Chapter Three The Community Context of the RML Campus



3 The Community Context of the RML Campus

3.1 Location of The Rocky Mountain Laboratories (RML) in the Region

RML is located in Hamilton, a small community in southwestern Montana approximately 46 miles south of Missoula. It is the largest city in Ravalli County and serves as the county seat. In 1998, Hamilton approved a Comprehensive Master Plan for the city, which included a Zoning Map. The Zoning Map identifies RML as a Public Institutional use which is described in the Hamilton Municipal Code as follows:

Public and Institutional Facilities

The **Public and Institutional Facilities** district establishes zoning to accommodate those public and institutional uses that are related to the health, safety, educational, cultural and welfare needs of the City. Permitted uses include colleges and schools; convention and cultural centers; churches; government-owned facilities, including fire stations, parks and playgrounds; fairgrounds; and non-profit organization facilities.

RML is bounded to a large extent by single-family residential (R-S) zoning, although there are a few scattered parcels located north and east of the campus that are either unzoned or outside the city boundaries. The land to the west is zoned single-family residential also although much of it is within the River Park and the Bitterroot River floodplain. To the south is the city boundary with bordering single-family residential properties in Ravalli County. Refer to Figure 3.1.

As federal property, the RML campus is not subject to local zoning rules. The National Institutes of Health (NIH) has briefed local officials on actions discussed in the Draft Master Plan.

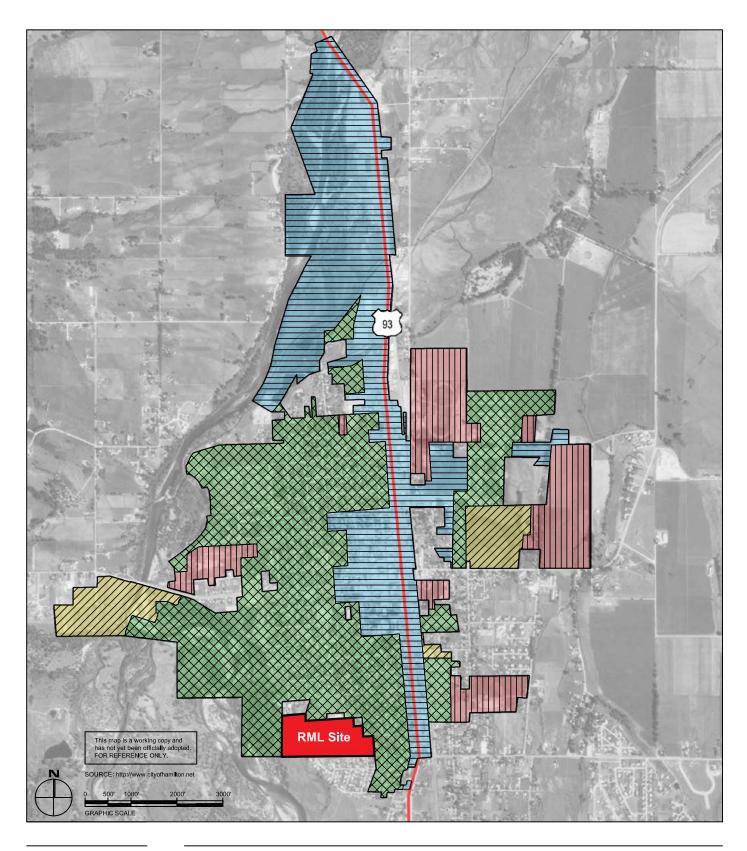
3.1.1 History - Hamilton and RML

Hamilton was founded by copper king Marcus Daly in the late-nineteenth century. As described on the City of Hamilton's web site, Daly's mines required a consistent supply of timber and a mill to support the timber operations. The town, in turn, was designed to support the mill. It is said that Daly wanted to begin business in the then county seat of Grantsdale, MT, but was denied the opportunity. He supposedly founded Hamilton out of his own pocket as a reaction to being rebuffed at Grantsdale. The town of Hamilton was incorporated in 1894 and was named after James Hamilton, a Daly employee, who platted the town along the route of the Northern Pacific Railway in 1890. When Daly died in 1900, Hamilton was the commercial center of the Bitterroot Valley and the seat of Ravalli County.

As the population expanded westward, many early settlers in the Montana foothills of the rugged Bitterroot Range of the Rocky Mountains contracted a disease known as "black measles," or "spotted fever," now known as Rocky Mountain Spotted Fever. In 1902, the U.S. Public Health Service sent out a research team to find the cause. Tents, cabins, and an old schoolhouse served as research facilities, where scientists determined that the disease was transmitted by ticks, identified the cause as what is now called *Rickettsia rickettsii*, and formulated a vaccine against the agent.

In gratitude, the State of Montana built a new facility in 1928, which the Public Health Service then purchased in 1931, resurrecting a local economy that had gone into decline.

In the summer of 2000, Hamilton made international headlines when forest fires throughout the Bitterroot Valley filled the area with smoke and prompted the evacuation of many residents. President Clinton declared a state of emergency in the area and dispatched National Guardsmen to assist with fighting the fires.



NIH-RML Master Plan

Hamilton, Montana

Hamilton City Limits

Commercial

Residential

Public Institution

Unzoned

Existing Zoning Districts

Figure 3.1

NIH/ORF/DFP

LSY Architects

Oudens + Knoop Architects, PC

Hamilton is home to two microbiological research and production facilities, RML and a branch of the Corixa Corporation (bought in the late 1990s from the Ribi Corporation). Glaxo Smith Kline purchased the Corixa Corporation in 2005.

