W. 8. D.

Memo Date:

June 23, 2008

First Reading Date: July 23, 2008

Second Reading/Public Hearing Date: August 6, 2008

TO:

Board of County Commissioners

DEPARTMENT:

Public Works, Land Management Division, Planning Department

PRESENTED BY:

Stephanie Schulz, Metro and Small City Planner

AGENDA ITEM TITLE:

Ordinance No. PA 1248 / In the Matter of Adopting the Cottage Grove 2007 Transportation System Plan and Adopting Savings and Severability Clauses. (File No. PA 08-

5142, Applicant: City of Cottage Grove)

I. MOTION:

<u>For July 23, 2008:</u> Move approval of the first reading and setting the second reading and public hearing on Ordinance No. PA 1248 for August 6, 2008 at 1:30 p. m.

<u>For August 6, 2008</u>: Move approval of Ordinance No. 1248 / In The Matter Of Co-Adopting The 2007 Cottage Grove Transportation System Plan For Application In The Urbanizable Area Outside Cottage Grove City Limits And Within The Cottage Grove Urban Growth Boundary and Adopting Savings and Severability Clauses. (File No. PA 08-5142, Applicant: City of Cottage Grove)

II. AGENDA ITEM SUMMARY

The Cottage Grove 2007 TSP identifies future transportation facility and service needs for the city out to the year 2025. Statewide Planning Goal 2 requires affected governmental units with land use planning responsibilities to coordinate all plans which guide land use decisions. Lane County has responsibility for the lands between the city limits and UGB of small cities in the county, and the Cottage Grove TSP contains policies and projects proposed that are applicable to the urbanizable area outside the city, therefore, the Board is requested to co-adopt the Cottage Grove 2007 TSP.

III. BACKGROUND/IMPLICATIONS OF ACTION

A. Board Action and Other History

March 10, 2007 - Cottage Grove City Council held a public hearing and adopted the attached Cottage Grove 2007 TSP (Resolution No. 1655).

<u>February 6, 2008</u> - City submitted the adopted refinement plan to Lane County for co-adoption by the Board under coordinated land use planning requirements. The Cottage Grove 2007 TSP identifies future transportation facility and service needs for the city out to the year 2025. Statewide Planning Goal 2 requires affected governmental units with land use planning responsibilities to coordinate all plans which guide land use decisions.

<u>April 30, 2008</u> – Notice of the Lane County planning commission public hearing was published in the Register Guard and written referral was mailed for agency comment.

May 20, 2008 – Lane County Planning Commission conducted a work session and public hearing regarding co-adoption of the Cottage Grove TSP. They deliberated after public

testimony and voted to unanimously recommend co-adoption of the Cottage Grove TSP by the Board.

<u>July 9, 2008</u> – Notice of the Board of Commissioners public hearing was published in the Register Guard and written referral was mailed to affected agencies and interested parties informing them of the opportunity to comment before the elected officials.

<u>August 6, 2008</u> – Board of Commissioners conducted a public hearing regarding co-adoption of the Cottage Grove TSP.

B. Policy Issues

There are no administrative policy issues that affect this agenda item.

Referral Comments Received

Lane County Public Works Transportation Planning staff responded favorably to the planning commission referral, as they had served on the city's technical advisory committee during development of the plan to ensure planning consistency by applying the same policies and objectives to the urbanizable area for future growth of the city within the existing UGB that apply to the city.

C. Board Goals

Adoption of this ordinance after conducting a hearing supports the following Lane County Strategic Goals adopted by the Board:

- Provide opportunities for citizen participation in decision making, voting, volunteerism and civic and community involvement.
- Contribute to appropriate community development in the areas of transportation and telecommunications infrastructure, housing, growth management and land development.

D. Financial and/or Resource Considerations

Current funding sources for Cottage Grove's transportation program are summarized on Table 10-1 in the TSP and include state fuel tax and vehicle license fees, local gas tax, and system development charges. The city has previously had other revenue sources including revenues from Lane County and Federal grants, however none of these programs are considered to be reliable sources of future funding on an annual basis and are not included in their future program budgets.

Processing fees for the application were paid by the city. There are no further financial or resource considerations.

E. Analysis

Since 1998, there have been changes to state transportation plan policies and regulations that are addressed in the Cottage Grove TSP update. In 2005, Cottage Grove received grant funding from the Oregon Department of Transportation (ODOT) to prepare this timely update to the city's 1998 Transportation System Plan to bring the TSP into compliance with amendments to the Transportation Planning Rule. The city process for developing this update included establishment of and regular meetings with a citizen advisory group, conducting open houses for public review, revision of the system plan, and public hearings at the city planning commission and city council prior to adoption by Resolution No. 1655.

The TSP retains relevant policies and regulations, and adds new goals, objectives and policies in response to recent initiatives within the state and county as they relate to transportation facilities. The Cottage Grove 2007 TSP addresses all modes of transportation: motor vehicles, public transportation, bicycle, pedestrian, air, waterways, and railroads.

Criteria

12.050 Method of Adoption and Amendment:

(1) The adoption of the comprehensive plan or an amendment to such plan shall be by an ordinance.

Ordinance No. PA 1248 is attached for consideration and adoption by the Board.

- (2) The Board may amend or supplement the comprehensive plan upon a finding of:
 - (a) an error in the plan; or
 - (b) changed circumstances affecting or pertaining to the plan; or
 - (c) a change in public policy; or

Changes to the Oregon Transportation Planning Rule adopted by the Oregon Legislature and applicable to Oregon cities became law after the adoption of the 1998 Cottage Grove TSP. Cottage Grove responded to this change in public policy by hiring a consultant, conducting a public review, and updating their 1998 TSP. The 2007 TSP adopted by city council and subsequently submitted to the Board under this application responds to transportation public policy through the year 2025.

(d) a change in public need based on a reevaluation of factors affecting the plan; provided, the amendment or supplement does not impair the purpose of the plan as established by LC12.005 below.

The Cottage Grove 2007 TSP identifies planned changes in response to public needs based on re-evaluation of the changing form of the Cottage Grove community and the changing state regulations which are the primary factors guiding land use planning in Oregon. Co-adoption by the Board would be fully compliant with and not impair the purpose of the plan as established in LC12.005.

LC12.005 Purpose. The board shall adopt a comprehensive plan. The general purpose of the comprehensive plan is the guiding of the social, economic, and physical development of the County to best promote public health, safety, order, convenience, prosperity and general welfare.

Lane County Rural Comprehensive Plan (RCP) Chapter 14 identifies general purpose urbanization policies applicable to small cities in Lane County. The Cottage Grove 2007 TSP is the best guidance to achieve coordinated establishment approaches for transportation needs of people and goods to serve the lands within the Cottage Grove UGB.

Within established UGB's, city plans ratified or adopted by the County are to be considered the governing land use documents, but do not pre-empt final County legal responsibility or authority. This ensures orderly and logical future expansion of urban land uses in a coordinated manner.

Lane Code Chapter 16.400(6)(h)(iii)(aa) further requires the Board to make findings that the proposed amendment meets all applicable requirements of state and local law, Statewide Planning Goals and Oregon Administrative Rules.

<u>Exhibit B</u> to Ordinance No. PA 1248 contains the Findings of Fact and Compliance with Statewide Planning Goals and Rules to support Board adoption of the Cottage Grove 2007 TSP.

F. Alternatives/Options

- Option 1. Approve the Ordinance as presented.
- Option 2. Revise the Ordinance as directed by the Board and return for approval of the revised Ordinance on a date certain set by the Board.
- Option 3. Do not approve the Ordinance and deny the application.

IV. TIMING/IMPLEMENTATION

Cottage Grove has adopted the Transportation System Plan and is applying those policies on transportation within the city limits at this time. Upon co-adoption by the Board, those policies will also apply to the urbanizable area outside the city limits and within the UGB, and therefore the entire area scheduled for future urban development will have the same planning policies and objectives to apply to implementing alternatives and transportation options through the planning period.

V. RECOMMENDATION

Staff recommends Option 1.

Planning Commission Recommendation

The Cottage Grove TSP was presented to the Lane County Planning Commission for their evaluation in a public hearing held on May 20, 2008. Following the public hearing the record was closed, the commission deliberated the proposal, and unanimously voted to recommend the Board adopt the refinement plan for application within the urbanizable area of Cottage Grove. Commission reasoning is set forth in the meeting minutes, <u>Attachment 2</u> to this packet.

VI. FOLLOW-UP

Notice of Board action will be provided to DLCD and all interested parties. If the Board adopts the Ordinance as presented or modified, notice of that action will also be provided.

Should the Board choose Option 3, an Order with findings setting forth the Board's reasons for denying the Ordinance would be prepared and returned to the Board for adoption.

VII. ATTACHMENTS

- Ordinance No. PA 1248
 Exhibit A Cottage Grove 2007 Transportation System Plan and Appendix Exhibit B Findings
- 2. Planning Commission Minutes, May 20, 2008

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

Ordinance No. PA 1248

IN THE MATTER OF ADOPTING THE COTTAGE GROVE 2007 TRANSPORTATION SYSTEM PLAN AND ADOPTING SAVINGS AND SEVERABILITY CLAUSES

WHEREAS, the Board of County Commissioners of Lane County adopted the Lane County Rural Comprehensive Plan with Ordinance PA 883; and

WHEREAS, the Introduction to the Lane County Rural Comprehensive Plan describes the hierarchal relationship between that Plan, the comprehensive plans for each of the Cities within the county, and special purpose plans such as the 2007 Cottage Grove Transportation System Plan ("Cottage Grove TSP"); and

WHEREAS, both the comprehensive plans for cities and special purpose plans such as the Cottage Grove TSP are to be incorporated as components of the Lane County Comprehensive Plan; and

WHEREAS, Section 660, Division 12, Oregon Administrative Rules (OAR) specifies the procedural and technical requirements of the Oregon Transportation Planning Rule and OAR 660-12-015(3) requires cities and counties to prepare local Transportation System Plans, and adopt them as an amendment to their acknowledged comprehensive plans; and

WHEREAS, the city of Cottage Grove and Lane County have entered into an Intergovernmental Agreement regarding coordinated planning and urban services pursuant to ORS 190.003 et. seq. to carry out their respective responsibilities under ORS Chapter 195 and ORS Chapter 197; and

WHEREAS, after conducting public hearings and considering the record, the City of Cottage Grove adopted the Cottage Grove TSP on March 10, 2008, by City Resolution No. 1655; and

WHEREAS, coordinated land use planning for the urbanizable lands outside the Cottage Grove city limits and within the Cottage Grove urban growth boundary requires co-adoption of refinement plans and plan amendments by Lane County; and

WHEREAS, the Lane County Planning Commission conducted a public hearing on the Cottage Grove TSP on May 20, 2008, and forwarded a recommendation to the Board of Commissioners to adopt the Cottage Grove TSP as adopted by the City; and

WHEREAS, the Board conducted a public hearing on August 6, 2008, where it heard testimony and received other evidence on the Cottage Grove TSP and is now ready to take final action.

NOW, THEREFORE, the Board of County Commissioners of Lane County ordains as follows:

<u>Section 1.</u> The Cottage Grove Transportation System Plan, November 2007, attached as Exhibit "A", and incorporated here by this reference, is hereby adopted as a refinement plan to the Cottage Grove Comprehensive Plan for land outside the Cottage Grove city limits and within the Cottage Grove Urban Growth Boundary, as shown in the adopted refinement plan, and as an amendment to the transportation element of the Lane County Comprehensive Plan.

FURTHER, though not part of this ordinance, the Board of County Commissioners adopts the Findings attached as Exhibit "B", in support of this action as constituting evidence in the record demonstrating that the proposal meets the requirements of the Cottage Grove Comprehensive Plan, Lane County Comprehensive Plan, Lane Code, and applicable state and local law.

The provisions of the Lane County Comprehensive Plan amended by this Ordinance remain in full force and effect to authorize prosecution of persons in violation of those provisions prior to the effective date of this Ordinance.

