TRANSPORTATION SYSTEM PLAN



CITY OF JACKSONVILLE OREGON JUNE 2009

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		and Architectural Review Commission	
HDM:	Highway	y Design Manual	
ITS:		ent Transportation System	
	_	ed Land Use and Transportation Plans	
	Level of		
LTP:	-	erm Potential	
NEPA: NWI:		l Environmental Policy Act l Wetlands Inventory	
OAR:		Administrative Rule	
		Department of Transportation	
OHP:		Highway Plan	
ORS:		Revised Statutes	
OAR:		Administrative Rule	
OTC:	Oregon '	Transportation Commission	
OTP:	Oregon	Transportation Plan	
PM_{10} :		ate Matter: 10 parts per million (air quality term)	
	Right of		
		River Valley Railway	
RTP:		ll Transportation Plan	
		Valley Council of Governments (also: COG)	
	_	Valley Metropolitan Planning Organization (also MPO)	
SDC:		Valley Transit District Development Charge	
SOV:		Occupancy Vehicle	
STA:	-	Transportation Area	
STIP:		de Transportation Improvement Program or TIP: not statewide	
TAC:		al Advisory Committee	
TDM:		rtation Demand Management	
TMA:	Transpo	rtation Management Association	
TOD:		Oriented Development	
TPAU:		ortation Planning and Analysis Unit (branch of ODOT)	
TPR:		rtation Planning Rule	
TSM:		rtation System Management	
TSP:		rtation Systems Plan (this document)	
UGB:		Growth Boundary	
		Growth Boundary Management Agreement	
V/C		to Capacity Ratio (also used as: v/c) Miles Traveled	
VMT:	v enicie	IVITIES TTAVEICU	

PREFACE:

This project was conducted under funding from the Oregon Department of Transportation (ODOT) and the Rogue Valley Council of Governments (RVCOG).

The progress of this plan was guided by a Technical Advisory Committee (TAC) comprised of City of Jacksonville staff, ODOT staff, RVCOG staff, Rogue Valley Transit District (RVTD) staff, Jackson County staff, Department of Land Conservation and Development (DLCD) staff, Medford School District staff, Parametrix (who performed the engineering study) and a representative of the Jacksonville business community.

Members of the TAC:

Paul Wyntergreen Jacksonville City Manager

Jeff Alvis Jacksonville Director of Public Works

John RenzDLCDJohn McDonaldODOTPaige TownsendRVTD

Mark Button Medford School District

Mike Kuntz Jackson County Susan Lee Jackson County

Linda Graham Jacksonville Businesses

Anne Sylvester Parametrix

RVCOG staff:

Vicki GuarinoProgram ManagerDick ConversePrincipal PlannerEric HeesackerAssociate Planner

The above-mentioned people spent a large amount of time and effort in developing the Jacksonville Transportation System Plan (TSP), and their participation was essential to develop the recommendations that are presented in this report.

The consultant team consisted of several individuals who work at Parametrix and Greenlight Engineering, the firm that provided the traffic counts/studies utilized to complete this TSP.

Executive Summary

Overview

The City of Jacksonville, in conjunction with ODOT and RVCOG, initiated a study of the City's transportation system in 2007. This TSP will assist in guidance of management and development of existing/future transportation facilities within Jacksonville. The TSP incorporates visions of the community and is consistent with all applicable plans and statutes applicable to TSP creation. This TSP provides the necessary elements for the City of Jacksonville to incorporate the TSP as a part of the city's comprehensive plan while at the same time provides recommendations which can be utilized by ODOT and Jackson County.

Contents of this TSP are guided by Oregon Revised Statute (ORS) 197.712 and DLCD's administrative rule: The Transportation Planning Rule (TPR). These laws and rules dictate that Oregon jurisdictions develop the following:

- a road plan for the network of arterial and collector streets;
- a public transit plan;
- a bicycle/pedestrian plan;
- an air, rail, water, and pipeline plan;
- a transportation financing plan; and,
- policies/ordinances to implement the TSP.

Oregon's TPR dictates that alternative travel modes be considered equally with automobiles and that effort be applied to development/enhancement of these alternative modes in preparation of a TSP. Findings in this TSP indicate a lack of automobile capacity issues in Jacksonville. Alternative travel modes are therefore an emphasis of this TSP. Oregon's TPR also requires local jurisdictions to adopt land use/subdivision ordinance amendments to protect transportation facilities and to provide alternative transportation links between differing land uses. Local communities are further required to coordinate local plans with applicable county, regional, and state transportation plans.

TSP Process

Jacksonville's TSP was developed by identifying transportation needs, by developing and analyzing proposed projects that address those needs, and by developing a fundable TSP which includes those projects best addressing Jacksonville's needs. The following steps were involved in this process:

- A review of applicable state, regional, county, and local transportation plans/policies with which the Jacksonville TSP must comply.
- Provision of public open houses to distribute applicable information and to collect feedback from the public. The development of transportation goals and objectives, and the establishment of a TAC was essential.
- Evaluation of existing transportation needs.

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- Evaluation of transportation needs required by future growth of the community.
- Development of different alternatives/planned projects intended to address Jacksonville's future transportation needs.
- Estimating revenue available, and required, to fund those future transportation needs.
- Compilation of results of this work into a TSP document for review, amendment, and adoption by the Jacksonville City Council.

Public Involvement

Public and agency involvement was secured by holding public meetings and creation of a TAC to guide creation of the TSP. The TAC was made up of staff of applicable agencies that provided essential guidance for TSP creation. Interested individuals and groups were including on mailing lists and meeting notifications. At least two public meetings and five TAC meetings were held for TSP review and the city's Transportation Committee, Planning Commission, and City Council all provided review before final adoption of the document.

Plan and Policy Review

All Oregon TSP's are required to be consistent with state, regional, county, and local plans. ODOT, Jackson County, and the City of Jacksonville all own roads within the city. The Jacksonville Development Code and Comprehensive Plan were reviewed for compliance/consistency with applicable state and county documents.

Existing Conditions

- **Public Transportation:** RVTD currently serves the Jacksonville area. The Route 30 line currently has a 45 minute headway and serves riders from downtown Jacksonville to the West Medford Transit center.
- **Pedestrian:** Element #4 provides a brief description of pedestrian activity within the city center and on those streets where sidewalks are provided.
- **Bicycle:** There are bike lanes painted on the state facilities running through the city. Details regarding bicycle traffic can be found in Element #4.
- **Pipelines/Transmission Systems:** Electric, water, natural gas, and sewer lines current serve the city; sewer and gas do not serve the northwest quadrant however. No issues have been identified with these services.
- **Rail:** While no rail systems currently serve the city, there are future plans for a trolley service, and there is an existing right-of-way (ROW) from a defunct railroad that connects Jacksonville with Medford. Current plans call for utilizing this ROW as a public pedestrian, bicycle easement.
- **Air:** There are no public airports located in Jacksonville. Medford international is located about six miles to the east.

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- **Marine:** There are no marine facilities/waterways in Jacksonville.
- Roadway Operations/Safety: State Highway 238 traverses Jacksonville and operates well below capacity for all hours except late-morning Sundays when large volumes of traffic traverse Jacksonville from west to east. Traffic volumes then cause delays in the LOS "F" range for about 90 minutes at the California/Oregon Streets intersection. Recommendations in the TSP suggest how to mitigate this 90 minute condition. There are no other safety or capacity warrants in Jacksonville.
- Truck Movement: There are several quarries located to Jacksonville's northwest. There have been numerous complaints about trucks hauling aggregate through the city on Highway 238. To alleviate this problem, Jacksonville does have a vision to construct an arterial connector around the north edge of the city which would reroute most of this truck traffic around the town's center. This arterial connector is discussed at length in the TSP.

Future Transportation Conditions

As explained in the "Planned Projects" element of the TSP, there are plans to enhance the city's pedestrian, bicycle, and automotive transportation systems. While there are no safety or capacity warrants for roadways in the city, Jacksonville has a vision for how the future transportation network will look. There are plans to create more bike paths, more pedestrian pathways ("C" and "Bybee" streets and Main Street) and plans to create an arterial connector to take truck traffic north of the city center. These details are all discussed in Elements 6, 7, and 8 of the TSP.

Alternative Analysis

This analysis turns out to be very brief in the form that local decision makers are informed that they do not have to act upon any of the planned projects out of necessity. The planned projects are planned to enhance and facilitate the city's desire to be a more pedestrian friendly city and to maintain its historic ambiance.

Roadway Connectivity

There are plans to enhance some local connectivity (see Connectivity Map: Appendix I) for automobiles while other improvements are conceptualized to provide more connectivity for bicycles and pedestrians.

Transit

While Jacksonville is currently served with RVTD's transit service, there are currently no long range plans to enhance the service. There are some concepts being discussed to enhance service during BRITT festivals (a local summer music festival that attracts visitors from outside Jacksonville) and RVTD does have some long range plans for service expansion but funding for expansion has not been identified.

Planned Transportation Facilities and Major Improvements

The most significant planned improvement is for an arterial connector that will remove truck traffic from Jacksonville's downtown core and reroute this traffic to the north edges of the city. This project has been studied locally and is included in the previous Jacksonville TSP, Jackson County's TSP, and is also included in the Regional Transportation Plan (RTP) as an 'unfunded, Tier 2' project. Prior to any final construction plans for this connector is a determination regarding which design standards will apply to the connector. Also, all environmental concerns will need to be addressed in compliance with the National Environmental Policy Act (NEPA).

Other major improvements are centered on bicycle and pedestrian facilities, as well as a few minor improvements to local roadways to enhance auto circulation within Jacksonville. Elements 6, 7, and 8 discuss these improvements and their funding sources.

Priority and Timing of Planned Facilities and Improvements

There are an estimated \$2,600,000 in costs that Jacksonville will be responsible for (based on planned projects) over the planning horizon but does not include conceptual projects. The TSP prescribes this schedule, based on input from Jacksonville for project implementation.

0-5 years:	\$2,599,000	(100%)
5-10 years:	\$0	(0%)
10-15 years:	\$0	(0%)

*15-20 years: \$Unknown(percentage unknown)

As shown above, all but one project (arterial connector) are proposed to be completed within the first ten years of the planning horizon. In 1998 total cost of the arterial connector was projected to approach \$26 million.

Transportation Financing and Funding Overview

To meet TPR requirements, Jacksonville's TSP must have a transportation financing program which includes:

- A list of planned transportation facilities and major improvements.
- Estimates regarding timing of improvements.
- Determination of rough conceptual capital cost estimates.
- Narrative regarding existing and potential funding sources.
- Alternative funding strategies for capital projects.

Brief descriptions of funding sources are provided in Element 8 of the TSP. Alternative funding sources include state motor vehicle, bicycle-pedestrian funds, street utility fees and gas taxes.

^{*}Reflects two conceptual projects; see Elements 6-8 for explanation

INTRODUCTION

Study Area and Context

The City of Jacksonville is located about six miles west of Medford and I-5 in Jackson County, located in Oregon's southwest corner. The city has a population of 2,655 according to 2008 figures provided by Portland State University (PSU). This represents a 3.1% increase over figures provided by PSU for 2006.

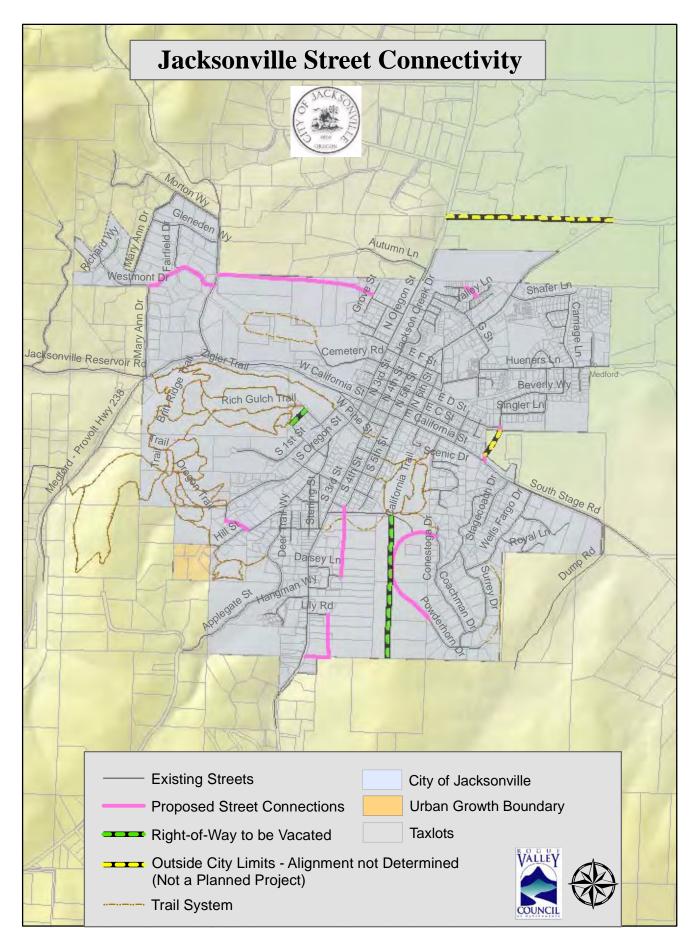
Jacksonville's beginnings can be traced to a gold rush in 1851. The town, then called Table Rock City, quickly grew to include more than 2000 people, most of whom were seeking the elusive yellow metal, while the remainder made a living from ancillary activities.

From 1852-1884, Jacksonville flourished as southwestern Oregon's largest commercial center. By 1927 most of the valley's growth took place in Medford and the county seat was reestablished there from Jacksonville. By this time, Jacksonville was quickly becoming an agricultural center.

Jacksonville was designated a national historic landmark district in 1966 and the town has managed to remain an historical resource for southwest Oregon. The visions for transportation improvements contained in this TSP reflect that desire to remain an historical destination through design and implementation of nonmotorized transportation improvements.

Public Involvement Process

Public input to this TSP process has occurred on more than one occasion with two public meetings being held to discuss the TSP and what it is designed to accomplish. The city's existing TSP was adopted in 1995 and this TSP update is sorely needed. Through funds provided by ODOT and RVCOG, COG staff have prepared this TSP in conjunction with private consultants (Parametrix and Greenlight Engineering) and through solicitation of input from many different entities and agencies.



Element 1

Jacksonville Transportation Goals & Policies

1.1 Introduction

The *Transportation System Plan* is the legal basis and policy foundation for decisions Jacksonville makes regarding transportation. The goals and policies guide the development of the plan and can be used to evaluate how well the plan reflects the community's values.

The Goals and Policies were developed with guidance from the TSP's Technical Advisory Committee and Jacksonville's Transportation Committee, the City's citizen advisory committee on transportation and citizen advisory committee for this TSP update. Additionally, the goals reflect comments gathered during a community Open House, which was the formal kick-off for this project.

1.2 Goals and Policies

The Goals and Policy shown below are not printed in any order relative to their importance.

Goal/Policy

Goal 1

Policy 1-1 Provide a transportation system that will promote safety, including pedestrian safety and awareness.

Preserve and enhance public safety and security.

Policy 1-2 Provide a transportation system that will promote security.

Goal 2 Support increased travel options.

- Policy 2-1 Provide for bicycle (especially Class I pathways), pedestrian, mass transit and other travel alternatives that include preservation of the RRVR easement for bicycling.
- Policy 2-2 Pursue measures to reduce per capita vehicle miles traveled (VMT) and use of single-occupancy vehicles (SOV) through transportation demand management (TDM) strategies and maintain consistency with "Alternative Measures" in the Regional Transportation Plan (RTP).

Policy 2-3	Use design elements and road treatments for a safe, convenient, pedestrian-friendly environment.
Policy 2-4	Support incentives for walking, carpooling, bicycling, parking in the municipal parking lot.
Policy 2-5	Where possible, design land divisions to provide pedestrian and bicycle connectivity among neighborhoods.
Policy 2-6	Locate transit stops to facilitate safe transit ridership.
Goal 3	Support accessibility and mobility
Policy 3-1	Plan, develop, maintain, and secure financing for a balanced multi-modal transportation system that will address existing and future movement of people and goods throughout the city.
Policy 3-2	Provide for appropriate street, pathway and sidewalk standards.
Policy 3-3	Maintain a comprehensive street classification system to support various land use densities, travel needs, and community expectations.
Policy 3-4	Maintain a parking plan that addresses visitors' needs, provides park-and-ride options, and encourages options to single-occupancy vehicle (SOV) travel.
Policy 3-5	Maintain a traffic-control plan that is consistent with the city's historic status.
Policy 3-6	Establish Long-Term Potential (LTP) corridor areas as necessary where future road connections beyond the planning horizon of the TSP are probable.
Goal 4	Support livability and community identity
Policy 4-1	Preserve unique historic and scenic resources.
Policy 4-2	Promote a sense of cooperation and respect within our community and with our neighbors and visitors.
Policy 4-3	Complete an acoustic study to determine the effect of heavy truck traffic traversing the town's historic core.
Goal 5	Encourage economic vitality
Policy 5-1	Use transportation investments to foster economic opportunities.

- Policy 5-2 Complete an economic study to ensure future transportation improvements (i.e.: the arterial connector around the town's north edge) do not decrease the economic viability of commercial uses located on California and 5th Streets.
- Policy 5-3 Promote energy conservation and efficiency.
- Policy 5-4 Explore the need for an economic study to ascertain impacts to downtown businesses as a result of rerouting traffic.

Goal 6 Support efficiency and good stewardship

- Policy 6-1 Maximize the efficiency of the transportation system through means including effective land use planning consistent with benchmarks in the "Alternative Measures" of the Regional Transportation Plan (RTP).
- Policy 6-2 Prioritize transportation funds to address safety and operation needs of the transportation system. Prior to allocating money to increase capacity, efficiency of the existing system will be maximized through Transportation System Management (TSM) and Transportation Demand Management (TDM) measures.
- Policy 6-3 Prioritize projects that add capacity based on securing funds, improving safety, relieving congestion and responding to growth.
- Policy 6-4 Encourage where appropriate to achieve TSP goals, the use of cost-effective emerging technologies.

Goal 7 Assure accountability

- Policy 7-1 Provide an open, balanced and credible process for planning and developing a transportation system that complies with state and federal regulations.
- Policy 7-2 Encourage Jackson County officials to evaluate the effect on traffic circulation of significant new or expanded uses west of Jacksonville. If impacts are determined to be significant, the county should work with the city to impose appropriate conditions to reduce the impact.
- Policy 7-3 Continue expanding, as the town's UGB is expanded, the dense and mixed use development (TOD) located at the northern edges of the city.

Element 2

Plans, Regulations, and Standards

2.1 Introduction

This section summarizes plans and policies at the state, Metropolitan Planning Organization (MPO), county, and local level that directly impact transportation planning in the City of Jacksonville. Although each document reviewed contains many policies, only those sections most pertinent were chosen for this examination. The purpose of this review is to provide a policy context for Jacksonville's Transportation System Plan. New policies introduced during the city's TSP process should be consistent with the adopted policies in this chapter.

Applicable standards and policies where possible are printed verbatim or paraphrased as necessary. A conclusion regarding relationship to Jacksonville's TSP is provided. The conclusions are meant to emphasize important aspects of policies.

Three jurisdictions own the public roads in the city: City of Jacksonville, Jackson County and the Oregon Department of Transportation (ODOT). The policies, plans, and standards governing each jurisdiction's roadway responsibilities are discussed below with a focus toward identifying impacts and influences on Jacksonville's TSP. Additionally, Jacksonville is within the Rogue Valley Metropolitan Planning Organization (RVMPO) planning area. The RVMPO coordinates transportation planning for federally funded, regionally significant transportation projects. This section begins with State of Oregon policy documents, followed by the RVMPO, Jackson County and Jacksonville.

2.2 State of Oregon

2.2.1 Transportation Planning Rule

The rule (Oregon Administrative Rules, Division 12, Section 660-012) implements Statewide Planning Goal 12, to provide and encourage a safe, convenient and economic transportation system, and provisions of other statewide planning goals related to transportation planning. The purpose is to direct transportation in coordination with land use planning and development. The Transportation Planning Rule (TPR) was most recently amended in November 2006.

The TPR requires cities, counties, Metropolitan Planning Organizations (MPOs) and ODOT to adopt TSPs, addressing the following:

• A determination of transportation needs:

- A plan for a network of arterial and collector roads;
- A public transportation plan;
- A bicycle and pedestrian plan;
- Plans for air, rail, water and pipeline transportation;
- Plans for transportation system management and demand management;
- A parking plan;
- A financing program; and,
- Polices and land use regulations to implement TSP provisions.

In MPO areas, local TSPs are to be designed to increase transportation choices and reduce reliance on the automobile. Key points that must be addressed to implement a TSP are noted below.

Protection of transportation facilities, corridors. Regulations to protect transportation facilities include:

- Access controls:
- Standards to protect future operations;
- A coordinated review of land use decisions that affect transportation facilities;
- A process to apply conditions on development to minimize transportation impacts;
- Regulations to provide notice of potential impacts to affected agencies; and
- Regulations assuring that land use, density and design decisions are consistent with function and performance standards in the TSP.

Land use and subdivision regulation. Provisions for safe and convenient movement of pedestrians, bicyclists and vehicles that are consistent with street function, including:

- Bicycle parking for retail office, and institutional development, and multi-family residential development of four or more units; and,
- Sidewalks and bicycle paths within new developments, and connecting to nearby neighborhoods, transit stops and activity centers.

Support for transit. Regulations that encourage transit service and ridership, carpooling.

- Provision of pull-outs, shelters and other amenities;
- Walkways connecting to transit stops from retail, office and institutional uses;
- Preferential parking for carpools and vanpools; and,
- Designation of densities and land uses to support transit service.

Adopt land use and subdivision regulations to reduce reliance on the automobile. The RVMPO audit for an Integrated Land Use and Transportation Plan for Jacksonville (discussed below and submitted as Appendix A) contains measure(s) to help reduce reliance on the automobile and contribute toward meeting the RVMPO Alternative Measures, which are noted in the Regional Transportation Plan (RTP) discussion below. The Alternative Measures set standards for meeting the TPR requirement to reduce vehicle miles traveled (VMT) in the RVMPO area. Other measures include:

• A parking plan; and,

• Provide the most direct possible access for pedestrians and bicyclists.

Minimum width standards for local streets. Establish street standards that minimize pavement width and rights-of-way consistent with operational requirements. Such measures reduce cost and discourage inappropriate traffic volumes and speeds, while providing adequate access for all emergency vehicles.

2.2.2 Access Management

The Transportation Planning Rule (TPR) requires local governments to adopt land use or subdivision ordinance regulations, consistent with applicable federal and state requirements, to protect transportation facilities, corridors and sites for their identified functions. Regulations include access control measures such as driveway and public road spacing, median control and signal spacing standards, which are consistent with functional classification.

California and Fifth streets (Hwy. 238) are classified as a state District Highway, and designated a Special Transportation Area (STA). Planning standards for the STA are discussed below. Access on state roadways must be consistent with OAR Chapter 734, Division 51 rules (revised in 2000). Division 51 rules are to provide a safe and efficient transportation system through the preservation of public safety, the improvement and development of transportation facilities, the protection of highway traffic from the hazards of unrestricted and unregulated entry from adjacent property, and the elimination of hazards due to highway grade intersections. The rules establish procedures and criteria used by the ODOT to govern highway approaches, access control, spacing standards, medians and restriction of turning movements in compliance with statewide planning goals and in a manner compatible with acknowledged comprehensive plans. The rules may not be used to deny reasonable access to adjacent properties. Criteria used to evaluate approaches may include project traffic impacts, crash history and the project's internal traffic circulation plan. Generally, minimum access management spacing for public road approaches is the existing city block spacing, or the city block spacing identified in the city comprehensive plan. Public road connections are preferred over private driveways and driveways are discouraged in STAs. However, where driveways are allowed and where land use patterns permit, the minimum access management spacing for driveways is 175 feet or mid-block if the current city block spacing is less the 350 feet. Most city blocks in the historic downtown area are 200 feet long.

2.2.3 Oregon Highway Design Manual

The manual, last revised in April 2005, provides uniform standards and procedures, and guidance for the location and design of new construction, major reconstruction, and resurfacing, restoration or rehabilitation projects. It is to be used for all projects that are located on state highways. Local planners use the manual in determining design requirements as they relate to state highways in TSPs. It is relevant here for addressing issues relative to Hwy 238.

More generally, the manual contains policies that are relevant to various project types. It provides uniform, general information about design processes and different design strategies. Specific design information is provided by area type, such as rural, urban, intersection, bicycle and pedestrian. Acceptable design standards are identified.

2.2.4 Oregon Highway Plan

The plan establishes long-range policies and investment strategies for the state highway system. The Oregon Transportation Commission adopted the Oregon Highway Plan on March 18, 1999 and amended through August, 2006.

The plan contains the following elements:

- **Vision** presents a vision for the future of the state highway system, describes economic and demographic trends in Oregon and future transportation technologies, summarizes the policy and legal context of the plan, and contains information on the current highway system.
- **Policy** contains goals, policies and actions in five areas: system definition, system management, access management, travel alternatives and environmental and scenic resources.
- **System** contains analysis of state highway needs, revenue forecasts, descriptions of investment policies and strategies, implementation strategy and performance measures.

The Oregon Highway Plan classifies Hwy. 238 as a District Highway. The plan describes District Highways as facilities of county-wide significance, which function largely as county and city arterials or collectors. These highways provide connections between small urbanized areas, rural and urban centers, and serve local traffic and access needs. Highway classification establishes the standards for mobility and access spacing. The maximum volume to capacity ratio (v/c) for a District Highway having a speed of less than 45 mph in an urban area, but outside an MPO or Special Transportation Area, is .85.

Additionally, the segment of Hwy. 238 within city limits (0.61 mile, from mile post 33.6, California Street at W. Main Street, mile post 33.97, North Fifth Street at Shafer Lane) was designated a Special Transportation Area (STA) by the Oregon Transportation Commission on January 14, 2004, pursuant to the highway plan's land use and transportation policy (more discussion on pg.66). The policy addressed the relationship between state highways and adjacent development patterns. The STA designation recognizes the dual purposes of the roadway to serve through travelers and be the main street of a community. Within STAs the need for appropriate local access outweighs the consideration of highway mobility. Management of STAs is to be governed by a memo of understanding between the city/ODOT, however no such agreement has been drafted.

2.2.5 Oregon Statewide Transportation Improvement Program

The Statewide Transportation Improvement Program (STIP) is a four-year construction (2006-2009), multi modal program that fulfills federal requirements. It is a compilation of projects utilizing various federal and state funding programs, and includes projects on the

state, city and county transportation systems, and projects in the National Parks, National Forests, and Indian Reservations. Also included are projects fully funded by the metropolitan planning organizations (MPOs) that are of regional interest or significance.

The STIP is not a planning document; it is a project prioritization and scheduling document developed through various planning processes involving local and regional governments, transportation agencies, and the interested public. Through the STIP, ODOT allocates resources to the highest priority projects in these plans.

There are projects in the STIP located in Jacksonville.

2.2.6 Executive Orders on Quality Development and Sustainability

Executive Order No. EO-00-23: Use of state resources to encourage the development of quality communities. The order adopted by the governor in August 2000 is intended to ensure that state programs and activities contribute to building and maintaining quality communities that are environmentally sound, offer affordable housing and a balance of jobs and housing to reduce transportation needs and the cost of providing services including transportation. The order has seven objectives, which state agencies should use in combination with state and local partnership principles and local development objectives. Objective 4 most closely relates to the TSP update. It reads: "Support development that is compatible with a community's ability to provide adequate public facilities and services."

Executive Order No. EO-03-03: A sustainable Oregon for the 21st century. The order recognizes that Oregon's economic recovery will be aided by establishing a commitment to lasting solutions that simultaneously address economic, environmental and community well-being. One aspect of well-being should not be traded against another. The order supports the goals of the Oregon Sustainability Act of 2001.

Executive Order No. EO-06-14 establishing the Transportation and Tourism Task Force to synchronize tourism and transportation enhancement efforts statewide, including traveler information.

2.2.7 Oregon Transportation Plan

The Oregon Transportation Commission (OTC) adopted the Oregon Transportation Plan (OTP) in 1999 and in September 2006 adopted a completely updated multi-modal plan. This Plan supersedes the 1992 Oregon Transportation Plan. The 1992 OTP established a vision of a balanced, multimodal transportation system and called for an expansion of ODOT's role in funding non-highway investments. With fourteen years of experience and technological advances, the 2006 OTP provides a framework to further these policy objectives with emphasis on maintaining the assets in place, optimizing the existing system performance through technology and better system integration, creating sustainable funding and investing in strategic capacity enhancements.

The OTP has four sections: (1) Challenges, Opportunities, and Vision; (2) Goals, Policies and Strategies; 3) Summary of Financial and Technical Analyses; and (4) Implementation. The OTP meets a legal requirement that the OTC develop and maintain a plan for a multimodal transportation system for Oregon. The OTP also implements the federal requirements for a state transportation plan. The OTP also meets land use planning requirements for State agency coordination and the Goal 12 Transportation Planning Rule. This rule requires ODOT, the cities, and the counties of Oregon to cooperate and to develop balanced transportation systems.

2.2.8 Oregon Public Transportation Plan (1997)

The Public Transport plan focuses primarily on public transportation in metropolitan and urban areas. The following optimum (plan Level 3) public transportation level of service standards for urban areas envisions increased funding and applies for conditions in the year 2015. Level 3 standards include:

- Increase services to enable metropolitan areas to respond to TPR requirements for per-capita reduction in vehicle miles traveled;
- Provide services to all parts of the urbanized area;
- Provide service frequencies for all routes at no less than one-half hour at peak periods;
- Provide service at no less that one-hour frequencies for off-peak services on all routes, or make a guaranteed ride home program available;
- Provide park-and-ride facilities along major rail or bus corridors to meet reasonable peak and off-peak demand for such facilities;
- Provide services with regular, convenient connections to all intercity modes and terminals; and
- Provide sufficient service levels to public transportation-oriented development to achieve usage goals of the development.

Level 2 service standards would allow transit service to expand at pace with population; and Level 1 would maintain existing service. In addition to public transportation, the plan also describes rail standards and minimum level of service standards for intercity bus service.

2.2.9 Oregon Bike and Pedestrian Plan (1999)

The goal of this plan is to provide safe, accessible and convenient bicycling and walking facilities and to support and encourage increased levels of bicycling and walking. The plan identifies policies, classification of bikeways, construction and maintenance guidelines, and suggested actions to achieve these objectives. These actions are: (1) provide bikeway and walkway systems that are integrated with other transportation systems; (2) create a safe, convenient, and attractive bicycling and walking environment, and (3) develop education programs that improve bicycle and pedestrian safety.

2.2.10 Freight Moves the Oregon Economy Report (1999)

This document addresses concerns and needs of those who move goods and services within and through the state. It summarizes a variety of information about freight transport in the state including an in-depth look at issues and needs surrounding

movements by road, rail, waterways, aircraft and pipelines. It is intended to help implement the Oregon Transportation Plan, especially that plan's economic development goals, and the Oregon Highway Plan, which includes highway designations for freight movement.

There are no state-designated freight routes (per Oregon Highway Plan) in Jacksonville.

2.2.11 Intersection Operations—Fifth and California Streets

ODOT in early 2007 began a study of "stop" and through traffic at the intersection of Fifth and California streets, considering whether to require traffic in all directions except east-bound California through traffic to stop. Further study of this intersection should be pursued with ODOT staff to ensure the continued safe multi-modal traffic flow here, in accord with Policy 1-2 on Page 1.

2.3 Regional and County Plans

Jacksonville is in the Rogue Valley Metropolitan Planning organization and is surrounded by land under the jurisdiction of Jackson County, so planning at the county and regional level impacts the city. City transportation projects that are federally funded and of regional significance must be part of the RVMPO planning process.

2.3.1 Regional Transportation Plan, Rogue Valley Metropolitan Planning Organization (RVMPO)

The Regional Transportation Plan (RTP) is the long-range, multimodal transportation plan for the Rogue Valley metropolitan area. A result of the 2000 U.S. Census was the expansion of the Medford urbanized area to include the City of Jacksonville. Jacksonville formally joined the RVMPO in March 2003, and participated in the drafting and adoption of the 2005-2030 RTP. The plan meets federal mandates by meeting standards for air quality and by being fully funded.

The RTP serves as a guide for managing existing transportation facilities and for the design and implementation of future transportation facilities. It provides the framework and policy foundation for decision making. The plan's Guiding Principles rely heavily on increasing facility efficiency, supporting alternatives to single-occupancy vehicles and balancing competing demands for services and resources. The plan's projections include forecasts for population and employment, and expectations based on results of travel-demand modeling.

Projects listed in the RTP are either Tier 1 (funded) or Tier 2 (no funding identified).

Table 2.1: Jacksonville Regional Transportation Plan projects, Tier 1 & 2 (subject to change)

RTP#	Location	Description	Timing	Cost	Cost by	Funds
					Phase	Avail
n/a	C Street	Bike/ped improvements	short	\$238,500	\$238,500	\$238,500
402	Jacksonville	Street sweeper purchase	short	\$199,240	\$199,240	\$241,000
	No projects identified		Medium		\$0	\$671,000
	in medium range		1		Φ0	Ф4 005 000
	No projects identified in long range		Long		\$0	\$1,935,000
	Jacksonville	Arterial Connector	Tier 2	Appox\$30million	unknown	\$0

No projects are identified in the currently drafted RTP (2009-2034) in Jacksonville except for the purchase of street sweeper. Later in this report are other projects that Jacksonville proposes to enhance the livability of the community. However, since these projects are neither federally funded, nor regionally significant, they are not shown in the above table. A project that would probably fit within Tier 2 guidelines is so conceptual at this point, it is not in the RTP. This is the proposed arterial connector routing through and commercial traffic north of the city and away from the historic downtown core. Under discussion in the community for more than 40 years, the connector would run just north of existing city limits, connecting Pair-a-Dice Ranch Road with Hwy. 238 north of the city, creating an alternative to going through the city via California and Fifth streets. The alignment would cross resource land outside an acknowledged urban growth boundary. As of this writing, Jacksonville is pursuing an urban growth boundary expansion that would include lands to be crossed by the alignment. A task in this project will be to review previous studies, analyze traffic volume and safety issues, examine alignment and other issues and development of a plan level purpose and need statement for the connector. As noted in the RTP, facility construction is not expected to be necessary within the planning horizon, however, preservation and recognition of the connection is important now to protect what is likely to be a critical connection in the future.

The plan's Alternative Measures section meets state planning requirements for MPOs contained in the Transportation Planning Rule. Alternative Measures set benchmarks for urban areas that, in general, encourage development of compact, pedestrian friendly development. The measures were adopted after travel-demand modeling for the 2000 RTP showed that the region could expect at 2.5 percent per capita reduction in vehicle miles traveled, falling short of the required 5 percent reduction. Measures address the following:

- 1. Increase bicycle, pedestrian and transit use;
- 2. Increase percentage of dwelling units within ¼-mile of transit;
- 3. Increase percentage of arterials and collectors with bicycle facilities;
- 4. Increase percentage of housing and jobs in mixed-use development near activity centers; and,
- 5. Increase transit funding on a regional (RVMPO) basis.

2.3.2 Transportation Improvement Program

The RVMPO Transportation Improvement Program (TIP) identifies transportation projects in the planning region that are expected to be funded in the federal fiscal years 2008-2011. Projects in the TIP are drawn from the RTP. The TIP, like the RTP meets air quality conformity requirements.

2.3.3 Air Quality Conformity

Jacksonville is within the Medford-Ashland Air Quality Maintenance Area and under state Department of Environmental Quality rules, the region must show conformity with emission standards for particulates, specifically PM₁₀. The Rogue Valley Metropolitan Planning Organization performs a conformity determination for all federally funded, regionally significant projects in the RTP and TIP. Therefore, Jacksonville projects listed in those documents must meet air quality standards.

2.3.4 Baseline Environmental Data

- **2.3.4.1 RVMPO Environmental Review** In late 2006 and early 2007, the RVMPO conducted a survey of environmental features within the MPO planning area to conform to new federal requirements. The survey used available local, state and federal conservation plans, maps, and inventories of historic and natural resources.
 - U.S. Department of Agriculture, Class 1 and 2 soils, which have the least amount of restrictions to their use and are considered most valuable for agriculture and conservation. None in the urban area.
 - Wetlands, National Wetlands Inventory (NWI), and Jackson County's Goal 5
 Inventory of Natural Areas. (NWI) wetlands were identified in the vicinity of Singler Lane at the eastern edge of the city.
 - Critical wildlife habitats, U.S. Fish and Wildlife, National Oceanic and Atmospheric Administration, Oregon Department of Fish and Wildlife areas for deer, elk, Coho salmon and vernal pools. None in the urban area; sensitive area for deer and elk winter range identified outside the urban growth boundary on the south.
 - Clean Water Act directive 303(d) listing of impaired waters lists Jackson Creek, mouth to headwaters (flows through northern portion of urban area), monitored for bacteria and temperature.
 - National Parks Service National Register of Historic Places, identifying the city limits as the Jacksonville National Historic Landmark District, and sites at the southwestern edge of the urban area as being on the National Register of Historic Places.
- **2.3.4.2 Statewide Land Use Goal 5** Goal 5 addresses many of the same features addressed in the previous two sections by the RVMPO and the City of Jacksonville. The Goal covers more than a dozen resources including wildlife habitats, historic places and aggregate. It contains measures intended to avoid duplication with other state or federal programs that address resources. The goal sets up a planning process to protect resources that includes: an inventory; identification of potential conflicts with existing or proposed uses; analysis of the consequences of the conflicts; a decision on protections needed; and adoption of measures to put protection policies into effect. Goal 5 resources not

addressed in the programs described above include options for local governments to designate open space and scenic views and sites.

Aggregate sites are protected under the goal. Although there are no aggregate sites within the urban area, traffic from sites north and west of the city have impacts on the city's transportation system because haul routes follow state and county roads through the center of the city.

2.3.5 Jackson County Comprehensive Land Use Plan, Transportation System Plan

The Jackson County Comprehensive Plan is the official long-range land use policy document for Jackson County. The plan sets forth general land use planning policies and allocates land uses into resource, residential, commercial and industrial categories. The plan serves as the basis for the coordinated development of physical resources, and the development or redevelopment of the county based on physical, social, economic and environmental factors. The Board of County Commissioners updated the 1989 plan in early 2004, and the revised plan took effect in March 2004. For the most part, the Comprehensive Plan guides rural development in Jackson County, but some policies affect cities as well.

