

IV. INFRASTRUCTURE INVENTORY

A. Transportation Accessibility

ROADWAYS

There are several primary highways within Missoula County. The first is Interstate-90 (I-90). I-90 provides connection to areas to the east and west of Missoula. In addition, U.S. Highway 93 provides services to the north and south. Inside the City of Missoula there are several highways that are suitable for the trucks. These roads include Reserve Street (U.S. Highway 93), Brooks Street, and Broadway (U.S. Highway 10).

In addition to the above, Missoula County is also served by Highway 200 which runs through Bonner and north to Clearwater and Highway 12 starts in Lolo and runs west to the Idaho State line.

In addition to the primary highways listed above, there are several state secondary highways that are suitable for truck traffic within Missoula County. Mullan Road west of Reserve Street and out to Huson is a state secondary highway. This road leads right past the old Smurfitt Stone Site.

Finally, there are several streets that are major arterials suitable for large trucks. A partial list includes Airway Blvd and Expressway in the Missoula Development Park, Rogers Street, Stockyard Road and 3rd Street in the City of Missoula.

Almost every region identified in the matrix has some access to either a secondary highway or major arterial. Individual lots within those regions may have to extend roads in order to get access to those Highways or streets.

In the matrix we rated each block on the basis of its access to one of two criteria:

1. Distance from Interstate 90 or Highway 93, and
2. Access to an "Arterial" roadway

We have also included an overlay on the Interactive Map that shows Missoula's Truck Routes. These routes generally coincide with Arterial roadways.

RAILROADS

Missoula is fortunate to be on a major east-west railroad mainline maintained by Montana Rail Link (MRL). Historically railroads have provided local industries an essential connection with supply of raw materials as well as delivery of products to their sometimes distant markets. Railroads provide an efficient means of transporting bulk materials over great distances and so have been linked with the public's perception of

major industrial production. In Montana, the railroads have played an important role in the timber and mining industries.

MRL describes itself as “*an FRA Class II regional railroad that has been partnering with businesses for twenty five years to ship their freight across Montana, the nation and the globe. The MRL system consists of more than 900 miles of track in the states of Montana, Idaho and Washington; connects with BNSF Railway; and handles more than 410,000 carloads annually.*”

While MRL provides local industries with transportation of heavy freight to and from their businesses, it is also an important industrial employer of its own: “*It is one of Montana’s major employers, providing jobs for approximately 1,000 people living in towns all along our route... As the nation’s eighth largest railroad, it is headquartered in Missoula, Montana and is privately held. Major freight classification yards and car repair shops are situated at Laurel and Missoula... The majority of MRL’s main line is single track with passing sidings and is controlled by Centralized Traffic Control from the Transportation Center in Missoula.*”

With the closing of the Frenchtown paper mill and the local lumber and plywood mills over the last few decades, the railroad’s role is changing as they are adapting to new opportunities to help local industries.

Here is a brief list of some major local industries that rely on rail transportation to deliver materials and transport product:

1. Roseburg Forest Products
2. Lefarge Cement
3. Conoco
4. Bitterroot Lumber
5. Pacific Steel and Recycling
6. Northern Energy
7. GTS Interior Supply
8. Cenex
9. Thatcher Company
10. Phillips 66 Company

SIDINGS AND SPUR LINES

In order to provide service to industries adjacent to the main rail lines, MRL has both **sidings** (rail lines that are parallel to the main line and connect with it at either end) and **spur lines** (rail lines that turn off of the main line or a siding and dead lend into the business). These sidings and spur lines can be either on MRL owned property or on adjacent ownership.

As part of this Study, MRL provided us with maps that show the sidings and spur lines in the Missoula vicinity. These rail lines have been added as two layers called “Missoula Track 1” and “Missoula Track 2” on the Interactive Map.

The mills at Frenchtown and Bonner have rail infrastructure in place from past use that could be brought back to benefit the current and future industries that may occupy those mills. This infrastructure could be expanded or adapted to the needs of industrial users, if the anticipated traffic would justify the investment. There are also under-utilized spur rail lines at Roscoe Steel in Momont Industrial Park and on lands north of the Missoula Cemetery.

POTENTIAL FOR NEW SIDINGS OR SPUR LINES

Montana Rail Link has a review process in place to determine the feasibility of building a new siding or spur line. The review centers on whether or not construction of the new siding can be justified, based on the projection of demand for the products into the future. MRL accomplishes this review in house and is more than willing to work with local industries that can provide projection of adequate demand.

