



Chapter 2. Vision, Goals, Objectives, Standards, Performance Measures and Targets

The metropolitan transportation plan's (MTP) - Streets and Highway Element vision, goals, objectives, standards, performance measures and targets are critical in the planning process because they defined the region's desired outcomes resulting from plan implementation. The Plan's vision, goals, objectives, standards, performance measures and targets were developed in coordination with North Dakota Department of Transportation (NDDOT), Minnesota Department of Transportation (MnDOT), the Federal Highway Administration, the Technical Advisory Committee (TAC), Policy Board, and general public.

The Plan's goals align directly with the ten federal transportation planning factors, and with the federal livability principles and the national transportation performance goals. They also build on the goals, objectives, standards, and performance measures, and performance targets adopted in the previous plan. Several goals, performance measures, and performance targets were updated to address requirements in the Fixing America's Surface Transportation Act (FAST Act), the most recent federal transportation reauthorization bill passed in 2015.

FAST Act Requirements

Federal law identifies seven (7) national performance goals (source: [23 USC § 150](#)). Each Grand Forks-East Grand Forks goal area is consistent with one or more national performance goal, and this alignment is shown in Table 2-1. The Grand Forks-East Grand Forks goals are not listed in order of priority. The national performance goals in order of alignment frequency with the Grand Forks-East Grand Forks goal areas are:

- Freight movement and economic vitality – In alignment with ten (10) Grand Forks-East Grand Forks MPO goals
- System reliability – In alignment with nine (9) Grand Forks-East Grand Forks MPO goals
- Safety – In alignment with nine (9) Grand Forks-East Grand Forks MPO goals
- Infrastructure condition – In alignment with eight (8) Grand Forks-East Grand Forks MPO goals
- Congestion reduction – In alignment with eight (8) 2040 Grand Forks-East Grand Forks MPO goals
- Environmental sustainability – In alignment with seven (7) Grand Forks-East Grand Forks MPO goals
- Reduced project delivery delays – In alignment with six (6) Grand Forks-East Grand Forks MPO goals

The national performance goals are prescribed by law, and MPO-identified objectives, measures, and metrics should not conflict with these national performance goals. Federal law creates flexibility for states and MPOs to define the exact means and methods used to track progress toward achieving locally identified outcomes. Each MPO is required to conduct a robust planning process that results in goals, objectives, measures, and metrics that are compatible with the national goals and are priorities for the local community. The MPO goals were designed to match local interests, while still supporting the national goals. The scope of each MPO goal was compared to each national performance goal. If there was any overlap in the scope of the MPO and the national goals, then it was noted that the federal goal was satisfied by a given MPO goal.

Appendix A also demonstrates the Plan's linkage with NDDOT Statewide Strategic Transportation Plan Goals and MnDOT Statewide Multimodal Transportation Plan Objectives.



Table 2-1: Grand Forks-East Grand Forks Goal Areas and Alignment with National Performance Goals

MPO Goal Number	MPO Goal (also Federal Transportation Planning Factors)	MPO Goal Statement	National Performance Goal(s) Satisfied
1	Economic Vitality	Support the economic vitality through enhancing the economic competitiveness of the metropolitan area by giving people access to jobs, and education services as well as giving business access to markets.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Freight movement and economic vitality ■ Reduced project delivery delays ■ Safety ■ System reliability
2	Security	Increase security of the transportation system for motorized and non-motorized uses.	<ul style="list-style-type: none"> ■ Freight movement and economic vitality ■ Infrastructure condition ■ Safety ■ System reliability
3	Accessibility and Mobility	Increase the accessibility and mobility options for people and freight by providing more transportation choices.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Environmental sustainability ■ Freight movement and economic vitality ■ Infrastructure condition ■ Reduced project delivery delays ■ Safety ■ System reliability
4	Environmental/ Energy/Quality of Life	Protect and enhance the environment, promote energy conservation, and improve quality of life by valuing the unique qualities of all communities – whether urban, suburban, or rural.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Environmental sustainability ■ Freight movement & economic vitality ■ Infrastructure condition ■ Safety ■ System reliability
5	Integration and Connectivity	Enhance the integration and connectivity of the transportation system, across and between modes for people and freight, and housing, particularly affordable housing located close to transit.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Environmental sustainability ■ Freight movement and economic vitality ■ Infrastructure condition ■ Reduced project delivery delays ■ Safety
6	Efficient System Management	Promote efficient system management and operation by increasing collaboration among federal, state, local government to better target investments and improve accountability.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Environmental sustainability ■ Freight movement and economic vitality ■ Infrastructure condition ■ Reduced project delivery delays ■ System reliability



MPO Goal Number	MPO Goal (also Federal Transportation Planning Factors)	MPO Goal Statement	National Performance Goal(s) Satisfied
7	System Preservation	Emphasize the preservation of the existing transportation system by first targeting federal funds towards existing infrastructure to spur revitalization, promote urban landscapes and protect rural landscapes.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Environmental sustainability ■ Freight movement and economic vitality ■ Infrastructure condition ■ Reduced project delivery delays ■ Safety ■ System reliability
8	Safety	Increase safety of the transportation system for motorized and non-motorized uses.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Freight movement and economic vitality ■ Infrastructure condition ■ Reduced project delivery delays ■ Safety ■ System reliability
9	Resiliency	Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.	<ul style="list-style-type: none"> ■ Congestion reduction ■ Environmental sustainability ■ Freight movement and economic vitality ■ Infrastructure condition ■ Safety ■ System reliability ■ Resiliency
10	Tourism	Enhance travel and tourism.	<ul style="list-style-type: none"> ■ Environmental sustainability ■ Freight movement & economic vitality ■ Safety ■ System reliability

The FAST Act also retained and strengthened federal emphasis on performance-based transportation planning. This performance-based approach is meant to improve accountability of federal transportation investments, assess risks related to different performance levels, and increase transparency. The FAST Act requires¹:

- States
 - Undertake performance-based transportation planning that integrates standards and targets encompassing every national, statewide, regional and local entity
- Metropolitan planning organizations (MPOs)
 - Link the investment priorities contained in the Statewide Transportation Improvement Program (STIP) and Transportation Improvement Program (TIP) to achievement of performance targets.