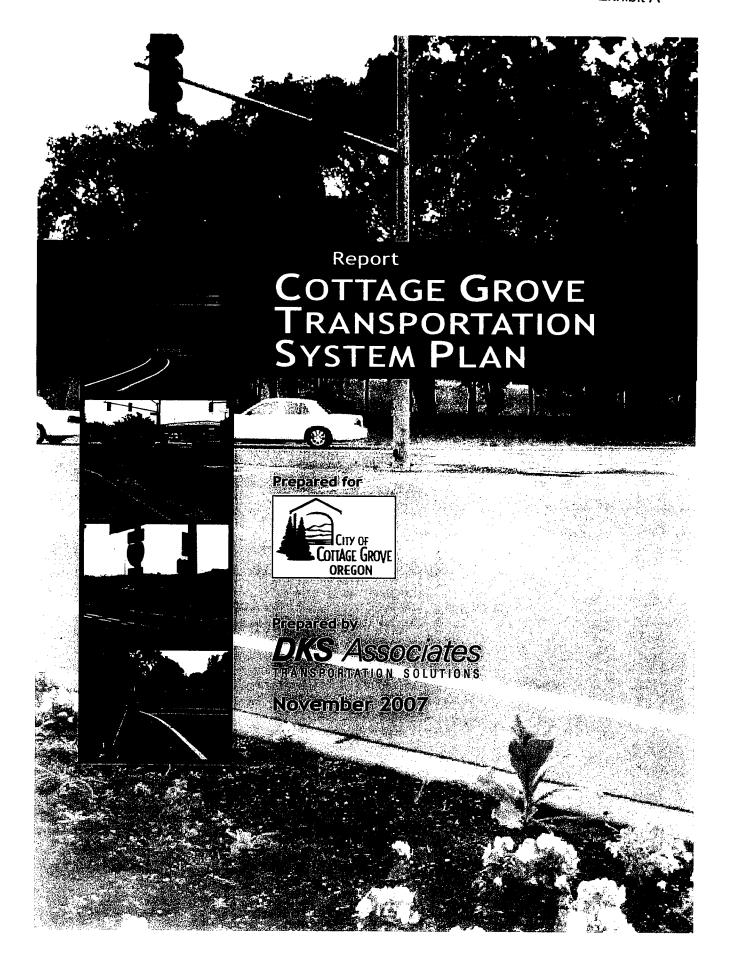
If any section, subsection, sentence, clause, phrase or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not effect the validity of the remaining portions hereof.

ENACTED this	day of	2008.
	Chair, Lane County Board of C	commissioners
	Recording Secretary for this M	eeting of the Board

APPROVED AS TO FORM

ate 7-14708 Lane Count

OFFICE OF LEGAL COUNSEL





Acknowledgements

Production of this report has been the collective effort of the following people:

City of Cottage Grove

Howard Schesser Community Development Director

Amanda Ferguson
City Planner
Ron Bradsby
City Engineer

DKS Associates

Carl Springer, PTP, PTOE Project Manager

Reah Flisakowski, PE Project Engineer

Mat Dolata, EIT
Transportation Engineering Staff

Winterbrook Planning

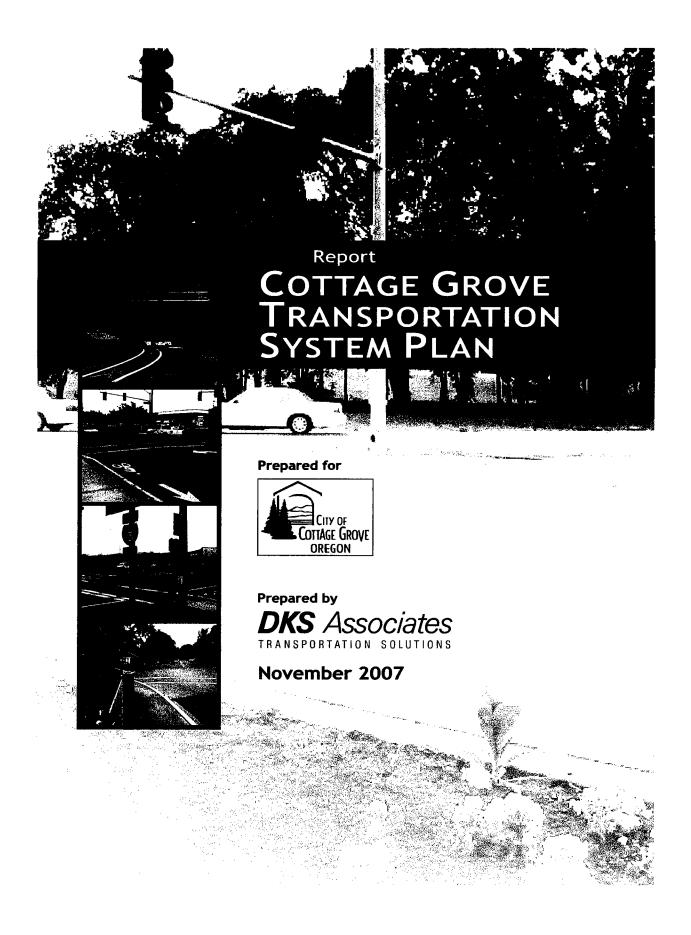
Tom Armstrong Jeannine Rustad

Technical Advisory Committee

Savannah Crawford, ODOT

Andy McClean, South Lane County Fire and Rescue
Cathy Bellavita, Citizen Representative
Celia Barry, Lane County Public Works
George Devine, Planning Commission
Jim Branch, Citizen Representative
Marguerite Nabeta, Department of Land Conversation and Development
Matt Parsons, Planning Commission
Robert Hunt, City Council
Tara Salusso, South Lane Wheels
Wayne Clark, City Council & South Lane School District

This project is partially funded by a grant from the Transportation and Growth Management (TGM) Program, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by federal Transportation Equity Act for the 21st Century (TEA-21), local government, and the State of Oregon funds. The contents of this document do not necessarily reflect views or policies of the State of Oregon.





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SUMMARY

Overview

This Cottage Grove Transportation System Plan (TSP) identifies projects and programs needed to support the City's Goals and Policies and to serve planned growth through the TSP horizon year (2025). The TSP builds on the previous plan that was developed in 1998 for the city, and addresses changes in local and regional growth patterns, new transportation planning policies adopted by the state, and recent changes in transit services provided to the City, among other issues. This document presents the recommended investments and priorities for the Pedestrian, Bicycle, Transit, and Motor Vehicle systems in the City of Cottage Grove along with new transportation programs to correct existing shortfalls and enhance critical services. For each travel mode, a Master Plan project map and list are identified to support the city's transportation goals and policies. The most critical elements of these Master Plans are referred to as Action Plans. The final chapter identifies the estimated plan costs and makes recommendations about potential new funding sources to support the plan.

Plan Committees

The plan was developed in close coordination with Cottage Grove city staff and key representatives from the surrounding communities. A formal committee was formed to participate in the plan development. The committee included agency staff from Oregon Department of Transportation, South Lane Wheels, Lane County, and Cottage Grove. Several of these members participated in reviewing the technical methods and findings of the study. They helped to consider consistency with the plans and past decisions in adjoining jurisdictions, and reach consensus on new recommendations.

The committee also included representatives for citizens and community members including several Planning Commissioners, City Council members, and local business leaders. A series of meetings were held with the committee to report interim study findings and any outstanding policy issues that required their direction.

Citizen input was incorporated into the plan via public involvement efforts that included public open houses. The open houses presented TSP development and provided a forum for citizens to give input and feedback related to transportation concerns in Cottage Grove. Mailings and online postings also communicated the TSP progress.

Plan Organization

This document is divided into ten chapters and a separate Technical Appendix. The title and focus of each chapter is summarized below:

Chapter 1: Summary

This chapter provides a brief overview of the plan and presents the estimated funding needed to implement it.

Chapter 2: Goals, Objectives and Policies

This chapter presents the recommended goals, objectives and policies related to transportation for adoption into the City's Comprehensive Plan.

Chapter 3: Existing Conditions

This chapter examines the current transportation system in terms of the built facilities, how well they perform and comply with existing policies, and where outstanding deficiencies exist.

Chapter 4: Future Demands

This chapter presents the details of how the City of Cottage Grove is expected to grow under its present Comprehensive Plan through 2025, and how travel demands on the city and regional facilities will change from general growth in the region.

Chapter 5: Pedestrian Plan

This chapter presents strategies and plan recommendations to enhance pedestrian facilities and focus new improvements in areas with the highest concentration of activity.

Chapter 6: Bicycle Plan

This chapter presents strategies and plan recommendations to enhance bicycle facilities and focus new improvements in areas with the highest concentration of activity.

Chapter 7: Transit

This chapter makes recommendations to be considered by Lane Transit District and South Lane Wheels in their future enhancements to transit services.

Chapter 8: Motor Vehicles

This chapter presents strategies and plan recommendations to provide adequate mobility and access to the city, county and state facilities as travel demands grow to 2025 levels. This chapter also addresses street design standards, access spacing standards, functional class designations, and other programs to monitor and manage the street system.

Chapter 9: Other Modes

This chapter discusses transportation issues related to rail, air, water, and pipeline transportation.

Chapter 10: Financing and Implementation

This chapter presents the complete estimated revenues and costs for the transportation projects and programs developed in the plan. New funding alternatives are presented to bridge the gaps between the two. New funding programs and implementation measures will be required to put this updated transportation plan into action.

Technical Appendix

The appendices contain detailed information regarding traffic volumes, reported vehicle crash data, street and intersection operational analysis, and other background materials.

Goals, Objectives and Policies

The City's Comprehensive Plan lays out a policy framework regarding transportation services. The proposed goals and objectives pertaining to Transportation are presented in Chapter 2. Goals are defined as brief guiding statements that describe a desired result. Objectives associated with the goals describe the actions needed to move the community in the direction of completing each goal. Policies are identified to assist in achieving goals and objectives. As a component of the Comprehensive Plan, policies have the force of law. These goals, objectives and policies were used in the development of this Transportation System Plan to develop strategies and implementing measures for each of the travel modes applied in the City of Cottage Grove. The TSP will be adopted as a refinement plan to the city's Comprehensive Plan.

Projects and Programs

Pedestrian

Detailed field observations and analysis was conducted on existing collector and arterial streets to identify locations where new or in-fill facilities would be most beneficial to the community. Separate considerations were made for enhancements to existing street crossings at key locations. The findings included:

- Identifying a series of sidewalk in-fill projects (Pedestrian Master Plan) to connect
 existing sidewalks to key major pedestrian generators, such as schools, government
 facilities, etc.
- Identifying critical locations along roadways where pedestrian crossings are difficult due to a lack of designated crossings along desired routes of travel.

Bicycle

A Bicycle Master Plan was developed to provide bicycle access to all areas of the City, particularly key destinations, such as schools, community facilities, and shopping areas. The main findings included:

- Providing for key north-south and east-west routes to connect residential neighborhoods to employment centers, transit, parks, and regional trail facilities.
- Identifying program costs to expand arterial streets to provide on-street bike facilities (or off-street trails).

Transit

A number of strategies were reviewed including increased fixed-route bus services and extended transit services in Cottage Grove. South Lane Wheels should continue to expand its service and increase public awareness. Lane Transit District should work with the City to evaluate additional bus stop amenities.

Motor Vehicle

A comprehensive evaluation of the 2025 motor vehicle needs for city streets and affected state highway facilities was performed to understand how well current plans will serve long-term growth within the City of Cottage Grove. A package of new projects was developed to maintain mobility standards or improve safety on city and state facilities. Key findings from the Motor Vehicle chapter include:

- A number of intersections in the city will fail to meet operational standards during peak hours without capacity expansion projects. (Gateway Boulevard at Main Street, OR 99 at Main Street, OR 99 at the Cottage Grove Connector, and I-5 southbound ramps at the Cottage Grove Connector are expected to fail without significant roadway widening projects.)
- New roadway extensions including Cleveland Avenue, Gateway Boulevard, R Street and Lincoln Avenue create improved connectivity in the roadway network and relieve pressure on otherwise failing intersections in the southern portion of the city.
- A number of local, neighborhood and collector street connections were identified at strategic locations within the existing community and the edges where growth is expected. These new connections should be made, either as development occurs or funding is available to improve circulation and connectivity for all travel modes.
- The "Downtown Revitalization and Refinement Plan" should be implemented. This realigns the existing OR 99 alignment at the north side of Main Street improving sight distance and creating a more welcoming environment for pedestrians and bicycles.
- An Interchange Area Management Plan (IAMP) to be conducted with ODOT is recommended to address operational issues along the Cottage Grove Connector from OR 99 to the I-5 ramps.

Several elements of the road system will require further study to determine the preferred solution, and expected costs would change accordingly.

Transportation Programs

Table 1-1 summarizes the elements of the plan that were not specifically defined in the recommended project lists, and explains how costs will be addressed for these elements.