It is important to note that rail transportation opportunities benefitting industrial growth are not limited to the having the new or expanded industry occupy lands adjacent to the rail spur line. Transloading can greatly expand the area served indirectly by rail.

TRANSLOADING

Simply stated, transloading is the process of transferring a shipment from one mode of transportation to another, typically from rail to truck or rail to pipeline. This type of transfer occurs in Missoula at the Conoco-Phillips plant where liquid products from the Yellowstone Pipeline are transferred to tanker cars to continue the trip westward. It also occurs at the loading dock for Bitterroot Lumber/J & R Planing, where lumber products are transferred to trucks for transport to other local building suppliers. In the past, Pyramid Lumber has transferred logs from rail to truck on a spur line near Piltzville.

The great benefit of transloading for local industries is that it does not require the industry to be located on a rail line and it does not require the great investment in constructing a new rail spur line. Product could be delivered to the transloading facility, where it would be loaded on a truck for local delivery.

Until recently, Missoula did not have a dedicated transloading facility. BNSF Railroad currently has three transloading facilities in Montana. They are located in Billings, Shelby and Butte. Just recently, Bonner Transfer and Storage Company moved into the large warehouse at the Boner millsite. We believe it will greatly benefit Missoula

industries and commercial businesses, and will make the area more attractive to potential industry from having this transloading facility here in town.

For our current Industrial Lands Needs assessment, we rated the Blocks on the basis of the likelihood that a new siding or spur could be constructed. Highest on the list were, of course, those properties with existing sidings. Next highest were properties along branch rail lines off of the main line. The main rail line through Missoula has the highest amount of rail traffic, which cannot be interrupted or delayed unnecessarily; therefore new sidings along this line are a little more difficult to justify. Lands that were not adjacent to rail lines were of course given the lowest rating.

AIRPORT

The Missoula International Airport is located on the west side of Missoula, approximately 10 minutes from Downtown. The airport provides air service into and out of Missoula. Several commercial airlines use the Missoula Airport to provide direct service to twelve major cities and connections thousands of destinations. These commercial airlines include Delta, United and Alaska Air.

In addition to the commercial carriers, the airport also provides private service, with more landings and takeoffs from private planes occurring than commercial flights.

Blocks were rated on the basis of travel distance from the Missoula County Airport.

B. Utility Infrastructure

TELECOMMUNICATIONS - BROADBAND AVAILABILITY

Internet service has emerged as a critical factor in determining where many industries, not only high-tech, will locate. Cost, level of service and proximity to fiber-optic lines are all important to fledgling businesses looking for suitable sites to launch their enterprises.

Last year, Magellan Advisors prepared a *Next-Generation Broadband Feasibility Study* for Missoula City and County. The Study concluded that Missoula needs “next-generation broadband” in order to be competitive in attracting the industries that Missoula Economic Partnership targeted for development in the region. While our study has identified a slightly different mix of target industries, the need for fast and affordable broadband service remains critical to Missoula’s competitive status.

The Magellan Study identified five steps to reach the goal of bringing Missoula into the 21st Century of broadband:

I. Create a Working Group to Carry Out Recommendations:

Missoula's broadband initiative should continue to be built with grassroots support from community stakeholders. A working group representing key stakeholders will need to drive the following initiatives based on our recommendations:

- Why it's Needed: To help coordinate and receive input from the various stakeholders and ensure a coordinated approach that maximizes cost savings and accelerates next generation broadband growth.*
- How it Works: For the City and County to be successful in building a community network, a small working group should be charged with carrying out the recommendations of the Feasibility Study*
- Cost: An organization to manage and coordinate the group.*
- Next Step: Ask key stakeholders for a participating member*

II. Build a Missoula Community Broadband Network

- Why it's Needed: To accelerate the deployment of next-generation broadband services to the community at an affordable rate to help the community remain competitive in the global economy.*
- How it Works: The City and/or County would either entirely or in partnership with the private sector cover the capital and maintenance costs associated with building a fiber network and lease excess fiber to local broadband providers who may use it to deliver more broadband to Missoula's community.*
- Cost: \$10.5 million in funding over 5 years, through a combination of federal, state, private grants and municipal bonds.*
- Next Step: Include all of Missoula's stakeholders to develop and finance a network that is capable of serving the broadband needs of business, K-12 and university education, healthcare, government, public safety and community support.*

III. Implement Broadband-Friendly Public Policy

1. Dig Once: Implement joint trenching agreements between public organizations, private broadband providers and other utilities.

