B|B|A Barber Business Advisors
Solutions in the Making

Transportation & Logistics Report for Great Falls Development Authority

Background

While the 13-county Great Falls region saw a 2 percent population increase over the past decade, growing from 161,420 in 2010 to 164,676 in 2020, the population size remains a factor in the region's higher transportation costs. Regional outbound freight rates are significantly higher than the inbound freight rates. Truckloads of commodities leave the region but come back empty because of the lack of demand for goods due to the smaller population base, thus increasing overall transportation costs.

Trucks coming into the Great Falls region for delivery of freight to a business then look for an outbound load to “take them back home or to another market. If the community is not a large metro area, there can be more freight moving out of the area than moving in. This forces trucks to drive empty on their outbound trips.

The rate for the outbound load is raised to cover the “deadhead miles cost” the carrier/truck incurs and maybe even some “down time costs” due to hours-of-service requirements causing the driver to go “off duty” due to reaching federally mandated driving time daily maximums. This is the situation in Great Falls. Not enough empty trucks in the community willing to take freight to faraway places like Seattle, LA, etc. drive up the cost of freight to the local firms.

The size of the manufacturing base and the population of the county contributes to increased transportation costs for the region. The manufacturing sector makes up only 3.5 percent of the total employment. Without more demand from larger manufacturers, transportation and shipping options are limited and thus costs are higher.

Every time a new shipper or a new family comes to Great Falls, it improves the opportunity to lower the overall outbound freight costs. More population means more consumption and more inbound freight. A new shipper also provides more freight activity so Great Falls becomes more visible to smaller regional trucking firms and independent owner-operators.

Leveraging existing industry clusters to create more demand for shipping and transportation activity will help lower the shipping premium, which some manufacturers have identified as a 20 percent price differential. One opportunity is to grow the value-added agricultural sector. The Golden Triangle region is a production center for a wide assortment of grains, including wheat, barley, and pulse crops, such as peas, lentils, and canola —the quality of which many say is the best in the world. Produce is grown in the Hutterite communities.

This should be one of the target industries that GFDA focuses on for business development in the future with an eye on unique, high margin items, produced with specialty and/or organic ingredients grown and/or growable in the area. The higher the quality and thus margin, the more readily the items can overcome the higher cost of truck transportation to reach more distant customer markets. The following list offers some examples of high-margin, value-added food businesses.

List of Most Profitable Food Businesses (Sorted by Highest Profit Margin):

- Honey production – 30 percent average profit margin
- Coffee shop – 25 percent average profit margin
- Popcorn business – 22 percent average profit margin
- Custom cakes – 19 percent average profit margin
- Chicken poultry -17 percent average profit margin
- Pizza –15 percent average profit margin
- Fruit juice –14 percent average profit margin
- Cookie business – 8 to 11 percent average profit margin
- Chocolate business – 8 to 10 percent average profit margin
- Tea brand – 10 to 20 percent average profit margin

Rail Transportation

From a freight transportation perspective, the Great Falls area has many pluses and some minuses. The region is blessed with assets like rail, a commercial airport, and an interstate highway. A BNSF railyard is active, serving rail sites in the area. Bulk rail shipping is utilized by multiple companies in the region already but there is no rail transload operation yet. Most smaller firms cannot make boxcar rail work for their products due to their small volume. A transload facility at the BNSF railyard would offer companies an option besides trucking.

A transload facility is designed to individually fill bulk rail cars by transloading the contents of a truck into the rail car. This transloading of boxed freight can be via a movable unloading/loading dock or using mechanical systems to move liquids like vegetable oil, chemicals, fuel, or dry items like raw grains, flour, or sugar. Open hopper cars would take items like scrap metals, lumber, or aggregates. The design of the operation would be along a track for the rail. The railroad would set the proper type of cars that are empty on the track for loading. There is paving and a road which is parallel to the rail for the trucks to park and unload their cargo into the rail cars. This allows maximum flexibility to move the loading along the road while the rail cars stay stationary.

