TRANSPORTATION SYSTEM PLAN FOR THE CITY OF WINSTON

CITY COUNCIL MEMBERS
2003

Rex Stevens, Mayor
Dick Hayes □ Bev Heyer □ Laura Duncan □ Larry Wait

PLANNING COMMISSION MEMBERS
2003

Ken McGinnis, President
Jim McClellan □ Gene Landolt □ Christopher Smith □ Don Richardson
Lloyd Stutsman □ John Turner

ASSISTED BY THE

UMPQUA REGIONAL COUNCIL OF GOVERNMENTS

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Adopted June 23, 2003
ORDINANCE NO. 587
CITY OF WINSTON

Transportation System Plan

June 23, 2003
City Council Adoption

May 2003
Planning Commission

September 2002
Traffic Safety Committee
Recommendations

October 2002
Transportation System Plan
Technical Task Force
Recommendations
Winston Location Map
City of Winston

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# CITY OF WINSTON

## Transportation System Plan

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<td>W-D Water District</td>
<td>RFP Transportation Manager</td>
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<td>Rex Stevens</td>
<td>Bruce Kelly</td>
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<td>Mayor</td>
<td>City Administrator</td>
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CITY OF WINSTON
Transportation System Plan

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(B) Greater Roseburg Transportation Study, May 1996
(C) City of Winston Transportation System Plan, Feb 1999
(D) City of Winston Comp Plan Update, June 2001 Draft
(E) City of Winston Public Facilities Plan, June 2001 Draft
(F) Corridor Plans for OR 38 and OR 42, June 2001
(G) Oregon Highway Plan, 1999
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SECTION 1

INTRODUCTION
SECTION 1- INTRODUCTION

This Winston Transportation System Plan (TSP) is a summary of the past transportation planning efforts and current Comprehensive Plan Periodic Review program activities underway for the City of Winston. This report expands upon the draft TSP prepared February 1999 by JHR Consulting Engineers. This plan includes the best available data for the City and URCOG to use, without undertaking new research to update the February 1999 Draft Plan. The Technical Advisory Committee has assisted with providing information to the URCOG and City staff. This TSP has been prepared with a minimum amount of updating information from the other transportation studies and plans that have been undertaken during the recent past. Generally, growth and travel patterns are not changing from those documented in the studies completed in the recent past. Summaries of the following studies/plans and other information is provided in the Appendix for reference and inclusion as a vital part of this plan.

(A) Winston Local Street Network Plan, Nov 1995
(B) Greater Roseburg Area Transportation Study, May 1996
(C) City of Winston Transportation System Plan, Feb 1999 Draft
(D) City of Winston Comprehensive Plan, June 2001 Draft
(E) City of Winston Public Facilities Plan, June 2001 Draft
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(J) Transportation Planning Rule 660-12-045
(K) Street Condition Inventory/Summaries
(L) School Access Hazards & Barriers
(M) Douglas County TSP

Background

In 1995 the Transportation Planning Rule (TPR) was passed through the Oregon Legislature with significant changes that impact local communities and how they plan for transportation services. The TPR was amended in 1998 and 2000 to include additional requirements for local planning consideration during the preparation of a Transportation System Plan (TSP). The TPR requires that cities practice multi-modal transportation planning and, through ordinance and policy changes, reduce principle reliance on the automobile. In adoption the city must develop:

- a road plan for a network of arterial and collector streets
- a public transportation element
- bicycle and pedestrian plans
- air, rail, water, and pipeline plans
- transportation financing program
- policies and land use regulations (ordinances) for implementing the TSP
In addition, the TPR requires local jurisdictions to adopt land use and subdivision ordinances to protect existing roadway capacity, establish bicycle and pedestrian connections between activity centers and residences, and establish standards that minimize pavement and right-of-way width for local streets. The TPR mandates that these take place with an appropriate amount of notice and coordination with State and regional agencies and plans.

To meet these requirements, the City of Winston, with the Umpqua Regional Council of Governments (URCOG) and the Oregon Department of Transportation (ODOT) entered into an agreement in 1994 to develop the Winston Local Street Network Plan, in 1995 the Greater Roseburg Area Transportation Study and in 1998 the City of Winston Transportation System Plan Draft prepared by JRH Engineers and Planners. These documents provided the background information and the delineation of community issues utilized to prepare this Transportation System Plan.

**Purpose**

The purpose of this report is to describe the existing transportation system for the Winston Urban Growth Area as illustrated on the following aerial photograph, provide a summary analysis of the system, present planning goals/policies that are consistent with statewide land-use and transportation policies and propose a plan for improving the area’s transportation system. Specifically this report:

- Presents an inventory of existing transportation facilities within the Winston Urban Growth Boundary (UGB) including roads, bicycle and pedestrian routes, public transportation facilities, and air, rail, and pipeline facilities.
- Analyzes transportation needs.
- Presents policies and land-use regulations for implementing the TSP that are consistent with the state and local transportation goals.
- Presents a Transportation Improvement Plan that outlines specific transportation improvements, the timing of the improvements, estimated costs, and potential funding sources.

**Transportation Planning Rule Issues and Implementation**

The Transportation Planning Rule implements Statewide Planning Goal 12 (transportation) and explains how local governments and state agencies responsible for transportation planning demonstrate compliance with other statewide planning goals. It sets the requirements for coordination among affected levels of government for preparation, adoption, refinement, implementation, and amendment of transportation system plans. Transportation plans adopted pursuant to the TPR fulfill the requirements for public facilities planning required under ORS 197.712 (2)(e), goal 11, and OAR Chapter 660, Division 11, as they relate to transportation facilities. The TPR is provided in its entirety in Appendix J.
The TPR requires ODOT to adopt a state TSP. The state TSP includes the state transportation policy plan, modal system plans including the State highway plan, and transportation facilities plans. State transportation project plans must be consistent with acknowledged comprehensive plans.

Cities and counties are required to adopt local TSPs that establish a system of transportation facilities and services adequate to meet identified needs and must be consistent with regional TSPs and adopted elements of the State TSP.

The primary issues of consistency with the TPR, related to the Winston Transportation Plan, occur between the City’s policy and regulation and the implementation requirements of the Transportation Planning Rule (660-12-045). The TSP must involve revisions to local policy and regulation, as well as identification of necessary improvement projects. Identification of needed improvements have resulted largely from previous plans, including the local street network plan that produced an inventory of existing conditions which was updated for the TSP in 1999, and an analysis of the transportation system and traffic circulation, which was confirmed by this TSP. Once the adoption of this TSP is completed, the City must revise their public facilities plan and local land use development ordinances to reflect the findings of this TSP and satisfy the requirements in the Transportation Planning Rule 660-12-045 (2), (3), and (7).
Map 2
Winston UGA Photo
SECTION 2

Transportation System Inventory
Section 2
Transportation System Inventory

Street System Inventory/Conditions

Highway 42 (Interstate 5 to Highway 101) runs through and provides the most direct access to the city. Winston is a very pedestrian-oriented community, and ODOT has recorded a high degree of pedestrian activity within this corridor. This presents a problem that must be addressed in the continued development of this facility; presently the highway acts as a barrier to pedestrian activity within the community.

The 1999 Oregon Highway Plan has classified this corridor as having “statewide significance” and has designated the route as part of the state highway freight system. In 2000 the Highway Plan was amended to designate the section of OR 42 between interstate 5 and Lookingglass Road as an expressway. As such it is expected that this highway will maintain appropriate access control to preserve the needed capacity to serve the statewide need, while remaining sensitive to the needs of the City of Winston. According to the 1999 highway plan, facilities with statewide significance should provide connections and links to larger urban areas, ports, and major recreation areas that are not directly served by interstate highways. State Highway 42 provides the Winston area with the major east-west access to the Roseburg Urban Area, Oregon Coast port facilities, regional recreation areas and provides a connection to I-5 for north-south travel through the county with access also to the Northwest and California for people and goods movements.

County Roads that are within the UGB are Old Highway 99 (Co RD 387), Lookingglass, Brockway and Winston Section Rd. These County Roads provide for moving traffic through the Urban Area connecting with the State Highways. Old Highway 99 is also Main Street where major traffic generators are located within the major Winston Business District. The following Map 3 shows these roads and their pavement conditions.

City Streets inventory from previous studies were updated and summarized in Appendix (J). The street pavement conditions for the City of Winston and UGA are illustrated on the following Map 3. The following Map 4 provides a summary of traffic volumes on the major City Streets, County Roads and State Highway 42 within the Urban Growth Area of Winston.
Map 3
Street System Inventory/Condition
Map 4
Traffic Volumes
Existing Traffic Control

The majority of intersections in the Winston area are two-way stop controlled. There is a four-way stop controlled intersection at Jorgens and Darrell. The only signalized control in the city is located at the intersection of Highway 42 and Main Street. This traffic signal operates under fully actuated control.

Pedestrian & Bicycle Facilities

Bicycling is now recognized as an important element of a multimodal transportation system. It provides a viable transportation option for people who cannot or choose not to use private automobiles. Bicycling helps to reduce traffic congestion and air pollution, helps to conserve energy resources, and is an increasingly popular form of recreation and exercise.

Bicycling was a useful mode of transportation in the early part of the 20th century when communities were smaller and travel distances shorter. As the automobile became increasingly available, and vast sums of money were invested in the roadway network in communities across America, cycling became less practical and less attractive as a means of transportation.

The following Map 5 displays the existing bicycle/pedestrian facilities within the City of Winston and Urban Growth Area. Sidewalks are provided most consistently in the downtown area and sporadically in different areas of the City. Current development codes require sidewalks to be installed with all new subdivisions. Bike lanes have been provided along a few streets and bike/pedestrian facilities are located along Hwy 42 as illustrated on Map 5.
Map 5
Existing Bicycle/Pedestrian Routes
Public Transportation

The City of Winston has had a long-standing Dial-a-Ride program primarily for seniors and disabled residents within the City. Trips can be for any purpose such as medical, shopping or social. Particular emphasis is given to service to the Senior Services Dining Site located in Winston. A trip is scheduled by telephone with no advance notice necessary. The service is provided Monday-Friday 9:30 to 5:00. The Winston Dial-a-Ride services has access to two vans for the program. The program is operated with approximately 15 volunteer drivers, with the City providing a backup vehicle should the van suffer an equipment failure. The program has shown rapid growth since its inception and fulfills an essential service in transportation for the community.

In 1995 the City of Winston was included in a 3-year demonstration project for public transportation to provide fixed route service in Central Douglas County. This program was funded by ODOT and administered out of the Douglas County Health and Human Services Department. In July 1996, the program was transferred to the Umpqua Regional Council of Governments (URCOG) which then created Umpqua Regional Transit. As Umpqua Regional Transit began the administration of the Douglas County public transportation program, it was realized that the greatest demand for services was in the greater Roseburg service area, which includes the City of Winston. Residents of the City of Winston now have access to daily fixed route service to the greater Roseburg area eight times a day beginning at 6:45 am, with the last bus leaving Winston at 6:15 pm.

Greyhound Bus Lines has a terminal in downtown Roseburg, approximately seven miles from Winston. Currently, eight buses per day operate between Portland and California, with four leaving southbound and four northbound out of the terminal in Roseburg.

Rail

The Central Oregon & Pacific Railroad operates freight terminals in Roseburg, Green and Dillard, and serves primarily the wood products industry. This short line operator provides connections to Eugene and the Oregon International Port of Coos Bay for shipping across the country or overseas. The Central Oregon & Pacific Railroad is a subsidiary of Railtex Corporation. Passenger rail service is provided by AMTRAK in Eugene, approximately 75 miles north of Winston.

Air

The Roseburg Regional Airport is a General Aviation Airport that serves the greater Roseburg area. While there are no commercial flights, a private charter service is available. Scheduled passenger service was discontinued at this facility in 1980. The Airport Master Plan, updated in 1994, estimated that there were 108 based aircraft with an estimated 31,000 annual operations. The master plan estimates that by the year 2014 there will be 150 based aircraft and 46,000 operations. Although the master plan called for new commercial commuter services to begin in 1997, this has not happened, and subsequent
discussions with State Aviation Division staff have cast doubt on whether this type of service will be viable in the near future.

Passenger service is currently provided at airports in Eugene, Medford, North Bend, and Portland. Eugene, Medford, and North Bend are all about 75-85 miles from Winston, with the Portland International Airport approximately 180 miles north of Winston.

**Water**

Historically, the South Umpqua River has been used for the shipment of raw timber and other bulk goods, as well as passenger transportation around the turn of the 20th Century. Current use of the river is only for fishing and recreational boating. The Oregon International Port of Coos Bay is located 70 miles west of the City of Winston via State Highways 42 and 101.

**Pipeline**

There are no pipelines for movement of products in or around the Winston area.

**Telecommunications**

The rapid expansion of telecommunications in the last decade has created new options. Today many people have the opportunity to choose where they want to live, because they can work out of their home and report to an office hundreds and perhaps thousands of miles away. This year, more than any other, people purchased merchandise over the Internet. People can do all their banking, pay their bills, and communicate with friends, relatives and associates from the comfort of their own homes. There is little debate that this telecommunications revolution is changing our society and has the ability to change our quality of life, and our travel behavior.

Presently the fastest modem connection available in the City of Winston is 28,800 baud, when the industry standard is 56,000 baud. This limitation in speed combined with the lack of a fiber optic telecommunication network creates a negative community image for business recruitment and residential location decisions.

**Street Functional Classification**

The following Map 6 shows the current Functional Classification for the streets and highways within the City of Winston and Urban Growth Area. The function is determined by operational characteristics such as traffic volume, operating speed, safety, and capacity. The ODOT and federal guidelines were used to determine the functional classification for existing streets and highways in Winston and the Urban Growth Area.
Map 6
Existing Street Classification
SECTION 3

Transportation System Conditions & Analysis
SECTION 3
TRANSPORTATION SYSTEM CONDITIONS & ANALYSIS

The City of Winston’s transportation system has developed around Highway 42 and Main Street (Old Highway 99/County Road 387). The South Umpqua River is the major topographical feature within the community that has influenced growth to some extent. It is these roads and the community’s connection with I-5 that have helped shape the City as we know it today. While this arterial network has connected Winston with the region, it has also divided the community and acts as a barrier between neighborhoods.

