DATA CENTER FEASIBILITY STUDY

SHELBY, MT

FINAL REPORT

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CITY OF SHELBY MONTANA

Cascade Consulting Group
Government Affairs Public Relations Business Development

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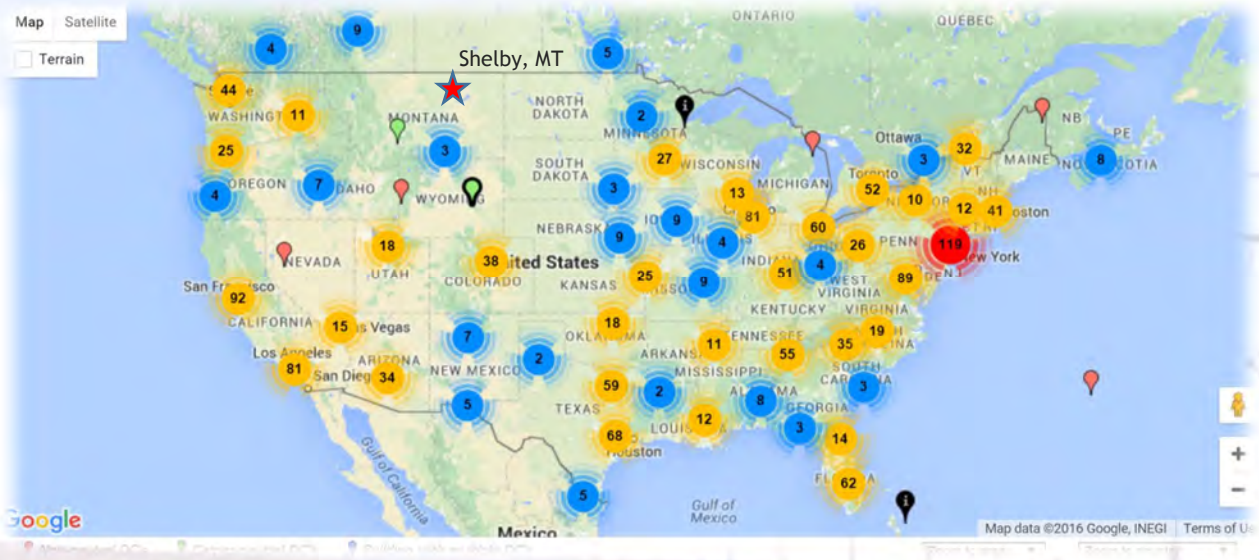
Table of Contents

List of Figures and Tables

EXECUTIVE SUMMARY

Enterprise data centers are spread across the United States with the highest density of facilities in the central and eastern regions as well as along the west coast in California, Oregon, and Washington. However as shown **Figure 1**, there is a gap in the grid with only a handful of centers in Montana, the Dakotas, eastern Idaho, and northern Wyoming. Shelby Montana is located in this gap, and the City has initiated this feasibility study/report to highlight and describe the relevant infrastructure (and related amenities) which would be necessary to attract/site an enterprise data center.

Figure 1. National Data Center Map



For this study, a potential site has been selected for placement of a data center in Shelby which consists of approximately 1,360 acres of farm ground with gradual slopes. Real estate in Shelby is estimated at approximately $2,000 per acre which is considerably less than land costs for other potential data center sites across the nation. As a proponent of economic development in the region, the City of Shelby has helped multiple businesses and industries locate in Shelby by providing tax incentives, teaming with businesses to identify and pursue funding, and providing connection options to existing City infrastructure. The City would welcome a data center in Shelby and help in any way possible to accommodate the facility requirements.

Shelby is located in an area with several options for providing power, allowing for a competitive market situation when negotiating power costs. Fiber optics access is also a critical component in placement of a data center, and two major tier 1 providers serve the Shelby area, connecting to internet hubs all over the United States and Canada. The purpose of this report is to provide information about infrastructure, climate, work force, and taxes to help interested parties make decisions about placement of a data center in Shelby Montana.

Data center construction and operation costs are typically dependent on the facility size. Without knowing the specific size of a potential data center, it is difficult to estimate construction and operating costs. However, for purposes of providing a comparison basis, shown in **Table** 1 are estimated costs for some of the key components of a 15 megawatt (MW) data center in Shelby Montana.

Table 1. Cost Comparison

Factor	Estimated Cost for 15 MW Data Center
Real Estate (Estimated 140 Acres)	$280,000
Construction (Estimated 100,000 SF Building)	$150 Million
Staffing (Estimated Cost Per Year)	$2.5 Million
Taxes (Estimated Taxes Per Year)	$10,000 per $1 Million of taxable real & personal property
Power (Estimated Cost Per Year Excluding Construction Cost)	$7.4 Million

The findings in this report indicate that based on climate, available infrastructure, and estimated construction and operating costs, Shelby is an excellent rural location to site a data center.

