	Manning Creek	RCBC
539	AC4049	Old Highway 30	25.3	Swayze Creek	RCBC
552	AC1051	South Rock Creek Lane	0.06	Rock Creek	5' x 10' RCBC
587	AB1057	Mill Creek Lane	0.15	Marble Creek	Steel Bridge
635	AC1059	Schoolhouse Road	1.77	Sand Creek	13' x 4.5' RCBC
646	AB1061	Pine Creek Road	1.87	Pine Creek	18' x 19' Wood Bridge
670	AB6065	Dry Creek Road	2.7	Dry Gulch	Wood Bridge
672	AB5067	Hereford Loop	2.96	Camp Creek	24' x 17' Steel Bridge
685	AC1069	McCarty Bridge Road	2.54	Powder River	CMP
695	AC1071	Shurtleff Road	0.66	Willow Creek	6' x 12' Arch
696	AC1073	Old Wingville Road	5.86	Pine Creek	3' x 17' RCBC
696	AC1075	Old Wingville Road	6.97	Mill Creek	30" x 13' RCBC
696	AC1077	Old Wingville Road	7.48	Salmon Creek	30" x 10' RCBC
701	AC1079	Brown Road	0.65	Mill Creek	5.5' x 10' RCBC
702	AC1081	Chandler Lane	0.9		44" x 72" Btmis-Arch
702	AC1083	Chandler Lane	3.76	Old Settler Slough	4' x 8' RCBC
705	AC1085	Chandler Lane	4.24	Salmon Creek	4' x 10' RCBC
705	AC5087	Pioneer Lane	2.78	McPherson Ditch	11' Wood Deck
715	AC2087	Collins Lane	1.07	Big Creek Ditch	44' x 72' CMP
730	AC5089	Cow Creek Road	2.17	Cow Creek	Wood Bridge
734	AC1091	Neill-Peck Lane	1.06	Sand Creek	RCBC
739	AC1093	West Airport Road	1.55	Geddes-Naverly Ditch	6' x 3' RCBC
747	AC6095	Beaver Creek Road	1.75	Cattle Pass	
748	AC6097	Schaffner Creek Lane	3.06	Ditch	44" x 72" CMP
753	AC6099	Sutton Creek Road	2.47	Cattle Pass	
753	AC6101	Sutton Creek Road	4.67	Cattle Pass	
755	AC6103	West Sutton Creek Road	0.1	Sutton Creek	68" x 96" CMP

BAKER COUNTY
BRIDGES AND LAREGE CULVERTS UNDER 20 FEET

Road Number	Bridge Number	Road Name	Milepost	Waterway	Structure Type
992	AC3213	Koopman Lane	0.85	East Pine Creek	Arch Multi-plate
993	AC3215	Sag Road	0.51	Sag Creek	3 - CMP
993	AC3217	Sag Road	1.29	Sag Creek	4' x 6' RCBC
993	AC3219	Sag Road	2.6	Sag Creek	3' x 4' RCBC
993	AC3221	Sag Road	3.44		3' x 6' RCBC
993	AC3223	Sag Road	4.18		3' x 6' RCBC
993	AC3225	Sag Road	4.94		3' x 6' RCBC
994	AC3227	Snake River Road	3.25	Squaw Creek	Multi-plate
994	AC3227	Snake River Road	3.71	Daly Creek	
994	AC3229	Snake River Road	4.01		
994	AC3231	Snake River Road	4.29		
994	AC3233	Snake River Road	13.68	Quicksand Creek	
994	AC3234	Snake River Road	17.38	Soda Creek	
994	AC3237	Snake River Road	24.16	Conner Creek	Multi-plate
994	AC3239	Snake River Road	25.45	Fox Creek	
994	AC3241	Snake River Road	27.32	Hibbard Creek	Multi-plate
994	AC3243	Snake River Road	27.72		
994	AC3245	Snake River Road	28.71	Morgan Creek	Multi-plate
994	AC3247	Snake River Road	40.82		
1009	AC3249	Fish Lake Road	0.28	McMullen Slough	RCBC
1009	AC3251	Fish Lake Road	2.54	Crego Channel	Arch Multi-plate
1011	AC3253	East Dry Creek Road	0.76	Dry Creek	
1011	AC3255	East Dry Creek Road	2.3	Dry Creek	
1012	AC3257	Oliver Road	0.82		CMP
1014	AC3259	Goodwin Sawmill Road	0.22	McMullen Slough	Arch Multi-plate
1015	AC3261	Slaughter House Road	4.12		CMP
1017	AC3261	Buchanan Loop	1.97	Dry Creek	Arch Multi-plate
1017	AC3265	Buchanan Loop	3.58	Bear Wallow Slough	Wood Bridge
1018	AC3267	Sunny Dell Lane	1.6		Arch Multi-plate
1028	AB3269	Gover Road	0.13	McQinnis Creek	Wood Bridge
1039	AC3271	Homestead Road	0.26	Ballard Creek	Arch Multi-plate
1122	AC1273	Wingville Road	0.46	Old Settler Slough	Arch Multi-plate
1122	AC1275	Wingville Road	0.74	Salmon Creek	Arch Multi-plate
1124	AC1279	Pocahontas Road	0.91	Pine Creek	RCBC
1124	AC1281	Pocahontas Road	5.98	Goodrich Creek	
1124	AC1283	Pocahontas Road	6.3	Marble Creek	RCBC
1124	AC1285	Pocahontas Road	7.9	Salmon Creek	Steel Bridge
1126	AC2289	Ruckles Loop	2.05		RCBC
1126	AC2291	Ruckles Loop	9.34	Ruckles Creek	Multi-plate
1118	AC3293	Gulick Road	0.18		Wood Bridge
1118	AC3295	Gulick Road	1.98	Pine Creek	RCBC
1118	AC3297	Gulick Road	3.4	McMullen Slough	RCBC
1129	AC3299	Sawmill Cutoff Lane	0.04	Sag Creek	CMP
1132	AC3301	Lone Fir Road	3.06	Mining Channel	RCBC
1132	AC3303	Lone Fir Road	3.25		RCBC
1135	AB1305	Bidwell Road	4.36		Wood Bridge
1137	AC1307	Payton Lane	0.04		CMP
1140	AC3309	New Bridge Road	0.85	I.N. Young Ditch	RCBC
1140	AC3311	New Bridge Road	2.14		RCBC
1141	AC3313	Ellis Road	0.05		RCBC
1144	AB1315	Foothill Road	0.94	Hutchinson Ditch	Steel Bridge
1144	AB1317	Foothill Road	6.33	Rock Creek	Steel Bridge

BAKER COUNTY
BRIDGES AND LAREGE CULVERTS UNDER 20 FEET

Road Number	Bridge Number	Road Name	Milepost	Waterway	Structure Type
1146	AC1335	Anthony Lakes Highway	1.23	Rock Creek	CMP
1146	AC1327	Anthony Lakes Highway	1.29	Rock Creek	CMP
1146	AC1319	Anthony Lakes Highway	1.69	Rock Creek	RCBC
1146	AC1321	Anthony Lakes Highway	2.29	Sand Creek	RCBC
1146	AC1323	Anthony Lakes Highway	3.63	Miller Ditch	CMP
1146	AC1325	Anthony Lakes Highway	5.58	Maxwell Ditch	RCBC
1146	AC1327	Anthony Lakes Highway	7.3	Warm Springs Creek	CMP
1146	AC1329	Anthony Lakes Highway	12.69	Gardner Ditch	Arch Multi-plate

Appendix C: Access Management Standards

Access Management Spacing Standards

The following tables show the access spacing standards for the access management classifications listed in Goal 3, Policy 3A: Classification and Spacing Criteria, Action 3A.1.

Table 12: Interchange Spacing
①

Access Management Classification	Area	Interchange Spacing②③
Interstate* and Non-Interstate Freeways (NHS)	Urban	3 miles (5 kilometers)
	Rural	6 miles (10 kilometers)
All Expressways on Statewide (NHS), Regional and District Highways	Urban	1.9 miles (3 kilometers)
	Rural	3 miles (5 kilometers)

* Interstate interchange spacing must be in conformance with federal policy.

① The spacing standards in Table 12 are for planning and design of new interchanges on freeways or expressways. A major deviation study is required to change these standards, but the deviation should consider the spacing requirements in the Interchange Access Management Area Tables 16-19.

② Crossroad to crossroad centerline distance.

③ A major deviations study is required to change these planning spacing standards.

Table 13: Access Management Spacing Standards for Statewide Highways
①②

(Measurement is in Feet)*

Posted Speed③	Rural		Urban			
	Expressway **	Other	Expressway **	Other	UBA	STA
≥55	5280	1320	2640	1320		
50	5280	1100	2640	1100		
40 & 45	5280	990	2640	990		
30 & 35		770		770	720	④
≤25		550		550	520	④

NOTE: The numbers in circles (②) refer to explanatory notes that follow tables.

*Measurement of the approach road spacing is from center to center on the same side of the roadway.

**Spacing for Expressway at-grade intersections only. See Table 12 for interchange spacing.

Table 14: Access Management Spacing Standards for Regional Highways
①②

(Measurement is in Feet)*

Posted Speed③	Rural		Urban			
	Expressway **	Other	Expressway **	Other	UBA	STA
≥55	5280	990	2640	990		
50	5280	830	2640	830		
40 & 45	5280	750	2640	750		
30 & 35		600		600	425	④
≤25		450		450	350	④

NOTE: The numbers in circles (②) refer to explanatory notes that follow tables.

* Measurement of the approach road spacing is from center to center on the same side of the roadway.

**Spacing for Expressway at-grade intersections only. See Table 12 for interchange spacing.

Table 15: Access Management Spacing Standards for District Highways
①②
(Measurement is in Feet)*

	Rural		Urban			
Posted Speed③	Expressway **	Other	Expressway **	Other	UBA	STA
≥55	5280	700	2640	700		
50	5280	550	2640	550		
40 & 45	5280	500	2640	500		
30 & 35		400		400	350	④
≤25		400		400	350	④

NOTE: The numbers in circles (②) refer to explanatory notes that follow tables.

* Measurement of the approach road spacing is from center to center on the same side of the roadway.

**Spacing for Expressway at-grade intersections only. See Table 12 for interchange spacing.

Notes on Tables 13, 14 and 15:

① Where a right of access exists, access will be allowed to a property at less than the designated spacing standard only if that property does not have reasonable access and the designated spacing cannot be accomplished. If possible, other options should be considered such as joint access.

Where the right of access exists, the number of approach roads (driveways) to a single property shall be limited to one, even when the property frontage exceeds the spacing standards. More than one approach road may be considered if, in the judgment of the Region Access Management Engineer, additional approach roads are necessary to accommodate and service the traffic to a property, and additional approach roads will not interfere with driver expectancy and the safety of the through traffic on the highway.

Approach roads shall be located where they do not create undue interference or hazard to the free movement of normal highway or pedestrian traffic. Locations on sharp curves, steep grades, areas of restricted sight distance or at points which interfere with the placement and proper functioning of traffic control signs, signals, lighting or other devices that affect traffic operation will not be permitted.

If a property becomes landlocked (no reasonable access exists) because an approach road cannot be safely constructed and operated, and all other alternatives have been explored and rejected, ODOT might be required to purchase the property. (Note: If a hardship is self-inflicted, such as by partitioning or subdividing a property, ODOT does not have responsibility for purchasing the property.)

(Note ① has precedence over notes ②, ③ and ④.)

② These standards are for unsignalized access points only. Signal spacing standards supersede spacing standards for approaches.

③ Posted (or Desirable) Speed: Posted speed can only be adjusted (up or down) after a speed study is conducted and that study determines the correct posted speed to be different than the current posted speed. In cases where actual speeds are suspected to be much higher than posted speeds, ODOT reserves the right to adjust the access spacing accordingly. A determination can be made to go to longer spacing standards as appropriate for a higher speed. A speed study will need to be conducted to determine the correct speed.

④ Minimum spacing for public road approaches is either the existing city block spacing or the city block spacing as identified in the local comprehensive plan. Public road connections are preferred over private driveways, and in STAs driveways are discouraged. However, where driveways are allowed and where land use patterns permit, the minimum spacing for driveways is 175 feet (55 meters) or mid-block if the current city block spacing is less than 350 feet (110 meters).

Access Management Spacing Standards for Interchanges

The following tables show the access spacing standards for interchanges as discussed in Goal 3, Policy 3C: Interchange Access Management Areas.

Table 16: Minimum Spacing Standards Applicable to Freeway Interchanges with Two-Lane Crossroads

Category of Mainline	Type of Area	Spacing Dimension			
		A	X	Y	Z
FREEWAY	Fully Developed Urban	1 mi. (1.6 km)	750 ft. (230 m)	1320 ft. (400 m)	750 ft. (230 m)
	Urban	1 mi. (1.6 km)	1320 ft. (400 m)	1320 ft. (400 m)	990 ft. (300 m)
	Rural	2 mi. (3.2 km)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.