¹ Source: Federal Register. Vol 81, No. 103. May 27, 2016. Rules and Regulations. p.34051.

- Establish targets in the key national performance areas to document expectations for future performance, and document the performance targets and measures in the MPO's metropolitan transportation plan
- Coordinate these targets with states to ensure consistency to the maximum extent practicable. Metropolitan planning organizations may adopt state-identified performance targets, or federal law allows MPOs to identify their own set of performance targets for the measures.
- In their transportation plans, MPOs need to describe these performance targets, evaluate the condition and performance of the transportation system, and report on progress toward the achievement of their performance targets.
- Integrate the MPO planning process and the goals, objectives, performance measures, and targets set by the states in the strategic highway safety plan, the highway asset management plan, and the State freight plan. This integration helps deliver performance elements as part of the MPO's investment decision-making processes. Federal rules do not require explicit integration of these elements in the development of the MPO's long-range transportation plan (LRTP) nor the transportation improvement program (TIP).
- Identify how they will cooperatively implement these performance-based planning provisions with States. The MPO(s) and the State(s) must jointly agree on and document in writing the coordinated processes for the collection of performance data, the selection of performance targets for the metropolitan area, the reporting of metropolitan area targets, and the reporting of actual system performance related to those targets. The documentation must also describe the roles and responsibilities for the collection of data for the national highway system.

States or MPOs may also develop and report on additional measures; neither Minnesota nor North Dakota state statutes require MPOs to adopt state-level performance measures.

While there are federal requirements for performance-based planning, the federal rules focus on nationally-significant near-term measures and performance. Long-term performance and local priorities, like those addressed in an MPO's long-range transportation plan (LRTP), may be better addressed through additional performance measures and targets. Federal and state rules allow for this flexibility in the MPO LRTPs.

Vision

The vision for the Grand Forks – East Grand Forks MPO covers all modal elements for the region's transportation system. The vision was crafted during the update process for the Transit and Pedestrian/Bicycle elements of the 2045 MTP, which involved input from the Technical Advisory Committee, Policy Board, and the general public. The vision for the Grand Forks – East Grand Forks MPO is stated below:

“A community that provides a variety of complementary transportation choices for people and goods that is fiscally constrained.”



Street and Highway Plan Goals, Objectives, Standards, Performance Measures and Targets

These goals, objectives, standards and performance measures were reviewed by GF/EGF MPO staff, staff from each state DOT, and the public. They generally reflect the needs and issues of the GF/EGF area. Additional elements of these performance measures include the provision of targets, action initiatives, and monitoring activities to ensure the next Street and Highway Plan update understands past performance and builds upon it. The Grand Forks-East Grand Forks goals are not listed in order of priority.

Goal 1: Economic Vitality

Goal statement: Support the economic vitality through enhancing the economic competitiveness of the metropolitan area by giving people access to jobs, and education services as well as giving business access to markets.

Table 2-2: Objectives and Standards for Goal 1 Economic Vitality

Objective	Standards
1. Coordinate land use and transportation planning, programming, and investments between agencies.	<ul style="list-style-type: none"> ■ Strengthen and connect existing communities by focusing street and highway system expansion in areas that are contiguous to currently developed areas. ■ Recognize and identify investments that support the types and locations of future development identified in the Grand Forks and East Grand Forks Land Use Plans. ■ Coordinate with local governments on the placement of regionally significant developments (e.g., ones that have a major impact on existing networks) and consider both motorized and non-motorized modes of transportation. ■ Identify prime corridors for industrial uses that are adjacent to major freight operations and truck routes, have facilities for efficient freight and goods movement, and route truck traffic away from incompatible land uses.
2. Enhance the area's economic competitiveness through the movement of goods and services.	<ul style="list-style-type: none"> ■ Develop and maintain roadway connectivity that is appropriate for the facility type and land-use environment. ■ Protect operational capacity of interstate and state highways through the GF/EGF MPO area and support the growth of regional intermodal freight capacity.
3. Support efficient local and regional street and highway connections for freight and rail movement.	<ul style="list-style-type: none"> ■ Participate in state and national freight planning efforts. ■ Build and maintain relationships with area businesses to increase the understanding of their freight needs. ■ Improve connections to freight terminals (e.g., air and multimodal), especially the last 1-2 miles of access. ■ Strategically locate freight rail improvements in areas that currently do not have freight rail access. Investments will support critical rail-street/highway connections for key regional centers and businesses to move goods and services. ■ Support integrated network of streets, roads, and highways that provide direct routes for freight and rail.



Objective	Standards
4. Consider economic development efforts in the transportation and programming process.	<ul style="list-style-type: none"> ■ Invite economic development officials to collaborate in the transportation system alternatives analysis process provide documentation of the alternatives' screening process to local economic development officials for review. ■ Recognize and respond to economic changes at the local, regional, state and national level that influence the metro area's transportation system.

Table 2-3: Performance Measures and Monitoring Activities for Goal 1 Economic Vitality

Performance Measures	Performance Target
1. Land use and economic development initiatives consistent with the LRTP and TIP development initiatives consistent with the LRTP and projects.	<ul style="list-style-type: none"> ■ Ninety percent (90%) land use and economic development initiatives consistent with the LRTP and TIP projects.
2. Communication/coordination improvement between freight operators and transportation officials.	<ul style="list-style-type: none"> ■ Communication/coordination improvement between freight operators and transportation officials via minimum of semi-annual meetings.

