

INFRASTRUCTURE & SERVICES

The infrastructure requirements in the Gateway Region are an ongoing area of growth and expansion. Each community is continuing to monitor and upgrade its needs, with vast expansion of rural sprawl that continues to be addressed. The information below compiles details of the infrastructure facilities within Lewis and Clark, Broadwater, and Meagher Counties.

The communities of East Helena, Helena, Townsend, and White Sulphur Springs are currently functioning under the estimated capacity of all infrastructure facilities including water, wastewater, power, natural gas, traffic, railroad, airport, and public transportation. As a result, each community is rated as “good” to “excellent” in their ability to support economic growth in terms of infrastructure.

The communities of Wolf Creek, Craig, Augusta, and Lincoln are functioning below capacity in the areas of power, natural gas, traffic, railroad, airport, and public transportation. The growth potential in these areas is held back by capacity limitations in the water and wastewater facilities. Due to geologic and environmental restrictions it is difficult to expand water and wastewater systems particularly larger systems accommodating population growth. Refer to the water, wastewater, and geologic descriptions in these areas for details.

Community Infrastructure Systems:

East Helena

| SYSTEM | SYSTEM TYPE |
|--------------------|--|
| Water | Groundwater Treatment* |
| Wastewater | Central Mechanical Treatment* |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | Northwestern Energy Distribution |
| Traffic | Complex Urban/Rural Hwy 287 |
| Railroad | Montana Rail Link |
| Airport | Helena Regional Airport |

Augusta

| SYSTEM | SYSTEM TYPE |
|--------------------|---|
| Water | Private Wells |
| Wastewater | Total Retention Lagoons* |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | Underground Distribution System |
| Traffic | Rural Hwy 287 / Hwy 12 |
| Railroad | N/A |
| Airport | Augusta Airport |

Craig

| SYSTEM | SYSTEM TYPE |
|--------------------|---|
| Water | Private Wells |
| Wastewater | Private Septic Systems |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | Underground Distribution System |
| Traffic | Rural |
| Railroad | N/A |
| Airport | N/A |

Wolf Creek

| SYSTEM | SYSTEM TYPE |
|--------------------|---|
| Water | Private Wells |
| Wastewater | Private Septic Systems |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | Underground Distribution System |
| Traffic | Rural |
| Railroad | N/A |
| Airport | N/A |

Helena

| SYSTEM | SYSTEM TYPE |
|------------------------------|---|
| Water | Ground/Surface Water Treatment |
| Wastewater | Central Mechanical Treatment |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | Underground Distribution System |
| Traffic | Complex Rural |
| Railroad | Montana Rail Link |
| Airport | Helena Regional Airport |
| Public Transportation | Big Sky Care Center, Citizens Advocate Office, Cooney Convalescent Home, Dev., Disabilities Planning, Family Outreach Inc., G&L Transit Inc., Helena Dial-a-Ride, Indian Alliance-Elderly Center, Neighborhood Center, Rocky Mountain Dev. Council, Silver Linings Inc., Spring Meadow Resources, St. Peter's Hospital-TCU, Westmont, Rimrock Trailways, Capitol Taxi |

Lincoln

| SYSTEM | SYSTEM TYPE |
|--------------------|---|
| Water | Private Wells |
| Wastewater | Step System and Lagoons |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | N/A |
| Traffic | Rural |
| Railroad | N/A |
| Airport | Lincoln Airport |

White Sulphur Springs

| SYSTEM | SYSTEM TYPE |
|--------------------|--|
| Water | Ground/Surface Water Treatment* |
| Wastewater | Facultative Lagoons |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | N/A |
| Traffic | Rural |
| Railroad | N/A |
| Airport | White Sulphur Springs Airport |

Martinsdales

| SYSTEM | SYSTEM TYPE |
|--------------------|--|
| Water | Ground/Surface Water Treatment* |
| Wastewater | Facultative Lagoons |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | N/A |
| Traffic | Rural |
| Railroad | N/A |
| Airport | N/A |

Townsend

| SYSTEM | SYSTEM TYPE |
|--------------------|--|
| Water | Groundwater Supply |
| Wastewater | 3-Cell partially mixed aerated Lagoon with quiescent cell* |
| Power | Overhead/Underground Northwestern Energy |
| Natural Gas | N/A-Underground Propane Service |
| Traffic | Rural |
| Railroad | Montana Rail Link |
| Airport | Townsend Airport |

Detailed inventories of each infrastructure sector are presented in the following sections of this chapter.

➤ Water Systems

This section contains a description of types, characteristics, and needs of the water systems in the research area. These systems are described in a manner relevant to the improvements necessary for economic growth in the area. Water systems discussed include the Helena and East Helena systems as well as the water systems of Wolf Creek, Craig, Augusta, Lincoln, Townsend, and White Sulphur Springs. Also included is a general discussion of the small systems and aquifers in Lewis and Clark, Broadwater, and Meagher Counties.

- **Lewis and Clark County**

<http://maps2.nris.state.mt.us/mapper/ReportsASP/DTtype1.asp?ProfileID=3180772&LayerID=1320&ReportID=1>

- 1) **City of East Helena**

<http://www.deq.mt.gov/ppa/swp/nrisreports/MT0000196.pdf>

1. Characteristics

The East Helena water system consists of two general sources. The McClellan source is an infiltration gallery with two radial wells, and the Wylie Drive source is a system of three deep groundwater wells. These sources service a network of transmission pipes that range in size from two inches to twelve inches. The majority of mains in town are six inches and eight inches while the transmission mains connecting the sources to the distribution system range from eight inches to twelve inches diameter.

East Helena currently has 1,550,000 gallons of water storage in the form of three reservoirs. A 1,000,000 gallon buried pre-stressed concrete reservoir was constructed in 1999. Also, two side-by-side reservoirs are located near the McClellan source. The older of these two was constructed in 1928 and has a capacity of 250,000 gallons. The newer tank holds 300,000 gallons and was built in 1948. Both of these are buried concrete reservoirs. The system is capable of providing a fire flow of 4,000 gpm for four hours through approximately 90 hydrants evenly spaced around the city with typical spacing of 400 – 500 feet.

2. Supply

The McClellan source has two radial wells, each of which, have two laterals approximately twelve (12) feet beneath the ground surface. The combined capacity of the two radial wells is approximately 700 gpm. The series of wells along Wylie Drive have a total capacity of approximately 1,350 gpm giving a total system capacity of 2,050 gpm. (RPA 1999)

3. Supply and Demand

It is estimated the existing water system could serve approximately twice the current population of East Helena depending largely on the needed fire flow requirement of any future annexations.

4. Current Needs

Having completed the 1999 improvement project, which included 35,000 linear feet of water main replacement, a new 1-MG concrete tank, and three new vertical turbine groundwater pumps, East Helena has no immediate system improvement needs.

2) City of Helena

<http://www.deq.mt.gov/ppa/swp/nrisreports/MT0000241.pdf>

1. Characteristics

The City of Helena receives its drinking water from three different sources. The Ten Mile, Missouri River, and Hale Systems provide source water to a network of reservoirs and pump stations that supply water to the pressure zones operating the City of Helena’s water system. The city system incorporates eight storage reservoirs, which hold the city’s operational, emergency, and fire storage. The below table contains a listing of the type, volume, and effective capacity of each of the water storage reservoirs.

Distribution Storage Reservoir Capacities

City of Helena Water System

| <u>Reservoir</u> | <u>Type</u> | <u>Volume ^a (MG)</u> |
|------------------|-------------|---------------------------------|
| Woolston No. 1 | Masonry | 3.1 |
| Woolston No. 2 | Concrete | 3.1 |
| Malben | Steel | 4 |
| Hale | Masonry | 2.2 |
| Upper Hale | Concrete | 0.2 |
| Winne No. 1 | Steel | 0.5 |
| Winne No. 2 | Steel | 0.5 |
| East Side | Concrete | 4 |
| TOTALS | | 17.6 |

^a storage volume of reservoir. 5 MG clear well at the TWTP also for emergency supply

^b Reservoir volume that is usable during normal water demands

2. Supply

The Ten Mile System is the largest contributor to the City of Helena water supply. This system contributes approximately 1,340 MG/yr. or 69 percent of Helena’s total water supply. Water from the Ten-Mile system is treated at the Ten Mile Water Treatment Plant (TWTP) and conveyed to the city through a gravity system. The TWTP complies with 1986 Safe Drinking Water Act standards and has a capacity of 19 mgd. The system however, supplies only 8.0 to 8.5 mgd due to capacity limitations of gravity transmission lines, as reported in the *1997 City of Helena Master Plan Update*.

The Ten Mile drainage system has an estimated yield of 1960 MG/yr. as reported in the 1978 master plan and is sufficient to handle the current production needs of the City of Helena. A small drainage area and hydraulic cycle fluctuations that adversely affect supply volumes on a periodic basis limit the system.

