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Chapter Five: Transportation

The City of Airway Heights is a community providing an efficient and effective transportation system accommodating motor vehicles, public transit users, bicycles, and pedestrians. The transportation system will have overcome the challenges provided by U.S. Highway 2, increasing vehicular and pedestrian safety through design improvements, and it will have created better overall continuity within the community by providing additional paved streets and convenient pedestrian routes.

Purpose and Intent

The relationship between transportation and land use is one of continuous interaction. The availability of transportation facilities and resources are major factors in determining land use development patterns.

Similarly, land use designations (zoning) influence the need and location for new transportation facilities, as well as the necessity for the ongoing repair and maintenance of existing transportation. As a result of this interdependency between land use and transportation, the City has made a conscious effort to coordinate its Land Use Chapter Chapter 4 and this Chapter. The purpose of this Chapter is to address the motorized and non-motorized transportation needs of the City of Airway Heights.

The Growth Management Act (GMA) requires local jurisdictions to prohibit new development if it causes the level of service on a local transportation facility to fall below the standards adopted in this chapter. However, the GMA will allow the development to proceed if transportation strategies and/or improvements to accommodate the impacts are made concurrent with the development. These improvements and/or strategies must either be in place, or planned for completion within six years from the time of development. The strategies may include increased public transportation service, ride sharing and demand management, plus other transportation management strategies. The Transportation Chapter considers the City land use asumptions and prioritizes and prices future transportation improvement projects based on current conditions and future growth.

Transportation Goals and Policies - Land Use Assumptions

This Chapter discusses and identifies assumptions used in estimating travel, estimated traffic impacts to state-owned transportation facilities, the identification of facility and service needs including level-of-service (LOS) standards, financing and the demand-management strategy. As the City plans for its future, both the non-motorized and motorized transportation needs and establishment of goals to achieve the current and future transportation needs are necessary to ensure that transportation infrastructure and mobility are properly addressed.

The following table identifies the goals, policies, and implementing programs for the City. Programs are designed to be tasks for which budgets can be developed and responsible parties can be identified.

Issues, Goals, Policies, and Implementing Programs

Goal	Policy	Implementing Program
Make U.S. Highway 2 a traffic corridor that supports Airway Heights' community, accommodating traffic volumes, traffic safety, and making it attractive to pedestrians.	Encourage roadway design approaches on U.S. Highway 2. These design approaches may include, introducing structural traffic calming elements, planting trees, or other techniques that may be described in a corridor design plan.	Coordinate with WSDOT regarding planned improvements to U.S. Highway 2.
		Prepare alternative design schemes for U.S. Highway 2 and present to WSDOT for consideration.
		Incorporate a landscaped median street edge along U.S. Highway 2. Work with WSDOT to make the corridor a model for highway/downtown compatibility.
		Investigate a Main Street program for Airway Heights.
		Consider a citywide trails master plan.
		Coordinate with WSDOT to enhance the corridor's pedestrian environment.
	Pursue ways to more effectively link areas north and south of U.S. Highway 2.	Consider an U.S. Highway 2 corridor study to identify pedestrian strategies and identify downtown activity areas. Investigate pedestrian overpasses and vehicle roundabouts.
		Promote pedestrian crossings at concentrated land use locations.
	Use new development to accentuate a central focus to downtown.	Shape land uses along U.S. Highway 2 to provide flexibility in highway design options.
		Create a design assistance program to encourage builders to share design ideas prior to applying for building permits.
		Establish an advisory design review program to encourage higher caliber design in the commercial core.
		Clarify right of way ownership with WSDOT.
		Amend zoning code to allow taller structures in the central area.
		Amend zoning code to encourage mixed uses in the central area.