Urban Lands Element:

GOAL: TO PROVIDE FOR AN ORDERLY, EFFICIENT AND ENVIRONMENTALLY SOUND PLAN FOR URBAN LAND USES WITHIN URBAN GROWTH BOUNDARIES.

Policy #1: Jackson County shall maintain a long-range commitment to the implementation of urban centered growth.

Transportation Element:

Jackson County updated its Transportation System Plan in 2004. The TSP is the county's long-range guide to managing and developing multi-modal transportation facilities within the county. It sets system goals and policies for livability, the modal components and integration with land use planning, financial and environmental planning. County roads providing access to Jacksonville are Old Stage Road (Oregon Street in Jacksonville) on the north, linking to Central Point, and South Stage Road on the southeast, linking to South Medford area. The TSP, like the RTP, includes a discussion of Jacksonville's proposed arterial connector. Land on which the connector would be built (north of Jacksonville) is resource land under county jurisdiction, although the city currently is seeking to have the area brought within its urban growth boundary. The county TSP notes both the expense and state land-use goal considerations raised by the connector proposal. The TSP notes the city's desire to protect its unique historic downtown core from the detrimental effects of through traffic. The county identified a need to coordinate with Jacksonville, and that through truck traffic in downtown Jacksonville is an important livability problem for the city. It suggests that the planning process for the connector would likely include an Environmental Impact Statement under the National Environmental Policy Act (NEPA). The county TSP's analysis of future conditions

(2023) notes queuing due to trucks – an operational deficiency – on Hwy. 238 between Ruch and Jacksonville.

The county TSP contains two policies relating to Jacksonville and the arterial connector:

- Policy 4.3.3-C: Support planning of an alternative transportation route to move regional through traffic, particularly logging, agriculture and aggregate generated truck traffic, out of historic downtown Jacksonville. Work with the city of Jacksonville to expand its (Urban Growth Boundary) UGB to include the areas proposed for its "north arterial connector" as the preferred alternative to address the city's trough-traffic issues.
- Policy 4.2.1-M: Jackson County establishes Long-Term Potential (LTP) Comprehensive Plan corridor areas where planning for future road connections beyond the planning horizon of the TSP are probable. (The north arterial connector was one of the corridor areas established.)

2.4 City Plans and Studies

2.4.1 Jacksonville Comprehensive Land Use Plan

Jacksonville's Comprehensive Plan includes 13 chapters. Each chapter includes a review of existing conditions and establishes goals and policies for future uses. Chapters that contain provisions pertinent to this review are: The Historic Element (Chapter 2), Transportation element (Chapter 5), Economic Element (Chapter 6), Public Facilities Element (Chapter 9), Housing Element (Chapter 11), and Land Use (Chapter 12). Each is briefly discussed below.

Historic Element: *Goal* – To preserve the integrity of the past, while guiding the evolution of the future. The Historic Element divides Jacksonville into neighborhoods, and each neighborhood is described using topography, transportation, streetscape, landscape, land use, and architecture.

Transportation Systems: *Goal* – To provide comprehensive, long-range Transportation Systems for the City of Jacksonville that include (1) providing for optimal public safety and services, (2) providing for appropriate street, pathway, and sidewalk standards, (3) preserving historic and scenic resources and values while recognizing the economic values of Hwy. 238.

Other development policies include the following:

- (A) Provide adequate, safe, and legal access to and from all property;
- (C) Meet the diverse transport needs of the community by striving to balance the competing needs of the various road user groups, including residents and those traveling through the City. Pedestrian movements, non-motorized vehicles (i.e. bicycle) movements, and truck deliveries shall be accommodated and conflict points between transportation modes shall be minimized.
- (G) Provide, promote, improve, and maintain a safe, convenient and pleasurable pedestrian and bicycling environment through increasing connectivity, continuity, and ease of crossings.

- (H) Provide a network of pedestrian and cycle paths, tracks and linkages that develop pedestrian/bicycle links from transit stops and give priority to pedestrian/bicycle access.
- (I) Moderate use of private vehicles and their impacts and encourage alternative modes of travel by encouraging the development of housing and activity centers near the public transport network.

The plan includes discussion of an arterial connector that would detour state highway through traffic north of the historic downtown. The new route could be built in phases: one phase to extend westerly from Highway 238 to Old Stage Road, and an additional phase that would connect Old Stage Road with an upgraded section of Pair-a-Dice Ranch Road by arcing north of Autumn Lane, combined with a new road north of Westmount Drive (see Element 6 of this TSP for more detail).

This project will update the Transportation Element. It will include amending the goals; updating the inventory, traffic counts, finance plan and forecasts; developing a Purpose and Need statement for the proposed arterial connector north of existing city limits; and examining street standards.

Economic Element: *Goal:* – To provide for and enhance the economic viability and vitality of the City of Jacksonville and to make provisions for expanding and diversifying its economic base in balance with the community's unique historical character and cultural attractions.

Policies include

• (B) Improve and maintain public services and facilities to enhance existing and future commercial activity. Prepare, utilize, monitor, and update a Capital Improvement Plan that will provide for visitors' services, parks, and parking in balance with financial constraints and tax base impacts. Explore grants to facilitate and augment funding.

The Economic Element includes an analysis of the city's strengths and weaknesses that identifies "transportation issues" as a serious weakness. Specifically, the city's distance from Interstate 5, the region's most important travel corridor, increases cost of moving goods to and from the city and hampers tourism – especially impulse stops. (As a positive, however, the distance preserves a quiet, isolated atmosphere that strengthens the city's historic character.) Other weaknesses noted include the following:

- Conflicts between highway traffic, including trucks, and the pedestrian-oriented downtown area,
- Narrow streets that hamper deliveries to local businesses;
- Event associated parking shortages and a lack of bus and RV parking impact residential areas,
- Growth in the existing tourist-based economy would lead to increased traffic, further straining existing facilities, and
- The distance to key services located outside Jacksonville (medical,

auto repair, large retail, etc.) that require city residents to travel to Medford or Ashland.

Housing Element: *Goal*: – To provide a range of safe, sanitary and affordable housing by type, location and density without regard to race, age, sex, income or marital status, balanced by the need to maintain the character and historical integrity of Jacksonville. Implementation Strategy (1) Remain receptive to and provide for new and innovative land development and housing techniques and opportunities.

Land Use: *Goal*: – To provide for a compatible, orderly and efficient arrangement and distribution of land uses to meet the needs of the community while guiding the physical development to complement the historic character and livability of the city. Pertinent policies include the following:

- Policy 2: Developing commercial areas along major transportation corridors should provide ample off-street parking, internal circulation, and reasonable, yet limited access and traffic control.
- Policy 3: Residential and commercial development should be enhanced and strengthened through sensitive but functional site layout and design, recognizing tradeoffs inherent among the various design variables.

Access Management Plan: Apply access controls along arterials and major collectors to reach the desired balance between accessibility and mobility and achieve the planned function of these streets.

Public Transportation Element: Weekday service is provided by Rogue Valley Transportation District with a single bus route from Medford along Hwy. 238 (N. Fifth Street) to California, turning back on C Street and returning to Medford on N. Fifth Street, with bus stops near Shafer Lane, D Street, and at the west end of C Street.

Appendix C (current TSP): Highway 238 Facilities Management Plan: This appendix to the current TSP was adopted by the City Council in 1996, eight years before the Oregon Transportation Commission reclassified the section of highway within city limits as a Special Transportation Area (STA). The designation is consistent with the purpose of Appendix C (current TSP) – recognition that the road serves both through traffic and "Main Street" functions in the city. Within STAs, the state recognizes that the need for appropriate local access outweighs the consideration of highway mobility. In STAs, this appropriate local access might include extra lighting, additional landscaping, and extra signage, among other amenities. Management of STAs is to be governed by a memorandum of understanding (MOU) between the city and ODOT, however no such agreement has been drafted.

Appendix C (current TSP) focuses on construction of an arterial connector route that would take Hwy. 238 through traffic west and north of the city. On the western end, through traffic would be routed on a rebuilt Pair-a-dice Ranch Road, curve eastward on a

new road north of existing city limits, cross Old Stage Road (N. Oregon Street) north of Autumn Lane, and continue west to Hwy. 238 (Jacksonville Hwy.) northeast of existing city limits. Appendix C notes that previous traffic studies determined that the connector would route at least 30 percent of traffic away from downtown (California and Fifth streets), and offers the best solution to problems of safety and congestion on Hwy. 238 within the city. Appendix C envisions that the section of state highway within the city would move from state to city jurisdiction. The appendix re-affirmed a 1995 City Council decision to select the 'northern' arterial connector corridor as a long-range project. The appendix contains strategies for protecting the corridor and managing access to preserve rural areas around the city.

Other corridor strategies include:

- Limiting Conflict Points, and consolidate accesses where feasible. Some of the
 properties may be adequately served with one or two accesses instead of two or three,
 respectively.
- Limit vehicles to right-in/right-out turning movements where feasible
- City and RVTD should consider constructing bus turn out bays at each of the stops along Highway 238.

Improve safety -- Fifth and Shafer is the intersection with the highest accident record in the city. As additional development occurs, it should be considered for a traffic control device.

2.4.2 Jacksonville Zoning and Subdivision Ordinance

City ordinances governing transportation facilities generally are found in the municipal code in Title 16, Land Division Regulations, and Title 17, Zoning (defining uses that require traffic and parking plans); and Title 18, Historic Protection.

Title 16: Land Division Regulations – enacts subdivision and land partition regulations including standards for public and private streets, including engineering and construction standards.

Title 17: Zoning – Defines city land use zones, overlay districts and Downtown Core Enhancement area. Section 17.24.055 sets standards and requirements for performance standards including standards for: traffic plans, to provide adequate vehicle circulation in and around a proposed project; load plan, to provide for truck turning and access; parking plan, for off-street parking; and pedestrian plan, to provide compacted, lighted walkways and entrances suitable for the handicapped within and in the vicinity of a project.

The Jacksonville Core Enhancement Plan resulted from a series of meetings held in 1998 and 1999. It recommends design standards for uses along C Street, California Street, and Main Street, stretching from 5th Street to the west city limits. Although the area affected by this plan does not extend to the study area, certain elements of the plan may be adaptable.

Title 18: In recognition of Jacksonville's designation as a National Historic Landmark, Title 18 establishes historic protection and design regulations. It sets both procedural

requirements and design criteria, and establishes the Historic and Architectural Review Commission (HARC), which reviews applications for compatibility with established uses. Detailed requirements control placement of structures, construction materials, and decorative features, outlining what is allowed and specifically excluding elements that are inconsistent with the city's historic designation. The requirements complement the guidelines contained in the *Design Guidelines for Jacksonville, Oregon*, prepared by The Architectural Resources Groups. This title contains standards for parking, access, and sidewalks.

2.4.3 RVMPO Integrated Land Use and Transportation Plan

The RVMPO in 2004 conducted audits of development regulations in several cities including Jacksonville to determine the steps participating jurisdictions would need to take to achieve an integrated land use and transportation plan, as required by the TPR. In Jacksonville, the audit identified several provisions that support the integrated planning requirement. It also made recommendations and proposed specific code changes. Recommendations included:

- Establish maximum lot sizes;
- Increase the amount of residential land having densities at a minimum of ten units per acre;
- Increase lot coverage [and building height?] where transportation facilities and public safety measures can be achieved;
- Consider requiring a portion of a commercial building to be at the property line, with entrances oriented to street to encourage pedestrian use;
- Provide measures for evaluating proximity of transit to commercial uses;
- Consider narrowing required street widths. To be consistent with the goal of providing narrower streets, evaluate the standards in the Model Code when updating the Transportation System Plan; and
- Consider permitting density transfers to preserve valuable characteristics (woodland, open space) while maintaining higher density overall.

2.4.4 Traffic Capacity Analysis, Greenlight Engineering

City of Jacksonville asked Greenlight Engineer, Tualatin, to evaluate specific traffic conditions, based on traffic counts obtained in summer 2006. Greenlight reported in February, 2007, on the following:

- 1. Existing operation of the California and Oregon streets intersection at Sunday peak hour (examining impacts of traffic generated west of town),
- 2. Existing operation of the California and Oregon streets intersection at peak Britt Festivals performance night,
- 3. Existing operation of the California and Oregon streets intersection alternative truck route volumes, and
- 4. Future operation of the California and Oregon streets intersection.

The study found the intersection performing adequately during weekday afternoon and Britt peak traffic hours, but inadequate performance at Sunday peak. Detailed findings appear in Chapter 4: Current Conditions and Deficiencies, and chapters examining future performance.

Element 3

Transportation Facilities and Services Inventory

3.1 Introduction

This element is a catalog of the city's existing transportation facilities and services. Although it generally addresses facilities within the city's urban growth boundary (UGB) it also extends to areas expected to be urbanized in the near term.

Sections in this element describe in detail Jacksonville's transportation system, including roadways, pedestrian and bicycle facilities, transit, rail, air, water, freight movement and pipeline/transmission modes. Each mode's current condition and purpose are described.

3.2 Facilities and Services

The following sections describe the present-day transportation system in the TSP study area by mode. As noted above, the study area includes the existing UGB area, plus other areas on the study area map, which are the mostly likely locations for future urban expansion and mostly likely to play a role in future transportation connectivity. Maps of the study area and existing streets appear on pages 29, 32, and Appendix I.

3.2.1 Street Network, with Bicycle and Pedestrian Facilities

Roads in the study are owned by the city, Jackson County and the state. Additionally, several roads are in private ownership. Generally, the city owns the smaller, local streets inside city limits.

County and state roads provide access to the city. County roads serving Jacksonville are:

- Old Stage Road, from the north, connecting to Central Point, becomes Oregon Street in the city. Road is under city jurisdiction inside city limits.
- South Stage Road, from the east, connecting to South Medford, becomes East California Street in the city. East California Street between Stagecoach Drive and Sixth Street is in county jurisdiction. West of Fifth Street, and continuing to city limits, the road is in city jurisdiction.
- Cady Road (a county road) from the south, connects to state Hwy. 238 (Ruch and Applegate communities), and becomes Applegate Street inside the city.

State Hwy. 238, the only state route in the study area, links Jacksonville to North Medford, providing the most direct link to the region's most significant road, Interstate

5. Hwy. 238 is classified as a District Highway in the Oregon Highway Plan. The plan describes District Highways as facilities of county-wide significance, which function largely as county and city arterials or collectors. These highways provide connections between small urbanized areas, rural and urban centers, and serve local traffic and access needs. Hwy. 238 follows a north-south route that tracks west through western Jackson County and eastern Josephine County. The southern terminus is Interstate 5 at North Medford, and the northern terminus is US 199 in Grants Pass. The route from Medford approaches Jacksonville from the north, becoming North Fifth Street inside the city. At the junction with South Stage Road (East California Street) in the central downtown area, Hwy. 238 makes a 90-degree turn to the west. West of the intersection, the road becomes West California Street. Beyond the western city boundary, Hwy. 238 turns to the south, passing through Ruch, Applegate and then north to Grants Pass, where it connects with US 199.

Hwy. 238 within city limits (0.81 mile, from mile post 33.16, West California Street at West Main Street, to mile post 33.97, North Fifth Street at Shafer Lane) is designated a Category 1 Special Transportation Area (STA) by the Oregon Transportation Commission (OTC). The OTC made the designation on January 14, 2004, pursuant to the highway plan's land use and transportation policy. The policy addresses the relationship between state highways and adjacent development patterns. The STA designation recognizes the dual purposes of the roadway to serve through travelers and be the main street of a community. Within STAs the need for appropriate local access outweighs the consideration of highway mobility. As stated in the Oregon Highway Plan (OHP), "the primary objective of an STA is to provide access to and circulation amongst community activities, businesses and residences and to accommodate pedestrian, bicycle and transit movement along and across the highway."

Jurisdiction, or ownership, of a roadway is significant in that it determines responsibility for the following:

- Determining the road's functional classification, which sets the road's role in the transportation system and design features including width, access and sidewalk and bicycle lane requirements;
- Maintenance; and
- Approving access permits

The functional classification follows a hierarchy, with each class of street serving a particular function and relationship to other types of streets. Classification is based on two distinct street functions – provide local land access and movement of vehicles – and the balance that is struck between them.

• Arterial: the highest class, serving greater traffic volumes than other categories, usually at higher speeds. Arterials in Jacksonville are North Fifth Street and West California Street – Hwy. 238 – under state jurisdiction. ODOT classifies the route from Medford through Jacksonville as a Principal Arterial. Generally, arterials also serve truck movements and should emphasize traffic movement over local access. However, because Hwy. 238 in the city is designated a Special Transportation Area, local needs receive greater attention. Jacksonville's existing

- standards call for 4- to 5.5-foot bike lanes on both sides and sidewalks on one or both sides separated by a 3- to 5.5-foot buffer strip.
- Collectors: are an intermediate class, drawing traffic from the lower class local streets and funneling it to the higher class arterials. Collectors support traffic circulation but balance traffic needs with local land access. North and South Oregon streets in the downtown area, East California Street and Applegate Street are Jacksonville's collector streets. Existing standards vary, and collectors may or may not have bicycle lanes, sidewalks or parking.
- Local: By far the largest category of streets in Jacksonville, local streets are designated to provide land access. They carry traffic at low speeds to facilitate access and optimize safety for pedestrians and bicyclists. They should be designed to provide traffic circulation within small, neighborhood areas and not encourage "short-cut" uses that should be routed to collectors. Local streets feed the collectors. Parking generally is permitted on both sides of the street, and a pedestrian path or sidewalk may be provided on one side. Street standards depend on which of four zones a street is located. Local street standards very depending on the zone: Standard are intended primarily to protect historical resources. In some areas, decomposed granite is the standard sidewalk surface.

The inventory of street network facilities shows all arterials, collectors and local streets. This section includes the inventory of public parking and pedestrian and bicycle facilities as they exist within the street-system rights-of-way.

The inventory is presented in maps that begin on the next page, followed by table 3.1, which contains additional facility information. Traffic counts appear in Chapter 4.

Intelligent Transportation System Planning

The Rogue Valley Metropolitan Planning Organization has an Intelligent Transportation System Plan for the region that includes medium- and long-range projects in Jacksonville. Projects are:

- Automatic Traffic Recorder and Closed Circuit Television, Fifth Street at California Street, proposed for 2011-2015; and
- Parking Management System, visitor information, associated with event management, at municipal parking lot at end of West C Street.

Regarding pedestrians, the city has a system of pedestrian trails separate from the street system. The trail system is discussed in a separate bicycle-pedestrian section that follows the street system section.

The parking inventory is discussed in section 3.2.5.

The street system map appears on the next page. The street inventory begins on the following page. Traffic count data is contained in Element 4.

Figure 3.1: Study Area Street System Inventory Jurisdictional Ownership Legend City of Jacksonville ODOT Jackson County Trail System Urban Growth Boundary

Tabl	e 3.1: Street Syste	em Inventory															
OID	NAME 1	FROM	то	CLASS.	JURISDICTION	SURFACE	LANES	SPEED	LENGTH FEET	ROAD WIDTH	ROW	TRUCK	CRASHES	BRIDGE	SIDE/ WALKS	BIKE	ID
_	Applegate St	CADY RD & PLACER HILL DR	GRAHAM ST	Collector	Jacksonville	Paved	LANGEO	2 25		20'	60		(No	No	1550
	Applegate St	W OAK ST	S OREGON ST & W FIR ST	Collector	Jacksonville	Paved		2 25			60		1 6		No	No	8269
	Applegate St	M ST	DAWSON WAY	Collector	Jacksonville	Paved		2 25			60		1		No	No	8270
	Applegate St	HILL ST	M ST	Collector	Jacksonville	Paved		2 25			60		1 7		No	No	8271
	Applegate St	ELM ST & STERLING ST	W OAK ST	Collector	Jacksonville	Paved		2 25			60		1 7		No	No	1565
	Applegate St	GRAHAM ST	HILL ST	Collector	Jacksonville	Paved		2 25			60		1		No	No	1555
	Applegate St	DAWSON WAY	ELM ST & STERLING ST	Collector	Jacksonville	Paved		2 25			60		1 6		No	No	1561
	Beekman Sq	End End	E CALIFORNIA ST	Local	Jacksonville	Paved	_	2 25			45		1 7		Yes	No	1637
$\overline{}$	Beverly Wy	45 DEGREE TURN	MIDDLE ST	Local	Jacksonville	Paved		2 25			60		1 7		l No	No	9724
	Beverly Wy	HUENERS LN	90 DEGREE TURN	Local	Jacksonville	Paved		2 25			60		1 - 2) No	No	8259
													1) No		9723
-	Beverly Wy	90 DEGREE TURN	MIDDLE ST	Local	Jacksonville	Paved					60		-			No	9727
	Beverly Wy	E D ST	SINGLER LN	Local	Jacksonville	Paved		2 25			60		1 2		No	No	
	Beverly Wy	SINGLER LN	45 DEGREE TURN	Local	Jacksonville	Paved	_	2 25			60		,		No	No	9725
	Blackstone Alley	N 5TH ST	E F ST	Local	Jacksonville	Paved		1 20		13' 8"	25		,		No	No	1503
	Blackstone Alley	E F ST	HUENERS LN	Local	Jacksonville	Paved	,	- 20		13' 8"	25		ļ ,		No	No	1498
	Blackstone Alley	HUENERS LN	EEST	Local	Jacksonville	Paved		1 25		13' 8"	25		1		No No	No	12897
	Cardwell Ct	G ST	End	Local	Jacksonville	Paved		2 25			60		,		No	No	12842
	Carriage Ct	End	CARRIAGE LN	Local	Jacksonville	Paved		2 25		75' circl			1) Yes	No	12841
	Carriage Ln	CARRIAGE CT	HUENERS LN	Local	Jacksonville	Paved		2 25			60		1		Yes	No	12470
	Carriage Ln	VINTAGE CIR	CARRIAGE CT	Local	Jacksonville	Paved		2 25			60		(Yes	No	50860
	Carriage Ln	VINTAGE CIR	VINTAGE CIR	Local	Jacksonville	Paved		2 25			60		() Yes	No	70272
	Carriage Ln	SHAFER LN	VINTAGE CIR	Local	Jacksonville	Paved	_	2 25			60		9		Yes	No	8267
	Cemetery Rd	END	N OREGON ST & W E ST	Local	Jacksonville	Paved	_	2 25			60		(No	No	8266
	Cleveland Av	SURSUMCORDA HTS	S 3RD ST	Local	Jacksonville	Paved		2 25			60		(No	No	1489
	Coachman Dr	SURREY DR	STAGECOACH DR	Local	Jacksonville	Paved		2 25			50		(No No	No	14519
	Coachman Dr	SURREY DR	CONESTOGA DR	Local	Jacksonville	Paved	_	2 25			50		() No	No	1490
	Coachman Dr	CONESTOGA DR	SURREY DR	Local	Jacksonville	Paved		2 25			50		(No No	No	1499
	Cottage St	WEST END	TAYLOR ST	Local	Jacksonville	Paved	1	2 25			40		() (Yes	No	1692
	Cottage St	TAYLOR ST	EAST END	Local	Jacksonville	Paved	1	2 25			40		() (Yes	No	1693
30	Creekside Ct	END	CREEKSIDE DR	Local	Jacksonville	Paved	1	2 25			60		(1	No No	No	1580
	Creekside Dr	PONDEROSA WAY	CREEKSIDE CT	Local	Jacksonville	Paved	2	2 25			50		(No No	No	14751
	Creekside Dr	CREEKSIDE CT	DAISEY LN	Local	Jacksonville	Paved	2	2 25			50		() (No No	No	70300
33	Daisey Ln	CREEKSIDE DR	S 3RD ST	Local	Jacksonville	Paved	1	2 25	393	21'	50	no	()	1 No	No	70301
34	Dawson Wy	M ST	GRAHAM ST	Local	Jacksonville	Paved	- 2	2 25			60	no	() (No	No	10005
35	Dawson Wy	APPLEGATE ST	NORTH END	Local	Jacksonville	Paved	- 2	2 25	263	16'	60	no	() (No	No	1529
36	Dawson Wy	GRAHAM ST	SOUTH END	Local	Jacksonville	Paved	- 2	2 25	123	10'	60	no	() () No	No	14665
37	Deer Trail Wy	GRAHAM ST	NORTH END	Local	Jacksonville	Paved		1 25	298	12'	60	no	() (No	No	8273
38	Deer Trail Wy	SOUTH END	GRAHAM ST	Local	Jacksonville	Paved		1 25	233	12'	60	no	() (No	No	1560
39	E C St	N 7TH ST	N 6TH ST	Local	Jacksonville	Paved	- 2	2 25	525	18'	60	no	()	1 No	No	50382
40	E C St	N 6TH ST	N 5TH ST	Local	Jacksonville	Paved	- 2	2 25	269	18'	60	no	() (No	No	50381
41	E C St	N 4TH ST	W C ST & N 3RD ST	Local	Jacksonville	Paved	1	2 25	263	18'	60	no	() () No	No	1467
42	E C St	N 5TH ST	N 4TH ST	Local	Jacksonville	Paved	1	2 25	256	18'	60	no	() (No	Yes	1470
43	E C St	8TH ST	N 7TH ST	Local	Jacksonville	Paved	1	2 25			60		() (No	No	1653
	E C St	N 9TH ST	8TH ST	Local	Jacksonville	Gravel	- :	2 25			60		() (No	No	1645
	E C St	EAST END	N 9TH ST	Local	Jacksonville	Gravel		2 25			60		i		No	No	1622
	E California St	STAGECOACH DR	CITY LIMITS	Collector		Paved		2 20			60		1) No	Yes	0
	E California St	WELLS FARGO DR	STAGECOACH DR	Collector		Paved		2 20			60		1		No	Yes	1 0
	E California St	CITY LIMITS	8TH ST	Collector		Paved		2 20			60		1		No	Yes	1643
	E California St	LAURELWOOD DR	BEEKMAN SQ	Collector	Jackson County	Paved		2 20			60		,		No	Yes	1703
	E California St	8TH ST	LAURELWOOD DR	Collector	Jackson County	Paved		2 20			60		1 7		No	Yes	1702
	E California St	N 6TH ST	N 5TH ST & S 5TH ST	Collector	Jackson County	Paved		2 20			60		 '		l No	Yes	9470
	E California St	S 5TH ST & N 5TH ST	N 4TH ST & S 4TH ST	Arterial	ODOT County	Paved		2 20			60		1		Yes	Yes	1700
																	1638
53	E California St	N 4TH ST & S 4TH ST	N 3RD ST & S 3RD ST & W CALIFORNIA ST	Arterial	ODOT	Paved		2 20	257	32	60	Yes	1	(Yes	Yes	16

								LENGTH	ROAD	Т Т	TRUCK	CRASHES		SIDE/	BIKE	$\overline{}$
OID NAME 1	FROM	то	CLASS.	JURISDICTION	SURFACE	LANES	SPEED		WIDTH	ROW	ROUTE			WALKS	LANES	ID
54 E California St	BEEKMAN SQ	N 6TH ST	Collector	Jackson County		2	20	87		60	Yes	() No	Yes	1640
55 E D St	DAISY CREEK	N 6TH ST	Local	Jacksonville	Paved	2		535		60	no	1 (No	No	1634
56 E D St	N 9TH ST	BEVERLY WAY	Local	Jacksonville	Paved	2	25	402		60	no	(No	No	1632
57 E D St	N 4TH ST	N 3RD ST & W D ST	Local	Jacksonville	Paved	2		267		60	no	1 () () No	No	1620
58 E D St	N 6TH ST	N 5TH ST	Local		Paved	2	25	261		60	no	(Yes	No	1635
59 E D St	N 5TH ST	N 4TH ST	Local		Paved	2		259		60	no	() () No	No	1656
60 E D St	8TH ST & N 8TH ST	DAISY CREEK	Local	Jacksonville	Paved	2	25	249		60	no	()	1 No	No	1648
62 E E St	N 4TH ST	N 3RD ST & W E ST	Local	Jacksonville	Paved	2		268		60	no	() (Yes	No	1655
63 E E St	N 6TH ST	N 5TH ST	Local	Jacksonville	Paved	2	25	267	18'	60	no	() () Yes	No	1650
64 E E St	BLACKSTONE ALY	N 6TH ST	Local	Jacksonville	Paved	2	25	171		60	no	() (Yes	No	1657
65 E F St	N 4TH ST	W F ST & N 3RD ST & JACKSON CREEK DR	Local	Jacksonville	Paved	2		280	20'	60	no	() ′	1 Yes	No	1679
66 E F St	N 6TH ST	N 5TH ST	Local	Jacksonville	Paved	2	25	273	20'	60	no	1) (No	No	1659
67 E F St	BLACKSTONE ALY	N 6TH ST	Local	Jacksonville	Paved	2	25	53	20'	60	no	() (No	No	1661
68 E F St	N 5TH ST	N 4TH ST	Local		Paved	2	25	252	20'	60	no	() () No	No	1652
69 E Fir St	S 4TH ST	S 3RD ST	Local	Jacksonville	Paved	2	25	258	20'	60	no	() (No	No	1680
70 E Main St	S 4TH ST	W MAIN ST & S 3RD ST	Local	Jacksonville	Paved	2	25	268		60	no	() (No	No	1599
71 E Main St	DAISY CREEK	S 4TH ST	Local	Jacksonville	Paved	2	25	112	22'	60	no	() (No	No	30549
72 E Oak St	S 5TH ST & BEEKMAN LOOP TRAIL	S 4TH ST	Local	Jacksonville	Paved	2	25	271	20'	60	no	() (No	No	30547
73 E Oak St	S 4TH ST	S 3RD ST	Local	Jacksonville	Paved	2	25	258	20'	60	no	() () No	No	14410
74 E Pine St	S 5TH ST	S 4TH ST	Local	Jacksonville	Paved	2	25	264	19'	60	no	() (No	No	1608
75 E Pine St	DEAD END	S 3RD ST & W PINE ST	Local	Jacksonville	Dirt	2	25	149	19'	60	no	() (No	No	1607
76 Elm St	STERLING ST & APPLEGATE ST	S 3RD ST	Local	Jacksonville	Paved	2	25	455	15'	60	no	() '	1 No	No	50320
77 Elm St	S OREGON ST	APPLEGATE ST & STERLING ST	Local	Jacksonville	Gravel	2	25	320	15'	60	no	() (No	No	14005
78 Elm St	S 1ST ST	S OREGON ST	Local	Jacksonville	Gravel	2	25	244	15'	60	no	() () No	No	12587
79 Fairfield Dr (Private	GLENEDEN WAY	WESTMONT DR	Local	Jacksonville	Dirt	1	25	872		60	no	() (No	No	1037
80 G St	N 5TH ST	HUENERS LN	Local	Jacksonville	Paved	2	25	891	24'	60	no	() (Yes	No	80840
81 G St	JACKSON CREEK DR	TAYLOR ST	Local	Jacksonville	Paved	2	25	443		60	no	() (Yes	No	12767
82 G St	CARDWELL CT	END	Local	Jacksonville	Gravel	2	20	321		50	no	() (Yes	No	15186
83 G St	SOPHIA LN	N 5TH ST	Local	Jacksonville	Paved	2	25	299	24'	60	no	() ′	1 Yes	No	15112
84 G St	TAYLOR ST	VALLEY LN	Local	Jacksonville	Paved	2		202		60	no	() (Yes	No	1714
85 G St	HUENERS LN	HUENERS LN	Local	Jacksonville	Paved	2	25	120	24'	60	no	() (Yes	No	11449
86 G St	HUENERS LN	CARDWELL CT	Local	Jacksonville	Paved	2	20	39		60	no	() (Yes	No	1711
87 G St	VALLEY LN	SOPHIA LN	Local	Jacksonville	Paved	2	25	34		60	no	() (Yes	No	11451
88 Gleneden Wy	FAIRFIELD DR	PAIR A DICE RANCH RD	Local	Jacksonville	Dirt	2	25	789		60	no	() No	No	11450
89 Gleneden Wy	MARY ANN DR	FAIRFIELD DR	Local	Jacksonville	Dirt	2	25	516		60	no	() (No	No	1712
90 Gold Terrace Dr	WOODBERRY LN	N OREGON ST	Local	Jacksonville	Paved	2		324	28'	60	no	() (No	No	12651
91 Gold Terrace Dr	GROVE ST	WOODBERRY LN	Local	Jacksonville	Paved	2		321		60	no	(No	No	14585
92 Gold Terrace Dr		GROVE ST	Local	Jacksonville	Paved	2	25	284		60	no	() (No	No	1547
93 Graham St	DAWSON WAY	S 3RD ST & STERLING ST	Local	Jacksonville	Paved	2		214		60	no	() No	No	1545
94 Graham St	APPLEGATE ST	DEER TRAIL WAY	Local	Jacksonville	Paved	2		187		60	no	(No	No	1676
95 Graham St	DEER TRAIL WAY	LAUREL LN	Local	Jacksonville	Paved	2	25	169		60	no	(No	No	1677
96 Graham St	LAUREL LN	DAWSON WAY	Local	Jacksonville	Paved	2	25	155		60	no	(No	No	1671
97 Grove St	GOLD TERRACE DR		Local	Jacksonville	Paved	2		291		60	no	(No No	No	2237
98 Grove St		GOLD TERRACE DR	Local	Jacksonville	Paved	2	25	281		60	no	() No	No	14147
99 Grove St	GOLD TERRACE DR	GOLD TERRACE DR	Local	Jacksonville	Paved	2	25	61		60	no	() (No	No	30627
100 Hangman Wy	OAK KNOLL	S 3RD ST	Local		Paved	2		725		40	no	(No	No	1674
101 Hangman Wy	CONIFER LN	OAK KNOLL	Local	Jacksonville	Paved	2	25	159		40	no	(No	No	1449
102 Hangman Wy		CONIFER LN	Local		Paved	2		111		40	no	(No	No	1464
103 Hill St	CHINESE DIGGINGS TRAIL	APPLEGATE ST	Local		Paved	2		1478		60	no	() No	No	14764
104 Hueners Ln	WIDEAN LN	G ST	Local		Paved	2		935		60	no	(Yes	No	1493
105 Hueners Ln	G ST	BLACKSTONE ALY	Local	Jacksonville	Paved	2		668		60	no	(Yes	No	1551
106 Hueners Ln	MIDDLE ST	WIDEAN LN	Local	Jacksonville	Paved	2		290		60	no	(Yes	No	1534
107 Hueners Ln	CARRIAGE LN	BEVERLY WAY	Local	Jacksonville	Gravel	2		167		60	no	(Yes	No	1001
108 Hueners Ln	LAVONNE ST	OFFORD CIR	Local	Jacksonville	Paved	2	25	167	25'	60	no	()	1 Yes	No	1715

									LENGTH	ROAD	TRUC	K CRASHES	SIDI	E/ BIKI	Ē
OID	NAME 1	FROM	то	CLASS.	JURISDICTION	SURFACE	LANES	SPEED		WIDTH RO			BRIDGE WAI		IES ID
109 I	lueners Ln	BEVERLY WAY	WIDEAN LN	Local	Jacksonville	Paved	2	25	159	25'	60 no		0 Yes	No	1710
110 I	Hueners Ln	WIDEAN LN	MIDDLE ST	Local	Jacksonville	Paved	2	25	157	25'	60 no		0 Yes	No	8262
111 I	lueners Ln	OFFORD CIR	CARRIAGE LN	Local	Jacksonville	Paved	2	25		25'	60 no		0 Yes	No	1721
112	lackson Alley	NUNAN ST	JACKSON CREEK DR	Local	Jacksonville	Paved	1	25	265	14'	20 no		0 Yes	No	1724
113 .	Jackson Creek Dr	JACKSON ALY	E F ST & W F ST & N 3RD ST	Local	Jacksonville	Paved	2	25	950	18'	60 no		0 Yes	No	1722
114 .	Jackson Creek Dr	NUNAN ST	JACKSON ALY	Local	Jacksonville	Paved	2	25		18'	60 no		0 Yes	No	70304
		NUNAN ALY	NUNAN ST	Local	Jacksonville	Paved	2	25			60 no		0 Yes	No	50323
116	Jackson Creek Dr	G ST	NUNAN ALY	Local	Jacksonville	Paved	2	25	133	18'	60 no		0 Yes	No	30537
117 .	Jackson Creek Dr	TAYLOR ALY	G ST	Local	Jacksonville	Paved	2	25	114	18'	60 no		0 Yes	No	12668
118 l	aurel Ln	GRAHAM ST		Local	Jacksonville	Paved	2	25			60 no		0 No	No	14508
119 l	aurel St		JACKSON FORKS TRAIL & W OAK ST	Local	Jacksonville	Paved	2	25			60 no		0 No	No	1513
	aurelwood Dr		SCENIC DR	Local	Jacksonville	Paved	2	25			60 no		0 No	No	50427
121 l	aurelwood Dr	SCENIC DR	E CALIFORNIA ST	Local	Jacksonville	Paved	2	25			60 no		0 No	No	1450
	aurelwood Dr			Local	Jacksonville	Paved	2				60 no		0 No	No	1556
		BEEKMAN LOOP TRAIL		Local	Jacksonville	Paved	2	25			60 no		0 No	No	1587
	avonne Dr		HUENERS LN	Local	Jacksonville	Gravel	2				60 no		0 No	No	1581
			S 4TH ST	Local	Jacksonville	Paved	2	25			50 no		0 No	No	1639
	ewis St		S 5TH ST	Local	Jacksonville	Paved	2	25			50 no		0 No	No	11234
	ily Rd		S 3RD ST	Local	Jacksonville	Paved	2				60 no		0 No	No	1567
128			APPLEGATE ST	Local	Jacksonville	Gravel	2	25			40 no	-	0 No	No	14267
129			DAWSON WAY	Local	Jacksonville	Gravel	2				40 no	1	0 No	No	30748
			S 3RD ST	Local	Jacksonville	Paved	2	25			60 no		0 No	No	8272
			HIGHWAY 238 & J'VIILLE RESERVOIR RD	Local	Jacksonville	Paved	2	25			60 no		0 No	No	1015
			WESTMONT DR	Local	Jacksonville	Paved	2				60 no	1	0 No	No	50353
			GLENEDEN WAY	Local	Jacksonville	Paved	2	25			60 no		0 No	No	11235
		HUENERS LN		Local	Jacksonville	Paved	2	25			60 no	1	0 No	No	1469
			SINGLER LN	Local	Jacksonville	Paved	2	25			60 no		0 No	No	1492
			N OREGON ST	Local	Jacksonville	Paved	2	25			60 no	1	0 No	No	9924
	Miners Wy		WOODBERRY LN	Local	Jacksonville	Paved	2	25			60 no	-	0 No	No	1495
	Morton Wy		MARY ANN DR	Local	Jacksonville	Gravel	2	25			60 no	-	0 No	No	8261
			PAIR A DICE RANCH RD	Local	Jacksonville	Paved	2	25			60 no		0 No	No	8258
		JACKSON CREEK DR & E F ST & W F ST		Local	Jacksonville	Paved	2	25			60 no	-	0 No	No	1670
			E C ST & W C ST	Local	Jacksonville	Paved	2	25	268		60 no		0 No	No	1668
			EDST&WDST	Local	Jacksonville	Paved	2	25			60 no	-	0 No	No	1549
			S 3RD ST & W CALIF. ST & E CALIF. ST	Local	Jacksonville	Paved	2	25			60 no		0 Yes	No	1548
			E C ST	Local	Jacksonville	Paved	2	25			60 no	-	0 No	No	9471
			EEST	Local	Jacksonville	Paved	2				60 no	-	0 No	No	1627
			E D ST	Local	Jacksonville	Paved	2	25			60 no	-	0 No	No	1629
			S 4TH ST & E CALIFORNIA ST	Local	Jacksonville	Paved	2				60 no	1	0 No	No	1621
			GST	Arterial	ODOT	Paved	2	35			60 Yes	_	1 0 Yes	Yes	
			E F ST	Arterial	ODOT	Paved	2	35			60 Yes		1 0 Yes	Yes	
			END	Arterial	ODOT	Paved	2	35			60 Yes		0 Yes	Yes	
	N 5th St		SHAFER LN	Arterial	ODOT	Paved	2	35			60 Yes		3 0 Yes	Yes	
			BLACKSTONE ALY	Arterial	ODOT	Paved	2	35			60 Yes		0 Yes	Yes	
			E C ST	Arterial	ODOT	Paved	1 2	35			60 Yes	_	1 0 Yes	Yes	
			E E ST	Arterial	ODOT	Paved	1 2	35			60 Yes		1 0 Yes	Yes	
			E CALIFORNIA ST & S 5TH ST	Arterial	ODOT	Paved	1 2	35			60 Yes		0 Yes	Yes	_
			E E ST	Local	Jacksonville	Paved	1 2	25			60 no	-	0 No	No	1646
			E D ST	Local	Jacksonville	Paved	2	25			60 no		0 1 No	No	1644
			E C ST	Local	Jacksonville	Paved	2				60 no		0 No	No	1651
	N 7th St		E C ST	Local	Jacksonville	Paved	1 2	25			60 no		0 No	No	1660
			E C ST	Local	Jacksonville	Paved	2	25			60 no	-	0 No	No	1658
-	N 8th St		E D ST & 8TH ST	Local	Jacksonville	Paved	2				60 no	-	0 No	No	1654
162	N 9th St	E D ST	E C ST	Local	Jacksonville	Gravel	2	25	244	21'	60 no		0 No	No	164

