Grand Forks - East Grand Forks
TRANSIT DEVELOPMENT PLAN

GRAND FORKS – EAST GRAND FORKS

Transit Development Plan

Final Plan

JANUARY 2023

A RESOLUTION ADOPTING THE YEAR 2050 LONG RANGE TRANSPORTATION PLAN FOR THE GRAND FORKS – EAST GRAND FORKS METROPOLITAN AREA

WHEREAS, the U.S. Department of Transportation requires the development of a Long Range Transportation Plan by a Metropolitan Planning Organization for each urbanized area and area expected to have growth over a twenty year period; and

WHEREAS, the Grand Forks – East Grand Forks Metropolitan Planning Organization (MPO) has been designated as the policy body with responsibility for performing transportation planning in the Grand Forks – East Grand Forks Metropolitan Area; and

WHEREAS, the MPO is designated by the Governors of North Dakota and Minnesota as the body responsible for making transportation planning decisions in the Grand Forks – East Grand Forks Metropolitan Area; and

WHEREAS, the existing Long Range Transportation Plan was adopted in 2018 and, as in accordance with 23 U.S.C. 135 and 23 CFR 450.322, is being updated to remain current and maintain a twenty year horizon; and

WHEREAS, the Long Range Transportation Plan, in accordance with 23 CFR 450.322, is multimodal in scope and accounts for all travel modes in the four sections of the plan: Street &Highway, Transit, and Bike and Pedestrian; and

WHEREAS, the MPO adopted a 2045 Long Range Transportation Plan in December 2018, and the Long Range Transportation Plan being considered today is an update of the Transit sections of that plan; and

WHEREAS, the Long Range Transportation Plan, in accordance with 23 CFR 450.322, shall be financially constrained to demonstrate that proposed projects have existing and/or reasonably projected sources of funds; and

WHEREAS, the MPO followed its adopted Public Participation Plan to proactively involved the public early and often in the transportation planning process and requests the planning commissions and city councils from each community consider adoption of the Long Range Transportation Plan; and

WHEREAS, the By-Laws of the MPO allow the MPO Executive Board to take action upon adoption of the Long Range Transportation sixty (60) days after said plan had been submitted to the representative city and the 60 day period ended on June 19, 2017; and

WHEREAS, the Technical Advisory Committee of the MPO held public meetings on the proposed Long Range Transportation Plan; and

WHEREAS, the Planning Commission for Grand Forks, North Dakota, held a public hearing on December 7, 2022, on the proposed MPO Long Range Transportation Plan; and

WHEREAS, the City Council for Grand Forks, North Dakota, held a public hearing on December 19, 2022, on the proposed MPO Long Range Transportation Plan; and

WHEREAS, the Planning Commission for East Grand Forks, Minnesota, held a public hearing on November 17, 2022, on the proposed MPO Long Range Transportation Plan; and

WHEREAS, the City Council for East Grand Forks, Minnesota, held a public meeting on December 6, 2022, on the proposed MPO Long Range Transportation Plan; and

WHEREAS, the Executive Policy Board of the Grand Forks – East Grand Forks Metropolitan Planning Organization considered the actions taken by the above referenced local governmental agencies; and

NOW, THEREFORE, BE IT RESOLVED, that the Executive Policy Board of the Grand Forks – East Grand Forks Metropolitan Planning Organization hereby adopts the proposed Year 2050 Long Range Transportation Plan as presented with the following amendments: None.

12/15/22
Date

Warren Strandell, Chairman

Stephanie Halford, Executive Director

RESOLUTION NO. 22 – 12 - 91

Council Member DeMers, supported by Council Member Vetter, introduced the following resolution and moved its adoption:

WHEREAS, the city of East Grand Forks has an adopted East Grand Forks Comprehensive Plan; and

WHEREAS, the proposed plan update is in general agreement with the other elements of the East Grand Forks Comprehensive Plan, those other elements being the following:

1. The Grand Forks – East Grand Forks 2009 Downtown Plan update Element, together with all Maps, information and data contained therein.
2. The Grand Forks – East Grand Forks 2045 Metropolitan Transportation Plan Update, which contains the following sections:
    a. Bikeway Element, together with all Maps, information and data contained therein.
    b. Pedestrian Element, together with all Maps, information and data contained therein.
    c. Transit Element, together with all Maps, information and data contained therein.
    d. Street and Highway Element, together with all Maps, information and data contained therein.
    e. Intelligent Transportation Systems (ITS) Strategy Element, together with all Maps, information and data contained therein.
3. The 2000 Urban Design Plan, together with all Maps, information and data contained therein.
4. Greenway Plan Element, together with all Maps, information and data contained therein.

And

WHEREAS, The Grand Forks – East Grand Forks Metropolitan Planning Organization with the City of East Grand Forks and Grand Forks has prepared a 2022 Plan Update of the Transit Development Plan Element to the East Grand Forks Comprehensive Plan; and

WHEREAS, 2022 Plan Update of the Transit Development Plan Element of the East Grand Forks Comprehensive Plan is a guide for future transit growth for the City of East Grand Forks; with goals and policies, and an implementation plan, and

WHEREAS, the Transit Development Plan may be amended to reflect changes to the community; and

WHEREAS, the Transit Development Plan is a representation of the transit goals and values of the city; and

WHEREAS, the City Council further held a public meeting on **December 6th 2022** to get input from the citizens of the community; and

WHEREAS, the East Grand Forks Planning and Zoning Commission forwards a recommendation that the 2022 Plan Update to the Transit Development Plan Element to the East Grand Forks Comprehensive Plan, be hereby approved and adopted with any potential changes made by the City Council;

NOW THEREFORE BE IT RESOLVED, By the City Council of the City of East Grand Forks, Minnesota, that the 2022 Plan Update to the Transit Development Plan Element of the East Grand Forks Comprehensive Plan, and proposed amendments, be hereby approved and adopted with any further amendments as stated:

Voting Aye: *Vetter, Helms, Riopelle, Olstad, DeMers, and Larson.*
Voting Nay: *None.*
Absent: *Johnson.*

The President declared the resolution passed. Passed: December 6, 2022

Attest: _____
City Administrator

_____
President of Council

I hereby approve the foregoing resolution this 6th day of December, 2022.

_____
Mayor

ORDINANCE NO. 4847.

AN ORDINANCE AMENDING THE COMPREHENSIVE PLAN, AMENDING CHAPTER XVIII, ARTICLE 8, COMPREHENSIVE PLAN; SECTION 18-0802, ELEMENTS OF THE GRAND FORKS CITY CODE OF 1987, AS AMENDED, PERTAINING TO THE GRAND FORKS-EAST GRAND FORKS 2045 TRANSPORTATION PLAN UPDATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND FORKS, NORTH DAKOTA, THAT:

Section 1. Amending Clause

Section 18-0802 (1) is hereby amended as follows:

(C) The Grand Forks-East Grand Forks 2045 Long Range Transportation Plan Update, which contains the following sections.

1. 20*22* ~~17~~ Alternative Transportation Modes: Transit Element, together with all maps, information and data contained therein; with the exception that the following not be declared a part of the comprehensive plan:
   A. Fare Structure for transit
   B. Vehicle Types for transit
   C. Bus Routes

Section 2. Effective Date

This ordinance shall be in full force and effect after its passage and approval as provided by law.

Brandon Bochenski, Mayor

ATTEST:

Maureen Storstad, City Auditor

Introduction and first reading: 11/21/2022
Public Hearing: 12/19/2022
Second reading and final passage: 12/19/2022
Approved: 12/19/2022
Published: Not required by law.
Recorded:

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Introduction

Introduction

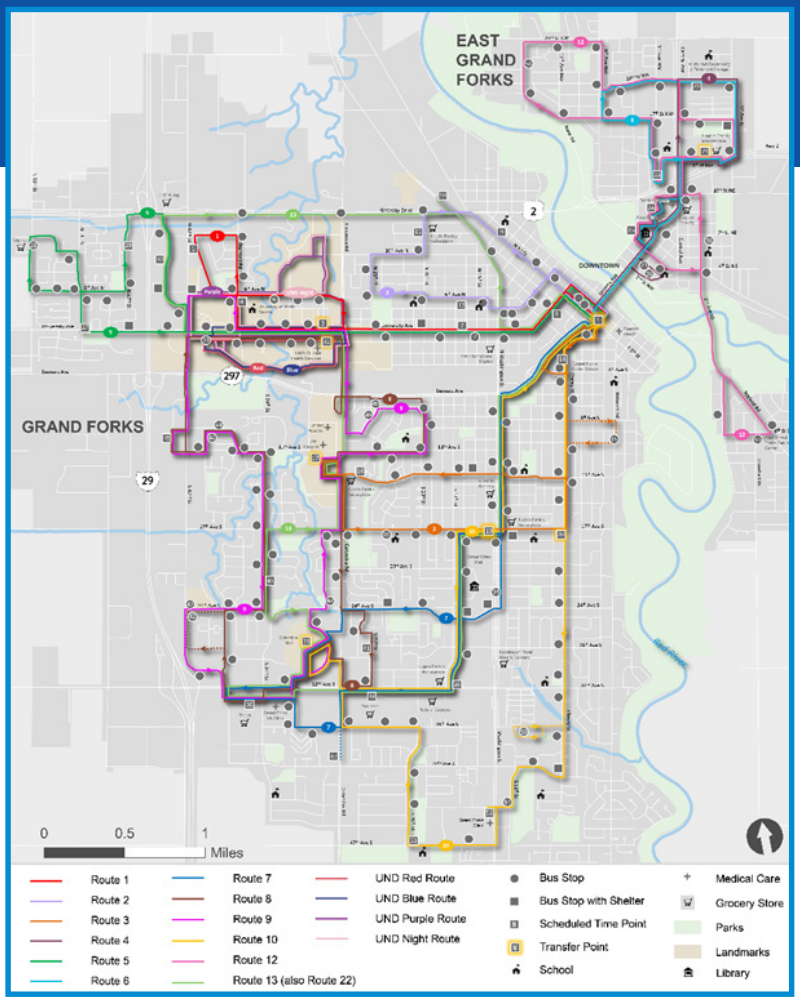
The Grand Forks-East Grand Forks Transit Development Plan (TDP) is a 10-year plan that provides a vision for Cities Area Transit (CAT). The system's previous transit development plan was completed in 2017. The 2022 plan update evaluates recent system improvements and has the following areas of focus:

- **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**

Existing Conditions

To better understand the needs and priorities, the study team created an existing conditions report that summarizes the current CAT system, provides information about how the system is performing, and identifies areas for improvement. **Figure 1** shows the existing CAT System Map. The full existing conditions report is available in Appendix 1.

