

Grand Fork – East Grand Forks 2035 Long Range Transportation Plan Executive Summary



November 2007

M.P.O.
M.P.O.
M.P.O.

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Disclaimer:

This publication is produced with funds from the Federal Highway Administration, Federal Transit Administration, North Dakota Department of Transportation, Minnesota Department of Transportation, and local supporting governments and agencies. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the NDDOT, Mn/DOT, or the FHWA/FTA.

Table of Contents

I.	Introduction	4
	Public Participation.....	5
II.	Goals, Objectives, and Standards	7
	Goal 1	7
	Goal 2	10
	Goal 3	12
	Goal 4	14
	Goal 5	17
	Goal 6	18
	Goal 7	20
	Goal 8	21
III.	Socioeconomic Characteristics	22
	Demographics	22
	Population Increase	22
	Land Uses	23
	Housing Increases	26
	Employment Increases	26
IV.	Future Transportation Improvements	26
	Streets and Highways	26
	River Crossings	31
	Transit	31
	Pedestrian and Bicycle	32
V.	Funding	36
	Funding Approach.....	36
	Street and Highway Funding Estimates.....	37
	Street and Highway Funding Projections.....	38
	Federal Funding Sources under SAFETEA-LU.....	39
	Comparison of Plan Costs and Funding Capacity.....	42
	Pedestrian and Bicycle Funding	46
	Intelligent Transportation Systems	46
	ITS Timeframe.....	47
	Transit Funding	48
	Recommended Transit Plan Operating Analysis	51
	Capital	52
	Coordination.....	53
VI.	Transportation Plan Amendment Policy and Procedures	55
	MPO Executive Policy Board	55
	MPO Technical Advisory Committee	55

Tables	
Table 1	8
Table 2	16
Table 3	22
Table 4	22
Table 5	40
Table 6	43
Table 7	47
Table 8	50
Table 9	51
Table 10	52

I. INTRODUCTION.

The Grand Forks – East Grand Forks MPO was formed in 1980 after Grand Forks and East Grand Forks was declared a contiguous metropolitan area, meeting the criteria of a census population over 50,000. The MPO planning area is comprised of the City of Grand Forks, the City of East Grand Forks, and portions of Grand Forks and Polk Counties (figure 1). The Grand Forks – East Grand Forks MPO is the planning agency responsible for multi-modal transportation planning in the region, including automobile, truck, pedestrian, bicycle, and bus transit travel.

The transportation system, as it exists, is one of the most pervasive components of any urban environment. A person's ability to work, shop and recreate is dictated to some degree by how well the transportation system works. A plan needs to be developed to assure that a safe, adequate transportation system is produced and maintained to provide the service that is needed today as well as to meet the public needs in the future. The Safe, Accountable, Flexible, Efficient Transportation Act – A Legacy for Users (SAFETEA-LU), the current federal transportation legislation, and other planning practices provide guidance and direction in the development of such a plan.

The SAFETEA-LU directs each Metropolitan Planning Organization (MPO) to provide a cooperative, continuing and comprehensive framework for making transportation investment decisions in metropolitan areas through the use of a Long Range Transportation Plan (LRTP). This long-range plan outlines the goals, policies and actions needed to maintain the competitive edge of a region's economy and to provide access to opportunities for its residents. Given financial constraints, this plan proposes to put forth those transportation projects that maximize the return on investment.

The 2035 LRTP provides a coordinated and long-range vision of the regionally significant transportation improvements and policies that will be needed to efficiently move goods and people within and through the MPO study area. All transportation initiatives presented by the Grand Forks – East Grand Forks LRTP will be made within the confines of the SAFETEA-LU, the Clean Air Act of 1990, as amended, the Americans with Disabilities Act of 1990, the National Environment Policy Act, local comprehensive plans and local regulations and ordinances.

The Grand Forks – East Grand Forks 2035 Long Range Transportation Plan Executive Summary incorporates the principles of existing modal plans and specialized MPO documents including:

- Street and Highway Plan (2007), which focuses on the street and highway element of the multimodal transportation system and reflects changes in the study area. This plan is concerned with the modes of automobile and truck transportation in the region.
- Alternative Transportation Modes Plan (2007), which focuses on the alternative transportation needs of the MPO study area for the next 20 or more years. This plan is concerned with the modes of pedestrian, bicycle and transit bus transportation in the region.
- Public Participation Plan (2006), which defines principles and strategies for public involvement throughout the transportation planning process.

- Coordinated Transportation Plan (2005), which focuses on community coordination of transportation resources and services provided through multiple Federal programs. This plan is concerned with encouraging the most cost-effective transportation possible and minimizing the duplication of Federal services.
- Regional Intelligent Transportation Systems (ITS) Architecture (2005), which guides the implementation of ITS systems in the MPO region and coordinates funding, deployment, information sharing, and operations of ITS systems in the region.

Public Participation

The Grand Forks – East Grand Forks MPO has long believed in fostering public participation early and often in the planning process. The MPO has actively involved the public through meetings and hearings to formally obtain public input. All of these activities were held on a project-by-project basis and without a formal, comprehensive strategy for involving the public in the planning process.

The passage of SAFETEA-LU legislation in 2005 increased public involvement standards of transportation planning entities. In order to support the Grand Forks – East Grand Forks MPO's commitment to equally involve the public early and often in the planning and project development process, a cohesive, comprehensive Public Participation Plan (PPP) was developed in 2006. To guide the preparation of the PPP, the following mission statement was adopted by the Grand Forks – East Grand Forks MPO:

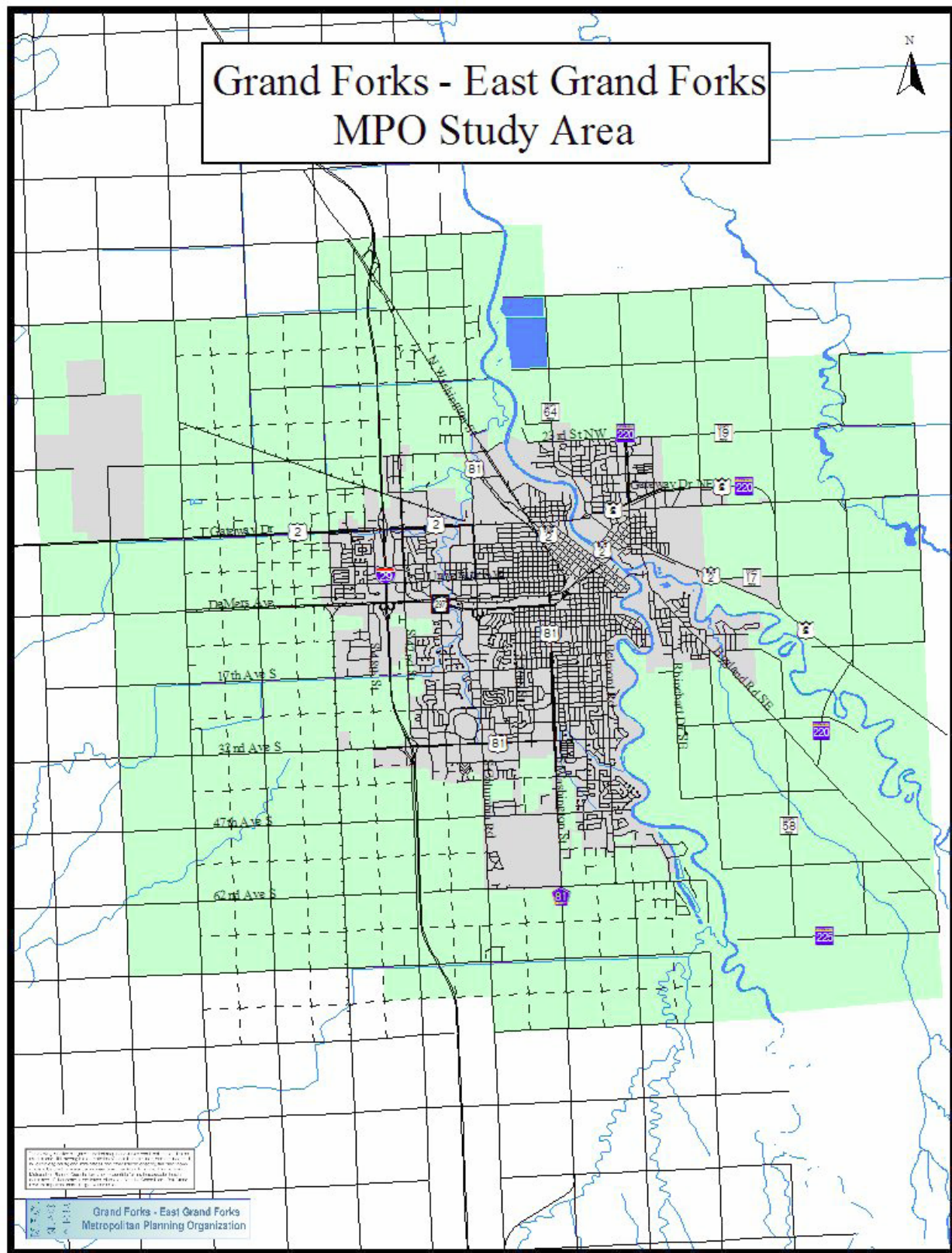
To make public participation an integral element of all transportation planning activities.

To ensure compliance with this statement, the Public Participation Plan has the following goals:

- to provide a proactive public involvement process;
- to provide complete information associated with transportation planning and programming;
- to provide timely public notice; and
- to provide full public access to key decisions.

These goals support early and continuing involvement of citizens, public agencies, transportation agencies, operators of major transportation systems, and other interested parties affected by transportation plans, programs, and projects. The PPP fosters an intermodal approach to transportation planning, in that all modes of transportation are considered.

Figure 1



II. GOALS, OBJECTIVES, AND STANDARDS.

Clearly defined goals, objectives, and standards help form the foundation of a transportation plan. Together, they form a vision of how the transportation system is intended to function. By their nature, they provide both a clear picture of the intent of the transportation system, as well as a way to evaluate the degree to which the plan has succeeded. The goals are applicable to all transportation modes addressed in this plan (street the highway, transit, bikeway, and pedestrian). While the objectives and standards are specific to each of the four transportation modes, they are still consistent with the overall goals of the LRTP.