								LENGTH ROAD		TRUCK	CRASHES		SIDE/	BIKE	$\overline{}$
OID NAME 1	FROM	то	CLASS.	JURISDICTION	SURFACE	IANES	SPEED	1	ROW	ROUTE		BRIDGE		1	: In
163 N 9th St		EDST	Local	Jacksonville	Paved	2	25		60	no	. 00		No	No	1701
	AUTUMN LN & OLD STAGE RD	NUNAN ST	Collector	Jacksonville	Paved	5			60				No	Yes	1704
	GOLD TERRACE DR	MINERS WAY	Collector	Jacksonville	Paved	1 2	25		60	Yes			No	Yes	1708
,	W F ST	CEMETERY RD & W E ST	Collector	Jacksonville	Paved	-	25		60	Yes			Yes	Yes	1705
	W D ST	W C ST	Collector	Jacksonville	Paved	1 5			60				Yes	Yes	12317
	W E ST & CEMETERY RD	W D ST	Collector	Jacksonville	Paved	-	25		60	Yes			Yes	Yes	1690
	NUNAN ST	GOLD TERRACE DR	Collector	Jacksonville	Paved	-	25		60	Yes			No	Yes	1667
9	MINERS WAY	W F ST	Collector	Jacksonville	Paved	2			60	Yes			No	Yes	1624
9	NUNAN ST	JACKSON CREEK DR			Paved	-							Yes		
	JACKSON CREEK DR		Local	Jacksonville		2	25		60 60	no			Yes	No	14077
		N OREGON ST	Local	Jacksonville	Paved	4	25			no				No	
	NUNAN ST	JACKSON CREEK DR	Local	Jacksonville	Paved	4			60	no			Yes	No	14270
	JACKSON ALY	END	Local	Jacksonville	Paved	2			60	no			Yes	No	14079
	NUNAN ST	JACKSON ALY	Local	Jacksonville	Paved	1	25		25	no			Yes	No	70302
	NUNAN ST	NUNAN ALY	Local	Jacksonville	Paved	1	25		25	no			Yes	No	11428
177 Oak Knoll - Private		HANGMAN WAY	Local	Jacksonville	Paved	1 2	45		60	no			No	No	70303
178 Offord Cr		HUENERS LN	Local	Jacksonville	Paved	2	25		50	no			Yes	No	70306
179 Pair-a-dice Ranch Ro		MORTON WAY	Local	Jacksonville	Dirt	1 2	25		60	no			No	No	8286
180 Pair-a-dice Ranch R		HIGHWAY 238	Local	Jacksonville	Paved	2			60	no	1	-	No	No	13979
181 Pair-a-dice Ranch R		WESTMONT DR	Local	Jacksonville	Paved	2	25		60	no	1		No	No	13980
182 Pair-a-dice Ranch R		GLENEDEN WAY	Local	Jacksonville	Paved	2			60	no			No	No	12556
,	CREEKSIDE DR	S 3RD ST	Local	Jacksonville	Paved	2			60	no			No	No	1026
184 Powderhorn Dr		SURREY DR	Local	Jacksonville	Paved	2	25		50	no		0 0	No	No	14026
185 Powderhorn Dr	SURREY DR		Local	Jacksonville	Paved	2	25		50	no		0 0	No	No	1524
186 Richard Wy		WESTMONT DR	Local	Jacksonville	Paved	2	25	581 23'	60	no		0 0	No	No	1525
187 Richard Wy		WESTMONT DR	Local	Jacksonville	Paved	2	25		60	no		0 0	No	No	11817
188 Royal Ln- Private		WELLS FARGO DR	Local	Jacksonville	Paved	2	25	1182 22'	60	no		0 0	No	No	1542
189 S 1st St		W OAK ST	Local	Jacksonville	Paved	2	25		60	no		0 0	No	No	1486
	W FIR ST	W PINE ST & ZIGLER TRAIL	Local	Jacksonville	Paved	2	25	406 15'	60	no		0 0	No	No	1471
191 S 1st St	W PINE ST & ZIGLER TRAIL	W MAIN ST	Local	Jacksonville	Paved	2	25	255 15'	60	no		0 0	No	No	1482
192 S 1st St		W FIR ST	Local	Jacksonville	Paved	2	25	216 15'	60	no		0 0	No	No	14692
193 S 3rd St	DAISY CREEK RD		Local	Jacksonville	Paved	2	25	1376 22'	60	no		0 1	No	No	1582
194 S 3rd St		LILY RD	Local	Jacksonville	Paved	2	25	887 22'	60	no		0 0	No	No	1597
195 S 3rd St	DAISEY LN	STERLING ST & GRAHAM ST	Local	Jacksonville	Paved	2	25	718 22'	60	no		0 0	No	No	1610
196 S 3rd St	PONDEROSA WAY	DAISEY LN	Local	Jacksonville	Paved	2	25	398 22'	60	no		0 0	No	No	1588
	E OAK ST	E FIR ST	Local	Jacksonville	Paved	2	25	369 22'	60	no		0 0	No	No	12607
198 S 3rd St	ELM ST	E OAK ST	Local	Jacksonville	Paved	2	25		60	no		0 0	No	No	14696
	MAPLE ST	ELM ST	Local	Jacksonville	Paved	1 2	25		60	no		0 0	No	No	1552
	STERLING ST & GRAHAM ST	CLEVELAND ST	Local	Jacksonville	Paved	2			60	no		0 1	No	No	10006
	LILY RD	HANGMAN WAY	Local	Jacksonville	Paved	2			60	no		0 1	No	No	1572
	W PINE ST & E PINE ST	E MAIN ST & W MAIN ST	Local	Jacksonville	Paved	1 2			60	no		0 0	No	No	1570
	E MAIN ST & W MAIN ST	W CALIFORNIA ST & E CALIF. ST & N 3RD ST	Local	Jacksonville	Paved	1 2	25		60	no			Yes	No	1568
	E FIR ST	W PINE ST & E PINE ST	Local	Jacksonville	Paved	1 2	25		60	no			No	No	8276
	CLEVELAND ST	MAPLE ST	Local	Jacksonville	Paved	1 2	25		60	no			No	No	10004
	HANGMAN WAY	PONDEROSA WAY	Local	Jacksonville	Paved	1 2			60	no			No	No	1606
	E OAK ST	E FIR ST	Local	Jacksonville	Paved	1 5	25		60	no			No	No	1617
	LEWIS ST	E OAK ST	Local	Jacksonville	Paved	1 5	25		60	no			No	No	1600
	MAPLE ST	LEWIS ST	Local	Jacksonville	Paved	1 5			60	no			No	No	1566
	E PINE ST	E MAIN ST	Local	Jacksonville	Paved	1 2	25	284 21'	60	no	+		No	No	12222
	S 5TH ST & BEEKMAN LOOP TRAIL	S 4TH ST	Local	Jacksonville	Paved	2			60	no	+		No	No	1577
	E MAIN ST	E CALIFORNIA ST & N 4TH ST	Local	Jacksonville	Paved	1 2			60	no	+		No	No	1574
	E FIR ST	E PINE ST	Local	Jacksonville	Paved	1 -	25		60	no		_	No	No	1569
	BEEKMAN LOOP TRAIL & E OAK ST	E FIR ST & BEEKMAN LOOP TRAIL	Local	Jacksonville	Paved	2			60	no			No	No	1602
	LEWIS ST	BEEKMAN LOOP TRAIL & E OAK ST				2			60			_	No	No	1579
	LLWIO 31		Local	Jacksonville	Paved	+ -				no	+				
216 S 5th St		LEWIS ST	Local	Jacksonville	Paved		25	296 24'	60	no		U (No	No	160

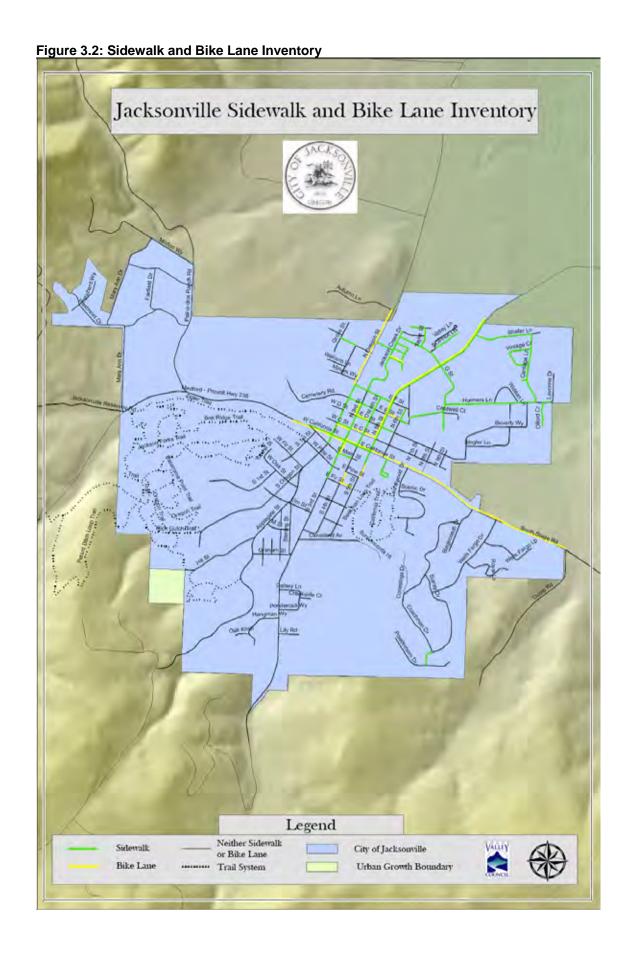
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217 S 5th St	E PINE ST	10									no		0 No		160
	E PINE 51	E CALIFORNIA ST & N 5TH ST	Local	Jacksonville	Paved	- 2				60			0 1 No	No No	1578
218 S 5th St	BEEKMAN LOOP TRAIL & E FIR ST		Local	Jacksonville	Paved	1	2 25			60 60	no		0 0 No	No	9086
219 S 5th St	BEEKMAN LOOP TRAIL & E FIR ST	E PINE ST	Local	Jacksonville	Paved						no				
220 S Oregon St		FIM OT	Local	Jacksonville	Paved	1				60	no		0 No	No	828
221 S Oregon St		ELM ST	Local	Jacksonville	Paved	1				60	no		0 No	No	1631
222 S Oregon St	APPLEGATE ST & W FIR ST	W PINE ST	Collector	Jacksonville	Paved	2				60	no			No	1633
223 S Oregon St	W OAK ST	W FIR ST & APPLEGATE ST	Local	Jacksonville	Paved	- 2				60	no		0 No	No	1630
224 S Oregon St	ELM ST	W OAK ST	Local	Jacksonville	Paved	2				60	no		0 No	No	1558
225 S Oregon St	W PINE ST	W MAIN ST	Collector	Jacksonville	Paved	2	2 25	244 2	1'	60	no		0 No	No	1559
226 S Oregon St	W MAIN ST	N OREGON ST & W CALIFORNIA ST	Collector	Jacksonville	Paved	2	2 25	193 2	1'	60	no		0 Yes	No	8268
227 Scenic Dr		LAURELWOOD DR	Local	Jacksonville	Paved	1	1 25	516 1	5'	30	no		0 No	No	1584
228 Shafer Ln	CARRIAGE LN	N 5TH ST	Local	Jacksonville	Paved	1	2 25	1083 3	3'	60	no		1 Yes	No	1564
	MIDDLE ST	BEVERLY WAY	Local	Jacksonville	Paved					40	no			No	1616
231 SOPHIA LN - Private		VALLEY LN	Local	Jacksonville	Paved	-				60	no		0 Yes	No	1723
232 Stagecoach Dr	·	COACHMAN DR	Local	Jacksonville	Paved					60	no		0 No	No	3170
233 Stagecoach Dr	COACHMAN DR	E CALIFORNIA ST	Local	Jacksonville	Paved	-	2 25			60	no		0 No	No	1020
	M ST	APPLEGATE ST & ELM ST				-				50					1519
			Local	Jacksonville	Paved	1					no		0 .10	No	
235 Sterling St	GRAHAM ST & S 3RD ST	M ST	Local	Jacksonville	Paved	2				50	no		٥١٠٠٥	No	12010
236 Surrey Dr	COACHMAN DR	WELLS FARGO DR	Local	Jacksonville	Paved	-	2 25			50	no		0 No	No	1510
237 Surrey Dr	WELLS FARGO DR	COACHMAN DR	Local	Jacksonville	Paved	- 2				50	no		0 No	No	8280
	POWDERHORN DR	COACHMAN DR	Local	Jacksonville	Paved	2				50	no	-		No	8277
	TAYLOR ST	JACKSON CREEK DR	Local	Jacksonville	Paved	2		433 1	3'	60	no			No	9719
240 Taylor St	TAYLOR ALY	G ST	Local	Jacksonville	Paved	2	2 25	229 13	3'	50	no		0 Yes	No	1694
241 Taylor St	COTTAGE ST	TAYLOR ALY	Local	Jacksonville	Paved	- 2	2 25	156 13	3'	50	no		0 Yes	No	9720
242 Valley Ln - Private		SOPHIA LN	Local	Jacksonville	Paved	1	1 25	775 9		60	no		0 No	No	9519
	SOPHIA LN	G ST	Local	Jacksonville	Paved	1	1 25	117 9		60	no		0 No	No	1465
244 Vintage Cr	CARRIAGE LN	CARRIAGE LN	Local	Jacksonville	Paved		1 25		1'	50	no		0 Yes	No	50358
	N OREGON ST	N 3RD ST & E C ST	Local	Jacksonville	Paved					60	no			No	1025
	END	N OREGON ST	Local	Jacksonville	Paved					60	no		0 Yes	No	15210
247 W California St - HW		CITY LIMITS	Arterial	ODOT	Paved					60	Yes		1 0 No	No	1716
248 W California St - HW		S OREGON ST & N OREGON ST	Arterial	ODOT	Paved	1				60	Yes		1 1 Yes	Yes	8264
249 W California St - HW		W MAIN ST		ODOT		-				60					1623
			Arterial		Paved	-					Yes		1 0 Yes	Yes	1626
	S OREGON ST & N OREGON ST	E CALIFORNIA ST & N 3RD ST & S 3RD ST	Arterial	ODOT	Paved	4	2 20		4	60	Yes		1 0 Yes	No	
251 W D St	END	N OREGON ST	Local	Jacksonville	Paved	- 2				60	no		0 No	No	1593
252 W D St	END	N 3RD ST & E D ST	Local	Jacksonville	Paved	- 2				60	no			No	1613
	N OREGON ST & CEMETERY RD	E E ST & N 3RD ST	Local	Jacksonville	Paved	2				60	no		0 1 Yes	No	1614
	N OREGON ST	N 3RD ST & JACKSON CREEK DR & E F ST	Local	Jacksonville	Paved	2		252 2	3'	60	no		0 Yes	No	1619
	RICH GULCH TRAIL	S 1ST ST	Local	Jacksonville	Paved	1	1 25			60	no		0 No	No	1625
256 W Fir St	S 1ST ST	S OREGON ST & APPLEGATE ST	Local	Jacksonville	Paved	1	1 25	313 1	5'	60	no		0 No	No	1628
257 W Main St	S 1ST ST	S OREGON ST	Local	Jacksonville	Paved	- 2	2 25	330 1	5'	50	no		0 No	No	1666
258 W Main St	S OREGON ST	S 3RD ST & E MAIN ST	Local	Jacksonville	Paved	- 2	2 25	269 1	5'	50	no		0 No	No	1683
259 W Main St	W CALIFORNIA ST	S 1ST ST	Local	Jacksonville	Paved	- 2	2 25	172 1	5'	50	no		0 No	No	1589
	LAUREL ST & JACKSON FORKS TRAIL	S 1ST ST	Local	Jacksonville	Paved	- 2				60	no			No	1596
	S 1ST ST	S OREGON ST	Local	Jacksonville	Paved					60	no		0 No	No	1612
	S OREGON ST	APPLEGATE ST	Local	Jacksonville	Gravel					60	no		_	No	1615
	S OREGON ST	E PINE ST & S 3RD ST	Local	Jacksonville	Paved					60	no		0 No	No	1238
	ZIGLER TRAIL & S 1ST ST	S OREGON ST	Local	Jacksonville	Paved	-				60	no		0 No	No	1586
	ZIGLER TRAIL & S 151 51		Local		Paved	-				60	no			No	14010
265 Welcum Ln - Private	OLIDDEN DD	WOODBERRY LN		Jacksonville											
	SURREY DR	ROYAL LN	Local	Jacksonville	Paved	1				50	no			No	14008
	ROYAL LN	WELLS FARGO LOOP	Local	Jacksonville	Paved	1 2				50	no		0 No	No	30664
	WELLS FARGO LOOP	E CALIFORNIA ST & S STAGE RD	Local	Jacksonville	Paved	1				50	no			No	14007
269 Wells Fargo Lp		WELLS FARGO DR	Local	Jacksonville	Paved	- 2		1109 2		60	no			No	1672
270 Westmont Dr	FAIRFIELD DR	PAIR A DICE RANCH RD	Local	Jacksonville	Dirt	1 2	2 25			60	no		0 No	No	14697
271 Westmont Dr	RICHARD WAY	MARY ANN DR	Local	Jacksonville	Paved	2	2 25	722 1	3'	60	no		0 No	No	9148
								LENCTUID	OAD		TDI ICV IC	DVCHEC	leine/	DIVE	$\overline{}$
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OID NAME 1	FROM	TO	CLASS.	JURISDICTION	SURFACE	LANES	SPEED	FEET W	IDTH	ROW	ROUTE (00	BRIDGE WALKS	S LANES	S ID
272 Westmont Dr	MARY ANN DR	FAIRFIELD DR	Local	Jacksonville	Dirt	-	2 25		3'	60	no	-	0 No	No	12079
						-			_			-	_		
	MARY ANN DR	MARY ANN DR	Local	Jacksonville	Paved	2				60	no	(0 No	No	11539
274 Westmont Dr		RICHARD WAY	Local	Jacksonville	Paved	2	2 25	289 18	3'	60	no	(0 No	No	1541
	HUENERS LN	HUENERS LN	Local	Jacksonville	Paved		2 25	815 29	ا ر	60	no	-	0 No	No	1540
						-							_	_	8257
276 Woodberry Ln	GOLD TERRACE DR	WELCUM LN	Local	Jacksonville	Paved	4	2 25	456 20) I	60	no	(O No	No	I 0/25/

3.2.2 Bicycle and Pedestrian Facilities

The city figures prominently in the Southern Oregon pioneer history, but its contribution to bicycle safety has statewide – and, some say, national – significance. A modern day pioneering legislator and Jacksonville resident Donald Stathos championed a state law for funding bicycle lane construction in 1971. Stathos' activism was prompted by his concern about the perils of riding a bike along Hwy. 238 between Jacksonville and Medford. His Oregon Bicycle Bill tapped state highway funds to finance bikeways and pedestrian paths. A 4-mile stretch of bicycle lane on Hwy. 238 was constructed under the state legislation and dedicated to Stathos in 1979. Advocates for such facilities subsequently set off a national movement for similar legislation, which now dedicates federal highway funds for pedestrian and bicycle improvements. Other roads around Jacksonville have wide shoulders and are popular with cyclists. The city is a popular stop for recreational cyclists using regional bike routes such as South Stage and Old Stage roads. As noted in the street network section, bicycle and pedestrian facilities that are within street system rights-of-way are included in the street network inventory, Table 3.1. All pedestrian and bicycle facilities are illustrated on the map on the following page: Jacksonville Sidewalk and Bike Lane Inventory.

Beyond the street network, the city has two woodland pathway networks: the largest trail network includes the Peter Britt Festival Grounds, city-owned woodlands and U.S. Bureau of Land Management woodlands; the second weaves through city-owned woodland between South Fifth Street and Laurelwood Drive. The pathways also are shown on the sidewalk and bike lane map.

Although these facilities serve a wide range of users, no facility expressly serves equestrians or two non-traditional vehicles that are growing in popularity—Segways (battery-powered personal mobility devices) and golf carts. Under state law, Golf carts are permitted only in limited locations associated with golf courses. The only lawful use of a golf cart in Jacksonville would be by disability permit. Under ORS 807.210(3), a Disability Golf Cart Permit "grants driving privileges for the operation of golf carts or substantially similar vehicles on roads or streets in an area with a speed designation not greater than 25 miles per hour." Golf carts also could be permissible on a multi-use path specifically developed for golf carts and not connected with the street network; Segway use is new, and has been governed by state law only since 2004. Operators must be at least 16 years old. The vehicles are permitted on bicycle lanes and paths, sidewalks, and roads with posted speed of 35 miles per hour or less. Operators must yield to pedestrians and warn then when they are about to be overtaken. Operators are exempt from license and helmet requirements, unless otherwise required by local government. Local jurisdictions may impose additional restrictions.



3.2.3 Public Transportation

Public transportation in Jacksonville is provided by Rogue Valley Transportation District. Under guidelines contained in the Oregon Public Transportation Plan for service level standards transit service is at Level 1. RVTD meets Level 1 standards by providing the following services:

- 1. Senior and disabled public transportation
- 2. Intercity bus service
- 3. Serve citizens dependent on public transportation
- 4. Serve citizens using public transportation by choice
- 5. Offer rideshare and transportation demand management
- 6. Thruway bus service (provide by connection to Greyhound bus line)

The basic services provided by RVTD are:

- Fixed-route bus service 13 or 14 hours each weekday, generally at ½ hour intervals.
- Paratransit service available to persons with disabilities traveling to and from points within ¾ mile of fixed bus routes. 24-hour advance reservations are required.
- Multi-modal incentive programs.

Fixed-Route Service

The district's fixed-route bus service has six bus routes totaling about 100 miles, serving seven communities and a number of rural county residents. Hours of operation are weekdays, 5 a.m. to 7:30 p.m. The route circulation is a "spoke and wheel" system, meaning that buses for all routes depart from the downtown station at the same times each hour, thus facilitating transfers between lines. This type of route design maximizes destination choices for passengers by ensuring that a rider can get to any stop in the system with no more than one transfer. However, it increases travel time for some passengers.

Paratransit Service

RVTD provides the Valley Lift paratransit service to people whose disabilities prevent them from using regular buses. By federal law, the paratransit service area extends to all locations within 3/4 mile of any fixed-route bus line. Hours of operation also mirror the fixed route service. Valley Lift provides users with curb-to-curb transportation upon request. Reservations must be received at least 24 hours prior to departure.

Multi-Modal Incentives

RVTD has a Transportation Demand Management (TDM) program that administers fare discount programs and works with employers to provide transit incentives to members of the region's workforce, including group fare discounts. One aspect of this effort is a Transportation Management Association (TMA) program, in which groups of employers work together with RVTD to provide transit incentives, reduce parking constraints, and provide infrastructure for non-automotive transportation modes.

Ridership and Trends

- RVTD ridership has more than doubled since 2000.
- RVTD ridership is expected to more than double over the next ten years.

In Jacksonville, weekday service to Medford is provided by Route 30, linking passengers to the Front Street, Medford, station, which provides connections to all other RVTD routes. Route 30 has the smallest ridership of all routes. Ridership figures from RVTD for 2005-06 show 19,415 riders annually on the route. As of June 2007, buses make nine round trips daily. The first bus arrives at the Jacksonville Post Office at 7:47 a.m., and that bus returns to Medford at 8:07 a.m. The last bus arrives in Jacksonville at 6:17 p.m., and that bus returns to Medford at 6:37 p.m. Table 3.2 shows the bus schedule at two Jacksonville locations.

Table 3.2: RVTD bus stop schedule in Jacksonville, Spring 2007

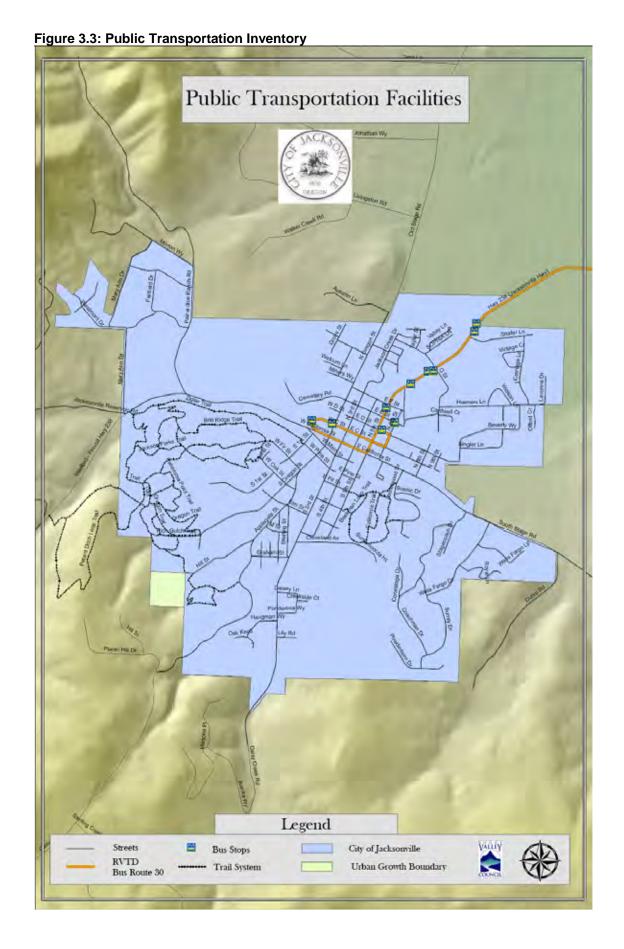
Location		-			Time				
JV P.O.	7:47 a	8:32 a	11:47 a	12:32 p	3:17 p	4:02 p	4:47 p	5:32 p	6:17 p
Museum	7:49 a	8:34 a	11:49 a	12:32 p	3:19 p	4:04 p	4:49 p	5:34 p	6:19 p

The bus approaches Jacksonville from the north, traveling southbound on Fifth Street, turning westbound on C Street to the post office, turning and traveling eastbound on California Street. The bus loops around the Jackson County Historical Society Museum (to North Sixth Street), and returns north to Medford on Fifth Street. Details about Jacksonville bus stops are shown on Table 3.3.

Table 3.3: RVTD bus stops in Jacksonville

Table 3.3.	Table 3.3: RVTD bus stops in Jacksonville								
		Sign			Trash	Bike	Wheelchair		
Stop	Location	Status	Shelter	Seating	Can	Rack	Accessible		
From Med	Iford to Jacksonville								
on Hwy	84' south of Royal								
238	Mobile Estates driveway	Yes	No	None	No	No	No		
	248' north of "G" St.								
5th St.	(Pioneer Village)	Yes	Yes	Bench	No	No	Yes		
	102' north of Blackstone								
5th St.	Alley (Back Porch BBQ)	Yes	No	None	No	No	uncertain		
	107' south of "F" St.								
5th St.	(Ray's Market)	Yes	No	None	No	No	Yes		
From Jac	ksonville to Medford								
	inside new parking lot								
C St.	(behind Post Office)	Yes	No	None	No	No	Yes		
C St.	west of 4th St.	Yes					uncertain		
	Jacksonville Museum /								
D St.	27' east of 5th St.	Yes	No	None	No	No	uncertain		
	150' north of Blackstone								
5th St.	Alley near 35 mph sign	Yes	No	None	No	No	uncertain		
	248' south of Shafer Ln.								
5th St.	(Stage Lodge)	Yes	Yes	Bench	No	No	Yes		

A map illustrating RVTD's bus service to and around Jacksonville is on the following page.



The bus route passes through a growing commercial and residential area along Fifth Street, which includes some of the highest-density housing and mixed commercial-residential housing in the city. These uses are cited in the Regional Transportation Plan's Alternative Measures as development patterns that encourage transit use and other alternatives to single-occupancy vehicle (SOV) use. By stopping at the post office, transit also accesses the adjacent municipal parking lot, enabling park-and-ride service to the Jacksonville area.

A challenge to providing transit service in Jacksonville is the sparsely populated area between Jacksonville and Medford. Buses travel across a three-mile stretch of rural farmland between the city limits/urban growth boundaries of both cities. Jacksonville is surrounded by rural farm and forest land, so there is no opportunity to reroute buses through more densely developed areas. The distance to Jacksonville contributes to Route 30's high cost. The cost per ride on Route 30 was \$6.89 in 2005-06, compared to the next highest cost per ride of \$3.70. (Highest cost-per-ride route, Route 4, was discontinued in 2006 because of its high cost and low ridership.)

3.2.4 Air, Water, Rail and Pipeline Inventory

Air

There are four public airplane facilities in Jackson County. The closest facility to Jacksonville is the Rogue Valley International-Medford Airport, located approximately 6 miles northeast of Jacksonville, off Biddle Road, Medford. Bus transport via RVTD is available during weekday hours of operation. It is classified as a non-hub facility serving roughly eight counties in southwestern Oregon. The airport serves eight hub airports in the Western states. Four air carriers currently serve the airport, with approximately 56 arriving and departing flights daily. The other three public airports are: Ashland Muni-Sumner Parker Field, Pinehurst State Airport, and Prospect State Airport.

The Rogue Valley International-Medford Airport has just been upgraded with a major expansion. Construction is finished on a new terminal and will soon be completed on a new control tower. Work is being done in phases, with the final phases being completed in 2009.

Rail

Central Oregon and Pacific (CORP) operates a shortline route through the region connecting to national Union Pacific line in Eugene. The CORP line passes through Medford, roughly 5 miles from Jacksonville.

In the past few years, some interest has been expressed in recreating the former Rogue Valley Railroad, which ran between Jacksonville and Medford from 1891 to the 1920s. Conceptual service would run to the C Street train station, where a section of rail still is visible embedded in the pavement. The line would make a loop out to the Little League fields on Jacksonville Highway, where it could pick up Britt passengers at a proposed parking lot at the back of the park, or proceed toward Medford across private property on

the northeast side of town. Within city limits, only a remnant of the old rail right-of-way exists today in public ownership—owned as a tax lot. It is a narrow, 1.48-acre strip approximately 1,300 feet long running south and roughly parallel to Hueners Lane. Between the city and Medford, the county owns an easement for rail purposes, which is largely intact; the intent is to preserve the easement for nonmotorized travel.

Pipeline

The only pipeline facility in the city is owned by natural-gas provider Avista Utilities. Avista makes natural gas available to most households in the city (not the northwest quadrant). Natural gas is transmitted from the north via the Williams Pipeline generally located along the I-5 corridor.

Water

There are no navigable waterways in or serving the city.

3.2.5 Parking Inventory

Most of the parking supply is on-street parking, although three parking lots – one private and two city-owned – help meet the surge in parking demand associated with the Britt Festivals' series of outdoor summer concerts.

The Britt concerts, coupled with the seasonal increase in tourism, tends to tax the supply of parking, in particular parking close to popular destinations. Those destinations are the core business district shops along or just off East California Street, and the Britt grounds at First and West Fir streets. On the afternoon-evening of a concert, Jacksonville can expect roughly 880 Britt-bound vehicles. This estimate is based on the capacity of Britt grounds – 2,200 people – and an average vehicle capacity of 2.5 people. The estimate assumes that concertgoers will arrive by motor vehicle as public transportation is not available. Festival grounds capacity is reported by Britt Festivals, and assumes sold-out concerts. The average vehicle capacity of 2.5 was established for outdoor summer concerts in the Rogue Valley Metropolitan Planning Organization area by the 2001 Jackson County Expo & Fair Amphitheater Traffic Control Plan. Although Jacksonville offers overnight accommodations and a few Britt attendees could stay in the city and walk to the concert, accommodations are very limited and are not likely to significantly impact traffic.

Inventory

A parking inventory was conducted, focusing on the availability of parking surrounding the downtown area, where parking often is perceived of being in short supply. The inventory identified 603 on-street parking spaces and 485 off-street spaces. The only public off-street parking is the 180 spaces in the city-owned lots at the end of West C and West D streets. The largest area of off-street parking—about 250 spaces – is owned by Bigham Knoll, which makes the lot available to Britt concert-goers. The inventory appears in Table 3.4A and B, on the following page. The area covered in the inventory is identified by the numbered blocks shown on Figure 3.4, following the inventory counts.

The inventory is a rough calculation because most of the on-street parking is not paved or marked, allowing motorists to leave their vehicles where convenient, but not necessarily where most efficient, i.e. one car taking up what could be two spaces. The inventory reflects an optimal use of unmarked space. Additionally, the city has a considerable amount of parking in the neighborhoods surrounding the Britt grounds where on-street parking is reserved for residents by permit from June 1 to September 30 (shown as Restricted Parking in inventory tables). The restriction helps mitigate the impacts of concerts on nearby households, and the area involved is too far from other points of interest to impact other visitors.

Table 3.4.A: Parking Inventory, North City

Location	Block #	On-Street. Capacity	Off-Street Capacity	Restricted Parking	Total Capacity
	1)	9	51		60
	2	24			24
California &	3	15	19	;====:°	34
C Street	4	14			14
	5	16			16
	6	33	26		59
Total		111	96	0	207
	12	11	129		140
12.035.4	13	25			25
C Street & D	14	22			22
Street	15	18			18
	16	19			19
	17	66			66
Total	-	161	129	0	290
	23	1.1			11
	24	10	1.		10
	25	- 23			23
D Street & E	26	16			16
Street	27	16	U.		16
	28	12	/- I		12
	29	48	1.1		48
Total		136		0	136
	-				
	35	18			18
300	36	9			9
E Street & F	37	18			18
Street &	38	14	46		60
Miners Wy	39	19			19
	40	- 5			- 5
	41		250		250
Total		83	296	0	379
Area Total		316	379	٥	695

Location	Block #	On-Street. Capacity	Off-Street Capacity	Restricted Parking	Total Capacity
	7	. 8	7		15
California e	8	17			17
California & Main Street	9	30	3		33
Main Street	10	21	18		39
	11	-5	3	-	8
Total		81	31	0	112
		-			0
	18	7			7
	19	12			12
Main & Pine	20	27			27
100	21	21			21
	22	14	14		28
Total		81	14	0	95
-		-			0
	30	3			3
	31	9			9
Pine & Fir	32	- 4		10	14
	33	8	3	18	29
	34	- 0	28		28
	48	0	30		30
Total		24	.61	28	113
					0
	42	6			6
F-00-L	43	24			24
Fir & Oak	44	7		16	23
	47			14	14
Total		61	0	30	114
	53	- 6		111	6
	52	25		1	25
	51	9		17	26
Oak & Elm	45			14	14
	46			23	23
	49		1	12	12
	50			В	8
Total		40	0	74	114
Area Total		287	108	132	548
Total		603	485	132	1,220

Tables above show the total number of parking spaces by category (on-, or –off-street). Restricted parking limits parking to permit holders from June 1 through September 30. Excluding the restricted parking, there are 1,088 parking spaces in the downtown area as shown on Figure 3.1 on the following page.

