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MEMORANDUM

Date: September 30, 2010 Project #: 10633

To: Jim Olson, P.E.
City of Ashland

cc: Project Management Team

From: Susan Wright, P.E.
Project: City of Ashland Transportation System Plan Update
Subject: Draft Technical Memorandum #3 - System Inventory

This memorandum provides an inventory of the current transportation system including elements that influence the transportation system such as land use, population, and environmental constraints. The purpose of the system inventory is to document the baseline existing transportation system within the Transportation System Plan (TSP) Project Area. The information presented below was obtained from a number of sources including the 1998 TSP, City of Ashland Comprehensive Plan, and the partial update to the TSP performed in 2007. The project team also used Geographic Information System (GIS) files, other data file formats (e.g., excel, PDF), and studies provided by the City of Ashland, Rogue Valley Council of Governments (RVCOG), Rogue Valley Metropolitan Planning Organization (RVMPO), Rogue Valley Transit District (RVTD), Jackson County, and the Oregon Department of Transportation (ODOT) to assemble the inventory and also conducted limited field data collection and verification.

The following elements are inventoried below:

- Land Uses and Population;
- Street System;
- Collision History;
- Public Transportation System;
- Rail System;
- Bicycle and Pedestrian Systems;
- Air Transportation System;
- Pipeline System; and
- Water Transportation System.

The majority of the inventory is presented in figures and tabular form with supplemental text provided as needed to further explain the information illustrated.

Land Uses and Population Inventory

The purpose of the land use and population inventory is to identify existing, planned, and potential land uses as well as environmental constraints to development. The land use and population inventory will help inform the exiting and future conditions analyses of the TSP update; particularly, as the project team works with the community to develop future alternative scenarios that capture the community's vision for the City of Ashland.

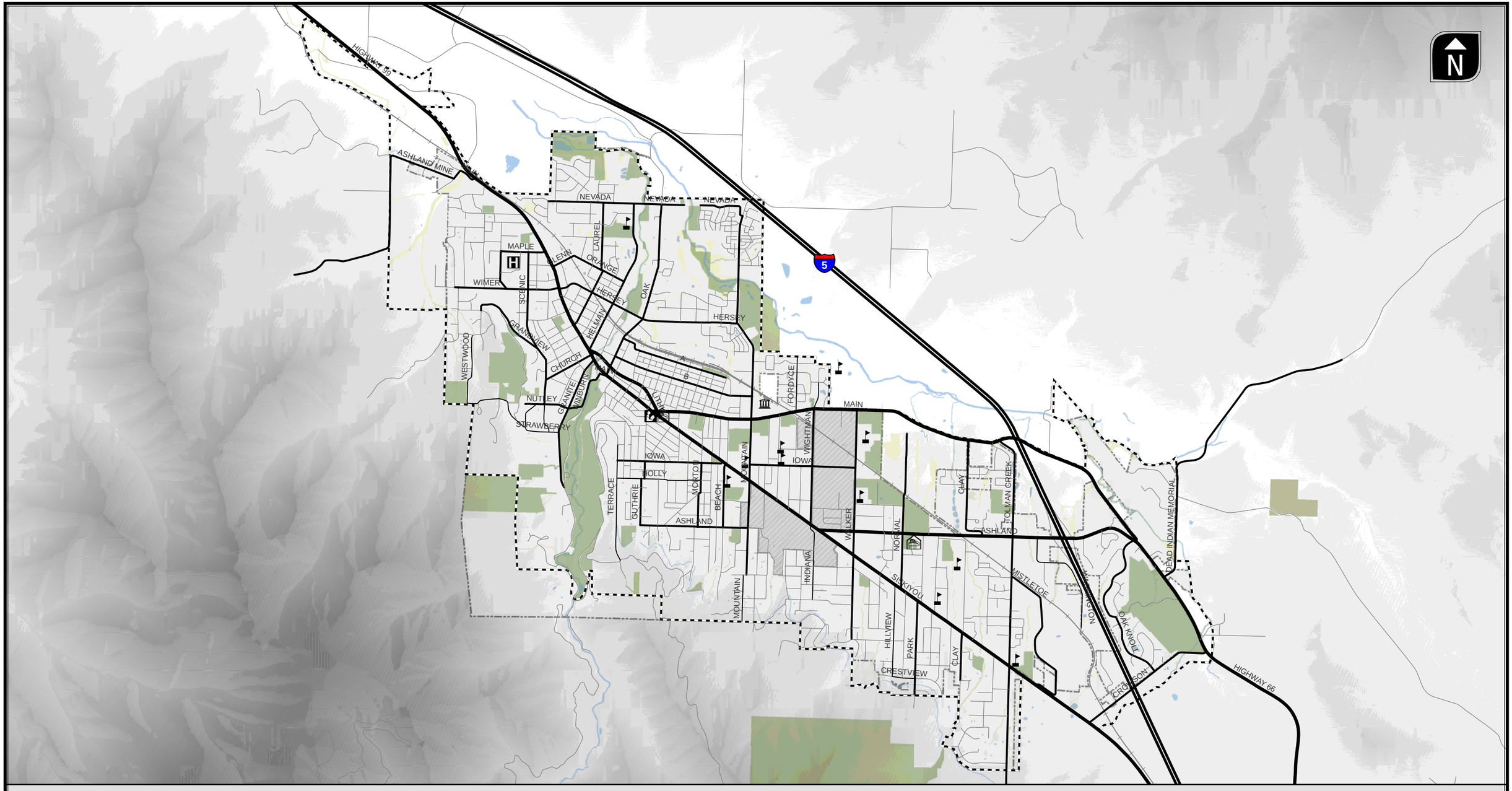
Existing maps produced by the City of Ashland illustrate the comprehensive plan, zoning, buildable lands, historic districts, and physical and environmental constraints including floodplain corridors, steep hillside lands, and wildfire lands. A set of these maps is contained in *Appendix A*.

Figure 1 illustrates activity centers that are likely destinations for bicyclists, pedestrians, and other active modes of transportation (e.g., rollerblading and skateboarding). These destinations are based on current City of Ashland maps and GIS data. As the TSP update completes the existing and future conditions analyses, the activity centers shown in Figure 1 will be integrated into considerations to improve access for pedestrians, bicyclists, and other active modes of transportation. Additional activity centers, such as concentrations of commercial and employment uses, will also be considered when making recommendations for enhanced transit service and active transportation improvements.

Key destinations identified include Ashland High School, Ashland Middle School, four elementary schools, Southern Oregon University, Ashland Community Hospital and the Ashland Public Library. Lithia Park is the city's largest park, but numerous neighborhood parks also generate significant bicycle and pedestrian travel. The downtown core is a significant pedestrian destination and accommodates the highest levels of pedestrian activity within the city. Exhibits 1 and 2 are examples of existing destinations in the City of Ashland. Exhibit 1 shows Garfield Park, a neighborhood park located off of E Main Street. Exhibit 2 is a picture of some of the shopping and downtown activity in Ashland.

Exhibit 1 Garfield Park

Exhibit 2 Downtown Ashland



City Hall
Fire Station
Hospital
Library
Schools
SOU Campus
City Limits
City UGB

Ashland Activity Centers

Figure

1

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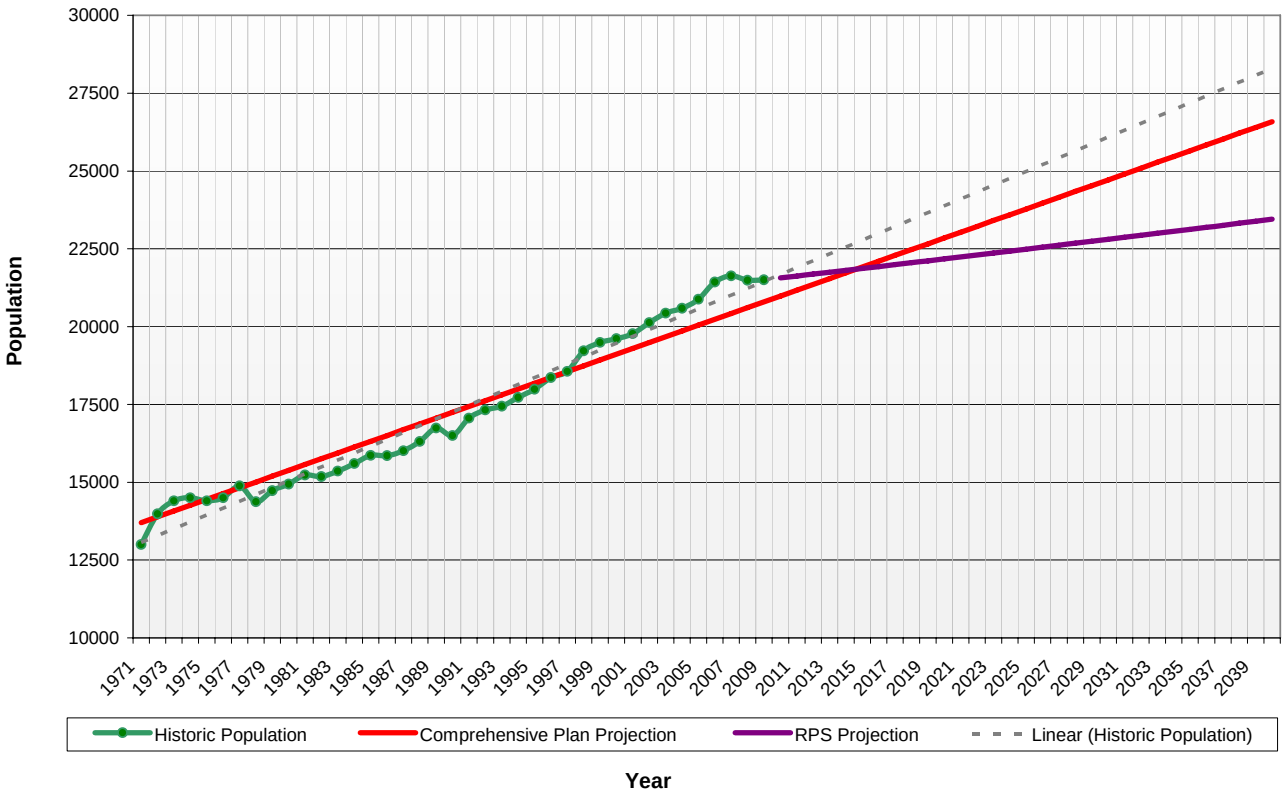
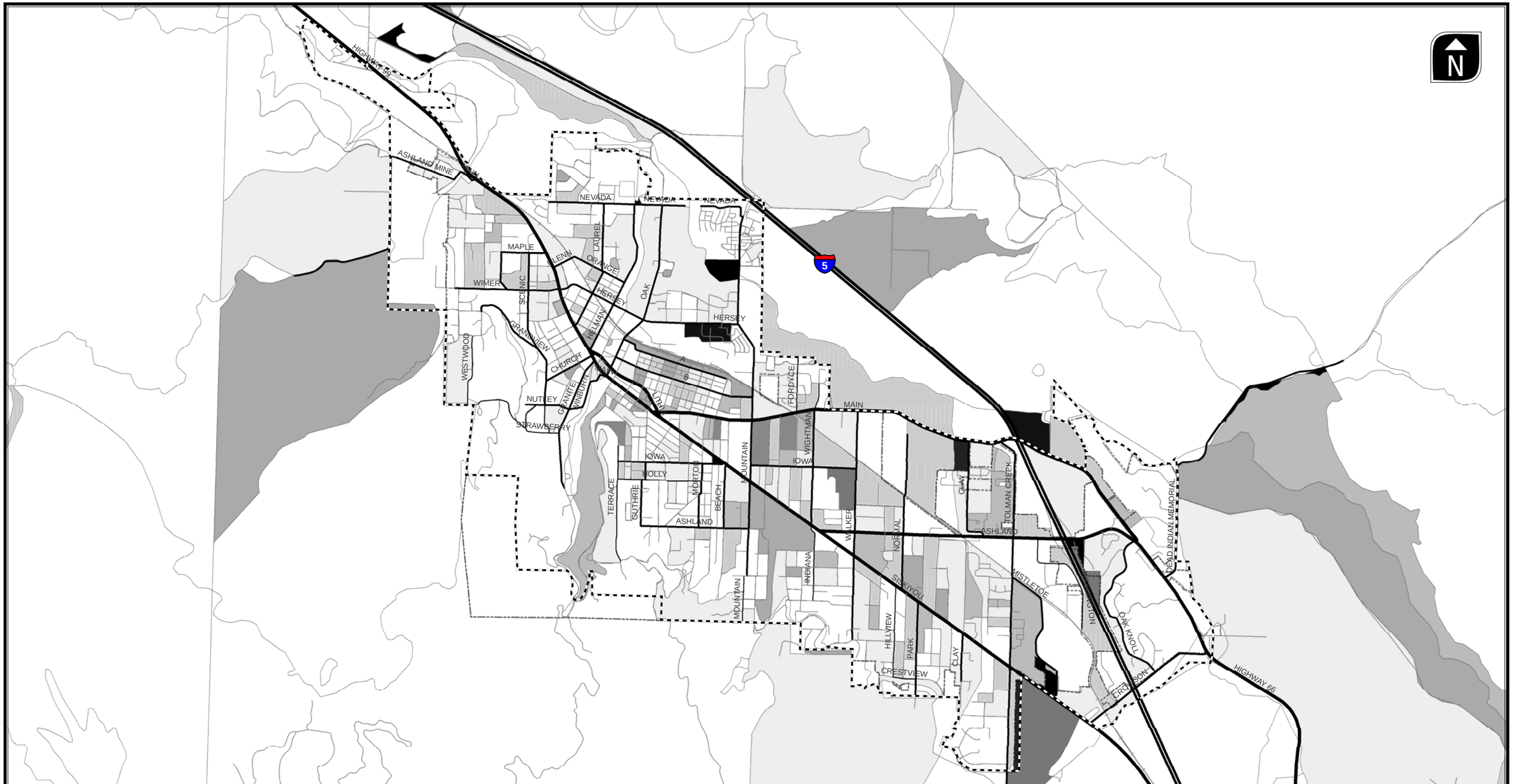
Figure 2 illustrates the location, by percentage, of the minority population residing within the City of Ashland. Figure 3 illustrates the percent of households without access to a personal automobile. The information displayed in Figure 2 and Figure 3 is based on 2000 Census Data. Some notable findings from these figures that will be explored in Technical Memorandum #4 include that larger concentrations of minority populations located north of Main Street and near Interstate 5 (I-5) that do not have easy walking access to fixed route transit. Those living near the intersection of Siskiyou Boulevard and Tolman Creek Road and those living between Iowa Street and Siskiyou Boulevard are within a reasonable walking distance of existing transit service.

This base information will be used to evaluate public transportation, pedestrian, and bicyclist improvements and opportunities as the TSP update progresses into existing and future conditions analyses.

The City of Ashland's historic and projected population is shown in Exhibit 3. As shown in Exhibit 3, the City of Ashland's population in 2009 was 21,505. Based on the Comprehensive Plan, the population projection for the TSP horizon year of 2034 is 25,464. The annual population growth rate from 1971 to 2009 has averaged 1.45% per year. Historical population growth has tracked closely with population projections from the Ashland Comprehensive Plan, which assumes a higher growth rate than was assumed for Ashland by Jackson County (RPS) projections. Growth projections by the city are reflected in economic opportunities analysis work completed in 2003 and in 2007. Figure 4 illustrates where growth has been occurring in the City of Ashland from 1990 to 2000 using 1990 and 2000 US Census Data.

Exhibit 3 Historical and Projected Ashland Population





0% - 5%
5% - 10%
10% - 15%
15% - 20%
20% - 25%
25% - 30%
30% - 35%
35% - 40%
40% - 45%
45% - 50%
50% - 75%
75% - 100%
City Limits
City UGB

Percent of Population With Minority Status by Census Block

Figure

2

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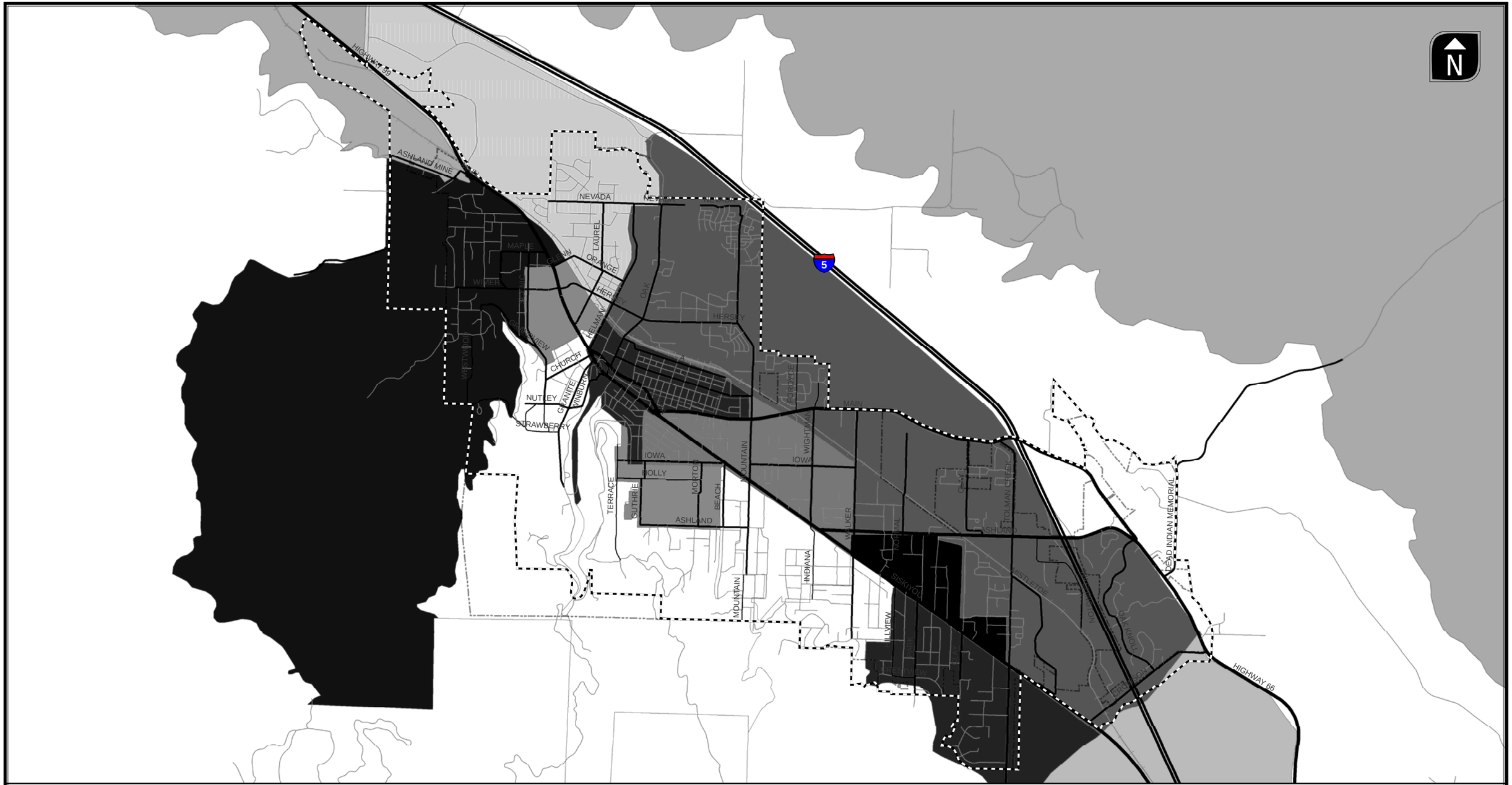