Goal	Policy	Implementing Program
	Use regulatory measures to enforce traffic safety rules.	Enforce speed limits.
		Control driveway access directly to U.S. Highway 2.
		Enforce regulations for pedestrians on public streets.
		Develop and enforce regulations for scooters and mini-bikes on public streets.
Pave all streets that are used in the community.	Pave streets in existing neighborhoods.	Identify unpaved streets.
		Prioritize paving projects.
		Fund or seek funding for paving projects.
		Sponsor local improvement districts or other funding mechanisms to pave streets serving residential areas.
	Ensure streets are paved as vacant land develops.	Require street improvements as part of all subdivisions.
		Sponsor local improvement districts or other funding mechanisms to pave streets serving vacant but already-subdivided commercial and industrial properties.
Provide an adequate transportation network for the City of Airway Heights which does not place an unfair burden on existing citizens.	Provide transportation system improvements concurrent with new development and consistent with adopted land use and transportation plans.	Maintain an inventory of transportation facilities and services to support management of the transportation system and to monitor system performance.
		Transportation improvements shall be consistent with land use plans, capital funding, and other planning elements.
		Implement concurrency review and management that evaluates impacts from new development and identifies funding sources for improvements. Evaluate the transportation system annually through the Six (6) Year Street Improvement Program update process.
		Coordinate planning with appropriate agencies and utility companies for utility corridors that affect the transportation system.
		Use a 10- and 20-year horizon when preparing transportation forecasts to provide information on the location, timing, and capacity needs of future growth.
		The transportation system shall support the land use element of the comprehensive plan as growth occurs.
		Transportation revenues and improvement costs should be addressed during the annual review of the 6-year transportation improvement program.
		Reassessment of transportation projects may affect land use, growth targets, level of service standards, and the Capital Facility Plan.

Goal	Policy	Implementing Program
Maintain adequate rail and highway access to the community's industrial areas.	Ensure that roadway and rail transport opportunities continue to exist to facilitate development in industrial areas.	Coordinate with the West Plains Chamber of Commerce and Regional EDC and other business groups to assess continued local demand for the rail spur.
		Coordinate with the rail line operator to support continued operation of the rail spur.
		Assess current use and maintain usage information.
	Coordinate with the state and the county to ensure Hayford Road and Craig Road continue to serve as a north-south link and truck route between Interstate 90, U.S. Highway 2, and State Route 902.	Coordinate with the West Plains Chamber of Commerce and Regional EDC and other business groups to assess continued local demand for Hayford Road.
		Review the Spokane International Airport's master plan to ensure Hayford Road remains open.
		Review the County's comprehensive plan to ensure continued availability of Hayford and other arterials to access regional markets.
		Investigate signage options displayed on Interstate 90 identifying Airway Heights.
Link central Airway Heights to the light rail project.	Support efforts to construct and extend light rail service along the Interstate 90 corridor and to Airway Heights.	Investigate possibility of extending light rail line to Airway Heights, and perhaps to FAFB through a joint-venture agreement.
		Participate in SRTC planning meetings for the light rail project and its extensions.
	Pursue ways to take full advantage of light rail to Airway Heights.	Study possibility for accommodating light rail line in U.S. Highway 2 median.
		Identify likely transportation station for light rail.
		Prepare a trails master plan, linking residential and commercial areas to light rail station site.
Work with STA on ways to improve its service to community residents.	Improve the condition of bus stops.	Inventory bus stop location and condition.
		Request bus stop improvements by STA and enter into partnership agreements as necessary.
	Make the bus accessible to community residents.	Investigate feasibility of increasing bus stops and bus routes within the community.
		Develop a trails master plan and include links to community bus stops.
		Investigate feasibility of establishing a centrally located transit center in the community.
		Sponsors commute trip reduction programs. Work with local employers to assess possibilities to increase transit ridership.

Goal	Policy	Implementing Program
		Sponsor STA community workshops to help the agency consider and adopt revisions to services if necessary.
Create an attractive, functional and useful pedestrian environment in Airway Heights, reducing reliance on the auto for local trips.	Reduce demand on the automobile	Prepare a community-wide trails master plan.
		Identify priority trails improvements.
		Seek funding for trail and sidewalk improvement in existing neighborhoods.
		Pursue the development of sidewalks in all areas of the City for safe pedestrian travel.
		Pursue improvements to pedestrian crossings on U.S. Highway 2.
		Beautify sidewalks in commercial areas.
		Require installation of bicycle racks as part of all new commercial, industrial or institutional development.

Airway Heights Transportation System - Facilities and Services
Pedestrian Transportation

The City recognizes that part of making Airway Heights more enjoyable for living and working is creating a network of trails, bike lanes and sidewalks that offer opportunities for leisure, recreation, exercise and errands.