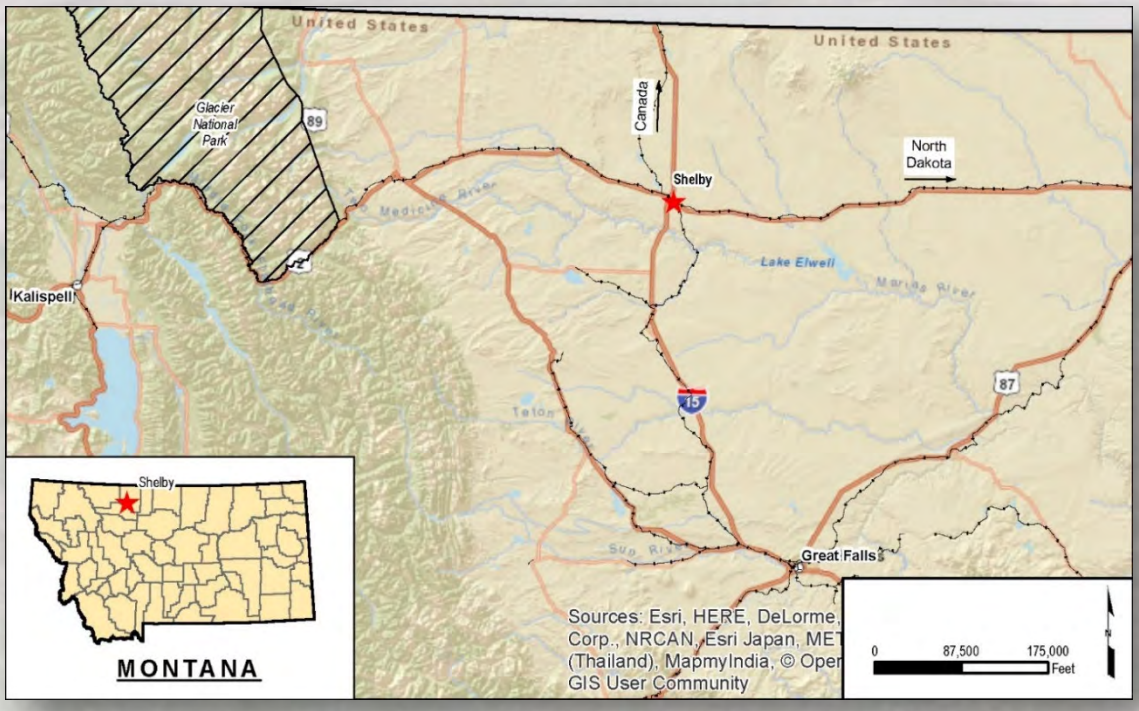
INTRODUCTION

Remote areas with relatively cold temperatures, an abundance of low-cost renewable energy, and access to high level fiber optics systems are common characteristics for data center locations. With its combination of cooler year-round weather and wealth of renewable wind energy, Shelby Montana is an ideal location to construct air-cooled cloud computing data center facilities.

Shelby Montana

Shelby is located in north central Montana, 30 miles south of the Canada border, and has a population of approximately 3,500 residents. Shelby is a family-oriented community that offers the true "small town Montana" atmosphere. **Figure 2** is a location map of Shelby in north central Montana.

