

GRAND FORKS – EAST GRAND FORKS

Transit Development Plan

Appendix 3: Performance Management Plan

September 2022





Project Overview

The Grand Forks-East Grand Forks Transit Development Plan (TDP) is a 10-year plan that provides a vision for transit in the community. Grand Forks – East Grand Forks’ previous transit development plan was completed in 2017. The 2022 plan update will evaluate recent system improvements and has the following areas of focus:



Integration of University of North Dakota (UND) campus bus routes



New or improved fixed route, paratransit, and Senior Rider services



Maintenance and growth of CAT ridership



Fare, pass, or transfer policy changes to increase ridership or funding



Transit fleet and technology recommendations



Investments in capital improvements like buses, bus stop enhancements, and support equipment



Support for existing and future CAT operations at transit facilities such as Midtown Transit Center and Metro Transit Center

Purpose of this Document

The purpose of this report is to inform and guide the development of the Goals, Objectives, and Performance Measures chapter of the TDP. This report was developed based on existing plans, guidance, and regulations, as well as public and stakeholder feedback. The goals, objectives, and performance measures in this document will be used to guide plan recommendations and monitor ongoing system performance.

Supporting & Guiding Sources

To meet the guidance established by Fixing America’s Surface Transportation Act’s (FAST Act), the TDP was developed with performance management elements in mind. These elements were driven, in large part, through close consultation with the North Dakota Department of Transportation (NDDOT) ND Moves Active Transportation and Transit Plan (2019). As the FAST Act requires performance-based planning, the NDDOT Plan provided a very reasonable framework for identification of performance measures and targets for use by Cities Area Transit (CAT). The FAST Act establishes a set of national goals to guide the development of surface transportation investments. It focuses on performance-based approach to transportation planning and has developed seven national performance goals.

- > Safety
- > Infrastructure condition
- > Congestion reduction
- > System reliability
- > Freight movement and economic vitality
- > Environmental sustainability
- > Reduced project delivery delays



Goals from the FAST Act were incorporated into the Grand Forks-East Grand Forks MPO's updated 2045 MTP. The approved MTP for the MPO area provides the background architecture for the TDP goals. To ensure consistency with the MTP, the TDP project team has relied on these goals to guide the development of transit-specific goals for CAT. These goals guide the objectives and performance measures that will drive the system moving forward. These goals also serve to ensure that the TDP is compliant with the FAST Act in order to be eligible for transit-specific funding from federal and state sources. The goals from the MTP are as follows:

1. Economic vitality
 - 1) Security
 - 2) Accessibility and mobility
 - 3) Environmental/energy/quality of life
 - 4) Integration and connectivity
 - 5) Efficient system management
 - 6) System preservation
 - 7) Safety
 - 8) Resiliency
 - 9) Tourism

Defining Performance Management

The following terminology will be used to guide the development of the Performance Management Plan.

- > **Goal** – Overall guiding topic related to the surface transportation system.
- > **Objective** – Desired action or initiative that is perceived as meeting the intent of the overall goal. Further, the objective is also designed to assist in achieving the defined performance level.
- > **Performance Target** – Measure used to evaluate system performance.
- > **Performance Measure** – Measurement of system performance.
- > **Consistency Monitoring** – Effort used to monitor, evaluate, and track performance levels.

Public and Stakeholder Engagement

Surveys

During the first round of public and stakeholder engagement, the project team asked the public and decision-makers their thoughts regarding potential CAT goals. Table 1 shows the results from these surveys, which were conducted in October 2021.

Table 1: Public and Decision Maker Survey Results - Prioritized Goals for Transit Development Plan

Potential CAT Goals	Decision Maker Survey Ranking ¹	Public Survey Ranking ²
To provide transportation for people who do not have or are unable to use a private automobile	1	1
To connect people to their job or school	2	2



Potential CAT Goals	Decision Maker Survey Ranking ¹	Public Survey Ranking ²
To operate an efficient and cost-effective transit system	3	4
To provide a travel-time competitive alternative to private automobiles	4	5
To support changing land uses and development	5	6
To provide better air quality	6	3

¹ Based on 7 respondents
² Based on 147 respondents

Steering Committee

In addition to the public and decision-maker surveys, potential goals for CAT were discussed at the TDP Steering Committee meeting on November 15th, 2021. Some of the topics that the Steering Committee recommended for inclusion in the CAT goals were:

- > Student retention and ridership
- > Equity and access of the system
- > Availability of information on the system and how to ride transit for current and potential riders
- > Use of alternative fuels in the vehicles
- > Connectivity and ease of use

Cities Area Transit Goals

Based on the guiding source documents and public and stakeholder engagement, seven goals were identified for the CAT system. These goals relate to the overall public transit system and primarily identify opportunities for system improvement. Table 2 documents how the goals developed for CAT relate to the MPO's MTP goals and relate to federal planning factors named in the FAST act goals. The following sections further outline the CAT goals and their associated objectives and performance measures.