Figure 5.1
Regional Transportation System

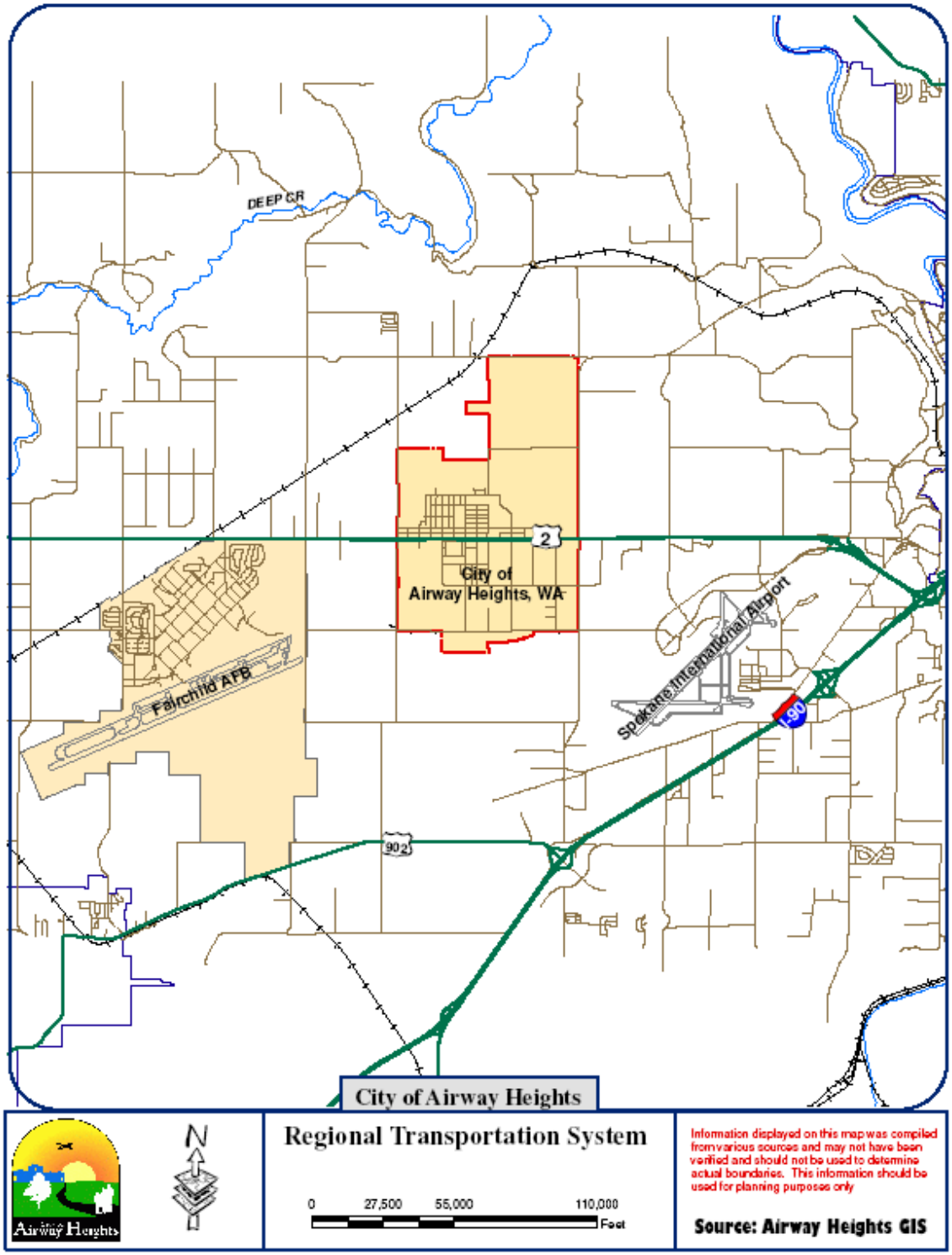