0% - 1%
1% - 2%
2% - 3%
3% - 4%
4% - 5%
5% - 6%
6% - 7%
7% - 8%
8% - 9%
9% - 10%
10% - 15%
15% - 30%
City Limits
City UGB

Percent of Households Without A Personal Automobile by Census Block Group

Figure 3

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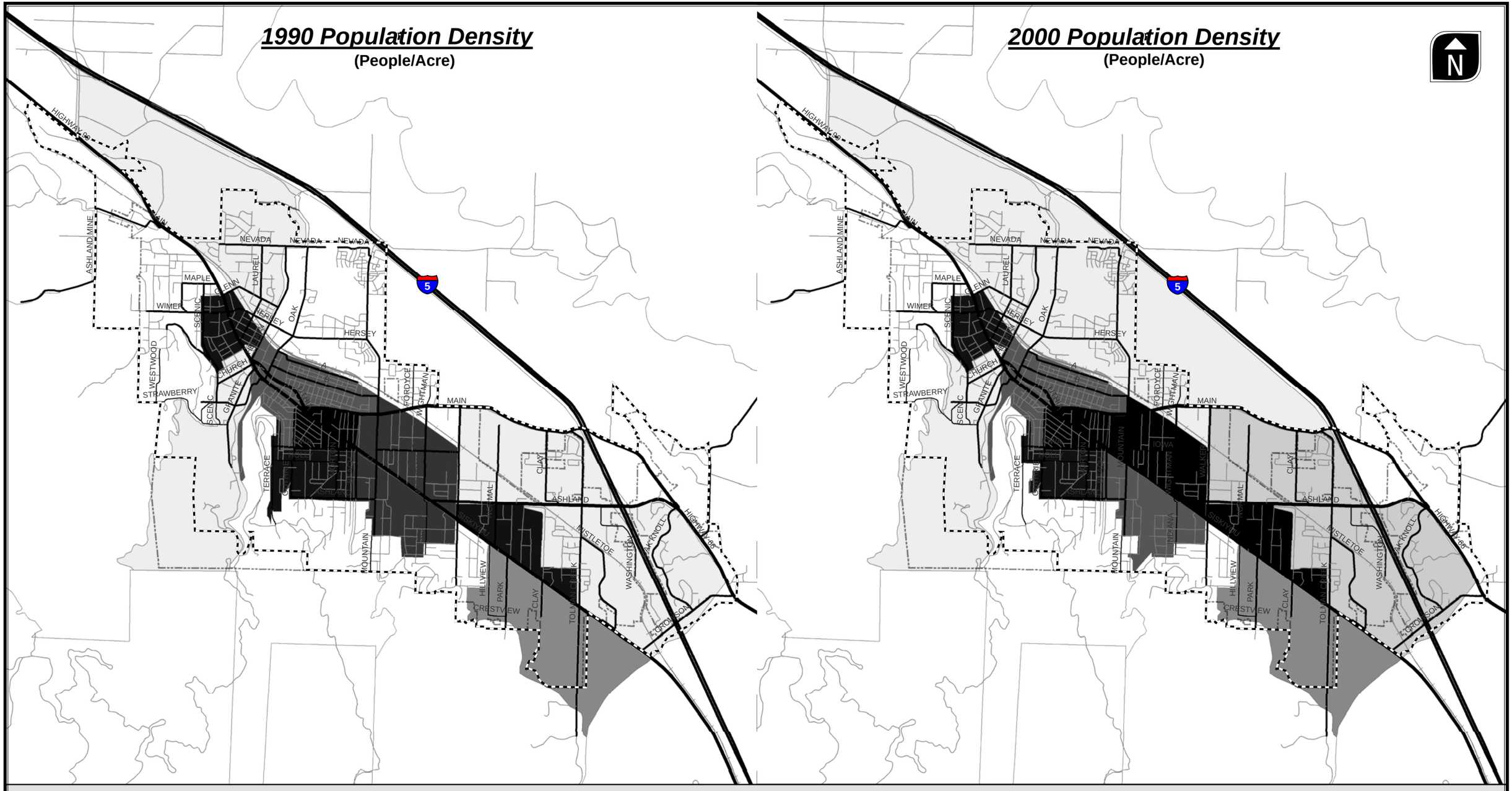
1990 Population Density
(People/Acre)

2000 Population Density
(People/Acre)



0 - 1
1 - 2
2 - 3
3 - 4
4 - 5
5 - 6
6 - 7
7 - 8
8 - 9
9 - 10
City Limits
City UGB

Population Density by Census Block Group

Figure

4

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Relative to Jackson County, the age distribution of the recent increases in population indicate lower shares of youth under 20 years of age and lower shares of the typical working-age range of 25 to 64 years. Retirees over the age of 65 years in Ashland are higher than the state average but remain slightly lower that Jackson County. The Economic Opportunities Analysis of 2007, reviewed as baseline data for Technical Memorandum #1, also provides analysis of growth trends for the City of Ashland. Key findings include:

- The population of Ashland is aging and will continue to do so through an in-migration of people nearing retirement age.
- Ashland has a large population of college aged residents.
- The most robust employment growth will likely be Retail, Health Care, Social Assistance, Leisure and Hospitality.

Housing costs in the City of Ashland are the most expensive in Jackson County and may be a constraint on growth, if affordable work force housing is not sufficiently available.

Street System Inventory

Roadway development and construction in the City of Ashland has historically been constrained due to the steep hillside topography through the southwestern portions of the City. I- 5 borders the City along its northern edge and passes through the southeastern edge of the City. In addition to I-5, two state ORs, OR 99 and OR 66, pass through the City of Ashland serving as key boulevards within the urban area. A local network of avenues and neighborhood collectors distribute traffic from OR 99 and OR 66 throughout the remaining urban area.

The following set of figures and tables illustrate and summarize the current street characteristics within the urban growth boundary including roadway classifications, roadway jurisdiction, intersection characteristics (e.g., signal locations), number of vehicle travel lanes, posted speed limits, on-street parking and other similar characteristics.

FUNCTIONAL STREET CLASSIFICATIONS AND JURISDICTIONAL ROADWAY RESPONSIBILITIES

The City of Ashland recognizes six functional street classifications, as documented in the Transportation Element of the Ashland Comprehensive Plan. These classifications are boulevard (i.e., arterial), avenue (i.e., major collector), neighborhood collector (i.e., minor collector), neighborhood street (i.e., local street), alley, and multiuse path. The Transportation Element of the Ashland Comprehensive Plan provides the following descriptions for the street classifications:

- **Boulevard** – Provide access to major urban activity centers for pedestrians, bicyclists, transit users and motor vehicle users, and provide connections to regional traffic ways such as Interstate 5.

- **Avenue** – Provide concentrated pedestrian, bicycle, and motor vehicle access from boulevards to neighborhoods and to neighborhood activity centers.
- **Neighborhood Collector** – Distribute traffic from boulevards or avenues to neighborhood streets.
- **Neighborhood Street** – Provide access to residential and neighborhood commercial areas.
- **Alley** – A semi-public neighborhood space that provides access to the rear of property; the alley eliminates the need for front yard driveways and provides the opportunity for a more positive front yard streetscape.
- **Multiuse Path** – Off-street facilities used primarily for walking and bicycling; these paths can be relatively short connections between neighborhoods or longer paths adjacent to rivers, creeks, railroad tracks, and open space.

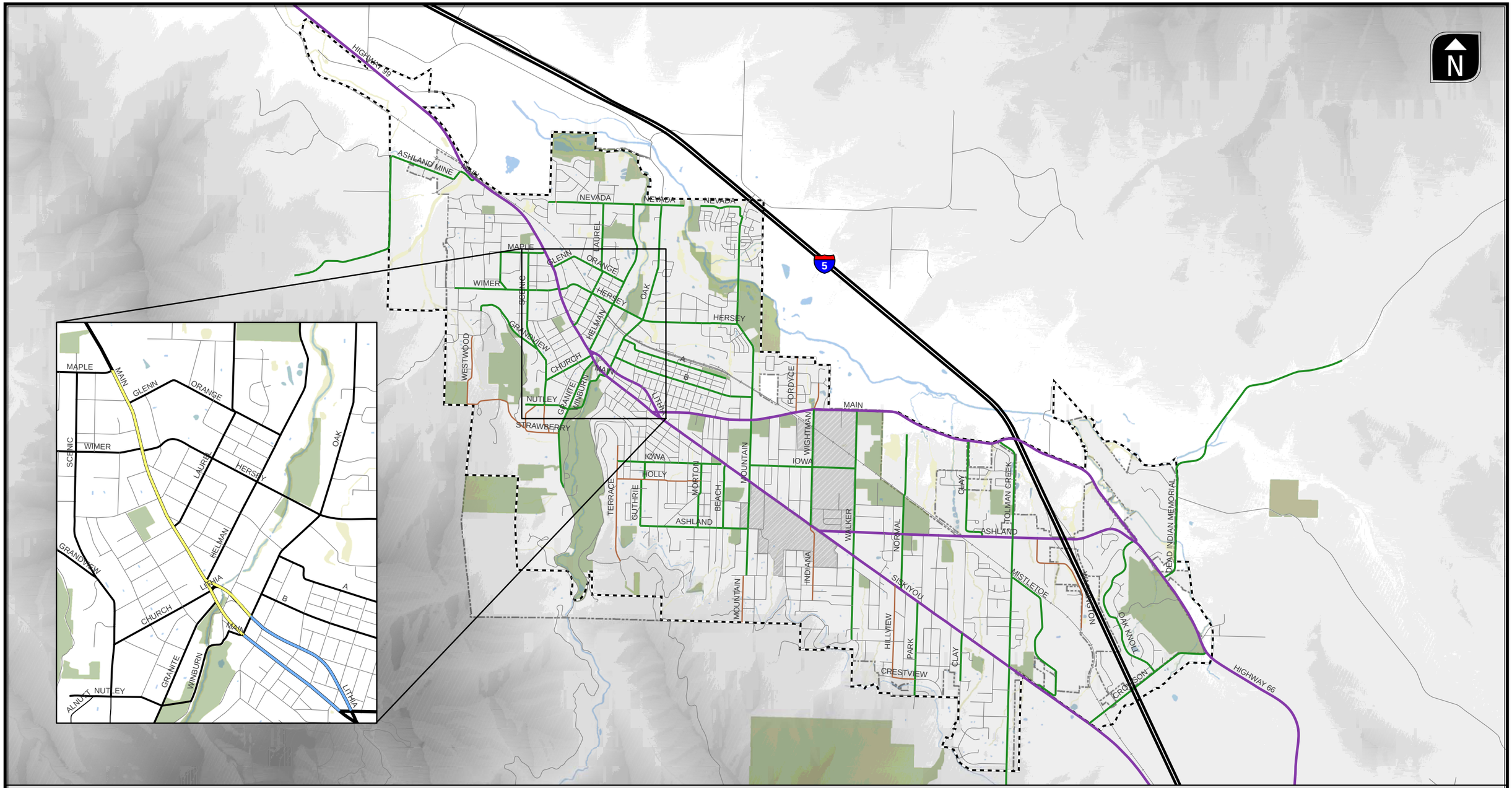
Table 1 summarizes the functional street classifications for roadways classified as neighborhood collectors and higher.

Table 1 City of Ashland Functional Street Classifications

Street Segment	Functional Classification
OR 99 (Siskiyou Boulevard)	Boulevard
OR 66 (Ashland Street)	Boulevard
E Main Street	Boulevard
Lithia Way	Boulevard
A Street	Avenue
Ashland Street from Guthrie Street to Mountain Avenue	Avenue
B Street	Avenue
Beach Street	Avenue
Church Street	Avenue
Clay Street from Ashland Street to E Main Street	Avenue
Clay Street from Mohawk Street to Siskiyou Boulevard	Avenue
Crowson Road	Avenue
Dead Indian Memorial Road	Avenue
Glenn Street	Avenue
Grandview Drive	Avenue
Granite Street	Avenue
Guthrie Street	Avenue
Helman Street	Avenue
Hersey Street	Avenue
Iowa Street	Avenue
N Laurel Street	Avenue
N Main Street and Ashland Mine Road	Avenue

Street Segment	Functional Classification
Maple Street	Avenue
Mistletoe Road	Avenue
Morton Street	Avenue
Mountain Avenue from Nevada Street to Prospect Street	Avenue
Nevada Street	Avenue
Normal Avenue	Avenue
Nutley Street	Avenue
Oak Knoll Drive	Avenue
Oak Street	Avenue
Orange Avenue/Orange Street	Avenue
Parker Street	Avenue
Scenic Drive from Maple Street to Nutley Street	Avenue
Tolman Creek Road	Avenue
Walker Avenue	Avenue
Wightman Street	Avenue
Wimer Street	Avenue
Winburn Way	Avenue
Alnutt Street	Neighborhood Collector
Crestview Drive	Neighborhood Collector
Fordyce Street	Neighborhood Collector
Hillview Drive	Neighborhood Collector
Holly Street	Neighborhood Collector
Indiana Street	Neighborhood Collector
Mountain Avenue from Prospect Street to the southern Urban Growth Boundary	Neighborhood Collector
Scenic Drive from Nutley Street to Strawberry Lane	Neighborhood Collector
Strawberry Lane	Neighborhood Collector
Terrace Street	Neighborhood Collector
Washington Street	Neighborhood Collector
Westwood Street	Neighborhood Collector

Figure 5 provides a map illustrating the streets noted in Table 1 and their corresponding functional street classifications.



- Interstate
- Boulevard
- Avenue
- Neighborhood Collector
- Local Street
- Special Transportation Area Designation
- Urban Business Area Designation
- City UGB
- City Limits

Street Classifications

Figure

5

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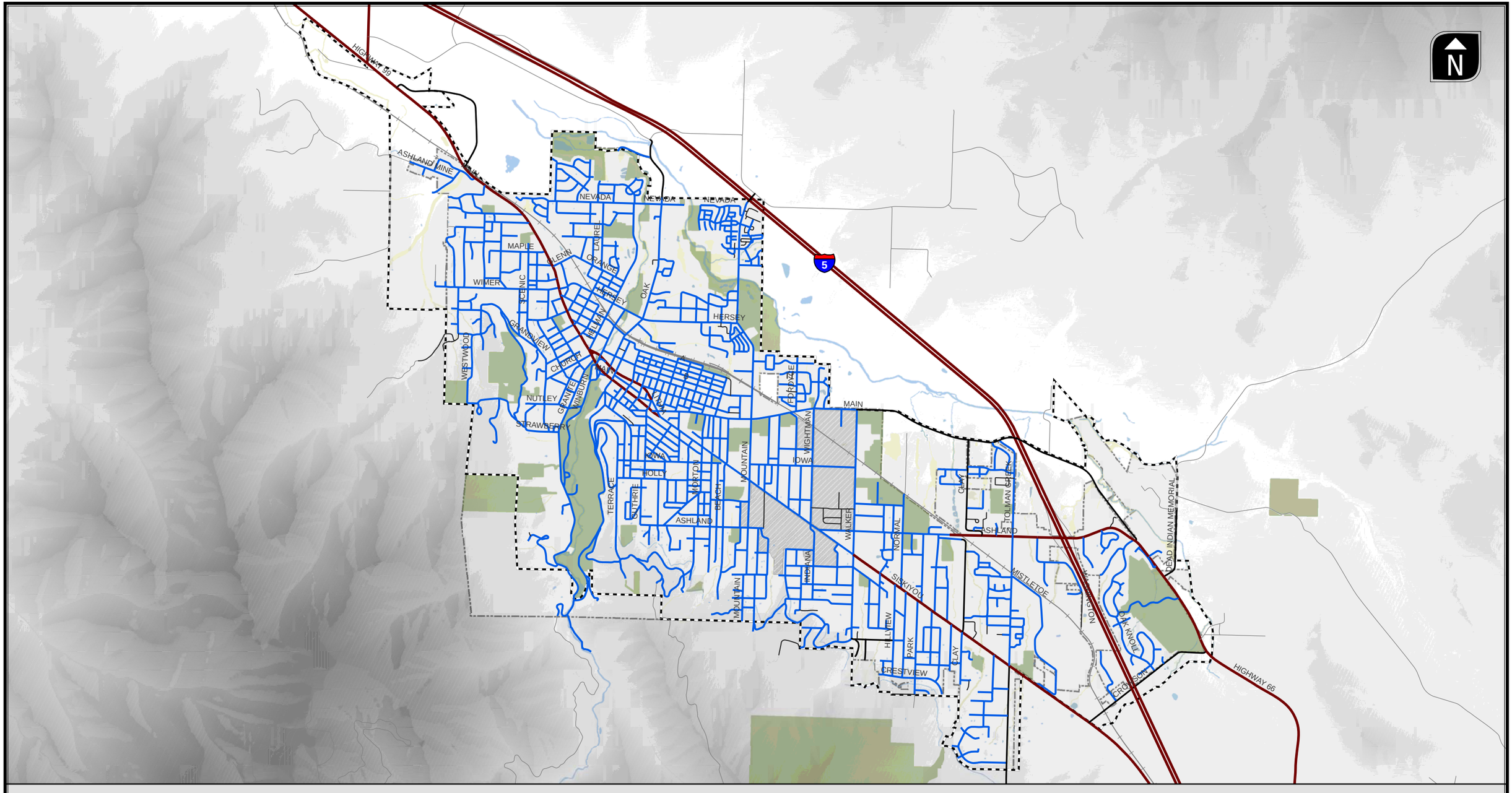
I-5 serves as the major north-south connection to destinations beyond the Rouge Valley Region and links Ashland to Oregon's largest communities including Eugene, Salem and Portland as well as extends south to California. As shown in Figure 5, three freeway interchanges provide access from City of Ashland surface streets to I-5; these interchanges are located at Exits 11, 14, and 19. Exits 11 and 14 provide access to the southern end of Ashland and Exit 19 provides access to the northern part of Ashland.

OR 99 and OR 66 serve as the primary east-west boulevards within Ashland. Their basic characteristics (e.g., number of lanes, posted speed limit) are summarized in Table 2 and Figures 8 through 10. OR 99 provides access from I-5 in the southeastern portion of Ashland through the approximate center of the City's urban area extending beyond the northwestern edge of the City's boundary. OR 66 provides access from I-5 at Exit 14 extending west to intersect with OR 99. OR 66 also extends east beyond the southeastern edge of the City's boundary.

The remaining roadways illustrated provide access to/from OR 66 and OR 99 to the surrounding commercial, residential, recreational, employment, and industrial areas within Ashland. Key avenues in Ashland include Tolman Creek Road, Walker Avenue, Mountain Avenue, Oak Street, Helman Street, Hersey Street, Iowa Street, Wimer Street, and Grandview Drive. These avenues provide north-south and east-west connectivity within the urban boundary.

Table 2 and Figure 6 summarize and illustrate the jurisdictional responsibilities for the streets in the City of Ashland.