- Why it's Needed: "Dig once" policies minimize repetitive installation of costly broadband infrastructure and allow multiple organizations to use a "common trench."*
- How it Works: The City and County will change local ordinances to ensure these organizations and providers are notified of any proposed trenching or related infrastructure projects.*
- Cost: The City and County should develop a CIP fund to pay for infrastructure that can be used as opportunities arise. Funding amounts will be dependent on the forecast for upcoming projects.*

- *Next Step: Work to incorporate “dig once” policies into City and County ordinances and identify funding mechanisms to use when opportunities to install infrastructure arise.*

2. Infrastructure Standards: Implement City and County broadband infrastructure standards for land development code.

- *Why it’s Needed: To ensure cost-effective broadband infrastructure construction in conjunction with City and County capital projects, as well as private utility and development efforts.*

- *How it Works: By incorporating broadband engineering standards into City and County land development code, these organizations can take advantage of road, water, sewer and other capital projects to install basic broadband infrastructure.*

- *Cost: The City and County should develop a CIP fund to pay for all broadband infrastructure investments. Funding amounts will be tied directly to the amount and scope of City and County capital projects where broadband infrastructure may be installed.*

- *Next Step: Review, modify and finalize sample broadband engineering standards supplied in this project and embed them into City and County land development code.*

3. Permitting: Evaluate, streamline and reduce permitting fees to lower broadband provider construction costs when broadband infrastructure is being installed, relocated or repaired.

- *Why it’s Needed: To incentivize broadband providers to build more broadband infrastructure, more quickly and at a lower cost.*

- *How it Works: Streamlining and reducing permitting fees will reduce the time and cost for providers to plan, install and manage their broadband infrastructure in Missoula.*

- *Cost: Reducing permitting fees could reduce fees collected by the City; however, it could positively affect broadband investment in the community.*

- *Next Step: Evaluate and streamline permitting processes; reduce permitting fee ordinances for any future broadband infrastructure providers.*

4. Uniform Standards: Educate and partner with local developers to ensure new buildings or retrofits are equipped with basic broadband infrastructure, in conjunction with City and County broadband infrastructure standards.

- *Why it’s Needed: To promote City and County broadband standards and ensure that premises are equipped with the infrastructure necessary to access next-generation broadband.*

- *How it Works: City and County will work with local developers to identify low-cost improvements to existing and new developments to meet Missoula’s broadband engineering standards.*

- *Cost: There is no direct cost to the City or County.*

- *Next Step: Implement the broadband infrastructure standards in Item 2.*

Discuss the implications with local developers to understand if any obstacles will be experienced.

IV. Maintain Accurate Records and Share Information

Map: Ensure all broadband infrastructure is built according to the above-mentioned public policy tools and that appropriate records and accurate data is included in City and County GIS systems in order to develop a broadband infrastructure map for the region.

- *Why it's Needed: To give the City and County the ability to track what broadband infrastructure is being built within the region.*
- *How it Works: The City and County would require all permits for broadband infrastructure to identify the location of installation and the type of infrastructure being installed.*
- *Cost: There is no direct cost to the City or County.*
- *Next Step: Evaluate the City and County systems to ensure they can track the broadband infrastructure being installed.*

V. Develop Education and Adoption Strategies

Information sharing: In cooperation with Missoula's service providers, raise awareness in the business community regarding broadband services that are available in Missoula. City and County economic development leaders should connect current and prospective businesses, developers and property owners with Missoula's local providers, on an equal and competitive basis.

- *Why it's Needed: The City and County should promote the local providers in Missoula so businesses and anchors know what telecommunications services are available and providers can increase their customers*
- *How it Works: City and County should co-market with providers to ensure end users know what services are available.*
- *Cost: There is no direct cost to the City or County.*
- *Next Step: Discuss service offerings with each of the providers and identify co-market strategies.*

Broadband Availability has fortunately been the focus of recent efforts by a number of local agencies and groups. Recently, ALPS, a legal professional liability insurance corporation, was able to produce a map of our broadband infrastructure. That infrastructure map was created through an agreement with the service providers, and it shows the fiber-optic lines buried throughout the Missoula urban area. It is noteworthy that it does not show equipment, whether it is lit or dark fiber, and it does not indicate its available capacity.