Such an operational design also allows the transloads to take place most of the time without large structural buildings. In some cases, the buildings would come into play if the items being loaded needed to be stored for some time in a building prior to shipment to generate enough cargo capacity for the railroad to bring in an adequate quantity of empties to make a profitable switch rather than live loading directly from a truck to the rail.

In our conversations with BNSF, the railway company indicated that it is ready and willing to add freight capacity and/or a transload partner to the certified site in the Agri-Tech Park along existing BNSF routes and destinations. BNSF has a long history of working well with the GFDA. Most transload companies would need at least a five-year contract to allow for the amortization of the estimated cost to lay the switch ($100,000+), track ($300+/foot from ballast to top of rail), and dock/road infrastructure.

There are no intermodal container rail yards within close proximity to Great Falls. So for rail to work, it would have to be a unit train, similar to what the mills already utilize. In order for a transload facility to be feasible, it must have committed customers and an operator that meets the standards necessary for BNSF.

Truck Transportation

Unfortunately for the trucking business, the region has various location challenges. The mountainous geography, the distance from other major Montana population centers and the lack of access to a direct east-west road corridor pose logistics challenges. In the trucking world, every mile driven costs around $4.00 and costs have been rising with inflation. This cost moves up and down, based on the price of fuel, drivers, and equipment, but currently the cost per mile is on the rise due to the steep rise in diesel fuel prices. Companies are increasing driver pay, and the cost of equipment is going up as well. This means that we are at a minimum of $4.00++ at least through 2022. In SWOT interviews with value-added ag producers, some manufacturers noted a 20 percent higher transportation premium from Great Falls relative to other production facilities located in other regions of the country.

An example of how distance and outbound considerations come into play is the seasonal "disruptions" of shipping live-cut Christmas trees. Tree farms only ship fresh cut live trees six weeks out of the year from mid-November to Christmas. The "normal" rate from point A to B might be $3.50 per mile during 11 months of the year. But during the tree seasonal shipping time, it might be $7.00 per mile in order to entice enough trucks to run empty and over longer distances to transport the tree loads.

Current freight rates per day from Great Falls to other markets

Great Falls	Miles	Minimum Daily Rate*
Helena (90 miles) 1/2 day R/T	90	$ 800.00
Butte (115 mile) 1/2 day R/T	115	$ 800.00
Missoula (165 miles)	165	$ 1,200.00
Bozeman (186 miles)	186	$ 1,200.00
Billings (219 miles)	219	$ 1,200.00
Salt Lake (590 miles)	590	$ 1,200.00
Boise, ID (600 miles)	600	$ 1,200.00
Cheyanne, WY (672 miles)	672	$ 1,200.00
* Going higher every week the price of Diesel goes up		

Additionally, the GFDA region lacks adequate truck driver capacity to move loads of finished goods out of the region at a competitive cost as well as refrigerated transport goods movement in small quantities. One opportunity for the local firms would be to link up with freight brokers and have them search for available trucks in closer proximity to them to help mitigate higher transportation costs. Freight brokers have networks across the country and can post load opportunities on "load board apps" for truckers to see in truck stops when refueling, eating, and/or just waiting for an opportunity to be posted going the "direction they want to go.

Freight brokers also use sophisticated communications systems and mobile-friendly websites and apps that post what loads will be readily available in the destination location. A shipper in Great Falls would "post the loads" with the broker several days in advance of the ship date. The broker will then post them on the boards with a targeted rate that they determine based on their knowledge of the markets. Truckers can "bid" on the freight if they are willing to haul the load. If the trucker wants a higher rate, then the broker would call the company in Great Falls to see if they approve the higher rate, or do they want to continue to look for a truck at their original rate.

Over time, both the broker and the shipper get to know the cost structure, and it even might vary by the time of year. Without a significant increase in demand for goods driven by a population surge that reduces the number of empty inbound truckloads, transportation costs will remain a hurdle for attracting or growing manufacturers. The business attraction strategy should focus on large rail users, smaller rail users that would support a rail transload facility, and high-margin, specialty grain food item processing that can still make profit given the high truck cost, estimated by some local firms at 20 percent higher than in other regions and states.