ODOT
City
County
Private
Undefined
Private/City
City Limits
City UGB

Jurisdiction Roadway Responsibilities

Figure

6

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Table 2 Jurisdictional Roadway Responsibilities

Street Segment	Jurisdiction
Boulevards	
OR 99 (Siskiyou Boulevard) from Walker Avenue to Urban Growth Boundary	ODOT[1,2]
OR 99 (Siskiyou Boulevard) from Walker Avenue to E Main Street	City of Ashland
OR 99 (Siskiyou Boulevard) from E Main Street to Urban Growth Boundary	ODOT
OR 66 (Ashland Street) from Siskiyou Boulevard to railroad crossing	City of Ashland
OR 66 (Ashland Street) from Railroad Crossing to Urban Growth Boundary	ODOT
Lithia Way	ODOT[1,2]
E Main Street from Lithia Way to Walker Avenue	City of Ashland
E Main Street from Walker Avenue to Ashland Street	Jackson County
Avenues	
A Street	City of Ashland
Ashland Street from Guthrie Street to Mountain Avenue	City of Ashland
B Street	City of Ashland
Beach Street	City of Ashland
Church Street	City of Ashland
Clay Street from Ashland Street to E Main Street	Jackson County
Clay Street from Mohawk Street to Siskiyou Boulevard	City of Ashland
Crowson Road	Jackson County
Dead Indian Memorial Road	Jackson County
Glenn Street	City of Ashland
Grandview Drive	City of Ashland
Granite Street	City of Ashland
Guthrie Street	City of Ashland
Helman Street	City of Ashland
Hersey Street	City of Ashland
Iowa Street	City of Ashland
N Laurel Street	City of Ashland
N Main Street and Ashland Mine Road	City of Ashland
Maple Street	City of Ashland
Mistletoe Road	City of Ashland
Morton Street	City of Ashland
Mountain Avenue from Nevada Street to Prospect Street	City of Ashland
Nevada Street	City of Ashland
Normal Avenue	City of Ashland
Nutley Street	City of Ashland

Street Segment	Jurisdiction
Oak Knoll Drive	City of Ashland
Oak Street	City of Ashland
Orange Avenue/Orange Street	City of Ashland
Parker Street	City of Ashland
Scenic Drive from Maple Street to Nutley Street	City of Ashland
Tolman Creek Road from E Main Street to Siskiyou Boulevard	City of Ashland
Tolman Creek Road from Siskiyou Boulevard to Urban Growth Boundary	Jackson County
Walker Avenue	City of Ashland
Wightman Street	City of Ashland
Wimer Street	City of Ashland
Winburn Way	City of Ashland
Neighborhood Collectors	
Alnutt Street	City of Ashland
Crestview Drive	City of Ashland
Fordyce Street	City of Ashland
Hillview Drive	City of Ashland
Holly Street	City of Ashland
Indiana Street	City of Ashland
Mountain Avenue from Prospect Street to the Urban Growth Boundary	City of Ashland
Scenic Drive from Nutley Street to Strawberry Lane	City of Ashland
Strawberry Lane	City of Ashland
Terrace Street	City of Ashland
Washington Street	City of Ashland
Westwood Street	City of Ashland

Notes:
[1] Indicates portion of the roadway segment with a Special Transportation Area designation
[2] Indicates portion of the roadway segment with an Urban Business Area designation

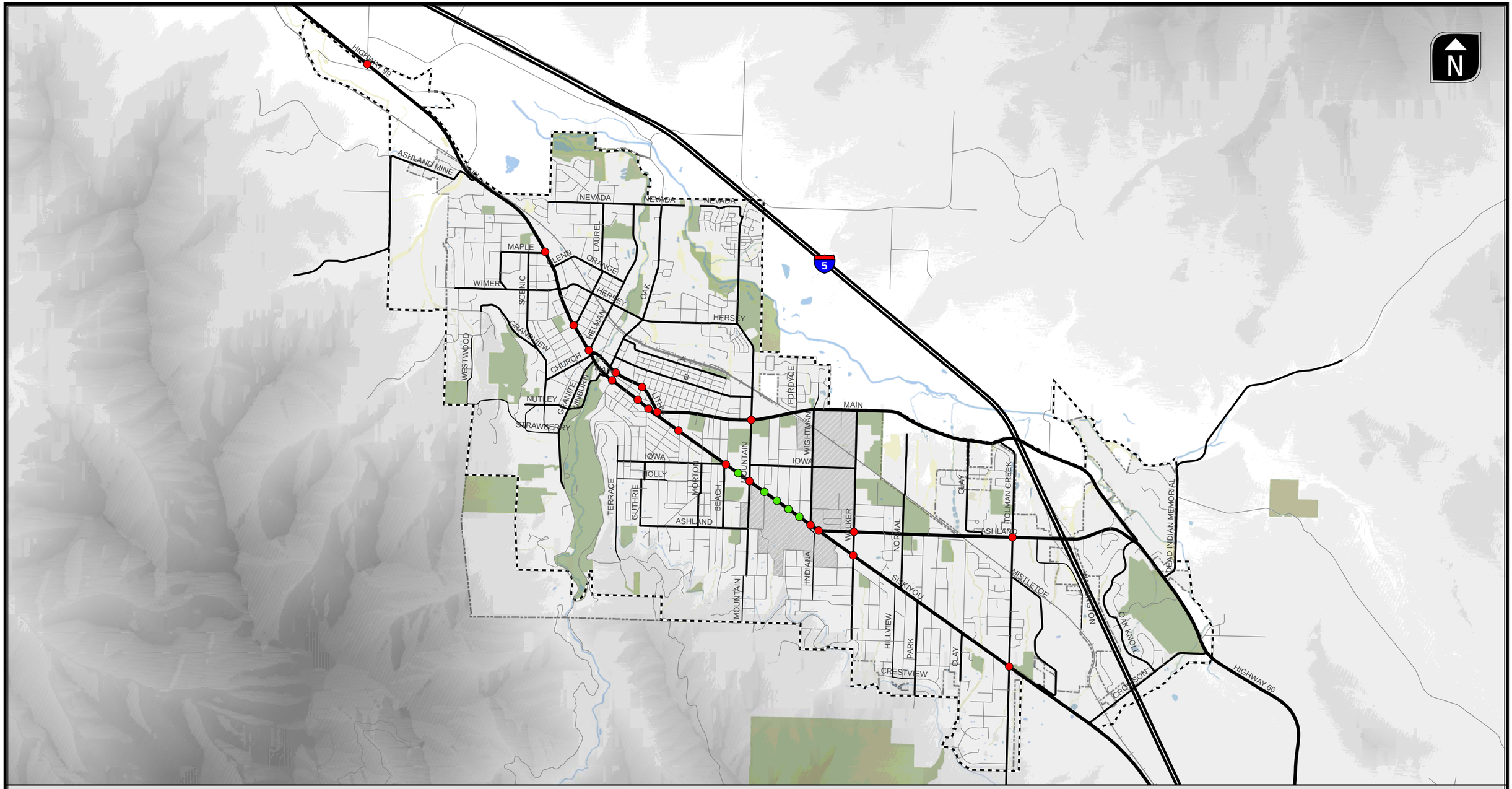
The City of Ashland is responsible for the majority of streets within the urban growth boundary. The exceptions are portions of OR 66 and OR 99, which fall under ODOT responsibility. Portions of OR 99 (Siskiyou Boulevard) have been designated by ODOT with Special Transportation Area (STA) and Urban Business Area (UBA) designations which allows OR 99 to deviate from typical ODOT District OR standards providing the City with additional flexibility when managing and planning their downtown urban core. These sections are located in the downtown Ashland area and on OR 99 northwest of downtown. The specific segments of OR 99 are shown in Figure 6 and noted in Table 2. There are also five roadway segments classified as avenues that fall under Jackson County jurisdictional responsibility.

STUDY INTERSECTION AND STREET SEGMENT CHARACTERISTICS

Table 3 and Figure 7 summarize the intersections (and the existing traffic control) that have had recent traffic counts conducted for the TSP and that will be analyzed operationally in future memorandums on existing operations and future operations. These study intersections are locations where neighborhood collector facilities and higher-order roadways intersect.

Table 3 TSP Study Intersections and Traffic Control

Study Intersections	Existing Traffic Control
Granite Street/Winburn Way/Nutley Street	Stop Controlled
Hersey Street/Oak Street	Stop Controlled
E Main Street/Walker Avenue	Stop Controlled
Mountain Avenue/Ashland Street	Stop Controlled
Mountain Avenue/Hersey Street	Stop Controlled
Mountain Avenue/Iowa Street	Stop Controlled
Mountain Avenue/E Main Street	Traffic Signal
Nevada Street/Oak Street	Stop Controlled
OR 66/Dead Indian Memorial Road	Stop Controlled
OR 66/I-5 Exit 14 Northbound Ramps	Stop Controlled
OR 66/I-5 Exit 14 Southbound Ramps	Stop Controlled
OR 66/Main Street/Oak Knoll Drive	Stop Controlled
OR 66/OR 99	Traffic Signal
OR 66/Tolman Creek Road	Traffic Signal
OR 66/Walker Street	Traffic Signal
OR 66/Washington Street	Stop Controlled
OR 99/Helman Street	Traffic Signal
OR 99/Hersey Street/Wimer Street	Stop Controlled
OR 99/Maple Street	Traffic Signal
OR 99/Mistletoe Road	Stop Controlled
OR 99/Mountain Avenue	Traffic Signal
OR 99/Tolman Creek Road	Traffic Signal
OR 99/Valley View Road	Traffic Signal
OR 99/Walker Street	Traffic Signal
OR 99 Northbound (Lithia Way)/E Main Street	Traffic Signal
OR 99 Northbound (Lithia Way)/ Oak Street	Stop Controlled
OR 99 Southbound/E Main Street	Traffic Signal
OR 99 Southbound/Oak Street	Stop Controlled
Tolman Creek Road/Mistletoe Road	Stop Controlled
Walker Street/Iowa Street	Stop Controlled



- Traffic Signal
- Pedestrian Signal (Flashing Amber Lights)
- City Limits
- City UGB

Signal Locations

Figure

7

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Of the thirty study intersections listed in Table 3, eighteen are stop controlled intersections and twelve are controlled by traffic signals. The traffic operations and safety performance of these intersections will be presented and discussed in Technical Memorandum #4.

Table 4 summarizes roadway segment characteristics including number of lanes, posted speed limits, and type of roadway surface. Figures 8 through 10 illustrate the roadway characteristics summarized in Table 4.

Table 4 Roadway Segment Characteristics

Street Segment	Number of Travel Lanes	Posted Speed	Roadway Surface
Boulevards			
OR 99 (Siskiyou Boulevard) from Urban Growth Boundary to Tolman Creek Road	2	45 mph	Paved
OR 99 (Siskiyou Boulevard) from Tolman Creek Road to Harmony Lane	2	35 mph	Paved
OR 99 (Siskiyou Boulevard) from Harmony Lane to Walker Avenue	2	30 mph	Paved
OR 99 (Siskiyou Boulevard) from Walker Avenue to Ashland Street	4	25 mph	Paved
OR 99 (Siskiyou Boulevard) from Ashland Street to Lithia Way	5	25 mph	Paved
OR 99 (Siskiyou Boulevard) from Helman Street to Grant Street	4	30 mph	Paved
OR 99 (Siskiyou Boulevard) from Grant Street to Jackson Road	4 to 5	35 mph	Paved
OR 99 (Siskiyou Boulevard) from Jackson Road to Urban Growth Boundary	4 to 5	45 mph	Paved
OR 66 (Ashland Street) from Siskiyou Boulevard to Normal Avenue	5	30 mph	Paved
OR 66 (Ashland Street) from Normal Avenue to I-5 Southbound Ramps	5	35 mph	Paved
OR 66 (Ashland Street) from I-5 Southbound Ramps to Dead Indian Memorial Road	2 to 3	35 mph	Paved
OR 66 (Ashland Street) from Dead Indian Memorial Road to Urban Growth Boundary	2	45 mph	Paved
Lithia Way	2	20 mph	Paved
E Main Street from Helman Street to Lithia Way	2	20 mph	Paved
E Main Street from Lithia Way to Walker Avenue	2	25 mph	Paved
E Main Street from Walker Avenue to Ashland Street	2	45 mph	Paved
Avenues			
A Street	2	20 mph	Paved
Ashland Street from Guthrie Street to Mountain Avenue	2	25 mph	Paved
B Street	2	25 mph	Paved
Beach Street	2	25 mph	Paved

Street Segment	Number of Travel Lanes	Posted Speed	Roadway Surface
Church Street	2	25 mph	Paved
Clay Street from Ashland Street to E Main Street	2	25 mph	Paved
Clay Street from Mohawk Street to Siskiyou Boulevard	2	25 mph	Paved
Crowson Road	2	45 mph	Paved
Dead Indian Memorial Road	2	50 mph	Paved
Glenn Street	2	25 mph	Paved
Granite Street	2	25 mph	Paved
Guthrie Street	2	25 mph	Paved
Helman Street	2	25 mph	Paved
Hersey Street	2	25 mph	Paved
Iowa Street	2	25 mph	Paved
N Laurel Street	2	25 mph	Paved
N Main Street and Ashland Mine Road	2	25 mph	Paved
Maple Street	2	25 mph	Paved
Mistletoe Road	2	25 mph	Paved
Morton Street	2	25 mph	Paved
Mountain Avenue from Nevada Street to Prospect Street	2	25 mph	Paved
Nevada Street	2	25 mph	Paved
Normal Avenue from Siskiyou Boulevard to Railroad Crossing	2	25 mph	Paved
Normal Avenue from Railroad Crossing to End	2	25 mph	Gravel
Nutley Street	2	25 mph	Paved
Oak Knoll Drive	2	25 mph	Paved
Oak Street	2	25 mph	Paved
Orange Avenue/Orange Street	2	25 mph	Paved
Park Street	2	25 mph	Paved
Scenic Drive from Maple Street to Nutley Street	2	25 mph	Paved
Tolman Creek Road	2	25 mph	Paved
Walker Avenue from E Main Street to Parker Street (school zone)	2	25 mph	Paved
Walker Avenue from Parker Street to Peachey Road	2	25 mph	Paved
Wightman Street	2	25 mph	Paved
Wimer Street	2	25 mph	Paved
Winburn Way	2	25 mph	Paved
Neighborhood Collectors			
Alnutt Street	1	25 mph	Paved
Crestview Drive	2	25 mph	Paved

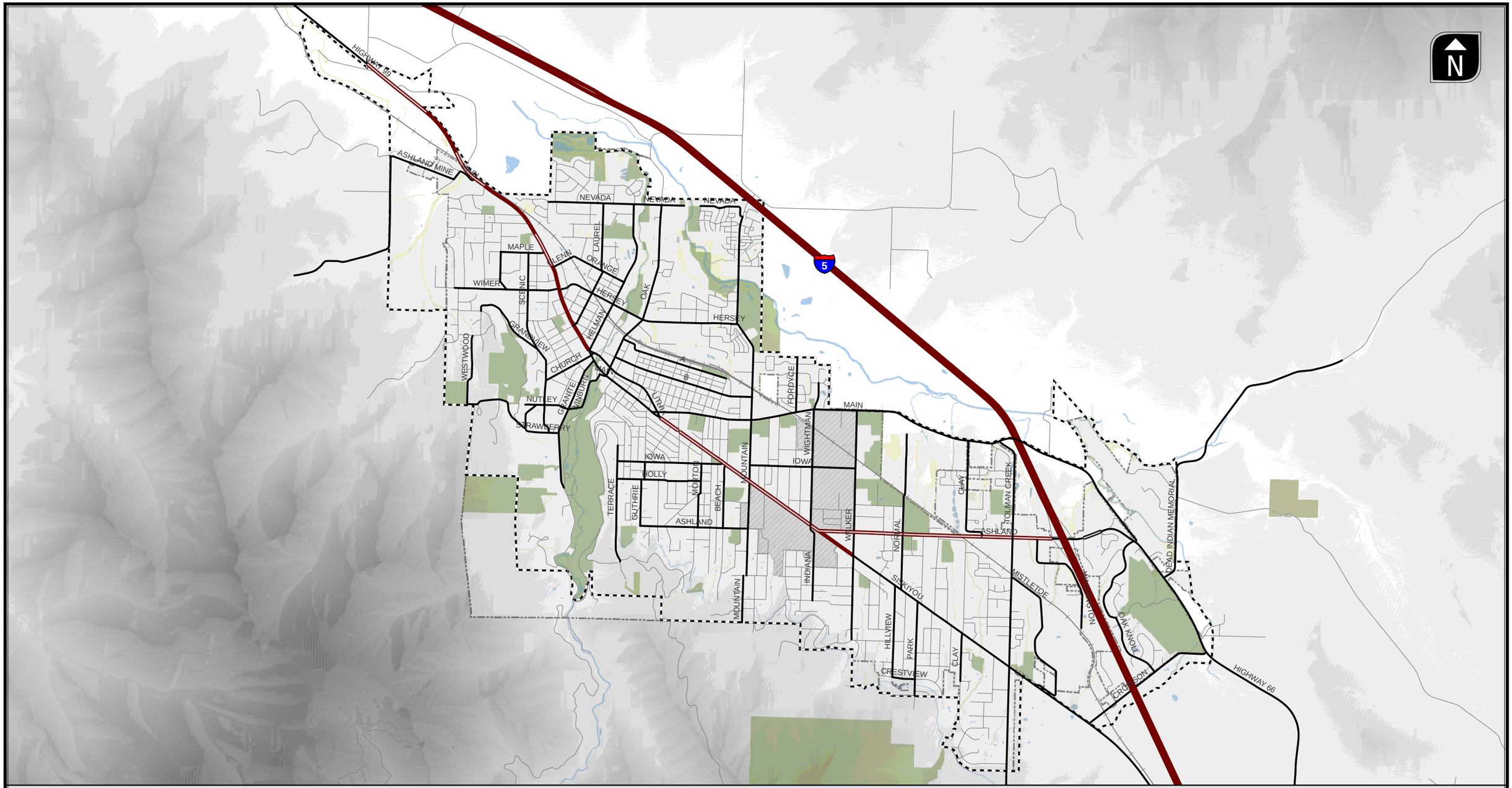
Street Segment	Number of Travel Lanes	Posted Speed	Roadway Surface
Fordyce Street	2	25 mph	Paved
Hillview Drive	2	25 mph	Paved
Holly Street	2	25 mph	Paved
Indiana Street	2	25 mph	Paved
Mountain Avenue from Prospect Street to Urban Growth Boundary	2	25 mph	Paved
Scenic Drive from Nutley Street to Strawberry Lane	2	25 mph	Paved
Strawberry Lane	2	25 mph	Paved
Terrace Street	2	25 mph	Paved
Washington Street	2	25 mph	Paved
Westwood Street	2	25 mph	Paved

As shown in Figure 9 and Figure 10, the majority of roadways within Ashland are paved with posted speeds of 25 mph. Roadway facilities such as Siskiyou Boulevard (OR 99) and Ashland Street (OR 66) have higher posted speeds particularly as these facilities approach I-5 and reach the southeastern and northwestern edges of the City limits.

Appendix B contains additional details regarding roadway segment characteristics including a tabular summary of pavement widths. *Appendix C* contains a series of figures illustrating existing right-of-way along streets classified as neighborhood collectors and higher.

DESIGNATED ON-STREET PARKING

Figure 11 illustrates designated on-street parking in the City of Ashland. As shown in Figure 11, designated on-street parking is primarily in the downtown core of Ashland. While on-street parking is permitted in other areas of Ashland, designations in terms of time and use (e.g., loading zones, commercial uses) occur primarily in the downtown shopping and commercial area and near the hospital.