2) No four-legged intersections may be placed between ramp terminals and the first major intersection.

A = Distance between the start and end of tapers of adjacent interchanges

X = Distance to the first approach on the right; right in/right out only

Y = Distance to first major intersection; no left turns allowed in this roadway section

Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp

Figure 18: Measurement of Spacing Standards for Table 16

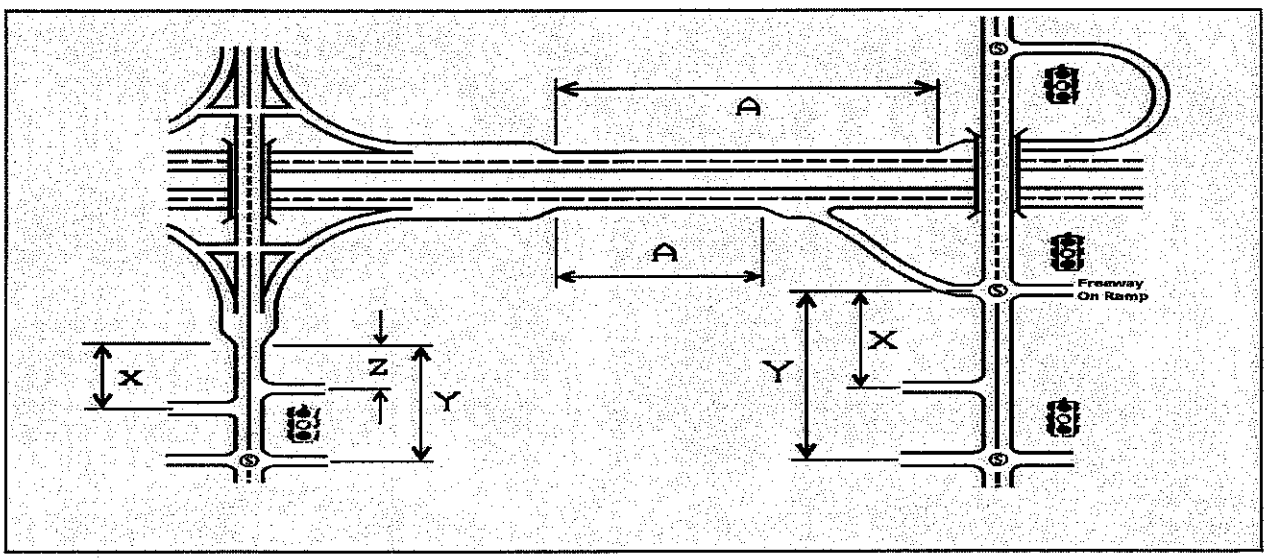


Table 17: Minimum Spacing Standards Applicable to Freeway Interchanges with Multi-Lane Crossroads

Category of Mainline	Type of Area	Spacing Dimension				
		A	X	Y	Z	M
FREEWAY	Fully Developed Urban	1 mi. (1.6 km)	750 ft. (230 m)	1320 ft. (400 m)	990 ft. (300 m)	1320 ft. (400 m)
	Urban	1 mi. (1.6 km)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)
	Rural	2 mi. (3.2 km)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.

2) No four-legged intersections may be placed between ramp terminals and the first major intersection.

A = Distance between the start and end of tapers of adjacent interchanges

X = Distance to first approach on the right; right in/right out only

Y = Distance to first major intersection

Z = Distance between the last approach road and the start of the taper for the on-ramp

M = Distance to first directional median opening. No full median openings are allowed in nontraversible medians to the first major intersection

Figure 19: Measurement of Spacing Standards for Table 17

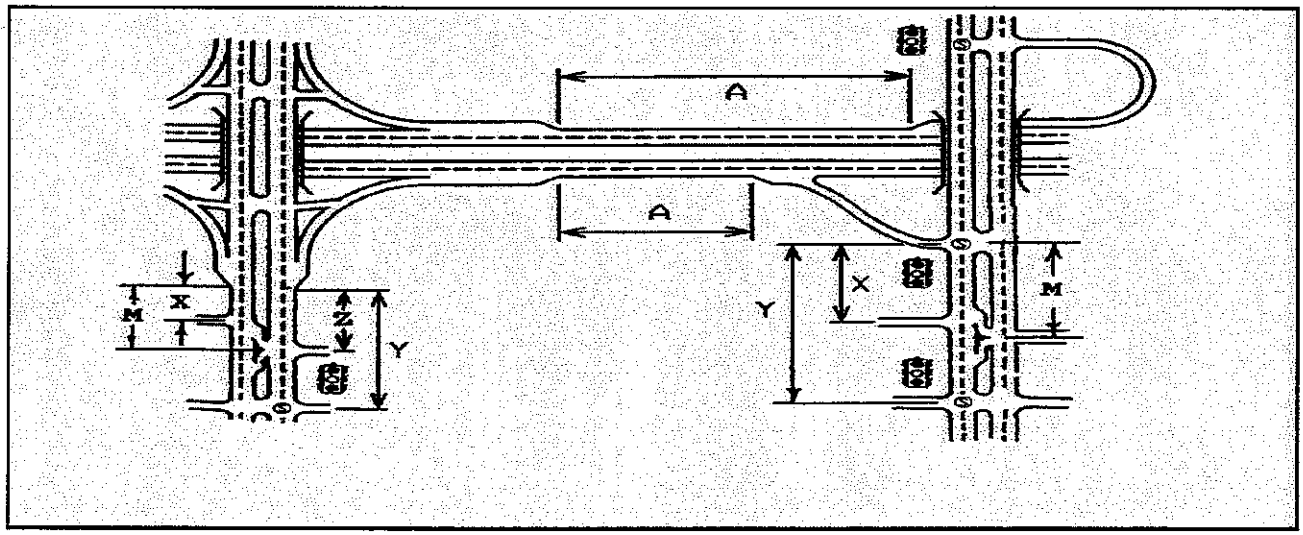


Table 18: Minimum Spacing Standards Applicable to Non-Freeway Interchanges with Two-Lane Crossroads

Category of Mainline	Type of Area	Speed of Mainline	Spacing Dimension				
			B	C	X	Y	Z
EXPRESSWAY	Fully Developed Urban	45 mph (70 kph)	2640 ft. (800 m)	1 mi. (1.6 km)	750 ft. (230 m)	1320 ft. (400 m)	750 ft. (230 m)
	Urban	45 mph (70 kph)	2640 ft. (800 m)	1 mi. (1.6 km)	1320 ft. (400 m)	1320 ft. (400 m)	990 ft. (300 m)
	Rural	55 mph (90 kph)	1 mi. (1.6 km)	2 mi. (3.2 km)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.

2) No four-legged intersection may be placed between ramp terminals and the first major intersection.

3) Use four-lane crossroad standards for urban and suburban locations that are likely to be widened.

4) No at-grade intersections are permitted between interchanges less than 5 miles apart.

B = Distance between the start and end of tapers

C = Distance between nearest at-grade and ramp terminal intersections or the end/start of the taper section

X = Distance to first approach on the right; right in/right out only

Y = Distance to first major intersection

Z = Distance between the last right in/right out approach road and the start of the taper for the on-ramp

Figure 20: Measurement of Spacing Standards for Table 18

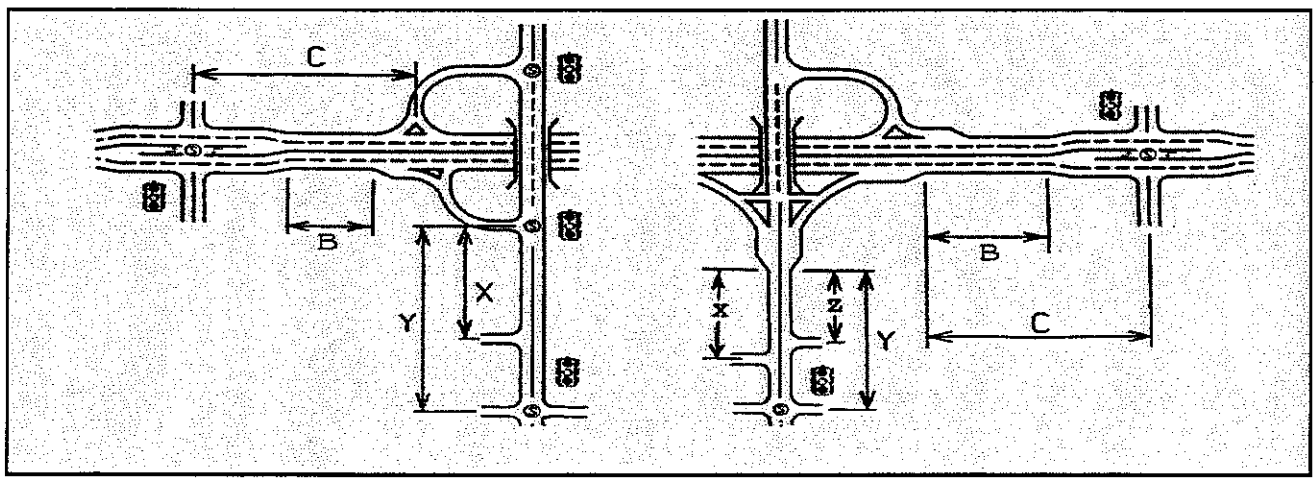


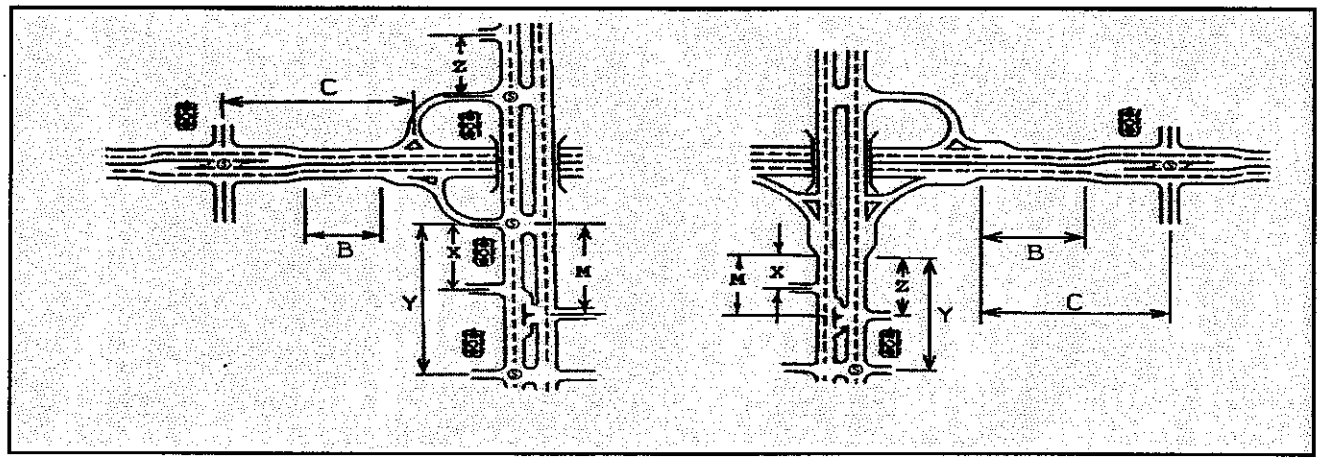
Table 19: Minimum Spacing Standards Applicable to Non-Freeway Interchanges with Multi-Lane Crossroads

Category of Mainline	Type of Area	Speed of Mainline	Spacing Dimension					
			B	C	X	Y	Z	M
EXPRESSWAY	Fully Developed Urban	45 mph (70 kph)	2640 ft. (800 m)	1 mi. (1.6 km)	750 ft. (230 m)	1320 ft. (400 m)	990 ft. (300 m)	1320 ft. (400 m)
	Urban	45 mph (70 kph)	2640 ft. (800 m)	1 mi. (1.6 km)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)
	Rural	55 mph (90 kph)	1 mi. (1.6 km)	2 mi. (3.2 km)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)	1320 ft. (400 m)

Notes: 1) If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.
2) No four-legged intersections may be placed between ramp terminals and the first major intersection.
3) No at-grade intersections are permitted between interchanges less than 5 miles apart.

B = Distance between the start and end of tapers
C = Distance between nearest at-grade and ramp terminal intersections or the end/start of the taper section
X = Distance to first approach on the right; right in/right out only
Y = Distance to first major intersection
Z = Distance between the last approach road and the start of the taper for the on-ramp
M = Distance to first directional median opening. No full median openings are allowed in nontraversible medians to the first major intersection

Figure 21: Measurement of Spacing Standards for Table 19



Access Management Spacing Standard Minor Deviation Limits

The following tables show the access management spacing standard minor deviation limits for the access management classifications listed in Goal 3, Policy 3A: Classification Spacing Criteria, Action 3A.1. The Access Management Spacing Standards are shown in Tables 13, 14 and 15 of this Appendix. Minor deviations may be considered down to the deviation limits shown in Tables 20, 21 and 22. Any request to deviate beyond these limits is considered a major deviation.