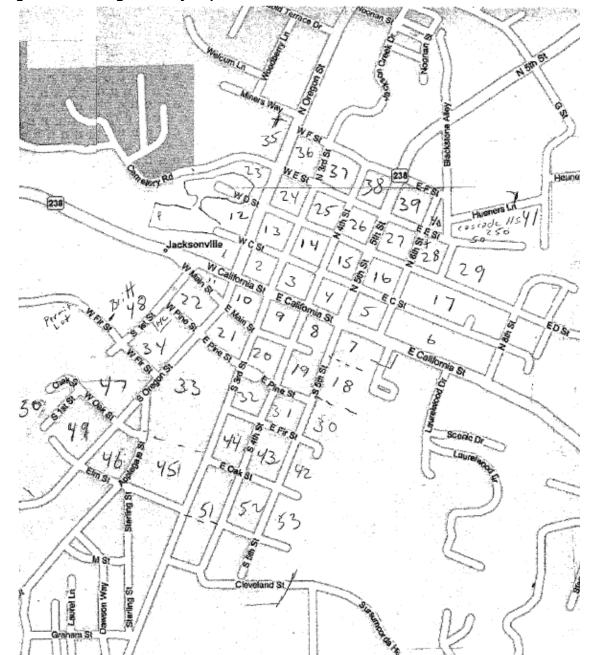


Figure 3.4: Parking Inventory Map

The numbers on the blocks shown above correspond to the block numbers in the inventory on the previous page.

Element 4

Current Conditions and Deficiencies

4.1 Introduction

This element describes the current operating condition of the street network and identifies where and to what extent deficiencies exist. The findings of the existing conditions analysis serve as a baseline to which future conditions can be compared and evaluated.

This element is, essentially, a fact-finding document. It combines the information from Element 3's inventory with traffic counts at key intersections to create a picture of the transportation system. The analysis includes examination of traffic controls and road geometrics, and addresses bicycle and pedestrian activities. It determines current (2006) intersection level of service (LOS) and volume to capacity (V/C) ratios.

The findings are based on analysis by traffic engineering staff at Parametrix, using a standardized method for determining traffic flow by adjusting for variations in traffic hourly, daily and seasonally. In addition, a second engineer's analysis looks at traffic conditions during two times of high activity: Britt Festivals' concert nights and Sunday mornings due to traffic volumes generated from parcels west of the townsite. This second analysis also identifies and evaluates potential alternatives, which will be taken up in Element 6: System Alternatives.

4.2 Summary of Findings

All 12 intersections examined in this review were found to be operating within generally acceptable levels. Lowest-performing intersections were found along North Fifth Street: the west-bound left turn movement from Shafer Lane, and all travel eastbound from West E Street. Both performed at a service level (LOS) of C, which is adequate according to city standards and means that the delay for motorists making these movements is not excessively long. All other intersections in the city were LOS B. V/C ratios, which compare traffic flow to a roadway's capacity, also were well within acceptable standards. Details are provided below.

Findings regarding traffic flow during special events are contained in section 4.3.4.

4.3 Existing Conditions

The purpose of this section is to establish the existing conditions (2006) of the study area roadways and intersections. This section does not include a comprehensive assessment of all existing conditions, but focuses solely on traffic analysis.

4.3.1 Study Area

The analysis of existing traffic conditions within the Jacksonville study area focuses on twelve key intersections located primarily along Hwy. 238 (Jacksonville Highway) through the City. Five other local intersections are also included in the study area. All study area intersections are unsignalized and include the following:

- 1. Hwy. 238 at Shafer Lane;
- 2. Hwy. 238 (Fifth Street) at E Street;
- 3. Hwy. 238 (Fifth Street) at California Street;
- 4. California Street at Sixth Street:
- 5. California Street at Eighth Street;
- 6. California Street (South Stage Road) at Wells Fargo Road;
- 7. Hwy. 238 (California Street) at Third Street;
- 8. Hwy. 238 (California Street) at Oregon Street;
- 9. Oregon Street at F Street;
- 10. Oregon Street at C Street;
- 11. Hwy. 238 at Pair-a-Dice Road; and,
- 12. Hwy. 238 at Old Ore 238 (Bybee Corner, outside city urban growth boundary)

Each of the unsignalized intersections is stop-controlled on the minor street approach. Existing traffic volumes for the 12 study area intersections (traffic counts with seasonal adjustments) are shown in Appendix B. Existing lane configurations and traffic control are shown in Appendix C and photographs of the study area intersections are presented in Appendix D. Posted speeds in the vicinity of study area intersections are as follows:

- Hwy. 238 at Old Hwy. 238 (Bybee Corner) 45 mph;
- Hwy.238 at Shafer Lane 30 mph;
- Hwy.238 from north of E Street through west of Oregon Street 20 mph;
- Hwy.238 at Pair-a-Dice Road 45 mph;
- California Street from Fifth Street to Wells Fargo Road 25 mph;
- Oregon Street from California Street through C Street 20 mph; and,
- Oregon Street at F Street 25 mph.

4.3.2 Existing Traffic Counts

Peak Period Turning Movement Counts

ODOT and the Rogue Valley Council of Governments provided turning movement counts for Jacksonville study area intersections. For most intersections, the counts were conducted for three hours between 3 and 6 p.m., and included vehicle classification by movement. At the intersections of Hwy. 238 with Old Hwy. 238 (Bybee Corner), and Fifth Street with California Street data was collected for 16 hours between 6 a.m. and 10 p.m. At the intersections of Hwy. 238 (California Street) with Oregon Street, and Hwy. 238 with Pair-a-

Dice Road, data was collected for 14 hours between 6a.m. and 8 p.m. Data for each intersection was disaggregated into 15-minute time increments for the PM peak travel periods to facilitate analysis.

A review of traffic count data indicated that average traffic activity in the study area over the entire peak period was highest from 4:45 p.m. to 5:45 p.m. Data presented in Table A-1 of Appendix C illustrates how this determination was made from the raw count data provided by ODOT. Table A-2 shows the total volumes for each movement and intersection during the identified peak hour.

Hwy. 238 (No. 272) traffic can be characterized as both commuter and recreational with significant seasonal variation occurring between summer and winter months. Accordingly, adjustments are required for the counts taken outside of the peak season to ensure that they reflect an appropriate level of traffic for use in assessing design/improvement options. Since there is no Automatic Traffic Recording station (ATR) close by or representative of the study area the ATR Seasonal Trend Table was used to determine adjustment factors. Adjustment factors were calculated averaging summer and commuter seasonal factors. The factors to seasonally adjust the peak hourly traffic counts are presented in Table A-3 of Appendix B.

The seasonally adjusted peak hour turning movement traffic counts that formed the basis of the existing conditions traffic operations analysis are summarized in Table A-2 of Appendix B. These volumes represent 30th highest hourly volumes that can be used as the basis for evaluation of improvement options.

Medium and Heavy Duty Truck Counts

Table 4.1 summarizes the percentage of total traffic on various roadway segments in the City of Jacksonville during the PM peak hour that is attributable to medium and heavy duty trucks. This data was collected for ODOT during August of 2006.

As indicated in the table, average percentages for medium and heavy duty trucks vary from 0.6 percent on California Street east of Wells Fargo Road to 3.1 percent along Hwy. 238 in the vicinity of Pair-a-Dice Road.

Table 4-1: Medium and heavy-duty truck traffic as percent of total traffic during p.m. peak hour at selected locations.

		Medium and Heavy Duty Trucks		Heavy [Outy Trucks
Location and Time Period	Total 2-Way Traffic	Volume	Percentage	Volume	Percentage
Hwy. 238 north of Shafer Lane	689	5	0.7%	3	0.4%
Hwy. 238 north of E Street	596	8	1.3%	5	0.8%
Hwy. 238 east of Third Street	706	7	1.0%	4	0.6%
Hwy. 238 east of Oregon Street	613	12	2.0%	3	0.5%
Hwy. 238 east of Pair-a-Dice Road	556	17	3.1%	8	1.4%
Hwy. 238 west of Pair-a-Dice Road	544	17	3.1%	8	1.5%
California Street east of Wells Fargo Road	618	4	0.6%	3	0.5%

Note: Medium duty trucks include single units with three or four axles, heavy duty trucks include double or multiple units with four to more than 6 axles.

Heavy duty truck percentages also vary throughout the study area with the higher percentages near Pair-a-Dice Road. However, overall percentages of heavy duty trucks are relatively small during the PM peak hour ranging from 0.4 percent north of Shafer Lane to 1.5 percent west of Pair-a-Dice Road. Heavy duty trucks typically affect intersection and roadway traffic operations more significantly than do smaller trucks and are always considered as a part of a traffic operations analysis.

A possible shortcoming to addressing traffic only in terms of overall p.m. peak hour traffic conditions is that the peak of truck traffic associated with quarry activity off Pair-a-Dice Ranch Road is missed. The greatest number of trucks to and from the quarry area passes through the city during the morning hours. A one-day "snapshot" of truck traffic serves as an example of this truck traffic through the city.

This snapshot captures trucks traveling north and south on Hwy. 238 between Pair-a-Dice Ranch Road, north of the city, and the intersection of California and Oregon Streets. Pair-a-Dice Ranch Road is the only access to a granite quarry. There are no intersections on Hwy. 238 between Pair-a-Dice Ranch Road and Oregon Street, so all southbound trucks at the Pair-a-Dice Ranch Road/Hwy. 238 intersection must pass through the California/Oregon intersection. Likewise, all northbound trucks at the Pair-a-Dice Ranch Road/Hwy. 238 intersection had to have passed through the California/Oregon intersection. In other words, a count of trucks entering and exiting Pair-a-Dice Ranch Road at Hwy. 238 from Jacksonville represents truck traffic in the city at California and Oregon streets. Table 4.2, below, shows the numbers of trucks, 3-axle and greater, counted in one day in mid-August, 2006. The count showed that for the remainder of the day (through 8 p.m.), a total of seven trucks passed California and Oregon streets intersection to and from Pair-a-Dice Ranch Road. Aggregate hauling activity is determined by market needs and business strategies. Volumes, therefore, are subject to significant change, short term and long term.

Table 4.2: Truck traffic a.m. hours at California and Oregon Streets, to and from Pair-a-Dice Ranch Road.

Hour	Trucks North-Bound (Jacksonville to Pair-a- Dice Ranch Road)	Trucks South-Bound (Pair-a-Dice Ranch Road to Jacksonville)	Total Trucks @ California & Oregon streets
7 a.m.	7	5	12
8 a.m.	3	4	7
9 a.m.	2	4	6
10 a.m.	1	0	1
11 a.m.	0	2	2
Noon	1	0	1

Table 4.2 reports the number of trucks on Pair-a-Dice Ranch Road that also travel through the intersection of California and Oregon streets, thereby impacting Jacksonville's historic downtown core area. Morning hours typically are the hours of highest truck volumes.

Hwy. 238 is a local route linking Interstate 5 at North Medford and US 199 in Grants Pass. As such it carries regional commercial traffic to and among the two cities and smaller communities along its route. This north-south through truck traffic also impacts Jacksonville. Table 4.3 shows the total number of through trucks, 3-axle and greater, at California and Oregon streets in the same period as table 4.2 above. Truck traffic is identified as mediumduty (3 to 4 axles) and heavy-duty (more than 4 axles). Comparing the total volume of trucks in 4.3, to the totals in table 4.2 shows the impact of regional truck traffic in the city. An

unknown percentage of the trucks in Table 4.3 are locally generated (i.e. deliveries to and from Jacksonville locations).

Table 4.3.a.: Truck Traffic at California and Oregon streets.

			and Heavy Trucks	Heavy Duty Trucks			
Hour	Total Traffic	Volume	Percentage	Volume	Percentage		
6 a.m.	444	17	3.8%	12	2.7%		
7 a.m.	676	20	2.9%	20	2.9%		
8 a.m.	684	15	2.1%	5	0.7%		
9 a.m.	666	18	2.7%	10	1.5%		
10 a.m.	612	14	2.2%	10	1.6%		
11 a.m.	712	28	3.9%	17	2.4%		
Noon	861	8	0.9%	6	0.6%		

Table 4.3.a. reports the number percentage of trucks at CA/OR streets compared to all classes of traffic passing through the intersection. Morning hours typically are the hours of highest truck volumes.

Table 4.3.b.: California/Oregon Streets truck traffic, unadjusted for peak hour

Hour	7/10/2008	7/16/2008
8am-9am	129	141
9am-10am	163	128
10am-11am	151	113
11am-12pm	112	111

Table 4.3.b. reports counts as of 7/10/2008 & 7/16/2008 submitted by a Jacksonville citizen. Counts have been aggregated to show the total number of tractor-trailer trucks passing through the CA/OR intersection at the times indicated.

Bicycle Counts

Table 4.4 presents a summary of bicycle travel at key study area intersections based on traffic count data collected for ODOT during August, 2006. As indicated by this summary, bicycle travel currently constitutes a relatively low percentage of total traffic during the peak travel hour of the day. The counts, taken on a weekday, don't reflect the city's position that it is a popular stopping point for recreational cyclists using regional bike routes such as South Stage and Old Stage roads.

Table 4.4: Peak Hour Bicycle Traffic at Key Intersections

Location	Total Traffic Approaching Intersection	Total Bicycles Approaching Intersection	Bicycle Traffic percent of total
Hwy. 238 at Shafer Lane	762	14	1.8%
Hwy.238 at E Street	703	11	1.5%
Hwy.238 at California Street	821	2	0.2%
California Street at Wells Fargo Road	640	14	2.1%
Hwy.238 at Third Street	731	12	1.6%
Hwy.238 at Oregon Street	914	0	0
Hwy.238 at Pair-a-Dice Road	572	0	0
Hwy.238 at Main St. (Bybee Corner)	1,035	0	0

Pedestrian Counts

Table 4.5 presents a summary of pedestrian activity at key study area intersections based on traffic count data collected for ODOT during August of 2006.

Table 4.5: Peak Hour Pedestrians at Key Intersections

Location	Total Pedestrians Crossing at Intersection
Hwy.238 at Shafer Lane	0
Hwy.238 at E Street	7
Hwy.238 at California Street	0
Hwy.238 at Third Street	94
Oregon Street at F Street	4
Oregon Street at C Street	1
Hwy.238 at Main Street (Bybee Corner)	0

4.3.3 Existing Traffic Operations

Operational Standards

Within the state of Oregon traffic operations are evaluated based on two sets of criteria or standards. For state highways, the operative standard is expressed in terms of a ratio between traffic volumes and the roadway or intersection's capacity (or V/C ratio). For many local communities, the quality of traffic performance is assessed in terms of intersection or roadway levels of service (LOS) which is based on average delay. These two operational standards are described below.

Volume to Capacity Ratios

As adopted in the 1999 Oregon Highway Plan (OHP), ODOT uses volume-to-capacity (V/C) ratios to measure state highway performance rather than intersection or roadway levels of service. Various V/C thresholds are applied to all state highways based on the OHP defined highway classification of these facilities. Oregon Highway 238 (Jacksonville Highway) is classified by the OHP as a district highway. The peak hour maximum V/C standards for Hwy. 238 locations and are summarized in Table 4.6.

Table 4.6: Maximum Volume to Capacity Ratios for Peak Hour Operating Conditions

District Highway Designation	Maximum V/C Ratio
Outside Urban Growth Boundary –Rural Lands	0.75
Inside MPO, outside STA boundary.	0.90
STA: Main Street to Shafer Lane (MP33.16 to 33.97)	0.95

Source: Oregon Highway Plan, Policy 1F Mobility Standards, Table 6.

Intersection Levels of Service

Another measure of intersection operating performance during peak travel periods is based on average control delay per vehicle entering the intersection. This delay is calculated using equations that take into account turning movement volumes, intersection lane geometry and traffic signal features, as well as characteristics of the traffic stream passing through the intersection, including time required to slow, stop, wait, and accelerate to move through the intersection. Various levels of delay are then expressed in terms of levels of service (LOS)

for either signalized or unsignalized intersections. The various levels of service range from LOS A (which reflects free-flow conditions) through LOS F (which reflects operational breakdown). Between LOS A and LOS F progressively higher LOS grades reflect increasingly worse intersection performance, with higher levels of control delay and increased congestion and queues. Characteristics of each LOS are briefly described below in Table 4.7.

Table 4.7: Level of Service Definitions

	Average Delay/Vehicle (sec.)		
Level of Service	Signalized	Unsignalized	Description
A (Desirable)	<10 seconds	<10 seconds	Very low delay; most vehicles do not stop.
B (Desirable)	>10 and <20 seconds	>10 and <15 seconds	Low delay resulting from good progression, short cycle lengths, or both.
C (Desirable)	>20 and <35 seconds	>15 and <25 seconds	Higher delays with fair progression, longer cycle lengths, or both.
D (Acceptable)	>35 and <55 seconds	>25 and <35 seconds	Noticeable congestion with many vehicles stopping. Individual cycle failures occur.
E (Unsatisfactory)	>55 and <80 seconds	>35 and <50 seconds	High delay w/ poor progression, long cycle lengths, high V/C ratios, and frequent cycle failures.
F (Unsatisfactory)	>80 seconds	>50 seconds	Very long delays, considered unacceptable by most drivers. Often results from over-saturated conditions or poor signal timing.

Source: 2000 Highway Capacity Manual, Transportation Research Board.

Summary of Existing Traffic Operations

The analysis of existing PM traffic operations was conducted using a Synchro traffic simulation model which was developed specifically for study area intersections. This model includes geometrics, other relevant physical data, and existing traffic control for each intersection that were identified from field reconnaissance. Analysis procedures follow the ODOT Transportation Planning and Analysis Unit's (TPAU) guidelines.

Table 4.8 summarizes existing (2007) traffic operations for the PM peak hour at the twelve intersections in the Jacksonville study area. Data in this table includes the overall intersection volume-to-capacity (V/C) ratios, average intersection delay, and intersection levels of service. The V/C ratio relates the magnitude of traffic traveling through an intersection with its theoretical capacity. Ratios above 1.0 often accompany LOS E and LOS F conditions indicating inadequate capacity for one or more major movements. At intersections operating at LOS D or better, V/C ratios above 1.0 are useful indicators of potential concerns such as sub-optimal signal timing or inadequate turn lane storage. The 2007 intersection analysis worksheets are included in Appendix E. Currently the intersections generally experience minimal delays and operate within the acceptable V/C standards.

Table 4.8: Existing (2007) 30th Highest Hourly (Peak) Intersection Traffic Operations

Unsignalized Intersections	Critical Movement	V/C Ratio	Control Delay (secs./vehicle)	LOS
Hwy.238 @ Shafer Lane	WB Left	0.02	15.7	С
Hwy.238 (5th Street) @ E Street	EB All	0.18	15.5	С
·	WB All	0.07	14.3	В
Hwy.238 (5th Street) @ Hwy.238 (California Street)	3-way Stop	0.72	10.2	В
California Street @ Sixth Street	SB All	0.11	13.2	В
California Street @ Eighth Street	SB All	0.07	13.8	В
California Street @ Wells Fargo Road	NB All	0.06	14.2	В
Hwy.238 (California Street) @ Third Street	NB All	0.07	11.3	В
•	SB All	0.02	10.7	В
Hwy.238 (California Street) @ Oregon Street	All-way Stop	0.55	10.4	В
Oregon Street @ F Street	WB All	0.10	10.2	В
Oregon Street @ C Street	EB All	0.12	11.7	В
	WB All	0.10	12.3	В
Hwy.238 @ Pair-a-Dice Road	SB All	0.04	13.9	В
Hwy.238 @ Old Hwy.238 (Bybee Corner)	NB Left	0.46	17.4	С
	WB Left	0.05	8.0	Α

Note 1: LOS means intersection level of service.

Note 2: "Critical Delay" and "Critical LOS" refers to the delay or LOS experienced for the specific intersection traffic movement listed

Note 3: NB means northbound, SB means southbound, EB means eastbound, WB means westbound.

4.3.4 Special Event Operations

Two recurring special events create a rush of traffic to and through the city: Britt Festivals' summer concert series in Jacksonville, and heavy Sunday traffic generated by parcels to the southwest of town. Traffic and pedestrian counts were taken in August 2006 on a Sunday morning and an evening of a Britt concert to identify impacts at the intersection of West California and Oregon streets. Greenlight Engineering, Tualatin, reviewed the counts and found that while the intersection works adequately during a Britt concert, it does not work adequately when Sunday morning through traffic reaches a peak. The analysis found that traffic operations at the intersection are compromised for a brief time on Sunday midday. With a delay of 53 seconds, the intersection performed at LOS F. During the peak of Britt traffic, the delay was no longer than typical for the intersection, LOS B.

Element 5

Future Demand, Deficiencies and Needs

5.1 Introduction

This element looks at the city's transportation system in terms of how well or poorly in can be expected to function through 2030. It describes anticipated travel demand and the capacity of the transportation network, and identifies deficiencies and needs that might exist. Deficiencies, in this case, are defined as the differences between the characteristics of the future transportation system and the performance standards that are already in place to measure performance of those characteristics. Needs are defined as the kind of transportation improvements or changes that will be necessary to correct or mitigate the deficiencies.

The element begins with a description of the procedures and methodologies used to forecast demand, the standards used to determine whether there will be any deficiencies and needs, and the information and data used to make the traffic forecasts. The element concludes with the analysis of future (2030 peak period) transportation conditions under two scenarios. Beyond offering a window into the future performance of Jacksonville's transportation system, the analysis serves as the basis for evaluating the benefits various land development and transportation alternatives. The identification and analysis of potential alternatives will be taken up in Chapter 6: System Alternatives.

5.2 Summary of Findings

The analysis showed that by 2030, no intersections in Jacksonville are expected to exceed the applicable intersection traffic operation standard, and therefore, no needs are identified. This was true under a No Build scenario, which considered development and transportation system changes as identified in current planning documents, and a Mode-Loss scenario, which considered impacts of the loss of transit service and bicycling. Tables 5-5 and 5-6 at the end of this chapter detail these findings.

Future-year findings echo analysis of present day performance. Intersections examined for 2007 performance (Element 4) were found to be operating within generally acceptable levels. Lowest-performing intersections were along North Fifth Street: the west-bound left turn movement from Shafer Lane, and all travel eastbound from West E Street. Both performed at a Level of Service (LOS) of C, which is adequate according to city standards and means that the delay for motorists making these movements is not excessively long. Under the two 2030 scenarios, service declined to LOS C on several streets, with an LOS D (still within city standards) on the west-bound left

turn movement from Shafer Lane. A summary comparison of current and future intersection performance is shown in table 5-1 below.

Table 5.1: Summary Comparison of Intersection Performance, 2007 and 2030

Unsignalized Intersections	Critical Movement	2007 LOS	2030 LOS
Hwy. 238 @ Shafer Lane	WB Left	С	D
Liver 220 (Eth Street) @ F Street	EB All	С	С
Hwy.238 (5th Street) @ E Street	WB All	В	С
Hwy.238 (5th Street) @ Hwy.238 (California Street)	3-way stop 1 yield	В	В
California Street @ 6th Street	SB All	В	С
California Street @ 8th Street	SB All	В	С
California St @ Wells Fargo Rd	NB All	В	С
Hwy.238 (California St) @ 3rd St	NB All	В	В
Tiwy.236 (Gaillottila St) & Std St	SB All	В	В
Hwy.238 (California Street) @ Oregon Street	All-way Stop	В	С
Oregon Street @ F Street	WB All	В	В
Oregon Street @ C Street	EB All	В	В
Oregon Street & C Street	WB All	В	В
Hwy.238 @ Pair-a-Dice Road	SB All	В	С
Hwy.238 @ W. Main (Bybee Corner)*	NB Left (W. Main)	С	Е
Tiwy.230 @ W. Maiii (Dybee Colliel)	WB Left	А	Α

^{*}Outside study area/Jacksonville UGB, but import to understanding city travel

5.3 2030 Forecast Methodology

This section describes the forecasting methodology employed to prepare future year traffic volumes for the Jacksonville Transportation System Plan update. It includes discussion of the following:

- A brief discussion of the data sources and analysis process employed to prepare future link and intersection turning movement projections to be used in assessing the traffic implications of population growth and land development within the study area and the surrounding community;
- A synopsis of the standards used to assess needs and deficiencies;
- A summary of planned city, county and/or ODOT roadway improvement projects in the study area; and
- A brief discussion of traffic model output at the street segment or link level to identify any locations that are anticipated to exceed planned capacity during the planning period. As appropriate, data would be stratified in 5 year increments to assist in determining the priority and timing of future recommended improvements.

5.3.1 Traffic Forecasting Process

Traffic forecasts for the Jacksonville study area were developed to compare and assess the anticipated roadway system improvement needs associated with the future peak hour No-Build condition and an array of transportation system alternatives. A multi-step process was undertaken to prepare these forecasts which relied on the Rogue Valley Metropolitan Planning

Organization's (RVMPO) travel demand model developed and maintained for the Jacksonville urbanized area by the ODOT Transportation Planning Analysis Unit (TPAU). For purposes of this study the future planning horizon year was assumed to be 2030, consistent with other transportation planning activities currently underway within the region.

The travel demand model uses current and projected land use to estimate travel demand. Estimates were prepared for two land use/transportation system alternative scenarios, a base year of 2005 and future year of 2030. It should be noted that the RVMPO model includes the entire area within the Jacksonville Urban Growth Boundary (UGB), as well as expansion areas currently located outside the UGB.

The travel demand forecasting process used to obtain future intersection level traffic volumes included the following steps:

- 1. Using traffic volume assignment output from the RVMPO model as supplied by TPAU, 2005 and 2030 peak hourly traffic volume estimates were prepared for street segments approaching key intersections throughout the Jacksonville study area. These estimates are based on land development consistent with the local city and Jackson County comprehensive plans and on the transportation system improvements anticipated to be in place by 2030 as denoted in the 2005-2030 Rogue Valley Regional Transportation Plan (RTP).
- 2. 2030 peak hour trip assignments from the model were compared with 2005 trip assignments to determine the extent of traffic growth anticipated on each roadway link in the study area. The roadway segment volumes for 2005 were subtracted from the 2030 volumes to determine the net difference in trips. The net difference was then divided by 25 years to yield an annual increase in trips. The annual trip increase was multiplied by 23 year to determine the increase in trips from 2007 to 2030.
- 3. Future traffic growth on each link approaching a key intersection was added to existing turning movement traffic counts using the methods specified in NCHRP Report #255 to produce smoothed 2030 PM peak hour turning movement projections. This involved proportioning the additional link volume entering each intersection to each turning movement according to the 2007 turning movement data. The turning movement estimates for each of the scenarios were rounded to the nearest 5 trips and balanced between each of the study intersections to be less than 10 percent of the link volume.

5.3.2 Operational Standards

Within the state of Oregon traffic operations are evaluated based on two sets of performance measures or standards. For state highways, the operative standard is expressed in terms of a ratio between traffic volumes and the roadway or intersection's capacity. For local street intersection within the City of Jacksonville, the quality of traffic performance is assessed in terms of intersection or roadway levels of service (LOS). These two operational standards are described below.

Volume to Capacity Ratios

As adopted in the 1999 Oregon Highway Plan (OHP), ODOT uses volume-to-capacity (V/C) ratios to measure state highway performance rather than intersection or roadway levels of

service. Various V/C thresholds are applied to all state highways based on functional classification of these facilities. Hwy. 238, (Hwy No. 272) or Jacksonville Highway, within the study area is classified by the OHP as District Highway inside the boundaries of a Metropolitan Planning Organization (MPO). A segment of Hwy. 238 in Jacksonville, from Shafer Lane to Main Street has also been designated as a special transportation area (STA) which accommodates higher levels of congestion than would otherwise be the case along a highway of this type. The adopted v/c standards for OR 238 are presented in Table 5-2.

Table 5.2: Maximum Volume/Capacity for Peak Hour Operating Conditions for District Highway

Location	Designation	Maximum V/C Ratio
Outside Urban Growth Boundary	Rural Lands	0.75
Within Urban Growth Boundary	STA (Shafer Lane to Main Street)	0.95
Within Urban Growth Boundary	<u><</u> 35 mph	0.90
Within Urban Growth Boundary	MPO(1)	0.90

Source: Oregon Highway Plan, Policy 1F Mobility Standards, Table 6

Highway Design Manual

The Highway Design Manual (HDM) prescribes v/c ratio standards for all major highway improvements. It is different from the OHP standards in that the OHP standards are for planning purposes, and the HDM standards are used when considering any design alternatives. If the acceptable v/c ratio cannot be met, it is necessary to seek a design exception. Table 5-3 lists the acceptable v/c ratios for future design options for Hwy. 238.

Table 5.3: 20 Year Design-Mobility Standards (Volume/Capacity [V/C]) Ratio for District/Local Interest Roads

Location	Designation	Maximum V/C Ratio
Outside Urban Growth Boundary	Rural Lands	0.70
Within Urban Growth Boundary	STA (Shafer Lane to Main Street)	0.95
Within Urban Growth Boundary	MPO	0.85

Source: Oregon Highway Design Manual, Transportation Analysis Table 10-4

Intersection Levels of Service

Another measure of intersection operating performance during peak travel periods is based on average control delay per vehicle entering the intersection. This delay is calculated using equations that take into account turning movement volumes, intersection lane geometry and traffic signal features (no traffic signals exist within the study area), as well as characteristics of the traffic stream passing through the intersection, including time required to slow, stop, wait, and accelerate to move through the intersection. Various levels of delay are then expressed in terms of levels of service (LOS) for either signalized or unsignalized intersections. The various levels of service range from LOS A (which reflects free-flow conditions) through LOS F (which reflects operational breakdown). Between LOS A and LOS F progressively higher LOS grades reflect increasingly worse intersection performance, with higher levels of control delay and increased congestion and queues. Characteristics of each LOS are briefly described below in Table 5-4. The City of Jacksonville has adopted LOS C as its operative standard for local intersection traffic performance and LOS D for collector and arterial intersections.

Table 5.4: Level of Service Definitions

	Average Delay/Vehicle (sec.)		
Level of Service	Signalized	Unsignalized	Description
A (Desirable)	<10 seconds	<10 seconds	Very low delay; most vehicles do not stop.
B (Desirable)	>10 and <20 seconds	>10 and <15 seconds	Low delay resulting from good progression, short cycle lengths, or both.
C (Desirable)	>20 and <35 seconds	>15 and <25 seconds	Higher delays with fair progression, longer cycle lengths, or both.
D (Acceptable)	>35 and <55 seconds	>25 and <35 seconds	Noticeable congestion with many vehicles stopping. Individual cycle failures occur.
E (Unsatisfactory)	>55 and <80 seconds	>35 and <50 seconds	High delay with poor progression, long cycle lengths, high V/C ratios, and frequent cycle failures.
F (Unsatisfactory)	>80 seconds	>50 seconds	Very long delays, considered unacceptable by most drivers. Often results from over-saturated conditions or poor signal timing.

5.3.3 Funded Transportation Improvement Projects

As noted in section 5.3.1: a key component of the Traffic Forecasting Process was to identify and factor in the transportation system improvements anticipated to be in place by 2030, as denoted in local, state and regional plans. There are very few roadway or intersection improvement projects currently identified and funded in the short-range plans and programs of ODOT, the City of Jacksonville or Jackson County within the study area. Projects that have been identified include the following:

Oregon Department of Transportation Projects

The current State Transportation Improvement Program (STIP) for 2006-2009 includes one project in the City of Jacksonville. The project, on Elm and M Streets, will pave and improve the streets, adding sidewalks and bike lanes. Construction is scheduled to begin in 2008.

Regional and County Projects

The Rogue Valley Regional Transportation Plan (RTP) as published in 2005 by the Rogue Valley Metropolitan Planning Organization includes a wide variety of regional and local agency projects throughout the urbanized area. It should be noted, however, that the time frame for implementation of these projects could stretch longer than the short-range future. The first project listed below (Pair-a-Dice Ranch Road: OR 238 to Westmont) is on the RTP Tier 1 (financially-constrained) project list, meaning that construction could be accommodated within the existing anticipated financial resources of the area. The second project would require a new and not presently identified funding source, and is listed in the RTP as Selected Regional Project with Long Term Potential. These projects in detail:

• Pair-a-Dice Ranch Road: OR 238 to Westmont – a fully funded project to install walkways along this roadway segment.

• Pair-a-Dice Ranch Road: OR 238 to City Limits – this project is currently unfunded and would involve construction of an arterial connector around the central, historically-significant portion of the city. This new/improved facility would provide an alternative to traversing the core area for existing and anticipated vehicular traffic, particularly trucks, which are not conducive to supporting the ambiance of the historic downtown. Also, significant traffic congestion is experienced on Sundays from traffic generated on parcels located west of the townsite.¹

As noted in the Jackson County TSP, diversion of through truck traffic away from the downtown core area is an important problem affecting the general livability of the City of Jacksonville and that development of an alternative connector around the north edge of town should be closely coordinated with the county.

City of Jacksonville Projects

No street or roadway improvement projects have been identified as fully funded.

5.3.4 Potential Future Congestion Locations

An assessment was made of roadway segments in the study area to determine whether future congestion problems may occur and, if so, the approximate timing of these problems in five-year increments between 2005 and 2030. To accomplish this assessment, traffic volume projections produced by the RVMPO model were reviewed and compared with estimated roadway capacities (also as determined by the model) for both 2005 and 2030 peak hours of travel. The intent of this assessment was to:

- 1. Identify locations where a volume-to-capacity ratio of greater than 0.80 (or 80 percent of theoretical roadway segment capacity) would be experienced; and
- 2. If such segments were identified, to then work backward to determine the point between 2005 and 2030 at which this v/c threshold would be exceeded.

Based on the assessment that was conducted, no roadway segments were identified where 2030 peak hourly v/c ratios of 0.80 or greater would occur. Section 5.4 provides further analysis.

5.4 Intersection and Roadway Segment Evaluation

This section contains the analysis of future (2030 peak period) transportation conditions in Jacksonville, documenting future traffic-volume growth at key intersections and identifying impacts and infrastructure requirements associated with future growth. The standards described in the preceding sections were applied to the volume forecasts to assess the impacts. Because the standards applied (v/c and LOS) to projected volumes are the same as standards applied to current (2007 volumes) in Element 4, it's possible to compare existing system performance to future performance. The information is intended to be used to support further development of the city's TSP by providing the basis for evaluating various land development or transportation

¹ Letter from Greenlight Engineering to Paul Wyntergreen of the City of Jacksonville dated, February, 2007 documenting traffic operations analysis at the intersection of California and Oregon Streets for various peak time periods.

alternatives in the study area. The expected traffic operational conditions that could be associated with each scenario will be identified and discussed in detail in Element 6.

The section begins with description of the development of future 2030 traffic volumes. It continues with the results of intersection traffic operations analysis for two scenarios. One scenario – the No-Build scenario – is based on assumed improvements identified in the 2005-2030 Rogue Valley Regional Transportation Plan, which articulates not only a variety of roadway improvement projects, but also anticipates a level of person travel via transit, walking or bicycling. The second scenario assumes that the availability of transit, walk and/or bicycle trip-making is reduced due to the cessation in a particular type of service. It should be noted that this analysis is based on anticipated traffic volumes during the normal peak traffic operating period (typically a weekday late afternoon). Analysis does not reflect summertime weekend peak travel activity and impacts associated with Sunday traffic generated west of the townsite.

5.4.1 Study Area

Analysis of future traffic conditions within the Jacksonville study area focuses on the same 12 key intersections that were initially addressed in Element 4: Existing Conditions. The intersections are located primarily along Hwy. 238 (Jacksonville Highway) through the city. Five other local intersections are also included in the study area. The 12th intersection listed below (Bybee Corner) is outside the study area, but an understanding of its traffic flows are necessary for an accurate analysis of many of the other intersections. All intersections are unsignalized, with stop-control on the minor street approach, and full stop at California and Oregon streets (state district highway and county road respectively. The intersections are:

- 1. Hwy 238 at Shafer Lane;
- 2. Hwy 238 (Fifth Street) at E Street;
- 3. Hwy 238 (Fifth Street) at California Street;
- 4. California Street at Sixth Street;
- 5. California Street at Eighth Street;
- 6. California Street (South Stage Road) at Wells Fargo Road;
- 7. Hwy 238 (California Street) at Third Street;
- 8. Hwy 238 (California Street) at Oregon Street;
- 9. Oregon Street at F Street;
- 10. Oregon Street at C Street;
- 11. Hwy 238 at Pair-a-Dice Road; and,
- 12. Hwy 238 at West Main Street (Old Hwy 238) Bybee Corner.

5.4.2 Development of Traffic Volumes

In order to determine the implications of community growth and associated increases in traffic volumes, peak period traffic forecasts were developed for each of the study area intersections. For purposes of this study, the future planning horizon year was assumed to be 2030, consistent with other transportation planning activities currently underway within the Rogue Valley region.

Two scenarios were developed as follows

- Scenario 1–2030 No Build; and
- Scenario 2–2030 Modal Option—loss of transit service.

Both scenarios were based on the population, households and employment assumptions inherent in the existing RVMPO travel demand model developed and maintained by the ODOT Transportation Planning Analysis Unit (TPAU). Population, household and employment assumptions were developed by the RVMPO with local agency consultation using an assessment of buildable lands. The buildable lands analysis represents future development potential within the Jacksonville area consistent with both Comprehensive Plan land use designations and the availability of property that could reasonably be expected to develop or redevelop over the planning horizon. Therefore, No Build in this instance means nothing built in terms of development and transportation improvements beyond what is already in an acknowledged plan. Scenario 2 assumes changes in multi-modal choices that could occur with existing zoning. Specifically, it assumes the loss of transit service and bicycle use.

The three-step process for forecasting travel demand at key intersections, described in section 5.3.1, was used to develop the volume projections. The 2030 p.m. peak hour turning movement traffic volume projections that resulted from these calculations are presented in Appendix G.

5.4.3 2030 Traffic Operations Analysis

Results of the analysis of future traffic performance of key Jacksonville intersections under two scenarios – No Build and Multi-Modal Loss (no transit service) are described below.

2030 No Build Scenario

The analysis of projected 2030 p.m. traffic operations was conducted using a Synchro traffic simulation model which had originally been updated for the existing conditions analysis described in Element 4. As indicated in the discussion of existing traffic operations analysis, this model includes geometrics, other relevant physical data, and existing traffic control for each intersection.