Figure 2. Location Map

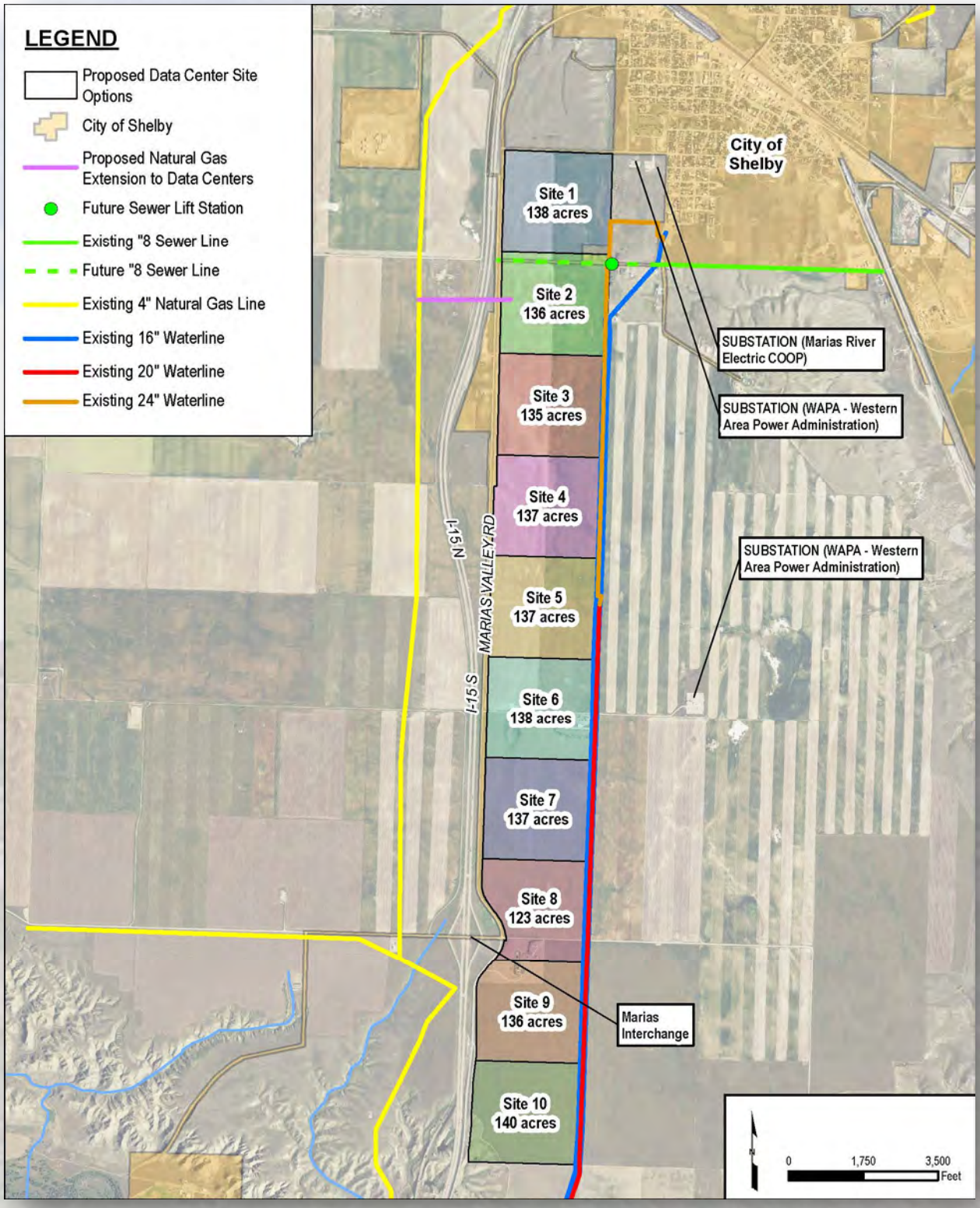


KEY COST FACTORS

For comparing costs to other markets in the country, this report includes costs for construction and operation of a 15 MW data center in Shelby. A 15 MW facility is currently considered the approximate median size of data centers in North America. In fact, a recent report released by the U.S. Department of Energy's Lawrence Berkeley National Laboratory (https://eta.lbl.gov/publications/united-states-data-center-energy-usag) shows that gains in energy efficiency are reducing data center energy use as the world transitions into a digital world of conducting business on the Internet and posting, streaming, and tweeting. Berkeley Lab researchers found that efficiency improvements have played a key role in slowing down the growth in electricity use by data centers after a period of large increases. Also stated in the report, it is projected that best practices in energy efficient operations and a continued shift from local data centers to more efficient cloud computing centers could cut data center energy use by an additional 45 percent by 2020.

For estimating costs for development of a data center site in Shelby, a potential site location has been identified for this study. The identified site consists of a total footprint of approximately 1,360 acres just east of Interstate I-15 on level agricultural ground, and extends approximately four miles south of the corporate City limits (see **Figure 3**). The footprint of this site is sufficient for construction of multiple data centers. For this study, the site has been divided into ten parcels; it is anticipated that development would commence in the northernmost parcel (Site 1) and progress to the south. In relevance to the identified site, included in the following sections is a description of the analysis/research that was performed to determine the estimated costs of the primary factors for developing a facility in Shelby Montana.

Figure 3. Data Center Site Location



Real Estate

The topography of Shelby and the surrounding areas consists primarily of agricultural land with gentle rolling hills and areas of steeper terrain bordering the Marias River (~6 miles south of Shelby). Flatter topography is ideal for a data center site as it minimizes earthwork requirements for construction. In addition to topography, data centers typically locate in proximity to existing infrastructure. The topography of the identified site is fairly flat with slopes estimated around one percent based on USGS quadrangle maps. The potential site is also located near existing utility infrastructure.