Action Initiatives

- Document local, state and national freight initiatives that influence the region's transportation system.

Monitoring Activities

Annually

- Track growth corridors through building permits and platting activities.
- Map the locations of major employment centers, including existing and proposed developments, and identify types of transportation available.
- Document locations and conditions of current freight routes.
- Evaluate the LRTP's effectiveness and consistency with new development and economic development decisions.
- Hold at least two joint meetings annually between the freight community and transportation agencies.
- Track number of new developments with multimodal connections.

Every 5 Years

- Evaluate the LRTP's effectiveness and consistency with local comprehensive plans.
- Track the increase in households or jobs by TAZ to identify potential employment and residential growth areas and to assist in the prioritization of future transportation projects.
- Conduct a freight assessment of the GF/EGF MPO area and update the freight section of the LRTP.



Goal 2: Security

Goal statement: Increase security of the transportation system for motorized and non-motorized uses.

Table 2-4: Objectives and Standards for Goal 2 Security

Objective	Standards
1. Identify and maintain security of critical street and highway system assets.	<ul style="list-style-type: none"> ■ Support improvement projects that do not compromise the security of identified critical street and highway assets. ■ Evaluate and manage the security of the transportation network, especially in critical areas. ■ During security threats or events, coordinate traffic operations consistent with the Grand Forks-East Grand Forks Bridge Closure Management Plan.
2. Support state and regional emergency, evacuation, and security plans.	<ul style="list-style-type: none"> ■ Incorporate state and regional emergency, evacuation, and security plans into transportation plans, project development, and project selection processes. ■ Develop an implementation plan that responds to various disaster events that might occur within the region including evacuation routes and contingency planning. ■ Coordinate efforts with local emergency/security/hazardous materials groups.

Table 2-5: Performance Measures and Monitoring Activities for Goal 2 Security

Performance Measures	Performance Target
1. Blockage of emergency transportation routes.	<ul style="list-style-type: none"> ■ 75 percent of emergency transportation routes remain unblocked.
2. Incident clearance time.	<ul style="list-style-type: none"> ■ Clearance time for federal aid eligible route incidents under three year average of 30 minutes.

Action Initiatives

- Identify and map emergency transportation routes.
- Maintain coordination with regional/emergency/security/hazardous materials movement plans and personnel.
- Refine and update any GF/EGF MPO transportation security plans or studies.

Monitoring Activities

Annually

- Collect traffic incident response and clearance times.
- Collect detailed flood/emergency traffic incident information (where, when, why).
- Map future roadway projects, both capacity expansion and state of good repair, in comparison to flood prone, low lying, future land use, and critical/sensitive environments.

Every 5 Years

- Evaluate coordination with regional/emergency/security/hazardous materials movement plans and personnel.



Goal 3: Accessibility and Mobility

Goal statement: Increase the accessibility and mobility options for people and freight by providing more transportation choices.

Table 2-6: Objectives and Standards for Goal 3 Accessibility and Mobility

Objective	Standards
1. Mitigate excessive travel delays.	<ul style="list-style-type: none"> ■ Evaluate all new roadway construction and roadway reconstruction for viability of fiber installation to support future interconnection of traffic signals. ■ Fund and implement a congestion management process that identifies congestion management strategies to expand roadway capacity prior to adding more lanes on streets and highways. ■ Identify, map, report, and regularly update corridor congestion levels in the MPO area using volume, capacity, level of service, and amount of delay. ■ Consider and implement as appropriate innovative intersection improvements, such as roundabouts, that do not stop cross traffic.
2. Maintain an acceptable level of service for all streets and intersections during peak hours.	<ul style="list-style-type: none"> ■ Strive to deliver level of service C or better at intersections, including peak travel periods (with the understanding that local and state agencies accept a lower level of service D threshold for determining deficiencies at intersections). ■ Define corridor-specific level of service criteria for corridors within the metro area, including acceptable levels of congestion, and the meaning of congestion in the context of the region.
3. Consider advances in autonomous vehicle and connected vehicle technology in the transportation planning and programming processes.	<ul style="list-style-type: none"> ■ Participate in national and state autonomous vehicle and connected vehicle planning efforts. ■ Support implementation in autonomous vehicle and connected vehicle technology that collectively provides increased transportation options for people and freight. ■ Recognize and address autonomous vehicle and connected vehicle changes at the local, regional, state, and national level that influence the metro area's transportation system.

Table 2-7: Performance Measures and Monitoring Activities for Goal 3 Accessibility and Mobility

Performance Measures	Performance Target
1. Interstate truck travel time reliability	<ul style="list-style-type: none"> ■ For 2020 and 2022, a ratio of 1.5 or less when comparing the 95th percentile and 50th percentile truck travel times in five different time periods throughout the day on the Interstate
2. Interstate travel reliability	<ul style="list-style-type: none"> ■ For 2020 and 2022, 90% of person-miles traveled on the Interstate are reliable
3. Non-Interstate travel reliability	<ul style="list-style-type: none"> ■ For 2020 and 2022, 85% of person-miles traveled on the non-Interstate National Highway System are reliable



Action Initiatives

- Expand and maintain implementation of traffic counting method utilizing cameras at signalized intersection.
- Update Metropolitan Intelligent Transportation System Strategy Plan and Regional Architecture.

Monitoring Activities

Annually

- Track percent of roadways that are regularly congested during weekday and peak-hour periods.
- Evaluate average commute times.
- Assess travel times on key corridors.
- Conduct turning movement counts at key intersections identified in a current study or identified with possible delay of service.
- Evaluate LOS.