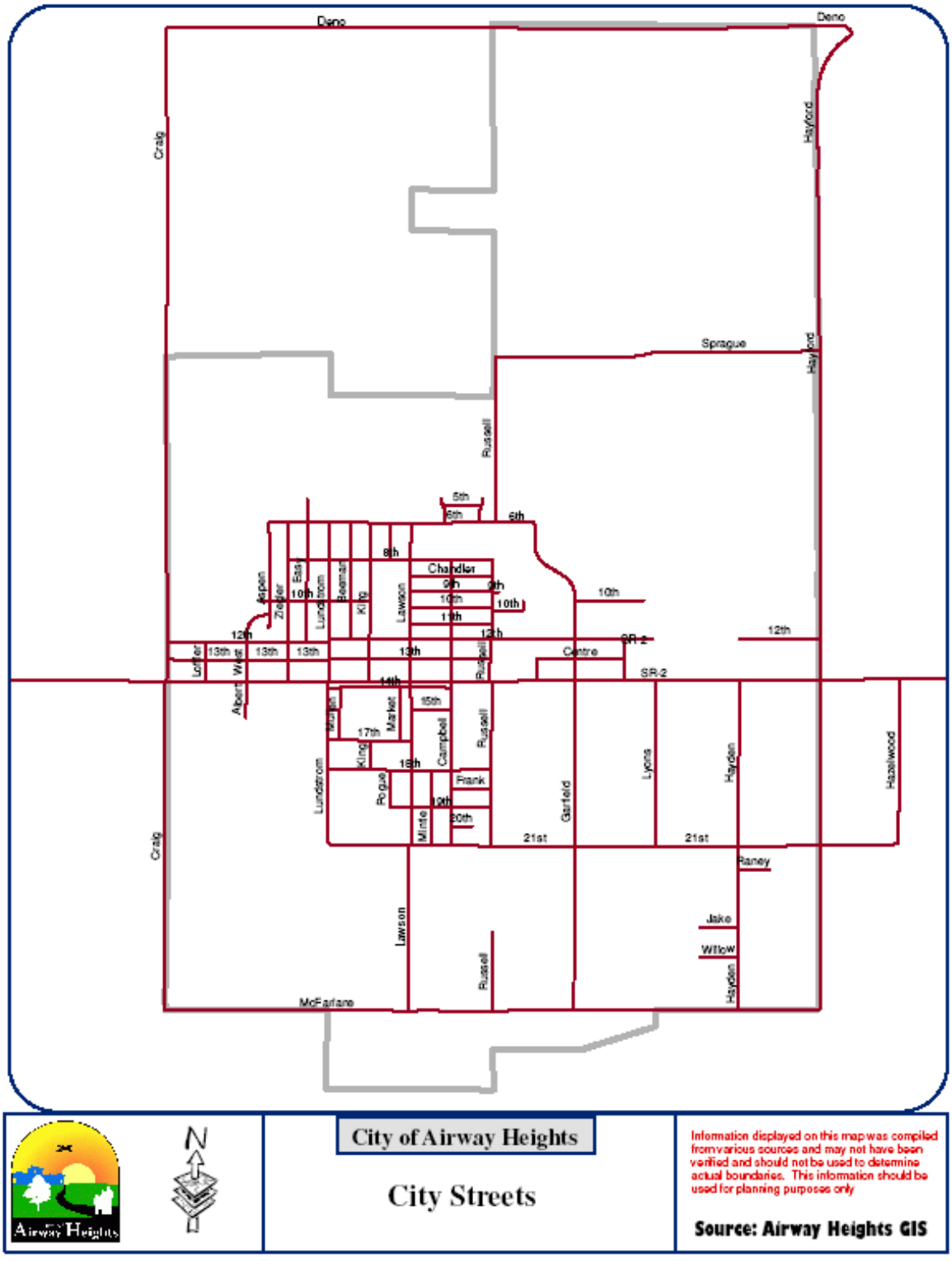