Table 1-1: Non-Auto, Pedestrian and Bicycle Costs Issues

Travel Mode	Issues
Parking	The Transportation System Plan does not define specific projects. Private property owners will provide off-street parking as land develops.
Neighborhood Traffic Management (NTM)	Specific NTM projects are not defined. These projects will be subject to neighborhood consensus based upon City placement and design criteria. A City NTM program, if desired, should be developed with criteria and policy adopted by the City Council. Traffic humps can cost \$2,000 to \$4,000 each and traffic circles can cost \$3,000 to \$15,000 each. A speed trailer can cost about \$10,000. It is important, where appropriate, that any new development incorporate elements of NTM as part of its on-site design. The City has no allocation for NTM in the current budget.
Public Transportation	Lane Transit District and South Lane Wheels will continue to develop costs for implementing transit related improvements.
Trucks/Freight	Roadway funding will address these needs.
Rail	Costs to be addressed and funded by private railroad companies and the state.
Air, Water, Pipeline	Not required by the City
Transportation Demand Management	Not required by the City

Financing

Current costs for maintaining the existing transportation system through 2025 are estimated at \$29.1 million. Estimated revenues with existing funding mechanisms fall short of this amount with \$28.1 million estimated gross revenues. Because projected revenues and maintenance costs result in an estimated \$1 million funding deficit, no capital improvement projects that provide new capacity (new roadways, turn lanes, bike lanes, etc.) would be constructed without additional revenues sources.

Therefore, to fund the capital projects identified in this plan for the City of Cottage Grove, new funding sources or programs need to be provided. A variety of funding options are discussed in detail in Chapter 10. However, one of the most common tools used by Oregon cities to construct infrastructure improvements as growth occurs is the System Development Charge (SDC). The city already has a transportation SDC in place, but it is in the process of being updated by staff. Two possible funding levels were illustrated in this plan to indicate how much buying power prospective increases to the current SDC rate could accomplish. The methodology

for SDC calculation requires that improvements serve growth and not correct existing system deficiencies. All of the projects included in this illustration are intended to serve growth. The specific SDC rate selected by the city council will also consider their perspective of a fair fee to be charged for new development in a community. Many times, councils choose lesser rates than could be justified by the technical analysis so that their community is not significantly higher than those in the surrounding region.

Doubling the SDC rate to approximately \$1,550 per PM peak hour trip (below a typical charge of \$2,000 in Oregon) would provide an additional \$5.8 million in revenues, cover the projected funding deficit, and leave approximately \$4.8 for Action Plan Projects. Under this funding assumption the Action Plan illustrated in Table 1-2 is recommended.

Table 1-2: Cottage Grove Action Plan Projects (2007 Dollars)

Project Improvement		Estimated City Cost
City Projects		•
Realign OR 99 at Main Street*	Realignment of OR 99 and Main Street Intersection as recommended in Downtown Revitalization and Refinement Plan	\$800,000 ¹
Main Street Access Management	Close Access to Main Street from Lane Street	\$10,000
Intersection Improvements	Intersection improvements at Row River Road and Jim Wright Way Intersection including full pedestrian crosswalk	\$200,000
Traffic Signal	New traffic signal at Row River Road and Thornton Road Intersection	
Traffic Signal	New traffic signal at Mosby Creek Road and Thornton Road Intersection	
Traffic Signal	New traffic signal at Main Street and M Street Intersection	\$200,000
Main Street at 16th Street Turn Lane	Addition of a southbound left turn lane at 16th Street and Main Street Intersection	\$400,000
Gateway Boulevard Restripe* Restripe Gateway Boulevard to 3 lanes (and bike lanes) from Harvey Road to Cottage Grove Connector		\$10,000
East/West Bicycle Route Include pavement markings and signage to designate east to west bike connection between OR 99 and Gateway Boulevard along Chamberlain Avenue, Douglass Street, Ostrander Lane, 19th Street and Oswald West Avenue		\$25,000

¹ Cottage Grove Downtown Revitalization and Refinement Plan, CH2Mhill, Alta Planning, Angelo Eaton Associates, June 2005. Preferred Alternative short–term projects estimated at \$760,000 in 2005 dollars.

Project	Improvement	Estimated City Cost	
State Projects			
Cottage Grove Connector - Interchange Area Management Plan*	Initiate IAMP for I-5/Cottage Grove Connector/OR 99 Corridor	-	
OR 99 Restriping*	Restripe OR 99 to 3 lanes (and bike lanes) from Woodson Bridge to Cottage Grove Connector	\$10,000	
OR 99 Pedestrian Refuge*	Construct pedestrian refuge in conjunction with restripe of OR 99 from Woodson Bridge to Cottage Grove Connector	\$60,000	
Intersection Improvements*	Add intersection improvements at the intersection of OR 99 and Cottage Grove Connector, including pedestrian signals and crosswalks.	\$1,000,000	
Private Development Projects			
Gates Road Extension	New roadway from Gowdyville Road to Harrison Avenue including bicycle and pedestrian facilities.	**	
Blue Sky Drive Extension	New roadway from Harrison Avenue to Sweet Ln. including bicycle and pedestrian facilities.	**	

^{*}Project would require ODOT approval.

The total costs for the Action Plan would be approximately \$3.1 million without providing any funding for new roadways. The Action Plan focuses on projects that have already been initiated or may be completed without incurring large costs. The Action Plan at this level of funding does not provide funding for new roadways and therefore fails to address several operational issues noted in the southern portion of the city.

^{**}Construction costs to be covered by private development exactions.

2. Goals, Objectives and Policies

Overview

The Cottage Grove Transportation System Plan (TSP) establishes transportation goals and objectives for the Cottage Grove area. The TSP addresses all forms or modes of transportation, focusing on motor vehicles, public transportation, bicycle and pedestrian modes. The TSP also identifies future facilities and services for the various modes which will be needed to meet the expected increase in travel demand through the year 2025.

The Cottage Grove Transportation System Plan is the guiding transportation policy document for the City of Cottage Grove, and is a component of the Cottage Grove Comprehensive Plan. It serves as a framework for the development of the future transportation system. As the TSP is a component plan of the Comprehensive Plan, its policies have the force of law.

Refinement plans to this TSP may supplement the plan with more detail and specific information on issues, policies, and project locations. These refinement plans and policies shall be consistent with the TSP.

Cottage Grove adopted a comprehensive transportation plan in 1998. Since 1998, there have been changes to state transportation plan policies and regulations that must be addressed as a part of this TSP update. In addition to retaining previously adopted goals, objectives, and policies that are still applicable, new goals, objectives and policies are included to incorporate recent initiatives within the state and county as they relate to transportation facilities. This update brings the City into compliance with the requirements of the Transportation Planning Rule and Statewide Goal 11.

Goals are statements that describe an ideal condition that the City desires to attain over time for various aspects of the transportation system. Objectives are more specific aims identified to achieve these goals. Policies are statements intended to set guidelines for implementing the Transportation System Plan in a manner that is consistent with the identified goals and objectives. Transportation System Plan policies are consistent with the local, regional and state transportation policies identified in the Background Plan and Document Review (Technical Appendix A), including the Oregon Transportation Plan and Transportation Planning Rule.

The following transportation-related goals, objectives and policies were developed with input from the City Council-appointed Technical Advisory Committee.

Goals

Goal 1: Enhance the Cottage Grove area's quality of life and competitive economic advantage by providing a transportation system that is:

Accessible,

- Balanced,
- Efficient,
- Environmentally responsible,
- Financially stable,
- Interconnected, and
- Safe.

Goal 2: Develop a cost-effective transportation system that meets the needs of passengers and freight, and that serves the existing and future arrangement of land uses to the consensus of all jurisdictions involved.

Goal 3: Develop a cost-effective transportation system plan that is based on informed citizen input, professional review, and technical analysis.

Goal 4: Develop an integrated transportation and land use system that helps implement statewide transportation goals, statewide administrative rules and the Cottage Grove Comprehensive Land Use Plan

Objectives

Objective 1: Provide an interconnected regional transportation system which ensures ease of transfer between modes of travel and appropriate access for all potential users to all areas of the city, region, state, and nation.

Objective 2: Provide a balanced transportation system that gives people realistic choices or options other than driving alone in an automobile.

- Objective 3: Provide for efficient movement of goods and services.
- Objective 4: Provide an environmentally responsible transportation system.
- Objective 5: Provide a safe transportation system.
- Objective 6: Provide support for sustainable development by designing and developing a transportation and land use system that integrates residential, retail and employment land uses.
- Objective 7: Make streets as "unobtrusive" to the community as possible.
- Objective 8: Require developments to address on- and off-site transportation system impacts.
- Objective 9: Provide opportunities for public involvement in transportation system decisions and respond to community needs and neighborhood impacts.

Objective 10: Coordinate among agencies to facilitate efficient planning, design, maintenance, and operation of the transportation system.

Objective 11: Ensure a financially stable, economically viable, and cost-effective transportation system.

Objective 12: Make full use of existing roadways by reducing demand during peak use periods and increasing operational efficiency.

Policies

Overall

Policy 1: Develop a well connected transportation system across all modes and locations in the city.

Policy 2: Consider the impact of all land use decisions on the existing and planned transportation facilities.

Policy 3: Protect the function of existing and planned transportation systems as identified in the Street Plan, Bicycle Plan and Pedestrian Plan through application of appropriate land use regulations.

Policy 4: Develop a street network that provides connections to and from activity centers such as schools, commercial areas, parks, and employment centers.

Policy 5: Develop a street network that accommodates the safe and efficient movement of emergency service vehicles.

Policy 6: Consider the level of community interest and support in evaluating and prioritizing street improvement projects within the existing street system.

Policy 7: Coordinate with ODOT and/or Lane County on roadway projects impacting land uses outside of city limits or roadways outside of City jurisdiction.

Policy 8: Consider the funding commitment or availability and ability of project to be constructed within timeframe in evaluating and prioritizing street improvement projects within the existing street system.

Standards

Policy 9: Consider physical community development trends (the extent to which the project complements or supports the emerging land use pattern) in evaluating and prioritizing street improvement projects within the existing street system.

Policy 10: Consider economic development potential (the extent to which the project relieves congestion and provides land use access to under-utilized and undeveloped urban lands) in evaluating and prioritizing street improvement projects within the existing street system.

- Policy 11: Consider the following primary criteria in evaluating and prioritizing street improvement projects within the existing street system average daily traffic, physical condition of street, street geometrics, and capacity/congestion (level of service).
- Policy 12: Utilize access management spacing standards on all new and/or improved arterial and collector streets to improve safety and promote efficient through street movement.
- Policy 13: Design streets that minimize impacts to topography and natural resources, such as streams, wetlands, and wildlife corridors.
- Policy 14: Consider commercial, industrial and recreational transportation needs in decisions about access management and in construction or reconstruction of roadways.
- Policy 15: Prohibit land development from encroaching on setbacks required for potential street expansion.
- Policy 16: Develop a street system and infrastructure that, where appropriate, conveys and treats stormwater runoff.
- Policy 17: Require the dedication of additional street right-of-way at the time of land development or land division to ensure adequate street widths.

Multi-Modal

- Policy 18: Plan and develop a network of streets, accessways, and other facilities, including bikeways, sidewalks and safe street crossings, to promote safe and convenient bicycle and pedestrian circulation within the community.
- Policy 19: Maintain bikeways and pedestrian accessways (including sidewalks) at the same priority as motor vehicle facilities.
- Policy 20: Consider multi-modal contributions and linkages in evaluating and prioritizing street improvement projects.
- Policy 21: Connect bikeways and pedestrian accessways with local and regional travel routes.
- Policy 22: Foster the design and construction of bikeways and pedestrian accessways to minimize potential conflicts between transportation modes.
- Policy 23: Consider opportunities for promoting interconnections between road, rail, and air freight transportation facilities.
- Policy 24: Encourage demand management programs, such as carpooling and park-and-ride facilities, to reduce single-occupancy auto trips to and from Eugene-Springfield.

Pedestrian

- Policy 25: Design new streets and crossings to meet the needs of pedestrians and encourage walking as a transportation mode.
- Policy 26: Develop a pedestrian network by focusing on direct, convenient, and safe pedestrian travel within and between residential areas, schools, parks, and shopping and working areas within the urban area.
- Policy 27: Install sidewalks and/or pedestrian trails of suitable surfacing on all future local streets. Reconstructed and new collectors and arterials shall include sidewalks. Pedestrian facilities may be installed on or off-street to facilitate walking between significant activity areas.
- Policy 28: Develop a downtown streetscape enhancement program to install curb extensions, crosswalk pavers, benches, pedestrian-scaled lighting, and bicycle parking racks.
- Policy 29: Consider the potential to establish or maintain accessways, paths or trails prior to the vacation of any public easement or right-of-way.