Every 5 Years

- Track the volume/capacity ratios, level of service, and the amount of delay on key corridors.
- On a ten-year basis, evaluate mobile phone network origin-destination data to track trip distance, purpose, etc.; and compare against outward growth.
- Evaluate Transportation Improvement Programs (TIP)/State LRTP projects to determine their effectiveness in supporting accessibility and mobility.



Goal 4: Environment/Energy/Quality of Life

Goal statement: Protect and enhance the environment, promote energy conservation, and improve quality of life by valuing the unique qualities of all communities – whether urban, suburban, or rural.

Table 2-8: Objectives and Standards for Goal 4 Environment/Energy/Quality of Life

Objective	Standards
<p>1. Avoid, minimize, and/or mitigate adverse social, environmental, and economic impacts resulting from existing or new transportation facilities.</p>	<ul style="list-style-type: none"> ■ Initiate corridor preservation and right-of-way acquisition procedures, to strengthen communities and avoid or minimize significant social, environmental, and economic impacts. ■ Incorporate elements of the Environmental Justice (EJ), Title IV and Limited English Proficiency (LEP) plans into the GF/EGF transportation planning process. ■ Prioritize transportation improvements that reduce existing transportation impacts on the environment through context sensitive solutions. ■ Protect, enhance, and mitigate impacts on social, natural, and economic resources when planning, constructing, operating, and maintaining transportation systems. This will include identification of priority resources through available maps, plans, and inventories, and integrating environmentally sustainable practices into street and highway design, construction, and operations.
<p>2. Maintain and improve quality of life along streets and highways.</p>	<ul style="list-style-type: none"> ■ Work with land use authorities to develop and implement context sensitive projects that incorporate placemaking and “complete streets” principles on new and existing roadways in the GF/EGF MPO area. Tactics may include traffic calming. ■ Identify and avoid, minimize, and mitigate the impact that transportation and development projects have on historical sites and areas of cultural or historical significance. ■ Plan and implement a transportation system that considers the needs of all potential users, including children, senior citizens, and persons with disabilities, and that promotes active lifestyles and cohesive communities. A special emphasis should be placed on promoting the environmental and health benefits of alternatives to single-occupancy vehicle travel.
<p>3. Maintain and improve regional air quality.</p>	<ul style="list-style-type: none"> ■ Provide and promote alternatives to single occupancy vehicle travel through the implementation of traffic demand management strategies, such as carpooling, vanpooling, telecommuting, walking, bicycling, and travel by public transit. ■ Evaluate air quality monitoring on a regular basis and incorporate mitigation strategies in all transportation and land use plans. ■ Conduct a regional Greenhouse Gas (GHG) Inventory. ■ Recognize the role of transportation choices in reducing emissions and support state and regional goals for reducing greenhouse gas and air pollutant emissions.



Table 2-9: Performance Measures and Monitoring Activities for Goal 4 Environment/Energy/Quality of Life

Performance Measures	Performance Target
1. Transportation-related CO2 emissions.	<ul style="list-style-type: none"> By 2045, reduce transportation-related CO2 emissions by 10 percent below 2010 levels. A reduction of 17,579 tons of transportation-related CO2 emissions is needed every five years.
2. Time/cost of project delivery.	<ul style="list-style-type: none"> Reduce the time/cost of project delivery by 20 percent.
3. Population characteristics such as low income, minority percentage, gender, disabled percentage and percentage having Limited English Proficiency (LEP)	<ul style="list-style-type: none"> Maintain EJ, Title VI, LEP plans to ensure they reflect current and future demographics, as well as community needs

Action Initiatives

- Reach agreements/MOUs on linking the planning process with the environmental permitting to reduce the time/cost of project delivery.
- Improve livability by applying measures such as:
 - Context sensitive design including matching design speeds, traffic calming elements, lane widths, and non-motorized elements to surrounding land uses on roadways and bridges
 - Delivering integrated street/highway construction projects that address bicycle, pedestrian, transit, and other infrastructure elements in one construction project
 - Coordinating transportation construction projects to avoid simultaneous construction on facilities that serve as alternate routes

Monitoring Activities

Annually

- Monitor the percent of transportation investment in EO #12898 Environmental Justice census tracts and evaluate any disproportional impacts as defined EO #12898.
- Evaluate the effectiveness of traffic calming measures.
- Evaluate EJ, Title VI, and LEP plans' effectiveness in supporting the GF/EGF MPO's transportation planning process.
- Distribute information through PSAs, Public Presentations, and awareness campaigns.

Every 5 Years

- Evaluate sustainability principles and their effectiveness with TIP projects.
- Conduct a greenhouse gas inventory of transportation related emissions.
- Update EJ, Title VI and LEP plans.
- Evaluate timeline from planning process to delivery of transportation projects to determine linkage between planning and environmental permitting.
- Maintain a list and location of environmentally sensitive properties.
- Evaluate whether agreement/MOUs were reached.



Goal 5: Integration and Connectivity

Goal statement: Enhance the integration and connectivity of the transportation system, across and between modes for people and freight, and housing, particularly affordable housing located close to transit.

Table 2-10: Objectives and Standards for Goal 5 Integration and Connectivity

Objective	Standards
1. Effectively coordinate transportation and land use by promoting the sustainability and livability principles, goals, and objectives from local land use plans.	<ul style="list-style-type: none"> ■ Identify priority corridors and nodes for infill development, densification, or transit-oriented development. ■ Increase the use of multi-modal transportation by providing additional transit service and reducing bicycle/pedestrian network gaps. ■ Promote transportation improvements that support access to employment centers, especially those that provide a mix of employment opportunities (e.g. jobs and income levels). ■ Promote higher land use densities.
2. Provide a balanced mix of local, collector, and arterial streets to help meet local and regional travel needs.	<ul style="list-style-type: none"> ■ Map and update street and highway functional classification based on consistency with adjacent land uses, street/highway design, road authority jurisdiction, and use. ■ Map and invest in the Minnesota Critical Urban Freight and NDDOT Strategic Freight corridors. ■ Maintain and update street and highway functional classification consistent with FHWA guidelines for mileage by classification, and to reflect the regional definitions established as part of the planning process. ■ Regularly update and implement access management guidelines for the region’s street and highway system.