Table 2: 2045 MTP and Cities Area Transit TDP Goals Matrix

TDP Identified Goals								
GF-EGF MPO 2045 MTP Goals		Community Connectivity	Multimodal Connectivity	Service Quality	Accessibility	Environmental Sustainability & Resiliency	Equity	Fiscal Sustainability & Efficient System Management*
	Safety*				X			X
	System Preservation							X
	Accessibility and Mobility	X	X	X	X		X	
	Integration and Connectivity	X	X	X	X			
	Efficient System Management*			X				X
	Economic Vitality	X		X	X		X	X
	Environmental/ Energy/Quality of Life			X	X	X	X	
	Resiliency					X		
	Tourism			X				
	Security							X

Community Connectivity

The focus of this goal is to connect people to important community destinations by transit.

Objectives

The following objectives support the system goal of Community Connectivity:

- > Objective 1: Provide transit service within 1/4 mile of residential areas and to major activity and employment centers



- > Objective 2: Facilitate and promote moderate to higher density and mixed-use development in areas near or along planned/existing transit routes
- > Objective 3: Encourage the concentration of employment and services along transit routes
- > Objective 4: Promote transit-oriented development into small area plans, master-planned developments, and site plans

To achieve these objectives, it is essential to collaborate with the Cities of Grand Forks and East Grand Forks and surrounding communities to affirm and accomplish these objectives.

Performance Measures

Community Connectivity performance measures are provided in Table 3.

Table 3: Community Connectivity Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
Residential service availability (all residents)	Fixed Route	90% of service area population within ¼ mile of a transit stop	89.0%
	Demand Response	75% of population covered by service area	100%
Job service availability (all jobs)	Fixed Route	65% of all jobs within ¼ mile of a transit stop	62%
	Demand Response	75% of all jobs covered by service area	100%
Service Hours Per Capita	Fixed Route	0.5	0.47
	Demand Response	0.75	0.45

Multimodal Connectivity

The focus of this goal is to connect transit service to active transportation infrastructure.

Objectives

The following objectives support the system goal of Multimodal Connectivity:

- > Objective 1: Connect to other local and regional transit services
- > Objective 2: Connect to other first-and-last mile connectivity options
- > Objective 3: Provide bicycle parking at transit centers and major bus stops (stops with at least 20 boardings per day)
- > Objective 4: Increase pedestrian access by locating bus stops along sidewalks and trails

Performance Measures

Multimodal Connectivity performance measures are provided in Table 4.



Table 4: Multimodal Connectivity Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
Bicycle Parking at Transit Stops	Fixed Route	At least 2 bike racks at stops with at least 20 boardings per day, prioritizing stops near existing or planned bike facilities	Stop level data needed for this performance measure
Continuous Walking Route and Crossings	Fixed Route	Pedestrian facilities (e.g., ADA accessible sidewalks, trails) within ¼ mile of stops with at least 20 boarding's per day	Stop level data needed for this performance measure

Service Quality

The focus of this goal is to provide high-quality transit service that attracts and retains riders.

Objectives

The following objectives support the system goal of Service Quality:

- > Objective 1: Implement service and infrastructure improvements that improve travel time and reliability (service that is regularly on-time for riders)
- > Objective 2: Improve system usability through user-friendly transit vehicles, easy to use stop and route design, and easy to understand information using plain language
- > Objective 3: Increase the number of people using public transportation for their main form of transportation (transit mode share)

Performance Measures

Service Quality performance measures are provided in Table 5.

Table 5: Service Quality Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
On-time performance	Fixed Route	Zero minutes early to five minutes late. 95% of trips should operate within the on-time range.	On-time performance data needed for this performance measure
	Demand Response	90% of trips on time within published pick-up window (10 minutes before/after)	On-time performance data is now collected by Route Match, but not available for 2019
Frequency	Fixed Route	30 minutes or better during peak hours, 60 minutes or better off peak	Select routes including the Route 3 and UND routes have 30 minutes or better frequency. Most others have 60 minutes.



Mode shift	Both	2% increase in transit mode share per year	-13% change (1.6% to 1.4%;2018-2019) ¹
Ridership	Fixed Route	2% increase in ridership per year	-11% (2018-2019)

Accessibility

The focus of this goal is to provide transit service that is accessible to all riders.