A set of eight goals has been established for the transportation plan. They include:

Goal #1	Provide a Safe Transportation System.
Goal #2	Provide an Efficient Transportation System.
Goal #3	Provide Mobility and Accessibility to Transportation System Users.
Goal #4	Ensure that Transportation and Land Use Systems are Compatible.
Goal #5	Minimize Adverse Impacts from Transportation.
Goal #6	Finance the Transportation System.
Goal #7	Promote a Balanced, Compact Land Use Growth Pattern.
Goal #8	Provide a Secure Transportation System

Goal # 1 – Provide a Safe Transportation System

Objectives:

All Modes

- Preserve and maintain the existing transportation facilities.
 - Std. Pavement, signal systems, signage, striping, and other features of the transportation infrastructure which influence traffic movement should be maintained to a level which permits safe traffic operation.
 - Std. Review and update maintenance goals and objectives.
- Identify and incorporate available state Strategic Highway Safety Plans (SHSP) into Plan update.
 - Std. Recommended improvements should not conflict with the SHSPs of North Dakota and Minnesota.

Streets and Highways

- Reduce incidence of traffic crashes on the roadway system.
 - Std. A reduction in crash rates and number of crashes compared with previous years, by type of facility.
 - Std. Identification and reduction in crashes at high-incident locations.
- Preserve, maintain and improve identified safe routes to school (SRTS) routes.
 - Std. Recommended street and highway improvements adjacent to an SRTS route should not degrade pedestrian and bicycle safety, and when possible should enhance pedestrian and bicycle safety.

Public Transit

- Provide safe on-board service.

Std. The number of bus crashes, as defined by the National Transit Database Reporting System, shall not exceed two per 100,000 bus miles.

Bikeway/Pedestrian

- Adopt a manual for bicycle/pedestrian facility design standards.

Std. Utilize Federal Highway Administration design standard guidelines.

Std. Utilize MNDOT design standard guidelines.

Std. Utilize AASHTO Guide for the Development of Bicycle and Pedestrian guidelines.

- Reduce points of automobile conflicts with non-motorized traffic.

Std. Educate bicyclists, pedestrians and drivers of the rules of the road.

Std. Develop a bicycle and pedestrian friendly roadway environment.

Std. Implement for sidewalk locations per AASHTO standards in Table 1 below.

Std. Adopt guidelines for safe pedestrian crossings.

Std. Continue the use of easements as a means of providing a continuous network of pedestrian facilities.

Table 1. The following information was taken from: *A Policy on Geometric Design of Highways and Street* (AASHTO, 2001). It summarizes guidelines for where to install sidewalks based on land use, roadway functional classification and, as applicable, type of dwelling unit. These guidelines, if followed, will establish a safer, more walkable community.

Types of areas (land-use, or roadway functional classification.)	Where do you need sidewalks with urban and suburban streets?
Commercial and industrial – all streets.	On both sides of these streets.
Residential – arterials.	On both sides of these streets.
Residential – collectors.	Required on one side, but preferred on both sides.
Residential – local streets	Required on one side, but preferred on both sides.
Residential streets with access to schools, parks, shopping areas, and transit stops.	On both sides of these streets.

Notes:

1. You may omit a sidewalk on one side of any new street when that side of the street clearly cannot be developed, and when there are no uses or planned uses for that side of the street that would encourage people to walk there.
2. When a main road has a service road, you may eliminate the sidewalk next to the main road if you replace it with a sidewalk on the far side of the service road.

- Reduce bike/pedestrian – auto accidents by 2%, and increase bike helmet use by 3% each year.
 - Std. Seek repeal of state and local laws which state that whenever a usable path for bicycles has been provided adjacent to a roadway, bicycle riders shall use such paths and shall not use the roadway.
 - Std. Include bicycle and pedestrian accidents in the monitoring & surveillance report.
 - Std. Annually identify and remove hazards to bicycle and pedestrian travel as part of maintenance program.
 - Std. Include bicycle and pedestrian facilities as part of Traffic Safety Management.
 - Std. Request that police reports include information on bicycle helmet use in accident reports.
 - Std. Survey bicycle helmet use in the G.F. /E.G.F. Metropolitan area.
 - Std. Request support from health institutions in order to obtain information on bicycle and pedestrian accidents and injuries not reported to police.

- Adopt uniform bicycle/pedestrian traffic control devices.
 - Std. Utilize Minnesota Department of Transportation (MNDOT) Manual on traffic control devices.
 - Std. Utilize uniform manual on traffic control devices.

- Enforce existing laws relating to bicycles and pedestrians.
 - Std. Develop local enforcement programs to target key violations and locations of bicyclists and drivers involved.
 - Std. Encourage the use of bicycle patrols by local police departments in urban areas to provide a good example of bicycling conduct.
 - Std. Develop specific procedures for dealing with young violators.
 - Std. Monitor the number, location, and type of issued citations/warnings related to bicycles.
 - Std. Promote local licensing/registration programs to assist in deterring bicycle theft.
 - Std. Emphasize enforcement of posted automobile speed limits on roadways with designated bike and pedestrian facilities.
 - Std. Enforce ordinance on Parking Near Intersections and Crosswalks.

- Implement bike and pedestrian safety education programs at the local level.
 - Std. Include a bike and pedestrian safety section in the driver education program.
 - Std. Teach basic bike and pedestrian safety to children in Kindergarten through grade 3.
 - Std. Implement school safety patrol program in Grand Forks.
 - Std. Participate in National Bike and Pedestrian Safety Weeks.

Goal # 2 – Provide an Efficient Transportation System

Objectives:

Streets and Highways

- Reduce excessive travel delays.
 - Std. Reduce vehicle-miles of travel (VMT) growth rate.
 - Std. Reduce vehicle-hours of travel (VHT) growth rate.
 - Std. Reduce travel delays.
- Define a proper mix of local, collector, and arterial streets according to land use and network continuity.
 - Std. Establish a network function hierarchy that reflects state guidelines for mileage by classification and that reflects the regional definitions established as part of the planning process.
- Preserve and maintain the street and highway system.
 - Std. Reduce the system mileage that falls below the NDDOT and Mn/DOT minimum thresholds for ride quality/condition.

Public Transit

- Provide efficient and cost-effective service.
 - Std. Monitor and report the following performance measures for fixed route and tripper service for both the peak (September through May) and off-peak (June through August) seasons:
 - Passengers per mile
 - Farebox recovery rate
 - Cost per passenger
 - Cost per mile
 - Cost per hour
 - Std. Monitor and report the following performance measures for demand responsive service:
 - Passengers per mile
 - Farebox recovery rate
 - Cost per passenger
 - Cost per mile
 - Cost per hour
 - Std. Improve reporting requirements through all operating systems.
 - Std. Performance measures should be no less than 75% of the average of transit systems of similar size.
- Reduce the cost of service delivery through service coordination.
 - Std. Promote and encourage an increase in multiple loads on demand response service.

- Assign riders to Dial-A-Ride and to accessible fixed route service based on user needs.
 - Std. Develop and maintain a centralized eligibility screening system for the disabled.
 - Std. Implement trip-by-trip eligibility determination for demand response service.

- Comply with federal regulations pertaining to paratransit service.
 - Std. Meet and maintain the ADA service criteria.

Bikeway/Pedestrian

- Maximize direct travel trips between major bicycle generators and destinations.
 - Std. Create a bikeway system using the most direct route by encouraging bicyclists to use on and off road facilities.
 - Std. Establish an inventory of existing and potential bicycle facilities.

- Establish a hierarchy of the bicycle network.
 - Std. Adopt a bicycle facility management system.
 - Std. Adopt a level of importance of bicycle maintenance into the cities' maintenance program.
 - Std. Fund maintenance of selected facilities that contribute to safe, year-round bicycle transportation.
 - Std. Annually update bikeway maintenance and construction map.
 - Std. Create an Adopt-a-Bikeway program.

- Develop a bikeway and pedestrian system utilizing aesthetic areas.
 - Std. Encourage use in the most scenic routes by emphasizing on and off road facilities.
 - Std. Emphasize aesthetic areas when establishing an inventory of existing and potential facilities.

- Develop 50 additional miles of bikeway network by the year 2030.
 - Std. Provide bicycle facilities on arterial and collector streets.
 - Std. Provide bicycle facilities along all scenic routes.
 - Std. Coordinate with other agencies, authorities, and groups to complete the bicycle network.

Goal #3: Provide Mobility and Accessibility to Transportation System Users

Objectives:

Streets and Highways

- Provide access control guidelines for functionally classified facilities.
 - Std. Roadway system mileage that is compatible with local access guidelines for collector and arterial streets.
- Establish standards for location of local, collector, arterial, and freeway facilities.
 - Std. Document that new roadways conform to adopted local, state and national standards and practices
- Provide an acceptable level of service for all streets during peak hours.
 - Std. Provide the locally desired level of service C where practical (with the understanding that Mn/DOT sets a lower level of service D threshold for determining deficiencies on the trunk system).

Public Transit

- Provide travel times that are as competitive with the automobile as possible.
 - Std. Allow fixed-route riders to travel from any point on the system to any other point within one hour.
 - Std. Operate routes on half-hour or hour headways.
 - Std. Implement ITS architecture and strategies to facilitate an efficient transit system.
- Serve the transit dependent population.
 - Std. Collect and analyze data showing population information to identify areas of transit dependency.
- Maintain existing ridership and attract new riders.
 - Std. Provide transit service within $\frac{3}{4}$ mile of residential areas and to major activity centers and employment centers.
 - Std. Increase ridership 10% per year throughout the fixed-route transit service.
 - Std. Devote 3% of total operating budget to marketing of the transit service.
- Minimize transfers within the fixed-route transit system.
 - Std. Allow fixed route riders to travel from any point on the system with two transfers or less.

- Provide convenient and dependable service.
 - Std. 80% of bus fleet should not exceed life expectancy of industry standards. Maintain ratio of spare buses to total fleet of 10 percent. Allow no more than one interruption of service for mechanical reasons per 30,000 miles.
 - Std. Maintain telephone hours during normal weekday business hours, with automated information messages operating at all other times. Post timetables at all bus shelters, activity centers, and downtown. Prepare and distribute route maps once a year. Place transit routes and schedules in the public telephone directory and supply to the City's web page.
 - Std. Provide ADA-accessible bus shelters at all major locations (minimum of 25 transit riders/day).
 - Std. Pick-up and drop-off passengers at any safe intersection on each route.

Bikeway/Pedestrian

- Develop a continuous bikeway network by the year 2030.
 - Std. Make connections in current gaps by the year 2020.
 - Std. Include all parts of each city into the development of the bikeway system.
- Provide system of non-motorized transportation facilities that conforms with or exceeds ADA accessibility standards.
 - Std. Grand Forks and East Grand Forks have developed plans to conform to the ADA standards for accessibility. The cities will continue to follow these plans for the installation of curb cuts on existing sidewalks.
 - Std. City staff shall review all plans for new bicycle and pedestrian facilities to ensure that they are ADA compliant.
- Increase uses of non-motorized modes of transportation 10% by the year 2030.
 - Std. Recognize that biking and walking are legitimate modes of transportation.
 - Std. Recognize that all streets are open to bicyclists; yet, also recognize that certain streets need additional treatment to better accommodate bicyclists and their various trip purposes (i.e., work commute, recreational, utilitarian, etc.).
 - Std. Monitor usage of bike facilities as part of the MPO monitor and surveillance program.
 - Std. All roadways should be designed to safely accommodate pedestrian traffic.