Table 2-11: Performance Measures and Monitoring Activities for Goal 5 Integration and Connectivity

Performance Measures	Performance Target
1. Daily vehicle miles traveled	<ul style="list-style-type: none"> ■ By 2045, reduce daily vehicle miles traveled per capita by 10 percent below 2010 levels. A reduction of approximately 2,885 daily vehicle miles traveled is needed every year.

Action Initiatives

- Maintain a functional classification system that identifies the proper adjacent land uses, access control, traffic signal spacing and truck routes.
- Assess land use plans to examine how they affect transportation.

Monitoring Activities

Annually

- Measure the amount of new streets and lane miles added within the region by functional classification.
- Track growth corridors through building permits and platting activities.
- Track land development patterns and map potential compact developments that may be supported by multimodal transportation.
- Review all development proposals.
- Obtain daily vehicle miles travelled data.



Every 5 Years

- Collaborate with local agencies to track the outward expansion of development through statistical and visual means.
- Assist in the update in land use plan.



Goal 6: Efficient System Management

Goal statement: Promote efficient system management and operation by increasing collaboration among federal, state, local government to better target investments and improve accountability.

Table 2-12: Objectives and Standards for Goal 6 Efficient System Management

Objective	Standards
<p>1. Implement best practice programming and innovative financing alternatives.</p>	<ul style="list-style-type: none"> ■ Include inflation in project cost estimates and report project costs for the forecast year(s) of expenditure. ■ Identify, track, and pursue alternate funding sources and financing tools to fund local transportation projects, maintenance, and operations. Innovative funding alternatives may include public/private partnerships. ■ For projects significantly benefitting private entities, develop and implement a cost sharing model to help fund street or highway projects. ■ Assess developers for the costs of street and highway improvements associated with new developments, where appropriate.
<p>2. Involve all local partners in the transportation planning process.</p>	<ul style="list-style-type: none"> ■ Collaborate with economic development, transit providers, housing providers, workforce, and other agencies whose clients impact the transportation network to deliver projects that benefit people, businesses, and freight. ■ Participate and invite nontraditional partners in the transportation planning process. ■ Execute agreements necessary (e.g., MOUs, cost sharing, service contracts, etc.) to facilitate regional traffic management strategies. ■ Incorporate environmental stewardship considerations and environmental agency coordination into the planning and implementation of transportation improvements. ■ Collaborate with local and state agencies in setting performance measures and targets for urban and rural areas.
<p>3. Cooperate across jurisdictional boundaries to create an integrated transportation network.</p>	<ul style="list-style-type: none"> ■ Establish multijurisdictional protocols for special events (e.g., events and parades). ■ Encourage region-wide coordination among traffic, emergency, and maintenance agencies (e.g., police, fire, DOTs, and public works). ■ Continue to develop and maintain a regional travel demand forecast model for use in forecasting future corridor levels of service. ■ Encourage member jurisdictions to continue participation in the GF/EGF MPO's transportation planning activities.
<p>4. Maintain and update the regional ITS architecture</p>	<ul style="list-style-type: none"> ■ Implement, where applicable, Active Transportation Demand Management techniques using existing and/or new ITS infrastructure. ■ Develop and implement coordinated signal timings between jurisdictions and along new corridors. ■ Invest in ITS infrastructure that can record travel times, traffic volumes, turning movements, and other various data points. ■ Implement, where appropriate, monitoring systems as part of transportation facilities, such as bridges that monitor fatigue, tampering, or failure



Table 2-13: Performance Measures and Monitoring Activities for Goal 6 Efficient System Management

Performance Measures	Performance Target
1. Comparison of programmed dollar amounts to actual obligated dollar amounts.	<ul style="list-style-type: none"> ■ Have no greater than 25 percent variance when comparing programmed dollar amounts to the actual obligated dollar amounts for projects listed in the GF/EGF MPO TIP.
2. Public Participation Plan - attendance at meetings, prior notice, key points of decision.	<ul style="list-style-type: none"> ■ Increase the effectiveness of the GF/EGF MPO Public Participation Plan in informing, education and engaging the public in transportation decisions.

Action Initiatives

- None

Monitoring Activities

Annually

- Compare the actual project expenditures to the amounts programmed in the local and state investment plans (e.g., CIPs and STIPs). These comparisons should assist in determining whether cost adjustments may be appropriate in the annual listing of obligations identified in the TIP.
- Evaluate the cost sharing opportunities for transportation projects.
- Conduct a customer satisfaction survey through various means of outreach (e.g., online, mailings and open houses). This activity should be done on an annual or bi-annual basis.
- Compare annually the amount of obligated funds to actual expenditures for projects listed in the GF/EGF MPO TIP.

Every 5 Years

- Evaluate the GF/EGF MPO's Public Participation Plan and its effectiveness under federal and state guidelines to engage community members and stakeholders from various groups.
- Evaluate the Long Range Transportation Plan for its effectiveness in public-private partnerships.
- Evaluate the Financial Planning Forecast in the LRTP.



Goal 7: System Preservation

Goal statement: Emphasize the preservation of the existing transportation system by first targeting federal funds towards existing infrastructure to spur revitalization, promote urban landscapes and protect rural landscapes.