Table 20: Access Management Spacing Standard Minor Deviation Limits for Statewide Highways
①②
(Measurement is in Feet)*

Posted Speed③	Rural		Urban			
	Expressways **	Other	Expressways **	Other	UBA	STA
≥55	(none)	(950)	(none)	(870)		
	[none]	[1150]	[none]	[1000]		
50	(none)	(700)	(none)	(640)		
	[none]	[900]	[none]	[810]		
40 & 45	(none)	(560)	(none)	(530)		
	[none]	[810]	[none]	[740]		
30 & 35		(400)		(350)	(350)	④
		[675]		[600]	[600]	
≤25		(280)		(250)	(250)	④
		[525]		[400]	[400]	

NOTE: The numbers in circles (②) refer to explanatory notes that follow the tables.

*Measurement of the approach road spacing is from center to center on the same side of the roadway.

**Spacing for Expressway at-grade intersections only. See Table 12 for interchange spacing.

(____) = Driveway Spacing Minor Deviation Limit.

[____] = Public Street Spacing Minor Deviation Limit.

Table 21: Access Management Spacing Standard Minor Deviation Limits for Regional Highways

①②

(Measurement is in Feet)*

Posted Speed③	Rural		Urban			
	Expressways **	Other	Expressways **	Other	UBA	STA
≥55	(none)	(700)	(none)	(700)		
	[none]	[870]	[none]	[870]		
50	(none)	(540)	(none)	(540)		
	[none]	[640]	[none]	[640]		
40 & 45	(none)	(460)	(none)	(460)		
	[none]	[550]	[none]	[550]		
30 & 35		(300)		(300)	(300)	④
		[375]		[375]	[375]	
≤25		(220)		(220)	(220)	④
		[350]		[350]	[350]	

NOTE: The numbers in circles (②) refer to explanatory notes that follow the tables.

*Measurement of the approach road spacing is from center to center on the same side of the roadway.

**Spacing for Expressway at-grade intersections only. See Table 12 for interchange spacing.

(____) = Driveway Spacing Minor Deviation Limit.

[____] = Public Street Spacing Minor Deviation Limit.

Table 22: Access Management Spacing Standard Minor Deviation Limits for District Highways

①②

(Measurement is in Feet)*

Posted Speed③	Rural		Urban			
	Expressways **	Other	Expressways **	Other	UBA	STA
≥55	(none)	(650)	(none)	(650)		
	[none]	[660]	[none]	[660]		
50	(none)	(475)	(none)	(475)		
	[none]	[525]	[none]	[525]		
40 & 45	(none)	(400)	(none)	(400)		
	[none]	[475]	[none]	[475]		
30 & 35		(275)		(275)	(250)	④
		[325]		[325]	[300]	
≤25		(200)		(200)	(175)	④
		[245]		[245]	[200]	

NOTE: The numbers in circles (②) refer to explanatory notes that follow the tables.

*Measurement of the approach road spacing is from center to center on the same side of the roadway.

**Spacing for Expressway at-grade intersections only. See Table 12 for interchange spacing.

(____) = Driveway Spacing Minor Deviation Limit.

[____] = Public Street Spacing Minor Deviation Limit.

Notes on Tables 20, 21 and 22:

① Where a right of access exists, access will be allowed to a property at less than minor deviation limits only if that property does not have reasonable access and the minor deviation limits cannot be accomplished. If possible, other options should be considered, such as joint access.

Where the right of access exists, the number of approach roads (driveways) to a single property shall be limited to one, even when the property frontage exceeds the spacing standards. More than one approach road may be considered if, in the judgment of the Region Access Management Engineer, additional approach roads are necessary to accommodate and service the traffic to a property, and additional approach roads will not interfere with driver expectancy and the safety of the through traffic on the highway.

Approach roads shall be located where they do not create undue interference or hazard to the free movement of normal highway or pedestrian traffic. Locations on sharp curves, steep grades, areas of restricted sight distance or at points which interfere with the placement and proper functioning of traffic control signs, signals, lighting or other devices that affect traffic operation will not be permitted.

If a property becomes landlocked (no reasonable access exists) because an approach road cannot be safely constructed and operated, and all other alternatives have been explored and rejected, ODOT might be required to purchase the property. (Note: If a hardship is self-inflicted, such as by partitioning or subdividing a property, ODOT does not have responsibility for purchasing the property.)

(Note ① has precedence over notes ②, ③ and ④.)

② These standards are for unsignalized access points only. Signal spacing standards supersede spacing standards for approaches.

③ Posted (or Desirable) Speed: Posted speed can only be adjusted (up or down) after a speed study is conducted and that study determines the correct posted speed to be different than the current posted speed. In cases where actual speeds are suspected to be much higher than posted speeds, ODOT reserves the right to adjust the access spacing accordingly. A determination can be made to go to longer spacing standards as appropriate for a higher speed. A speed study will need to be conducted to determine the correct speed.

④ Minimum spacing for public road approaches is either the existing city block spacing or the city block spacing as identified in the local comprehensive plan. Public road connections are preferred over private driveways, and in STAs driveways are discouraged. However, where driveways are allowed and where land use patterns permit, the minimum spacing for driveways is 55 meters (175 feet), or mid-block if the current city block spacing is less than 110 meters (350 feet).

BEFORE THE BOARD OF COMMISSIONERS
OF BAKER COUNTY, OREGON

AN ORDINANCE IN THE MATTER OF ADOPTING TEXT AMENDMENTS TO THE BAKER COUNTY ZONING AND SUBDIVISION CODE	) ORDINANCE NO. 2005-03

WHEREAS, Baker County received a grant from ODOT, Region 5 to complete the Baker County Transportation System Plan and Implementing Ordinances which included amendments to the Baker County Zoning and Subdivision Code; and

WHEREAS, Baker County involved public input into the process to develop the Baker County Transportation System Plan and transportation amendments to the Baker County Zoning and Subdivision Code. Public input was received from a public open house, series of Planning Commission workshops open to the public, and a series of public hearings held by the Planning Commission; and

WHEREAS, notice to the public was advertised at least 20 days in advance of the Planning Commission/Board of Commissioners public hearings listed below; and

WHEREAS, a public hearing by the Baker County Planning Commission was held on the following days to solicit public testimony:

June 1, 2005 @ 6:00 p.m.
June 23, 2005 @ 7:00 p.m.

WHEREAS, a public hearing was held on June 23, 2005 for the Baker County Planning Commission to deliberate and make a decision to forward the transportation amendments to the Baker County Zoning and Subdivision Code to the Baker County Board of Commissioners; and

WHEREAS, the Baker County Planning Commission, at their June 23, 2005 public hearing, has recommended approval of the transportation amendments to the Baker County Zoning and Subdivision Code to the Baker County Board of Commissioners; and

WHEREAS, the Baker County Board of Commissioners held a public hearing regarding the transportation amendments to the Baker County Zoning and Subdivision Code on June 29, 2005; and

WHEREAS, the Baker County Board of Commissioners, after public testimony and deliberation, voted to approve the transportation amendments to the Baker County Zoning and Subdivision Code on June 29, 2005.

NOW THEREFORE, THE BAKER COUNTY BOARD OF COMMISSIONERS HEREBY ORDAINS AS FOLLOWS:

Article 1: Zoning and Subdivision Code Amendment Ordinance

Section 1

A new code section, Section 340, shall be added to the Baker County Zoning and Subdivision Code. Section 340 contains all of the transportation related code regarding new development. It is attached hereto and incorporated herein by this reference.

Section 340 shall supercede any transportation related code in the previously approved Zoning and Subdivision Code. Should any conflicts arise, Section 340 shall be interpreted to be correct and have authority over any previously approved code.

APPROVED AND ADOPTED this 29th day of June 2005, by The Baker County Board of Commissioners.

BAKER COUNTY BOARD OF COMMISSIONERS

Fred Warner Jr., Chair

Tim L. Kerns, Commissioner

Carl E. Stiff MD, Commissioner

Attachment A

Baker County Zoning & Subdivision Code Amendment
Section 340 – Transportation Standards

Chapter 340
TRANSPORTATION STANDARDS

SECTIONS

340.01 PURPOSE

The purpose of the transportation standards chapter is to consolidate all of the transportation related code into one chapter, Chapter 340. All of the contents of Chapter 340 apply directly to new development that is subject to a land use decision with the exception of Section 340.04 which defines transportation improvement projects that are outright permitted or conditionally permitted.

340.02 DEFINITIONS

For the purposes of this Chapter, 340, the definitions below shall apply.

340.02.001 **Abutting** – Contiguous or adjoining. It shall include the terms adjacent, adjoining and contiguous.

340.02.002 **Access Easement** – An easement recorded for the purpose of providing vehicle, bicycle, and/or pedestrian access from a public street to a parcel across intervening property under separate ownership from the parcel being provided access.

340.02.003 **Accessible** – Approachable and useable by people with disabilities. Complies with the Americans With Disabilities Act.

340.02.004 **Access Management** – Measures regulating access to arterials, collectors, local streets, and highways from public roads, private roads, and private driveways for the purpose of improving efficiency, safety, and/or operation of the roadway. These measures may include but are not limited to restrictions on the type and amount of access to roadways and the use of physical controls such as signals and channelization.

340.02.005 **Accessway** – A walkway that provides pedestrian and/or 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 which provides convenient access for pedestrians.

340.02.006 **Adjacent** – Abutting or located directly across a street right-of-way.

340.02.007 **Administrative** – A discretionary action or permit decision made without a public hearing, but requiring public notification and an opportunity for appeal.

340.02.008 **ADT – Average Daily Traffic.** This term denotes the total traffic volume passing a point or segment of roadway in both directions for over an average weekday 24-hour period.

340.02.009 **Adverse Impact** – Negative affect of a development that can be measured (eg., noise, air, pollution, vibration, traffic, dust, etc.).

340.02.010 **Bicycle** – A vehicle having two tandem wheels, a minimum of 14" (35 cm) in diameter, propelled solely by human power, upon which any person or persons may ride. A three-wheeled adult tricycle is also considered a bicycle.

340.02.011 **Bicycle Facility** – Any facility provided for the benefit of bicycle travel, including bikeways and parking facilities as well as all other roadways not specifically designated for bicycle use.

340.02.012 **Bicycle Lane** – A portion of a roadway which has been designated by striping and pavement markings for the preferential or exclusive use of bicyclists.

340.02.013 **Bikeway** – A bikeway is created when a road has the appropriate design treatment for bicyclists, based on motor vehicle traffic volumes and speeds. The following facilities are considered bikeways: shared roadway, shoulder bikeway, bike lane or bicycle boulevard. Another type of bikeway facility is separated from the roadway and is called a multi-use path.

340.02.014 **Block** – An area of land whose boundaries are defined by public or private streets, excluding alleys.

340.02.015 **Block Length** – The distance between intersections with other public or private roads as measured along the near-side right-of-way line.

340.02.016 **Block Perimeter** – The perimeter of a block as measured along the near-side right-of-way lines of public streets or accessway easements, but exclusive of driveways.

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

340.02.018 **Centerline Radius** – The radius of a centerline of a street right-of-way.

340.02.019 **City Road or Street** – A road opened to and maintained for public travel by an incorporated city.

340.02.020 **Commercial Access** – An on-site road providing access to properties zoned for business, commercial, manufacturing, or industrial uses.

340.02.021 **Conditional Use** – A use which requires a Conditional Use Permit (CUP).

340.02.022 **Corner Radius** – The radius of a street corner, as measured around the curb or edge of pavement.

340.02.023 **Crosswalk** – Portion of a roadway designated for pedestrian crossing, marked or unmarked. Unmarked crosswalks are the natural extension of the shoulder, curb line or sidewalk.

340.02.024 **Dedication** – A conveyance of right-of-way to the city.

340.02.025 **Development** – All improvements on a site, including buildings, other structures, parking and loading areas, landscaping, paved or graveled areas, grading, and areas devoted to exterior display, storage, or activities. Development includes improved open areas such as plazas and walkways, but does not include natural geologic forms or landscapes.

340.02.026 **Driveway** – Areas that provide vehicular access to a site, except for public and private streets. A driveway begins at the property line and extends into the site. Driveways do not include parking, maneuvering, or circulation areas in parking space areas.

340.02.027 **Easement** – A right of usage of real property granted by an owner to the public or to specific persons, firms, and corporations.

340.02.028 **Flag Lot** – A lot or parcel which has access to a road, street, or easement, by means of a narrow strip of lot or easement.

340.02.029 **Frontage** – The dimension of a property line abutting a public or private street.

340.02.030 **Frontage Street or Road** – A minor street which parallels an arterial street in order to provide access to abutting properties and minimize direct access onto the arterial.