The Missouri River Supply System is the City of Helena’s most reliable drinking water supply. The system contributes approximately 272 MG/yr. or 14 percent of the city's total annual water supply. The city of Helena purchases 600-acre feet or 195.5 MG/yr. of Missouri River Water Treatment Plant (MRWTP). Additional Missouri River water is available for purchase by the city up to 5,600-acre feet or 1,850 MG/yr. This system is primarily a summer supply source adding additional water in times of heavy irrigation and must be pumped from the treatment plant to the city supply grid, as reported in the *1997 City of Helena Master Plan Update*.

The Hale System consists of a combination of the Oro Fino and Eureka collector and well pump systems. This system contributes a combined 320 MG/yr., or 17 percent of the Helena water supply. The Hale System is currently untreated, as it has historically met water quality standards. However, as the system does incorporate shallow wells, the threat of surface water contamination is increasing and the City of Helena will abandon this supply if changes in water quality occur. This recommendation is based on information provided by the *1997 City of Helena Water Master Plan Update*.

Deep aquifer groundwater is an additional source of city water currently under investigation. The City of Helena has water rights to an additional 2,300 MG/yr. of groundwater to be taken from the deep aquifer under the Helena Valley. There are however, concerns of shallow aquifer impacts in the Helena area if a large quantity of water is taken from the deep aquifer. Recent consecutive dry years have prevented normal recharge of the shallow aquifer used by many Helena Valley residents outside the city system. Tapping the deep aquifer for use by the city system raises concerns of negative impacts on the shallow groundwater level and ultimately the available water supply of rural residents. The *1997 City of Helena Master Plan* further addresses this issue.

3. Supply and Demand

The City of Helena water system’s supply and demand relationships are based on 2000 Montana Census data, and the 1978 and 1996 Master Plan documents. 2000 Census data indicates a slight change in population within the city’s water service area from the 1996 master plan population. The 1996 Master Plan indicates a service area population of approximately 26,000 residents where the 2000 Census shows a city population 25,780. This current number does not account for the resident living outside the city limits using the city water system. The difference is slight and validates the 1997 Master Plan supply and demand relationships and projections for current examination. The below table illustrates the historical and projected water supply/demand relationship for the City of Helena system.

| Source Water Capacity and Usage Estimates | | | | | | |
|---|---------------------------------|------------------|---|------------------|---|------------------|
| City of Helena Water Supply | | | | | | |
| Source | Firm Capacity Estimates (MG/YR) | Percent of Total | Current Annual Usage ^e (MG/yr) | Percent of Total | Projected Future Usage ^f (MG/yr) | Percent of Total |
| Ten Mile Supply | 1960 ^a | 47 | 1340 | 69 | 1600 | 62 |
| Missouri River | 1850 ^b | 44 | 272 | 14 | 1000 | 38 |

| | | | | | | |
|---|------------------|-----|-----|----|-----|----------|
| Oro Fino Collector | 150 ^c | 4 | 112 | 6 | | |
| Eureka Collector | 200 ^c | 5 | 208 | 11 | | |
| TOTALS | 4160 | 100 | | | 100 | 2600 100 |
| ^a As reported in 1978 Master Plan Report. ^b Contractual upper limit. ^c Based on historical flow measurements. ^e Based upon historical data 1990-1996 ^f Estimates for year 2020. Annual sewage projected at 1600 MG/yr. | | | | | | |

4. Future Needs

Future needs of the City of Helena water systems are included in a Capital Improvements Plan detailed by the 1995 Master Plan. Phase II, planned for 2002–2007, includes additional east side pipelines (located west of I-15), the Dalhausen Pump Station, Main Street piping improvements, and two additional deep aquifer wells or a new treatment plant. Phase III of the Capital Improvements Plan, planned for 2007–2020, includes a new storage tank at the Malben site, Woolston reservoir improvements, and additional groundwater wells. All of these planned improvements are designed to accommodate the projected growth of the City of Helena to a population of 35,000 service-area residents by the year 2020.

3) Town of Wolf Creek

1. Characteristics

The Town of Wolf Creek has no central water system. The residents are provided with drinking water through individual private wells. Water tenders serviced by the Missouri River provide fire protection for the residents and businesses.

2. Supply and Demand

The water supply in Wolf Creek is provided by the Missouri River alluvial aquifer and is not currently faced with water quality or capacity issues.

3. Current Needs

Growth in this rural area is forecasted to be slow over the next 20-year period according to projections of the 2000 Census. Montana Rural Water Inc., expects the current private well water system will provide an adequate drinking water supply over this interval. Fire suppression requirements will grow with the town and the Missouri River will provide an adequate and consistent reserve of available water in a fire emergency.

4) Town of Craig

1. Characteristics

The Town of Craig has no central water system. The residents are provided with drinking water through individual private wells. Water tenders serviced by the Missouri River provide fire protection for the residents and businesses.

2. Supply and Demand

The water supply in Craig is provided by the Missouri River alluvial aquifer according to Montana Rural water Inc., is not faced with water quality or capacity issues.

3. Current Needs

The 2000 Census forecasts slow growth in this rural area over the next 20-year period. The current private well-water system is expected to provide an adequate drinking supply over the next 20-year interval. Likewise, fire suppression requirements will grow with the town and the Missouri River will provide an adequate and consistent reserve of available water in a fire emergency.

5) Town of Augusta

1. Characteristics

The Town of Augusta has no central water system. Residents are provided with drinking water through individual private wells. Water tenders used by the Augusta Fire Volunteer Fire Department provide the only fire protection for the town.

2. Supply

The shallow Sun River alluvial aquifer at 12 – 40 feet deep provides the drinking water in Augusta. Currently there are no water quality or capacity issues with the shallow supply.

3. Current Needs

The water supply system in Augusta has no current needs and is expected to accommodate the expected growth over the next 20 years.

6) Town of Lincoln

1. Characteristics

The Town of Lincoln has no central water system. The 1,100 residents are provided with drinking water through individual private wells. Water tenders serviced by the Blackfoot River provide fire protection to the town.

2. Supply and Demand

The Blackfoot Rim alluvial system provides the groundwater supply to the Town of Lincoln. Currently there are no water quality concerns with the drinking water supply.

3. Current Needs

The Blackfoot Rim alluvial aquifer is currently accommodating the residential demand in the Town of Lincoln and the individual supply system has no current needs. Nick Clos of Montana Rural Water Inc., suggests if the population of Lincoln experiences rapid growth a central community water system may be necessary.

- **Broadwater County**

<http://maps2.nris.state.mt.us/mapper/ReportsASP/DType1.asp?ProfileID=3180788&LayerID=1320&ReportID=1>

- 1) **City of Townsend**

<http://www.deq.mt.gov/ppa/swp/nrisreports/MT0000344.pdf>

1. Characteristics

The City of Townsend's water system consists of a series of three wells, which feed directly to the distribution grid with a 200,000-gallon elevated tank. Wells one and two are used year round while well three is used only during the irrigation season to provide additional volume.

2. Supply

The three wells supplying water to the City of Townsend tap a groundwater aquifer 60–90 feet deep and supply water to the system at approximately 600–900 gallons per minute per well. This groundwater source is untreated at present and has no water quality concerns other than hard water characteristics. Well #1 (900 gallons/min) is provided with a back-up generator, giving the City water pumping capabilities in the event of a power outage.

3. Supply and Demand

Townsend's current population of 2,000 residents (water study dated May 2007) determines that the system is well under capacity. Currently the City provides twice as much water as necessary to meet the WQB design standards.

4. Current Needs

The Townsend system appears to be in good working order, the City is currently working on a preventive maintenance program of replacing service valves as needed.

- **Meagher County**

<http://maps2.nris.state.mt.us/mapper/ReportsASP/DType1.asp?ProfileID=3180791&LayerID=1320&ReportID=1>

- 1) **Town of White Sulphur Springs**

<http://www.deq.mt.gov/ppa/swp/nrisreports/MT0000360.pdf>

1. **Characteristics**

White Sulphur Springs is supplied with drinking water by a combination of two wells and Willow Creek. The creek supply is serviced through a sand filter and this supply along with the water supplied by the two wells is treated with chlorine. The town's water system is gravity driven and distributes its water to the 948 residents through a system of two- to twelve-inch PVC and steel pipes. The system holds 450,000 gallons of fire reserves in a buried concrete tank and has fire service hydrants evenly spaced on two block intervals around town.

2. **Supply and Demand**

The White Sulphur Springs water supply is currently functioning under a demand of 300,000 gallons per day and has no water quality or supply capacity issues. Most of the town's water supply is provided by Willow Creek while the wells are used to supplement the supply when needed. Currently the well pumps are used every other day.

