

Volume V, Appendix C

Capital Facilities Plan

City of Spokane Comprehensive Plan

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C.1 INTRODUCTION

The Capital Facilities Goals and Policies and this Capital Facilities Plan (CFP) complement the Land Use Chapter to ensure that facilities are available and funded for the city's proposed land uses.

This CFP specifically identifies public facilities that will be needed in the future. When a service provider does not maintain a separate plan addressing capital facilities, it is included within this document. The Citywide Six-Year Capital Improvement Program (CIP) is the six-year financing portion of the CFP. The CIP is updated annually prior to adoption of the city budget in order to incorporate capital improvement projects identified in the CFP.

For each service provider, this CFP contains an inventory of existing and proposed capital facilities, establishes level of service (LOS) standards, identifies long-range facility service capacities and projected deficiencies, and outlines the actions necessary to meet such deficiencies. The six year Citywide CIP, City of Spokane Stormwater Management Program, City of Spokane Integrated Clean Water Plan, City of Spokane Water System Plan, City of Spokane Wastewater Facilities Plan, Spokane County Solid Waste and Moderate Risk Waste Management Plan, Spokane Public Library Facilities and Future Service Plan, and the City of Spokane Parks and Open Spaces Plan, Roadmap to the Future are hereby adopted by reference as a part of the Comprehensive Plan. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

Program Scope

The Capital Facilities Plan (CFP) addresses all areas within the incorporated city limits. The scope of the City of Spokane's Capital Facilities Plan is:

- Fire and Emergency Medical Services
- Law Enforcement
- Libraries
- Parks, Recreation, and Open Space Facilities
- Wastewater Management
- Schools
- Solid Waste
- Water
- Private Utilities

The Capital Facilities Plan for Transportation is included in Chapter 4, Transportation, of the Comprehensive Plan. Table CFU 1 lists service types, service providers and the associated capital facility related plans and programs.

TABLE CFU 1 - TYPES AND PROVIDERS OF CAPITAL FACILITIES		
Service Type	Service Provider	Source for Capital Facility Inventory, Planning, and Programming.
Fire and Emergency Services	City of Spokane Fire Department and Fire Districts 1,3,6,8,9, and 10 See Map CFU 1	Comprehensive Plan Chapter 5.5 Citywide Six-Year Capital Improvement Program
Law Enforcement	City of Spokane Police Department and Spokane County Sheriff See Maps CFU 2 and 3	Comprehensive Plan Chapter 5.5 Citywide Six-Year Capital Improvement Program
Libraries	Spokane Public Libraries Spokane County Public Library District See Map CFU 4	Comprehensive Plan Chapter 5.5 Spokane Public Library's 2016 Facilities and Future Service Plan
Parks, Recreation, and Open Spaces	City of Spokane Parks and Recreation Department Spokane County Department of Parks, Recreation and Golf See Map CFU 5	City of Spokane Parks and Open Spaces Plan, Roadmap to the Future.
Wastewater Management	City of Spokane Sewer Maintenance, Spokane Wastewater Management, and Spokane County Public Works and Utilities See Maps CFU 6 and 7	Citywide Six-Year Capital Improvement Program City of Spokane Stormwater Management Program Spokane County Wastewater Facilities Plan City of Spokane Integrated Clean Water Plan City of Spokane Wastewater Facilities Plan (2014)
Schools	Spokane Public Schools (District 81), Mead School District, and Cheney School District See Maps CFU 8,9,10, and 11	Each school district maintains their own capital facility plan as needed.
Solid Waste	City of Spokane Solid Waste Management	Spokane County Comprehensive Solid Waste Management Plan of 2015 Citywide Six-Year Capital Improvement Program
Water	City of Spokane Water and Hydroelectric Services See Map CFU 12 and 13	Citywide Six-Year Capital Improvement Program City of Spokane 2016 Water System Plan
Transportation	City of Spokane Spokane County WA State Department of Transportation See Maps TR 1, 2, 3, 4, and 5	Transportation Chapter (Ch. 4) of the City of Spokane Comprehensive Plan Citywide Six-Year Capital Improvement Program

Explanation of Levels of Service (LOS) Standards

Levels of service (LOS) measure the quality and quantity of public facilities and services that are provided to the community, factors that significantly contribute to the community's quality of life. Service providers establish LOS to identify future capacities of capital facilities, projected deficiencies, and the necessary improvements to serve new growth while still maintaining service levels that will meet the desires of the community, state standards, and federal requirements.

Typically, LOS is expressed as a ratio of facility or service capacity to unit(s) of demand. Examples of LOS measures include the number of police officers per 1,000 people, the number of park acres per 1,000 people, and the number of gallons of water used per day per customer.

Future Demand

As the LOS is based, for the majority of services, on population it is necessary to understand just how much the population of the city and UGAs may grow over the years. Per RCW 43.62.035 the Washington State Office of Financial Management (OFM) provides each county with a population projection range. The County chooses a population growth rate within this range and then allocates (or distributes) the population to the municipalities within its jurisdiction. The Spokane County Steering Committee of Elected Officials recommended that the OFM median 20 year population projection be used.

Spokane County has tentatively allocated for “initial planning purposes” a twenty year (to 2037) population growth of 20,859 new people to the City of Spokane.

The level of service standards and capacity analysis are based on population projections recommended to the Steering Committee of Elected Officials for Spokane County by the Planning Technical Advisory Committee (PTAC) and adopted by the Board of County Commissioners in June of 2016. The PTAC was comprised of planning professionals from Spokane County, cities within the County, the Spokane Regional Transportation Council (SRTC), and the Spokane Transit Authority (STA). The committee used information provided by the Washington State Office of Financial Management (OFM) to determine an appropriate population growth forecast to help predict the number of new users that may increase demand on existing facilities. Details of the committee’s recommendation can be found in Volume V, Appendix E – Planning Technical Advisory Committee Population Forecast and Allocation.

The recommended forecast is based, in part, on OFM’s Projections of the Resident Population for the Growth Management Medium Series, May 2012 which contains a high, medium, and low forecasted growth rate. The city’s previous Comprehensive Plans utilized a higher growth rate which the city has historically not seen come to fruition. This has resulted in planning efforts that exceed the realized growth. The newly adopted growth rate forecasts a population that is smaller than what was used to inform the 2006 Plan resulting in facility and service capacity above what is needed to serve the forecasted population growth within our twenty year planning horizon.

The City of Spokane is planning to be able to accommodate a population increase of approximately 20,859 new people by the end of 2037. If the population increases according to these numbers, the total City of Spokane population will be 236,698 in 2037. For those service providers who have completed future planning prior to the adoption of these numbers, see those plans for information on the population on which they based their projections. Where possible (e.g. police) the information provided in this CFP utilizes the updated projections. Those service providers who used prior population projections accounted for higher growth than what has currently been adopted, therefore they can accommodate the now lower growth projections without additional services and/or capital facilities.

Table CFU 2 - Population Estimates	
Service Type	Service Provider
2017	215,839
2037 Population Forecast	236,698
2017-2037 Population Allocation	20,859

Notes: Spokane County Planning and Technical Advisory Committee Population and Forecast Allocation. Report and recommendation to the Steering Committee of Elected Officials, adopted by County Commissioners June 2016.

Table CFU 3, "Capital Facility Level of Service Standards" lists proposed capital facility levels of service.

Table CFU 3 - Capital Facility Level of Service Standards	
Fire and Emergency Medical Services	11:00 min – non-emergency / non-life threatening - 90% of the time 8:30 min – emergency / potentially life-threatening -90% of the time 8:30 min – priority fire incident – 90% of the time 11:00 min – Effective Fire Force on Structure fires (16 personnel) – 90% of the time
Law Enforcement	1.5 officers per 1,000 residents
Libraries	.813 square feet per capita
Parks	Neighborhood – 1.28 acres per 1000 persons Community – 1.61 acres per 1000 persons Major - 3.09 acres per 1000 persons
Recycling	4.33 collections per household per month
Schools	1 teacher per 19 students
Solid Waste	4.33 collections per household per month
Stormwater	10 year design rainfall frequency for public right of way Prevent flooding of property during a 25-yr 24-hour rainfall event Prevent damage to buildings for a 100-year rainfall event
Wastewater	100 gallons per capita per day
Water	Minimum water pressure of 45 pounds per square inch

C.2 FIRE AND EMERGENCY MEDICAL SERVICES

The Spokane Fire Department (SFD) serves the City of Spokane with a full range of “all-risk” fire suppression and Emergency Medical Services (EMS), as well as prevention and risk-reduction activities. Map CFU 1, “2016 Fire Districts” shows the location of city fire stations staffed and maintained by the Spokane Fire Department. It also shows the boundaries of the fire agencies in Spokane County and the current (as of 2016) fire station locations throughout Spokane County. All of these agencies have mutual aid agreements to assist each other in major emergencies.

Emergency Medical Services (EMS)

The fire department provides first response Emergency Medical Services (EMS) throughout the city for Basic Life Support (BLS) and Advanced Life Support (ALS). All firefighters assigned to the City of Spokane’s 16 fire stations are cross-trained at the Emergency Medical Technicians (EMTs) level to provide a BLS function or trained to a paramedic level to provide ALS care. As of 2016, fifteen (15) SFD stations have paramedics assigned. It is anticipated that paramedic service will be added to Station 8 before the end of 2017 which would result in all SFD fire stations having paramedic service.

When someone calls 911 for medical help, the closest, most appropriate SFD unit is dispatched. SFD can respond in a number of different types of vehicles. SFD personnel may respond on a fire apparatus because they have multiple responsibilities – fire, rescue, and EMS, and might be called to another type of emergency at a moment’s notice. If a patient needs advanced treatment, fire department paramedics can perform advanced life support functions, as well as administer IVs and medication. A private ambulance company is currently under contract with the City of Spokane to provide transportation of 9-1-1 patients to medical facilities.

Future Needs – EMS

Approximately 87 percent of SFD’s total calls for services are for EMS purposes. In 2015, 33,441 EMS incidents, including automobile accidents, occurred within the city limits. This percentage has been steadily rising since the mid-1980s, when 67 percent of the Fire Department’s total calls were for EMS purposes.

In recent years, Non-Life Threatening (NLT) medical calls have been the fastest growing segment of SFD incident response. NLT calls and other EMS calls are increasing for a number of reasons including: an aging population; access to insurance through federal health care legislation; growing health care cost; perceived delays in access to physicians; reduction in funding for Mental Health patients; and many others. This increasing demand has caused SFD and other fire agencies across the U.S. to evaluate and implement nontraditional programs and response models to minimize the out of service time for larger, more critical firefighting apparatus (Engines & Ladders). Furthermore, jurisdictions are looking at ways to meet the greater NLT call volume demand in the most cost-effective manner that may not include traditional staffing models.

In 2008, SFD took a major step towards helping to link the most vulnerable in the community, to the existing and growing social services available, by creating the CARES (Community Assistance Response) Team. The CARES Team is a program within the SFD in cooperation with Eastern Washington University (EWU), to interface with citizens who have received a response from fire personnel and are identified as needing social service or other support system assistance. Generally, the citizen needs help that is available through existing social services programs, but the individual was not able to access them

through traditional means. In most cases, FD responders find these individuals feeling isolated or in some crisis and do not know where to turn for help. Often, these citizens generate many 9-1-1 calls for aid. The CARES team is composed of EWU students who are majoring in the Social Work degree programs. These students meet their academic practicum requirements by serving the CARES Team as student Interns who work to help those in need and reduce the chance of repeat calls for service.

Based on recommendations of the “2013 Fire Task Team” report, Alternative Response Units (ARU) were placed in service in 2013 to help reduce the responses by SFD’s larger apparatus. This program places smaller SUV type vehicles with two personnel in the response system during peak incident periods (approximately 7:00 am – 7:00 pm) for response to primarily NLT incidents. The fire department’s experience has shown positive results in reducing the number of responses by Engine and Ladder companies.

Because of the NLT call increase phenomena across Washington, legislative changes are being pursued to give SFD and other EMS providers other alternatives for transportation to medical destinations such as urgent care clinics and specialty facilities. The traditional model of ambulances taking 9-1-1 callers to the Emergency Department on every incident is not sustainable with the increasing demands on the healthcare system. In 2015, SFD initiated an Integrated Medical System approach towards streamlining EMS oversight, training and quality improvement. Through an Inter-Local Agreement with the Spokane Valley Fire Department, SFD began providing coordination services to improve the EMS system in Spokane County. The Integrated Medical System approach will continue to develop and impact SFD’s involvement in how health care services are delivered in Spokane over the next decade.

Fundamental Health Care Education will be an important factor impacting future EMS needs. Increasing citizen participation in health care initiatives could help reduce the number of EMS needs in the future. Likewise, community involvement in learning Hands Only CPR and willingness to help those in need through the Pulse Point Mobile Application and other technology advancements can have a positive impact on the outcome of patient survivability and overall health system demands.

Level of Service (LOS)

A statewide standard for fire and EMS levels of service (LOS) does not exist. Individual communities are responsible for establishing their own level of service standards in consideration of variables such as risk, existing department resources, population density and dispersal, and benchmarking with other communities.

The National Fire Protection Association (NFPA) is a global nonprofit organization that provides research, training, and industry codes and standards related to the provision of fire and EMS services. The NFPA regularly updates and publishes hundreds of codes and standards for use by its members. As a member of the NFPA, the City of Spokane uses these publications as a guide for determining appropriate response times for our community. Although the city is not currently in a position to meet all of the specific objectives outlined by the NFPA, it is the city’s goal to continuously update our service delivery model, improve response times, and align our levels of service as closely as possible with the guidelines recommended by the NFPA.

The level of service for EMS is a function of call type, response time and call volumes. These, in turn, are dependent on the number and location of fire stations, the number of response units, and the number of firefighters available to respond.

In 2001, the Growth Management Steering Committee for Spokane County amended the interim regional minimum levels of service for emergency medical services to the following:

1. Urban areas shall be served by a state certified Basic Life Support (BLS) agency.
2. Urban areas should be served by:
 - a. An operating Basic Life Support (BLS) unit within 5 miles; and
 - b. An operating Advanced Life Support (ALS) unit within 6 miles or 10 minutes response time for those jurisdictions with urban areas in excess of 5,000 population; and
 - c. BLS and ALS transport service.

Within the City of Spokane, the Fire Department's levels of service for EMS are as follows:

11:00 min – non-emergency / non-life threatening (90% of the time)
8:30 min – emergency / potentially life-threatening (90% of the time)

Need for Capital Facility Improvements

The Citywide Six-Year Capital Improvement Program provides information on the needed and planned capital improvements for fire protection and EMS services.

Proposed Facilities – EMS

The location of paramedic - equipped apparatus required within the next twenty years will depend on the location of additional population and demand for service. New units will likely be housed in either existing fire stations or in new fire stations, depending on demographics. It is anticipated that new ALS units will be achieved by staffing an existing BLS unit with additional personnel trained as paramedics or adding new companies with paramedics assigned. The assessment and use of Alternative EMS response unit utilization will be necessary to stabilize costs as EMS calls for service continue to rise.

As it becomes necessary to add additional response units, there is a cost associated with doing so. The approximate cost necessary to add additional units is as follows:

- 4 person company – 4 personnel per shift (4 x 4 = 16 personnel) ~ \$1,500,000 (2016 cost)
- 3 person company- 3 personnel per shift (3 x 4 shifts = 12 personnel) ~ \$1,200,000 (2016 cost)
- 2 person company – 2 personnel per shift (2 x 4 shifts = 8 personnel) ~ \$800,000 (2016 cost)
- Apparatus & Equipment (2016 costs):
 - Engine ~ \$630,000 + Equipment ~ \$90,000
 - Tillered Ladder ~ \$1,160,000 + Equipment ~ \$70,000
 - Alternative Response Unit ~ \$125,000 + Equipment ~ \$60,000

Fire Protection Services

The Washington Survey and Rating Bureau establishes a class of fire protection for an area, which is the basis for the insurance ratings charged by the insurance industry. The city currently has a Class 3 rating (on a scale of 1 to 10, with 1 being the best, thus lowest, insurance rates).

Inventory of Existing Facilities and Apparatus – Fire Protection

The fire department utilizes sixteen (16) fire stations, all staffed on a full-time basis. Staffed front-line equipment includes thirteen (13) engines, two quints, three ladders/towers and one Attack unit. Additionally, numerous apparatus is cross-staffed by station personnel including: one heavy rescue, one hazardous materials unit, one technical rescue unit, two marine rescue units, eight brush units and one command/rehab vehicle. The Fire Department maintains a reserve apparatus fleet of five engines and one ladder/tower. Table CFU 4, "Existing Facilities and Apparatus – Fire Protection," lists locations and square footage for each station.