340.02.031 **Level of Service** – For transportation, a qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. At intersections, level of service is measured in terms of average delay and correlated to grades from LOS A which indicated little delay, to LOS F which indicates significant delay.

340.02.032 **Mitigation** – To avoid, rectify, repair, or compensate for negative impacts which result from other actions (e.g., Improvements to a street may be required to mitigate for transportation impacts resulting from development.)

340.02.033 **Multi-Use Path** – A path physically separated from motor vehicle traffic by an open space or barrier and either within a roadway right-of-way or within an independent right-of-way, used by bicyclists, pedestrians, joggers, skaters, and other non-motorized travelers.

340.02.034 **Pavement Markings** – Painted or applied lines or legends placed on a roadway surface for regulating, guiding, or warning traffic.

340.02.035 **Pedestrian** – A person on foot, in a wheelchair, or walking a bicycle.

340.02.036 **Pedestrian Facility** – A facility provided for the benefit of pedestrian travel, including walkways, crosswalks, signs, signals, illumination, and benches.

340.02.037 **Private Road** – A road not maintained by a governmental jurisdiction.

340.02.038 **Public Road** – A road maintained by a governmental jurisdiction.

340.02.039 **Right-of-Way** – A general term denoting publicly-owned land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

340.02.040 **Roadway** – The improved portion of an easement or right-of-way, excluding curbs, sidewalks, and ditches. Road, roadway, and street will be considered interchangeable terms.

340.02.041 **Shared Driveway** – When land uses on two or more lots or parcels share one driveway. An easement or tract (owned in common) may be created for this purpose.

340.02.042 **Shared Roadway** – A type of bikeway where bicyclists and motor vehicles share a travel lane.

340.02.043 **Shoulder** – The portion of a roadway that is contiguous to the travel lanes providing for pedestrians, bicyclists, emergency use by vehicles and for lateral support of base and surface courses.

340.02.044 **Shoulder Bikeway** – A type of bikeway where bicyclists travel on a paved shoulder.

340.02.045 **Shy Distance** – The distance between the edge of a travelway and a fixed object.

340.02.046 **Sidewalk** – A walkway separated from the roadway with a curb, constructed of a durable, hard and smooth surface, designed for preferential or exclusive use by pedestrians.

340.02.047 **Sight Distance** – The distance a person can see along an unobstructed line of sight.

340.02.048 **Street Connectivity** – The number of street connections within a specific geographic area. Higher levels of connectivity provide for more direct transportation routes and better dispersion of traffic, resulting in less traffic on individual streets and potentially slower speeds through neighborhoods.

340.02.049 **Street Stub** – A temporary street ending; i.e., where the street will be extended through adjacent property in the future, as those properties develop. Not a permanent street-end or dead-end street.

340.02.050 **Traffic Calming Devices** – Physical devices within the roadway designed to manage traffic speeds or which disperse traffic such as speed bumps/humps and traffic circles.

340.02.051 **V/C Ratio** – The ratio of demand flow rate to capacity for a traffic facility.

340.02.052 **Volume** – The number of persons or vehicles passing a point on a lane, roadway, or other trafficway during some time interval, often taken to be one hour, expressed in vehicles.

340.02.053 **Walkway** – A transportation facility built for use by pedestrians, including persons in wheelchairs. Walkways include sidewalks, paths, and paved shoulders.

340.02.054 **Wide Outside Lane** – A wider than normal curbside travel lane that is provided for ease of bicycle operation where there is insufficient room for a bike lane or shoulder or shoulder bikeway.

340.03 ACCESS MANAGEMENT STANDARDS

340.03.01 Intent and Purpose

This section of the subdivision ordinance identifies who is subject to apply for an access permit, how the number of accesses are determined, where the access(es) may be located, access standards that must be met, and development review procedure and submittal requirements in relation to access management. It primarily applies to new development that would be constructing a new approach onto an existing road and/or a change in use.

340.03.02 Actions Requiring Access Permits and Authority to Grant Access Permits

a) Projects Requiring Access Permits

Access permits are required for projects requiring permits from Baker County that result in additional trip generation and a change in use. A change in use is defined as: a change in land use, a land use decision, an expansion of an existing use, or the construction of a new dwelling. If the existing use requires a permit from Baker County, generates additional trips, and meets the change in use criteria above, then the existing use shall meet the current access management requirements and standards.

b) Access Permits onto County Roads

Permits for access onto county roads shall be subject to review and approval by the Road Master and/or his/her designee. The criteria for granting access permits shall be based on the standards contained in this section. The access permit may be granted in the form of a "Baker County access permit" or it may be attached to a land use decision notice as a condition of approval.

c) State Highway Access Permits

Permits for access onto State highways shall be subject to review and approval by Oregon Department of Transportation (ODOT), except when ODOT has delegated this responsibility to Baker County. In that case, Baker County shall determine whether access is granted based on ODOT's adopted standards.

d) City Roadway Access Permits

Permits for access onto city owned roadways shall be subject to review and approval by that city, except where the city has delegated this responsibility to Baker County. In that case, Baker County shall determine whether access is granted based on adopted city standards.

e) Conditions of Approval with Granting of Access Permit

Baker County or other agencies with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e. for shared driveways), development of a frontage road, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the road system.

f) Non-Conforming Access Features

Legal access connections in place as of the effective date of this section 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:

(1) Change in use as defined in 340.03.02.a);

(2) When new access connection permits are requested or required.

g) County's Authority to Change Accesses

(1) Baker County has the authority to change accesses for all uses if it is constructing a capital improvement project along that section of the public road. The access changes shall meet all current standards. If it is not possible to change a particular access to meet all the current standards, then a non-conforming access shall be acceptable only if it improves the condition to more closely meet the current standards.

(2) Baker County has the authority to change accesses for all uses if it is necessary to correct a safety problem related with that/those access(es).

340.03.03 Access from New Private Road Easements

New proposed private road easements shall be designated on the tentative plan and may be approved by the Planning Commission if they meet the following conditions:

a) New private road easements shall provide access to no more than two proposed or potential parcels. If more than two proposed or potential parcels need access, then access shall be provided by a public use road. No road easement providing access between public roads or other private road easements shall be approved as a private road easement. If access is needed between public roads or other private road easements, then access shall be provided by a public use road. The public use road standard can be found in Figure 7-7 of Section 7 of the Baker County Transportation System Plan.

b) No private road easement shall be approved unless the Planning Commission is satisfied that such right-of-way is not presently needed, nor will ever be needed to be extended through to adjacent property, or to be utilized for public road purposes in the normal growth of the area. If there is a potential that additional right-of-way is needed in the future or that the right-of-way may need to be extended through to adjacent property, or that the road may need to be used for public purposes, then access shall be provided by a public use road. The public use road standard can be found in Figure 7-7 of Section 7 of the Baker County Transportation System Plan.

c) No private road easement shall be less than 30-feet wide, except that a modification may be approved to allow a driveway easement of 20-feet to one parcel or lot.

d) Surface improvements on private road easements shall be as prescribed in Figure 7-9 of Section 7 of the Baker County Transportation System Plan.

e) Maintenance responsibility for private road easements shall be pre-determined before final plat approval according to ORS Chapter 660 through one of the following options:

(1) A maintenance agreement established by the developer with the legal mechanism for the agreement to be presented prior to approval of the final plat.

(2) Any other method of providing perpetual financing for maintenance services and improvements.

340.03.04 Access from Existing Private Road Easements

There is a number of existing private access easements in Baker County providing more than two parcels access. No additional access will be allowed on these private easements unless the following conditions are met.

a) It is demonstrated that the parcel has a legal right to use the existing private access easement or has an easement agreement from the property owners controlling the private easement.

b) The private easement roadway meets the "Public Use/Existing Private Road Easements" road standard defined in Figure 7-7 of Section 7 of the Baker County Transportation System Plan. If the private road easement roadway does not meet the standard above, then the applicant has the option to make the necessary improvements to meet the standard.

c) Development of all road standards must be met from the point in which the property is accessed to that point where the road does meet the current standard or to the county road.

d) The Planning Commission may grant the applicant a variance to provide only a 30-foot right-of-way and a 22-foot wide roadway surface if Condition b) above cannot be met. This variance may only be granted for existing substandard roadways if the applicant can demonstrate to the Planning Commission that this condition does not create or impact an unsafe condition.

e) A turnaround shall be provided at the end of a private road easement within a new development. The turnaround standard is defined in Figure 7-10 of Section 7 of the Baker County Transportation System Plan.

340.03.05 Number of Allowed Accesses

a) Number of Allowed Accesses for Single-Family Residential Lots

A single-family residential lot may request up to two driveways on a local road. If two residential driveways are requested from a single-family lot, then it shall be subject to spacing standards of 340.03.06.b).

b) Number of Allowed Accesses for Multi-Family Uses

The number of driveways allowed for multi-family residential uses shall be based on the daily trip generation of the site in question. One driveway shall be allowed for up to 1,000 daily trips generated. A maximum of two accesses shall be allowed if it is proven through a traffic impact study that this limitation creates a significant traffic operations hardship for on-site traffic. The Road Master or his/her designee shall determine whether the traffic study adequately proves a significant traffic operations hardship to justify more accesses. Emergency access requirements shall be determined by the fire chief and/or the Road Master or his/her designee. Each driveway/access shall meet the spacing standards defined in Table 340.03.06.h).

c) Number of Allowed Accesses for Non-Residential Uses

The number of driveways allowed for non-residential uses shall be based on the daily trip generation of the site in question. One driveway shall be allowed for up to 2,500 daily trips generated with a maximum of two driveways. An exception shall be allowed if it is proven through a traffic impact study that this limitation creates a significant traffic operations hardship for on-site traffic. The primary criteria to allow more driveways will be level of service (see standards in 340.07) analysis, queuing analysis, and safety analysis of the site accesses. If a development has a need for more than two access points, then signalization of the main access shall be investigated as a potential option prior to allowing additional driveways. A signal warrant study will then be required to study whether or not signalization of the main access is required. The Road Master or his/her designee shall determine whether the traffic study adequately proves that more accesses are needed for a particular project.

d) Right in, Right Out Access

(1) If a center left turn lane is not available on the arterial and/or collector to facilitate movements turning into and out of a driveway, then the Road Master or his/her designee has right to limit the driveway access to a right in, right out driveway. The right in, right out driveway is also subject to meeting the access spacing standards in Table 340.03.06.h).

(2) If a driveway cannot meet the access spacing standards in Table 340.02.06.h) and a variance is being sought for the development's access, then a right in, right out driveway shall be the first consideration to provide access. Only if a demonstrated hardship such as the creation of significant out of direction travel is demonstrated in the variance shall consideration be given to a conditional full access driveway. Any conditional access shall be subject to 340.03.06.d).

(3) Right in, right out driveways shall count toward the maximum number of driveways allowed under 340.03.05.

340.03.06 Location of Accesses

Vehicle access locations shall be provided based on the following criteria:

a) Corner Lot Access

Corner lot driveways on local roads shall be a minimum of fifty (50) feet from the intersecting property lines or in the case where this is impractical, then the applicant shall file for a variance to this standard to the Road Master. Corner lots on arterial or collectors shall have driveways located on the minor cross road. If this is not feasible, then the corner lot driveway on an arterial or collector must follow the minimum access spacing standard in Table 340.03.06.h). or in the case where this is impractical, the applicant file for a variance to this standard to the Road Master.

b) Two Single-Family Residential Driveway Spacing for One Lot

Where two single-family residential driveways are permitted for one single-family residential lot, a minimum separation of 50 feet shall be required. The 50 feet separation shall be measured from the perpendicular near edge to perpendicular near edge.

c) Access onto Lowest Functional Classification Roadway Requirement

Access shall be provided from the lowest functional classification roadway. If a tax lot has access to both an arterial and a lower classified roadway, then the arterial driveway shall be closed and access shall be granted along the lower functional classification roadway. This shall also apply for a series of non-

residential contiguous tax lots under the same ownership or control of a development entity per the requirements set for in 340.03.06.g).

d) Conditional Access Permits

Conditional access permits may be given to developments that cannot meet current access spacing and access management standards as long as other standards such as sight distance and other geometric standards can be met. In conjunction with the conditional access permit, crossover easements shall be provided on all compatible parcels without topography and land use conflicts. The conditional access permit shall allow temporary access until it is possible to consolidate and share access points in such a manner to either improve toward the current standards or to meet the current access spacing standards. Figure 340.03.06.d) illustrates the concept of how the crossover easements eventually work toward meeting access spacing standards.

e) Shared Driveway Requirement for Adjacent Non-Residential Parcels with Non-Conforming Access(es)

Adjacent non-residential parcels with non-conforming access(es) shall be required to share driveways along arterial and collector roadways pursuant to 340.03.02 which defines when the requirement is triggered. If the adjacent use refuses to allow for a shared driveway, then a conditional access permit may be given. As a condition of approval, cross-easements shall be granted to the adjacent non-residential parcel to secure a shared driveway later when the adjacent parcel redevelops, seeks to obtain an access permit, or becomes available.

f) Residential Subdivision Access Requirements

Residential subdivisions fronting an arterial or collector roadway shall be required to provide access from secondary local roads for access to individual lots. When secondary local roads cannot be constructed due to topographic or physical constraints, access shall be provided by consolidating driveways per the requirements set for in Table 340.03.06.h). In this situation, the residential subdivision shall still meet driveway spacing requirements of the arterial or collector roadway.

g) Phased Development Plans

In the interest of promoting unified access and circulation systems, development sites under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as a single property in relation to the access standards of this section. The number of access points permitted shall be as defined in 340.03.05. All necessary easement agreements and stipulations within the phased development shall be met to assure that all tenants within the phased development have adequate access.