Figure 1. *Existing CAT System Map*



Grand Forks – East Grand Forks
TRANSIT DEVELOPMENT PLAN

CAPITAL OVERVIEW

15 Fixed Route Buses

10 Dial-A-Ride/ Senior Rider Shuttles

49 Bus Shelters and many more bus stops

Route Performance

- CAT routes provided 226,000 rides in 2019.
- CAT ridership since the COVID-19 pandemic declined 37% (between 2019 and 2020) which is a smaller decline than the national average of 55% for the same time period.
- **RANKED #1-** Route 7 is the most popular route with the highest ridership before and since the pandemic.
- **RANKED #2-** Route 5 is a very popular route, consistently ranking second or third in ridership over time.
- **RANKED #3-** Route 3 provides service twice an hour and is ranked number one for efficiency, and number two for total boardings.

Demand Response Performance

- CAT's curb to curb (demand response) service provided 65,182 rides in 2019.
- Before the COVID-19 pandemic there was a 24% increase between 2013 and 2019 in rides, compared to less than 9% nationally.

Fares

- CAT 31 Day passes are growing in popularity.
- CAT 31 Day passes are more affordable than four out of seven peers compared.
- System Reliability & Safety
- Compared to national statistics, both services operate very safely, with only minor injuries and motor vehicle issues on the fixed route service and no safety events for the demand response service.
- The system's vehicles have become more reliable over time. For the fixed route service there were over 350,000 miles between mechanical failures and in 2020 the demand-response vehicles had no mechanical failures at all.

Peer Comparison

- Similar to peer cities nationally, CAT has experienced increasing costs and lower ridership in recent years.
- CAT has consistently provided a similar level of service compared to peers, despite overall population growth of the region.

COMMUNITY OVERVIEW

- The Grand Forks-East Grand Forks Area has **104,362 people**.
- About **30% of households in East Grand Forks** have at least one person with a disability.
- The **highest population density is near UND**—Most areas of the Grand Forks-East Grand Forks area are relatively low density with between seven and nine people per acre.
- **The highest job densities in the region are in Grand Forks** near UND and along 32nd Avenue with up to 3,500 jobs in one area.

FINANCIALS

- In addition to fares from riders, CAT is funded through a combination of cities (Grand Forks & East Grand Forks), state (MN & ND), and federal funding.
- Currently, the system is doing a good job balancing expenses and costs with revenue coming in from the system.
- The fixed route system costs $2.5 Million to run, while the Demand Response (Dial-A-Ride/Senior Rider) costs just over $450,000 to operate.
- Additional federal funding over the next five years may provide new opportunities.

Public and Stakeholder Engagement Phase 1

To gain a better understanding of the existing Grand Forks-East Grand Forks transit system, the study team engaged the public and stakeholders about their experiences using CAT services and what is and is not currently working well. The engagement methods for this phase fell into two primary categories: surveys and meetings. This chapter summarizes the engagement methods and key findings during this initial phase of engagement. For more detailed information, view the Phase 1 Public Engagement Summary in Appendix 2. Table 1 lists the number of people engaged in outreach activities.

Table 1. *Phase 1 Public Engagement Participation by Method*

METHOD	NUMBER OF PEOPLE ENGAGED
Public Survey	208
Operator Survey	2
Decision Maker Survey	7
Interactive Map	16
Focus Groups	17

SURVEYS

PUBLIC SURVEY

The public survey was available online and in paper format and was administered to riders and non-riders broadly. While promoting the public survey, the study team made a concerted effort to reach people traditionally underrepresented in planning processes by:

- Placing posters (directing people to take the public survey) inside buses, at key transit stops, and popular destinations around Grand Forks-East Grand Forks.
- Distributing paper surveys on CAT buses and to locations connected to people less likely to take an online survey (e.g., senior centers, the public school district, and social service organizations).
- Riding CAT buses and tabling at the Metro Transit Center to notify people of the project, answer questions, and encourage people to take the project survey.

The following are some key findings from the survey results:

- Most respondents ride CAT to go to stores/restaurants (35%) and/or work (33%).
- Approximately one-third of respondents ride CAT about the same amount as before the COVID-19 pandemic.
- 40% of respondents find riding CAT easy or very easy.
- Respondents noted that the biggest barrier to taking transit is that traveling on the bus takes too long (34%).
- Respondents said having the bus serve more locations and come more often would make transit more appealing to them.

OPERATOR SURVEY

Because bus operators know the system better than anyone due to their interaction with customers and experience driving the routes, the study team developed an operator-focused survey, which was available in paper format at the garage for operators to complete before or after their shifts. The following are some key findings from the survey results:

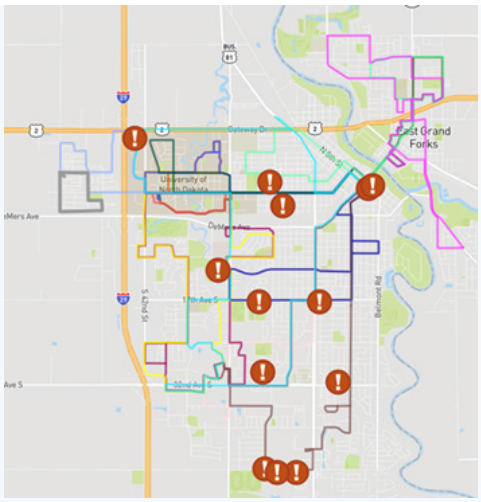
- Regarding safety, respondents identified several concerns with the routes they operate, most focused on turning movements and merging with traffic at certain locations such as pulling out of Odegard Hall and mixing with traffic on Hamline Street and 6th Avenue.
- Regarding underserved areas, respondents noted a need for service at UND on Friday nights and that the Home of Economy stop should be located closer to the correction center and municipal court.
- Regarding route or system changes, respondents noted a need for a mall route traveling south to 62nd Avenue and adjustments to relief times for Routes 5 and 9.

DECISION MAKER SURVEY

Because decision makers often hear from constituents when systems aren't working well, the study team developed a decision maker-focused survey to gain their insights on issues with the existing system and their priorities for transit. The survey was available online and distributed to decision makers representing the service area, including elected and appointed government officials and staff at the Cities of Grand Forks and East Grand Forks as well as partner agencies. The decision maker survey received seven responses. The following are some key findings from the survey results:

- When asked to rank how well the transit system serves their constituents on a scale of 1-10, with 10 being highest, respondents gave an average rank around 7, citing concerns about low ridership in East Grand Forks, inconvenience of riding transit, and need for shorter travel times, increased frequency, and better service coverage. Some spoke highly of the fixed route and Dial-A-Ride services, noting that do an exceptional job of serving the communities' highest need areas.
- Respondents said that the availability and timeliness of service, bus drivers, and buses are all strengths of the current system.
- Regarding improvements to the systems, respondents said there is a need for increased frequency, better travel times, shelter improvements, service to important places like the industrial park, later service, and on-demand service.
- Respondents noted availability of service, increased ridership, and more efficient, cost-effective, and convenient service as their top priorities for CAT.
- Respondents ranked the goal "to provide transportation for people who do not have or are unable to use a private automobile" as the most important goal for the Grand Forks–East Grand Forks transit system.

▲ **Figure 2.** *Project staff asking transit riders for their feedback on the existing CAT system*



INTERACTIVE MAP

The study team developed an interactive map that featured the current CAT system and allowed users to add location-specific comments about places they go and transit improvements they would like to see.

Comments focused on where routes, stops, and service schedule improvements are needed, particularly near schools in Grand Forks. A full list of map comments is available in the Phase 1 Public Engagement Summary in Appendix 2.

◀ **Figure 3.** *Phase 1 Interactive Map Comment Locations*

MEETINGS

FOCUS GROUPS

The study team held three focus groups discussions to hear from businesses, non-profit organizations, and those living, working, and studying in Grand Forks–East Grand Forks (particularly those already riding the CAT system). The following are some key findings from the focus groups:

- For most participants, travel patterns are the same as before the COVID-19 pandemic.
- Participants travel to appointments, work, downtown, shopping destinations (e.g., Hugo's, Walmart), friends' houses, and the industrial park.
- Participants cited the following as locations that need service: industrial park, airport, new clinics, Lincoln Drive, north and west Grand Forks, south of University Avenue in Grand Forks.
- Participants said the mall/other shopping destinations and the industrial park need night service.
- Participants noted the following as some of the biggest barriers to using transit: a need for later weekday service, Sunday service, increased frequency, and service that aligns better with work/school start and end times.
- Regarding strengths of CAT, participants highlighted the reasonable fares, widespread service, safe and clean buses, friendly driver, Dial-A-Ride service, educational programming, and CAT Prowler app.
- Regarding opportunities for improvement, participants suggested things such as free bus passes for students, year-round bus passes, real-time transit information at key stops, more shelters, heating at shelters, more accessible CAT Prowler app, and training bus drivers on engaging with people with disabilities.

COMMON THEMES

The study team employed a variety of methods to reach and solicit input from the public and stakeholders during Phase 1. While we heard from many different voices throughout these efforts, a few common themes emerged:

- The quality of bus operators' customer service, the cleanliness of buses, and reasonable fares were frequently cited as CAT's strengths by riders.
- Respondents identified many areas of improvements to CAT service. Key among these were the need for increased frequency, service on weekends (including Sundays) and extended hours on weeknights, service to key destinations like the industrial park and mall, and bus schedules that align with work/school schedules.
- Respondents identified areas of improvement to CAT facilities. Key among these were shelters that protect from the cold/wind and more visible bus stops.
- Respondents identified areas of improvement for customer information and customer experience. Key among these were improvements to information at stops and onboard vehicles and easy navigation/more accurate bus tracking on the CAT Prowler app.

Figure 4. *Metro Transit Center Bus Shelter*

Goals, Objectives, and Performance Measures

Based on the guiding source documents and public and stakeholder engagement, the study team identified seven goals for the CAT system. Table 2 shows the seven goals with supporting objectives and performance measures. The Performance Management Plan (see Appendix 3) provides additional details including performance metrics for each system: fixed route; demand response; non-revenue support vehicles; and maintenance, administration, and stations. The goals, objectives, and performance measures will be used to guide plan recommendations and monitor ongoing system performance.