Table 5-5 summarizes future 2030 traffic operations for the design hour at the study intersections. Data in this table includes the overall intersection volume-to-capacity (v/c) ratios, average intersection delay, and intersection levels of service. The v/c ratio relates the magnitude of traffic traveling through an intersection with its theoretical capacity. Ratios above 1.0 typically accompany LOS E and LOS F conditions indicating inadequate capacity for one or more major movements. At intersections operating at LOS D or better, v/c ratios above 1.0 are useful indicators of potential concerns such as sub-optimal signal timing or inadequate turn lane storage. 2030 intersection analysis worksheets for the No-Build Alternative are included in Appendix G.

Table 5.5: Future (2030 No Build) 30th Highway Hourly (Peak) Intersection Traffic Operations

	Critical Movemen	V/C	Control Delay (sec/vehicle)		Applicable Standard
Unsignalized Intersections	t	Ratio		LOS	
Hwy. 238 @ Shafer Lane	WB Left	0.07	27.2	D	0.95
Hung 229 (Eth Stroot) @ E Stroot	EB All	0.31	21.0	С	0.95
Hwy.238 (5th Street) @ E Street	WB All	0.09	17.0	С	0.95
Hwy.238 (5th Street) @ Hwy.238 (California Street)	3-way stop 1 yield	0.84	12.7	В	0.95
California Street @ 6th Street	SB All	0.16	15.3	С	D
California Street @ 8th Street	SB All	0.14	17.1	С	D
California St @ Wells Fargo Rd	NB All	0.07	16.0	С	D
Hwy.238 (California St) @ 3rd St	NB All	0.16	13.7	В	0.95
Tiwy.256 (Camorina St) & Sid St	SB All	0.02	11.7	В	0.95
Hwy.238 (California Street) @ Oregon Street	All-way Stop	0.63	15.4	С	0.95
Oregon Street @ F Street	WB All	0.16	11.5	В	D
Oregon Street @ C Street	EB All	0.12	12.3	В	D
Oregon offeet @ O offeet	WB All	0.11	13.1	В	D
Hwy.238 @ Pair-a-Dice Road	SB All	0.10	16.1	С	0.90
Hwy.238 @ W.Main (Bybee Corner)	NB Left (W. Main)	0.77	36.2	E	0.90
	WB Left	0.07	8.3	Α	0.90

Note 1: LOS means intersection level of service.

Note 2: "Critical Delay" and "Critical LOS" refers to the delay or LOS experienced for the specific intersection traffic movement listed. Note 3: NB means northbound, SB means southbound, EB means eastbound, WB means westbound.

By 2030, no intersections are expected to exceed the applicable intersection traffic operational standard (e.g., either the ODOT V/C standard or the City's operational standard for intersection level of service).

2030 Scenario with Loss of Multi-Modal Transportation (Transit and Bicycle)

A sensitivity analysis was conducted of the 2030 No-Build traffic forecasts and operations analysis to determine potential street and intersection impacts associated with the loss of multimodal transportation system opportunities. In particular, this analysis focused on potential increases in vehicular traffic that might be experienced if existing transit services were discontinued and/or if no further bicycle facilities were provided to/from and within Jacksonville urban area. A reduction in walking was not assumed to occur.

Future peak hour traffic volumes for this analysis were developed by adjusting the volumes developed for the No-Build scenario as described above. Review of mode share estimates developed with the RVMPO travel demand model indicates regional transit and bicycle travel constitutes about 1 percent of all person travel within the Rogue Valley Metropolitan region. Additionally, review of 2005 Census survey data as published in the American Community Survey, indicates that approximately 2 percent of commuters in the greater Medford Urbanized Area (including Jacksonville) currently use transit or bicycles to travel to/from work. Accordingly, the 2030 peak hour volumes for the No-Build scenario were adjusted up by 2

percent to reflect the potential loss of these alternative modes. Results are presented in Table 5-6. Worksheets for the mode-loss scenario are contained in Appendix I.

As indicated in Table 5-6, there would be little change in projected 2030 peak hour intersection operations with the loss of transit and bicycle mode share. No intersection is anticipated to exceed its applicable performance standard*.

Table 5.6: Future (Transit/Bicycle Mode Loss) 30th Highway Hourly (Peak) Intersection Traffic

Unsignalized Intersections	Critical Movement	V/C Ratio	Control Delay (sec/vehicle)	LOS	Applicable Standard
Hwy. 238 @ Shafer Lane	WB Left	0.07	28.1	D	0.95
Liver 220 (Eth Ctroot) @ F Ctroot	EB All	0.32	21.8	С	0.95
Hwy.238 (5th Street) @ E Street	WB All	0.09	17.4	С	0.95
Hwy.238 (5th Street) @ Hwy.238 (California Street)	3-way stop 1 yield	0.86	13.2	В	0.95
California Street @ 6th Street	SB All	0.16	15.6	С	D
California Street @ 8th Street	SB All	0.14	17.5	С	D
California St @ Wells Fargo Rd	NB All	0.07	16.3	С	D
Llun, 220 (California Ct) @ 2rd Ct	NB All	0.16	13.9	В	0.95
Hwy.238 (California St) @ 3rd St	SB All	0.02	11.8	В	0.95
Hwy.238 (California Street) @ Oregon Street	All-way Stop	0.65	16.5	С	0.95
Oregon Street @ F Street	WB All	0.17	11.6	В	D
Oregon Street @ C Street	EB All	0.13	12.4	В	D
Oregon Street @ C Street	WB All	0.11	13.3	В	D
Hwy.238 @ Pair-a-Dice Road	SB All	0.10	16.4	С	0.90
Hwy.238 @ W. Main St. (Bybee Corner)	NB Left (W. Main)	0.80	39.7	E	0.90
Outrier)	WB Left	0.07	8.4	Α	0.90

Note 1: LOS means intersection level of service.

Note 2: "Critical Delay" and "Critical LOS" refers to the delay or LOS experienced for the specific intersection traffic movement listed. Note 3: NB means northbound, SB means southbound, EB means eastbound, WB means westbound.

^{*} Transportation model runs have been completed for the entire MPO that forecast conditions through the year 2030. Additional analysis extends to 2050, beyond the horizon of the TSP. 2050 modeling by ODOT shows congestion around the Jacksonville area in "no-build" modeling scenarios. However, when an "enhanced" model run is performed, with placement of the anticipated northerly arterial connector and other major roadway improvements throughout the RVMPO area, congestion around Jacksonville is not found.

Element 6

System Alternatives

6.1 Introduction

Traffic engineering analyses conducted to identify long-term (2027) system deficiencies found that there are no deficiencies relative to traffic. Both volume/capacity (v/c) and Level of Service (LOS) levels for key intersections in the study area are within state and city standards. This element will identify other potential transportation projects identified by stakeholders, and present solutions for further evaluation and decision making.

6.2 Special Tourist Needs

Due to Jacksonville's historic amenities, the town has special transportation needs related to its tourism. There are further needs associated with the city's historic heritage and its livability for local residents. These needs are detailed below.

6.2.1: Special Transportation Area (STA)

Hwy. 238 within city limits (0.81 mile, from mile post 33.16, West California Street at West Main Street, to mile post 33.97, North Fifth Street at Shafer Lane) is designated a Category 1 Special Transportation Area (STA) by the Oregon Transportation Commission (OTC). The OTC made the designation on January 14, 2004, pursuant to the highway plan's land use and transportation policy. Upon completion and adoption of this TSP, officials from Jacksonville and ODOT shall meet to discuss creation of a management agreement related to STA designation of Hwy. 238 through the city. This designation prescribes greater flexibility for state highway standards, including design standards. These features can include wider sidewalks, adding or retaining on-street parking, allowing more flexibility for signage and crosswalks, adding street trees and other measures. Recognition of the incompatibility of thru-freight traffic and a tourist destination center is part of this designation. The designation may help the community's main street projects qualify for funding such as Oregon Livability Initiative and Federal Transportation Enhancement Funding. Jacksonville would thus have the ability to provide improvements in the STA area in accord with an approved management agreement for STA standards. adoption of this TSP, approval of a management agreement for the STA designation shall be reserved as a future planning objective. See page 66 for more discussion.

6.2.2: First and Main Streets Enhancement Project

The First and Main Streets enhancement project will connect the downtown core business area of Jacksonville National Historic Landmark to the acclaimed recreational and cultural facilities of the Britt Gardens and the Woodland Trails system. The streetscape project, a partnership between the City of Jacksonville and the Peter Britt Gardens Music and Arts Festival Association (Britt Festivals), will install sidewalks, streetlights, bicycle parking, landscape plantings and street trees, benches, and other hardscape treatments in two sloped sections, one 400 foot section along Main Street between Oregon Street & Highway 238 and 650 feet of First Street between Main and Fir Streets. Two pedestrian plazas will anchor the ends of the walkway, one enhancing and protecting the 1855 Brunner Building in downtown Jacksonville and the other creating an attractive focal shelter feature at the entrance into the Britt Concert Grounds and the trails beyond. Additional connections will tie to points south and to Highway 238 and the City's Intermodal Center on its north side.

The Historic Core and the portion of Highway 238 to which the project will connect have been designated as a Special Transportation Area (STA). An STA management agreement will be pursued upon TSP adoption. In coordination with the project, on-street parking (particularly performers' bus parking) which obstructs the potential pedestrian facilities will be relocated, storm drainage will be provided, and the slopes adjacent to the roadway will be stabilized and landscaped. All activities will be within the public right-of-way, County-owned, or City-owned property.

6.2.3: 'C' Street Enhancement

C Street connects the City's Intermodal Center with the Jacksonville Museum (Jackson County Historical Society museum). C Street Corridor Enhancement project has been planned to include construction of separated or shared, pathways for pedestrians, such as "sharrows" or bicycle boulevards, bicyclists, motorists and possibly a trolley line on 'C' Street. These improvements will span the distance between the museum and the City's Intermodal center (Library parking lot), and points beyond. Trolley development would require study of the preservation and adaptive reuse of the historic Rogue River Valley Railway (RRVR: Trolley) corridor. Creation of distinctly separate pathways will be achieved through the planning, detail design, and construction and/or improvement of, and/or placement of:

- Approximately 1100' of six-foot-wide, historically-appropriate, scored concrete sidewalks, to resemble the circa 1920's concrete work that is prevalent in this area, on the north side of 'C' Street, along with colored and stamped asphalt crosswalks for pedestrians.
- A segment of the officially designated bicycle route from Medford to the Applegate, through the use of five-foot-wide colored, stamped, and stenciled asphalt.
- A bicycle shelter in the vicinity of the Jacksonville Museum.

- Interpretative signage regarding the prominent transportation history along 'C' Street and signage regarding parking.
- Aesthetically-pleasing landscape treatments to both sides of 'C' street, to include pedestrian-scaled lighting, for the creation of a safe, scenic, and inviting gateway for pedestrians.
- Although there are no specific treatments selected at this time, it is intended that "C" street become a "bike boulevard" in lieu of cyclists riding on busy California Street. Enhancements for cyclists may include signage, very smooth street overlay, and possibly some curb extensions, all intended to foster the circulation of bicycles. Improvements to facilitate this bike boulevard concept can complement those improvements made for pedestrians. These improvements shall comply with all ODOT/AASHTO requirements.
- Jacksonville staff have expressed interest in pursuing a "woonerf" concept along 'C' street. The basic concept is to foster multi-modal traffic flow along the same routes of a transportation network. In the case of 'C' street, cyclists, pedestrians, and motorized vehicles will all be promoted to share the proposed improvements. Future endeavors would find transit routing as yet another mode of shared use. The current situation finds these more pedestrian-type modes of travel competing for roadway space with automobile and heavy truck traffic. A goal of Jacksonville's would be to find a way to safely combine these modes of travel while promoting them to tourists interested in the historic amenities the town has to offer.

6.2.4: Rogue River Valley Railway (RRVR)

Separation of distinctive modal spaces would also allow for the potential, historically-appropriate reconstruction of the RRVR, running in its original corridor along 'C' Street.

This project would require an overall feasibility study to include a benefit/cost analysis of the RRVR (from Jacksonville to Medford); especially since most of the reserved RRVR easement is located outside of Jacksonville city limits. Creation of a detailed plan, determining the standards and regulations regarding design specifications, might include street typicals and rail crossings/traffic controls for Phase I (C Street) of the RRVR Concept Plan, to be located on this corridor. Much of the length of this entire easement is unencumbered by structures and the majority of the entire length has been reserved as an easement. The County and City of Medford need to establish a policy whereby new developments are required to reserve the easement for future bicycle/pedestrian transportation needs via the RRVR right-of-way (ROW). Along with hopeful creation of many Class I bike paths in/around the townsite, Jacksonville conceptualizes the RVRR-ROW as being a future commutable six-mile bike path between Jacksonville and Medford providing an alternative means of transportation (along with transit) between the two cities. While long range plans look at this easement to be restored as some kind of trolley system, immediate plans call for utilizing the easement as a bicycle commuting trail and pedestrian pathway. The city has identified the feasibility study a high priority.

Population and tourism growth projections indicate a need to provide alternative modes of travel between communities, to stage vehicular traffic outside of the historic downtown, and to promote a pedestrian friendly historic core. There is merit to planning for this growth (and potentially a pedestrian/bicycle greenway) now while the public has time to carefully protect the corridor instead of reacting to it later when market forces could drive the intervening lands to be developed more aggressively. The City of Jacksonville shall adopt the following policy:

The City shall encourage Jackson County and City of Medford to protect the Rogue River Valley Railway right-of-way from incompatible development (see Policy 2-1, Page 1).

The concept could be developed in three phases: a tourism feature between downtown Jacksonville and the city's edge; an urban feature between downtown Medford and the Medford West Main Transit-Oriented Development; and, then a final connection between the two cities. Initially, the connection would be focused on a bicycling commute and pedestrian corridor, and eventually the restoration of some sort of trolley system.

The feasibility study shall include a review of the funding sources available for capital and operational needs, a comparison of the operational structures to be considered, an analysis of the required level of ridership to make the concept feasible during each phase, along with probability of attaining those levels, and finally, an analysis of the need for public subsidy, if any.

6.2.5: Parking

Jacksonville continues to improve the town's parking situation in order to accommodate tourists visiting the historic center and the popular Britt music festivals. Combined with this effort is the desire to accommodate those tourists arriving in their larger vehicles. Figure #1 is a master parking plan indicating those areas of town that are currently being investigated and/or finalized as areas where tourists and/or Britt patrons may park.

A proposal for additional parking, especially during busy BRITT festivals in the summer, is to have expanded parking occur in Medford and somehow utilize RVTD transit services to ferry people back and forth. While these services cannot be provided to a private entity, such as BRITT, the festival managers and city officials may be able to enter into some sort of joint arrangement to provide parking and bus service in conjunction with BRITT ticket sales.

This sort of proposal then lends itself well to Transportation Demand Management (TDM) programs which are designed to reduce overall traffic flow. While Jacksonville itself is not of sufficient size to warrant a full-blown TDM program, there is no reason why Jacksonville cannot pursue TDM measures, like combined bus trips and extra parking in Medford, with flex-time, staggered work hours, and overall parking space reduction. These are things that city officials can pursue in order to maintain Jacksonville's livability without adding more parking spaces that merely accommodates more cars.

6.2.5.A. RV Parking

Another aspect of the town's special tourist needs includes the need for parking; day or hourly parking for tourists' recreational vehicles (RV) as they shop on foot through town; and overnight parking for RV's. There are currently no internal solutions for this second problem. RV's are now directed (when possible) to communities outside Jacksonville, requiring visitors to make a second trip into Jacksonville by means other than their RV. It is an objective of Jacksonville to begin planning for placement of this kind of amenity for tourists arriving via RV.

6.2.5.B. Auto Parking

A parking study, detailed in the Inventory Element, found a total of 1,220 on-street and off-street parking spaces in Jacksonville. This inventory includes counts for parking spaces at the intermodal parking lot by the library and includes spaces at the Bigham Knoll/Old Schoolhouse Historic Site. Due to change in ownership, the Bigham Knoll parking agreement will have to be renewed. Parking concerns for Jacksonville center on the town's Britt Music festivals. The Oregon Transportation Planning Rule (TPR) requires a 10 percent per-capita reduction in parking of the duration of this plan (20 years). Jacksonville historically has limited parking, specifying less parking for development than other jurisdictions in the region, as shown in Appendix H.

The city supports the intent of this particular part of the state rule, recognizing the importance of reducing the total numbers of vehicles (especially Single Occupancy Vehicles – SOVs) on the transportation network, Additionally, alternative forms of transportation (i.e. contracts with RVTD for Britt Festivals) should be pursued in order to reduce the total number of parking spaces required for Britt Festivals. Indeed, RVTD's Long Range Plan calls for enhanced service to, and within Jacksonville. On March 10, 2006, the town administrator received a letter from DLCD staff indicating a possible exemption that could reduce the required amounts of parking from 1990 standards; this reduction is further acknowledged in Appendix J. A parking inventory of existing spaces is included as part of this TSP's inventory. Figure 6.1 is a Jacksonville parking master plan that indicates where spaces may be acquired from within the townsite and how many spaces each area may accommodate. Note this figure includes construction of a second tier at the intermodal parking lot for 60 spaces; funding will be needed. In summary, these areas are:

<u>NAME</u> :	NUMBER OF SPACES:	SPACES SECURED?
D Street & 3 rd Street	12	Yes
Brook & Gordon	26	No
Hay Property	15 (Private non-profit)	No
Main Street near Lumberyard	1 22	Yes
Wayside Britt Grounds	15	Yes
Bigham Knoll	150 (approx.)	Yes (temporary)
Intermodal Second Tier	60	No
Calvary Church	40 (Britt to pursue)	No

NAME:	NUMBER OF SPACES:	SPACES SECURED?
City property on 5 th Street	3	Yes
Parallel Parking Imps. D Stre	et 25	Yes
Rasmussen Service Station	20 (Private non-profit)	No
Ray's Market	20 (Britt to pursue)	No
Creekside	20 (Britt to pursue)	No
Pioneer Village	30 (Britt to pursue)	No
TOTAL SPACES:	458	

The table below compares Jacksonville's parking requirements for new development to other cities in the county and the Oregon model development code. The table shows that Jacksonville historically has limited parking to meet the Transportation Planning Rule, specifying less parking for development than other jurisdictions in the region and the model code.

Table 6.1: Comparison of Sample Parking Requirements, non-residential

USE USE	Jacksonville	Medford	Central Pt.	Ashland	Model
					Code
Hotel	1/ room	1/ room &	1/ room &		.75/ room
		1/3 employees	1/2 employees		
Care home	1/ 1,000 sq.ft.	1/ 6 beds &	1/ 2 beds	1/ 3 beds	.5/ 4 rooms
		1/ employee			
Church	1/ 4 seats	1/ 4 seats	1/4 seats	1/4 seats	1/75 sq. ft.
Library, museum	1/ 400 sq. ft.	1/ 400 sq. ft.	1/ 400 sq. ft.	1/ 400 sq. ft.	1/ 200 sq. ft.
Preschool	2/ teacher	1/ teacher	1/ employee &	1/ 2	1/ 500 sq. ft.
			1/ 5 kids	employees	
Elem/m.school	2/ class rm		3/ class rm	1.5/ class rm	1/ class rm
High school	6/ class rm	1/ employee&	1/5 students	1.5/ class rm	7/ class rm
		1/5 non-buses		& 1/ 10	
		students		students	
Aud./theater	1/ 4 seats	1/3 seats	1/4 seats	1/ 4 seats	1/6 seats
Retail store	1/ 400 sq. ft	1/ 200 sq. ft	1/ 200 sq ft	1/ 350 sq ft	1/500 sq ft
Repair shop	1/ 800 sq.ft	1/ 300 sq. ft	1/ 300 sq. ft	1/ 350 sq ft	1/ 500 sq. ft
Bank/office	1/ 400 sq.ft	1/ 200 sq ft	1/ 300 sq. ft	1/ 350 sq ft	1/500 sq ft
Medical office	1/ 200 sq. ft		1/ 200 sq ft	1/ 350 sq ft	1/ 500 sq ft
Restaurant/bar	1/4 seats, or	1/3 seats	1/3 seats	1/4 seats	8/ 1,000 sq.
	1/ 100 sq. ft				ft.
Open air market	1/ 1,500 sq. ft		1/ 2000 sq. ft	1/ 1,000 sq.	1/ 1,000 sq.
				ft/	ft/
Storage warehse	1/ employee		2/3 employees	1/ 1,000 sq.	.5/ 1,000 sq.
				ft.	ft.
Wholesaler	1/ employee &				1/ 1,000 sq.
	1/ 700 sq ft				ft.

6.2.5.C. Parking Lot Signage

Along with the necessary parking, signs need to be placed directing tourists to various locations in town. As parking improvements are made, parking lot amenities may be necessary that could contain signs in the form of maps showing tourists where walking tours might be located and/or show locations of historic destinations. The goal would be to get tourists efficiently into the

townsite, without having to dodge large trucks, to available parking spaces. The focus would then be to efficiently get these people to the special/historical tourist facilities. It is hoped that tourists could utilize any number of transportation modes (or combinations thereof) such as: walking, cycling, segways, trolleys, horse-drawn buggies, or pedal-powered taxis. Recommendations for signage from the Jacksonville Transportation Committee are included as follows:

- * Develop two distinct types of parking signage: one for automobiles and one for oversized vehicles such as RVs and buses. Consider differing colors and potentially reflective materials. This may require an approved deviation from State standards through the STA agreement.
- * Place an Oversize indicator with right arrow on South Stage Road westbound approximately 50 feet east of 6th Street.
- * Place an 'Auto Parking Only' indicator with straight arrow on South Stage Road westbound approximately 50 feet west of 6th Street.
- * Place an 'Auto Parking Only' & 'Bicycle Route' indicator with left arrow on Fifth Street northbound approximately 50 feet south of 'C' Street.
- * Place an 'Auto Parking Only' & 'Bicycle Route' indicator with right arrow on Fifth Street southbound approximately 50 feet north of 'C' Street.
- * Place an 'Overflow Auto Parking' indicator with right arrow on Fifth Street northbound approximately 50 feet south of 'E' Street, if Bigham Knoll agreement signed.
- * Place an 'Overflow Auto Parking' indicator with left arrow on Fifth Street southbound approximately 50 feet north of 'E' Street, if Bigham Knoll agreement signed.
- * Remove 'Bus Parking' indicator with right arrow on Fifth Street southbound immediately north of 'F' Street.
- * Place a combination indicator with straight arrow on Old Stage Road southbound approximately 50 feet north of Nunan Drive.

6.3 Roadway Alternatives

In efforts to accommodate tourists, daily traffic flows, and maintain the "historic flavor" of the town, alternatives to current traffic circulation patterns are being sought. These alternatives are discussed below.

6.3.1: California/Oregon Street Options

Traffic counts show that the worst delays occur at the California/Oregon Street intersection at midday on Sunday when traffic generated to the southwest of Jacksonville experiences a sharp

rise. For a brief period, the intersection experiences a Level of Service (LOS) F. Although motorists are delayed at the intersection, LOS F is within the range of acceptable performance for Jacksonville, and most other cities in the state. The city has options to improve intersection performance as identified in a 2007 review by Greenlight Engineering. Any intersection enhancements related to striping (see below) will alleviate problems with truck traffic everyday of the week and not just on Sundays when the problem is noted to occur.

- A flagger/traffic monitor. A flagger could direct traffic for one or two hours on Sunday. Funding for any necessary flagger should come from those responsible for causing the traffic problem. Jacksonville shall alert Jackson County staff (with jurisdiction over those parcels west of town) to notify Jacksonville officials of any future development requests on those subject parcels. Any future development plans shall investigate any needed conditions to provide, and fund, a flagger at Jacksonville's problem intersection on Sundays.
- 2) Roadway Restriping: The radius of the NW corner of California Street/Oregon Street is not sufficient for southbound right turning trucks. Appendix F contains two options that accommodate turning radii for a WB50 truck. In Option One, the radii of the NW corner is increased to 25 feet. Option Two contains a six foot striped median that could be used by right turning trucks. Both options are sufficient for left turning trucks from California Street to Oregon Street. It is recommended to construct both options, the larger radius and the median. The increased radius with the median will accommodate larger trucks always (not just on Sundays) and provide additional shy distance for the typical truck that will traverse the intersection.

Traffic analysis shows all other intersections within the city will perform at an LOS of C or better through the 20-year planning horizon..

6.3.2: Arterial Connector

Jacksonville's Comprehensive Plan, Jackson County's Comprehensive Plan, and the Urban Growth Boundary Management Agreement (UGBMA: incorporated into the Jacksonville Comprehensive Plan) all include discussion of an arterial connector that is proposed to detour state highway truck traffic around the historic downtown. Although not required for safety and/or capacity reasons, the proposed connector is needed for reasons of livability and historic preservation. Concerns have been raised by stakeholders about the number of trucks that traverse the city's historic downtown. Greenlight Engineering calculated that truck traffic accounts for about 1.5% of the total traffic traversing the historic area.

The arterial connector is proposed to be built in two phases, include a new roadway (the connector itself) and an upgraded section of Pair-a-Dice Ranch Road. Current description of this proposal is as follows:

Phase I construction of the arterial connector will include a 90-degree intersection at Hwy. 238 a little more than ½ mile west of the Hwy. 238-Hanley Road intersection. The connector would then continue northwesterly, coming into alignment with the existing utility easement, then westward towards another 90 degree intersection with Old Stage/North Oregon Street. The two 90 degree intersections are then needed to accommodate larger vehicles. This will also require improvements to North Oregon Street.

Phase II of the project then has three options:

- Option 1: The connector would continue westerly/northwesterly from the new intersection at Old Stage across the Buena Vista Subdivision, possibly utilizing a portion of the Autumn Lane roadway alignment, then westerly/southwesterly to a proposed 90 degree intersection with Pair-A-Dice Ranch Road. Upon making that connection, Phase II construction would then continue south on Pair-A-Dice Ranch Road to an improved intersection at Hwy. 238 west of the townsite.
- Option 2: The second possibility shows that after intersecting Old Stage Road, the arterial connector would continue southwesterly onto Oregon Street, then turn right (west) onto E Street and go through (westerly) the existing "intermodal, Britt" parking lot, either utilizing the Cemetery Road alignment, or running parallel to/south of, Cemetery Road, then continue west to a point intersecting Hwy. 238 at the west edge of town.
- Option 3: Swing north after intersecting Old Stage Road to Livingston/Walker Creek Road, as recommended by the County Engineer.

Intersection improvements would be made wherever the arterial connector intersects existing roadways. Over the years, a broad array of other alignments have been considered and now the focus of these efforts is the routing north of the city. The intended financing mechanism is through the collection of System Development Charges on new development and through development assemblage. Development assemblage is a term referring to the way public improvements are made on a parcel by parcel basis. As development is approved on individual parcels, right-of-way is dedicated, sidewalks get extended, or streets get built or widened, or traffic safety signals get further warranted. In other words, as development gets approved, associated public improvements take place.

Jacksonville shall pursue design/construction of the arterial connector and the Oregon Department of Transportation (ODOT) will be the appropriate approval body to approve any decisions regarding any connector or rerouting of Hwy. 238 traffic out of downtown

Jacksonville. The currently proposed connector route traverses lands zoned exclusive farm (EFU) outside of the city's UGB, which would require an exception to Goal 3. Bringing the connector route inside the city's UGB may simplify land-use processes. Much of the proposed alignment is currently within Jackson County's jurisdiction, and Jackson County's TSP contains discussion of the proposed connector.

6.4: Other Future Planning Objectives

Understanding that times change and the future almost always brings growth to urban areas, the following are also identified as needs that should be addressed.

6.4.1: Hueners Lane

Jacksonville proposes modifying and "smoothing" the connections of the two offset ends of Hueners Lane. This improvement is proposed to be made through physical improvements such as the construction of a flattened "S" curve or through placement of regulatory signs and/or signals to ensure safer transition from one leg of Hueners Lane to the other.

6.4.2: Bybee Drive

A proposed new 700' long connection between the existing bridge over Daisy Creek and Hueners Lane terminus. Improvements are stormwater, pedestrian pathways, and landscaping.

6.4.3: Third Street Improvements

Proposed right-of-way (ROW) purchase and road widening on South 3rd Street from Daisy Lane to 1060 So. 3rd Street. The existing ROW is 40 feet and will need to be expanded to 60 feet and the road itself will be widened and overlaid for approximately 1400 linear feet.

6.4.4: Intelligent Transportation System (ITS)

As mentioned in Element 2 of this TSP, there is a proposal for an automatic traffic recorder and closed circuit television to be place at the intersection of 5th/California Streets. Proposed placement is somewhere between 2011 and 2015.

6.4.5: Transit-Oriented Development (TOD)

Transit-Oriented Development (TOD) is a land use planning method providing a means to place people near transit services, decreasing their automobile usage. The currently popular "sprawl" of land use development patterns necessitates the use of vehicles on almost every trip taken from home. Through creative change in land use decisions to opt for higher density development, mixed use development, and pedestrian districts, TODs and the associated use of public transit reduce automobile dependency.

Jacksonville has implemented such a development at the north "gateway" to the city and this TOD is slated to occur as the city expands its UGB to the north of the city. Focusing on transportation and land use issues affecting a group of commercial parcels, including a senior housing project, the project is pedestrian oriented and has the potential to expand with any expansion of the Urban Growth Boundary (UGB) near that location. A future planning objective is the study of expanding Jacksonville's TOD as UGB expansion occurs in the future. This policy shall be adopted:

As the Jacksonville Urban Growth Boundary (UGB) expands, the dense and mixed use development (TOD) located at the north edge of the city shall be expanded accordingly.

6.4.6: Intermodal Parking: Second Tier:

As mentioned in the table on pg. 60, and referenced in Figure 6.1 on pg.67, a second tier of 60 parking spaces is proposed over the existing intermodal municipal parking lot.

6.4.7: STA Designation:

As mentioned on pgs.7 and 56 of this TSP, a management agreement between Jacksonville and ODOT for the city's STA area on Highway 238 should be pursued. Along with this agreement, Jacksonville should request that the STA designation of Highway 238 be extended northeasterly to encompass all of Highway 238 within city limits. This extension would then include the mobile home park located at the north edge of the city where a need exists for transit stops and crosswalk on Highway 238. These features would enable pedestrian and transit patron movement to/from the mobile home park to the east side of Highway 238 and beyond via the transit stops. Additionally, any/all existing/future pedestrian and bicycle connections to/from and across Highway 238 should be evaluated as a part of this agreement/extension process.

6.4.8: Jacksonville Livability Issues:

Jacksonville's livability is mentioned elsewhere in this TSP. The town's historic designation is important to residents and is tied economically to tourism. Because of this, three additional issues need to be examined here: roadway safety due to aggregate hauling, an acoustic study, and economic considerations.

Safety: As noted on page 41 of this TSP existing traffic counts referenced within this document are a 'snapshot' in time; the figures may not reflect accurate counts from day to day. Also, safety issues may be associated with aggregate hauling in the downtown core. Further studies are required.

Acoustic Studies: Acoustic studies are also warranted to determine if noise associated with heavy trucking is negatively impacting the livability and historic designation of Jacksonville. A seismic study has been completed and no negative impacts were noted.

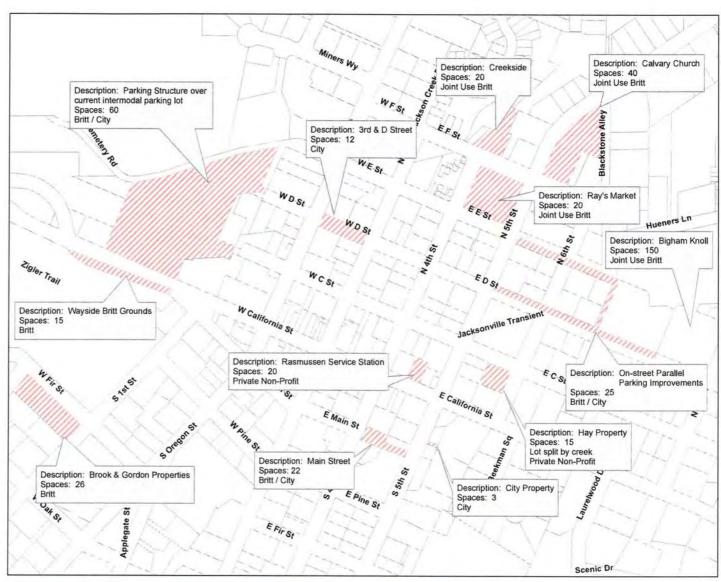
Economic Considerations: While a proposed connector around the city may take some business away from the town center, the improved livability of the downtown core without the heavy truck traffic may increase tourist and resident business. An economic study may be warranted for livability issues as well.

Figure 6.1

Legend
Parking & Taxlots
Taxlots
Areas with parking

All parking space estimates are generalized; site design will affect the final number of spaces. There are tax base reductions incurred by the transfer of any private property to public ownership





Jacksonville Parking Plan

Element 7

Preferred Alternatives and Planned Projects

7.1 Introduction:

While no issues are identified requiring mitigation, the City proposes three measures to enhance the transportation system and the city's livability: 1) place a flagger at the at the California Street/Oregon Street intersection on Sundays to mitigate traffic problems experienced there; or, 2) restripe California Street at that same intersection to promote left turn movements; and, 3) construct an arterial connector around the north edge of town to enhance the town's livability by having truck and most thru-traffic routed away from the town center.

7.2 Roadway Improvement Alternative:

Two roadway improvement alternatives are mentioned above: 1) restriping of California Street at Oregon Street; and, 2) constructing an arterial connector around the northern edge of the town. Only the restriping of California Street is warranted to alleviate LOS problems identified by the traffic engineer. While construction of the connector is not warranted, it is a desired potential improvement to enhance the city's transportation network and overall livability as the connector would serve to divert some traffic away from downtown.

Other improvements to the town's transportation network include:

- * Bybee Drive: improvements include a 700' connection between the existing bridge over Daisy Creek and the terminus of Huener's Lane. The Bybee Drive improvements will include enhancements to transportation, storm water, and pedestrian networks, and new landscaping.
- * C Street Enhancements: improvements include a new 850' bike and pedestrian connection, a 'Multi-Modal Mall', with landscaping and storm drain work between N. Oregon Street and 5th Street. This will require some modification to street surfacing to accommodate the new facilities. Element 6 contains more detail.
- * Third Street: improvements to South 3rd Street include the purchase of right-of-way and road widening of 3rd Street from Daisy Lane to 1060 South 3rd Street. The existing right-of-way width is 40 feet and is to be expanded to 60 feet. The roadway itself will need to widened and overlaid over 1400' linear feet.
- * Huener's Lane: along with improvements associated to Huener's Lane with Bybee Lane improvements, there are plans to smooth a sharp "S" curve at 'G' Street.

- * First/Main Streets: this project will connect the downtown core business area to the BRITT festivals in the form of added pedestrian connections, enhancing pedestrian circulation in these areas.
- * Third/Main Streets: associated improvements to South 3rd Street include the purchase of right-of-way and road widening of 3rd Street from Daisy Lane to 1060 South 3rd Street. The existing right-of-way width is 40 feet and is to be expanded to 60 feet. Main Street is to be improved with pedestrian facilities.
- * As mentioned in Element 2, there are plans for an Intelligent Transportation System (ITS) project for Fifth/Main street. Included will be an automatic traffic recorder and a closed circuit television.
- * Rogue Valley Rail Road (RVRR): The old RVRR right-of-way (ROW) is to be preserved as an easement fostering a potential trolley service which may operate on C Street serving future tourists. An added benefit of preserving the entire easement of the old RVRR-ROW is that this area could be preserved to be utilized by those who commute back/forth to Medford by bicycle. A pedestrian pathway could also be constructed with the RVRR-ROW and the trolley service could potentially be extended to connect Jacksonville and Medford. Preserving this easement is also another TDM measure that can eventually serve to reduce cars going to/from the historic Jacksonville area. Construction of other Class I bikepaths is encouraged (see Policy 2-1 on Page 1).

7.3 Transportation System Management (TSM) Alternative:

TSM strategies emphasize improving efficiency, capacity, and safety of existing transportation networks through alternatives like: facility design modifications; access management; creation of new lanes; incident response plans; traffic enforcement that is targeted at specific situations; and, use of intelligent transportation systems (ITS).

For Jacksonville, the only TSM strategy identified as being needed throughout the analysis period is the restriping of California Street at Oregon Street. This restriping is not necessary to alleviate traffic problems during peak hours, but is necessary to avoid an LOS of F around midmorning to mid-afternoon on Sundays when a large volume of traffic traverses the townsite from west to east. This large volume of traffic occurs weekly causing an approximate 53 second delay at the California Street/Oregon Street intersection for about an hour every Sunday, resulting in an LOS of F. This is the only identified failure in Jacksonville's entire transportation network, according to the traffic engineer. As detailed in Element 6 of this TSP, there are two alternatives which can alleviate this LOS problem: restripe the road to facilitate left turn movements from California Street to Oregon Street, or place a flagger/traffic flow monitor at the intersection for about an hour each Sunday afternoon.

Parcels generating this traffic are within Jackson County's jurisdiction. Jacksonville officials therefore propose this policy:

The city strongly encourages Jackson County officials to evaluate the effect on traffic circulation of significant new or expanded uses west of Jacksonville. If impacts are determined to be significant, the county should work with the city to impose appropriate conditions to reduce the impact (see Policy 7-2 on Page 3).

Jacksonville encourages this policy and possibly the placement of a flagger at the California Street/Oregon Street intersection for two hours each Sunday morning to alleviate the traffic problem – OR – the possible establishment/maintenance of the necessary striping as recommended by Greenlight Engineering to improve intersection circulation.

While a flagger could prove to be an unreliable solution due to sickness or other issues, the more permanent, and maybe less expensive solution (due to the possible need to pay a flagger) would be the restriping of California Street as the traffic engineer suggests.

Policy 1-1 (Page 1) is also included to ensure continued cooperation with ODOT to maintain a safe traffic circulation pattern at the problematic 5th Street/California Street intersection.

7.4: Transportation Demand Management (TDM) Alternative:

TDM strategies focus on reducing travel demand to alleviate congestion. So, rather than increasing capacity through construction or modification of transportation network design, as with TSM strategies, TDM would recommend alternatives like: ride sharing; flextime alternatives in workplaces; the increased use of transit; pedestrian activities; and, promotion of riding bikes and other modes of travel.