All access to individual uses or buildings within a phased development must be internalized within the site plan using the shared circulation system of the principal development. Driveways shall be designed to avoid queuing across surrounding parking and driving aisles.

h) Access Spacing Standards

The roads within Baker County are classified as arterials, collectors, and local roads. The access spacing standards are shown in Table 340.03.06.h). for both full intersection spacing and driveway spacing.

Table 340.03.06.h). Access Spacing Standard

Classification	Minimum Posted Speed	Minimum Spacing Between Driveways/Roads[1]	Minimum Spacing Between Intersections	Adjacent Land Use
Arterial	55 mph	1200 feet	1 mile	Undeveloped or agricultural land between major population centers
Collector	23-55 mph	300 feet	½ mile	Undeveloped or agricultural land between and through cities or rural service centers
Local/Public Use	25-50 mph	50 feet	220 feet	Residential
Private	25-50 mph	Access to each lot permitted	220 feet	Residential
RS2477	25-50 mph	Access to each lot permitted	220 feet	Forest

i) Joint and Cross Access for Properties with Non-Conforming Access(es)

(1) Adjacent non-residential uses shall provide a crossover easement drive and pedestrian access to allow circulation between sites.

(2) A system of joint use driveways and crossover easements shall be established wherever feasible.

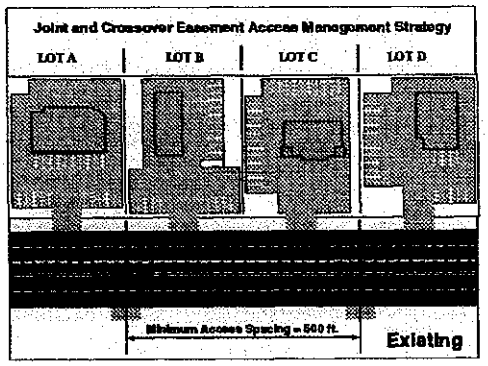
(3) Pursuant to this section, property owners shall:

(a) 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.

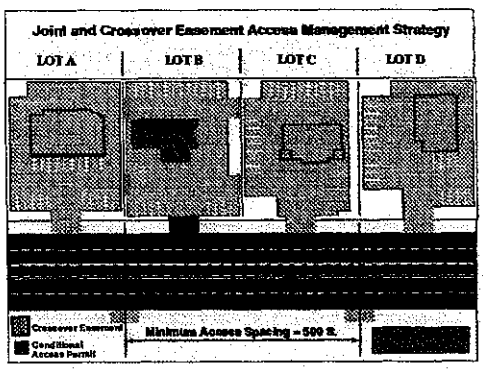
(b) Record an agreement with Baker County that pre-existing driveways will be closed and eliminated after construction of the joint-use driveway.

(c) Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners.

Figure 340.03.06.d)
Example of Crossover Easement and Conditional Access Policy



Step 1



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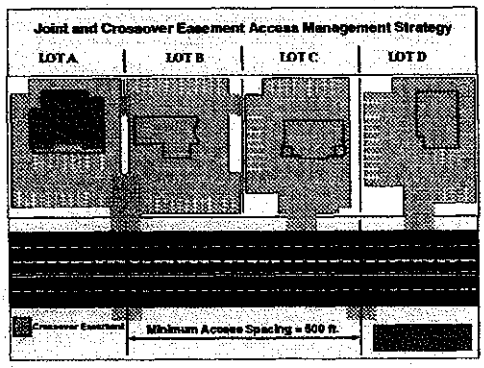

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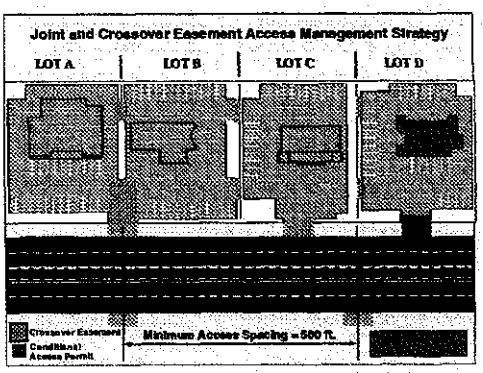

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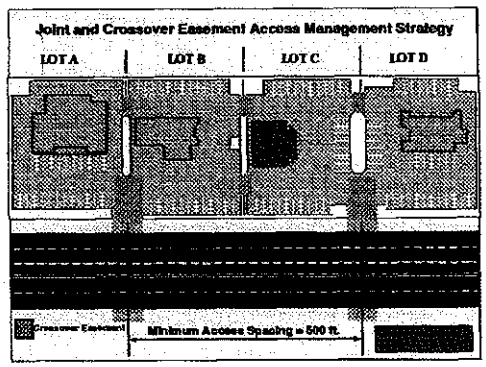
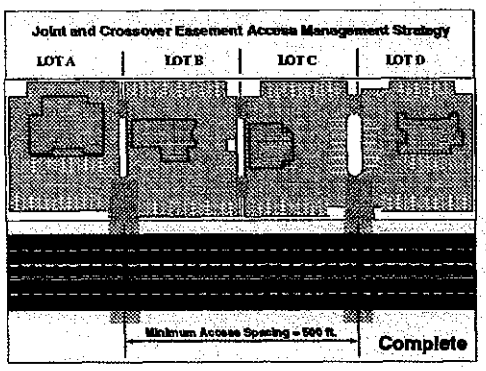


Step 5



Step 6

Continued Figure 340.03.06.d)
Example of Crossover Easement and Conditional Access Policy

Step	Process
1	*EXISTING* – Currently Lots A, B, C, and D have site-access driveways that neither meet the access spacing criteria of 500 fee nor align with driveways or access points on the opposite side of the highway. *Under these conditions motorists are put into situations of potential conflict (conflicting left turns) with opposing traffic. Additionally, the number of side-street (or site-access driveway) intersections decreases the operation and safety of the highway*
2	*REDEVELOPMENT OF LOT B* – At the time that Lot B redevelops, the local jurisdiction would review the proposed site plan and make recommendations to ensure that the site could promote future crossover or consolidated access. Next, the local jurisdiction would issue conditional permits for the development to provide crossover easements with Lots A and C, and ODOT would grant a conditional access permit to the lot. *After evaluating the land use action, ODOT would determine that LOT B does not have either alternative access, nor can an access point be aligned with an opposing access point, nor can the available lot frontage provide an access point that meets the access spacing criteria set forth for this segment of highway.*
3	*REDEVELOPMENT OF LOT A* – At the time Lot A redevelops, the local jurisdiction and ODOT would undertake the same review process as with the redevelopment of LOT B (see Step 2); however, under this scenario ODOT and the local jurisdiction would use the previously obtained cross-over easement at Lot B to consolidate the access points of Lots A and B. ODOT would then relocate the conditional access of Lot B to align with the opposing access point and provide safe and efficient access to both Lots A and B. *The consolidation of site-access driveways for Lots A and B will not only reduce the number of driveways accessing the highway, but will also eliminate the conflicting left-turn movements on the highway by the alignment with the opposing access point.*
4	*REDEVELOPMENT OF LOT D* – The redevelopment of Lot D will be handled in the same manner as the redevelopment of Lot B (see Step 2)
5	*REDEVELOPMENT OF LOT C* – The redevelopment of Lot C will be reviewed once again to ensure that the site will accommodate crossover and/or consolidated access. Using the crossover agreements with Lots B and D, Lot C would share a consolidated access point with Lot D and will also have alternative frontage access via the shared site-access driveway of Lots A and B. *By using the crossover agreement and conditional access permit process, the local jurisdiction and ODOT will be able to eliminate another access point and provide the alignment with the opposing access points.*
6	*COMPLETE* – After Lots A, B, C, and D redevelop over time, the number of access points will be reduced and aligned, and the remaining access points will meet the *Category 4* access management standard of 500-foot spacing.

j) The Baker County may reduce required separation distance of access points defined in Table 340.03.06.h) where they prove impractical as defined by the Road Master or his/her designee, provided all of the following requirements are met:

(1) Joint access driveways and cross access easements are provided in accordance with this section.

(2) The site plan incorporates a unified access and circulation system in accordance with this section.

(3) The property owner enters into a written agreement with the Baker County, recorded with the deed, that pre-existing connections on the site will be closed and eliminated after construction of each side of the joint use driveway.

k) The Baker County may modify or waive the requirements of this section where the characteristics or layout of abutting properties would make a development of a unified or shared access and circulation system impractical based on physical site characteristics that make meeting the access standards infeasible. Modification or wavier of the requirements of this section shall be based on the following:

(1) The application of the location of access standard will result in the degradation of operational and safety integrity of the transportation system.

(2) The granting of the variance shall meet the purpose and intent of these regulations and shall not be considered until every feasible option for meeting access standards is explored.

(3) Applicants for variance from these standards must provide proof of unique or special conditions that make strict application of the provisions impractical.

Applicants shall include proof that:

(a) Indirect or restricted access cannot be obtained;

(b) No engineering or construction solutions can be applied to mitigate the condition; and

(c) No alternative access is available from a road with a lower functional classification than the primary roadway.

(4) No variance shall be granted where such hardship is self-created.

340.03.07 Access Standards

a) Driveway Design

(1) If a commercial or residential driveway is a one-way drive, then the driveway shall be a minimum width of 10 feet and a maximum width of 12 feet. A one-way commercial or residential driveway shall have appropriate signage designating the driveway as one-way.

For a two-way commercial or residential driveway, each lane shall have a minimum width of 10 and a maximum width of 12 feet. The total two-way commercial or residential driveway width shall be between 20 and 24 feet. A commercial driveway width may be increased by an additional 10 to 12 feet if two outbound lanes are provided and delineated.

For industrial uses, the maximum driveway width is 40 feet.

(2) Driveways providing access into off-road, surface parking lots shall be designed in such a manner to prevent vehicles from backing into the flow of traffic on the public road or to block on-site circulation. The driveway throat approaching the public road shall have adequate queue length for exiting vehicles to queue on-site without blocking on-site circulation of other vehicles. The driveway throat approaching the public road shall also have sufficient storage for entering traffic not to back into the flow of traffic onto the public road. A traffic impact study, subject to approval by the Road Master or his/her designee, shall be used to determine the adequate queue length of the driveway throat. This requirement shall be applied in conjunction with other design requirements of parking lots. If there is a conflict between these two code provisions, then this code provision supersedes the other parking lot code requirements.

(3) Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view. Sight distance triangle requirements are identified in 340.03.07.c) and 340.03.07.d). Construction of driveways along acceleration lanes, deceleration lanes, or tapers shall be prohibited due to the potential for vehicular weaving conflicts unless there are no other alternatives for driveway locations. Only after a traffic impact study is conducted as defined in 340.06 and concludes that the driveway does not create a safety hazard along acceleration lanes, deceleration lanes, or taper shall the driveway be considered for approval. Approval of a driveway location along an acceleration lane, deceleration lane, or taper shall be based on the Road Master or his/her designee agreeing with the conclusions of the traffic impact study.

b) Public Road Stopping Sight Distance

Public roads shall have a minimum stopping sight distance requirement as summarized in Table 340.03.07.b). The minimum stopping sight distance is

measured from a height of 3.5 feet to a target on the roadway nominally six (6) inches in height.

The minimum stopping sight distance is based on design speed of the roadway. If a design speed is not known, then the assumed design speed shall be at least 5 mph more than the posted speed or may be measured as the 85th percentile speed.

Table 340.03.07.b)
Stopping Sight Distance Requirement

Design Speed (mph)	Minimum Distance (feet)
25	155
30	200
35	250
40	305
45	360
50	425

c) Sight Distance Triangle

Traffic entering an uncontrolled public road from a stop sign controlled public road, or from private roads or private driveways, shall have minimum sight distances, as shown in Table 340.03.07.c), except as allowed in 340.03.07.d).

The sight distance triangle is based on design speed of the roadway. If a design speed is not known, then the assumed design speed shall be at least 5 mph more than the posted speed or may be measured as the 85th percentile speed.