Bicycle

- Policy 30: Ensure consistency with the policies in the most current Bikeway Master Plan.
- Policy 31: Require adequate bicycle parking in schools, parks, churches, existing shopping and working areas, and other destination areas to encourage increased use of bicycles.
- Policy 32: Include bicycle facilities such as bike lanes or dedicated bikeways in the planning, design, and construction of all new and/or reconstructed collectors and arterial roads. The Oregon Bicycle and Pedestrian Plan Bike Lane Matrix for urban and suburban settings shall be used as a guide in making decisions regarding the need for bike lanes.
- Policy 33: Require provision of bicycle parking facilities with new commercial and industrial development and multi-family residential development.

Transit

- Policy 34: Develop a cost effective accessible transit program that meets the needs of all potential and identified users.
- Policy 35: Support provision of basic mobility services for the elderly and people with special needs.

Policy 36: All new development shall be referred to transit service providers for review and comment to determine if new transit stops are appropriate and can reasonably be provided as part of the new development.

Rail

- Policy 37: Increase economic opportunities for the State by having a viable and competitive rail system.
- Policy 38: Strengthen the retention of local rail services.
- Policy 39: Protect abandoned rail right-of-ways for alternative or future use.
- Policy 40: Integrate rail freight considerations into land use planning process.
- Policy 41: Consider adequate rail freight access for planned and existing development in the zoning of adjacent property.
- Policy 42: Consult with freight rail service providers and the Oregon Department of Transportation Rail Division as appropriate, in the review of new development or other decisions that may impact freight rail lines or rail crossings.

Air

- Policy 43: The function of existing or planned general use airports shall be protected through the application of appropriate and compatible land use designations.
- Policy 44: Incompatible land uses shall be prohibited on the lands adjacent to the airport. Approved uses around the airport shall be required to provide an environment that will not be adversely impacted by and will be compatible with the airport and its operations.

3. Existing Conditions

This chapter summarizes the current condition of the transportation system within the City of Cottage Grove. An inventory of each travel mode (pedestrians, bicycles, transit, motor vehicles, freight, water, air, and pipeline) was performed during the summer of 2006 to establish base year conditions for the TSP Update. Much of these data provides a benchmark of existing conditions which serve as a basis of comparison for future assessment of transportation performance in Cottage Grove relative to existing and proposed policies.

Fifteen intersections within the study area were selected for focused analysis. Traffic data was gathered at these locations and analyzed to evaluate current traffic conditions and performance for all travel modes. The study area is shown in Figure 3-1.

The City of Cottage Grove is oriented around the downtown central business district located in the center of the study area. Central Cottage Grove, located west of the Interstate 5 (I-5), is organized in a grid network of streets that are crossed by the north-south principal arterial through the center of town, the Goshen Divide Highway (OR 99). Main Street serves as the major east-west route through Cottage Grove. I-5 serves as a critical transportation route to areas north and south of the City.

The following sections describe the characteristics, usage, and performance of the existing transportation system in the City of Cottage Grove.

Pedestrians

An inventory of sidewalks and crosswalks along arterial and collector streets and off-street trails was conducted to assess the existing pedestrian system in Cottage Grove. The location of activity centers such as parks, schools, City Hall, the city library, transit stops and the downtown central business district were identified to determine possible pedestrian trip generators. Figure 3-2 shows the existing pedestrian facility inventory in Cottage Grove as well as the location of major activity centers. The sidewalk inventory is not intended as an inclusive listing of sidewalks in Cottage Grove, but rather to identify sidewalks located on major roadways (arterials and collectors) as well as select local streets.

General Observations

Main Street, the primary east-west arterial in Cottage Grove, provides consistent sidewalks on both sides of the roadway and numerous crosswalks along its length. The Goshen Divide Highway (OR 99), also known as 9th Street in central Cottage Grove, provides sidewalks on at least one side of the road in most of the central Cottage Grove area between Woodson Place and Harrison Avenue. Other arterials outside of downtown, such as River Road, Gateway Boulevard and most collectors provide adequate sidewalk connectivity with sidewalks located on at least one side of the roadways. However, there are several locations with significant gaps in the overall sidewalk system.

Pedestrian facility connectivity between residential areas south of Taylor Avenue and the major collectors and activity generators to the north is poor. This is of particular concern near Lincoln Middle School. The Cottage Grove Connector, which is designated as a principal arterial, does not provide adequate sidewalks east of the Goshen Divide Highway (OR 99). Existing gaps in the sidewalk system are detailed in Table 5-1 in the Chapter 5 pedestrian system needs assessment.

Several multi-use paths are provided in the north and east portions of the study area. These facilities are primarily used for pedestrian recreational purposes.

Pedestrian Activity Levels

Pedestrian crossing volumes at the study intersections were counted between 6 AM and 10 PM. The 16 hour pedestrian volumes indicate the relative differences in pedestrian demand at study intersections. Although the study area vehicular evening peak hour typically occurs from 4 to 5 PM, intersections located near schools and other activity centers may experience higher pedestrian volumes earlier in the day. This is likely at the Harrison Avenue/River Road and Taylor Avenue/8th Street intersections. Pedestrian volumes at each study intersection are shown in Table 3-1.

Table 3-1: 16-Hour Pedestrian Crossing Volumes at Study Intersections

Intersection	North/South Pedestrian Volume	East/West Pedestrian Volume	
I-5 SB Ramps/Cottage Grove Connector	1	7	
I-5 NB Ramps/Row River Road	0	3	
I-5 Off Ramp/6 th Street	6	1	
I-5 On Ramp/6 th Street	0	0	
OR 99/Cottage Grove Connector	2	0	
OR 99/Woodson Bridge ¹	60	15	
OR 99/Main Street ¹	102	38	
OR 99/6 th Street ²	30	8	
OR 99/4 th Street	33	84	
OR 99/S. River Road	13	12	
Main Street/Gateway Boulevard ³	88	48	
Main Street/16 th Street ³	27	37	
Main Street/River Road	14	1	
Main Street/R Street	10	5	
Harrison Avenue/River Road	68	52	
S. 8 th Street/Taylor Avenue	205	81	
S. 10th Street/Monroe Avenue	51	39	

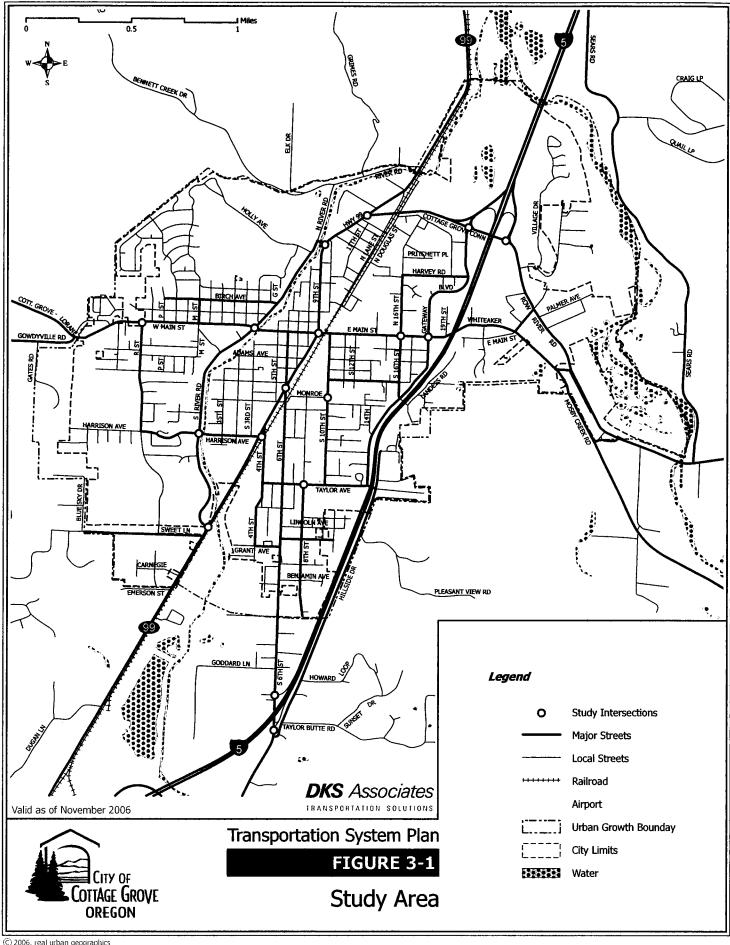
Source: ODOT Transportation System Monitoring Unit Counts, October, 2005, unless otherwise noted.

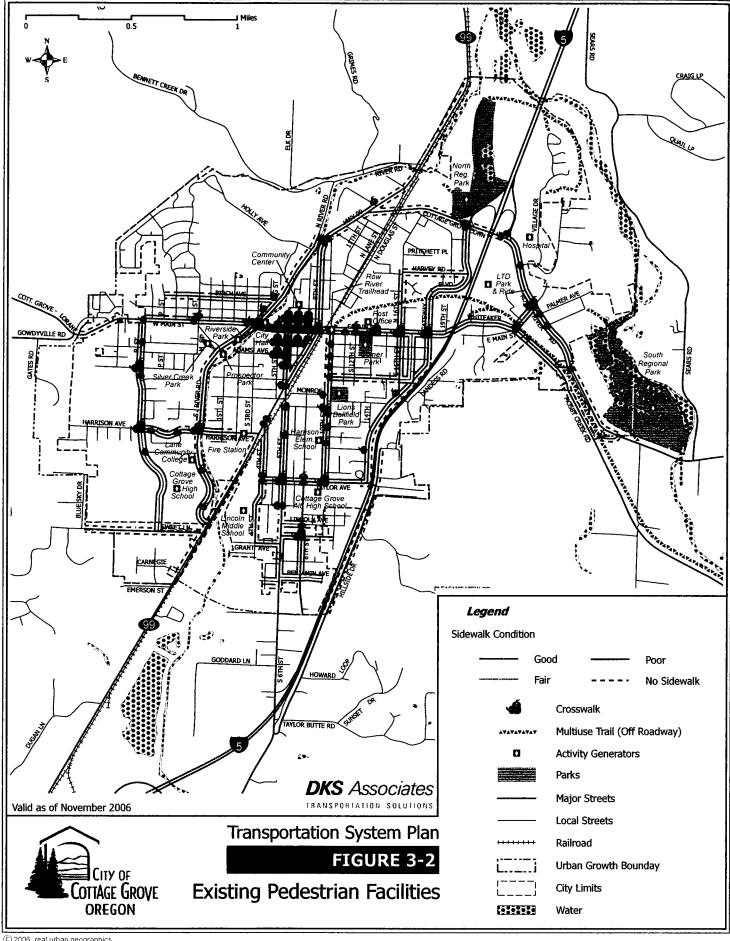
ODOT Transportation System Monitoring Unit Counts, January, 2004.

² ODOT Transportation System Monitoring Unit Counts, March, 2004. (14 hour count, 6AM to 8PM)

³ ODOT Transportation System Monitoring Unit Counts, February, 2006.

Typically, the highest pedestrian movements occur at intersections located near retail, recreational, and educational land uses. This trend is present in Cottage Grove, as Table 3-1 shows significant pedestrian volumes near the downtown core and schools. Lower volumes also occur where the sidewalk network is incomplete, such as along the Cottage Grove Connector.





Bicycles

An inventory of bicycle facilities was conducted to assess the existing bicycle system in Cottage Grove. The City maintains four types of bikeways: bike lanes, multi-use paths, shared roadways, and shoulder bikeways. Figure 3-3 shows the location of existing bicycle facilities in Cottage Grove

The Oregon Bicycle and Pedestrian Plan¹ defines several types of bikeways and describes the design criteria for safe travel by bicycle. According to the Oregon Bicycle and Pedestrian Plan, bike lanes exist where a portion of roadway, marked by a bike lane symbol stencil, is designated for use by bicycle riders. Multi-use paths are physically separated from motor vehicle traffic. Shared roadways are the most common bikeway and they are suitable in urban areas where traffic volumes are under 3,000 average daily vehicles and where speeds are no more than 25 miles per hour. Paved shoulders at least six feet wide are recommended for shoulder bikeways.

General Observations

Bicycle facilities are provided throughout the study area. Portions of bike lanes are found on most minor arterials, however the bike lanes are not continuous. River Road and Main Street provide consistent bike lanes along the majority of their length. No bike lanes are provided on OR 99 and the Cottage Grove Connector which are designated as principal arterials. Other arterial and collector roadways in the study area have bike lanes that are incomplete.

Several roadways in the study area provide shoulder bike routes including Row River Road, 6th Street and River Road. Several multi-use paths are provided in the north and east portions of the study area. These facilities are primarily used for bicycle recreational purposes.

