3.8 Land Use

Land use is defined by the physical and functional arrangement of and interrelationships between structures, transportation systems, utilities, uses, and open lands. Human decisions and actions create, influence, and are subject to these physical and functional systems.

To the extent enabled by law, most communities attempt to manage land use in ways that will promote orderly development and limit the negative impacts of unplanned, unregulated random development. While the benchmark of what constitutes orderly development varies widely, the tools used to accomplish orderly development are common and include comprehensive plans and zoning regulations. Prudent planning, combined with land use regulations designed to accomplish plan objectives, can increase the likelihood of orderly growth.

3.8.1 Regulatory and Policy Framework

Several VA documents address various aspects of siting and designing different types of VA health care facilities including land use compatibility and constraints. Consideration is given to local land use planning and zoning ordinances even if VA is not legally required to comply with them.

3.8.1.1 VA Directive and Guidelines

3.8.1.1.1 VA Directive 0066, Sustainable Locations

In fiscal year (FY) 2012, VA issued Directive 0066 regarding sustainable locations for VA facilities. This directive states that VA will:

- advance local and regional planning goals
- seek location-efficient sites that
  - prioritize central business districts and rural town centers,
  - prioritize locations that promote transportation choice,
  - promote walkable and bikeable sites,
  - locate in areas that are accessible to a diverse range of employees and visitors
- maximize use of existing resources by
  - prioritizing areas that are currently well-served by water, sewer and other relevant public infrastructure
  - prioritizing brownfield/grayfield and infill development, including historic districts
  - emphasizing the preservation and re-use of historic and other existing buildings
- foster protection of the natural environment by
  - preserving existing ecosystems
  - avoiding development of green space
  - promoting climate change adaptation planning

In choosing sites for new medical facilities, VA deploys a strategy to minimize greenfield construction (that is, construction in a previously undeveloped location). VA's Sustainable Design Manual (VA 2014a) promotes the practice of sustainable siting.

3.8.1.1.2 VA Mental Health Facilities Design Guide

The VA *Mental Health Facilities Design Guide* (VA 2014b) makes specific reference to local zoning: "Unlike many general aspects of site design such as roadways and parking aisles, zoning is site specific. Preliminary plans should not advance without performing a zoning analysis. In the case of government-owned property, it is important to consider the zoning and adjacencies for compatibility with neighboring buildings." The design guide factors for zoning include:

- Height
- Lot occupancy
- Number of stories
- Parking
- Green space
- Historic district
- Floor area ratio (ratio of the total area of all floors of a building to the area of the parcel
- Setbacks
- Use groups

According to VA, an RRTP should be developed as part of a larger campus with compatible uses or adjacent to such uses, so that efficiencies and operations are enhanced. Landscaping is also emphasized in VA's design guides.

3.8.1.1.3 VA Outpatient Clinic Design Guide and Standards for Leased CBOC Facilities

The VA *Outpatient Clinic Design Guide* (VA 2009a) includes criteria for site selection. The clinic site should be in a neighborhood with prime commercial or medical office space, or with research, clinical, or technology space that is suitable for medical uses. The neighborhood should present a professional image and offer a feeling of security for patients and personnel. Other selection factors include:

- Topography without steep grades and not within the 100-year or 500-year floodplains.
- No environmental hazards or restrictions.
- Prominent visibility from major public thoroughfares.
- Ingress/egress easily accessible from major public thoroughfares.
- Convenient to regularly scheduled public transportation.

VA's standards for leased CBOC facilities (VA 2009b) include the same site selection criteria listed above, in addition to being within two miles of laboratory and x-ray facilities, evidence of compliance with local zoning laws or variance approvals, and evidence of compliance with any specific zoning conditions that may be required in order to develop the property.

3.8.1.1.4 VA Site Development Design Manual

VA has published a comprehensive Site Development Design Manual (VA 2013) concerning a wide range of issues, and incorporates contemporary practices such as low-impact development and green building principles (LEED – Leadership in Energy & Environmental Design). This guidance addresses sustainability, stormwater management, energy and water conservation, linkages to

adjacent and proximal uses, solar orientation, pedestrian and bike paths, various benefits of and approaches to site landscaping, and other topics.

3.8.1.2 Local Land Use Planning

Land use in the State of South Dakota is primarily regulated through county and municipal planning and zoning ordinances, as well as subdivision platting requirements. South Dakota state laws specifically grant this local authority (11 South Dakota Codified Laws [SDCL] 2, 4, 6; 9 SDCL 9-12(3)).

3.8.1.2.1 Fall River County

Fall River County does not at present have a comprehensive plan or a transportation plan, but has a land use policy adopted by the County Commission (Fall River County 2011). Policy #2011-01, "Land Use Policy for Fall River County" states that:

- The Commission opposes the following actions:
  - Reduction in grazing allotments or changes that would hamper agricultural industry
  - Reduction in public access to public lands
  - Road closures or travel restrictions on public lands
  - The introduction or re-introduction of any species not currently present except biological control of noxious weeds and invasive plant species
  - The introduction or re-introduction of any predator animals
  - Further additions to public land unless an equal value of land is returned to private ownership
  - Restriction on public access to archaeological resources
- The Commission supports or favors the following actions:
  - Control of any existing predators
  - Immediate attention to disease outbreak or infestation in the forests or grasslands
  - Good forestry management, well managed timber sales, and safe mineral extraction
  - Agricultural and recreational activity on public land to include, but not be limited to, livestock grazing, hunting, hiking, ATV riding, rock hounding, horse-back riding, sight-seeing, photography, or camping

3.8.1.2.2 Pennington County

The Pennington County Comprehensive Plan was adopted in August of 2003 by the Board of County Commissioners (Pennington County 2003).

Rapid City is the largest community in the county, with roughly 71,000 of the county's 106,000 residents in 2013. At the time the plan was developed, it was anticipated that over 75 percent of future population growth in the county would occur within Rapid City. It was also anticipated that Rapid City's position as a "regional healthcare, educational and retail center" would lead to additional service sector employment and that the area would continue to attract retirees. The future

land use map focuses urban growth toward areas that have sufficient infrastructure and public services, such as water, sanitary sewer, access, and public safety. The plan is not specific in regard to health care and related services.

3.8.1.2.3 Hot Springs Comprehensive Plan

The current comprehensive plan was written in the early 1980s based on the data cited within it (Hot Springs n.d.). The plan was partly based on the assumption that the VA Hot Springs facility would continue to grow. The population projections of 6,000 to 7,000 persons by the year 2000 have not occurred compared to the current population of 3,800. Thus, instead of specifics, this overview summarizes the basic goals and policies within the plan.

The stated land use goal is "To establish a land use pattern which will enhance and preserve the environment while allowing new growth and development to occur, and to preserve those fragile natural areas and features which contribute to the present community character and atmosphere." The stated land use objectives are:

- Protect prime irrigated agricultural lands from development and direct future urban growth toward dry land areas.
- Prohibit development in natural hazard areas (floodplains, steeply sloping areas, and unstable geologic areas).
- Promote clustering activities to discourage costly urban sprawl and inefficient land use.
- Preserve unique and sensitive natural areas (lakes, unique scenic vista, unique natural areas, wildlife habitats, and aquifer recharge areas).
- Provide intensified land uses adjacent to transportation facilities.
- Utilize open space as a means of preserving and protecting the natural environment.
- Support reasonable air, water, and land quality management programs.
- Review adjoining unincorporated areas, with the goal of obtaining mutual benefits in annexation procedures.
- Acquisition of land for a second landfill site outside the City.
- Develop annexation procedures to ensure the orderly development of the City. Cooperation between City and County should be fostered in efforts to control growth in the three mile area. Examine the following areas for possible future annexation:
    - The area along Fall River Road
    - The west edge of the City (north and south of U.S. Highway 18), including the Municipal Golf Course
    - The area north of Cold Brook
    - The area along U.S. Highway 385 (north of City)
    - The area south of the City along Cascade Road

The plan recognizes the VA Hot Springs facility stating it "should continue to play a major role in the economic vitality of Hot Springs [and] will continue to grow in size and importance." Other objectives included the need to reserve land for future development of public facilities and developing a long-range plan for providing new and expanding facilities to meet the community's needs.

Residential development within the city is separated into two distinct types: suburban residential, which includes areas for medium residential development; and mountain residential, which includes areas that are natural or scenic home site locations. Projected residential development (as of circa 1980) was expected to increase south and east along U.S. Highway 385, north of U.S. Highway 385, west of U.S. Highway 18, and south along Cascade Road.

Major traffic generators identified within the comprehensive plan included the VA Hot Springs campus and other "destination" uses, such as Evans Plunge and the downtown business area. The plan states that these areas with more traffic need to be serviced with adequate streets and lanes to meet expected growth along with the anticipated population increase.

3.8.1.2.4 Rapid City Comprehensive Plan

The Rapid City Comprehensive Plan, updated in 2014, describes how the city's economic vitality is weighted towards tourism, healthcare, retail and the military; however the city's focus is to support efforts to diversify its economic base (Rapid City 2014a). Rapid City has adopted a strategic goal to be "nationally recognized by industry trade measures as a premier regional hub for health care," and to "enhance the quality of healthcare services in the City to assure Rapid City is the regional destination for healthcare."

The purpose of the city's Regional Health Area is to continue to develop primarily as an area for medical uses and to focus on improving pedestrian amenities, infill development, and encouraging mixed land uses. Chapter 5 of the Comprehensive Plan, titled "A Safe, Healthy, Inclusive & Skilled Community (SHIS)," sets goals and policies for accessing health care services. Rapid City recognizes the need for improvement to health care facilities including enhanced access and adding new medical services. The following planning policies endorse health care services development within Rapid City:

- SHIS-3.3A Facility Coordination: Coordinate and collaborate with health and social service providers on the siting of new facilities. Encourage locations that are convenient for clients, and explore options for shared-use facilities to maximize efficiency and client access.
- SHIS-3.3B Multi-Modal Accessibility: Support improvements that increase opportunities for community members to access health and social services.
- SHIS-3.3C Nearby Housing: Encourage housing (especially for the elderly, disabled, low-income and other special populations) in close proximity to health and social service facilities to enhance convenience and provide opportunities for access without needing to drive.
- EC (Economic Stability & Growth)-2.2A Additional Health Care Services and Providers: Attract additional medical services and providers that are not currently present or are under-represented in Rapid City. Identify strategies to enhance and expand the medical services offered in Rapid City, support the expansion of existing health care services and facilities, and market the medical services available to the City.

The above policies encourage community housing, access, and medical services which provide convenient opportunities and reduce travel time for patients. The 2014 Comprehensive Plan further identifies the need to maintain and improve open spaces, park accessibility, and transportation near medical service areas. The plan identifies future land uses surrounding the VA BHHCS Rapid City CBOC for employment purposes located east and west of 5th Street, low residential south of Fox Road, and urban development on the southeastern corner surrounding 5th Street just south of the employment zone. In addition, regional medical facilities are expected to expand around the northern edge of U.S. Highway 16 (Rapid City 2014).

3.8.2 Current Conditions

3.8.2.1 Hot Springs Area

Land use in the Hot Springs area is primarily agriculture, grazing, and recreation. Land surrounding the city is under federal ownership by the U.S. Forest Service for Buffalo Gap National Grasslands and Black Hills National Forest, and by the U.S. Army Corps of Engineers (USACE) for Cold Brook and Cottonwood Springs reservoirs, and under state ownership by the South Dakota Game, Fish, and Parks.

Most of the city lies to the west of U.S. Highway 385 and includes a diverse mix of land uses, utility infrastructure, and road network. The Fall River Hospital is located at the far south end of Hot Springs, just outside the city limits. The Michael J. Fitzmaurice State Veterans Home is located in the northwestern corner of Hot Springs.

The City of Hot Springs Land Use Map and Zoning Ordinance (Hot Springs 2014) shows that land is used and zoned for Class A Residential Development located to the north and south of the VA Hot Springs campus, General Commercial land uses to the west, and Mountain Residential to the east. The land use zones are shown in Figure 3.8-1.

The land use within Hot Springs north of the VA campus is primarily small single family homes, small-scale commercial and retail developments, Evans Plunge recreational facility, and a city park. Land use to the east is undeveloped private land at the foot of Battle Mountain, which is managed for recreation by the South Dakota Game, Fish, and Parks. Land use directly south of the campus is a, moderate density residential neighborhood of single-family homes. Land use directly to the west of the campus is the commercial, retail, and hospitality business area along the historic River Street and the city park that parallels Fall River.

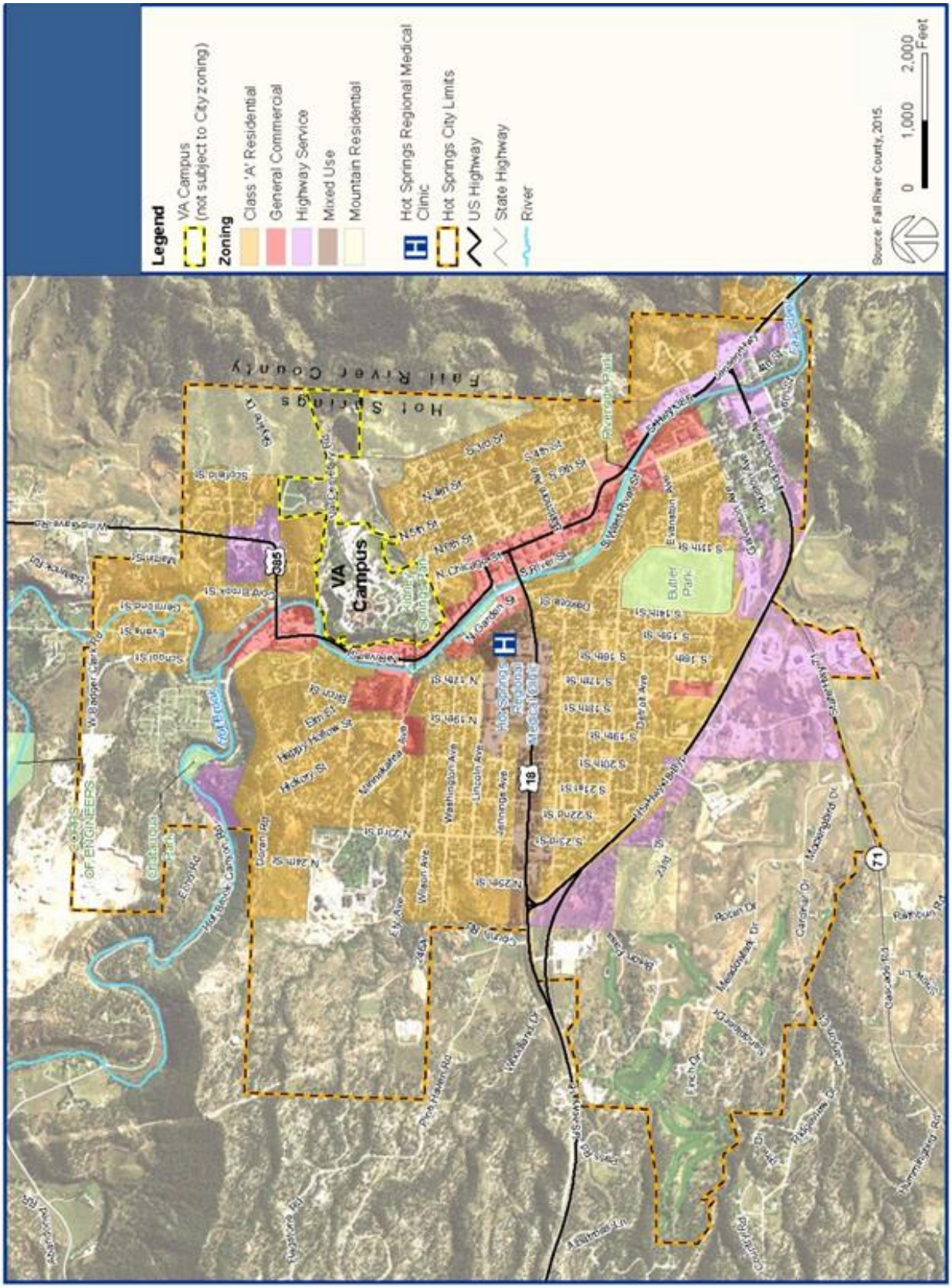


Figure 3.8-1. Hot Springs Zoning.

3.8.2.2 VA BHHCS Hot Springs Campus

The VA Hot Springs campus is located at 500 North 5th Street and encompasses 68 acres. The campus sits on a bluff north and east of the historic River Street business area of Hot Springs and overlooks the Fall River canyon. The campus has approximately 45 buildings connected by a curvilinear system of streets. The campus landscape plan and road system were designed by renowned city planner and architect George Kessler. Land use on the campus includes the medical services and administration complex, infrastructure and maintenance, housing, fire and security, Hot Springs National Cemetery, and open space.

The campus was intended to operate independent of its immediate surroundings, for the most part, and was not designed to incorporate significant physical or functional connections with adjacent lands and uses, with the exception of access. The campus' location on the bluff also segregates it topographically from River Street and commercial and retail uses to the west.

3.8.2.3 Rapid City Area

Rapid City is located along the eastern edge of the Black Hills National Forest within Pennington County. Since the nineteenth century, Rapid City has developed as gateway to the Black Hills. Its location and setting made it an ideal distribution node for the northern plains region, and today it is served by major interstate highways and rail. The city is home to Camp Rapid, a U.S. Army National Guard base located approximately five miles northwest of the existing VA BHHCS CBOC. Ellsworth Air Force Base is just outside the city limits, approximately 15 miles northeast of the clinic. As a well-developed community, Rapid City has a full complement of public facilities including numerous parks, golf courses, and lakes. Regional and community health centers, and public and private schools are generally located east of U.S. Highway 16, south of Interstate 90 and north of Catron Boulevard.

Shown in Figure 3.8-2, the future land use map for Rapid City depicts the land use patterns across the city. It identifies specific land use categories, centers, and corridors associated with different locations or types of places within the community. Figure 3.8-3 shows the location and type of zoning within Rapid City. Future zone changes would generally adhere to the land use categories shown on the land use map.

3.8.2.4 VA BHHCS Community-Based Outpatient Clinic

The VA BHHCS CBOC is located on 5th Street at Fox Run Drive in Rapid City. The CBOC is adjacent to the Colonial and Robbinsdale neighborhoods. According to the city's Planning Boundaries Map (Rapid City 2014), the VA BHHCS CBOC is located within the U.S. Highway 16 Neighborhood Area, the land use category is Employment (see Figure 3.8-2), and the area is currently zoned Office Commercial on the city's zoning map (see Figure 3.8-3).

The CBOC is surrounded by multi- and single-family developments, with a mix of apartments and homes defining the area as a suburban location. The surrounding zoning districts include Office Commercial, Low-Density Residential 1, Medium-Density Residential, General Commercial, and Civic Center.

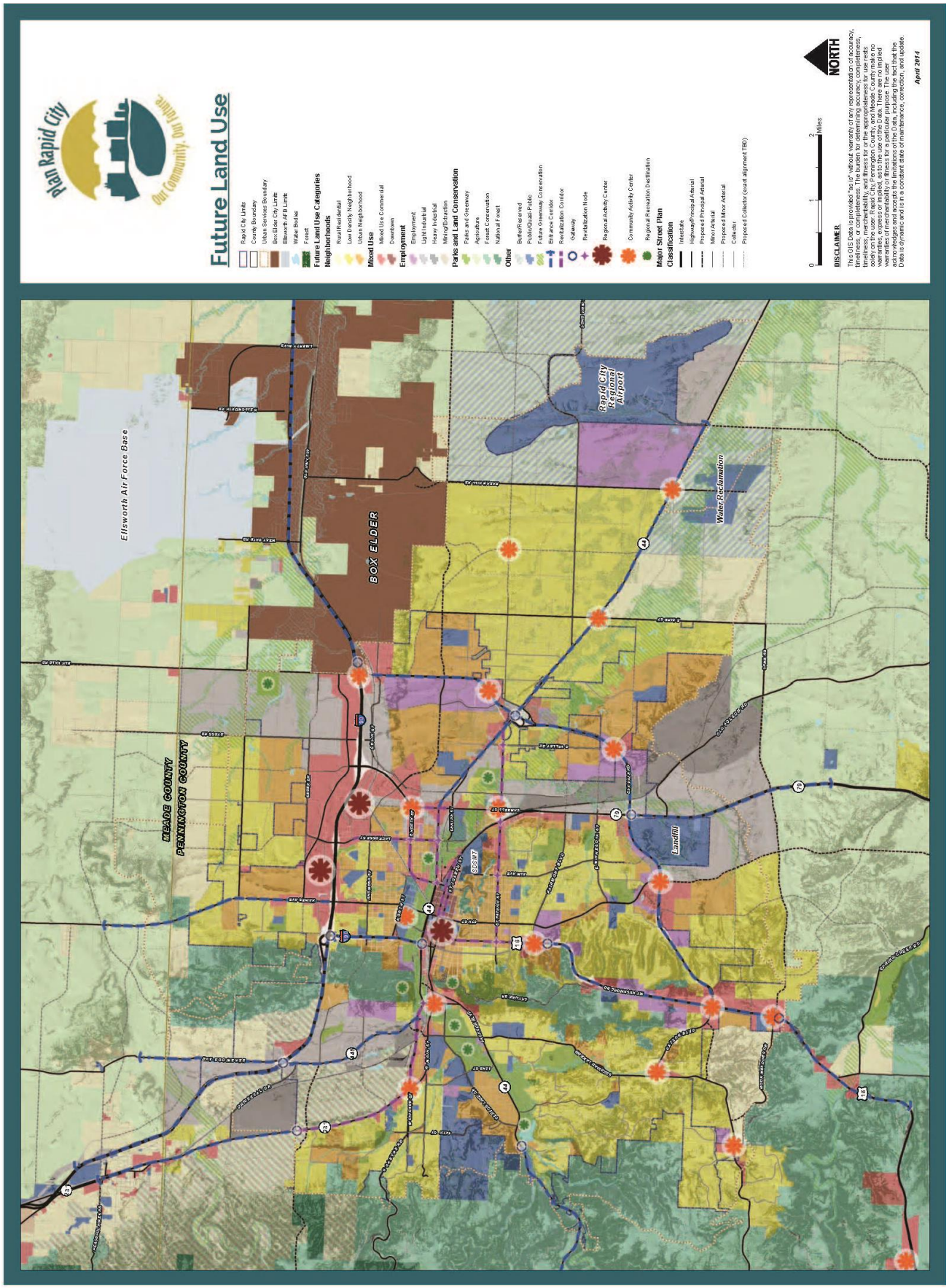


Figure 3.8-2. Rapid City Future Land Use.