The City’s connection with the timber industry has been evident from its earliest beginnings. Winston’s Main Street connects the community with the small town of Dillard and the largest mill in Douglas County, operated by Roseburg Forest Products. The downsizing of the timber industry has impacted this community and required its economy to become more diversified. While the economy is changing, and has changed significantly over the last 20 years, the transportation system for the community has stayed virtually the same. To keep pace with the growing demands for transportation services, the growth that the community is experiencing, and the increasing demands that will be placed on the existing infrastructure, Winston must plan to improve the connectivity of the existing transportation network. Improving connectivity within the community will give people options for local circulation away from Highway 42 and Main Street, preserving essential capacity, de-emphasizing the division these roads create, and enhancing the livability of the area.

Winston has participated in several significant transportation studies over the last four years. In 1995, the City developed a local street network plan that went a long way toward establishing inventories and base level data necessary to develop this Transportation System Plan (TSP). At the same time, ODOT established a regional transportation planning process in the Greater Roseburg Area Transportation Study (GRATS) and the Highway 42 Corridor Plan, both of which included Winston in a regional setting for transportation improvements. In 1997 the Umpqua Regional Council of Governments, through a Transportation Growth Management grant, conducted a public transportation feasibility study, designed to implement a limited fixed route transit service in the Roseburg and Winston area. A Comprehensive System Assessment and Enhancement Plan for Public Transit and Special Transportation, Douglas County, Oregon was undertaken by the Umpqua Regional Council of Governments in 2000 with a draft report completed in November 2001.

The TSP development began with a check of the existing conditions and an update of the information collected for the Local Street Network Plan (LSNP). This included inventory of the physical, operational, traffic safety, and travel characteristics of all the major roadways within the study area. The issues identification portion of the LSNP is still largely relevant, but was checked through a meeting with the advisory committee and a public open house held in October 1997.
Existing Roadway Deficiencies

The Local Street Network Plan determined that additional contiguous east/west connections were needed to link the various parts of the city, and lessen dependence on the State highway for local trips. This again has been substantiated through the public input and analysis of roadway needs. The City of Winston is fairly well developed in areas where roads would need to be placed, creating serious impacts on local residential and business areas that would make the cost of these improvements extremely expensive. To mitigate these impacts, and lessen dependence on the State highway for local trips, smaller connections need to be implemented on existing facilities.

Connectivity

The November 1995 Winston Local Street Network Plan identified several issues around local street connectivity and how it could be improved within the community. That study identified three neighborhood areas that had to use the arterial road system to circulate through the community. Establishing local network connections would take traffic off State Highway 42 and County Road 387 (Main Street). This benefits the community and the State by preserving the capacity of the arterial network and minimizing the need for costly road upgrades.

The three areas identified are the area to the east of Highway 42 as it enters the north side of Winston and Main Street; the area north and west of Highway 42; and the area south of Highway 42, and west of Main Street. As is evidenced by Map 7 (pg 28), it is difficult to travel between areas within Winston without using either Highway 42 or Main Street. To change this situation, the Winston Local Street Network Plan recommended a series of local street improvements that were intended to connect the areas identified previously.

Looking at Map 7, every connection between neighborhoods separated by Highway 42 and Main Street (Old Highway 99) would need to use the arterial network to complete the trip. This situation can be best illustrated when looking at the post office in Winston. The City presently has very limited mail delivery service, requiring many local people to go to the post office at least once a day to collect their mail. The post office is located on Main Street (Old Highway 99) and, because there are no connections between the City’s three major residential areas, every trip to the post office is on Highway 42 and Main Street (Old Highway 99). Some of these circulation deficiencies should be alleviated through a series of minor connections and realignments.

Another circulation problem is access to McGovem Elementary School. There are no local routes that link Cary Street with the remainder of the northwest neighborhood or any other neighborhood within Winston. To access Cary Street, all traffic is required to use the City’s arterial street network (Highway 42, Main Street, and Lookingglass Road). The school area also lacks pedestrian connections to allow children pedestrian-access to the school grounds.

New north/south connections to the southwest and northwest neighborhood
areas across Highway 42 would allow better local connectivity. In addition, new north/south connections would improve circulation in the vicinity of the Jorgen Street neighborhood and the neighborhood areas around Brosi Orchard Road.

**Existing Traffic Control Deficiencies**

At this time no additional signals are warranted within the City of Winston, and the existing signal operates acceptably. As part of the proposed Brockway Oaks/Brockway Village development, the City has agreed to the installation of a signal, when warranted, at the intersection of Highway 42 and Brockway Road.

**Existing Pedestrian and Bicycle Deficiencies**

Connectivity is the greatest problem for the bicycle and pedestrian system within the City of Winston. Neither system fully connects schools, parks, and commercial areas within the community. Another problem is that some streets have very long blocks with no direct bicycle or pedestrian connections. Some of the deficiencies can be corrected through the development of roadway connections discussed earlier; however, several arterial and collector streets within Winston will need to be retrofitted with these improvements to fully correct deficiencies.

**School Access Hazards & Barriers**

The City has recently completed a study to identify the school access hazards and barriers. The concerns & recommendations of School Access Hazards & Barriers Study need addressed as part of the implementation of this TSP by the City, Douglas County and ODOT. A copy of the School Access Hazards & Barriers Study is included as Appendix L.

**Traffic Operations**

During the development of the Local Street Network Plan, there was an extensive analysis conducted of the traffic operations within the city. It has been determined, through comparison of counts taken on the State Highway 42 in 1994, 1996 and 2000, that there has been little change (less than 5%) in traffic volumes since the publication of the LSNP. Thus, the conclusions reached in that analysis are still valid. Traffic volumes are an excellent indicator for changes in circulation patterns and levels of service on the road network. The following is an excerpt from the LSNP describing the present state of traffic operations in Winston.

“Manual turning movement counts were conducted at each study area intersection during the weekday p.m. peak period (4:00pm to 6:00pm) in May 1994 as part of the Greater Roseburg Area Transportation Study and were supplemented with counts conducted in January 1995 by ODOT. The p.m. peak hour traffic counts were examined for reasonableness and were also compared to previous traffic counts conducted in the area as reported in previous traffic studies.”
Existing Operational Analysis

All of the intersections within the study area are currently operating at acceptable levels of operation for their traffic volume to capacity ratios. The following Table 1 shows the Year 2000 and Year 2022 V/C Ratios. The only intersection that is expected to exceed the acceptable by Year 2022 is Lookingglass Road and Highway 42.

Table 1
Interception V/C along Highway 42

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<th>Intersection</th>
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<th>2022</th>
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<tr>
<td>Brockway Road</td>
<td>0.29</td>
<td>0.61</td>
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<tr>
<td>Abraham Avenue</td>
<td>0.08</td>
<td>0.20</td>
</tr>
<tr>
<td>Glenhart Avenue</td>
<td>0.20</td>
<td>0.55</td>
</tr>
<tr>
<td>Old Highway 99</td>
<td>0.54</td>
<td>0.73</td>
</tr>
<tr>
<td>Jorgen Street</td>
<td>0.17</td>
<td>0.70</td>
</tr>
<tr>
<td>Lookingglass Road</td>
<td>0.74</td>
<td>2.55</td>
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With the exception of the Lookingglass Road intersection, all inventoried intersections are expected to operate within acceptable levels through the planning horizon of this TSP. Because of the high volumes of traffic on Highway 42, Lookingglass Road experiences a high degree of delay for left turns from Lookingglass Road. This in turn may create an operational level that exceeds the minimum standards set by ODOT. In order to improve the operational efficiency of this intersection, improvements may be needed to either restrict left turn movements in their entirety, or to more easily permit them.

Consideration should be given to four alternatives available that may resolve the operational issues at Highway 42 and Lookingglass.

1. Install a raised median creating a right-in/right-out intersection.
   *Median should be landscaped. Impacts to Highway 42/Main St. intersection, Brosi Orchard, and Expressway should be examined.*

2. Install a traffic signal at the existing intersection when warranted.
   *Additional study will be required. Impacts to the Highway 42/Main St. intersection, Brosi Orchard, and Expressway will also need to be examined.*

3. Develop Lost Lane from Safari Rd to OR 42/Brosi Orchard intersection and install a traffic signal when warranted.
   *Additional study will be required. Impacts to Lookingglass (Highway and Safari intersections), Brosi Orchard, Highway 42/Main St. intersection*

4. Separated grade crossing.

ODOT has not agreed to any new signals on Highway 42 and generally discourages the installation of new traffic signals on freight designated routes. Additional study will need to be completed to evaluate the impacts to the highway, the local street system, and other potentially impacted intersections. Traffic signals require the approval of the State Highway Traffic Engineer.
Bicycle Element

Increasing traffic demand and its associated impacts on communities has led to renewed interest in bicycling as a means of transportation, as well as recreation. Recent legislation such as ISTEA and the Oregon Transportation Planning Rule has once again elevated the importance of bicycling (as well as other alternatives to the private automobile) in transportation system planning and improvements. Bicycles are viewed as a viable way to meet a portion of the travel demand in communities, and an attractive alternative to private automobiles.

Today people use bicycles for a wide variety of trips, including commutes to work, personal business (e.g., shopping or banking), school, and recreation. It is a critical transportation mode for those people too young to drive, and an increasingly popular mode for other travelers as well. The relatively flat terrain over much of the Winston Urban Area, combined with the mild climate, make this travel mode a good option in this area.

Bicycle System Facilities

A complete bicycle system consists of several different types of facilities or improvements to safely and efficiently accommodate travel by bicycle. The challenge for local governments is to provide facilities within the area’s financial constraints that adequately meet the needs of experienced and inexperienced cyclists. Inexperienced and less stable riders usually feel more secure when there is some physical separation from automobile traffic. More experienced riders may need only a little extra pavement along the side of the road that is properly maintained. The impact of bicyclists on traffic is also an important consideration, especially in congested locations where they must compete for limited space. The Oregon Bicycle and Pedestrian Plan (Appendix H) includes a summary of the major types of facilities and a brief description of their key characteristics.

Pedestrian Element

Pedestrians are walking in Winston’s downtown at almost any hour of the day, even though there is a lack of pedestrian facilities within the town. Some streets do have sidewalks, such as both sides of Highway 42 to Glenhart, Main Street (Old Hwy 99) to Thompson, Glenhart, and Thompson. This serves the downtown core well, but misses some important areas where sidewalks would be very beneficial.

Unlike bike lanes that are not appropriate on all levels of roadway, sidewalks should be included on all street types. Past development standards have not required sidewalks, and consequently this need is not served well in the community. The City leaders recognize this and the need for safe pedestrian
| Map 7 | Major Traffic | Generators |
accommodation. Standards have been included in this plan by which certain areas in the community might be retrofitted with pedestrian facilities. It is important to note that these facilities may not always be the standard concrete sidewalk with curb and gutter attached, due to expense and right-of-way constraints. These might be an asphalt pathway, widened shoulder, or a road shoulder with a curb between the pedestrian area and the travel way.

Certain areas within Winston need sidewalks, or other pedestrian facilities, because they tend to generate many pedestrian trips as illustrated on the previous Map 7. These areas include:

- McGovern Elementary School
- Winston Community Center
- Winston Public Library
- Commercial areas West of Glenhart on Highway 42
- Riverbend Park

The following streets should to be considered for retrofitting of sidewalk facilities:

- Darrell Street
- Cary Street
- Grape Street
- Rose Avenue
- Highway 42 from Glenhart west
- Safari Road south of Lookingglass
- Baker Street

Still other areas in Winston need to have pedestrian connections made where presently no road exists. These are needed for circulation purposes or to make a more direct route for pedestrians. These areas are:

- a connection between Gregory and Darrell
- a connection between Civil Bend and Cary
- a connection between Darrell and Grape
- a connection between Tower and Thiele

The facility between Gregory and Darrell is needed to allow more direct access between the neighborhoods on the east side and the downtown commercial areas. This allows people to walk to do errands, go to the post office or grocery store without the extensive out-of-direction travel that is currently required by these residents. Without this more direct connection, it is not reasonable to expect people living in neighborhoods east of Main Street, to walk to downtown.

The connection between Civil Bend and Cary will give a pedestrian connection to the local elementary school. At the present time, children need to walk along one of two major arterials in Winston: along Highway 42 on an area without sidewalks; or along Lookingglass Road, which is narrow and without sidewalks as well. A third option exists which is a path that has been cut along a fence and connects with Tumlin Avenue. This land is not owned by the City and, therefore, cannot be improved and maintained at this time. Further study is necessary if
this third pedestrian option is to be continued.

**Telecommunications**

There is an infrastructure component that is critical to making full use of this burgeoning new technology. Many small towns and rural areas do not have the needed capacity in their telecommunications networks to make full use of this new medium of travel and communication. This lack of infrastructure can negatively impact Winston’s economy, as well as stifle creativity in developing long-range transportation solutions to regional traffic congestion.

The development and installation of upgraded telecommunication infrastructure can have a beneficial impact on community travel behavior and Vehicle Miles of Travel (VMT) reduction. Having improved telecommunications would allow business to locate in Winston, allowing jobs to be closer to where people live, and would allow a range of travel options that are presently only partially available to people that live in limited service areas.

**Traffic Accidents**

Traffic accident data for the City of Winston was obtained from ODOT and reviewed for the period 1/1/96 to 12/31/00. The following Table 2 provides a summary analysis of these accidents.

| TABLE 2 |
|-----------------|-----|-----|-----|-----|-----|
| **Winston Accidents Summary Analysis** |     |     |     |     |     |
| Fatal | 0 | 1 | 0 | 0 | 0 |
| Non-Fatal | 14 | 9 | 7 | 8 | 9 |
| Property Damage Only | 13 | 11 | 14 | 9 | 8 |
| Total | 27 | 21 | 21 | 17 | 17 |
| People Killed | 0 | 1 | 0 | 0 | 0 |
| People Injured | 23 | 16 | 11 | 10 | 12 |
| Trucks | 1 | 0 | 2 | 1 | 0 |
| Dry Surface | 23 | 17 | 13 | 12 | 12 |
| Wet Surface | 4 | 4 | 8 | 5 | 5 |
| Day | 25 | 16 | 18 | 16 | 12 |
| Dark (Night) | 2 | 5 | 3 | 1 | 5 |
| Intersection | 15 | 6 | 10 | 6 | 6 |
| Off-Road | 1 | 6 | 1 | 4 | 6 |
| Angle | 2 | 1 | 2 | 1 | 2 |
| Rear-End | 8 | 5 | 6 | 3 | 7 |
| Turning Movement | 13 | 10 | 9 | 8 | 4 |
| Parking Movements | 1 | 0 | 0 | 0 | 0 |
| Fixed/Other Object | 1 | 2 | 0 | 3 | 1 |
| Backing | 2 | 2 | 3 | 1 | 3 |
| Pedestrian | 0 | 0 | 1 | 1 | 0 |
Transportation Safety

A summary of accidents reported in Winston from January 1994 to December 2000 was assembled from ODOT records and is summarized in Table 2 on the preceding page. Accidents reported for intersections are listed by severity and type. As the table shows, most accidents in the City of Winston result from turning movements and rear-end collisions.