2 Lanes
3 Lanes
4 Lanes
5 Lanes
City Limits
City UGB

Number of Lanes

Figure

8

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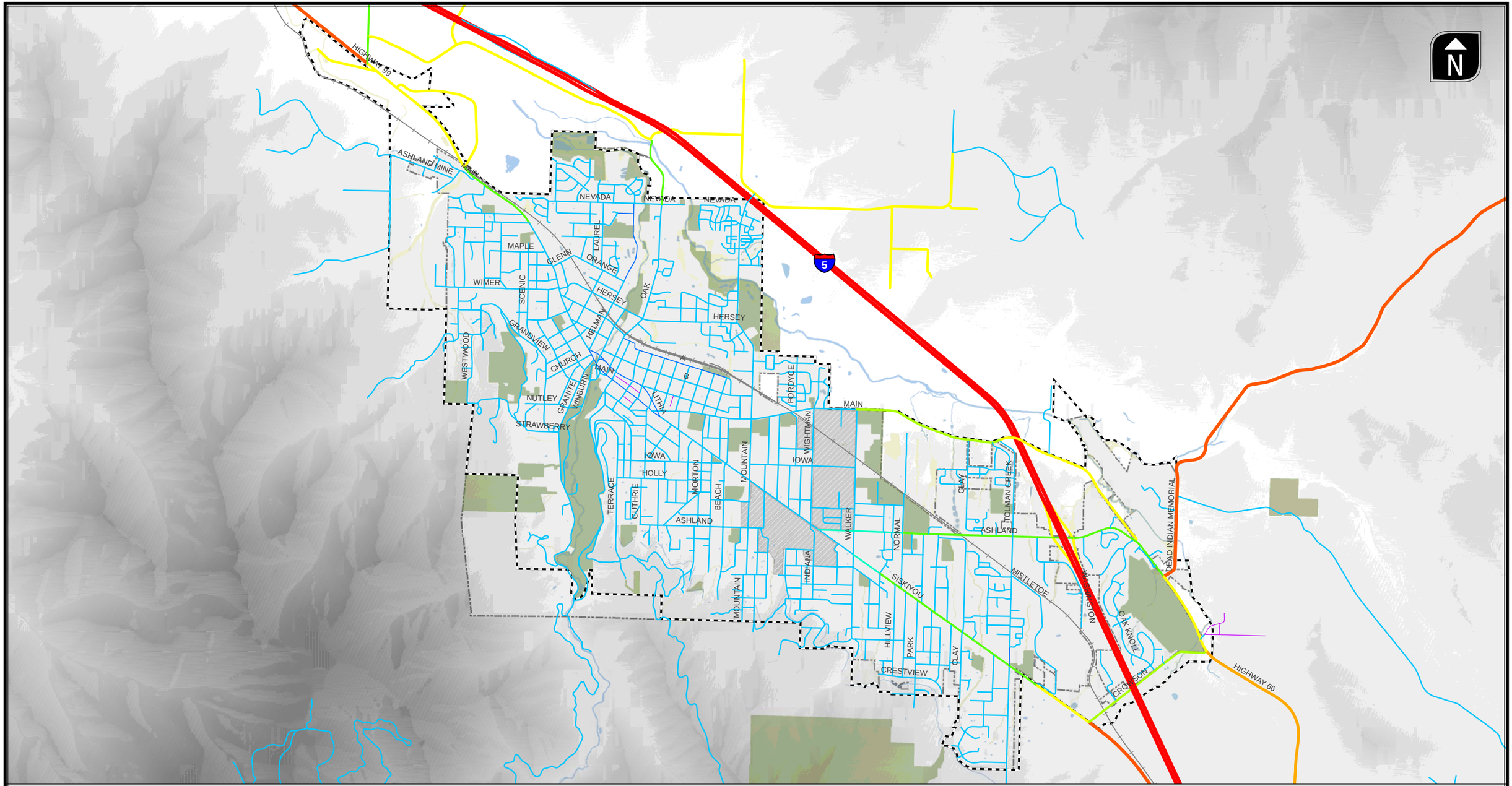

15
20
25
30
35
40
45
50
55
65
City Limits
City UGB

Posted Speed Limits

Figure
9

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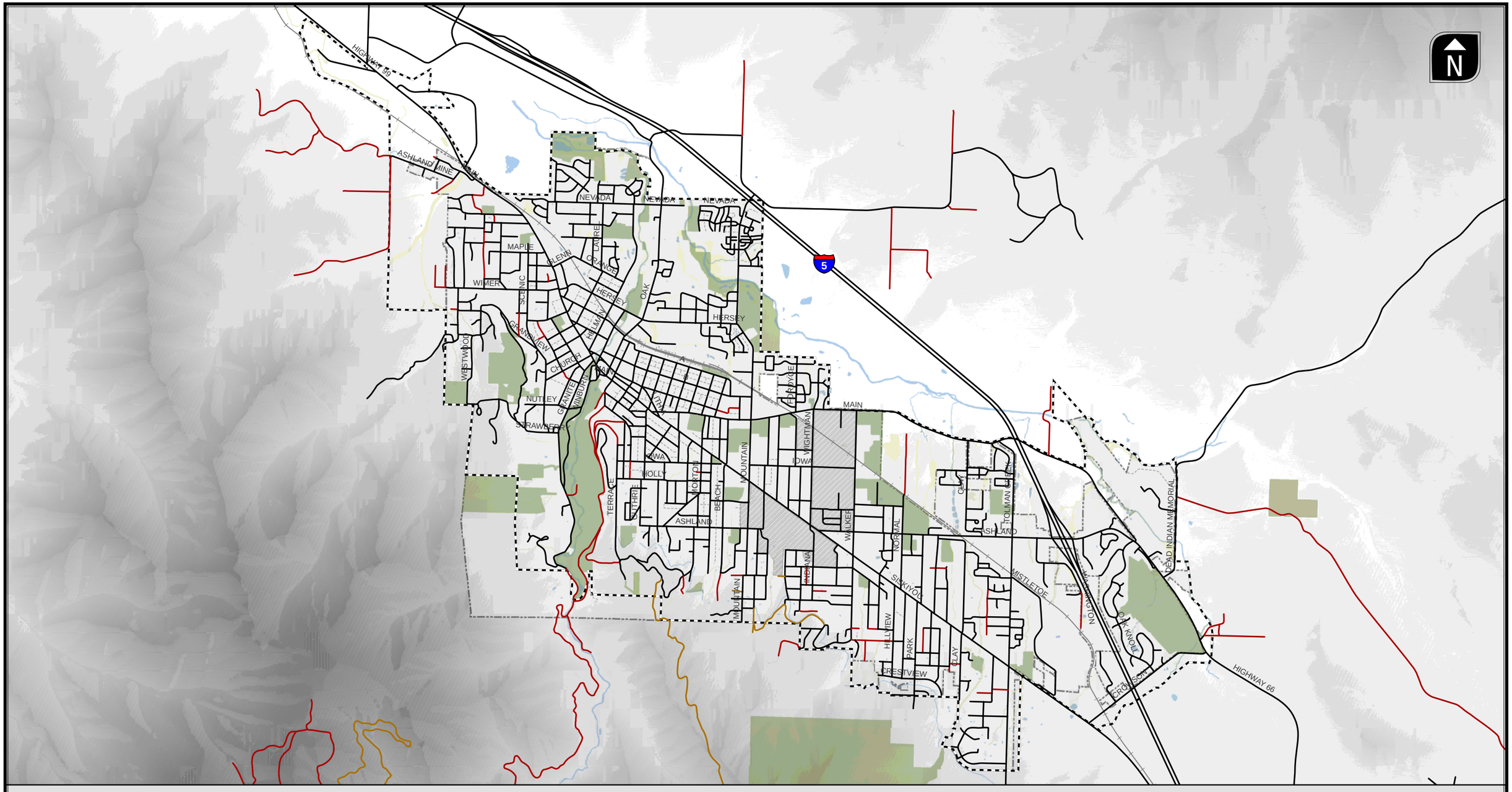

Paved
Gravel
Dirt
Unspecified

City Limits
City UGB

Roadway Surface

Figure

10

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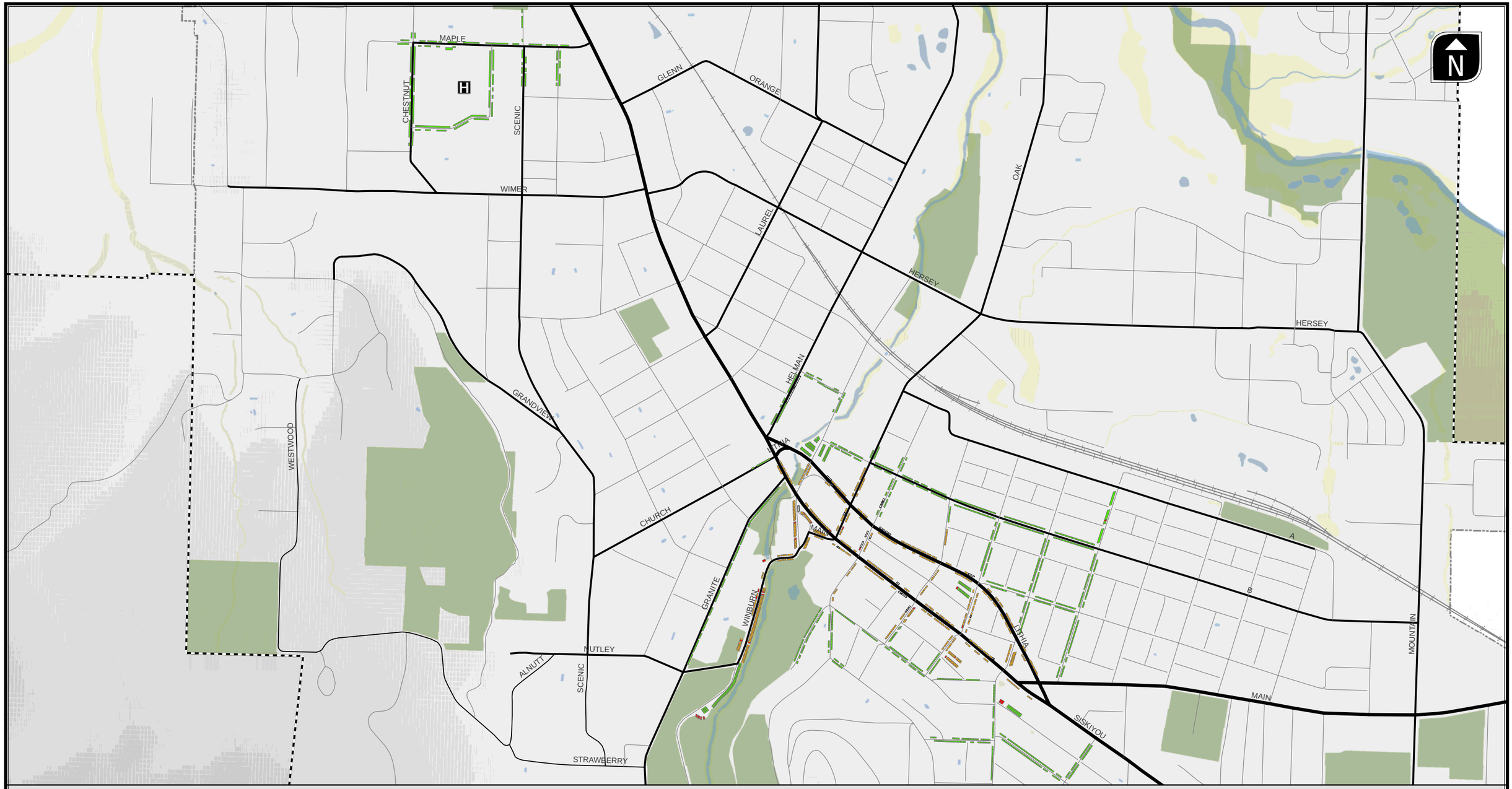

Reserved
Time Restricted
Unrestricted
Loading Zone
City Limits
City UGB

Designated On-Street Parking Map

Figure
11

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ACCESS SPACING

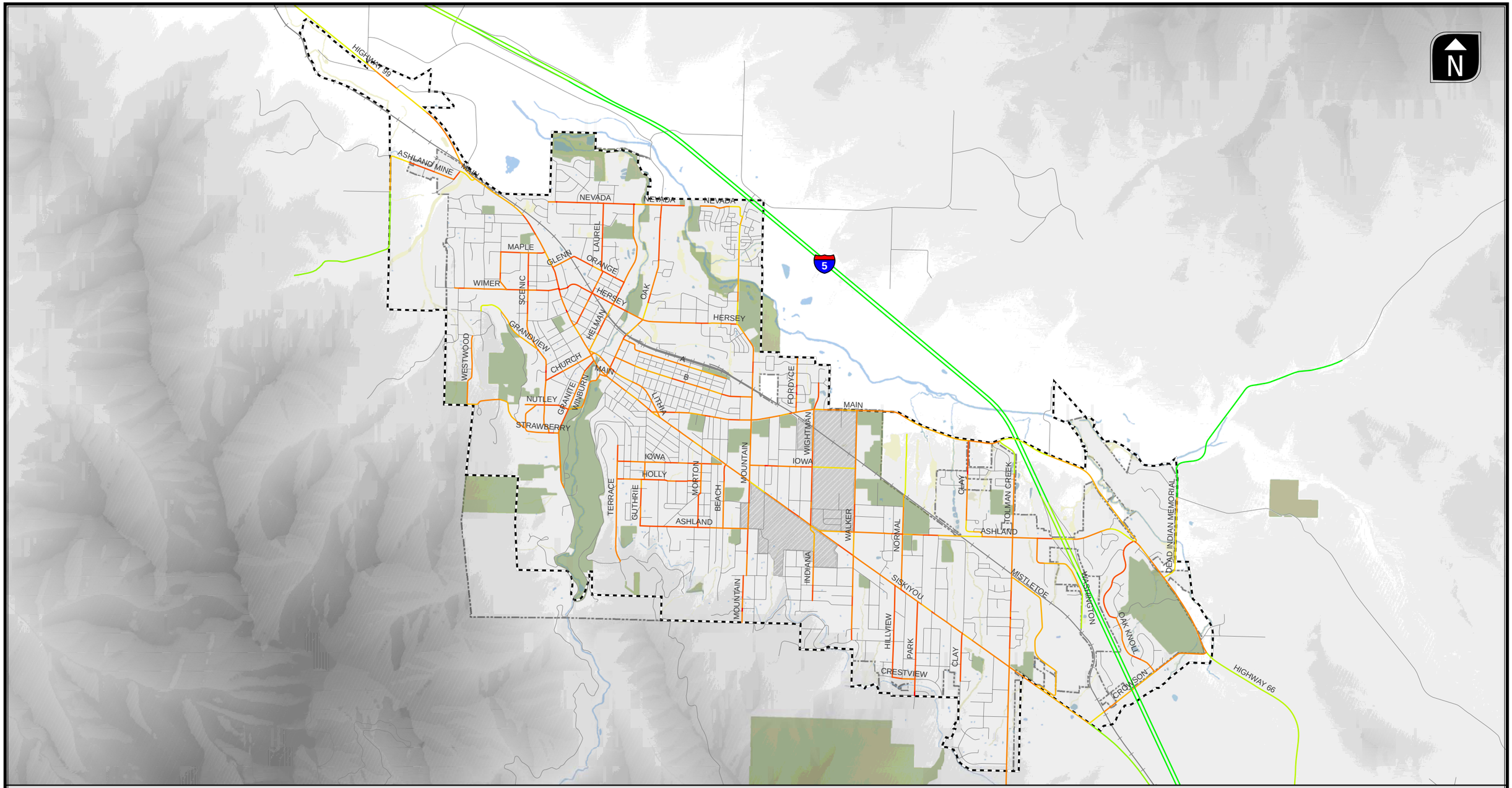
Providing adequate access to other public roadways, land uses, and destinations is a critical part of an effective transportation system. However, it is necessary to balance access with the need for mobility and safety on the system as well. Providing access via other public streets and driveways to land uses creates points of friction from a traffic operations perspective and introduces conflict points.

To manage and implement a system that balances access with mobility and safety, the City of Ashland has minimum access spacing standards based on street classifications. The City of Ashland has a minimum driveway access spacing standard of 300 feet for boulevards, 100 feet for avenues, and 75 feet for neighborhood collectors. The public roadway spacing standards for boulevards is 1 mile and ¼ mile for avenues. The City currently does not have minimum public roadway spacing standards for neighborhood collectors or neighborhood streets. Because OR 66 and OR 99 are ODOT facilities, they are subject to ODOT access spacing standards. However, ODOT and City of Ashland have established an agreement that OR 66 and OR 99 within the City limits are subject to minimum spacing standards different than those typically applied to District Highways. OR 66 and OR 99 within Ashland are subject to a public roadway spacing standard of ¼ mile and a minimum driveway spacing standard of 300 feet.

Figure 12 illustrates existing average access spacing along roadway segments classified as boulevards, avenues, and neighborhood collectors. The average spacing identified for each segment represents the average driveway spacing for the side of the roadway with the most number of driveways.

In general, the boulevards in Ashland do not meet the 1 mile public roadway spacing standard; similarly, the majority of the avenues do not meet the ¼ mile public roadway spacing standard. OR 99 and OR 66 also do not meet the modified minimum public roadway spacing standard of 1/4 mile agreed upon by ODOT and the City. In terms of driveway access spacing, the boulevards and avenues in the downtown core of Ashland tend to be more frequent than the minimum spacing standard. There are also segments of Siskiyou Boulevard from Mountain Avenue to Tolman Creek and segments of Ashland Street from Siskiyou Boulevard to Tolman Creek that have more access driveways than the minimum driveway access spacing standard. Technical Memorandum #4 will provide a more comprehensive assessment of existing access spacing conditions in Ashland.

Appendix C contains a set of more detailed figures illustrating driveway and block spacing for study roadway segments in the City of Ashland.



0 - 50 ft
50 - 100 ft
100 - 250 ft
250 - 500 ft
500 - 750 ft
750 - 1000 ft
1000 - 1250 ft
1250 - 2500 ft
2500 - 5000 ft
5000 ft +
City Limits
City UGB

Average Existing Access Spacing

Figure

12

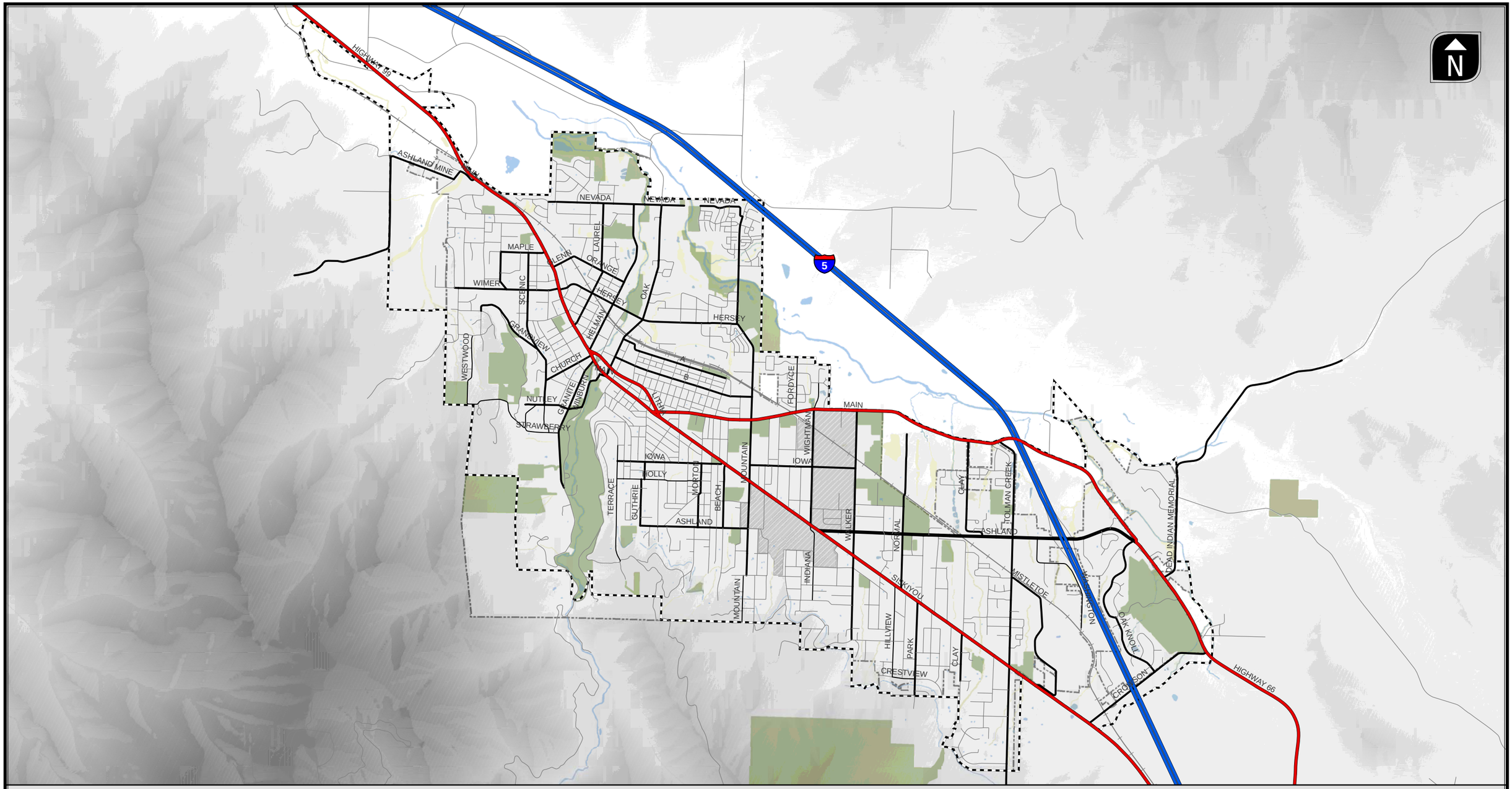
H:\profile\10633 - City of Ashland TSP Update\gis\Memo-figs\Fig13_Accessspacing

FREIGHT ROUTES

The freight routes within the study area are illustrated in Figure 13 and include I-5, OR 99 and OR 66. I-5 is designated as a National OR System Freight Route. The City has designated OR 66 and OR 99 as freight routes through the City. The City designated routes are intended primarily for local freight deliveries and local freight movements. Regional and national truck freight movements are intended to occur via I-5.