Table 2. *Goals, Objectives, and Performance Measures*

GOAL 1. COMMUNITY CONNECTIVITY
Connect people to important community destinations by transit

Objectives	Performance Measures
» Provide transit service within 1/4 mile of residential areas and to major activity and employment centers » Facilitate and promote moderate to higher density and mixed-use development in areas near or along planned/existing transit routes » Encourage the concentration of employment and services along transit routes » Promote transit-oriented development into small area plans, master-planned developments, and site plans	» Residential service availability (all residents) » Job service availability (all jobs) » Service hours per capita

GOAL 2. MULTIMODAL CONNECTIVITY
Connect transit service to active transportation infrastructure

Objectives	Performance Measures
» Connect to other local and regional transit services » Connect to other first-and-last mile connectivity options » Provide bicycle parking at transit centers and major bus stops (stops with at least 20 boardings per day) » Increase pedestrian access by locating bus stops along sidewalks and trails	» Bicycle parking at transit stops » Continuous walking route and crossings

GOAL 3. SERVICE QUALITY
Provide high-quality transit service that attracts and retains riders

Objectives	Performance Measures
» Implement service and infrastructure improvements that improve travel time and reliability (service that is regularly on-time for riders) » Improve system usability through user-friendly transit vehicles, easy to use stop and route design, and easy to understand information using plain language » Increase the number of people using public transportation for their main form of transportation (transit mode share)	» On-time performance » Frequency » Mode shift » Ridership

GOAL 4. ACCESSIBILITY
Provide transit service that is accessible to all riders

Objectives	Performance Measures
» Shift ridership from demand response to fixed-route system through improved information availability and service quality » Manage system demand between fixed-route and demand response system through eligibility screening and better coordination with demand users and human services agencies » Improve the customer experience for riders who use mobility devices by monitoring advances in securement technology » 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)	» Demand response ridership » Stops with ADA access

GOAL 5. ENVIRONMENTAL SUSTAINABILITY & RESILIENCY
Invest in fleet and infrastructure improvements that promote environmental sustainability and resiliency.

Objectives	Performance Measures
» Develop a Zero-Emission Transition Plan that meets Federal Transit Administration requirements » Explore the use of an on-site energy storage system to improve resiliency of battery-electric buses » Evaluate the potential for solar integration at transit facilities » Integrate CAT as a consideration into future updates to the UND Climate Action Plan and other similar plans for local organizations » Avoid transit routing on roadways that are frequently subjected to closure due to flooding	» Alternative fuel/electric vehicles in fleet

GOAL 6. EQUITY
Advance equity through transit access

Objectives	Performance Measures
» Prioritize transit investments that benefit transit-dependent populations and historically disadvantaged populations » Improve service for shift-workers and those who commute outside of traditional peak hours » 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) » Ensure compliance with Title VI requirements » Engage in coordinated outreach with key agencies and consortiums to better coordinate Demand Response services with social and human service providers » Renovate facilities that continue/expand transit service in disadvantaged communities or services that benefit low-income riders » Train and develop the transit workforce that provides services to disadvantaged communities and rural areas » Prioritize the enhancement of transit services/routes in areas of affordable housing	» Residential service availability (residents who rely on transit) » Job service availability (low-wage jobs) » Shelters » Benches » Equitable level of service for transit-dependent or historically disadvantaged populations

GOAL 7. FISCAL SUSTAINABILITY & EFFICIENT SYSTEM MANAGEMENT

Operate a safe, efficient, and fiscally sustainable transit system

Objectives	Performance Measures
» 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 » Engage the local business community and local, state, and federal governments to combine local and regional transportation improvement efforts » Coordinate with MPO on local and regional transit improvements and system efficiency enhancements » Seek community participation and input in planning processes such as route modifications, service expansions, stop/shelter locations » Coordinate with human services to share resources and align efforts to improve public transportation » Seek opportunities for public-private partnerships (e.g., TNCs) to improve transportation options and expand on pilot programs » Identify and incorporate state and regional emergency, evacuation, and security plans into transportation plans ant TIP project selection » Continue to track performance measures annually to determine progress » Achieve "State of Good Repair" performance levels agreed to between MnDOT, NDDOT, and the MPO » Identify grant and other funding opportunities to maintain and renew/expand transit equipment and services » Preserve existing infrastructure and protect future infrastructure and right-of-way, with support from other City Departments » Ensure daily transit operations without interruption for fleet maintenance or repair » Implement and periodically update Transit Asset Management plan » Reduce the number, severity and rate of crashes compared to previous years » Develop an agency safety plan and certify the plan meets FTA requirements	» Road Calls » Fleet Maintenance » Equipment » Rolling Stock » Facilities » Spare Ratio » Passengers per Service Hour » Cost per Revenue Hour » Cost per Ride » Farebox Recovery » Safety Events

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 National Transit Database (NTD) datasets. Reporting could be done through a simple and easy to follow dashboard format that shows historic and existing performance levels.

Service Ideas

The study team developed initial service improvement ideas based on the needs and priorities for the CAT system identified in the Existing Conditions report, as well as the goals, objectives, and performance measures and input provided in the first phase of public engagement.

A summary of the route changes associated with the service ideas are summarized for daytime service in Table 3. Daytime Service Idea Route Changes and nighttime service in Table 4.

Microtransit

Microtransit is an on-demand shared transportation service that uses technology to operate efficiently and effectively. Rides can be requested on-demand or in advance for pick-up and drop-off at certain locations within a defined zone. The study team proposed four microtransit zones, two for daytime service and two for nighttime service, as described in the following sections..

WHAT ARE THE BENEFITS OF MICROTRANSIT?

- **Flexible:** schedule rides where you need, when you need
- **Convenient:** schedule ahead or in real time. Book via app, online, or over the phone
- **Efficient:** rides with similar routes or destinations are matched to minimize wait and travel time
- **Connections:** connect to destinations within the on-demand transit zone or to other bus routes

HOW DOES MICROTRANSIT WORK?

Daytime Service Ideas

Figure 5 shows the system-wide map of service ideas covering Grand Forks-East Grand Forks and the UND campus during the day.

Figure 5. *Daytime Service Ideas Map*

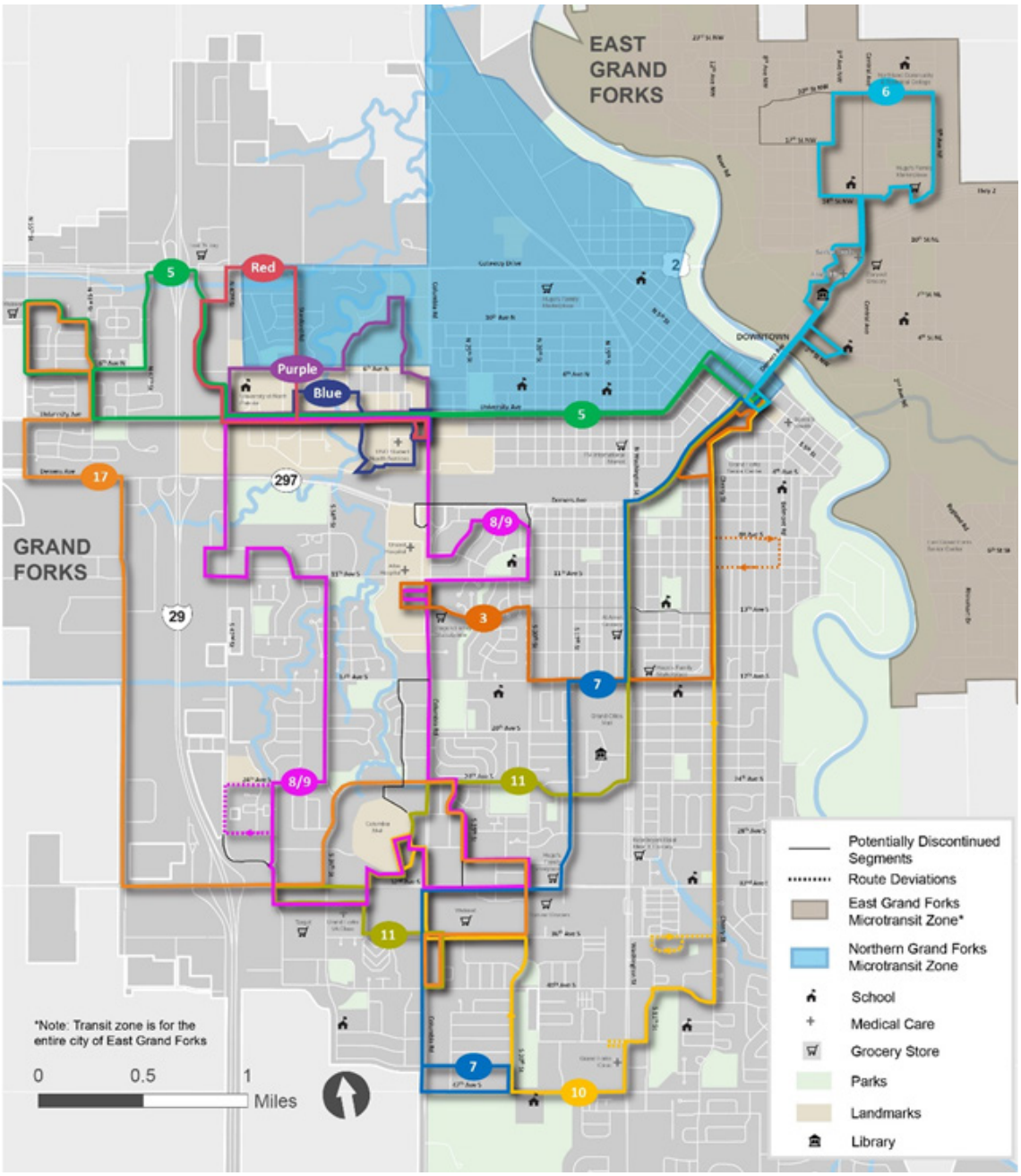


Table 3. *Daytime Service Idea Route Changes*

Route	Idea Description
Route 1	Discontinue Route 1 service and reallocate service to Route 5
Route 2	Discontinue service and change to an microtransit that would serve northeast Grand Forks and the northern section of existing Route 1
Route 3	Simplify route to travel the same way in both directions, using 17th and 13th Avenues
Route 4	Combine with Route 6
Route 5	Continue the same routing and operate the route twice as often (every 30 minutes)
Route 6	Combine with Route 4
Route 7	Split into two routes: Route 7 and Route 11. Route 7 would operate on Washington Street, 17th Avenue, 17th Street, 32nd Avenue, and Columbia Road to 47th Avenue, traveling by Midtown, Hugo's, and Walmart
Route 8	Realign Routes 8 and 9 to follow the same route. This would include adding service on 30th and 32nd Avenues S between S 20th Street and S 25th Street. It would also remove service from Demers Avenue and add service to S 26th Street and 7th Avenue S
Route 9	Realign Routes 8 and 9 to follow the same route. This would discontinue service on 6th Avenue N and S 29th Street on the east side of the route and 29th Avenue S, S 42nd Street and 24th Avenue S, on the southwest portion of the route
Route 10	Simplify the route to cover the eastern half of the existing Route 10 and operate the route in both directions. This would create a route that is the same both south and northbound. This change would remove service on 32nd Avenue, 17th Street, and 17th Avenue, which would be served by Route 7
Route 11	A new route idea that would cover the eastern half of the existing Route 7. It would provide service from downtown Grand Forks to Columbia Mall and retail along 32nd Avenue
Route 12	Discontinue Route 12 and replace it with a microtransit service zone that would cover all of East Grand Forks
Route 17	A new route that would serve the commercial and residential areas along 32nd Avenue, the industrial park, and the residential area and Walmart in northwest Grand Forks
UND Red	Restructure this route to focus connecting students living along 43rd Street, Stanford Road, and the west part of University Avenue with the campus buildings further east along University Avenue
UND Blue	Restructure this route to focus on connecting students living in the student housing along University Avenue with the campus buildings on the southern part of campus along Campus Road
UND Purple	Modify route to longer serve south of University Avenue to avoid challenging left turning movements
Microtransit Zone 1	Serve the entire city of East Grand Forks all day
Microtransit Zone 2	Serve only Northern Grand Forks during the day

Nighttime Service Ideas

The study team identified service ideas at nighttime. The concept includes four fixed routes and three microtransit zones serving Grand Forks-East Grand Forks and UND as shown in Figure 6.