The location and number of reported accidents is illustrated on Map 8. The intersections having six or more accidents in the past three and a half years are all located along Highway 42. The Highway 42/Civil Bend Avenue intersection had the most reported accidents, a total of nine, with seven collisions being rear-end accidents which may be the result of vehicles following too closely or driving too fast in an urban area.

PREVIOUS PLAN EFFORTS AND FINDINGS

The City of Winston has undergone or participated in several recent planning activities that impact in whole or part the development of this Transportation System Plan. Recent plans include:

- Greater Roseburg Area Transportation Study
- Winston Local Street Network Plan
- Highway 42 Corridor Plan
- Draft Update of the Oregon Highway Plan
- Douglas County Transit Feasibility Study
- Douglas County Transportation System Plan
- Douglas County Population Projections

The following is a brief synopsis of each plan effort and how it effects the development of the Winston TSP. Each of these plans have been reviewed in its entirety, and salient parts have been included or used in the preparing this TSP.

GREATER ROSEBURG AREA TRANSPORTATION STUDY (GRATS)—The GRATS was a planning study initiated by the Oregon Department of Transportation (ODOT) after the initial passage of the Transportation Planning Rule (TPR) in 1993 by the Oregon Legislature. Once passed, it became clear that the analytical basis for local transportation planning needed to be improved, and the TPR established a timeline by which local agencies needed to update the transportation element of their local comprehensive plan or TSPs. The GRATS was designed to give Roseburg, Winston, and the surrounding Douglas County area the analytical basis they needed to develop their TSPs.

This document’s main concern, with respect to Winston, is an effort to establish a more balanced jobs-to-housing ratio. To do this, the document has slightly decreased total housing in Winston and more than doubled the employment base for the community. This was in an effort to reduce forecast congestion on Highway 42 from I-5 to Main Street in Winston by reducing the total commuter demand during the peak hour.

The GRATS also identifies Winston as a mixed use and medium density node
for intensification of land use. Under the preferred alternative, Winston is forecast to develop with small lot single family development of about 9 units per acre and multi-family units of about 12 units per acre. Employment densities are increased to 40 employees per acre for retail developments and 80 employees per acre for office development.

**WINSTON LOCAL STREET NETWORK PLAN** — The LSNP was developed concurrently with the GRATS. The LSNP is far more detailed in its analysis of transportation within the City of Winston. There are several recommendations in this plan that have significantly impacted the development of the TSP. The LSNP covers all modes of transportation within Winston and establishes a comprehensive project list designed to improve local circulation.

This document emphasizes the current dependence on Highway 42 and Main Street for circulation within the community. This ultimately fractures the community with overcrowded arterials that inhibit pedestrian movement and decrease community livability. The Local Street Network Plan focuses on improving circulation within the community and decreasing dependence on the City’s two main arterials. To do this it has established several links in the street network that connect neighborhoods, promote easier bicycle and pedestrian access, and increase the utility of the local street system for circulation within town. The LSNP also has recommendations for bicycle and pedestrian improvements.

The LSNP also included an inventory of local streets and facilities that was updated for the TSP effort. Other significant features of the LSNP are the analysis done for levels of service, an historical look at accidents in the community, which is updated for the TSP, and cost estimates for the improvements suggested, which also have been updated to reflect inflation over the last three years.

**HIGHWAY 42 CORRIDOR PLAN** — This document focuses on the Highway 42 facility as it relates to statewide mobility and its operation, maintenance, and improvement as the road traverses southwestern Oregon from Roseburg to Coos Bay. The Plan focuses on policies for the operation, maintenance, and improvement of the facility; the Plan focuses more on the physical features of the road and what project needs and priorities exist for improvement of the highway over the next twenty years.

The Plan also recommends keeping pace with the significant improvements that have already been made to the road, in an effort to attract freight movements to this alignment rather than the Highway 38 alignment. This supports projects that enhance this facility from Glenhart to Brockway Road. Finally, the Corridor Plan identifies urban areas for potential traffic calming measures. This can include things like narrowing the lane width in town to enhance pedestrian movement across the facility and reduced speeds and signalization of intersections for a more orderly flow and to enhance local traffic accessibility.
THE OREGON HIGHWAY PLAN— The plan states: “The through function on major freight routes designated in this plan will be protected because of the route’s importance to the State’s economy. An existing urban center on major freight routes may be acceptable as an STA, but proposed centers that straddle highways will not. Centers will be encouraged to be off the highway system.

This highway plan will also address the issue of access management, much like the current plan. However, the access spacing requirements for Statewide highways in developed urban areas have not been determined at this time. Further detail will be needed to understand the range of impacts on Highway 42 in Winston. This plan also addresses appropriate traffic volume to capacity criteria for State highways.

DOUGLAS COUNTY TRANSIT FEASIBILITY STUDY— This document looks at placing a park-n-ride facility in Winston, with hourly fixed route service available, basically along Highway 42. This study would establish service between Winston on the southern end and Sutherlin on the northern end, with frequent service to the Umpqua Community College.

DOUGLAS COUNTY TRANSPORTATION SYSTEM PLAN— The Transportation Planning Rule requires that local TSPs be consistent with Regional or County TSPs. Douglas County submitted their TSP to Department of Land-use Conservation and Development (DLCD) for review and 45 day comment period in mid 1997. The County had pushed back their original submittal date to allow time to meet ODOT concerns with the Draft Plan and Land Use Development Ordinance. The Department of Land Conservation and development have appealed the County TSP on two general issues: alternate (minimized) street standards and pedestrian facilities. The remainder of the County TSP was not appealed and is considered completed. The City has several county roads within the Winston City Limits & Urban Growth Area and is anticipating County funded upgrades to these facilities. The City is actively working with Douglas County to coordinate these with City projects.

DOUGLAS COUNTY POPULATION PROJECTIONS— Oregon Planning Rules require Douglas County to provide population forecasts for its areas, as well as the incorporated cities within its boundaries. The County’s forecast, however, was appealed to the Land Use Board of Appeals (LUBA) by the Department of Land Conservation and Development (DLCD). The appeal was being made because the DLCD believes the County’s projections are too high. The County prevailed in the LUBA decision and the population analysis was upheld. The coordinated population growth rate for the City of Winston was 3%. The following Table 3 shows the projected population for the City of Winston for the planning periods for this TSP. However, it is important to note that the 2000 Census tabulation for the City of Winston was 4613.
TABLE 3
POPULATION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>4724</td>
<td>5476</td>
<td>6346</td>
<td>7360</td>
<td>8532</td>
<td>9052</td>
</tr>
</tbody>
</table>

Public Transportation

The City of Winston owns and operates a Dial-a-Ride service that is primarily used by elderly and disabled patrons. The service is run on time and money donations with the City of Winston and the County providing partial financial support for transportation services. The following Table 4 shows the rides provided by the City’s Dial-a-Ride service from 1993 to 2001.

Table 4
Winston Dial-a-Ride
Public Transit Ridership (People Trips)

<table>
<thead>
<tr>
<th>Ridership Period</th>
<th>Elderly</th>
<th>Disabled</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>2,412</td>
<td>830</td>
<td>1,517</td>
<td>4,759</td>
</tr>
<tr>
<td>1994</td>
<td>4,470</td>
<td>1,244</td>
<td>1,241</td>
<td>6,955</td>
</tr>
<tr>
<td>1995</td>
<td>6,501</td>
<td>1,545</td>
<td>932</td>
<td>8,978</td>
</tr>
<tr>
<td>1996</td>
<td>6,124</td>
<td>1,092</td>
<td>480</td>
<td>7,696</td>
</tr>
<tr>
<td>1997</td>
<td>5,633</td>
<td>858</td>
<td>1,554</td>
<td>8,045</td>
</tr>
<tr>
<td>1998</td>
<td>6,560</td>
<td>759</td>
<td>1,684</td>
<td>9,003</td>
</tr>
<tr>
<td>1999</td>
<td>7,089</td>
<td>538</td>
<td>1,447</td>
<td>9,074</td>
</tr>
<tr>
<td>2000</td>
<td>7,700</td>
<td>723</td>
<td>1,595</td>
<td>10,018</td>
</tr>
<tr>
<td>2001</td>
<td>8,694</td>
<td>924</td>
<td>1,680</td>
<td>11,298</td>
</tr>
</tbody>
</table>

Presently Winston is the southern terminus of a fixed route transit system operated by the Umpqua Regional Council of Governments (URCOG). This service provides transportation to the greater Roseburg area, extending to Sutherlin in the north and Winston in the south. The service has three loops and mainly provides service to Umpqua Community College, medical and commercial centers in Roseburg.

It is anticipated that the Dial-a-Ride service will meet demand for public transportation services over the duration of this plan precluding the need to implement a more intensive type of service. Ridership on the current system has stabilized and, based on growth projections for the community, should handle future demands over the life of this plan, with moderate growth in the program.
SECTION 4
Traffic Resulting From Growth
Section 4
Traffic Resulting From Growth

Winston Urban Area Growth
The Winston UGA is a relatively low density developed community with large areas of open undeveloped land surrounding the City. However, the South Umpqua River forms a barrier to the City developing south and limits the potential for future growth around the east and south sides of the City as is shown on the following Map 9. The City is projected to experience a 4% rate of growth as illustrated by projected population increases shown in the preceding Table 3. If employment growth in Winston increases in proportion to the population growth of Winston in relation to Douglas County, approximately 670 jobs would be added during the next 20 years.

The estimated 2002 population is 5,012 with the projected 20-year population of 9,052. The household size for Winston in 2000 was 2.61 people. If the household size for the area remains the same, this increase of 4,040 residents for the City will result in about 1,548 new households by the end of the planning horizon for this TSP in 2022. The traffic resulting from this growth is anticipated to be modest and will disperse relatively evenly onto the existing and planned street system for the City and Urban Growth Area. If the average number of vehicle trips generated per household in the Winston Area is 10 per day, the annual increase in traffic would be approximately 774 vehicle trips as a result of residential growth in the area.

PLANNED GROWTH

Approximately 300 acres of land designated by the City's Comprehensive Plan for residential use is either vacant or underdeveloped. Almost all of this will need to be developed to accommodate the anticipated residential growth if the average density of new development is 6 houses per acre. About 258 acres will be needed to accommodate the planned addition of 1,548 dwelling units within the City of Winston and Urban Growth Area. It is clear that a substantial portion of this new residential development will occur to the north of Highway 42 and east of Old Highway 99 where the bulk of the undeveloped residential land is located. The majority of anticipated residential growth will be single-family.

Commercial is mostly located along Highways 42 & 99. There are a wide variety of employment categories that can be accommodated on land designated for commercial use. Douglas County has been transitioning from one based on agricultural, timber and extractive industries. Like much of the rest of the state and the region, the area has been changing to one with more retail and service jobs. For the purposes of estimating the traffic growth for the next 20 years, a combination of new employment is assumed to be in the retail and service

The following Table 5 lists the traffic expected as a result of the new growth anticipated in the next twenty years. The trip generation rates are approximations that correspond with the variety of uses that fall into the categories indicated. For the purposes of the analysis, equal growth in two employment sectors was
assumed.

**TABLE 5**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Rate</th>
<th>Total Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Dwellings</td>
<td>945 houses</td>
<td>10 trips/dwelling unit</td>
<td>9,450</td>
</tr>
<tr>
<td>Retail employment</td>
<td>225 employees</td>
<td>10 trips/employee</td>
<td></td>
</tr>
<tr>
<td>2,250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service employment</td>
<td>225 employees</td>
<td>7 trips/employee</td>
<td>1,575</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Total Trips 13,275</strong></td>
</tr>
</tbody>
</table>

**Increases in Residential Densities**

The usual densities for single-family residences are in the range of 4 to about 6 dwelling units per acre. Assuming 20 percent of land is devoted to road rights-of-way, a subdivision with 8000 square foot residential lots has a density of approximately 4.5 dwelling units per acre. In fact, this is very similar to the configuration and density of the newer residential areas of Winston.

Medium density multi-family dwellings usually fall in the range of about 8 to 12 dwelling units per acre. This is likely to be the maximum density that will be constructed in the City of Winston and adjacent Urban Growth Area.

Increases in residential densities have at least two benefits from a transportation standpoint. First, the increase in density can reduce driving distances. A given population can be contained in a smaller space. This reduces by a small degree, the distance from each house to various destinations. Since the average vehicle trip is several miles in length, a reduction resulting from an increase in densities would not likely make a significant difference in the annual mileage traveled within the community.

A more significant difference may be in relation to walking and transit trips. The transit industry uses a standard of one-quarter mile to determine whether one has transit service available. An increase in residential densities from 4.5 to 6 dwelling units per acre can increase the number of houses within walking distance of a bus stop by one-third. Likewise, increases in density can reduce walking distance for other types of trips, perhaps by just enough to change some of them from driving trips to walking or bike trips. Map 9 is the City of Winston & Urban Growth Area Future Land Use Plan which illustrates the patterns of growth for the area.

Studies in larger communities indicate that housing density and overall employment density are the key variables that influence the demand for public transit. The City of Winston’s Goals, Objectives & Policies promote in-fill development, one of the easiest and most cost-effective methods of promoting increased densities for residential development. If there is a desire to increase transit demand by increasing residential densities further, it may be appropriate to review the lot sizes, setbacks, and other factors influencing residential development density. This TSP is an element of the program underway to update the Winston Comprehensive Plan.
Concentration of Commercial Establishments
Traditional downtown areas and other concentrations of retail establishments are typically more supportive of transit and alternatives modes of travel. Among other things, the traditional downtown area usually has buildings located in much closer proximity to streets than do the modern, “big box” establishments. “Big box” establishments such as Wal-Mart have increasingly dominated the retail market. Where large retail establishments are used, smaller stores are sometimes clustered around them. This approach may, at least, provide opportunities for shared parking and reduce walking distances between adjoining establishments.