ITS INFRASTRUCTURE

The only Intelligent Transportation System (ITS) infrastructure in the area is outside of the urban growth boundary and is located along I-5. There are two locations along I-5 with dynamic message signs, one weigh in motion station, and a OR advisory signal for motorists; the location of these items are shown in Figure 14.



City Designated Freight Route

National Highway System Freight Route

City Limits

City UGB

Freight Routes

Figure

13

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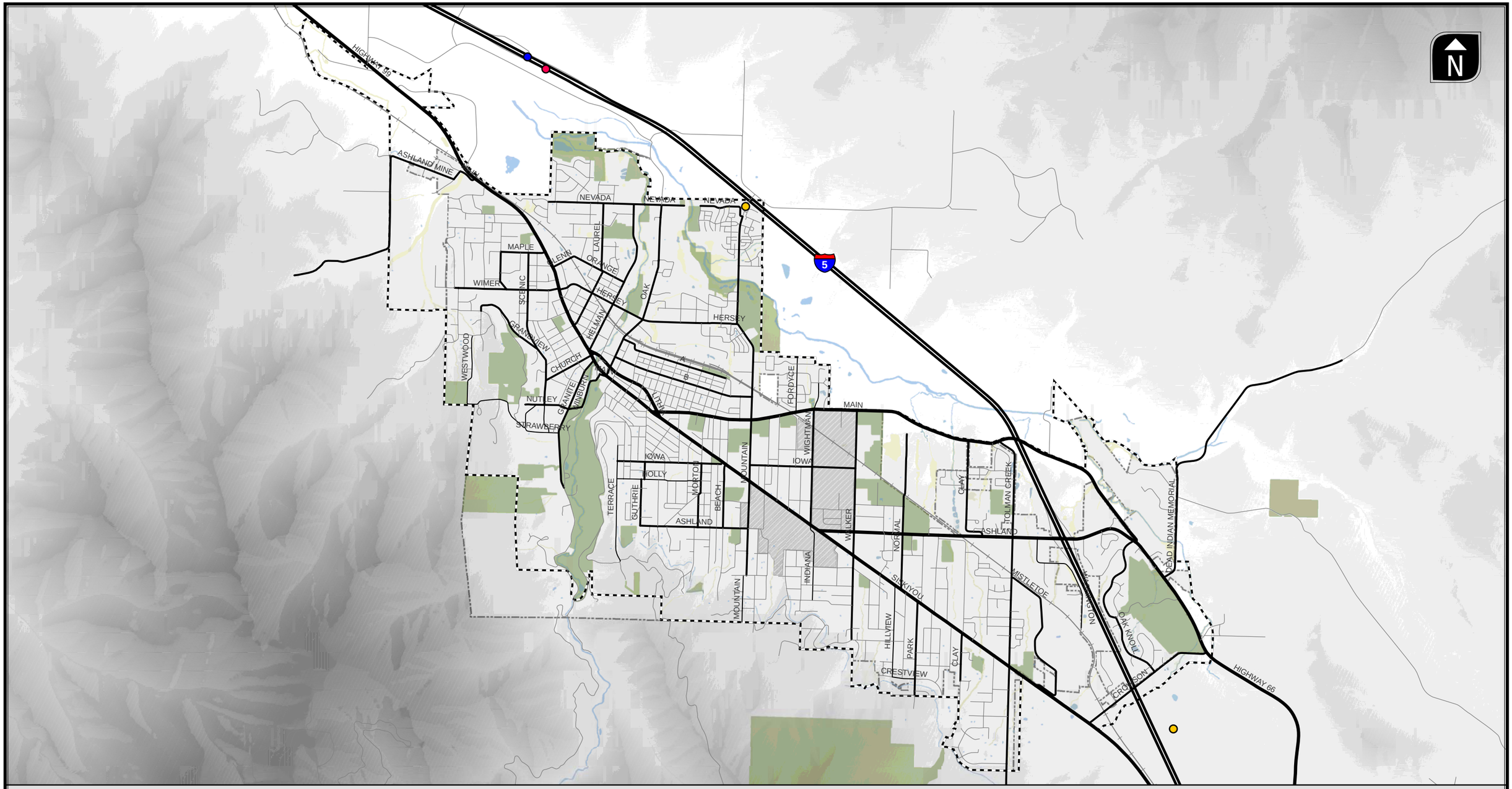


- Dynamic Message Sign
- Highway Advisory Radios
- Weigh in Motion
- City Limits
- City UGB

ITS Infrastructure

Figure
14

H:\proj\file\10633 - City of Ashland TSP Update\gis\Memo-figs\Fig16_ITSinfrastructure

Collision History

Ten years of collision data was obtained from ODOT for the roadway segments and intersections with functional street classifications of neighborhood collector and higher. Table 5 summarizes the collision data by study intersection providing the number and severity of crashes that have been reported from 2000 through 2009.

Table 5 Reported Collisions from 2000 through 2009 in the City of Ashland

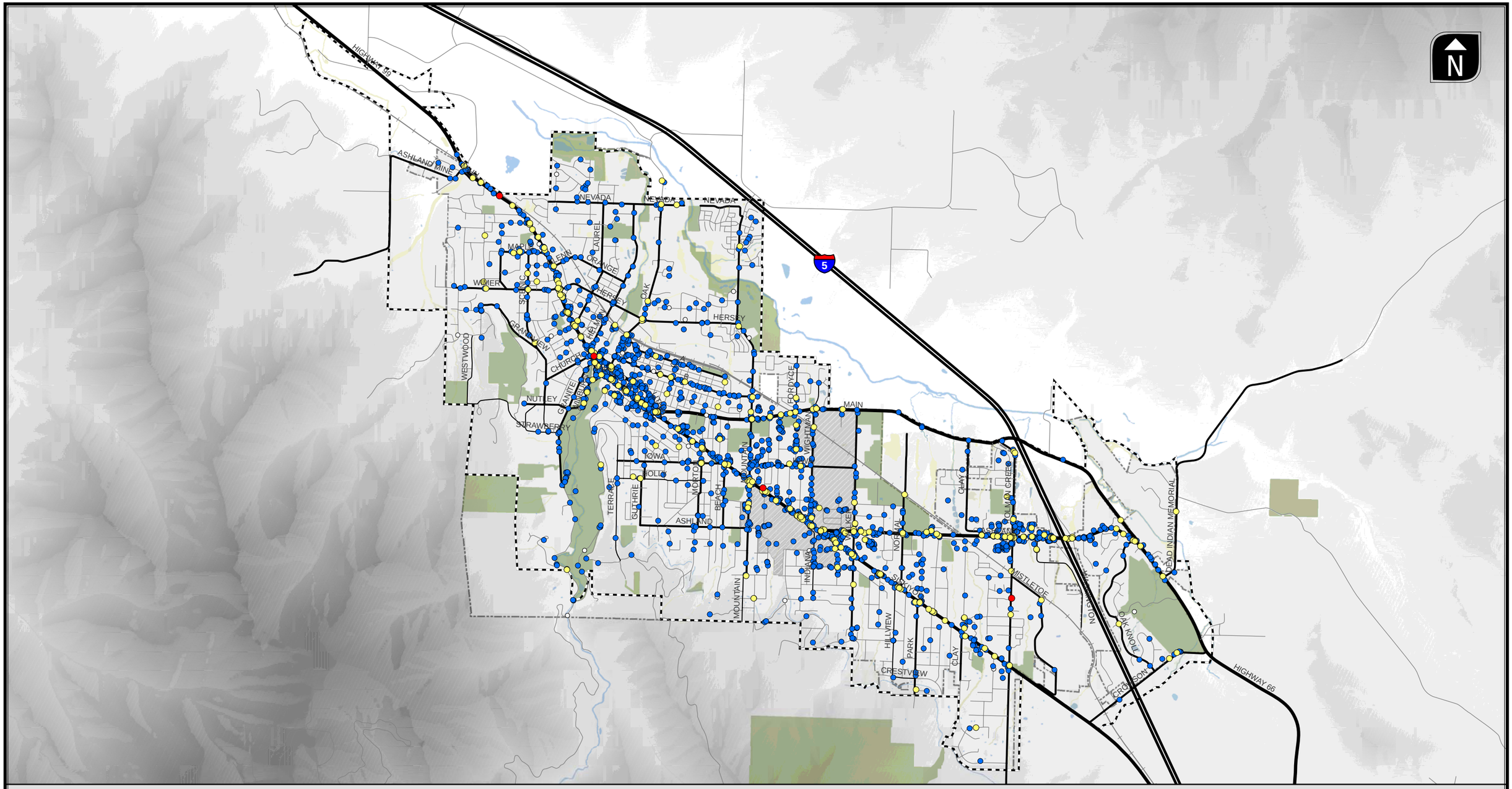
Study Intersections	PDO	Injury	Fatal	Total	Pedestrian Involved	Bicycle Involved
Granite Street/Winburn Way/Nutley Street	1	0	0	1	0	0
Hersey Street/Oak Street	3	1	0	4	0	1
E Main Street/Walker Avenue	0	0	0	0	0	0
Mountain Avenue/Ashland Street	0	1	0	1	0	1
Mountain Avenue/Hersey Street	0	1	0	1	0	1
Mountain Avenue/Iowa Street	0	1	0	1	0	0
Mountain Avenue/Main Street	4	6	0	10	0	1
Nevada Street/Oak Street	2	1	0	3	0	0
OR 66/Dead Indian Memorial Road	1	0	0	1	0	0
OR 66/ Interstate 5 Exit 14 Northbound Ramps	2	6	0	8	1	0
OR 66/ Interstate 5 Exit 14 Southbound Ramps	9	6	0	15	0	0
OR 66/Main Street/Oak Knoll Drive	6	8	0	14	0	0
OR 66/OR 99	3	11	0	14	0	1
OR 66/Tolman Creek Road	8	11	1	20	0	1
OR 66/Walker Street	5	3	0	8	1	0
OR 66/Washington Street	1	4	0	5	0	0
OR 99/Helman Street	3	2	0	5	0	0
OR 99/Hersey Street/Wimer Street	23	19	0	42	1	3
OR 99/Maple Street	1	3	0	4	0	0
OR 99/Mistletoe Road	2	1	0	3	0	0
OR 99/Mountain Avenue	8	7	1	16	1*	2
OR 99/Tolman Creek Road	8	1	0	9	0	0
OR 99/Valley View Road	6	7	0	13	0	0
OR 99/Walker Street	4	5	0	9	1	0
OR 99 Northbound (Lithia Way)/ E Main Street	4	12	0	16	2	0
OR 99 Northbound (Lithia Way)/ Oak Street	5	9	0	14	1	0
OR 99 Southbound/E Main Street	4	4	0	8	0	1

Study Intersections	PDO	Injury	Fatal	Total	Pedestrian Involved	Bicycle Involved
OR 99 Southbound/Oak Street	18	7	0	25	2	0
Tolman Creek Road/Mistletoe Road	0	0	0	0	0	0
Walker Street/Iowa Street	2	0	0	2	0	0
Note: *Indicates a pedestrian was fatality injured in the crash.						

In Technical Memorandum #4, the safety performance of these study intersections will be presented and discussed. The safety performance of the study intersections will be based on the number of crashes that have occurred, the intersections' type and geometric characteristics, and the traffic volumes served at the intersection.

Figure 15 illustrates the severity and location of reported crashes within the study area from 1998 through 2009. Figure 16 illustrates the severity and location of reported crashes involving vulnerable users (e.g, bicyclists, pedestrians).

Similar to the forthcoming safety analysis for the study intersections, the safety performance of study roadway segments during the past ten years will be evaluated using the data illustrated in Figure 15 and 16. This evaluation will be part of the existing conditions analyses under taken in Task 4 of the TSP Update. In subsequent TSP Update activities, the team will look for opportunities to improve the safety performance of the City's transportation system.



- Fatal
- Injury
- Property Damage Only
- Unknown
- City UGB
- City Limits

Collisions By Severity

Figure 15

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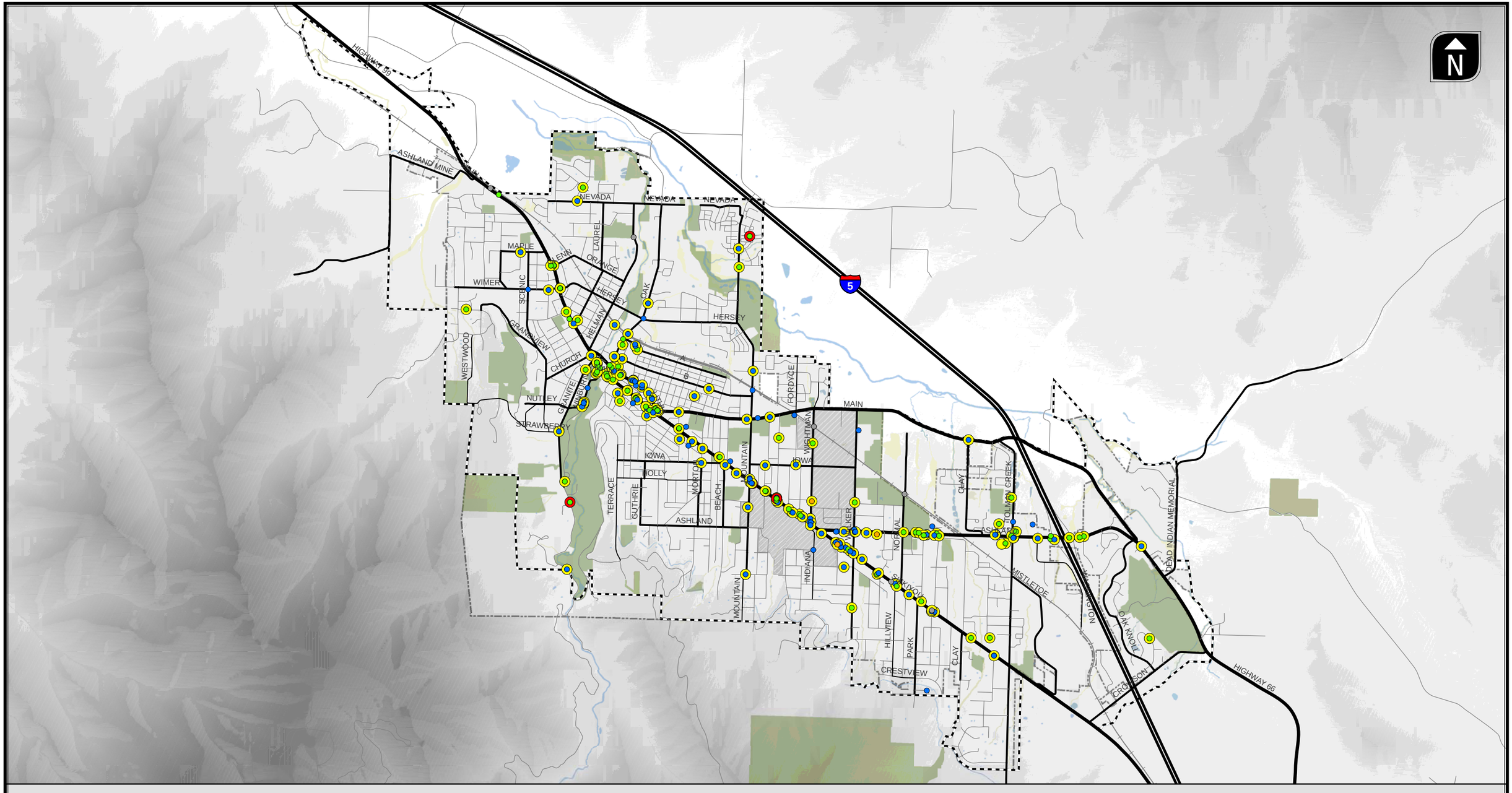


Type
- Bicycle
- Pedestrian
- Skateboard
- Other

Severity
- Fatal
- Injury

- City Limits
- City UGB

Vulnerable Users Collisions by Severity

Figure
16

H:\profile\10633 - City of Ashland TSP Update\gis\Memo-figs\Fig20_Transit

Public Transportation System Inventory

The Rogue Valley Transit District (RVTD) provides intercity and regional public transit. RVTD serves the City of Ashland as well as Talent, Phoenix and Medford with fixed-route bus service. System-wide, the bus fares are $2.00 for fixed route service, but fares inside the City of Ashland are reduced to $1.00 through city funds that buy down the cost of fares. City subsidies also allow for free bus passes to senior citizens and high school students. The $1.00 fare begins at the north end of town at the Jackson Well Spring bus stop and ends at the south end of town at the Ashland Hills Inn stop.