Table 2-14: Objectives and Standards for Goal 7 System Preservation

Objective	Standards
1. Identify sufficient funding for the program of projects included in GF/EGF MPO transportation plans.	<ul style="list-style-type: none"> ■ Inform project finance planning and fiscal constraints by identifying all available funding amounts and their sources. ■ Identify funding that can be used for operations, maintenance, and facility construction. ■ Assign more likely construction, operation, and maintenance funding to near-term projects. ■ Document funding used for “State of Good Repair” projects and document whether a “State of Good Repair” for the federal transportation system can be currently maintained. ■ Provide technical assistance to local jurisdictions in applying for state and federal funding programs.
2. Cost-effectively preserve, maintain, and improve the existing street and highway system.	<ul style="list-style-type: none"> ■ Maintain pavement, signal systems, signage, striping and other features of the transportation system to a level that permits safe and multimodal traffic operations. ■ Continue pavement management programs that include monitoring, reporting, and integrating reporting across jurisdictions. ■ Continue implementing appropriate preventative maintenance, rehabilitation, or reconstruction projects. Partners will identify projects based on pavement needs documented in an objective and measurable prioritization matrix, and will include elements that improve travel efficiency as identified through the congestion management process. ■ Develop a life-cycle cost analysis of pavement type done for projects with cost estimates over \$2,500,000. (note to reviewers: \$2.5 million needs to be updated based on Asset Management plans) ■ Identify and implement, where appropriate, new pavement technologies. ■ When developing the transportation improvement program (TIP), prioritize improvement of the existing transportation network over construction of new infrastructure.

Table 2-15: Performance Measures and Monitoring Activities for Goal 7 System Preservation

Performance Measures	MPO Performance Target
1. Percent of Interstate pavement in good condition	■ 75.6%
2. Percent of Interstate pavement in poor condition	■ 3%



Performance Measures	MPO Performance Target
3. Percent of non-Interstate NHS pavement in good condition	North Dakota ■ 58.3% Minnesota ■ Two-year target: 50% ■ Four-year target: 50%
4. Percent of non-Interstate NHS pavement in poor condition	North Dakota ■ 3% Minnesota ■ Two-year target: 4% ■ Four-year target: 4%
5. Percent of NHS Bridges in good condition	North Dakota ■ 60% Minnesota ■ Two-year target: 50% ■ Four-year target: 50%
6. Percent of NHS bridges in poor condition	North Dakota ■ 4% Minnesota ■ Two-year target: 4% ■ Four-year target: 4%

Action Initiatives

- Develop a common pavement condition reporting system for the Interstate and non-Interstate National Highway System in North Dakota and Minnesota
- Maintain and update the Pavement Management Systems for the metro area so it can be utilized to guide decisions on which type of pavement work makes best use of funds available to ensure state of good repair and reduce yearly average maintenance costs by evaluating the effectiveness and cost-benefit of preservation and maintenance projects.
- Incorporate and evaluate bridge inspection reports into biennial performance reports.

Monitoring Activities

Annually

- Track the number “ride-quality deficient roadway” miles and “distress deficient roadway” miles in the GF/EGF region and compare to overall Grand Forks County, Polk County, MnDOT and NDDOT system.
- Track the percentage of federal funds programs that is put toward existing and new infrastructure.

Every 2 Years

- Review bridge inspection report.

Every 5 Years

- Update pavement system for metro area.



- Evaluate Transportation Improvement Programs (TIP)/State LRTP projects to determine their effectiveness in achieving system preservation.



Goal 8: Safety

Goal statement: Increase safety of the transportation system for motorized and non-motorized uses.

Table 2-16: Update Objectives and Standards for Goal 8 Safety

Objective	Standards
<p>1. Keep vehicles from encroaching on the roadside in rural areas</p>	<ul style="list-style-type: none"> ■ Continue to install shoulder rumble strips, edge lines, “profile marking” edge line rumble strips, modified shoulder rumble strips, 6-inch edge lines, or embedded wet-reflective pavement markings on section with narrow or no paved shoulders. ■ Continue to install enhanced shoulders, lighting, delineation (for example, Chevrons), or pavement markings for sharp horizontal curves in rural areas. ■ Continue to install improved highway geometry for horizontal curves. ■ Increase skid-resistance pavement surfaces. ■ Continue to install shoulder treatments. ■ Eliminate shoulder drop-offs from paved road to unpaved shoulder. ■ Shoulder edge. ■ Widen and/or pave shoulders.
<p>2. Minimize the likelihood of crashing into an object or overturning if the vehicle travels off the shoulder in rural areas</p>	<ul style="list-style-type: none"> ■ Continue to install safer slopes and ditches to prevent rollovers. ■ Remove/relocate objects in hazardous locations.
<p>3. Reduce the likelihood of a head-on vehicle collision in rural areas</p>	<ul style="list-style-type: none"> ■ Continue to install centerline rumble strips and 6-inch center lines for two-lane rural roads. ■ Continue operation of alternating passing lanes or four-lane sections at key locations. ■ Continue to install cable median barrier for narrow-width medians and multilane roads. ■ Continue operation of buffer space between opposite travel directions. ■ Continue to install directional medians.
<p>4. Reduce frequency and severity of intersection conflicts through traffic control and operational improvements in urban areas</p>	<ul style="list-style-type: none"> ■ Continue operation of multiphase signal operation. ■ Optimize clearance intervals. ■ Restrict or eliminate turning maneuvers (including right turns on red). ■ Continue operation of signal coordination along a corridor or route. ■ Continue operation of emergency vehicle preemption ■ Continue to install countdown timers, advanced walk phase, and other low-cost pedestrian/bicycle facility improvements. ■ Remove unwarranted signals. ■ Continue to supplement conventional red-light running enforcement with traffic signal confirmation lights and other technology enhancements that support enforcement efforts.
<p>5. Reduce the severity of the crash</p>	<ul style="list-style-type: none"> ■ Continue to improve design and applications of barrier and systems to maintain flow of traffic.



