East Grand Forks-Grand Forks Regional Bridge Crossing(s)

Planning for Improved Mobility, Equity, Sustainability, and Economic Competitiveness

MERIT CRITERIA

FY 2025 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program



Project Name: East Grand Forks-Grand Forks Regional Bridge Crossing(s) Planning for Improved Mobility, Equity, Sustainability, and Economic Competitiveness

Project Type: Rural Planning Project

Future Eligible Project Costs: \$7.5 million

2025 RAISE Funds Requested: \$7.5 million

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https://www.srfconsulting.com/grand_forks-east_grand_forks/





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Submitted by City of East Grand Forks, MN

FY 2025 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program

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MERIT CRITERIA

1. SAFETY

The East Grand Forks-Grand Forks Regional Bridge Crossing(s) Planning for Improved Mobility, Equity, Sustainability, and Economic Competitiveness Project (herein known as the Project) will advance planning activities for a transportation corridor with new bridge crossing(s) over the Red River in the <u>Grand Forks-East Grand Forks</u> <u>Metropolitan Planning Area</u>. The construction of new bridge(s) as a result of these planning activities will directly improve safety for travelers in Minnesota, North Dakota, and others utilizing this thriving regional transportation hub. The Project will advance alternatives that address documented existing and projected future safety and traffic operational challenges in the region. The City of East Grand Forks, MN along with project partners City of Grand Forks, ND, Polk County, MN, and Grand Forks County, ND, are committed to the evaluation, documentation, and measurement of progress towards advancing the goal of transportation safety in alignment with RAISE program and USDOT's strategic goals.



Time range 2019-2023

The <u>Project Area</u> is a growing region contending with a severely restricted cross-river transportation system. Locally, the Project Area supports the movement of over 70,000 residents, travelling to <u>29,000 jobs</u>, through three primary bridges:

- Kennedy Memorial Bridge (United States Highway (US) 2)
- Sorlie Memorial Bridge (Demers Avenue)
- First Avenue Bridge (weight-restricted two-lane)

As the local and regional populations continue to grow as forecasted in East Grand Forks Land Use Plan and Grand

Forks Land Use Plan, the existing river crossings will service increasing multimodal traffic movements. These increasing volumes will exacerbate the documented safety issues at the existing river crossings and outlying street networks on either side of the Red River. The existing vehicular bridges in the Project Area exhibit "Poor" and/or "Minimum Tolerable" conditions that could potentially impact the safety of the entire transportation network in an event of closure or restrictions due to adverse environmental impacts. The population of Grand Forks and East Grand Forks is projected to increase by 59 percent and 22 percent respectively, between 2020 and 2050 (Table 1).

Table 1 Area Population Forecasts

City	2020 Decennial Census	2023 ACS Estimate	2025	2035	2045
Grand Forks	59,166	58,882	60,247	67,879	76,479
East Grand Forks	9,176	9,067	9,841	10,764	11,773
Total	68,342	67,949	70,088	78,643	88,252

*1.2 percent growth rate assumed per 2045 Grand Forks Land Use Plan

^0.9 percent growth rate assumed per 2045 East Grand Forks Land Use Plan

Source: 2045 Grand Forks Land Use Plan, East Grand Forks 2045 Land Use Plan

Figure 1 Fatal and Serious Crashes within the Project Area



A significant number of documented crashes, including fatalities and severe crashes, continue to occur in proximity to the Project Area's river crossings (Figure 1). These crashes occurred near the area's densest and poorest residential neighborhoods, which include several elementary schools.

Within the Project Area, the intersection of US 2 and North Washington Street services traffic directly adjacent and west of the Kennedy Memorial Bridge. This intersection has been identified by the Grand Forks-East

Grand Forks Metropolitan Planning Organization (MPO) as a <u>Top Crash Frequency Intersection</u>. Similarly, the intersection of Demers Avenue and Fourth Street NW services traffic directly adjacent to and east of the Sorlie Memorial Bridge, has also been identified as another <u>Top Crash Frequency</u> <u>Intersection</u>.

Areas directly adjacent to, and in proximity to the existing bridge approaches have been the site of <u>numerous crashes</u> <u>involving bicyclists and pedestrians</u>. The Grand Forks-East Grand Forks MPO's <u>Bicycle and Pedestrian Plan</u> concluded that crashes in the region tend to occur around busy arterials like Washington Street, Columbia Road, and US 2, as these roadways are directly connected or adjacent to the existing bridges. Within a five-year period (2018-2022), the Project Area experienced 16 fatal crashes and 62 serious injury crashes.

Furthermore, areas directly adjacent to and in proximity to the existing bridge approaches form a hot spot of <u>freight</u> <u>vehicle crashes</u>, with crash sites along US-2, I-29 and US-81 in the project area.