TABLE CFU 4 - EXISTING FACILITIES AND APPARATUS – FIRE PROTECTION		
Facility Name	Address	Unit Capacity Size (square feet)
Buildings		
Station 1	44 West Riverside Avenue	31,284
Station 2	1001 East North Foothills Drive	8,110
Station 3	1713 West Indiana Avenue	8,110
Station 4	1515 West 1st Avenue	12,821
Station 5	115 West Eagle Ridge Boulevard	3,218
Station 6	1615 South Spotted Road	5,015
Station 7	1901 East First Avenue	6,544
Station 8	1608 North Rebecca Street	8,110
Station 9	1722 South Bernard Street	8,110
Station 11	3214 South Perry Street	8,110
Station 13	1118 West Wellesley Avenue	8,110
Station 14	1807 South Ray Street	8,110
Station 15	2120 East Wellesley Avenue	6,724
Station 16	5225 North Assembly	8,110
Station 17	5121 West Lowell Road	8,110
Station 18	120 N. Lincoln Road	11,165
CCB (Combined Communications Building)	1620 North Rebecca	21,200 Total Bldg SFD space 12,200
Training Fieldhouse	1614 North Rebecca	26,126
Training Admin/ EOC.	1618 North Rebecca	17,000
Shop	1610 North Rebecca	21,754
Burn Building	1616 North Rebecca	3,215
Total		(21 Buildings) 220,067

TABLE CFU 4 - EXISTING FACILITIES AND APPARATUS – FIRE PROTECTION		
Facility Name	Address	Unit Capacity Size (square feet)
Fire Apparatus	Location	Number of Units
Engines: Pumper/ Ladders; Attack Unit		
Front Line Engine	Station 1	1
Front Line Engine	Station 2	1
Front Line Engine	Station 3	1
Front Line Engine	Station 4	1
Attack Unit	Station 5	1
Front Line Engine	Station 6	1
Front Line Engine	Station 7	1
Front Line Engine	Station 8	1
Front Line Engine	Station 9	1
Quint	Station 11	1
Quint	Station 13	1
Front Line Engine	Station 14	1
Front Line Engine	Station 15	1
Front Line Engine	Station 16	1
Front Line Engine	Station 17	1
Front Line Engine	Station 18	1
Reserve Engines	Various Locations	5
Total		21
Ladders		
Front Line Ladder	Station 1	1
Front Line Tower	Station 2	1
Front Line Ladder	Station 4	1
Reserve Tower	Fire Station	1
Total Ladders		4
Specialty Vehicles		
Battalion Chief	Stations 1, 13	2
Rescue	Station 9	1
Air Trailer	Station 1	1
Hazardous Materials Unit	Station 1	1
Decon Unit	Station 1	1
Marine 2	Station 2	1
Wildland Cache	Station 3	1
Tech Rescue	Station 4	1
Reserve Medic Units	Stations 11, 13	2
Command/Rehab Vehicle	Training	1

TABLE CFU 4 - EXISTING FACILITIES AND APPARATUS – FIRE PROTECTION		
Facility Name	Address	Unit Capacity Size (square feet)
Marine 16	Station 16	1
Salvage Cache	Station 18	1
Brush Units	Stations 6,7,8, 11,14,15,17	8
ARU	Stations 1, 3, 15	3
Total Specialty Vehicles		25
Total Fire Apparatus		50

Future Needs – Fire Protection

Existing Demand

The fire department received 4,673 fire and miscellaneous calls in 1999, or 21.3 percent of total emergency service calls received and in 2015 received 4,958 fire calls and miscellaneous calls or nearly 13.3 percent of total emergency service calls. The level of calls for service received from a specific area can be influenced by numerous factors such as population density, age of construction of the area and income.

Level of Service (LOS)

Within the City of Spokane, the Fire Department's levels of service for Fire Protection is as follows:

8:30 min – Priority Emergency Incidents - 90% of the time

11:00 min – Effective Fire Force-Structure (16 Personnel) – 90% of the time

The level of service for fire protection is a function of response time, station/unit call volumes and the minute to minute status of the overall response system. These, in turn, are dependent on: the number and location of fire stations; the number of fire apparatus units; the number of firefighters; traffic patterns and vehicle or pedestrian congestion; and the type of structure.

Fire stations are located to provide the best citywide coverage possible within reasonable response times. The fire department's ability to serve the community was greatly improved in 1989 when the public approved a bond issue that allowed fire stations to be relocated and built to accommodate multiple emergency units. The station design allowed the department to place various types of resources in fire stations based on analysis of prior calls for service.

Jurisdictions with urban areas shall, at a minimum, provide for the enforcement of the International Fire Code and conduct inspections.

Need for Capital Facility Improvements

By Washington Survey and Rating Bureau (WSRB) requirements, any areas within the city limits that are more than five (5) road miles from a fire station, receive a 9A rating rather than the city's general WSRB rating. This provision has been modified since the last update of the Comprehensive Plan and those areas impacted, typically see insurance rate increases. Currently, most of the populated portions of the city limits are within five (5) road miles of a fire station. The City intends to evaluate service needs and develop plans to serve areas identified outside the five (5) road miles requirement to address insurance rates and ensure balanced coverage across the city. Additionally, during 2015, the city entered into an

Automatic Aid agreement with adjacent fire agencies to the north, east and south of the city. This means the closest unit responds to the incident, regardless of the jurisdictional boundary where the incident is occurring. This agreement provides better overall coverage for the citizens of all the involved jurisdictions.

Additional fire stations beyond the 16 currently in service in the City of Spokane, will only likely be necessary if significant growth or annexations occur. Other than the impacts on insurance rates due to distance from fire stations (as outlined above), in broad terms, a new fire station is justified with a population increase of approximately 7,000 to 10,000 and/or 200 calls for service per year. The location, construction and staffing of new fire stations will not only be determined based on maintaining levels of service and the timing of annexations, but will also be dependent on the city's ability to fund such new capabilities.

If increased population density occurs within the existing city limits, additional engines and ladder/towers will also need to be purchased, and staffed. These additional units and personnel would likely be housed in existing fire stations or through partnering opportunities. Apparatus and equipment may be redistributed based on where the specifically increased concentrations of the population and service demands occur.

Proposed Facilities

Additional Stations within Twenty Years:

1. No Stations are expected to be needed unless population density and incident volumes grow or annexations occur to trigger the need for additional stations. Land for future station locations may be acquired in growth areas if funding is available.
2. If fill-in growth occurs, additional engines, ladder/tower or other apparatus would have to be purchased and staffed. It is likely these added units would be housed in existing fire stations or through cooperative partnerships.

Additional Apparatus within Twenty Years:

1. One new Engine is expected to be needed when Permanent Fire Station 5 is opened in Southwest Spokane on or before January 1, 2020. The area is currently served from a Temporary Fire Station using Attack 5, a smaller response unit with minimal firefighting capabilities that is utilized due to space limitations within the temporary fire station.
2. No additional apparatus are expected to be needed unless population density and incident volumes grow or annexations occur to trigger the need for additional engines, ladders or other units.
3. If fill-in growth occurs additional engines and additional ladder/towers would have to be purchased and staffed.

Six-Year Financing Plan – Fire Protection

The Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

C.3 LAW ENFORCEMENT

Inventory of Existing Facilities – Law Enforcement

The Spokane Police Department (SPD) and the Sheriff's Office both reside in the county-owned City-County Public Safety Building (PSB) located on the Spokane County government campus. Both agencies rent additional space in nearby buildings to house expanding programs.

SPD and the Sheriff's Department have occupied the Public Safety Building jointly since 1970. SPD provides all records and property room services for both departments. The Sheriff's Department provides all identification, major crime processing, and evidence processing for both departments. The county, on a straight square foot basis, bills the Spokane Police Department for the space directly occupied. The joint use space such as the Records, Property, and Forensics Division are paid on calculations performed by the County Auditor formulated on 60 percent city expense and 40 percent county expense.

TABLE CFU 5 - EXISTING FACILITIES – LAW ENFORCEMENT (EXCLUDING C.O.P.S. SUBSTATIONS)		
Facility Name	Location	Size (square feet)
Public Safety Building	1100 West Mallon Avenue	60,425
YWCA – Regional Domestic Violence Task Force	930 North Monroe	450
Police Academy (without Range Area)	2302 North Waterworks	13,500
Gardner- Investigations	1427 West Gardner	19,000
Regional Evidence Facility	4010 East Alki	63,000
North Precinct	5124 North Market	7,703
Downtown Intermodal	221 West 1st Avenue Amtrack Station	1,704
South Precinct	2116 East 1st Street	563
Core Office Facilities (Public Safety Building, YWCA and Gardner)	Total Square Feet	79,875

The Spokane Police Department and community volunteers have also developed and staffed Community Oriented Policing Services Substations (see Map CFU 3, "C.O.P.S. Substations," for locations). Both private and public funding sources fund the C.O.P.S. Substations. Because of the varied funding sources and limited capital expense, the C.O.P.S. Substations are not included in the needs analysis for future capital facilities. Currently, the Spokane Police Department has 282 vehicles for commissioned officers, 13 motorcycles, 16 vehicles for non-commissioned employees, 28 new and inactive vehicles, 9 ATV/Trailer/Etc. vehicles/units and 5 motorcycles in reserve status. Eight of the vehicles/units have been flagged for disposal.

Future Needs – Law Enforcement

Existing Demand

The Regional Evidence Facility vehicle storage area is at capacity today. There is an immediate need to seek additional space for these storage needs.

The Spokane Police Department has an authorized strength of 311 commissioned officers, although vacancies, attrition, and budget constraints cause actual staffing to fall below authorized numbers. The

SPD also has 96 full-time civilians, 12 temporary or project employees, and 68 volunteers. All but a few of the 487 SPD employees work out of 79,875 square feet of combined core facility space (164 square feet per SPD employee).

Level of Service (LOS)

The number of officers per one thousand city residents is a common method used to measure level of police service. It is not a good indicator, however, of the actual demand upon police services because the service population is regionally based. More than this, some areas of the city require more police service as they generate more calls for service than others do.

A ratio of 1.5 officers per thousand persons has historically been considered adequate for the City of Spokane. The 2016 LOS was 1.45. The average for cities over 100,000 population in Washington State is 1.8 officers per one thousand citizens.

The city can afford to maintain the proposed LOS of 1.5 officers per thousand residents over the next six years. There is more to police work than just policing; it also includes a well-proportioned number of civilian employees to keep things running smoothly. It has been suggested that the current LOS provided by civilian employees at approximately .33 civilian employees per police officer is the standard that should be carried forward. This need is also reflected in Table CFU 6.

Future Demand

Table CFU 6 shows the number of officers needed over the next twenty years to maintain the LOS of 1.5.

The projected population growth within the city and its UGA is 20,859 new people through the year 2037. In order to maintain the adopted level of service the city will need a total of 455 officers and 150 civilian employees by 2037. This means the city will need to add a total of 144 additional officers and 54 civilians over the next 20 years.

In 2015, the total cost to support one officer was \$191,703, which includes the cost of civilian personnel. This is operating cost only and does not address capital needs. A conservative 3 percent annual increase in operating expenses was used to project future officer support costs. The additional operating cost to support a level of service equal to that of 1.5 officers per thousand residents will require approximately \$5.9 million in additional revenue to support SPD through 2037.

TABLE CFU 6 - LEVEL OF SERVICE – NEEDED LAW ENFORCEMENT OFFICERS				
Year	Population	Officers per 1,000 Residents (LOS)	Number of Officers Needed to Provide Adopted LOS	Number of Civilian Employees Needed*
Total Population 2017 City (Present)	215,839	1.5	324	107
2017-2037 (Increase-City)	20,859	1.5	31	10
Total 2037 Population	303,106	1.5	455	150

**The number of civilian employees per police officer is estimated to be close to .33. Including this category in the Comprehensive Plan is intended to reflect the actual numbers of employees, and their associated costs, with anticipated population growth.*

Six-Year Financial Plan

The Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

C.4 LIBRARIES

Inventory of Existing Facilities

Spokane Public Library (the “Library”) currently has six branch libraries in the Indian Trail, Shadle, Downtown, South Hill, Hillyard, and East Side areas. Since their construction in the 1990s, these facilities have been inadequately maintained and are in dramatic need of updating due to rapid changes in technology, constant usage, and community need.

Future Needs

Existing Demand

High-quality public education is provided through the downtown branch, two community branches, three neighborhood branches, a digital branch, and outreach to the business and nonprofit community, seniors and youth. We serve the educational needs of every citizen.

Early, adult and digital literacy is supported through our collection of resources. In addition to resource materials for self-directed education, branch libraries also offer their meeting rooms for use by the community. Technology and research assistance is also provided via professional staff to navigate an increasingly complex and evolving world of information. Clearly, the public library system plays a crucial role in the educational, social, economic, recreational, technological and cultural health of the community. In 2013, Spokane Public Library adopted a new mission statement to better meet the evolving needs of the community with a renewed commitment to “high quality education for all,” and established strategic directions related to community success, library impact, and organizational innovations.

This mission dovetails with City of Spokane’s strategic focus, as well as with local and national shifts in library service demands. The Library has embraced its role as an educational resource and has bolstered its physical and digital resources, programmatic offerings, and staffing to reflect this role.

Level of Service (LOS)

Spokane Public Library’s Strategic Directions, developed in 2014, outline the Library’s service priorities.

- | |
|---|
| |
| 1. Empower our citizens to help our community succeed <ul style="list-style-type: none">◆ Goal: Inspire a community of readers◆ Goal: Expand citizen access and knowledge of emerging literacies and technologies◆ Goal: Be the resource for free learning opportunities for citizens of all ages so they can achieve their personal and professional goals |
| 2. Build partnerships for a greater impact on citizen’s lives <ul style="list-style-type: none">◆ Goal: Be an engaged community partner◆ Goal: Collaborate to expand access to community expertise for customers◆ Goal: Meet customers and partners when and where they are with the information they want |
| 3. Become an organization of growth and innovation <ul style="list-style-type: none">◆ Goal: Remain relevant and vital through continuous learning |

- ◆ Goal: Transform our libraries to meet local needs of our customers and community
- ◆ Goal: Share the library messages widely

In addition, their level of service standards are as follows:

	1996	2014	Recommended
Operating budget per capita	\$33.80	42.68	\$50.00
Materials budget per capita	\$4.56	4.24	\$7.50
Percent of operating budget for materials	14%	10%	15%
Square feet per capita	.671	.671	.813
Circulation per capita	10.5	10.14	10.5
Unduplicated hours of operation per week	60	58	60

Spokane Public Library's Strategic Directions stress flexibility so their programs and level of service standards have room to evolve as customer needs change in the future.

Future Demand

Increased service demand resulting from future population growth could be addressed either through construction of new facilities, creative outreach programs and satellite service points, or a combination of both.

Need for Capital Facility Improvements

All of Spokane Public Library's facilities have been replaced with new buildings since 1991. Given an average life span of a library facility of 20 to 30 years, these facilities should not have to be replaced over the next 20 years. However, depending on how and where future growth and development occur, future population increases could require the expansion of existing facilities (at Indian Trail, for example) or construction of new facilities (perhaps in the Qualchan area).

As of 1998, all of Spokane Public Library's facilities were replaced with new buildings. Given an average life span of a library facility of 20 to 30 years, in 2015, Spokane Public Library conducted an extensive evaluation encompassing four aspects of library operations and capital:

- The system of library locations as they work together to serve the city;
- The Library's operations and customer experience, including the staffing structures that can maximize customer engagement and return on investment;
- SPL's technology platforms and technology-based opportunities; and
- The specific, physical facilities, their conditions, and how they can best accommodate current and future public demand.

In 2016, the Library Board of Trustees adopted a Facilities and Future Service Plan to lay the groundwork for delivering 21st century library services. In addition to many outstanding deferred costs, all six branches are in need of updating in order to continue to meet growing and evolving demand. The Library's 2016 Future and Facilities Study revealed that substantial upgrades are necessary throughout the system to meet the needs of the 21st century citizen. Additionally, the Shadle and South Hill libraries will need to undergo expansions. Since the South Hill library is effectively landlocked, this branch will need to be relocated in order to undergo the necessary expansion.