Real estate costs vary throughout the area as they are dependent on location, acreage, and agricultural production potential. Based on projects completed in the area, land acquisition costs are typically around $2,000 per acre for open, non-residential, agricultural land. In December of 2015, CBRE, a commercial real estate company, published a study which included analysis of the cost of constructing, commissioning, and operating a data center for 10 years across 30 U.S. markets. For comparison to the markets analyzed in the CBRE report, the estimated real estate cost for Shelby equates to approximately $0.05 per square foot; which is well below the $7.65 per square foot average of the markets analyzed in the CBRE report.

Taxes & Incentives

TEDTIF District

In 2015, the City of Shelby developed a Targeted Economic Development Tax Increment Financing (TEDTIF) district which can offer a substantial tax incentive and tax reduction for companies locating within the district. Here is how the TEDTIF district works: The pursuant developer and the City of Shelby enter an agreement to develop the proposed land. This development agreement provides for the mechanism which allows the company's future tax payments to be leveraged on the front end of their project for up to 20 years to provide the necessary infrastructure needed for the company to develop its project. This tax incentive may apply to real and personal property. Substations, electrical transmission, water, sewer, roads, parking lots, and exterior lighting, are just some of the eligible infrastructure which can benefit from the TEDTIF incentives. Companies who have used this mechanism for development in Shelby have received a taxable valuation rate for real property tax of 0.945 percent and a personal property tax of 0.750 percent; both less than 1 percent.

In addition to Shelby's TEDTIF district, it should be noted that there is no sales tax in Montana.

Foreign Trade Zone

Shelby is located in Toole County Foreign Trade Zone (No. 187). A Foreign Trade Zone (FTZ) is a geographical area in a U.S. Port of Entry where commercial merchandise, both domestic and foreign, receives the same customs treatment it would if it were outside the commerce of the U.S.; a FTZ is under the supervision of the U.S. Customs and Border Protection under the U.S. Homeland Security Council. In particular, merchandise may be held in the zone without being subject to tariffs (customs duties) and other ad valorem taxes. This tariff and tax relief is designed to lower the costs of U.S.-based operations engaged in international trade and thereby create and retain the employment and capital investment opportunities that result from those operations. For data centers, the FTZ in Shelby could prove to be useful for computer server assembly and related materials.

Construction

Shelby is primarily suited for an Enterprise data center facility due to the rural setting. Therefore, a Tier III facility has been assumed for estimating construction costs. Although the cost can vary depending on the density of computer servers in each data center, the estimated cost per square foot for construction is between $1,300 and $2,000 which includes construction, infrastructure, computer servers, etc.

The construction phase of a data center project can have a significant impact on a small community due to the number of workers required, and the associated lodging requirements. Shelby has a strong track record of siting and building large projects and has proven that the area can support the construction efforts. The Shelby area recently supported construction of an approximately $1 billion wind farm and a $500 million project for construction of a Montana Alberta Tie Line (MATL) power line. For construction of these projects, the Shelby area accommodated a work force of over 400 for a period of 3 years. Shelby has over 330 lodging rooms and more than 120 RV sites, and there is additional lodging available in Cut Bank which is located approximately 18 miles west.

Transportation of construction materials is also a significant cost during the construction phase. The Burlington Northern Sante Fe (BNSF) Railway in association with the Port of Northern Montana Multimodal Hub (PNMMH) facility could be utilized for transporting materials to the project. As discussed later in this report, the PNMMH is a railroad transload facility located just east of Shelby. A primary BNSF mainline passes through the City of Shelby running east/west, and the PNMMH is a direct connection to the rail system.

Climate

Shelby, Montana is located at an elevation of 3,361 feet in north central Montana on the 48th parallel north (Latitude 48°30'26"N), and is classified as a high desert arid steppe climate. Shelby's climate consists of long cold winters which typically give way to cool spring-like weather from March to May. Summers are typically dry and warm, with cool nights. Fall weather is colder, with potential snowfall as early as October. Also, due to the city's location adjacent to the Rocky Mountain Front, wind is nearly constant. In fact, Shelby boasts an average annual wind speed of approximately 25 km/h, which makes it one of the windiest places in Montana.

Data center electronic components are continually becoming smaller and more powerful, so the facilities must be capable of accommodating the heat generated by thousands of high-power servers and processors, tightly packed in a small space. In the past, data center cooling has primarily been accomplished using water cooling systems including infrastructure such as cooling towers, condenser pumps, water treatment systems, and treatment chemicals. These water cooling systems are expensive to install, operate, and maintain.

Air-cooled systems are therefore being utilized where possible, and cold external air is becoming a big attraction for data center operators. Many high-profile cloud computing companies are building new data centers in relatively cold and windy locations to cut power and cooling costs. Air-cooled systems are very simple and straight forward. Frequently checked components are located on the sides and ends of the unit for easy access; therefore, maintenance staff requirements and budgets for air-cooled systems are smaller than for comparable water-cooled systems. Utilization of natural environmental conditions for cooling also results in less impacts to the environment. Locating a data center in a colder region such as Shelby will result in dramatically lower power consumption costs associated with cooling.