Figure 6. *Nighttime Service Ideas Map*

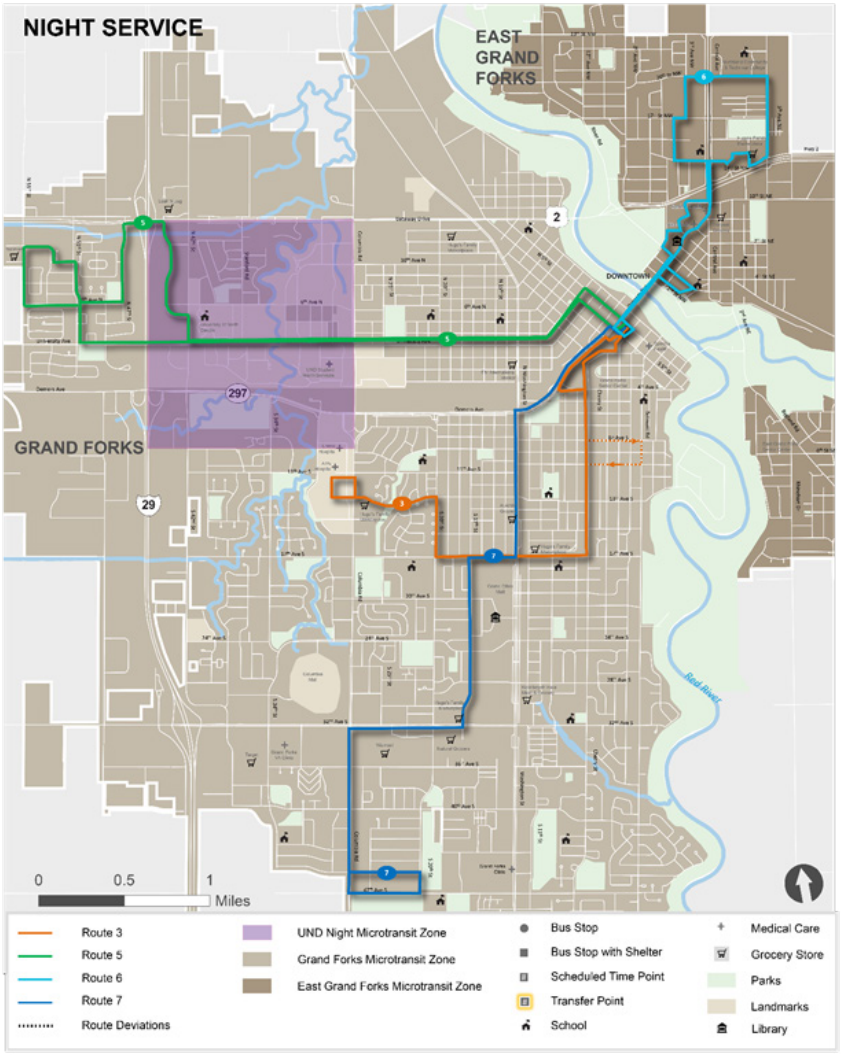


Table 4. *Nighttime Service Idea Route Changes*

Route	Idea Description
Route 3	Simplify route to travel the same way in both directions, using 17th and 13th Avenues
Route 5	Continue the same routing and operate the route twice as often (every 30 minutes)
Route 6	Combine with Route 4
Route 7	Split into two routes: Route 7 and Route 11. Route 7 would operate on Washington Street, 17th Avenue, 17th Street, 32nd Avenue, and Columbia Road to 47th Avenue, traveling by Midtown, Hugo's, and Walmart
Route 13/22	Discontinue Route 13/22 and replace it with fixed routes that operate during the day or microtransit service
UND Night	Discontinue this route and replace it with microtransit service
Microtransit Zone 3	Serve the entire city of Grand Forks at night
Microtransit Zone 4	Serve the UND campus and surrounding areas at night

Public and Stakeholder Engagement Phase 2

The study team conducted a second phase of engagement to gather feedback from the public and stakeholders on initial service improvement ideas and draft CAT goals. Phase 2 engagement methods fall into three primary categories: surveys, meetings, and comment forms. This chapter summarizes the engagement methods and key findings during Phase 2. For more detailed information, view the Phase 2 Public Engagement Summary in Appendix 2. Table 6 lists the number of people engaged in outreach activities.

Table 4. *Phase 2 Public Engagement Participation by Method*

METHOD	NUMBER OF PEOPLE ENGAGED
Input Group Meetings	30
Service Ideas Survey	59
UND Survey	438
Business Survey	50
Interactive Map	2
General Comments	6

SURVEYS

SERVICE IDEAS SURVEY

The service ideas survey was available online and in a paper booklet format and was administered to riders and non-riders broadly. As in Phase 1, while promoting the survey, the study team made a concerted effort to reach people traditionally underrepresented in planning processes. The following are some key findings from the survey results:

- 56% of respondents support discontinuing Route 1 and operating Route 5 twice an hour, while 22% disliked this idea. An additional 22% expressed no preference.
- Over half of the respondents (53%) support the proposed changes to Route 3. Only 12% of respondents are not supportive of the changes. 36% of respondents expressed no preference.
- Most respondents (65%) support the idea of splitting Routes 7 and 10, with only 7% of respondents saying they do not like this idea. 27% of respondents expressed no preference.
- 77% of respondents support the idea for a new route that serves the Industrial Park and northwest Grand Forks. 21% of respondents expressed no preference, while 2% disliked this idea.
  - 50% of respondents said they would ride this new route weekly or more frequently.
- 44% of respondents support changing evening service of Routes 3, 6, 13, and the UND Night Route to microtransit, while 30% prefer to keep evening service as fixed route. 27% expressed no preference.
- Route 5 and Route 13 are the two most common routes respondents said should operate as fixed routes in the evening.

UNIVERSITY OF NORTH DAKOTA SURVEY

Transportation staff at UND administered their own survey to the students and faculty at UND to gather more feedback about their familiarity with the campus shuttle service, travel patterns, and strengths and opportunities to improve the service. UND shared these survey findings with the TDP study team to help inform service improvement ideas. The following are some key findings from the survey results:

- Almost 90% of respondents live on campus or within five miles of campus.
- The two most popular ways respondents get to campus are by driving alone (40%) or walking (34%).
- 86% of respondents said they are aware of the campus shuttle, while 14% said they are not.
- Of respondents that ride, one-third said they ride less than once a week.
- Of respondents that ride, they do so because of **lack of parking**, the **weather**, and the **convenience of the shuttle**.
- Respondents said the biggest barrier to riding the shuttle is that it's late/not reliable.
- The top 5 most common responses for preferred locations for campus shuttle stops are Memorial Union, Wilkerson, Odegard, the Medical School, and Columbia.
- 80% of respondents are **somewhat** or **very interested** in an on-demand campus ride share service.
- Respondents said the two most important things to make riding the shuttle more appealing is **serving more locations** and **more frequent service**.

▲ **Figure 7.** *Project staff tabling and engaging with riders at the Metro Transit Center*

BUSINESS SURVEY

As a result of feedback received during the Phase 1 business focus group meeting, the study team developed an online survey for employers and employees in the Grand Forks – East Grand Forks area to learn more about their employees' transit needs and travel patterns. The study team shared the survey with business focus group participants and contacts at the Grand Forks Region Economic Development Corporation and Grand Forks–East Grand Forks Chamber of Commerce, who helped promote the survey by emailing it out to their member distribution lists. The following are some key findings from the survey results:

- 56% of respondents identified as employees, while 42% identified as employers.
- Respondents represented 24 different organizations in the Grand Forks–East Grand Forks area.
- Most respondents we heard from work for organizations with less than 25 employees (40%) or 251 – 500 employees (30%).
- 60% of respondents said their organization does not have easy access to transit, while 24% said it does.

INTERACTIVE MAP

The study team developed an interactive map that featured two maps, one of the new service ideas and one of the existing CAT bus routes. Users could add location-specific comments about what they like and dislike about the service improvement ideas.

Comments received focused on areas that need service including the industrial park and 8th Avenue NW in East Grand Forks. A full list of map comments is available in the Phase 2 Public Engagement Summary in Appendix 2.

Meetings

INPUT GROUP MEETINGS

The study team held five input group meetings to solicit feedback and answer questions about the service improvement ideas. Two of the meetings were open to all community members, while the other three meetings were small, audience-specific focus groups with human services partners, UND, and CAT operators. Around 30 non-project staff attended these meetings. The following are some key takeaways from these meetings:

Overall:

- Support for the draft CAT goals
- Support for piloting microtransit, but people have questions/need more information on booking rides, zone expansion, and training on how to use microtransit
- Support for the Grand Forks service ideas, particularly the industrial park route
- Regarding East Grand Forks service ideas, people would like Route 6 to go past the apartments in East Grand Forks to serve the residents there

UND:

- Need for wayfinding/signage/bus identification at stops on UND campus
- Need for improvements to the bus app
- Concern about the UND Red Route and UND Blue Route
- Support for the UND Night Microtransit zone

Coordinated Human Services:

- Application process and technology are barriers for people with disabilities to secure transportation
- Need for an online platform for human services agencies to connect clients with transportation services
- Need for transportation agencies to be more involved in services coordination discussions/meetings

CAT Operators

- Regarding Route 1, outbound service down University Avenue is good, but crossing Washington is an issue
- Regarding Route 3, it's important to serve the Lewis and Clark Elementary School and Red River stop; also important to have a midtown transfer on 17th
- Regarding Route 6, there are timing issues with interlining with Route 3
- Regarding Routes 7, 10, and 11, operators like that 7 and 10 alternate every 30 minutes; there's a need to drop off at Altru South
- Regarding the industrial park route, if there is a microtransit zone, there's a need for connections to Routes 5 and 3

General Comments

Community members could share their feedback through comment forms (available when the study team tabled at the Metro Transit Center) and via email. The following are key findings from the general comments:

- Need for night service and increased frequency (e.g., Route 5, dial-a-ride)
- Would like to keep certain routes the same (e.g., Routes 7 and 3)
- Support for some of the service ideas (e.g., Route 7, industrial park route)

Common Themes

Several common themes emerged through public and stakeholder engagement during Phase 2:

- **Opportunities for Improvement**
  - Application process and technology are barriers for people with disabilities to secure transportation.
  - Need for wayfinding/signage/bus identification at stops on UND campus.
  - Need for improvements to the bus app, bus arrival times are inaccurate.
  - Need for more advertisement/education around the CAT system and training if microtransit service is implemented.