The intersection and driveway sight distance is measured from an eye height of 3.5 feet above the controlled road at least 15 feet from the edge of the vehicle travel lane of the uncontrolled public road to an object height of 4.25 feet on the uncontrolled public road in accordance with the table below. This definition for measuring sight distance is consistent with AASHTO (American Association of State Highway and Transportation Officials) standards.

Table 340.03.07.c)
Intersection/Driveway Sight Distance Triangle Requirement

Design Speed (mph)	Minimum Distance (feet)
20	200
25	250
30	300
35	350
40	400
45	450
50	500

d) Uncontrolled Intersection and Driveway Sight Distance Triangle in Residential Areas

This subsection only applies to local access roads in urban and rural residential areas. Uncontrolled intersections shall have an unobstructed sight distance triangle of 30 feet along the property lines of both intersection approaches. Any vegetation within the sight distance triangle must be 24 inches in height or less. For driveways, the sight distance triangle along the driveway and property line adjacent to the public road shall be a minimum of 10 feet for each leg.

e) Flag Lot Access Standard

(1) 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 county arterials or collectors.

(2) 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 road, or preserving natural or historic resources, under the following conditions:

(a) Flag lot driveways shall be separated by at least twice the minimum frontage requirement of that zoning district and at a minimum 220 feet.

(b) The flag lot driveway shall have a minimum width of 10 feet and maximum pavement width of 20 feet. The flag lot driveway shall be either a private right-of-way or access easement. This supersedes the requirements for minimum and maximum driveway widths.

(c) The lot area occupied by the flag driveway shall not be counted as part of the required minimum lot area of that zoning district.

(d) No more than two flag lots shall be permitted per private right-of-way or access easement.

(e) 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 whichever is greater. The intent is to accommodate flag lots in an infill situation and not to create a development of flag lots.

340.03.08 Connectivity and Circulation Standards

a) Connectivity

(1) The road system of proposed subdivisions shall be designed to connect with existing, proposed, and planned roads outside of the subdivision.

(2) Wherever a proposed development abuts unplatted, developable land for a future development phase of the same development, road stubs shall be provided to provide access to abutting properties or to logically extend the road system into the surrounding area.

(3) Neighborhood collectors and local residential access roads shall connect with surrounding roads 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 roads. Appropriate design and traffic calming measures are the preferred means of discouraging through traffic.

(4) A system of joint use driveways and crossover easements shall be established wherever feasible and shall incorporate the following:

(a) A continuous service drive or crossover easement corridor extending the entire length of each block served to provide for driveway separation consistent with the access standards set for each functional roadway classification.

(b) A design speed of 10 mph and an aisle width consistent with off-road parking lot standards, to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;

(c) Access stub-outs and other design features to make it visually obvious that the abutting properties will be tied in to provide crossover easement via a service drive;

(d) A unified access and circulation system plan shall be submitted as part of the documentation for joint and cross access. A unified access and circulation system plan encompasses contiguous, adjacent parcels that share access(es). The unified access and circulation system plan shows how the joint and cross access(es) work together to meet the needs of all property owners and uses. It includes showing how parking areas of the various uses sharing access(es) coordinate and work with each other.

b) Cul-de-sac and Accessways

(1) Cul-de-sacs or permanent dead-end roads may be used as part of a development plan only if topographical, environmental, or existing adjacent land use constraints make connecting and through roads infeasible. Where cul-de-sacs are planned, accessways shall be provided connecting the ends of cul-de-sacs to each other, to other roads, or to neighborhood activity centers unless topographical, environmental, or existing adjacent land use constraints make it infeasible.

(2) Accessways for pedestrians and bicyclists shall be 10 feet wide and located within a 15-foot-wide right-of-way or easement. If the roads within the subdivision are lighted, the accessways shall also be lighted at residential/residential illumination standard. Stairs or switchback paths may be used where grades are steep. Any vegetation planted within the accessway shall be less than 30 inches in height and must not create a safety issue for pedestrians and bicyclists.

340.03.09 Development Review Procedure for Access Management

a) Applicants for Development Reviews impacting access shall submit a preliminary site plan that shows:

(1) Location of existing and proposed access point(s) on both sides of the for a distance great enough to show that access spacing requirements are met;

(2) Distances from proposed access point to neighboring constructed access points, median openings (where applicable), traffic signals (where applicable), intersections, and other transportation features on both sides of the property;

(3) Number and direction of lanes to be constructed on the driveway plus striping plans;

(4) All planned transportation features (such as sidewalks, bikeways, signs, signals, etc.);

b) Development Reviews shall address the following access criteria:

(1) Access shall be properly placed in relation to sight distance, driveway spacing, and other related considerations, including opportunities for joint and cross access.

(2) The external road system to the project site and internal road system within the project site shall provide adequate access to buildings for residents, visitors, deliveries, emergency vehicles, and garbage collection.

c) The Oregon Department of Transportation shall review any application that involves access to the State Highway System for conformance with state access management standards.

d) Baker County Road Department staff shall review any application that involves road development or access to the Baker County road system.

340.04 BICYCLE AND PEDESTRIAN STANDARDS

At the discretion of the planning commission, special uses can be required to provide pedestrian and bicycle amenities. The bicycle and pedestrian facility standards can be found in Section 7 of the Baker County Transportation System Plan. The Baker County Transportation System Plan uses the standards for non-motorized facilities that are contained in the Oregon Bicycle and Pedestrian Plan, ODOT, June 14, 1995.

340.04.001 Bicycle and Pedestrian Circulation and Access Requirements for Site Plans

Required elements for a site plan shall include bicycle and pedestrian circulation elements such as accessways and walkways. The following shall be included in the site plan:

a) Pedestrian Access and Circulation.

Internal pedestrian circulation shall be provided in new commercial, office, and multi-family residential developments through the clustering of buildings, construction of hard surface walkways, landscaping, accessways, or similar techniques.

b) All site plans (industrial and commercial) shall clearly show how the site's internal pedestrian and bicycle facilities connect with external existing or planned facilities or systems.

340.04.002 Bicycle and Pedestrian Circulation and Access Requirements for Approval of Subdivision Tentative Plans and Final Plats

Information required shall include the location and design of all proposed pedestrian and bicycle facilities, including accessways. The following shall be included in subdivision tentative plans and final plats:

a) Cul-de-Sacs and Accessways.

(1) 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. If 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.

(2) 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.

(3) Accessways for pedestrians and bicyclists shall be provided at mid-block where the block is longer than 400 feet.

(4) The Hearings Body or Planning Director may determine, based upon evidence in the record, that an accessway is impracticable. Such evidence may include but is not limited to:

(a) Physical or topographic conditions make an access-way connection impractical. Such conditions include but are not limited to freeways, railroads, extremely steep slopes, wetlands, or other bodies of water where a connection cannot reasonable be provided.

(b) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering potential for redevelopment.

(c) If accessways would violate provisions of leases, easements, covenants, restrictions, or other agreements existing as of May 1, 1995 that preclude a required accessway connection.

340.05 ROAD STANDARDS

340.05.001 Road Design Conformity

The arrangement, character, extent, width, grade and location of all roads shall be designed to coordinate with existing and planned roads, topographical conditions, construction and maintenance costs, public conveniences and safety, and in their appropriate relation to the proposed uses of the land to be served by such road. Where not shown on an area plan, the arrangement and other design standards of roads shall conform to the provisions found in the Baker County Transportation System Plan and herein.

340.05.002 Relation to Adjoining Road System

The arrangement of roads in partitions and subdivisions shall be designed to coordinate with existing or desired roads in adjoining areas.

340.05.003 Projection of Roads

Where adjoining areas are not partitioned or subdivided to the maximum density allowed by the applicable zone(s), the arrangement of roads in new subdivisions shall make provisions for the proper projection of roads.

340.05.004 Dead-end Road or Cul-de-sac

No dead-end roads shall be constructed without a turn-around or cul-de-sac. A turn-around shall have an outside roadway radius of at least 45 feet and a road right-of-way radius of at least 60 feet. Future extension of the road into adjoining properties will result in vacating the unused portion of the cul-de-sac to adjacent properties. A cul-de-sac shall not be used as a parking area. Individual parcels and lots shall have access driveways extending into them where necessary.

340.05.005 Roads to be Carried to Property Lines

When a proposed partition or subdivision joins land capable of further division, road rights-of-way shall be carried to the boundaries of the tract to be partitioned or subdivided.

340.05.006 Frontage Roads

Where a partition or subdivision abuts or contains an existing arterial road, the Commission may require frontage roads or other such treatment as may be necessary for adequate protection of abutting properties and to afford separation of through and local traffic in order to preserve mobility on the arterial.

340.05.007 Local Roads

Local roads shall be so laid out that their use by through traffic will be discouraged.

340.05.008 Road Widths and Improvements

(a) Road standards shall not be less than those set forth in Figures 7-2 to 7-10 in the Baker County Transportation System Plan, except where it can be shown that probable future traffic development or physical characteristics are such as to justify modification of the standards.

(b) In areas designed and zoned for commercial use, road widths may be increased by such amount as may be deemed necessary by the Commission to provide for the free flow of through traffic without interference by parked or parking vehicles, and to provide safe parking space for such commercial or business districts.

(c) Road and related improvements shall be completed or bonded for completion prior to final plat consideration and shall be constructed under the direction of the Baker County Planning Department, according to the minimum Road Standards set forth in Figures 7-2 to 7-10 in the Baker County Transportation System Plan.

340.05.009 Reverse Curve

A tangent at least 100-feet long shall be introduced between reverse curves on arterial roads.

340.05.010 Large Parcel Partitions and Large Lot Subdivisions

Where a tract is partitioned or subdivided into larger parcels or lots than permitted by the applicable zone, such parcels or lots shall be arranged so as to allow the opening of future roads and logical further partitioning or subdividing.

340.05.011 Reserve Strips

Reserve strips controlling access to roads shall be prohibited except under conditions approved by the Planning Commission.

340.05.012 Road Grades

No road grade shall be less than 3/10 of one-percent, and shall not exceed the following, with due allowance for reasonable vertical curves:

Road Type	Percent Grade
Arterial	10
Collector	12

Minor	15
Marginal Access	15

340.05.013 Railroad or Limited Access Highway On or Abutting a Partition or Subdivision

Where a partition or subdivision is bordered on or contains a railroad right-of-way or limited access highway right-of-way, the Planning Commission may require a road approximately parallel to and on each side of such right-of-way at a distance suitable for the requirements of approach grades and future grade separations.

340.05.014 Half Road Prohibited

Half roads shall be prohibited except where essential to the reasonable development of the partition or subdivision in conformity with the other requirements of these regulations. Where the Commission finds it will be practicable to require the dedication of the other half when adjoining property is partitioned or subdivided, such right-of-way may be required as part of the initial plat.

340.05.015 Road Names and Numbers

Road names and numbers shall be assigned and conform to the Baker County Road Naming and Rural Address Ordinance No. 94-05.

340.05.016 Access to Roads Across Ditches

The developer shall provide access to all proposed lots or parcels, across all ditches and streams to accommodate a gross vehicle weight of 50,000 pounds and by a standard method approved by the County Planning Department.

340.05.017 Dedication

Streets and roads for public use are dedicated without any reservation or restriction other than reversionary rights upon vacation of any street or road and easements for public utilities [ORS 92.090(3)]. Baker County shall preserve right-of-way for planned transportation facilities through exactions, voluntary dedications, or setbacks.

340.05.018 Private Road Easements

Proposed private road easements shall be designated on the tentative plan and may be approved by the Planning Commission if they meet the following conditions:

(a) Private road easements shall provide access to no more than two proposed or potential parcels. No road easement providing access between public roads or other private road easements shall be approved as a private road easement.

(b) No private road easement shall be approved unless the Planning Commission is satisfied that such right-of-way is not presently needed, nor will ever be needed to be extended through to adjacent property, or to be utilized for public road purposes in the normal growth of the area.

(c) No private road easement shall be less than 30-feet wide, except that a modification may be approved to allow a driveway easement of 20-feet to one parcel or lot.

(d) Surface improvements on private road easements shall be as prescribed in Figure 7-9 in the Baker County Transportation System Plan.

(e) Maintenance responsibility for private road easements shall be predetermined before final plat approval according to ORS Chapter 660 through one of the following options:

(1) A maintenance agreement established by the developer with the legal mechanism for the agreement to be presented prior to approval of the final plat.

(2) Any other method of providing perpetual financing for maintenance services and improvements.

340.05.019 Alleys

(a) *Commercial and Industrial Districts:*

Alleys shall be required in commercial and industrial districts, except that the Commission may waive this requirement where other definite and assured provisions are made for service access, such as off-road loading, or unloading and parking consistent with and adequate for the uses proposed.

(b) *Width:*

The right-of-way width of an alley shall be that width determined necessary by the Planning Commission.

(c) *Dead-end:*

Dead-end alleys shall not be permitted, except that the Commission may waive this requirement where such dead-end alley is unavoidable, and where adequate turn-around facilities have been provided.