Bicycle Activity Levels

Bicycle counts were conducted during weekday 16 hour periods (6 AM to 10 PM) at the study intersections in Cottage Grove. The bicycle count data was obtained outside of the summer season. It is reasonable to assume that the existing bicycle volumes would increase moderately during the summer months. The 16 hour bicycle volumes at each study intersection are shown in Table 3-2. These volumes indicate the relative differences in bicycle demand between study intersections.

¹ Oregon Bicycle and Pedestrian Plan, Oregon Department of Transportation, 1995

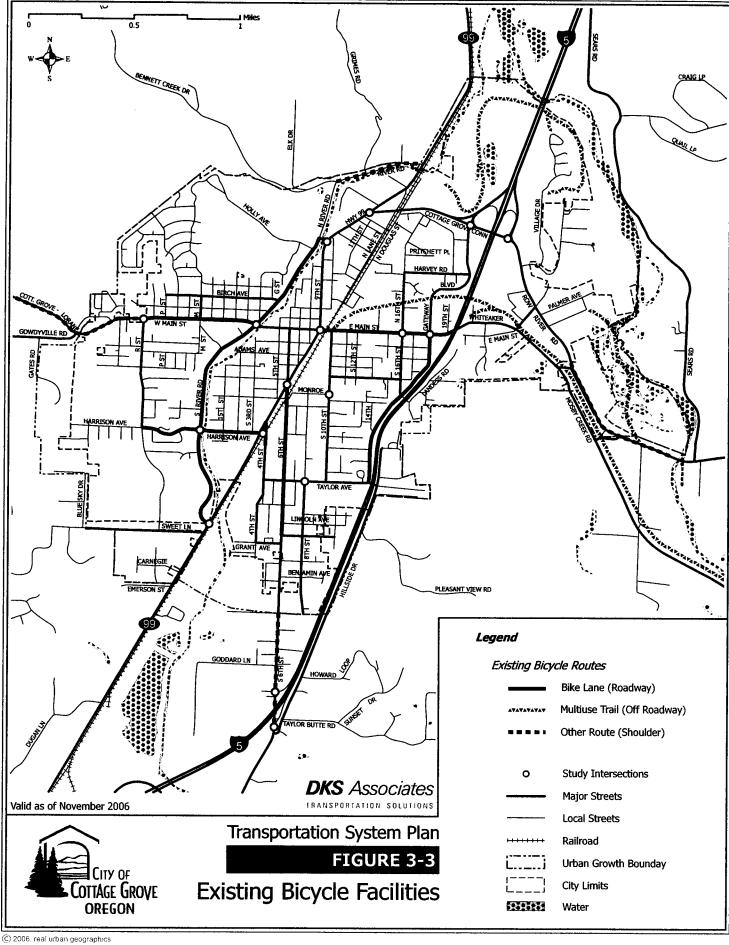


Table 3-2: 16-Hour Bicycle Crossing Volumes at Study Intersections

Intersection	North/South Bicycle Volume	East/West Bicycle Volume		
I-5 SB Ramps/Cottage Grove Connector	10	1		
I-5 NB Ramps/Row River Road	0	10		
I-5 Off Ramp/6 th Street	8	0		
I-5 On Ramp/6 th Street	4	0		
OR 99/Cottage Grove Connector	11	4		
OR 99/Woodson Bridge ¹	20	7		
OR 99/Main Street ¹	26	3		
OR 99/6 th Street ²	0	0		
OR 99/4 th Street	19	38		
OR 99/S. River Road	5	5		
Main Street/Gateway Boulevard ³	15	11		
Main Street/16 th Street ³	6	15		
Main Street/River Road	33	16		
Main Street/R Street	10	30		
Harrison Avenue/River Road	17	42		
S. 8 th Street/Taylor Avenue	34	19		
S. 10th Street/Monroe Avenue	40	22		

Source: ODOT Transportation System Monitoring Unit Counts, October, 2005, unless otherwise noted.

Some of the highest bicycle volumes were observed at the 10th Street/Monroe Avenue intersection which is located near two schools. Both 10th Street (designated as a collector) and Monroe Avenue (designated as a local street) do not have any bicycle facilities.

ODOT Transportation System Monitoring Unit Counts, January, 2004.

² ODOT Transportation System Monitoring Unit Counts, March, 2004. (14 hour count, 6AM to 8PM)

 $^{^{3}}$ ODOT Transportation System Monitoring Unit Counts, February, 2006.

Transit

Transit service is provided in Cottage Grove by the Lane Transit District (LTD) and South Lane Wheels (SLW). LTD provides fixed route bus service between Cottage Grove and Eugene. South Lane Wheels provides both a deviated schedule route service and demand responsive service to transportation disadvantaged residents and the general public. Transit routes and stop locations are shown in Figure 3-4.

Fixed Route Service

LTD provides service in Cottage Grove through LTD Route 98, with stops at Eugene Station, the University of Oregon Campus, Lane Community College Station, and Creswell. The one-way loop route reaches Cottage Grove via the Cottage Grove Connector, with several stops including the Village Shopping Center, Cottage Grove High School and the Lane Community College (Cottage Grove campus), Main and River Road, and the LTD Park & Ride lot near Wal-Mart.

LTD Route 98 operates seven times a day on weekdays, three times on Saturday, and twice on Sundays. Average weekday ridership statistics indicate that 120 people board Route 98 in Cottage Grove, with approximately half of those boardings taking place at the Park & Ride lot near Wal-Mart.²

Deviated Schedule Route Service

SLW provides service to Cottage Grove through its "Route Around Town". The route includes frequent stops throughout the City of Cottage Grove (35 total stops) including each of the six designated LTD stop locations. Special pick-up service is available at residences located within 0.75 miles of any SLW bus stop, for seniors, the disabled, and other people in need, for an additional \$0.50. This service is offered for pick-ups only.

SLW operates the route twelve times on weekdays and ten times on Saturday. There is no Sunday service. Standard fares, as of July 1, 2006, are \$1.00 for a single ride, with discounted fares available to youths, seniors and other transportation disadvantaged riders for \$0.50. Children aged five or under ride free. No historical ridership statistics are available for SLW's Route Around Town, as the service began operation in July 2006.

Demand Responsive Service

SLW provides door-to-door transportation to seniors, the disabled and the general public. The "Dial-a-Ride" service is provided within Cottage Grove and the surrounding area including trips to Eugene and Springfield for medical appointments. Varying fares are charged based on the distance traveled.

In addition to the door to door service, a "shopper service" provides rides to various retail locations each day of the week. A different shopping destination is set for each weekday. The shopper service is discounted, by \$2 per ride, relative to standard door-to-door service.

² Route 98 Weekday Cottage Grove Daily Activities by Bus Stop – Spring 2006, Kenneth Augustson, Senior Transit Planner, Lane Transit District, July 2006.

The ridership statistics³ for SLW door to door service shows that approximately 1,800 passengers utilize this service per month. The types of passengers include disabled people, seniors and the general public.

Carpool Service

LTD's "Commuter Solutions" provides a contact list for potential car pool users in Lane County. The contact list is based on compatible routes and schedules and serves to help coordinate ride-sharing arrangements between commuters. In 2000, twelve percent of Cottage Grove workers aged 16 and over participated in carpools of two or more people⁴.

Transit Level of Service

Table 3-3 summarizes the average time between bus arrivals at a stop (headways) and corresponding level of service⁵ for both LTD Route 98 and SLW Route Around Town.

Table 3-3: Transit Service Route Weekday Peak Period Level of Service

Transit Route	Av	Average Headways (minutes)			Level of Service	
	AM	Midday	PM	AM	Midday	PM
LTD #98 Cottage Grove	55	180	60	E	F	E
South Lane Wheels	60	65	60	E	F	Е

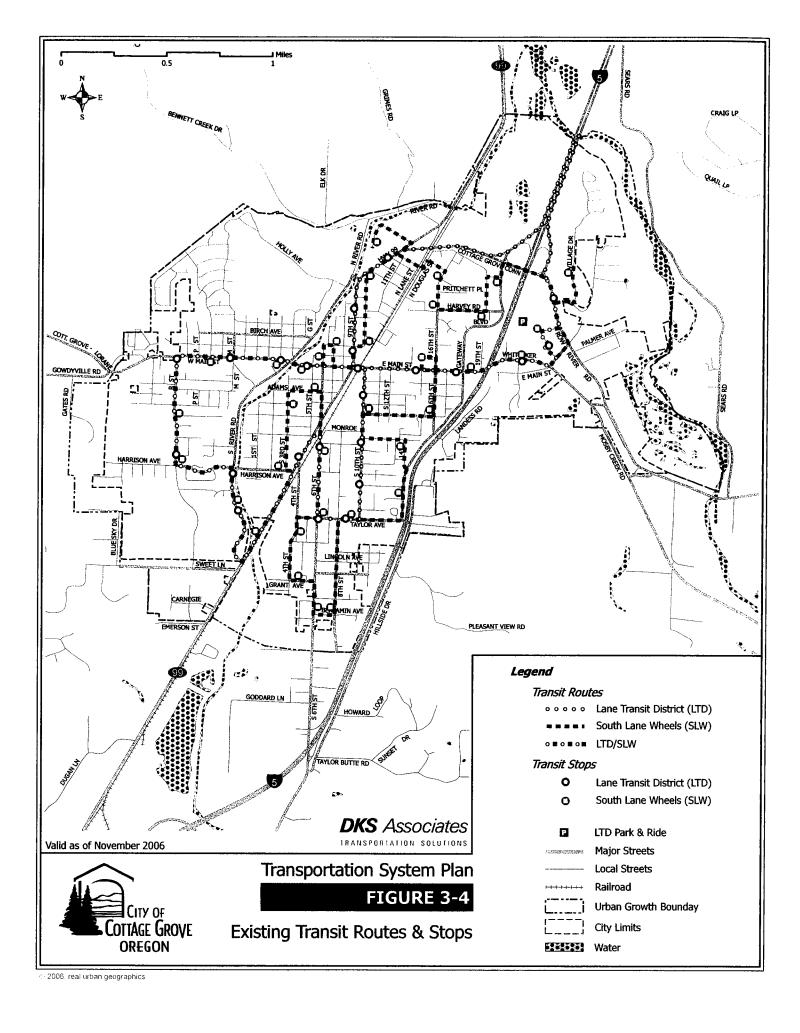
Note: AM Period = 06:00-08:30, Midday Period = 08:30-16:00, PM Period = 16:00-18:00

Level of Service for transit service based on headway: less than 10 minutes = LOS A; 10-14 minutes = LOS B; 14-19 minutes = LOS C; 20-29 minutes = LOS D; 30-60 minutes = LOS E; and greater than 60 minutes = LOS F.

³ Tara Sue Salusso, Executive Director, South Lane Wheels, August 2006.

⁴ Journey to Work: 2000, Census 2000 Summary File 4, U.S. Census Bureau.

⁵ 2000 Highway Capacity Manual, Transportation Research Board, 2000, Chapter 27.



Motor Vehicles

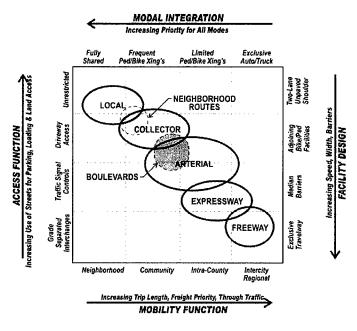
The motor vehicle system within the City of Cottage Grove includes city streets, county roadways, state highways, and an interstate freeway. This section is divided into a description of how the system has developed to date, then a more detailed review of how it is used and operated.

Functional Classification

The functional classification system is designed to serve transport needs within the community. The schematic diagram below is useful for understanding how worthwhile objectives can have opposing effects by illustrating the competing functional nature of roadway facilities as it relates to access, mobility, multi-modal transport, and facility design. For example, as mobility is increased (bottom axis), the provision for non-motor vehicle modes (top axis) is decreased accordingly. Similarly, as access increases (left axis), the facility design (right axis) dictates slower speeds, narrower travel ways, and non-exclusive facilities. The goal of selecting functional classes for particular roadways is to provide a suitable balance of these four competing objectives.

The diagram shows that as street classes progress from local to collector to arterial to freeway (top left corner to bottom right corner) the following occurs:

- Mobility Increases Longer trips between destinations, greater proportion of freight traffic movement, and a higher proportion of through traffic.
- Integration of Pedestrian and Bicycle
 Decreases Provisions for
 adjoining sidewalks and bike
 facilities are required up through
 the arterial class, however, the
 frequency of intersection or midblock crossings for nonmotorized vehicles steadily
 decreases with higher functional
 classes. The expressway and
 freeway facilities typically do not
 allow pedestrian and bike facilities
 adjacent to the roadway and any
 crossings are grade-separated to
 enhance mobility and safety.