3. **Current Needs**

The White Sulphur Springs water system includes approximately two miles of twelve-inch steel pipe. This pipe was installed in 1948 and due to leakage concerns is in need of replacement. The first 3,000' of pipe was replaced in 2007, to be followed by 3,000' in 2009-2010. The sand filter is experiencing freezing in inclement winter weather, greatly reducing the daily capacity. The current water storage tank is approaching the end of its useful life expectancy without lining and a new cover.

➤ **Wastewater Systems**

This section contains a discussion of the wastewater systems within the study area. Each of the respective systems is described in an effort to log the types and needs of the existing systems as population and economic changes occur in the area.

- **Lewis and Clark County Wastewater Systems**

<http://maps2.nris.state.mt.us/mapper/ReportsASP/PType1.asp?ProfileID=3180802&LayerID=1316&ReportID=1>

- 1) **City of East Helena**

1. **Characteristics**

The wastewater system in East Helena is composed of mechanical treatment lagoons, extended aeration, and activated sludge systems. The effluent from the treatment facility is discharged into Prickly Pear Creek. Disinfection of effluent with chlorine gas is performed during warmer months.

The system currently treats an average daily flow of approximately 0.2 MGD. The system was originally designed for .63 MGD at a time when ASARCO contributed a great deal of flow. The collection system consists of approximately ten miles of gravity pipe (primarily vitrified clay), and one lift station. The collection system is characterized as good to fair condition with a few problem areas.

2. Current Needs

The city was issued a new MPDES Discharge Permit for its municipal treatment works in April 1997. The new permit contains effluent limits more stringent than those previously required. Process changes are required at the treatment facility, primarily to provide ammonia removal due to ammonia toxicity requirements in the new permit.

Modifications are scheduled to take place in the summer and fall of 2002. Improvements scheduled primarily include modifying the existing process to an extended aeration activated sludge process. Solids handling facilities will also be added. Solids handling improvements will include an aerated sludge holding basin, sludge thickening process, and drying beds.

The collection system does have some problems with root intrusions and cracked pipes, it is functional and in satisfactory condition. The only lift station in the system will be upgraded along with treatment facility improvements during the summer of 2002.

| Helena Area Wastewater System Inventory | | | |
|--|-----------------|--|--|
| Town/City | County | Wastewater System | System Needs |
| <i>Helena</i> | Lewis and Clark | Mechanical Primary and Secondary Treatment | <i>Odor Control, Collection System Expansion</i> |
| <i>East Helena</i> | Lewis and Clark | Aerated Lagoon System | <i>Facility Improvements</i> |
| <i>Augusta</i> | Lewis and Clark | Total Retention Lagoon | <i>None</i> |
| <i>Lincoln</i> | Lewis and Clark | Step System Lagoons | <i>None</i> |
| <i>Craig</i> | Lewis and Clark | None | <i>None</i> |
| <i>Wolf Creek</i> | Lewis and Clark | None | <i>None</i> |
| <i>Townsend</i> | Broadwater | Four Celled Lagoon | <i>Upgrade to Collection System Pipes</i> |
| <i>White Sulphur Springs</i> | Meagher | 2 Total Retention Lagoons | <i>None</i> |

2) City of Helena

1. Characteristics

The wastewater system of the City of Helena is composed of a central mechanical treatment plant that incorporates primary treatment, secondary treatment with ammonia removal followed by UV disinfections. This system currently treats approximately 3.5 MGD of influent wastewater collected by approximately 100 miles of pipe and has a design capacity of 6.2 MGD. Recent upgrades to the city system include a new secondary treatment process with ammonia removal, UV disinfections and an expanded sludge thickening process. Sludge is currently land applied. (The Water/Wastewater Superintendent for the City of Helena provided this information).

2. Current Needs

The effluent of the Helena wastewater system is discharged directly to Prickly Pear Creek. The Montana Department of Environmental Quality regulates central wastewater systems around the state by setting design standards for new systems and inspecting facilities on a five-year interval. The City of Helena wastewater system is currently in compliance with the US Clean Water Act, the Montana Water Quality Act, and the Public Water Supply Act. According to Leonard Willett, City Water/Wastewater Superintendent, the short and long term needs of the city system include odor control and expansion of the collection system to accommodate growth within the city and inclusion of outlying areas to the city system in the future

3) Communities of Wolf Creek and Craig

1. Characteristics

Neither community of Wolf Creek nor Craig has municipal wastewater systems. The residents of these communities dispose of their wastewater through individual onsite septic systems.

2. Current Needs

Growth in and around the Wolf Creek and Craig areas is expected to be slow over the next 20 years due to topographical, high groundwater, and flood plain restraints according to the *Lewis and Clark County Comprehensive Draft Plan*. The current individual septic systems appear to be adequate. Individual septic systems have difficulty supporting larger scale wastewater producers and growth in the Wolf Creek and Craig area may require the construction of a central community system.

4) Town of Augusta

1. Characteristics

In 1999 the Town of Augusta through the formation of the Augusta Sewer and Water District completed work on a 24.1-acre total retention evapo-transportation lagoon. This lagoon was designed for 38,000 gallons per day influent and collects wastewater from the 270 hookups with a network of eight-inch PVC pipes. Fees levied by the district are intended to fund operating and

maintenance of the lagoon. Wastewater outside the sewer and water district is treated by individual septic systems.

2. Current Needs

The wastewater system in Augusta is modern and functioning properly. The system will accommodate only minimal future growth in the Augusta area and significant population growth may require upgrading to the wastewater system.

5) Town of Lincoln

1. Characteristics

The wastewater system in Lincoln is described as a STEP system, which collects the gray water from the individual septic systems in town and transports this water to a facultative lagoon. The effluent from the lagoon is land applied through spray irrigation to the neighboring landscape. The lagoon was constructed in 1985 for 1,250 residents and was revamped in 1999 to add an additional cell. While the current influent of the Lincoln system is unknown, the design influent of the lagoon is 100,000 gallons per day and the system is functioning properly.

2. Current Needs

The wastewater system in Lincoln was designed for 1,250 residents. Currently the population of the town is 1,100 and according to the county sanitarian the system has sufficient functioning capacity for the expected growth over the next ten years.

- **Broadwater County**

<http://maps2.nris.state.mt.us/mapper/ReportsASP/PType1.asp?ProfileID=3180796&LayerID=1316&ReportID=1>

- 1) **City of Townsend**

1. Characteristics

The City of Townsend's wastewater system consists of a four-celled lagoon. Three cells are aeration cells and the fourth is a settling pond. Wastewater from the town is delivered to the lagoon from a lift station on Cedar Street and network of eight inch PVC, trancite, and clay pipes. The effluent from the lagoon is discharged to a side channel of the Missouri River.

2. Current Needs

The four-celled lagoon servicing the City of Townsend was upgraded in 1997 and is functioning properly. Old trancite and clay pipes in the collections system along with separated taps, settled piping, and invasive roots are causing leakage and groundwater infiltration problems in the system. A large quantity of groundwater infiltrates the collection system in some area. Leakage problems will become a concern as growth occurs in the area, according to the Townsend Public Works Department. Upgrade of the collection system is a currently underway using modern bursting techniques to replace problematic areas of the city. The city annual budget is allocating funds each year to address the priority list of lines

- **Meagher County**

<http://maps2.nris.state.mt.us/mapper/ReportsASP/PType1.asp?ProfileID=3180799&LayerID=1316&ReportID=1>

- 1) **City of White Sulphur Springs**

1. **Characteristics**

White Sulphur Springs wastewater system, according to the White Sulphur Springs Public Works Department, functions on a gravity operated system of six- to eight-inch clay and asbestos pipes delivering wastewater to two ten-acre facultative lagoons. Wastewater from eight to ten residents in one section of town is pumped through a lift station to the lagoon. Effluent from the lagoon system is discharged to the Smith River.

2. **Current Needs**

The wastewater system was designed for a population of 2,500 residents. Currently the town's population is 948 according to the 2000 Census, and the wastewater system is functioning at under half of its influent capacity with no current needs. Changes in wastewater discharge regulations may adversely affect the capacity of the current system.

- **System and Environmental Issues of Lewis and Clark County**

While many of the communities in Lewis and Clark County have no central wastewater systems the majority of wastewater generated in the county is treated through central treatment systems. These central systems primarily discharge effluents to surface waters or are land applied. The remaining areas consist of individual septic systems.

Individual septic systems threaten the remainder of the wastewater generated in the county. Currently these private systems are unmonitored and little is known of their effectiveness. Due to the unknown characteristics the individual private wastewater systems are the primary contributors to environmental quality concerns in Lewis and Clark County.

Most of the water supply for residents in and around the communities of Lewis and Clark County are provided by shallow groundwater aquifers dependent on surface water recharge. Because these aquifers are shallow and surface waters are the primary source of recharge, the aquifers are susceptible to contamination by surface water pollutants. Individual septic systems are a possible contributor to surface water pollutants and cause for environmental concern as the number of individual systems increases with growth.