Additionally, limited bridge access across the river contributes to increased emergency response times. Altru Ambulance, located in central Grand Forks, reported nearly double the response time to reach the south end of East Grand Forks as the average response time to the rest of the community.

The planning activities as a result of this Project will identify solutions that target and improve these documented safety problems by bringing much-needed capacity to the cross-river multimodal system and protect non-motorized travelers from safety risks.

As the Projects advances into preliminary design and environmental documentation, the identified alternatives will include improvements to positively impact the safety of nonmotorized travelers. The City as well as all project partners recognize the importance of adopting designs that utilize the U.S. Federal Highway Administration's (FHWA) Complete Streets Approach and Proven Safety Countermeasures (PSC) initiative, to reduce roadway fatalities and serious injuries on our Nation's highways. These countermeasures continue to be a leading guide for local transportation agencies addressing safety concerns within the Project Area. Some of the proposed PSCs may include low cost-high impact strategies such as walkways, high visibility crosswalks, speed management, etc. which will be further developed as the design progresses (Figure 2). The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) is currently developing the Safe Streets for All (SS4A) Safety Action Plan (SAP) which is expected to be completed by August 2025. The SAP will serve as a guiding document for Grand Forks, East Grand Forks, and partners in their pursuit of a systemic, proactive approach to roadway safety and will open new opportunities for state and federal funding for safety-related improvements.

Figure 2 FHWA's Proven Safety Countermeasures.



In alignment with USDOT's <u>National Roadway Safety</u> <u>Strategy</u> (NRSS) objectives, the City and project partners prioritize designing the region's transportation network as an integrated system that accommodates all modes of travel. In 2018, the City of Grand Forks reaffirmed its commitment to Complete Streets Approach with the <u>Grand Forks Complete</u> <u>Streets Policy</u>. In 2019 the City of East Grand Forks adopted its <u>Americans with Disabilities Act Transition Plan for Public</u> <u>Right of Way</u>, a proactive approach to improving the safety and utility of the multimodal transportation system for all users. Further, the Grand Forks-East Grand Forks MPO's <u>2050 Street and Highway Plan</u> employs Safe Streets, Safe People, Safe Vehicles, Safety Data, and Safety Focused Enforcement as its core elements.

Figure 3 Safe System Approach



With forthcoming population growth and development, and rising concerns about safety and increased awareness of disparities, project partners and decision makers continue to place transportation safety at the forefront of community decision making. **These plans and policies will be the guiding principles in planning the new bridge crossing(s) over the Red River**. Project outcomes will reflect community values and enhance multimodal connectivity, resiliency, and sustainability.

2. ENVIRONMENTAL SUSTAINABILITY

The Red River Valley is a nearly featureless plain with poorly drained silty and clayey soils that are highly prone to major risk of flooding due to rapid melting of snow in spring. The Grand Forks-East Grand Forks Area has experienced several major floods in the last few decades where much of the flooding accumulated not only because of the rising river levels, but also from overland flooding, as meltwater did not drain away. The most <u>severe flooding</u> in the region happened in the spring of 1997, when floodwaters reached more than 3 miles inland, resulting in damages of roughly \$3.5 billion in the two communities.

Figure 4 Flooding of 1997 - Sorlie Memorial Bridge



The project partners are established leaders in building community resilience in the face of extreme weather events, flooding, and environmental sustainability. **The City of Grand Forks Sustainable Community Plan maintains goals to protect the environment and natural diversity of the community, manage urban growth, and to promote a healthy and safe environment.** The Project will additionally conform to best practices as outlined in the North Dakota <u>Sustainability Forum, the Minnesota Climate Action</u> <u>Framework, Grand Forks County Environmental Health</u> guidelines, and the Polk County Local Water Plan.

Figure 5 City of Grand Forks' Sustainable Community Plan.



The Project Area is home to local industries, manufacturing, and farmers, including sugar beet industry, that would benefit from an efficient freight route due to potential reduction in vehicle miles traveled (VMT) and distance traveled with heavy loads. Additionally, three <u>North Dakota</u> <u>Centers of Research Excellence for Energy</u>, which develop technologies to make energy production and use more efficient and environmentally friendly, are located within the Project Area. The Project Area is also home to the <u>Energy</u> and <u>Environmental Research Center at the University of</u> <u>North Dakota</u>. The regional community's focus on energy is diverse with local manufacturers leading the development of green solutions such as LM Wind Power.

The Project will advance a broad range of local, regional, and national environmental sustainability and resilience goals in a manner that is equitable, transparent, and supported by project partners and the community. As project design progresses, the selected alternative will lead to creation of a network of resilient infrastructure better equipped for disaster preparedness. The river crossing(s) will be designed with specially engineered approach spans and substructure that flex and allow for movement in the underlying soils while maintaining a stable deck and driving surface. Additionally, as design progresses, the project team will evaluate incorporation of natural infrastructure or naturebased solutions with the use of native plants.