3.1.2 Geography

Ravalli County is part of a north/south mountain valley bordered by the Sapphire Mountain Range on the east and the Bitterroot Mountains on the west. The Bitterroot Valley is named for the Bitterroot Flower, the Montana state flower. Hamilton, like much of the county, is adjacent to the Bitterroot River which drains the valley.

According to the U.S. Census Bureau, the county has a total area of 6,217 km² (2,400 mi²). 6,201 km² (2,394 mi²) of it is land, and 16 km² (6 mi²) is water. Only 0.25% of the total area is water.

Hamilton is located at 46°14'54" North, 114°9'35" West (46.248412, -114.159852) GR1. According to the U.S. Census Bureau, the city has a total area of 6.0 km² (2.3 mi²), none of which is considered water as defined by the Bureau. The Bureau's calculations exclude areas occupied by bodies of water such as the Bitterroot River. RML is immediately adjacent to the river with some floodplain and wetlands at the western end of the site. It has an altitude of approximately 3,500 feet above sea level.

Neighboring communities include Pinesdale (pop. 742) and Corvallis (pop. 443) to the north and Grantsdale (pop. Unknown) to the south. Other communities in the county are Darby, Florence, Stevensville and Victor.

3.1.3 Regional Context

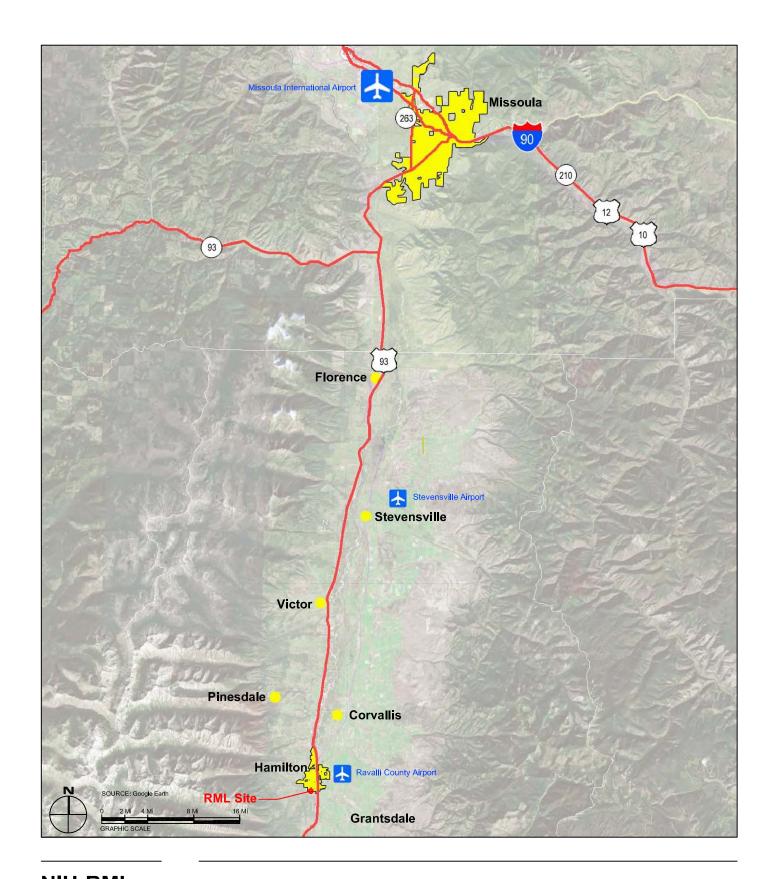
Hamilton is located in the Bitterroot Valley between the Bitterroot River and the Bitterroot Mountain Range to the west and the Sapphire Mountain Range to the east. Refer to Figure 3.1.3. The city is built along U.S. Route 93 (first street within the city), a popular route for travelers between Yellowstone and the Glacier National Park, and a seldom-used rail line operated by Montana Rail Link, Inc., both of which run north-south roughly paralleling the Bitterroot River which joins the Clark Fork River of the Columbia River Basin in Missoula, MT.

The highway is especially significant since it is the primary route to Missoula to the north and its population of over 57,000, the University of Montana main campus, the Northern Region headquarters for the U.S. Forest Service and other employment centers. Residents of Ravalli County and Hamilton regularly commute to Missoula for work.

Missoula has an international airport, though Ravalli County has a small air strip for private aircraft. In addition, Missoula contains the nearest major medical care centers with the 164-bed St. Patrick Hospital and Health Sciences Center and the 120-bed Community Medical Center which provide more facilities and care than currently available from the 25-bed Marcus Daly Memorial Hospital in Hamilton, the only hospital in Ravalli County.

Both the City of Hamilton and Ravalli County experienced rapid growth in the early part of the decade and have since adopted Growth Policies to control future expansion. Hamilton's policy was adopted in 2003 for FY 2004-2008, and Ravalli County's in 2002. The Ravalli County Growth Policy states, in part:

Ravalli County will probably continue its rapid growth during the current decade. "Population growth will almost certainly be governed by the rate of in-migration to the valley... The factor most affecting future growth is what will happen to perceptions of the valley's attractiveness as this fast growth continues and increasingly takes its toll on the very thing enticing more people to move to the valley- the area's scenic qualities and rural character."- Dr. Larry Swanson.



NIH-RML Master Plan Hamilton, Montana

Figure 3.1.3

Bitterroot Valley Area Map

And:

If current trends continue, the county will experience more development, primarily residential, in a scattered pattern. Commercial and industrial development will likely locate near existing service centers and along major travel corridors.