Goal # 4 – Provide Compatible Transportation and Land Use Systems

Objectives:

All Modes

- Develop processes to coordinate the transportation plan with local land use planning activities.
 - Std. Plan recommendations should recognize and address the types and locations of future development identified in the Grand Forks and East Grand Forks Land Use Plans.
 - Std. Refrain from street and highway system expansions that promote development which is not contiguous to currently developed areas.
- Consider local economic development activities in the transportation planning process.
 - Std. Invite economic development officials to be a part of the alternative analysis process to provide for comment on the consistency with economic development plans and initiatives.
 - Std. Provide documentation of the alternatives screening process to local economic development officials.

Streets and Highways

- Map the current street system to reflect the appropriate functional classification based on the adjacent activities, characteristics of the street, and the type (urban/rural).
 - Std. Document that the current roadways reflect the established classification guidelines.

Streets and Highways and Public Transit

- Design roadways to new land use using appropriate facility types.
 - Std. Document that new roads are consistent with established functional classification guidelines.

Public Transit

- Integrate transit planning practices with the development approval process.
 - Std. Apply transit design standards to new and renovated developments and roadways through site plan reviews.
 - Std. Incorporate transit as a review item on the development approval process.
 - Std. Encourage Transit Oriented Developments.
- Coordinate with developers in the metro area.
 - Std. Provide assistance to developers utilizing transit friendly designs.

Bikeway/Pedestrian

- Review all development proposals for continuity of this bike and pedestrian plan.
 - Std. Coordinate our local bicycle and pedestrian plan with the MN & ND plans.
 - Std. Require new development and redevelopment to follow the current bike and pedestrian plan by adding bike and pedestrian facilities in their design.
 - Std. Review each city's land use regulations for consistency with this plan.
 - Std. Encourage the consideration of bike and pedestrian travel on all major reconstruction projects.

- Future trail corridors shall reflect current and future growth trends.
 - Std. Prioritize trail development in those areas experiencing residential growth or designated for future residential growth by the Land Use Plans.

Table 2.

Land Use And Transportation Facilities

Land Use	Roadway Facility Type	Transit Service	Freight and Commercial Transportation	Pedestrian and Bicycle Facilities
Residential	Local, with collector streets bordering the land use	Typically on collector streets, low-profile bus stops on local streets	Ideally, no truck routes or rail rights-of-way	Sidewalks, bike and pedestrian trails. Local streets accommodate local bike traffic
Park and Open Space	Local, collector and special use facilities such as parkways	Service provided on periphery and serving main entrance of park	No truck routes allowed, or active rail lines	Extensive pedestrian and bicycle facilities in interior of park, and non-motorized connections to other areas of city
CBD	Collector and arterial	Transit service to the CBD. Transit center provides convenient transfer and schedule information. Transit shelter typically provided.	Truck delivery facilities on and off-street. Rail lines through the CBD should be avoided.	Urban pedestrian and bicycle amenities, such as curb ramps for ADA compliance, pedestrian walk signal, pavement markings, adequate sidewalk width, and bike lanes
Outlying District	Business Collector and arterial	Transit service to a central location. Shelter and schedules often provided.	Truck delivery via arterial and collector streets	Pedestrian Facilities are typically oriented to retail establishments, providing parking lot to front door accessibility. Exclusive bike paths and bicycle storage.
Industrial	Arterial and freeway	Typically no transit service required, but should provide if demand exists	Truck routes provided and truck movements accommodated with wide turning radii	Minimal Pedestrian and Bicycle facilities typically provided
Agricultural/Rural	Freeway and arterial	Typically no transit service required, with some paratransit if demand exists	Agricultural truck hauling requires truck routes serving area farms and processing plants	Minimal Pedestrian and Bicycle facilities due to low demand

Goal # 5 – Minimize Adverse Impacts from Transportation

Objectives:

All Modes

- Minimize, avoid or mitigate adverse social and economic impacts resulting from existing or new transportation facilities.

Std. Initiate corridor preservation and right-of-way acquisition procedures where appropriate.

Std. Incorporate assessment of potential for environmental impacts into the alternatives screening process.

Std. Seek transportation enhancement projects that reduce existing transportation impacts to the environment.

Street and Highway

- Reduce environmental impacts by vehicles.

Std. Reduce VMT and VHT growth rates and optimize vehicle speeds.

Std. Promote projects, policies that increase the use of non-motorized modes, transit, and other travel demand management strategies.

Bikeway/Pedestrian

- Make public participation and education an integral part of the bike and pedestrian plan.

Std. Annually update and publish an informational brochure of the Grand Forks and East Grand Forks bikeway system.

Std. Develop a bicycling/walking awareness campaign with the support of local media and local and national clubs to promote the environmental, social, and health benefits of bicycling and walking.

Std. Organize a “Bike to Work Day” in conjunction with the “National Bike to Work Day”.

Std. Annually perform at least two public presentations for further awareness on bicycle and pedestrian issues.

Std. Submit at least four articles per year to local media promoting all aspects of bicycling or walking.

Std. Develop or acquire at least one radio or television Public Service Announcement (PSA) per year.

Goal # 6 – Finance the Transportation System

Objectives:

Street and Highway

- Identify sufficient funding for each proposed improvement.

Std. Associate funding source(s) with each proposed improvement.
- Identify timing and likelihood of funding. Higher likelihood should be associated with near-term projects.

Std. Increased likelihood of funding, corresponding to the timing of projects.
- Encourage public/private partnerships and other applicable innovative financing alternatives.

Std. Inclusion of public/private partnerships and other innovative funding sources in funding plan.
- Improve the cost-effectiveness of maintenance and preservation of existing pavement.

Std. Develop a life-cycle cost analysis of pavement types for all projects.
- Recognize the relationship between planning and financing of needed transportation infrastructure.

Std. Incorporate transportation facility costs into each community's capital improvement program.
- Increase the flexibility in funding for both construction and maintenance of transportation facilities in the annual transportation budget.

Std. Effect administrative procedures to obtain increased funding flexibility.

Public Transit

- Fund the transportation system.

Std. Identify funding source(s) for each proposed improvement.
Std. Identify timing and probability of funding, through the Program of Projects.

Std. Update the Transit Development Plan every five years.

- Encourage public/private partnerships and other applicable innovative financing alternatives.

Std. Inclusion of public/private partnerships and other innovative funding sources in funding plan.

Std. Seek innovative funding opportunities.

- Improve the cost-effectiveness of the transportation system.

Std. Develop and maintain a fully allocated cost model.

- Find ways to capitalize funding for both construction and maintenance of transit facilities.

Std. Follow administrative procedures to ensure funding flexibility.

Bikeway/Pedestrian

- Develop a life cycle cost analysis of pavement types for all projects.

Std. Require a cost analysis of all bicycle projects by pavement type.

- Utilize the platting process to implement a cost-effective bikeway system.

Std. Commit the necessary right-of-way for trail development during the platting process.

Std. Installation of trail facilities is the responsibility of the developer when associated with new development.

Std. Placement of new trail facilities shall be in accordance with the Grand Forks – East Grand Forks Bikeway Map.

- Minimize developer's construction costs of new trails when possible.

Std. Allow developers to use park dedication fees toward costs of trail construction when associated with new developments.

- Incorporate bikeway facility costs into each community's Capital Improvement Program (CIP).

Std. Solicit each city's bike committee for projects to be included into the CIP's.

Std. Solicit to be included in the cities' CIP as part of MPO TIP project selection process.

- Increase funding for both construction and maintenance of bicycle facilities in the annual transportation budget.

Std. Develop a bicycle plan which is based on the cost-effectiveness of recommended improvements in each of the three stages—short, middle, and long term.

Std. Involve bicycle facilities in transportation budgetary decisions.

Goal # 7 – Promote a Balanced, Compact Land Use Growth Pattern

Objectives:

All Modes

- Obtain a balance between transportation capacity and land use.

Std. Ensure compatibility between street functional classification and adjacent uses, while monitoring locations of congestion.

Streets and Highways

- Obtain a balance between transportation services and land use.

Std. Refrain from expansion of the street and highway system which would promote development which is not contiguous.

Public Transit

- Utilize public transit and transit facilities to reinforce compact land use patterns.

Std. Provide guidance for transit service through development approval process.

Std. Monitor land development patterns and identify compact development which may be supported by transit.

Bikeway/Pedestrian

- Place bicycle facilities at major destination points.

Std. Establish appropriate bikeway facilities and have governmental agencies take a leadership role by providing facilities (i.e. bike racks, lockers, showers, employee incentive programs) to promote biking to work.

Std. Reduce the off-street parking requirement for new development and redevelopment when they provide bicycle parking facilities.

Std. Require all new development and redevelopment to provide

appropriate bicycle parking facilities at all commercial and business establishments.

Std. Review the land development code for consistency with this plan.

Goal #8 – Provide a Secure Transportation System

Objectives:

- Coordinate Transportation Plan with flood control operations during flood events

Std. Compatibility with current flood control operations planning.

- Identify and incorporate state and regional emergency, evacuation, and security plans into Plan update

Std. Improvement projects should enhance/compliment existing emergency, evacuation and security plans.

Std. Review and update external operating procedures with local emergency agencies.

- Identify critical street and highway system assets

Std. Improvement projects should not compromise the security of identified critical street and highway systems.

- Provide a secure transit system

Std. Review and update internal safety and security manual and training.

Std. Ensure 1 percent of Federal funds are spent for transit security projects.

III. Socioeconomic Characteristics.

Demographic and economic background of the metropolitan area can provide an overall understanding of the community, while at the same time this data can be used as an indicator or predictor of travel behavior.

Demographics.

Forecasts of growth in population, households and employment are translated into future travel patterns and provide the basis for developing the 2035 LRTP for the Grand Forks – East Grand Forks metropolitan area. By studying the population, housing, and employment, future travel needs can be determined and a plan for an efficient transportation system can be developed.

Population Increase.

The MPO conducts population estimates and forecasts for both cities. Population estimates are derived from a combination of data from the census, building permits, and the board of realtors. In Table 3, the MPO's population estimates show a metropolitan increase of 5,684 persons during the period of 2000 through 2006.