The southern portion of Lewis and Clark County, primarily the Helena Valley, is an area characterized by a shallow groundwater supply. According to *1998 Helena Area Wastewater Treatment Facility Plan* this area is beginning to experience elevated contaminant levels in the water supply as the number of individual septic systems increase. Growth in Lewis and Clark County is likely to be focused in this southern portion of the county and must be sensitive to the environmental issues associated with wastewater disposal. An increase in private system

monitoring along with a trend toward inclusion of outlying areas to community systems must follow growth in the county.

- **Systems and Environmental Issues of Broadwater County**

Wastewater disposal in Broadwater County is primarily accomplished through individual and private septic systems. The City of Townsend has the only central wastewater system in the county. The county does not closely monitor groundwater or wastewater effluent characteristics of the individual septic systems scattered throughout the county.

Currently there is not water quality or environmental concerns associated with the wastewater disposal practices in Broadwater County. As the population of the county expands, an increase in the number of unmonitored private septic systems may raise the risk of groundwater contamination and other environmental impacts.

- **Systems and Environmental Issues of Meagher County**

With the exception of White Sulphur Springs' wastewater system the majority of the wastewater in Meagher County is disposed of through individual private septic systems.

As the population of Meagher County is small and dispersed over a larger area the volume and concentration of wastewater is minimal. Very little data is available characterizing the groundwater supply aquifers and the influence of wastewater disposal on the groundwater quality in the county. The Montana Bureau of Mines is currently compiling information to further detail the aquifer and groundwater quality characteristics in this region.

➤ **Solid Waste Disposal**

Most of the Helena Valley is included in the Scratch Gravel Landfill District. The district operates a Class 2 landfill licensed in 1994 and has an available life of 47 years based upon projections. Waste from Northern Jefferson County is received on a contractual basis.

Recycling is conducted through a partnership between the City of Helena and Lewis and Clark County. There were 4,117 tons diverted from the landfill in fiscal year 1997, constituting approximately ten percent of the total waste system. Most commodities are processed through local private-sector recycling businesses. A green waste composting facility has been available since 1994 and a bio composting of green waste and municipal sewage sludge (which is currently landslide) will be developed.

➤ **Power Service**

1) **Power Service Available**

There are two companies providing power service within the study area; NorthWestern Energy, formerly Montana Power Company, and Vigilante Electric. NorthWestern Energy was established in 1912 with the merger of four regional electric companies. Based in Butte, Montana,

NorthWestern Energy provides a regulated electric service to 288,000 electric customers in the western two-thirds of Montana. NorthWestern Energy’s electric transmission system consists of over 7,000 miles of transmissions lines and associated terminal facilities. This expansive system with voltage levels ranging from 50,000 to 500,000 volts, serves an area of 97,540 square miles, which is equivalent to two-thirds of Montana. NorthWestern Energy system has interconnections to five major transmission systems located in the Western Systems Coordinating Council (WSCC) area, as well as one interconnection to a system connecting with the Mid-Continent Area Power Pool (MAPP) region. With these interconnections, NorthWestern Energy electric transmission system is strategically located to allow for the purchase and delivery of power in diverse markets—from the Pacific Northwest to the desert Southwest and California, and to the Colorado area and the MAPP region.

NorthWestern Energy’s main business is the transmission and distribution of electricity, generally with transmission services being from the power plant to a city substation and distribution service from there throughout a city.

Vigilante Electric was established in 1936 to service areas NorthWestern Energy did not feel were profitable at the time. These were areas outside city limits and agricultural communities (Siring, 2002). Based in Dillon, this member-owned utility company provides service to 4,339 electric customers throughout Beaverhead, Broadwater, Deer Lodge, Gallatin, Jefferson, Lewis and Clark, Madison, Meagher, and Silverbow Counties in Montana as well as Clark County, Idaho. This electric company’s transmission system consists of 2,516 miles of transmission lines and average two to two and a half meters per line.

The below table lists the areas each power company serves and the description of the service provided.

Power Service Provided

| Location | Power Company | Area of Service* | Description of Service* |
|-----------------------|----------------------|--------------------------|--|
| East Helena | NorthWestern Energy | City | Overhead and underground distribution system |
| Helena | NorthWestern Energy | City and Valley | Overhead and underground distribution system |
| Wolf Creek | NorthWestern Energy | Town and outlying area | Overhead and underground distribution system |
| Craig | NorthWestern Energy | Town | Overhead and underground distribution system |
| Augusta | NorthWestern Energy | Town | Overhead and underground distribution system |
| Lincoln | NorthWestern Energy | City and parts of valley | Overhead and underground distribution system |
| Townsend | NorthWestern Energy | City and valley | Overhead and underground distribution system |
| White Sulphur Springs | NorthWestern Energy | City and parts of valley | Overhead and underground distribution system |

| | | | |
|------------------------|--|---------------------------|--|
| Lewis and Clark County | NorthWestern Energy and Vigilante Electric | Cities and outlying areas | Overhead and underground distribution system |
| Broadwater County | NorthWestern Energy and Vigilante Electric | Cities and outlying areas | Overhead and underground distribution system |
| Meagher County | NorthWestern Energy | Cities and outlying areas | Overhead and underground distribution system |

*NorthWestern Energy, Howard Skjervem, 2002

*Vigilante Electric, Rod Siring, 2002

None of the areas listed in above table have reached their available capacity.

➤ **Natural Gas Service**

NorthWestern Energy provides natural gas service within the study area. While the company was established in 1912, the Butte-based establishment did not venture into natural gas until the 1930s. NorthWestern Energy provides regulated natural gas delivery services generally in the western two-thirds of Montana. Their gas transportation system consists of more than 2,100 miles of transmission pipelines, 3,300 miles of distribution pipelines, and three storage facilities all within Montana. NorthWestern Energy system has pipeline interconnections with NOVA, Havre Pipeline Company, Williston Basin Interstate Pipeline Company, and Colorado Interstate Gas Company. NorthWestern Energy natural gas service area covers 70,500 square miles serving approximately 141,000 customers.

NorthWestern Energy’s gas transportation services are segregated into two categories: on-system transportation, which is regulated by the Montana Public Service Commission, and off-system transportation, which is regulated by the Federal Energy Regulatory Commission.

End-use customers with annual consumption of 5,000 dekatherms or greater can contract for on-system transportation services. On-system services include firm and interruptible transmission and distribution transportation and firm storage service.

NorthWestern Energy’s off-system transportation service provides shippers with the opportunity to transport gas across the system for delivery to the interconnecting pipelines noted above. Off-system service includes off-peak transmission, interruptible transmission and interruptible storage. In 1997, NorthWestern Energy transported 6.3 bcf for its off-system customers.

The table below lists areas that have natural gas service and the description of the service provided by Northwestern Energy.

Natural Gas Service Available

| Location | Company | Area of Service* | Service* |
|-----------------|---------------------|-------------------------|-----------------|
| East Helena | NorthWestern Energy | City | Natural Gas |
| Helena | NorthWestern Energy | City and Valley | Natural Gas |
| Wolf Creek | NorthWestern Energy | Town | Natural Gas |
| Craig | NorthWestern Energy | Town | Natural Gas |
| Augusta | NorthWestern Energy | Town | Natural Gas |

| | | | |
|------------------------|---------------------|--------|---------------------|
| Lincoln | None | N/A | N/A |
| Townsend | NorthWestern Energy | City | Propane |
| White Sulphur Springs | None | N/A | N/A |
| Lewis and Clark County | NorthWestern Energy | Varies | Natural Gas |
| Broadwater County | NorthWestern Energy | Varies | Propane in Townsend |
| Meagher County | None | N/A | N/A |