Other Plans

Meeting level of service standards is also affected by fluctuating revenue levels. For example, in November of 1999, Washington voters passed Initiative 695. One of the consequences of this action was that the Library, which receives operating support from the City of Spokane, was required to cut back on services. Their decision was to reduce off-hour access to the main library downtown. In addition, they shifted branch library operating hours to match those of the downtown library, with the exception that some branch libraries remained open on Saturdays. Operating budgets through the early 2000s were cut or flat for many years. Consequently, open hours for branches were drastically reduced for neighborhood branches. In 2013, City of Spokane voters passed a levy lid lift that stopped reductions in service hours and extended hours through 2017. A good library system is accessible to the community, and it is important that library hours include morning, afternoon, evening and weekend hours to serve customer needs. Availability and convenience of hours for citizens is an essential component of meeting level of service standards.

Proposed Facilities

Library facilities should either be in proximity to population centers or easily accessible by bicycle, bus, or private vehicle. If future development and population growth were to continue away from the city center and major corridors, the library would feel it necessary to build new facilities to serve these new areas.

Library operations would also be affected by growth patterns. Operations (utilities, security, minor contracts, etc.) and personnel costs would also increase.

Six-Year Financial Plan

Over the next six years, all six branch libraries will need to undergo significant makeovers and infrastructure upgrades. This is estimated to cost from \$30-90 million, depending on the desires of the community. Information about planning related documents for the Spokane Public Library can be found at www.spokanelibrary.org.

The Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

C.5 PARKS, RECREATION, AND OPEN SPACE FACILITIES

The City of Spokane provides a system of local parks (neighborhood and community), major parks, and open space. The park system is managed by the Spokane Parks and Recreation Department with policy direction provided by the Spokane Park Board.

The current Parks and Recreation Department's Parks, Recreation, and Open Spaces Plan, Roadmap to the Future, offers a much more detailed picture of the park, recreation and open space system and what changes and improvements will be made in the future. The current Parks, Recreation and Open Spaces Plan, Roadmap to the Future is hereby adopted by reference as a part of the Comprehensive Plan. Information about planning related documents for the Spokane Parks and Recreation Department can be found at www.spokaneparks.org.

Inventory of Park Lands

The current Spokane Parks, Recreation, and Open Spaces Plan, Roadmap to Future, includes an inventory of each park and facility in the city. For a general location by park or facility type see Map CFU 5, "Parks". The various types of parks are described as follows:

Major Parks

A major park is a large expanse of open land designed to provide natural scenery and unique features of citywide and regional interest as well as affording a pleasant environment and open space in which to engage in active and passive recreation.

Physical Size

Between 90 and 237.94 acres.

Built Environment

Assets (desired)

Restroom.

Assets (optional)

Shelter, electricity, play equipment, softball/ baseball, ADA access, picnic area, aquatic recreation.

Parking

0-120 Spaces.

Multiple off-street parking lots to allow for access to different areas of the park.

Natural Environment

Natural Area

May have natural area, stream, lake.

Environmental Benefits

Stormwater infrastructure, native plants, habitat.

Programs

Programming (desired)

Community gatherings.

Programming (optional)

Scheduled for athletic teams, concerts, special sporting events, large special events, nature programs.

Geographic Range of Users (LOS)

Citywide, regional, tourists.

Community Parks

Community parks offer diverse recreational opportunities. These parks may include areas suited for facilities, such as athletic complexes and large swimming pools. Natural areas

for walking, viewing, and picnicking are often available in community parks. Water bodies are present in many of these parks.

Physical Size

Between 8- 51.3 acres.

Built Environment

Assets (desired)

Play equipment, restroom, ADA access.

Assets (optional)

Shelter, electricity, baseball/ softball, picnic area, aquatic recreation.

Parking

0-312 Spaces.

Off street parking.

Natural Environment

Natural Area

May have natural area, stream, lake.

Environmental Benefits

Stormwater infrastructure, native plants, habitat.

Programs

Programming (desired)

Community gatherings.

Programming (optional)

Scheduled for small concerts, natural activities, food vendors.

Geographic Range of Users (LOS)

Several surrounding neighborhoods between ½–2 mile radius.

Neighborhood Parks

Neighborhood parks are intended to provide both active and passive recreation for residents enjoying short daily leisure periods but should provide for most intensive use by children, family groups, and senior citizens. These parks are centrally located in neighborhoods with safe walking and bicycle access.

Physical Size

Between .66- 13.33 acres.

Built Environment

Assets (desired)

Picnic area, ADA access, play equipment, restroom.

Assets (optional)

Basketball, Tennis, Softball, Baseball, Shelter, Electricity, Aquatic recreation.

Parking

Generally street parking, may have off street parking.

Natural Environment

Natural Area

May have natural area, creek, lake.

Environmental Benefits

stormwater infrastructure, native plants.

Programs

Programming (desired)

None.

Programming (optional)

Light scheduling for athletic teams, community gatherings, small concerts.

Geographic Range of Users (LOS)

Surrounding neighborhood, between ¼ mile and ½ mile.

Neighborhood Mini-Parks

Mini-parks are developed to serve a concentrated or specific group, such as children or senior citizens. Mini-parks have often been developed in areas where land is not readily available for neighborhood parks.

Physical Size

Between .22 and 2.33 acres.

Built Environment

Assets (desired)

Play equipment.

Assets (optional)

Shelter, electricity, restroom, ADA access, picnic area.

Parking

On street.

Natural Environment

Natural Area

May have natural area, creek.

Environmental Benefits

Stormwater infrastructure, native plants.

Programs

Programming (desired)

None.

Programming (optional)

Small community gatherings.

Geographic Range of Users (LOS)

Immediate neighborhood, ¼ mile radius.

Trails

Trails are paved or unpaved surfaces that are ideally separated from streets and are within an open space corridor. Trails are typically used for running, biking, walking, and skating.

Physical Size

1- 11 miles

Built Environment

Assets (desired)

Assets (optional)

Restroom, picnic area, ADA accessible.

Parking

Trailhead and on street parking.

Natural Environment

Natural Area

May have shoreline, riparian area.

Environmental Benefits

Stormwater infrastructure, native plants, riparian area.

Programs

Programming (desired)

None.

Programming (optional)

"Fun runs" and other small community gatherings.

Geographic Range of Users (LOS)

Citywide, regional, tourists.

Parkways

Parkways are often associated with arterials that have scenic features or connect parks. They have special landscape treatments such as trees, shrubbery, and grass. Some parkways have trails associated with them.

Physical Size	Between 0.3 and 189.52 acres.
Built Environment	
Assets (desired)	Trees, grass.
Assets (optional)	Native plants, street lights.
Parking	N/A.
Natural Environment	
Natural Area	May have natural area.
Environmental Benefits	Stormwater infrastructure, native plants, riparian area.
Programs	
Programming (desired)	None.
Programming (optional)	None.
Geographic Range of Users (LOS)	Citywide, all travelers using the street.
<hr/>	
Conservation Land	Conservation areas are open space areas designed to protect environmentally sensitive features, such as steep slopes, unstable soils, and shorelines. These areas are generally maintained in their natural state and help preserve significant views and wildlife habitats and corridors.
Physical Size	Between 7 and 464.15 acres.
Built Environment	
Assets (desired)	Native plants and vegetation.
Assets (optional)	Trails, shelter, restroom, picnic area.
Parking	0- 40 Spaces.
On or off street.	
Natural Environment	
Natural Area	May have natural area, creek, lake.
Environmental Benefits	Stormwater infrastructure, native plants, habitat, riparian corridor, erosion control.
Programs	
Programming (desired)	Environmental education.
Programming (optional)	Plant restoration, service projects, research.
Geographic Range of Users (LOS)	Citywide, regional, tourists.
<hr/>	
Other Facilities	The Parks and Recreation Department also owns and manages other facilities including an arboretum, an art center, community/senior centers, golf courses, sports complexes and aquatic centers.
Physical Size	Between 1 and 198.99 acres.

Built Environment

Assets (desired)	Depends on intended use.
Assets (optional)	Depends on intended use.
Parking	Depends on intended use.

Natural Environment

Natural Area	None.
Environmental Benefits	Native plants, habitat, and green stormwater infrastructure.

Programs

Programming (desired)	Depends on intended use.
Programming (optional)	Depends on intended use.

Geographic Range of Users (LOS)	Citywide, regional, tourists.
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Forecast of Future Park Needs

Level of Service (LOS)

The city measures LOS by comparing the acres of parks per every thousand residents. See the current Parks, Recreation and Open Spaces Plan, Roadmap to the Future, for an LOS analysis.

The city does not measure LOS for conservation land, parkways, or trails. These park types are typically purchased and developed on an opportunity basis. The city seeks to purchase and designate conservation land each year. The primary funding source is the Conservation Futures Program, which is administered by Spokane County.

Need for Capital Facility Improvements

In order to maintain the existing LOS as the city grows over the next twenty years, the city will have to develop new parks. See the Citywide CIP for a list of park facility projects scheduled for the next six years as well as project funding sources.

Six-Year Project and Financing Plan

See the current Parks, Recreation, and Open Space Plan, Roadmap to the Future, for details on needed future capital facilities and for a LOS analysis. The Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

C.6 WASTEWATER MANAGEMENT

Service Area

The Riverside Park Water Reclamation Facility (RPWRF) (Previously known as the Spokane Advanced Wastewater Treatment Plant (SAWTP)) serves the city, portions of the urbanized un-incorporated county, and several other communities. The city serves these additional areas based on interlocal agreements, which are similar to contracts. Some of these agreements are for small amounts of capacity while others, like the agreement with Spokane County, are for ten million gallons per day. With the multitude of users, the RPWRF is a regional system. See Map CFU 6, "Sewer Service Area."

Because of existing agreements and the location, the RPWRF will most likely always be a regional system. Spokane County Regional Water Reclamation Facility began operating in 2011. The current treatment capacity is 8 million gallons per day (MGD), but it can be increased in phases to 24 MGD.

Inventory of Existing Facilities

Sanitary Sewer and Stormwater Systems

The sanitary sewer system doesn't consist of a treatment plant alone. The city operates and maintains over 470 miles of sanitary sewer lines and 400 miles of "combined" sanitary lines that connect the treatment plant with the service area. Where needed, lift stations or inverted siphons provide sanitary sewage service in locations that are too low. Over 350 miles of storm drain pipes, catch basins and drywells, and combined sewer overflow structures (CSOs) provide stormwater service. Map CFU 7, "Stormwater Facilities," shows the location of the major sanitary sewer and stormwater facilities.

The City of Spokane Wastewater Facilities Plan with Amendments 1 through 3 includes a detailed inventory and future needs assessment of the regional wastewater system. This long range planning document covers a fifty year period and currently describes the needs of the system until 2030.

The 2014 City of Spokane Combined Sewer Overflow (CSO) Plan Amendment amends the city's 2005 CSO Plan and is designed to reduce CSO events. This 2014 Plan Amendment, documents modifications to the city's CSO Program as a result of changes to applicable regulations, improvements in computer modeling tools, information about the actual performance of CSO storage facilities already built, implementation of the Spokane County Reclamation Facility, and other progress made on CSO control within the city. To consider future growth, the computer simulations of individual basins were based on 2030 growth conditions and varied basin by basin.

The City of Spokane Integrated Clean Water Plan builds from the city's CSO Plan Amendment (final submitted to Ecology March 2014) and Wastewater Facilities Plan Amendment No. 3 (final submitted to Ecology March 2014), integrating CSO projects, stormwater projects, and municipal wastewater treatment projects into an overall investment focused on water quality.

Table CFU 7 is an inventory of the sewer system.

TABLE CFU 7 - INVENTORY OF EXISTING SEWER FACILITIES		
Facility Category	Quantity	Units
Treatment Plant	1	each
Sewage Lift Stations	29	each
Sanitary Collection System	470	miles
Storm Water Collection System	350	miles
Combined Sewer Collection System	400	miles
Inverted Siphons	14	each
Catch Basins and Drywells	Over 18,000	each
CSO Regulating Structures	24	each

Future Needs

Existing Demand and Capacity Summary

The RPWRF recycles approximately 34 million gallons of wastewater a day and returns the cleaned water to the Spokane River. The facility can handle peak flows, included combined sewer flows, up to 150 million gallons a day. Planned construction is based on projected growth within city, as well as Spokane County contribution of 8 MGD and the completed CSO Abatement Program, as described in Facility Plan Amendment No. 3. The collection system, CSO control, and RPWRF are all being designed for 2030 projected population.

Variable flow is water that infiltrates or inflows into the system and is not associated with sanitary sewer users. The city continues to make improvements to the sewer collection system to limit the amount of variable flow.

Level of Service (LOS)

The proposed level of service (LOS) for sanitary sewage processing is 100 gallons per capita per day (GPCD). This means that the city must plan to be able to accommodate 100 gallons of sanitary sewage per day for every person in the service area. Although some citizens may generate less or more sanitary sewage, this is an accepted average that can be used for planning purposes.

The level of service (LOS) for stormwater is to design public right-of-way for a 10-year rainfall frequency, prevent flooding of property during a 25-yr 24-hour rainfall event, and prevent damage to buildings for a 100-year rainfall event.

Six-Year Financial Plan

The Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years. Projects include reductions in septic systems, CSO events, infiltration and inflow, and capital improvements to the RPWRF. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

C.7 SCHOOLS

There are three school districts operating within the current Spokane city limits. The vast majority of the City of Spokane is served by Spokane School District No. 81 (Spokane Public Schools). Cheney School District No. 360 serves some small corners in the southwest area of the city and the west plains. Mead School District No. 354 is generally located on Five-Mile Prairie and north of Lincoln Road. Depending on the placement of the City of Spokane's final urban growth boundary and annexations related to those new boundaries, more of the city might be served by these last two school districts, with the possible addition of the Nine-Mile Falls and West Valley school districts. (See Map CFU 11, "School Districts and Facilities.")

Inventory of Existing Facilities

Spokane Public Schools operates thirty-four elementary schools, six middle schools and five high schools, in addition to several special schools, serving nearly 30,000 students each year. See Maps CFU 8, "Elementary School Boundaries," CFU 9, "Middle School Boundaries," and CFU 10, "High School Boundaries." In addition to the regular attendance center programs, the district is the sponsoring agency for the Spokane Area Skill Center (NEWTECH Skill Center), which serves students from Spokane Public Schools and nine neighboring school districts. Special learning centers like the Libby Center, Spokane Public Montessori, The Community School, The Enrichment Cooperative, On-Track, before and after-school childcare programs such as Express, and an extensive summer school program, round out the district offerings. The district also offers preschool for low income and special education students at some sites.

TABLE CFU 8 - INVENTORY OF EXISTING FACILITIES: SCHOOLS	
School	Total Existing Enrollment
Elementary Schools	16,173
Middle Schools	3,992
High Schools	8,094
Other Buildings	1,678
Total School Facilities	29,937

Existing Enrollment

Spokane Public Schools has a total full-time enrollment of nearly 30,000 individual students. This includes 1,678 students enrolled in special schools. The focus of these alternative schools ranges from programs for troubled youth to professional-technical training at the NEWTECH Skill Center.

Shifting enrollment between schools requires the School District to remain flexible. State mandated classroom size reduction in kindergarten through third grade, combined with slow and steady growth, is adding to the complexity of facility capacity issues. The district reacts to these fluctuations through busing, building additions, and the use of "relocatables," which are portable buildings.

TABLE CFU 9 - INVENTORY OF EXISTING FACILITIES: SCHOOLS BUILDING SQUARE FOOTAGE				
School	Permanent	Portable	Total	Site Acreage
Elementary	1,715,198	61,904	1,777,102	214.41
Middle	695,139	0	695,139	104.69
High	1,319,728	31,344	1,319,728	143.59
Other Buildings	515,666	0	547,010	63.27
Total for All Buildings	4,245,731	43,248	4,338,979	525.96

Existing Capacity

Currently the School District is facing a facility capacity challenge at the elementary level in two areas within the school district boundaries – the southern and northern most regions of the School District. To address this issue in the south area, the School District is adding an eight classroom addition to Mullan Road Elementary and making some minor boundary adjustments. To address the capacity issues in the northern area, the School District is building a new Linwood Elementary with more capacity. There will also be some boundary adjustment to address facility capacity issues at other elementary schools in the northern region. Another issue the district will be addressing is the state mandated K-3 classroom size reduction legislation. The School District is currently undertaking long range planning to address this facility capacity challenge in the next bond cycle to be voted on in February 2021.

Enrollment has been slowly increasing in the School District, starting at the elementary level. Where growth will occur has been difficult to predict due to the growth of apartments and multifamily developments in the city.