As mentioned in Element 6, a viable TDM measure would be for BRITT Festivals and the city to enter into an agreement with RVTD to provide transit during festivals between Jacksonville and Medford. This transit service would ferry concert-goers from one city to the other, alleviating the need for Jacksonville to continually provide more parking spaces in an historic city where more parking spaces are undesired. Combined with this strategy, other TDM strategies the city may wish to consider promoting flex-time, staggered work hours with some of the city's larger public/private employers, as well as a provision of a cap on how many parking spaces the city can provide. Sixty new spaces are proposed in a second tier above the current municipal lot.

The town of Jacksonville is well set for pedestrian-oriented activities, use of Segways (there is a Segway rental shop in town), golf carts, skateboards, and bicycle riding. Although it has been noted that most cycling occurs while people recreate on the weekend, the townsite is small enough to invite the use of bicycles throughout. Proposed connectivity enhancements to 'C' Street, and Medford via the RVRR-ROW have been mentioned in this Element and in Element 6; use of this easement will enhance the 'Multi-Modal' opportunities in and around Jacksonville.

7.5: Transit Alternative:

The local Rogue Valley Transit District (RVTD) provides limited service throughout its entire system. As stated in the meeting, scheduling needs to be more conducive to reliable 8-to-5

commuting to Medford and points beyond. Services generally start around 6:00a.m. and end around 6:00p.m. Throughout the day, RVTD averages about a 45 minute headway for Jacksonville riders. RVTD's budget does not currently allow for an expansion of service; however, future service enhancements are being studied. Because Jacksonville's system fails only on Sunday, and that is a day of the week that RVTD does not currently operate, relying on a transit alternative as a preference is not possible at this time. A transit stop relocation study may be warranted to increase RVTD safety and ridership (see Policy 2-6 on Page 2).

7.6: Land Use Alternative:

In terms of a land use alternative, Jacksonville has created a Transit-Oriented Development (TOD). A TOD is a land use planning method providing a means to place homes (built at higher than normal densities), and some businesses, near transit services thus decreasing automobile usage. Nationwide, the currently pervasive "sprawl" of land use development patterns necessitates the use of vehicles on almost every trip one takes from the home. Tools such as higher density development, mixed use development, multi-modal malls, TODs, and the associated use of public transit, reduce automobile dependency. A TOD in and of itself also promotes the further expansion of multi-modal malls.

Jacksonville has implemented such a development at the north "gateway" to the city. Focusing on transportation and land use issues affecting a group of commercial parcels, including a senior housing project, the project is pedestrian oriented and has the potential to expand with any movement of the Urban Growth Boundary (UGB) from that location.

Virtually the entire townsite is designated as a Historic Landmark District. Land use rules/regulations are very specific to development in such a District, so no other land use alternatives are being recommended at this time.

7.7: No-Build Alternative:

While this alternative emphasizes Jacksonville's choice to build nothing, this TSP points out the benefits of building the planned projects which will enhance Jacksonville's livability. As a specific example, construction of the additional connector will serve the Northwest Quadrant of the community, along with the exception lands along Old Stage Road. Travel from these parcels currently must go back into the center of town at 'F' Street in order to get a straightforward connection to Highway 238 and to reach destination points in Medford. The proposed arterial connector will alleviate this condition.

As identified throughout this TSP, there is a livability desire to construct the arterial connector around the north edge of the townsite. This route remains an identified option not only in Jacksonville's Comprehensive Plan, but in this TSP, in Jackson County's TSP, and in the Regional Transportation Plan. It would thus seem that a no-build alternative is not favored and while construction of the arterial connector may not happen, it is at least identified in the appropriate documents to "reserve the town's right" to pursue construction of such a roadway.

Element 8 Transportation Funding Plan

8.1 Introduction:

In compliance with the Transportation Planning Rule, the Jacksonville Transportation System Plan (TSP) has a transportation financing program that includes the following:

- A list of planned transportation facilities and major improvements;
- A general estimate of the priority or timing of planned facilities and improvements;
- Determination of rough conceptual capital cost estimates;
- A discussion of existing and potential financing sources; and,
- Alternative funding strategies for capital projects.

8.2: Planned Transportation Facilities and Major Improvements:

8.2.1: Capital Improvements

The following projects are proposed as planned projects and/or desired improvements to enhance Jacksonville's transportation network and livability:

PROJECT DESCRIPTION	PROJECT TIMING	PROJECT COST ESTIMATE
(ITS) Intelligent Transportation	Somewhere between 2011-2014	\$50,000
Systems: as mentioned in		
Element 2 of the TSP this		
proposal is for an automatic		
traffic recorder and closed circuit		
television at 5 th Street and		
California		
First/Main Enhancement Project:	2010-2011	\$1,100,000
pedestrian connection between		
the downtown area and the		
BRITT festivals area. Project will		
include pedestrian and bicycle		
amenities.		
"C" Street Enhancements: a	2009	\$238,500
detailed description of this		
project is contained in Element 6.		
California/Oregon intersection,	2009-2011	\$2000 to restripe
either a flagger on Sunday		A flagger may include no cost to
afternoons or a restriping of the		the city.
intersection to accommodate left		
turns.		
Bybee Drive at Daisey Creek	2011	\$350,000
Third Street Improvements;	2011	\$738,000
detailed description in Element 6.		
Hueners Lane: smooth S curves	2014	\$120,000
Sixty parking spaces(2 nd Tier)	2030	\$5,000,000

8.2.2: Non-Capital Improvements (Potential Future Alternatives):

8.2.2.A: Arterial Connector:

Based on plans for construction of an arterial connector around the north edge of town, current estimates for construction of the entire facility exceed \$15 million. The town of Jacksonville would be responsible for the all construction within the town's limits. Estimates put this amount at about \$6 million. A detailed analysis of the connector is contained in Element 6 of this TSP. Since there are so many unknowns related to and regarding this arterial connector, it is mentioned here in the TSP only as a 'facility requiring further study'.

The Oregon Department of Transportation (ODOT) may require the connector to be constructed to state highway standards. These standards are strict and require more construction costs than those of a typical local connector. Costs of the arterial connector outside Jacksonville's city limits may be shared by others; however, no entity has stepped forward to say exactly what sort of financial commitment this might be. As mentioned above, any planning, design, and construction of this facility will require future study.

8.2.2.B.: Rogue River Valley Railroad (RRVR) Easement:

As discussed in Element 6 of this TSP, it is the city's desire to begin preserving, utilizing portions of the RRVR easement for tourist uses (C Street Trolley) and for use as an approximate six-mile commutable bicycle path connecting Jacksonville with Medford. Like the proposed arterial connector, these desires are mentioned in the TSP as 'improvements requiring future study'. While these are designs for future study, it is Jacksonville's intent to begin preserving portions of this easement now.

8.3: Financing for Capital Projects:

8.3.1.: Revenues

Funding sources for capital improvements are shown in Table 8.1 in the columns headed SDC (system development charge), and Franchise fees. As shown on this table, totals generated over the short-term planning period (2009-2014) are \$50,000 and \$689,000 from Franchise Fees.

In addition to these revenues, the City of Jacksonville is going to receive an as yet undetermined amount of money for a federal stimulus package that has been granted in light of the nation's current bleak economic outlook. Some of these funds will be utilized to begin construction on one, or more of the capital projects being proposed.

As mentioned in Element 6 of the TSP, it is possible that parcels to the southwest of Jacksonville may be responsible for costs of provision of any required flagger associated with the late Sunday morning traffic issue. If restriping of the CA/OR intersection is the preferred (and more permanent) method of traffic mitigation, restriping costs are fairly minimal. For the town, the cheapest/most cost effective way to deal with the Sunday LOS problem would be the provision a

flagger/traffic monitor during those hours when the traffic problem materializes. The idea that the County mandate a flagger as a condition of any future approvals on parcels to the southwest has been mentioned as a possibility. A flagger would possibly be provided on late Sunday mornings. Although the intersection operates the remainder of the week with no identified problems, now, or during the period this study covers, the traffic engineer has indicated that roadway restriping will solve the problem at least as efficiently as the presence of a flagger in the intersection. The cost for roadway striping is minimal; the treatment to the pavement is much more permanent than a traffic monitor/flagger; and, funding for restriping can come from the town's coffers without the need for implementing a systems development charge (SDC).

Regarding other capital improvements mentioned above, Jacksonville will rely on System Development Charges (SDCs). An SDC is a method to fund transportation improvements by assessing developers a cost associated with the impacts to infrastructure that would normally result from approved development. As development occurs in Jacksonville an SDC will be levied on new development for transportation purposes (as allowed by Oregon law). In accord with SDC requirements, the "transportation purpose" required for SDC implementation, would be the proposed enhancements to 'C' Street that would be constructed to encourage walking and cycling, both viable forms of transportation. It is a goal of the Rogue Valley Metropolitan Planning Organization (RVMPO) that nonmotorized methods of travel be provided wherever/whenever possible. Implementing "pedways" furthers RVMPO and state goals to reduce reliance on single-occupancy vehicles.

Jacksonville Public Works staff detailed the estimated costs associated with each desired improvement contained in Section 8.2.1. Expected funding/revenue sources in the form of Systems Development Charges (SDCs) and Franchise Fees-are outlined in Table 8-1, along with expected expenditures.

Table 8.1: Fees and Expenditures: (numbers shown are in thousands) Trans. SDCs currently generate about \$9,750 per year and franchises about \$137,000 per year. There is also a one-time \$50,000 available for street improvements from Urban Renewal in 2010. What is not shown on Table 8.1 are federal and state funding that Jacksonville is expecting through 2034. Those figures are:

STATE FUNDING	FEDERAL FUNDING
\$677,000	\$197,000
\$882,000	\$735,000
\$2,566,000	\$2,900,000
	\$677,000 \$882,000

8.3.2.: Expenditures

Table 8.1 shows expenditures forecast for Jacksonville through the year 2034. This table indicates that administration and maintenance costs for the city will exceed \$9,000,000 through 2034. These are costs associated with maintaining those roads and transportation facilities that currently exist in Jacksonville. Table 8.1 and the figures contained thereon then demand more discussion regarding funding.

8.4.: Financing for Non-Capital Projects

Two non-capital projects have been mentioned for further study: an arterial connector that would arc around the north edge of the city, and acquisition of an easement that would serve as a bicycle commuter pathway between Jacksonville and Medford. Since these are items mentioned as projects for future study only, it is currently unknown what costs may be associated with each project. An estimate of \$6,000,000 (Jacksonville's share) has been included in this TSP for funding for the arterial connector, but an actual amount is unknown. There is no cost estimate for RRVR easement preservation.

8.5.: Alternative Funding Sources

Many federal and state experts have suggested that the current economic downturn is the worst since the Great Depression. Note that they are not saying things today are as bad as they were during The Depression, but the worst 'since' that time.

In light of this economic fact facing the entire globe, SDC charges on Table 8.1 have been greatly deflated to reflect the current economy; this matches what is seen in the current update of the 2009-2034 Regional Transportation Plan (RTP). The SDC rate remains 'flat' for Jacksonville as it does for every municipality in the nation and the RVMPO; there simply is no development occurring. Without the economic stimulus (discussed above) being handed out to every state by the federal government, very few of the nation's jurisdictions would be currently acquiring any funding for transportation improvement projects. This current and very bleak outlook aside, nobody expects the economic crisis to continue much past another 24 months. There is therefore no reason to expect Jacksonville's SDCs to remain as flat as shown. It is therefore reasonable to conclude that 'alternative funding' may come in the form of increased (or normal) SDCs.

Other alternative funding sources may come as increases to SDCs and/or to Franchise/utility fees. While the size of Jacksonville is not likely to find huge increases to these fees, it is possible that they can increase some amount.

A tax levy is another source of possible funding. These funding sources are typically not popular with voters, but if transportation enhancement projects are highly desired, voter approval of levies is much easier to accomplish.

Local, state, and federal loan and grant programs are available on a project by project basis and could be utilized as an additional source of alternative funding.

Table 8.1: City Revenue Sources and Expenditures

City of Jac									
Vear	City Re	venue Sou	rces				Non-Capi	tal Expenses	
Year	SDC	Sub- Total SDCs	Franchise Fees	Sub- Total Fees	Urban Renewal	Total Other	Admin	Maintenance	Total Non- Cap
2009	\$10		\$135				\$33	\$228	
2010	\$10		\$136		\$50		\$34	\$234	
2011	\$10		\$138				\$35	\$240	
2012	\$10		\$139				\$36	\$246	
2013	\$10	\$50	\$141	\$689		\$50	\$36	\$252	\$1,372
2014	\$10		\$142				\$37	\$258	
2015	\$10		\$144			\$0	\$38	\$264	
2016	\$10		\$145				\$39	\$271	
2017	\$11		\$147				\$40	\$278	
2018	\$11		\$148				\$41	\$285	
2019	\$11	\$63	\$150	\$876			\$42	\$292	\$1,886
2020	\$11		\$151				\$43	\$299	. ,
2021	\$11		\$153				\$44	\$307	
2022	\$11		\$154				\$45	\$314	
2023	\$11		\$156				\$47	\$322	
2024	\$11		\$157				\$48	\$330	
2025	\$11		\$159				\$49	\$338	
2026	\$12		\$161				\$50	\$347	
2027	\$12		\$162				\$51	\$356	
2028	\$12		\$164				\$53	\$364	
2029	\$12		\$165				\$54	\$374	
2030	\$12		\$167			\$0	\$55	\$383	
2031	\$12		\$169			,	\$57	\$393	
2032	\$12		\$170				\$58	\$402	
2033	\$12		\$172				\$60	\$412	
2034	\$13	\$175	\$174	\$2,434			\$61	\$423	\$6,141
Totals	\$288	\$288	\$4,000	\$4,000	\$50	\$50	\$1,188	\$8,211	\$9,399
	Searmptions 1.0% are increase	inual	1% annual				2.5% annual increase	2.5% annual increase	·

APPENDIX A: AUDIT FOR INTEGRATED LAND USE & TRANSPORTATION PLAN



Rogue Valley Metropolitan Planning Organization

Regional Transportation Planning

Ashland • Central Point • Eagle Point • Jacksonville • Medford • Phoenix • Talent • White City Jackson County • Rogue Valley Transportation District • Oregon Department of Transportation

DATE: June 14, 2005

TO: Jacksonville Planning Commission and City Council

FROM: Dick Converse and Vicki Guarino, Rogue Valley Council of Governments

SUBJECT: Final Report: Integrated Land Use and Transportation Plan

Jacksonville is a member of the Rogue Valley Metropolitan Planning Organization (RVMPO), which has adopted measures to reduce reliance on the automobile. The state requires these measures when a metropolitan area is unable to demonstrate through its Regional Transportation Plan that per capita vehicle miles traveled will be reduced by at least five percent over the planning period (for the RVMPO the timeframe is 2000-2020).

Another requirement is that cities and counties within the metropolitan area prepare and adopt integrated land use and transportation plans (ILUTP). This ILUTP final report contains results of an audit of Jacksonville's land use regulations. It also contains recommendations to increase densities in residential and commercial areas.

Discussion

In February, the RVMPO staff made an initial presentation on the ILUTP to the city, including results of the ILUPT audit (checklists charts at the back of this report) and an audit of development from 2000-03. These audits showed that Jacksonville largely supports the aims of the ILUTP. There were questions from City Council members, however, about flexibility in adopting recommendations contained in this report. In a report issued last fall by the Department of Land Conservation and Development on the status of ILUTPs around the state, it was noted that the adoption of requirements for ILUTPs marked a shift from measuring results, such as a reduction in per capita vehicle miles traveled, to measuring efforts toward achieving the result.

The state requires that an ILUTP contain changes to land use designations, densities and design standards that:

- Increase residential densities along transit lines and near major employment and shopping areas;
- Increase allowed densities in office and retail developments in centers:
- Designate land for neighborhood shopping within convenient walking and cycling distance of residential areas;
- Designate land to provide a better balance of jobs and housing.

In February 2003, the Department of Land Conservation and Development conducted a workshop with the RVMPO Technical Advisory Committee (TAC) to present information about the Transportation Planning Rule (TPR) requirements for and benefits of integrated land use and transportation planning. At that time, the TAC recommended that RVCOG staff assist communities in conducting assessments to determine what each RVMPO jurisdiction needs to do to comply with the TPR requirements.

The purpose of the ILUTP project is to audit existing plans, policies, and ordinances with the specific intent of identifying opportunities and constraints to integrate land use and transportation planning consistent with the TPR. The audits provide each jurisdiction with a planning direction to enable land use choices and transportation opportunities that work together to reduce VMT per capita.

Other Measures

In addition to the ILUTP, the RVMPO is working to meet the requirements of seven Alternative Measures. These measures, which the Land Conservation and Development Commission approved December 13, 2001, are to be followed within the RVMPO in place of the Vehicle Miles Traveled (VMT) reduction standard contained in the state Transportation Planning Rule.

Several Alternative Measures relate to land use and, therefore, are closely linked with the ILUTP. In particular, two measures set benchmarks for the percentage of new dwelling units and employment growth that must occur within compact, mixed-use, pedestrian- and transit-friendly neighborhoods. By 2005, this kind of development must account for 9 percent of development in the RVMPO. Jacksonville has exceeded both the residential and employment benchmarks so far, with 21 percent of homes and all of the business growth (100 percent) meeting the standards. The requirements will grow more demanding in the years to come, however, necessitating ILUTP provisions. By 2020, nearly half of all development occurring since 2000 will have to meet the benchmarks.

Other RVMPO Alternative Measures set benchmarks for bicycle lanes, sidewalks, and houses near transit lines. This ILUTP project addresses all of these standards and offers RVMPO member cities suggestions for zoning ordinance changes that can help the region meet state requirements

ALTERNATIVE MEASURES

Measure	How Measured	Current 2000	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Transit and bicycle/pedestrian mode share	and walking (non-motorized) modes. Determined from best available data	% daily trips transit: 1.0	transit: 1.2	transit: 1.6	transit: 2.2	% daily trips transit: 3.0 bike/ped: 11
(DU's) w/in ¼ mile	Determined through GIS mapping. Current estimates are that 12% of DU's are within ¼ mile walking distance of RVTD transit routes.	12%	20%	30%	40%	50%

% Collectors and arterials w/ bicycle	Determined through GIS mapping. Current estimates are that 21% of collectors and arterials in the MPO have provisions for bicyclists.	21%	28%	37%	48%	60%
% Collectors and arterials in TOD	Determined through GIS mapping. Current estimates are that 46% of collectors and arterials in TOD areas have sidewalks.	47%	50%	56%	64%	75%
% Mixed-use DUs	Determined by tracking building permits - the ratio between new DUs in TODs and total new DUs in the region.	0%	9%	26%	41%	49%
% Mixed-use employment in new	Estimated from annual employment files from State - represents the ratio of new employment in TODs over total regional employment.	0%	9%	23%	36%	44%
Transportation Funding	Funding committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent ½ of the MPO's estimated accumulation of discretionary funding (STP*).	N/A	8950 DOD	\$2.5 Million	\$4.3 Million	\$6.4 Million

Jacksonville ILUTP

This ILUTP notes several strengths of Jacksonville's current land use regulations as they relate to supporting the transportation system. It also suggests some revisions or changes that could be made to some zones, and applied in some areas of the city.

In addition, this report contains the audit of exiting land use regulations to gauge the extent to which city measures support transportation efficiencies. The audit was developed as a checklist by RVCOG staff based on Oregon's *Model Development Code & User's Guide for Small Cities*. The checklist identifies features that support conditions under which motor vehicle use may be reduced. City zones reviewed are grouped by category: residential, commercial and industrial. The audit also examined city design standards that relate to transportation. The audit distinguishes whether a feature is permitted outright in a particular zone (P), or is allowed conditionally (C). Jacksonville audit results are attached at the end of this memo.

Strengths

Historically, Jacksonville has supported innovative designs that have led to compact, pedestrian and transit-friendly, mixed-use development. These efforts include the pedestrian network that links important city destinations, and the Nunan Square development.

Other city regulations that support an efficient transportation system include:

- Opportunities for mixed-use development, including industrial-residential mix in the Cottage Industry zone
- Flaglots to achieve infill
- Commercial zones permit mixed-use residential
- Sidewalks are required to connect with existing sidewalks, even beyond project boundary.
- Industrial and commercial zones provide buffers from incompatible uses
- Street access issues

Access consolidation recommended in residential and commercial zones

Shared driveways recommended in residential and commercial zones 400-foot maximum block length

Traffic calming provided in land division regulations

• Pedestrian access

Required to connect with adjacent lots

The Core Enhancement goal is to enhance the pedestrian environment

• Landscaping required in land division regulations

Street trees

Landscape conservation

Landscape buffers

Parking

Shared parking permitted

Bicycle parking required

In Core Enhancement area, parking must be to the side or rear of buildings

• Nunan Square is recognized statewide as an example of Smart Development.

Recommendations: Achieving the benchmarks adopted for the MPO will require concerted effort on the part of all member jurisdictions. The Model Code and Development Guide for Small Cities suggests several measures that Jacksonville has not yet incorporated into its regulations:

- Establish maximum lot sizes. While most zoning ordinances include minimum parcel sizes, they do not have maximum parcel sizes. The model code recommends that single-family zones have a maximum size of 120 percent of the minimum size; e.g., 7,200 square feet in an SF-6 zone. In multi-family zones, the recommendation is 150 percent of the minimum.
- The alternative measures recommend increasing the amount of residential land having densities at a minimum of ten units per acre. Currently, only the MF zone provides for this density in Jacksonville. Medford, for example, has an SFR-10 district that permits 10 dwelling units per gross area, and Central Point's TOD district permits densities of at least 10 dwelling units per acre in its mixed residential zones. Nunan Square comes close, but doesn't entirely achieve the 10 dwelling units per acre goal.
- Increase lot coverage [and building height?] where transportation facilities and public safety measures can be achieved. Current coverage requirements for single-family and multi-family districts are in the middle of the ranges suggested by the Model Development Code. For example, the SF zone limits coverage to 35 percent, while the model code suggests a range from 30-40 percent. The MF zone limits coverage to 50 percent, while the model code suggests 40-60 percent. Jacksonville could increase its coverage, but it is clearly consistent with current standards.
- Consider requiring a portion of a commercial building to be at the property line, with entrances oriented to street to encourage pedestrian use. The North 5th Street planning area has at least two examples of this.
- Provide measures for evaluating proximity of transit to commercial uses in other than the North Fifth Street planning area.
- As in many communities, Jacksonville's street design standards call for wider streets than the Model Code recommends. To be consistent with the goal of providing narrower streets, evaluate the standards in the Model Code when updating the Transportation System Plan.
- Consider permitting density transfers to preserve valuable characteristics (woodland, open space) while maintaining higher density overall.

Proposed Zoning Ordinance Revisions:

Because of Jacksonville's traditional downtown development pattern, coupled with its Smart Development principles embodied in such areas as Nunan Square, there are few specific suggestions for changes. General proposals are in the previous discussion, including the need to evaluate street, sidewalk, and bike lane widths.

If the City decided to include maximum lot sizes to ensure that zones achieve their desired residential densities, new sections could be added as follows:

CHAPTER 17.20 SINGLE-FAMILY RESIDENTIAL (SF) DISTRICT 17.20.055 Maximum Lot area

Maximum lot areas in the SF zone shall be as follows:

	Maximum Lot Size
<u>Zone</u>	Square Feet
SF-6	7,200
SF-8	9,600
SF-10	12,000
SF-12	14,400

CHAPTER 17.24 MULTIPLE-FAMILY RESIDENTIAL (MF) DISTRICT 17.24.045 Maximum Lot Area

Maximum lot area shall be 7,500 feet for two family dwellings; for each additional dwelling unit, the lot area shall be increased by 3,600 feet.

Residential Zones			city: Jacksonville					e date: October 2004						
	FEATURE		ZONE		NE	ZO	NE	ZO	NE	ZO	NE	ZO	NE	
		I	3R*	Н	R *	S	F*	N.	IF*	Pl	U D *	B- l	PUD*	
		P*	CU*	P	CU	P	CU	P	CU	P	CU	P	CU	
1 2 2	Zero lot line									/ T Ta	aa a f	dauluiv		
	Accessory dwelling	A		X		X								
3	Attached townhome	X		X		X						X		
4	Two-, three-family homes	X		X		X						X		
5	Multi-family											X		
6	Care home (<15 adults)		X		X		X		X					
7	Family daycare		X		X		X		X					
8	Home occupations *1		X		X		X		\mathbf{X}					
9	Public/institutional		X		X		X	X						
10	Churches		X		X		X	X		X		X		
11	Clubs, lodges		X		X			X		X		X		
12	Govt. facilities		X		X		X	X		X		X		
13	Library, museum, com. cntr		X		X		X	X		X		X		
14	Parks, rec. facilities		X		X		X	X		X		X		
15	Schools		X		X		X	X		X		X		
16	Child Care (12+)							**2						
17	Food service (non-auto)							*2						
18	Laundry							*2						
19	Lt. Manufacturing													
20	Retail goods/services													
21	Medical office/lab							*2						
22	Personal Service (barber/etc.)							*2						
23	Professional office													
24	Repair services Mixed use									₩.		V		
25 26			v		v		v	v		X		X		
26	B&B Inn		X		X		X	X						
27	Maximum lot size		No	P	No	7	No	7	No	1	No		No	
28	Density <0.1 ac max		No		No		*3		Zes		Yes		Yes	
29	Encourage infill		Yes		Zes		Zes		l es		Yes		Yes	
30	a. Flag lots		Yes		es es		Zes		Zes	_	Co		1 63	
31	b. Mixed Use/density/design		I CS	•	CS		CS	1	CS	7	Yes	,	Yes	
32	Max. lot coverage (enter %)	3	5%	3/	5%	4	0%	50	0%	_	CS		I CS	
33	Building height (enter feet)		35 [']		370 35'		35°		35 [°]					
34	Proximity to transit	_ `				•			Zes					
35	1 Toximity to transit							,	Co					
36														
37														
38														
39														
40														
41														
41														

42

Commercial Zones	cii	ty: Jackson	ville	date: October 2004				
FEATURE	ZONE	OVERLA	Y ZONES		ZONE	ZONE		
	Gen. Com	Core	Historical	Special				
	*4	Enhance	Core	Protection	D CII	D CII		
1 Aggestowy dwyallings	P CU X	P CU	P CU X	P CU	P CU	P CU		
1 Accessory dwellings2 Mixed use residential	X		X					
3 Single-fam. attached townhse	X		X					
4 Two- & three-family housing	X		X					
5 Multi-family housing	X		X					
6 Care home/facility	X		X					
7 Day care (<12 children)	$\ddot{\mathbf{X}}$							
8 Home occupations	X							
9 B&B Inns, vacation rental	X							
10 Churches/temples	X			X				
11 Clubs, lodges	X	X		X				
12 Gov't offices	X	X		X				
13 Library, museum, com. cntr.	X	X						
14 Public parking	X	X						
15 Parks/recreation facilities	X	X						
16 Schools	\mathbf{X}		X	X				
17 Auto-oriented	X							
18 Entertainment	X							
19 Hotel/motel	X							
20 Medical office/lab	X		X					
21 Office	X		X					
22 Professional services	X		X					
23 Repair services (fully enclsd)	X							
24 Retail/service (non-auto)	X		X	X				
25 Lt. Ind. only with retail	X							
26 Setbacks				*6				
27 a. No min. setback (y/n)	Yes		Yes	No				
28 b. Max. distance (#ft.)	No		No	No				
29 Floor area ratio			110	140				
30 a. Min. ratio (y/n)	No		No	No				
31 b. Floor/lot ratio (%)	No		50%	40%				
32 Street entrance (y/n)	Yes	Yes	Yes	4070				
33 Ped./transit amenities	Yes	105	105					
34 a. Plaza/park		Yes						
35 b. Sitting area		Yes						
36 c. Canopy (Bike Parking)	Yes	Yes						
37 d. Art								
38 e. Bus shelter								
39 f. Connect w/adjacent lot	Yes		Yes					
40 Proximity to transit								
41								

Inc	dustrial/Employment Zones		city: Jacksonville					date: October 2004					
	FEATURE	ZONE		ZO	NE	ZC	NE	ZC	NE	ZC	NE	ZO	NE
		Cot P	tage CU	P	CU	P	CU	P	CU	P	CU	P	CU
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Light manufacturing Research Warehousing/distribution Mini-storage Commercial uses Auto-oriented Entertainment Hotel/motel Medical facility Outdoor sales Professional services Laundry Repair services Civic uses Gov't facilities Utilities Special dist. Facilities	X X X X X	X X										
18 19 20 21 22 23 24 25	Vocational schools Residential uses *6 Retail *6	X X											
	Commercial use by CII only	V	ng *6										
27 28]	es *6 No										
29 30 31		\ \ \	Yes Yes Yes										
32 33 34 35	Pedestrian-scale entry Ped./transit amenities a. Plaza/park b. Sitting area		No No										
36 37 38 39 40 41	c. Canopy (<i>Bicycle parking</i>) d. Art e. Bus shelter	•	Yes										

Design Standards			city: Jacksonville				date: October 2004				
FEATURE		ZONE Residential		ZONE Downtown		ZONE Commercial		ZONE Industrial		Land Division Regs.	
		Yes	No	Yes	No	Yes	No	Yes	No	Yes	
	eet-access permit										
	Conditions for approval	X								X	
	Access consolidation	X									
	Shared driveways	X									
5 d. N	Max. block length 600 ft.	X		X		X		\mathbf{X}		X	
	(400 ft.)										
	ffic calming		X		X		X		X	X	
	estrian access				***				T 7	Ţ	-
	Path grade separated		X		X		X		X	<u> </u>	Ĺ
	Marked crosswalks	T 7	X	T 7	X	T 7	X	T 7	X	X	
	Connect w/adjacent lot	X		X		X		X		X	
	dscaping									X 7	
	Street trees									X	
	Landscape conservation								X 7	X	
	Buffers		_	_	_	_	_	_	X	X	_
	king Set max. for off-street		X		X		X		X		X
		X	Λ	X	Λ	X	Λ	X	Λ		X
	Shared parking	X		X		X		X			X
	Bicycle prkng required Protected walkways	Λ	X	Λ	X	Λ	X	Λ	X		X
	Street-like features		X		X		X		X		X
20 6. 5	outer-like leatules		Λ		A		Λ		Λ		Λ

Y Local
_
Local
Locai
es No
X
X
K

Integrate Land Use and Transportation Plans

Audit of Existing Plans

Jacksonville, Audit Notes

*The following typography elements apply in all instances:

A. The double dash (--) indicates feature is not allowed, or discussed in the city's documents.

B. Items in **bold italic type** are from city documents. They include features not contained in the ILUTP checklist.

C. P=Permitted Use; CU=Conditional use

D. Zones:

BR Border Residential

HR Hillside Residential

SF Single-Family Residential

MF Multiple-Family Residential

PUD Planned Unit Development

B-PUD Border Planned Unit Development

Gen Com General Commercial (C-1)

Cottage Cottage Industrial (CI)

1. Where allowed, use is conditional if pick-up and delivery service is needed.

2. Ordinance limits use to tenants only. Allowing these uses as small businesses would reduce residents' need to drive.

3. May meet standard if developed as PUD, which permits density increase by up to 35 percent.

- 4. All uses in the General Commercial zone are controlled by performance standards to ensure compatible development and protect the prevailing pattern of differentiation and uniqueness.
- 5. Sets front, side and rear yard minimum setbacks.
- 6. Uses permitted outright, but subject to space limitations.

The city has several overlay districts addressing various needs and uses that were not addressed in the review. These districts address specific concerns, such as future growth areas and use of manufactured homes, and do not contain provisions pertinent to the requirements triggered by the Regional Transportation Plan's Alternative Measures.

Appendix B

Documentation of Traffic Counts & Seasonal Adjustments

Table A-1 Summary of All Turning Movements by Intersection - 2006

	OR238& Old238	OR238& Shafer	OR238&E	5th&Calif ornia	Calif&3rd	Calif& Oregon	Calif&6th	Calif&8th	SoStage &W ellsFargo		Oregon&F	OR238& PairDice	Total by Time	Forward One- Hour Total
3:00 - 3:15	193	165	139	198	155		134	144	131	115	77		1451	6088
3:15 - 3:30	223	152	156	189	136		103	109	110	112	55		1345	6526
3:30 - 3:45	288	180	158	189	168		128	132	246	141	107		1737	7034
3:45 - 4:00	261	145	150	186	179		140	154	150	113	77		1555	7141
4:00 - 4:15	232	164	163	231	179	212	111	144	136	102	77	138	1889	7575
4:15 - 4:30	243	157	154	198	179	227	102	108	113	137	80	155	1853	7689
4:30 - 4:45	216	191	170	179	175	200	114	126	127	121	90	135	1844	8014
4:45 - 5:00	251	175	148	244	177	230	116	142	138	136	96	136	1989	8244
5:00 - 5:15	262	175	158	199	160	216	149	165	185	119	94	121	2003	8181
5:15 - 5:30	280	196	200	192	197	253	157	166	156	115	99	167	2178	n/a
5:30 - 5:45	242	216	197	186	197	215	155	172	161	95	90	148	2074	n/a
5:45 - 6:00	253	195	158	205	180	224	107	117	138	96	90	163	1926	n/a.
PHF	0.92	0.88	0.88	0.84	0.93	0.90	0.92	0.94	0.86	0.85	0.96	0.86		

Table A-2																	
Raw Traffic Volumes		B. 4.T.E				NET	NDD								WET	wee	T
INTNAME	INTID	DATE	TIME		NBL			SBL	SBT					WBL_	WBT	WBR	Totals
OR 238 & Old OR 238	1	1/22/2007			513	0	88	_	_	_	0	202	227	56	357	0	
OR 238 & Shafer Lane	2	8/17/2006			26	264	16				6	1	27	6	0		796
OR 238 & E Street	3	8/17/2006			33	252	9				16	21	31	2	15		734
OR 238/5th Street & OR 238/California Street	4				0		3				174	142	0		147	59	926
OR 238/California Street & 3rd Street	5	8/17/2006			4		34	_		_	6	263	4	57	369		763
OR 238/California Street & Oregon Street	6	8/17/2006			4		46				47	171	3		268		955
California Street & 6th Street	7	8/17/2006			0	_	0		_	-	3	201	0		296		603
California Street & 8th Street	8				0	_	0		0	5	9	257	0	0	346	30	
South Stage Road & Wells Fargo Drive	9				14	0	7	0	0	0	0	262	9	19	357	0	668
Oregon Street & C Street	10	8/17/2006	4:45 PM	- 5:45 PM	18	96	17	11	226	10	11	16	37	16	13	16	486
Oregon Street & F Street	11	8/17/2006	4:45 PM	- 5:45 PM	0	122	7	13	176	0	0	0	0	33	0	33	385
OR 238 & Pair-a-Dice Ranch Road	12	8/17/2006	4:45 PM	- 5:45 PM	0	0	0	13	. 0	0	0	184	0	0	384	17	597
	.																
Adjusted & Dounded Volumes		ng Movemer	nt Count														
Adjusted & Rounded Volumes	60 Mir	nute Data			NDI	NDT	NDD	CDI	CDT	CDD	ED!	EDT	EDD	WBI	WDT	WDD	Tarala
INTNAME	60 Mir INTID	nute Data DATE	TIME	5:45 DM	NBL			SBL	SBT					WBL	WBT	WBR	Totals
INTNAME OR 238 & Old OR 238	60 Mir INTID 1	nute Data	TIME	- 5:45 PM	515	NBT 0	90	0			EBL 0	200	225	55	355	0	
INTNAME OR 238 & Old OR 238 Balanced Volume	60 Mir INTID 1	nute Data DATE 1/22/2007	TIME 4:45 PM		515 225	0	90	0	0	0	0	200 135	225 155	55 55	355 180	0	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane	60 Mir INTID 1	nute Data DATE 1/22/2007 8/17/2006	TIME 4:45 PM 4:45 PM	- 5:45 PM	515 225 25	265	90 90 15	30	0 375	15	o 5	200 135 0	225 155 25	55 55 5	355 180 0	25	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street	60 Min INTID 1 2 3	nute Data DATE 1/22/2007 8/17/2006 8/17/2006	TIME 4:45 PM 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM	515 225 25 35	0 265 250	90 90 15 10	30 10	0 375 305	0 15 25	5 15	200 135 0 20	225 155 25 30	55 55 5 0	355 180 0 15	25 10	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street OR 238/5th Street & OR 238/California Street	60 Min INTID 1 2 3 4	nute Data DATE 1/22/2007 8/17/2006	TIME 4:45 PM 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM	515 225 25	0 265 250 10	90 90 15 10	30 10 25	375 305 10	0 15 25 345	0 5 15 175	200 135 0 20 140	225 155 25 30 0	55 55 5 0 5	355 180 0 15 145	25 10 60	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street OR 238/5th Street & OR 238/California Street Balanced Volume	60 Min INTID 1 2 3 4	nute Data DATE 1/22/2007 8/17/2006 8/17/2006 9/19/2005	TIME 4:45 PM 4:45 PM 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM - 5:45 PM	515 225 25 35 0	265 250 10	90 90 15 10 5	30 10 25 45	375 305 10 20	0 15 25 345 270	0 5 15 175 170	200 135 0 20 140 145	225 155 25 30 0 5	55 55 5 0 5	355 180 0 15 145 190	25 10 60 90	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street OR 238/5th Street & OR 238/California Street Balanced Volume OR 238/California Street & 3rd Street	60 Min INTID 1 2 3 4	nute Data DATE 1/22/2007 8/17/2006 8/17/2006 9/19/2005	TIME 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM	515 225 25 35 0	265 250 10 10 0	90 90 15 10 5 5	30 10 25 45	0 375 305 10 20	0 15 25 345 270 10	5 15 175 170 5	200 135 0 20 140 145 265	225 155 25 30 0 5	55 55 5 0 5 10	355 180 0 15 145 190 370	25 10 60 90	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street OR 238/5th Street & OR 238/California Street Balanced Volume OR 238/California Street & 3rd Street OR 238/California Street & Oregon Street	60 Min INTID 1 2 3 4	nute Data DATE 1/22/2007 8/17/2006 8/17/2006 9/19/2005 8/17/2006 8/17/2006	TIME 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM	515 225 25 35 0	0 265 250 10 10 0 35	90 90 15 10 5 5 35 45	30 10 25 45 0	0 375 305 10 20 0 60	0 15 25 345 270 10 170	5 15 175 170 5 45	200 135 0 20 140 145 265 170	225 155 25 30 0 5 5	55 55 5 0 5 10 55 60	355 180 0 15 145 190 370 270	25 10 60 90 10 45	
INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street OR 238/5th Street & OR 238/California Street Balanced Volume OR 238/California Street & 3rd Street OR 238/California Street & Oregon Street California Street & Oregon Street California Street & 6th Street	60 Min INTID 1 2 3 4 5 6 7	nute Data DATE 1/22/2007 8/17/2006 8/17/2006 9/19/2005 8/17/2006 8/17/2006 8/17/2006	TIME 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM - 5:45 PM	515 225 25 35 0 5 5	0 265 250 10 10 0 35	90 90 15 10 5 5 35 45 0	30 10 25 45 0 50 45	0 375 305 10 20 0 60	0 15 25 345 270 10 170 5	5 15 175 170 5 45	200 135 0 20 140 145 265 170 200	225 155 25 30 0 5 5	55 55 5 0 5 10 55 60	355 180 0 15 145 190 370 270 295	0 25 10 60 90 10 45	
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INTNAME OR 238 & Old OR 238 Balanced Volume OR 238 & Shafer Lane OR 238 & E Street OR 238/5th Street & OR 238/California Street Balanced Volume OR 238/California Street & 3rd Street OR 238/California Street & Oregon Street California Street & the Street California Street & the Street California Street & 8th Street South Stage Road & Wells Fargo Drive Oregon Street & C Street	60 Mir INTID 1 2 3 4 5 6 7 8 9	nute Data DATE 1/22/2007 8/17/2006 8/17/2006 9/19/2005 8/17/2006 8/17/2006 8/17/2006 8/17/2006 8/17/2006 8/17/2006	TIME 4:45 PM 4:45 PM	- 5:45 PM - 5:45 PM	515 225 25 35 0 5 5 0 0 15 20	0 265 250 10 10 0 35 0 0	90 90 15 10 5 5 35 45 0 0	30 10 25 45 6 50 50 45 25 0 45 0 10 10 10 10 10 10 10 10 10 10 10 10 1	0 375 305 10 20 0 60 0 0	0 15 25 345 270 10 170 5 5 0	5 15 175 170 5 45 5 10 0	200 135 0 20 140 145 265 170 200 255 260 15	225 155 25 30 0 5 5 5 0 0	55 55 5 0 5 10 55 60 0 0	355 180 0 15 145 190 370 270 295 345 355	25 10 60 90 10 45 50 30 0	
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12 8/17/2006 4:45 PM - 5:45 PM