Prioritizing Communities and Avoiding Adverse Environmental Impacts

Although the location and design of the selected alternative(s) will be determined over the course of the Project, the crossriver improvement(s) will provide regional transportation benefits to several communities within the Project Area, including nine Areas of Persistent Poverty (APP) tracts and two Climate & Economic Justice Screening Tool (CEJST) designated Historically Disadvantaged Communities (HDC). The Project will conduct planning activities to evaluate the vehicle miles traveled (VMT) redistribution through the metropolitan area due to the construction of new crossing(s) and potential reduction of in the emissions of localized pollutants and greenhouse gases (GHG) due to reduced vehicle delays. By alleviating current safety, environmental sustainability, community connectivity, quality of life, and state of good repair challenges, the Project will accomplish RAISE program goals to:

- Reduce transportation-related air pollution and greenhouse gas emissions in rural communities.
- Address the disproportionately negative environmental impacts of transportation on local communities by reducing exposure to elevated levels of air, water, and noise pollution.

Improving Resiliency and Disaster Preparedness

The Project will also advance RAISE program goals to improve the resilience of at-risk infrastructure to be resilient to extreme weather events and natural disasters caused by climate change. Within the Project Area, there are only three bridges which support motorized traffic between the two cities: the Kennedy Memorial Bridge (US 2), the Sorlie Memorial Bridge (Demers Avenue), and the First Avenue Bridge (weight restricted). The closest crossing to the north is in Oslo, MN, located 24.5 miles away. The closest crossing to the south is 6th Avenue NE, located 20 miles away. The Project will bring improved cross-river connection and build additional capacity and redundancy to the regional crossriver transportation system, a critically important issue given the Red River's high level of flooding volatility. The Red River is unique due to its low gradient and northward flow. These features lead to a high flooding risk, as the Red River through the Project Area routinely floods. The nearby County Road 6 Bridge was completely under water during the spring floods of 2019, 2020, 2022, and 2023. Ice melt comes earlier in southern regions, causing ice jams and other conditions that result in flooding nearly every year. Any cross-river connection infrastructure implemented as a result of the Project will provide sufficient clearance for 100-year flooding events. The project is being developed in coordination with US Army Corp of Engineers (USACE) with respect to their investment in the community's resiliency, and for the bridge(s) to be resilient against flooding.



Figure 6 Flooding of the County Road 6 Bridge

The Project will bring urgently needed improvements to the region's overall resiliency to increasing flooding events.

3. QUALITY OF LIFE

Expand Access to Essential Services

The proposed planning outcomes due to the Project will focus on providing numerous Quality of Life benefits, including improving access and travel time reliability to daily destinations such as the two downtowns, several neighborhoods, one of the area's highest employment center, numerous schools, healthcare facilities, two documented disadvantaged census tracts, houses of worship, and places of recreation (Figure 6), making travel safer.

Figure 7 Map of Daily Destinations.



An analysis of traffic operations for the MPO area was conducted as part of the <u>Metropolitan Transportation Plan</u> to understand where operational issues occur. The existing river crossings at Kennedy Memorial Bridge (US 2) and Sorlie Memorial Bridge (Demers Avenue) were identified as among the top congested commuting corridors in the region. Further, predictive modelling found that the 2045 Level of Service (LOS) on the Kennedy Memorial Bridge will degrade to <u>LOS E</u>, and on the Sorlie Memorial Bridge to LOS F, if no additional river crossing(s) are planned.

Improves Connectivity for Rural Communities

Additionally, these two bridges are located only about 3,300 feet downriver from each other. This creates a regionwide funneling effect into a dense, acute, highly populated area. As the region continues to develop, users will have to travel greater distances to reach these two bridges. This is particularly evident for a significant amount of future development south of Grand Forks and East Grand Forks. If no improvement is made, occupants of this future development will have to travel out of their way northward to cross into the neighboring state through the existing bridges.

Figure 8 Planning LOS Classifications



The Project will present designs that improve travel time reliability and traffic flow through the region to these destinations. This will alleviate existing and deteriorating future congestion through the Project Area's urban core. Additionally, the designs resulting from the Project will include bicycle and pedestrian facilities, thereby improving and expanding active transportation options and improving public health by adding new facilities that promote walking, biking, and offers increased transportation choices.

These project improvements will aid in economic development, gaining prosperity and increasing qualityof-life by offering expanded transportation methods to access jobs and businesses, as set out in the Grand Forks 2050 Land Use Plan.