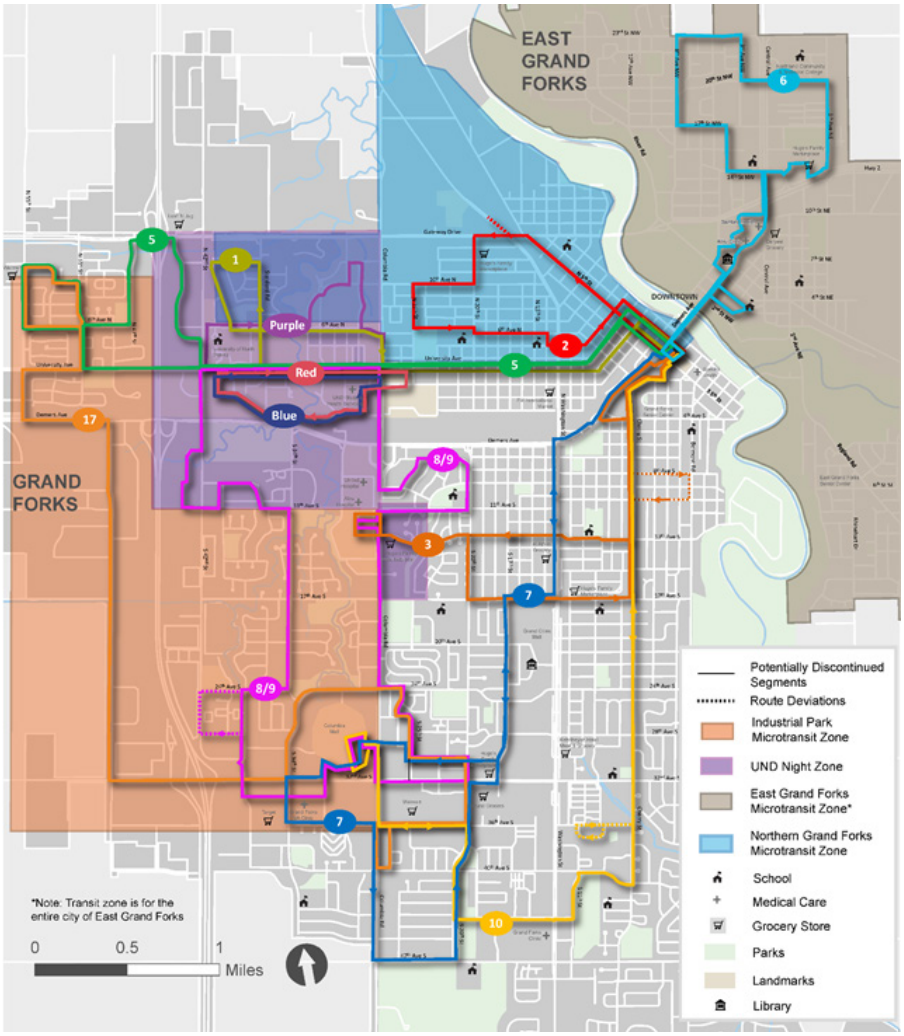
- **Service Ideas**
  - Overall need for later service (service until midnight or throughout the night).
  - Concern about the UND Red Route – while many students live northwest of campus, routing doesn't make sense unless you travel between the apartment buildings.
  - Concern about the UND Blue Route – need for service west of Coulee, many students congregate at Odegard.
  - Support for the UND Night Microtransit zone as it class schedules can vary from week to week; microtransit allows for this flexibility and is more efficient than riding the Night route loop.
  - Support for the proposed route to the Industrial Park and northwest Grand Forks, but ensure it aligns with work shift start/end times.
  - General support for splitting the Routes 7 and 10 into three bidirectional routes.
  - General support for making Route 3 bidirectional.
  - Mixed feedback about discontinuing Route 1 and running Route 5 more frequently.

Future Service Recommendations

The future service recommendations for the Grand Forks-East Grand Forks were developed based on the public feedback received, as well as coordination with transit operators and stakeholders. Recommendations were developed for a cost-neutral scenario, which maintains a similar level of service hours as is currently provided, as well as an added service scenario, which increases frequencies or adds additional service. Some routes also include options for microtransit replacement service, which would eliminate the existing fixed route to be replaced with a microtransit "zone." For many routes, proposed service under each of the three scenarios is the same.

The overall system recommendations are summarized in Figure 8. Additional detailed information on the recommendations for each route are available in Appendix 4.

Figure 8. *Route Recommendations*



CAT SERVICE BY ROUTE

Routes 1 and 2: In the short term, routes should be maintained as they are, and funding possibilities for fixed-route school bus service should be explored. In the medium term, microtransit should be studied as a potential option for the future.

Route 3: In the short term, service should be maintained as-is. A stop-level study of boarding patterns and ridership should be conducted to determine options to simplify the route.

Routes 4 and 6: In the short term, Routes 4 and 6 should be combined and the new Route 6 should run interlined with Route 3 to determine any schedule issues. Options for better pedestrian connections to Demers Avenue should be studied and, in the medium term, implemented to allow Route 6 to run a more direct route.

Route 5: In the short term, Route 5 should remain as it is today, and funding partnerships with the school district for K-12 busing should be explored. Under the added service scenario, Route 5 would run twice an hour and into the evening.

Route 7: Route 7 should be modified to be more direct. The connection to Target should be removed and transfers to Routes 8 and 9 should be encouraged instead. The route should provide a direct connection to the Post Office from downtown. Route 7 should also be extended further south to reach new development on 47th Avenue.

Routes 8 and 9: In the short term, Routes 8 and 9 should be aligned and should provide service to the Verge apartments. In the medium term, aligned Routes 8 and 9 will provide daytime service for the area previously covered by Route 13.

Route 10: In the short term, Route 10 should shift to bi-directional service, starting downtown and ending at the Columbia Mall. Transfer locations with Route 7 should be promoted for connections to Hugo's on 32nd and the Grand Cities Mall.

Route 12: In the short term, Route 12 should be discontinued as fixed-route service. In the medium term, replacement of Route 12 daytime and evening service should be included in the microtransit study.

Route 13: In the short term, service should continue as it is today. In the medium term, the microtransit study should include replacing Route 13 with nighttime microtransit service.

Route 17: In the short term, funding opportunities for this new route should be pursued through public-private partnerships or other sources. Service in this area should run between 5AM-9AM and 3PM-8PM to accommodate industrial park shift changes. In the medium term, replacement of this route should be included in the microtransit study.

UND CAMPUS SHUTTLE SERVICE

Red Route: In the short term, maintain Red Route service as it is today. In the medium term, reroute to travel to 25th on the east side of campus, and re-time route schedules to reflect new traffic patterns on campus.

Blue Route: Maintain service as it is today.

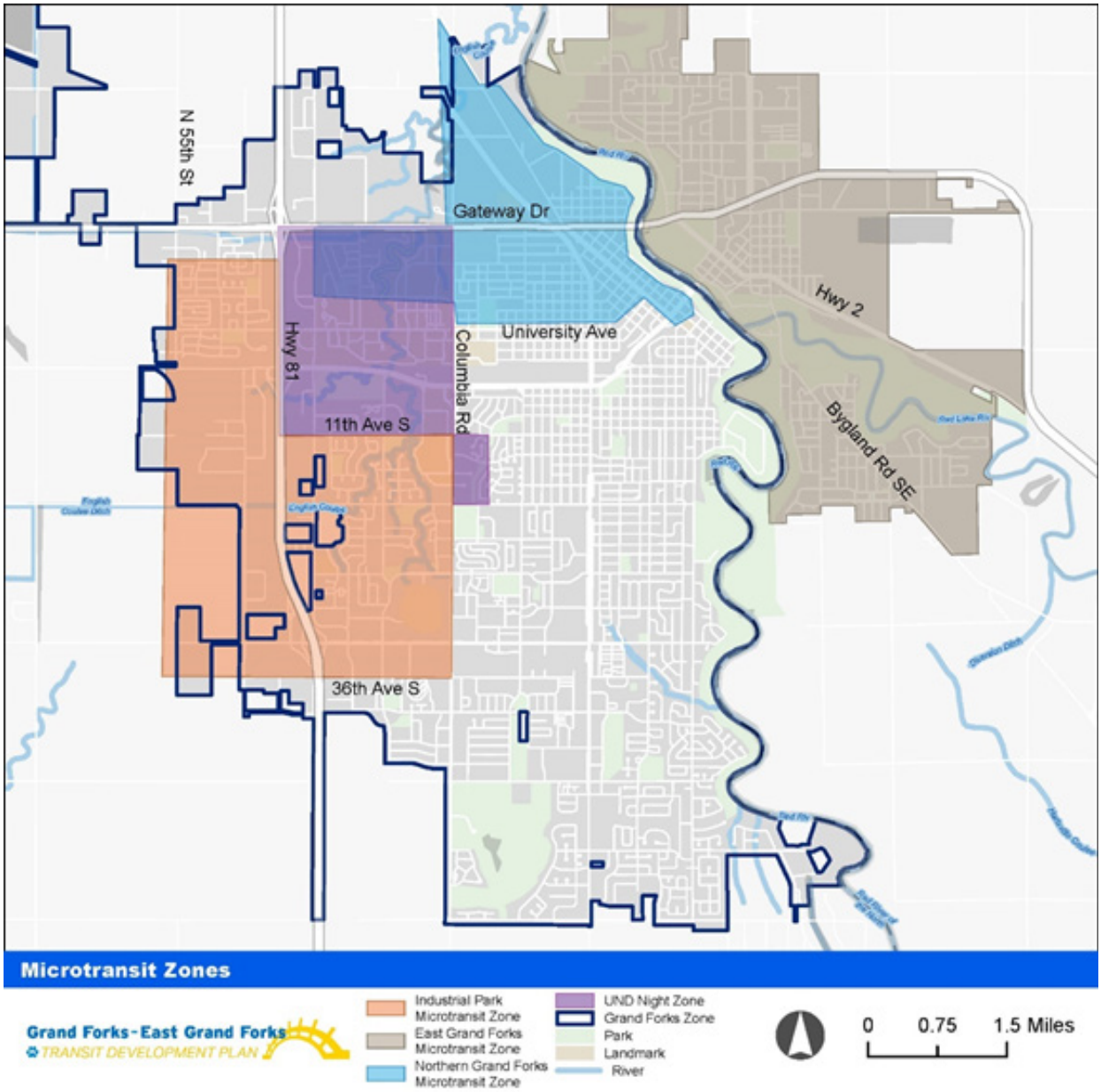
Purple Route: In the short term, maintain Purple Route service as it is today. In the medium term, to improve on-time performance, consider keeping service as it is today along Columbia Road and 6th, assess ridership for the part of the route that deviates to the south to serve Odegard Hall, and remove this stop and follow University Avenue to avoid traffic concerns with the deviation and required left turn.