However, technology has been outpacing market driven network expansion, so the fight to stay current with technological advances is an ongoing challenge. In order to focus community energy and make recommendations for coordinated improvements in the

broadband infrastructure, Missoula's Broadband Task Force was formed last year. A coordinated effort can help reduce cost to the end users and ensure better access for important segments like education, healthcare, and government. The TaskForce has already made recommendation to Missoula City Council to lower permitting fees for telecommunication infrastructure, which went into effect in January 2015. They are currently working on an Open Access Master Plan, the outcome of this work is to deliver a business plan and operations strategy that will increase competition and reduce rates with the goal to deliver improved and affordable high speed/high capacity broadband for the benefit of economic development in the region.

ELECTRICITY

There are two electrical utilities in Missoula County, Northwestern Energy and Missoula Electric Co-Op. The matrix shows the service provider of each of the blocks. The electricity available to each lot was determined through site visits and conversations with Northwestern Energy and Missoula Electric Co-Op. Site visits determined the locations of three-phase power relative to each area.

The capacity of each electrical line is more difficult to develop. Even if current capacity of a line is limited, the capacity of these existing lines can be increased with some fairly minor changes to the sub-station supplying the power. At other times, the diameter of the line is the limiting factor and upgrades to the lines will be required.

Costs associated with extending electrical facilities in the area are dependent upon the amount of electricity being consumed by the facility. There are instances where electrical power can be extended into a building with little to no cost because the cost is offset by the amount of power that will be consumed by the building. Each site will need further examination to determine the cost effectiveness of power being brought to the site.

NATURAL GAS

Natural gas in Missoula County is provided by Northwestern Energy. There are no other service providers. Most areas within Missoula County have natural gas available. The capacity is dependent on existing distribution pipe size and existing demand on the pipe. There are several areas within Missoula County that have high pressure lines servicing the area. Such as the high pressure gas line that runs out to the old Smurfit-Stone Container site. There is a high pressure natural gas pipeline that runs from Missoula, out through the Missoula Development Park and onto Stone Container.

Although, most of the identified blocks have natural gas available, each lot within the block may have to extend a gas main in order to get natural gas to their lots. Generally, Natural Gas pipelines follow the public rights of way. However, not all if the rights of way have a pipeline in them. Gas line is similar to electric in that some of the costs

associated with extending a main may be offset by current tariffs.

It is important to note that there are no natural gas pipelines available in the Seeley/Swan Valley.

WATER

Water service is provided through Mountain Water Company, Missoula County's RSID 901, Seeley Water District and several small public water districts and individual water systems. For the industrial blocks served by Mountain Water Company, we have consulted existing system drawing and GIS Reports. Mountain Water Company flow tests all of their fire hydrants on regular basis. The flow data from hydrants near the blocks served by Mountain Water Company has been requested and received making determination of adequate water supply fairly easy. The other water systems we have relied on speaking with people knowledgeable about the system. For RSID 901 we spoke with the full time water operator from Missoula County. For the Smurfitt Stone Container Site, we have relied on the data obtained from well logs in the area. For the Seeley area we have relied on the Seeley Water District.

Areas that do not have a water supply will either have to develop a new water system or extend water mains from an established system to the new site. Consumptive Water Rights in Montana are becoming increasingly difficult to obtain. Any property that does not have access to water should consider the cost and feasibility of developing its own waTer system especially if fire suppression will be included in the system.

SEWER

Sewer service in Missoula County is provided through the City of Missoula, Missoula County's RSID 901, Seeley Wastewater Treatment System and private sewage systems comprised mostly of drainfields.

Access to sewer within the City of Missoula as obtained through its online GPS mapping documentation. In addition, PCI has the as-built information for Missoula County's RSID 901. The Seeley information, we had to rely on information obtained from its treatment plant operator. All of these systems are not currently at maximum capacity, however none of them are able to accept unlimited wastewater flows. Consultation with the authority having jurisdiction of the system prior to any project being developed is recommended.

Areas with no wastewater treatment system available, will either have to extend sewer mains to service the property or develop an onsite wastewater treatment system. The onsite wastewater treatment system normally requires a fairly large piece of land.

C. Regulatory and Environmental Opportunities and Impediments

ZONING

The following analysis outlines some basic differences between City and County Zoning:

There are two County industrial zoning districts; C-11 (Light Industry), and C-12 (Heavy Industry). Those Districts define Industry as “The manufacture, storage, extraction, fabrication, processing, reduction, destruction, conversion, or wholesaling of any article, substance or commodity or any treatment thereof in such a manner as to change the form, character, or appearance thereof.” What makes County zoning different than City Zoning is that less intensive uses are not permitted in Light Industry. This is called “Euclidian” zoning. Euclidian zoning has less flexibility and requires that only permitted industrial uses are possible on the property. Because of this, it appears that there in the County there is more industrially zoned land than there is demand for use of it for the foreseeable future.