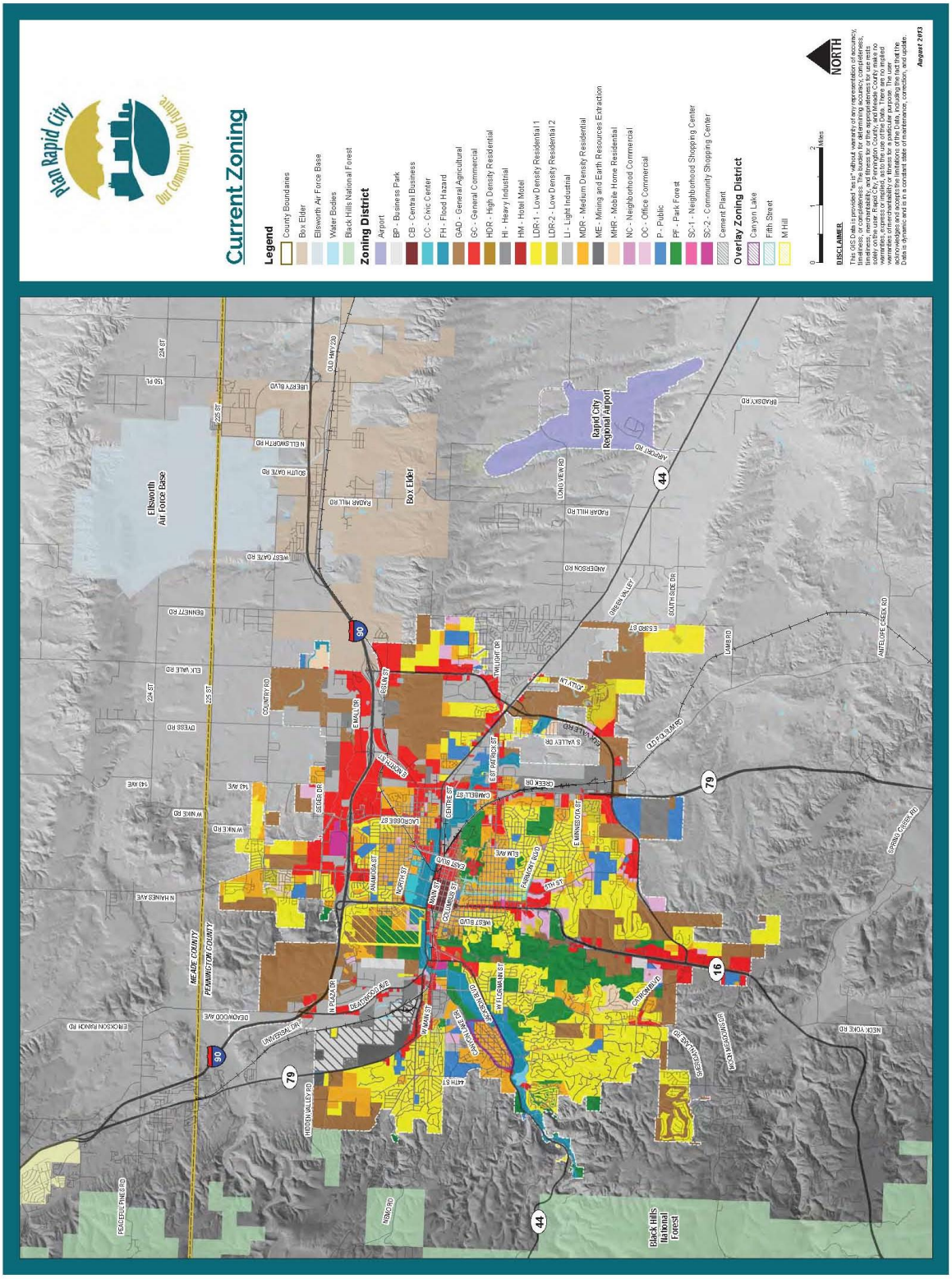


Figure 3.8-3. Rapid City Zoning.

3.9 Floodplains and Wetlands

A floodplain is the low-lying area adjacent to a river or stream that is periodically subject to flooding. A wetland is an area that is inundated or saturated by surface or groundwater and supports hydrophytic vegetation.

3.9.1 Regulatory and Policy Framework

Development in floodplains is regulated through the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA) and managed through mutual agreements with local governments. The program regulates development in special flood hazard areas to prevent flooding, protect human health and safety, and minimize property damage caused by flooding. Special flood hazard areas are those areas subject to inundation by the one percent annual chance flood (commonly referred to as the 100-year flood). FEMA models the flooding potential within communities and delineates special flood hazard zones (collectively referred to as the 100-year floodplain) and other flood areas, which are published on Flood Insurance Rate Maps (FIRM). Designated flood-prone areas within the City of Hot Springs are regulated by its Code of Ordinances, Chapter 31, Flood Damage Prevention. Special flood hazard areas within the City of Rapid City are regulated by its Code of Ordinances, Chapter 32.15, Flood Area Construction Regulations.

Federal agencies are required to avoid or minimize actions that could adversely affect floodplains (Executive Order 11988, *Floodplain Management*; see Section 1.5). The VA Site Development Design Manual (VA 2013) provides direction for planning, siting, and designing VA facilities. The manual states that when siting a facility, floodplain functions should be protected by avoiding or limiting development within the 100-year floodplain. Development in floodplains should be limited to open spaces and recreation areas first, parking areas second, and structures only if absolutely necessary.

Development in wetlands is regulated under the *Clean Water Act* and as authorized by USACE, and by farmland conservation programs administered by the Natural Resources Conservation Service. Regulating the filling of wetlands is primarily to avoid damage to aquatic environments and to prevent degradation of water quality. Three indicators (hydric soil, hydrophytic vegetation, and wetland hydrology) must be present during some portion of the growing season to define an area as a wetland within the regulatory jurisdiction of the USACE. Although not all-encompassing, the National Wetland Inventory (NWI) maintained by FWS provides location information on possible wetlands. Not all wetlands shown on the NWI would meet the criteria required to delineate a regulated wetland. Federal agencies are required to avoid filling or modifying wetlands to the extent practicable (Executive Order 11990, *Protection of Wetlands*; see Section 1.5).

3.9.2 Current Conditions

3.9.2.1 VA Hot Springs Campus

The VA Hot Springs campus is located atop a bluff overlooking the Fall River that flows along the base of the bluff on the west and north. The campus sits about 100 feet above the Fall River channel, which is delineated on the Hot Springs FIRM (FEMA 2007) as a regulated floodway. There is minimal flood risk with no rivers, streams, or other surface water bodies on the campus. The campus is outside the 0.2 percent annual chance flood (commonly referred to as the 500-year flood),

which is labeled on the FIRM as an unshaded Zone X. The FIRM does not show any special flood hazard areas and the NWI (FWS 2015) does not identify any wetlands on the campus.

3.9.2.2 City of Hot Springs

The City of Hot Springs participates in the National Flood Insurance Program; the FIRM for the city was updated in 2007. The flood hazards are primarily Fall River, which flows approximately through the center of the city from north to south; Cold Brook Canyon Creek, which enters Fall River near the north end of the city; and an unnamed tributary, which enters Fall River along the south end of the city. The FEMA-designated 100-year floodplain in Hot Springs is shown on Figure 3.9-1.

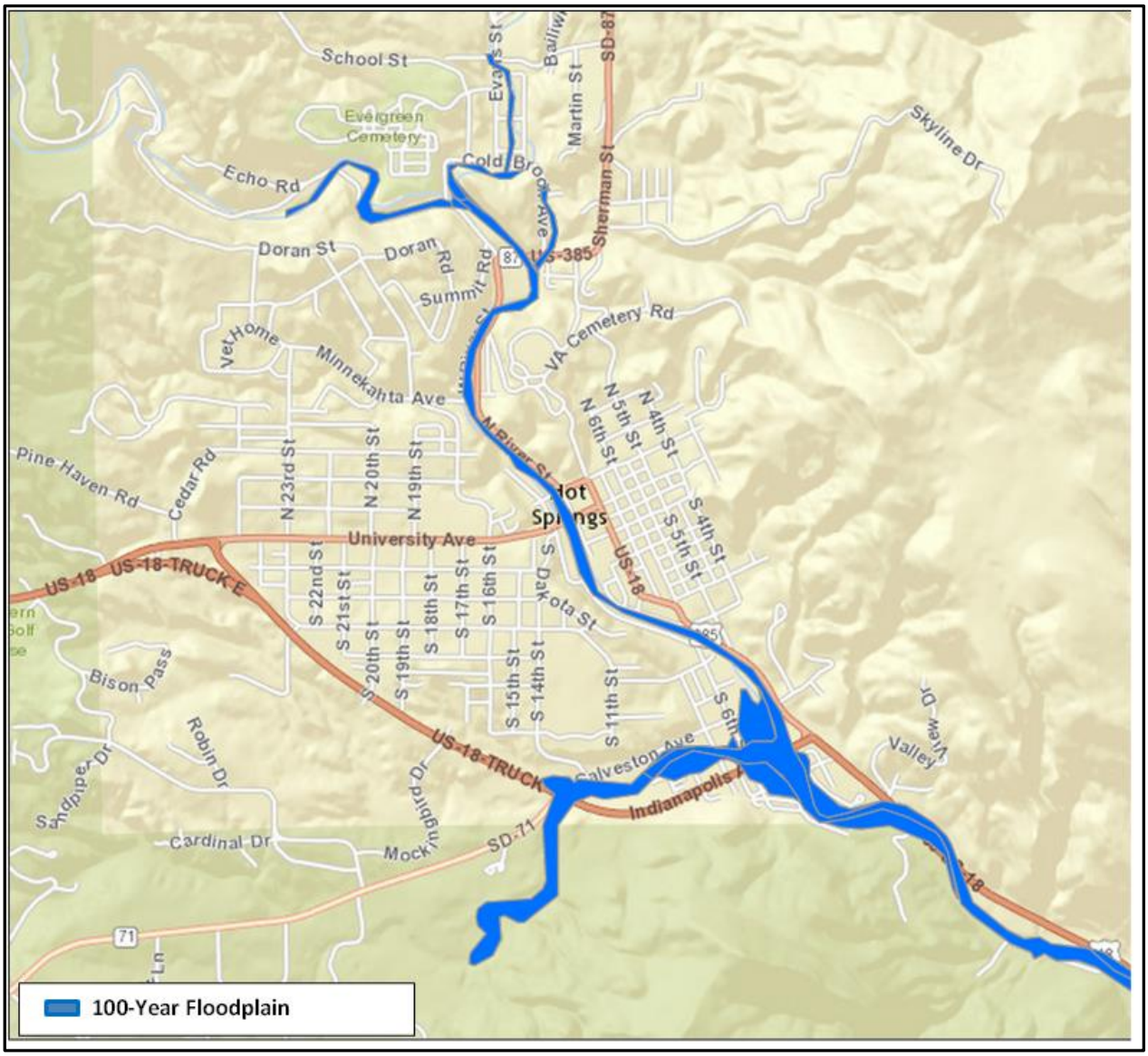


Figure 3.9-1. Location of Flood-Prone Areas in Hot Springs.

As a regulated floodway, the channel and adjacent floodplain of Fall River must be kept free of encroachment to carry the 100-year flood. The floodplain is generally less than 150 feet wide through most of the city except at the confluence area with the unnamed tributary near the U.S. Highway 18 bypass intersection.

The unnamed tributary and Cold Brook Canyon Creek have designated areas subject to flooding by a 100-year flood. The 100-year floodplain of the unnamed tributary begins in Fall River County outside the south edge of the Hot Springs corporate limits and extends to the confluence with Fall River near U.S. Highway 18/385. The width of the floodplain varies from 200 to 400 feet and approaches 800 feet in the confluence area. The designation of the 100-year floodplain of Cold Brook Canyon Creek begins at the west edge of the Hot Springs corporate limits and extends to the confluence with Fall River. The width of the floodplain is mostly less than 100 feet but approaches approximately 150 to over 250 feet through a bend and at the confluence.

Fall River is considered "waters of the U.S." and is therefore subject to the regulatory jurisdiction of USACE under the *Clean Water Act*. The NWI identifies an area of approximately one-half acre adjacent to Fall River between Jennings Avenue and U.S. Highway 18 as a wetland. It is defined as a riverine wetland with surface water present throughout the year except during times of drought. The NWI shows two other smaller wetlands less than one-quarter acre each located in the far northeast corner of the city. One is defined as seasonally flooded with emergent vegetation and the other is defined as a manmade pond. Two additional wetlands less than one-quarter acre and identified as manmade excavations are located southwest of the U.S. Highway 18 bypass.

3.9.2.3 City of Rapid City

The City of Rapid City participates in the National Flood Insurance Program; the FIRM for the city was updated in 2013. The flood hazards are primarily Rapid Creek, which flows through a major portion of the city from the southwest to the southeast, and a number of named and unnamed tributaries and drainages to Rapid Creek. The FEMA-designated special flood hazard zones and other flood areas in Rapid City are shown on Figure 3.9-2.

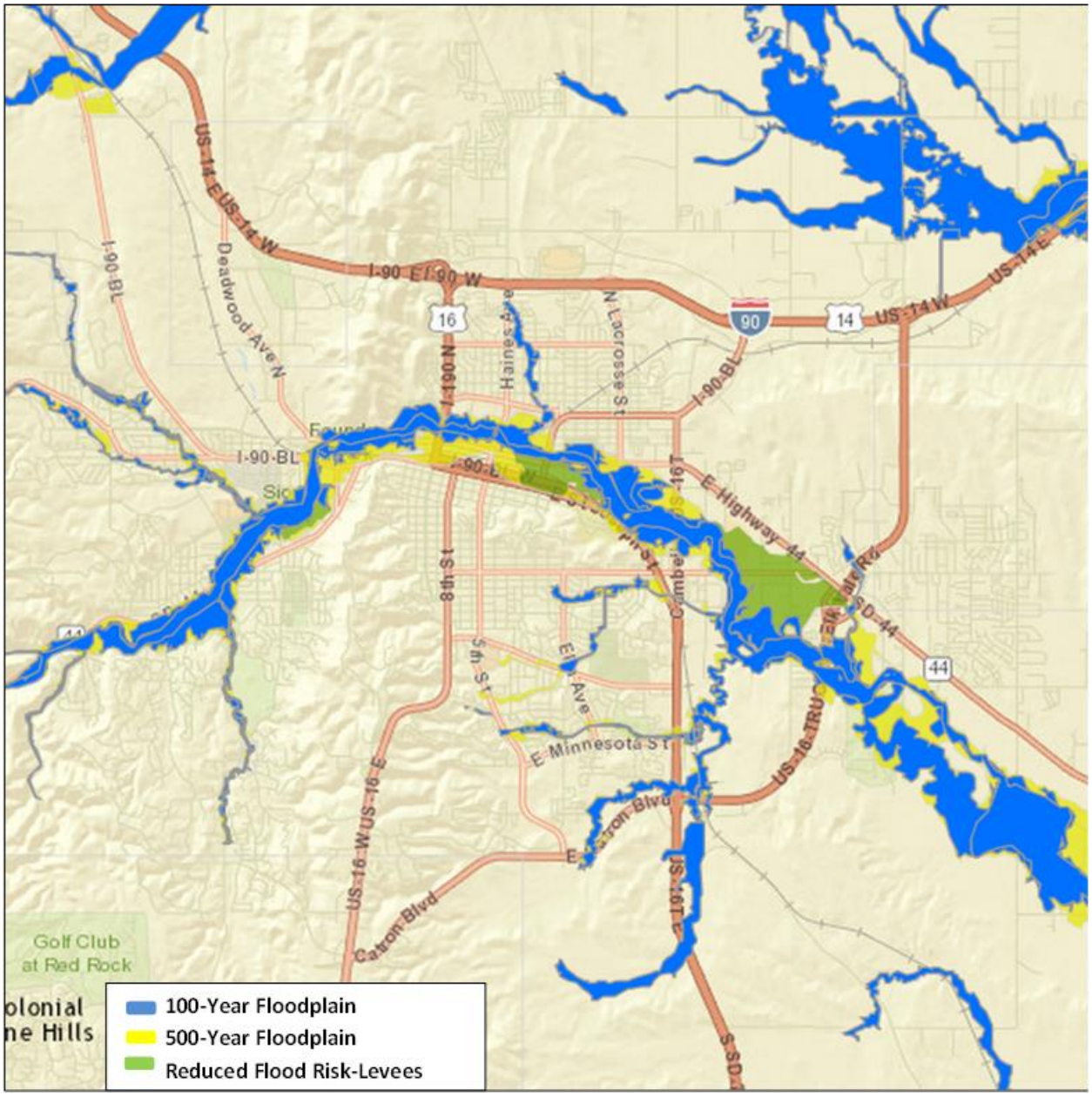


Figure 3.9-2. Location of Flood-Prone Areas in Rapid City.

The City of Rapid City implemented an extensive floodplain management program in the aftermath of the 1972 floods. Most of the 100-year floodplain of Rapid Creek has been converted to greenway occupied by parks, trails, golf courses, and open spaces. Flood hazard zones along Rapid Creek include the regulated floodway, 100- and 500-year floodplains, and areas of reduced flood risk due to levees. These flood-prone areas are extensive and collectively encompass many city blocks reaching over one-half mile in width in most locations.

Rapid Creek is considered "waters of the U.S." and is therefore subject to the regulatory jurisdiction of USACE under the *Clean Water Act*. The NWI shows numerous areas as wetlands of different shapes, sizes, and lengths throughout Rapid City, with most being located within or near the 100- and 500-year floodplains. The wetlands include seasonally and permanently flooded ponds (natural and manmade), seasonally and temporarily flooded palustrine wetlands with emergent vegetation, and temporarily flooded palustrine wetlands with forested vegetation.

The location of the existing CBOC is labeled on the FIRM as within unshaded Zone X, which is outside the 500-year floodplain in an area of minimal flood risk. Across 5th Street to the east of the CBOC, the NWI shows a temporarily flooded palustrine wetland with forested vegetation of approximately one-half acre. The wetland was created or modified by manmade flow obstructions.

3.10 Socioeconomics

Socioeconomics are described using demographic and employment measures, as these measures influence the local economy and housing demand.

3.10.1 Regulatory and Policy Framework

There are no federal standards relating to socioeconomics that apply to VA, and no state or local requirements to address. The regulatory framework for addressing socioeconomics is in the context of the human environment referred to in NEPA and defined by the CEQ regulations implementing NEPA. Economic or social effects will be discussed in an EIS when interrelated with the natural and physical environment (40 CFR 1508.14).