TABLE 3	2000	2001	2002	2003	2004	2005	2006
Grand Forks	49,366	49,561	50,065	50,872	51,810	53,230	54,083
E. Grand Forks	7,501	7,626	7,730	7,926	8,041	8,355	8,477
Metropolitan	56,867	57,187	57,795	58,798	59,851	61,585	62,560

Population forecasts predict future growth rates based on current and historical trends. The MPO and both City Councils have adopted a 1.2% annual growth rate for planning purposes and forecasts. Table 4 demonstrates the city and metropolitan forecasts through the year 2040.

TABLE 4	2000	2010	2020	2030	2040
Grand Forks	49,366	56,097	63,747	72,440	81,250
E. Grand Forks	7,501	8,523	9,686	11,007	12,715
Metropolitan	56,867	64,620	73,433	83,447	94,965

Land Uses

The Grand Forks *2035 Land Use Plan* differs from previous plans completed in Grand Forks in that it emphasizes implementation and takes a proactive approach to managing growth both in the City and in its Growth Management Area. Much of Grand Forks' new development will occur in the Growth Management Area.

The future land use map is focused on the city's Growth Management Area—the area outside the city limits, but within the four-mile zoning jurisdiction. Growth Management identifies a three level tier system for managing timing and sequencing of growth for

Grand Forks. Future land uses have been identified for all three tiers of the city's Growth Management Area. Specific uses and locations have been identified for Tier 1, where more immediate growth is anticipated, and Tier 2, which is not anticipated to develop for another 25 years. Tier 3 is identified broadly as an agricultural zone, an area where no urban development is expected within the planning period.












Tier 2 future land uses have been identified to provide a broad brush approach for the city and its residents. Although Tier 2 is not anticipated for immediate development, it is important for the community to establish a vision for this area's eventual land uses and their most appropriate location. Should there be a need to expand Tier 1 to accommodate increased development, the map provides a land use guide for determining where expansion might be appropriate for particular land uses.

The East Grand Forks 2035 Land Use Plan carries forward a similar Growth Management philosophy, but with one major difference. The flood protection system in the City has provided the growth boundaries for the future, so a tier system is not necessary. The City promotes the growth within city limits, where municipal services are available. The City thus preserves an urban expansion area located inside the flood protection system for future urban development.

The following pages show each City's future land use plan.

FUTURE LAND USE GRAND FORKS, NORTH DAKOTA

LEGEND

-  TIER 1
-  TIER 2
-  TIER 3
-  AGRICULTURAL
-  RESIDENTIAL
-  COMMERCIAL
-  OFFICE PARK
-  MIXED USE
-  INDUSTRIAL
-  PUBLIC / SEMI PUBLIC
-  OPEN SPACE
-  EXISTING NON FARM RESIDENTIAL

N
O
T
E

All dimensions, descriptions, measurements, boundaries and data contained in this rezoning document are included for general information only. No warranties or covenants are made or given by the City of Grand Forks, or the Grand Forks / East Grand Forks Metropolitan Planning Organization. Any user must confirm the accuracy of this same with official records/by survey.



2
MILES

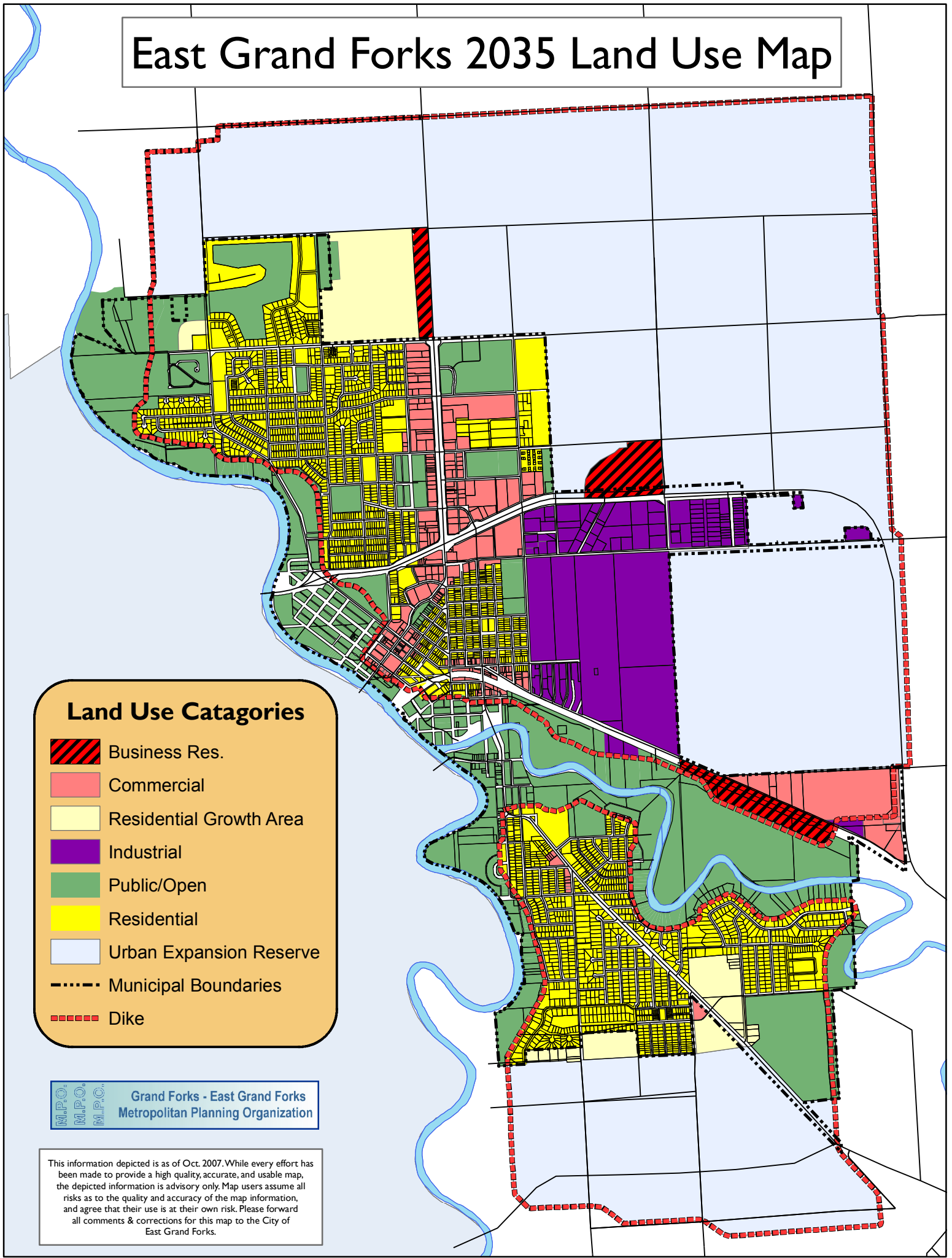
2035 Land Use Plan City of Grand Forks, ND Future Land Use

M.P.O.
M.P.O.
M.P.O.

Grand Forks - East Grand Forks
Metropolitan Planning Organization



East Grand Forks 2035 Land Use Map



Land Use Categories

-  Business Res.
-  Commercial
-  Residential Growth Area
-  Industrial
-  Public/Open
-  Residential
-  Urban Expansion Reserve
-  Municipal Boundaries
-  Dike

 Grand Forks - East Grand Forks
Metropolitan Planning Organization

This information depicted is as of Oct. 2007. While every effort has been made to provide a high quality, accurate, and usable map, the depicted information is advisory only. Map users assume all risks as to the quality and accuracy of the map information, and agree that their use is at their own risk. Please forward all comments & corrections for this map to the City of East Grand Forks.

Housing Increases

While population projections do not predict future land uses, they can indicate the scale at which various land uses may be needed in the future. Projections can generally be partnered with household size information to forecast the number of housing units needed; this information can be combined with residential density information to provide a general sense of the area of land required to accommodate growth.

Using each City's land use plans, the MPO can identify where the future housing will be located. See the map indicating the areas of future housing developments. Land identified as appropriate for residential development, as well as a proportion of currently vacant land within the MPO area, is capable of providing housing for future population growth. In other words, the two Cities appear to be on-track for providing adequate land area for its residential growth between now and 2035.

Employment Increases

Greater Grand Forks is the dominant retail trade center for an eighteen county trade area that serves an estimated population of 208,000 people. In a similar manner for forecasting housing, a ratio of employment to population can help the MPO make reasonable employment forecasts, which can be combined with employment density information to give a general sense of the land area required to provide future jobs.

After consultation with the area economic development agencies, together with the identified areas shown on each City's land use plans, the MPO identified the locations where future employment will take place. The distribution is shown on the map.

IV. Future Transportation Improvements.

Streets and Highways.

This list of proposed improvements was developed by the MPO, in conjunction with its member jurisdictions, after evaluating the results of the traffic modeling process and receiving comments from the public. These improvements will both maintain and upgrade the quality of the current transportation facilities and provide the improvements necessary to meet the demands of the transportation system in the future. Besides identifying specific, recommended street and highway improvement projects, planning for the future street and highway system also includes identifying the need to explore concepts in transportation development, concepts that include the need for major river crossings or additional interstate interchanges. The need to further explore these and other concepts as they arise will be evaluated and, if decided to move forward, will be acted upon by the MPO.

Proposed street and highway improvements are identified on page 28. The projects, when implemented, will produce the future traffic volume projections shown on the second map.