Black (Night) Route: In the short term, maintain Black Route service as it is today. In the medium term, replacement of this route should be included in the microtransit study, with consideration of implementing weekend service and later evening hours.

MICROTRANSIT

The service recommendations identify several areas of Grand Forks and East Grand Forks where fixed route service may be replaced by on-demand microtransit services in the future. This should be a topic of further study to determine pick-up and drop-off locations for the established zone, develop a user guide and a plan for dissemination/communication of the plan, and establish trial period and metrics for success. These should include quantitative metrics, such as ridership, costs, and on-time performance, and qualitative metrics, such as customer feedback and meetings with UND staff and student leadership.

Figure 9. *Microtransit Zones for Further Study*



Programmatic Recommendations

In addition to specific service changes, the TDP includes a number of program-level recommendations that may help to improve service and customer experience system-wide. These recommendations are explored in-depth in Appendix 5, but examples include:

- Review route timings and schedules and make improvements where necessary for customer experience.
- Implement consistent branding across websites, bus stops and other communications tools.
- Improve CAT's online presence through website updates and the implementation of interactive maps and service planning tools.
- Develop a customer feedback system to allow riders to easily share ideas and feedback with CAT operators.
- Continue to strengthen external partnerships and coordination with Cities, UND, and other partner agencies.
- Continue to monitor and seek additional funding sources.

Capital Improvement Plan and Transit Asset Management Plan

The purpose of this section is to document the Grand Forks–East Grand Forks Public Transit's existing capital assets as well as their replacement needs and future system capital needs. The capital plan will be used to identify the financial resources needed to purchase the capital assets necessary to keep the system in a state of good repair as well as those needed for system growth. The full capital and financial plan is available in Appendix 6.

EXISTING CAPITAL ASSETS

VEHICLES

CAT has a fleet of 26 active vehicles, comprised of 14 fixed route vehicles and 12 demand response vehicles. All vehicles are accessible and feature bicycle racks. These vehicles are stored at the City Bus Garage and Administrative Office.

The fixed route fleet includes 11 heavy-duty buses, one light-duty bus, and two light-duty cutaway buses. The average age of the fleet is 5.8 years. The conditions of the vehicles range between "Good" and "Excellent." The demand response fleet includes 11 light-duty minivans and one light-duty van. The average age of the fleet is 2.9 years. The conditions of the vehicles range between "Good" and "Excellent."

FACILITIES

CAT currently uses two facilities for its operations. The Cities Area Transit Metro Transit Center Downtown facility serves as a bus transfer center, and the Grand Forks Cities Area Transit facility currently functions as a general-purpose maintenance facility/depot. Both facilities are owned by the City of Grand Forks. CAT has made several recent investments to improve facilities.

OTHER INFRASTRUCTURE

CAT also has several other capital assets, including heavy machinery, fare collection equipment, lighting, and cleaning tools necessary to maintain the CAT fleet. The condition of the equipment ranges from "Good" to "Excellent", and the average cost of the assets is $40,372.42. Federal grants, most notably Section 5339 funds, were used to purchase the equipment.

CAT has 49 bus shelters at stops, which provide a glass enclosed structure with benches that protects riders from the weather elements.

EXISTING CAPITAL ASSET REPLACEMENT NEEDS

VEHICLES

Of the existing fleet, two demand response vehicles are beyond their useful life age, and a few fixed route and demand response vehicles are nearing their useful life in both age and mileage. Replacement of these vehicles will be critical to keep assets in a state of good repair and keep CAT service running smoothly.

A vehicle replacement schedule and associated costs were developed for the CAT fleet that extends through the ten-year horizon of this plan. The replacement schedule, if followed, will result in total expenditure of $5,300,00 over a 10-year timespan.

An alternative replacement schedule if the 40' buses are replaced with cutaway buses once they reach their ULB was also developed. Total fleet costs for replacement of the 40' bus fleet with cutaway vehicles are $2,500,000, under half of the total costs of purchasing new 40' buses (i.e., $5.3 million). While CAT staff has inquired about this potential transition of their fleet, further study of different service delivery models, including service, technology, and capital needs, will be required.

SCENARIO	40-FOOT BUSES	20-FOOT BUSES	OTHER VEHICLES	ESTIMATED TOTAL COST
Maintain 40-foot bus fleet	6	2	12	$5,300,000
Transition to 20-foot bus fleet	0	5	12	$2,500,000

FACILITIES

The Grand Forks Cities Area Transit facility was built in 1978 and was rebuilt and remodeled in 2019-2020. CAT consistently maintains its facilities to ensure a state of good repair and includes this in its overall operating budgets. This will be important to continue.

The other facility, Cities Area Transit Metro Transit Center Downtown, is a bus transfer center that has a remaining useful life of 18 years. While this facility continues to meet the needs of CAT, future budgets should consider additional improvements to or future replacement of this facility, given its growing age.

OTHER INFRASTRUCTURE

Other transit infrastructure is active and in good or excellent condition. All equipment is active and in good or excellent condition. However, these assets will need to be replaced over time as they age and may no longer meet CAT operations and service requirements.

Useful life benchmarks (ULBs) for each asset in CAT's capital equipment list were identified using FTA Transit Economic Requirements Model (TERM) Lite ULB guidance. Based on the identified ULBs, only the fare collection equipment purchased in 2017 is scheduled to reach its useful life over the next ten years. Replacement costs for the fare collection equipment are estimated to be $55,564 in 2029 YOE$.

FUTURE CAPITAL ASSETS NEEDED

OTHER CAPITAL NEEDS – SERVICE RECOMMENDATIONS

New Route 17: CAT has proposed the addition of Route 17 to its fixed-route system, which would serve the Grand Forks Industrial Park. CAT can implement this new route without purchasing a new expansion vehicle by reallocating Route 12 equipment (i.e., one bus).

Bus Stop Improvements and Safe and Accessible Paths: Providing increased space and accessible paths within roadway right-of-way for bus stops and passenger amenities enhances access to transit and improves customer satisfaction levels as CAT, Grand Forks MPO, and other agency partners undertake roadway improvement projects. CAT should collaborate with partners to develop and maintain a cohesive inventory of transit assets including, but not limited to, bus stop locations, route maps, accurate timetables, and amenities.

Furthermore, it is recommended that CAT identify non-compliant bus stop locations (i.e., ADA) in the bus stop inventory and prioritize the construction of ADA-compliant bus boarding pads, passenger amenities such as benches and shelters, and accessible paths.

Based on public engagement with CAT patrons and other community stakeholders, providing a comfortable means of accessing bus stops is essential for patrons heavily reliant on non-motorized travel to access transit. CAT plans to work further with the Grand Forks-East Grand Forks MPO and other community partners to prioritize improvements in the bicycle and pedestrian network to enhance connections to existing transit lines.

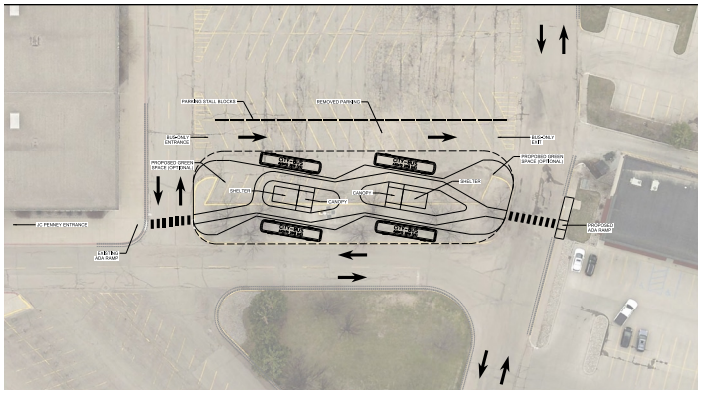
Bus Stop Construction Costs: Cost estimates for the design and construction of bus shelters along with a range of pricing for various stop amenities were developed. The cost to install a package of upgraded amenities, including a shelter, bench, lighting, trash receptacle and bike rack, was found to range between $6,700 and $17,800 per location, depending on a range of factors. The design and engineering costs are based on peer-reviewed information from other small and large transit agencies. Stop amenity costs reflect 2022 pricing obtained for Buy America compliant bus stop infrastructure collected from multiple transit shelter vendors.

Zero Emission Buses and Solar Additions to Facilities: CAT is currently looking towards transitioning to a zero-emission fleet and aims to explore feasibility through a Zero Emission Fleet Transition Plan. The Zero Emission Transition Plan is essential for CAT and other transit agencies to be able to apply for various Federal Transit Administration (FTA) grants that support the transition to zero or low-emission fleets and other related infrastructure and facilities.

The Bipartisan Infrastructure Law, as enacted in the infrastructure Investment and Jobs Act (IIJA), reauthorized surface transportation programs for FY 2022-2026. Transit agencies transitioning towards low and zero-emission vehicles and facilities can apply for such programs as the Grants for Buses and Bus Facilities Formula Program – 5339(a), Grants for Buses and Bus Facilities Competitive Program - (49 U.S.C. 5339(b)), and the Low and No-Emission Vehicle Program – 5339(c).

TRANSIT HUB IMPROVEMENTS

CAT operates transit hub facilities at Columbia Mall, Grand Forks Mall, and at Metro Transit Center (MTC). While the MTC serves as the central transit hub for CAT's system, Columbia Mall and Grand Forks Mall serve as essential hubs for many of the system's routes. Currently, proposed enhancements to all three centers are intended to improve overall operations and accessibility.