Access Decreases— The shared uses for parking, loading, and direct land access is reduced.
This occurs through parking regulation, access control and spacing standards (see
opposite axis).

• Facility Design Standards Increase – Roadway design standards require increasingly wider, faster facilities leading to exclusive travelways for autos and trucks only. The opposite end of the scale is the most basic two-lane roadway with unpaved shoulders.

Two additional areas are noted on the diagram for **Neighborhood Routes** and **Boulevards** that span two conventional street classes.

The current Cottage Grove functional class system for roadway facilities is depicted in Figure 3-5. The functional class system identified is based on the functional classification plan identified in the 1998 Cottage Grove TSP.

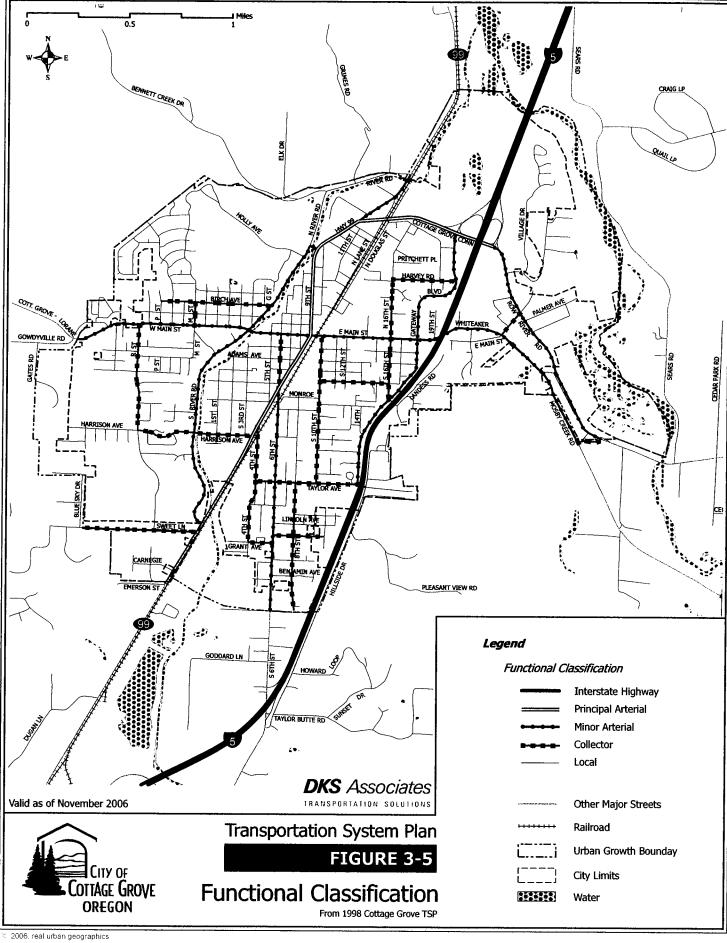
The Oregon Highway Plan identifies the Goshen Divide Highway (OR 99) as a District highway. District highways often function as county and city arterials or collectors and provide connections between small urbanized areas, rural centers and urban hubs, while also serving local access and traffic. The ODOT management objective for District highways is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas and moderate to low-speed operation for traffic flow and pedestrian/bicycle movements in urban areas.

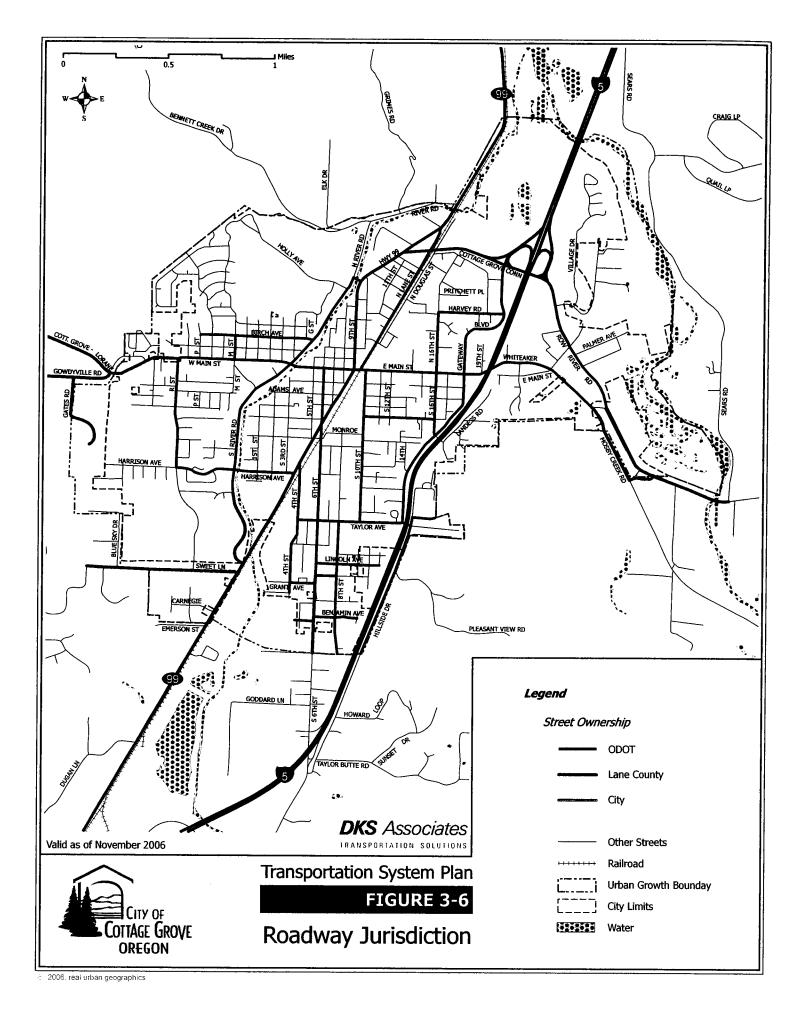
Roadway Jurisdiction

Roadway jurisdiction (ownership and maintenance responsibilities) of collector and arterial roads in the City of Cottage Grove is identified in Figure 3-6. OR 99, the Cottage Grove Connector, and I-5 along with its entrance and exit ramps are state facilities managed by ODOT. Arterial and collector roadways outside of the Cottage Grove City limits are owned and operated by Lane County, while the City is responsible for all other arterials and collectors within city limits with the exception of portions of Cottage Grove-Lorane Road, Row River Road, Mosby Creek Road, South River Road, South 10th Street and South 6th Street. Future jurisdictional transfers are expected to put additional roadways under City jurisdiction.

Roadway Connectivity

Interstate 5 (I-5), located on the eastern section of Cottage Grove, serves as a national facility which serves the region and is the major route of travel to the Eugene metropolitan area, located approximately 20 miles to the north. The Goshen Divide Highway (OR 99) is the primary roadway for traffic passing through downtown Cottage Grove. Access to OR 99 from I-5 is provided by the Cottage Grove Connector. OR 99 includes turn lanes at several intersections and functions as an arterial through central Cottage Grove. Main Street serves as the primary east-west arterial passing through downtown Cottage Grove. River Road serves as a northwest arterial in the western portion of the city. Gateway Boulevard and Row River Road provide arterial access west and east of I-5, respectively. The primarily residential areas south of Main Street, between I-5 and OR 99, are accessible via the 6th Street arterial.





Roadway Characteristics

Field inventories were conducted to determine characteristics of major roadways in the TSP study area. Data collected included posted speed limits, roadway lanes, roadway widths, geometry and lane configurations, and intersection controls. These characteristics define roadway capacity and operating speeds through the street system, which affects travel path choices for drivers in Cottage Grove. The locations of designated parking spaces on city streets were also examined.

Vehicle Speeds⁶

Figure 3-7 shows a focused inventory of the posted speeds in Cottage Grove. The majority of roadways in Cottage Grove are posted at 20 to 35 miles per hour (mph). Arterial roadways on the periphery of the city such as Row River Road and the Cottage Grove Connector, as well as Main Street and OR 99 segments on the fringes of the city limits, are posted at higher speeds ranging from 40 to 55 mph.

Intersection Controls

In addition to posted speeds, Figure 3-7 illustrates the intersection control types at study intersections. Traffic signals are located at most major intersections on arterial roadways. The Cottage Grove Connector/OR 99 intersection is stop controlled with free moving traffic between the Cottage Grove Connector and the northbound approach of OR 99. All-way stop controlled intersections are located at the Harrison Avenue/South River Road and Taylor Avenue/South 8th Street intersections. All-way stops are also located at several non-study intersections including Harrison Avenue/R Street and other intersections in northwest neighborhoods.

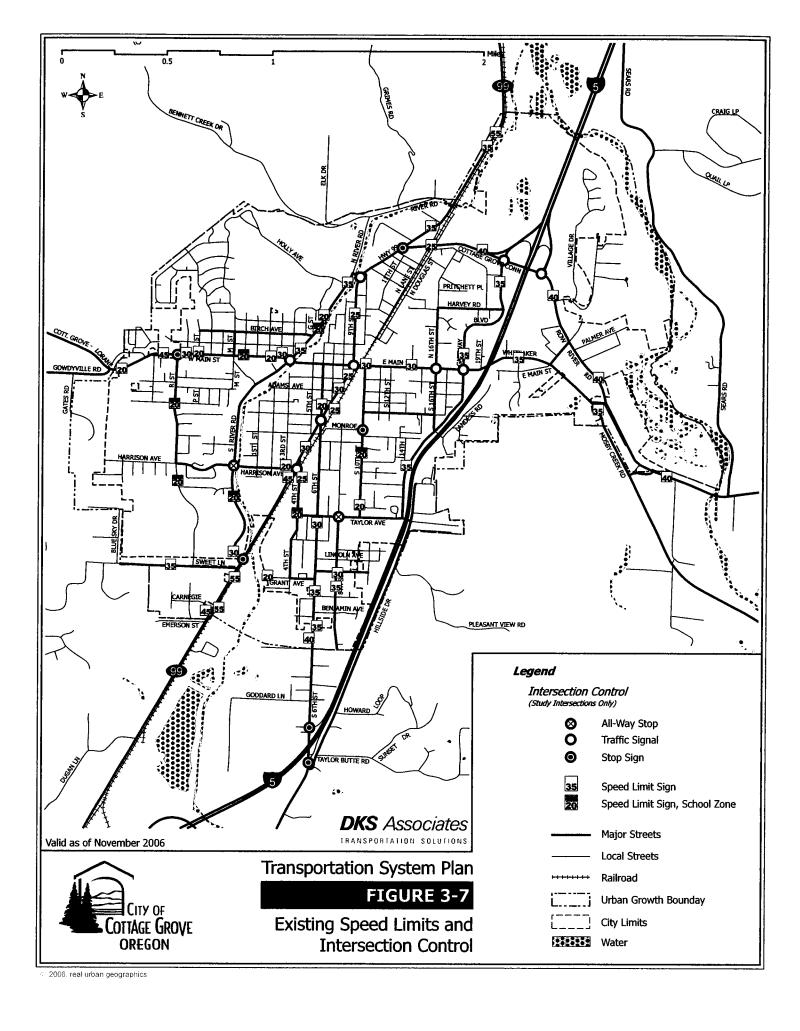
Roadway Cross-section⁷

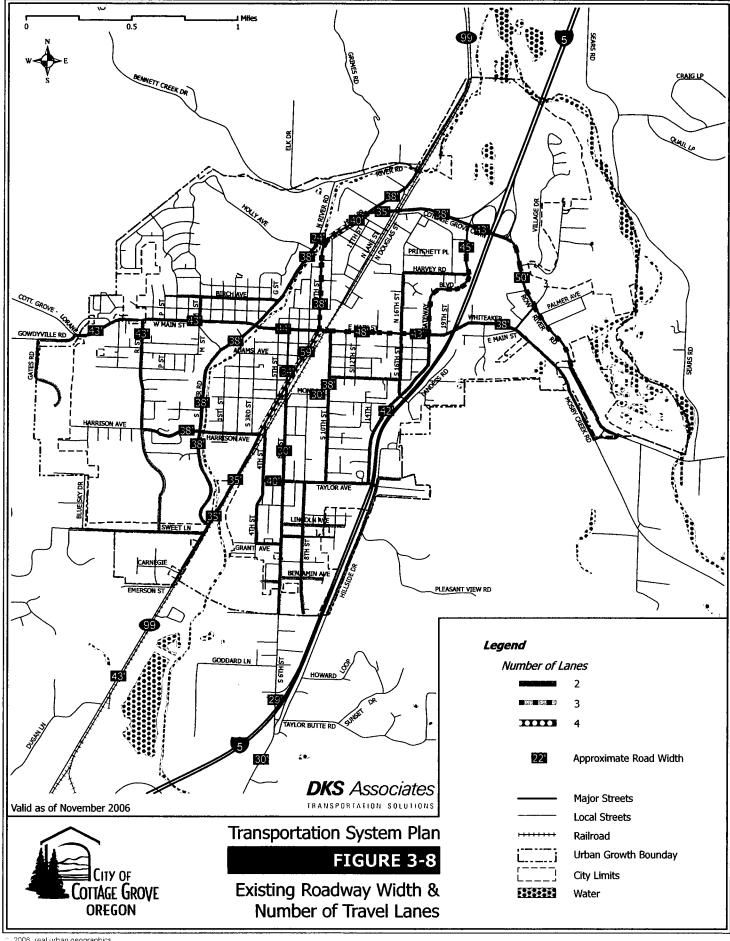
Figure 3-8 shows the existing number of lanes on each roadway in Cottage Grove. The majority of roadways in Cottage Grove are two lanes, although additional turn lanes are provided at many intersections. OR 99 has four lanes between the Cottage Grove Connector and Woodson Place and south of Main Street to Harrison Avenue. Gateway Boulevard has three lanes between Main Street and Harvey Road, with four lanes between Harvey Lane and the Cottage Grove Connector. Row River Road has three lanes between the northbound I-5 ramps and Thornton Lane. The remaining roads in the City of Cottage Grove are two lane roadways.