A major challenge for local trucking companies based in Great Falls and shipping products out of the area is the shortage of qualified truck drivers. We saw trucking companies that had tractors “parked against the fence” as we say in the business due to lack of drivers. Great Falls needs to generate trained CDL licensed drivers so the existing trucking firms in the area can fully utilize their fleet capacity and generate additional loaded trucks of local goods going to more markets. In interviews with local trucking companies, they have more than enough business to fill their tractors but not enough drivers to make the haul. Having more qualified drivers from Great Falls would allow the local firms to expand and fully utilize their equipment thus providing more capacity for outbound loads. A driver training program is critical to making this strategy work.

Truck drivers are heavily in demand. Currently, there are 501 active job postings for heavy and tractor-trailer truckers — the second most in-demand occupation for Great Falls (JobsEQ). With 2,712 workers employed in transportation and material moving occupations, the concentration of this occupation in Great Falls is below the national average.

Transportation and Material Moving Occupations	
Employment	2,712
Mean Annual Wages	$36,500
Location Quotient	0.86
Unemployment Rate	5.00%
Unemployment	139

Source: JobsEQ

Occupation	Active Job Ads
Retail Salespersons	518
Heavy and Tractor-Trailer Truck Drivers	501
First-Line Supervisors of Retail Sales Workers	487
Registered Nurses	479
Stockers and Order Fillers	397
Fast Food and Counter Workers	347
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	312
First-Line Supervisors of Food Preparation and Serving Workers	252
Customer Service Representatives	251
Driver/Sales Workers	207

postings that were active from 3/16/2021 to 3/16/2022
lp for important Technical Notes

Max Rows: 10

Souce: JobsEQ

Air Transportation

Great Falls International Airport offers thousands of acres of available land for lease with several hundred acres fronting Interstate15. Foreign Trade Zone 88 exists for the Agri-Tech Park at the Airport. At this time there are no companies taking advantage of this service, but plans can be made to make that transition easier in the future. FedEx regional hub is located at the airport. Avmax MRO, Holman Aviation, and the Air National Guard are also taking advantage of the airport location.

The airport authorities are working hard to make sure the activity at the airport from a passenger perspective is stable and potentially growing. It is very challenging for regional airports to thrive in this post-Covid world with reduced leisure air travel, a shortage of pilots, and regional aircrafts being replaced by larger planes making fewer flights needed to transport the same number of passengers. The flip side of this is that the larger aircraft will allow air freight to travel in the cargo section as opposed to the smaller regional jets.

Having the FedEx regional hub in Great Falls puts Great Falls on par with Boseman's service levels and offers competitive pricing for small package delivery service on shipments as compared to other cities without this asset. Billings does have a slight advantage on second and third-day delivery coverage due mainly to its location on the eastern side of the state and access to I-90/94 (E/W) as the interstate splits going eastbound. The GFDA must ensure that any marketing mission contains some material on the airport and its headline marketing efforts. The airport is key to keeping Great Falls "on the map" and growing.

Conclusion

Despite the Golden Triangle producing one of the highest quality of grains and livestock, relatively few value-added products are being produced, due in part to transportation costs, workforce issues and local market size. There are multiple strategies that GFDA can implement in an effort to grow the manufacturing base in the area. BBA recommends that GFDA aggressively support Great Falls Community College's CDL training program, starting

Spring 2022. GFDA can help market career opportunities for truck drivers in order to ensure the CDL program is sustainable.

By training more truck drivers locally, local trucking companies can expand their capacity thus lowering transportation costs. Two elements of the marketing for this truck driver training program should be that the pay expectation exceeds what the most unskilled positions pay, and that 18- to 20-year-olds can actually get a truck driving license as long as they drive **within** the state of Montana. The age minimum of 21 years old applies to interstate transport CDL licenses.

BBA recommends targeted business attraction and recruitment efforts be directed toward manufacturers that require very high quality and specific specialty grain ingredients that are grown in the Golden Triangle area. Such a specialty niche product can demand and get a premium price. **BR&E will probably generate the most jobs in the short run.**

We also recommend that GFDA develop and market a transload facility at the Agri-Tech Park, so more producers could take advantage of rail and facilitate connections between local companies and freight brokers to expand the trucking options available to companies in the area.