According to the Hamilton Growth Policy:

The City of Hamilton's jurisdictional area consists of 1.8 square miles of land area within the city limits. Its anticipated planning area extends several miles in all directions beyond the city limits. In general, the city is an urban community that has developed with a broad mix of land uses including housing, commercial, industrial, public, recreation and open space uses. Hamilton, to a large part, is built out within the existing city limits. The residentially zoned parcels located in the city limits are mostly infill projects. The existing commercial and industrial lands within the city limits are available for new development primarily along Route 93.

And:

The constraints on potential land uses within the city are divided between those that are a part of the city's natural endowment, and those that result from man-made structures and activities.

Constraints Resulting From Nature

Twenty-five percent (25%) of the city is within the flood hazard area. Flooding may be expected in extreme conditions in the event of a 100-year flood.

Constraints Resulting From Human Activities

Route 93 divides the city on its north/south axis, presenting both opportunities and constraints. As a constraint, the highway literally divides Hamilton in two. However, the city has both visual and direct access from the highway as well as visual highway frontage for commercial and/or industrial users. Route 93 provides the primary source for regional access to and from the city. There are some industrial and commercial businesses located throughout the city that are involved in the processing, storage, and/or manufacture of a wide variety of goods and materials that benefit from the highway access.

Taken together, these observations suggest that the region will continue to grow along the north-south axis of the river and Route 93.

3.2 Transportation

3.2.1 Automotive

The overwhelming preponderance of travel in Ravalli County and Hamilton is made by private vehicles. However, since 1976, the Ravalli County Council on Aging (COA) has been providing a demand-response service to senior citizens five days a week using an ADA-accessible 14-passenger van. The service is headquartered in Hamilton. In addition, Valley Taxi and Mountain Taxi provide taxi service within Hamilton, and Yellow Cab, Inc. provides taxi service from Missoula. An airport shuttle is also available from the Missoula International Airport.

Ravalli County has approximately 1,450 miles of public roadways. Approximately 550 miles of these roads are maintained by the County Road Department. Of the 550 miles of roadway approximately 300 miles are paved and 250 miles are graveled.

Ravalli County Transportation Planning

The need for transportation planning and alternate modes of travel that reduce reliance on single-occupancy vehicles has been recognized by the county. According to the Ravalli County Growth Policy:

The seven-member Ravalli County Transportation Advisory Committee (RCTAC) has completed a five-year long-range transportation plan. A major goal of the plan is to provide improved transit connections with Missoula due to the large number of local commuters who work in the Missoula job market. Mass transportation is provided by:

- The Missoula Ravalli County Transportation Management Association (MRCTMA)
- The Transportation Advisory Committee
- The Council on Aging

Hamilton's Transportation Plan

The Hamilton Area Transportation Plan, contained in the city's Growth Policy, is the result of the city's desire to conduct an in-depth analysis of their transportation system and develop a short-term and long-term needs assessment.

The future roadway system in Hamilton is defined using a classification system that reflects a hierarchy of facility types. The desirable goal for every classified street section is that it carry the design volume of traffic at the desired level-of-service. The facility types are as follows:

Principal Arterials: U.S. Route 93

Function: Mobility

A four-lane divided roadway with a typical right-of-way width of 120 feet and curb-to-curb pavement width of 100 feet.

- Major Collectors: SR 269 (East Side Highway) and SR 531 (Main Street)
- Minor Collectors: (All other local collector streets in Hamilton)
 Function: Land access/Mobility
 Collectors are intra-community highways connecting residential neighborhoods with community centers and facilities.
- Local/Residential Streets (all remaining residential and commercial streets)
 Function: Land access

Primary function of local/residential streets is access to abutting properties. Local streets include a variety of designs and spacing depending on access needs. Local streets typically have low traffic volumes and provide internal circulation and undivided roadway access to residential development boundaries and small community facilities.

Streets surrounding and serving the RML campus are classified as Local/Residential Streets, and the city's Transportation Plan does not propose to change or widen these.

On the arterial system, primary north/south arterial travel is provided by Route 93, with two lanes in each direction. Secondary east/west travel is provided by Main Street, Fairgrounds Road and Golf Course Road. Each of these facilities currently operates with one lane in each direction.

RML's main entrance for employee and visitor vehicles is on South 4th Street which is connected to Route 93 approximately three blocks to the east by a number of east-west streets – the nearest being Grove and Baker Streets. Baker Street also provides access to the commercial vehicle entrance on the north side of the property at 5th Street, though for larger vehicles, the approach may best be from 5th Street by using Desta Street or another east-west street north of Baker Street. Properties to the south of the RML campus are generally accessible by Montana Avenue which connects with Route 93 via Hope Avenue.

3.2.2 Rail

A single-line Federal Railroad Administration Class 2 freight line runs from Missoula through Hamilton to Darby. The line carries fewer than two carloads per mile of freight and is restricted to a 25 mph speed limit. It has limited load capacity, many grade crossings and was deemed at risk of abandonment in a Montana Department of Transportation Study, 2000 Montana State Rail Plan Update. There is no known consideration by the owner, Montana Rail Link (MRL) of upgrading or adapting this line for potential passenger use.

3.2.3 Air

Hamilton is served by the Ravalli County Airport which is publicly owned and operates only during dawn to dusk hours. The airport is not federally certified but is State inspected. It has a paved, 4,200 ft. runway and accommodates small, private single and multiple engine and jet aircraft, commercial air taxi, and general aviation helicopter. Stevensville has a 3,800 ft "hard surface" runway for small aircraft.