For Winston, the key to concentration of commercial establishments is a benefit for transit service. As indicated in the preceding discussion of residential densities, the density of employment is the second key element for generating transit use.

Mixed-Use Development Patterns
A mixed land use development concept is one that provides both commercial and residential uses in close proximity. The typical mix includes small-scale retail establishments and services, but may also include offices and other employment sites. The mixed-use concept is reminiscent of the inclusion in neighborhoods of the “corner grocery” store as well as the neighborhood pharmacy, dry cleaners, or the newer establishments such as video stores. The small insurance office, bookkeeping services, and other businesses that provide services are similar uses that may mix reasonably with residential uses.

In recent years, the concept of mixed-use developments has received strong support. In the discussion of mixed land use concepts, Winston is small enough that much of the community already meets the definition of a mixed-use development. Indeed, some of the mixed-use developments constructed in recent years in large metropolitan areas are larger, both geographically and in population, than is Winston. Many of Winston’s residential neighborhoods already lie within walking distance of the downtown.

Large amounts of the vacant land designated for residential growth in Winston lays both in the western and eastern sides of the city. Rezoning of some of the commercial parcels to residential near the downtown core of the City would provide a better mix of uses in that area. Parcels currently designated for commercial zoning that might be candidates for mixed-use development or for residential use include some larger parcels along Highway 42.

The astute reader will note an apparent contradiction between the mixed-use development concept and the concentration of commercial establishments. There is in fact a conflict between them. Those issues do need to be considered in light of the community’s overall goals including the provision of affordable housing, preservation of open space, and all of the other factors that relate to Winston’s livability.
TRANSPORTATION SYSTEM CHANGES

Enhancing the Local Street System

Like many communities, Winston has developed and grown around the state highway. Highway 42 and Old Highway 99 serves as the community’s “Main Streets.” Numerous businesses have subsequently developed along these Highways.

As the region grows, the state highway system can be expected to carry additional regional traffic. Highway 42 is a major freight movement route with access from I-5 through Winston to the Oregon Coast at Coos Bay. New development in Winston will increase traffic volumes on Highway 42. The impact on the highway will be especially important if new developments are oriented to the highways and if the local street system does not provide attractive alternative routes. This TSP proposes undertaking changes in the local street system to serve local traffic and provide a means for traffic circulation within areas of the City that will not require using Highway 42 and Old Highway 99 for virtually all travel within the Winston.

Protection of the Functionality of the State Highway System

Because of severe limits on resources available for modernizing state highways or building new highways, ODOT has placed a priority on maintaining the existing system. Access management is one of the key tools being used by ODOT to retain the functionality of the system and to maintain the appropriate level of mobility. The 1999 Oregon Highway Plan specifies the access management standards for the state highway system. The Highway Plan’s access management standards seek to promote a balance between access to adjacent properties and the need to provide adequate capacity for through traffic. The standards are generally considered to be more restrictive than the previous versions.

Each highway improvement project is approached on an individual basis and must account for unique characteristics of right-of-way width, access, and topography. When the design of improvements is undertaken, special efforts are usually made to reduce access. Access adjustments typically include narrowing extra-width driveways, eliminating second and third driveways serving individual parcels, and by combining access with that provided for adjacent parcels. To the extent possible, access is provided to intersecting streets rather than the state highway. To the extent that Winston’s land use policies support such actions, the implementation of access management measures on the state highway system within the UGB will be easier. Land use policies that support the state’s access management policies will also make it less expensive to implement future improvement projects, thus increasing the likelihood that such improvements will be advanced for inclusion in the State Transportation Improvement Program.

Pedestrian and Bicycle System Improvements
The City of Winston’s policies already provide for construction of sidewalks with new development. The street standards proposed in the Transportation System Plan provide even more specific provisions for sidewalks and bike lanes for the city’s street system. The provision of these facilities will supplement the effect of land use actions (including higher density developments, mixed use, and in-fill development) to help achieve some traffic reductions in the areas where bike and pedestrian facilities are to be provided in the future.

**Public Transportation Demand**

It is assumed that the need for public transportation services will grow at the same rate as the population. An average of people trip totals from 1993 to 1997 was divided by the number of households in 1995. This gave information on rides per household, based on a rolling 5-year average. The average of 4.41 rides per household was used to determine total trip demand in 2020. Based on these calculations, demand for rides should reach approximately 18,800. This demand will continue to largely be from elderly and disabled patrons.
SECTION 5

Future Transportation Needs
SECTION 5
FUTURE TRANSPORTATION NEEDS

TRAFFIC CAPACITY ISSUES
Historically, traffic has increased at a slightly higher rate than has population. Factors that have contributed to this trend include smaller households (fewer persons per household), higher labor force participation (more two-worker families), and increased automobile ownership (more households with two and three autos). The population and employment figures would represent increases of approximately 27 percent between 1997 and year 2020. The daily traffic generated by new development as shown in the preceding Table 5 would represent an increase estimated at 35 percent over current traffic volumes.

Traffic increases will be greatest on a percentage basis at the fringes of the community where current traffic volumes are low and where land is vacant but proposed for development. On an absolute basis the traffic increases will be greatest on major routes that already carry significant amounts of traffic. Collector streets serving vacant land designated for residential use will experience high percentage increases in traffic. Probably the most significant examples of concern to Winston would be the streets serving the residential land north of Highway 42 and Lookingglass Rd. Development of this land inside the urban growth boundary is calculated to produce as many as 4,000 daily trips. Since access to this planned residential area is basically restricted to two major routes, the calculation of traffic increases on the collector streets is fairly easy. Other collector roads which can be expected to have significant percentages increases in traffic volume measured on a daily basis are likely to range from a few hundred to a few thousand vehicles per day.

The arterial and major collector streets, including Highway 42, Old Highway 99 and Lookingglass Road, will experience significant traffic volume increases. Vacant and under-utilized parcels designated for commercial and industrial use abut these major roads. As shown in Table 5, retail and service employment has high trip generation rates. Retail uses, such as fast food restaurants and convenience stores have particularly high trip generation rates. Where these uses abut the arterial streets, significant increases in traffic can be expected. In addition, the arterial streets can be expected to experience significant increases in through traffic. The most impacted through traffic routes in Winston are Highway 42 from the east city limits to the west city limits, Old Highway 99 from the intersection with Highway 42 to the south city limits and Lookingglass Road from the intersection of Highway 42 to the west city limits.

The most important aspect of traffic increases is the relationship between expected traffic and the capacity of the individual streets. The highest priority for local streets is serving adjacent properties. They generally have a design capacity of 200 to 1,200 vehicles per day. Residential Collector Streets have a dual purpose: they serve adjacent uses and carry a portion of through traffic destined for more distant locations. Residential Collector Streets have a design capacity of 1,200 to 6,000 vehicles per day. Major Collector Streets place a higher priority on carrying through traffic and a design capacity of up to 10,000
vehicles per day. Arterial Streets are designed to give priority to carrying high traffic volumes with minimum service to adjacent lands. Design capacities of 10,000 to more than 30,000 vehicles per day are commonly used for arterial streets.

FUTURE TRAFFIC CAPACITY DEFICIENCIES
Based upon the analysis of existing traffic volumes and the expected traffic generated by planned development, there do not appear to be significant deficiencies related to the capacity of the roads in Winston. The expected traffic volumes on Winston’s collector streets are not expected to exceed their capacity. Likewise, the traffic volumes on arterial streets, Highway 42, Old Highway 99 and Lookingglass Road, are not expected to exceed the capacity of five-lane arterial streets. There are, however, some specific locations where capacity issues may be anticipated.

Four specific locations have been identified where increased traffic may result in need for capacity improvements. Three locations of concern are intersections of collector streets with Highway 42, Old Highway 99 and Lookingglass Roads.

The potential capacity deficiencies are summarized in the following Table 6.

TABLE 6

<table>
<thead>
<tr>
<th>Facility</th>
<th>Location</th>
<th>Existing Condition</th>
<th>Capacity Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highway 42</td>
<td>Pepsi Rd</td>
<td>Stop-controlled</td>
<td>Proposed closing Winston Section Rd will increase traffic with limited sight distance east by So Umpqua River bridge making turns onto highway hazardous.</td>
</tr>
<tr>
<td>Highway 42</td>
<td>Lookingglass</td>
<td>Stop-controlled</td>
<td>Turning vehicles must slow or top in 45 MPH travel lanes</td>
</tr>
<tr>
<td>Highway 42</td>
<td>Old 99</td>
<td>Signal controlled</td>
<td>Access/properties on east side of intersection confusing with no signal control from east accesses</td>
</tr>
<tr>
<td>Highway 42</td>
<td>Brockway Rd</td>
<td>Stop controlled</td>
<td>Important freight intersection expected to fall below v/c standards/existing eastbound right turn on private property</td>
</tr>
</tbody>
</table>

The existing signalized intersection at Highway 42 and Old Highway 99 was specifically analyzed to determine whether this represented a likely capacity deficiency. It was determined that the existing intersection configuration could
accommodate traffic increases of up to 70 percent without exceeding standards established for the highway. A right turn lane westbound is needed to improve traffic flow.

Highway and Street System Connectivity Needs

Connectivity project needs illustrated on the following Map 10 were the starting point for the Transportation System Plan to begin to prioritize needs and improvements that will be built over the life of the plan. Several of these projects, along with others, have been prioritized for inclusion in the plan and, ultimately, construction. Connectivity projects that are included in the plan include:

- Extend Ronald Avenue to Darlene Street/Brosi Orchard Road, and extend Darlene Street to Highway 42/Lookingglass Road
- Extend Tokay Street to Winston Section Road
- Extend Jorgen Street from Ronald Avenue to Winston Section Road
- Extend Thiele Street to Ford Street
- Extend Johnson Road to Tokay
- Extend Edwards Street to Grape Street
- Connect Abraham Avenue to Brockway Road

Roadway Design Deficiencies

Like most communities, the City of Winston has developed from a small rural center. As the community has developed, development occurred along the roads leading to outlying areas. For the most part, houses were constructed individually without significant improvements to the abutting streets. Not until recently did development occur as subdivisions which require curb, gutter, sidewalks and paving to be installed before houses are constructed.

Many of the streets within the city are merely rural streets with houses and businesses constructed on the adjacent property. Most of these rural roads feature paved travel lanes, either gravel or paved shoulders, and open ditches for drainage. Newer streets including those constructed in connection with subdivisions in the last twenty to thirty years feature curbs, gutters, and sidewalks. These streets meet “urban standards.” Streets designed to urban standards are generally considered to be less expensive to maintain than are rural streets. They are also superior to the rural streets since they make provisions for pedestrians and bicyclists. These advantages have led to the adoption of design standards for all new streets and policies of improving existing streets to urban standards.
Map 10
Highway and Street System Needs

The inclusion of an improvement in the TSP does not represent a commitment by ODOT to fund, allow, or construct the project. Projects on the state highway system that are contained in the TSP are not considered “planned” projects until they are programmed into the Statewide Transportation Improvement Program (STIP). As such, projects proposed in the TSP that are located on a State highway cannot be considered for future development or land use actions until they are programmed into the STIP. Highway projects that are programmed to be constructed may have to be altered or cancelled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

The following is a list of street and highway improvements needed for the City of Winston and UGB. The following Map 11 illustrates the location of these needs.

1) Widen Highway 42 west from Glenhart Avenue to Milepost 71
2) Widen and resurface Lookingglass Rd from Abraham Avenue to Glenhart Ave
3) Extend Ronald Ave to Brosi
4) Extend Tokay to Winston Section Road
5) Extend Jorgen Street from Ronald Avenue to Winston Section Road
6) Improve Winston Section/Pepsi Road to collector standards from Highway 42 to Thompson Avenue
7) Extend Thiele Street to Ford Street
8) Install acceleration and deceleration lanes on Highway 42 at the Pepsi Road intersection and the Lookingglass Road intersection
9) Install a traffic signal at the Lookinglass Road/Highway 42 intersection as warrants justify
10) Upgrade remaining section of Brosi Orchard Road to local street standards
11) Upgrade Johnson Road
12) Connect Main St to Grape Street
13) Upgrade Brockway from Douglas Ave to Lookingglass Rd
Map 11
Highway and Street System Needs
Public Transportation System Needs

Presently the Dial-a-Ride system is staffed with volunteers and has access to one van and one sedan. Douglas County provides reimbursement for transporting senior and disabled people to the community center. This, however, is a fairly specialized service and funding is from year to year.

To meet future demand, an additional van is needed. Presently one van is used, and it still has some additional capacity. The addition of a second van will ensure that timely service is available during high demand times. There may be a need for more orderly reservations. At present, when a call comes in, the City calls in a driver specifically to provide the ride. If another call comes in, the driver provides that ride after the first is complete. As the area grows, there may be a need for regular driver hours and advance reservations, while still allowing some flexibility. This will allow coordination of trips as needed. Finally, there will be a need for additional volunteer drivers to serve the anticipated volume.

Pedestrian/Bike System Needs

Sidewalks should be provided on both sides of all future arterial, collector, and local streets within the City of Winston. The only collector or arterial streets which have sidewalks at present are Old Highway 99 (County Road 387), Highway 42, Glenhart Avenue, and Thompson Avenue. Winston is a very pedestrian oriented community with very few sidewalks and pedestrian facilities. Landscaping and other treatments need to be installed that crate a more inviting environment for pedestrians.

Striped on-street bicycle lanes should be provided on all arterial streets, and on collector streets. Lanes should also be provided anywhere that it may be necessary to ensure safe bicycle travel. In some instances, the provision of separately striped bicycle lanes on arterial and collector streets may require street widening and perhaps the acquisition of addition right-of-way.

Both Gregory Drive and Darrell Avenue are very long blocks that discourage residents from walking to destinations within the City. Pedestrians avoid walking because they must travel so far out of direction to get to the downtown area, Community Center, and other locations. Providing a mid-block pedestrian path would make the Winston town center more accessible to pedestrians on the east side of the City.