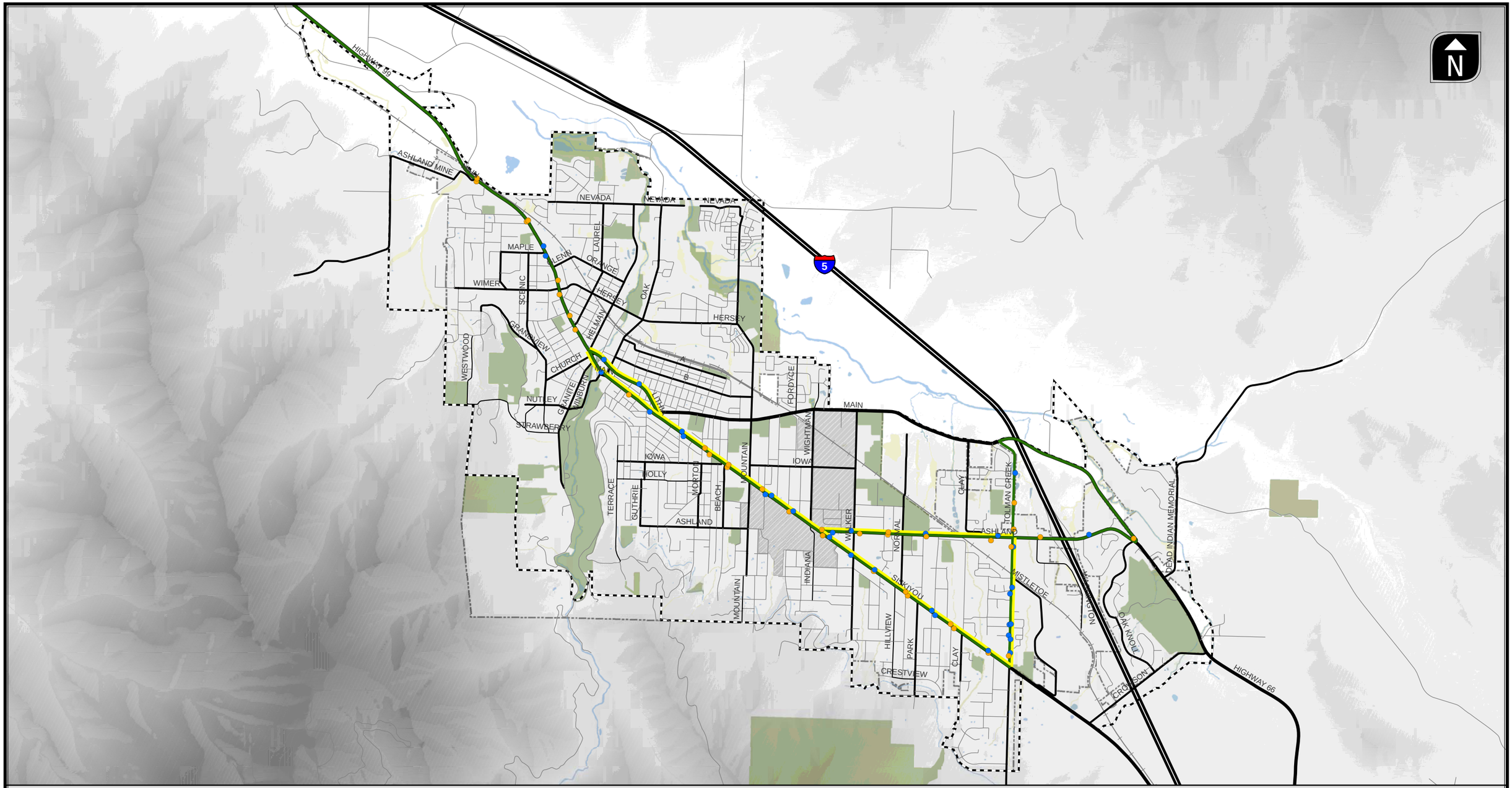
Routes 10 and 15 currently provide service for Ashland on Monday through Friday. Service hours are approximately 5:00 am to 6:30 pm. Route 10 has a farebox recovery rate of 32% compared with a farebox recovery of 27% system-wide. Exhibits 4 and 5 are photos of some of the public transportation system elements currently in Ashland.

Exhibit 4 RVTD Bus in Operation in Downtown Ashland

Exhibit 5 RVTD Stop with Seating

Figure 17 illustrates the transit routes and stops. Currently, there are no park and ride locations within the City of Ashland. Connectivity to other transit is through the Front Street Station in Medford.

Ridership levels for the City of Ashland have fluctuated with changes in fares and service. Historically, ridership system-wide and within the City of Ashland have increased in response to sharp increases in fuel prices. Peak ridership levels were reached during 2003 through mid- 2006 when no fares were charged to Ashland riders. When fares were increased and the Route 5 loop service was discontinued, ridership dropped sharply. Loop service was restored in 2009 (Route 15); however, fares were increased from $0.50 to $1.00 (which still represents a significant city subsidy to the $2.00 fare on the rest of the RVTD system) and the overall fixed route ridership has been declining over the past two years.



Bus Route 15

Bus Route 10

Bus Stop W/ Seating

Bus Stop W/out Seating

City Limits

City UGB

Transit Routes and Stops

Figure

17

Similarly, as shown in Table 6, ridership for the Valley Lift paratransit service, described later in this section, has also had minor but steady decline since 2005 (data is not available prior to 2005).

Exhibit 6 Ashland Transit Ridership 1997 - 2010

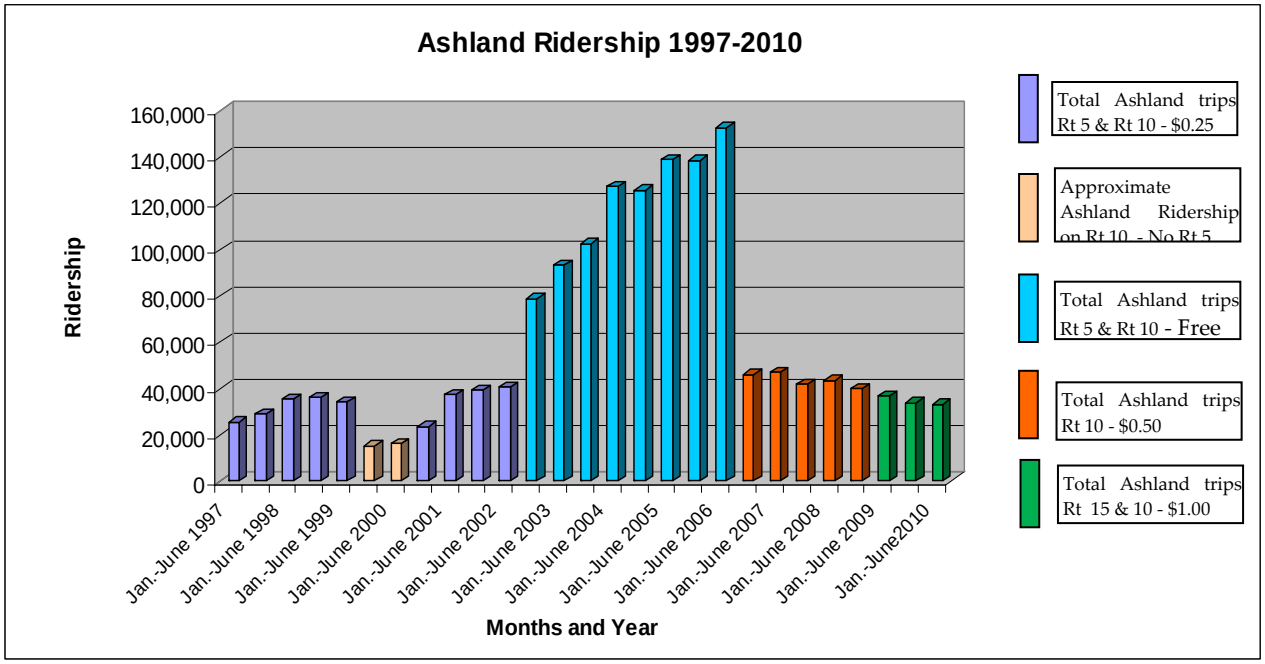


Table 6 Valley Lift Average Monthly Trips in Ashland

FY 2005-2006	FY 2006-2007	FY 2007-2008	FY 2008-2009	FY 2009-2010
1,290	938	969	893	776

Stop amenities for RVTD's fixed-route bus service include shelters and bike racks at some locations. Amenities by location are listed in Table 7. In addition to the shelters provided by RVTD, the City of Ashland has purchased shelters for additional stops and pays for repair and maintenance of those shelters. RVTD is currently developing new bus stop standards and policies that will determine which stops will qualify for shelters in the future.

Table 7 Bus Stop Amenities

Stop ID	Stop Location	Landmarks/Destination	Shelter Type	Bike Rack
Route 10				
010400	On N. Main	50' S of Ashland Mine Rd.	-	-
010410	On N. Main	50' N of Grant St.	-	-
010420	On N. Main	S of Maple St.	-	-
010430	On N. Main	154' S of Wimer St.	-	-
010440	On N. Main	110' S of Laurel St.	-	-
010450	Ashland Plaza	Ashland Plaza	Full	Present
010460	On East Main	S of First St.	-	-

Stop ID	Stop Location	Landmarks/Destination	Shelter Type	Bike Rack
010470	On East Main	55' S of Gresham St.	Full	Present
010480	On Siskiyou Blvd.	123' S of Sherman St.	Full	Present
010490	On Siskiyou Blvd.	41' N of Liberty St.	-	-
010500	On Siskiyou Blvd.	78' S of Beach St.	Full	-
010510	On Siskiyou Blvd.	40' S of University Way	Full	Present
010520	On Siskiyou Blvd.	69' S of Avery	-	-
010530	On Hwy. 66 (Ashland St.)	270' E of Siskiyou Blvd.	-	-
010540	On Hwy. 66 (Ashland St.)	145' E of Walker Ave.	-	-
010550	On Hwy. 66 (Ashland St.)	75' E of Lit. Way	-	-
010560	On Hwy. 66 (Ashland St.)	53' E of Park St.	-	-
010570	On Hwy. 66 (Ashland St.)	278' W of Tolman Ck. Rd.	-	-
010580	On Tolman Ck. Rd.	N of Hwy. 66 at Albertsons	-	-
010590	On Tolman Ck. Rd.	At Abbott Ave. sign	-	-
010600	On Tolman Ck. Rd.	At Chautauqua Trace	Full	-
010610	On East Main	Flag Stop at Hwy. 66 (20' before stop sign)	-	-
010620	On Hwy. 66	At Windmill Inn	Full	
010630	On Hwy. 66	69' E of Washington St.	-	-
010640	On Tolman Ck. Rd.	230' S of Hwy. 66	Bench	-
010650	On Tolman Ck. Rd.	50' S of Grizzly Dr.	Bench	-
010660	On Tolman Ck. Rd.	173' S of Diane	Bench	-
010680	On Tolman Ck. Rd.	380' N of Siskiyou Blvd.	-	-
010690	On Siskiyou Blvd.	200' N of Bellview St.	Full	-
010700	On Siskiyou Blvd.	105' S of Glendale Ave.	-	-
010710	On Siskiyou Blvd.	65' N of Faith Ave.	Full	Present
010720	On Siskiyou Blvd.	135' S of Normal Ave.	-	-
010730	On Siskiyou Blvd.	165' N of Harmony Ln.	-	-
010740	On Siskiyou Blvd.	235' S of Hwy. 66	Full	Present
010750	On Siskiyou Blvd.	198' N of Bridge St.	-	-
010760	On Siskiyou Blvd.	100' S of Palm	Full	-
010770	On Siskiyou Blvd.	S of Morse St.	Full	-
010780	On Siskiyou Blvd.	75' S of Morton St.	-	-
010790	On Siskiyou Blvd.	96' S of Sherman	Full	Present
010800	On Lithia Way	94' N of Second St.	-	-
010810	On Lithia Way	257' N of Oak St.	Full	-
010820	On N. Main St.	122' N of Central St. (sign behind big tree)	-	-
010830	On N. Main St.	276' S of Glenn St.	-	-

Stop ID	Stop Location	Landmarks/Destination	Shelter Type	Bike Rack
010840	On N. Main St.	150' N of Maple St.	Full	-
010850	On N. Main St.	102' N of Grant St.	-	-
010860	On N. Main St.	445' S of Jackson Rd	-	-
Route 15				
015010	DMV	213' S of Ashland	-	-
015020	On Ashland St.	28' W of YMCA Way	-	-
015030	On Ashland St.	100' W of Shamrock Lane	-	-
015040	On Ashland St.	100' W of Ray Lane	-	-
015050	On Ashland St.	25' W of Walker Ave.	-	-
015060	On Ashland St.	85' E of Siskiyou	-	-
010740	On Siskiyou Blvd.	198' N of Bridge St. – SOU	-	-
010750	On Siskiyou Blvd.	100' S of Palm (by pool at Palm Motel)	Full	-
010760	On Siskiyou Blvd.	S of Morse St. – Ashland High School	Full	-
010770	On Siskiyou Blvd.	75' S of Morton St.	-	-
010780	On Siskiyou Blvd.	96' S of Sherman – Safeway	Full	Present
010790	On Lithia Way	94' N of Second St. – Ashland Physical Therapy	-	-
010800	On Lithia Way	257' N of Oak St.	Full	-
010450	Ashland Plaza	Ashland Plaza	Full	-
010460	On East Main	S of First St. – Ashland Springs Hotel	-	-
010470	On East Main	55' S of Gresham St. – Library	Full	Present
010480	On Siskiyou Blvd.	123' S of Sherman St. –Safeway	Full	Present
010490	On Siskiyou Blvd.	41' N of Liberty St.	-	-
010500	On Siskiyou Blvd.	78' S of Beach St. – Ashland High School	Full	-
010510	On Siskiyou Blvd.	40' S of University Way – SOU	Full	Present
010520	On Siskiyou Blvd.	69' S of Avery at Hwy. 66 sign – SOU	-	-
015210	On Siskiyou Blvd.	210' W of Walker Ave.	-	-
015220	On Siskiyou Blvd.	243' W of Harmony	-	-
015230	On Siskiyou Blvd.	111' E of Beswick	-	-
015240	On Siskiyou Blvd.	70' E of Terra Ave.	-	-
015260	On Siskiyou Blvd.	180' W of Bellview	-	-
015270	On Tolman Ck. Rd	170' N of Siskiyou	-	-
015290	On Tolman Ck. Rd	20' S of Springhill	-	-
015300	On Tolman Ck. Rd	262' S of Mistletoe	-	-

RVTD owns 29 buses assigned to fixed-routes service, six of which are currently listed as retired from service. An inventory of vehicles is provided in Table 8.

Table 8 Fixed Route Vehicles

Stop ID	Vehicle	Class	Fuel	Past Useful Life	Replacement Status[1]
3701	1991 Gillig Phantom	A	Diesel	Yes	NEEDS REPLACEMENT
3702	1991 Gillig Phantom	A	Diesel	Yes	NEEDS REPLACEMENT
4531	1980 GMC	A	Diesel	Yes	Retired
4532	1980 GMC	A	Diesel	Yes	NEEDS REPLACEMENT
2802	1995 Bluebird	B	CNG	Yes	Retired
2803	1995 Bluebird	B	CNG	Yes	Retired
2808	1995 Bluebird	B	CNG	Yes	Retired
4527	1980 GMC	A	Diesel	Yes	NEEDS REPLACEMENT
4528	1980 GMC	A	Diesel	Yes	Retired
4529	1980 GMC	A	Diesel	Yes	NEEDS REPLACEMENT
4530	1980 GMC	A	Diesel	Yes	Retired
3011	2004 New Flyer	A	CNG	No	No need for replacement
3012	2004 New Flyer	A	CNG	No	No need for replacement
3013	2004 New Flyer	A	CNG	No	No need for replacement
3014	2004 New Flyer	A	CNG	No	No need for replacement
3015	2004 New Flyer	A	CNG	No	No need for replacement
3016	2004 New Flyer	A	CNG	No	No need for replacement
3017	2004 New Flyer	A	CNG	No	No need for replacement
3018	2004 New Flyer	A	CNG	No	No need for replacement
3019	2004 New Flyer	A	CNG	No	No need for replacement
3020	2004 New Flyer	A	CNG	No	No need for replacement
3021	2006 New Flyer	A	CNG	No	No need for replacement
3022	2006 New Flyer	A	CNG	No	No need for replacement
3023	2007 New Flyer	A	CNG	No	No need for replacement
3024	2008 New Flyer	A	CNG	No	No need for replacement
3025	2009 New Flyer	A	CNG	No	No need for replacement
2901	2010 New Flyer	A	Diesel	No	No need for replacement
2902	2010 New Flyer	A	Diesel	No	No need for replacement
2903	2010 New Flyer	A	Diesel	No	No need for replacement

Note:

[1] Replacement status identified by RVTD.

RVTD also operates a paratransit service through their Valley Lift Program and TransLink. The Valley Lift Program is a shared ride, curb-to-curb, wheelchair accessible transportation service for people with disabilities preventing them from using RVTD's fixed-route bus service. Valley Lift service is provided within ¾ mile buffer on either side of the RVTD fixed-route system. This

transportation options fulfills requirements of the Americans with Disabilities Act. RVTD owns and maintains the vehicles; the drivers are contracted through Paratransit Services. Users of this service fall into three categories of eligibility: temporary, conditional and unconditional. During the last fiscal year, ridership averages 750-800 trips per month. The fare is $2.00 and provides a low cost recovery since each trip costs $20-30. Table 9 is an inventory of the Valley Lift vehicles.

Table 9 Paratransit Vehicles

Stop ID	Vehicle	Class	Fuel	Past Useful Life	Replacement Status[1]
1305	1997 E350	D	Diesel	Yes	POSSIBLE REPLACEMENT
1306	1997 E350	D	Diesel	Yes	POSSIBLE REPLACEMENT
1307	1997 E350	D	Diesel	Yes	POSSIBLE REPLACEMENT
0301	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0302	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0303	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0304	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0305	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0306	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0307	2005 Chevy Venture	E	Gas	Yes	No need for replacement
0701	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0702	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0703	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0704	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0705	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0706	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0707	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0708	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0709	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0710	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0711	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0712	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement
0713	2006 Ford-Braun Tranz	E	Gas	No	No need for replacement

Note:

[1] Replacement status identified by RVTD.

TransLink is a 7-county Medicaid transportation service provided to eligible Oregon Health Plan (OHP) and eligible Medicaid clients traveling to authorized medical services. TransLink is funded through the Oregon Department of Human Services. RVTD is considered the Lead Special Transportation Service for ODOT Region 3. In that administrative capacity, the agency schedules and dispatches rides through multiple providers.

Rail System Inventory

Freight rail service is provided through and within city limits by the Central Oregon and Pacific Railroad (CORP) and the White City Terminal and Utilities (WCTU). The rail line provides service to several local manufacturers, including the timber industry and plants in the White City industrialized area just north of Medford. CORP acts as a feeder line to Union Pacific.

The Siskiyou Line of the Southern Pacific Rail System runs from Springfield, Oregon through Roseburg, Grants Pass, central Point, Medford, Phoenix, Talent and Ashland. The line continues into California under the name Black Butte Line. Rail Tex owns the entire rail line from Springfield to Montague, California.