Objectives

The following objectives support the system goal of Accessibility:

- Objective 1: Shift ridership from demand response to fixed-route system through improved information availability and service quality
- Objective 2: Manage system demand between fixed-route and demand response system through eligibility screening and better coordination with demand users and human services agencies
- Objective 3: Improve the customer experience for riders who use mobility devices by monitoring advances in securement technology
- Objective 4: Provide paratransit service that is complementary to fixed-route service and which, at a minimum, meets the requirements of the Americans with Disabilities Act (ADA)

Performance Measures

Accessibility performance measures are provided in Table 6.

Table 6: Accessibility Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
Demand response ridership	Demand Response	1% reduction per year	+3.6% (2018-2019)
Stops with ADA access	Fixed Route	Study implementation of stops with ADA pads and other ADA accommodations	Not assessed

Environmental Sustainability & Resiliency

The focus of this goal is to invest in fleet and infrastructure improvements that promote environmental sustainability and resiliency.

Objectives

The following objectives support the system goal of Environmental Sustainability & Resiliency:

¹ "Commuting Characteristics by sex" American Community Survey: 2018 & 2019.



- Objective 1: Develop a Zero-Emission Transition Plan that meets Federal Transit Administration requirements
- Objective 2: Explore the use of an on-site energy storage system to improve resiliency of battery-electric buses
- Objective 3: Evaluate the potential for solar integration at transit facilities
- Objective 4: Integrate CAT as a consideration into future updates to the UND Climate Action Plan and other similar plans for local organizations
- Objective 5: Avoid transit routing on roadways that are frequently subjected to closure due to flooding

Performance Measures

Environmental Sustainability & Resiliency performance measures are provided in Table 7.

Table 7: Environmental Sustainability & Resiliency Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
Alternative Fuel/Electric Vehicles in Fleet	Fixed Route	At least 30% of fleet renewable fuels or electric by 2030	0
	Demand Response		

Equity

The focus of this goal is to advance equity through transit access.

Objectives

The following objectives support the system goal of Equity:

- Objective 1: Prioritize transit investments that benefit transit-dependent populations and historically disadvantaged populations
- Objective 2: Improve service for shift-workers and those who commute outside of traditional peak hours
- Objective 3: Provide shelters and benches at bus stops based on ridership warrants (e.g., stops with at least 20 boards per day, major transfer points) and equity considerations (e.g., stops near facilities serving transportation-disadvantaged and historically disadvantaged populations)
- Objective 4: Ensure compliance with Title VI requirements
- Objective 5: Engage in coordinated outreach with key agencies and consortiums to better coordinate Demand Response services with social and human service providers
- Objective 6: Renovate facilities that continue/expand transit service in disadvantaged communities or services that benefit low-income riders
- Objective 7: Train and develop the transit workforce that provides services to disadvantaged communities and rural areas
- Objective 8: Prioritize the enhancement of transit services/routes in areas of affordable housing

Performance Measures

Equity performance measures are provided in Table 8.



Table 8: Equity Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
Residential service availability (residents who rely on transit)	Fixed Route	75% of service area population within ¼ mile of a transit stop	70%
	Demand Response	85% of population covered by service area	100%
Job service availability (low-wage jobs)	Fixed Route	70% of low-wage jobs within ¼ mile of a transit stop	65%
	Demand Response	85% of low-wage jobs covered by service area	100%
Shelters	Fixed Route	Shelters at stops with at least 20 boardings per day or major transfer points. Higher priority for installation is given for stops in areas with concentrations of transit-dependent or historically disadvantaged populations.	Stop level data needed for this performance measure
Benches	Fixed Route	Installed at bus stops with 15+ average daily boardings. Higher priority given for stops in areas with concentrations of transit-dependent or historically disadvantaged populations.	Stop level data needed for this performance measure
Equitable level of service for transit-dependent or historically disadvantaged populations	Fixed Route	Transportation-disadvantaged and historically disadvantaged populations have a higher transit level of service than non-transportation disadvantaged populations.	Compared with the 89% of the total population: <ul style="list-style-type: none"> 79% of the People of Color that live in the Grand Forks-East Grand Forks area is located within ¼ mile of at least one bus stop 78% of households with a person with a disability in the Grand Forks-East Grand Forks area are located within ¼ mile of at least one bus <ul style="list-style-type: none"> 82% of low-income households in the Grand Forks-East Grand Forks area



Performance Measure	System	Performance Target	Overall CAT System (2019)
			are located within ¼ mile of at least one bus ²

Fiscal Sustainability & Efficient System Management

The focus of this goal is to operate a safe, efficient, and fiscally sustainable transit system.