An off-street bicycle path should be provided between Cary Street and Civil Bend Avenue in the vicinity of Tumlin Avenue. This would allow bicyclists to access the elementary school from neighborhoods on the west side of Highway 42 without having to access Highway 42 or Lookingglass Road. Currently, there are no pedestrian/bike connections between Carry Street and Civil Bend Avenue and children walking between McGovern Elementary School and their homes must walk on either Highway 42 or Lookingglass Road.
The bicycle path and pedestrian path connecting the City with Douglas High School is a valuable beginning for an area-wide network of paths. Other needs to establish a good pedestrian/bike path network include the following improvements which also shown on the following Map 12.

- Along Thompson Avenue from County Road 387 east to the area of the regional sewer line, then northward to Highway 42 north of town.
- From Thompson Avenue south directly to the river.
- From Highway 42 west along Lookingglass Road to Brockway Road, then south to Highway 42, then east on Highway 42 to the High School.
- From the High School east along Highway 42, then north on Rose Street to Jorgens Street, then east to Highway 42, then to the Lookingglass Road intersection.
- From Suksdorf Street east to Ronald Street, then north on Ronald to Brosi Orchard Road, then east to the sewer line easement.
- Along a proposed collector street from Brockway Road to Highway 42 on the north side of Lookingglass Creek.
- Along Brockway Road form Lookingglass Road, south to the Urban Growth Boundary.
- Add an off-street bicycle/pedestrian path between Cary Street and Civil Bend Avenue.
- Improve pedestrian way on both sides of Cary Street.
- Add a pedestrian path from Gregory Drive to Darrell Avenue
- Provide pedestrian path, Highway 42, Sherry Street, and Rose Avenue.
- Striped on-street bicycle lanes should be developed on all collector and arterial streets.
- Pedestrian path on both sides Grape Street.
- Improve pedestrian path on both sides of Newton Drive.
- Improve pedestrian way along Safari Road south.
- Construct pedestrian path on both sides of Brosi Orchard Road.

Air
The City of Winston is served by the Roseburg Municipal Airport. There are no airport facilities planned for the Winston area.

Rail
The City of Winston does not have railroad facilities within the UGB. The Green District between Winston and I-5 has railroad service and the Dillard area south of the City has rail facilities.

Water
Highway 42 provides access to Coos Bay and the Port facilities for shipping and receiving freight via water for the area.
Map 12
Bicycle and Pedestrian System Needs
SECTION 6

Goals, Objectives & Policies
GOALS, OBJECTIVES AND POLICIES

General Transportation Goal: The overall goal of the Winston Transportation System Plan is to provide a safe and efficient transportation system for moving people and goods within/through the urban area.

1. GENERAL TRANSPORTATION OBJECTIVES
   A. The City will implement its transportation goals through this Transportation System Plan (TSP) and will review and update the TSP during periodic review, or more frequently if necessary.
   
   B. The rapid and safe movement of fire, medical and police vehicles shall be an integral part of the design and operation of the transportation system.
   
   C. The City will coordinate transportation planning and construction efforts with Douglas County and ODOT.
   
   D. The implementation of transportation system and demand management measures, enhanced transit service, and provision for bicycle and pedestrian facilities shall be pursued as a first choice for accommodating travel demand and relieving congestion in a travel corridor, before street widening projects are considered.
   
   E. The construction of transportation facilities will be timed to coincide with community needs, and will be implemented in a way that minimizes impacts on existing development. Where possible, the timing of facility maintenance will be coordinated with other capital improvements to minimize cost and avoid extraordinary maintenance on a facility scheduled for reconstruction or replacement.
   
   F. Transportation facilities should be designed and constructed to minimize noise, energy consumption, neighborhood disruption, economic losses to the private or public economy and social, environmental and institutional disruptions, and to encourage the use of public transit, bike and pedestrian facilities.
   
   G. Aesthetics and landscaping will be considered in the design of the transportation system. Within the physical and financial constraints of the project, landscaping, and where appropriate, public art, shall be included in the design of the transportation facility. The City, private entities or individuals to enhance the livability of the area shall use various landscaping designs, suitable plants and materials.

2. LAND USE OBJECTIVES
   A. The City will consider changes to the Winston Zoning Ordinance that will more effectively implement Comprehensive Plan goals that encourage mixed-use and high density development near the city center to reduce private vehicle trips by increasing access to transportation alternatives.
   
   B. The City should implement plans for the downtown area and the area designated for future downtown development that include mixed-use, high-density (where appropriate), transit oriented and pedestrian-friendly design standards.
C. To reinforce the implementation of this transportation plan in land use decision making, corridors for future auto, bicycle and pedestrian facilities have been adopted into this plan.

D. The City will adopt a new Subdivision and Land Partition Ordinance that includes simplified Planned Unit Development requirements, and that includes design standards and review criteria for adequate transportation facilities. Such provisions shall include, but are not limited to, connections between neighborhoods for vehicles, bicycles and pedestrians, access management standards, and street width and parking requirements.

E. The City should revise the Winston Zoning Ordinance wherever appropriate, especially the articles regarding Off-Street Parking, Site Development Plan review and Conditional Use Permit review, to add or improve transportation-related design standards and review criteria. Such revisions shall include, but are not limited to, connections between neighborhoods for vehicles, bicycles and pedestrians, access management standards, and street width and parking requirements.

F. The City will coordinate land use planning with transportation planning by notifying the City Administrator, Traffic Committee, Public Works Director, City Engineer, Fire Department and Police Department of all planning proposals that include transportation components. All departments will be invited to make suggestions for design improvement and conditions of approval, and to participate in pre-application conferences whenever practical.

G. The City will coordinate land use planning activities with the Oregon Department of Transportation and Douglas County. To this end, the City will provide notice of pending decisions and invite ODOT and/or Douglas County to make suggestions for design improvement and conditions of approval, and to participate in pre-application conferences whenever practical.

3. STREET GOAL, OBJECTIVES & POLICIES

Goal: Provide a comprehensive system of streets and highways that serves the mobility and multi-modal travel needs of the Winston Urban Area.

Objective 1: Develop a comprehensive, hierarchical system of streets and highways that provides for optimal mobility for all travel modes throughout the Winston Urban Area.

Policies:
A. The City will fulfill its system wide travel capacity needs through the use of multiple travel modes within the public rights-of-way.

B. The City’s street system will contain a network of collector streets that connect local traffic to the arterial street system.

C. The City shall classify streets and highways within the Winston Urban Area based on how they will function within the overall system.
D. The City will periodically review and revise street design standards. The City shall consider incorporating traditional neighborhood design elements into their Public Facilities Standards, including, but not limited to, planting strips, minimum necessary curb radius, alleys and “appropriately” sized streets based upon the anticipated needs of the area.

E. To facilitate pedestrian crossing, discourage through traffic, and reduce speeds, local streets should not be excessive in width. However, streets must have sufficient width to provide emergency access.

F. The City will integrate traffic calming techniques into city street design standards to reduce automobile speeds within new and existing neighborhoods.

G. The City should maintain street surfaces to achieve maximum pavement life so that road conditions are good and pavement maintenance costs are minimized.

H. The City will prohibit development of new unpaved roads.

I. The City should discourage new development on unpaved roads.

J. The City should discourage cul-de-sac or dead-end street designs whenever an interconnection alternative exists. Development of a modified grid street pattern will be encouraged for connecting new and existing neighborhoods during subdivisions, partitions, and through the use of the Public Facilities Plan.

K. The City will require street dedications as a condition of land development.

L. Improvements to streets in addition to those in or abutting a development may be required as a condition of approval of subdivisions, land partitions, comprehensive plan changes and re-zoning requests.

Objective 2: Design City streets in a manner that: maximizes the utility of public right-of-way, is appropriate to their functional role, and provides for multiple travel modes, while minimizing their impact on the character and livability of surrounding neighborhoods and business districts.

Policies:

A. The City of Winston will design its streets to safely accommodate pedestrian, bicycle and motor vehicle travel.

B. Arterial and collector street intersections will be designed to promote safe and accessible crossings for pedestrians and bicyclists.

C. Left-turn pockets should be incorporated into the design of intersections of arterial streets with other arterial and collector streets, as well as collector streets with arterial and other collectors.

D. The City of Winston will develop “Standard Details” for design of all streets within the Winston Urban Area, in cooperation with Douglas County and ODOT.
E. The City of Winston should apply the street design standard that most safely and efficiently provides motor vehicle capacity appropriate for the functional classification of the street.

F. Wherever possible the City of Winston should incorporate safely designed, aesthetic features into the streetscape of its public rights-of-way.

G. When existing streets are widened or reconstructed they should be designed to the adopted street design standards for the appropriate street classification. Adjustments to the design standards may be necessary to avoid existing topographical constraints, historic properties, schools, cemeteries, existing on-street parking and significant cultural features. The design of the street should be sensitive to the livability of the surrounding neighborhood.

H. Impacted neighborhoods should be invited to review proposed designs before construction begins.

I. To maintain the utility of the public right-of-way for the mobility of all users, access location and spacing to arterial and collector streets will be controlled.

Objective 3: The City will continue to promote traffic safety by enforcing clear vision area regulations applicable to public and private property located at intersections. The existing clear vision area ordinance shall be reviewed and revised as needed to ensure that fences, hedges, foliage and other landscaping features do not obstruct the line of sight or drivers and cyclists entering intersections.

Policies:
A. The City will work with federal, state and other local government agencies to promote traffic safety education and awareness, emphasizing the responsibilities and courtesies required of drivers and cyclists.

B. Through its law enforcement resources, the City will continue to work to increase traffic safety by actively enforcing the City and State motor vehicle codes.

C. The City should place a higher priority on funding and constructing street projects that address identified vehicular, bicycle, and pedestrian safety problems than those projects that solely respond to automotive capacity deficiencies in the street system. Exceptions are those capacity improvements that are designed to also resolve identified safety problems.

D. The City will work to increase traffic safety by requiring private property owners to maintain vision areas adjacent to intersections and driveways clear of fences, landscaping, and foliage that obstruct the necessary views of motorists, bicyclists, and pedestrians.

E. The City should develop a process for identifying and addressing areas prone to traffic accidents.
Objective 4: Efficiently plan, design, and construct City-funded street improvement projects to meet the safety and travel demands of the community.

Policies:
A. The City will select street improvement projects from those listed in the Winston Transportation System Plan when making significant increases in system capacity or bringing arterial or collector streets up to urban standards. The selection of improvement projects should be prioritized based on consideration of improvements to safety, relief of existing congestion, response to near-term growth, system-wide benefits, geographic equity, and availability of funding.

B. To maximize the longevity of its capital investments, the City should design street improvement projects to meet existing travel demand and, whenever possible to accommodate anticipated travel demand for the next 20 years for that facility.

C. Proposed new arterial and collector street alignments will be surveyed and delineated after their adoption in the Winston Transportation System Plan. The determination of alignments will allow for the preservation of land for public rights-of-way and give advance notice to property owners and citizens of where future expansions of the street system will occur.

D. The City should involve representatives of affected neighborhoods and citizens in an advisory role in the design of street improvement projects.

Objective 5: A street system that is improved to accommodate travel demand created by growth and development in the community.

Policies:
A. The City will require Traffic Impact Analyses as part of land use development proposals to assess the impact that a development will have on the existing and planned transportation system. Thresholds for having to fulfill this requirement and specific analysis criteria shall be established in the Winston Public Facilities Standards.

B. The City should require new development to make reasonable site-related improvements to connecting streets where capacity is inadequate to serve the development.

C. The City may require new development to pay charges towards the mitigation of system-wide transportation impacts created by new growth in the community through established Street System Development Charges (SDCs) and any other street fees that are established by the City. These funds can be used towards improvements to the street system. Projects funded through these charges are growth-related and should be selected from the approved list and prioritized based upon the established criteria.

4. PUBLIC TRANSIT GOALS, OBJECTIVES & POLICIES

Goal: A transit system that provides convenient and accessible transit services to the
citizens of the Winston Urban Area.

**Objective 1:** Ensure that transit services be accessible to Winston Urban Area residences and businesses.

**Policies:**
A. The City of Winston will continue to support and maintain the Winston Dial-a-Ride Bus Program.

B. The City will work with the local transit provider to encourage transit services to be routed in a manner that, where practical, service coverage is provided within a _ mile walking distance of Winston Urban Area residences and businesses.

C. To encourage accessibility and increased ridership, the City should continue to encourage future transit-supportive land uses, such as mixed uses, multiple-family, and employment centers to be located on or near transit corridors.

D. Through its zoning and development regulations, the City will continue to facilitate accessibility to transit services through transit-supportive streetscape, subdivision, and site design requirements that promote pedestrian connectivity, convenience and safety.

E. The City should include the consideration of transit operations in the design and operation of street infrastructure wherever it is appropriate.

F. The City will support the continued development and implementation of accessible fixed-route and appropriate complementary “dial-a-ride” services.

G. The City of Winston will encourage connectivity between different travel modes. The Winston Public Transit facilities should be accessible by pedestrian, bicycle, bus and automobile travel modes.

H. The City should cooperate with the local transit provider to identify and include features beneficial to transit riders and transit district operations when developing plans for roadway projects.

I. The City should support the local transit providers efforts to provide pleasant, clean, safe, comfortable shelters along transit lines, at or near transit stops.

J. The City should install bike racks or lockers at transit stops when adequate financial resources are available.

K. The City should identify park and ride, bike and ride, and walk and ride lots in Winston to support ridesharing.

**Objective 2:** Increase overall daily transit ridership in the Winston Urban Area, to mitigate a portion of the traffic pressures expected by regional growth.

**Policies:**
A. Through rideshare programs and other Transportation Demand Movement (TDM)
efforts, the City should work with Winston employers and government agencies to encourage commuter transit ridership through voluntary, employer-based incentives such as subsidized transit passes and guaranteed ride home programs.

B. The City will work through the local public transit provider rideshare programs and other transportation demand efforts (TDM) to assist in the effective marketing of the local transit provider services to Winston Urban Area residents and businesses.

C. The City will encourage promotional and educational activities that encourage school children and other people to use public transit.