With future growth, the smaller class sizes and continuing programmatic changes, the School District will need to add classrooms (i.e., schools) to its inventory. The current estimate is a need for nearly 120 additional classrooms, possibly with additional elementary schools or middle schools.

The School District recently remodeled or replaced all five of its comprehensive high schools. A high school's capacity is measured more by total teaching stations than total enrollment. The district has capacity in its high schools.

Future Needs – Public Schools

Existing Demand – Enrollment

There were nearly 30,000 students enrolled in Spokane Public Schools elementary, middle, and high schools in 2016.

Level of Service (LOS)

Spokane Public Schools describes their current level of service standard as, “educate all children who wish to attend public schools, between the ages of five years and 21 years who have not received a high school diploma or equivalent [and] educate handicapped children between the ages of three and five years.”

For elementary schools, more specific level of service standards include: 500 to 625 students per school, 5 or more acres of land per school, and a student/teacher ratio in K-3 of 25 to 1 and a ratio of 28 to 1 in 4-6. The standard student/teacher ratio for middle and high school is 30:1. Students who live more than a mile from school may travel to school on district-approved buses. Bus service is also provided to those

students whose school route has been declared unsafe by the district safety office or who participate in after-school activities.

Future Demand – Enrollment Projections

Demographic shifts have a cyclical effect on projected enrollment. As the adults in a neighborhood age, the number of school children decreases. When older residents gradually give way to young families, the number of school children increases. Certain types of employment and higher income levels typically indicate a family with older children who will be phasing out of the school system relatively soon.

In addition to unique local phenomenon, Spokane Public Schools bases their enrollment projections on the cohort survival method. Since there is limited in-migration, births within the School District account for the bulk of growth. Birth numbers are based on enrollments in birth classes and are projected out five years to calculate the projected kindergarten enrollments

Shown in Table CFU 10 the projections are showing a slow and steady growth pattern. This does not however show the impact of classroom size reduction that is being projected by the state. This is planned to be fully implemented by 2018. This will drive a need for additional classroom needs at grades K-3. The projected classroom size reduction ratio is 1 teacher to 20 students. This will leave a shortage of classrooms in our elementary schools of approximately 120 classrooms that will require additional construction of schools.

TABLE CFU 10 - ENROLLMENT PROJECTIONS				
Year	School Level			Total
	Elementary	Middle School	High School	
16-17	16,801	4,294	8,394	29,490
17-18	16,950	4,224	8,391	29,583
18-19	17,077	4,370	8,244	29,691
19-20	17,032	4,621	8,209	29,862
20-21	17,028	4,743	8,303	30,074
21-22	16,983	4,707	8,520	30,209
22-23	17,113	4,540	8,777	30,429
23-24	17,155	4,458	9,001	30,614

Projections from Spokane School District 81: Planning Capital Projects, April 2, 2014.

Plans of Other Providers

In order to sustain and improve overall community health, Spokane Public Schools makes their buildings and recreational facilities available to the public for use during non-school hours. Priority for scheduling and rental fee structure ranges over five classes: school district sanctioned activities, joint use agreements and contracts, other educational institutions, civic and service use, and private interest groups. (See the Spokane Public School Board Policy Procedure Manual.)

Proposed Facilities

Currently, the School District is in the third six-year bond cycle of a long-range facility improvement plan. The District is already starting preliminary bond planning for a 2021 election which will be implemented

between 2021 and 2027. A list of projects has not been selected at this time and will be determined by the District's bonding capacity in 2021.

Six-Year Financial Plan

Six-Year Funding and Projects

In 2015, Spokane Public Schools successfully passed a \$145 million bond, which funds the following projects shown on Table CFU 11, "2015 Bond Projects." With bond interest income, a capital fund residual balance from 2009, and the estimated state matching funds the total funds of the 2015 bond will be \$209,425,000. The projects fall into the categories of: Major Construction Projects, Smaller School Improvements at All Schools, Technology Upgrades and Replacements, and Safety and Security Improvements.

TABLE CFU 11 - 2015 BOND PROJECTS			
Bond Project	Stage of Project	Project Budget	Completion Date
Adams – Limited Facility Improvements	Planning	\$5,000,000	2021
Franklin Modernization and Renovation	Design Phase	\$25,725,000	2018
Linwood Replacement	Design Phase	\$22,400,000	2020
Wilson - Classroom Addition	Planning	\$4,500,000	2020
Salk Middle School Replacement	25 Percent	\$36,000,000	2017
Shaw Middle School Gymnasium Replacement and Master Plan	Planning	\$13,600,000	2021
Lewis and Clark – Classroom Addition	Planning	\$4,500,000	2020
North Central Commons and Classroom Additions	20 Percent	\$18,600,000	2017
Land Acquisitions	In Process	\$9,500,000	2021
Portable/Classroom Additions	In Process	\$9,000,000	2021
District Annual School Projects	20 Percent	\$33,000,000	2021
District Technology Improvements	20 Percent	\$23,000,000	2021
Safety and Security Upgrades	30 Percent	\$4,000,000	2018
Total		\$209,425,000	

Capacity Balance

Spokane Public Schools knows that additional facility capacity will need to be generated to meet future needs. Excess capacity will not be generated, as it limits their eligibility for state matching funds to offset the cost of school construction. Table CFU 12, "Capacity Balance After 2015 Bond Projects," shows the capacity balance after completion of the 2015 school bond projects.

TABLE CFU 12 - CAPACITY BALANCE AFTER 2015 BOND PROJECTS		
Site	Project	Additional Capacity
Adams Elementary	HVAC upgrades, window replacements and elevator addition	0 students
Franklin Elementary	Modernization and replacement	100 to 150 students
Linwood Elementary	Replacement	100 to 125 students
Wilson Elementary	Classroom addition	25 to 50 students
Salk Middle School	Replacement	75 to 100 students
Shaw Middle School	Gymnasium replacement and master planning	0 students
Lewis and Clark High School	Classroom addition	0 students
North Central High School	Commons and classroom addition	100 to 150 students
Land Acquisitions	Purchase land for growth and class size reduction	Unknown
Portable/Classroom Addition	To allow for growth and class size reduction	Unknown
Annual Capital	Investments to the school sites	0 students
Technology	Improve and update technology	0 students
Safety and Security	Single point of entry at all sites	0 students

Elementary Schools

Spokane Public Schools continues to look ahead in anticipation of future growth and program needs that will impact the need for elementary schools. Their current standard of an elementary school is a capacity of 585 to 625 students. Programs for music, physical education, art, science and other special courses have increased the need for additional classrooms and specialty spaces. The district is also seeing a growth in special education. In the last two years, the School District has opened Spokane Public Montessori as a K-8 school.

The state has also been charged with fully funding basic education. In the McCleary decision, the Washington State Supreme Court found that legislators were not meeting that requirement. The state responded by implementing a goal of classroom size reduction in grades K-3 by 2018. This alone will bring about a need for additional classroom capacity in all district elementary schools.

Spokane Public Schools is looking at many ways to address the need for growth and class size reduction in the next 20 years. They are studying many long range plans to address these upcoming needs at their elementary schools. The District would need to build five to seven additional elementary schools keeping their current grade configuration of K-6. If the District were to change the configuration to be K-5 and 6-8 middle schools, it could require one to two new elementary schools along with 3 additional middle schools looking twenty years ahead.

Middle Schools

Spokane Public Schools currently has six middle schools with grade configurations of 7-8. One of the six, Salk Middle School, is currently under construction and will open for the 2017-18 school year. The old building will then be demolished. Shaw Middle School is also on the current 2015-2021 bond with a new gymnasium to be constructed and master plan for the campus completed. This will allow the district to get an early start on the replacement of the school with passage of the 2021 bond. Middle schools slated

to be replaced in the future include Glover, Sacajawea, and Shaw. Chase and Garry have had some major renovations during the past bonds.

The decision of how we address the needs at the elementary level will drive the need for adding new middle schools in the future. Currently, there is limited facility capacity in the District's middle schools. There will be a need for additional capacity in middle schools looking forward 20 years. The School District's current designs add capacity to middle schools with a standard capacity of 850 students.

TABLE CFU 13 - TWENTY-YEAR PROJECTS	
Scenario	
Scenario 1: Middle Schools Include Only Grades 7-8 K-6, 7-8, 9-12	NC Phase III renovation
	5 existing elementary schools: Renovate/replace with new construction
	8 to 9 new elementary schools along with property
	3 existing middle schools: Renovate/replace with new construction
	Selected high schools: Additions
Estimated Total Cost	\$650,000,000 - \$800,000,000
Scenario 2: Middle Schools Include Grades 6-8 K-5, 6-8, 9-12	5 existing elementary schools: Renovate/replace with new construction
	Selected high schools: Additions
	1 to 2 new elementary schools: New construction/new sites
	3 existing middle schools: Renovate/replace with new construction
	3 new middle schools: New construction/new sites
Estimated Total Cost	\$570,000,000 - \$700,000,000

High Schools

Since passage of the 2003 bond, Spokane Public Schools has renovated all five of its comprehensive high schools. North Central High School will need additional modernization as part of the master campus improvement plan in the future to include renovation of 1980-era classrooms, administration center and site improvements. When renovating the high schools, the School District added capacity and replaced all relocatables that were located at the sites. High school athletic fields were also improved to new standards. There remains a need to replace two of the School District's alternative high schools in the coming future - On Track Academy and The Community School.

C.8 SOLID WASTE

The Solid Waste Management Department is responsible for the collection of solid waste and recyclables generated within the City of Spokane and the operation of disposal facilities that serve Spokane County. The City of Spokane administers and operates a broad range of solid waste management activities within the city and in Spokane County. They include:

- Collection of solid waste generated by residential and commercial customers in the city.
- Operation of the Valley Transfer Station and the Colbert Transfer Station.
- Operation of the Northside Landfill.
- Collection of recyclables and yard waste from residential and commercial customers in the city.
- Contract administration for the processing of recyclables collected in the City of Spokane.
- Operation of a moderate risk waste collection station at the Waste to Energy (WTE) Plant.
- Operation of transfer activities between the WTE Plant and a Regional Disposal Company.
- Operation of transfer activities between the transfer stations, WTE Plant, Private Compost Facility, and recycling companies.
- Administration and permitting of medical waste haulers in the city.
- Illegal dumping inspections and cleanup for the city through the Department of Code Enforcement.
- Coordination with the Spokane Regional Health District and the City of Spokane on facility inspections and enforcement.

The information that follows in the rest of 5.12 Solid Waste is a general overview of the existing Solid Waste management system. The full details of the Solid Waste Management Plan and financing program are found in the Spokane County Comprehensive Solid Waste Management Plan of 2015 and the Citywide Six-Year Capital Improvement Program (CIP).

The Spokane County Comprehensive Solid Waste Management Plan of 2015 contains detailed descriptions of the Solid Waste system and interlocal agreements between the City of Spokane and surrounding jurisdictions that describe the Solid Waste Management system.

The Citywide Six-Year Capital Improvement Program contains the projects or programs, with descriptions of the proposed locations and capacities of the new or expanded capital facilities the city contemplates funding in the next six years. These projects and programs are incorporated herein, along with the financing plan for each of them found in the CIP. The projects and programs may change over time. Emergencies and unanticipated circumstances may result in allocating resources to projects not listed. This finance plan shows full funding for all improvements to existing facilities and for new or expanded facilities the city expects to need to serve the projected population through the six-year period covered by the CIP. Additionally, the CIP contains funding for major maintenance and for other improvements that will both maintain and enhance the city's existing facilities.

General Inventory of Existing Facilities

A detailed inventory of existing facilities and their capacity is contained in the Citywide CIP.

Service Area

The City of Spokane provides collection of solid waste generated by residential and commercial customers in the City of Spokane. As stated earlier, the City of Spokane also administers and operates a broad range of solid waste management activities within the city and county.

Capacity

The city has the ability to meet the present and future recycling and disposal needs. To accommodate future population growth, there will be a need to acquire additional solid waste apparatus and there may be a need for modifications to the WTE Plant. Specific alternatives and potential funding mechanisms are discussed in the Spokane County Comprehensive Solid Waste Management Plan of 2015.

Future Needs

Existing Demand

In 2000, city crews collected 66,052 tons of solid waste from residential customers and 72,903 tons from business and institutional customers. In 1996, the city began transitioning to a fully automated collection system for residential refuse. This system is now in place citywide. Recyclables are collected from residential customers in automated collection vehicles. Most refuse collected by the city is delivered to the WTE Plant and recyclables are delivered to a private intermediate processor. In 1997, the city began offering curbside collection of yard waste to residential customers. Further details on existing demand and levels of service are found in the Citywide CIP and the Spokane County Comprehensive Solid Waste Management Plan.

Capacity

The city has the ability to meet the present and future solid waste disposal needs. Specific alternatives to accommodate future population growth and potential funding mechanisms are discussed in the Spokane County Comprehensive Solid Waste Management Plan (CSWMP), 2015. The CSWMP addresses the management and disposal of municipal solid wastes and moderate risk waste currently generated in Spokane County, identifies types and quantities of wastes currently generated in the county, discusses needs and opportunities for solid waste management, develops objectives for solid waste management, and proposes alternatives for management of these wastes.

Level of Service (LOS)

Information regarding the existing and proposed solid waste level of service is provided below.

Existing LOS

- Residential: 4.33 collections per household per month.
- Commercial: As needed.
- Recycling: 4.33 collections per household per month.
- Yard/Food Waste: 4.33 collections per household per months of service (9 months.)

Proposed LOS

- Residential: 4.33 collections per household per month.

- Commercial: As needed.
- Recycling: 4.33 collections per household per month.
- Yard/Food Waste: 4.33 collections per household per months of service (9 months.)

Facility Improvements

Collection System

As growth occurs, the number of solid waste and recycling collection routes will increase. Additional trucks and other apparatus will be needed, as well as employees to drive the trucks and operate equipment. Other equipment, such as recycling carts, and dumpsters, will also have to be purchased as customers are added to the collection routes. In general, equipment needs and employees are funded by collection fees. Details on the needs of the collection system as growth occurs are found in the Citywide Six-Year CIP and the Spokane County Comprehensive Solid Waste Management Plan.

Financial Plan

The Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years.

C.9 WATER

The City of Spokane Water and Hydroelectric Services Department provides potable water to the City of Spokane and several areas that are outside the Spokane city limits. A complete inventory, analysis of need, and Capital Facilities Plan is provided in the City of Spokane Water System Plan (2014).

Inventory of Existing Facilities

Service area summary

The City of Spokane provides water service to approximately 208,916 residents in Spokane as well as to approximately 18,539 residents outside the Spokane City limits. The City of Spokane provides water to, and has interties with, several small purveyors plus Fairchild Air Force Base to provide them water during emergency situations. The Intertie Agreements between the City of Spokane and each purveyor dictate the conditions for providing water. The current retail service area is approximately 88 square miles. Map CFU 12, "Water Service Areas," identifies the current water service area.

Facilities and Water Rights

The City of Spokane's sole source of water is the Spokane Valley – Rathdrum Prairie Aquifer. The water system is comprised of 7 well stations that pump water from the aquifer, 25 booster pump stations, 34 storage reservoirs, and 1,000 miles of pipeline. The city's current average daily demand is approximately 58.6 million gallons per day (MGD) based on an average daily use of approximately 258 gallons per person per day.

The City of Spokane holds water rights to a Maximum Instantaneous Flow Rate of 241,100 gallons per minute (gpm). The Current Maximum Instantaneous Flow Rate is 195,570 gpm. Map CFU 13, "Water Facilities and Pressure Zones," identifies the location of various water facilities and pressure zones.

Fire Flows

Firefighting requires water at high flow rates and sufficient pressures for the time period necessary to extinguish the fire. A water system is required to have a supply, storage, and distribution system grid of sufficient capacity to provide firefighting needs while maintaining maximum daily flows to residential and commercial customers.

The City of Spokane typically requires designs for the water system to provide fire flows that exceed: standards established by the Insurance Service Office (ISO); standards administered by the Washington Survey and Rating Bureau (WSRB); minimum fire flows required by state law, set forth in Washington Administrative Code 248-57; and/or fire flows required by the fire district that has jurisdiction.

In 1999, The City of Spokane Water Department and the water system it operates were the subject of an extensive survey conducted by the WSRB. The results of this survey placed the Water Department and the water system in Class I. This rating, in conjunction with the Fire Department rating of Class III, brings with it a very good firefighting system, and with that, lower fire insurance rates for the citizens of Spokane.

Capacity Summary

Table CFU 14, "Inventory of Capital Facilities: Water Supply," shows the city's existing water system facilities and corresponding capacities. The current pumping capacity of the water system is 282 MGD. This capacity is based on equipment nameplate data.