The City of Missoula has three industrial zoning districts; two are similar to the County districts, M1 (Limited Industrial) and M2 (Heavy Industrial), in addition the City has a M1R (Limited Industrial-Residential). The M1R zoning district allows single family and multifamily residential uses in conjunction with the various industrial and commercial uses permitted in the zoning district. The City has what is called “Pyramidal” zoning because less intensive uses can be accommodated in industrial zones, therefore it is harder to draw a conclusion that there is more industrially zoned land than there is demand for use of it in the City.

According to the Economic and Trend Analysis prepared by the O’Connor Center for the Rocky Mountain West, and projections from the Montana Department of Labor and Industry, the sectors producing the most new jobs between 2001 and 2012 have been non-industrial uses such as Health Care Services, Accommodations & Food Services, and Retail Trade, Professional Scientific, and Technical Services. Manufacturing appears to be producing fewer jobs over time according to both projections. While it appears there is still demand for lands that can accommodate industrial uses, the demand is not as great as that for non-manufacturing uses. If special zoning districts are excluded, the County has over 3,750 acres of industrially zoned land in contrast to over 800 acres of industrially zoned land in the City. Therefore the County has more land with a limited number of uses which are trending low in job creation while the City has less industrially zoned land with a broad range of uses possible, accommodating those which are trending higher in job creation.

The space and bulk requirements vary between the County and the City as well. In the County there is no minimum lot size and there is a 25’ front yard and 15’ rear and side yard setback. The maximum building height permitted is 45’. In the City there is 5,000 s.f. minimum lot size and no front, rear, or side yard setbacks unless the lot abuts a

residential zoning district. The maximum building height varies from 40' to 125' and is typically 50' in the M1 zone and 125' in the M2 zone.

There is no land in the City which is unzoned with a land use designation of Industrial; however in the County there are lands that are unzoned and have a land use designation of Light or Heavy Industry.

It is interesting to note how prior attempts at industrial park development have had mixed results. For instance the Reserve Street Industrial Center which is in the City, is located southeast of the intersection of Broadway and Reserve has some industrial uses such as Northern Energy and Pacific Recycling, but is dominated by retail such as Costco and Lowe's; this area also has the Enterprise Commercial (EC) overlay used to temper "big box" development. This was intended to have two rail sidings, however only one was constructed. In contrast the Missoula Industrial Park, which is in the County by the Wye is dominated by transportation and warehousing types of businesses this subdivision was intended to have a rail siding, but it was never constructed. A hybrid example would be the Missoula Development Park which has a mix of manufacturing, transportation and warehousing, and commercial uses. The Development Park also has a special zoning district that creates transitions between uses and housing development to the east. Interestingly, the most vacant lots in the industrial park are in the area zoned for Technology which has 12 vacant lots; there is also one vacant lot in the Community Commercial district and 5 lots in the Light Industrial district.

As the County and City Growth Policy is modified over time, it may behoove the County to explore the possibility of converting some areas of industrial zoned land to commercial use, so that a property owner could rezone to accommodate a commercial use without a Comprehensive Plan Amendment. Also, if the County were to broaden the potential allowed uses on industrially zoned land by modifying the Zoning Resolution, that, too would require support from the Growth Policy.

Concentrated areas of industrial use in the City and County of Missoula:

- North Reserve near the intersection with West Broadway which has a siding north and south of the main line
- The Wye (intersection of Interstate 90 and Highway 93) which has access to rail, but does not have any active sidings
- Bonner Mill Site which has an MRL siding north of the main line
- Seeley Lake which does not have access to rail
- Lolo
- Frenchtown Mill Site which has a major BNSF siding

FLOODPLAIN AND OTHER MAPPED LIMITATIONS

We have included overlays to the Interactive Map for ***Floodplains, Airport Influence Area, DEQ designated monitoring sites, and the Air Stagnation Zone***. Each of these designations are analyzed in the Matrix, along with ***Steep Slopes***, which we

derived from topographic information. At this point, the analysis indicates simply whether the block is in, out, or partly in each of these areas.

By highlighting this information, we are suggesting that further research is needed to determine how limiting the particular environmental or regulatory restraint may be on a proposed use.