Avoiding Inequitable Burden of Inefficiencies

The Project Area covers 23 census tracts, of which two tracts (27119020200 and 38035010600) are identified as Historically Disadvantaged Communities by the Climate & Economic Justice Screening Tool (CEJST). CEJST analysis indicates that these communities meet thresholds to be affected by health disparities, legacy pollution, water and wastewater pollution, and meet the CEJST threshold for Low Income communities (people in households where income is less than or equal to twice the federal poverty level). These disparities are likely increased by proximity to traffic congestion and to the East Grand Forks Water Treatment facility which is subject to a Risk Management Plan (RMP). The Project will directly benefit these documented populations and reduce burdens placed on these and surrounding rural communities.

Census Tract 27119020200, Polk County, MN Figure 9 Census Tract 27119020200



With a population of 1,384, residents of this tract rank in the:

- 96th percentile for proximity to RMP facilities
- 94th percentile for low life expectancy
- 67th percentile for low income
- 94th percentile for wastewater discharge

Census Tract 38035010600, Grand Forks County, ND Figure 10 Census Tract 38035010600



With a population of 2,201, residents of this tract rank in the:

- 74th percentile for low life expectancy
- 82nd percentile for low income
- 96th percentile for wastewater discharge
- 97th percentile for proximity to RMP facilities
- 96th percentile for expected building loss rate

The Project seeks to lessen these health and economic burdens by exploring different multimodal traffic routes to be located further away from these documented disadvantaged populations.

Table 2 Existing Bridge Crossings between East Grand Forks and Grand Forks

Connection	Average Annual Daily Traffic	Heavy Commercial Vehicle Average Annual Daily Traffic
Kennedy Memorial Bridge (US 2)	15,475 (2021)	1,299 (2022)
Sorlie Memorial Bridge (Demers Avenue)	13,400 (2019)	478 (2022)
First Avenue Bridge (weight-restricted two-lane)	6,660 (2021)	0

4. IMPROVES MOBILITY AND COMMUNITY CONNECTIVITY

Improving System-wide Connectivity

The cross-river connection network within the Project Area serves as the backbone of the region's multimodal transportation system. These roadways experience the highest daily regional traffic volumes and serve as top regional commuting corridors. The annual average daily traffic as well as the heavy commercial truck traffic on roadways crossing the existing Red River bridges is noted in Table 2. While safe and reliable multimodal travel across the Red River is critical to serving the needs of Project Area residents, it also serves an important function for travelers into and out of the region. These travelers include a high number of freight users traveling on regional, national, and international trips utilizing the network of interstate, arterials, connectors, and local roadways within the region. This network facilitates the movement of people, goods, and services throughout the region while connecting key destinations such as housing and employment centers. Additionally, the existing cross-river connections assist services such as intercity bus service and alternate mobility/ paratransit providers that are vital to the balanced regional transportation system. The existing cross-river system also facilitates travel to and from a critical regional passenger rail hub and the Grand Forks International Airport.



Figure 11 Functional Classification Map

Active Transportation

Figure 12 Community Bike Audit of Greater Grand Forks



The Project Area was recognized nationally in 2018 when Greater Grand Forks was awarded with a bronze level <u>Bicycle Friendly Community</u> designation by the League of American Bicyclists. The cities of Grand Forks and East Grand Forks were re-certified in 2023 as a Bronze Bicycle Friendly Community. The <u>Greater Grand Forks Greenway</u>, developed after the 1997 Red River flood, has added more than 20 miles of trails for bikers, walkers, and joggers to travel between an extensive selection of amenities on both sides of the Red River. <u>Grand Rides</u>, a dockless bike share system within the Project Area, was launched in 2020. East Grand Forks and project partners will continue to design and construct transportation facilities friendly as feasibly possible to all modes of transportation.

Project partners understand the importance of consistently improving the regional multimodal transportation system. As a high number of residents in Grand Forks and East Grand Forks do not have access to a vehicle (over eight percent and over ten percent, respectively), it is important to design the region's transportation infrastructure to cater to commuting needs of all users through provisions of shared mobility alternatives.

Table 3 Project Area Resident Vehicle Access

Source: American Community Survey 5-Year Estimates (2014)

	Grand Forks	East Grand Forks		
No vehicle available	8.4%	10.6%		
1 vehicle available	37.9%	31.0%		
2 vehicles available	35.6%	42.4%		
3 vehicles available	13.3%	12.5%		
4 vehicles available	4.9%	3.5%		

Coordinated Community Mobility

Local municipalities continue to implement a coordinated approach to improving community connectivity and mobility. In the last five years, local municipalities have <u>reduced</u> <u>car parking minimums, and have implemented paid public</u> <u>car parking and shared-parking allowances.</u> The local communities also provide a wide range of bicycle endof-trip facilities, including public bicycle repair stations, public air pumps, and public bike racks (both covered and uncovered). The Project Area is home to numerous bicycle and pedestrian overpasses and underpasses, refuge islands, high visibility markings and signs, High-Intensity Activated Crosswalk (HAWK) signals, and Rapid Rectangular Flashing Beacons (RRFBs), and drinking fountains along bicycle/ pedestrian routes.