TABLE CFU 14 - INVENTORY OF CAPITAL FACILITIES: WATER SUPPLY	
Facilities	Capacity
Ground Water	Pump Capacity
Spokane Valley-Rathdrum Prairie Aquifer	Estimated 624.6 MGD
Well Stations	Station Capacity
Well Stations-Total System Capacity	282 MGD
Booster Stations	Station Capacity
Total Booster Station Capacity	212.85 MGD
Reservoirs and Storage	Storage Capacity
Total Storage Capacity	106.34 MGD

Forecast of Future Needs

Existing Demand

The city's average daily water system demand in 2013 was 58.6 million gallons per day (MGD), which is a daily water demand of approximately 258 gallons per person per day based on a service area population of approximately 227,455 persons. The city's peak day water system demand in 2013 was 188 million gallons, which is 828 gallons per person.

Level of Service (LOS) Standard

The city presently has seven well sites tapping into the aquifer for its water supply source. Ideal design practice recommends that the source of supply capacity be equal to the maximum day demand (MDD), allowing stored water to be used for the peaking requirements of the system. The total system pumping capacity is 282 MGD. The highest recorded MDD is 188 MGD.

Minimum LOS standards were established in the Countywide Planning Policies. According to these policies, distribution pipelines must be designed to deliver sufficient water to meet peak customer demands (peak hourly demand), this period occurring over a range of a few minutes to several hours. The flow rate must be provided at no less than 30 psi (pounds per square inch) at all points in the distribution system (measured at any customer's water meter or at the property line if no meter exists) except for fire flow conditions. By existing policy, the City of Spokane Water Department requires that the water system provide the specified LOS at a minimum pressure of 45 psi. Water pressures of at least 45 psi have proven more satisfactory in terms of meeting the water needs for most customers.

Future Demand

It is recognized that the city is not the only water purveyor within the proposed UGA. If the City of Spokane should someday annex areas within the adopted UGA that are currently being served by other water purveyors, it is anticipated that these water purveyors will continue to serve the customers into the foreseeable future. It is anticipated, however, that City of Spokane design standards will be implemented to govern the installation or replacement of water system facilities in these areas.

Proposed Facility Improvements

This is a summary review of proposed water facility improvements. A detailed list of capital improvement projects is provided in the 2014 Comprehensive Water System Plan.

Source Improvements

Source improvements refer to improvements at well stations. The improvements may entail upgrades and/or rehabilitation of existing facilities that are subject to aging equipment. Improvements may also include the construction of new well stations to accommodate growth, and/or provide redundancy for wellhead protection.

Booster Pump Stations

Improvements to existing booster stations may require upgrades and/or rehabilitation of aging equipment. Improvements may also include the construction of new booster stations to accommodate growth. As an example, anticipated growth in the West Plains Pressure Zone will require construction of a new booster station as well as increasing the pumping capacity of two existing booster stations.

Storage System

Improvements to the water and storage facilities are made to accommodate growth, hydraulic consistency within a pressure zone, or for redundancy.

Any project that requires a water system expansion and/or infrastructure infill to support new growth will be funded at the expense of the project proponent.

Pipelines

Most of the system piping is in good shape. However, old large steel transmissions, cast iron pipe with leadite joints, and kalamein pipe are being replaced on a systematic basis.

Funding

Facilities constructed to replace old worn out infrastructure will be paid for from the rate stabilization fee portion of the rate structure. Facilities constructed for growth will be paid for with a combination of general facility charges (hook-up fees), developer funding, and cash reserves.

Six-Year Financial Plan

To ensure current or improved levels of service to its customers, the city is following an aggressive improvement schedule. The Six-Year Citywide Six-Year Capital Improvement Program identifies the funding sources and projects necessary to maintain the proposed LOS at proposed growth rates over the next six years. Printed copies are available and the programs may be viewed online at my.spokanecity.org.

C.10 PRIVATE UTILITIES

Introduction

The Growth Management Act (GMA) requires a utilities element consisting of the general location, proposed location, and capacity of all existing and proposed utilities, including, but not limited to, electrical lines, telecommunication lines, and natural gas lines.

The City of Spokane recognizes that planning for private utilities is the primary responsibility of the service providers. Regulations may place restrictions on the location and site development of the utilities and may require a public review process before utility facilities may be located.

Many private utilities are under directive by their licensing agency and franchise agreements to provide a specific level of service to their service area. In many instances, this regulating agency is the Washington Utility and Transportation Commission (WUTC). Services are provided on an "on demand basis." Any new development within a service provider's area must be served. Most service providers monitor development plans and try to build excess capacity into their facilities at the time of construction to allow for future demand.

Private utilities may be restricted by their environment. Competing districts or limited service areas may limit future expansion. For example, packaged sewage treatment plants may serve only the development for which they were originally intended. Water providers may be limited by the quantity of their water rights or surrounding providers. Telecommunication companies are not restricted by these types of limitations; however, they are regulated by the WUTC.

Map CFU 14, "Existing Electrical and Natural Gas Facilities," identifies the location of existing major utility transmission lines, substations, and other regional facilities in Spokane.

Utilities

Electricity

Avista is the only private electricity provider within the City of Spokane. Other providers may be found in the surrounding area. In addition to Avista, the Bonneville Power Administration (BPA) owns transmission lines and substations on the outskirts of the city boundary which are interconnected to the Avista transmission system. Map CFU 14, "Existing Electrical and Natural Gas Facilities," indicates the current and future location of electrical transmission lines and substations in and around the City of Spokane. The Bonneville Power Administration (BPA) provides electricity from the federal power grid to Avista Utilities and some private businesses in the area. BPA has a number of substations in the area, which allow the power coming from Grand Coulee Dam and other locations on the grid to be stepped down to a level that is compatible with local needs.

With population growth, Avista anticipates increases in future system demands. Planning for future substation upgrades and new substations are forecasted periodically to adequately keep the correct capacity to meet demands of the increasing population. Enhancements include the installation of additional equipment, the replacement of existing equipment with larger capacity and other technological enhancements to facilitate improved system performance methodologies. Avista continually strives to keep updated with state of the art technologies and endeavors to research, design and implement those innovations and technologies that provide the greatest benefits to the community. In addition to enhancing existing substations, new substations are desired on the east and west sides of the downtown

area within the ten year planning horizon. Other new substation locations are being evaluated. Plans for rebuilding and constructing several new transmission lines are under consideration. New transmission line construction is primarily being considered on the outskirts of the city.

Natural Gas

Map CFU 14, "Existing Electrical and Natural Gas Facilities," shows the location of transmission natural gas lines as well as Avista's natural gas distribution system in and around the City of Spokane. Existing gas service serves the majority of the city limits and urban growth areas in the City of Spokane. Avista identifies a strategic natural gas resource portfolio to meet customer demands over the next 20 years. Evaluations are completed to include peak weather conditions as well as normal/average conditions to meet customer demand forecasting. Construction projects of varying magnitude will happen each year as aging infrastructure is replaced and capacity is added to support future growth. The Spokane area and urban growth area is a part of the Washington/Idaho service territory.

TABLE CFU 14 - UTILITY SERVICES: SPOKANE			
Utility	Provider	Existing Capacity	Planned Capacity
Natural Gas	Avista Utilities	Within the WA service territory the average daily demand is 137,110 dekatherms.	Within the WA service territory, the forecasted levels in 2035 is projected at 159,541 dekatherms.
Electrical	Avista Utilities Inland Power and Light	Several internal and external company standards require adequate capacity to serve the expected customer demand. The summer peak load within the general city boundary in 2015 was 575 MW.	Planned capacity will be sufficient to meet the increase in customer demand.

Telecommunications

Telecommunications travel many paths throughout the city of Spokane; fiber optic, traditional telephone lines and cellular phones. Fiber optic lines provide another communication link and are replacing traditional telephone lines that can be found throughout the developed areas of the city. Cellular phones provide a third method of communication. Traditional telephone lines and wireless communication support towers can have a profound impact on the visual environment. The WUTC regulates a number of long distance and cellular phone companies in the Spokane area. The City of Spokane has Class "A" and "B" local telephone exchange services that are regulated by the WUTC. The WUTC defines a "Class B" telecommunications company as having less than 10,000 access lines. Communication by computer is a fast growing method of general communication and commerce, as well.

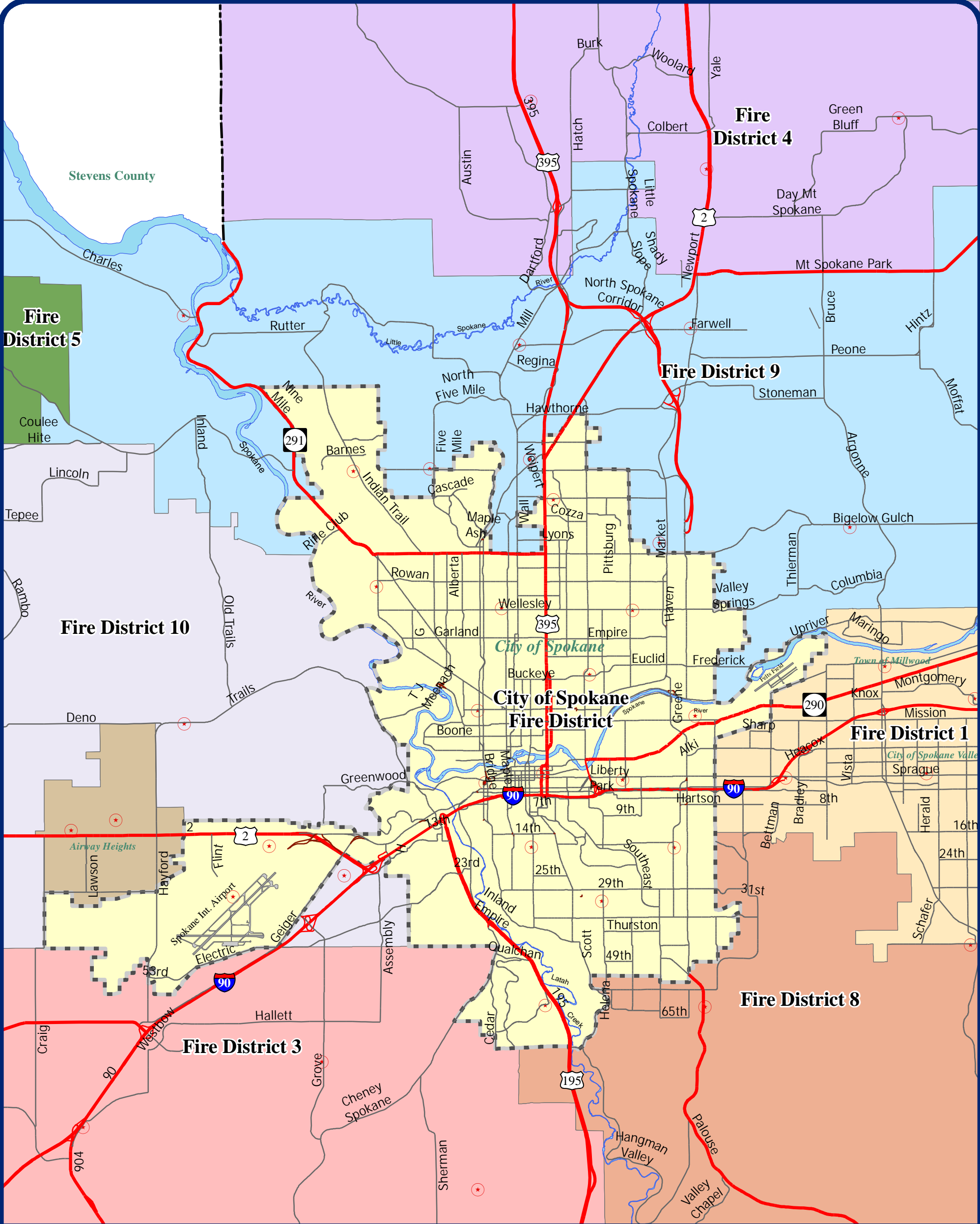
Cable television is provided by a private franchise for the City of Spokane. Because the franchise is held by a private company, it provides services on demand through its distribution system generally located on the same poles as traditional telephone lines. In addition, satellite television is increasingly providing competition to cable and free television.

The Spokane area is served by several cellular providers. Cellular calls are routed by a series of low-powered transmitting antennas through a central computer, which connects the call to its destination. Transmitting antennas are located at "cell sites", and their coverage areas are known as "cells." A network of strategically placed antennas allows a "handing off" of the signal as the carrier of the phone travels.

Capacity overload and cellular system expansion are in response to several factors: an increase in the number of customers residing within a designated area, a shift in traffic volumes affecting cellular users, or a record of service inadequacies, such as dropped calls or poor sound quality. In these cases, additional antennas are then planned with site selection influenced by topography and other engineering constraints.

C.11 MAPS

CFU 1	Fire Districts
CFU 2	Police Patrol Areas
CFU 3	C.O.P.S. Substations
CFU 4	Library Sites and Service Areas
CFU 5	Parks
CFU 6	City of Spokane Sewer Service Area
CFU 7	City of Spokane Stormwater Facilities
CFU 8	Elementary School Boundaries
CFU 9	Middle School Boundaries
CFU 10	High School Boundaries
CFU 11	School Districts and Facilities
CFU 12	Water Service Areas
CFU 13	Water Facilities and Pressure Zones
CFU 14	Existing Electrical and Natural Gas Facilities



Fire Districts

Map CFU 1

Legend

Fire Stations

Base Information

- | | |
|-----------------|--------------------|
| City Limits | Major Arterials |
| County Boundary | Interstate Highway |
| Highways | Rivers |

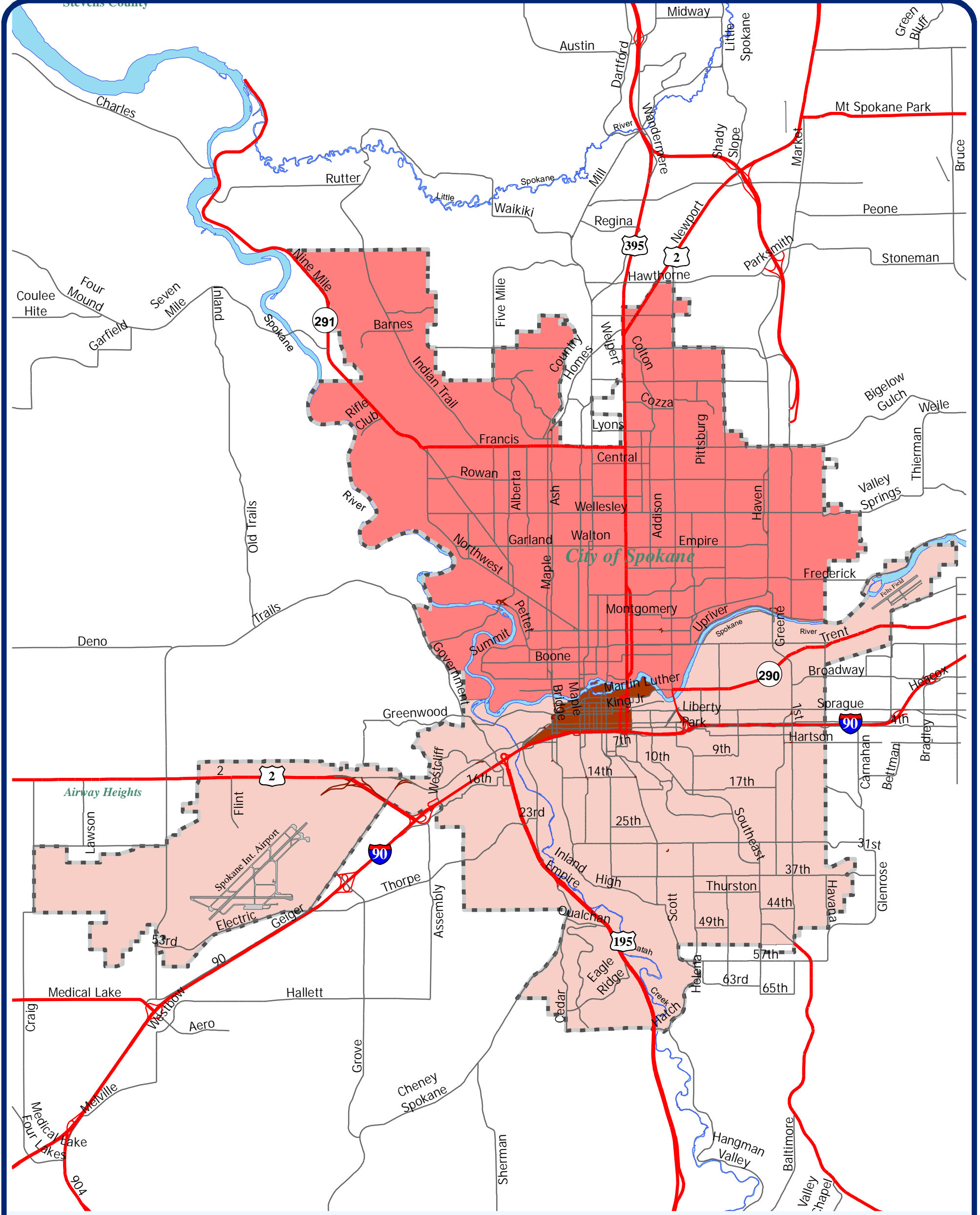
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Source: GIS
Date: 08/16/2016