3.10.2 Current Conditions

The VA BHHCS service area covers approximately 100,000 square miles and includes 34 counties in South Dakota, Nebraska, and Wyoming. Socioeconomic data are presented by the following groupings:

- Fall River County, South Dakota: location of the VA Hot Springs campus and where components of the proposed reconfiguration would occur.
- Pennington County, South Dakota: location where components of the proposed reconfiguration would occur.
- Other South Dakota Counties: counties within the VA BHHCS service area, including Bennett, Butte, Corson, Custer, Dewey, Haakon, Harding, Hughes, Jackson, Jones, Lawrence, Lyman, Meade, Mellette, Oglala Lakota, Perkins, Stanley, Todd, Tripp, and Ziebach.
- Nebraska Counties: counties within the VA BHHCS service area, including Box Butte, Cherry, Dawes, Garden, Grant, Morrill, Scotts Bluff, Sheridan, and Sioux.
- Wyoming Counties: counties within the VA BHHCS service area, including Crook, Niobrara, and Weston.

3.10.2.1 Population

The total population within the VA BHHCS service area using the 2010 census was 349,864 people. As shown in Table 3.10-1, the population in the VA BHHCS service area is projected to increase by 10.5 percent between 2010 (349,864) and 2030 (386,625). Pennington County is projected to experience the highest population growth rate at 24 percent, while the population of Fall River County is projected to increase by 6.8 percent through 2030. The other South Dakota counties and Wyoming counties are projected to experience growth of 11.5 percent and 16.4 percent, respectively, while the Nebraska counties are projected to lose population (-10.0 percent).

Table 3.10-1. Current and Projected Population in VA BHHCS Service Area.

Counties in VA BHHCS Service Area	Population					Change 2010–2030
	2010	2015	2020	2025	2030	
Fall River, South Dakota	7,094	7,262	7,394	7,500	7,575	+6.8%
Pennington, South Dakota	100,948	107,845	114,161	119,876	125,154	+24.0%
Other South Dakota	148,284	152,799	157,397	161,647	165,282	+11.5%
Nebraska	76,763	75,125	73,286	71,240	69,094	-10.0%
Wyoming	16,775	17,810	18,600	19,070	19,520	+16.4%
Total	349,864	360,841	370,838	379,333	386,625	+10.5%

Source: Census 2010; SD DLR 2015a; UnivNE 2009; WY DAI 2011.

3.10.2.2 Veteran Population

The Veteran population projection in the VA BHHCS service area for the fiscal year ending September 30, 2014 (FY 2014) was 35,007 Veterans. Table 3.10-2 shows the projected Veteran population through FY 2030 by the counties in the service area, along with the percent change over this time period. The population projections are those developed by VA's National Center for Veteran Analysis and Statistics; these projections of county-level Veteran population changes are the basis for VA's nationwide services and facilities planning. This analysis was based on the most recent projections available, which were modeled using 2013 Veteran population estimates. With the exception of Pennington County, the Veteran population is projected to decrease throughout the VA BHHCS service area with an overall decline (35,007 to 33,755) of 3.6 percent by the end of FY 2030.

Table 3.10-2. Projected Veteran Population in VA BHHCS Service Area.

Counties in VA BHHCS Service Area	Veteran Population				Change 2014–2030
	FY 2014	FY 2020	FY 2025	FY 2030	
Fall River, South Dakota	1,013	968	933	882	-12.9%
Pennington, South Dakota	12,433	12,767	12,919	12,973	+4.3%
Other South Dakota	14,136	13,699	13,263	12,931	-8.5%
Nebraska	5,733	5,592	5,481	5,352	-6.6%
Wyoming	1,692	1,661	1,634	1,617	-4.4%
Total	35,007	34,657	34,230	33,755	-3.6%

Source: VA 2015a.

Approximately 60 percent of the Veteran population in the VA BHHCS service area was enrolled in the VA health benefits program in FY 2014 (VA 2015a). Although the Veteran population is projected to decrease by FY 2030, enrollment to receive health care services is projected to increase to approximately 62 percent (VA 2015a).

3.10.2.3 Housing

Table 3.10-3 shows the number of housing units and the occupancy rate in the VA BHHCS service area between 2000 and 2010. A housing unit is defined by the U.S. Census Bureau as a house, apartment, mobile home or trailer, group of rooms, or a single room that is intended for occupancy

as separate living quarters. The total number of housing units increased (144,645 to 160,220) by 10.8 percent, with Pennington County having the largest increase (37,249 to 44,949) at 20.7 percent and the Nebraska counties having the smallest increase (36,831 to 37,193) at 1.0 percent. Although the number of housing units increased across the service area, the occupancy rate of those units decreased slightly (87.8 to 87.2 percent). The exception is the Wyoming counties, with a small occupancy increase of 3.6 percent. Pennington County had the highest 2010 occupancy rate at 91.8 percent and Fall River County had the lowest rate at 78.1 percent. Fall River County also had the largest change in occupancy with a decrease of 3.9 percent. Approximately one-third of the occupied housing units are by renters in the counties throughout the service area, except for the Wyoming counties where renters occupy approximately one-fourth of the housing units (Census 2010).

Table 3.10-3. Housing Units in VA BHHCS Service Area.

Counties in VA BHHCS Service Area	Housing Units		Occupancy Rate		Change 2000–2010	
	2000	2010	2000	2010	Units	Rate
Fall River, South Dakota	3,812	4,191	82.0%	78.1%	9.9%	-3.9%
Pennington, South Dakota	37,249	44,949	93.0%	91.8%	20.7%	-1.2%
Other South Dakota	59,249	65,421	86.0%	85.6%	10.4%	-0.4%
Nebraska	36,831	37,193	87.7%	86.5%	1.0%	-1.2%
Wyoming	7,504	8,466	79.2%	82.8%	12.8%	+3.6%
Total	144,645	160,220	87.8%	87.2%	10.8%	-0.6%

Source: Census 2010.

VA BHHCS contracts for health care professionals, including physician staffing services (locum tenens) and other support personnel on an as-needed basis to augment VA staff. These contract or fee-based positions amounted to approximately $678,000 for FY 2014 (VA 2015b). VA BHHCS also purchases care for Veterans from non-VA providers, which amounted to approximately $25.9 million in FY 2011 (VA 2012).

3.10.2.4 Income

Median household income from the 2010 census is used as a benchmark to evaluate income levels in the VA BHHCS service area. Census data is readily available and is generally a more reliable source, particularly for small counties like the ones that are in the service area. While more current data is available from the U.S. Bureau of Economic Analysis, personal income data from this source is not considered to be as reliable because income levels of groups atypical of the resident population may cause a longer term high or low per capita personal income that is not indicative of the economic well-being of the area (BEA 2014). For example, a major construction project could substantially raise the per capita personal income of an area for several years because it attracts highly paid workers whose incomes are measured at the construction site instead of their county of residence.

Table 3.10-4 shows the change in estimated median household income for the VA BHHCS service area between 2000 and 2010. The entire service area had large increases in median household income, with the most significant increase of 56.1 percent in the three counties in Wyoming. Fall River County had both the lowest median income ($29,631 and $35,833) and the smallest increase at 20.9 percent. Although there were individual counties in the three states with lower median incomes than Fall River County, the average by data groupings for Other South Dakota, Nebraska, and Wyoming counties was higher.

Table 3.10-4. Median Household Income in VA BHHCS Service Area.

Counties in VA BHHCS Service Area	Median Household Income		Change 2000–2010
	2000	2010	
Fall River, South Dakota	$29,631	$35,833	20.9%
Pennington, South Dakota	$37,485	$46,849	25.0%
Other South Dakota	$30,943	$42,645	37.8%
Nebraska	$30,690	$38,403	25.1%
Wyoming	$31,667	$49,440	56.1%
Total[1]	$32,083	$42,634	32.9%

[1] Represents the average of the median household incomes.
Source: Census 2010.

3.10.2.5 Labor Force and Employment Characteristics

The U.S. Bureau of Labor Statistics defines the labor force as civilians (not active duty military or institutionalized persons) 16 years and older who are employed, seeking employment, or unemployed and available to work. Table 3.10-5 shows the number of persons who were employed compared to the size of the labor force in the VA BHHCS service from 2010 through 2014. The total labor force in the service area fluctuated slightly between 2010 (181,978) and 2013 (182,322) and then dropped to 178,422 in 2014. The trend in the number of persons employed tracked with the total labor force. Employment increased each year from 2010 to 2013, and then in 2014 the number of persons employed (171,496) dropped below the 2010 level (172,336). This would not be unexpected since the labor force in 2014 was also smaller than it was in 2010. While the overall change to the total labor force in the service area from 2010 to 2014 (181,978 to 178,422) decreased by 2.0 percent, the number of persons employed only decreased by 0.5 percent. Only the three Wyoming counties in the service area experienced both an increase in their total labor force (9.5 percent) and employment (12.2 percent) over the past five years. Although the total labor force decreased in Pennington County (0.7 percent) and the Nebraska counties (0.3 percent) between 2010 and 2014, the number of persons employed increased by 1.2 percent.

Table 3.10-6 shows the number of unemployed persons in the VA BHHCS service area along with the unemployment rate from 2010 to 2014. All county groupings within the service area had sizeable decreases in the number of unemployed persons, along with improvements (decreases) in the unemployment rate. The Nebraska and Wyoming counties had the largest decreases in unemployed persons at 30.8 and 33.1 percent, respectively, while the service area counties in South Dakota had decreases between approximately 21 to 36 percent. The largest decrease in the unemployment rate from 2010 to 2014 was in the Wyoming counties with a decrease of 2.3 percentage points from 6.0 to 3.7 percent. Pennington County was next with a decrease of 1.8 percentage points from 5.2 to 3.4 percent. The Nebraska counties had the lowest unemployment rate in the service area over the past five years from 4.8 percent down to 3.3 percent. The unemployment rate in Fall River County and the other South Dakota counties improved by 0.9 and 1.0 percentage points, respectively. For comparison purposes, the 2014 statewide unemployment rates for South Dakota, Nebraska, and Wyoming were 3.4, 4.3, and 3.3 percent, respectively (SD DLR 2015b; NE DOL 2015; WY LMI 2015).

Table 3.10-7 provides overview information on the different employment sectors, establishments, employees, and average and total wages for Fall River County and Pennington County for 2014.

Table 3.10-5. Labor Force and Employment in VA BHHCS Service Area, 2014.

Counties in VA BHHCS Service Area	Total Labor Force (Total) and Persons Employed (Empl)										Change 2010–2014	
	2010		2011		2012		2013		2014			
	Total	Empl	Total	Empl	Total	Empl	Total	Empl	Total	Empl	Total	Empl
Fall River, South Dakota	3,815	3,607	3,741	3,548	3,677	3,499	3,632	3,473	3,026	2,886	-20.7%	-20.0%
Pennington, South Dakota	54,063	51,251	54,881	52,299	54,783	52,451	55,056	52,946	53,691	51,878	-0.7%	+1.2%
Other South Dakota	74,330	70,180	73,427	69,274	72,887	68,972	72,710	69,057	71,295	68,022	-4.1%	-3.1%
Nebraska	41,500	39,527	42,082	40,265	42,391	40,694	42,741	41,086	41,358	39,992	-0.3%	+1.2%
Wyoming	8,270	7,771	8,188	7,741	8,320	7,914	8,183	7,830	9,052	8,718	+9.5%	+12.2%
Total	181,978	172,336,	182,319	173,127	182,058	173,530	182,322	174,392	178,422	171,496	-2.0%	-0.5%

Source: BLS 2015.

Table 3.10-6. Unemployment and Unemployment Rate in VA BHHCS Service Area.

Counties in VA BHHCS Service Area	Persons Unemployed (Unempl) and Unemployment Rate (Rate)										Change 2010-2014	
	2010		2011		2012		2013		2014			
	Unempl	Rate	Unempl	Rate	Unempl	Rate	Unempl	Rate	Unempl	Rate	Unempl	Rate
Fall River, South Dakota	208	5.5%	193	5.2%	178	4.8%	159	4.4%	140	4.6%	-32.7%	-0.9%
Pennington, South Dakota	2,812	5.2%	2,582	4.7%	2,332	4.3%	2,110	3.8%	1,813	3.4%	-35.5%	-1.8%
Other South Dakota	4,150	5.6%	4,153	5.7%	3,915	5.4%	3,653	5.0%	3,273	4.6%	-21.1%	-1.0%
Nebraska	1,973	4.8%	1,817	4.3%	1,697	4.0%	1,655	3.9%	1,366	3.3%	-30.8%	-1.5%
Wyoming	499	6.0%	447	5.5%	406	4.9%	353	4.3%	334	3.7%	-33.1%	-2.3%
Total	9,650	5.3%	9,437	5.2%	8,793	4.8%	8,171	4.5%	7,242	4.1%	-25.0%	-1.2%

Source: BLS 2015.

Table 3.10-7. Employment Sectors and Wages, Fall River County (FRC) and Pennington County (PC).

Employment Sector	Establishments		Employees		Average Wage		Total Wages	
	FRC	PC	FRC	PC	FRC	PC	FRC	PC
Industry (total private ownership)	250	4,377	1,351	47,680	$25,794	$36,765	$34,847,153	$1,752,947,009
Natural resources/mining	12	33	53	146	$41,348	$33,639	$2,191,442	$4,911,288
Construction	26	516	81	3,635	$27,181	$42,577	$2,201,630	$154,766,796
Manufacturing	8	138	15	2,639	$31,563	$43,119	$473,443	$113,791,333
Trade/transportation/utilities	49	1,027	278	11,888	$25,847	$33,452	$7,185,466	$397,676,287
Information	4	83	25	875	$48,866	$42,188	$1,221,640	$36,914,837
Financial activities	24	471	60	3,755	$36,733	$43,944	$2,203,968	$165,008,811
Professional/business services	40	824	83	4,628	$32,133	$49,758	$2,667,018	$230,281,192
Education/health services	24	437	323	9,651	$34,243	$47,313	$11,060,351	$456,622,256
Leisure/hospitality services	45	511	385	8,376	$12,759	$15,961	$4,912,241	$133,687,185
Other services	18	337	49	2,089	$14,897	$28,381	$729,954	$59,287,024
Government	44	136	1,040	7,761	$40,238	$43,285	$41,847,893	$335,932,253
Total (Government and Industry)	**294**	**4,513**	**2,391**	**55,441**	**$32,077**	**$37,678**	**$76,695,046**	**$2,088,879,262**

Source: SD DLR 2015c.

Only these two counties within the VA BHHCS service area are listed because they are the counties where the proposed reconfiguration would occur. The information in the table is intended to provide an overview of employment sector information, and the reader should note that the data are not inclusive of all workers because of how data are collected from and reported for private industry, government, self-employed, and religious and non-profit organizations.

As shown in Table 3.10-7, private industry in Fall River County employed approximatley one-third more persons (1,351) than did the government (local, state, and federal) sector (1,040), yet accounted for approximately $7 million less in total wages ($34.8 to $41.8 million) in 2014. The highest average wage in Fall River County was in the natural resources/mining sector ($41,348) and the lowest was in the leisure/hospitality sector ($12,759). The construction sector was very small with only 81 employees earning an average wage of $27,181. The education/health services sector was larger with 24 establishments supporting 323 employees earning an average wage of $34,243.

As shown in Table 3.10-7, private industry in Pennington County employed significantly more persons (47,680) than did the government sector (7,761) and accounted for approximately five times the total wages ($1.75 billion to $333.9 million) in 2014. The highest average wage in Pennington County was in the professional/business services sector ($49,758) with the lowest in the leisure/hospitality sector ($15,961). The construction sector had 3,635 employees earning an average wage of $42,577. The education/health services sector had 437 establishments supporting 9,651 employees earning an average wage of $47,313.

3.10.2.6 VA BHHCS Employment

VA BHHCS employed 1,103 people (1,021 full-time and 82 part-time) in FY 2014 (VA 2015b). This equates to 1,069 full-time equivalent employees (FTEEs) assigned to the VA facilities in Hot Springs (357 FTEEs), Rapid City (30 FTEEs), and Fort Meade (682 FTEEs). One FTEE represents either one full-time employee working 40 hours per week, or two or more part-time employees whose combined working hours total to 40 hours per week. Table 3.10-8 shows the location assignment of the FTEEs for FY 2014 by the county of residence of the employees associated with those FTEEs. Fall River County and Pennington County are listed separately because they are the counties where the proposed reconfiguration would occur. The "Other" counties include the remaining counties within the VA BHHCS service area and others outside the service area.

Table 3.10-8. VA BHHCS FTEEs by VA Facility and Employee County of Residence.

FTEE County of Residence	Hot Springs Campus	Rapid City CBOC	Fort Meade Campus	Total
Fall River	266	0	6	272
Pennington	39	26	149	214
Other	52	4	527	583
Total	357	30	682	1,069

Source: VA 2015b.

Table 3.10-9 shows the estimated total wages earned by VA BHHCS employees for FY 2014. The wages are listed by VA facility and county of residence of the FTEEs earning the wages at that facility.

Table 3.10-9. VA BHHCS Estimated Total Wages by VA Facility and FTEE County of Residence

FTE County of Residence	Hot Springs Campus	Rapid City CBOC	Fort Meade Campus	Total
Fall River	$16,377,677	$0	$406,248	$16,783,925
Pennington	$2,401,238	$2,020,316	$10,088,504	$14,510,058
Other	$3,201,651	$310,818	$35,682,157	$39,194,626
Total	$21,980,566	$2,331,135	$46,176,909	$70,488,609

Source: VA 2015b.

3.11 Community Services

Community services are provided by public and non-profit agencies and organizations to support and enhance the community with educational, protective, medical, and recreational services. These services include local community hospitals and clinics, fire/rescue and emergency medical services, law enforcement, local schools, and parks and recreation facilities.

3.11.1 Regulatory and Policy Framework

Legislation, regulations, and plans govern local government responsibilities for providing community services. No state or local requirements related to community services apply to VA.

VA acts as its own building and fire protection official and "authority having jurisdiction". As such, VA reviews fire code requirements during the design and construction phases of a project. VA may also conduct an evaluation of the emergency response services (including local fire departments) available to facility operations. Construction and operation of a dedicated VA fire department are included in project plans when required to support VA medical facilities operating 24 hours a day in communities where fire response is provided by volunteers instead of full-time, 24-hour fire response staff. A support agreement or mutual aid agreement may be prepared to document shared fire response services. A police and security unit is staffed 24 hours a day at VA facilities operating 24 hours a day to provide physical security and monitor law enforcement activities for the protection of persons and VA property. VA Handbook 0730 *Security and Law Enforcement* (VA 2014) requires the establishment of a support agreement with local law enforcement agencies.

3.11.2 Current Conditions

Figures 3.11-1 and 3.11-2 identify the locations of the community services in the Hot Springs and Rapid City areas described in the following subsections.

3.11.2.1 Hospitals and Clinics

In the VA BHHCS service area, there are 3 tertiary care hospitals, 18 critical access hospitals, 5 Indian Health Services hospitals, 3 Indian Health Services health care centers, and numerous primary care clinics.

3.11.2.1.1 Hot Springs and Fall River County

The VA Hot Springs hospital and clinic serve Veterans predominately from the VA BHHCS service area. Services provided at the VA Hot Springs campus include primary care, urgent care, pharmacy services, outpatient surgery, inpatient care (10 beds), dialysis, x-ray and mobile imaging, specialty care, laboratory services, mental health, and a call center. There are also seven beds for long-term care in a Community Living Center (nursing home) and 100 beds for the RRTP that serves homeless Veterans and provides mental health services for post-traumatic stress, substance abuse, alcohol abuse, and other conditions.