The locally adopted <u>Streets and Highways Plan</u> identifies an additional Red River crossings as a Key Need for the community.

Local and Regional Transit Service

The Project will enhance intercity bus service operating in the Project Area. The local transit provider, <u>Cities Area</u> <u>Transit (CAT)</u> provides accessible <u>Dial-A-Ride</u> and fixed route community services. This local bus service relies heavily on the cross-river connection system. Regional bus service is provided by Jefferson Lines, which currently operates a north-south route through the Project Area along I-29, from the South Dakota border to Grand Forks. Grand Forks is home to two stops for Jefferson Lines' north-south route. These stops are the Twin Cities Area Transit Metro Transit Center (MTC) in downtown Grand Forks and the <u>University</u> of North Dakota (UND) Memorial Union. The Project will advance regional multimodal mobility and connectivity goals. The Project represents a coordinated community-driven approach to increase mobility and accessibility for both motorized and non-motorized travelers.

5. ECONOMIC COMPETITIVENESS AND OPPORTUNITY

The Project will advance design solutions that promote long-term economic competitiveness and growth, improve intermodal and multimodal freight flows, and improve access to a range of important freight corridors which form a critical network of regional and national trade corridors. Freight is a major component of the MPO Area's transportation system, as the movement of goods supports the region's economy. Freight assets found within the MPO Area include I-29, US 2, State highway routes, freight rail lines, and the Grand Forks International Airport.

The Grand Forks general-purpose Foreign Trade Zone #103 is one of two Federal Trade Zones in North Dakota. Within an hour of the Canadian border and located on the crossroads of US 2 and Interstate 29, Grand Forks provides a distinct advantage to manufacturing businesses.

Interstate 29 (I-29) is a designated Primary Highway Freight Network Route (PHFN) and a Locally Designated Truck Route. Through the Project Area, I-29 services an average annual daily traffic (AADT) of 15,920 vehicles per day (vpd) (2023) and heavy commercial average annual daily traffic (HCAADT) of 3,770 vpd (2023). US Highway 2 is a critical regional transportation corridor with more than 23,000 vehicles crossing each day (2023). Through the Project Area, US 2 services an AADT of 19,725 vpd (2021) and HCAADT of 1,300 vpd (2021). According to the Grand Forks-East Grand Forks 2050 Street and Highway Plan, by 2050 the US Highway 2 bridge is expected to have a LOS E while the DeMers Avenue bridge and the Point bridge are expected to deteriorate to a LOS rating of F. I-29 and US 2 west of I-29 are estimated to carry some of the highest levels of tonnage in the MPO Area, while US 2 in East Grand Forks carries the highest level of annual tonnage on the Minnesota side of the MPO Area. US-2 and I-29 are two of the most significant routes in ND for carrying farm product tonnage and food or kindred product tonnage. Within Grand Forks County, US-2 average almost 1.5 million tons of farm product truck tonnage and 337 thousand tons of food or kindred product tonnage (2019). Demers Avenue carries a relatively high level of annual tonnage within the region as well. Each of these vital roadways is dependent on the Project's outcome of improved cross-river connections.



Figure 13 Annual Truck Tonnage, 2017.

Local Industry & Regional Economy

From local businesses to large-scale corporations, the Grand Forks-East Grand Forks region is home to many major employers across diverse industries. American Crystal Sugar, located in East Grand Forks, is a major processor of sugar beets. About 2,800 farmers who live in the Red River Valley region grow sugar beets for the company, raising about one-third of nation's sugar beet acreage. The project will be beneficial to the company's freight operations as additional bridge crossing(s) would shorten the travel times for trucks (making 16,000 total truck movements annually) between the growers' fields south of Grand Forks and the receiving station in East Grand Forks. The shortened travel time will result in efficiencies and savings in cost and labor, drive time for truck drivers, and reduced GHG emissions.. International food and agriculture company J. R. Simplot Company is one of the largest privately held firms in the country, with annual sales of about \$4.5 billion. Another major regional employer, North Dakota Mill & Elevator has wheat milling operations in the area since 1922. The North Dakota Mill supports the regional economy with a payroll of \$14 million annually. Key to the continued operation of these agribusinesses is the capacity for food product trucking and access to processing, markets, and services, as demonstrated by the predicted decrease in LOS through the area in conjunction with the already high truck tonnage levels. Opening up new points of connection will increase the area's economic development potential, where the south side of East Grand Forks is slated for future development in the 2050 Land Use Plan but has historically been restrained by access.