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Information shown on this map should not be used to determine the location of facilities in relationship property lines, section lines, roads, etc.*



Police Patrol Areas

Map CFU 2

Legend

- North Patrol
- South Patrol
- Downtown Patrol

Base Information

- City Limits
- County Boundary
- Highways
- Major Arterials
- Interstate Highway
- Rivers

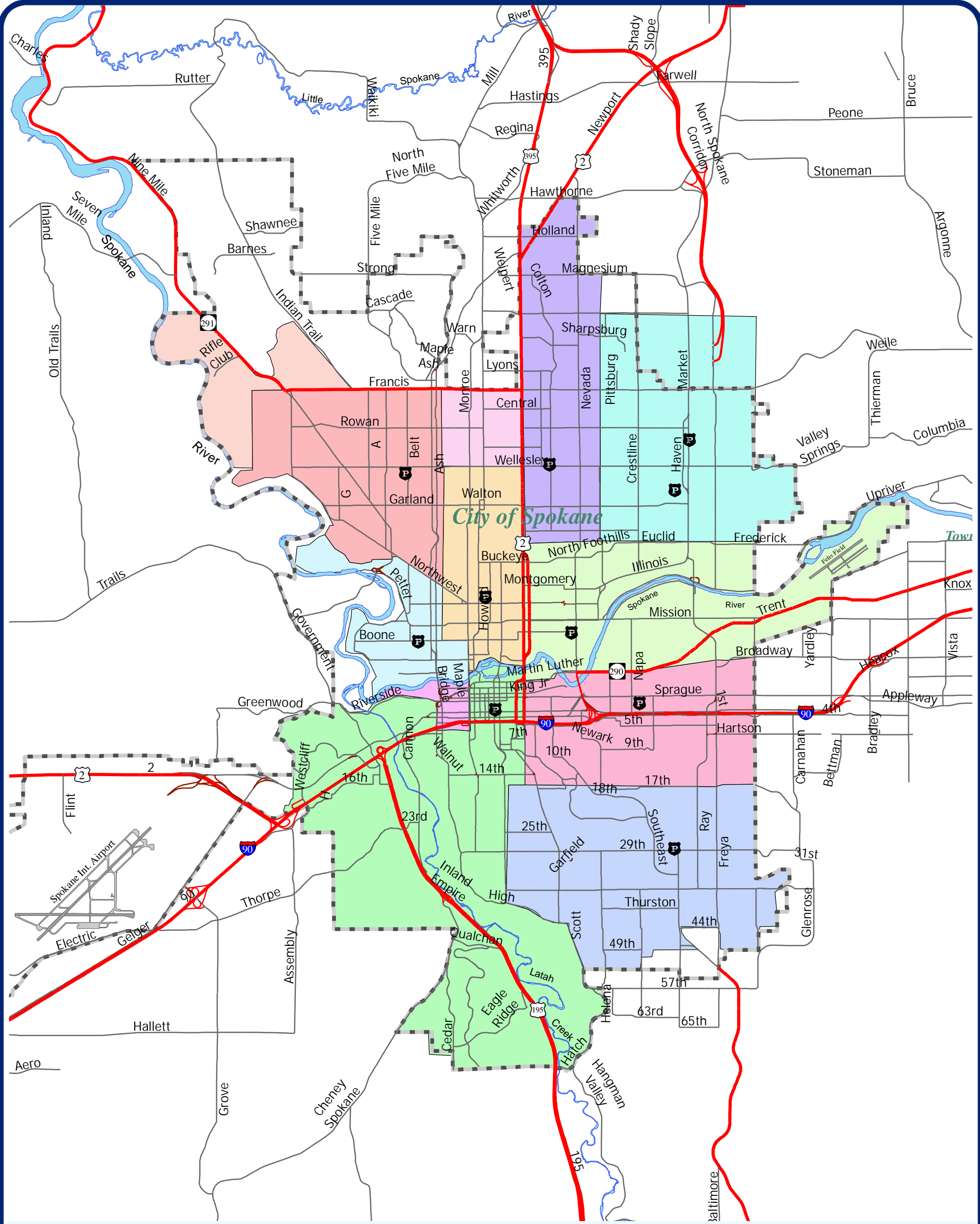
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Date: 08/17/2016



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C.O.P.S. Substations

Map CFU 3

Legend

C.O.P.S. Substation Locations

Base Information

- | | | | |
|--|-----------------|--|--------------------|
| | City Limits | | Major Arterials |
| | County Boundary | | Interstate Highway |
| | Highways | | Rivers |

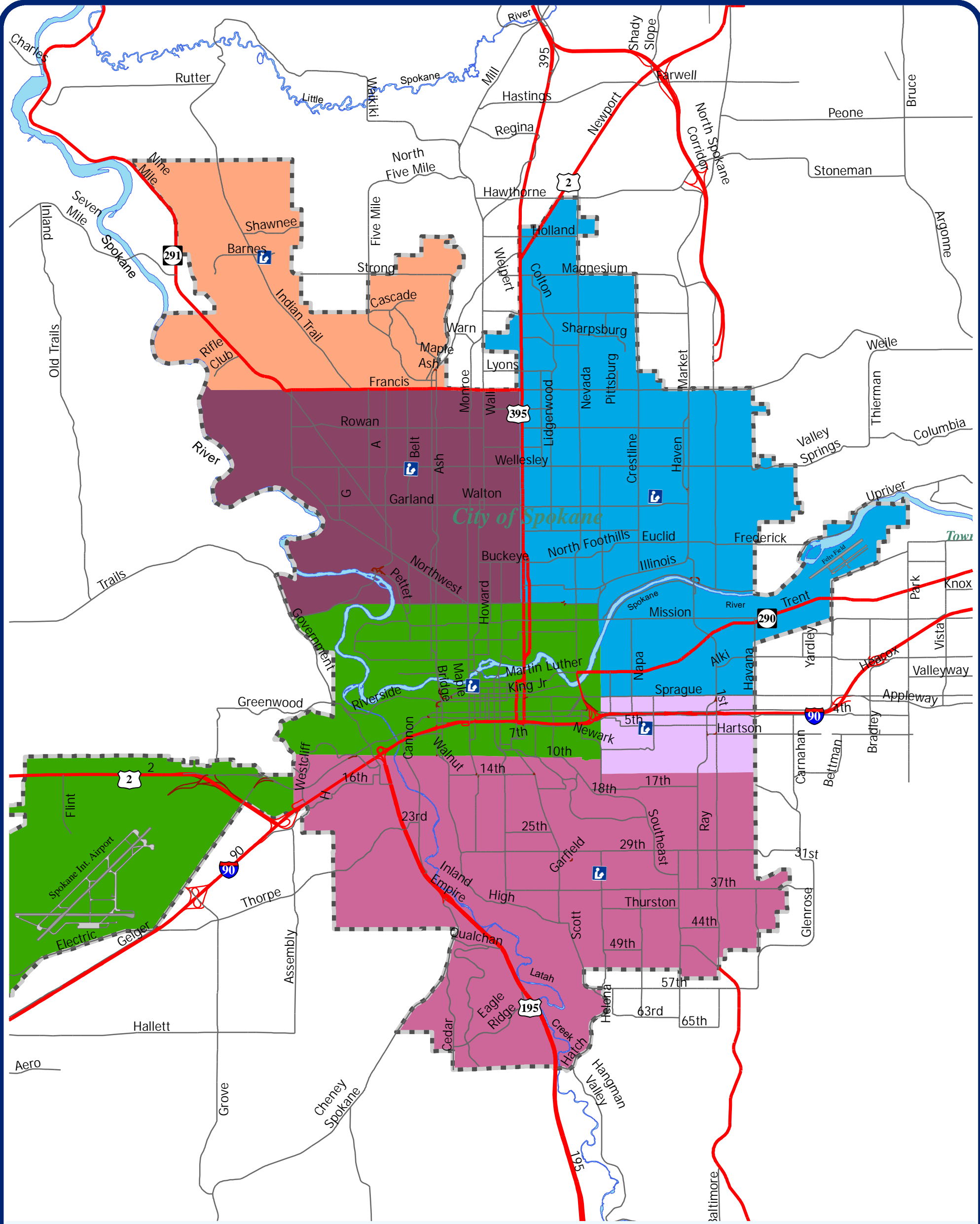
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











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Library Sites and Service Areas

Map CFU 4

Legend

- | | | | | | |
|---|--------------|--|--------------|---|--------|
|  | City Library |  | Indian Trail |  | Shadle |
|  | East Side |  | Main |  | Manito |
|  | Hillyard | | | | |
- Base Information**
- | | | | |
|---|-----------------|---|--------------------|
|  | City Limits |  | Major Arterials |
|  | County Boundary |  | Interstate Highway |
|  | Highways |  | Rivers |

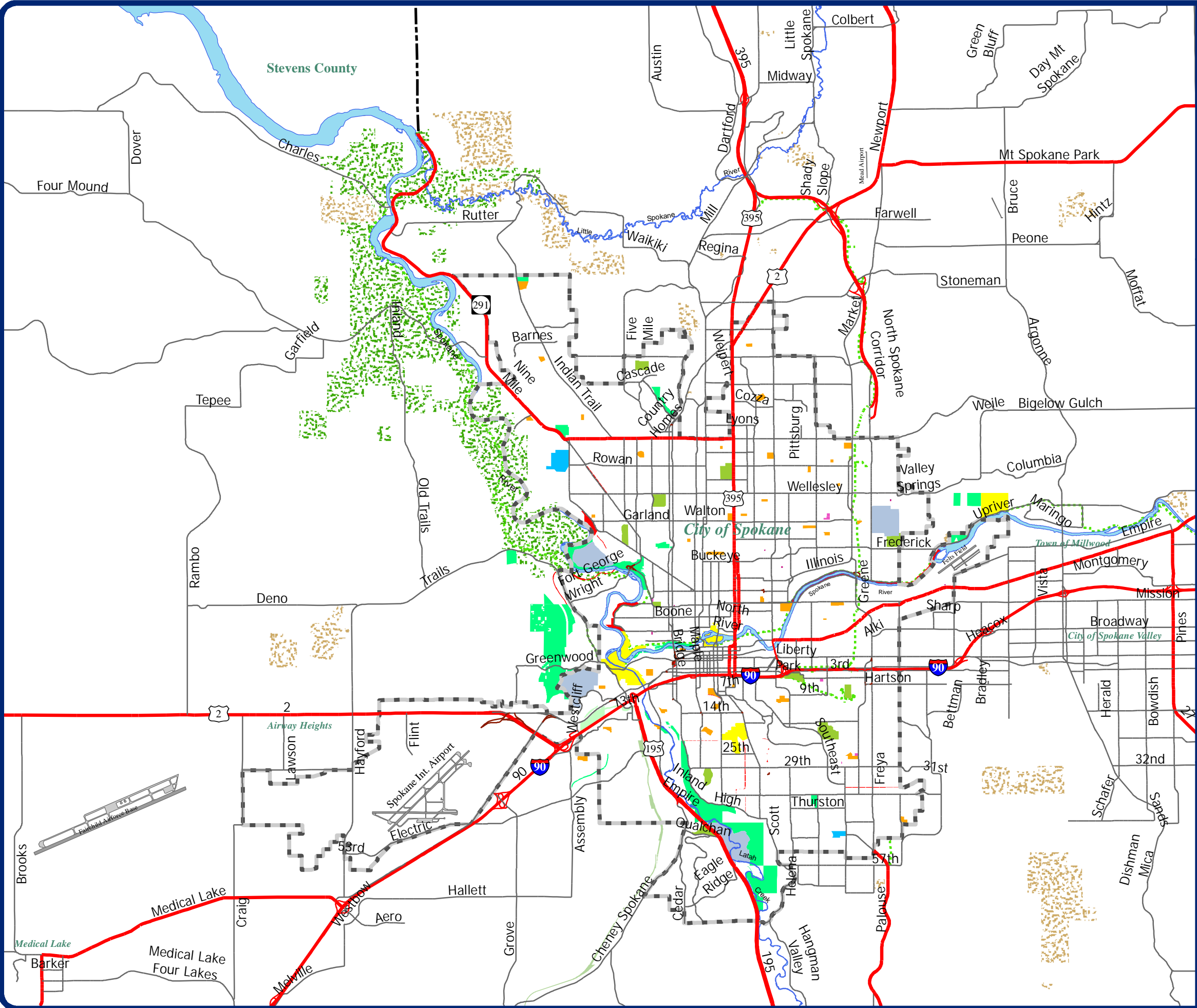
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Parks

Map CFU 5

Legend

- | | |
|-------------------------|----------------------------|
| Arboretum | Golf Courses |
| Community Parks | Parkway |
| Community Center | Sports Complexes |
| Conservation Land | State Parks |
| Major Parks | County Parks & Open Spaces |
| Neighborhood Mini-Parks | Trails |
| Neighborhood Parks | |

Base Information

- | | |
|-----------------|--------------------|
| City Limits | Regional Streets |
| County Boundary | Interstate Highway |
| Highways | Rivers |



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Date: 08/17/2016



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





City of Spokane Sewer Service Area

Map CFU 6

Legend

-  Currently Served Areas
-  Sewer Service Area Boundary (County Comprehensive Wastewater Plan)
-  Interceptor Trunk
-  Wastewater Treatment Plant Lift Stations
-  Siphons

Base Information

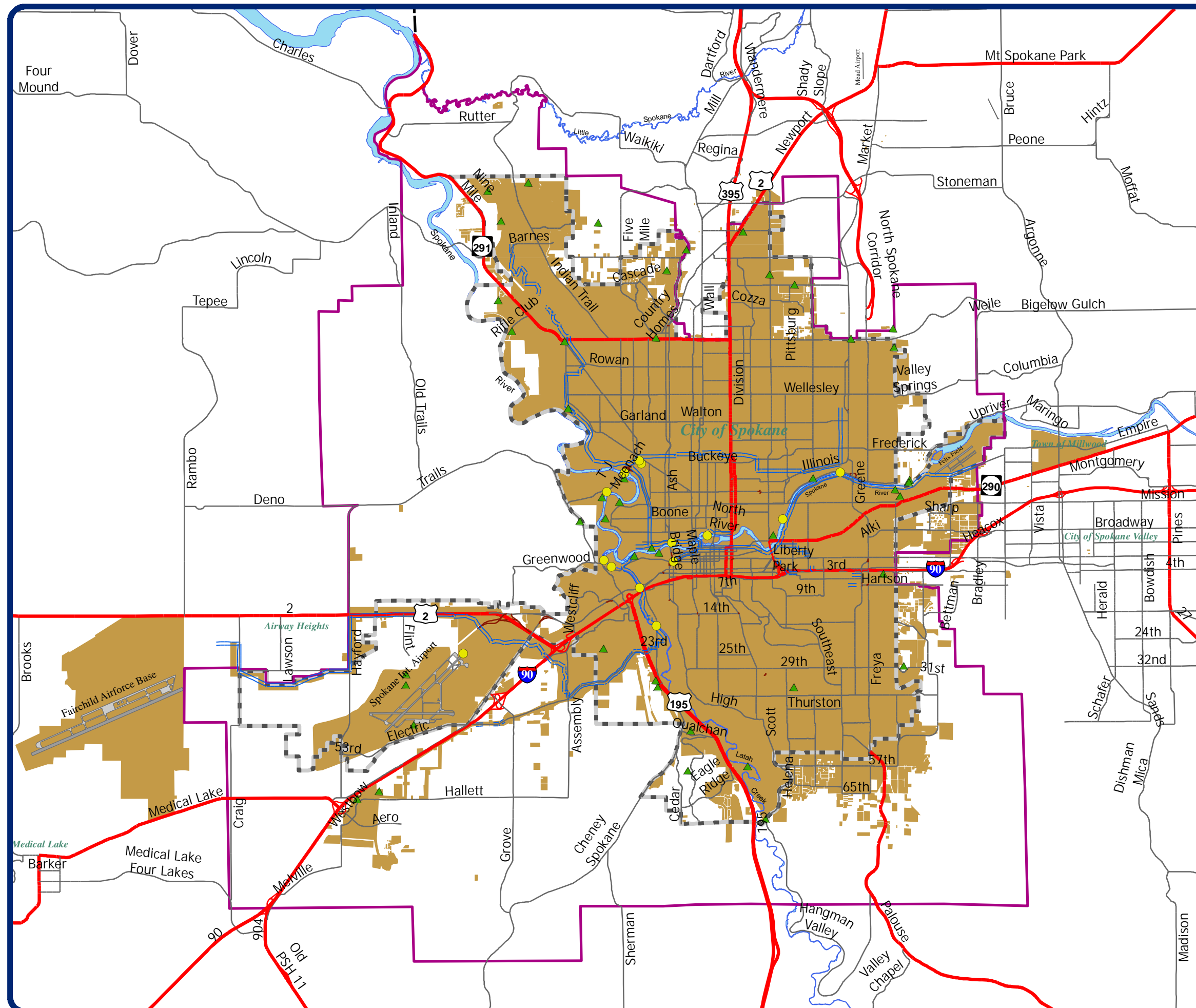
-  City Limits
-  Regional Streets
-  County Boundary
-  Interstate Highway
-  Highways
-  Rivers