Labor

Data center staff for a 15 MW facility is estimated to consist of 25 – 75 direct employees and a similar number of indirect employees (consultants, contractors, electronic maintenance, security, trucking, etc.). Qualified personnel for data center staffing typically have engineering and skilled trade backgrounds. There are numerous Montana colleges with engineering curriculums, and several of them are relatively close to Shelby (see **Table 2**).

Table 2. Engineering Colleges

College	Distance from Shelby
Northern Montana College (Havre, MT)	100 mi
Carroll College (Helena, MT)	170 mi
University of Montana (Missoula, MT)	225 mi
Montana Tech (Butte, MT)	235 mi
Montana State University (Bozeman, MT)	265 mi

According to the Bureau of Labor Statistics, average engineering wages in Montana are approximately 10 percent less than the national average; and Montana wages in general are significantly lower (~22%) than the national average.

Security Staffing

A full-time security management staff is critical to the safety and protection of data center facilities. While protecting servers from digital attack is of utmost importance, facilities must also be equipped with state-of-the-art protection against physical human intruders. Professional security officers are employed to oversee access control, fire safety, emergency storm response, camera and systems monitoring and other security and safety services. Industry resources indicate professional security companies will secure contracts for data center facilities bringing staff on-site as needed. Following is a list of local law enforcement agencies which may be employable as part of the data center security operations:

- Core Civic (formerly Crossroads Correctional Center) is located within a half mile from Interstate-15 due west of the proposed site location;
- U.S. Customs and Border Protection Sector Headquarters (Toole County);
- FBI station (Toole County);
- Montana Highway Patrol (Toole County); and
- Toole County Office of Public Safety.

Infrastructure Demands

A data center facility requires substantial civil infrastructure including power, water, wastewater, and communications. Data centers are typically located where construction of utility infrastructure can be minimized. The potential site identified in Shelby has the majority of the necessary services within relative proximity. The existing infrastructure is shown in **Figure 3**. The following sections include a description of the capacity of the existing utility infrastructure at the site and the associated estimated costs to connect to the utilities.

Power

A data center has potential for electrical loads ranging from 5-100 MW, which is a very significant power requirement for most areas. Discussed in the following sections are several options for delivering power to the identified data center site.

Primary Power

The most traditional power source approach is to request service from the local electrical cooperative, in this case Marias River Electric Cooperative (MRE). With offices located in Shelby, MRE's primary power supply is delivered from

both the Western Area Power Administration (WAPA) and Basin Electric Power Cooperative (BEPC). When MRE receives a load request, the cooperative sends the request to their local transmission provider (WAPA) to study expansion requirements. To accommodate the power request necessary for operating a data center, MRE would need to build a new substation at or near the data center location, and transmission upgrades may also be required; the data center would be responsible for funding the infrastructure upgrades with no mechanism for recovery over time. The current electrical rates for a load request applicable for a data center is $6.25/kW per month with an additional $0.05425/kWh charged for energy use each month. For example, a 15 MW data center running on the cooperative power 90 percent of the time, the associated annual energy costs would be approximately $7.4 million.

Other alternatives to the traditional power supply approach also exist in the Shelby area. These alternatives, which would likely incur large up-front construction costs, would result in cost savings over a period of time based on a lower energy cost than the rate offered by MRE. If desired, the utility companies may consider including the up-front construction costs in the monthly rate to help spread costs out over time. Based on discussions with local energy providers, because alternative approaches are all situation specific, pricing for alternative options cannot be provided until additional project details are available. However, the City of Shelby has good relationships with the alternative energy providers and can assist an interested data center in navigating the power purchase options once a project is initiated. It should be noted that companies which are considered large power consumers (over 5 MW) are eligible to solicit power form any company they choose.

The first power alternative investigated for this study includes utilizing power from a local wind farm owned and operated by NaturEner USA, LLC (NaturEner) and hydroelectric power from another local provider, Energy Keepers, Inc. Based on discussions with NaturEner personnel, a data center energy contract would proceed as follows: A data center would enter a power purchase agreement (PPA) with NaturEner for the amount of wind energy required to serve the facility. To balance the intermittency of wind generation, NaturEner would purchase hydroelectric generation assets from Energy Keepers as part of the PPA. Transmission service under this scenario would be provided by Northwestern Energy, the local investor owner utility company. This alternative would provide 100 percent renewable electricity to the data center. NaturEner has verbally expressed a rate of $0.045/kWh for their power, but they have also expressed a willingness to negotiate based on contract length and certainty.