340.05.020 Easements

(a) Provided for Utilities

Easements with a sufficient right-of-way for utility maintenance may be required by the Planning Commission where necessary for utilities.

(b) Providing for Drainage

Where a partition or subdivision is traversed by a water course, drainage way, channel, or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of such water course, and such further width of construction, or both, as will be adequate for the purpose.

340.05.021 Blocks

(a) All subdivision plats shall continue the lot numbers and, if used, the block numbers of the subdivision plat of the same name last filed. New subdivisions shall not use block numbers or letters unless such subdivision is a continued phase of a previously recorded subdivision, bearing the same name, that previously used block numbers or letters [ORS 92.090(1)].

(b) Factors Governing Dimensions

Block length and width or acreage within boundary roads shall be such as to accommodate the size of lots required in the area by the zoning ordinance of the County, and to provide for convenient access, circulation control and safety of road traffic.

(c) Arrangement

A block shall generally be so designed as to provide two rows of lots.

340.05.022 Parcels & Lots

(a) Every parcel and lot shall abut and have adequate access to an approved public or private road and shall have a road frontage of not less than 100 feet, except a parcel or lot on the radius of a curved street or facing the circular end of a cul-de-sac shall have frontage of not less than 30 feet upon a street, measured on the arc of the right-of-way.

(1) Flag parcels and lots with less than 100 foot frontage shall not be permitted.

(2) In creating parcels and lots of two acres or less, their minimum area calculation shall not include the following:

(3) The land area located below the mean high water elevation of a lake, river, stream or other water body.

(4) The land area included within a public or private road right-of-way.

(b) A lot or parcel lawfully created through a platting process shall remain a discrete lot or parcel, unless the lot or parcel lines are vacated or the lot or parcel is further divided, as provided by law. Parcels not created through a platting process but legally created shall be comprised of contiguous ownership which joins by more than a point.

340.05.023 Subdivided Lots in a Forested Area

(a) Fuel Breaks

A buffer area shall be at least 200-feet wide in a forested area around an entire subdivision where all dead and down material is removed and remaining vegetation is thinned to reduce fire spreading. On slopes greater than 30-percent the fuel break shall be widened to 300-feet or as advised by the State Forester.

(b) Internal Fuel Breaks

Each residential dwelling shall maintain a fuel break of not less than 30-feet from dense vegetation. Dead and down material shall be removed and no natural or ornamental shrubbery within the fuel break shall provide a means for rapid transmission of fire from outside natural areas. Wider breaks may be required on slopes exceeding 30% on advice of a State Forester.

340.05.024 Water Distribution System

No subdivision shall receive final approval unless the county has received and accepted:

(a) A certification by the owner or superintendent of a publicly or privately owned domestic water supply system, that water is available to the boundary line of each and every lot depicted in the proposed subdivision;

(b) A performance agreement, bond, contract or other assurance that a domestic water supply system will be installed to the boundary line of each and every lot or parcel depicted in the proposed subdivision; or

(c) Where a community or public water supply system is not available, a statement signed by the applicant that water service will not be provided to any lot or parcel depicted in the subdivision.

340.05.025 Sewage Distribution System

No subdivision shall receive final approval unless the county has received and accepted:

(a) A certification by the owner or superintendent of a publicly or privately owned sewage disposal system that sewerage service is available to the boundary line of each and every lot depicted in the proposed subdivision;

(b) A performance agreement, bond, contract or other assurance that a sewage disposal system will be installed by or on behalf of the developer to the boundary line of each and every lot depicted in the proposed subdivision; or

(c) Where no community sewerage service is available, the Department of Environmental Quality shall approve the proposed methods of sewage disposal.

340.05.026 Storm & Water Runoff & Flood Control

Prior to considering final approval of a partition or subdivision, the developer shall make or be bonded to make drainage improvements as needed to accommodate storm water runoff and to minimize the potential for flood damage.

340.05.027 Sidewalk & Bicycle Trail Improvements

Sidewalk and bicycle improvements shall conform to the Baker County Bicycle-Pedestrian Plan.

340.05.028 Monuments

Monuments shall be placed by a professional land surveyor in all locations as required by ORS Chapter 92. Any monument which might be disturbed during construction, shall be properly replaced when such construction has been completed.

340.05.029 Map of Improvements as Constructed

A map showing all public improvements as built shall be filed in the Planning Department upon completion of said improvements.

340.05.030 Uninhabitable Lots

Lots or parcels subject to natural hazards deemed by the Commission to be undesirable for habitation shall not be plotted for residential occupancy, nor for such other uses as may increase danger to health, life or property, or aggravate the natural hazard. Such land within a plat shall be combined with lots suitable for development, or shall be set aside for such uses as will not be endangered by

periodic or occasional natural hazards or will not produce unsatisfactory living conditions.

340.05.031 Lot Remnants

All remnants of lots below minimum size left over after subdivision of a larger tract must be added to adjacent lots, rather than be allowed to remain as unused lots.

340.05.032 Access.

For joint and cross access, adjacent commercial and industrial developments classified as major traffic generators shall provide a cross access drive and pedestrian access to allow circulation between sites. Shared parking areas shall be permitted a reduction in required parking spaces if peak demands do not occur at the same time periods.

340.05.033 Access Connection and Driveway Design.

Driveway width shall meet the following guidelines: a) if the driveway is a one way in or one way out, then the driveway shall be a minimum width of 10 feet and shall have appropriate signage designating the driveway as a one way connection; b) for two-way access, each lane shall have a minimum width of 10 feet and a maximum of four lanes shall be allowed. Whenever more than two lanes are proposed, a median should be considered to divide the entrance and exit lanes. 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. 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 onsite circulation.

340.05.034 Existing Access Features.

Legal driveway connections on the state highway system in place as of adoption of the TSP shall be designated as conforming features and will be reconsidered only if safety concerns develop, if changes in use occur producing an additional 100 vehicle trips per day or more, or if zone changes/plan amendments are proposed accessing the state highway system. There are several alternatives for access point consideration - the access onto the state highway is closed and moved to a side road, the access is combined with other access points, the access is moved according to the spacing standards set forth in Table 7-1 of the Baker County Transportation System Plan in order not to conflict with intersection traffic, the access conforms to "Access Management Techniques" listed in the TSP, or nothing is done and the access is left alone.

340.05.035 New Access Features.

For proposed development of properties abutting the state highway system, new public roads shall be based on the existing spacing standards set forth in Table 7-1 of the Baker County Transportation System Plan. For proposed new development of properties adjacent to the state highway system, the developer/owner shall, prior to making application, notify and coordinate with Baker County and the ODOT District Manager (ODOT, Region 5) to ensure access safety and pursue access alternatives if safety is compromised. The highest priority shall be placed on providing access to property abutting the state highway system from local roads or combining driveways. Land development affecting the state highway system will address safety, capacity, functional classification, and level of service. Access management policies for Baker County set forth in the Transportation System Plan will be observed.

340.05.036 Shared Access. Proposed subdivisions with frontage on the state highway system shall be designed to share access points from the highway. If access from a local road is possible, then access shall not be allowed onto the state highway. If access from a local road becomes available, then conversion to that access is encouraged, along with closing the state highway access. A maximum of 2 accesses may be allowed regardless of the number of lots or businesses served.

340.06 APPROVAL OF TRANSPORTATION IMPROVEMENT PROJECTS IDENTIFIED IN THE TRANSPORTATION SYSTEM PLAN

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

(a) Normal operation, maintenance, repair, and preservation activities of existing transportation facilities.

(b) Installation of culverts, pathways, medians, fencing, guardrails, lighting, and similar types of improvements within the existing right-of-way.

(c) Projects specifically identified in the Transportation System Plan as not requiring further land use regulation.

(d) Landscaping as part of a transportation facility.

(e) Emergency measures necessary for the safety and protection of property

(f) 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.

(g) Construction of a street or road as part of an approved subdivision or land partition approved consistent with the applicable land division ordinance.

340.06.002 Conditional Uses Permitted

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 site plan and/or conditional use review, 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 and social patterns, including noise generation, safety, and zoning.

(b) The project is designed to minimize avoidable 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.

340.06.003 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.

340.06.004 Time Limitation on Transportation-Related Conditional Use Permits

Authorization of a conditional use shall be void after a period specified by the applicant as reasonable and necessary based on season, right-of-way acquisition, and other pertinent factors. This period shall not exceed three years.

340.07 TRAFFIC IMPACT STUDY REQUIREMENT

340.07.001 Intent and Purpose

A transportation impact analysis (TIA) provides an objective assessment of the anticipated modal transportation impacts associated with a specific land use action. The purpose of the scope of the TIA is to demonstrate compliance with the TPR (OAR 660-0012-0060) and Statewide Planning Goal 12, Transportation. For the project to demonstrate compliance with the TPR and Statewide Planning Goal 12, it must be demonstrated that the proposed project's traffic impacts are either within the performance standards of the impacted transportation facilities or that adverse impacts are mitigated within the adopted performance standards. A TIA answers important transportation-related questions such as:

- Can the existing transportation system accommodate the proposed development from a capacity and safety standpoint?
- What transportation system improvements are necessary to accommodate the proposed development?
- How will access to the proposed development affect the traffic operations on the existing transportation system?
- What transportation impacts will the proposed development have on the adjacent land uses, including commercial, institutional, and residential uses?
- Will the proposed development meet current standards for roadway design?

Throughout the development of the TIA (and beginning as early as possible), cooperation between Baker County staff, the applicant, and the applicant's traffic engineer is encouraged to provide an efficient and effective process.

Baker County staff may, at its discretion, and depending on the specific situation, require additional study components in a TIA beyond what is outlined in this section or waive requirements deemed inappropriate.

Baker County assumes no liability for any costs or time delays (either direct or consequential) associated with the preparation and review of a transportation impact analysis.

340.07.002 When a Transportation Impact Analysis is Required

A TIA shall be required when:

a) The development generates 25 or more peak-hour trips or 250 or more daily trips.

b) An access spacing exception is required for the site access driveway(s) and the development generates 10 or more peak-hour trips or 100 or more daily trips.

c) The development is expected to impact intersections that are currently operating at the upper limits of the acceptable range of level of service during the peak operating hour.

d) The development is expected to significantly impact adjacent roadways and intersections that have previously been identified as high crash locations or areas that contain a high concentration of pedestrians or bicyclists such as school zones.

e) A plan or land use regulation amendment significantly affects a transportation facility. This is defined by if a plan or land use regulation amendment does the following:

(1) Changes the functional classification of an existing or planned transportation facility;

(2) Changes standards implementing a functional classification system;

(3) Allows types or levels of land uses that would result in levels of travel or access what are inconsistent with the functional classification of a transportation facility; or

(4) Would reduce the level of service of the facility below the minimum acceptable level identified in the Transportation System Plan.

340.07.003 When a Transportation Assessment Letter is Required

If a TIA is not required, the applicant's traffic engineer shall submit a transportation assessment letter to Baker County indicating the proposed land use action is exempt. This letter shall outline the trip-generating characteristics of the proposed land use and verify that the site-access driveways or roadways meet Baker County's sight-distance requirements and roadway design standards.

340.07.004 Contents of a Transportation Impact Analysis

The following format shall be used in preparing a transportation impact analysis.

a) Table of Contents. Listing of all sections, figures, and tables included in the report.

b) Executive Summary. Summary of the findings and recommendations contained within the report.

c) Introduction. Proposed land use action, including site location, building square footage, and project scope. Map showing the proposed site, building

footprint, access driveways, and parking facilities. Map of the study area, which shows site location and surrounding roadway facilities.

d) Existing Conditions. Existing site conditions and adjacent land uses. Roadway characteristics (all transportation facilities and modal opportunities located within the study area, including roadway functional classifications, street cross section descriptions, posted speeds, bicycle and pedestrian facilities, on-street parking, and transit facilities). Existing lane configurations and traffic control devices at the study area intersections. Existing traffic volumes and operational analysis of the study area roadways and intersections. Roadway and intersection crash history analysis.

e) Background Conditions (without the proposed land use action). Approved developments and funded transportation improvements in the study area. Traffic growth assumptions. Addition of traffic from other planned developments. Background traffic volumes and operational analysis.

f) Full Buildout Traffic Conditions (with the proposed land use action). Description of the proposed development plans. Trip-generation characteristics of the proposed development (including trip reduction documentation). Trip distribution assumptions. Full buildout traffic volumes and intersection operational analysis. Intersection and site-access driveway queuing analysis. Expected safety impacts. Recommended roadway and intersection mitigations (if necessary).

g) Site Circulation Review. Evaluate internal site access and circulation. Review pedestrian paths between parking lots and buildings. Ensure adequate throat depth is available at the driveways and that vehicles entering the site do not block the public facilities. Review truck paths for the design vehicle.

h) Turn Lane Warrant Evaluation. Evaluate the need to provide turn lanes at the site driveways.

i) Conclusions and Recommendations. Bullet summary of key conclusions and recommendations from the transportation impact analysis.

j) Appendix. Traffic counts summary sheets, crash analysis summary sheets, and existing/background/full buildout traffic operational analysis worksheets. Other analysis summary sheets such as queuing and signal warrant analyses.

k) Figures. The following list of figures shall be included in the Transportation Impact Analysis: Site Vicinity Map; Existing Lane Configurations and Traffic Control Devices; Existing Traffic Volumes and Levels of Service (all peak hours evaluated); Future Year Background Traffic Volumes and Levels of Service (all peak hours evaluated); Proposed Site Plan; Future Year Assumed Lane Configurations and Traffic Control Devices; Estimated Trip Distribution Pattern; Site-Generated Traffic Volumes (all peak hours evaluated); Full Buildout Traffic Volumes and Levels of Service (all peak hours evaluated).

l) Preparer Qualifications. A professional engineer registered in the State of Oregon shall prepare the Transportation Impact Analyses. In addition, the preparer shall have extensive experience in the methods and concepts associated with transportation impact studies.