Figure 5.2
Airway Heights Street System



Public Transportation
The City of Airway Heights is served with public transit by Spokane Transit Authority (STA), which provides public transit service for the Spokane metropolitan region. At the present time Airway Heights is served by the STA for bus service that provides service to downtown Spokane and to Fairchild Air Force Base.

As Airway Heights develops and carries out its transportation improvements, the City will work with STA to increase the safety, aesthetics and usability of the bus stops. Adding bus pull out lanes and building bus shelters are two means to achieve a safer more attractive bus stop.

Rail Transportation

A rail line runs near the City limits, bordering the northwest corner of the UGA. There is also a spur operated by Burlington Northern Railroad that passes through the southern part of the City along McFarlane Road. After exiting the City to the west, the line passes through FAFB before tying back into the main Burlington Northern line.

Air Transportation

Airway Heights is adjacent to the Spokane International Airport. The airport is mostly accessed with private automobile, ground service via taxi or airport shuttle to and from Airway Heights. Bus service from STA is also provided, but requires transfering at the STA transit plaza in downtown Spokane.

State Transportation Facilities
U.S. Highway 2 is the primary state-owned transportation facility within the City's corporate limits. This road bisects the City and divides it into a norht and southern half. Adjacent to U.S. Highway 2, the land use designation is primarily commercial. Acccordinaly, properties contain various commercial uses which offer services and goods to residents and visitors within the community.

Through the years, the City has worked with and will continue to work with the state to make the highway more accomodating in terms of vehicular traffic and pedestrian safety. It is important that the highway not be a barrier to the community's development, but be viewed as an asset.

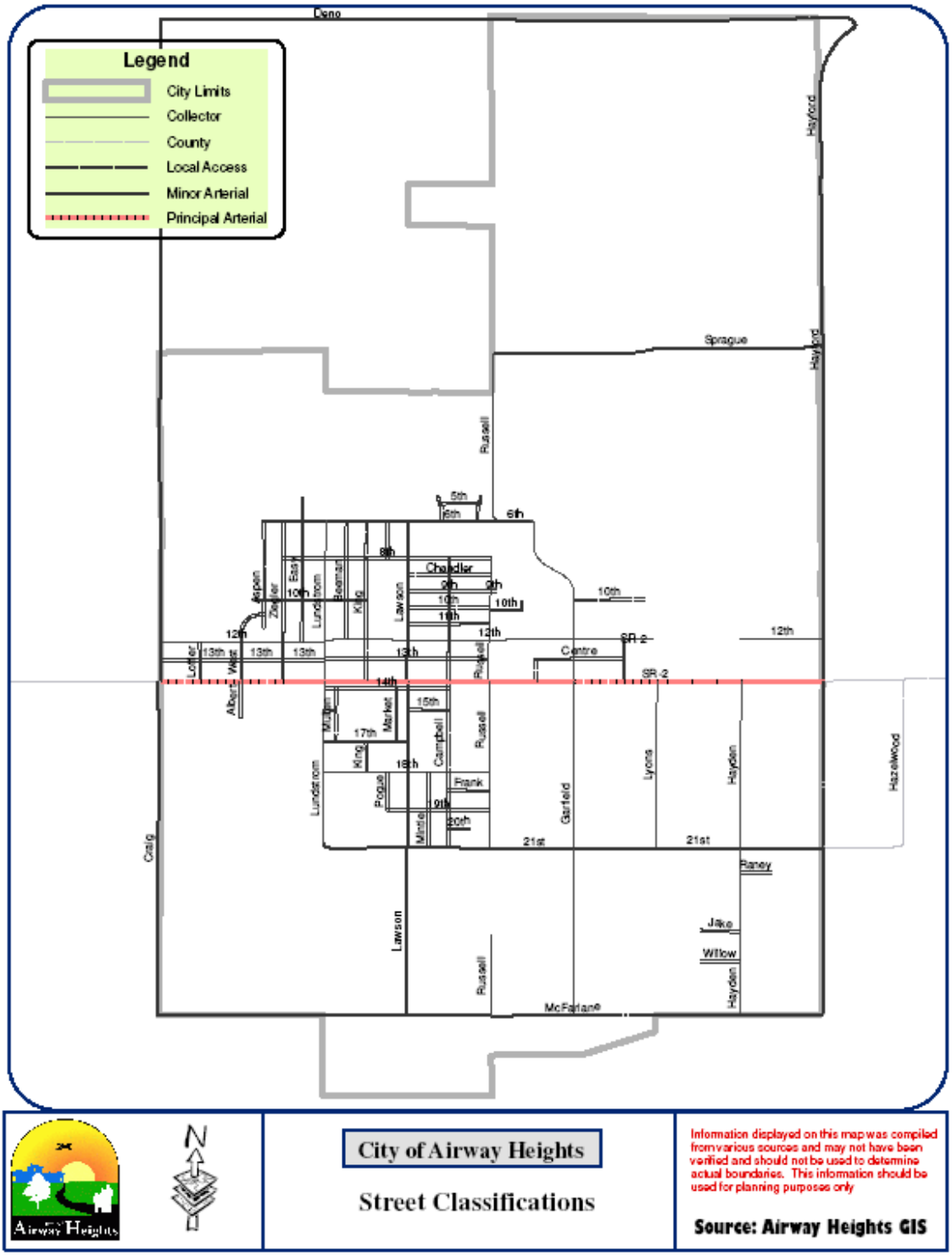
Street Classifications
The state Department of Transportation (WSDOT) has developed a Functional Classification System (FCS) which all municipalities in the state use as a guide in classifying streets in their jurisdiction. This FCS has evolved over time to ensure consistent designation of streets throughout the State of Washington. The designation of streets within the City of Airway Heights was developed by the Spokane Regional Transportation Council (SRTC), which is the designated Metropolitan Planning Organization (MPO) for transportation related issues throughout Spokane County.