Figure 14 Project Area Major Employers.



With a medical school, major medical complex, and research centers, the region also has a strong biomedical industry. Founded in 1905, the <u>UND School of Medicine & Health</u> <u>Sciences</u> is the only medical school in North Dakota. In addition, the region has a diverse <u>manufacturing base</u> with niche companies that manufacture products for industries including wind energy, oil and gas, aviation, construction, food, and automotive components.

Figure 15 Project Area Employment Densities



Local analysis of Travel Analysis Zones (TAZs) highlights the strong local relationship between existing land uses and freight truck activity. TAZs representing areas with high truck generation rates within the limits of Grand Forks include 32nd Avenue S, I-29, and US 2, which highlight freight demand and the desire for accessibility to major freight routes. TAZs in East Grand Forks with the highest truck generation rates are along US 2 and along Business 2 adjacent to the American Crystal Sugar Company. The American Crystal Sugar Company is a major economic engine for the local, regional, and state economies and has a high freight component. Traffic to American Crystal Sugar varies significantly by time of year, with very high truck volumes during the beet harvest. These crucial providers of good-paying jobs, along with many others, are directly dependent on a well-functioning cross river connection network.

Regional Employment Hub

The US Census OnTheMap tool indicates that there are <u>over</u> 29,500 jobs located within the Project Area. The Project Area is a net exporter of jobs, meaning it draws commuters daily from outlying areas. Almost 13,000 commuters enter the Project Area daily. Forecasted employment growth through the year 2050 is shown in Table 4. The City of Grand Forks forecasts an annual employment growth rate of 1.4 percent, with 18,290 new jobs added by 2050. The City of East Grand Forks expects growth of 1,103 new jobs, or an annual job growth rate of 0.8 percent. Overall, the MPO Area is forecasted to add 19,393 jobs through 2050 at an annual growth rate of 1.4 percent. The Project Area is the beating heart of regional employment and economic activity. Its importance as a regional economic driver will continue to grow in the coming years.

Figure 16 Project Area Inflow-Outflow



Source: U.S. Census Bureau

Table 4 Forecasted Growth in Grand Forks-East
Grand Forks Area Jobs, 2020-2050

Agency	2020	2050	Jobs Added	Annual Growth
Grand Forks	34,728	53,018	18,290	1.4%
East Grand Forks	3,816	4,909	1,103	0.8%
MPO Area	38,544	57,937	19,393	1.4%

The Project will advance planning work to build a more resilient cross-river connection(s) network which will improve travel time reliability, trip reliability, and safety throughout the region. This will expand the capacity of critical supply chain bottlenecks and will positively impact the economic health of the local, regional, and national communities.

6. STATE OF GOOD REPAIR

Under a no-build condition, the East Grand Forks-Grand Forks Metropolitan Area will deteriorate at a quickening pace as traffic volumes continue to rise as forecasted. This will be exacerbated as the immediate and adjacent areas continue to develop as outlined in the land use plans of both the cities. The Project is a major piece of the envisioned multimodal system improvements shared by multiple local and state agencies and is aligned with planned future improvements for nonmotorized users. The existing vehicular bridges in the Project Area exhibit "Poor" and/or "Minimum Tolerable" conditions that lead to increase in maintenance burdens. **The Project will include planning activities to restore and modernize the cross-river connection system such that the condition and safety of the region's existing transportation infrastructure system is improved.** Therefore, the Project is a sound investment as it maximizes previous and future investments and the long-term value of city-, county-, and state-maintained infrastructure.

Figure 17 GF-EGF MPO's Strategies for Transportation System Improvements



Maintenance / State of Good Repair Keep current streets in a state-of-good-repair (SOGR)

Operations / Safety Focus on intersections (signal timing, safer geometry, roundabouts, etc) Limited / no widening

Widenings Adding travel lanes in growth corridors Current 2-lane rural to 3-lane and 4-lane divided streets

New Streets / Bridges New streets in growth areas

New Red River crossings New railroad grade separations

Pave Gravel Roads Current rural gravel roads paved In growth areas and industrial parks

Addressing Current and Projected Vulnerabilities

Presently, three cross-river bridges provide connections between the neighboring cities and into Minnesota and North Dakota. Two of these three bridges can only accommodate certain truck widths and weight. New river crossing(s) could provide better opportunity for over sized and over weight vehicles to move through the region and reduce strain on existing bridges. The existing crossings include:

Bridge #9090 (John F. Kennedy Memorial Bridge)

The Kennedy Memorial Bridge is the northernmost connection between the cities via US Highway 2. Built in

1963 and reconstructed in 2016, this bridge's superstructure is currently rated as "<u>Poor Condition</u>." It is anticipated to service 18,700 AADT by year 2039. There is a sidewalk on the north side of the corridor.