The key roadways in Cottage Grove were measured at various locations to determine typical cross-section widths. Some streets within the study area have new sections intermixed with older sections resulting in ranges of roadway widths depending on location.

⁶ Posted speed and data was obtained by field observation during DKS Associates transportation inventory (Summer 2006).

⁷ Roadway cross section data was obtained by field observation during DKS Associates transportation inventory (Summer 2006).





Pavement Conditions⁸

Pavement conditions in the City of Cottage Grove vary and include some unpaved gravel surfaces within the city limits. In general, arterials and collectors should have good pavement quality, while local streets should have good to fair pavement quality.

An inventory of pavement conditions was performed on major roadways in the City. Roadway pavement conditions were ranked as good, fair, poor, or unpaved. Good conditions mean stable pavement structure, with good ride quality. Minor surface erosion, cracking, patching or deformation may be present. Fair conditions may have minor areas with structural weakness, with cracking and deformation easier to detect. Patching may be evident but not excessive. Poor conditions describe roadways that have areas of instability, marked with evidence of structural deficiency, numerous patches, and noticeable deformations. Ride quality is poor and spot repair may be required. The pavement condition inventory is shown in Figure 3-9. Field observations during the transportation inventory indicated fair to good pavement conditions on all arterials and collectors.

Designated Street Parking

An inventory of existing designated on-street parking was conducted for the arterial and collector roadways within the study area. Figure 3-10 shows the location of designated on-street parking in Cottage Grove. Designated parking includes locations where parking is specifically identified by pavements markings or signage. Most local streets and many collectors in Cottage Grove also allow on-street parking. The designated on-street parking is generally limited to the downtown area.

Motor Vehicle Volumes

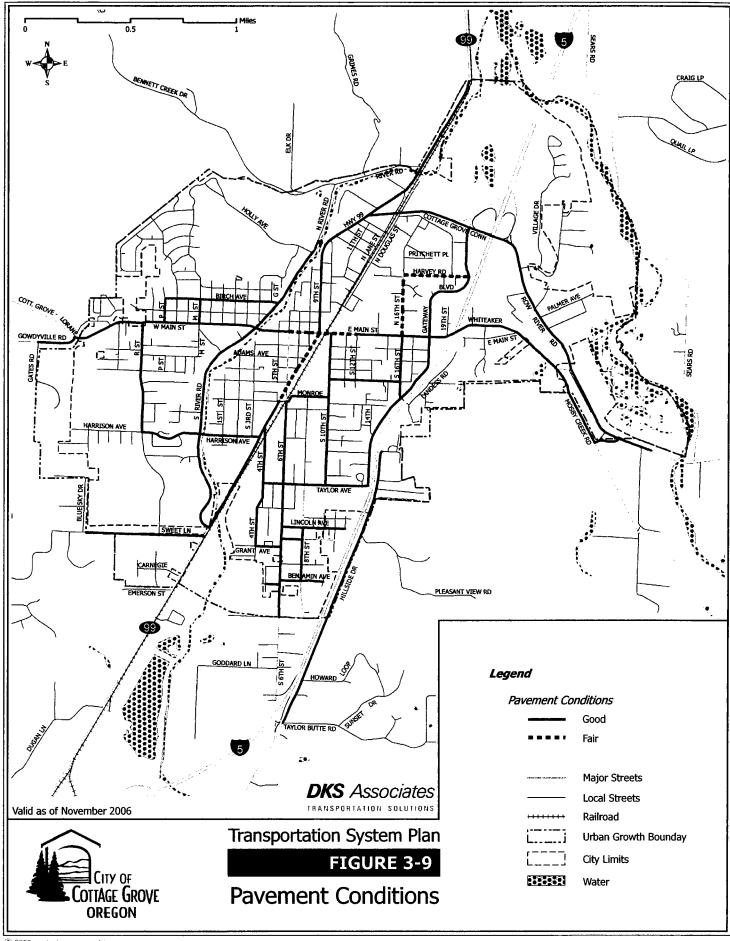
As part of the Cottage Grove TSP Update, fifteen study intersections were selected for focused analysis in coordination with the City of Cottage Grove and ODOT staff in order to address areas of concern along major roadways. ODOT provided 16-hour intersection turn movement counts at the study intersections to be utilized as a basis for establishing current traffic performance. The 16-hour count data was converted to 24-hour traffic volumes based on factors provided by ODOT.

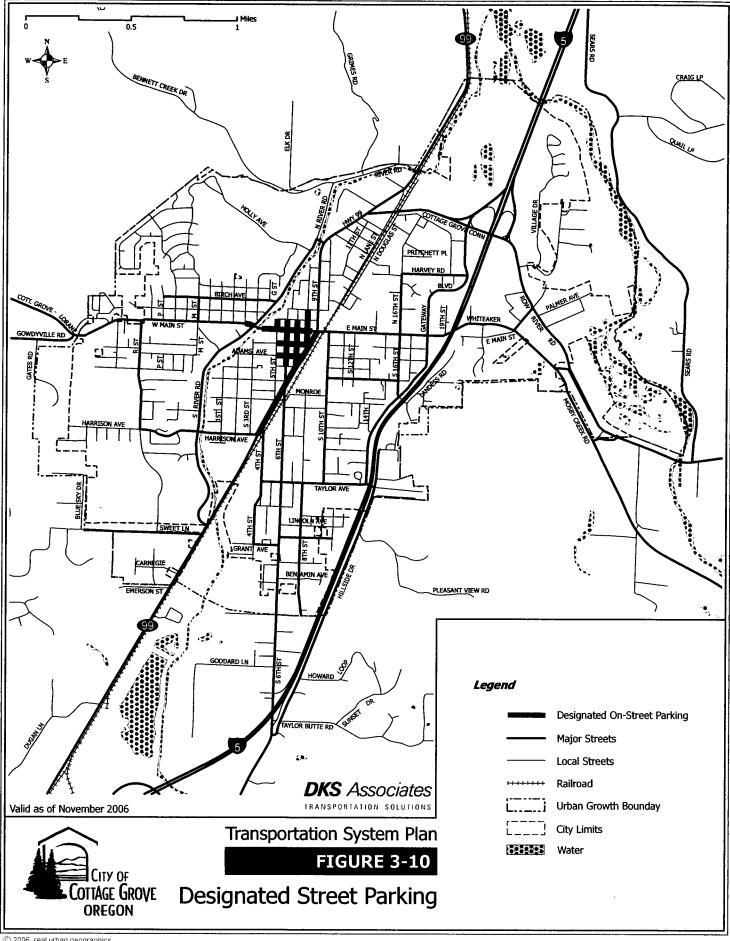
Figure 3-11 shows the average daily two-way existing traffic volumes on roadways in the Cottage Grove area. These two-way traffic volumes can vary from day to day and month to month based on weather, surrounding roadway conditions (such as construction), and holidays. In addition, seasonal recreational traffic can vary the traffic volumes in the City.

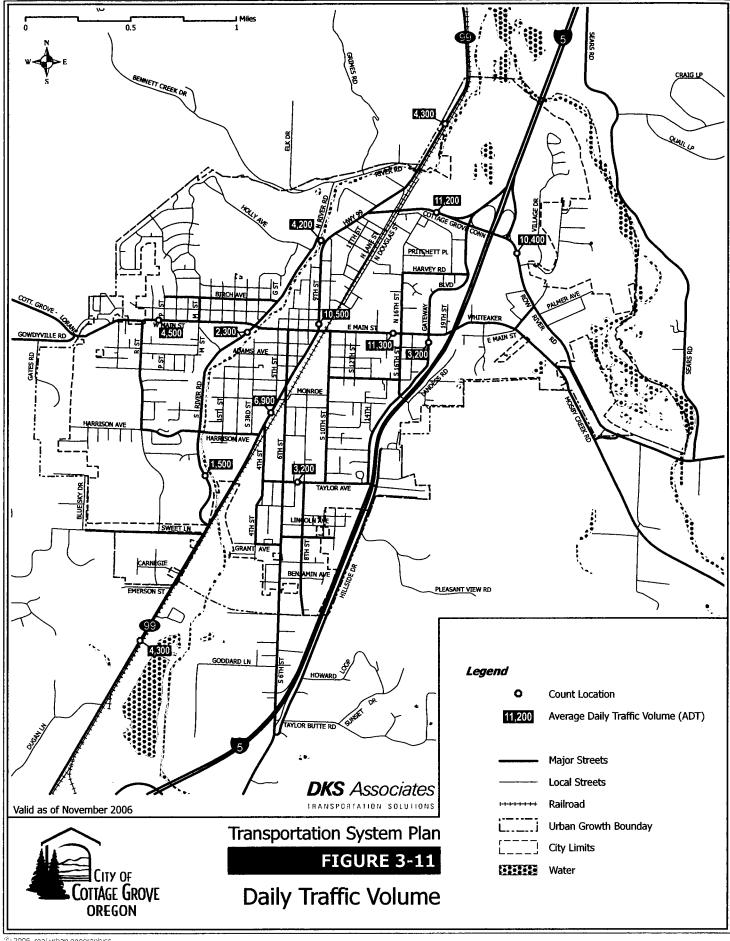
The figure indicates that the highest vehicle volumes (not including I-5) in Cottage Grove occur along the principal arterials: the Cottage Grove Connector, OR 99, and Main Street. Vehicle volumes on these roadways are over 10,000 per day. Away from the downtown area, average daily volume on OR 99 decreases to approximately 4,300 near the northern and southern city limits.

Traffic count data were used as a basis for evaluating traffic performance at the study intersections during PM peak hour conditions. To analyze operating conditions it is necessary to

⁸ Pavement conditions data was obtained by field observation during DKS Associates transportation inventory (Summer 2006).







determine peak hour volumes for each turning movement, lane configurations, and traffic signal timings at signalized intersections. The PM peak hour traffic volumes and intersection geometry used for the operational analysis are illustrated in Technical Appendix H, Figure 1.

Based on an evaluation of the count data, the evening peak hour for the operational analysis was determined to be from 4:00 to 5:00 PM for most study intersections. Four intersections located on OR 99 south of Main Street indicated a peak hour of 3:00 to 4:00 PM to reflect peak traffic conditions along that corridor. The peak hour traffic volumes were further refined to reflect the 30th highest annual hour volumes (30HV), which are commonly used in operational analysis. These factored volumes account for seasonal variations in traffic and generally represent the levels of congestion present during the weekday PM peak hour in the summer time, when volumes are at their highest.

Traffic Operations

Definition of Traffic Level of Service

Level of Service (LOS) and volume to capacity (v/c) ratios are both used as measures of effectiveness for intersection operation. LOS is similar to a "report card" rating based upon average vehicle delay. Level of Service A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. Level of Service D and E are progressively worse peak hour operating conditions. Level of Service F represents conditions where average vehicle delay exceeds 80 seconds per vehicle entering a signalized intersection and demand has exceeded capacity. This condition is typically evident in long queues and delays. Unsignalized intersections specify levels of service for major and minor street turning movements. For this reason, LOS E and even LOS F can occur for a specific turning movement; however, the majority of traffic may not be delayed (in cases where major street traffic is not required to stop). LOS E or F conditions at unsignalized intersections generally provide a basis to study intersections further to determine availability of acceptable gaps, safety and traffic signal warrants.