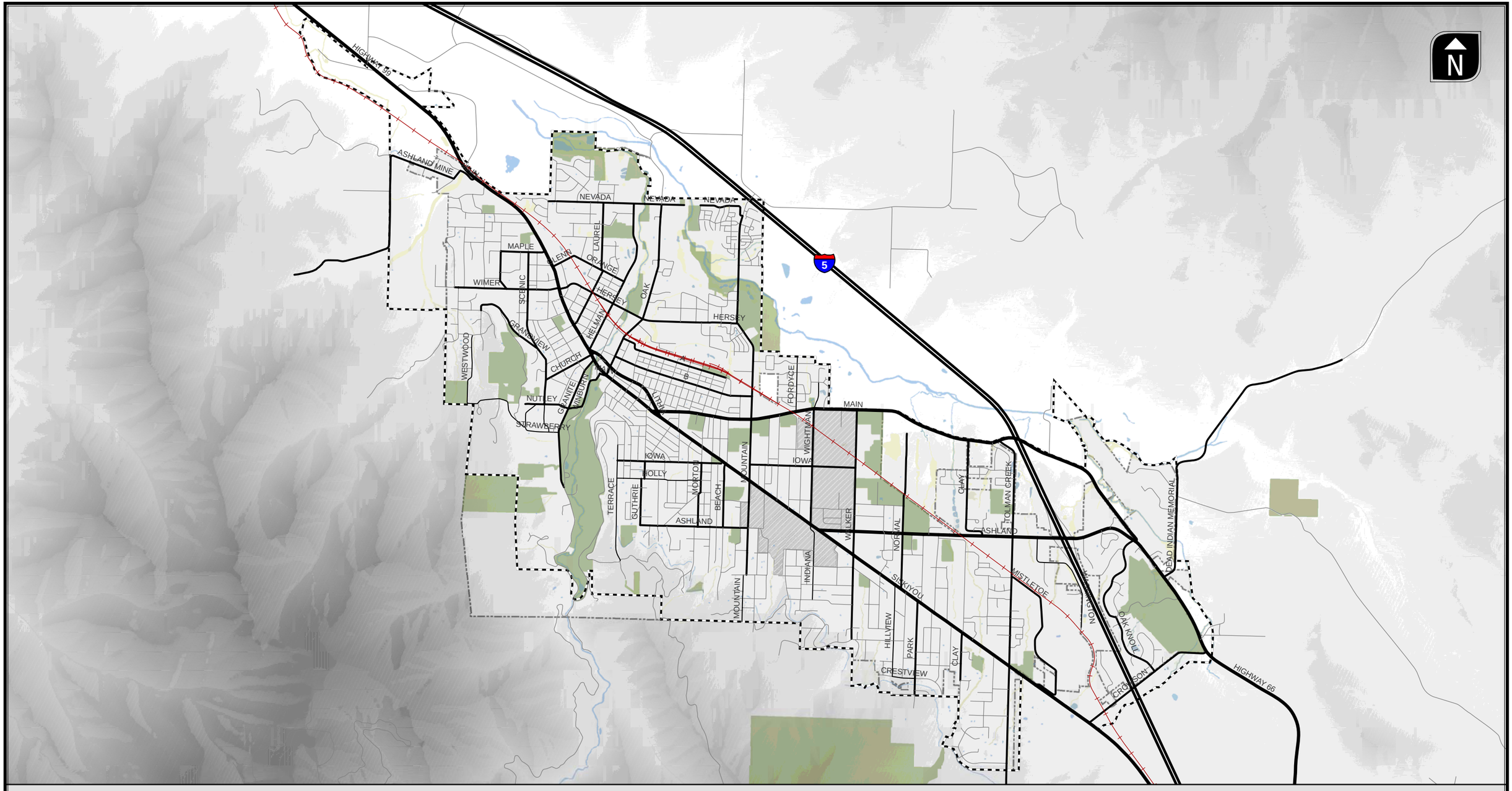
The rail enters the City from the north by crossing eastward over OR 99 and passing southeast through the city limits approximately ½ mile to the east of downtown and OR 99. It runs parallel to OR 99 south of the city and crosses over I-5 where OR 99 merges into I-5. The rail alignment through Ashland is primarily single track with a section of double track extending approximate 1500 feet west of Oak Street transitioning to a triple track extending approximately 3000 feet east of Oak Street and then transitioning back to a double track and then single track over a few hundred feet. Figure 18 illustrates the railroad track alignment through Ashland.

The lines are maintained as FRA Class 2, which allows train speeds of 25 mph. The rail lines primarily handle products of the timber industry including lumber, plywood, veneers, sand, clay, cements, siding, particleboard and feed and fertilizers. There is no passenger rail service along the rail line that passes through Ashland (and Medford). The nearest passenger rail service stops is located in Klamath Falls, approximately 80 miles to the east of Ashland.

Within Ashland's city limits there are eleven railroad crossings. Table 10 summarizes the traffic control devices at each of the railroad crossings in Ashland.

Table 10 Traffic Control Devices at Railroad Crossing in Ashland

Intersecting Roadway	Safety/Control Device
Glenn Street	Stop Signs
N Laurel Street	Stop Signs
W Hersey Street	Stop Signs
Helman Street	Crossing gates and flashing lights
Oak Street	Flashing lights
N Mountain Avenue	Crossing gates and flashing lights
E Main Street	Crossing gates and flashing lights
Wightman Street	Stop Signs
Walker Avenue	Crossing gates and flashing lights
Tolman Creek Road	Crossing gates and flashing lights
Crowson Road	Crossing gates and flashing lights



Central Oregon & Pacific Railroad

City Limits

City UGB

Rail Lines Owners/Operators

Figure

18

Bicycle and Pedestrian System Inventory

This section provides an inventory of existing pedestrian and bicycle systems in the City of Ashland based on data provided by the City. The GIS data identifying sidewalks and sidewalk gaps was created by the project team based on the information in the city's impervious surface GIS layers provided in *Appendix C*. Some modifications to the City's GIS bicycle network were also made based on field observations. Travel trends as well as facility types and demands are discussed below.

PEDESTRIAN NETWORK

Facility Types

The *Oregon Bicycle and Pedestrian Plan* (OBPP) defines pedestrian facilities as those that can be utilized by a pedestrian or persons in wheelchairs. They include walkways, traffic signals, crosswalks, curb ramps, and other features such as illumination or benches.

The following types of pedestrian facilities are recognized by the American Association of State OR and Transportation Officials (AASHTO) and the OBPP:

- **Sidewalks** – Sidewalks are located along roadways, are separated from the roadway with a curb and/or planting strip, and have a hard, smooth surface, such as concrete. The Oregon Department of Transportation (ODOT) sidewalk width standard is 6 feet, with a minimum width of 5 feet acceptable on local streets. The unobstructed travelway for pedestrians should be clear of utility poles, sign posts, fire hydrants, vegetation and other site furnishings.
- **Shared Use Paths –** Shared use paths are used by a variety of non-motorized users, including pedestrians, cyclists, skaters, and runners. Shared use paths may be paved or unpaved, and are often wider than an average sidewalk (i.e. 10 – 14 feet). In circumstances where peak traffic is expected to be low, pedestrian traffic is not expected to be more than occasional, good passing opportunities can be provided, and maintenance vehicle loads are not expected to damage pavement, the width may be reduced to as little as 8 feet.
- **Roadway Shoulders –** Roadway shoulders often serve as pedestrian routes in many rural Oregon communities. On roadways with low traffic volumes (i.e., less than 3,000 vehicles per day), roadway shoulders are often adequate for pedestrian travel. These roadways should have shoulders wide enough so that both pedestrians and bicyclists can use them, usually 6 feet or greater.

Crossing Types

In Oregon, the pedestrian is given the right of way at marked or unmarked crosswalks, which are defined as "the prolongation of a curb, sidewalk or shoulder across an intersection, whether it is marked or not". A crosswalk can also be created outside an intersection using road markings.

Marked crosswalks are generally located at all signalized intersections, but can also be provided at other locations, including unsignalized intersections and mid-block crossings. These are typically marked with 10-foot wide "double lines" but the visibility and effectiveness of the crosswalk can be enhanced by introducing "zebra" markings or textured crossings using non-slip bricks or pavers. Exhibit 7 is a photo of an existing mid-block crossing across Siskiyou Boulevard in Ashland.

Exhibit 7 Mid-Block Pedestrian Crossing across Siskiyou Boulevard

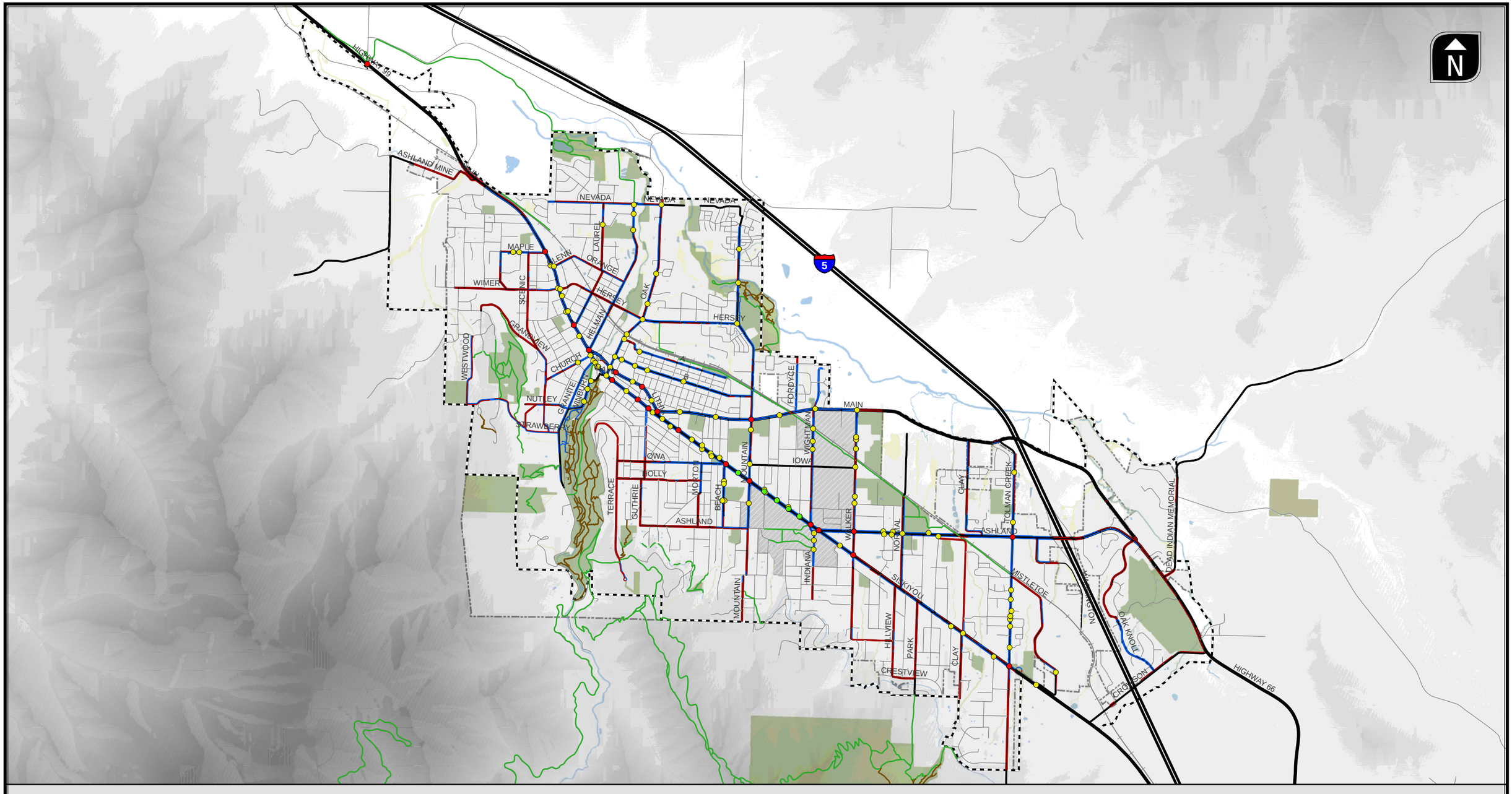
Providing frequent and safe crossing opportunities is paramount to a successful pedestrian network. Pedestrian crossing opportunities can be enhanced using pedestrian activated signals, marked crosswalks, mid-block curb extensions, etc. or by designing roads to allow safer crossings, e.g. providing median refuge or altering signal timing to create gaps in traffic.

Inventory

The existing pedestrian network is shown on Figure 19. Table 11 provides a summary of the existing sidewalk network coverage within Ashland's UGB.

Table 11 City of Ashland Sidewalk Inventory

Sidewalk Present	Neighborhood Collectors	Avenues	Boulevards	Neighborhood Collectors, Avenues, and Boulevards
Both Sides	0.6 miles (13%)	6.6 miles (24%)	5.1 miles (34%)	12.3 miles (26%)
One Side	1.4 miles (30%)	6.4 miles (24%)	1.5 miles (10%)	9.3 miles (20%)
No Sidewalk	2.7 miles (57%)	14.0 miles (52%)	8.6 miles (56%)	25.3 miles (54%)
Total	**4.7 miles (100%)**	**27.0 miles (100%)**	**15.2 miles (100%)**	**46.9 miles (100%)**



Sidewalk
Sidewalk Gaps
Hiker Path
Shared-Use Path

Traffic Signal
Pedestrian Signal
Crosswalk

City Limits
City UGB

Pedestrian Network

Figure
19

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In general, the higher density areas of the City including the downtown and surrounding residential streets are well served with a comprehensive network of sidewalks and crossings. Sidewalk coverage declines as you travel further from downtown and the primary traffic corridor (Main Street – Siskiyou Boulevard), although a number of the newer residential developments on the outskirts of the City have been constructed with sidewalks on both sides of all streets.

Table 11 shows that just over half (54%) of the major street network (i.e., neighborhood collectors, avenues and boulevards) does not have sidewalks. The network of boulevards have sidewalks on both sides along just over a third (34%) of its length and on one side for a another 10%. Avenues are covered by 24% with sidewalks on both sides and 24% with sidewalks on one side, i.e. over half of avenues in the City of Ashland (52%) are without sidewalks on either side. Similarly, 57% of neighborhood collectors have no sidewalks. In addition to the sidewalk network, there is approximately 6.8 miles of off-street shared use path.

The density of designated crosswalks, i.e. signalized or marked crosswalks is approximately 2.9 crossings per mile along boulevards (i.e. one every 0.35 miles or approximately 3 - 4 minutes walk to the closest crossing) and 2.5 crossings per mile along avenues (i.e. one every 0.4 miles or 4 minutes walk). In general the downtown and other high-density locations are well served with frequent crossing opportunities. Further from these areas, crossing density is less, but traffic volumes may reduce sufficiently to allow safe and frequent crossing opportunities.

Demands

Sixteen hour intersection counts (6:00 AM – 10:00 PM) were conducted at 12 intersections in Ashland during September and October in 2009. Four hour counts (2:00 PM – 6:00 PM) were conducted at another 19 intersections and two marked crosswalks. For all locations, the number of pedestrians crossing the street was counted.

Exhibit 8 shows the 16-hour profile of pedestrian activity at the counted intersections. Pedestrian crossings peaked during the hour between 3:15 PM and 4:15 PM and in general the afternoon (3:00 PM to 6:00 PM) represented the highest demand time with smaller but noticeable peaks occurring during the middle of the day (11:00 AM to 1:00 PM) and in the morning (8:00 AM to 10:00 AM).

Exhibit 8: Pedestrian Crossings Observed at 12 Intersections in City of Ashland

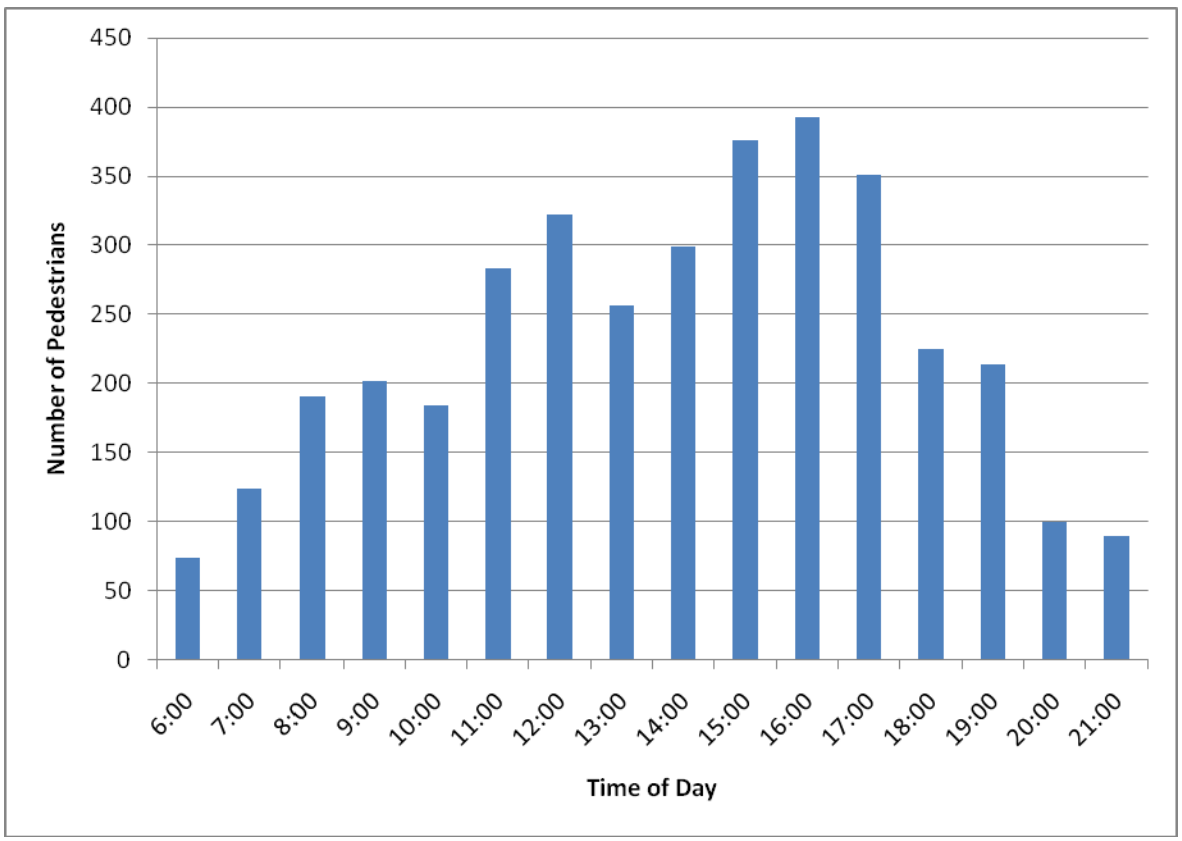


Table 12 summarizes 2000 US Census data showing the percent of work trips made by various modes. Based on 2000 US Census data, 11.2% of Ashland trips to work were made by walking.

Table 12 City of Ashland Journey to Work Statistics (2000 US Census)

Mode	Percent of Trips
Auto (Driver or Passenger)	75.2%
Transit	1.5%
Walked	11.2%
Worked at Home	8.4%
Other	3.7%
Average Travel Time Across All Modes	17 minutes

BICYCLE NETWORK

Facility Types

According to AASHTO's *Guide for the Development of Bicycle Facilities* (1999) and the OBPP, there are several different types of bicycle facilities. Bikeways are distinguished as preferential roadways that have facilities to accommodate bicycles. Accommodation can be a bicycle route designation or bicycle lane striping. Shared use paths are facilities separated from a roadway for use by cyclists, pedestrians, skaters, runners, and others. Bicycles are allowed on roadways in the City of Ashland.

The following types of bikeways are recognized by AASHTO and OBPP:

- **Shared Roadway / Signed Shared Roadway** – Shared roadways include roadways on which bicyclists and motorists share the same travel lane. This is the most common type of bikeway. The most suitable roadways for shared bicycle use are those with low speeds (25 mph or less) or low traffic volumes (3,000 vehicles per day or fewer). Signed shared roadways are shared roadways that are designated and signed as bicycle routes and serve to provide continuity to other bicycle facilities (i.e., bicycle lanes) or designate a preferred route through the community. Common practice is to sign the route with standard Manual on Uniform Traffic Control Devices (MUTCD) green bicycle route signs with directional arrows. The OBPP recommends against the use of bike route signs if they do not have directional arrows and/or information accompanying them. Signed shared roadways can also be signed to highlight special touring routes (i.e., Oregon Coast Bike Route) or to provide directional information in bicycling minutes or distance (e.g., "Library, 3 minutes, 1/2 mile").
- **Shoulder Bikeway** – These are paved roadways that have striped shoulders wide enough for bicycle travel. ODOT recommends a 6-foot paved shoulder to adequately provide for bicyclists, and a 4-foot minimum in constrained areas. Roadways with shoulders less than 4-feet are considered shared roadways. Sometimes shoulder bikeways are signed to alert motorists to expect cyclists.
- **Bike Lane** - Bike lanes are portions of the roadway designated specifically for bicycle travel via a striped lane and pavement stencils. ODOT standard width for a bicycle lane is 6 feet. The minimum width of a bicycle lane against a curb or adjacent to a parking lane is 5 feet. A bicycle lane may be as narrow as 4 feet, but only in very constrained situations. Bike lanes are most appropriate on arterials and major collectors, where high traffic volumes and speeds warrant greater separation.
- **Shared Use Path** - Shared use paths are used by a variety of non-motorized users, including pedestrians, cyclists, skaters, and runners. They may be paved or unpaved, and are often wider than an average sidewalk (i.e. 10 – 14 feet). In certain circumstances where peak traffic is expected to be low, pedestrian traffic is not expected to be more than occasional, good passing opportunities can be provided, and maintenance vehicle loads are not expected to damage pavement, the width may be reduced to as little as 8 feet.