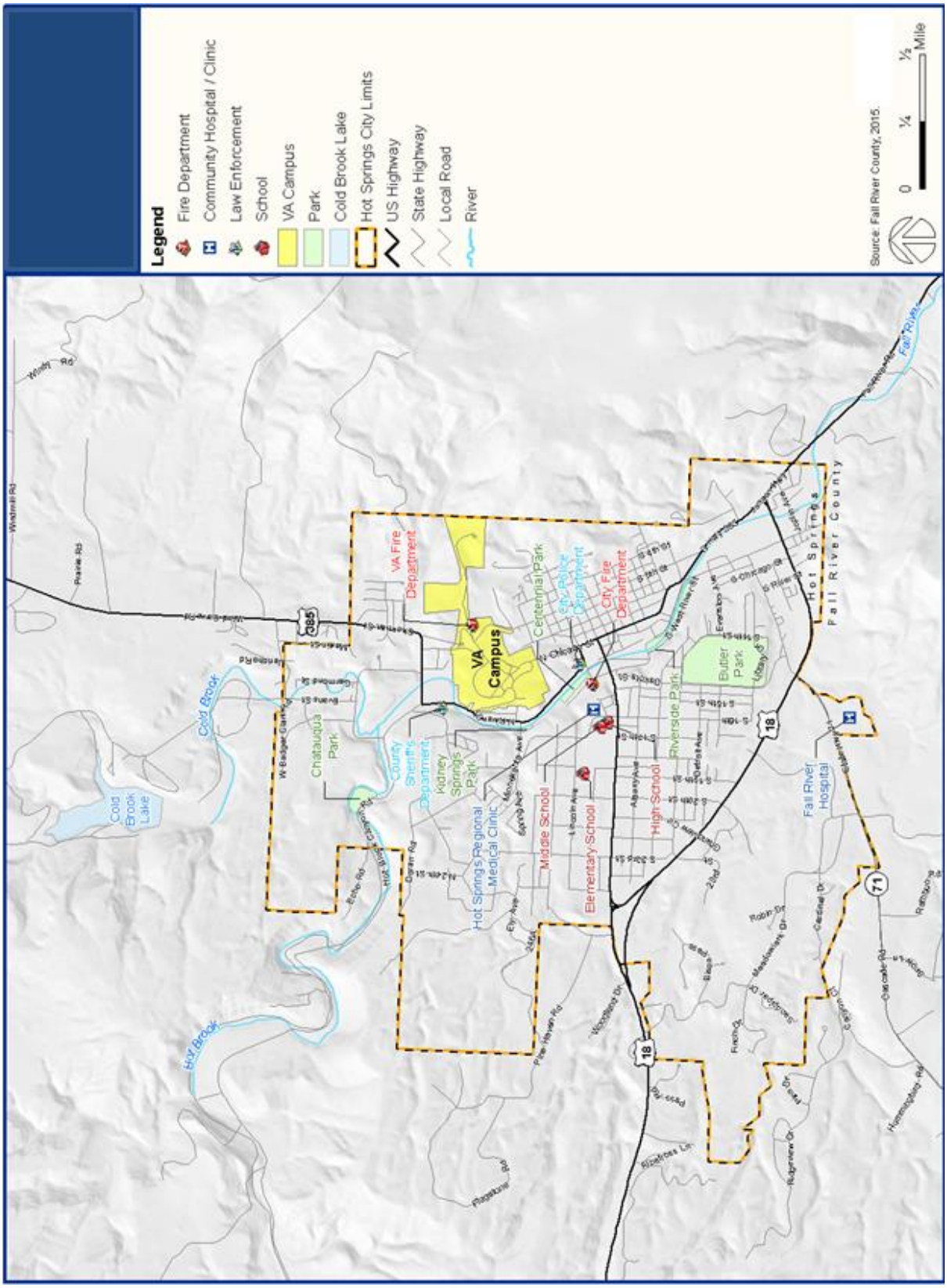


Figure 3.11-1. Hot Springs Community Services.

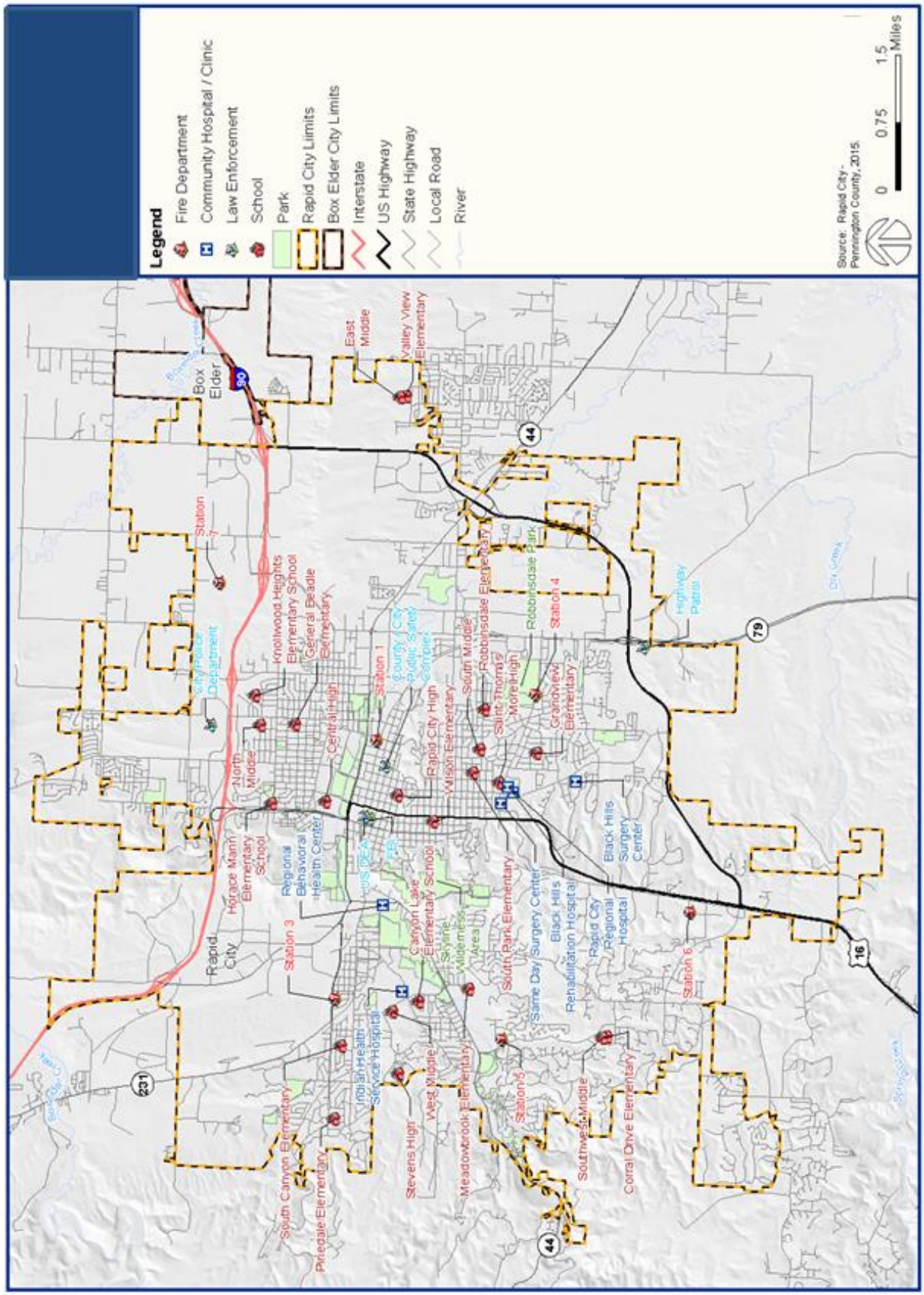


Figure 3.11-2. Rapid City Community Services.

Fall River Health Services operates the Fall River Hospital, Rural Health Clinic, and Seven Sisters Living Center in Hot Springs. The hospital is designated by the U.S. Department of Health and Human Services as a critical access hospital. The hospital has 25 inpatient beds and provides services for acute (urgent) and emergency care, laboratory, medical imaging, ultrasound, physical therapy and rehabilitation, surgery, orthopedics, podiatry, and sleep studies. Fall River Hospital employees two physicians and two nurse practitioners; contracts four emergency medicine physicians and four outreach specialty physicians; and has additional nursing, patient care, and service and facility support staff (Fall River Health Services 2013).

Hot Springs Regional Medical Clinic operates Monday through Friday from 9:00 a.m. to 4:00 p.m. It offers family and internal medicine services and specialties in audiology, counseling, endocrinology, nephrology, urology, and surgical practices.

3.11.2.1.2 Rapid City and Pennington County

The VA CBOC in Rapid City serves Veterans primarily from the Rapid City area. The facility provides primary care, specialty care, and compensated work therapy.

Rapid City Regional Hospital is an urban hospital serving the communities in Pennington County and the Black Hills region. The hospital has an inpatient capacity of 329 beds and provides specialty medical, surgical, and intensive care (tertiary) services. Rapid City Regional Hospital is one of the three tertiary hospitals in the VA BHHCS service area; the other two are located in Pierre and Scottsbluff.

3.11.2.2 Fire/Rescue and Emergency Medical Services

3.11.2.2.1 Hot Springs and Fall River County

There are nine volunteer fire department (VFD) response areas in Fall River County, of which Hot Springs is one. Hot Springs Volunteer VFD has over 30 volunteers, of which approximately 20 are active firefighters providing fire suppression within and surrounding the city (G. Hanson, personal communication, July 29, 2015). The City of Hot Springs provided approximately $85,000 from the general (tax) fund for fire department operations (Hot Springs 2013). The fire station is located on Garden Street, approximately one mile south of the VA Hot Springs campus.

Wildland fire suppression in Fall River County is provided by VFDs, the State of South Dakota, and the U.S. Forest Service. Because local fire departments are staffed by volunteers, the status and response capability to wildland fires may vary. Hot Springs is considered a "community at risk" due to the moderate level of wildland fire susceptibility (BLM 2004) and because of the size of and structures within the wildland-urban interface surrounding the city (Fall River County 2014).

VA BHHCS Fire Department (FD) is a federally funded department that provides fire response services for VA facilities in Hot Springs and Fort Meade. The fire department on the VA Hot Springs campus is staffed 24 hours a day with a total staffing level of 13 firefighters who operate two fire engines and one brush truck. A mutual aid agreement was executed between the VA Hot Springs FD and the Hot Springs VFD in June 1998 to provide firefighting assistance (personnel and apparatus) to one another (VA 1998). Requests for assistance are infrequent. VA Hot Springs FD is rarely called to provide assistance to the Hot Springs VFD; there have been approximately two to three calls over the past couple of years (J. Henderson, email message to M. Peters, June 26, 2015.).

Although there is no written mutual aid agreement with another federal agency for wildland firefighting assistance, the VA Hot Springs FD would provide appropriate assistance to the Forest Service if requested. VA Hot Springs FD and medical center do not provide ambulance transport for emergency medical response, although the urgent care clinic accepts ambulance transport vehicles.

Hot Springs Ambulance Service provides basic and advanced life support service throughout Fall River and Custer Counties using volunteer and paid personnel (emergency medical technicians and paramedics) from Hot Springs and surrounding communities.

3.11.2.2.2 Rapid City and Pennington County

The Rapid City FD is a paid professional department providing fire suppression and prevention and incident response 24 hours a day from seven fire stations located throughout Rapid City. The department has 142 employees, including 119 firefighters (RCFD 2015). The Emergency Medical Service Division of the Rapid City FD is provides basic and advanced life support ambulance service for Rapid City and throughout Pennington County, and frequently responds into neighboring counties as well. Approximately one-third of the firefighters are paramedics with the others certified as emergency medical technicians. The Rapid City FD responded to 15,422 calls during 2014, of which 75 percent were emergency medical or rescue related (RCFD 2015). The Rapid City FD budget for 2015 is approximately $12.9 million dollars, of which approximately 75 percent is general (tax) funds and 25 percent enterprise (non-tax) funds (Rapid City 2015).

Pennington County Volunteer Fire Service consists of over 450 volunteers belonging to 20 individual VFDs throughout the county providing fire suppression and emergency medical response. These VFDs operate under a mutual aid agreement among the VFDs, the Rapid City FD, and Ellsworth Air Force Base's FD.

3.11.2.3 Law Enforcement Services

3.11.2.3.1 Hot Springs and Fall River County

VA BHHCS maintains a police and security unit to provide law enforcement and security services for the safety and well-being of patients, staff, and visitors at VA facilities. VA Hot Springs Police Department (PD) is staffed by 10 police officers and a supervisor with a minimum of two officers patrolling the VA Hot Springs campus 24 hours a day. The police officers provide security patrols of the facilities, parking lots, and living quarters, and respond to reported suspicious or criminal activity, vehicle activity, and personal property losses on the campus. Although the campus is federal property, VA Hot Springs PD has a support agreement with the local, state, and federal law enforcement agencies having jurisdiction over the area for assistance, as needed, with law enforcement situations.

Police protection and law enforcement within the City of Hot Springs is provided by the Hot Springs PD with a staff of 10 people (Hot Springs 2015). The City of Hot Springs provided approximately $577,000 from the general (tax) fund for police department operations (Hot Springs 2013). The area surrounding the city (outside the corporate limits) is served by the Fall River County Sheriff's Office with a staff of 19 people (R. Evans, personal communication, December 12, 2014). Both law enforcement agencies provide assistance to the VA Hot Springs PD in the event of an emergency or if requested in accordance to the terms of the support agreement.

3.11.2.3.2 Rapid City and Pennington County

Rapid City PD provides law enforcement patrol and investigative and forensic services for the city and surrounding suburban areas. Rapid City PD has a staff of 153 employees and operates on a budget of approximately $13.6 million from general (tax) funds (Rapid City 2015). The Pennington County Sheriff's Office is co-located in the same station as the Rapid City PD. The Sheriff's Office has 372 employees and 221 volunteers with an annual budget of approximately $28 million (Pennington County 2014).

The VA CBOC in Rapid City is not a 24-hour operation and therefore does not require 24-hour protection by a VA police and security unit. VA police from the Fort Meade campus monitor alarms and other law enforcement actions at the CBOC, with assistance from the Rapid City PD in accordance with the terms of a written support agreement. Rapid City PD responds to calls or alarms at the CBOC that require an immediate response.

3.11.2.4 Schools

3.11.2.4.1 Hot Springs and Fall River County

There are three public school districts in Fall River County serving pre-kindergarten through grade 12: Hot Springs, Edgemont, and Oelrichs. Hot Springs School District covers part of Custer County. There is one private elementary school in Hot Springs serving pre-kindergarten through grade 5. School enrollment and expenditure by student for the past five school years are shown in Table 3.11-1.

Table 3.11-1. Enrollment and Expenditure per Student, Fall River County School Districts.

School District	School Year Ending					Change 2010–2014
	2014	2013	2012	2011	2010	
***Enrollment*[1]**						
Hot Springs	802	798	813	810	840	-1.1%
Edgemont	163	170	169	153	150	+2.3%
Oelrichs	123	115	125	123	126	-0.5%
***Expenditure per Student*[1]**						
Hot Springs	$7,559	$8,599	$7,291	$7,891	$6,186	+6.5%
Edgemont	$11,312	$11,592	$11,600	$11,680	$9,542	+4.8%
Oelrichs	$16,019	$17,821	$15,264	$18,082	$14,419	+4.1%

[1] Kindergarten through grade 12.
Source: SDDOE 2015a.

Student enrollment has decreased slightly in Hot Springs and Oelrichs and has increased in Edgemont, while expenditure per student has increased at the three school districts. Expenditures per student for the 2014 school year for Hot Springs, Edgemont, and Oelrichs ranked 115, 24, and 4, respectively, out of the 151 districts in the state (SDDOE 2015b).

Student-to-staff ratios vary by school and from one school year to another. The State of South Dakota Department of Education creates a model district profile based on enrollments and averages for the model district profile. Table 3.11-2 shows the student-to-staff ratio at the Fall River County school districts for the past five school years compared to the state model district average. Hot Springs School District historically operates at a student-to-staff ratio comparable to other school

districts throughout the state with similar student enrollment, whereas Edgemont and Oelrichs historically have had better ratios compared to similarly situated school districts.

Table 3.11-2. Student-to-Staff Ratio, Fall River County School Districts.

School District	School Year Ending					State Average[1]
	2014	2013	2012	2011	2010	
Hot Springs	13.7	13.3	14.6	13.1	14.2	14.1
Edgemont	8.8	9.2	9.5	9.3	10.3	11.3
Oelrichs	8.7	7.5	8.8	6.9	6.5	11.3

[1] School year ending 2014.
Source: SDDOE 2015a.

School district revenue is from local, county, state, and federal sources. The majority of revenue is from local and state sources, with the local sources predominantly from property and sales taxes. There are over 60 other sources of school revenue, such as utility taxes, bank franchise taxes, fines, investment income, and payments in lieu of taxes. A school district's revenue is augmented based on enrollment; number of English proficiency, special needs, and free/reduced lunch eligible students; and if the district is in a sparsely populated area. Table 3.11-3 shows the revenue and expenditure for the Fall River County school districts for the past five school years. Hot Springs and Oelrichs have experienced slight decreases in both revenue and expenditure, whereas Edgemont has experienced increases.

Table 3.11-3. Revenue and Expenditure, Fall River County School Districts.

School District	School Year Ending					Change 2010–2014
	2014	2013	2012	2011	2010	
Revenue[1]						
Hot Springs	$7,216,608	$7,132,873	$7,195,607	$7,477,682	$7,248,351	-0.1%
Edgemont	$2,243,334	$2,277,875	$2,143,916	$2,179,328	$2,047,434	+2.4%
Oelrichs	$1,551,557	$1,654,053	$1,585,342	$1,661,987	$1,574,098	-0.2%
Expenditure[1]						
Hot Springs	$7,056,672	$7,692,006	$6,851,147	$7,827,951	$7,410,216	-0.7%
Edgemont	$2,849,552	$2,209,797	$2,046,652	$2,066,355	$1,893,636	+11.3%
Oelrichs	$2,059,353	$1,972,087	$2,055,241	$2,129,296	$2,087,621	-0.3%

[1] Includes general, capital outlay, special education, and pension funds from local, county, state, and federal sources.
Source: SDDOE 2015a.

3.11.2.4.2 Rapid City

There are six public school districts located entirely or partially in Pennington County: Rapid City, Douglas, New Underwood, Wall, Hill City, and Custer. For purposes of this EIS, only the Rapid City School District is described.

School enrollment and expenditure by student for the past five school years for the Rapid City School District are shown in Table 3.11-4. Enrollment has increased slightly while expenditure per student has increased more. Expenditure per student for the 2014 school year for Rapid City ranked 111 out of the 151 districts in the state (SDDOE 2015b).

Table 3.11-4. Enrollment and Expenditure per Student, Rapid City School District.

School District	School Year Ending					Change 2010–2014
	2014	2013	2012	2011	2010	
Enrollment[1]						
Rapid City	13,702	13,898	13,506	13,280	13,126	+1.1%
Expenditure per Student[1]						
Rapid City	$7,611	$7,188	$7,302	$7,565	$5,778	+7.9%

[1] Kindergarten through grade 12.
Source: SDDOE 2015a.

Table 3.11-5 shows the student-to-staff ratio at the Rapid City public schools for the past five school years compared to the state model district average. Rapid City School District historically operates at a student-to-staff ratio comparable to other school districts throughout the state with similar student enrollment.

Table 3.11-5. Student-to-Staff Ratio, Rapid City School District.

School District	School Year Ending					State Average[1]
	2014	2013	2012	2011	2010	
Rapid City	15.4	16.1	15.6	15.2	16.2	15.5

1 School year ending 2014.
Source: SDDOE 2015a.

Table 3.11-6 shows the revenue and expenditure for the Rapid City School District for the past five school years. Rapid City has experienced minor increases in both revenue and expenditure.

Table 3.11-6. Revenue and Expenditures, Rapid City School District.

School District	School Year Ending					Change 2010–2014
	2014	2013	2012	2011	2010	
Revenue[1]						
Rapid City	$118,372,970	$120,052,644	$119,888,704	$121,909,594	$117,489,528	+0.8%
Expenditure[1]						
Rapid City	$121,742,480	$134,674,624	$154,233,665	$136,078,716	$110,443,034	+3.6%

[1] Includes general, capital outlay, special education, and pension funds from local, county, state, and federal sources.
Source: SDDOE 2015a.

3.11.2.5 Parks and Recreation

Recreational resources near the VA Hot Springs campus include local, state, and national parks. The City of Hot Springs maintains a number of public parks and amenities for various recreational and community events, including golfing, playgrounds, trails, sports, picnicking, swimming, organized events, and relaxing. City parks include Upper Chautauqua, Lower Chautauqua, Brookside, Butler, Centennial, and Cold Brook. Cold Brook Lake and Angostura Reservoir provide fishing, boating, and camping options. Evans Plunge, fed by the natural hot springs, is an enclosed pool offering year-round swimming, hot tubs, and a steam room. Fall River is a major recreational asset through the center of the city with the Freedom Trail system and parks along the river.

Custer State Park is approximately 20 miles north of Hot Springs. Encompassing 71,000 acres within the Black Hills, the park is known for its granite peaks and buffalo herds, and provides wildlife viewing areas, scenic drives, fishing, educational programs, trails, and resort services.

Wind Cave National Park is approximately six miles north of Hot Springs. Encompassing approximately 33,000 acres, the park offers trails, camping opportunities, and tours through one of the longest caves in the world.

The Rapid City Parks and Recreation Department maintains parks, open space, bicycling and walking trails, recreation facilities, and golf courses throughout the community. Rapid City has approximately 22 acres of parks, open space, and public grounds per 1,000 people, which exceeds the national standard of 10 acres (Rapid City 2014). The department manages approximately 1,650 acres of parkland, with some of the more notable being Dinosaur Park (a historic site), Skyline Wilderness Area, Memorial Park, and Storybook Island.

3.12 Solid Waste and Hazardous Materials

Hazardous material is defined (49 CFR 171.8) as a substance or material that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce. The term includes "hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions" in 49 CFR Part 173. Transportation of hazardous materials is regulated by the U.S. Department of Transportation (49 CFR Parts 105–180).