Table 5.1
Street Classification

Street Classification	Street Description	Airway Heights' Streets
Principal Arterial	Streets and roadways connect primary community centers with major facilities. Principal arterials are generally intended to serve through traffic with limited direct access to abutting land uses. Boulevards may be a principal or minor arterial.	U.S. Highway 2 and Hayford Road, Deno Road, Sprague Road and McFarlane Road.

Street Classification	Street Description	Airway Heights' Streets
Minor Arterial	Streets and roadways connect community centers to principal arterials, with partially controlled and infrequent access to abutting land uses.	6th Avenue, 21st Avenue, Craig Road, Garfield Street and Lawson Street.
Collector Arterial	Streets and roadways connect residential neighborhoods with smaller community centers and facilities, as well as access to minor and principal arterials. Through traffic is a lesser priority and access to abutting land uses is a greater priority.	12th Avenue, 18th Avenue, Lyons Road, Lundstrom Street, Russell Street and Hayden Road.
Access Street	Perform a variety of functions with the primary purpose of providing access to abutting land uses. Through traffic is not encouraged and buses and heavy trucks are not recommended except as needed for commercial or industrial uses. The access street also serves as easements for utilities, open spaces between buildings, and as an element to the urban environment.	Typically, these are alleyways.
Local Street	Streets and roadways provide access to abutting land uses, as well as principal, minor, and collector arterials. Through traffic is not a priority.	All streets not classified as an arterial would be classified as a local street.

Figure 5.3
Street Classifications



Transportation Demand and Needs Assessment

Level-of-Service (LOS) Standards

Vehicular traffic within the City is generated primarily by several sources: Geiger Correctional Facility, Northern Quest Casino, Zak Designs, the residential, commercial and industrial areas within the City and commuter traffic on U.S. Highway 2 generated by FAFB and people traveling to and from Spokane. LOS is those standards established by the Washington State Department of Transportation that describe the level of service for streets.

Arterial streets, principal, minor, and collector, are measured against established standards allowing the City to determine if a street or street segment is operating at an acceptable level based on community needs. When a street or street segment falls below an established standard, it is an indication traffic volume is exceeding the street traffic carrying capacity or traffic controls, such as stop signs and turning or traveling lanes. The City of Airway Heights has adopted LOS standards ranging from A to F as its minimum criteria for quality of service provided at peak hours of traffic on its arterials handling significant levels of traffic.

Table 5.2
LOS Descriptions

LOS Category	Description
A	Primarily free-flow traffic operations at an average travel speed; vehicles are completely unimpeded in their ability to maneuver within the traffic stream; stopped delays at intersections are minimal.
B	Reasonably unimpeded traffic flow operations at average travel speed; ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome; drivers are not generally subject to appreciable tensions.
C	Stable traffic flow operations; ability to maneuver and change lanes in mid-block locations may be more restricted than in LOS B with lower than average travel speed; drivers will experience appreciable tension while driving.
D	Small increases in traffic flow, from that of LOS C, may cause substantial increases in approach delays and decreases in average speed: typically caused by high traffic volumes.
E	Significant delays in traffic flow operations and lower operating speed; typically caused by high traffic volume and improper traffic control devices.
F	Traffic flow operates at extremely slow speed; intersection congestion is a result of improper traffic control devices, delays at intersections and high traffic volumes.

LOS standards are based on the perceptions of the driver and their passengers. While qualitative, these LOS standards do have a quantitative basis of measurement. The motorist will judge the quality of the commute trip based on road conditions, time traveled, and safety of the commute from point A to point B. To determine if the street or roadway is contributing to the overall efficiency of the combined transportation network and operating at designed capacity, a quantitative analysis must be done to determine the minimum LOS standard acceptable.