- **Bicycle Boulevard** – Bicycle boulevards are an adaptation of shared roadways that modify local streets to allow the through movement of bicycles whilst maintaining local access for automobiles. Bicycle boulevards typically include bicycle route signage and pavement markings and often feature traffic calming to slow vehicle speeds and provide a more comfortable environment for cyclists.

Inventory

An inventory of the bicycle network (Figure 20) shows the following breakdown of bicycle facilities:

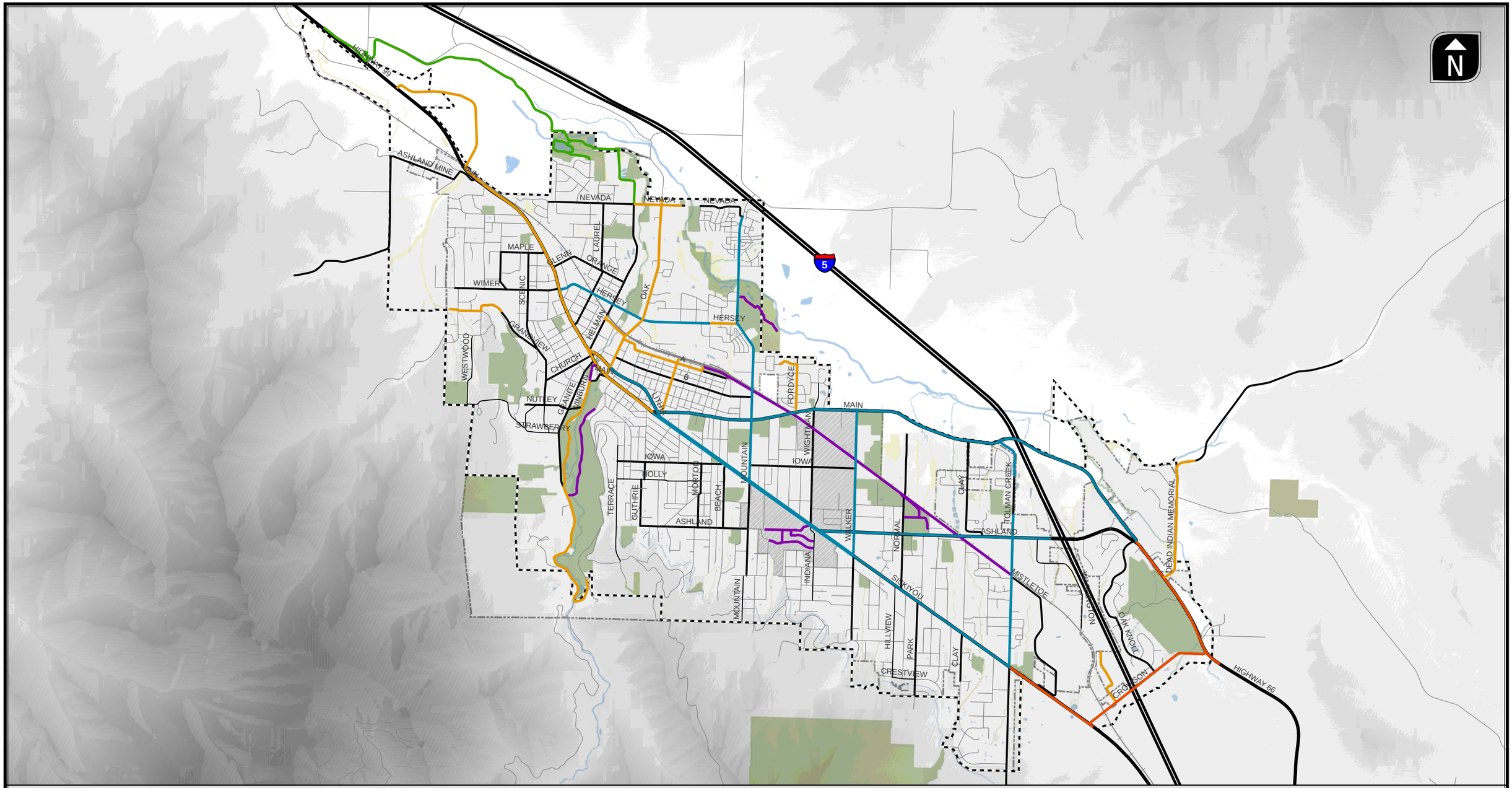
- Shared roadway / signed shared roadway: 8.3 miles.
- Shoulder bikeway: 2.1 miles.
- Bike lanes: 12.7 miles.
- Shared use path: 4.06 miles.
- Greenway Trails: 2.89 miles.

Overall, the on-street bicycle network (i.e., bicycle lanes, shared roadways, and shoulder bikeways) covers approximately 48% of the major road network (i.e. neighborhood collectors, avenues and boulevards) with bike lanes covering 26% of the major roadway network. The local street network has not been included in this analysis, but it is likely many local streets provide a comfortable environment for bicyclists and could form part of a future network of bicycle boulevards.

Exhibit 9 and 10 are photos of some of the existing bicycle network elements in Ashland. Exhibit 9 shows an example of on-street bicycle parking provided in downtown Ashland. Exhibit 10 shows one of the shared use paths in Ashland.

Exhibit 9 Bicycle Parking in Downtown Ashland

Exhibit 10 Shared Use Path in Ashland



Bike Lane
Bike Path
Greenway
Shared Lane
Shoulder lane
City Limits
City UGB

Bicycle Network

Figure

20

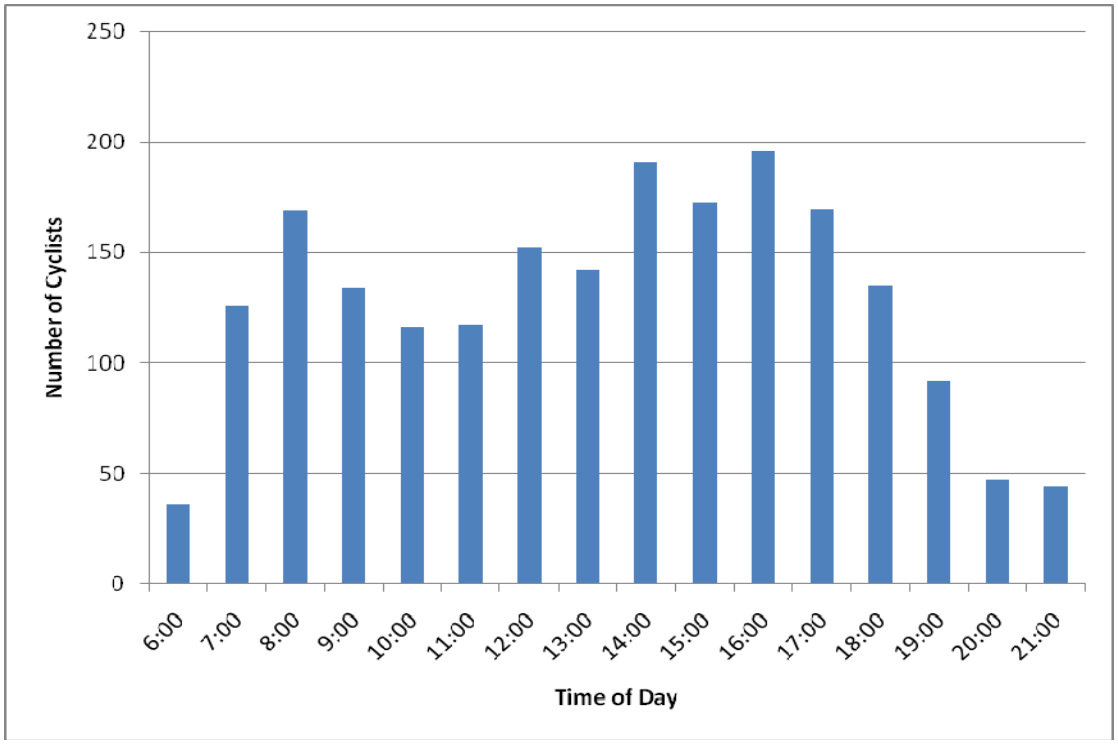
H:\proj\file\10633 - City of Ashland TSP Update\gis

Demands

Sixteen hour intersection counts (6:00 AM – 10:00 PM) were conducted at 12 intersections in Ashland during September and October in 2009. Four hour counts (2:00 PM – 6:00 PM) were conducted at another 19 intersections and two marked crosswalks. For all locations, bicycle turning movements were also counted, and in many locations, helmet usage was observed.

Exhibit 11 shows the 16-hour profile of cycling activity at the counted intersections. Cycling demands peaked for the hour between 4:00 PM and 5:00 PM and in general the morning (around 8:00 AM), midday, and mid-to-late afternoon (2:00 PM to 6:00 PM) represented noticeable peaks in activity. Overall, two-thirds (66%) of cyclists were observed wearing helmets.

Exhibit 11: Cycling Activity Observed at 12 Intersections in the City of Ashland



EXAMPLE CROSS-SECTIONS WITH PEDESTRIAN AND BICYCLE FACILITIES

Cross-sections for boulevards, avenues and local streets are shown below in Table 13 and provide examples of the pedestrian and bicycle facilities provided in Ashland.

Table 13 Cross-Sections with Pedestrian and Bicycle Facilities

	**Siskiyou Boulevard, east of Sherman Street** Boulevard Sidewalks both sides On-street bike lanes
	**Siskiyou Boulevard, east of Walker Avenue** Boulevard Sidewalk one side Bike lane one side –shoulder bikeway other side
	**E Hersey Street, west of Carol Street** Avenue Sidewalk one side On-street bike lanes
	**Crispin Street** Local street Sidewalk both sides Cyclists share roadway

Air Transportation Inventory

The Ashland Municipal Airport is located 3 miles northeast of downtown at the eastern boundary of the city limits. The airport has two runways, both 3,600 feet long, paved in asphalt and in good condition. The surface area of the airport is approximately 95 acres. The airport is only for general aviation and private use. The land within Ashland city boundary within the Airport Overlay Zone is zoned as E-1, RR-1, R-110 and C-1. Figure 21 shows the location of Ashland Municipal Airport.

The Ashland Municipal Airport does not offer any commercial flights. The nearest commercial flights are out of the Rogue Valley International-Medford Airport. Medford offers both passenger and freight service to cities throughout the Northwest with connections to larger airports and markets. The Rogue Valley International-Medford Airport is 989 acres in size and is located 3 miles north of the Medford central business district near I-5. Figure 22 illustrates the location of Rogue Valley International Medford Airport as well as several other smaller municipal or regional airports.

Pipeline Inventory

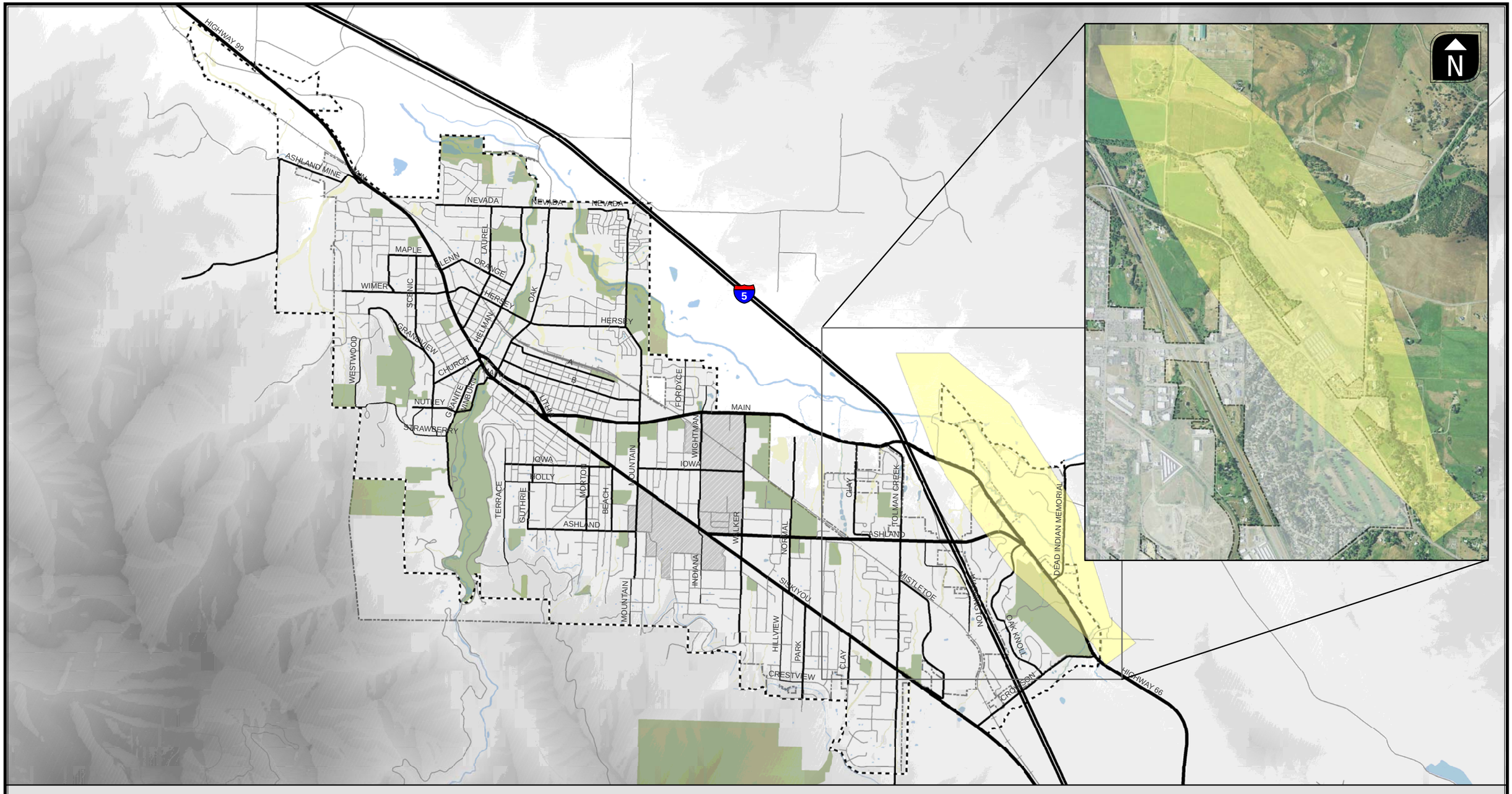
Within the Rogue Valley there is a natural gas pipeline owned and operated by Avista Corporation. Originally the pipeline extended from Portland to Medford but a subsequent project connected this pipeline to a line that crosses central Oregon. The distribution lines for this pipeline are located along I-5 between Grant's Pass and Ashland and the main pipeline is located within the I-5 corridor.

Recently a new pipeline was installed from Ashland to Klamath Falls to increase the natural gas capacity of the local lines and meet increasing demand.

There are no intermodal terminals located in or near Ashland. Natural gas can only be transported by pipeline.

Water Transportation Inventory

The Rogue River is the largest body of water in the area but is not large enough to use as a form of transportation, only recreation. The nearest port is located in Coos Bay and is an international/national shipping facility.



Airport Overlay Zone

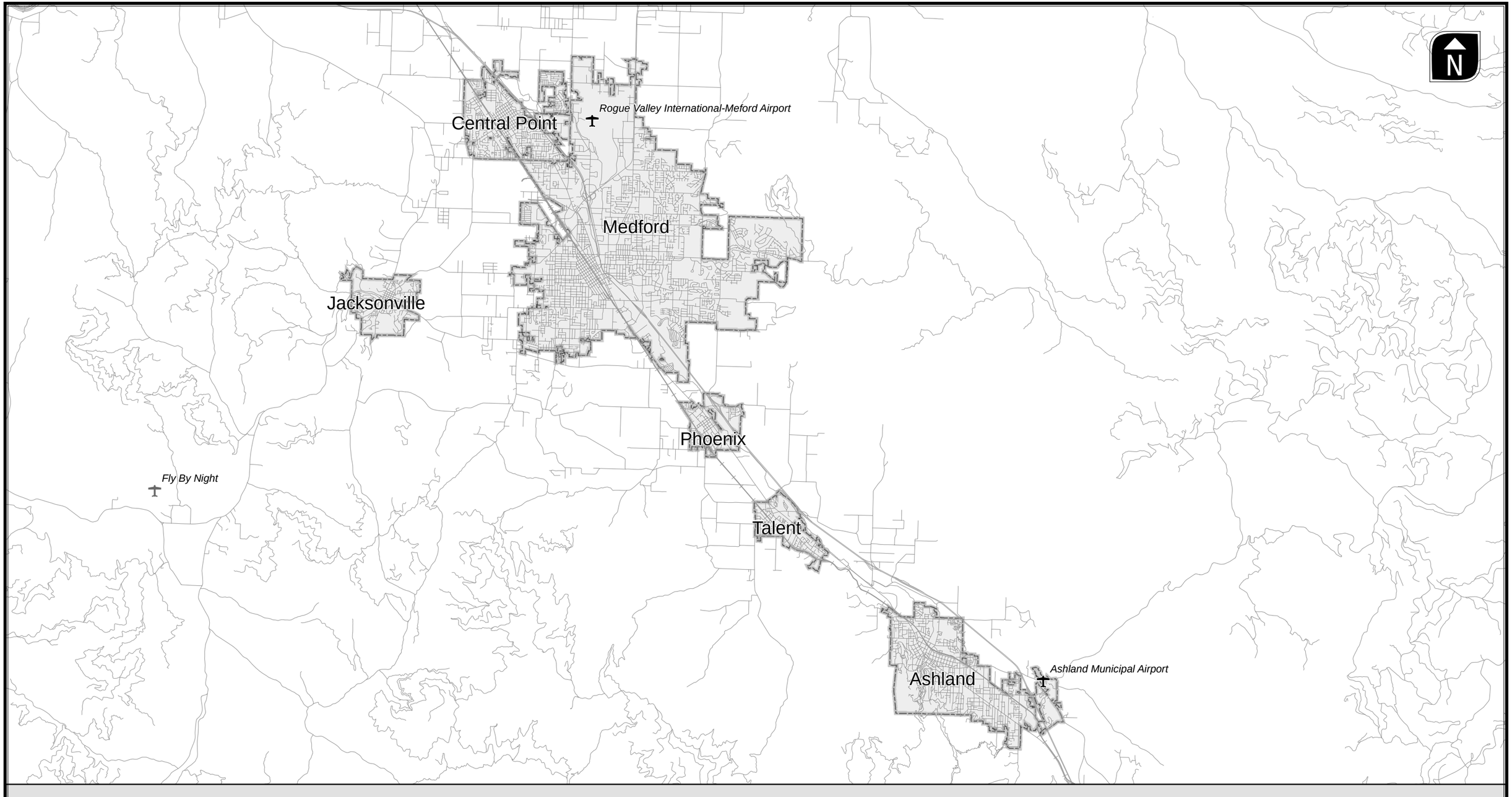
City Limits

City UGB

Ashland Airport

Figure

21



Municipal Airport

Local Airport

City Limits

Regional Airports

Figure

22

Summary

The above provides a summary of the existing transportation system inventory as well as elements that influence the transportation system such as land use, population, and environmental constraints. This information will be used as the baseline information used to prepare the existing transportation system conditions analysis that will be documented in Technical Memorandum #4. We look forward to receiving your comments on the existing inventory and hope that you will help us identify any missing or incorrect information that may influence the outcome of the existing conditions analysis currently underway.