Example of Columbia Mall proposed upgraded transit hub.

Coordinated Public Transit-Human Services Transportation Plan

The CHSTP as a subset of the overall TDP focuses on addressing transportation needs for three specific target groups: elderly, low-income and minority and individuals with disabilities. The demographic and geographic context of these populations was discussed in depth in the Existing Systems Analysis. The full CHSTP is available in Appendix 5.

EXISTING PROVIDERS AND DEMOGRAPHICS

Assembling a mobility management framework starts first with a documentation of current transportation assets in the community. Existing providers include public, county-operated transportation services, private bus and taxi services, and transportation programs operated by human services agencies. These providers tend to offer more specialized services and, in many cases, transportation provided by these groups is available only for clients specific to a facility or organization.

DEMAND RESPONSE CHARACTERISTICS

There were over 65,000 rides given on the Demand Response system in 2019. Ridership fell for the first time in 2020 when only 38,000 rides were provided. About 60% of Demand Response trips were paratransit and 40% were senior rides in 2020. Paratransit had a 6% decline in ridership and senior riders had an 11% growth rate from 2013-2020. Thus, senior rider service is growing while paratransit service is declining.

SYSTEM NEEDS AND ISSUES

The CHSTP identifies several system needs and issues. As part of the public input process, the base set of transportation barriers from the 2012 and 2017 CHSTP were discussed and evaluated. Based on the input received from key stakeholders, including CAT and the MPO, those barriers were evaluated for development of an updated framework.

As part of the engagement process, a focus group was held with agency and human services providers in which several issues were highlighted as new or additional concerns regarding coordination of services. Insight was also gathered from project staff and the TDP Steering Committee. New transit system issues include: the existing application process, technology access, funding coordination, and agency responsibilities.

PROGRAM GUIDANCE

Having considered the range of most significant transit system issues and human service barriers, the following set of programmatic strategies that would serve to improve the overall transportation options for targeted populations. Further, these efforts would improve the dialogue among human service agencies and significant transportation providers in the Grand Forks-East Grand Forks area.

- **System Route Improvements:** As CAT seeks to improve the fixed route system, the areas of frequency, service span, Sunday service, service area, and route connectivity were all considered. More detail will be provided in the recommendations section of the TDP.
- **Microtransit Implementation:** Implementation of microtransit could provide more cost-efficient service than the current demand response service by limiting unnecessary miles from the fixed route system.
- **System Coordination:** A major overall issue identified is the system coordination. Several initiatives should be explored to improve outreach and marketing to disadvantaged populations within the larger community.

  - Establish Dedicated Senior/Paratransit Coordinator Role
  - Annual "Major Users" Meeting
  - Community Agency Networking Association
  - Interagency Forum
  - Rural Transportation Collaborative
  - Northwest Regional Transportation Coordination Council
  - Intercity Service Coordination

- **Targeted Marketing Materials and Communications:**
  - Directory of Transportation Services (Annual Update) – Print + Web
  - Senior and Paratransit Ride Guides
  - How to Ride Seminars
  - Online Comment and Question Portal
- **Eligibility and Screening:**
  - Eligible User Lists
  - Applications and Initial Screening
- **Service and Program Development Coordination:** Through the communications strategies listed above, CAT and the MPO can collaborate with area providers to support the allocation of funding in the best ways possible.
  - Capital and Operating Needs (Agencies)
  - Community Capital Assistance Program
  - Coordinated Service Delivery Initiative
- **Full Cost Allocation:** Full cost allocation models look to partner with agencies who receive the benefit of CAT services for their clients but are not currently sharing in the cost of those services. Pricing for agency rates can range anywhere from a full cost allocation of the ride to a price brokered between CAT and affected agencies.

PROJECT PROGRAMMING AND PRIORITIZATION

This section of the CHSTP provides an overview of the project programming and prioritization process for implementation of this element of the Transit Development: Section 5310, Section 5539, Section 5309, Community Development Block Grant (CDBG) and Community Service Block Grant (CSBG). These will be discussed in more detail in the financial plan section of this TDP.

The following table shows prioritization of the strategies listed above based on goals established for the CHSTP federally. The Top Priority Strategies are strategies that could be the first step, shorter-term actions (1-2 years). Secondary Priority Strategies include policies and programs that may require initial steps or more input from policymakers and could fit in a medium-term timeline (3-5 years).

CHSTP GOALS	TOP PRIORITY STRATEGIES	SECONDARY PRIORITY STRATEGIES
Promote interagency cooperation and the establishment of appropriate mechanisms to minimize duplication and overlap of Federal programs and services so that transportation-disadvantaged persons have access to more transportation services.	» Dedicated Senior/Paratransit Coordinator Role » Annual "Major Users" Meetings » Capital and Operating Needs (Agencies)	» Interagency Forum » Rural Transportation Collaborative
Facilitate access to the most appropriate, cost-effective transportation services within existing resources.	» Directory of Transportation Services (Annual Update) - Print + Web » Senior and Paratransit Ride Guides	» Coordinated Service Delivery Initiative
Encourage enhanced customer access to the variety of transportation and resources available.	» How to Ride Seminars » Online Comment and Question Portal	» Intercity Service Coordination
Formulate and implement administrative, policy, and procedural mechanisms that enhance transportation services at all levels.	» Eligible User Lists » Applications and Initial Screening	» Community Capital Assistance Program

Financial Plan

The financial plan is a critical component of the Transit Development Plan that examines the system's current finances, identifies any ongoing funding challenges, and lays out a plan to fund the system over the next 10 years.

Current and Future Revenues

Funding for the CAT system is currently made up of a variety of federal, state, and local sources. An evaluation of local, state, and federal funding was completed based on the Transportation Improvement Programs (TIPs) for the Grand Forks-East Grand Forks Metropolitan Planning Organization (GF-EGF MPO). The first year in each TIP was evaluated for the years 2017 to 2021 and used to provide an annual average based on the five years of inputs for both operational and capital funding.

Funding has been split out for the Grand Forks and East Grand Forks systems separately. This provides for the ability to understand the unique funding mixes for each system.

Table 7. *System Revenue Profile for CAT System (By Source)*

EAST GRAND FORKS			
	Revenue	**% City**	**% of System**
Local	$119,000	15%	3%
State	$502,000	62%	12%
Federal	$191,000	24%	4%
Subtotal	**$812,000**		**19%**
GRAND FORKS			
	Revenue	**% City**	**% of System**
Local	$1,426,000	41%	33%
State	$249,000	7%	6%
Federal	$1,770,000	51%	42%
Subtotal	**$3,445,000**		**81%**
Total	**$4,257,000**		**100%**

Note: State funding for East Grand Forks includes MN State Transit Formula Funds.

Financial forecasts were developed for each of the system's current funding sources. Results of the 10-year revenue forecast are shown in Table 8.

FEDERAL

Federal Section 5307 apportionments under BIL are projected to grow by about 5%. However, a more conservative estimate of 2% is proposed. This rate is lowered also so it can be applied across the life of the 10-year projection, whereas the BIL only goes through 2026. For comparison, under the FAST Act (FY 2015-2019) the rate of growth in the 5307 programs would have been about 2%.

The 2% forecasts should apply equally to both the Grand Forks and East Grand Forks system revenues for Federal funds.

STATE

State funding for public transit is different between both Minnesota and North Dakota. Historic trends and current budget outlooks for both states demonstrates that real growth rates will likely differ. For example, MnDOT is likely to enhance funding for transit operators, while state aid for public transit in North Dakota continues to grow slowly. However, for consistency in this analysis, ***the same growth rate of 2.5% is used for both states*** based on an average.

LOCAL

Local funding for transit will be set at 2% growth rate for both Grand Forks and East Grand Forks. This should be seen as the bare minimum needed to match anticipated increases in Federal funds under BIL. In fact, later stages of the TDP may identify the need to recommend greater increases in local funding assumptions to meet gaps in either local match or publicly desired services levels.

STIMULUS FUNDING

Recent one-time awards from the CARES Act and ARPA were excluded from the financial analysis. East Grand Forks currently has approximately $110,000 in unused ARPA funds and no remaining CARES funds. Grand Forks currently has $600,0000 in ARPA and $750,000 in remaining CARES funds. Assumptions regarding expenditures of these funds will be coordinated into the development of TDP financial forecasts.

Table 8. *Ten-Year Revenue Forecast by System and Source*

EAST GRAND FORKS											
	Revenue	% City	% of System	YoY Inflation Rate	10 Year Revenue Forecast								
2022					2023	2024	2025	2026	2027	2028	2029	2030	2031
Local	$119,000	15%	3%	2%	$121,380	$123,808	$126,284	$128,809	$131,386	$134,013	$136,694	$139,427	$142,216
State	$502,000	62%	12%	2.5%	$514,550	$527,414	$540,599	$554,114	$567,967	$582,166	$596,720	$611,638	$626,929
Federal	$191,000	24%	4%	2%	$194,820	$198,716	$202,691	$206,745	$210,879	$215,097	$219,399	$223,787	$228,263
Subtotal	**$812,000**	**100%**	**19%**		**$833,260**	**$855,096**	**$877,523**	**$900,559**	**$924,221**	**$948,525**	**$973,489**	**$999,133**	**$1,025,475**
GRAND FORKS													
	Revenue	% City	% of System	YoY Inflation Rate	10 Year Revenue Forecast								
2022					2023	2024	2025	2026	2027	2028	2029	2030	2031
Local	$1,426,000	41%	33%	2%	$1,454,520	$1,483,610	$1,513,283	$1,543,548	$1,574,419	$1,605,908	$1,638,026	$1,670,786	$1,704,202
State	$249,000	7%	6%	2.5%	$255,225	$261,606	$268,146	$274,849	$281,721	$288,764	$295,983	$303,382	$310,967
Federal	$1,770,000	51%	42%	2%	$1,805,400	$1,841,508	$1,878,338	$1,915,905	$1,954,223	$1,993,307	$2,033,174	$2,073,837	$2,115,314
Subtotal	**$3,445,000**	**100%**	**81%**		**$3,512,655**	**$3,581,644**	**$3,651,995**	**$3,723,733**	**$3,796,886**	**$3,871,482**	**$3,947,551**	**$4,025,120**	**$4,104,220**
System Total	**$4,257,000**		**100%**		**$4,345,915**	**$4,436,740**	**$4,529,518**	**$4,624,292**	**$4,721,107**	**$4,820,007**	**$4,921,040**	**$5,024,253**	**$5,129,695**

CURRENT AND FUTURE EXPENSES

An evaluation of Grand Forks Budget Performance Reports was conducted based on the years 2018-2021. This evaluation provides a baseline expense profile for each component of Cities Area Transit (CAT) Transit System. Expenses were isolated into three primary categories: Labor, Operations & Maintenance (O&M) and Capital.