A volume to capacity ratio (v/c) is the peak hour traffic volume at an intersection divided by the maximum volume that intersection can handle. For example, when a v/c is 0.80, peak hour traffic is using 80 percent of the intersection capacity. If traffic volumes exceed capacity, queues will form and will lengthen until demand subsides below the available capacity. When the v/c approaches 1.0, intersection operation becomes unstable and small disruptions can cause traffic flow to break down.

As performance measures of intersection performance, LOS and v/c often correspond. However, they do not necessarily have a direct correlation. Depending on control type, operating characteristics, geometries, and specific movement volumes one of the measures may raise concerns about performance while the other does not.

Operating Standards

Level of Service, delay and volume to capacity ratios are used as measures of effectiveness for study intersection performance. The intersection operational standards for Lane County and ODOT are summarized below.

Lane County Performance Standard⁹ — Requires county roads inside an urban growth boundary (UGB) to operate at LOS D or better and below a maximum volume to capacity ratio dependent on posted speed during the peak hour as specified in Table 3-4.

Table 3-4: Lane County Operating Standard for County Roads Inside UGB

Posted Speed (MPH)	>=45	<45
Volume to Capacity Ratio (v/c)	0.75	0.85

ODOT Performance Standard¹⁰ — Requires District Highways inside a UGB to operate below a maximum volume to capacity ratio dependent on posted speed during the peak hour as shown in Table 3-5.

Table 3-5: ODOT Operating Standards

Posted Speed (MPH)	>=45	40	<=35
Volume to Capacity Ratio (v/c)	0.80	0.85	0.90

ODOT performance standards apply along all ODOT facilities including OR 99 as well as I-5 ramp interchanges (where a v/c of either 0.85 or a lower value of the intersecting street is used). Lane County has jurisdiction on S. River Road and South 6th Street. No city operational standards are specified in the 1998 Cottage Grove TSP or current Comprehensive Plan. As such, new performance standards are recommended for use on city street intersections.

The suggested standard for city facilities is a volume-to-capacity ratio of 0.90 during the peak hours of operation. This would apply to streets and intersections controlled by traffic signals. Intersections that have stop sign controls (two-way or all-way stop controlled) would be allowed to drop to Level of Service E conditions, as defined by the latest *Highway Capacity Manual* for the minor side street approach. The jurisdiction and applicable performance standard for each study intersection is identified in Technical Appendix L.

Existing Operating Conditions

The 30HV intersection volumes for the PM peak hour were used to determine the existing study intersection operating conditions based on the 2000 Highway Capacity Manual methodology for signalized and unsignalized intersections ¹¹. Traffic volumes and level of service calculation sheets can be found in Technical Appendix C. Table 3-6 summarizes the existing (2006) weekday PM peak hour intersection operation at study intersections. Each of the study intersections operates at a LOS of D or better. The intersection of the I-5 SB ramp interchange with the Cottage Grove Connector and Gateway Boulevard has a v/c ratio of 0.88, which exceeds the ODOT performance

⁹ Lane County Transportation System Plan, Lane County Public Works, June 2004

¹⁰¹⁹⁹⁹ Oregon Highway Plan - Amendment, The Oregon Department of Transportation, July 2005.

^{11 2000} Highway Capacity Manual, Transportation Research Board, 2000.

standard of 0.85. All other intersections have an acceptable v/c ratio based on ODOT and Lane County standards. In order to represent operating conditions adequately at the Cottage Grove Connector/OR 99 intersection, the approaches were separated into three smaller intersections for analysis purposes.

Table 3-6: Existing Weekday PM Peak Hour Intersection Level of Service

Intersection	Level of Service	Average Delay (Sec)	Volume / Capacity	Standard Met?	
Signalized Intersections	·				
I-5 SB Ramp/Cottage Grove Connector	D	44	0.88	No	
I-5 NB Ramp/Row River Road	В	14	0.53	Yes	
OR 99/Woodson Place	Α	10	0.58	Yes	
OR 99/Main Street	D	50	0.71	Yes	
OR 99/6 th Street	В	11	0.33	Yes	
OR 99/4 th Street	В	19	0.33	Yes	
Main Street/River Road	В	17	0.41	Yes	
Main Street/16 th Street	В	17	0.59	Yes	
Main Street/Gateway Boulevard	С	28	0.78	Yes	
Unsignalized Intersections					
OR 99/River Road	A / B	3	0.03 / 0.23	Yes	
Harrison Avenue/River Road*	Α	9	0.22	Yes	
Main Street/R Street	A / B	3	0.05 / 0.10	Yes	
Monroe Avenue/10 th Street	A / B	2	0.01 / 0.06	Yes	
Taylor Avenue/8 th Street*	Α	8	0.18	Yes	
I-5/6 th Street (southbound off ramp)	A / B	5	0.00 / 0.23	Yes	
I-5 NB Ramp OFF Ramp (Southbound Right) /Row River Road	A / B	1	0.00 / 0.12	Yes	
OR 99/Cottage Grove Connector	A / C	-	0.00 / 0.34	Vaa	
(OR 99 northbound & southbound)	A / C	5	0.00 / 0.31	Yes	
OR 99/Cottage Grove Connector	A / A	3	0.03 / 0.09	Yes	
(CGC northbound right turn)	A / A	J	0.03 / 0.09	162	
OR 99/Cottage Grove Connector (OR 99 eastbound left turn)	A / C	1	0.00 / 0.17	Yes	

Notes: Unsignalized Intersection Operations:

A/A = Major street turn LOS / Minor street turn LOS

#/# = Major street turn v/c / Minor street turn v/c

Signalized and All-Way Stop Intersections:

Delay = Average vehicle delay in the peak hour for entire intersection in seconds.

* All-Way Stop Intersection

Railroad Crossings

There are six at-grade railroad crossings in the study area. Five are located within the city limits of Cottage Grove with an additional crossing located south of the City limits at Rachel Road. The railway intersections at Main Street and South 4th Street are flashing-light signals with an overhead cantilever structure and automatic gates. The railway intersection at 6th Street includes post-mounted flashing-light signals and automatic gates. The three remaining at-grade rail crossings in Cottage Grove are stop controlled with no signals or gates present. The location of rail crossings in Cottage Grove is illustrated in Figure 3-12.

Feedback from city residents indicates that significant delays exist at railroad crossings due to trains stopping for durations as long as 40 minutes. Blockage of at-grade crossings presents significant delays for emergency response crews who must reroute to railroad overpasses, school buses, and other vehicles, pedestrians, and bicyclists. Public railroad crossings may not be blocked for longer than 15 minutes between 10 PM and 6 AM, with 10 minute limits between 6 AM and 10 PM, except for continuously moving trains. Blockage complaints are handled by ODOT Rail Division which may fine rail operators for blockage infractions.

Traffic Safety

Five years of available collision data (2000 through 2004) were obtained from ODOT to identify areas of traffic safety concern within Cottage Grove. The analysis of collision data was separated into a review of past highway performance (specifically along OR 99) and past city street performance.

The collision data assessment indicated that three fatalities occurred within Cottage Grove from 2000 through 2004. The fatal collisions occurred on 8th Street near Taylor Avenue which involved a sideswiped parked car, at Gateway Street and Harvey Road which involved a turning movement and on the I-5 mainline (within Cottage Grove) which involved a pedestrian. No fatalities were reported at the study intersections.

OR 99 Performance

To assess the significance of collisions that have occurred along OR 99, collision rates by intersection, as well as by highway segments, were calculated to relate collision frequencies with the volume of traffic served. Within the study area, 59 collisions have occurred on OR 99 over the five year period. Of these incidents, 31 collisions occurred within 100 feet of a study intersection. These incidents were primarily rear end (52%) and turning (32%) collision types.

Table 3-7 summarizes the collisions experienced along study intersections on OR 99 within the five-year period examined, as well as the resulting collision rate which calculates the number of collisions per million vehicles entering the intersection. Collision rates of 1.0 or greater are generally used as indicators that specific intersections should be investigated further for potential safety enhancements. As shown, all study intersections maintain collision rates well below 1.0. In addition, the intersection of OR 99 with Harrison Avenue and 4th Street has recently been signalized resulting in improved traffic safety.

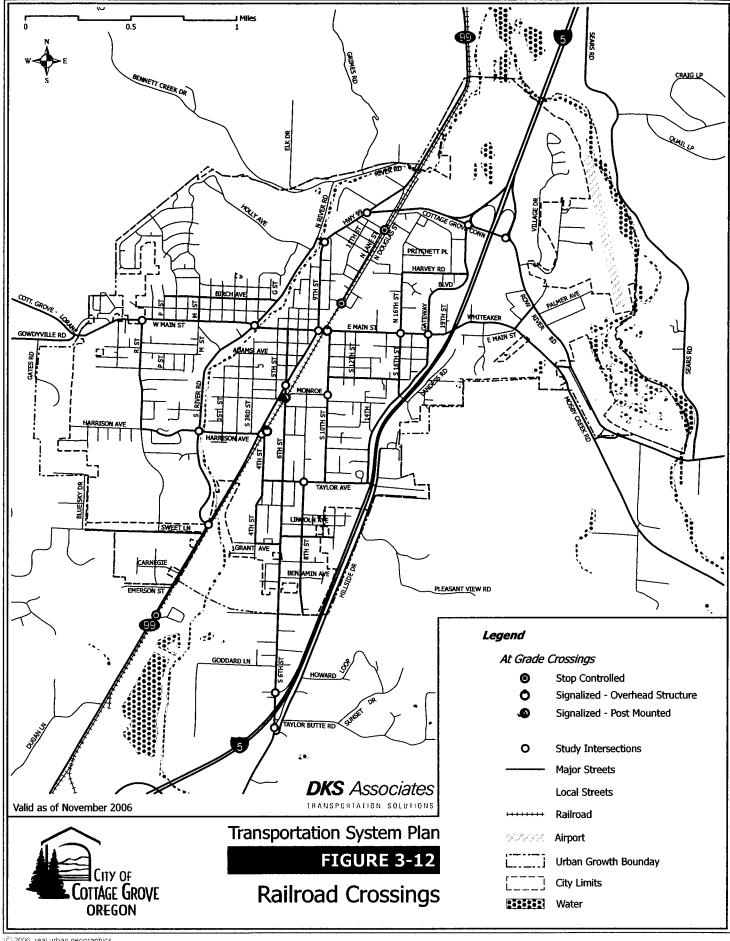


Table 3-7: OR 99 Collisions (2000-2004)

Intersection on OR 99	Fatal	Non- Fatal Injury	Property Damage Only	Total Collisions	Collision Rate
Cottage Grove Connector	0	1	2	3	0.13
Woodson Place	0	0	4	4	0.17
Main street	0	3	8	11	0.31
6 th Street	0	1	3	4	0.20
Harrison Avenue / 4 th Street	0	2	7	9	0.58
South River Road	0	0	0	0	0.00

Source: ODOT - Transportation Data Section - Crash Analysis and Reporting Unit, Continuous System Crash Listing, City of Cottage Grove, 2000-2004.

Other (non-study) intersections located along OR 99 had six collisions at most over the five year period. Even with conservatively low average daily traffic volume estimates, these non-study intersections indicate collisions rates well below the 1.0 threshold. The fairly even geographical distribution of collisions along the corridor and low collision rates indicate that areas outside of study intersections on OR 99 would not present a significant traffic safety concern.

Collision rates identifying the number of crashes per million vehicle-miles traveled on specified sections of OR 99, as well as statewide average crash rates for various facility types, were obtained from ODOT's 2004 State Highway Crash Rate Tables¹². Highway sections analyzed in these tables are categorized by area type and functional classification to provide a basis for comparison between various facilities. For this analysis OR 99 within Cottage Grove city limits was categorized as "Suburban city". Table 3-8 summarizes the ODOT crash rates and statewide average rates for similar environments for each of the five years in the analysis period. As shown, the crash rate experienced on OR 99 for the last five years has been well below the statewide average crash rate for similar facilities.

Table 3-8: OR 99 Segment Crash Rates

Facility	2000	2001	2002	2003	2004
OR 99	1.81	2.47	2.13	2.81	1.32
Statewide Average*	3.37	3.50	2.86	3.14	2.05

^{*} Based on state highways in suburban cities

The analysis of the highway crash history was supplemented by reviewing ODOT's Safety Priority Index System (SPIS) listing for locations in the study corridor ranked

^{12 2004} State Highway Crash Rate Table, Oregon Department of Transportation, 2004.