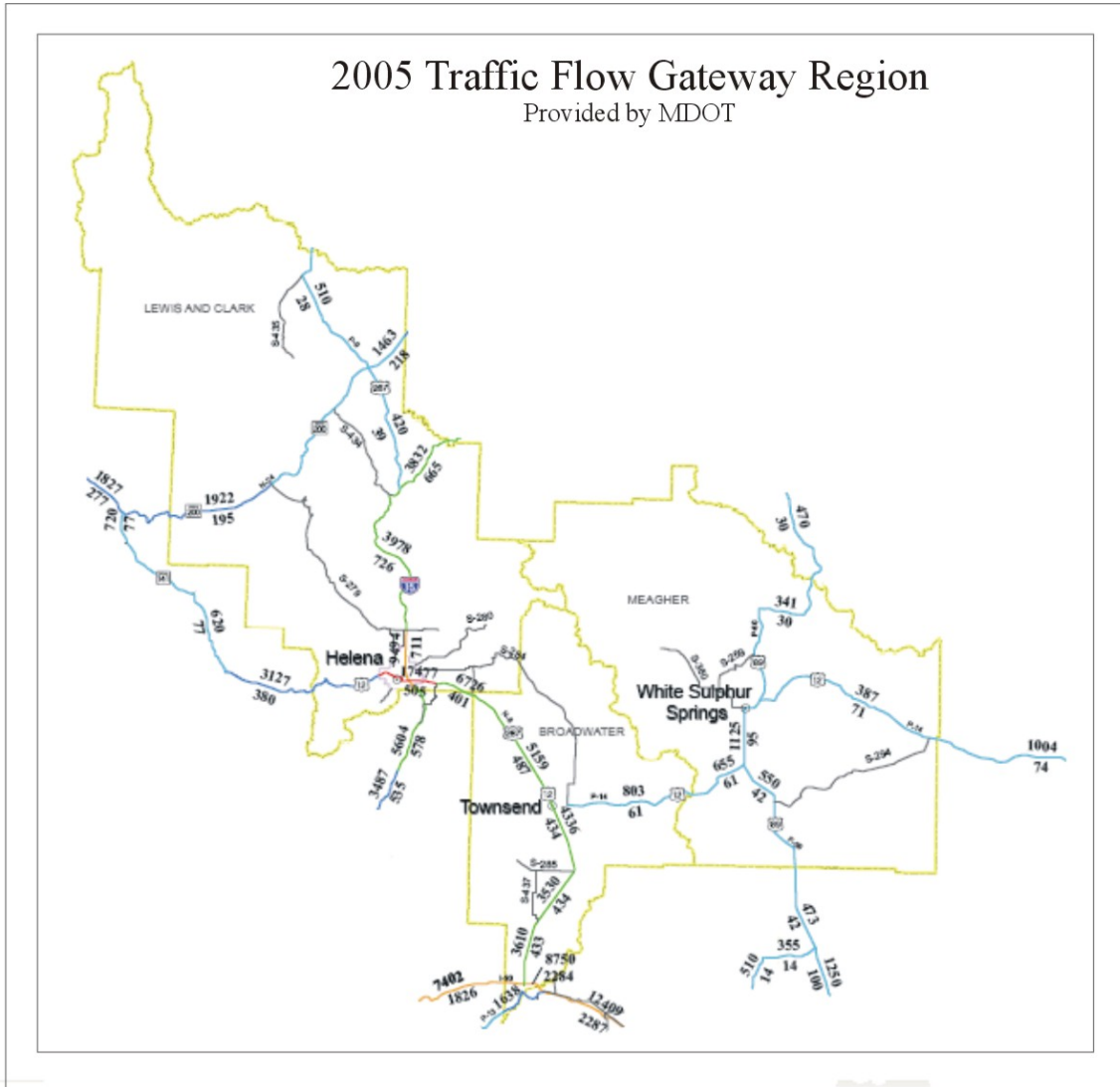
*NorthWestern Energy, Howard Skjervem, 2002

None of the areas listed in the above table have reached their available capacity and the NorthWestern Energy has no plans to upgrade any portion of their system in the study area (Skjervem, 2002).

➤ **Transportation Systems**

Map 1 contains the 2005 traffic counts for the Gateway Region. Map 2 represents the tentative construction projects and dates in the region. <http://www.mdt.mt.gov/publications/datastats.shtml>

Map 1)

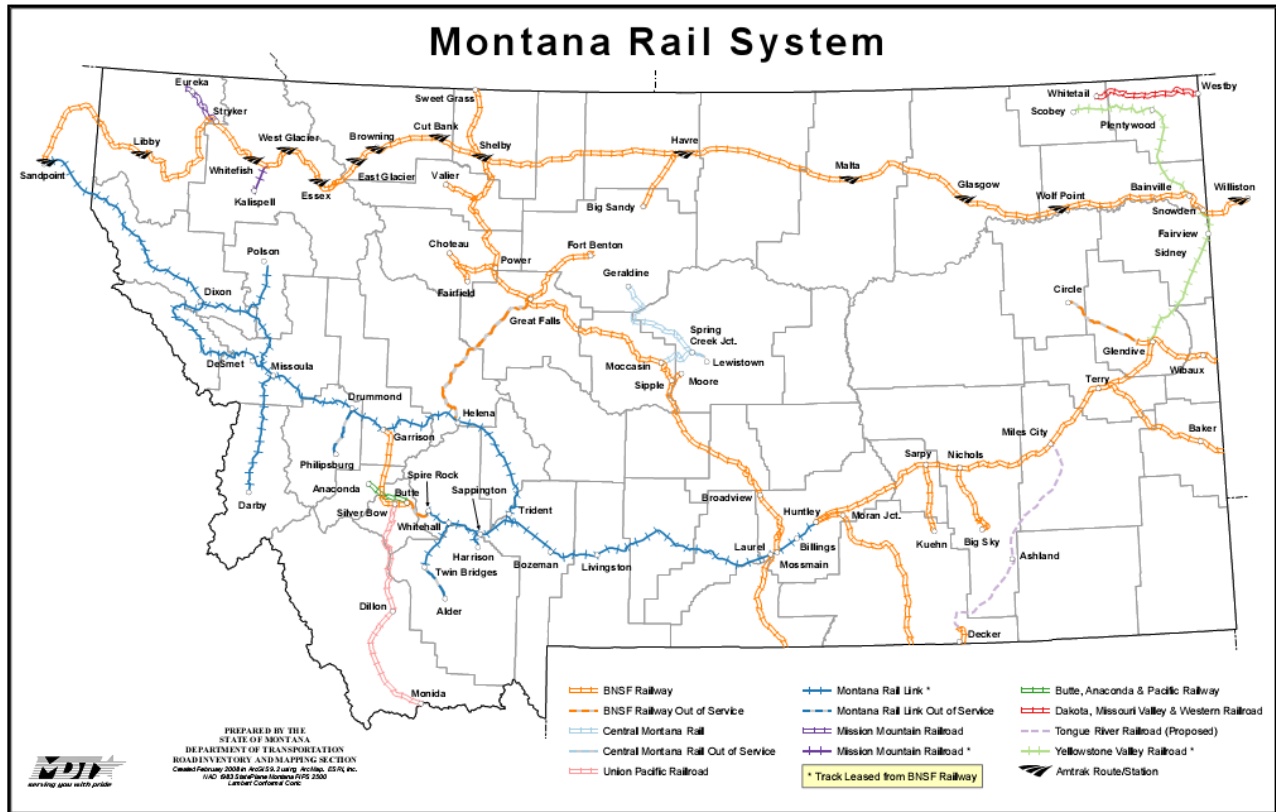


<http://www.mdt.mt.gov/publications/datastats.shtml>

Map 2)

➤ **Railroad Access**

This section contains a description of the various means of railroad access available within the study area. Map below shows individual rail lines traveling through Montana.



<http://www.mdt.mt.gov/travinfo/docs/railmap.pdf>

Lewis and Clark County

Lewis and Clark County has service by both Montana Rail Link, Inc. (MRL) and Burlington Northern SantaFe (BNSF). In addition to the stations at Helena and East Helena, Montana Rail Link also has a station in Fort Harrison. The frequency of service to each of these locations listed is once per day, Monday through Friday, by the local train or switch job assigned to service the location. On the main line going through Helena, there are numerous through trains traveling over that route each day, but they do not provide service to those points. Through trains operate between such major points as Portland, Oregon; Seattle, Washington; Kansas City, Missouri; Memphis, Tennessee; Minneapolis, Minnesota; and Missoula and Laurel, Montana.

Montana Rail Link has no plans for upgrading the system. They maintain the tracks to certain standards provided by the Federal Railroad Administration (FRA). MRL’s main line track-age is maintained to FRA Class IV standards, which provide for maximum train speeds up to 60 mph.

Broadwater County

Montana Rail Link has service in Winston, Townsend, and Toston, operating Sunday through Friday. Service to these stations is provided on an as-needed basis, and any train can stop at any of

these stations to meet or pass other trains. MRL has no future plans of upgrading this line but maintains the track to FRA Class IV standards.

Meagher County

There is no rail service in Meagher County.

➤ **Airport Systems**

This section contains a description of the types, characteristics, current use, and capacity of the airports in the research area. These airports are described in a manner relevant to the improvements necessary for economic growth in the area. Airports discussed include the Helena, Townsend, White Sulphur Springs, Lincoln, Augusta, Benchmark, Canyon Ferry, and Mountain Lakes. The Fort Harrison Airport is excluded from this discussion, as all operations are military.

Airport Types and Characteristics

The Airport inventory details the name, classification, airport capacity and maximum size of airplane, navigational aids, instrument approach facilities, and fuel availability at each of the aforementioned airports follows. Table data was gathered from the *Montana State Aviation System Plan Update 1998 – 1999*, the Montana Aeronautics Division’s most current planning document.