Bridge #4700 (Sorlie Memorial Bridge)

The Sorlie Memorial Bridge connects each of the two cities' downtown areas via Demers Avenue. Built in 1929, this bridge's Structural Evaluation Appraisal is rated as "<u>Minimum Tolerable</u>." It is anticipated to service 15,000 AADT by year 2039. There is a sidewalk on either side of the corridor.

Bridge #60506 (Point Bridge)

The Point Bridge is the southernmost connection between Grand Forks and East Grand Forks. It connects Minnesota Avenue in ND and 1st Street SE in MN. Built in 1967 with a low slump concrete overlay added in 1982, there has been no other major repairs or modifications since then. The bridge is weight restricted and its Deck Geometry Appraisal is rated as "<u>Minimum Tolerable</u>." It is anticipated to service 7,400 AADT by year 2039. The bridge is signposted for no trucks on the Grand Forks side and has a weight restriction of 40,000 pounds. There is a very narrow (3.5 foot) sidewalk on the south side of the bridge; however, signs are posted prohibiting pedestrians from using the bridge, as the sidewalk leading to the bridge has been removed. Bicycles are allowed on the bridge, although there are no bicycle facilities.

The existing infrastructure is a critical piece in the region's transportation network and its economy. However, the current and projected vulnerabilities in the existing network need to be addressed to improve the resiliency of the transportation infrastructure and accommodate the anticipated growth in the region. In alignment with Grand Forks-East Grand Forks MPO's long-range planning for future improvements in the region, the Project will conduct detailed operational assessment and public involvement

Bridge #	Location	Year		NBI Condition Rating*				Domorka
		Built	Reconstructed	Deck	Superstructure	Substructure	Channel	Remarks
9090	US 2 over Red River	1963	2016	7	4	6	6	
4700	Demers Avenue over Red River	1929	-	7	5	5	6	
60506	First Avenue over Red River	1967	-	5	6	5	5	Posted for load

Table 5 Bridge Condition Ratings

* Bridge condition scores greater than 7 suggest a bridge is new or was repaired to a good condition. Scores 5 and less indicate a fair to serious condition and repair is required.

to identify implementable context sensitive solutions. The planning outcomes due to the Project will result in reducing the construction and maintenance burdens through efficient and well-integrated design.

Operations and Maintenance Plans

Upon completion of this Project and prior to the construction of the Capital Project, a joint operations and maintenance partnership will be accomplished between the Cities, Counties, MnDOT, NDDOT, and appropriate jurisdictions for their respective jurisdictional portions. All project partners are fully committed to operating and maintaining project components within their right of way. Long-term maintenance operations will be performed in partnership based upon the typical maintenance schedule for transportation infrastructure in the region. The project partners commit to fund the operations and maintenance of infrastructure within their respective jurisdiction through stable and growing sources of the funding based upon continued residential and commercial growth.

The new infrastructure created based on the planning efforts of this Project will be maintained in a state of good repair.

7. PARTNERSHIP AND COLLABORATION

Project Partners

The Project represents a strong collaborative and integrated approach to transportation decision-making between local governments and communities, namely the City of East Grand Forks, MN (lead applicant), the City of Grand Forks, ND, Polk County, MN, and Grand Forks County, ND. In addition, the project is strongly supported by the Grand Forks-East Grand Forks Metropolitan Planning Organization, local businesses, and community stakeholders.





The Project will continue an efficient and collaborative visioning of the corridor, as local agencies will partner in studying the Project Area within the framework of the Federal Highway Administration's (FHWA) <u>PEL Program</u>, along with the Minnesota Department of Transportation (MnDOT), North Dakota Department of Transportation (NDDOT), FHWA Division Offices in Minnesota and North Dakota, U.S. Coast Guard (USCG), and U.S. Army Corp of Engineers (USACE). Project partners have initiated coordination with the State and Local Floodplain Administrators and regulators in Minnesota and North Dakota and with USACE to ensure appropriate floodplain management is identified and implemented.

Meaningful Cross-Jurisdictional Collaboration

The Grand Forks-East Grand Forks MPO is a regional partner for coordinated, comprehensive, and continued transportation planning. The MPO's <u>Streets and Highways</u> <u>Plan</u> was developed via a robust public process and approved by local municipalities, and included a diverse range of public and stakeholder engagement efforts, including:

- Public meetings and open houses in August 2017 in Grand Forks and December 2017 in East Grand Forks.
- Interactive mapping, surveys, and comment forms on the project website.
- Coordinated social media campaign.
- Website updates.
- Agency and stakeholder meetings.
- Local media press releases and interviews with public agency staff.