Hazardous materials can also be defined as any substance with special characteristics that poses a health or safety hazard to people, plants, or animals when released. Specific types of solid and hazardous materials identified and evaluated in this EIS include:

- Solid (municipal) waste – Solid material discarded by a community, including excess food, containers and packaging, residential garden wastes, other household discards, and light industrial debris (Lindeburg 2001).
- Asbestos-containing materials – Used in many building materials prior to 1989, including floor tiles, textured ceilings, heating pipe insulation, and structural fire protection insulation.
- Lead-based paint – Used in building paints prior to 1978.
- Polychlorinated biphenyls (PCBs) – Includes dielectric fluids, heat-transfer fluids, and hydraulic fluids. Although no longer manufactured in the U.S., PCBs remain in products still in use and in contaminated media from spills and previously contacted surfaces.
- Hazardous waste – Specific wastes regulated by the *Resource Conservation and Recovery Act* (RCRA), including characteristic wastes (wastes exhibiting ignitable, corrosive, reactive, or toxic properties) and listed wastes (specifically identified process and chemical wastes).
- Regulated medical waste – Includes disposable equipment, instruments, utensils, human tissue, laboratory waste, blood specimens, or other substances that could carry pathogenic organisms.
- Hazardous materials stored in aboveground storage tanks (ASTs) and underground storage tanks (USTs).

3.12.1 Regulatory Framework

3.12.1.1 Federal Requirements

The *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) (commonly known as Superfund), enacted in 1980, provides a federal mechanism for cleaning up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants. CERCLA imposes a tax on hazardous substances to create a fund (Superfund) so that EPA can clean up abandoned sites when potentially responsible parties cannot be identified or located, or when potentially responsible parties fail to act (IHMM 2002). Releases of hazardous

substances to the environment in excess of reportable quantities are required to be reported to the National Response Center.

In 1986, the *Superfund Amendments and Reauthorization Act* (SARA) reauthorized CERCLA to continue cleanup activities around the country (IHMM 2002). Title III of this reauthorization act expanded chemical reporting requirements and is also known as the *Emergency Planning and Community Right-to-Know Act*. Title III also required each state to appoint a state emergency response commission, which in turn divided states into emergency planning districts managed by a local emergency planning committee. Chemical use reports are made available to the public to aid in emergency planning and community awareness.

The *Toxic Substances Control Act* of 1976 provides a means to test, regulate, and screen all chemicals produced in or imported into the U.S. The Act has special provisions for the regulation of PCBs, asbestos, radon, lead-based paint, and dioxins (IHMM 2002).

Enacted in 1976, RCRA gave EPA the authority to regulate hazardous waste from "cradle-to-grave," which includes the generation, transport, treatment, storage, and disposal of hazardous waste (IHMM 2002). RCRA also provides a framework for managing nonhazardous solid wastes. The law set forth an intent to promote conservation of resources through reduced reliance on landfilling (ACHMM 2000). In South Dakota, RCRA is administered by the SDDENR.

The 1984 amendments to RCRA, known as the *Hazardous and Solid Waste Amendments*, required that land disposal of hazardous waste be phased out (IHMM 2002). The amendments also increased EPA's enforcement authority, provided more stringent hazardous waste management standards, and created a comprehensive UST program.

Through the 1975 *Hazardous Materials Transportation Act* and its regulations in 49 CFR, the U.S. Department of Transportation has authority over the safe transportation of hazardous materials. The regulation covers hazardous materials classification, hazard communication, packaging requirements, operational rules, and training (IHMM 2002).

Under the *Pollution Prevention Act* of 1990, preventing or reducing waste generation where it originates was made the national environmental policy of the U.S. The Act's purpose was to focus attention on reducing pollution through changes in production, operation, and hazardous material selection.

The *Atomic Energy Act* of 1954 governs the use, possession, and disposal of source, special nuclear, and byproduct materials for civilian and military uses (IHMM 2002). Medical facilities that may use nuclear materials for medical imaging or research purposes are subject to the regulations of the Act.

3.12.1.2 South Dakota Requirements

South Dakota Codified Laws define infectious and medical wastes and govern the unlawful release of infectious wastes to the environment (SDCL 34A-6). Facilities that generate infectious and medical wastes are subject to these laws. SDDENR also regulates the management of solid wastes (as defined in SDCL 34A-6-1.3(17), including municipal garbage, tires, yard waste, construction and demolition debris, contaminated soil, and sludge), hazardous wastes (as defined in SDCL 34A-11-2(4), as they apply to apply to generators and transporters of hazardous waste, used oil, and universal waste), and asbestos abatement (as described in SDCL 34-44, including the removal, storage, and handling of asbestos containing construction, renovation, and demolition debris).

3.12.1.3 Department of Veterans Affairs Guidance

Several VA directives and handbooks provide guidance for the management of solid and hazardous materials and waste, including:

- VA Directive 0057, VA Environmental Management Program (January 15, 2010) – establishes environmental policies within VA.
- VA Directive 0059 and VA Handbook 0059, VA Chemicals Management and Pollution Prevention (May 25, 2012) – prescribes the goals, policies, roles and responsibilities, and major requirements for chemicals management within VA, including reducing or eliminating the quantity of hazardous chemicals and materials acquired, generated, used, or disposed to the extent possible. The guidance also requires development of a chemical management and pollution prevention plan.
- VA Directive 0062 and VA Handbook 0062, Environmental Compliance Management (January 10, 2012) – prescribes the goals, policies, roles and responsibilities, and major requirements for environmental compliance management and reporting within VA, including continual improvement of environmental compliance and optimization through robust environmental management systems.
- VA Directive 0063 and VA Handbook 0063, Waste Prevention and Recycling Program (October 17, 2011) – establishes waste prevention and recycling program policy within VA, promoting source reduction as the most important approach for meeting waste prevention and recycling goals.

3.12.2 Current Conditions

3.12.2.1 Solid Waste

Solid waste is routinely generated through operations at the Hot Springs VAMC. In FY 2013, the Hot Springs VAMC generated 274,530 pounds (137.3 tons) of solid waste (VA 2014a). Corrugated cardboard is compacted onsite; solid waste is collected and transferred by a third party and disposed at the Custer Fall River Regional Landfill (see Figure 3.12-1). The Custer Fall River Regional Landfill (currently managed by Barker Concrete & Construction, Inc.) is a Type IIB municipal landfill that covers 280 acres and is permitted to receive up to 25,000 tons per year of solid waste (SDDENR 2014a), including authorization to receive construction and demolition waste. The landfill accepted approximately 18,000 tons of solid waste in 2013, and ample landfill capacity remains as two additional cells will be constructed in the coming months and a subsequent phase of expansion is planned (Barker 2014).

Solid waste is also routinely generated through operations at the Rapid City CBOC. The Rapid City CBOC is located in a leased facility, and thus the FY 2013 solid waste generation amount is unknown. The solid waste is collected and transferred by a third party and disposed at the Rapid City Landfill (see Figure 3.12-2). The Rapid City Landfill covers 451 acres and is permitted to receive up to 200,000 tons per year of solid waste (SDDENR 2014b), including authorization to receive construction and demolition waste. The landfill accepted approximately 17,000 tons of solid waste from over 18,000 accounts in 2011 (Rapid City 2011). The Rapid City CBOC operations are an insignificant contributor to the overall solid waste intake at the Rapid City Landfill.

Figure 3.12-1. Hot Springs Area Solid Waste Landfills.

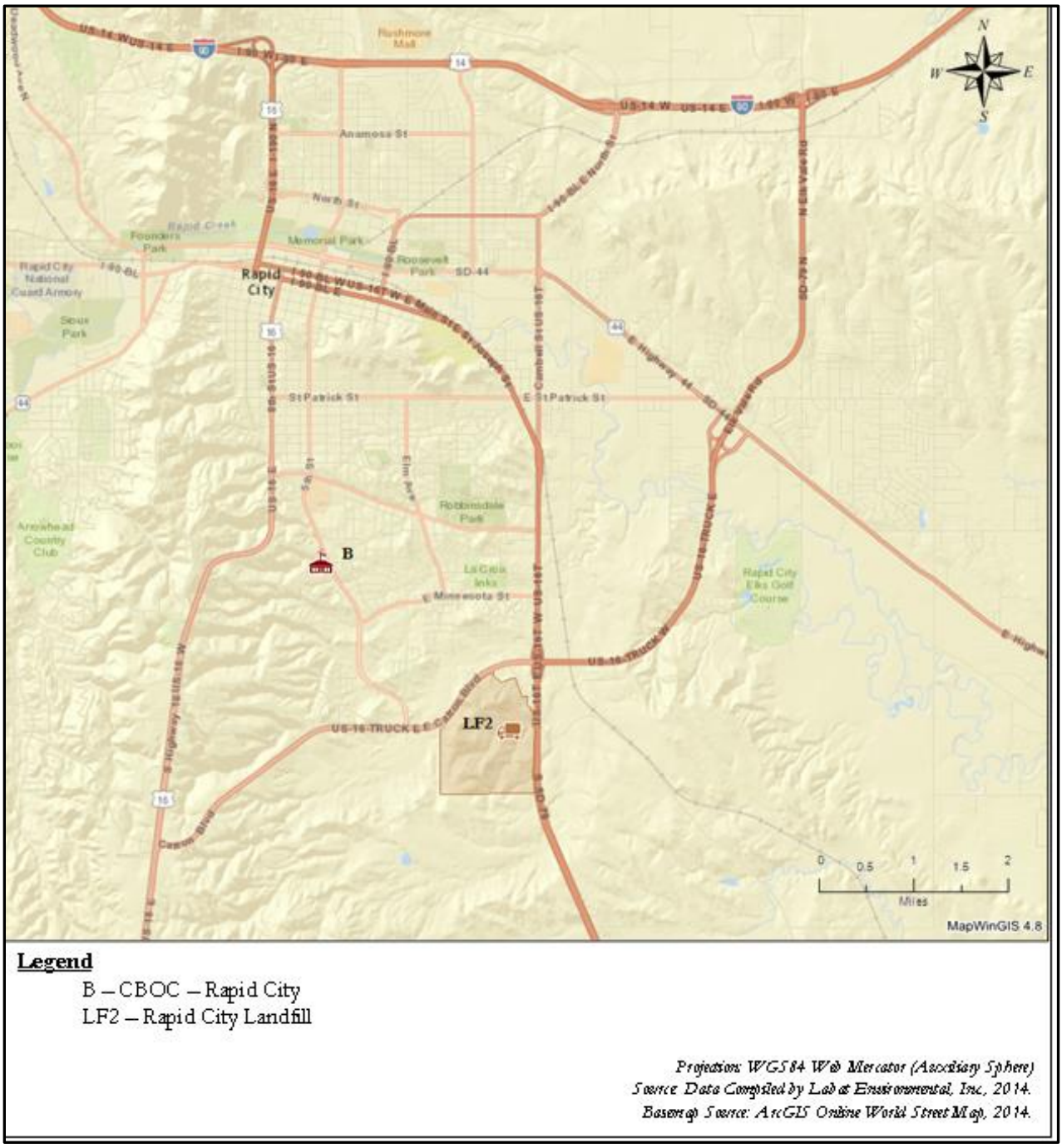


Figure 3.12-2. Rapid City Area Solid Waste Landfills.

3.12.2.2 Medical Waste

Medical waste is routinely generated through operations at both the Hot Springs VAMC and the Rapid City CBOC. Medical waste is collected by a third party and transferred to Stericycle in Dacono, CO, where wastes are treated for ultimate disposal. In FY 2013, the Hot Springs VAMC generated 12,754 pounds of medical waste and the Rapid City CBOC generated 806 pounds of medical waste (VA 2014a).

3.12.2.3 Hazardous Waste

The Hot Springs VAMC is classified as a RCRA Conditionally Exempt Small Quantity Generator (CESQG) of hazardous waste (EPA 2014a). CESQGs generate 100 kilograms (220 pounds) per month) or less of hazardous waste or 1 kilogram (2.2 pounds) per month or less of acutely hazardous waste. Additionally, CESQGs may not accumulate more than 1,000 kilograms (2,200 pounds) of hazardous waste at any time. During FY 2014, the Hot Springs VAMC generated 603 pounds of hazardous waste, including 4 pounds of acutely hazardous waste (VA 2014b). All generated hazardous waste is contracted for transportation and disposal at authorized facilities.

Hazardous waste generated at the Rapid City CBOC is managed through the Fort Meade VAMC (a small quantity generator of hazardous waste) (EPA 2014b). Rapid City CBOC operations contribute a small fraction of the hazardous waste generated and managed by the Fort Meade VAMC.

3.12.2.4 Hazardous Materials

Hazardous materials stored and used in VA BHHCS operations (including operations at the Hot Springs VAMC and the Rapid City CBOC) are tracked using a chemical inventory tracking system developed by the VA Center for Engineering and Occupational Safety and Health. Management of hazardous materials within VA is outlined in VA Directive 0059, *VA Chemicals Management and Pollution Prevention* (VA 2012).

The Hot Springs VAMC stores some hazardous materials in ASTs; no USTs are present at the site. Three ASTs (39,590 gallons each) store #2 diesel fuel oil for site heating purposes. Twelve additional ASTs (ranging from 40 gallons to 2,000 gallons) store #1 and #2 diesel fuel, gasoline, hydraulic oil, cylinder oil, and compressor oil. ASTs at the site are located within secondary containment and are managed in accordance with the site Spill Prevention, Control, and Countermeasures Plan. Rapid City CBOC operations do not utilize any ASTs or USTs.

Radioactive materials are used in medical operations within the VA BHHCS. The BHHCS radioactive material management program effectively tracks and manages radioactive sources while onsite, where they naturally decay and are eventually disposed in accordance with solid waste regulations.

3.12.2.5 Building Materials

Many uses of asbestos-containing materials were phased out or banned in a series of federal regulations from 1973 to 1990. Lead-based paint was used in many structures built or repainted before 1978. Due to the age of the facilities at the Hot Springs VAMC, asbestos-containing materials and lead-based paint are present in facility building materials. The VA BHHCS Industrial Hygiene group maintains an inventory of facilities where asbestos-containing materials and lead-based paint

are present. These materials are not known or expected to be present at the Rapid City CBOC, as the facility was constructed in 1995.

No PCB-containing equipment is known to be located at either the Hot Springs VAMC or the Rapid City CBOC.

3.13 Transportation and Traffic

Transportation and traffic are defined by the physical attributes and functionality of the roadway network within the VA BHHCS service area, along with the available modes of travel that are available within the service area. A segment of a roadway network is commonly referred to as a transportation facility.

3.13.1 Regulatory and Policy Framework

3.13.1.1 South Dakota

The Statewide Long Range Transportation Plan prepared by the South Dakota Department of Transportation provides an overview of the transportation network and trends in the state, and outlines actions to address these trends and develop solutions to transportation problems (SDDOT 2010). The plan guides annual decision-making for the Statewide Transportation Improvement Program, which is a five-year list of transportation projects scheduled for completion. State and federal funding for transportation improvement projects is based on these two plans.

3.13.1.2 Pennington County and Rapid City Area

The transportation goal established by the Pennington County Comprehensive Plan is to achieve a safe, efficient, and convenient transportation network that is coordinated with existing land use and future planned growth throughout the county (Pennington County 2003). Pennington County coordinates with municipal governments in the development of the regional transportation system and facility improvements.

Transportation planning in the Rapid City area is conducted by the Rapid City Area Metropolitan Planning Organization (MPO). The MPO includes the cities of Rapid City, Box Elder, Summerset, and Piedmont; Ellsworth Air Force Base; unincorporated areas of Black Hawk; and developing areas of Pennington and Meade Counties. The long range transportation plan for the Rapid City area is called *RapidTRIP 2035* (MPO 2010). The MPO is in the process of updating the plan to 2040. The plan identifies specific services and projects for different modes of travel that will be necessary to meet the transportation needs of the Rapid City area through 2040, once updated. The different modes of travel addressed in the plan include auto, transit, non-motorized (bicycle and pedestrian), and, to a lesser extent aviation, rail, and freight.

The MPO prepared the *2013-2017 Coordinated Public Transit-Human Services Transportation Plan* (MPO 2013) to identify strategies to improve transportation and access to services, health care, and employment for seniors, persons with disabilities, and individuals with low incomes. Some of the strategies to improve transportation services include expanding the transit service times, days, and destinations; adding *Americans with Disabilities Act* accessible bus stops; sharing resources among agencies; and increasing outreach to transit users.

The MPO prepared the *Rapid City Area Bicycle and Pedestrian Master Plan* (MPO 2011) to guide the development of a network of bicycle and pedestrian routes that link activity centers within Rapid City and provide opportunities for connections to surrounding areas. The plan calls for including appropriate bicycle and pedestrian access in design criteria for roadway construction projects.

The Rapid City Comprehensive Plan (Rapid City 2014) goals and policies pertaining to transportation include synchronizing the transportation network with land use needs, and expanding public transit service by enhancing bus stops, improving safety and functionality for elderly or disabled residents, and expanding transit service hours and connectivity between key community destinations.

3.13.1.3 Fall River County and Hot Springs Area

Fall River County does not have a transportation plan.

The Hot Springs Comprehensive Plan (Hot Springs n.d.) goals specific to transportation include:

- Provide for adequate road capacity to serve both current and future needs as new development occurs.
- Evaluate street improvement standards to encourage designs that will serve to reduce adverse effects on adjacent and abutting land uses.
- Improve signage along the main traffic corridors, indicating distance and direction to shopping and parking areas and areas of special interest.
- Improve north-south traffic flow along North River Street (through the lower town area).
- Provide financial resources for improvements and adequate maintenance of existing roads.
- Establish a street grade ordinance for new streets to avoid future problems.
- Institute a program to ensure that all main collector streets be resurfaced with durable all-weather hard-surfaced finish through the use of assessment districts or a bond issue.
- Require private developers to install curb and gutter and sidewalks during new development in major renovation areas.
- Monitor high accident intersections in Hot Springs and develop effective measures to reduce accidents in these areas.

3.13.2 Current Conditions

Roadways are classified by function based on the type of service the road provides for the traveling public. Road functions fall generally within four broad classifications, which are further defined by transportation planning agencies to reflect local conditions, such as in rural or urban areas. The road functional classifications in the VA BHHCS service area include:

- Principal (major) arterials: Divided, limited access facilities that serve higher traffic volumes and longer distance trips, connect major traffic generators, and are primarily interstates, freeways, or expressways. In rural areas, principal arterials also include two-lane, undivided highways with no access controls, and are primarily U.S. highways or major state highways.
- Minor arterials: Collect and distribute traffic from principal arterials to lower classified streets in urban areas, or link rural communities.
- Collectors: Provide traffic circulation and land access between urban residential and commercial areas, or serve intra-county travel in rural areas.

- Local roads: Provide lowest level of mobility and highest level of access to adjacent land; traffic speed is relatively slow.

3.13.2.1 VA BHHCS Service Area

The principal arterials crossing east-west through the VA BHHCS service area include Interstate 90 (I-90), U.S. Highway 18 (US-18), US-20, and US-26. The principal arterials crossing north-south through the service area include US-385, US-85, and South Dakota Highway 79 (SD-79). Examples of minor arterials in the rural area include SD-36, SD-44, SD-73, Nebraska Highway 2 (NE-2), and NE-27; and examples of collectors include SD-71 and SD-471. The major roadways in the VA BHHCS region are shown in Figure 3.13-1.

Average daily traffic (ADT) counts range between approximately 5,100 and 7,300 vehicles on the rural stretches of I-90 through the VA BHHCS service area, and approximately 3,400 and 9,000 vehicles on SD-79 between Hot Springs and Rapid City (SDDOT 2014). The ADT counts on the rural stretches of other principal arterials and minor arterials range between approximately 1,500 and 3,600 vehicles, with less than 1,000 vehicles on the collector roads (SDDOT 2014; NDOR 2014; WYDOT 2013). These counts increase near and through the rural communities.

Rural public transit services are available throughout the VA BHHCS service area that are 80 percent funded by the Federal Transit Administration and operated by local governments, transportation service providers, non-profit organizations, or Indian tribes. These services are generally operated on a 24-hour advance request and some provide regularly scheduled trips to the larger communities. Fares vary based on originating location and trip destination. Some of the rural public transit providers offer free or reduced fare services for Veterans and senior citizens. The VetTrans program offered by rural transit services assists Veterans, Veterans' families, and Veteran service organizations with their transportation needs for medical appointments, employment, and daily activities.

Commercial bus transportation in the VA BHHCS service area is limited to interstate routes. Commercial air transportation is available in Pierre, Rapid City, and Scottsbluff. Commercial taxi or private shuttle services are available in most communities within the service area.

The Disabled American Veterans (DAV) organization provides transportation for Veterans to VA medical facilities. The DAV has volunteer shuttle coordinators and drivers for Rapid City, Fort Meade, and other communities in the VA BHHCS service area to arrange transportation services to local CBOCs and to the medical facilities in Hot Springs and Fort Meade. The DAV estimates that they provide 200 to 250 rides per month throughout the VA BHHCS service area (Personal communication, Don Sealock, DAV Hospital Service Coordinator for BHHCS, with A. Woodruff, 7/15/15). Transportation services are funded by donation and federal grants and are free for injured or ill Veterans.