Commercial air service is via the Missoula International Airport which is located about 46 miles north of Hamilton. Carriers currently serving the airport include:

- Alaska Airlines Horizon Air
- Allegiant Air
- Big Sky Airlines
- Compass Airlines/Northwest Airlink
- Delta Connection
- Northwest Airlines/KLM
- United Express

There are no regularly scheduled international flights at this writing.

3.3 Utilities

3.3.1 Water - Hamilton Water Supply

The City of Hamilton completed a series of major improvements to their water system in 2003-2004, bringing on-line three new wells with disinfection facilities and replacing their 1934-era water storage reservoir. The city now pumps water from seven groundwater wells spread throughout the distribution system. The capacity of these wells ranges from 300 to 700 gallons per minute (gpm), with a theoretical combined capacity of 4,375 gpm. The water is chlorinated at each well. The City of Hamilton Department of Public Works (CHDPW) municipal water supply system is pressurized by a one million gallon in-ground concrete storage tank located in the SW ¼ of Section 32, Township 6 North, Range 20 West. This tank supplies water to nearly all of Hamilton via a gravity fed system. A limited number of homes located at a higher elevation than the tank are served by a pump station using five pumps.

The city water system includes a 12-inch diameter water main connecting the storage reservoir to the 10-inch diameter main located within 1st Street. RML installed a 12-inch water main from 1st Street down Grove Street to the RML Campus in 1995, connecting the city's 6-inch diameter cast iron water mains at 2nd, 3rd, and 4th Streets, improving the city's distribution system and pressure. The city water pressure is approximately 60 psi. The city can supply more than 2,000 gpm at the corner of 4th and Grove Streets - the RML connection point.

In 2000, the average daily use for the system was 1.6 million gallons per day (mgd). The peak was 2.5 mgd.

3.3.2 Storm Water

Storm water is currently drained locally on the RML campus by dry wells that discharge to groundwater. According to the Hamilton Growth Policy, this is a common form of storm water

management in the Hamilton area. Dry wells or sumps are frequently used on public right-ofways, public lands, and commercial properties. There is no municipal storm water drainage system at this time, or any known plan to add one.

3.3.3 Sanitary - Wastewater Treatment

Currently, wastewater generated at RML is discharged to the sanitary sewer system operated by the CHDPW. Current sources of RML wastewater include sanitary waste, liquid waste from animal facilities, boiler water, and cooling water. Wastewater discharges from RML to the CHDPW sanitary sewer are via four sewer mains.

3.3.4 Electrical Utility Systems:

The City of Hamilton currently has two power substations owned by the Northwestern Energy Company (formerly The Montana Power Company). One is an older 4,160-volt substation that is being phased out. The second is a 12,470-volt, 20 MVA station that is loaded to approximately 12 MVA. Two of the four distribution lines that serve the community feed RML. The 'West Line' is the main utility primary feeder for RML and runs along the west side of town. This line is currently feeding both the West Distribution and East Distribution systems at RML via aerial lines that run along the northern border of the campus. If the West line is cut or damaged between the substation and RML, Northwestern's 'Central' primary feeder has manual switches that allow RML to be cut over to that feeder. Due to the limited capacity on the Central Feeder, it should only be considered for short term emergency use according to Northwestern. The Master Utility Plan (MUP), currently under development, is anticipated to include recommendations for additional dedicated power to the campus from a substation to the southeast.

The electrical distribution to the RML campus consists of two primary underground services from the local utility company, designated the West and East Distribution systems. An additional separate underground service has also been installed as part of the IRF. In addition to the primary electrical feeders there is one overhead 120/240 volt, single-phase secondary feeder to a utility pole in pasture.

All primary feeders are 12,470-volt primary services with utility owned, oil filled, pad mount transformers to step the voltage down to 480-volt 3-phase 4 wire wye secondary services. The MUP is anticipated to include recommendations for modifications to this system. The feeders are fed from the same overhead primary line running by the north and west sides of the property. The lines enter the property underground to the transformer locations. The East Distribution system is fed with a 2.5 MVA transformer that feeds a 4,000 amp, 480-volt main distribution board. Based on readings made for the MUP and projections for additional demand from projects currently under construction, the demand load for the East Distribution system is estimated to be between 1,800 and 2,000 KW. The West Distribution system is fed with a 2.5 MVA transformer that feeds a 4,000 amp, 480-volt main distribution board. The new service to Building 28 (IRF) is from a single 3 MVA transformer. Based on readings made for the MUP the average peak load for the West Distribution system has been estimated to be 1,000 KW, although demand as high as 1,200KW has been recently recorded. The 200 KW spike was attributed to a temporary rental chiller used on Building 13 during that time period.

3.3.5 Telephone and Data Network System:

The local service providers are upgrading systems and a recent upgrade providing fiber optics to RML has been completed. These systems are constantly being upgraded and do not present a limiting factor in the growth of RML. The RML campus currently has a 100 pair telephone line and a DS3 Line via fiber optic cable coming in from Qwest, the local telephone company. The 100 pair provides service for direct telephone lines and three T1 lines from MCI. One T1 line is for backup for the NIH WAN (Wide Area Network) connection, a second is for the switched voice circuits on the Definity telephone switch, and a third is for video teleconferencing. The DS3 line is the primary WAN Connection.