WSDOT has established LOS D for principal arterials as the minimum acceptable standard for roads in urban areas. Streets and roadways operating at this level are considered to be operating at capacity. A LOS D at peak hour is reasonable and an achievable standard for the City's principal arterial. According to WSDOT and City data, U.S. Highway 2 is operating at LOS B standards. The following table, Table 5.3, highlights the correlation between LOS and street classification.

Table 5.3
The LOS Standard and Average Traffic Volume Relationship

Average Weekday Traffic on 2 Lane Streets and Roadways, without Turn Lanes at Intersection		***Average Weekday Traffic on 2 Lane Streets and Roadways, with Turn Lanes at Intersection***	
LOS Standard	**Average Traffic Volume**	**LOS Standard**	**Average Traffic Volume**
A	0 – 4,000	**A**	0 – 9,000
B	4,001 – 7,000	**B**	9,001 – 13,000
C	7,001 –9,000	**C**	13,001 –14,000
D	9,001 – 11,000	**D**	14,001 – 15,000
E	11,001 – 13,000	**E**	15,001 – 16,000
F	13,001+	**F**	16,001+

The City of Airway Heights adopts LOS D as the standard for its principal and minor arterials and collector streets, with LOS C for local access streets, except where such streets abut a principal, minor or collector street, in which case the LOS may be "D" at the intersection.

Forecasted Traffic Volumes
There is a strong correlation between land use and transportation. As growth in community population and employment opportunity increases, so too does the amount of traffic generated. The City has only traffic counts for the U.S. Highway 2 corridor, which are maintained by WSDOT. As the City develops the U.S. Highway 2 corridor plan, it should forecast traffic demand for the City's streets.

As the City begins to build-out, forecasted traffic volumes may shift somewhat requiring periodic updating to ensure the City can adequately meet the demand on its transportation system. It is also important to note, that while traffic volumes may shift on specific street segments, the overall forecasted traffic volume would remain constant. The WSDOT uses standard traffic counting equipment to record daily traffic volumes.

Table 5.4
Forecasted Daily Traffic Volume (DVT) for City arterials

Street Classification	2010 DTV	2015 DTV	2020 DTV	2025 DTV
Principal Arterial				
U.S. Highway 2	40,000	45,000	45,000	50,000
Hayford – McFarlane - U.S. Highway 2	7,000	8,000	9,000	10,000
Hayford – U.S. Highway 2 - Sprague	12,000	13,000	14,000	15,000
Hayford – Sprague – Deno	12,000	13,000	14,000	15,000
Minor Arterial				
Craig – Mc Farlane – U.S. Highway 2	6,000	7,000	8,000	9,000
Craig – U.S. Highway 2 – Deno	6,000	7,000	8,000	9,000
McFarlane – Craig - Hayford	4,000	5,000	6,000	7,000
Collector Arterial				
Lundstrom – U.S. Highway 2 – 6th	2,000	3,000	4,000	5,000
Garfield / Lawson – McFarlane – 21st	2,000	3,000	4,000	5,000
Garfield / Lawson – 21st – U.S. Highway 2	3,000	4,000	5,000	6,000
Garfield / Lawson – U.S. Highway 2 – 6th	3,000	4,000	5,000	6,000
Lyons – 21st – U.S. Highway 2	2,000	3,000	4,000	5,000
Lyons – U.S. Highway 2 – Sprague	2,000	3,000	4,000	5,000
Hayden – 21st – U.S. Highway 2	2,000	3,000	4,000	5,000
Russell – U.S. Highway 2 – 6th	2,000	3,000	4,000	5,000
Russell – 6th – Sprague	2,000	3,000	4,000	5,000
6th – Lundstrom -Garfield	2,000	3,000	4,000	5,000
Sprague Avenue				
Total DTV	**109,000**	**130,000**	**146,000**	**167,000**

Transportation Improvement Projects - Financing

The City of Airway Heights has a number of transportation improvement projects that are detailed in the transportation plan which is updated yearly. Transportation projects are reviewed periodically in connection with the City Six-Year Street Program.

The City desires to address and shape a transportation network that fully integrates the pedestrian and automobile into a cohesive network. Convenience, safety and aesthetics are key components.

U.S. Highway 2 is a primary concern, issue and opportunity. At the present time, the WSDOT Highway System Plan identifies the need to increase the capacity of U.S. Highway 2. This plan recommends that the City develop consensus of the type of improvements it would like on U.S. Highway 2 and work closely with WSDOT in developing the plan to carry out those improvements.