Source: GIS
Date: 08/17/2016



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City of Spokane Stormwater Facilities

Map CFU 7

Legend



CSO Outfall Locations
Wastewater Treatment Plant



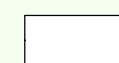
Interceptor Trunk



Storm Sewer to River



Combined Sewer to Treatment Plant



On-Site Storm Sewer Systems

Base Information



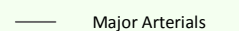
City Limits



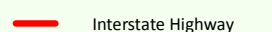
County Boundary



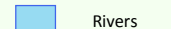
Highways



Major Arterials



Interstate Highway



Rivers

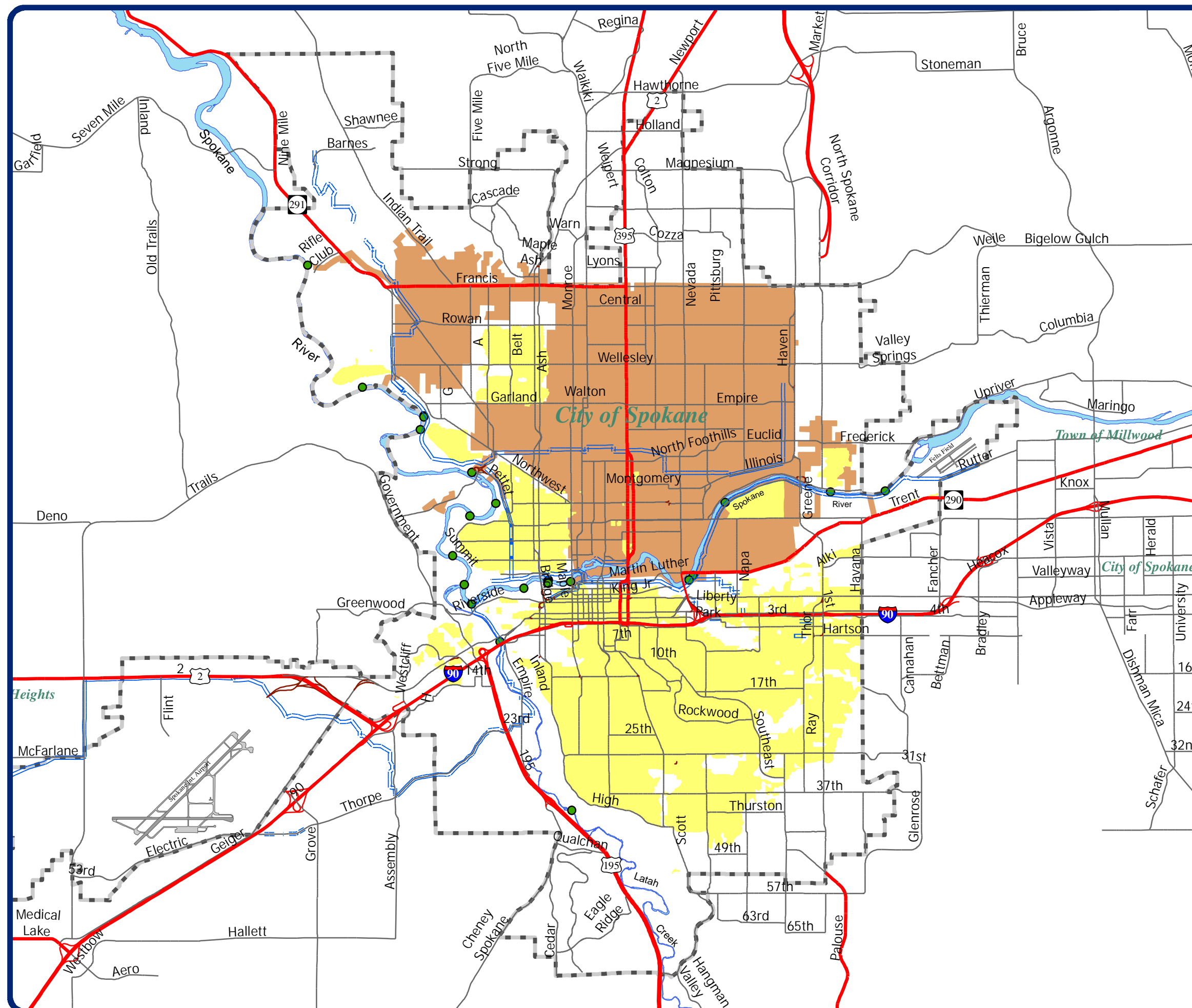
*CSO (Combined Sewer Overflow)



Source: GIS
Date: 08/17/2016



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Elementary School Boundaries

Map CFU 8

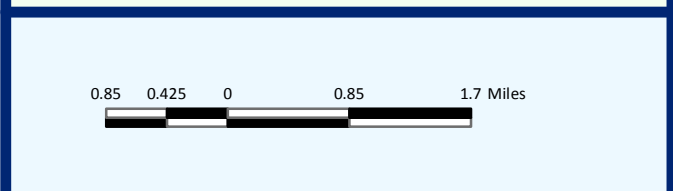
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District 81 Schools

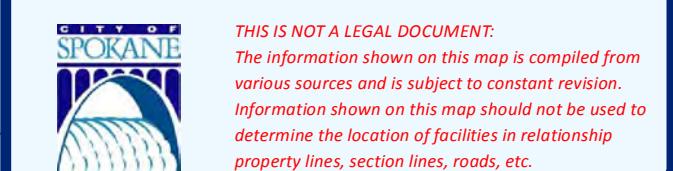
n	Elementary
n	Middle
n	High
n	Alternative

Base Information

	City Limits		Regional Streets
	County Boundary		Interstate Highway
	Highways		Rivers



Source: GIS
Date: 08/17/2016



Downloaded from <http://ajph.org/> on November 10, 2015

Middle School Boundaries

Map CFU 9

Legend

District 81 Schools

- n Elementary
- n Middle
- n High
- n Alternative

Base Information

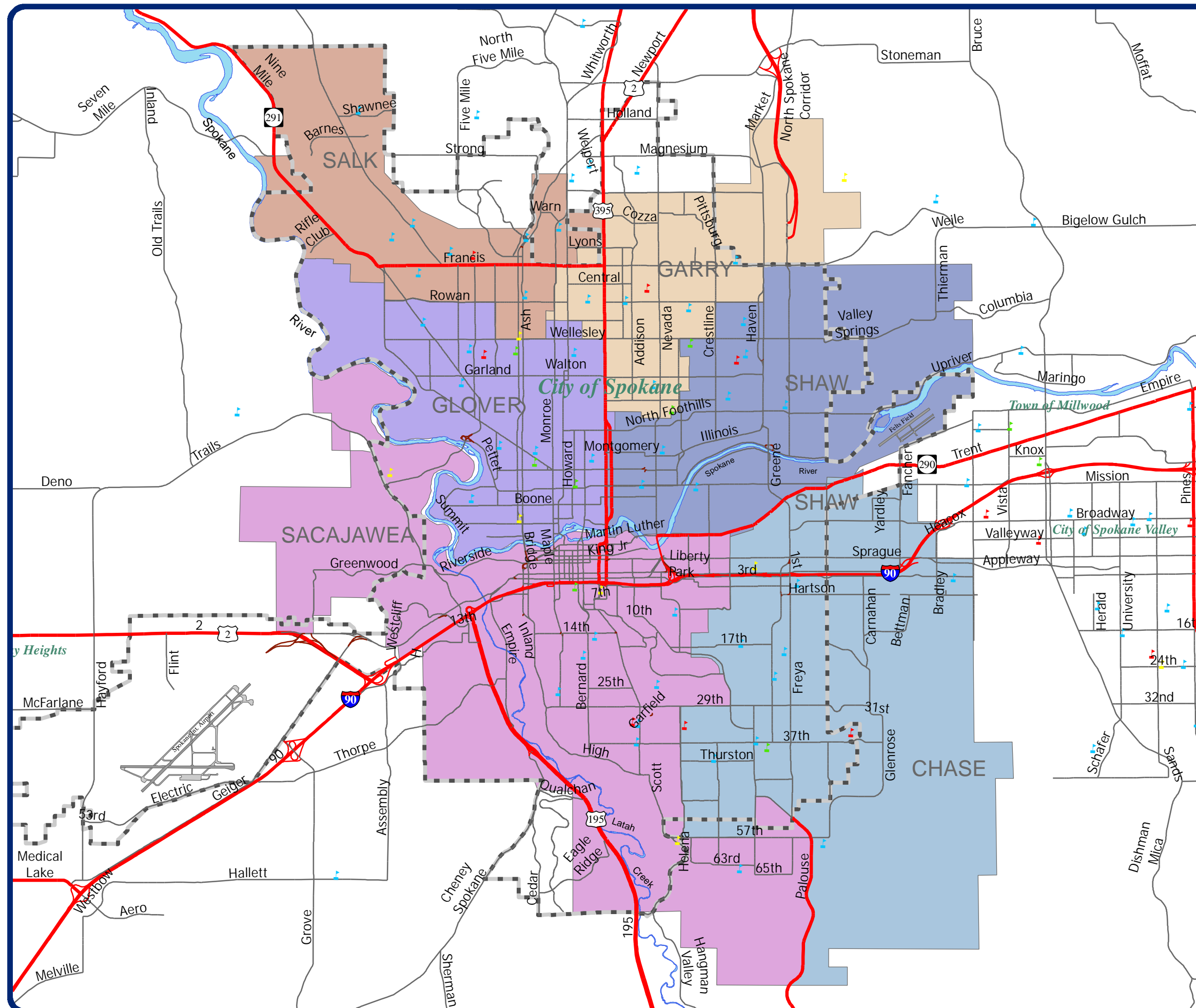
- City Limits
- County Boundary
- Interstate Highway
- Highways
- Rivers
- Major Arterials



Source: GIS
Date: 08/17/2016



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High School Boundaries

Map CFU 10

Legend

District 81 Schools

- Elementary
- Middle
- High
- Alternative

Base Information

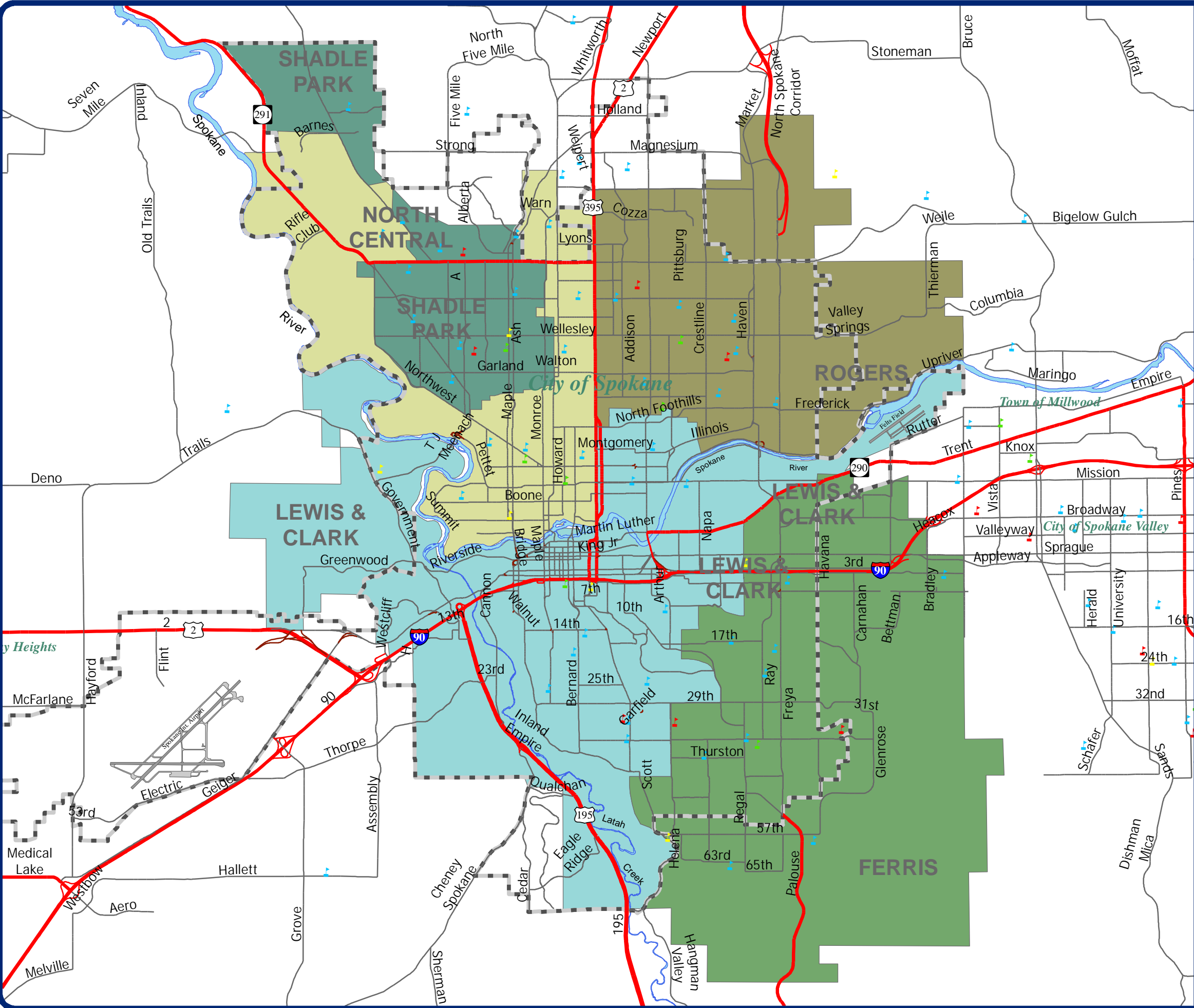
- City Limits
- County Boundary
- Highways
- Major Arterials
- Interstate Highway
- Rivers