Figure 3.13-1. Major Roadways in VA BHHCS Service Area.

3.13.2.2 Rapid City Area

The principal arterials through Rapid City include I-90, I-190, US-16 (Mount Rushmore Road), US-16 Bypass (Elk Vale Road), and SD-44 (Jackson Boulevard and Omaha Street). Examples of minor arterials in the urban area of Rapid City include Main Street, St. Patrick Street, 5th Street, and Campbell Street. Examples of collectors include Skyline Drive and Minnesota Street.

The ADT counts on I-90 through the Rapid City area range between approximately 21,000 and 35,000 vehicles (SDDOT 2014). The ADT counts on the other principal arterials range between approximately 8,000 and 23,000 vehicles, with the highest counts between 25,000 and 30,000 vehicles in the downtown area on Omaha Street between East Boulevard and West Boulevard (MPO 2015). The ADT counts vary widely on the minor arterials and collectors based on the locations throughout the city, but generally range between 5,000 and 15,000 vehicles (MPO 2015).

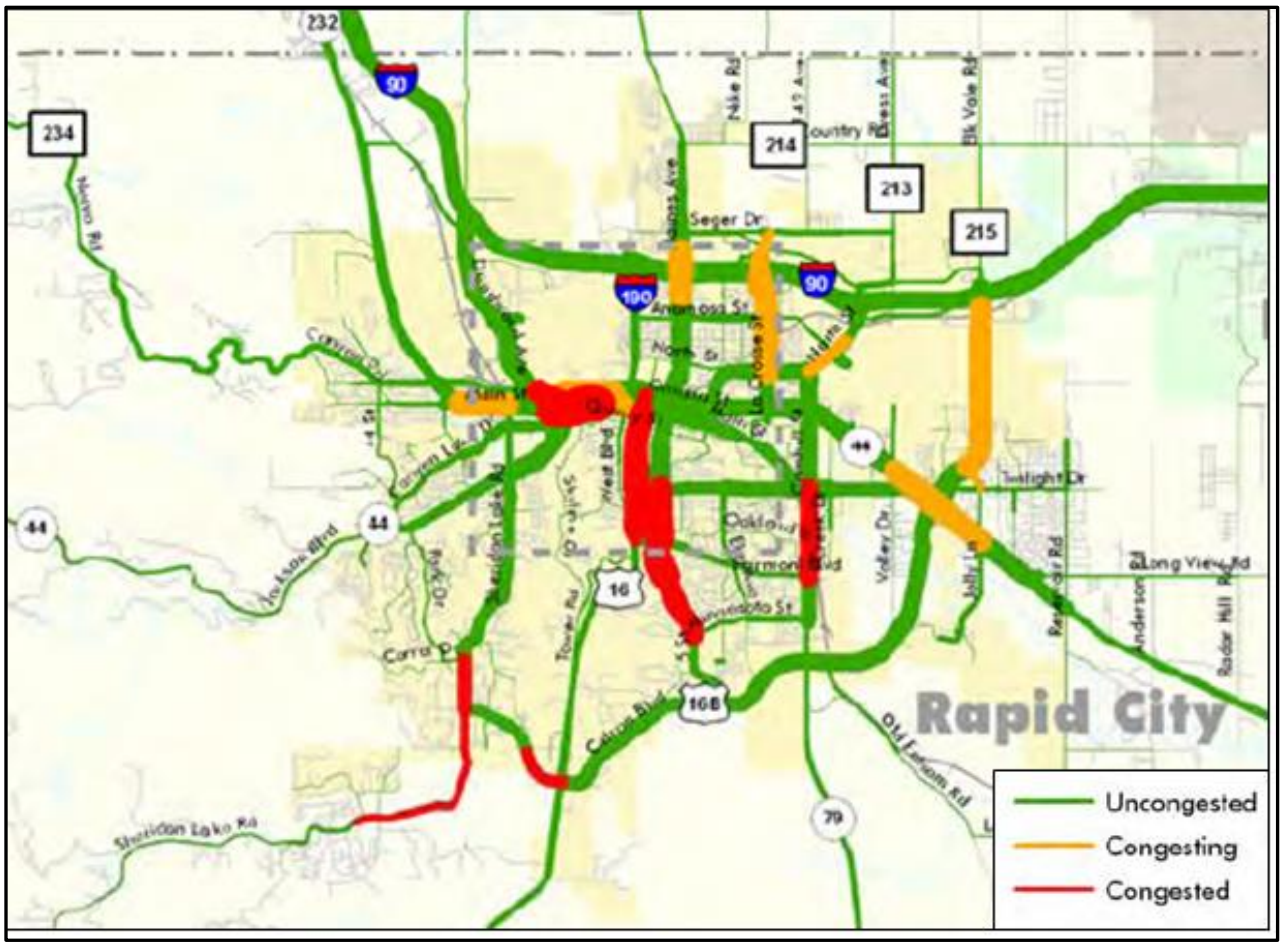
According to the long-range transportation plan, *RapidTRIP 2035,* the existing roadway network handles current traffic demands quite well, with sporadic congestion problems generally occurring at intersections with deficient signalization or where the addition of turn lanes could alleviate the congested condition. The baseline traffic congestion that was used for transportation planning is shown in Figure 3.13-2.

Research and data gathering for the 2015 update of *RapidTRIP 2035* indicated that residents and employers are satisfied overall with the quality of roads and highways in the Rapid City area, including road maintenance and improvements. There was some dissatisfaction with congestion in specific locations, including Sheridan Lake Road, SD-44 from the airport, and in the vicinity of schools (BBC 2014).

Congestion during morning and evening peak hours will increase based on residential growth in the south and southwest areas of Rapid City. The transportation facility improvements through 2015 with projected 2035 traffic increases will likely result in peak hour congestion on north-south principal and minor arterials, as shown in Figure 3.13-3.

Source: MPO 2010.

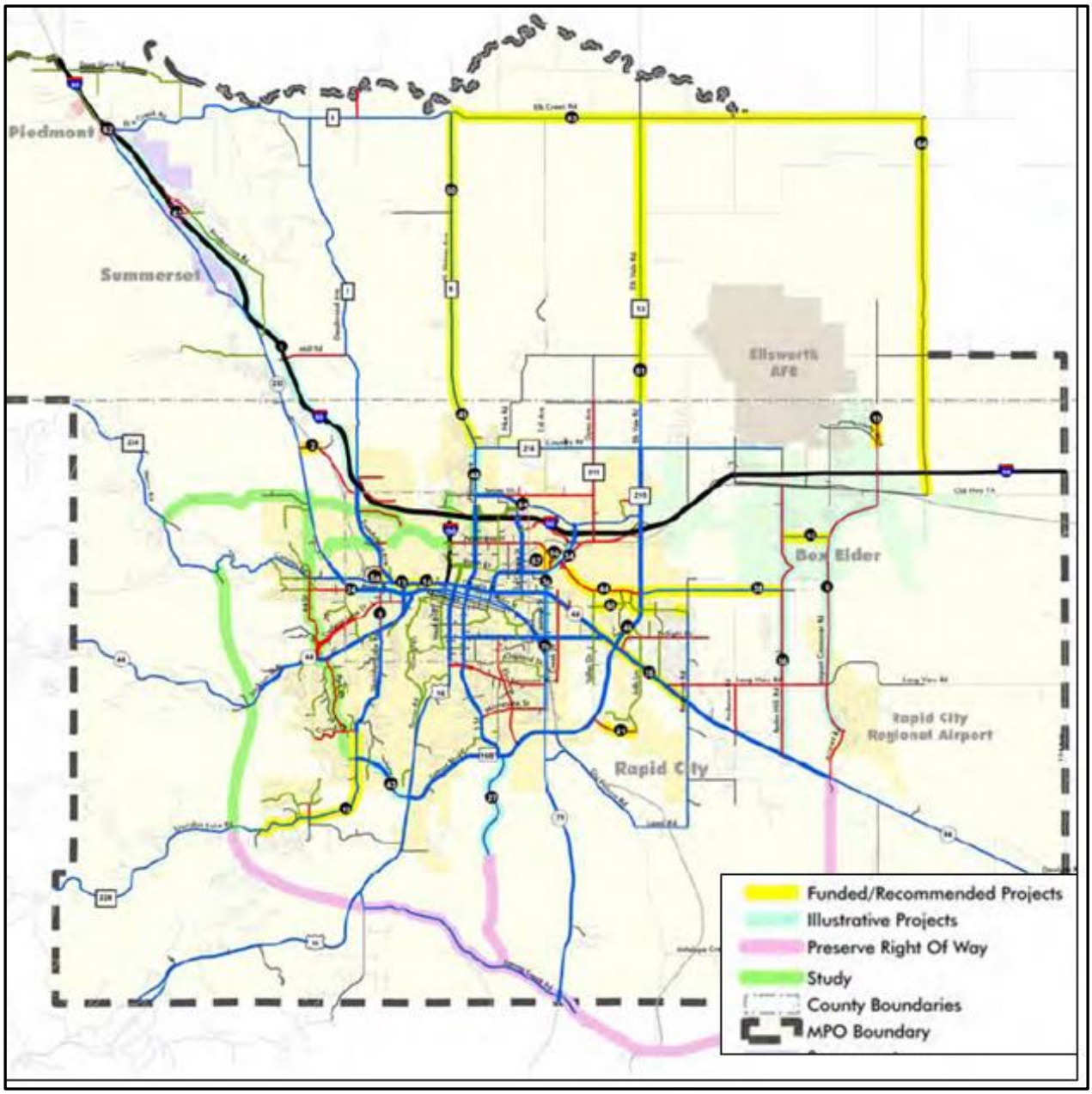
Figure 3.13-2. Traffic Congestion in Rapid City.



Source: MPO 2010.

Figure 3.13-3. Future Congestion with 2015 Transportation Improvements and 2035 Traffic.

The Rapid City Area MPO adopted a future "financially constrained" roadway plan in *RapidTRIP 2035* that identified projects and studies needed to improve transportation capacity. The plan includes recommended (funded) projects, but it is financially constrained because it also includes illustrative (unfunded) projects, studies to determine feasibility of transportation improvement projects, and right-of-way preservation. Figure 3.13-4 shows this future roadway plan. Although this future roadway plan would not address all anticipated congestion with 2035 traffic, it would be expected to improve conditions in the Rapid City area, as shown in Figure 3.13-5.



Source: MPO 2010.

Figure 3.13-4. Future 2035 Financially Constrained Roadway Plan.

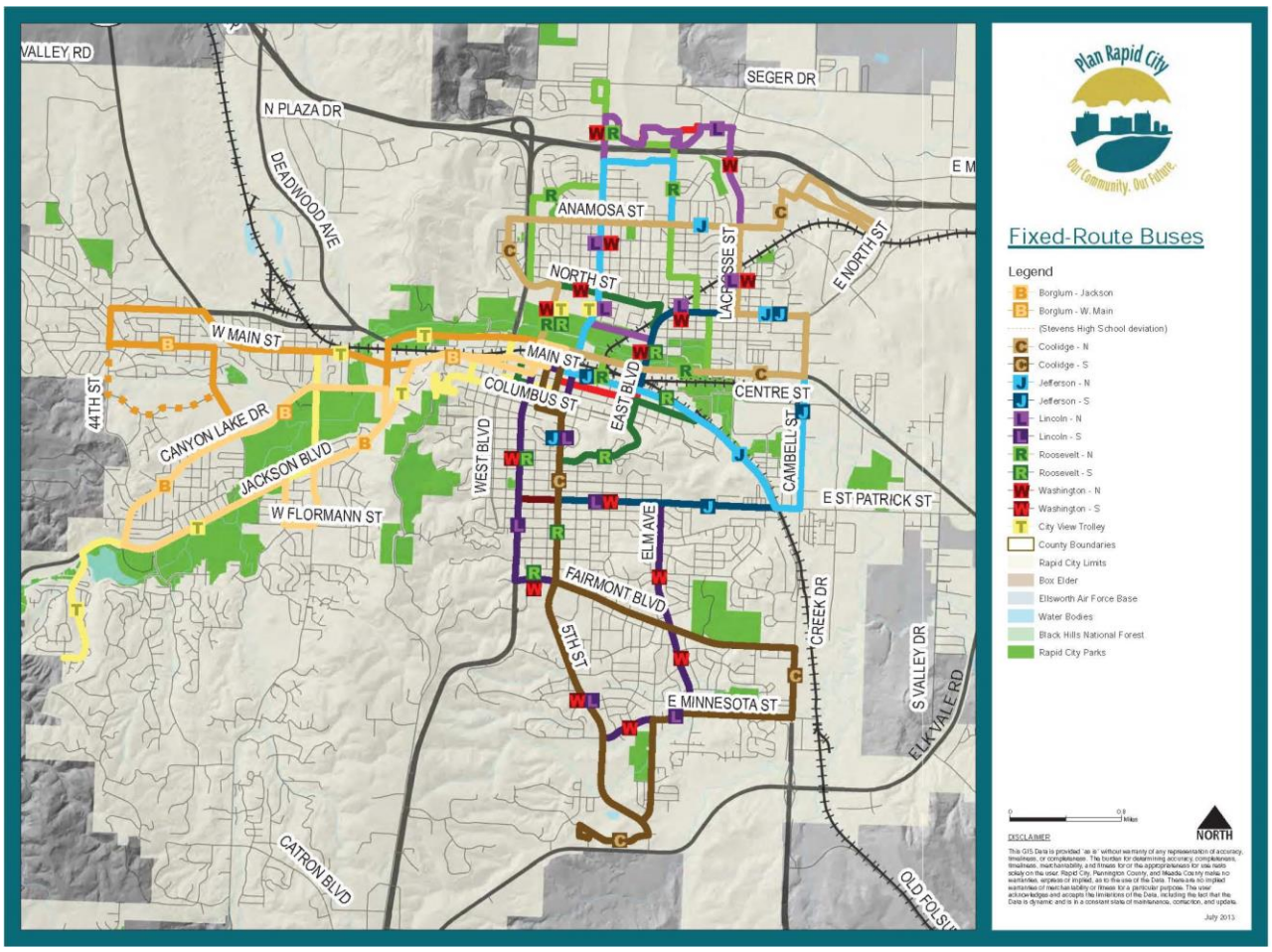
Source: MPO 2010.

Figure 3.13-5. Future Congestion with 2035 Financially Constrained Roadway Plan.

Public transportation options in Rapid City include a fixed bus route system (RapidRide), para-transit service (Dial-A-Ride) for passengers with disabilities, and trolley service (City View Trolley) between popular tourist destinations. These services are operated by Rapid Transit System.

Dial-A-Ride provides curb-to-curb or door-to-door transportation for local residents who qualify for services under the *Americans with Disabilities Act*. The service operates within the corporate limits of Rapid City on Monday through Friday from 6:20 a.m. to 5:50 p.m. and on Saturday from 8:00 a.m. to 7:00 p.m., excluding holidays. Service must be scheduled with Rapid Transit System one day prior to the passenger's planned trip.

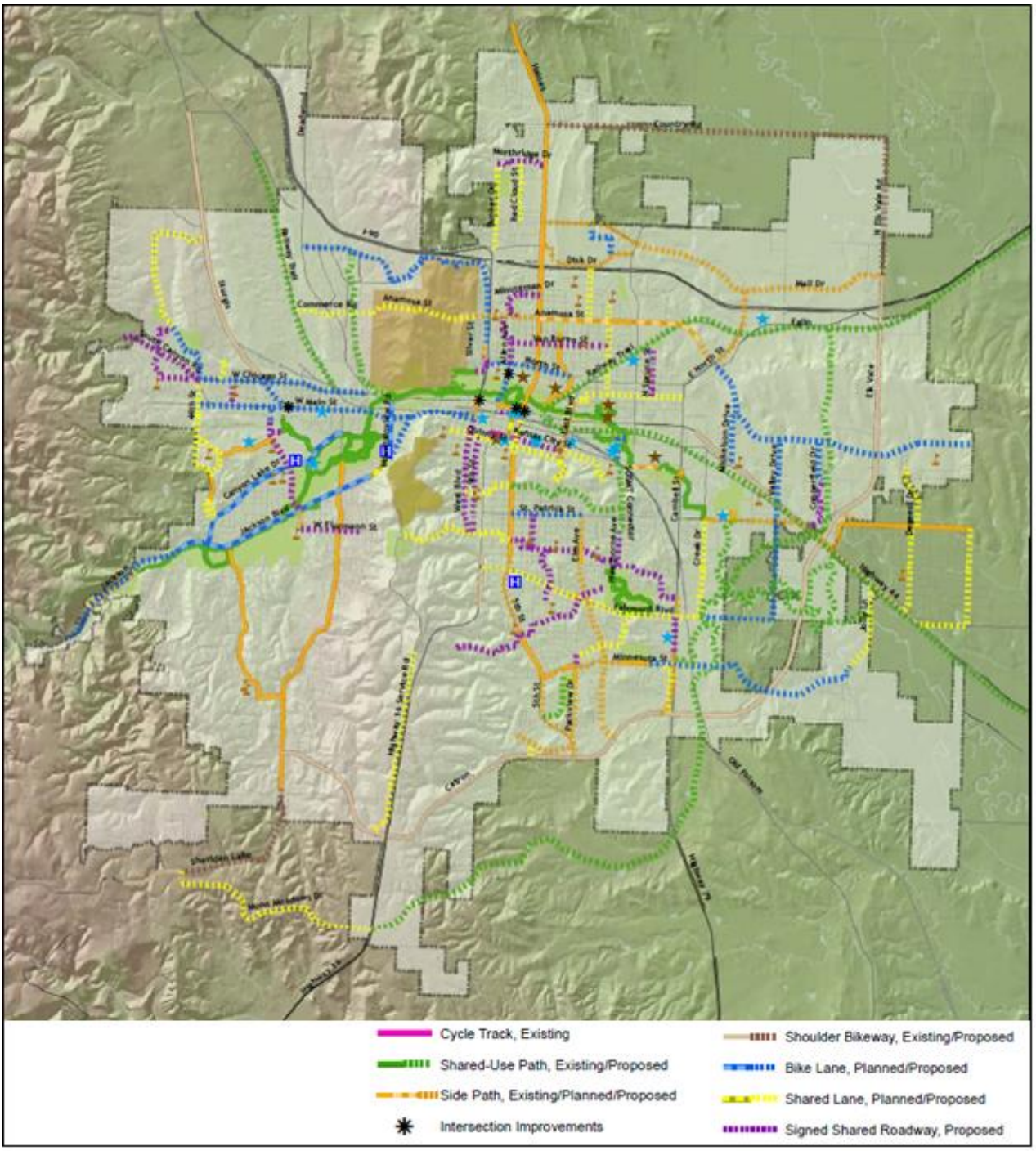
RapidRide operates year-round on six different fixed routes from the Milo Barber Transportation Center located at 333 6th Street, and on two school routes during the school year. The service operates on Monday through Friday from 6:20 a.m. to 5:50 p.m. and on Saturday from 9:50 a.m. to 4:40 p.m., excluding holidays. The route system map is shown in Figure 3.13-6.



Source: Rapid City 2014.

Figure 3.13-6. RapidRide Bus System Route Map.

The *Bicycle and Pedestrian Master Plan* is intended to make bicycling and walking a more viable mode of transportation in the Rapid City area. A network of on-street and off-street bicycle and pedestrian facilities will provide connections to destinations throughout the city, and will integrate with the bus network to increase the distance that can be comfortably traveled by a pedestrian or bicyclist. The locations of existing and proposed bikeways are shown in Figure 3.13-7.



Source: MPO 2011.

Figure 3.13-7. Existing and Proposed Bikeways.

3.13.2.3 Hot Springs Area

The principal arterials through the Hot Springs area include SD-79, US-18/US-385, US-18 Bypass (Indianapolis Avenue)/US-18, US-18 (Chicago Street), and US-385 (River Street). University Avenue (US-18) is a minor arterial, and Galveston Avenue, SD-71, Argyle Road, and a short segment of 6th Street are collector roads. The remaining street network throughout Hot Springs is rural local roads.

The ADT counts on the principal arterials range from approximately 4,900 to 5,700 vehicles on the stretch of US-18/US-385 from SD-79 through Hot Springs (SDDOT 2014). The ADT counts on US-18 between Hot Springs and Edgemont range from 1,940 to 1,785 vehicles, and from 1,600 to 120 vehicles on SD-71 between Hot Springs and Ardmore at the Nebraska state line. The ADT count on US-385 north of Hot Springs is less than 1,400 vehicles.

The main travel route through Hot Springs on Chicago Street and River Street can experience congestion with additional cars, tour buses, and recreational vehicles during the peak tourist season.