5. PEDESTRIAN GOAL, OBJECTIVES & POLICIES

Goal: To provide a comprehensive system of connecting sidewalks and walkways that will encourage and increase safe pedestrian travel.

Objective 1: The City of Winston will create a comprehensive system of pedestrian facilities.

Policies:
A. The City should establish evaluation criteria for prioritizing sidewalk projects.

B. The City will identify a systematic approach to filling gaps in the sidewalk system.

C. The City should continue to inventory and map existing pedestrian facilities.

D. The City should establish a Sidewalk Construction Program to complete the pedestrian facility network.

E. Sidewalks and walkways should complement access to transit stations/stops and multi-use paths. Activity centers and business districts should focus attention on and encourage pedestrian travel within their proximity.

F. All future new street development should include sidewalk and pedestrian access construction as required by the Winston Zoning Ordinance and adopted Street Standard Details. All major road construction or renovation projects, except maintenance and pavement preservation projects, shall include sidewalks.

G. Encourage ODOT and Douglas County to have marked crosswalks at all signalized intersections. Crosswalks at controlled intersections should be provided near schools, commercial areas, and other high volume pedestrian locations on collector and arterial streets within the City and Urban Growth Area.

H. The location and design of sidewalks will comply with the requirements of the Americans with Disabilities Act.

I. The City should require pedestrian and bicycle easements to connect neighborhoods and reduce vehicle trips. The City shall modify the street vacation process so pedestrian and bicyclist through-access is maintained.
J. Pedestrian walkway or access way connections should be required between adjacent developments when roadway connections cannot be provided.

**Objective 2:** Mixed-use development that encourages pedestrian travel by including housing close to commercial and institutional activities will be encouraged.

**Policies**
A. The Zoning Ordinance provisions for mixed-use development will be reviewed to consider changes that will increase opportunities and incentives for mixed-use development.

B. The City should establish standards for the maintenance and safety of pedestrian facilities. These standards shall include the removal of hazards and obstacles to pedestrian travel, as well as maintenance of benches and landscaping.

C. Zoning will be developed to allow for mixed land uses that promote pedestrian travel.

D. The City should encourage efforts that inform and promote the health, economic, and environmental benefits of walking for the individual and community. Walking for travel and recreation should be encouraged to achieve a more healthful environment that reduces pollution and noise, that will foster a more livable community.

E. The City will encourage the development of a connecting, multi-use trail network.

F. The City should provide sidewalks and other amenities to make pedestrian access to bus stops easier.

**Objective 3:** The City of Winston will encourage education services and promote safe pedestrian travel to reduce the number of accidents involving pedestrians.

**Policies:**
A. The City will encourage schools, safety organizations, and law enforcement agencies to provide information and instruction on pedestrian safety issues that focus on prevention of the most important accident problems. The programs shall educate all roadway users of their privileges and responsibilities when driving, bicycling and walking.

B. The City will enforce pedestrian safety laws and regulations to help increase safety as measured by a reduction in accidents. Attention should be focused on areas where high volumes of automobile and pedestrian travel occur. Warnings and citations given to drivers and pedestrians will serve to impress the importance of safety issues.

C. Pedestrian traffic should be separated from auto traffic on streets and in parking lots wherever possible.

6. **BICYCLE GOAL, OBJECTIVES & POLICIES**

**Goal:** To facilitate and encourage the increased use of bicycle transportation in Winston
by assuring that convenient, accessible and safe cycling facilities are provided.

**Objective 1:** The City of Winston will create a comprehensive system of bicycle facilities.

**Policies:**

A. The City of Winston recognizes bicycle transportation as a necessary and viable component of the transportation system, both as an important transportation mode, and as an air quality improvement strategy.

B. The City of Winston should progressively develop a linked bicycle network, focusing on the arterial and collector street system, and concentrating on the provision of bicycle lanes, to be completed within the planning period (20 years). The bikeway network will serve bicyclists’ needs for travel to workplaces, commercial district, transit stops, schools and recreational destinations.

C. The City of Winston will use all opportunities to add bike lanes in conjunction with road reconstruction and striping projects on collector and arterial streets.

D. The City of Winston should encourage ODOT and Douglas County to use all opportunities to add bike lanes in conjunction with road reconstruction and striping projects on collector and arterial roads.

E. The City of Winston will assure that the design of streets and public improvement projects facilitate bicycling by providing proper paving, lane width, traffic control, storm drainage grates, striping, signage, lighting, etc.

F. The City of Winston should assure regular maintenance of existing City bicycle facilities and encourage ODOT and Douglas County to regularly maintain State/County bicycle facilities which will include taking actions to improve crossings at creeks and major streets.

G. The City of Winston should assure the provision of bicycle racks and/or shelters at critical locations within the downtown and other locations where publicly provided bicycle parking facilities are called for.

H. The City of Winston will actively work with ODOT to improve bicycling on State Highway 42 within the City and Urban Growth Area.

I. The City of Winston will actively work with Douglas County to improve bicycling on County maintained roads within the City and Urban Growth Area.

J. The City of Winston should support the local transit provider in their efforts to facilitate bikes on buses and bicycle facilities at transit stations and stops.

K. The City of Winston will encourage bicycle recreation.

L. The City will require sidewalks and pedestrian access in all new developments.

M. The City will coordinate bicycle planning efforts within the City and Urban Growth
Area with Douglas County and ODOT.

**Objective 2:** The City will promote bicycle safety and awareness.

**Policies:**
A. The City of Winston will actively support and encourage local and state bicycle education and safety programs intended to improve bicycling skills, observance of laws, and overall safety for both children and adults.

B. The City will consider the use of the media, bicycle committees, bicycle plans and other methods to promote safe bicycling for transportation purposes.

7. **AVIATION OBJECTIVES**

A. The City will support reasonably priced air transportation and convenient connections with other areas through the Roseburg Regional Airport.

B. The City should support inter-modal connections between the City of Winston and the Roseburg Airport.

8. **RAIL GOAL OBJECTIVE**

A. The City will support rail transportation in the region and its connections with the other areas in the state and nation. The City shall encourage passenger service as part of statewide rail transportation planning efforts.

9. **TRANSPORTATION SYSTEM MANAGEMENT GOAL, OBJECTIVES & POLICIES**

**Goal:** To maximize the efficiency of the existing surface transportation system through management techniques and facility improvements.

**Objective 1:** A system of traffic control devices maintained and operated at an optimal volume/capacity ratio that is consistent with existing funding levels.

**Policies:**
A. The City will regularly maintain all of the traffic control devices (signs and markings) within its inventory to minimize congestion and driver delay due to confusion. While priority shall always be given to regulatory and warning signs, informational (street name and directional) signs shall also be given proper maintenance.

B. The City will encourage Douglas County and ODOT to regularly maintain all of the traffic control devices on county and state maintained roads within the City of Winston and Urban Growth Area.

**Objective 2:** To maximize the effective capacity of the street system through
improvements in physical design and management of on-street parking.

**Policies:**

A. The City should give the physical improvement of intersections a higher priority in the design process than general street corridor widening, when seeking ways to increase capacity and relieve congestion on a street.

B. The City should facilitate implementation of bus bays by the local public transit provider on congested city collector and arterial streets as a means of facilitating traffic flow during peak travel periods. The feasibility, location and design of bus bays for City Streets shall be developed in consultation between the City and the local public transit provider.

C. The City should facilitate implementation of bus bays by the local public transit provider on congested collector and arterial roads maintained by Douglas County and ODOT. The feasibility, location and design of bus bays for county and state maintained roads shall be developed in consultation between the City, County, ODOT and the local public transit provider.

**10. ACCESS MANAGEMENT GOAL, OBJECTIVES & POLICIES**

**Goal:** To increase street system safety and capacity through the adoption and implementation of access management standards.

**Objective 1:** The City will develop and adopt specific access management standards to be contained in the Department of Public Works Standard Details, based on the following policies:

**Policies:**

A. Properties with frontage along two streets shall take primary access from the street with the lower classification.

B. Any one development along the arterial street system will be considered in its entirety, regardless of the number of individual parcels it contains. Individual driveways will not be considered for each parcel.

C. Shared, mutual access easements should be designed and provided along arterial street frontage for both existing and future development.

D. The spacing of access points will be determined based on street classification. Generally, access spacing includes accesses along the same side of the street or on the opposite side of the street. Access points should be located directly across from existing or future access, provided adequate spacing results.

E. All access to the public right-of-way will be located, designed, and constructed to the approval of the Public Works Superintendent, or his designee. Likewise, variances to access management standards should be granted at the discretion of the Public Works Superintendent, or his designees.
F. The City will incorporate access management standards into all of its arterial street design projects. Access management measures may include, but are not limited to, construction of raised median, driveway consolidation, driveway relocation, and closure of local street access to the arterial.

G. Consistent with the City’s goal of improving mobility, the City should consider developing access management projects for any congested arterial to help improve safety and traffic flow. Access management projects may include, but are not limited to, construction of raised medians, driveway consolidation, driveway relocation, and closure of local street access to the arterial.

H. The City should maintain carrying capacity and safety of pedestrian, bicycle, public transit and motor vehicle movement on arterial and collector streets through driveway and curb cut consolidation or reduction.

I. The City will discourage direct driveway access onto streets designated as collector and arterial whenever an economically feasible alternative exists or can be made available.

J. The City should require design that combines multiple driveway accesses to a single point in a residential and commercial development along collector and arterial streets.

11. TRANSPORTATION DEMAND MANAGEMENT GOAL, OBJECTIVES & POLICIES

Goal: To reduce the demands placed on the current and future transportation system by the single-occupant automobile.

Objective 1: The City of Winston will encourage the use of alternative travel modes by serving as an institutional model for other agencies and businesses in the community.

Policies:
A. The City should serve as a leading example for other businesses and agencies by maximizing the use of alternative transportation modes among City employees through incentive programs. The City should provide information on alternative transportation modes and provide incentives for employees who use alternatives to the single-occupant automobile.

B. The City should offer flexible schedules and compressed work-week options whenever feasible, as a way of reducing travel demand. The City should allow employees to telecommute, whenever feasible.

Objective 2: The City will work towards reducing the vehicle miles traveled (VMT) in the Winston Urban Area by assisting individuals in choosing alternative travel modes.

Policies:
A. The City will encourage major employers to allow work arrangements providing an alternative to the 8-to-5 work schedule. These arrangements shall include, but are not limited to, employee flex-time programs, staggered work hours, and compressed work
weeks.

B. The City will encourage major employers to allow telecommuting where feasible.

C. The City and major employers should encourage ridesharing by making ridesharing more convenient.

D. The City should encourage major employers to work with the local public transit provider to adopt trip reduction goals designed to reduce site vehicular trip generation.

12. PARKING GOALS, OBJECTIVES & POLICIES

Goal: To ensure the Winston Urban Area has an appropriate supply of parking facilities that supports the goals and objectives of this plan.

Objective 1: The City will define an appropriate role for on-street parking facilities.

Policies:
A. The City should manage the supply, operations and demand for parking in the public right-of-way to encourage economic vitality, traffic safety and livability of neighborhoods. Parking in the right-of-way, in general, should serve land uses in the immediate area.

B. The provision of on-street parking is second in priority to the needs of the travel modes (i.e., vehicle, transit, bicycle & pedestrian) using the street right-of-way, except where abutting properties have no ability to provide their own off-street parking, or where on-street parking is needed to support an existing business district.

C. Where practical, existing on-street parking will be removed in preference to widening streets for additional travel lanes, except for streets within the central business district. Efforts will be made to mitigate the impact of parking removal in those areas where abutting properties have no ability to provide their own adequate supply of off-street parking, or where on-street parking is needed to support an existing business district.

D. The City should re-evaluate parking space size requirements due to the increased use of smaller cars.

E. In those areas where demand exists, an adequate supply of on-street carpool and vanpool parking spaces should be provided. The location of these spaces shall have preference over those intended for general purpose on-street parking.

Objective 2: The City of Winston will promote economic vitality and neighborhood livability by requiring an appropriate supply of off-street parking facilities.

Policies:
A. To avoid the negative impacts to surrounding residential neighborhoods or other nearby land uses, new development must provide, or have access to, an appropriate supply of off-street parking.
B. The City should consider adopting maximum parking requirements in the current zoning code to reduce the amount of off-street parking supply provided by new businesses.

C. The location of major activity centers should be accessible by transit, and shall meet their parking demand through a combination of shared, leased, and new off-street parking facilities.

D. The City should encourage sharing of existing and future parking facilities by various nearby businesses.

E. The City should continue to require effective landscaping throughout continuous paved parking areas to provide shading, screening and buffering aesthetics, and shall consider standards for percolation of water into the groundwater table.

Objective 3: The City will work towards meeting the State Transportation Planning Rule goals to reduce per capita parking supply by the year 2022 to discourage reliance on private cars and consequently encourage the use of public transit, bicycles and walking.

Policies:
A. The City of Winston should carefully monitor how new lands are designated in the Winston Comprehensive Plan to achieve a decrease in the parking supply per capita for commercial, and institutional lands over the next 20 years.

B. Impacts on overall parking supply and Transportation Planning Rule compliance will be taken into account when any significant expansion in the supply of commercial, industrial, or institutional designated land is considered.

C. The City should inventory the parking spaces available and shall set up a process for updating the parking space inventory.

13. FINANCE GOAL, OBJECTIVES & POLICIES

Goal: A transportation system for the Winston Urban Area that is adequately funded to meet its current and future capital, maintenance and operations needs.

Objective 1: Meet the current and future capital improvement needs of the transportation system for the Winston Urban Area, as outlined in this plan, through a variety of funding sources.

Policies:
A. Transportation System Development charges (SDCs), as defined by Oregon Revised Statutes and City ordinances, will be collected by the City to offset costs of new development on area-wide transportation facilities. The City will continue to collect SDCs as an important and equitable funding source to pay for transportation capacity improvements.
B. The City will require those responsible for new development to mitigate their development’s impacts to the transportation system, as authorized in the City of Winston Development Ordinances and Oregon Revised Statutes, concurrent with the development of the property.

C. The City should set-aside part of its allocation of State Highway Fuel Tax funds for creation of bicycle and pedestrian facilities.