OR 238 & Pair-a-Dice Ranch Road

0 185

Table A-3 Seasonal Adjustment of Traffic Volumes

			Seasonal	2007	
			Adjustment	Adjustment	Total
INTNAME	INTID	DATE	Factor	Factor	Adjustment
OR 238 & Old OR 238	1	1/22/2007	1.3950	1.000	1.395
OR 238 & Shafer Lane	2	8/17/2006	1.0263	1.018	1.044
OR 238 & E Street	3	8/17/2006	1.0263	1.018	1.044
OR 238/5th Street & OR 238/California Street	4	9/19/2005	1.0897	1.035	1.128
OR 238/California Street & 3rd Street	5	8/17/2006	1.0263	1.018	1.044
OR 238/California Street & Oregon Street	6	8/17/2006	1.0263	1.018	1.044
California Street & 6th Street	7	8/17/2006	1.0263	1.018	1.044
California Street & 8th Street	8	8/17/2006	1.0263	1.018	1.044
South Stage Road & Wells Fargo Drive	9	8/17/2006	1.0263	1.018	1.044
Oregon Street & C Street	10	8/17/2006	1.0263	1.018	1.044
Oregon Street & F Street	11	8/17/2006	1.0263	1.018	1.044
OR 238 & Pair-a-Dice Ranch Road	12	8/17/2006	1.0263	1.018	1.044

Calculation of Seasonal Adjustments

Peak Period Season Factor Count Date Seasonal Factors	Summer 0.8378	Commuter 0.9000	Average 0.8689	Adjustment Factor	
January (15th)		1.0256	1.2121	1.3950	
February (1st)	1.5940	1.0240	1.2121	1.0000	
September(15th)	0.9318	0.9449	0.9468	1.0897	
October(1st)	0.9631	0.9474	0.5400	1.0097	
August(15th)	0.8525	0.9224	0.8918	1.0263	
September(1st)	0.8922	0.9000	0.0910	1.0263	

Calculation of Annual Adjustments

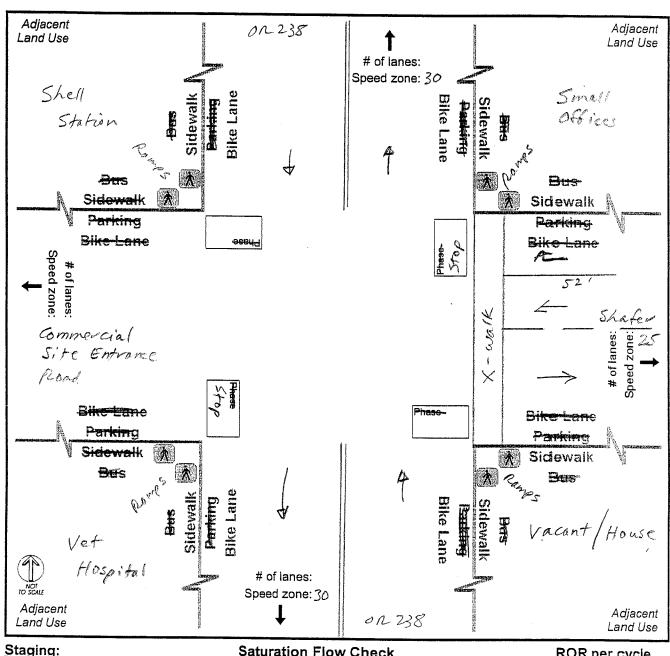
OR 238 (Hwy No. 272)	Mp	2004	2025	RSQ	Annual Gr	owth
0.01 mile East of Oregon St.	33.24	8400	11500	0.9354	0.018	1.8%

Appendix C

Intersection Geometrics and Traffic Control

LANE GEOMETRY

Date:				
Time:				
Intersection Name:	OR	238	٦	Sheler Lane



Staging:	Saturation Flow Check	ROR per cycle		
Queuing Problems:	Direction Vehicles Seconds Lanes			
	Cycle Length: Cycle Length: Cycle Length:	Perceived LOS A B C D E F		

Deter	, <u>I</u>	ANE GE	OMETRY	, -	
Date:					
Intersection Name:	01	2 238 (51	-Street)	26	treat
Adjacent Land Use		dr 238	† # of lanes:		Adjacent Land Use
Store sing	Sidewalk Parking	Sike Lane	Speed zone:	Sidewall Parking Bike Lan	
Parking					Sidewalk Parking
# of lanes: Speed zone:	The second secon	<u>इट्टम</u> न्		Phase SSD	Bike-Lane E Street
	Sensor Control of Cont	<u>.</u>		Gambia - Marifa an'i pao Galegoro (de la compansión de la compansión de la compansión de la compansión de la c	# of lanes:
E Street Bike Eane Parking Sidewalk	The second secon	ase	R	ha se	Bike-Lane Parking Sidewalk
\mathcal{A}^{r}	designation	# of lanes:		Sidewalk Parking Bike Lane	Bus House
NOT TO SCALE Adjacent Land Use		Speed zone:	ORZ	8	Adjacent Land Use
Staging:	······································	Saturation FI			ROR per cycle
		Direction	Vehicles Seco	onds Lanes	
Queuing Problems:					-

Cycle Length:

Cycle Length:

Cycle Length:

E

Perceived LOS

BCD

	LANE GEOM	METRY	
Date:			
Intersection Name:	ORZ38 corner -	- 5th Street 2 Cal	lifornia Street
Adjacent Land Use	01238	† # of lanes:	Adjacent Land Use
	idewalk	Speed zone: 20 Sidewalk Parking Ranking	Food 4 Thought Carte
Sidewalk Parking Bike Lane # of lanes: Speed zone:	Stop - At turn OIL w/o Stop	Story	Parking Bike Lane California 57.
California ST. Bike-Lane Parking		LON-CONDING TON-CONDING TON-C	Bike Lane Speed Zone:
McCully House Inn Adjacent Land Use	# of lanes: Speed zone: 25	Bildewalk Parking Parking Parking Street	Sidewalk
Staging:	Saturation Flow		ROR per cycle
	Direction Vehic		
Queuing Problems:	Cycle Length:		

Cycle Length: Cycle Length:

Perceived LOS

D = 4 = .	-/ ((1L OLO)	WILL I IX I	
Date:			
Time:	0100 5	1 ~ 1 41 -	•
Intersection Name:	California Str	eet 2 6th Str	eet
Adjacent Land Use	Coth Street	The second secon	Adjacent Land Use
House s		# of lanes: Speed zone: 25 Pa	Church
House Sidewalk &	Bilte-tane	Sidewalk Parking Bike ane	No Bus
Parking Bike Lane	Stople Stople		Sidewalk Parking Bike Lane
# of lanes.		Phase	California St.
California		•	# of lanes:
St. Bike Lane Parking Sidewalk	Phase	Phase	Bike Lane P arking Sidewalk
Bus 🛣	Tale Driven	Par Sin	
#ouse #	#offanes: Ho	Tang Tang	House '
Adjacent Land Use	Speed zone:	and an army life potential is in	Adjacent Land Use
Staging:	Saturation Flow		ROR per cycle
	Direction Veh	icles Seconds Lanes	<u> </u>
Queuing Problems:			
accounty i robietits.	Cycle Length		
	Cycle Length: Cycle Length:		Perceived LOS
	Cycle Length:		A B C D E F

Date:				
Time:	California	54	2 8th Str	4
Intersection Name:	Colliornia	JY PERY	e o stre	es effective
Adjacent Land Use	8th Str	# of la	nes:	Adjacent Land Use
House Per Side Side Side Side Side Side Side Side	Bike Lane	Speed z	one: 25 Sidewalk Parking Bike-Lane	House
Parking Bike Lane Speed	Stop _{gsaud}		Figure 1	Sidewalk Sidewalk Parking Bike Lane
Bike Lane	Phase		Phace	# of lanes:
Bus Driveway 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	n at the state of tanes # of tanes Speed zone		Bus Sidewalk Parking Bike-Lame	Rarking Sidewaik House Adjacent Land Use
Staging:	Saturation	Flow Check	1	ROR per cycle
Queuing Problems:	Direction Cycle Length	Vehicles	Seconds Lanes	
	Cycle Length Cycle Length			Perceived LOS A B C D E F

Date:	· · · · · · · · · · · · · · · · · · ·	_					
Time:	50 u)	K Stage P	load	,			
Intersection Name: _	(Cal	ifornia	Stree	t))	Wells F	argo Roa	-el
			,			U	
Adjacent Land Use				A >	4		Adjacent
			< # a	Hanes:	>		Land Use
	Annual Control of the			d zone:			
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	Buls Side Walk Parksing	v occur	nt Aj)	Side Falls Parting Parting		
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Bus	- ****					Buc_	
Sidewalk	**					Sidewalk	â.
Parking						Perking	a Fernandae
Bike Lane		351 44				Bike Lane	¥
Spe #					Brase Charles	(Califo	ornia
← ed z							
# of lanes:						So. Sta	ge Road
	Antion of the Control	WATER Approximate models of	del 1976 industrian (m. 1974)	bernouse.	600 GEORGE CONTRACTOR	enancas Manimengajas, a.	Animanachus
							nes:
						a manufacture construction of the construction	# of lanes leed zone
	Phase					<i>P</i>	# of lanes Speed zone
Bike Lane	8			Pha		Bike Lane	25 45
P arkin g				54	90	Parking	
∜ S idewalk	A						MANUAL ANDERS
Bus	 (%)	,		<i>th</i> .		Bus	W
	¥be	* State of the Sta			П		
	Buts Shirtewalk Pastking Silke Lane	V	()		Bus Sidewalk Parking Parking		
House			9				
	第二章		1			Vacar	19 1
NOT TO SCALE	em ur es	# of lanes:	3				
то scale Adjacent		Speed zone:	10 5%				A No y A de Comercia.
Land Use	company of the control of the contro	125	,	wells			Adjacent Land Use
Staging:		Saturation F				POP no	
		Direction	Vehicles	Secon	ds Lanes	ROR pe	Cycle
				O.O.O.II	Lanco		ر
						—	
							[
Queuing Problems:						F	
		Cycle Length:		<u> </u>			
		_				Perceive	4106
	1	Cycle Length: Cycle Length:					D E F
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Appendix C: p.6

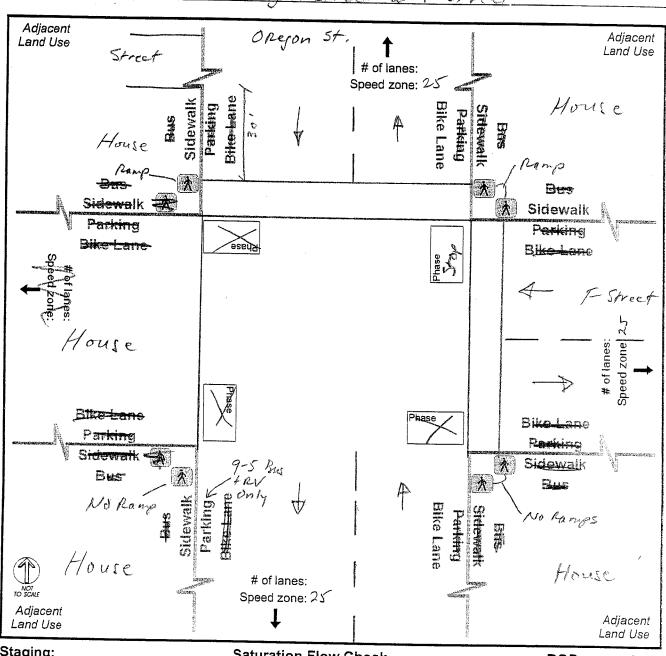
Date:	<u> </u>	
Time:		1 .
Intersection Name:	238 (California Street) 2 3rd Street
Adjacent Land Use	3rd Street # of lanes: Speed zone: 25	Adjacent Land Use
Burk Burk Burk Burk Burk Burk Burk Burk	- C	Sidewalk Shop
Sidewalk 🔥	70 P 39942	Sidewalk Parking Bike-top California Sgreet
Californió Street Bike-Lane Parking Sidewalk	Phase Stop	Bike Lane # of lanes: Speed zone Sidewalk
J'ville Jivevn Sidewalk Sidewalk Adjacent	# of lanes: Speed zone:	Sidewalk Drug Store
Land Use	₹ 3rd Street	Land Use
Staging: Queuing Problems:	Saturation Flow Check Direction Vehicles Seconds	ROR per cycle
	Cycle Length: Cycle Length:	Perceived LOS

Cycle Length:

Date:	_		**************************************		
Time:		_		•	
Intersection Name:	OR 2	38 (Califo	rnia St	reet) à C	Pregon Street
Adjacent Land Use		Oregon ST.	† # of lane	A received the second	Adjacent Land Use
Office By	Sidewalk Parking		Speed zon	ne: ²⁵	Shop (rawl ⁵ Dus
Sidewalk Parking Bike Lane # of lanes Speed zone	SFE		okravitation physical popular properties and photos and	FIRST CONTROL OF THE	Parking Bike-Lane California
Bi ke Lan e Parking Sidewalk	8 gr			Phase For	# of lanes: Speed zone:
Shop Shop Shop Adjacent	Sidewalk Wall Parking	# of lanes: Speed zone:	1	Sidewalk Parking Bike Lane	Shop,
Land Use	Professat 798.	1 25		100 200 100 100 100 100 100 100 100 100	Adjacent Land Use
Staging:		Saturation Flor	w Check		ROR per cycle
Queuing Problems:			shicles Se	econds Lanes	
		Cycle Length: Cycle Length:			Perceived LOS

Time: .

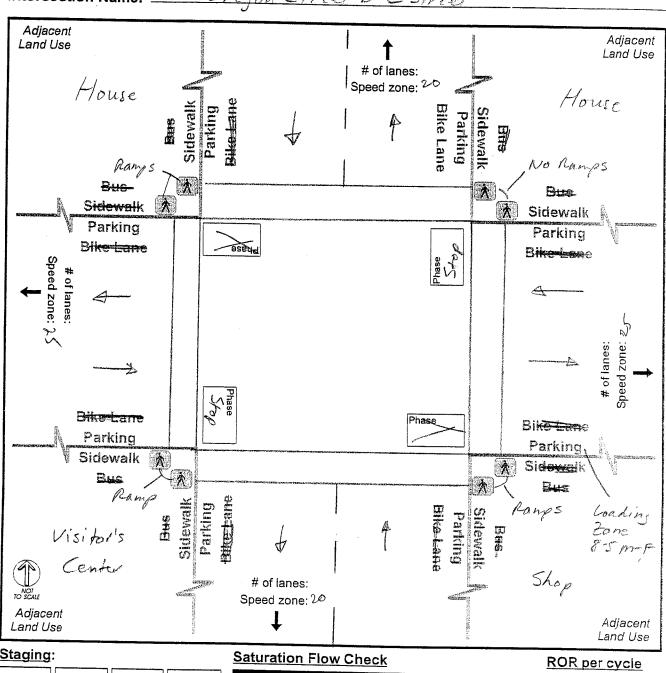
Intersection Name: Oregon Street a) F Street



Staging:	Saturation Flow Check	ROR per cycle			
Queuing Problems:	Direction Vehicles Seconds Lanes				
<u>waeuing Problems</u> :	Cycle Length: Cycle Length: Cycle Length:	Perceived LOS A B C D E F			

Date: ______/3*o*/*o* 7

Intersection Name: Oregon Street D C Street



Staging:	Saturation Flow Check	ROR per cycle				
Queuing Problems:	Direction Vehicles Seconds Lanes					
	Cycle Length:					
	Cycle Length:	Perceived LOS				
	Cycle Length:	ABCDEF				

	<u>L</u>	ANE GEO	METRY			
Date:						
Time:	·		, ,	0		
Intersection Name:	016	138 0 Fa.	in -a - 01	ce Road		
Adjacent Land Use	Pa 1	r-A-Dice Road	# of lanes:		rgrade	Adjacent Land Use
House	Bue Sidevalk Backing Backing		Speed zone:	Sidewalk Sidewalk Panking Bike-Lane	Vaca	int
Bus Sidewalk Parking Bike Lane # of lanes: Speed zone:	Sro	Stup bar		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Sidewalk Parking Bike Lanc	Section and the section and th
Bille Lane Parking	T R		Pb	asē	Bike Lanc	# of lanes:
Sidewalk Bus NOT TO SCALE Adjacent	Bees Stitemalk & Stitemanne	# of lanes: Speed Zone:		Sidewalk Narking Blice-Lame	Parking Stdewalk	Adjacent
Land Use		*		1		Land Use
Staging:		Saturation Flor			ROR po	er cycle
Queuing Problems:			ehicles Seco	nds Lanes	٠ - -	*
		Cycle Length:			Perceive	dine
		Cycle Length:			TESTESTA	

Cycle Length:

Date:	THE ORIGINAL I	
Time:		
Intersection Name:	OR 238 2 010 010	238 (w. Main Street) - Bybec Corne,
·		Corner
Adjacent Land Use	1 # of la	Adjacent Land Use
	Speed z	/
BHS X	Parking Ag. Land birth Land	Bus Sidewalk Parkuug Bika-Lane
	EG BIR	ane Eg
Bess 57		B us Si dewalk A
P arking Bike Lane	esself	Parking.
Shoulders)	492.00	Bike Lane (Shoulder)
# of lanes:		or238
on 238	2	Jane S
	□ P	# of lanes.
Bike Lane	Phase	Phase Stop Bike Lane (Shoulder) Parking
Sidewalk M		Sidewalk -
Housel Housel Favor TO SCALL Adjacent Land Use	ing Lane	Blike B
Housel & B	Bike	
NOT TO SCALE	# of lanes: Speed zone:	Adjacent Land Use
Adjacent R Land Use	145 Winnist	Adjacent Land Use
Staging:	Saturation Flow Check	ROR per cycle
	Direction Vehicles	Seconds Lanes
		<u> </u>
Queuing Problems:		
	Cycle Length:	
	Cycle Length:	Perceived LOS

Appendix D

Intersection Photographs



OR 238 (5th Street) @ Shafer Lane: Looking west through intersection from northeast corner. Jville01.jpg



OR 238 (5th Street) @ Shafer Lane: Looking northwest through intersection from southeast corner.

Jville02.jpg



OR 238 (5th Street) @ Shafer Lane: Looking west through intersection from southeast corner. Jville03.jpg



OR 238 (5th Street) @ E Street: Looking east through intersection along north side of E Street.



OR 238 (5th Street) @ E Street: Looking southeast through intersection from northwest corner. Jville05.jpg



OR 238 (5th Street) @ E Street: Looking south through intersection along west side of 5th Street. Jville06.jpg



OR 238 (5th Street) @ E Street: Looking northwest through intersection from southeast corner. Jville07.jpg



OR 238 (5th Street) @ E Street: Looking north through intersection along east side of 5th Street. Jville08.jpg



OR 238 (5th Street) @ E Street: Looking west through intersection along south side of E Street. Jville09.jpg



OR 238 (5th Street) @ California Street: Looking west through intersection along north side of California Street.

Jville10.jpg



OR 238 (5th Street) @ California Street: Looking north through intersection from south leg (5th Street). Jville11.jpg



OR 238 (5th Street) @ California Street: Looking northwest through intersection from south leg (5th Street). Jville12.jpg



OR 238 (5th Street) @ California Street: Looking west through intersection from southeast corner.

Jville13.jpg



OR 238 (5th Street) @ California Street: Looking northwest through intersection from southeast corner.

Jville14.jpg



OR 238 (5th Street) @ California Street: Looking north across intersection from southwest corner.

Jville15.jpg



OR 238 (5th Street) @ California Street: Looking east through intersection along south side of California Street. Jville16.jpg



OR 238 (5th Street) @ California Street: Looking northeast through intersection from southwest corner.

Jville17.jpg



OR 238 (5th Street) @ California Street: Looking south across intersection from northwest corner.



OR 238 (5th Street) @ California Street: Looking south across intersection from northwest corner. Jville19.jpg



California Street @ 6th Street: Looking south into intersection from north leg (6th Street). Jville20.jpg



California Street @ 6th Street:

Looking west through intersection along north side of California Street.



California Street @ 8th Street:

Looking west through intersection along north side of California Street.



California Street @ 8th Street:

Looking northeast through intersection from south side of California Street.

Jville23.jpg



California Street @ 8th Street:

Looking south into intersection from north leg (8th Street).

Jville24.jpg



South Stage Road (California Street) @ Wells Fargo Road:

Looking north into intersection from south leg (Wells Fargo Drive).

Jville25.jpg



South Stage Road (California Street) @ Wells Fargo Road:

Looking west at California Street approaching intersection from southeast corner.



OR 238 (California Street) @ 3rd Street: Looking south through intersection along west side of 3rd Street.



OR 238 (California Street) @ 3rd Street: Looking southeast through intersection from northwest corner.

Jville37.jpg

Jville36.jpg



OR 238 (California Street) @ 3rd Street: Looking southwest through intersection from northeast corner.



OR 238 (California Street) @ 3rd Street: Looking south through intersection along east side of 3rd Street.



OR 238 (California Street) @ 3rd Street: Looking southwest through intersection from northeast corner. Jville40.jpg



OR 238 (California Street) @ 3rd Street: Looking northwest through intersection from south side of California Street. Jville41.jpg



OR 238 (California Street) @ 3rd Street: Looking west through intersection along south side of California Street.

Jville42.jpg



OR 238 (California Street) @ 3rd Street: Looking north through intersection along west side of 3rd Street.

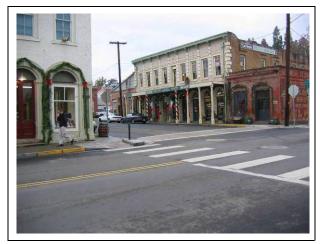
Jville43.jpg



OR 238 (California Street) @ Oregon Street: Looking west through intersection along north side of California Street. Jville27.jpg

OR 238 (California Street) @ Oregon Street: Looking southwest through intersection from northeast corner.

Jville28.jpg



OR 238 (California Street) @ Oregon Street: Looking south through intersection from northeast corner.



OR 238 (California Street) @ Oregon Street: Looking west through intersection from southeast corner.

Jville30.jpg



OR 238 (California Street) @ Oregon Street: Looking northeast through intersection from southwest corner.

Jville31.jpg



OR 238 (California Street) @ Oregon Street: Looking east through intersection along south side of California Street. Jville32.jpg



OR 238 (California Street) @ Oregon Street: Looking east through intersection along north side of California Street.



OR 238 (California Street) @ Oregon Street: Looking south through intersection from northwest corner. Jville34.jpg



OR 238 (California Street) @ Oregon Street: Looking southwest through intersection from north leg (Oregon Street). Jville35.jpg



Oregon Street @ F Street: Looking north through intersection along west side of Oregon Street. Jville44.jpg



Oregon Street @ F Street: Looking east through intersection at F Street. Jville45.jpg



Oregon Street @ F Street: Looking southeast through intersection at south leg and F Street. Jville46.jpg



Oregon Street @ F Street: Looking south through intersection along west side of Oregon Street. Jville47.jpg



Oregon Street @ C Street: Looking south through intersection along west side of Oregon Street. Jville48.jpg



Oregon Street @ C Street:

Looking southeast through intersection at C Street.

Jville49.jpg



Oregon Street @ C Street:

Looking east along C Street through intersection at Oregon Street.



Oregon Street @ C Street:

Looking north through intersection along east side of Oregon Street.

Jville51.jpg



Oregon Street @ C Street:

Looking west by northwest on C Street through intersection with Oregon Street.

Jville52.jpg



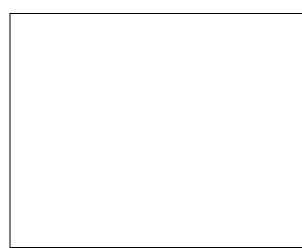
Oregon Street @ C Street: Looking west by southwest on C Street through intersection at Oregon Street. Jville53.jpg



OR 238 @ Pair-a-Dice Road: Looking south into intersection from north leg (Pair-a-Dice Road). Jville54.jpg



OR 238 @ Pair-a-Dice Road: Looking west through intersection from north side of OR 238. Jville55.jpg



Appendix E

2007 Intersection Analysis Worksheets

1: OR238 & OLD OR 238

	→	\rightarrow	•	←	4	~	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	†	7	ሻ		ሻ	7	
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	135	155	55	180	225	90	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	147	168	60	196	245	98	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			315		462	147	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			315		462	147	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)							
tF (s)			2.2		3.5	3.3	
p0 queue free %			95		54	89	
cM capacity (veh/h)			1245		531	900	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	
Volume Total	147	168	60	196	245	98	
Volume Left	0	0	60	0	245	0	
Volume Right	0	168	0	0	0	98	
cSH	1700	1700	1245	1700	531	900	
Volume to Capacity	0.09	0.10	0.05	0.12	0.46	0.11	
Queue Length (ft)	0	0	4	0	60	9	
Control Delay (s)	0.0	0.0	8.0	0.0	17.4	9.5	
Lane LOS			Α		С	Α	
Approach-Delay (s)	0.0		49		15.2		
ARBIOASh Pelay (Min) Approach LOS			- 13		С		
Intersection Summary							
Average Delay			6.2				
Intersection Capacity Ut	ilization		32.9%	10		el of Servic	<u>م</u>
intersection Capacity Of	Zalioi i		02.970		SO FEAG	or Octal	

2: Shafer Lane & OR 238

	•	4	†	~	/	†	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	ሻ	7	(Î			4	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	5	25	265	15	30	375	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	
Hourly flow rate (vph)	6	28	301	17	34	426	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type	None						
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	804	310			318		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	804	310			318		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free %	98	96			97		
cM capacity (veh/h)	343	730			1242		
Direction, Lane #	WB 1	WB 2	NB 1	SB 1			
Volume Total	6	28	318	460			
Volume Left	6	0	0	34			
Volume Right	0	28	17	0			
cSH	343	730	1700	1242			
Volume to Capacity	0.02	0.04	0.19	0.03			
Queue Length (ft)	1	3	0	2			
Control Delay (s)	15.7	10.1	0.0	0.9			
Lane LOS	С	В		Α			
Approach Delay (s)	11.1		0.0	0.9			
Approach LOS	В						
Intersection Summary							
Average Delay			1.0				
Intersection Capacity U	tilization		49.6%	IC	CU Leve	l of Service	е
Analysis Period (min)			15				

Synchro 6 Report 4/25/2007 Appendix E: p.2 Parametrix, Inc.

2007 30 HV Balanced

3: 'E' St & OR 238

	•	→	•	•	+	•	•	†	<i>></i>	/	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	15	20	30	0	15	10	35	250	10	10	305	25
Peak Hour Factor	0.88	0.92	0.88	0.92	0.92	0.92	0.88	0.88	0.92	0.92	0.88	0.88
Hourly flow rate (vph)	17	22	34	0	16	11	40	284	11	11	347	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	771	757	361	797	766	290	375			295		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	771	757	361	797	766	290	375			295		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	94	93	95	100	95	99	97			99		
cM capacity (veh/h)	291	323	684	266	319	750	1183			1266		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	73	27	335	386								
Volume Left	17	0	40	11								
	34	11	11	28								
Volume Right cSH	415	414	1183	1266								
	0.18	0.07	0.03	0.01								
Volume to Capacity												
Queue Length (ft)	16	5	1.3	1								
Control Delay (s)	15.5	14.3		0.3								
Lane LOS	C	14.2	A	A								
Approach LOS	15.5	14.3	1.3	0.3								
Approach LOS	С	В										
Intersection Summary												
Average Delay			2.5									
Intersection Capacity Ut	ilization		47.4%	I	CU Leve	el of Ser	vice		Α			
Analysis Period (min)			15									

4: OR 238 & California St

	۶	→	•	•	•	•	4	†	/	>	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			<u></u>	7		4	
Sign Control		Yield			Stop			Stop			Stop	
Volume (vph)	170	145	5	10	190	90	0	10	5	45	20	270
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.92	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	202	173	6	12	226	98	0	12	6	54	24	321
Direction, Lane #	EB 1	WB1	NB 1	NB 2	SB 1							
Volume Total (vph)	381	336	12	6	399							
Volume Left (vph)	202	12	0	0	54							
Volume Right (vph)	6	98	0	6	321							
Hadj (s)	0.1	-0.1	0.0	-0.7	-0.4							
Departure Headway (s)	5.7	5.3	7.0	6.3	5.4							
Degree Utilization, x	0.60	0.49	0.02	0.01	0.60							
Capacity (veh/h)	609	564	432	477	639							
Control Delay (s)	10.7	9.6	8.9	8.1	10.4							
Approach Delay (s)	10.7	9.6	8.6		10.4							
Approach LOS	В	Α	Α		В							
Intersection Summary												
Delay			10.2									
HCM Level of Service			В									
Intersection Capacity Uti	lization		70.2%	[0	CU Leve	el of Ser	vice		С			
Analysis Period (min)			15									

2007 5: OR 238 & 3rd St 30 HV Balanced

5: OR 238 & 3rd St										30	ли Ба	anceu
	۶	→	•	•	←	•	4	†	/	/	ļ	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	265	5	55	370	10	5	0	35	0	0	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	5	285	5	59	398	11	5	0	38	0	0	11
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	409			290			831	825	288	858	823	403
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	409			290			831	825	288	858	823	403
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			98	100	95	100	100	98
cM capacity (veh/h)	1150			1271			273	292	751	253	293	647
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	296	468	43	11								
Volume Left	5	59	5	0								
Volume Right	5	11	38	11								
cSH	1150	1271	617	647								
Volume to Capacity	0.00	0.05	0.07	0.02								
Queue Length (ft)	0	4	6	1								
Control Delay (s)	0.2	1.4	11.3	10.7								
Lane LOS	Α	Α	В	В								
Approach Delay (s)	0.2	1.4	11.3	10.7								
Approach LOS			В	В								
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Ut	ilization		54.6%	[(CU Leve	el of Ser	vice		Α			
Analysis Period (min)			15									

6: OR 238 & Oregon St

	•	→	•	•	+	•	•	†	~	/	↓	-√
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	45	170	5	60	270	45	5	35	45	50	60	170
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	189	6	67	300	50	6	39	50	56	67	189
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	244	417	94	311								
Volume Left (vph)	50	67	6	56								
Volume Right (vph)	6	50	50	189								
Hadj (s)	0.1	0.0	-0.3	-0.3								
Departure Headway (s)	5.8	5.8	6.0	5.6								
Degree Utilization, x	0.39	0.67	0.16	0.48								
Capacity (veh/h)	581	562	515	619								
Control Delay (s)	9.7	11.4	9.3	9.8								
Approach Delay (s)	9.7	11.4	9.3	9.8								
Approach LOS	Α	В	Α	Α								
Intersection Summary												
Delay			10.4									
HCM Level of Service			В									
Intersection Capacity Uti	lization		55.0%	[0	CU Leve	el of Ser	vice		Α			
Analysis Period (min)			15									

7: California St & 6th St

	ၨ	→	←	•	>	✓	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		4	f)		W		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	5	200	295	50	45	5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	5	217	321	54	49	5	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	375				576	348	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	375				576	348	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)							
tF (s)	2.2				3.5	3.3	
p0 queue free %	100				90	99	
cM capacity (veh/h)	1183				477	695	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	223	375	54				
Volume Left	5	0	49				
Volume Right	0	54	5				
cSH	1183	1700	492				
Volume to Capacity	0.00	0.22	0.11				
Queue Length (ft)	0	0	9				
Control Delay (s)	0.2	0.0	13.2				
Lane LOS	Α		В				
Approach Delay (s)	0.2	0.0	13.2				
Approach LOS			В				
Intersection Summary							
Average Delay			1.2				
Intersection Capacity Ut	tilization		28.6%	I	CU Leve	l of Service	
Analysis Period (min)			15				

8: California St & 8th St

	٠	→	←	•	\	1	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		4	f a		W		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	10	255	345	30	25	5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	
Hourly flow rate (vph)	11	271	367	32	27	5	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	399				676	383	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	399				676	383	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)							
tF (s)	2.2				3.5	3.3	
p0 queue free %	99				94	99	
cM capacity (veh/h)	1160				415	664	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	282	399	32				
Volume Left	11	0	27				
Volume Right	0	32	5				
cSH	1160	1700	443				
Volume to Capacity	0.01	0.23	0.07				
Queue Length (ft)	1	0.20	6				
Control Delay (s)	0.4	0.0	13.8				
Lane LOS	Α	0.0	В				
Approach Delay (s)	0.4	0.0	13.8				
Approach LOS	0.4	0.0	В				
			ט				
Intersection Summary			-				
Average Delay			0.8		2111		
Intersection Capacity Ut	ilization		31.5%	10	JU Leve	el of Service	9
Analysis Period (min)			15				

9: S. Stage Rd & Wells Fargo Rd.

	-	•	•	←	•	/
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	4			4	W	
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	260	10	20	355	15	5
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	302	12	23	413	17	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			314		767	308
vC1, stage 1 conf vol			• • •			
vC2, stage 2 conf vol						
vCu, unblocked vol			314		767	308
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					0	0.2
tF (s)			2.2		3.5	3.3
p0 queue free %			98		95	99
cM capacity (veh/h)			1246		363	732
					000	102
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	314	436	23			
Volume Left	0	23	17			
Volume Right	12	0	6			
cSH	1700	1246	416			
Volume to Capacity	0.18	0.02	0.06			
Queue Length (ft)	0	1	4			
Control Delay (s)	0.0	0.6	14.2			
Lane LOS		Α	В			
Approach Delay (s)	0.0	0.6	14.2			
Approach LOS			В			
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Ut	ilization		45.0%	10	CULeve	el of Service
Analysis Period (min)			15			. OI OOI VIO
, maryono i oriod (iliili)			10			

10: 'C' St & Oregon St

	♪	→	•	•	+	•	1	†	~	\	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	10	15	35	15	15	15	20	95	15	10	225	10
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	12	18	41	18	18	18	24	112	18	12	265	12
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	488	471	271	512	468	121	276			129		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	488	471	271	512	468	121	276			129		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	95	96	96	98	98			99		
cM capacity (veh/h)	458	478	768	426	480	931	1286			1456		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	71	53	153	288								
Volume Left	12	18	24	12								
Volume Right	41	18	18	12								
cSH	607	545	1286	1456								
Volume to Capacity	0.12	0.10	0.02	0.01								
Queue Length (ft)	10	8	1	1								
Control Delay (s)	11.7	12.3	1.3	0.4								
Lane LOS	В	12.5 B	Α	Α								
Approach Delay (s)	11.7	12.3	1.3	0.4								
Approach LOS	В	В	1.0	0.4								
Intersection Summary												
Average Delay			3.2									
Intersection Capacity Ut	ilization		25.6%	Į.	CU Lev	el of Ser	vice		Α			
Analysis Period (min)			15		,							
,												

11: 'F' St & Oregon St

	•	•	†	/	>	ļ
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥		f)			4
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	35	35	120	5	15	175
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	36	36	125	5	16	182
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	341	128			130	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	341	128			130	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	94	96			99	
cM capacity (veh/h)	648	922			1455	
Direction, Lane #	WB1	NB 1	SB 1			
Volume Total	73	130	198			
Volume Left	36	0	16			
Volume Right	36	5	0			
cSH	761	1700	1455			
Volume to Capacity	0.10	0.08	0.01			
Queue Length (ft)	8	0	1			
Control Delay (s)	10.2	0.0	0.7			
Lane LOS	В		Α			
Approach Delay (s)	10.2	0.0	0.7			
Approach LOS	В					
Intersection Summary						
Average Delay			2.2			
Intersection Capacity U	tilization		30.7%	IC	CU Leve	of Service
Analysis Period (min)			15			

12: OR 238 & Pair-A-Dice Rd

	۶	→	←	•	\	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		ર્ન	^		W		
Sign Control		Free	Free		Stop		
Grade		0%	0%		0%		
Volume (veh/h)	0	185	385	15	15	0	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	
Hourly flow rate (vph)	0	215	448	17	17	0	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	465				672	456	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	465				672	456	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)							
tF (s)	2.2				3.5	3.3	
p0 queue free %	100				96	100	
cM capacity (veh/h)	1096				421	604	
	ED 4	WD 4	OD 4				
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	215	465	17				
Volume Left	0	0	17				
Volume Right	0	17	0				
cSH	1096	1700	421				
Volume to Capacity	0.00	0.27	0.04				
Queue Length (ft)	0	0	3				
Control Delay (s)	0.0	0.0	13.9				
Lane LOS			В				
Approach Delay (s)	0.0	0.0	13.9				
Approach LOS			В				
Intersection Summary							
Average Delay			0.3				
Intersection Capacity Ut	ilization		31.2%	10	CU Leve	of Service	
Analysis Period (min)			15				

Parametrix, Inc.