Objective	Standards
<p>6. Improve efficiency and effectiveness of aggressive driving/speed enforcement efforts</p>	<ul style="list-style-type: none"> ■ Strengthen speed detection and public perceived risk of being stopped and ticketed through sustained, well-publicized, highly visible speed enforcement campaigns. ■ Conduct highly visible, publicized and saturated enforcement campaigns at locations with higher incidence of aggressive driving/speed related crashes. ■ Enact/support legislation to strengthen penalties such as increased fines for right-of-way and speed violations. ■ Strengthen the adjudication of speeding citations to enhance the deterrent effect of fines. ■ Address the perception of widespread speeding by heavy vehicles by first conducting a statewide assessment of commercial vehicle speeds. In response to the assessment results, examine enforcement, safety education, and outreach safety strategies for priority regions or corridors identified as needing improvement.
<p>7. Review crash data</p>	<ul style="list-style-type: none"> ■ Continue to analyze data to clearly define aggressive driving and identify factors contributing to aggressive driving.
<p>8. Set and communicate appropriate speed limits</p>	<ul style="list-style-type: none"> ■ Continue to implement active speed warning signs, including dynamic message boards at rural to urban transitions, school zones, and work zones. ■ Continue operation of in-pavement measures to communicate the need to reduce speeds.
<p>9. Ensure that roadway design and traffic control elements support appropriate and safe speeds</p>	<ul style="list-style-type: none"> ■ Effect safe speed transitions through design elements and on approaches to lower speed areas.
<p>10. Improve sight distance at signalized and unsignalized intersections</p>	<ul style="list-style-type: none"> ■ Continue to clear sight triangles. ■ Redesign intersection approaches. ■ Change horizontal and/or vertical alignment of approaches to provide more sight distance. ■ Eliminate parking that restricts sight distance.
<p>11. Improve driver awareness of intersections and signal control</p>	<ul style="list-style-type: none"> ■ Continue to improve visibility of intersections by providing enhanced signing, delineating, overhead indications, 12-inch lenses, background shields, or pavement markings/messages. ■ Continue to call attention to intersections by installing rumble strips on intersection approaches. ■ Continue to improve visibility of intersections by providing appropriate street lighting. ■ Continue to install larger regulatory and warning signs at intersections, including the use of dynamic warning signs at appropriate intersections. ■ Continue to provide dashed markings (extended left edge lines) for major road continuity across the median opening at divided highway intersections.



Objective	Standards
12. Improve management of access near signalized and unsignalized intersections	<ul style="list-style-type: none"> ■ Continue to restrict or eliminate parking on intersection approaches. ■ Expand driveway closure/relocations. ■ Provide longer left-turn lanes at intersections. ■ Expand driveway turn restrictions. ■ Continue to install left-turn lanes at intersections. ■ Continue to offset left-turn lanes at intersections. ■ Continue to install bypass lanes on shoulders at T-intersections. ■ Continue to provide acceleration lanes at divided highway intersections. ■ Continue to install right-turn lanes at intersections. ■ Continue to offset right-turn lanes at intersections. ■ Expand to provide right-turn acceleration lanes at intersections. ■ Expand channelized or closed median openings to restrict or eliminate turning maneuvers. ■ Close or relocate “high-risk” intersections. ■ Continue to convert four-legged intersections to two T-intersections. ■ Realign intersection approaches to reduce or eliminate intersection skew. ■ Continue to improve pedestrian and bicycle facilities to reduce conflict between motorists and nonmotorized travelers. ■ Convert 2-lane intersection to 3-lane intersection.
13. Choose appropriate intersection traffic control to minimize crash frequency and severity	<ul style="list-style-type: none"> ■ Continue to construct roundabouts at appropriate locations. ■ Currently occurring at intersections in Grand Forks: 23th St & 40th Ave S, 34th St & 24th Ave. ■
14. Improve the roadway and driving environment to better accommodate drivers’ needs	<ul style="list-style-type: none"> ■ Expand the use of advanced guide signs and street name signs. ■ Continue to increase sign and letter heights of roadway signs. ■ Provide more all-red clearance intervals at signalized intersections. ■ Provide more protected left-turn signal phases at high-volume intersections. ■ Continue to improve lighting at intersections, horizontal curves, and railroad grade crossings. ■ Continue to improve roadway delineation. ■ Continue to reduce intersection skew angle.
15. Improve Sight Distance and/or Visibility Between Motor Vehicles and Pedestrians/Bicyclists	<ul style="list-style-type: none"> ■ Continue to provide crosswalk enhancements. ■ Continue to implement lighting/crosswalk illumination measures ■ Continue to eliminate screening by physical objects. ■ Expand signals to alert motorists that pedestrians/bicyclists are crossing. ■ Continue to improve reflectivity/visibility of pedestrians/bicyclists.
16. Reduce Vehicle Speed	<ul style="list-style-type: none"> ■ Continue to implement road narrowing measures. ■ Continue to install traffic calming—road sections. ■ Continue to install traffic calming—intersections. ■ Continue to provide school route improvements.
17. Improve Motorist Safety Awareness and Behavior	<ul style="list-style-type: none"> ■ Continue to provide education, outreach, and training. ■ Continue to implement enforcement campaigns.
18. Reduce Effect of Hazards	<ul style="list-style-type: none"> ■ Fix or remove surface irregularities. ■ Provide routine maintenance of bicycle facilities.