D. When the City agrees to vacation of a public right-of-way at the request of a property owner, conditions of such agreement shall include payment by the benefited property owner of fair market value for the land being converted to private ownership. Funds received for vacated lands should be placed in a fund for the acquisition of future rights-of-way.

E. The City should seek changes in the criteria for allocations of State funding sources to increase funding for local street system improvements proposed in the TSP.

F. The City should pursue new sources of federal, state and private funding to pay the costs of improvements recommended in the TSP.

Objective 2: Secure adequate funding to implement a street maintenance program that will sustain a maximum service life for pavement surface and other transportation facilities.

Policies:
A. Assuming no changes in State funding mechanisms, the primary funding sources for street system maintenance activities will be the City’s allocation of the State Highway Fuel Tax.

B. The City should seek additional funding sources to meet the long-term financial requirements of sustaining a street maintenance program.

C. The City will continue to participate in cooperative agreements with other State and local jurisdictions for maintenance and operation activities based on equitable determinations of responsibility and benefit.

Objective 3: Secure adequate funding for the operation of the transportation system including advance planning, design engineering, signal operations, system management, illumination, and cleaning activities.

Policies:
A. Assuming no changes in State funding mechanisms, transportation system operations should be funded primarily from the City’s allocation of the State Highway Fuel Tax.

B. The City should seek changes in the State funding sources criteria for allocation of more funding to local street systems operation.

C. Other funding sources should be pursued to augment the financial requirements of providing adequate future system operations.
D. The City should continue to pursue federal, state and private grants to augment operations activities, especially in the planning and engineering functions.

E. Transportation system development charges (SDCs), as defined by Oregon Revised Statutes and City ordinances, will be collected by the City to offset costs of new development on area-wide transportation facilities. The City will continue to collect SDCs as an important and equitable funding source to pay for transportation capacity improvements.

F. The City will require those responsible for new development to mitigate their development’s impacts to the transportation system, as authorized in the Winston Development Ordinances and Oregon Revised Statutes, concurrent with the development of the property.
Section 7

Transportation System Plan
SECTION 7
TRANSPORTATION SYSTEM PLAN

The Transportation System Plan includes plans for all modes of transportation. Components of the street system plan include:

- street improvements and other transportation system improvements
- other modal plans
- access management standards
- street classification and street development standards

Street Improvements

The following Table 7 summarizes the recommended Street and Highway improvements and Map 13 (pg 74) illustrates the TSP project time line.

Table 7
Street and Highway Improvements

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>PROJECT COST</th>
<th>TIME LINE (Years)</th>
<th>FUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widen Hwy 42 to 3 lanes, west from Glenhart Ave. to Looking glass Cr Bridge/appropriate turn lanes.</td>
<td>$3,000,000</td>
<td>0-5</td>
<td>C&amp;D</td>
</tr>
<tr>
<td>Widen Hwy 42 to 3 lanes from Looking glass Creek Bridge to Brockway Rd/appropriate turn lanes.</td>
<td>$1,500,000</td>
<td>0-5</td>
<td>C&amp;D</td>
</tr>
<tr>
<td>Highways 42 &amp; 99 intersection improvements/west bound right turn lane</td>
<td>$950,000</td>
<td>0-5</td>
<td>C&amp;D</td>
</tr>
<tr>
<td>Looking glass Road from Abraham Ave. to Glenhart Ave. widen, resurface &amp; include bike-ped facilities</td>
<td>$750,000</td>
<td>0-5</td>
<td>E</td>
</tr>
<tr>
<td>Extend Tokay to Winston Section Road</td>
<td>$672,000</td>
<td>0-5</td>
<td>A&amp;B</td>
</tr>
<tr>
<td>Improve Winston Section/Pepsi Road to collector standards from Highway 42 to Thompson Ave., including closure of Winston Section Road and Highway 42 intersection.</td>
<td>$3,192,000</td>
<td>0-5</td>
<td>D&amp;E</td>
</tr>
<tr>
<td>Install acceleration/deceleration lanes on Highway 42 at the Pepsi Road and Looking glass Road intersections.</td>
<td>$150,000</td>
<td>0-5</td>
<td>A&amp;D</td>
</tr>
<tr>
<td>Extend Jorgen Street from Ronald Ave. to Winston Section Road</td>
<td>$780,000</td>
<td>5-10</td>
<td>A&amp;C</td>
</tr>
<tr>
<td>Upgrade remaining section of Brosi Orchard Road to local street standards</td>
<td>$200,000</td>
<td>5-10</td>
<td>C</td>
</tr>
<tr>
<td>Signalization of Highway 42 and Brockway to handle traffic anticipated from proposed development</td>
<td>$250,000</td>
<td>5-10</td>
<td>A</td>
</tr>
<tr>
<td>Extend Ronald Ave. to Brosi.</td>
<td>$772,800</td>
<td>10-20</td>
<td>A&amp;B</td>
</tr>
<tr>
<td>Extend Thiele Street to Ford Street</td>
<td>168,000</td>
<td>10-20</td>
<td>A&amp;C</td>
</tr>
<tr>
<td>Install a traffic signal at the Looking glass Road/Highway 42 intersection as warrants provide</td>
<td>$250,000</td>
<td>10-20</td>
<td>D</td>
</tr>
<tr>
<td>Upgrade Johnson Road to Residential Collector</td>
<td>$1,008,000</td>
<td>10-20</td>
<td>A&amp;B</td>
</tr>
<tr>
<td>Extend Edwards Street to Connect Main Street with Grape Street</td>
<td>$414,400</td>
<td>10-20</td>
<td>C</td>
</tr>
<tr>
<td><strong>TOTAL IMPROVEMENT COST</strong></td>
<td>$14,056,800</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Projects on the state highway system that are contained in this TSP are not considered “planned” projects until they are programmed into the Statewide Transportation Program (STIP). As such, projects proposed in this TSP that are located on a State highway cannot be considered for future development or land use actions until they are programmed into the STIP. Highway projects that are programmed to be constructed may have to be altered or cancelled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

Projects proposed in this TSP that are located on a County Road cannot be considered for future development or land use actions until they are programmed into the Douglas County Public Improvement Program. County road projects that are programmed to be constructed may have to be altered or cancelled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

Projects proposed in this TSP that are located on City Streets cannot be considered for future development or land use actions until they are programmed into the City of Winston Public Facilities Plan/Annual Capital Improvement Budget. City street projects that are programmed to be constructed may have to be altered or cancelled at a later time to meet changing budgets or unanticipated conditions such as environmental constraints.

Estimation of Costs

The planned projects are a summary of the identified future transportation needs that may be financially possible from current and future funding sources as shown on Table 7. A detailed discussion of funding options is in the following Section 8 of this TSP. The project cost estimates in Table 7 include a general cost for engineering, right-of-way, and construction. It is important to note that these cost estimates are planning level cost estimates and, as such, do not have the accuracy that a more refined engineering construction estimate would yield. These planning level estimates are meant to give a relative feel for the cost of each project, and how it may compare, relative to other projects.

The project list, presented in Table 7, totals over $14 million. There are some projects identified as future needs, however, that were not included, which would make the actual total somewhat higher. A funding source for these projects did not seem likely at this time, so, they were not included as a project for this plan.

**Funding Sources: (A) Developer, (B) LID, (C) City Revenue, (D) ODOT, (E) County and (F) Other State/Federal Funds**

Inclusion of an improvement in this TSP (Table 7 & Table 8) does not represent a commitment by the City, Douglas County or ODOT to fund, allow or construct the project.
Map 13
Roadway Improvements Timeline
Bicycle and Pedestrian Improvements

The bicycle and pedestrian improvements included in this portion of the plan primarily add bicycle and pedestrian facilities around alternative mode trip generators. Some of the identified projects create bicycle and pedestrian linkages specifically, minimizing required out-of-direction travel for people choosing to use alternative modes. Table 8 has a list of the projects cost estimates, proposed time line for construction and the anticipated sources of funding. The following Map 14 illustrates the proposed time line for construction of the planned Bike/Pedestrian improvements. In addition, Map 14 shows several bike/pedestrian improvements that are included in the street/highway projects on Table 7 and Map13.

Table 8
Bike/Pedestrian Improvements

<table>
<thead>
<tr>
<th>PROJECT TYPE</th>
<th>PROJECT NAME</th>
<th>PROJECT COST</th>
<th>TIME LINE (Years)</th>
<th>FUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIKE/PED</td>
<td>Add an off-street bicycle/pedestrian path between Cary St. and Civil Bend Ave.</td>
<td>$300,000</td>
<td>0-5</td>
<td>C</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>Pedestrian path on both sides of Grape Street.</td>
<td>$75,000</td>
<td>0-5</td>
<td>C&amp;F</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>Construction of pedestrian way on both sides of Cary Street</td>
<td>$22,400</td>
<td>5-10</td>
<td>C</td>
</tr>
<tr>
<td>BIKE/PED</td>
<td>Add a bicycle/pedestrian path from Gregory Drive to Darrell Avenue.</td>
<td>$56,000</td>
<td>5-10</td>
<td>C</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>Provide pedestrian path, Highway 42, Sherry Street, and Rose Avenue</td>
<td>$22,000</td>
<td>5-10</td>
<td>C</td>
</tr>
<tr>
<td>BIKE</td>
<td>Striped on-street bicycle lanes should be developed on all collector and arterial roads.</td>
<td>$125,000</td>
<td>5-10</td>
<td>C, D&amp;E</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>Construct pedestrian path on both sides of Brosi Orchard Road.</td>
<td>$75,000</td>
<td>5-10</td>
<td>C&amp;F</td>
</tr>
<tr>
<td>BIKE/PED</td>
<td>Construction of new Darrell Ave bicycle/pedestrian path</td>
<td>$25,000</td>
<td>5-10</td>
<td>B&amp;C</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>Improve pedestrian path on both sides of Newton Drive</td>
<td>$40,000</td>
<td>10-20</td>
<td>C</td>
</tr>
<tr>
<td>PEDESTRIAN</td>
<td>Improve pedestrian way along Safari Road south</td>
<td>$28,000</td>
<td>10-20</td>
<td>C</td>
</tr>
</tbody>
</table>

**TOTAL IMPROVEMENT COST** $768,400

**Funding Sources: (A) Developer, (B) LID, (C) City Revenue, (D) ODOT, (E) Douglas County and (E) Other State/Federal Funds**

The project list, presented above in Table 8, totals $768,400. There are some projects identified as future needs that were not included because a funding source for these projects did not seem likely at this time. The project cost
estimates include a general cost for engineering, right-of-way, and construction.

Map 14
Bicycle & Pedestrian Improvement Timeline
Public Transportation Improvements

Winston has had a long rich history of providing publicly available transportation services to its residents who choose to use them. The Winston Dial-a-Ride system has been in place for many years. Recently the Umpqua Regional Council of Governments has established the Umpqua Transit System which serves the City of Winston with one of three (3) routes. The Umpqua Transit system connects the City of Winston with Roseburg and Sutherlin routes to provide riders with regional access to employment and services outside the City of Winston. The recommendations for public transit are to maintain the City of Winston Dial-a-Ride program

Access Management

During the development of the Greater Roseburg Area Transportation Study (GRATS) a supplemental report was developed that detailed access management strategies for the GRATS study area. These strategies represent Oregon Department of Transportation guidelines where access management is concerned, and they can apply to Highway 42 through the study area.

The GRATS classified Highway 42 as an access management category 4, which applies to statewide level of importance highways. Under currently adopted access management guidelines, accesses should have limited control, with public roads no more frequent than every 1/4 mile, and individual driveway spacing no more frequent than every 500 feet. These guidelines have been compromised through the years to the point where there is a driveway approximately every 210 feet through Winston on Highway 42.

While the ODOT guidelines for access management on this Highway currently stipulate the desired 500 feet between access points, no appreciable degradation in level of operations is shown over the life of this plan, despite the average driveway spacing of 210 feet. Should traffic increase beyond our projections, however, we could anticipate diminished levels of operation as a direct result of multiple access points.

Another consideration is that current accesses are clustered rather than evenly spaced at 210 feet. Thus, there are areas greater than 210 feet with no direct access. The Access Management policies and standards need to be updated with the latest ODOT guidelines for incorporation into the City of Winston Public Facilities Plan and Subdivision Regulations as a follow-up to this TSP.

Functional Classification of Roads

Functional classification is the process by which streets and highways are grouped into classes or systems according to the character of service they are intended to provide. Basic to this process is recognition that individual roads and streets do not serve travel independently in any major way; rather, most travel involves movement through a network of roads. It becomes necessary to
determine how this travel can be channeled within the network in a logical and efficient manner. Functional classification defines the nature of this channeling process by defining the part that any particular road or street should play in serving the flow of trips through the highway network.

The City of Winston has developed a future street functional classification system, shown on the following Map 15, that is based upon the Federal and ODOT standards for classification of roads. The City also has further delineated some street classifications to better describe their intended function and plan for needed improvements to existing facilities. While Winston conforms to the standards for arterial, collector, and local street classifications, they have also found a need to develop a residential collector classification and a classification for local access ways.

**Arterial**—The system of streets and highways under the arterial system should serve the major centers of activity within the city, the highest traffic volume corridors, and should carry a high proportion of the total urban area travel on a minimum of mileage. This system should carry the major amount of traffic entering and leaving the urban area, as well as the majority of traffic desiring to move through the city without stopping.

**Major Collector**—The collector street system provides both land access service and traffic circulation between residential neighborhoods, commercial areas, and industrial areas.

**Residential Collector**—As the City of Winston has developed, certain streets have been developed as residential streets in an area large enough to generate and carry a large enough volume of traffic to be considered collectors. In these areas, the City recognizes the dual function of the facility and balancing that must take place to maintain a livable street, while allowing higher levels of traffic.

**Residential Street**—The local street system comprises all facilities not on one of the higher systems or local access ways. It serves primarily to provide direct access to abutting land and access to the City’s collector and arterial street systems. Service to through traffic movement is deliberately discouraged.

**Local Access Way**—This street classification is intended to recognize the lowest order of roads in the Winston urban area. These roads only serve private residences, and are typically either narrower than required by City residential street standards, serve flag lots, or some combination of all these factors. These streets are considered to be in a transitional state.
Map 15
Transportation System Plan
Future Functional Class System
Street Width Standards

The Transportation Planning Rule requires that local communities re-examine their standards for local street widths. This is done for several reasons. Many communities have older street development standards, using wider widths to allow for future development of the community. This model no longer reflects the prevailing thought in planning; there is an overall feeling that land is scarce and should be preserved, and that neighborhoods should be protected from encroachment of the arterial network. Since many local roads are actually constructed by private land developers, the width standards have come under scrutiny because they take greater land resources that would otherwise be usable by the developer.