Growth in Housing Units by TAZ 2005 to 2035

484 - Number of Added Houses (if more than 50)

- Less than 50 Added Houses
- 51 - 100 Added Houses
- 101 - 250 Added Houses
- 251 - 500 Added Houses
- More than 500 Added Houses

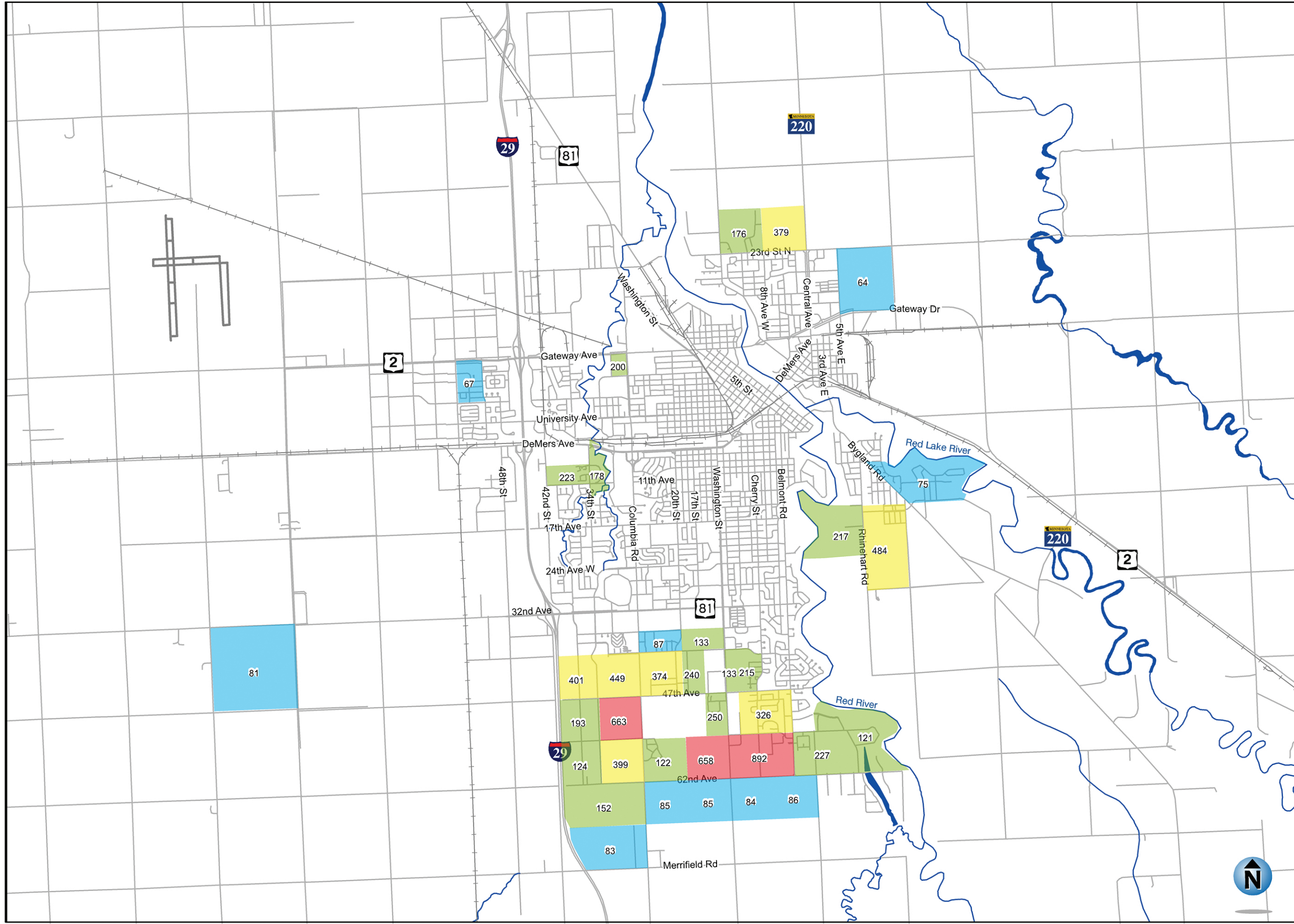


Figure 10



Growth in Employment by TAZ 2005 to 2035

62 - Number of Added Jobs (If more than 50)

- Less than 50 Added Jobs
- 51 - 100 Added Jobs
- 101 - 250 Added Jobs
- 251 - 500 Added Jobs
- More than 500 Added Jobs

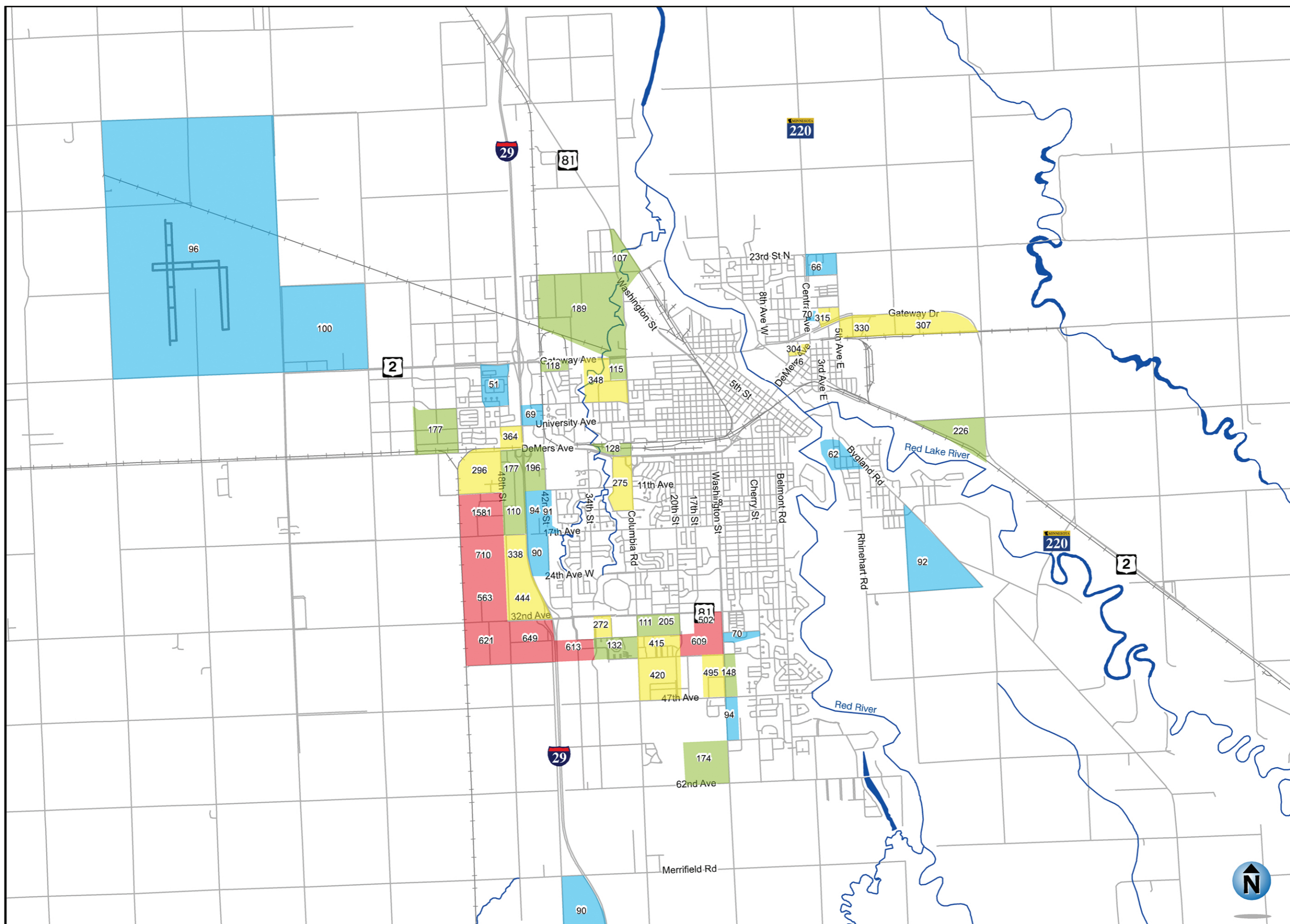


Figure 11



2035
Recommended
Street and
Highway Plan

Implementation Period

- TIP Project
- Short-term
- Mid-term
- Long-term
- Illustrative

Project Listing

- TIP Projects**
 TIP 1 48th Street Extension
 TIP 2 5th Avenue NE / Gateway Drive Intersection
- Short-term Projects**
 4A CBD Traffic Signal System Upgrade
 5B Channelize Northbound 29th St at 24th Ave
 13A 11th Ave / 14th St Parking Restrictions
 14A Gateway Drive Access Management Recommendations
- Mid-term Projects**
 1A Add 3rd SB Columbia Rd lane between DeMers on-ramp and 13th Ave S
 1C Columbia / 17th Ave S: Add dual left-turn lanes for all approaches
 1E 20th Ave S Extension to Columbia Road
 1I Widen 42nd Street to 4 Lanes, 17th Ave to 29th Ave
 1K Merrifield Road Red River Crossing
 2H DeMers / Washington: Add Eastbound and Westbound Through Lanes
 3H Merrifield Road Interchange
 3K 17th Ave S Overpass of I-29
 3M Realign 42nd St / Reconfigure NB I-29 / 32nd Ave Ramps
 3O 34th St / 32nd Ave: Add Southbound Right-turn Lane
 5A Roundabout at 34th St / 24th Ave
 6A Bygland Road: Restripe as 3-Lane Roadway
 10A Signalize 36th / Columbia and Provide 3/4 Access at Wal-Mart SuperOne Driveway
 18D 3-Lane 47th Ave South, Columbia Rd and Washington St
 18E Widen Central Ave: 17th St to 23rd St
 20A Extend NB I-29 DeMers On-Ramp
 22D WB Left-Turn Lane at Bygland Rd / CR 58
- Long-term Projects**
 1L 32nd Ave S Red River Crossing
 3B 32nd / Columbia: NB and WB Dual Lefts
 8A Signalize 48th / DeMers and I-29 / DeMers Ramps
 18A 4-Lane 32nd Ave: 52nd St to 48th St
 18B 4-Lane Columbia Rd: 34th Ave to 50th Ave
 18C 4-Lane Washington St: 48th Ave to 57th Ave
 19A DeMers / 42nd / BNSF Grade Separation
 22B New East-West Arterial Connecting the 32nd Ave Bridge to Bygland Rd
 22E Signalize TH 220 / US 2
- Illustrative Projects**
 1G 47th Ave S: Preserve Corridor for Future Interchange
 7A Central Spine Concept
 17E New North-South Road Connecting Crystal Sugar Plant to 10th St NE
 18E Widen Central Ave: 23rd St to North Dike
 23A Continue to Evaluate Long-Term Need for North Bypass / Truck Relief Route