Airport Inventory

| CITY | PUBLIC AIRPORT | CLASS | AIRPORT CAPACITY | MAX SIZE OF PLANES | NAVIGATIONAL AIDS | INSTRUMENT APPROACH FACILITIES | FUEL |
|-----------------------|-------------------------------|---|--|---|---|--|-----------------------|
| HELENA | Helena Regional | Primary Commercial | 20 Year Projected Airport Demand Is Under Current Capacity | *Primary Commercial Service; C-III B727-200 | *** Rotating Airway Beacon, VORTAC, Rotating Airport Beacon, NDB, Remote Communications Outlet, Lighted Obstructions, | RWY 27-ILS,A-VOR, B-VOR/DME or GPS, C-LOC/DME BC, D-NDB or GPS | 80, 100, 100LL, Jet A |
| TOWNSEND | Townsend Airport | General Aviation 10,000 or fewer annual operations | 20 Year Projected Airport Demand Is Under Current Capacity | * B-I,G.A.; <12,500# | Rotating Airport Beacon (Dawn to Dusk) | None | 100LL |
| WHITE SULPHUR SPRINGS | White Sulphur Springs Airport | General Aviation, 10,000 or Fewer Annual Operations | 20 Year Projected Airport Demand Is Under Current Capacity | * B-I, G. A.; <12,500 # | Rotating Airport Beacon (Dawn to Dusk) | None | 100LL |
| LINCOLN | Lincoln Airport | General Aviation 10,000 or Fewer Annual Operations | 20 Year Projected Airport Demand Is Under Current Capacity | * B-I, G.A.; <12,500 # | Rotating Airport Beacon (Dawn to Dusk) | None | None |

| | | | | | | | |
|---------|-------------------|---|--|------------------|------|------|------|
| AUGUSTA | **Augusta Airport | Turf General Aviation 10,000 or Fewer Annual Operations | 20 Year Projected Airport Demand Is Under Current Capacity | * A-1, Turf G.A. | None | None | None |
|---------|-------------------|---|--|------------------|------|------|------|

Within the research area, Helena Regional Airport is the only “primary commercial service” airport. <http://www.helenaairport.com/> The airport services scheduled passengers, cargo/charter, military, itinerant general aviation, and local general aviation. Helena Regional Airport accommodates the majority of shipping and passenger demands within Lewis and Clark, Broadwater, Meagher Counties. The southern portions of Meagher, and Broadwater Counties route a portion of the shipping and passenger activity through Gallatin Field in Bozeman and Bert Mooney Airport in Butte.

All other airports in the Helena region are classified as *general aviation airports* and support fewer than 10,000 annual operations. The airports of Townsend, White Sulphur Springs, and Lincoln are paved runway *general aviation* airports while the airports of Augusta, Benchmark, Canyon Ferry, and Mountain Lakes function on turf or gravel runways. All of these general aviation airports support a combination of recreational, governmental, light business, and crop dusting operations. The airports of Augusta, Lincoln, Townsend, and White Sulphur Springs facilitate a combination of air cargo, military, and general aviation operations; however, the majority of operations in the region are classified as general aviation. General aviation includes all operations of civil aircraft excluding air carrier, charter, and military operations. The “1998 – 1999 Montana State Aviation System Plan” details the current and forecasted operations of all airports in the research area. The Airport inventory map shows the locations and classifications of all airports in the State of Montana. The Airport Inventory shows that 62.4 percent of the current airport operations in the region are classified as *general aviation*. The included State Aviation System Map shows the airports of Helena, Lincoln, White Sulphur Springs, Benchmark, and Townsend are included in the National Plan Integrated Airport System (NPIAS). This classification is given to airports eligible for State and Federal funding.

Airport Inventory

| CITY | PUBLIC AIRPORT | CLASS | AIR PORT CAPACITY | MAX SIZE OF PLANES | NAV. AIDS | INST. APPROACH FACILITIES | FUEL AVA. |
|----------------|------------------------|---|--|--------------------|-----------|---------------------------|-----------|
| Canyon Ferry | **Canyon Ferry Airport | Turf General Aviation 10,000 or Fewer Annual Operations | 20 Year Projected Airport Demand Is Under Current Capacity | * A-1, Turf G.A. | None | None | 2005 |
| Mountain Lakes | Mountain Lakes Airport | Turf General Aviation 10,000 or Fewer Annual Operations | 20 Year Projected Airport Demand Is Under Current Capacity | * A-1, Turf G.A. | None | None | None |
| Benchmark | Benchmark Airport | Turf General Aviation 10,000 or Fewer Annual Operations | 20 Year Projected Airport Demand Is Under Current Capacity | * A-1, Turf G.A. | None | None | None |

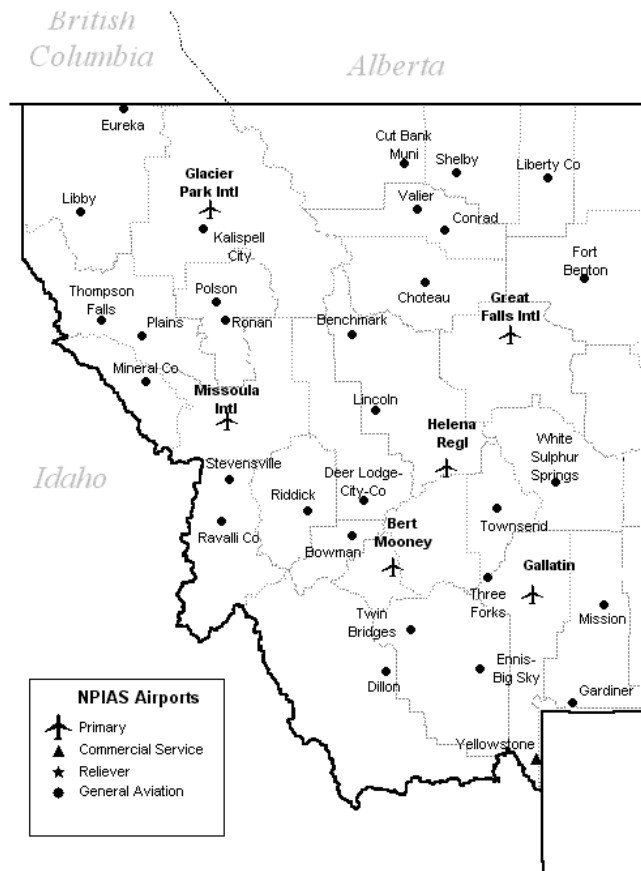
*---Approach Speed Category

| Approach Speed | | | Wing Span Design Groups | | |
|----------------|---|----------|-------------------------|-----|---------|
| | A | <91 kts | | I | <49 ft |
| 91 kts< | B | <121 kts | 49 ft < | II | <79 ft |
| 121 kts< | C | <141 kts | 79 ft < | III | <118 ft |
| 141 kts< | D | <166 kts | 118 ft < | IV | <171 ft |
| 166 kts< | E | | 171 ft < | V | <214 ft |
| | | | 214 ft < | VI | |

*****--Instrument Approach Facility Abbreviations**

- RWY Runway
- ILS Instrument Landing System
- A-VOR Very High Frequency Omidirectional Radio Beacon
- B-VOR/DME Very High Frequency Omidirectional Radio Beacon
- GPS Global Positioning System
- C-LOC/DME Localizer/ Distance Measurement Equipment
- D-NDB Non Directional Radio

Airport inventory map. Current Demand and Capacity of Regional Airports



http://www.faa.gov/airports/airtraffic/airports/planning_capacity/npias/reports/states/