Source: GIS
Date: 08/17/2016




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



School Districts and Facilities

Map CFU 11

Legend

 School and Facility Locations

Base Information

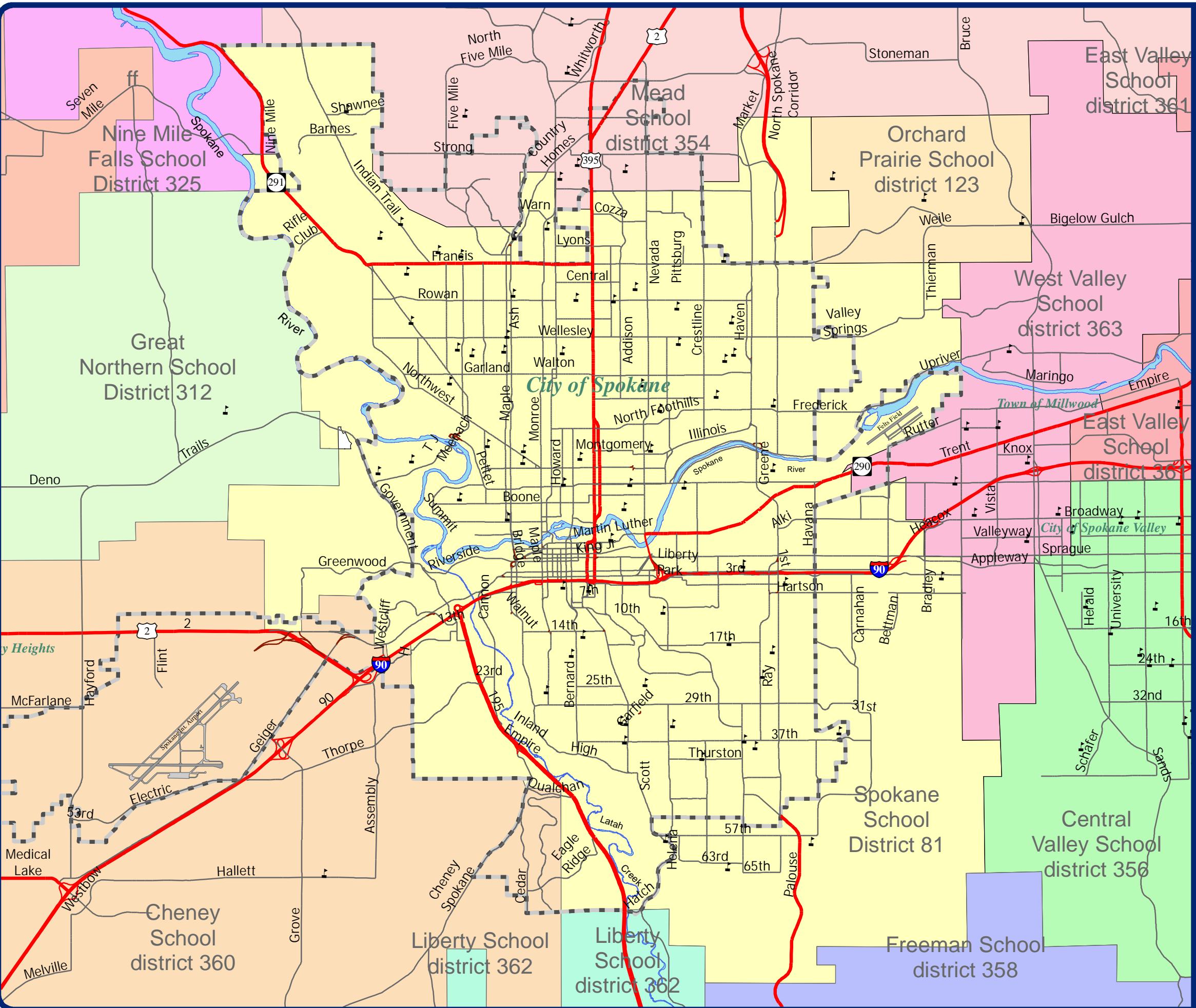
- | | |
|---|--|
|  City Limits |  Major Arterials |
|  County Boundary |  Interstate Highway |
|  Highways |  Rivers |



Source: GIS
Date: 08/17/2016









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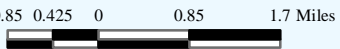


Water Service Areas

Map CFU 12

- Legend**
-  City of Spokane
Current Service Area
 -  Airway Heights
 -  Fairchild AFB
 -  Medical Lake
 -  Millwood
 -  City of Spokane
 -  Other Water Districts

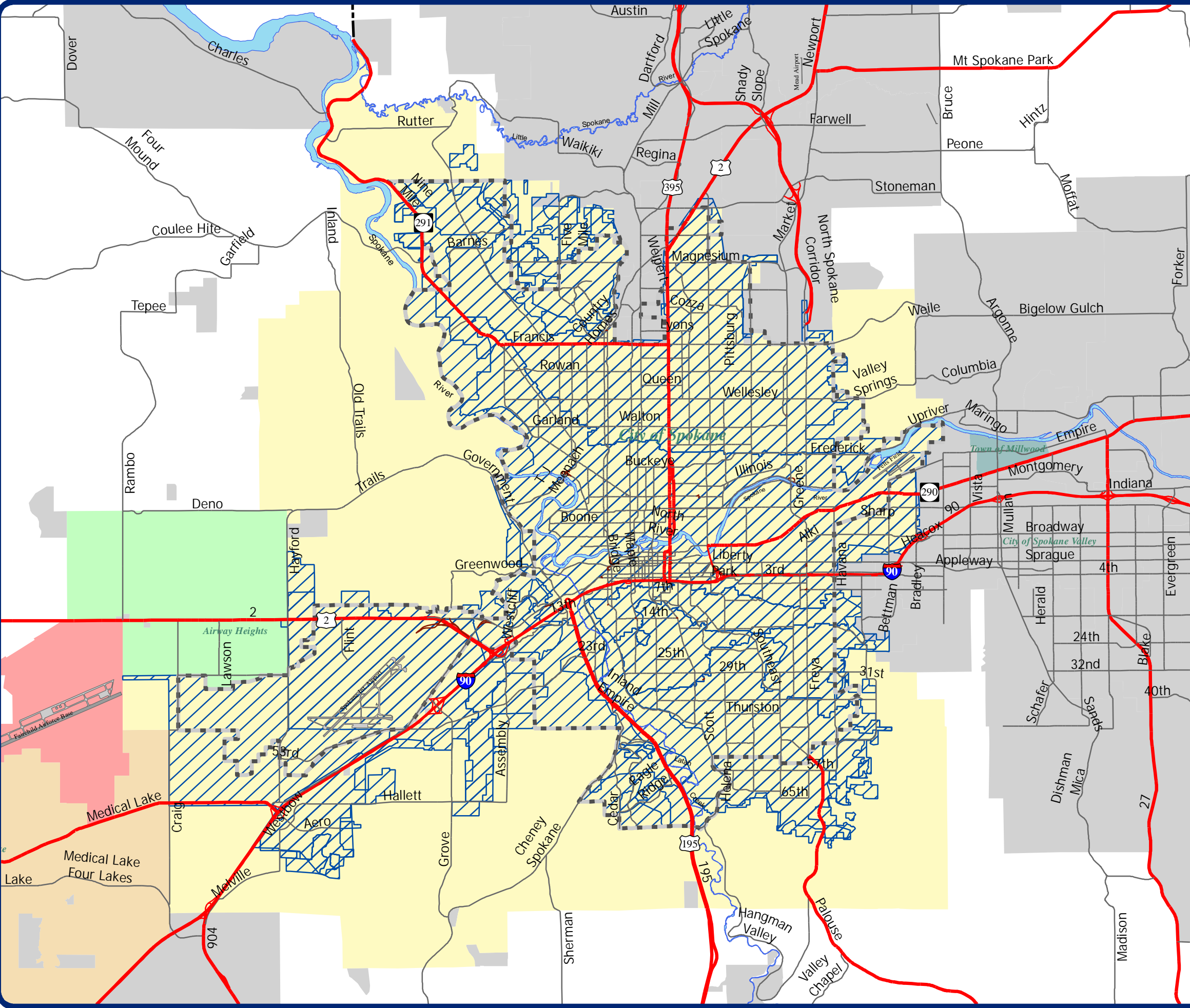
- Base Information**
- | | |
|---|--|
|  City Limits |  Major Arterials |
|  County Boundary |  Interstate Highway |
|  Highways |  Rivers |



Source: GIS
Date: 08/17/2016



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






Water Facilities and Pressure Zones

Map CFU 13


Legend

Water Facility Locations






- | | | | |
|---|------------|---|-----------------|
|  | Reservoir |  | Booster Station |
|  | Stand Pipe |  | Press Reducer |
|  | Well |  | Elevation Tank |

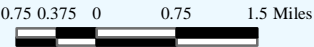
Water Pressure Zones

- | | | | |
|---|----------------|---|------------------|
|  | Cedar Hills |  | Low |
|  | Eagle Ridge |  | Midbank |
|  | Eagle Ridge 2 |  | N.W. Terrace |
|  | Five-Mile |  | North Hill |
|  | Geiger Heights |  | S.I.A. |
|  | Glennaire |  | Shawnee |
|  | Hatch Road |  | South View |
|  | High |  | Top |
|  | Highland |  | Vel View |
|  | Indian Hills |  | Woodland Heights |
|  | Intermediate |  | Woodridge |
|  | Kempe |  | West Plains |

 Water Transmission Lines

Base Information

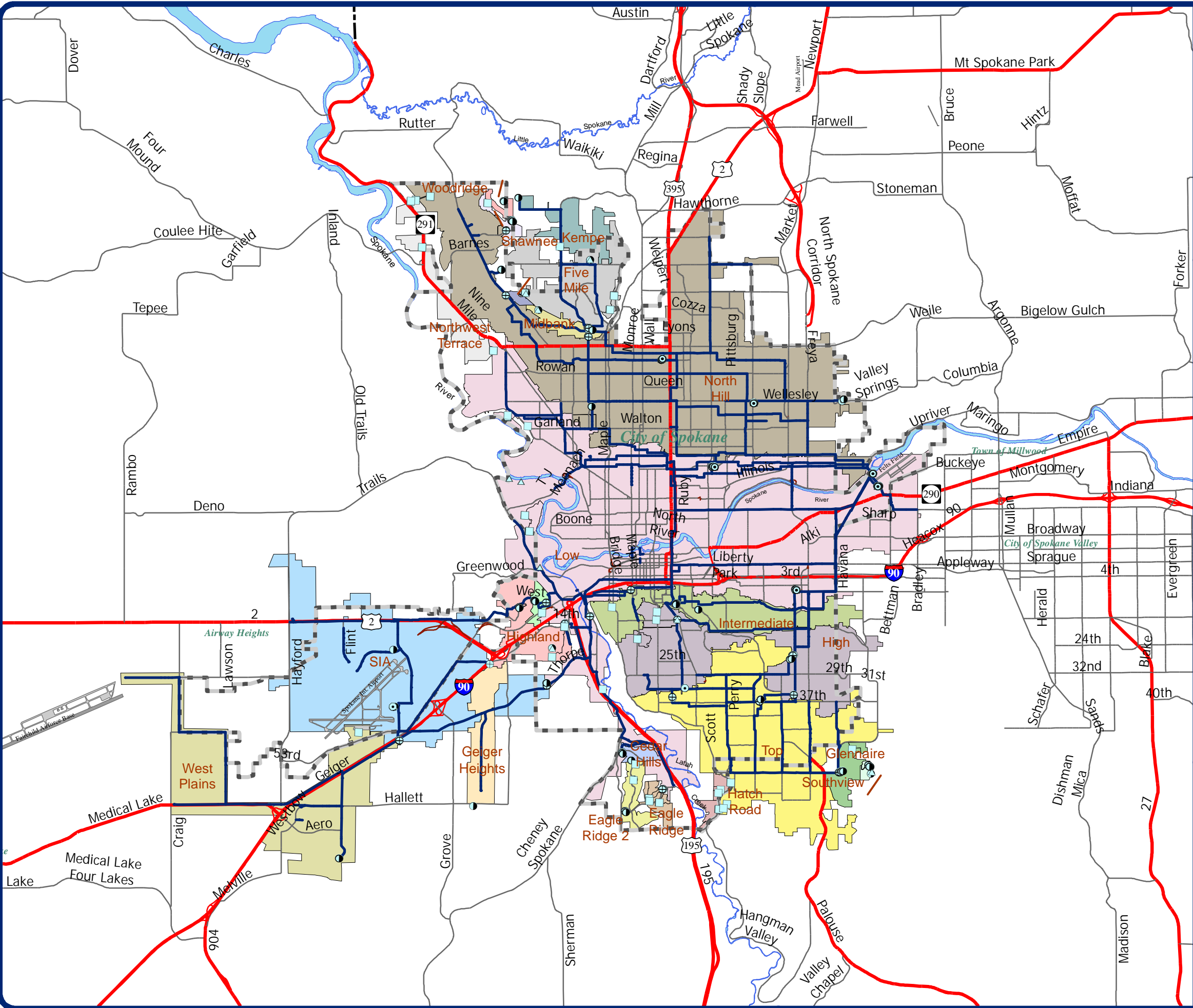
- | | | | |
|---|-----------------|---|--------------------|
|  | City Limits |  | Major Arterials |
|  | County Boundary |  | Interstate Highway |
|  | Highways |  | Rivers |



Source: GIS
Date: 08/17/2016

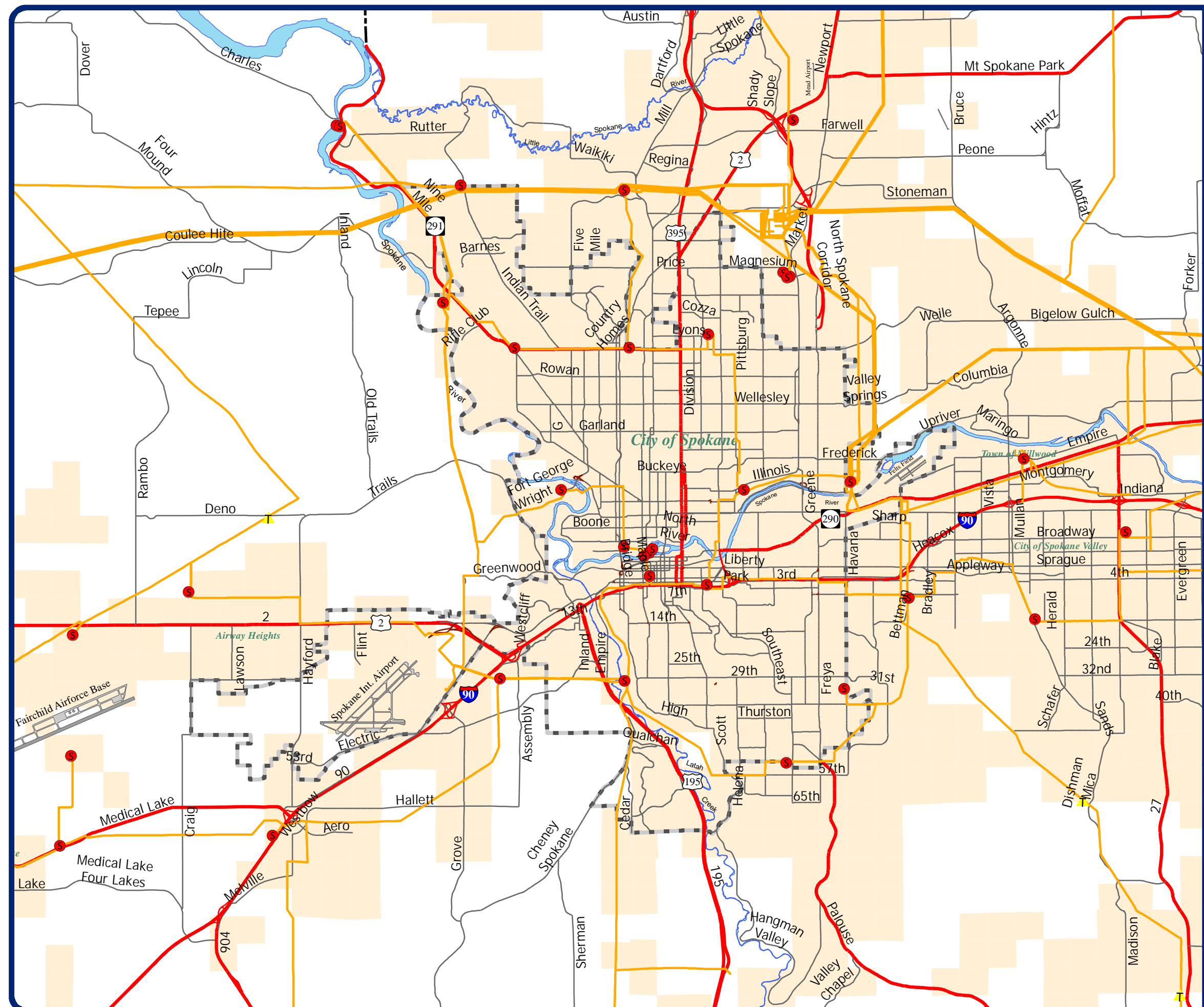


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Existing Electrical and Natural Gas Facilities

Map CFU 14

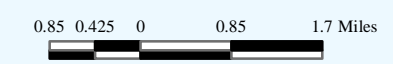


Legend

- Avista Power Transmission Line
- Avista Gas Service Area
- Avista Sub Station
- IP&L Sub Stations

Base Information

- City Limits
- County Boundary
- Highways
- Major Arterials
- Interstate Highway
- Rivers



Source: GIS
Date: 08/17/2016



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