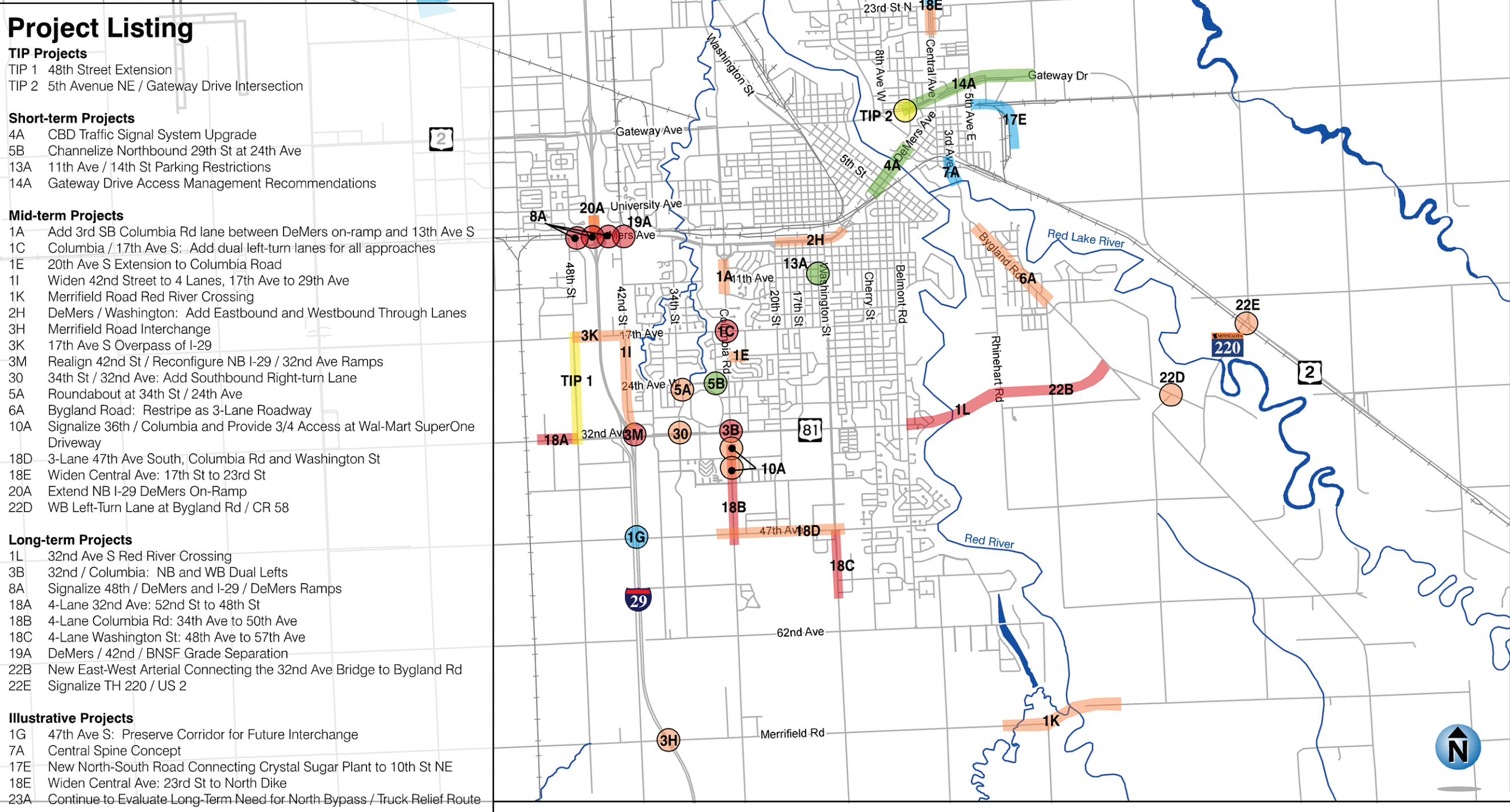
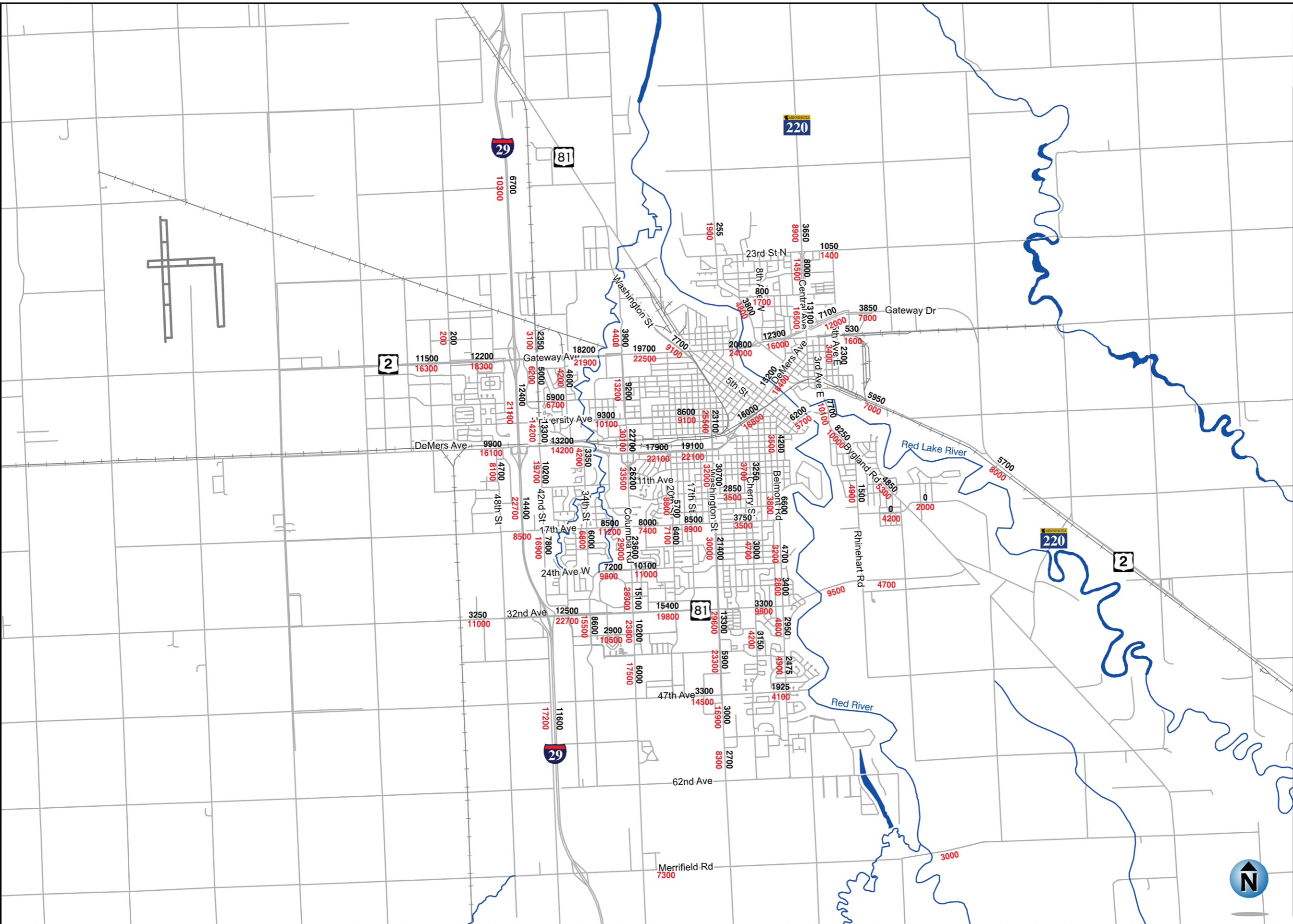


Figure 12

2035 Daily Traffic Forecasts, Recommended Future Network

1,000 - 2005 Daily Traffic Count
1,000 - 2035 Daily Traffic Forecast



River Crossings

There are a total of five river crossings in the MPO study area. Three bridges cross the Red River and two cross the Red Lake River. The 2035 LRTP has identified two additional river crossings. Preliminary studies have been completed on proposals to build the first, which would cross the Red River and Merrifield Road. The Merrifield Road Bridge would serve as a bypass for truck traffic, specifically sugar beet truck traffic which would be able to directly access the East Grand Forks plant without driving through either city.

The second new river crossing would be located at 32nd Avenue South. This bridge would provide an outlet for local traffic congestion, which is projected to develop towards the end of this planning horizon as population and subsequent traffic volumes increase.

Transit

The transit service in the metropolitan area consists of five services: regular fixed route, night bus, one tripper, senior rider, and Dial-A-Ride service. Each of these services and their performance has an effect on one another. The system as a whole is evaluated by performance measures. Each service is measured individually and, where appropriate, each individual route is studied. Recommendations for future improvements are based on upgrading the performance of the transit system.

It was recommended that the senior rider and DAR service combine into one system. This recommendation is derived from the performance measures which detail that the senior rider service did not perform as well as the DAR service. Not only did it cost the city more for each rider on senior rider, but the fare is only \$1 vs. \$3 on DAR. And at the same time, the bidding process should be divorced from the taxicab rate that the system is currently charged. An evaluation of this new combined service was completed for 2006. It showed the system saved over \$100,000 by implementing this recommendation. In addition, service hours and days were extended to attract more users.

The operation of the tripper service continues to be reviewed. This service is what remains from the system providing special bus service for school aged kids in Grand Forks. Previously, several buses ran special routes during the am peak hour and the pm peak hour in order to pick up pupils and take them to/from school. A private provider took over this service in 2005. However, one remaining tripper services provides this specialized service for a group of disabled persons all working at one location. The recommendation in the TDP is for this service to seek outside funding to help offset the system's negative balance in offering this custom service.

These recommended improvements did save the system money which was used in 2007 for an additional route of the fixed service system. A study was conducted in 2007 to analyze housing and employment locations in Grand Forks. The final route map is shown on page 32.

The future improvements recommended for the regular fixed route and night bus service consist of only minor tweaks, as shown on page 33. These tweaks were the result of the public input

process where both the public and fixed route drivers provided input. These tweaks will not require any additional investment into the system.