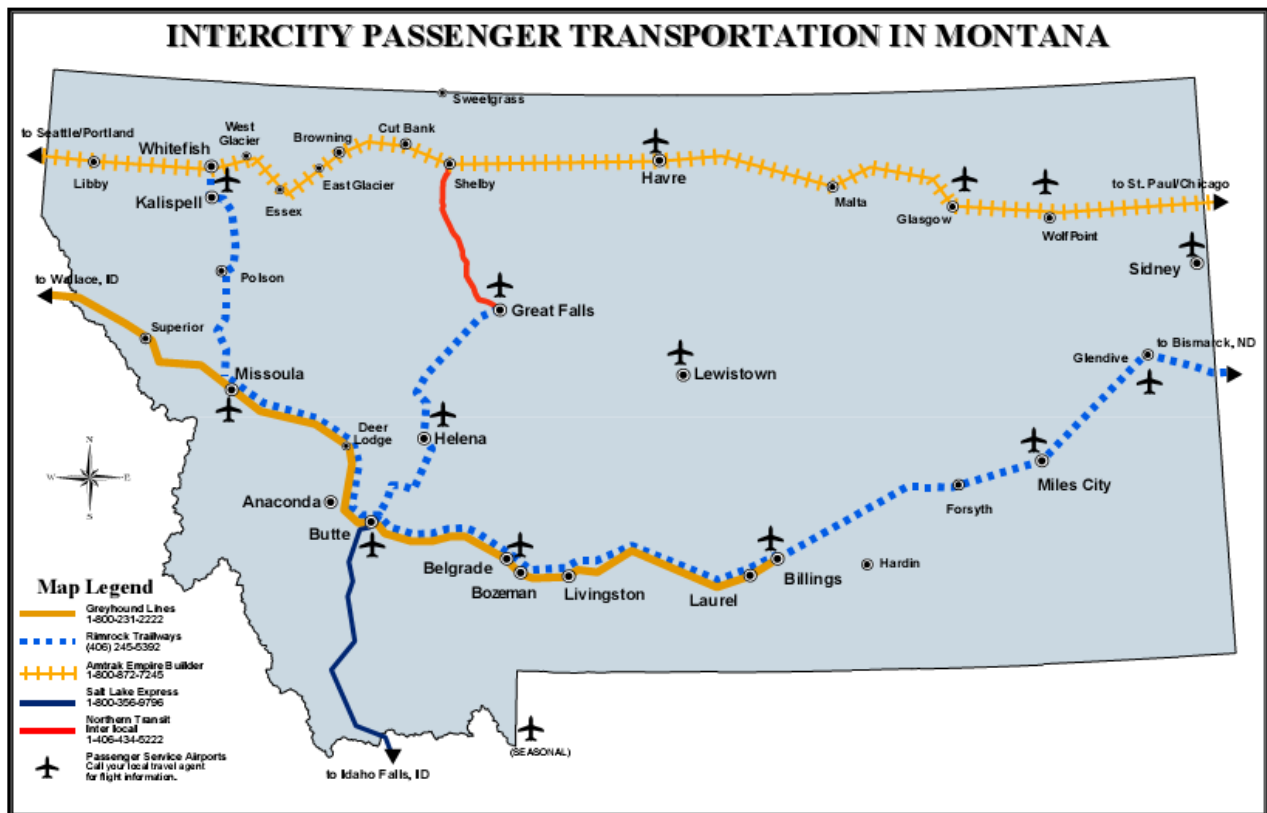
The 1998–1999 Montana State Aviation System Plan indicates a slow growth rate for the Montana aviation system over the next 20 years. Within in this 20-year period the system plan indicates no capacity concerns for the Helena region airports other than a potential need for longer and upgraded runways at many smaller airports to facilitate an increase in activity of higher approach speed business and air ambulance aircraft. A transition from large, high-capacity jets to regional jets

carrying 30–70 passengers may double or triple the air carrier operations at Helena Regional Airport. An increase in overnight inventory, express mail, and e-business shipment, could also double or triple the cargo activity at Helena Regional Airport.

➤ **Public Transportation**

This section contains a description of the various means of public transportation available within the study area. Along with the public transportation available in Helena, East Helena, Lincoln, Wolf Creek, and Augusta, Rimrock Trailways and Capitol Taxi provide transportation service to parts of Lewis and Clark County. Rimrock Trailways, a regional bus service, makes two trips daily from Great Falls to Butte on Highway Interstate 15 and will make an unscheduled drop off or pick up along this route. This bus service also travels from Great Falls to Missoula on Highway 200 and will also make an unscheduled drop off or pick up along this route. Capitol Taxi is a taxi service based in Helena and will provide transportation service within a 50-mile radius of Helena.

Rimrock Trailways is a Billings based company providing a variety of transit services, airport transfers, and charter services throughout Montana. Rimrock operates two scheduled busses through Helena each day, one eastbound and one westbound. These buses travel through Helena and connect to Bozeman, Billings and Missoula. Rimrock also provides daily bus service between Helena and Great Falls. The East-West buses provide connections in Billings and Missoula to the Greyhound Bus that provides transit service to most locations throughout the country (*The Greater Helena Area 2001 Transportation Development Update, 2001*). The map below shows the bus routes throughout Montana. http://www.mdt.mt.gov/travinfo/public_trans.shtml



Capitol Taxi is a private business that began serving the Helena area in 1982. Capitol Taxi is currently the only taxi service in the Helena area and provides door-to-door service on demand, 24 hours a day, 365 days a year.

City of Helena

There are a variety of different transportation providers operating within the Helena area. These providers include public, private and non-profit operations. Most of these organizations serve a specific segment of Helena's population (*The Greater Helena Area 2001 Transportation Development Update, 2001*).

The Downtown Trolley was established in May 2001, operated by Helena Dial-a-Ride for the Downtown Helena area. The trolley system was designed to circulate through Downtown Helena, providing an alternative mode of transportation for people traveling in the area. The trolley operates six days a week on a 20-minute cycle and serves the area between the Helena walking mall and the Great Northern Town Center (*The Greater Helena Area 2001 Transportation Development Update, 2001*).

Spring Meadow Resources is a non-profit organization providing services to adults with mental deficiencies. The service was originated in 1974. Spring Meadow has numerous group homes in the Helena area and provides transportation to its clients involving daily trips to the Spring Meadow Resources Day Center and Helena Industries. The service is also used to take clients to shopping centers, medical offices, banks, and restaurants.

The Montana Department of Transportation Employee Vanpool has three vans that are used in an employee vanpooling program. The program was started in 1978 and operates on three routes, which include Helena, the Helena Valley, and East Helena.

Rocky Mountain Development Council (RMDC) is a public agency serving a variety of clients and has been providing transportation services for their senior program participants since 1986. RMDC operated five days a week and the buses pick up their clients at their homes and take them to and from their program functions within the city limits.

G & L Transit is a charter bus company based in Helena and Butte. The service provides transportation for tour charters, the U.S. Military, airlines, and hospitals. The service is available 24 hours a day, seven days a week and coordinates with Dial-A-Ride and RMDC to meet the needs of the clients.

➤ Health Care

Broadwater County

The Broadwater Health Center has 44 beds, a critical care center and offers obstetric care. It provides physical therapy, occupational therapy, speech therapy and respiratory therapy. There are ambulance services, a diagnostic laboratory a radiology department and 9 acute care beds. BHC also operates a home health program and the BHC Nursing Home.

There are two doctors in Townsend, one chiropractor, an optometrist, and one dentist. The hospital has an emergency room, but there are no general medical facilities open on weekends. The doctors are on call for the emergency room, but it is not otherwise staffed. There is a medical clinic, operated by the two doctors and a nurse practitioner that has limited hours.

There are two hospice providers that serve Broadwater County, Intrepid and Hospice of St. Peter's. Both of these are based in Helena. There are two full time R.N.'s and a part-time R.N. providing hospice care.

There are visiting physical therapists, one from Intrepid and one from Homelink. A speech therapist visits as well, supplied through Intrepid.

Vaccinations are available through the County Health Office. There is one R.N. County Health Nurse.

Lewis and Clark County

St. Peter's Hospital, profiled in the Business Profiles section, serves as a hub for regional health care encompassing all the surrounding counties: Broadwater, Meagher, Jefferson, Powell and Granite. There are physicians and facilities available in Helena in every medical specialty.

The City-County Health Department operates The Cooperative Health Center. This is a community health center for people who need basic medical care - including people with limited income and/or insufficient health insurance. A team of doctors, nurse practitioners, and physician assistants offers physical exams, diagnosis, treatment and follow-up for basic health care needs.

The Cooperative Health Center's Medication Assistance Program, available to patients, provides reduced-cost medications to patients with no prescription drug coverage. The Center offers access to short term mental health therapy. It also provides free breast and cervical health screening for women age 50 and over.

The Cooperative Health Center operates a limited dental clinic. Available services include dental screening, cleaning, basic dental services and extractions.

The Parker Medical Center in Lincoln is operated by the Cooperative Health Center, Inc. The Parker Medical Center offers health care for illnesses and injuries, physical exams, and immunizations for all age groups. The Center's services are available to all Ovando, Helmville, and Lincoln residents regardless of their ability to pay. There is one Physician's Assistant at the Parker Medical Center.

Meagher County

The Mountainview Medical Center in White Sulphur Springs has been involved in a \$2.6 million expansion and upgrade over the past 18 months. It is licensed for 6 beds including 2 Intensive Care Units. There are two M.D.'s, one of whom is a pediatrician. There is an associated 31 bed nursing home and a home health agency. The Center provides emergency room coverage 24/7. The expansion has doubled the ER capability and more than doubled the lab, outpatient and physical

therapy capacity. The hospital has a visiting gastroenterologist. There is also a mental health social worker. The hospital does no surgery and provides no obstetric services.

The Center is a teaching hospital, with residents receiving training through the WAMI program at MSU. It is a satellite site for nursing education. It is a teaching site for the University of Great Falls' medical coding program. It is also a certified diabetes teaching site.

➤ **Housing**

Broadwater County

Inquiries have produced no county information about housing needs in Broadwater County.

Lewis and Clark County

In 1999 the Helena Area Housing Task Force adopted the Greater Helena Area Housing Plan. This plan resulted from the Task Force's efforts and a survey by Dodge Data. The Task Force and the survey addressed only low income/affordable housing. The Task Force report states that the waiting list for section 8 housing fluctuates between 450 and 650 applicants. 84.8% of survey respondents indicated a need for affordable rental housing. 82% of the homeless people in the area are single and need one-bedroom residences.