The current telephone switch is a Definity switch by Lucent. It is no longer being manufactured

but it is still being supported. The current campus licensing agreement is for 700 telephone lines, and presently, there are 390 ports available for use. If necessary, the license could be modified to add additional lines, but this could be limited by hardware availability in the future.

According to Qwest Federal Services, the Qwest Hamilton central office is currently unable to directly provide ISDN PRI or BRI circuits. These types of circuits must be pulled from the Missoula office, which result in Missoula numbers being assigned. If available, these services would allow caller ID information to pass to RML telephone equipment to digital display voice terminals. Features such as this may not be mandatory, but would provide more efficient communications.

Limited services from the local Qwest office may impact some future telecommunications functions at RML. However, the demand from a local federal government agency may prompt or force upgrades of the local Qwest facilities

3.3.6 Natural Gas Utility Service:

The RML campus is currently served by four natural gas utility service lines. Only one of these is a large industrial service. Three are smaller residential type services.

The existing three smaller service lines serve Buildings 8, 9 and 11. Each of these is a ¾" residential gas service. These services extend individually to each building from the utility company's service main in the alley between 3rd and 4th Streets south of Grove Street. Each building serviced is fitted with its own meter and service regulator as is typical for residential gas service.

A large industrial gas service line was installed in 2000 specifically to serve the new heating plant in Building 26. It is now the source for the entire campus gas distribution system. A new gas distribution system was installed in 2003.

The main service line is sized to carry no less than 100,000 scfh (nearly twice the current campus load) of gas and could easily carry nearly twice this volume without undue pressure drop. However, the capacity of the utility company's distribution grid in the vicinity of RML will limit the amount of natural gas which can be delivered to campus. During the installation of the 6" service line, the utility company raised its distribution pressure in order to meet expected campus loads. The utility company has recently completed a distribution assessment of their grid capacities in Hamilton and believes with its other demands (other consumers) it can support a load at RML of only 60,000 scfh (the current projected demand). However, the utility company is currently planning to upgrade a major leg of its distribution in Hamilton. When complete, the planned upgrade will allow the utility to deliver up to 150,000 scfh to the RML campus, more than twice the current connected load. The utility company has assured RML that they will supply what gas volume is needed.

3.4 Fire Protection and Emergency Services

Fire protection and emergency response services throughout Ravalli County are supplied by 12 local volunteer fire departments. These include the Corvallis Fire Department, Darby Fire Department, Florence Fire Department and Quick Response Unit, Hamilton Fire Department, Painted Rocks Fire and Quick Response Unit, Pinesdale Fire Department, Stevensville Fire Department, Stevensville Rural Fire Department, Sula Fire and Quick Response Unit, Three Mile Fire and Quick Response Unit, Victor Fire Department, and West Fork Fire Department and Quick Response Unit. These units utilize a mutual aid agreement to provide assistance to each other as required. During major fire and emergency situations that exceed the capacity of local departments and/or response units, the Ravalli County Disaster and Emergency Services (DES) Coordinator offers assistance in the definition of combined plans and actions.

3.5 Law Enforcement

3.5.1 Ravalli County

The Ravalli County Sheriff's Office is primarily responsible for the investigation and enforcement of criminal and traffic laws throughout the county. However, these duties are concentrated outside the incorporated limits of towns and cities.

The Sheriff's Office serves as coroner and runs the county jail, which houses arrested persons for all law enforcement agencies in Ravalli County as well as for the U.S. Marshals, Federal Bureau of Investigations (FBI), Drug Enforcement Agency, law enforcement resources of the Immigration and Naturalization Service, and the Montana Highway Patrol.

3.5.2 City of Hamilton

The Hamilton Police Department has a total of 13 sworn officers, resulting in approximately one police officer for every 290 residents of the city. As the county seat and a center of commerce for the valley, Hamilton requires a larger police force than the suggested "one sworn officer for every 1,000 city residents" ratio typically used by other police departments. The rank structure includes the Chief of Police, one sergeant, two detectives (one who serves as the School Resource Officer), eight patrol officers and one animal control/parking enforcement officer. Service is provided 24 hours a day/seven days a week.

3.5.3 RML

The responsibility of the NIH Police is to protect people and property from the threat of terrorism, crime, or other hazards so the administration of the business and research of the NIH may progress as unimpeded as reasonable. The police accomplish this by conducting routine patrols, and by responding to and handling emergencies and other requests for service. The NIH Police enforce laws, investigate crimes, issue IDs and provide public services such as escorts and lock-out relief to those in need of assistance. The force utilizes crime prevention methods and techniques to reduce crime at the RML. They work to ensure the safe and efficient movement of traffic on the campus, investigate traffic accidents, and enforce traffic laws and parking regulations. The NIH Police conduct initial and follow-up investigations of all crimes committed against persons and property on the RML campus. The investigations include crime scene processing, interviewing victims and witnesses, arrests for prosecution and documentation of all activities. The NIH Police maintain a liaison with the FBI and all local law enforcement agencies. The NIH Police support the contract guard services by handling all incidents where law enforcement authority and expertise is needed. Contract guards at the RML provide patrols, escorts for visitors, and perimeter screening of persons and vehicles at the entrances.

3.6 Community Facilities and Cultural Assets

3.6.1 Museums. Theater and Historic Resources:

Hamilton currently boasts two museums. In 1887, the wife of Marcus Daly, a copper mining magnate who developed the local timber industry to supply framing timbers to his mines, completed the Daly Mansion. The mansion was closed following Mrs. Daly's death in 1941 until 1987 when it was reopened to the public as a museum. The second museum, the Ravalli County Museum, is housed in the former Ravalli County Courthouse. This museum was built in 1900 and has among other exhibits the Ricketts Museum which commemorates the development of RML.