Pedestrian and Bicycle

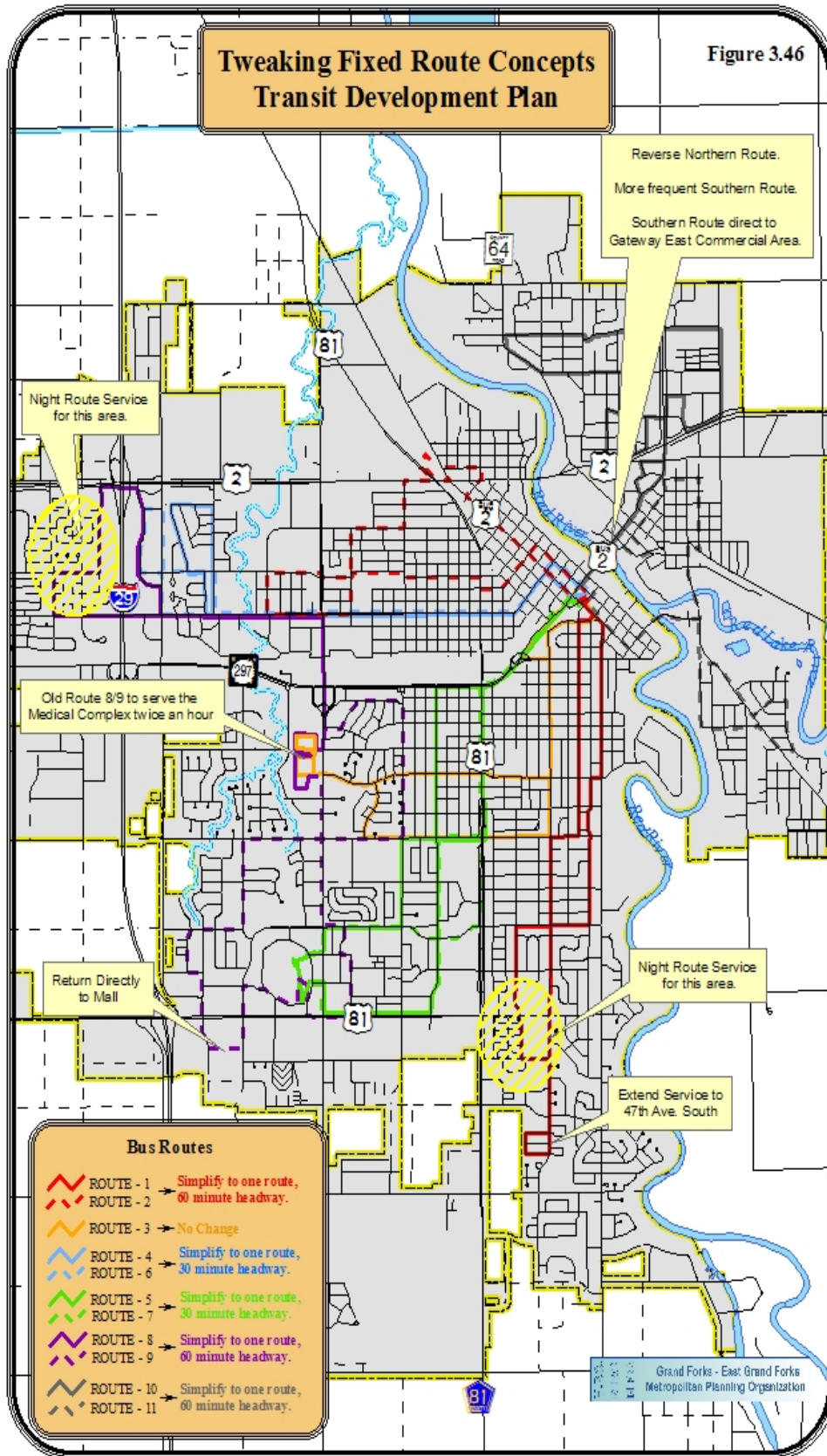
While pedestrian and bicycle transportation systems are similar to street and highway systems, they have a quality all their own. They can not be compared directly with highways and modeled as such, but they provide for a much needed and respectable mode of transportation. Sidewalks are primarily designed for pedestrian traffic, especially in commercial areas. Table 2, in the goals and policies section, demonstrates the guidelines for the installation of sidewalks based on different land uses and functional road classifications.

The trails plan for the metro area consists of 64 miles of planned trails. The existing trail system is comprised of 46 miles, 20 of which that have been built since the year 2000. The plan also shows the need for future on-street facilities, bike lanes and bike routes. All of these projects are based on current perceived needs and depend on the ability of the jurisdictions involved to provide funding.

The plan has identified three future bike/pedestrian river crossings in the implementation and staging section of the plan. Two shared use river crossings are currently being funded as part of the flood protection system, and were designated as short-term projects. The planned downtown bike/pedestrian river crossing is shown as a long-term project in the implementation and staging section. The map on page 34 illustrates current and proposed bike and pedestrian facilities in the MPO study area.

Tweaking Fixed Route Concepts Transit Development Plan

Figure 3.46

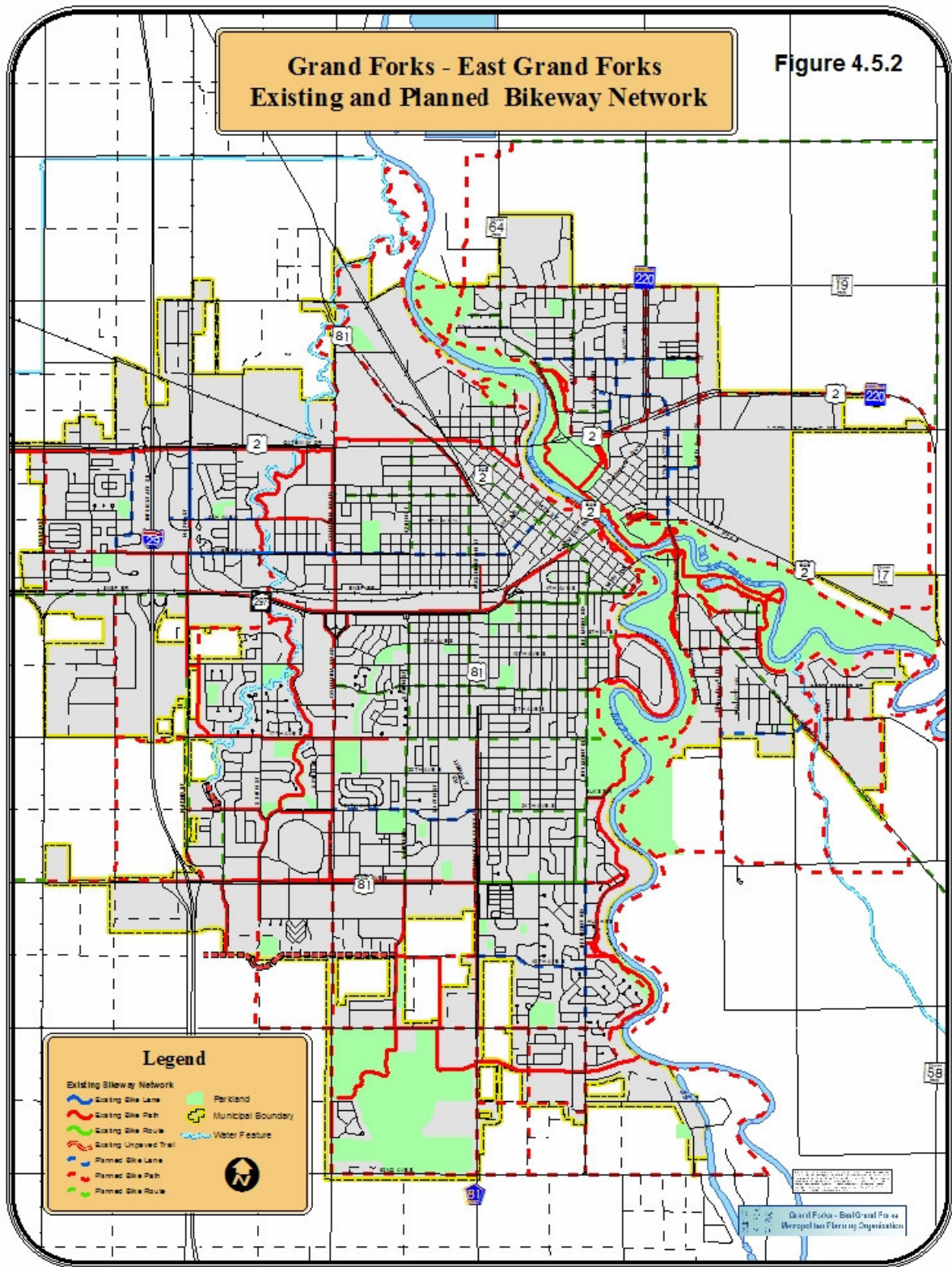


Bus Routes	
ROUTE - 1	Simplify to one route, 60 minute headway.
ROUTE - 2	60 minute headway.
ROUTE - 3	No Change
ROUTE - 4	Simplify to one route, 30 minute headway.
ROUTE - 6	30 minute headway.
ROUTE - 5	Simplify to one route, 30 minute headway.
ROUTE - 7	30 minute headway.
ROUTE - 8	Simplify to one route, 60 minute headway.
ROUTE - 9	60 minute headway.
ROUTE - 10	Simplify to one route, 60 minute headway.
ROUTE - 11	60 minute headway.

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Grand Forks - East Grand Forks Existing and Planned Bikeway Network

Figure 4.5.2



V. Funding

Passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 moved the long-range transportation planning process in many metropolitan areas away from “needs” based analyses or a wish list of projects, with little-to-no consideration given to the transportation funding amount, to a financially-constrained project/program planning approach. The fiscal evaluation element of the process has evolved considerably since that point. Through ISTEA and the Congressional transportation funding re-authorizations of TEA-21 and SAFETEA-LU in 2005, MPOs were required to demonstrate that projects and program activities included in the transportation plan were reasonably fundable for both the long-term and the near-term TIP.

The process of determining a fundable/financially-constrained plan involves determining both: 1) the level of anticipated funding/revenue through the planning horizon of 2035 and 2) the cost associated with the projects and programs included in the recommended street and highway plan. This section will focus on the funding side of the plan development.

Funding Approach

Estimating future funding levels for the region is much like the process of forecasting land development or future traffic levels. The process requires making a number of assumptions relative to the individual components that impact the allocation of transportation dollars. As outlined in 49 USC Section 3005, the improvement plan incorporated into the metropolitan areas Long Range Transportation Plan is required to contain:

*“A financial plan that demonstrates how the adopted transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs. The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted transportation plan if reasonable additional resources beyond those identified in the financial plan were available.”*⁷

The legislation and FHWA guidance do not provide an approach to demonstrating that metropolitan transportation plan funding estimates are “reasonably expected to be made available”. The methodology used for Grand Forks - East Grand Forks was developed specifically for the region based on the information available and was reviewed by FHWA. The approach to forecasting future funding relied on a review of historical expenditure levels in the MPO area and an assessment of future “expected” levels of funding included in the current transportation system.

Street and Highway Funding Estimates (2007 Dollars)

The process of estimating funding levels specifically employed the following steps

1. Examination of actual expenditures in the MPO area over a historical period. Data were available for East Grand Forks from 1993 through 2006 and were available for Grand Forks from 1995 through 2006.
2. Division of projects over the historical period into two categories: 1) maintenance/rehabilitation and 2) expansion projects. Expansion projects were the focus of this exercise, since the LRTP-recommended project list will only include expansion projects. Maintenance and rehabilitation projects will not be included on the list of Plan projects; as such, the LRTP will not need to identify funding for maintenance/rehabilitation projects, and thus historical spending on such projects needs to be removed from the Plan's historical-based funding evaluation.
3. Inflation of the historical period expenditure levels to 2007 dollars, on a year-by-year basis. Consumer Price Index (CPI) inflation rates observed over the period were applied to expenditure values in each of the years in a period to develop 2007 dollar amounts. Application of a Construction Price Index rate of change in costs was not used because the real value of the expended dollars is not directly tied to that more focused basket of goods and services index.
4. Development of an annual average expenditure on transportation system for the combined categories of maintenance/rehabilitation and expansion for the historical period.
5. Extrapolation of the annual average expenditure level through the 2035 planning period.
6. Application of the historical split between maintenance/rehabilitation and expansion observed in the data reviewed.