Rural public transit services are available in Hot Springs and Fall River County. Prairie Hills Transit, a non-profit organization, provides public transportation within Hot Springs and service to Rapid City, Custer, and Edgemont via disability accessible vehicles. The transportation service is available Monday through Friday from 7:00 a.m. to 4:00 p.m. with a 24-hour advance request.

Bicycle and pedestrian routes in the Hot Springs area include the Freedom Trail that parallels Fall River through the city, and the George S. Mickelson Trail that crosses the western part of Fall River County.

3.14 Utilities

Utilities are defined as services provided to the public, often but not always distributed by community-wide infrastructure. Specific utilities identified and evaluated in this EIS include:

- Water treatment and supply
- Wastewater treatment
- Electricity supply
- Heating supply (natural gas or heating oil)
- Communications (telephone and data)

3.14.1 Regulatory and Policy Framework

Three *Energy Policy Acts* have been passed, which include provisions for conservation and energy development, use of alternative fuels, increased fuel economy requirements, biofuel development, and changes to indoor lighting, with grants and tax incentives for both renewable and non-renewable energy.

On March 19, 2015, the White House issued Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*. This order stated that federal agencies should prioritize reducing energy use and cost, then on finding renewable or alternative energy solutions; propose greenhouse gas emission reduction targets; beginning in FY 2016, where life-cycle cost-effective, implement measures specified in the order related to building energy use, renewable energy sourcing, water use, decreasing fleet inventories and mobile source greenhouse gas emissions, use of recycled and sustainably produced materials; advance waste prevention and pollution prevention; and promote electronics stewardship. Agencies, including VA, were previously required to develop and implement strategic sustainability performance plans (SSPPs) in accordance with Executive Order 13514, which was revoked by Executive Order 13693. VA's existing SSPP identifies sustainability goals and defines strategies for achieving these goals, consistent with VA's Sustainability Management Policy. The SSPP includes goals for sustainable buildings, water use efficiency, greenhouse gas reductions, and renewable energy usage (VA 2014). A draft 2015 SSPP is in review at this time of this publication (Email from B. Carlson, July 23, 2015).

3.14.2 Current Conditions

3.14.2.1 Water Treatment and Supply

Water is supplied to the Hot Springs VAMC from a natural spring located approximately one-half mile northwest of the VAMC campus. Water is diverted from the spring to a cistern located at the VAMC Boiler Plant (Building 18) through a buried eight-inch diameter pipe via gravity. Water is pumped from the cistern via two pumps to two water towers (980,000 gallons total capacity) through buried eight-inch and six-inch diameter pipe. Typically, one pump is operated at a time, but both pumps can be operated if necessary. Water is treated for potable use with gaseous chlorine. Water uses at the VAMC include potable use, heating, fire protection, and landscape irrigation. Water diverted to the cistern in excess of VAMC demand is discharged to Fall River.

South Dakota administers water rights under the Doctrine of Prior Appropriation, where the priority of each water right is established based on the date of filing an application (priority date) –

older rights are senior to more recent rights. VA holds two water rights licenses authorizing its use of the spring water supply. Vested Right Water License No. 2420-2 appropriates 1.56 cubic feet per second (700 gallons per minute) of water from the spring. This water right has a priority date of January 1, 1907 (SD 1999). Water License No. 2421-2 appropriates an additional 1.23 cubic feet per second (551 gallons per minute) of water from the spring. This water right has a priority date of March 17, 1999 (SD 2011).

The Hot Springs VAMC is also connected to the Hot Springs municipal water system for backup supply.

The Hot Springs VAMC reported a total water consumption of 24,284,000 gallons in FY 2013 and 26,103,000 gallons in FY 2014, with greater consumption during the summer months when landscape irrigation is required (VA 2015). Figure 3.14-1 depicts the monthly water consumption for the Hot Springs VAMC.

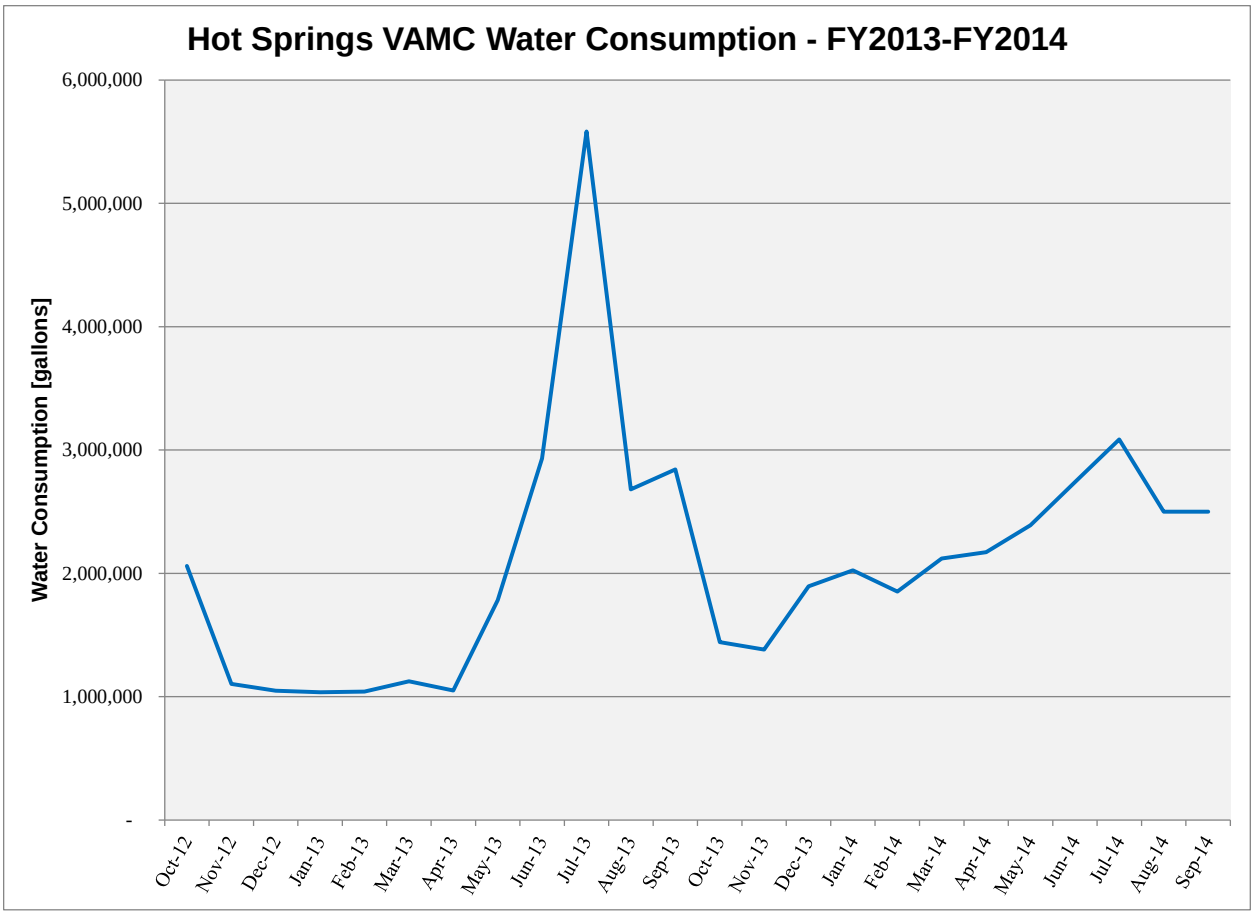


Figure 3.14-1. Hot Springs VAMC Water Consumption, FY 2013 – FY 2014.

The Rapid City CBOC is connected to the Rapid City municipal water system for water supply. Water uses at the CBOC include potable use and fire protection. The CBOC is one tenant located within a leased facility, and water consumption attributable only to CBOC operations is not available.

3.14.2.2 Wastewater Treatment

The Hot Springs Wastewater Treatment Plant treats wastewater generated throughout Hot Springs, including wastewater generated at the Hot Springs VAMC. The treatment facility design flow is 700,000 gallons per day (EPA 2014a), and the average facility flow is 350,000 gallons per day (Bastian 2014). Treated water is discharged to Fall River. The Hot Springs City Engineer noted that concerns have been raised regarding the potential for anaerobic conditions developing in the treatment plant clarifier if average flows are significantly lower than the design flow. However, such conditions have not yet developed at the current average flow, and it is unknown at what average flow such conditions would develop (Bastian 2014).

Wastewater generation from the Hot Springs VAMC is metered at two locations where wastewater is discharged to the city wastewater collection and treatment system. The Hot Springs VAMC reported a total wastewater generation of approximately 13,200,000 gallons in FY 2013 and approximately 10,100,000 gallons in FY 2014 (VA 2015), or approximately nine percent of the Hot Springs Wastewater Treatment Plant average facility flow. Figure 3.14-2 depicts the monthly wastewater generation for the Hot Springs VAMC.

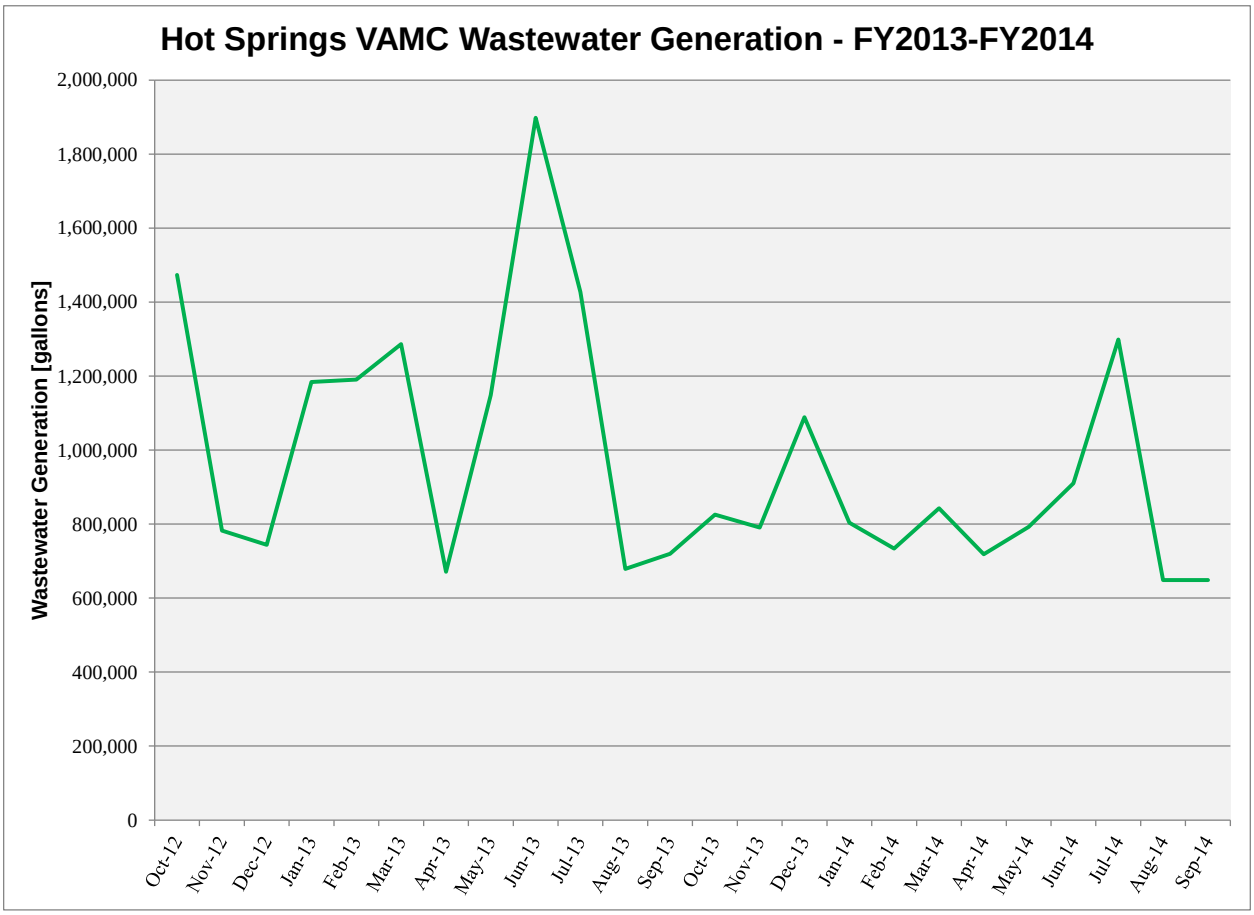


Figure 3.14-2. Hot Springs VAMC Wastewater Generation, FY 2013 – FY 2014.

The Rapid City Wastewater Treatment Plant treats wastewater generated throughout Rapid City, including wastewater generated at the Rapid City CBOC. The treatment facility processed 3.5 billion gallons of wastewater in 2011 (averaging 9.6 million gallons per day from over 20,000 accounts) (Rapid City 2011). Treated water is discharged to Rapid Creek (EPA 2014b). The Rapid City CBOC is one tenant located within a leased facility, and wastewater generation attributable only to CBOC operations is not available. However, the Rapid City CBOC operations are an insignificant contributor to the overall wastewater inflow at the Rapid City Wastewater Treatment Plant.

3.14.2.3 Electricity Supply

Electricity service at both the Hot Springs VAMC and the Rapid City CBOC is provided by Black Hills Power, a subsidiary of Black Hills Corporation. Black Hills Power provides electricity service to nearly 70,000 customers in 20 different communities throughout western South Dakota, northern Wyoming, and southeastern Montana (BHP 2014a). Black Hills Power has full or partial ownership in 11 power generating facilities in the region (BHP 2014b).

The Hot Springs VAMC consumed 6,409,513 kilowatt-hours in FY 2013 and 6,275,920 kilowatt-hours in FY 2014 (VA 2015). The operational square footage of the Hot Springs VAMC is 464,000 square feet, meaning the average annual electricity consumption for the facility was 13.8 kilowatt-hours per square foot. This electricity consumption rate is similar to the electricity consumption rate of 13.2 kilowatt-hours per square foot for all buildings in the Midwest census region (EIA 2003). Figure 3.14-3 depicts the monthly electricity consumption for the Hot Springs VAMC.

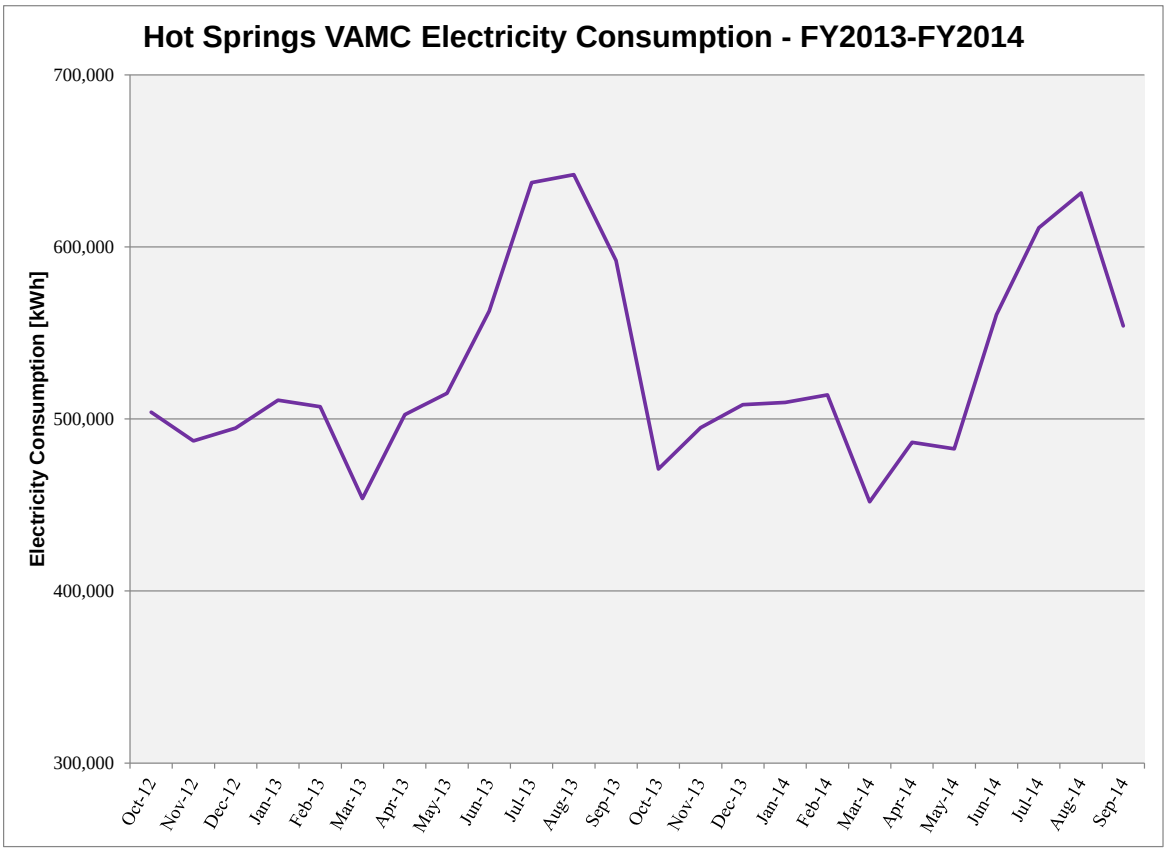


Figure 3.14-3. Hot Springs VAMC Electricity Consumption, FY 2013 – FY 2014.

The Rapid City CBOC is one tenant located within a leased facility, and electricity consumption attributable only to CBOC operations is not available.

3.14.2.4 Heating Supply

The Hot Springs VAMC operates three 500-horsepower steam boilers to provide facility heating. The boilers utilize #2 fuel oil supplied by Harm's Oil in Aberdeen, SD. Fuel oil is stored in three 39,590-gallon ASTs. The Hot Springs VAMC consumed 397,444 gallons of #2 fuel oil for steam generation in FY 2013 and 438,765 gallons in FY 2014 (VA 2015). Figure 3.14-4 depicts the monthly fuel oil consumption for the Hot Springs VAMC. The majority of facilities and residences in Hot Springs use either electricity or propane for heating purposes (City-Data 2014a).

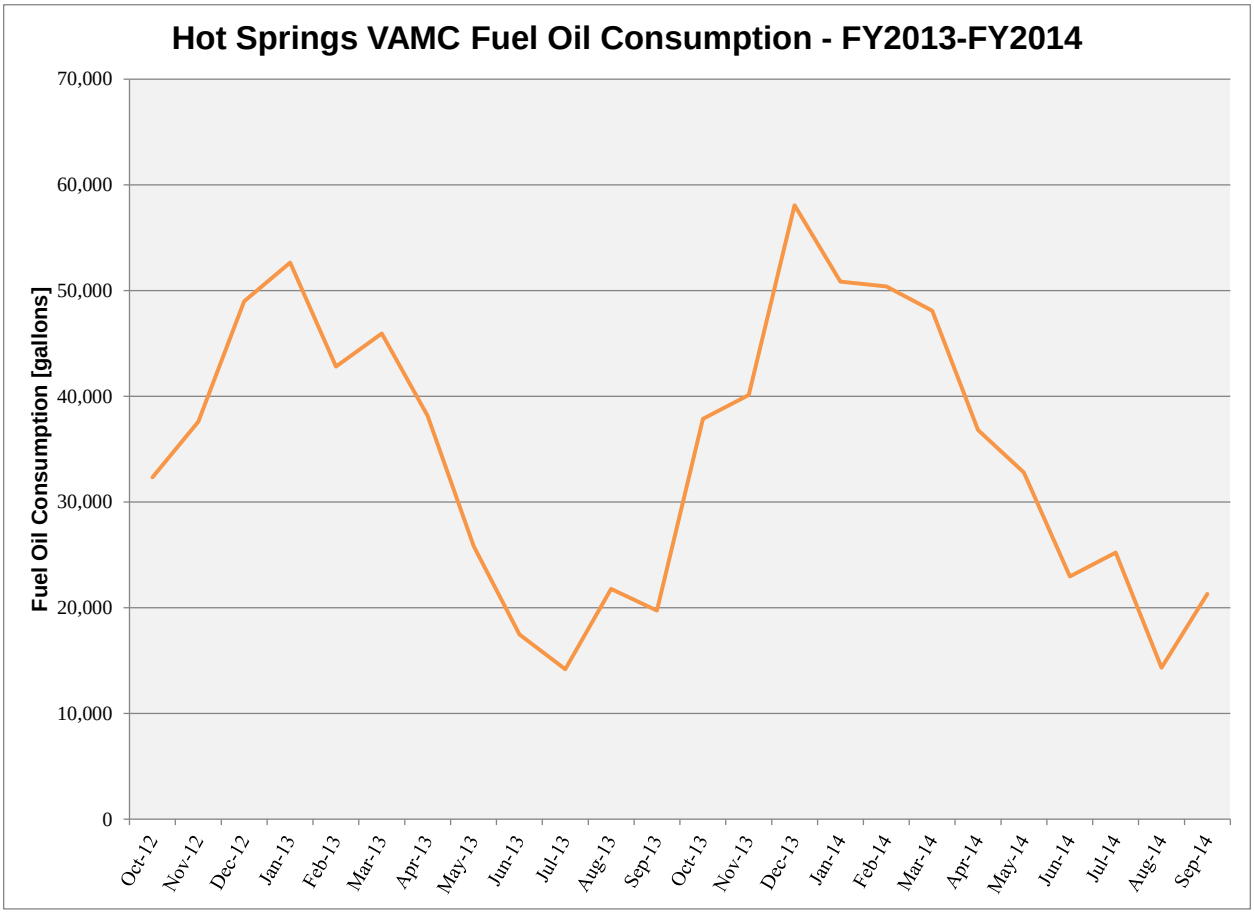


Figure 3.14-4. Hot Springs VAMC Fuel Oil Consumption, FY 2013 – FY 2014.