This plan also recommends that the City work on developing a network of arterials that run parallel to U.S. Highway 2 to reduce local demand on U.S. Highway 2, thereby offsetting the need for widening the right-of-way. The City should also consider developing or encouraging the development of turn lanes and bus pull-outs, which in essence increase the capacity of U.S. Highway 2 without increasing the right-of-way.

The following table, Table 5.5, highlights some of the funding options available for various transportation improvement projects, both pedestrian-oriented and vehicular.

Table 5.5
Possible Funding Sources for Pedestrian and Vehicle Improvement projects

Funding Source	Description
WSDOT	Provides various grants and other funds for projects, although generally limited to the state highway system.
Transportation Improvement Board (TIB)	Administers the Urban Arterial Transportation Account (UATA), and other programs for improvements in both the pedestrian and vehicular transportation networks. A local match is generally required with these funds ranging from 20 percent to 50 percent.
Spokane Regional Transportation Council	Administers the Pedestrian Facility Program (PFP), which is aimed at projects promoting pedestrian mobility and safety. Funds are limited to $100,000 per project.

The City continuously works with WSDOT to ensure that state-owned facilities are serving both the City needs and state operational requirements. Through SRTC and coordination efforts with other local jurisdictions including Spokane County, the City assesses the impacts of the various transportation plans and land use assumptions on the transportation system of the City, county and state. Frequently, the City confers with various jurisdictions when development, either within or around the City, has the potential to create off-site impacts. It is the intent and goal of the City to ensure that the regional transportation system adjacent to and within the City is functional and compatible with the City street system.

Transportation Finance
As generally identified in the Six-Year Street Improvement Program, and the annual budget process of the City, the ability to fund transportation projects is dependent upon the general revenues of the City, available state and federal grants and loans, utilization of bond or local improvement district financing, and the contribution of funds or property from developments. The City, through its Capital Facility Plan, will develop a long-range financial strategy to implement the transportation improvement program. Adequate staff resources will be allocated to work with adjoining, regional, state and federal agencies for the purpose of supporting projects that benefit the City and surrounding jurisdictions. Further, the City will endeavor, through its budget process, to protect and maintain its existing transportation infrastructure to include the consideration of impact fees as a way to mitigate and provide concurrency for transportation improvements.

The City will annually identify its street infrastructure, including current and projected deficiencies, with a cost to alleviate such deficiencies. Revenue will be periodically reviewed and allocated in order to develop a financing schedule which is feasible and will allow the City to maintain its Level of Service standards. In the event revenues or projects cannot be completed in a timely manner, the City may consider an adjustment to its Level of Service.

Transportation Demand Management
The objective of Transportation Demand Management (TDM) is to provide incentives for reducing the single-occupant vehicle travel mode to and from work thereby increasing alternative modes of travel. Examples of incentives include, but are not limited to, bus fare subsidies or reduced prices on bus passes, ride-sharing, and alternative work schedules such as four-day work weeks or telecommuting. The City sets the example for the community by practicing commute trip reduction and encouraging its major employers to do the same.

Through this plan, the City has encouraged the development of alternative modes of transportation to

include pedestrian and bicycle facilities that enhance community access and promote the health and safety of City residents. Further demand management strategies that the City will promote through its development regulations are reliance on increased public transportation, ride sharing programs and land use policies that reduce the dependence on the automobile.

Transportation Concurrency

The City has developed a concurrency ordinance that requires transportation facilities to have adequate capacity to accommodate a proposed development. Adequate capacity includes a commitment to have the transportation facilities in place within six years from the date of development. The City has established a level of service that will be reviewed in connection with development applications. The City's levels of service are set to reflect realistic expectations consistent with the City's land use plan and a commitment toward reasonable and responsible growth. Where a development creates a concurrency problem, the City will review its levels of service, demand management strategy and capital facility plan in order to develop an appropriate response to the development proposal. While the City recognizes that the absence of transportation concurrency can result in the denial of a development project, the City may also use this situation as an emergency for the purpose of amending or revising the goals and policies set forth in this comprehensive plan.

Finally, the City may consider a system of development deferrals, which means approving a proposed development but deferring authority to construct until adequate transportation facilities become available. Alternatively, the City may consider conditional approval whereby a developer agrees to mitigate the offsite impacts either individually or in connection with the City or other governmental entities.