Objective	Standards
<p>19. Implement a multimodal transportation system that is balanced and integrated with all transportation modes to ensure safe and efficient movement of people and goods</p>	<ul style="list-style-type: none"> ■ Minimize congestion on roadways and at intersections. ■ Maintain roadway and other Level of Service standards consistent with regional, county, and municipal comprehensive plans. ■ Provide a balanced system with viable multi-modal options that are consistent with local comprehensive plans. ■ Provide infrastructure that supports transportation (transit riders, pedestrians, bicyclists and other alternative transportation modes). ■ Improve intermodal connectivity and access to intermodal facilities (e.g., airports, transit centers, Interstate bus system, rail, etc.) and activity centers. ■ Provide more sidewalks and bikeways. ■ Improve public transit services so they are efficient, frequent, reliable, convenient, safe, easy to use and understand, and promotes other intermodal uses.
<p>20. Increase the safety and security of the transportation system for motorized and non-motorized users</p>	<ul style="list-style-type: none"> ■ Provide for safer travel by all transportation modes, including pedestrian, bicycling, transit, and automobile. ■ Encourage measures that reduce congestion. ■ Encourage strategies that improve emergency response to crash.
<p>21. Reduce the number, severity, and rate of crashes compared to previous years by type of vehicle and transportation facility.</p>	<ul style="list-style-type: none"> ■ Identify and maintain a database and map of frequent or severe crash locations by transportation facility within the MPO area (intersections, road segment, bicycle/pedestrian facility, and bicycle/pedestrian – vehicle conflict point). The database will include number, type, and severity of crashes. ■ Identify and implement, where possible, intersection treatments that reduce crashes. ■ Support policies that prohibit/penalize distracted driving. ■ Identify funding available to improve the safety of the roadway system. ■ Coordinate with local, county, and state agencies to develop education, public health, engineering, and enforcement strategies targeted at crash reduction. ■ Support the region's vision of moving toward zero traffic fatalities and serious injuries, which includes supporting educational and enforcement programs to increase awareness of regional safety issues, shared responsibility, and safe behavior.

Table 2-17: Performance Measures and Monitoring Activities for Goal 8 Safety

Performance Measures	Performance Target
<p>1. Number of traffic fatalities</p>	<ul style="list-style-type: none"> ■ 3 or fewer traffic fatalities by 2018 ■ No change in trend
<p>2. Number of fatalities per 100 million vehicle miles traveled</p>	<ul style="list-style-type: none"> ■ 0.673/mvmt or lower by 2018 ■ No change in trend
<p>3. Number of crash-related serious injuries</p>	<ul style="list-style-type: none"> ■ 18 or fewer serious injuries by 2018 ■ Decline in trend



Performance Measures	Performance Target
4. Number of serious injuries per 100 million vehicle miles traveled	<ul style="list-style-type: none"> ■ 5.933/mvmt or lower by 2018 ■ Decline in trend
5. Number of non-motorized fatalities and non-motorized serious injuries	<ul style="list-style-type: none"> ■ 3 or fewer non-motorized fatal and serious injury crashes by 2018 ■ Decline in trend

Action Initiatives

- Adopt Vision Zero by 2045
- Update state-, county-, and local-level strategic highway safety plans in cooperation with the MPO
- Conduct travel training as needed

Monitoring Activities

Annually

- Establish safety performance targets in cooperation with state DOTs and local road authorities
- Evaluate intersection crash frequency for all nodes with significant commuter and freight traffic volumes, and compare to critical crash rates.
- Evaluate crash severities.
- Review crash data.
- Identify vehicle crash locations that would benefit from changes in traffic or pedestrian signal operations, raised medians, street lights, and signage.
- Evaluate Highway Safety Improvement Program (HSIP) priorities and their effectiveness in addressing GF/EGF MPO safety needs.
- Report the number of times travel training programs were conducted.

Every 5 Years

- Evaluate Transportation Improvement Programs (TIP)/State LRTP projects to determine their effectiveness in achieving safer roadway system.



Goal 9: Resiliency and Reliability

Goal statement: Improve resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

Table 2-18: Objectives and Standards for Goal 9 Resiliency

Objective	Standards
1. Reduce street and highway system vulnerability to snow and storm water	<ul style="list-style-type: none"> ■ Maintain passable streets and highways under all reasonable weather conditions. ■ Strategically design and maintain the street and highway system to operate under all reasonable weather conditions. ■ Assess and mitigate any possible impacts new roadway construction may have on high water events, including proximity to waterways, construction in wetlands or floodways, storm drainage, etc.
2. Support the region's resilience and travel reliability through efficient detour and evacuation routes	<ul style="list-style-type: none"> ■ During river flood events, reroute traffic consistent with the Bridge Closure Management Plan, or revised to respond to significant, observed delays or changes. ■ Be trained in and use established alternate routes and intelligent transportation systems (ITS) to maintain street and highway operations during incidents and temporary street or highway blockages. ■ Provide auxiliary power sources to operate traffic signals when mainline power is interrupted.

Action Initiatives

- Establish agreements with local agencies on reporting closures and time length of closure.

Monitoring Activities

Annually

- Monitor the weather-related closure interruptions.
- Identify locations experiencing frequent closure.

Every 5 Years

- Update Bridge Closure Management Plan.
- Develop a Traffic Incident Management Plan.



Goal 10: Tourism

Goal statement: Enhance travel and tourism.

Table 2-19: Objectives and Standards for Goal 10 Tourism

Objective	Standards
1. Maintain convenient and intuitive street and highway access to major activity centers	<ul style="list-style-type: none"> ■ Develop and use event traffic management plans for major activity centers such as the Alerus Center, Ralph Engelstad Arena, and Greater Grand Forks Greenway including the Red River State Recreation Campground. ■ Identify, coordinate, and communicate traffic plans for simultaneous events.

Action Initiatives

- Develop agreements for data on event traffic management plans.

Monitoring Activities

Annually

- Assemble report on event traffic results.

Every 5 Years

- Review and update as needed any event traffic management plans.