The Rapid City CBOC is one tenant located within a leased facility, and natural gas consumption for heating purposes attributable only to CBOC operations is not available. The majority of facilities and residences in Rapid City use natural gas for heating purposes (City-Data 2014b), supplied by Montana-Dakota Utilities Company.

3.14.2.5 Communications

The Hot Springs VAMC currently receives telephone, television, and internet service from Golden West Telecommunications. Golden West Telecommunications provides services to much of the southwestern South Dakota area, including Hot Springs. Communications services are available throughout the area.

As the Rapid City area is a larger metropolitan area than the Hot Springs area, a greater number of telephone, television, and internet providers service the area, allowing consumers a choice in service providers. Communications services are available throughout the area.

3.15 Environmental Justice

Environmental justice applies to potential adverse environmental impacts disproportionately borne by minority or low income populations. Environmental justice includes protection from health and safety risks if the potential for such risks are driven by an environmental impact. Related to environmental justice is any disproportionate risk to children, regardless of minority or income status, from environmental health and safety impacts.

3.15.1 Regulatory and Policy Framework

3.15.1.1 Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 requires each federal agency identify and address, as appropriate, the disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. These provisions also apply fully to programs involving Native Americans. The executive order is also intended to promote nondiscrimination in federal programs, policies, and activities that affect human health and the environment, and to provide minority and low-income communities with access to public information and public participation.

3.15.1.2 Council on Environmental Quality Guidance

CEQ prepared *Environmental Justice Guidance under the National Environmental Policy Act* (CEQ 1997) for performing environmental justice analyses as part of the NEPA process. The guidance provides definitions, thresholds, and overall methodology for environmental justice analyses, including the following:

- ***Minority.*** Individuals who identify themselves as American Indian or Alaska Native, Hispanic or Latino, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, some other race, or member of two or more races. For purposes of this EIS, the definition has been updated from the population groups listed in CEQ (1997) to include groups currently listed on the U.S. Census form.
- ***Minority population.*** Minority populations should be identified in a NEPA document where either (a) the minority population of an affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. For purposes of this EIS, "meaningfully greater" is defined as more than 10 percentage points higher than the general population of the geographic unit of the VA BHHCS service area in the states of South Dakota, Nebraska, and Wyoming.
- ***Low-income population.*** Low-income populations in an affected area are identified based on the annual statistical poverty thresholds from the U.S. Census Bureau's Current Population Reports, Series P60, Income and Poverty. For purposes of this EIS, a "low-income population" is defined similarly to a minority population in terms of percentages of persons in the affected area.

3.15.1.3 Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

Under Executive Order 13045, each federal agency must identify and assess environmental health risks and safety risks that may disproportionately affect children, and ensure that its actions address disproportionate risks to children that result from environmental health risk or safety risks.

3.15.1.4 Interagency Environmental Justice Memorandum of Understanding and VA Strategy

In 2011, VA and 16 other federal agencies signed the *Memorandum of Understanding on Environmental Justice and Executive Order 12898* (Holder et al. 2011). Combined, Executive Order 12898 and the Memorandum of Understanding:

- Require each covered and participating agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."
- Declare the continued importance of identifying and addressing environmental justice considerations in agency programs, policies, and activities as provided in Executive Order 12898.
- Renew the process for agencies to provide environmental justice strategies and implementation progress reports.
- Establish structures and procedures to ensure that the Environmental Justice Interagency Working Group operates effectively and efficiently.
- Require development or review/update of each agency's environmental justice strategy.
- Require agencies to provide opportunities for the public to submit comments and recommendations relating to the agency's environmental justice strategy, annual implementation progress reports, and ongoing efforts to incorporate environmental justice principles into its programs, policies, and activities.

The VA Environmental Justice Strategy is a dynamic framework intended to be a living document. This strategy was drafted as an initial step in an ongoing effort to ensure integration of environmental justice objectives into VA's activities. VA has adopted the following three goals for its environmental justice strategy:

- Identify and address VA programs, policies, and activities that may have disproportionately high and adverse human health or environmental effects on minority, low-income, or tribal populations.
- Ensure transparent and accessible information sharing and promote public participation for programs, activities, and operations that have potential environmental justice implications.
- Identify areas to improve research and data collection methods.

3.15.2 Current Conditions

The affected area for identifying environmental justice populations based on minority and low-income status consists of the counties in the VA BHHCS service area, which covers western South Dakota, northwestern Nebraska, and eastern Wyoming (see Figure 1.1-1). The counties are listed in Tables 3.15-1 through 3.15-6.

Data on populations of concern and poverty status for purpose of identifying minority and low-income composition in the affected area are from the 2010 U.S. Census, with income adjusted for inflation to 2013 dollars. Poverty thresholds are updated annually for inflation by the U.S. Census Bureau and are used for calculating official poverty population statistics. The dollar value thresholds vary by family size and composition (adults and children), but do not vary geographically. The Census Bureau calculates a weighted average poverty threshold based on the relative number of families in each size and composition. The weighted average provides a general sense of the poverty level. For purposes of this EIS, the census categories of "all families" and "all people" are used, along with the weighted average poverty threshold for one and four persons.

3.15.2.1 Demographic Conditions: VA BHHCS Service Area in South Dakota

Table 3.15-1 presents demographic data for each of the counties in the VA BHHCS service area in South Dakota. The counties for which minority populations are identified based on the guidance in CEQ (1997) are Bennett, Corson, Dewey, Jackson, Mellette, Oglala Lakota (previously Shannon), Todd, and Ziebach. These counties represent the Indian reservations, and accordingly, these populations consist primarily of Native American people (Census 2010).

As shown in the table, minority persons in the VA BHHCS service area in South Dakota are approximately 27.9 percent of the population. In addition to the eight counties listed above, Lyman County's minority percentage is meaningfully greater (10 percentage points higher) than the service area. For comparison, the number of minority persons in the State of South Dakota is approximately 17.6 percent of the total population. The eight counties listed above along with Lyman County have minority population percentages that are meaningfully greater than the state's percentage.

The number of children, defined in the U.S. Census as persons 18 years and younger, varies among the counties. The percentage of children in the total population in the VA BHHCS service area and the State of South Dakota is fairly similar at approximately 25 percent.

Table 3.15-1. Populations of Concern, South Dakota Counties in VA BHHCS Service Area.

County	Total Population	Minority		Children	
		Number of Persons	Percent Total Population	Number of Persons	Percent Total Population
Bennett	3,431	2,341	68.2%	1,189	34.7%
Butte	10,110	890	8.8%	2,527	25.0%
Corson	4,050	2,952	72.9%	1,390	34.3%
Custer	8,216	661	8.0%	1,630	19.8%
Dewey	5,301	4,284	80.8%	1,803	34.0%
Fall River	7,094	966	13.6%	1,334	18.8%
Haakon	1,937	120	6.2%	431	22.3%
Harding	1,255	71	5.7%	292	23.3%
Hughes	17,022	2,979	17.5%	4,017	23.6%
Jackson	3,031	1,774	58.5%	997	32.9%
Jones	1,006	57	5.7%	225	22.4%
Lawrence	24,097	1,962	8.1%	4,720	19.6%
Lyman	3,755	1,606	42.8%	1,106	29.5%
Meade	25,434	2,802	11.0%	6,415	25.2%
Mellette	2,048	1,264	61.7%	661	32.3%
Oglala Lakota	13,586	13,487	99.3%	5,342	39.3%
Pennington	100,948	20,642	20.4%	24,837	24.6%
Perkins	2,982	112	3.8%	639	21.4%
Stanley	2,966	317	10.7%	721	24.3%
Todd	9,612	8,918	92.8%	3,857	40.1%
Tripp	5,644	1,015	18.0%	1,323	23.4%
Ziebach	2,801	2,278	81.3%	1,095	39.1%
Total for VA BHHCS service area in South Dakota	256,326	71,498	27.9%	66,551	25.9%
South Dakota	844,877	148,698	17.6%	207,840	24.6%

Source: Census 2010.

Table 3.15-2 shows the percentage of families and individuals living below the poverty level in the South Dakota counties in the VA BHHCS service area. Bennett, Corson, Dewey, Mellette, Oglala Lakota, Todd, and Ziebach Counties have families or persons living below the poverty level at a meaningfully greater percentage (10 percentage points higher) than the VA BHHCS service area in South Dakota and the State of South Dakota. The average percentage of families and persons living below the poverty level in the VA BHHCS service area in South Dakota is not meaningfully greater than the state's percentage.

Table 3.15-2. Poverty Information, South Dakota Counties in VA BHHCS Service Area.

County	Families Below Poverty Level[1]	Persons Below Poverty Level[1]
Bennett	30.3%	39.3%
Butte	7.2%	10.2%
Corson	32.1%	44.2%
Custer	5.1%	10.3%
Dewey	24.8%	33.3%
Fall River	12.1%	17.4%
Haakon	12.7%	14.9%
Harding	14.6%	17.6%
Hughes	6.0%	11.4%
Jackson	14.5%	22.3%
Jones	11.0%	14.4%
Lawrence	8.2%	14.4%
Lyman	13.6%	17.0%
Meade	8.5%	11.0%
Mellette	27.7%	36.6%
Oglala Lakota	45.4%	53.2%
Pennington	8.9%	13.5%
Perkins	6.9%	14.1%
Stanley	7.1%	10.2%
Todd	39.1%	44.6%
Tripp	16.1%	20.6%
Ziebach	39.3%	42.3%
Aggregate average for VA BHHCS service area in South Dakota	18.3%	23.9%
South Dakota	9.1%	14.1%
Weighted average poverty threshold	$23,834[2]	$11,888[3]

[1] Based on 2013 inflation adjusted dollars.
[2] Four-person family.
[3] One person.
Source: Census 2013a, 2013b.

3.15.2.2 Demographic Conditions: VA BHHCS Service Area in Nebraska

Table 3.15-3 presents demographic data for each of the counties in the VA BHHCS service area in Nebraska. Minority persons do not exceed 50 percent of the population in any county. As shown in the table, minority persons in the VA BHHCS service area in Nebraska are approximately 24.6 percent of the population, which is approximately the same as the State of Nebraska at 24.9 percent. No county has a percentage of minority persons that is meaningfully greater (10 percentage points higher) than the VA BHHCS service area in Nebraska. However, Scotts Bluff County's minority percentage is meaningfully greater than the state's percentage.

The percentage of children in the total population in the VA BHHCS service area and the State of Nebraska are similar at approximately 24 percent.

Table 3.15-3. Populations of Concern, Nebraska Counties in VA BHHCS Service Area.

		Minority		Children	
County	Total Population	Number of Persons	Percent Total Population	Number of Persons	Percent Total Population
Box Butte	11,308	2,316	20.5%	2,849	25.2%
Cherry	5,713	628	11.0%	1,265	22.1%
Dawes	9,182	1,280	13.9%	1,766	19.2%
Garden	2,057	150	7.3%	382	18.6%
Grant	614	17	2.8%	115	18.7%
Morrill	5,042	1,129	22.4%	1,210	24.0%
Scotts Bluff	36,970	12,448	33.7%	9,152	24.8%
Sheridan	5,469	1,011	18.5%	1,293	23.6%
Sioux	1,311	103	7.9%	293	22.3%
Total for VA BHHCS service area in Nebraska	77,666	19,082	24.6%	18,325	23.6%
Nebraska	1,868,516	377,440	20.2%	465,260	24.9%

Source: Census 2010.

Table 3.15-4 shows the percentage of families and individuals living below the poverty level in the Nebraska counties in the VA BHHCS service area. None of the counties have families or persons living below the poverty level at a meaningfully greater percentage (10 percentage points higher) than the VA BHHCS service area. However, the percentage of individuals below the poverty level in Box Butte County is meaningfully greater than the state's percentage.

Table 3.15-4. Poverty Information, Nebraska Counties in VA BHHCS Service Area.

County	Families Below Poverty Level[1]	Persons Below Poverty Level[1]
Box Butte	17.3%	23.9%
Cherry	6.1%	13.0%
Dawes	7.8%	19.3%
Garden	7.2%	9.4%
Grant	10.3%	18.8%
Morrill	10.9%	13.8%
Scotts Bluff	10.2%	13.7%
Sheridan	12.9%	16.0%
Sioux	7.7%	9.3%
Aggregate average for VA BHHCS service area in Nebraska	10.04%	15.24%
Nebraska	8.6%	12.8%
Weighted average poverty threshold	$23,834[2]	$11,888[3]

[1] Based on 2013 inflation adjusted dollars.
[2] Four-person family.
[3] One person.
Source: Census 2013a, 2013b.

3.15.2.3 Demographic Conditions: VA BHHCS Service Area in Wyoming

Table 3.15-5 presents demographic data for each of the counties in the VA BHHCS service area in Wyoming. Minority persons do not exceed 50 percent of the population in any county. As shown in the table, minority persons in the VA BHHCS service area in Wyoming are approximately 6.1 percent of the population. No county has a percentage of minority persons that is meaningfully greater (10 percentage points higher) than the VA BHHCS service area in Wyoming. The minority population percentages of each county and the VA BHHCS service area are all less than the State of Wyoming's percentage.

Table 3.15-5. Populations of Concern, Wyoming Counties in VA BHHCS Service Area.

County	Total Population	Minority		Children	
		Number of Persons	Percent Total Population	Number of Persons	Percent Total Population
Crook	7,083	340	4.8%	1,689	23.8%
Niobrara	2,484	139	5.9%	470	18.9%
Weston	7,208	539	7.5%	1,573	21.8%
Total for VA BHHCS service area in Wyoming	16,775	1,018	6.1%	3,732	22.2%
Wyoming	582,658	98,469	16.9%	137,507	23.6%

Source: Census 2010.

The percentages of children in the total population in the VA BHHCS service area and the State of Wyoming are similar at approximately 22 to 23 percent.

Table 3.15-6 shows the percentage of families and individuals living below the poverty level in the Wyoming counties in the VA BHHCS service area. None of the counties have families or persons living below the poverty level at a meaningfully greater percentage (10 percentage points higher) than the VA BHHCS service area in Wyoming or the State of Wyoming. The percentages of families and persons living below the poverty level in the VA BHHCS service area in Wyoming is the same as the State of Wyoming.

Table 3.15-6. Poverty Information, Wyoming Counties in VA BHHCS Service Area.

County	Families Below Poverty Level[1]	Persons Below Poverty Level[1]
Crook	4.3%	6.7%
Niobrara	8.8%	16.3%
Weston	9.0%	11.2%
Aggregate average for VA BHHCS service area in Wyoming	7.4%	11.4%
Wyoming	7.7%	11.5%
Weighted average poverty threshold	$23,834[2]	$11,888[3]

[1] Based on 2013 inflation adjusted dollars.
[2] Four-person family.
[3] One person.
Source: Census 2013a, 2013b.

3.16 Other Past, Present, and Reasonably Foreseeable Projects

This section identifies other past, present and reasonably foreseeable projects and actions that are considered in the evaluation of cumulative impacts. Data sources include:

- VA BHHCS
- U.S. Forest Service, Black Hills National Forest
- South Dakota Department of Environment and Natural Resources
- South Dakota Public Utility Commission
- South Dakota Department of Transportation
- Nuclear Regulatory Commission (EIS for the Dewey-Burdock Project in Custer and Fall River Counties. Supplement to the Generic EIS for In-Situ Leach Uranium Mining Facilities. January 2014)
- EPA databases for other recent EISs within South Dakota
- In-person observations

Table 3.16-1 lists the projects identified during this process.

Table 3.16-1. Projects Considered in Cumulative Impacts Analysis.

Project Description
Expansion of State Veterans Home in Hot Springs 2500 Minnekahta Avenue, Hot Springs, SD Construction of new 133,000 ft^2 two-story building at the Michael J. Fitzmaurice South Dakota Veteran's Home and demolition of existing Building 4 (previously used as an infirmary)
Fall River County Health Service (Hospital) 1209 Highway 71 South, Hot Springs, SD Plans to update Castle Manor Nursing Home by building a new structure and bringing the services onto the campus of Fall River Health Services in next few years
Teckla-Osage-Lange 230-Kilovolt Transmission Line Crosses Black Hills National Forest from the South Dakota/Wyoming border through Pennington County to Pactola substation to the Lange substation northwest of Rapid City. Proposed 144-mile transmission line (Black Hills Power), including 37 miles of National Forest System land and through a right-of-way through Rapid City http://www.fs.usda.gov/project/?project=30774
Southern Black Hills Water System Construction and Operation Construction of water system to provide potable water to rural residents of Southern Black Hills area of South Dakota (along Argyle Road). Southern boundary of Phase I service area lies immediately north of Hot Springs; southern boundary of Phase II service area lies immediately northwest of Hot Springs.

Table 3.16-1. Projects Considered in Cumulative Impacts Analysis (continued).

Project Description
Transportation projects in Hot Springs area • US 79 Concrete pavement repair, northbound and southbound lanes, Junction US 18 (runs through Hot Springs) north to Junction SD-36 (http://sddot.com/travelers/docs/ConstructionMap.pdf) • US 18 from junction with US 385 to the southeast city limits of Hot Springs; urban reconstruction, grading, surfacing, curb and gutter, sidewalk, roadway lighting
Transportation projects in Rapid City area • I-90 westbound, exit 30, deceleration land extension • I-90 North service road, from exit 44 to exit 46, near Piedmont in Meade County; grading, gravel surfacing, and structures • US 16 - Mt. Rushmore Road between Tower Road and Flormann Street in Rapid City; full urban reconstruction • SD 44 – Jackson Boulevard in Rapid City from Chapel Lane to Rapid Creek west of Argyle Street

In addition to these defined projects, there are other general community development objectives, resource uses, and disturbances that may occur in the Hot Springs and Rapid City areas. Table 3.16-2 lists examples of actions for which timing and location are generally not predictable in terms of their specific likelihood during construction or operation of VA's reconfigured BHHCS.

Table 3.16-2. Other Generalized Actions and Disturbances Considered in Cumulative Impacts Analysis.

Action	Description
Wildfires	The frequency, size and intensity of possible wildfires depend upon various factors, including weather, ignition means, and fuels loadings. The Black Hills area has a level of wildland fire fuel hazard as a result of mountain pine beetle destruction of pines.
Livestock grazing Range development	Developments include fencing, dugouts, wells, and spring developments. Permitted livestock grazing would continue on National Forest system and private lands.
Vegetation treatment	Commercial and non-commercial vegetation treatments would continue in the area. Treatments may include mechanical or chemical measures to achieve timber harvest, hardwood restoration, meadow restoration, and fuel treatments. These types of treatments may also occur on private land but at a smaller scale.
Recreational activities (motorized, hunting, fishing)	Recreation activities including hunting, fishing, hiking, skiing, and the use of off-road vehicles would continue in the area.

Table 3.16-2. Other Generalized Actions and Disturbances Considered in Cumulative Impacts Analysis.

Action	Description
Subdivision and development of residential areas in Fall River and Pennington Counties	Given current trends, it is likely that additional private lands may be subdivided and new residences constructed. Additional special use permits such as utility, water line, rights of way, and access/easements may be requested.
Special use permits related to utility lines and transmission line projects	The area contains telephone overhead and underground distribution and transmission power utility lines under special use permits. Maintenance is ongoing for these facilities.
Targets/goals for Rapid City as identified in 10-year Comprehensive Plan (adopted in 2014).	Examples include: • Downtown revitalization (Rapid City): Priorities are enhancing connections to and between major destinations, mixed income housing, employment space, and retail/entertainment; encourage and enhance infill development; encourage multi-family housing project in downtown area. • Study Box Elder drainage basin to identify future stormwater infrastructure needs in the area prior to development. • Plan for new north-south roadway connection between Rapid City Regional Airport and I-90; assess feasibility of connection between airport and rail to enhance efficiency of freight transfers. • Water and sewer infrastructure expansion.

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