There are other cultural assets in the area as well. The Hamilton Players, a theater company, perform plays on a regular basis in the building that once housed the predecessor of RML. Also, the High School has a large performing arts facility. St. Mary's Mission, in nearby Stevensville, was the first permanent white settlement in Montana, founded by Jesuit priests in 1841, and nearby Fort Owen provides a glimpse of early life in the valley.

A portion of the RML Campus is part of a Historic Preservation District. The buildings included in this district are Buildings 8, 9, 11 and the Quad. These buildings date back to the beginning of the RML campus and care has been taken to preserve and renovate them while maintaining their historical integrity.

3.6.2 The Bitterroot Library District:

The Bitterroot Public Library in Hamilton was originally chartered under the authority of the Bitterroot Library District, and receives partial funding from both Ravalli County and the City of Hamilton through property tax mills. Public libraries are also located at Stevensville and Derby.

The Library Board is comprised of residents who live throughout the Library District. The Board consists of five members: two each appointed by the city and county, and one that is appointed jointly by the city and county. This Board governs total operation of the Library and has the authority to make loans and grants.

3.6.3 Parks and Recreation:

Recreational opportunities abound in Ravalli County. Hiking, horseback riding, mountain biking, downhill and cross-country skiing, snowmobiling, golf, hunting, fishing, wildlife photography, and soaking in a natural hot spring are among the many activities available. Community Theater, rodeos, county fair, and various bluegrass, arts, harvest and microbrew festivals occur throughout the year. The adjacent Selway-Bitterroot Wilderness Area to the west and the Anaconda-Pintler Wilderness Area to the southeast provide protected wilderness areas. Lewis and Clark expedition campsites and trails are scattered throughout the valley. The City of Hamilton website (www.cityofhamilton.net) shows five parks within the city, including Hieronymous Park, Claudia Driscoll Park, Legion Park, the Vester Wilson Athletic Fields, and River Park, a portion of which adjoins the RML property on its western boundary. These parks are shown on Figure 3.6.

3.6.4 Education:

Elementary and secondary education consists of three elementary schools, a middle school and a high school. The University of Montana (student population of 12,124) and Missoula Vocational Technical Center, both located in Missoula, 46 miles to the north, are the closest centers of higher education. Newspapers such as the local "Bitterroot Star", the "Ravalli Republic" and the "Missoulian" provide a range of news from community updates to world events.

3.6.5 Public Facilities:

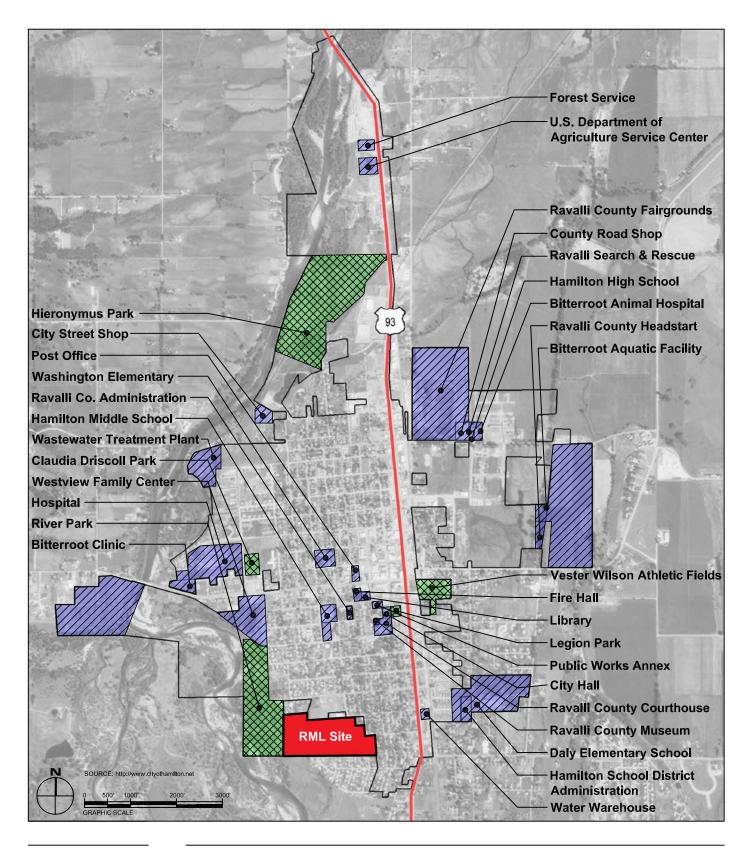
In addition to the assets listed above the City of Hamilton website includes a broad range of public facilities that contribute to the well-being of the community. These are included in Figure 3.6.

3.7 Population and Housing

3.7.1 Ravalli County

Following is a summary of demographic statistics for Ravalli County and its principal communities according to the 2000 U.S. Census:

Community	Population	Households	Area - Miles ²	Persons Per Miles ²	Dwellings per Miles ²
Hamilton	3,705	1,722	2.3	1,603.6	828.8
Stevensville	1,553	652	0.5	3008.3	1,377.3
Florence	901	323	4.7	190.7	71.1
Victor	859	351	1.6	537.6	234.7
Pinesdale	742	132	1.3	567	113.9
Darby	710	279	0.5	517.2	594.8
Corvallis	443	185	0.5	363.9	417.7
Ravalli County	36,070	14,289	2,400	15	7



NIH-RML Master Plan Hamilton, Montana — Hamilton City Limits

Public Facilities

Recreational Facilities

Figure 3.6

Community Facilities & Cultural Assets

Table 3.7.1

As of the 2000 Census, there were 36,070 people, 14,289 households, and 10,188 families residing in the county. The population density was 6/km² (15/mi²). There were 15,946 housing units at an average density of 3/km² (7/mi²). The racial makeup of the county was 96.71% White, 1.88% Hispanic or Latino of any race, 0.88% Native American, 0.30% Asian, 0.14% Black or African American, 0.10% Pacific Islander, 0.44% from other races, and 1.44% from two or more races..