Meagher County

In summer 2004, Meagher County completed a survey of housing needs. The survey had a 40% response rate, or 125 out of 316 surveys mailed. 98% of respondents live in single family residences. 69% were over 70 years old, but 86% said they did not need assisted living care and 98% do not have mobility problems. 64% were low to moderate income. While the majority of respondents do not need assisted living or senior housing, there are still some people, 17, who do need assisted living. 22 people do have mobility problems. There is currently no assisted living housing in Meagher County, so there is a need among those who responded that they need assistance and have problems with mobility. Also, 76 people said they would live in senior housing if it were available.

Educational Institutions

The below table itemizes the number of elementary and secondary schools operating within the four-county area. It also denotes that within the area, there are two post-secondary institutions located in Helena. Both the University of Montana-Helena College of Technology and Carroll College provide educational opportunities for local and regional students.

| Number of Educational Institutions | | | | | | | | | | | | | |
|------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|---------|-----------------------------------|------------------|
| County | PK-K | K-6 | 1-3 | K-5 | 4-6 | 6-8 | 7-8 | K-8 | 1-8 | 9-12 | Private | Colleges/ University System | * Home School |
| Broadwater | | 1 | | | | | 1 | | | 1 | | | 27 |
| Lewis & Clark | | 5 | | 13 | | 3 | 2 | 1 | | 4 | 7 | 2 | 165 |
| Meagher | | | | | | | 1 | 3 | | 1 | | | 18 |

* Total enrollment, K-12.
 Source: MT Office of Public Instruction, Directory of Montana Schools, 2001-2002 (www.opi.state.mt.us).

The 2003 enrollment in public K-12 schools is:

| County | K-8 | 9 to 12 | Total K-12 |
|-----------------|-------|---------|------------|
| Broadwater | 512 | 233 | 745 |
| Lewis and Clark | 6,303 | 3,223 | 9,526 |
| Meagher | 208 | 78 | 286 |

| County | Total K-12 Private | Total K-12 Home school |
|-----------------|--------------------|------------------------|
| Broadwater | 0 | 19 |
| Lewis and Clark | 331 | 217 |
| Meagher | 0 | 13 |

The Region is home to two colleges. The **University of Montana-Helena College of Technology** offers technical proficiency Certificates, Associate of Applied Science, Associate of Arts, and Associate of Science degrees, as well as study toward upper-level and graduate-level programs in cooperation with other Montana University System institutions. The campus recently completed an expansion and added new facilities. This included a state-of-the-art science, computer labs, automotive and construction facilities. www.umhelena.edu



Front of new addition at UM-Helena. Photo courtesy of UM-Helena.



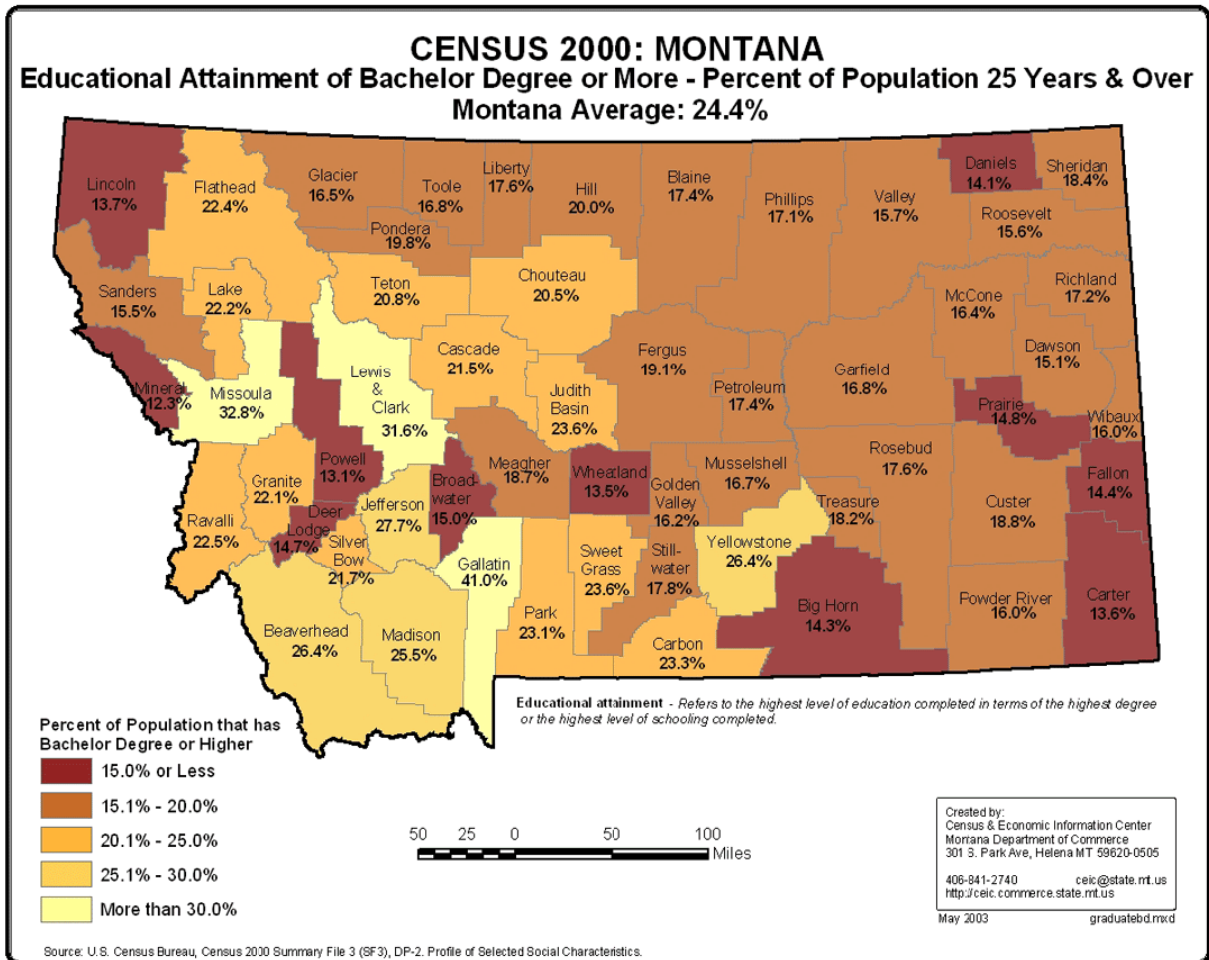
Picture of Carroll College from www.carroll.edu

Carroll College was founded in 1909 in Helena by the Catholic Diocese. It is a liberal arts college that offers over 40 Bachelor's degree majors which include many pre-professional degrees such as pre-law, pre-med and pre-pharmacy. Carroll College current student population is 1,400.

Career Training Institute, a private, non-profit organization in existence since 1983, administers several employment/training programs sponsored by or established through, Housing and Urban Development, TANF, WORC and FSET (food stamp), the Workforce Investment Act, and the State Comprehensive Economic Development Strategy - 2008 57

Displaced Homemaker program. It also offers professional development classes in general workplace and interpersonal skills, and computer-based learning in operating software programs. It has a Business Information Center that has computer workstations, business counseling, and business formation and operating information resources. There is a Business Resource Center which offers classes from professionals in marketing, planning, finance, government procurement and Quickbooks Pro.

The below figure illustrates the percent of the county population that has attained a bachelor degree or higher.



➤ **Taxes**

Property Tax Levies

| | Broadwater County | City of Townsend | L & C County | City of Helena | City of East Helena | Meagher County | White Sulphur Springs |
|------------|-------------------|------------------|--------------|----------------|---------------------|----------------|-----------------------|
| Tax Value | 11,062,900 | 1,581,140 | 101,888,410 | 50,927,068 | 2,414,609 | 7,463,000 | 925,560 |
| Mill Value | 11,062.90 | 1,581.14 | 101,888.41 | 50,927.07 | 2,414.61 | 7,463.00 | 925.56 |

Bonding Capacity

The Montana Code Annotated 2003 provides for the computation of all counties’ capacity to issue bonds.

“7-7-2101. Limitation on amount of county indebtedness. (1) A county may not issue bonds or incur other indebtedness for any purpose in an amount, including existing indebtedness, that in the aggregate exceeds 1.4% of the total assessed value of taxable property, determined as provided in [15-8-111](#), within the county, as ascertained by the last assessment for state and county taxes.” MCA 2003

| Values as of 2008 | Broadwater | Lewis and Clark | Meagher |
|-------------------|-------------|-----------------|-------------|
| Assessed Value | 277,228,776 | 2,962,741,713 | 221,570,395 |
| Debt Limit | 6,930,719 | 74,068,543 | 5,539,260 |