A second power alternative would also involve a PPA with NaturEner, but transmission would be provided by Enbridge, Inc., a local energy distribution company. Enbridge owns the Montana-Alberta Tie Line (MATL) which is a 230 kV line carrying power between Alberta, Canada and Montana. Enbridge currently provides short term contracts at $0.015/kWh to wheel energy to their customers. If this alternative were pursued, a data center could buy power out of the Alberta Market and wheel it across the Enbridge transmission system to the data center location. Current market rates are approximately $0.026/kWh. Using the NaturEner Alberta market and Enbridge wheel fees, total delivered energy cost to the location equates to $0.086/kWh. These rates are based on short term spot contracts, but based on the load size, contract length and high load factor, it is expected that a less expensive rate could be negotiated for a long-term contract.

Both of the researched power alternatives would require transmission and substation construction to reach the nearest interconnection location (approximately 10 miles from the proposed site location). It is estimated that the design and construction of a 230 kV transmission line would cost approximately $750,000-$1,000,000 per mile. The costs associated with construction of the required wind power infrastructure upgrades could not be determined for this study.

For additional information regarding power supply, contact the City of Shelby for local power supply provider contact information.

Backup Power

All data centers have a backup power source to maintain operation during power outages. While backup power is a relatively small cost of the overall project, it is an absolute necessity. Based on research completed for this study, backup power costs are included in the estimated price of the building structure cost (see **Table** 1 for the estimated building structure cost). Diesel fired generators are the most common backup power source. Natural gas is a very secondary source and not typically used for backup power. In the western U.S., there are a very few enterprise or colocation data centers that use natural gas for backup power, as they would need to be near a pressurized natural gas line, and it is difficult to find sites that have suitable electric power, fiber optics and natural gas capacity. However, with increased regulations on diesel emissions, the interest in using natural gas as a backup source of power in data centers in getting more and more interest.

In the Shelby area, there are two sources of natural gas (Northwestern Energy and Shelby Gas), so Shelby is one of the unique sites in the U.S. that has natural gas, fiber optics, and electricity. The nearest natural gas line to the proposed data center property is located on the west side of Interstate I-15, and it is estimated that the cost to connect to the existing line and bore a new line underneath the interstate would be approximately $150,000.

Fiber Optics

Shelby, Montana is connected to and/or very close to several fiber optics lines. The local fiber optics providers are Northern Telephone Cooperative and 3 Rivers Communications. Both providers have an existing access point with both lit and dark fiber available at the northwest corner of the identified property, and their network is directly connected to the following carriers:

- CenturyLink/Level 3 Communications
- Zayo Group
- Vision Net: Vision Net has direct connections to Cermack Internet hub in Chicago, the Western Building in Seattle, and the Denver Internet hub. Vision Net is also a member of Indatel (nationwide fiber optics network).
- BNSF
- 2 Canadian fiber optics carriers (Axia and Shaw)

The existing Northern Telephone fiber optic lines contain between 24 and 36 fibers with only 2-4 fibers currently in use, so there is plenty of capacity available.

More importantly, Tier 1 fiber optics providers, CenturyLink/Level 3 Communications and Zayo Group, also have direct dark fiber connections that are very close to Shelby. Zayo has a major fiber optics line just west of Shelby, while CenturyLink/Level 3 Communications has a major fiber optics line that runs just south of Shelby. Additionally, CenturyLink recently merged with Level 3 Communications; this merger will result in a combined fiber network in the U.S. of 450,000 miles (as opposed to CenturyLink's current 250,000 miles of fiber). Furthermore, Zayo recently acquired Canadian long-distance fiber optics provider Allstream, which will provide Zayo with extensive intercity and metro fiber connections throughout Canada. With these two major providers in the area, Shelby has good combination of fiber optics capacity and redundancy (i.e, two major diverse Tier 1 providers), and is connected to internet hubs all over the U.S. and Canada.

According to information provided by the companies that own the local fiber optics lines, the estimated cost to extend high capacity fiber optics cables to the proposed site in Shelby would be approximately $1.5 to $2.0 million. It is estimated that the first phase of the project will require a fiber size of 10G lit, while at full buildout the fiber size requirement would need to be approximately 30G lit.

Water

If a water cooling system is desired, data center cooling processes can require hundreds of thousands of gallons of water per day in addition to other normal potable water uses (bathrooms, kitchens, etc.). As shown in **Figure 3**, there are two existing water lines which run along the eastern boundary of the proposed site; a 16" diameter line and a 20"-24" diameter line. Utilizing this existing infrastructure, there is capacity to provide the necessary demand for a data center, and the only cost to the developer would be the construction cost of connecting to the existing infrastructure and metering fees. An estimated cost for constructing a connection to the City's water system is $75,000 which is dependent on the facility location within the identified site. The City's water fee is dependent on the size of meter and the amount of water used per month, but the approximate cost of water is between $1.20 and $2.30 per 1,000 gallons. As an example, if a 4" meter is installed, the cost of water is a set cost of $182 per month for 79,000 gallons with a cost of $1.23 per 1,000 gallons for water use above 79,000 gallons. If 200,000 gallons per month was used on a 4" meter, the cost would be $331 per month or $1.65 per gallon.