Ravalli County's population has been projected to reach over 60,000 by 2025 in the Ravalli County Growth Policy (derived from 2002 Ravalli County Needs Assessment [Swanson] and the Montana Department of Commerce 2004).

Of the 14,289 households, 30.2% had children under the age of 18 living with them; 60.3% were married couples living together; 7.50% had a female householder with no husband present; and 28.7% were non-families. Twenty-four percent of all households were made up of individuals and 9.8% had someone living alone who was 65 years of age or older. The average household size was 2.48, and the average family size was 2.94.

In the county the population was spread out with 25.6% being under the age of 18; 6.2% were from 18 to 24 in age, 24.7% were from 25 to 44 old, 28.0% fell into the 45 to 64 age category; and 15.5% were 65 years of age or older. The median age was 41 years. For every 100 females there were 98.6 males. For every 100 females age 18 and over, there were 95.4 males.

The median income for a household in the county in the 2000 Census was \$31,992, and the median income for a family was \$38,397. Males had a median income of \$30,994 versus \$19,987 for females. The per capita income for the county was \$17,935. Almost 14% of the population and 9.6% of families were below the poverty line; 20.1% of those under the age of 18 and 6.3% of those 65 and older were living below the poverty line.

3.7.2 Adjacent Counties

The following table compares Ravalli County with its adjacent counties, the most economically significant of which is Missoula to the north:

County	Population	Households	Area - Miles ²	Persons per Mile ²	Dwellings per Mile ²
Ravalli	36,070	14,289	2,400	15	7
Missoula	95,802	38,439	2,618	37	16
Granite	2,830	1,200	1,733	2	1
Beaverhead	9,202	3,684	5,572	2	1
Lemhi, ID	7,806	3,275	4,570	2	1
Idaho, ID	15,511	6,084	8,485	2	1
Montana	1,087,340		147,165	6.19	

Table 3.7.2

3.7.3 City of Hamilton

As of the 2000census, there were 3,705 people, 1,772 households, and 855 families residing in the city. The population density was 619.3/km² (1,603.6/mi²). There were 1,915 housing units at an average density of 320.1/km² (828.8/mi²). The racial makeup of the city was 96.22% White, 0.89% Native American, 0.78% Asian, 0.11% African American, 0% Pacific Islander, 0.22% from other races, and 1.78% from two or more races. Approximately 1.65% of the population was Hispanic or Latino of any race.

There were 1,772 households out of which 22.3% had children under the age of 18 living with them, 36.3% were married couples living together, 9.5% had a female householder with no husband present, and 51.7% were non-families. 47.6% of all households were made up of individuals and 24.9% had someone living alone who was 65 years of age or older. The average household size was 1.95, and the average family size was 2.81.

In the city the population was spread out with 20.2% under the age of 18; 6.8% were from 18 to 24 in age; 24.0% ranged in age from 25 to 44; 20.6% reported ages from 45 to 64; and 28.3% were 65 years of age or older. The median age was 44 years. For every 100 females there were 82.2 males. For every 100 females age 18 and over, there were 74.9 males.

The median income for a household in the city was \$22,013, and the median income for a family was \$30,665. Males had a median income of \$25,795 versus \$22,138 for females. The per capita income for the city was \$14,689. Almost 18% of the population and 14.3% of families were living below the poverty line while 28.4% of those under the age of 18 and 15.3% of those 65 and older were below the poverty line.

3.8 Economy

3.8.1 Regional Economic Conditions

The Hamilton Growth Policy makes the following points about the local economy:

Key Area Conditions & Trends

The single greatest force in the Ravalli County area's recent and on-going economic change is relatively high rates of people moving into the area and population growth. In fact, about 95% of the recent population growth is attributable to much higher rates of net in-migration to the county. Ravalli County's in-migration and population growth is spurring employment growth at a relatively high rate. Total personal income is rising fairly rapidly as well. However, these high levels of "quantitative" growth are not translating directly into significant improvements in the "quality" of economic life for many Ravalli County citizens.

As the population grows, it is also aging. The principal areas of population growth are among teenagers and persons in their 40s and 50s. Generally these age shifts are consistent with what is happening in the U.S. population as a whole, but also are caused by the net in-migration and age of new residents.

The economy of the Bitterroot Valley has become increasingly "growth driven" and "growth dependent", with much of the employment and income growth associated with more people moving to the area and with heightened levels of construction activity. Historically, high levels of growth do not continue indefinitely. It is important for leaders and decision makers in the valley to enhance area qualities in ways that can assure future prosperity. The greatest deficiency in the area's economy is the relatively low level of per worker earnings, both for wage and salary employees and for proprietors.

Greatest Needs

Ravalli County and the City of Hamilton have two paramount needs in the area of economic development:

- Improve the quality of jobs in the valley;
- Find ways to condition economic growth and change in the valley so that it doesn't degrade the amenities that make the Bitterroot Valley so attractive to newcomers.