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Appendix F Future Volume Data

Appendix F: Future Volume Data

2030 Added Volumes												
INTNAME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
OR 238 & Old OR 238	61	0	24				0	49	56	15	50	0
OR 238 & Shafer Lane	8	83	5	9	116	5	0	0	0	2	0	8
OR 238 & E Street	6	42	2	3	99	8	6	8	12	0	0	0
OR 238/5th Street & OR 238/California Street	0	0	0	11	5	64	37	32	1	2	29	14
OR 238/California Street & 3rd Street	2	0	13	0	0	0	1	48	1	14	94	3
OR 238/California Street & Oregon Street	2	14	19	5	6	18	11	43	1	16	72	12
California Street & 6th Street				0	0	0	1	39	0	0	38	7
California Street & 8th Street				13	0	3	1	34	0	0	51	4
South Stage Road & Wells Fargo Drive	0	0	0				0	48	2	3	62	0
Oregon Street & C Street	0	0	0	1	28	1	0	0	0	0	0	0
Oregon Street & F Street	0	38	2	3	32	0				8	0	8
OR 238 & Pair-a-Dice Ranch Road				5	0	0	0	45	0	0	72	3

2030 No Build Balanced Volumes												
INTNAME	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
OR 238 & Old OR 238	300		120					165	200	70	235	
OR 238 & Shafer Lane	30	315	20	40	475	20	5		25	10		45
OR 238 & E Street	45	300	10	15	400	35	20	25	40		15	10
OR 238/5th Street & OR 238/California Stre	et	10	5	65	25	345	210	185	5	10	235	110
OR 238/California Street & 3rd Street	10		60			10	5	320	5	75	460	25
OR 238/California Street & Oregon Street	5	45	60	60	55	200	55	210	5	75	340	55
California Street & 6th Street				45		10	10	255			355	60
California Street & 8th Street				35		5	15	305			415	35
South Stage Road & Wells Fargo Drive	15		5					315	15	30	425	
Oregon Street & C Street	25	125	10	15	260	15	10	15	35	15	15	15
Oregon Street & F Street		160	5	20	230					45		45
OR 238 & Pair-a-Dice Ranch Road				30				220			470	40

Appendix G 2030 Intersection Analysis Worksheets (No Build)

	*	-	*	1	•	*	1	1	-	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Stop 0%		7	Stop 0%	ř		Free 0%			Free 0%	
Volume (veh/h)	5	0	25	10	0	45	30	315	20	40	475	20
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	6	0.55	29	12	0	53	33	350	22	44	528	22
Right turn flare (veh)												
Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked		None			None							
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	1108	1067	539	1085	1067	361	550			372		
vCu, unblocked vol	1108	1067	539	1085	1067	361	550			372		
tC, single (s) tC, 2 stage (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tF(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	95	93	100	92	97			96		
cM capacity (veh/h)	164	207	543	174	207	683	1020			1186		
Direction, Lane #	EB 1	WB1	WB 2	NB 1	SB 1		. 1533					
Volume Total	35	12	53	406	594							
Volume Left	6	12	0	33	44							
Volume Right	29	0	53	22	22							
cSH	391	174	683	1020	1186							
Volume to Capacity	0.09	0.07	0.08	0.03	0.04							
Queue Length (ft)	7	5	6	3	3							
Control Delay (s)	15.1	27.2	10.7	1.0	1.0							
Lane LOS	C	D	В	Α	Α							
Approach Delay (s) Approach LOS	15.1 C	13.7 B		1.0	1.0							
Intersection Summary	3					17	1 3		BANCE.			
Average Delay Intersection Capacity Ut Analysis Period (min)	ilization		2.2 49.4% 15	IC	CU Leve	l of Sen	vice		Α			

	*	→	7	1	←	*	1	1	-	1	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Sign Control		Stop			Stop			Free			Free	
Grade		0%	1		0%			0%			0%	
Volume (veh/h)	20	25	40	0	15	10	45	300	10	15	400	35
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	24	29	47	0	18	12	50	333	11	17	444	39
Pedestrians												
Láne Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)		Mana			Mana							
Median type Median storage veh)		None			None							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	957	942	464	998	956	339	483			344		
vC1, stage 1 conf vol	557	342	404	330	330	339	403			344		
vC2, stage 2 conf vol												
vCu, unblocked vol	957	942	464	998	956	339	483			344		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)			0		0.0	0.2	7.1			7.1		
tF(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	88	92	100	93	98	95			99		
cM capacity (veh/h)	211	247	598	178	243	703	1079			1215		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	10-21	New H					-	
Volume Total	100	29	394	500				HATTE I			100	100
Volume Left	24	0	50	17								
Volume Right	47	12	11	39								
cSH	323	329	1079	1215								
Volume to Capacity	0.31	0.09	0.05	0.01								
Queue Length (ft)	32	7	4	1								
Control Delay (s)	21.0	17.0	1.5	0.4								
Lane LOS	С	С	Α	Α								
Approach Delay (s)	21.0	17.0	1.5	0.4								
Approach LOS	С	С										
Intersection Summary	61		in Allie				125					SEE S
Average Delay			3.3									
Intersection Capacity Ut	ilization		54.8%	IC	U Leve	of Sen	/ice		Α			
Analysis Period (min)			15									

Jacksonville TSP OR 238 @ 5th Street

	۶	-	*	•	-	•	1	†	-	-	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control		4 Yield			⇔ Stop			↑ Stop	7		Stop	
Volume (vph)	210	185	5	10	235	110	0	10	5	65	25	345
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	233	206	6	11	261	122	0	11	6	72	28	383
Direction, Lane #	EB1	WB1	NB 1	NB 2	SB 1		1358	A THE		1000	1 15 17	19230
Volume Total (vph)	444	394	11	. 6	483							
Volume Left (vph)	233	11	0	0	72							
Volume Right (vph)	6	122	0	6	383							
Hadj (s)	0.1	-0.1	0.0	-0.7	-0.4							
Departure Headway (s)	6.2	5.7	7.8	7.1	5.8							
Degree Utilization, x	0.76	0.63	0.02	0.01	0.79							
Capacity (veh/h)	561	548	384	421	600							
Control Delay (s)	13.5	11.0	9.7	8.9	13.4							
Approach Delay (s)	13.5	11.0	9.4		13.4							
Approach LOS	В	В	Α		В							
Intersection Summary	LTD LTD	A					100	NESHI	8 -17	DESIGNA	植竹带	10
Delay HCM Level of Service Intersection Capacity Uti Analysis Period (min)	lization	į	12.7 B 84.1% 15	IC	CU Leve	el of Serv	rice		Ε			

California Street @ 6th Street

	*	-	-	*	1	1	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	1
Lane Configurations Sign Control Grade		Free 0%	Free 0%		Stop 0%		
Volume (veh/h)	10		355	60	45	10	
Peak Hour Factor Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	0.90 11	0.90 283	0.90 394	0.90 67	0.85 53	0.85 12	
Right turn flare (veh) Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked					None		
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	461				733	428	
vCu, unblocked vol	461				733	428	
tC, single (s) tC, 2 stage (s)	4.1				6.4	6.2	
tF (s)	2.2				3.5	3.3	
p0 queue free % cM capacity (veh/h)	99 1100				86 384	98 627	
Direction, Lane #	EB 1	WB1	SB 1		I I I		The state of the s
Volume Total	294	461	65				
Volume Left	11	0	53				
Volume Right	0	67	12				
cSH	1100	1700	413				
Volume to Capacity	0.01	0.27	0.16				
Queue Length (ft)	1	0	14				
Control Delay (s)	0.4	0.0	15.3				
Lane LOS Approach Delay (s)	A 0.4	0.0	C 15.3				
Approach LOS	0.1	0.0	C				
Intersection Summary	1.91.3		Helia.	- 245	100	100	Secretary of the second
Average Delay Intersection Capacity Ut Analysis Period (min)	ilization		1.4 32.3% 15	10	CU Leve	l of Servi	ice A

California Street @ 8th Street

	*	-	-	•	-	1	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations Sign Control Grade		Free 0%	Free 0%		Stop 0%		
Volume (veh/h)	15		415	35	35	5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.85	0.85	
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s)	17		461	39	41	6	
Percent Blockage Right turn flare (veh) Median type Median storage veh) Upstream signal (ft)					None		
pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	500				853	481	
vCu, unblocked vol	500				853	481	
tC, single (s) tC, 2 stage (s)	4.1				6.4	6.2	
tF (s)	2.2				3.5	3.3	
p0 queue free %	98				87	99	
cM capacity (veh/h)	1064				324	585	
Direction, Lane #	EB 1	WB 1	SB 1		110	34.5	
Volume Total	356	500	47				
Volume Left	17	0	41				
Volume Right cSH	1004	39	6				
Volume to Capacity	1064	1700 0.29	344 0.14				
Queue Length (ft)	0.02	0.29	12				
Control Delay (s)	0.6	0.0	17.1				
Lane LOS	Α.	0.0	17.1 C				
Approach Delay (s)	0.6	0.0	17.1				
Approach LOS	0.0	0.0	C				
Intersection Summary			was -	10 10			
Average Delay			1.1	-		Ablas s	
Intersection Capacity Ut Analysis Period (min)	ilization		38.3% 15	10	JU Leve	of Service	ce A

California Street @ Wells Fargo Road

	-	-	1	-	1	-	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	The Condition of the State of t
Lane Configurations	4			4	N/		
Sign Control	Free			Free	Stop		
Grade	0%			0%	0%		
Volume (veh/h)	315	15	30	425	15	5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.85	0.85	
Hourly flow rate (vph)	350	17	33	472	18	6	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume			367		897	358	
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol			367		897	358	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s)					2.2	750000	
tF (s)			2.2		3.5	3.3	
p0 queue free %			97		94	99	
cM capacity (veh/h)			1192		302	686	
Direction, Lane #	EB 1	WB1	NB 1		Shell (Malling of	
Volume Total	367	506	24				
Volume Left	0	33	18				
Volume Right	17	0	6				
cSH	1700	1192	351				
Volume to Capacity	0.22	0.03	0.07				
Queue Length (ft)	0	2	5				
Control Delay (s)	0.0	0.8	16.0				
Lane LOS		A	C				
Approach Delay (s)	0.0	8.0	16.0				
Approach LOS			С				
Intersection Summary	100		I TOTAL	3.50%		Mana	
Average Delay			0.9				
Intersection Capacity Ut	ilization		54.8%	IC	U Leve	of Servi	ice A
Analysis Period (min)			15				

	*	-	7	1	-	*	4	1	-	-	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Free 0%	7		Free 0%			Stop 0%			Stop 0%	
Volume (veh/h)	5		5	75	460	25	10	0	60	0	0	10
Peak Hour Factor	0.90		0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85
Hourly flow rate (vph) Pedestrians	6	356	6	83	511	28	11	0	67	0	0	12
Lane Width (ft) Walking Speed (ft/s) Percent Blockage	r								,			
Right turn flare (veh) Median type Median storage veh) Upstream signal (ft)								None			None	
pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	539			361			1073	1075	358	1128	1064	525
vCu, unblocked vol	539			361			1073	1075	358	1128	1064	525
tC, single (s) tC, 2 stage (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tF(s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			93			94	100	90	100	100	98
cM capacity (veh/h)	1029			1198			183	203	686	155	206	552
Direction, Lane #	EB 1	WB1	NB 1	SB 1			TINE	I Alton	Z Acc			
Volume Total	367	622	78	12								
Volume Left	6	83	11	0								
Volume Right	6	28	67	12								
cSH	1029	1198	492	552								
Volume to Capacity	0.01	0.07	0.16	0.02								
Queue Length (ft)	0	6	14	2								
Control Delay (s)	0.2	1.8	13.7	11.7								
Lane LOS	Α	Α	В	В								
Approach Delay (s) Approach LOS	0.2	1.8	13.7 B	11.7 B								
Intersection Summary	PLP :	2.5	San L	1	I ALL	1.5	22.349	C 4314 B	3.1		5811	1
Average Delay			2.2									
Intersection Capacity Ut Analysis Period (min)	tilization		68.2% 15	10	CU Leve	l of Sen	vice		С			

Jacksonville TSP OR 238 @ Oregon Street

	*	-	*	1	←	1	1	1	-	-	1	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control		Stop			Stop			♣ Stop			⇔ Stop	SEAL
Volume (vph)	55	210	5	75	340	55	5	45	60	60	55	200
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	61	233	6	83	378	61	6	50	67	67	61	222
Direction, Lane #	EB 1	WB 1	NB 1	SB 1	444				NUMBER OF			2000
Volume Total (vph)	300	522	122	350								
Volume Left (vph)	61	83	6	67								
Volume Right (vph)	6	61	67	222								
Hadj (s)	0.1	0.0	-0.3	-0.3								
Departure Headway (s)	6.5	6.7	7.0	6.4								
Degree Utilization, x	0.55	0.97	0.24	0.62								
Capacity (veh/h)	523	539	457	545								
Control Delay (s)	11.4	21.3	10.6	11.8								
Approach Delay (s)	11.4	21.3	10.6	11.8								
Approach LOS	В	С	В	В								
Intersection Summary		51 0 85	1518.73		State Of	10000		50 500	1/15-10			1000
Delay			15.4									
HCM Level of Service			C									
Intersection Capacity Uti Analysis Period (min)	lization		63.5% 15	10	CU Leve	el of Sen	vice		В			

Oregon Street @ F Street

	*	*	1	1	1	↓	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	KA		72			4	
Sign Control	Stop		Free			Free	
Grade	0%		0%			0%	
Volume (veh/h)	45	45	160	5	20	230	
Peak Hour Factor	0.85	0.85	0.90	0.90	0.90	0.90	
Hourly flow rate (vph)	53	53	178	6	22	256	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)	Mana						
Median type Median storage veh)	None						
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	481	181			183		
vC1, stage 1 conf vol	401	101			103		
vC2, stage 2 conf vol							
vCu, unblocked vol	481	181			183		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)					- 45		
tF(s)	3.5	3.3			2.2		
p0 queue free %	90	94			98		
cM capacity (veh/h)	536	862			1392		
Direction, Lane #	WB 1	NB 1	SB 1	10.880		High said	
Volume Total	106	183	278				
Volume Left	53	0	22				
Volume Right	53	6	0				
cSH	661	1700	1392				
Volume to Capacity	0.16	0.11	0.02				
Queue Length (ft)	14	0	1				
Control Delay (s)	11.5	0.0	0.7				
Lane LOS	В		Α				
Approach Delay (s)	11.5	0.0	0.7				
Approach LOS	В						
Intersection Summary	9, 15, 15	Value			P. S. SHIP		
Average Delay			2.5	1.00			
Intersection Capacity Ut	ilization	:	37.2%	IC	U Level	of Serv	vice A
Analysis Period (min)			15				

Oregon Street @ C Street

	*	-	*	1	+	*	1	1	-	1	+	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Stop			Stop			Free	0		♣ Free	
Volume (veh/h)	10	0% 15	0.5	45	0%		0.5	0%	40		0%	7.5
Peak Hour Factor	0.85	0.85	35 0.85	15 0.85	15 0.85	15	25	125	10	15	260	15
Hourly flow rate (vph)	12	18	41	18		0.85	0.90	0.90	0.90	0.90	0.90	0.90
Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	12	10	41	18	18	18	28	139	11	17	289	17
Right turn flare (veh) Median type Median storage veh) Upstream signal (ft)		None			None							
pX, platoon unblocked vC, conflicting volume	557	536	297	581	539	144	306			150		
vC1, stage 1 conf vol vC2, stage 2 conf vol												
vCu, unblocked vol	557	536	297	581	539	144	306			150		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)		7.7			0.0	0.2	1.50			7.1		
tF(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	94	95	96	98	98			99		
cM capacity (veh/h)	408	436	742	379	434	903	1255			1431		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1							-	
Volume Total	71	53	178	322								
Volume Left	12	18	28	17								
Volume Right	41	18	11	17								
cSH	566	496	1255	1431								
Volume to Capacity	0.12	0.11	0.02	0.01								
Queue Length (ft)	11	9	2	1								
Control Delay (s)	12.3	13.1	1.4	0.5								
Lane LOS	В	В	Α	Α								
Approach Delay (s)	12.3	13.1	1.4	0.5								
Approach LOS	В	В										
Intersection Summary	2	- 100	0121	1							1 1-	1
Average Delay Intersection Capacity Ut Analysis Period (min)	ilization	J.	3.2 28.2% 15	IC	CU Leve	l of Ser	vice		Α			

OR 238 @ Pair-a-Dice Road

	1	-	-	*	1	1	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	Control of the Contro
Lane Configurations Sign Control Grade		Free 0%	Free 0%		Stop 0%		
Volume (veh/h)	0		470	40	30	0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.85	0.85	
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	0	244	522	44	35	0	
Right turn flare (veh)							
Median type Median storage veh) Upstream signal (ft)					None		
pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	567				789	544	
vCu, unblocked vol	567				789	544	
tC, single (s)	4.1				6.4	6.2	
tC, 2 stage (s)					0.4	0.2	
tF (s)	2.2				3.5	3.3	
p0 queue free %	100				90	100	
cM capacity (veh/h)	1005				360	539	
Direction, Lane #	EB 1	WB1	SB 1	355	THE STATE OF	H502	
Volume Total	244	567	35				
Volume Left	0	0	35				
Volume Right	0	44	0				
cSH	1005	1700	360				
Volume to Capacity	0.00	0.33	0.10				
Queue Length (ft)	0	0	8				
Control Delay (s)	0.0	0.0	16.1				
Lane LOS			C				
Approach Delay (s)	0.0	0.0	16.1				
Approach LOS			C				
Intersection Summary	16			inlay.	10		
Average Delay			0.7				
Intersection Capacity Ut Analysis Period (min)	ilization	,	37.2% 15	IC	CU Leve	l of Serv	rice A

Jacksonville TSP

OR 238 @ Old OR 238 (Bybee Corner)

	\rightarrow	1	1	-	1	-	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations Sign Control Grade	Free 0%	٦	J.	Free 0%	Stop 0%	74	
Volume (veh/h)	165	200	70	235	300	120	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh)	183	222	78	261	333	133	
Median type Median storage veh) Upstream signal (ft) pX, platoon unblocked					None		
vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol			406		600	183	
vCu, unblocked vol			406		600	183	
tC, single (s) tC, 2 stage (s)			4.1		6.4	6.2	
tF(s)			2.2		3.5	3.3	
p0 queue free %			93		23	84	
cM capacity (veh/h)			1153		433	859	
Direction, Lane #	EB 1	EB 2	WB1	WB2	NB 1	NB 2	
Volume Total	183	222	78	261	333	133	
Volume Left	0	0	78	0	333	0	
Volume Right	0	222	0	0	0	133	
cSH	1700	1700	1153	1700	433	859	
Volume to Capacity	0.11	0.13	0.07	0.15	0.77	0.16	
Queue Length (ft)	0	0	5	0	165	14	
Control Delay (s)	0.0	0.0	8.3	0.0	36.2	10.0	
Lane LOS	0.0		A		E	Α	
Approach Delay (s) Approach LOS	0.0		1.9		28.7 D		
Intersection Summary				LOTE TABLE			
Average Delay Intersection Capacity Uti Analysis Period (min)	lization		11.6 39.2% 15	IC	CU Leve	l of Serv	rice A

Appendix H 2030 Intersection Analysis (Transit/Bike Loss)

	•	-	*	•	+	•	1	†	<i>></i>	/		1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Stop 0%		*	Stop	7		Free 0%			Free 0%	
Volume (veh/h)	5	0	25	10	0	45	30	315	20	40	475	20
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage Right turn flare (veh)	6	0	30	12	0	54	34	357	23	45	538	23
Median type Median storage veh) Upstream signal (ft)		None			None							
pX, platoon unblocked vC, conflicting volume vC1, stage 1 conf vol vC2, stage 2 conf vol	1131	1088	550	1107	1088	368	561			380		
vCu, unblocked vol	1131	1088	550	1107	1088	368	561			380		
tC, single (s) tC, 2 stage (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tF(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	94	93	100	92	97			96		
cM capacity (veh/h)	157	200	535	168	200	677	1010			1179		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	36	12	54	414	606							
Volume Left	6	12	0	34	45							
Volume Right cSH	30 382	100	54	23	23							
Volume to Capacity	0.09	168 0.07	677 0.08	1010 0.03	1179 0.04							
Queue Length (ft)	8	6	0.06	3	0.04							
Control Delay (s)	15.4	28.1	10.8	1.1	1.0							
Lane LOS	C	D	В	A	A							
Approach Delay (s) Approach LOS	15.4 C	13.9 B		1.1	1.0							
Intersection Summary												68,236.83
Average Delay Intersection Capacity Uti Analysis Period (min)	lization	Ę	2.3 50.3% 15	IC	U Leve	of Ser	vice		A		<u> </u>	<u></u>

	*	→	*	•	4	4	1	†	/	/	 	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Stop 0%			Stop 0%			Free 0%			Free	
Volume (veh/h)	20	25	40	0	15	10	45	300	10	15	0% 400	35
Peak Hour Factor	0.85 24	0.85 30	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s)	24 ,	30	48	0	18	12	51	340	11	, ,	453	40
Percent Blockage Right turn flare (veh)												
Median type Median storage veh)		None			None							
Upstream signal (ft) pX, platoon unblocked												
vC, conflicting volume vC1, stage 1 conf vol	976	960	473	1018	975	346	493			351		
vC2, stage 2 conf vol vCu, unblocked vol	976	960	473	1018	975	346	493			351		
tC, single (s) tC, 2 stage (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tF(s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free % cM capacity (veh/h)	88 203	88 241	92 591	100 171	92 236	98 697	95 1071			99 1207		
	EB 1	WB 1	NB 1		230	097	1071			1207		Harananan pa
Direction, Lane # Volume Total	102	30	402	SB 1 510								
Volume Left	24	0	51	17								
Volume Right	48	12	11	40								
cSH	315	321	1071	1207								
Volume to Capacity	0.32	0.09	0.05	0.01								
Queue Length (ft) Control Delay (s)	34 21.8	8 17.4	4	1								
Lane LOS	21.6 C	17.4 C	1.5 A	0.4 A								
Approach Delay (s)	21.8	17.4	1.5	0.4								
Approach LOS	C	C	1.0	0.4								
Intersection Summary												<u> </u>
Average Delay	till-atio-	,	3.4	.,-	NELL -	1-40			_			
Intersection Capacity U Analysis Period (min)	unzation		55.7% 15	IC	CU Leve	of Ser	vice		В			

Jacksonville TSP OR 238 @ 5th Street

	•	→	7	€	•	•	1	†	<i>></i>	-	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control		∢∯₊ Yield			-∰ Stop			↑ Stop	7		♣ Stop	
Volume (vph)	210	185	5	10	235	110	0	10	5	65	25	345
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	238	210	6	11	266	125	0	11	6	74	28	391
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1							
Volume Total (vph)	453	402	11	6	493			,				
Volume Left (vph)	238	11	0	0	74							
Volume Right (vph)	6	125	0	6	391							
Hadj (s)	0.1	-0.1	0.0	-0.7	-0.4							
Departure Headway (s)	6.3	5.8	7.9	7.2	5.9							
Degree Utilization, x	0.79	0.65	0.02	0.01	0.81							
Capacity (veh/h)	556	546	381	418	595							
Control Delay (s)	14.1	11.3	9.8	9.1	14.0							
Approach Delay (s)	14.1	11.3	9.5		14.0							
Approach LOS	В	В	Α		В							
Intersection Summary												
Delay			13.2									
HCM Level of Service			В									
Intersection Capacity Util	ization	4	85.5%	IC	CU Leve	l of Serv	/ice		Ε			
Analysis Period (min)			15									

	→	→	←	*	\	4		
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations Sign Control Grade		Free 0%	Free 0%	WDIT	Stop 0%	ODN		
Volume (veh/h) Peak Hour Factor	10 0.90	255 0.90	355 0.90	60 0.90	45 0.85	10 0.85		
Hourly flow rate (vph) Pedestrians	11	289	402	68	54	12		
Lane Width (ft) Walking Speed (ft/s) Percent Blockage			`					
Right turn flare (veh) Median type					None			
Median storage veh) Upstream signal (ft)					,			
pX, platoon unblocked vC, conflicting volume	470				748	436		
vC1, stage 1 conf vol vC2, stage 2 conf vol vCu, unblocked vol	470				748	436		
tC, single (s) tC, 2 stage (s)	4.1				6.4	6.2		
tF (s) p0 queue free %	2.2 99				3.5 86	3.3 98		
cM capacity (veh/h)	1091				376	620		
Direction, Lane # Volume Total	EB 1	WB 1	SB 1					
Volume Left	300 11	470 0	66 54					
Volume Right	0	68	12					
cSH	1091	1700	405					
Volume to Capacity Queue Length (ft)	0.01 1	0.28 0	0.16 14					
Control Delay (s)	0.4	0.0	15.6					
Lane LOS	Α		С					
Approach Delay (s) Approach LOS	0.4	0.0	15.6 C					
Intersection Summary								
Average Delay Intersection Capacity Ut Analysis Period (min)	ilization	. ;	1.4 32.8% 15	IC	CU Leve	l of Servi	ce	A

	→	-	-	•	\	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations Sign Control Grade	See Led See	Free 0%	Free 0%	W Dit	Stop 0%	ODIT	
Volume (veh/h)	15	305	415	35	35	5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.85	0.85	
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	17	346	470	40	42	6	
Right turn flare (veh) Median type					None		
Median storage veh)					INDITE		
Upstream signal (ft) pX, platoon unblocked							
vC, conflicting volume vC1, stage 1 conf vol	510				870	490	
vC2, stage 2 conf vol							
vCu, unblocked vol	510				870	490	
tC, single (s) tC, 2 stage (s)	4.1				6.4	6.2	
tF (s)	2.2				3.5	3.3	
p0 queue free %	98				87	99	
cM capacity (veh/h)	1055				317	578	
Direction, Lane #	EB 1	WB 1	SB 1				
Volume Total	363	510	48				
Volume Left	17	0	42				
Volume Right cSH	0 1055	40 1700	6 336				
Volume to Capacity	0.02	0.30	0.14				
Queue Length (ft)	1	0.00	12				
Control Delay (s)	0.6	0.0	17.5				
Lane LOS	Α		C				
Approach Delay (s) Approach LOS	0.6	0.0	17.5 C				
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Ut Analysis Period (min)	ilization	S V	38.8% 15	IC	U Leve	l of Serv	ice A

California Street @ Wells Fargo Road

	-	*	•	←	4	<i>></i>			
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Lane Configurations Sign Control Grade	Free 0%			Free 0%	Stop 0%				
Volume (veh/h)	315	15	30	425	15	5			
Peak Hour Factor	0.90	0.90	0.90	0.90	0.85	0.85			
Hourly flow rate (vph) Pedestrians Lane Width (ft)	357	17	34	482	18	6			
Walking Speed (ft/s)									
Percent Blockage Right turn flare (veh)									
Median type Median storage veh)					None				
Upstream signal (ft) pX, platoon unblocked									
vC, conflicting volume vC1, stage 1 conf vol			374		915	366			
vC2, stage 2 conf vol									
vCu, unblocked vol			374		915	366			
tC, single (s)			4.1		6.4	6.2			
tC, 2 stage (s)									
tF (s)			2.2		3.5	3.3			
p0 queue free %			97		94	99			
cM capacity (veh/h)			1184		294	680			
Direction, Lane #	EB 1	WB 1	NB 1				440		
Volume Total	374	516	24						
Volume Left	0	34	18						
Volume Right	17	0	6						
cSH	1700	1184	343						
Volume to Capacity Queue Length (ft)	0.22 0	0.03	0.07 6						
Control Delay (s)	0.0	0.8	16.3						
Lane LOS	0.0	Α	C						
Approach Delay (s)	0.0	0.8	16.3						
Approach LOS	0.0	0.0	C						
Intersection Summary									
Average Delay			0.9				, <u>, , , , , , , , , , , , , , , , , , </u>		
Intersection Capacity Ut	ilization	į	55.7%	IC	U Level	of Servi	ce	В	
Analysis Period (min)			15						

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Free 0%			Free 0%			Stop 0%			Stop 0%	<u></u>
Volume (veh/h)	5	320	5	75	460	25	10	0	60	0	0	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85
Hourly flow rate (vph) Pedestrians	6	363	6	85	521	. 28	11	0	68	0	0	12
Lane Width (ft) Walking Speed (ft/s)												
Percent Blockage Right turn flare (veh)												
Median type Median storage veh)								None			None	
Upstream signal (ft) pX, platoon unblocked												
vC, conflicting volume vC1, stage 1 conf vol	550			368			1094	1096	366	1150	1085	536
vC2, stage 2 conf vol												
vCu, unblocked vol	550			368			1094	1096	366	1150	1085	536
tC, single (s) tC, 2 stage (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			93			94	100	90	100	100	98
cM capacity (veh/h)	1020			1190			176	197	680	148	200	545
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	374	635	79	12					-			
Volume Left	6	85	11	0								
Volume Right	6	28	68	12								
cSH Volume to Capacity	1020 0.01	1190	483	545								
Queue Length (ft)	0.01	0.07 6	0.16 15	0.02 2								
Control Delay (s)	0.2	1.9	13.9	11.8								
Lane LOS	Α	7.5 A	10.0 B	В								
Approach Delay (s)	0.2	1.9	13.9	11.8								
Approach LOS			В	В								
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Uti Analysis Period (min)	ilization	(39.2% 15	IC	U Leve	l of Sen	/ice		С			

Jacksonville TSP OR 238 @ Oregon Street

	>	→	\rightarrow	€	♣	*	4	†	<i>></i>	\	ļ	1
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		44-			4			4			43	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	55	210	5	75	340	55	5	45	60	60	55	200
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	62	238	6	85	385	62	6	51	68	68	62	227
Direction, Lane #	EB 1	WB1	NB 1	SB 1								
Volume Total (vph)	306	533	125	357								
Volume Left (vph)	62	85	6	68								
Volume Right (vph)	6	62	68	227								
Hadj (s)	0.1	0.0	-0.3	-0.3								
Departure Headway (s)	6.7	6.8	7.2	6.5								
Degree Utilization, x	0.57	1.00	0.25	0.64								
Capacity (veh/h)	519	537	453	539								
Control Delay (s)	11.7	23.6	10.8	12.2								
Approach Delay (s)	11.7	23.6	10.8	12.2								
Approach LOS	В	С	В	В								
Intersection Summary												
Delay			16.5									
HCM Level of Service			С									
Intersection Capacity Uti	lization	3	64.5%	IC	U Leve	l of Sen	/ice		С			
Analysis Period (min)			15									

Oregon Street @ F Street

	€	•	†	/	>	ļ	
Movement	WBL	WBR	NBT	NBR	SBL	SBT	
Lane Configurations	γ		\$			4	
Sign Control	Stop		Free			Free	
Grade Volume (veh/h)	0% 45	45	0% 160	E	00	0%	
Peak Hour Factor	0.85	0.85	0.90	5 0.90	20 0.90	230 0.90	
Hourly flow rate (vph)	54	54	181	6	23	261	
Pedestrians				-		_0.	
Lane Width (ft)	×						· · · · · · · · · · · · · · · · · · ·
Walking Speed (ft/s)							
Percent Blockage Right turn flare (veh)							
Median type	None						
Median storage veh)	110110						
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	490	184			187		
vC1, stage 1 conf vol vC2, stage 2 conf vol							
vCu, unblocked vol	490	184			187		
tC, single (s)	6.4	6.2			4.1		
tC, 2 stage (s)							
tF (s)	3.5	3.3			2.2		
p0 queue free % cM capacity (veh/h)	90 529	94 858			98 1387		
· · · · · · · · · · · · · · · · · · ·			reference <u>de l'estimation</u>		1307	to a distribution of the second of the secon	Wiled Wall was a state parties and a state of the state o
Direction, Lane # Volume Total	WB 1	NB 1	SB 1				
Volume Lotal Volume Left	108 54	187 0	283 23				
Volume Right	54	6	23				
cSH	654	1700	1387				
Volume to Capacity	0.17	0.11	0.02				
Queue Length (ft)	15	0	1				
Control Delay (s) Lane LOS	11.6	0.0	0.7				
Approach Delay (s)	B 11.6	0.0	0.7				
Approach LOS	B	0.0	0.7				
Intersection Summary							
Average Delay			2.5				
Intersection Capacity Ut	ilization	;	37.7%	IC	U Level	of Servic	ce A
Analysis Period (min)			15				

Jacksonville TSP

Oregon Street @ C Street

	۶	→	*	•	4	•	4	†	*	\	↓	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations Sign Control Grade		Stop 0%			Stop 0%			Free 0%			rf• Free	
Volume (veh/h)	10	15	35	15	15	15	25	125	10	15	0% 260	15
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	18	42	18	18	18	28	142	11	17	295	17
Pedestrians												
Lane Width (ft) Walking Speed (ft/s)								,				
Percent Blockage												
Right turn flare (veh) Median type		None			None							
Median storage veh)		7.0			110110							
Upstream signal (ft)												
pX, platoon unblocked vC, conflicting volume	568	547	303	592	550	147	312			153		
vC1, stage 1 conf vol	000	5-17	000	002	550	177	012			100		
vC2, stage 2 conf vol												
vCu, unblocked vol	568	547	303	592	550	147	312			153		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s) tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	94	95	96	98	98			99		
cM capacity (veh/h)	400	429	737	371	428	900	1249			1428		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	72	54	181	329								<u> </u>
Volume Left	12	18	28	17								
Volume Right	42	18	11	17								
cSH Volume to Capacity	559 0.13	488 0.11	1249 0.02	1428 0.01								
Queue Length (ft)	11	9	0.02	1.01								
Control Delay (s)	12.4	13.3	1.4	0.5								
Lane LOS	В	В	Α	A								
Approach Delay (s)	12.4	13.3	1.4	0.5								
Approach LOS	В	В										
Intersection Summary												
Average Delay			3.2									
Intersection Capacity Utilization Analysis Period (min)		2	28.6% 15									

Jacksonville TSP OR 238 @ Pair-a-Dice Road

	•	-	←	•	\	4		
Movement	EBL	EBT	WBT	WBR	SBL	SBR		
Lane Configurations Sign Control	Las 140 Cc.		ጉ Free	n Sit	Stop	ODIT		
Grade		0%	0%		0%			
Volume (veh/h)	0	220	470	40	30	0		
Peak Hour Factor	0.90	0.90	0.90	0.90	0.85	0.85		
Hourly flow rate (vph)	0	249	533	45	.36	0		
Pedestrians Lane Width (ft)								
Walking Speed (ft/s) Percent Blockage								
Right turn flare (veh)					ang Seleti Sesantan			
Median type Median storage veh)					None			
Upstream signal (ft) pX, platoon unblocked								
vC, conflicting volume vC1, stage 1 conf vol	578				805	555		
vC2, stage 2 conf vol								
vCu, unblocked vol	578				805	555		
tC, single (s)	4.1				6.4	6.2		
tC, 2 stage (s)								
tF (s)	2.2				3.5	3.3		
p0 queue free %	100				90	100		
cM capacity (veh/h)	996				352	531		
Direction, Lane #	EB 1	WB1	SB 1					
Volume Total	249	578	. 36					
Volume Left	0	0	36					
Volume Right	0	45	0					
cSH	996	1700	352					
Volume to Capacity Queue Length (ft)	0.00 0	0.34	0.10					
Control Delay (s)	0.0	0 0.0	8 16.4					
Lane LOS	0.0	0.0	10.4 C					
Approach Delay (s)	0.0	0.0	16.4					
Approach LOS	0.5	0.0	C					
Intersection Summary								
Average Delay			0.7					
Intersection Capacity Ut	ilization	;	37.7%	IC	U Level	of Service	Α	
Analysis Period (min)			15					

Jacksonville TSP OR 238 @ Old OR 238 (Bybee Corner)

	-	•	€	←	4	*	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations Sign Control Grade	Free 0%	7	ħ	Free 0%	Stop 0%	7	
Volume (veh/h)	165	200	70	235	300	120	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly flow rate (vph) Pedestrians Lane Width (ft) Walking Speed (ft/s) Percent Blockage	187	227	79	266	340	136	
Right turn flare (veh)							
Median type Median storage veh)					None		
Upstream signal (ft) pX, platoon unblocked							
vC, conflicting volume vC1, stage 1 conf vol			414		612	187	
vC2, stage 2 conf vol							
vCu, unblocked vol			414		612	187	
tC, single (s)			4.1		6.4	6.2	
tC, 2 stage (s) tF (s)			2.2		3.5	3.3	
p0 queue free %			93		20	84	and the state of
cM capacity (veh/h)			1145		425	855	
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	
Volume Total	187	227	79	266	340	136	*:
Volume Left	0	0	79	0	340	0	
Volume Right	0	227	0	0	0	136	
cSH Volume to Canacity	1700 0.11	1700 0.13	1145 0.07	1700	425	855	
Volume to Capacity Queue Length (ft)	0.11	0.13	0.07	0.16 0	0.80 179	0.16 14	
Control Delay (s)	0.0	0.0	8.4	0.0	39.7	10.0	
Lane LOS	0.0	0.0	A	0.0	E	В	
Approach Delay (s) Approach LOS	0.0		1.9		31.2 D		
Intersection Summary							
Average Delay	4.000		12.6				
Intersection Capacity Utilization Analysis Period (min)			39.8% 15	IC	U Leve	l of Service	e A

Appendix I
Jacksonville Street Design Standards