Wastewater

The City of Shelby recently constructed an 8-inch gravity sewer line approximately 1,000 feet east of the proposed data center site which is connected to the City's wastewater treatment system (see **Figure 3**). There are future plans to extend the sewer main with a pressurized line and associated pumping station which will extend to the west side of the interstate and run through the middle of the proposed data center property. Based on the site topography, it is anticipated that a data center facility constructed on Site 1 or Site 2 could connect to the new line with a gravity connection, but any facilities further to the south would require a separate sewer pumping station. The estimated cost of a lift station and the required pipe from the facility to the City line (approximately 2,000 feet) is $250,000. The monthly connection cost to the City of Shelby wastewater treatment system is $35 for a 4-inch service. With a connection to the City's system, a separate discharge permit is not required.

The City of Shelby is planning an upgrade to its wastewater treatment system which, and depending on the size of the data center, the upgraded system would likely have the capacity to accommodate discharge of cooling water if desired.

Accessibility

Shelby is centrally located and readily accessible. Travel and transport are available via car, bus, train, and plane.

Car

Thirty miles south of the Canada border, Shelby is located at the intersection of Interstate 15 (I-15) and Highway 2. Highway 2 is a 2-lane highway which extends west to Idaho and east to North Dakota. I-15 is a four-lane north-south corridor with access north to Canada and south to southern California.

Train and Bus

Shelby is home to an Amtrak train station with both bus and train services. The Golden Triangle Transit bus system provides services as far west as Kalispell (~160 miles) and as far south as Great Falls (~85 miles); passengers may connect to other transportation services at these ports. The Amtrak train station provides service west to Seattle and east to Chicago.

There is also a Burlington Northern Santa Fe (BNSF) Railway which passes through Shelby available for freight transport. In 2014, the Port of Northern Montana Multimodal Hub (PNMMH) was constructed on the southeast end of town. The PNMMH is a railroad transload facility which includes rail frontage for more than 20 parcels as well as a 20-acre laydown area for loading and unloading of rail freight. The PNMMH facility would be an ideal facility for economically importing construction materials and hardware for a data center.

Air Travel

The local Shelby airport is located approximately two miles north of town and provides daily services to local airports in the surrounding area. The Great Falls International Airport is located approximately 80 miles to the south and provides full commercial airline services.

Quality of Life

AreaVibes.com is an internet site designed to help people determine the livability of specific towns throughout the U.S. based on seven categories. **Table 3** is the "report card" for Shelby according to AreaVibes.com. Based on these categories, Shelby is ranked nineteenth in Montana and is above the national average with a score of 78 out of a possible 100 (Note: the highest score for the cities analyzed on the website is 91). The following sections are a summary of the information for Shelby as published on the AreaVibes.com website.

Table 3. ***Report Card***

Category	Score
Amenities	A-
Cost of Living	A+
Crime	B+
Education	C-
Employment	B
Housing	D
Weather	C-
LIVABILITY SCORE = 78	

However, not all the categories for locating a data center directly correlate with categories for quality of life. In particular, the weather ranking differs. For quality of life, warmer year-round temperatures are desirable, while cooler year-round temperatures are more desirable for data center climates (for utilizing air-cooling techniques). Average Shelby temperature in December (coldest month) is 21°F while the average July temperature (warmest month) is 68°F. The following is a breakdown of some of the categories analyzed on AreaVibes.com for the City of Shelby.

Amenities & Attractions

With 3,500 residents, all the daily living essentials are available right in town. **Table 3** includes a summary of the primary amenities in Shelby.