Objectives

- Objective 1: Establish twice annual working meetings and roundtables with key human and social service agencies and other organizations who utilize CAT services or provide ancillary service in the MPO area
- Objective 2: Engage the local business community and local, state, and federal governments to combine local and regional transportation improvement efforts
- Objective 3: Coordinate with MPO on local and regional transit improvements and system efficiency enhancements
- Objective 4: Seek community participation and input in planning processes such as route modifications, service expansions, stop/shelter locations
- Objective 5: Coordinate with human services to share resources and align efforts to improve public transportation.
- Objective 6: Seek opportunities for public-private partnerships (e.g., TNCs) to improve transportation options and expand on pilot programs
- Objective 7: Identify and incorporate state and regional emergency, evacuation, and security plans into transportation plans and TIP project selection
- Objective 8: Continue to track performance measures annually to determine progress.
- Objective 9: Achieve “State of Good Repair” performance levels agreed to between MnDOT, NDDOT and the MPO
- Objective 10: Identify grant and other funding opportunities to maintain and renew/expand transit equipment and services
- Objective 11: Preserve existing infrastructure and protect future infrastructure and right-of-way, with support from other City Departments
- Objective 12: Ensure daily transit operations without interruption for fleet maintenance or repair
- Objective 13: Implement and periodically update Transit Asset Management plan
- Objective 14: Reduce the number, severity and rate of crashes compared to previous years.
- Objective 15: Develop an agency safety plan and certify the plan meets FTA requirements.

Performance Measures

Fiscal Sustainability & Efficient System Management performance measures are provided in Table 9.

² 2015-2019 Census American Community Survey Summary File (ACS).

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Table 9: Fiscal Sustainability & Efficient System Management Performance Measures and Targets

Performance Measure	System	Performance Target	Overall CAT System (2019)
Road Calls	Fixed Route	Less than 5 annually	0
	Demand Response		
Fleet Maintenance	Fixed Route	At least 75% of all regular fleet available for operations	>100%*
	Demand Response		
Equipment	Non-Revenue Support Vehicles	50% of vehicles at or exceed useful life	8%*
Rolling Stock	Revenue Vehicles	20% of vehicles at or exceed useful life	<20%*
Facilities	Maintenance, Administration & Stations	50% of facilities at TERM rating of 3.0 (adequate) or better by the year 2025	Adequate or better
Spare Ratio	Fixed Route	Spare vehicles to peak requirement less than 20%	15%
	Demand Response		
Passengers per Service Hour	Fixed Route	15.00	7.84
	Demand Response	3.00	2.37
Cost per Revenue Hour	Fixed Route	\$70.00	\$82.39
	Demand Response	\$50.00	\$50.94
Cost per Ride	Fixed Route	\$5.00	\$10.51
	Demand Response	\$20.00	\$21.50
Farebox Recovery³	Fixed Route	15%	7%
	Demand Response	12%	14%
Safety Events	Fixed Route	0 Safety Events	0
	Demand Response	0 Safety Events	0

*represents 2021 information



Consistency Monitoring

Performance Tracking

The MPO should integrate an annual summary report of CAT performance related measures and performance levels included in the TDP. Data used for the development of this element of the TDP is sourced from annual data developed by CAT and NTD datasets. Reporting could be done through a simple and easy to follow dashboard format that shows historic and existing performance levels.

FTA Section 5340 Small Transit Intensive Cities (STIC) Apportionments

FTA Section 5340 STIC funding provides additional operating funds apportioned to transit systems which meet or exceed system averages based on all UZA providers with a population between 200,000 – 999,999. Most recently CAT has been able to attain target levels in Vehicle Revenue Hours per Capita. Based on FY 2021 funding, this amounted to an additional \$276,053 in FTA operating funds. The most recent targets for the FTA Section 5340 program and the performance for CAT (2021) are shown in Table 6 below. Performance tracking on FTA Section 5340 program can be reviewed annually with each submittal of the NTD reporting process.



Table 6: FY 2021 Small Transit Intensive Cities Performance Data and Apportionments

Urbanized Area	Passenger Miles/Revenue Mile	Passenger Miles/Revenue Hour	Revenue Mile/Capita	Revenue Hour/Capita	Passenger Miles/Capita	Passenger Trips/Capita	Number of Performance Factors Met or Exceeded	STIC Funding
Grand Forks, ND-MN	1.86	20.35	10.03	0.92	18.67	4.74	1	\$276,053
Average	5.68	96.79	11.80	0.76	77.57	11.81	-	-

Bipartisan Infrastructure Law Considerations

The Bipartisan Infrastructure Law (BIL) was passed in November 2021. BIL will provide numerous transportation and transit funding opportunities, which will likely be associated with additional objectives and performance measures. It will be essential for CAT and MPO staff to stay apprised of all funding, guidance, and regulations that come out of BIL that will impact funding, performance monitoring, and future plan requirements.