Table 9. *Expense Profiles for CAT System (by mode)*

COST CATEGORY	CATEGORY DESCRIPTION	TOTAL	
Labor	Employee wages and benefits	$1,785,326	
Operations & Maintenance	Fuel, supplies, insurance, maintenance, professional services, and building operations	$728,056	
		$2,513,382	*Subtotal - Operations*
Capital	Vehicles, equipment, and infrastructure	**$1,053,650**	*Subtotal Capital*
		$3,567,032	*Total - Fixed Route*
Labor	Employee wages and benefits	$1,126,000	
Operations and Maintenance	Fuel, supplies, insurance, maintenance, professional services, and building operations	$169,326	
		$1,295,326	*Subtotal - Operations*
Capital	Vehicles, equipment, and infrastructure	**$179,683**	*Subtotal Capital*
		$1,475,683	*Total – Demand Response*
		$5,042,041	**Total**

**Grand Forks Budget Performance Reports (2018-2021)*

FUTURE OPERATING EXPENSES

Based on recent inflation trends, as well as historic data, expenses are forecast to increase approximately 4% per year over the life of the financial plan.

Using National Transit Database (NTD) CAT System profile data from 2013-2020, average per-revenue hour expenses were calculated for both fixed route and demand-response services, as shown below in Table 10.

Table 10. *Costs per Vehicle Revenue Hour by Mode*

	2022	2031
Fixed Route Cost per VRH	$91.98	$130.92
Demand-Response Cost per VRH	$57.52	$81.87

Based on 2022 Operating Costs and the Combined System baseline average of 49,842 AVRH per year, current 2022 Combined System Expense (Cost) per VRH is $76.42. At the midpoint forecast in 2026, Cost per VRH increases to $89.40, and to $108.76 in 2031. Over the ten-year forecast period, the Combined System Cost per VRH increases approximately $33.00. Total System Wide Expenses (excluding capital costs), increase $1.6 million over the 10-year forecast period from $3.8 million in 2022, to 4.5 million at the midpoint in 2026, to $5.4 million in 2031. Refer to Table 11.

Table 11. *Forecasted Total System Expenses*

COMBINED SYSTEM EXPENSES: EXCLUDING CAPITAL - (10 YR. FORECAST): ASSUMES INFLATION FACTOR OF 4% YOY										
YEAR	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
TOTAL EXPENSES	$3,808,708	$3,961,056	$4,119,499	$4,284,279	$4,455,650	$4,633,876	$4,819,231	$5,012,000	$5,212,480	$5,420,979
TOTAL: Operating Expenses (Cost) per Vehicle Revenue Hour	$76.42	$79.47	$82.65	$85.96	$89.40	$92.97	$96.69	$100.56	$104.58	$108.76
TOTAL: Averaged Annual Vehicle Revenue Hours (AVRH)										**49,842**

Summary

Over the 10-year financial plan period, operating expenses are increasing faster than system revenues. This is forecasted to result in an operating shortfall by the year 2029 if not corrected. Additional sources of local funding may be necessary to shore up system finances if expenses continue to increase at the forecasted rates.

Table 12. *Projected Surplus/Shortfall*

YEAR	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Total Revenues	$4,257,000	$4,345,915	$4,436,740	$4,529,518	$4,624,292	$4,721,107	$4,820,007	$4,921,040	$5,024,253	$5,129,695
Total Expenses	$3,808,708	$3,961,056	$4,119,498	$4,284,278	$4,455,649	$4,633,875	$4,819,230	$5,011,999	$5,212,479	$5,420,979
Surplus/Shortfall	$448,292	$384,839	$317,164	$245,062	$168,322	$86,720	$25	($92,004)	($189,621)	($293,088)

Implementation Plan

Three scenarios were developed for possible implementation: a budget-neutral scenario that follows the existing budget closely, an added-service scenario with more fixed-route service and additional costs, and a microtransit scenario where some fixed-route service is replaced by microtransit service, at a small cost increase from the existing budget.

Service recommendations can be implemented on a short- or medium-term time frame. These strategies have been aligned with plan goals.

Budget Scenarios Summary

YEAR	SERVICE CONDITIONS	APPROXIMATE TOTAL ANNUAL REVENUE HOURS	COST BASED ON 2022 COST PER REVENUE HOUR	DIFFERENCE FROM EXISTING CONDITION
Budget Neutral	» Replaces route 4 service with route 6 Service » Includes route modifications listed above » Assumes Route 12 is eliminated as it is today	37,800	$3,300,000	Costs are estimated to remain neutral or drop up to $100,000
Added Service	» Add service hours for an industrial park route which would run 5-9AM and 3-8PM Monday-Friday » Add 11 daily revenue hours to either increase frequency or span for Route 5	» Adds around 2,700 revenue hours for the industrial park route » Doubles revenue hours for the Route 5 » Total added annual revenue hours: 3,400	$3,790,000	Estimated $310,000 added to budget from existing conditions
Microtransit Implementation	» Will replace or supplement existing fixed-route service. See recommendations by route for details	Includes about 13,500 revenue hours for microtransit in place of fixed route services	$3,520,000	Estimated $40,000 added to budget from existing conditions

SHORT TERM

Could be implemented immediately

CAT SERVICE

Routes 1 and 2: Routes should be maintained as they are and funding possibilities for fixed-route school bus service should be explored.

Goals supported: Fiscal Sustainability and Efficient System Management

Route 3: Service should be maintained as-is. A stop-level study should be conducted to determine options to simplify the route.

Goals supported: Service Quality

Routes 4 and 6: Routes 4 and 6 should be combined and the new Route 6 should run interlined with Route 3 to determine any schedule issues. Options for better pedestrian connections from Altru Clinic and surrounding clinics in East Grand Forks to DeMers Avenue should be studied; these would enable the route to run directly on DeMers rather than deviating.

Goals supported: Multimodal Connectivity, Service Quality, Equity

Route 5: Route 5 should remain as it is today, and funding partnerships with the school district for K-12 bussing should be explored.

Goals supported: Fiscal Sustainability and Efficient System Management

Route 7: Route 7 should be modified to be more direct. The connection to Target should be removed and transfers to Routes 8 and 9 should be encouraged instead. The route should provide a direct connection to the Post Office from downtown. Route 7 should also be extended further south to reach new development on 47th Avenue.

Goals supported: Community Connectivity, Service Quality

Route 8: Routes 8 and 9 should be aligned into one bidirectional route that provides service to the Verge apartments.

Goals supported: Community Connectivity

Route 10: Route 10 should shift to bi-directional service, starting downtown and ending at the Columbia Mall. Transfer locations with Route 7 should be promoted for connections to Hugo's on 32nd and the Grand Cities Mall.

Goals supported: Community Connectivity

Route 12: Route 12 should be discontinued as fixed-route service and converted to on-demand service, providing connection to Route 6 for inter-city transportation.

Goals supported: Community Connectivity

Route 13/22: Service should continue as it is today, as Route 22.

Goals supported: Service Quality

UND CAMPUS SHUTTLE SERVICE

All routes: Maintain service as it is today.

DEMAND-RESPONSE SERVICE

Consider options for shared taxis to fill some gaps in service, lower costs and provide quicker turnaround of service.

Goals supported: Service Quality, Accessibility, Fiscal Sustainability, and Efficient System Management

MEDIUM TERM

Could be implemented before the next TDP

CAT SERVICE

Routes 1 and 2: Microtransit should be studied as a potential option for the future.

Goals supported: Community Connectivity, Service Quality, Fiscal Sustainability, and Efficient System Management

Routes 4 and 6: Implement better pedestrian connections to Demers Avenue.

Goals supported: Multimodal Connectivity, Equity

Route 5: Route 5 should run twice an hour and into the evening.

Goals supported: Equity

Route 8: Route 8 should replace Route 13 for evening service.

Goals supported: Service Quality

Route 12: Replacement of Route 12 daytime and evening service should be included in the microtransit study.

Goals supported: Community Connectivity, Service Quality, Fiscal Sustainability and Efficient System Management

Route 13: The microtransit study should include replacing Route 13 with nighttime microtransit service.

Goals supported: Community Connectivity, Service Quality, Fiscal Sustainability and Efficient System Management

Route 17: This route can be implemented through fixed-route or microtransit service. To compare these options, replacement of the proposed route should be included in the microtransit study, and funding opportunities for fixed-route service through public-private partnerships or other sources should be researched as well. Service in this area should run between 5AM-9AM and 3PM-8PM to accommodate industrial park shift changes.

Goals supported: Community Connectivity, Equity, Service Quality, Fiscal Sustainability, and Efficient System Management

UND CAMPUS SHUTTLE SERVICE

Red Route: Reroute to travel to 25th on the east side of campus and re-time route schedules to reflect new traffic patterns on campus.

Goals supported: Service Quality

Purple Route: To improve on-time performance, consider keeping service as it is today along Columbia Road and 6th, assess ridership for the part of the route that deviates to the south to serve Odegard Hall, and remove this stop and follow University Avenue to avoid traffic concerns with the deviation and required left turn.

Goals supported: Service Quality

Black (Night) Route: Replace night service with a microtransit pilot and consider implementing weekend and later evening hours.

Goals supported: Equity, Service Quality

DEMAND-RESPONSE SERVICE

Consider integration of services with the microtransit service. Demand-response services are different from microtransit service in that they provide origin-to-destination services and assistance for riders, while microtransit provides pick-up and drop-off locations within a zone. CAT's service with Routematch could be used to integrate these two services. This should be part of the microtransit study.

Goals supported: Service Quality, Accessibility, Fiscal Sustainability and Efficient System Management

RECOMMENDED FURTHER STUDIES

ADA Improvements Study: Updates to capital and communications. Examples of capital improvements include ADA pads and shelters. Examples of communications improvements include websites and other media in ADA-accessible formats.

Airport Connectivity Study: Consider options to collaborate with public and private partners to provide regular service to the airport. Collaborate with airport to determine ideal scheduling.

Industrial Park Service Study: Review existing research on this service area. Develop ridership estimates and proposed cost sharing.

Microtransit Study: A microtransit study should be conducted in the short term for implementation of micro transit options in the long term. The study should include costs, a transition/education plan, anticipated ridership, fare review, a plan for integration with demand-response service, and a review of peer agency best practices.

Rideshare Alternatives Study: Investigate use of federal funding for rideshare reimbursement.

Zero Emission Fleet Transition Plan: Identify the necessary investments and improvements needed to transition the CAT fleet to 100% zero-emissions vehicles. This study will be required in order to access certain future federal funding sources.