340.07.005 Study Area

The study area shall include, at a minimum, all site-access points and intersections (signalized and unsignalized) adjacent to the proposed site. If the proposed site fronts an arterial or collector street; the study shall include all intersections along the site frontage and within the access spacing distances extending out from the boundary of the site frontage. Beyond the minimum study area, the transportation impact analysis shall evaluate all intersections that receive site-generated trips that comprise at least 10% or more of the total intersection volume. In addition to these requirements, the Public Works Director (or his/her designee) shall determine any additional intersections or roadway links that might be adversely affected as a result of the proposed development. The applicant and the Public Works Director (or his/her designee) will agree on these intersections prior to the start of the transportation impact analysis.

340.07.006 Study Years to be Analyzed in the Transportation Impact Analysis

A level-of-service analysis shall be performed for all study roadways and intersections for the following horizon years:

a) Existing Year. Evaluate all existing study roadways and intersections under existing conditions.

b) Background Year. Evaluate the study roadways and intersections in the year the proposed land use is expected to be fully built out, without traffic from the proposed land use. This analysis shall include traffic from all approved developments that impact the study intersections, or planned developments that are expected to be fully built out in the horizon year.

c) Full Buildout Year. Evaluate the expected roadway, intersection, and land use conditions resulting from the background growth and the proposed land use action assuming full build-out and occupancy. For phased developments, an analysis shall be performed during each year a phase is expected to be completed.

d) Twenty-Year Analysis. For all land use actions requesting a Comprehensive Plan Amendment and/or a Zone Change, a long-term level-of-service analysis shall be performed for all study intersections assuming buildout of the proposed site with and without the comprehensive plan designation and/or zoning designation in place. The analysis should be performed using the future year traffic volumes identified in the Transportation System Plan (TSP). If the applicant's traffic engineer proposes to use different future year

traffic volumes, justification for not using the TSP volumes must be provided along with documentation of the forecasting methodology.

340.07.007 Study Time Periods to be Analyzed in the Transportation Impact Analysis

Within each horizon year, a level-of-service analysis shall be performed for the time period(s) that experience the highest degree of network travel. These periods typically occur during the mid-week (Tuesday through Thursday) morning (7:00 a.m. to 9:00 a.m.), mid-week evening (4:00 p.m. to 6:00 p.m.), and Saturday afternoon (12:00 p.m. to 3:00 p.m.) periods. The transportation impact analysis shall always address the weekday a.m. and p.m. peak hours when the proposed lane use action is expected to generate 25 trips or more during the peak time periods unless there is negligible traffic generated by the proposed project in those time periods. If the applicant can demonstrate that the peak-hour trip generation of the proposed land use action is negligible during one of the two peak study periods and the peak trip generation of the land use action corresponds to the roadway system peak, then only the worst-case study period shall be analyzed.

Depending on the proposed land use action and the expected trip-generating characteristics of that development, consideration of non-peak travel periods may be appropriate. Examples of land uses that have non-typical trip generating characteristics include schools, movie theaters, and churches. The Public Works Director (or his/her designee) and applicant shall discuss the potential for additional study periods prior to the start of the transportation impact analysis. The Public Works Director (or his/her designee) has the right to condition the applicant to study a non-peak period.

340.07.008 Traffic Count Requirements

Once the study periods have been determined, turning movement counts shall be collected at all study area intersections to determine the base traffic conditions. These turning movement counts shall be conducted during the weekday (Tuesday through Thursday) between 7:00 and 9:00 a.m. and between 4:00 and 6:00 p.m., depending on the proposed land use. Historical turning movement counts may be used if the data are less than 12 months old, but must be factored to meet the existing traffic conditions.

340.07.009 Trip Generation for the Proposed Development

To determine the impacts of a proposed development on the surrounding transportation network, the trip-generating characteristics of that development must be estimated. Trip-generating characteristics shall be obtained from one of the following acceptable sources:

- Institute of Transportation Engineers (ITE) Trip Generation Manual (latest edition).

- Specific trip generation studies that have been conducted for the particular land use action for the purposes of estimating peak-hour trip-generating characteristics. The Public Works Director (or his/her designee) shall approve the use of these studies prior to their inclusion in the transportation impact analysis.

In addition to new site-generated trips, several land uses typically generate additional trips that are not added to the adjacent traffic network. These trips include pass-by trips and internal trips and are considered to be separate from the total number of new trips generated by the proposed development. The procedures listed in the most recent version of the *Trip Generation Handbook* (ITE) shall be used to account for pass-by and internal trips.

340.07.010 Trip Distribution

Estimated site-generated traffic from the proposed development shall be distributed and assigned on the existing or proposed arterial/collector street network. Trip distribution methods shall be based on a reasonable assumption of local travel patterns and the locations of off-site origin/destination points within the site vicinity. Acceptable trip distribution methods shall be based on one of the following procedures:

- An analysis of local traffic patterns and intersection turning movement counts gathered within the previous 12 months.

- A detailed market study specific to the proposed development and surrounding land uses.

340.07.011 Intersection Operation Standards

Baker County evaluates intersection operational performance based on levels of service and "volume-to-capacity" (v/c) ratio. When evaluating the volume-to-capacity ratio, the total traffic demand shall be considered.

a) Intersection Volume-to-Capacity Analysis. A capacity analysis shall be performed at all intersections within the identified study area. The methods identified in the latest edition of the *Highway Capacity Manual*, published by the Transportation Research Board, are to be used for all intersection capacity calculations. Baker County requires that all intersections within the study area must maintain a v/c ratio of 0.95 or less. It should be noted that the mobility standards in the Oregon Highway Plan apply to Oregon Department of Transportation facilities.

b) Intersection Levels of Service. Baker County requires all intersections within the study area to maintain an acceptable level of service (LOS) upon full buildout of the proposed land use action. LOS calculations for signalized intersections are based on the average control delay per vehicle, while LOS calculations for unsignalized intersections are based on the average control

delay and volume-to-capacity ratio for the worst or critical movement. All LOS calculations shall be made using the methods identified in the most recent version of the *Highway Capacity Manual* (or by field studies), published by the Transportation Research Board. The minimum acceptable level of service for signalized intersections is LOS "D". The minimum acceptable level of service for all-way stop controlled intersections and roundabouts is LOS "D". The minimum acceptable level of service for unsignalized two-way stop controlled intersections is LOS "E" or LOS "F" with a v/c ratio of 0.95 or less for the critical movement. Any intersections not operating at these standards will be considered to be unacceptable.

340.07.012 Review Policy and Procedure

The following criteria shall be used in reviewing a transportation impact analysis as part of a subdivision or site plan review.

a) The road system is designed to meet the projected traffic demand at full build-out.

b) Proposed driveways do not adversely affect the functional character of the surrounding roadways.

c) Adequate intersection and stopping sight distance is available at all driveways.

d) Proposed driveways meet Baker County's access spacing standard or sufficient justification is provided to allow a deviation from the spacing standard.

e) Opportunities for providing joint or crossover access have been pursued.

f) The site does not rely upon the surrounding roadway network for internal circulation.

g) The road system provides adequate access to buildings for residents, visitors, deliveries, emergency vehicles, and garbage collection.

h) A pedestrian path system is provided that links buildings with parking areas, entrances to the development, open space, recreational facilities, and other community facilities per the Transportation Planning Rule.

340.07.013 Conditions of Approval

As part of every land use action, Baker County (if access to a County roadway is proposed) and ODOT (if access to a state roadway is proposed) is required to identify conditions of approval needed to meet operations and safety standards and provide the necessary right-of-way and improvements to develop the future planned transportation system. Conditions of Approval that should be evaluated as part of subdivision and site plan reviews include:

a) Crossover easement agreements for all adjoining parcels to facilitate future access between parcels.

b) Conditional access permits for new developments which have proposed access points that do not meet the designated access spacing policy and/or have the ability to align with opposing access driveways.

c) Right-of-way dedications for future planned roadway improvements.

d) Half-street improvements along site frontages that do not have full-buildout improvements in place at the time of development.

e) Off-site improvements to bring transportation facilities impacted by development to current standards identified in the Transportation System Plan.

340.07.014 Conditions of Approval for Comprehensive Plan and Land Use Regulation Amendments

Amendments to the comprehensive plan and 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.

340.07.015 Transportation Impact Analysis Checklist

As part of the transportation impact analysis review process, all transportation impact analyses submitted to Baker County must satisfy the requirements illustrated in the Checklist for Acceptance of Transportation Impact Analyses. The checklist is provided below.

Transportation Impact Analysis Checklist

Title of Report: _____

Author: _____ Date: _____

Yes	No	N/A	
			BACKGROUND INFORMATION
☐	☐	☐	P. E. Stamp and Signature
☐	☐	☐	Proper format including Table of Contents, Executive Summary, Conclusions, and Appendices
			EXISTING CONDITIONS
☐	☐	☐	Description of proposed land use action
☐	☐	☐	Figure - Proposed Site Plan
☐	☐	☐	Figure - Site Vicinity Map showing the minimum study area boundary
☐	☐	☐	Description of existing site conditions and adjacent land uses
☐	☐	☐	Description of existing transportation facilities including roadway, transit, bicycle, and pedestrian facilities
☐	☐	☐	Figure - Existing Lane Configurations and Traffic Control Devices
☐	☐	☐	Figure - Existing traffic-volumes measured within previous 12 months
☐	☐	☐	Existing conditions analysis of the study area intersections
☐	☐	☐	Roadway and intersection crash history analysis
			BACKGROUND CONDITIONS
☐	☐	☐	Approved planned developments and funded transportation improvements
☐	☐	☐	Documentation of traffic growth assumptions and added traffic from other planned developments
☐	☐	☐	Figure – Background traffic volumes at study area intersections
☐	☐	☐	Background conditions analysis of the study area intersections
			FULL BUILDOUT CONDITIONS
☐	☐	☐	Description of proposed land use action and intended use
☐	☐	☐	Trip Generation - Based on most recent edition of ITE Trip Generation or approved other rates; include daily, AM, and PM peak hour (other time periods where applicable); provide complete documentation of calculations.
☐	☐	☐	Trip Distribution - Based on a regional planning model, supplied by staff, or analysis of local traffic patterns based on collected data.
☐	☐	☐	Figure – Estimated Trip Distribution Pattern (showing assignment onto major arterial/collector system)
☐	☐	☐	Figure – Site-Generated Traffic Volumes at study area intersections
☐	☐	☐	Figure – Full Buildout Traffic Volumes at study area intersections

☐	☐	☐	Full Buildout conditions analysis of the study area intersections
☐	☐	☐	Identify study area intersection and access driveway deficiencies

WARRANTS/SAFETY ANALYSIS

☐	☐	☐	Verify compliance to Access Spacing Standard or justify any variance needed
☐	☐	☐	Address potential safety problems resulting from conflicting turn movements with other driveways and internal traffic circulation
☐	☐	☐	Determine need for storage lanes, right-turn lanes, and left-turn lanes
☐	☐	☐	Address availability of adequate sight distance at frontage road access points, for both existing and ultimate road configuration
☐	☐	☐	Evaluate need for deceleration lanes, and channelization when determined necessary by accepted standards and practices.
☐	☐	☐	Evaluate whether traffic signals are warranted at study area intersections

IMPROVEMENT RECOMMENDATIONS

☐	☐	☐	Identify alternate methods of mitigating identified deficiencies
☐	☐	☐	If a signal is warranted, recommend type of signal control and phasing
☐	☐	☐	If turn lanes required, recommend amount of storage

OTHER

☐	☐	☐	Technical Appendix-sufficient material to convey complete understanding to staff of technical adequacy

COMMENTS:

_____

_____

_____

_____

_____

_____

Reviewed by: _____ Date of Review: _____

NOTE: This checklist displays the mimimum information required for a Transportation Impact Analysis to be accepted as complete. Acceptance does not certify adequacy and is in no way an approval. Additional information may be required after acceptance of the Transportation Impact Analysis.