This Plan exemplifies cohesive cooperation between federal, state, and local agencies across jurisdictions, which reflects the MPO's unique collaborative position.

Figure 18 Public Involvement in Corridor Planning



The Streets and Highways Plan specifically calls out the need for the Project, listing it among the Illustrative Projects of Significance. The Streets and Highways Plan states, "The Red River Crossing projects will provide regional connectivity across the Red River, supplementing the three existing river crossings that are forecast to operate with significant congestion in 2045." Working together to highlight shared issues and solutions, the identification of this project in previous plans exemplifies the demonstrated cooperative commitment of the project partners.

As part of the PEL Study as well as preliminary engineering design/environmental documentation, the project partners will conduct multiple rounds of public engagement to involve residents and community-based organizations such that considerations for all communities and local economic stakeholders including rural communities, are meaningfully integrated throughout the lifecycle of the project. This public input also includes potential for Public-Private Partnership (PPP) opportunities, reflecting long-standing business interest in the project.

Workforce Development Opportunities

As the Project planning advances, the project partners will create opportunities to train existing staff as well as create a pipeline of developing future workforce opportunities through the use of apprenticeship and internship programs. The details of such programs are in-progress and will align with the employment policies of each agency. Additionally, project partners will partner with Disadvantaged Business Enterprises (DBE) as per Federal requirements. Project Partners will continue their strong history of collaboration to work together to solve regional transportation challenges.

8. INNOVATION Innovative Technology

The Project will oversee a preliminary design process which will include innovations in design, construction, materials, operations, and maintenance. Project partners will leverage opportunities for innovation as the design process progresses, which may include innovation in construction techniques, equipment, and materials.

The design process will include consideration for integration of Intelligent Transportation Systems (ITS). ITS technologies advance transportation safety, mobility, and efficiency by integrating advanced technologies into transportation infrastructure or vehicles. ITS encompasses a broad range of electronic communication and sensing technologies but traditionally includes elements such as dynamic message signs, CCTV cameras, and vehicle detection.

The design process will also include a robust investigation of innovative methods to mitigate environmental impacts. Since the project lies across the floodplain of the Red River, hydraulic modeling and subsequent mapping of the floodplain will be undertaken so that the floodway and floodway fringe of the river can be identified and used to inform alternative evaluation. The project team will also analyze the heights of past flood events which will aid in ultimate design considerations for the new bridge crossing(s).

Innovative Project Delivery

The Project represents a unique partnership between the cities of East Grand Forks, MN, Grand Forks, ND, Polk County, MN, and Grand Forks County, ND. This partnership will help streamline construction management and reduced projected cost through innovative project delivery.

PEL Study

The Project is requesting RAISE funds to conduct a Planning and Environment Linkage (PEL) study and complete NEPA documentation of the potential river crossing(s) across the Red River. The intent of the local agencies is for the PEL study to be adopted or incorporated directly into a future NEPA process. Dating back to the early 2000s, the local partners have worked through the MPO to identify and evaluate a variety of new river bridge locations to promote safety and improve mobility within the region. Analysis to date has included traffic forecasting, hydraulic analysis, and conceptual designs to determine feasibility and impacts of potential new crossings. However, due to the length of time between studies, the changing regulatory environment climate and requirements, along with political pressures, there has not been a definitive approach or comparison of options completed. Nevertheless, these studies do indicate transportation benefits may be achieved from a new river crossing location(s). The completion of the PEL study will facilitate accelerated project delivery by establishing a streamlined process for NEPA environmental documentation.

Bridge Bundling

Upon completion of the NEPA documentation, if more than one bridge crossing is recommended, the City and its partners may utilize bridge bundling to deliver the project. Developing the bridges with similar design and materials could lead to enhanced efficiency in the design and construction processes and thereby, lower project costs.

Innovative Financing

The City of East Grand Forks and project partners recognize that transportation investments directly and indirectly foster economic growth through the provisioning of construction jobs, enabling goods to be transported through a commerce friendly network of corridors and providing mobility to citizens. As project design progresses, the City and partners will explore funding options such as local option sales tax, state bonding funds, CSAH funds, etc. to further the design of this crucial infrastructure project. The four partners involved with the design and delivery of this project have extensive experience working together to deliver major projects in the Grand Forks-East Grand Forks Metropolitan Area and have crafted Memorandum of Understanding (MoU) to establish clear direction on project commitments, roles, and responsibilities for each party. All partners are committed to investing in our roads and bridges that contribute to a growing economy and will continue supporting commerce.

SUPPORTING DOCUMENTS

Links to supporting documents are included throughout this narrative. All supporting documents and the RAISE grant application narrative are available to view at the following webpage:

https://www.srfconsulting.com/grand_forks-east_grand_forks/