Key Area Assets

The following are considered to be current and potential key economic assets of Ravalli County and the City of Hamilton:

- Natural setting;
- Proximity to Missoula, a large and growing regional center;
- The presence of a highly adaptive wood products industry;
- The presence of RML, an NIH research lab and GlaxoSmithKline Corporation, a biomedical research facility;
- The long-standing presence and area relationship with the U.S. Forest Service;
- Matured and experienced work force;
- Proximity to the University of Montana and the College of Technology in Missoula;
- High level of area self-employment;
- Area farmers and ranchers;
- Scheduled improvement and capacity expansion of Route 93.

3.8.2 Rocky Mountain Laboratories Contribution to the Economy

An Economic Fact Sheet developed by RML makes the following points:

 For every 100 jobs at RML, approximately an additional 40 jobs in other parts of the Montana economy are affected, including fractional jobs. The total employment multiplier is therefore 1.4 or a total of 140 jobs including the original 100.¹

Presently, RML staffing, exclusive of the new IRF, is approximately 250. This means RML affects another 100 Montana jobs. The following economic data from RML is approximate, but indicates the impact of RML on the economy:

- The largest segment affected is retail trade (spending by employees at RML plus employees in other affected sectors) at roughly 22.5 of the 100 jobs. Health services are another 10 jobs; finance, insurance, and real estate sectors combined are an additional 10 jobs, split between serving businesses and consumers. Another 37.5 jobs are scattered primarily among other consumer services sectors.
- For every \$1 million in employee compensation at RML (payroll + fringe benefits), roughly an additional \$600,000 of employee compensation is generated in other parts of the Montana economy. The total employee compensation multiplier is therefore about 1.6.²
- At the present RML payroll of \$10.4 million, RML impacts another \$6.24 million in the Montana economy.
- The same segments of the Montana economy that were prominent in the employment impact analysis above are also prominent for employee compensation. Of the \$6.24 million generated by RML, about \$1.25 million is in retail trade, \$1.15 million in health services (health services wages and salaries are much higher than for retail trade), and \$624,000 in finance, insurance, and real estate combined.
- The present average annual salary at RML is \$41,600, based on 250 workers and an annual payroll of \$10.4 million for 2003. When the proposed IRF is built, the average annual salary at RML would be \$48,571, based on 350 workers and an annual payroll of \$17 million.³
- RML is included in a list of seven Montana research facilities that are considered vital to

¹ Phil Brooks, Ph.D., Chief Economist, Montana Dept. of Labor and Industry. November 2003

² Brooks.

³ RML Administrative and Facilities Management Section. November 2003

establish a "life sciences" economic development cluster in Montana.4

- Analysis indicates that, "The research infrastructure is concentrated in the west (Missoula, Hamilton). ... Establishment concentrations in the biotechnology core are above average in western Montana and almost twice the national average in the southwest. Employment concentrations are below average even in these regions, indicating that Montana's biotechnology cluster consists primarily of small companies. This suggests some promising entrepreneurial activity."
- The analysis further states, "Recruitment does not appear to be a problem. There are an adequate number of potential candidates for highly specialized or skilled positions who would like to move to Montana. . . . There is also an adequate supply of entry-level candidates, because large percentages of recent graduates with life science-related degrees seek to remain in Montana."
- As a side note, a recent streptococcus (strep throat) research project was significant in two
 ways. The research uncovered new information about bacteria-immune system
 interactions, and the five-person research team all have deep Montana connections, both
 as natives to the state and graduates of Montana universities.
- RML is cited in an economic research document as having an important role in the Bitterroot Valley's future.⁵

3.9 Other Relevant Federal Facilities in the Region

- USDA U.S. Forest Service
 - Northern Region 1 Missoula Office of the Regional Forester
 The Northern Region National Forest lands encompass 25 million acres and are spread over five states. Included are 12 national forests located within the perimeter of northeastern Washington, northern Idaho, and Montana; and a national grassland in North Dakota and northwestern South Dakota.
 - O Bitterroot National Forest Hamilton Office of the Forest Ranger The Bitterroot National Forest consists of 1.6 million acres of forest in southwest Montana and Idaho. Half of the forest is dedicated to the largest expanse of continuous pristine wilderness in the lower 48 states -- the Selway Bitterroot, Frank Church River of No Return, and the Anaconda Pintler. Much of its beauty can be attributed to the heavily glaciated, rugged peaks of the Bitterroot Range. Drainages carved by glaciers form steep canyons that open into the valley floor.
 - Federal Bureau of Investigation Missoula
 The Missoula Office of the FBI is under the jurisdiction of the Salt Lake City, UT Field
 Office, and is responsible for Covering Deer Lodge, Granite, Lake, Mineral, Missoula,
 Rayalli and Sanders counties.

3.10 Coordination with Local Planning Agencies

The planning agency with jurisdiction over the Ravalli County area is the Ravalli County Planning Board. Representatives of the RML have been in frequent communication with the county staff and the Hamilton City Planning Board staff over the years.

Continuing the practice developed for the IRF, Informal meetings and interviews were held with government agencies, local jurisdictions, citizen associations, and individuals. NIH and RML representatives and the master planning team established initial contact with city and county staff members.

⁴ Montana Industry Cluster Analysis, pp. 37-43. Regional Technology Strategies, Inc. May 2003.

^{5 2002} Ravalli County Needs Assessment, p. c. Dr. Larry D. Swanson, University of Montana. November 2002