Finally, maintenance costs for wider streets are greater than for narrow streets. The ability to hold on-going maintenance costs in check can be essential to the municipality’s ability to provide needed services.

Street standards are necessary to provide a community with roadways that are relatively safe, aesthetic, and easy to administer when new roadways are planned or constructed. Within the generally accepted range of standards, communities have some flexibility in adopting specific design requirements to match the planned roadways with adjacent land uses.

In light of the Transportation Planning Rule 660-12-045 (7), Winston must now assess their present set of street standards. The local street standards must be scrutinized for needed widths. Because of changes that have occurred since development of the original standards, the existing street standards probably do not provide sufficient guidance for planned development in Winston. As a result, a new set of recommended street standards are proposed as part of this TSP. The proposed standards provide for more categories of streets and are designed to be used in combination with the new, proposed functional classification system. The proposed standards are based on input from city staff, and the Technical Advisory Committee (TAC), Planning Commission and Traffic Safety Committee. The new, proposed street standards are summarized and shown graphically in the following Illustrations.

Current City Standards

Dimensional standards for streets as required in the City of Winston Public Facilities Standards and Subdivision Ordinance are shown in Table 9.

Table 9
Winston Roadway Dimensional Standards

<table>
<thead>
<tr>
<th>Road Type</th>
<th>Right of Way Width</th>
<th>Pavement Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterials</td>
<td>80 feet</td>
<td>64 feet</td>
</tr>
<tr>
<td>Collectors</td>
<td>60 feet</td>
<td>40 feet</td>
</tr>
<tr>
<td>Local Streets</td>
<td>60 feet</td>
<td>30-36 feet</td>
</tr>
<tr>
<td>Alley Way</td>
<td>20 feet</td>
<td>18 feet</td>
</tr>
<tr>
<td>Cul-de-sac Radius</td>
<td>50 feet</td>
<td>40 feet</td>
</tr>
</tbody>
</table>
Proposed Standards

Upon review of the current street development standards, it was found that some of the requirements for the roads may be reduced, while others may be increased to improve the intended function. The following standards are recommended for the City of Winston and Urban Growth Area street network for future street improvements and subdivision/platting requirements. It should be noted that these are minimal standards for Right-of-Way and they should be increased when additional easements for water, sewer and storm drainage are identified during project planning, subdivision and platting proposal reviews. The following 4 pages contain illustrations of the proposed street standards for Arterial, Major Collector, Residential Collector, Residential and a Local Access Way. These proposed standards need to be incorporated into the City Public Facilities Plan and Development Regulations.
3-Lane Arterial/Collector

Right-of-Way = 62 Feet  
Pavement Width = 48 Feet

This road is meant for higher volume streets with surrounding land uses that require direct access to the arterial or collector street network. These roads typically do not have a parking lane and are appropriate for bike lane facilities. Two feet of right of way are reserved on each side of the right-of-way for utilities and needed working space for later road or sidewalk improvements.

2-Lane Collector with Parking

Right-of-Way = 62 Feet  
Pavement Width = 48 Feet

The two-lane collector facility is commonly used to channel traffic from residential areas to the arterial network. Residential land uses with higher setback distances, or low intensity commercial/office land uses, are common. These roads are appropriate for bicycle facilities, but if the traffic volumes are less than 3000 vehicles per day or the posted speed is 25 mph or less, a shared roadway facility is appropriate. Two feet of right of way are reserved on each side of the right-of-way for utilities and needed working space for later road or sidewalk improvements.
Residential Collector

Right-of-Way = 48 Feet
Pavement Width = 34 Feet

This facility is primarily a residential street. It is inappropriate for bike lanes but is a shared use facility. Land uses surrounding the facility are mainly residential, varying in intensity from detached single family to multi-unit apartments. Since the surrounding land use is residential, these roads are suitable for traffic calming techniques, thus minimizing the adverse impacts of higher traffic volumes in a residential setting. Two feet of right of way are reserved on each side of the right-of-way for utilities and needed working space for later road or sidewalk improvements.
Residential Street

Right-of-Way = 41 Feet
Pavement Width = 27 Feet

These roads are strictly residential. They are not appropriate for bike lanes but bikes are accommodated through shared use of the roadway. As with all other classifications, sidewalks are appropriate on both sides of the road. Two feet of right of way are reserved on each side of the right-of-way for utilities and needed working space for later road or sidewalk improvements.

Alley Way and Cul-de-sac

Review found the standard for cul-de-sacs, as currently required by Winston, to be exemplary and in no need of revision. The City has expressed a desire to eliminate its current Alley Way standard for purposes of setting speed standards and community uniformity.

Non-motorized Element

This chapter includes the planned transportation system to serve bicyclists and pedestrians in the Winston Urban Area. Specific capital improvements are included for non-motorized travel facilities. Supporting programs and policies are identified to promote and enhance the use of non-motorized travel modes in the urban area.
Bicycle Element

The bicycle element of the Winston Urban Area study is based on several sources of information. The Winston Local Street Network Plan provided an inventory of what had been proposed in the past for the area. Information gathered about the local transportation system and its current utilization helped in the analysis of the status of the proposed improvements, as well as information about the current environment for travel by nonmotorized travel modes, and the ODOT Bicycle and Pedestrian Plan provided guidelines for proposed improvements.

Bicycle System Facilities

A complete bicycle system consists of several different types of facilities or improvements to safely and efficiently accommodate travel by bicycle. The challenge for local governments is to provide facilities within the area’s financial constraints that adequately meet the needs of experienced and inexperienced cyclists. Inexperienced and less stable riders usually feel more secure when there is some physical separation from automobile traffic. More experienced riders may need only a little extra pavement along the side of the road that is properly maintained. The impact of bicyclists on traffic is also an important consideration, especially in congested locations where they must compete for limited space. The following Map 13 illustrates the Bicycle and Pedestrian Improvement needs for the City of Winston and UGB. Map 14 illustrates the recommended timeline for Bicycle and Pedestrian Improvements for the City of Winston and UGB. Appendix H includes a summary of the major types of facilities and a brief description of their key characteristics.

Pedestrian Element

Certain areas within Winston need sidewalks, or other pedestrian facilities, because they tend to generate many pedestrian trips as illustrated on the previous Map 7. These areas include:

- McGovern Elementary School
- Winston Community Center
- Winston Public Library
- Commercial areas West of Glenhart on Highway 42
- Riverbend Park

The following streets (illustrated on Map 13), should to be considered for retrofitting of sidewalk facilities:

- Darrell Street
- Cary Street
- Grape Street
- Rose Avenue
- Highway 42 from Glenhart west
SECTION 8

Funding Options & Financial Plan
SECTION 8
FUNDING OPTIONS & FINANCIAL PLAN

The Transportation Planning Rule requires that all cities over 2500 population have a financing element that implements the plan and explains how projects identified will be funded. The finance element will include a list of planned transportation facilities, a general estimate of the timing for each improvement, a rough cost estimate, and a discussion of the City of Winston's existing funding mechanisms and the ability of new mechanisms to fund the projects identified in the TSP. To the greatest extent possible, projects should be prioritized and constrained to revenue likely to be available or that may be made available through other funding mechanisms such as LIDs, SDCs, etc. The importance of this is emphasized in TPR Section 660-12-060 Plan and Land Use Regulation Amendments, which states:

"Amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility. This shall be accomplished by either:

(a) Limiting allowed land uses to be consistent with the planned function, capacity, and performance standards of the transportation facility;

(b) Amending the TSP to provide transportation facilities adequate to support the proposed land uses consistent with the requirements of this division;

(c) Altering land use designations, densities, or design requirements to reduce demand for automobile travel and meet travel needs through other modes; or

(d) Amending the TSP to modify the planned function, capacity and performance standards, as needed, to accept greater motor vehicle congestion to promote mixed use, pedestrian friendly development where multi-modal travel choices are provided."

The transportation-planning rule was adopted to ensure that adequate transportation facilities are or will be made available to support proposed land use changes. OAR 660-12-060(1) requires that "amendments to functional plans, acknowledged comprehensive plans, and land use regulations which significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards (e.g. level of service, volume to capacity ratio, etc.) of the facility."

In order to determine whether a proposed Comprehensive Plan amendment or zone change will "significantly affect" a facility, the TPR establishes a set of
specific criteria against which the proposed amendment is to be evaluated. The TPR states that "a plan or land use regulation amendment significantly affects a transportation facility if it:

(a) Changes the functional classification of an existing or planned transportation facility;

(b) Changes standards implementing a functional classification system;

(c) Allows types or levels of land uses which would result in levels of travel or access which are inconsistent with the functional classification of a transportation facility; or

(d) Would reduce the performance standards of the facility below the minimum acceptable level identified in the TSP.

Interpretation of this passage has been that, if a project is listed in the local or regional TSP with identified funding for the project, a developer may use that identified project as part of their mitigation for their proposed development. The City of Winston has recently adopted a System Development Charge (SDC) that factors in the costs for impact mitigation on planned projects. Additional mitigation may be needed on a development by development basis depending on the anticipated impacts to the localized transportation network. The City of Winston will attempt, where possible, to coordinate projects with proposed improvements which affect other transportation providers.

**Estimation of Costs**

By looking back on previous plans and through the public and stakeholder involvement for this TSP, a project list was assembled. Cost estimates include the total cost of the project (e.g. engineering, right-of-way, and constructions). It is important to note that these cost estimates are planning level cost estimates and, as such, do not have the pinpoint accuracy that a more refined estimate would yield. These planning level estimates are meant to give a relative feel for the cost of each project, and how it may compare, relative to other projects.

The project list, presented in Table 16, totals approximately $13.9 million. There are some projects, however, that were not included, which would make the actual total somewhat higher. These projects have costs associated with them that can vary so widely as to make any estimate meaningless. An example is public transportation. The City could decide to keep current levels of public investment and have only the dial-a ride system they now have, or they might scrap this totally and invest nothing, saving money. They may decide to invest in a fixed route system to give greater service, and the amount of service would be directly related to the amount of public investment. Similarly, in developing bikeways, the cost is a function of the extent of the bicycle network developed. The cost is so small that it typically can be piece-mealed into the city streets budget. Because of the varying cost, these types of projects have been left out of the cost estimate.
Revenue Sources

City Streets Budget— In 2001 the budget for the City Street Department was $1,825,422. This budget included a one-time $1,500,000 loan from Douglas County to finance a Local Improvement District for road upgrades. The actual working capital was $325,422. This budget was almost entirely taken by operating and equipment expenses and one-time allocations earmarked for specific projects. These include $22,000 for bike path improvements on Lookingglass Road, $25,000 in the Street Improvement Reserve, and almost $27,000 in transfers for on-going work and carry-over from previous fiscal years. When all is accounted for, there is about $35,000 of discretionary funding that is allocated to the Street Department on an annual basis. This $35,000, while not a large amount in any given year, can be used as a revenue stream against which the City can bond to accomplish some larger projects up front. Over the life of this plan, this revenue source will generate $700,000.

System Development Charges— New to the City of Winston, System Development Charges (SDCs) are levied against new development for impacts they cause to the transportation system. SDCs for transportation in Winston hold promise for a significant source of local revenue annually. After the first half year of the SDCs being in place, the revenue is approximately $1,600. This is low, but as the program becomes more widely accepted by local developers, and as development continues in Winston, this could be a significant money generator. It is not unreasonable to assume that this source could generate $20,000 annually, which would yield $400,000 over the life of this plan.

At this time, these funds are dedicated to two intersection improvements on Highway 42. The intersections at Brockway Road, and Main Street are the focus for these funds. These intersections are seen as critical once the proposed Brockway Oaks subdivision and business establishments are developed.

Local Street Fee— In Oregon, some cities assess a fee for maintenance of the street system. This needs to be based upon use and is levied against all taxable properties with improvements. The street fee is typically placed on the City utility bills, and usually amounts to between one to two dollars a month for residential units. For multi-family and commercial areas, the charge can be levied per 1000 square feet of floor area, based on parking space requirements, or based on trip generation. This currently is not in place in Winston, but could produce revenue around $2,000 per month. Over the life of this plan this would generate $480,000.

Local Improvement Districts — Local Improvement Districts (LIDs) have been around for a long time in Oregon and elsewhere. The general premise behind LIDs is that those who benefit from an improvement are the ones to pay for it. LIDs in Oregon require that a district be identified. Presently Winston has one LID in place that is funded for $1.5 million for street improvements east of Main Street. It is anticipated that, over the life of this plan, an additional $3 million worth of LIDs can be voted in and funded.
Tax Increment Finance— Tax Increment Finance (TIF) is yet another district level funding concept. Establishment of a TIF requires that an economic development district be created by the City Council, which identifies an area of emphasis for economic development efforts. This district then attracts development and improvements based in part on the promise of infrastructure improvements from the increment.

The increment is based on the difference in assessed value of the property before and after development occurs. The base value continues to go to the City, County, school district, etc., but the increment, or that amount of tax revenue above the base value without new development in the district, is reinvested into infrastructure improvements. This revenue stream is usually converted into a twenty-year revenue bond that is paid for by the annual increment assessment.

Depending upon the type of development attracted, the value of the increment could vary. However, over the 20 year life of the plan, if significant tourism-based development occurs, it is conceivable that the value of the increment could approach or even surpass $1 million.

In total, the City of Winston could generate approximately $5.6 million for locally sponsored projects over the life of this plan. ODOT has committed $5 million to improvements on Highway 42 for a possible total of $10.6 million for TSP improvements during the next 20 years. However, this is well short of the identified $14,056,800 million in street project needs and $768,000 in bike/pedestrian project proposals contained in this TSP. That brings the shortfall to about $4.23 million which will require a serious prioritization of needs for funding and a concerted effort to seek additional funds to carry out the projects in this TSP.

The City is urged to pursue new sources of State and Federal Transportation Improvement Funds. The City should actively seek a larger allocation of State funds for transportation system improvements.
Section 9

Public Participation
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