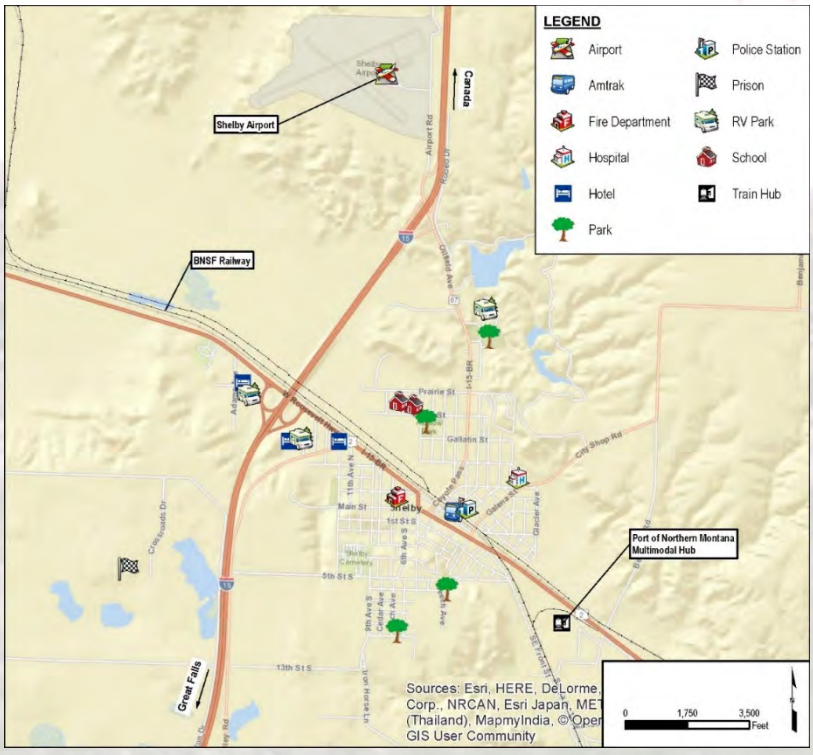
Table 4. ***Shelby Amenities***

Amenity	Count
Retailers	18
Taverns/Casinos	11
Motels/Hotels	8
Schools	7
Parks	7
Libraries	1
Youth and Adult Sporting Programs	Multiple
Trap Club	1

Amenity	Count
Archery Range	1
Swimming Pool/Splash Park	1
Marias River 18-Hole Golf Course	1
Roadrunner Recreation Trail	1
Tennis Courts	1
Horseshoe Pits	1
Civic Center Fitness Center	1
Ten Pin Bowling Alley	1

In addition to the above amenities, there are plenty of attractions in the surrounding area. See **Figure 4** for approximate locations of the various amenities.

Figure 4. ***Local Amenities***



Cost of Living

The cost of living in Shelby is 13% lower than the national average and housing costs are 39% lower than the average. The cost of living index is primarily based on 1) goods & services; 2) groceries; 3) health care; 4) housing; 5) transportation; and 6) utilities.

Crime

The crime rate in Shelby is 35% lower than the national average with an average rate of 1,857 incidents per 100,000 people versus the national average of 2,860 incidents per 100,000 people.

Education

There are five schools located in Shelby, including day care, special education, adult education, and public schools. Shelby High School is a "Class B" (Montana schools range from Class AA (largest) to Class C (smallest)) school with an enrollment of approximately 145 students and an average student to teacher ratio of 14:1.

CONCLUSION

The purpose of this study is to determine whether construction of a data center in Shelby Montana is feasible. It is becoming more common for data centers to locate in rural areas for security reasons; but the problem with rural locations is that the required infrastructure is typically not available. This is not the case for Shelby; although it would be necessary to construct smaller power transmission upgrades, all the necessary infrastructure for a data center is currently available. **Therefore, not only is Shelby a feasible data center location, it is an ideal location due to its rural setting, cool climate, and accessibility. There are also numerous financial incentives which make Shelby an attractive data center site; and the City of Shelby welcomes incoming businesses and has a long history of helping businesses to become established and succeed.**

Following is a summary of the research performed as part of this study which highlights the feasibility of Shelby as an ideal data center location.

Real Estate and Taxes:

- Estimated Cost: ~$2,000/acre ($0.05/square foot);
- TEDTIF District & Foreign Trade Zone.

Construction and Labor:

- Topography: relatively level farm ground with some rolling hills;
- Estimate Building Cost: $1,300 - $2,000/square foot;
- Labor: labor force and engineering colleges close to Shelby; labor wages are 22% below national average.

Infrastructure:

- Power: several options are available for negotiation;
- Fiber Optics: two major diverse Tier 1 providers are connected to internet hubs all over the U.S. and Canada;
- Water: data center site located adjacent to City and regional water systems;
- Wastewater: data center site located adjacent to City wastewater system.

Accessibility:

- Car and Freight Truck Access: located at intersection of Interstate 15 and Montana Highway 2;
- Bus Access: bus station in Shelby;
- Passenger Train Access: Amtrak station in Shelby;
- Freight Train Access: primary freight route via Port of Northern Montana Multimodal Hub;
- Air Travel: local airport and full commercial service 80 miles south.

Quality of Life:

- Climate: cool, dry, windy;
- Cost of Living: 13% below the national average;
- Housing Costs: 39% below the national average;
- Crime: less than 35% below the national average;
- Education: 14:1 student/teacher ratio.

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