Generally, reviewing 12 to 14 years of data, such as the period available for Grand Forks – East Grand Forks, results in observing a full cycle of local/regional street and highway expenditures. Over an extended period in a given urban area there generally is a cycle of years with low expenditures and years with high expenditures, relative to the mean. More specifically, the historical period studied should also capture a good representation of both Federal allocations of street and highway dollars and of local/state capacity to match those Federal dollars. Thus, this approach provides a reasonable expectation of future available funding resources as it is based on a solid trend of historical performance.

Listed below is the annual average funding estimates for each community:

- Annual historical period expenditures (2007 dollars):
 - Grand Forks: \$5,549,000
 - East Grand Forks: \$1,662,000
- Expansion, rehabilitation/maintenance and transportation enhancements division (annual levels in 2007 dollars):
 - Grand Forks:

Expansion:	\$3,884,000
Rehabilitation/maintenance:	\$1,387,000
Transportation enhancements:	\$277,000
 - East Grand Forks:

Expansion:	\$831,000
Rehabilitation/maintenance:	\$665,000
Transportation enhancements:	\$277,000

Street and Highway Funding Projections

As the LRTP must be cost constrained, an analysis of the revenue estimates for the expected year of expenditure must be completed. A locally derived methodology for estimating street and highway revenue was developed based on the steps outlined below

- From available sources, including the TIPs, planning documents and DOT staff, estimation of the potential for change in absolute dollar funding levels over time (i.e., not adjusted for inflation) relative to historical levels.
- From the information gathered as part of the above step, determination of a planning period annual adjustment to apply to the 2007 dollar annual funding estimate.
- Escalation of the funding level through the planning period, summing the levels for each state of the Short-term, Mid-term and Long-term periods.

For each state, forecasts of potential funding changes beyond the 2007 levels were based on available documents and discussions with staff at the state DOT level. The general approach to this is:

- *North Dakota:* The primary source of locally-expended transportation funds are the Urban Roads, Urban Regional, and Transportation Enhancement programs. The Statewide Transportation Improvement Program (STIP) for the period from 2008 through 2011 documents an annual average increase of 5.4 percent. Based on discussions with NDDOT staff, the 5.4 percent annual growth shown in the Urban Roads portion of the STIP was exceptionally high compared to long-term expectations. A more conservative assumption of 2 percent per year was agreed upon as a more reasonable rate of revenue growth for the state. Annual and planning period cumulative funding estimates associated with an annual escalation rate of 2 percent per year are

shown in Table 6. The cumulative planning period funding estimate would be \$150.7 million.

- *Minnesota:* As part of the statewide LRTP, Mn/DOT has developed planning-level roadway construction funding forecasts for each of the districts and a cumulated level for the entire state. Part A of the General Guidance also states that the Mn/DOT district projections used in the statewide LRTP should be used to project each District’s fiscally constrained investment scenarios. For District 2 the state road construction funding estimates for the various periods are as follows:
 - 2008-2010: \$31 million per year.
 - 2011-2014: \$34 million per year.
 - 2015-2023: \$36 million per year.
 - 2024-2030: \$38 million per year.

The projected change in district funding reflects an annualized growth rate of approximately 1 percent per year over the state LRTP planning period. The state LRTP funding forecasts were used only to obtain an estimate of the annualized change in funding (not actual funding levels), since only a portion of the overall projected district construction funding will be allocated to the East Grand Forks study area. The annual and planning period cumulative funding estimates, which result from applying the 1.0 percent annual factor to the current annual funding estimate of \$831,000 (for expansion projects), is shown in Table 6.

In addition to the historical-based expectations, transportation funding for projects in the East Grand Forks area will increase due to revisions to the Areawide Transportation Partnership (ATP) sub-target allocation that took effect in 2006. The change in the ATP sub-target increased funding on a four-year cycle from \$375,000 to \$755,000. Thus, over the planning period through 2035 an additional \$2,660,000 would be available to fund street and highway projects. It is estimated that \$1,330,000 of the 28-year ATP increase would go towards expansion projects, and the remainder towards rehabilitation/maintenance and enhancement projects.

Federal Funding Sources Under SAFETEA-LU

The purpose of this section is to provide an overview of the various Federal sources from which transportation funds could be available for implementing the recommended plan improvements and to provide estimates of the funding levels. SAFETEA-LU has many distinct funding categories, but the vast majority of Federal funding used in the Grand Forks – East Grand Forks area is provided through a handful of programs, mainly the following:

- Interstate Maintenance (IM) Program
- National Highway System (NHS) Program
- Surface Transportation Program (STP) Program
- Congestion Mitigation Air Quality (CMAQ) Program
- Highway Bridge Program
- Transportation Enhancement Program (TE) Program
- Safe Routes to School Program

For projects funded through most of the Federal programs, cost responsibilities are generally split 80 percent and 20 percent between Federal and state or local sources, respectively. Outlined in the following sections are the general parameters of each of the Federal and state funding programs likely tapped as part of the financial assessment for the LRTP.

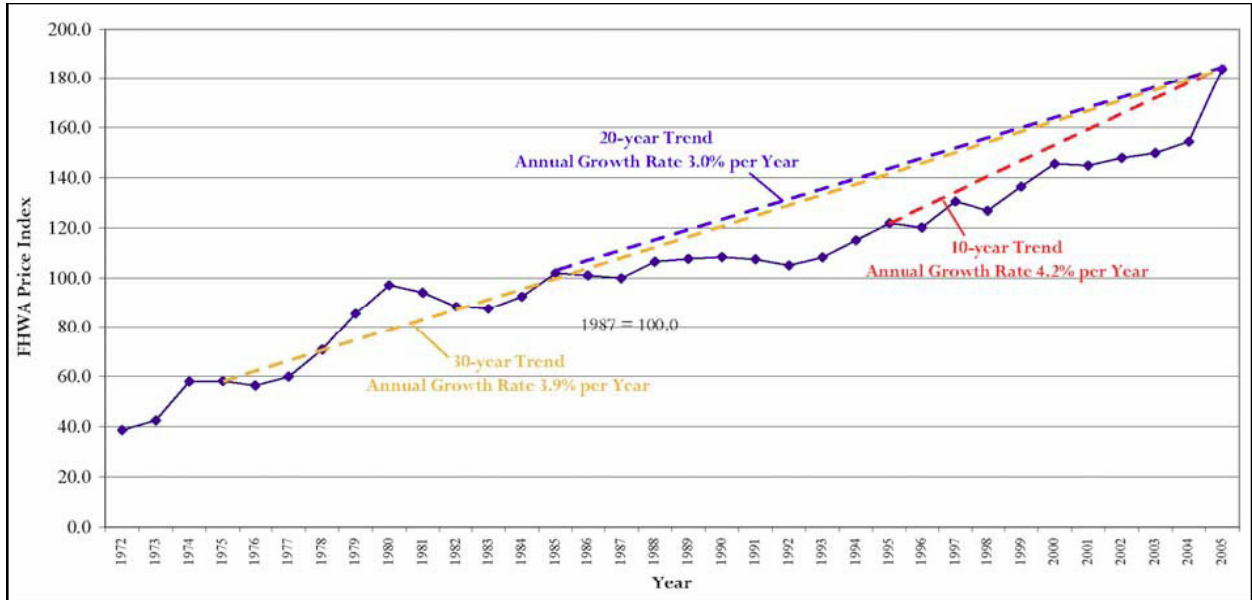
Table 5:

Year	Funding Received by Year	
	North Dakota	Minnesota
2007	\$3,884,000	\$831,000
2008	\$3,962,000	\$838,000
2009	\$4,041,000	\$846,000
2010	\$4,122,000	\$854,000
2011	\$4,204,000	\$862,000
2012	\$4,288,000	\$870,000
2013	\$4,374,000	\$878,000
2014	\$4,461,000	\$886,000
2015	\$4,550,000	\$894,000
2016	\$4,641,000	\$902,000
2017	\$4,734,000	\$910,000
2018	\$4,829,000	\$918,000
2019	\$4,926,000	\$926,000
2020	\$5,025,000	\$934,000
2021	\$5,126,000	\$942,000
2022	\$5,229,000	\$950,000
2023	\$5,334,000	\$959,000
2024	\$5,441,000	\$968,000
2025	\$5,550,000	\$977,000
2026	\$5,661,000	\$986,000
2027	\$5,774,000	\$995,000
2028	\$5,889,000	\$1,004,000
2029	\$6,007,000	\$1,013,000
2030	\$6,127,000	\$1,022,000
2031	\$6,250,000	\$1,031,000
2032	\$6,375,000	\$1,040,000
2033	\$6,503,000	\$1,049,000
2034	\$6,633,000	\$1,058,000
2035	\$6,766,000	\$1,068,000
Total Funding Anticipated	\$150,706,000	\$27,411,000

New Federal requirements for metropolitan transportation plans state that the financial analysis for projects included in the recommended plan need to account for price inflation to an estimated “year of expenditure”. Based on guidance received from FHWA, a cost escalation rate of 4 percent per year was added to the base year cost estimates prepared for the study. Despite recent sharp increases in construction costs, a four percent per year rate of growth is relatively consistent with historical construction price trends. Figure 13 illustrates the FHWA Construction cost index between 1972 and 2005 (the last year for which complete cost data is available). As shown, there have been a few construction cost “spikes” over the past 33 years. The 10-year, 20-year and 30-year historical cost increases have ranged between 3 percent and 4.2 percent

annually. The annual cost increase over the past 30 years (3.9 percent per year) is nearly identical to the 4 percent per year increases that the Plan anticipates through 2035.

FIGURE 13. FHWA CONSTRUCTION COST INDEX, 1972 - 2005



Determining the exact year of expenditure, or when each project will be constructed, is a relatively complex process that involves considering/conjecturing on multiple variable, including public and political opinions. There is no specific direction provided by FHWA on this portion of the analysis. To address this uncertainty, the Grand Forks - East Grand Forks Street and Highway Plan applied the following streamlined methodology:

- As previously described, the planning period was divided into Short-term, Mid-term and Long-term implementation periods. The short-term was defined as 0 to 5 years forward (2007 to 2012), the mid-term as 6 to 15 years forward (2013 to 2022) and the long-term as 16 to 28 years forward (2023 to 2035).
- Assign individual projects to one of the implementation periods based on need and funding levels. Each project’s implementation period was documented earlier in this chapter.
- Escalating 2007 project costs to a year consistent with the mid-point of each implementation period. Thus, the “year of expenditure” in each of the three periods was set to correspond with the midpoint of the implementation period. The years forward from 2007 to be used in each period are:
 - Short-term: 2.5 years into the future.
 - Mid-term: 10.5 years into the future.
 - Long-term: 22 years into the future.

Table 6 presents the project cost estimates for 2007 and the midpoint of the implementation period (year of expenditure). Table 6 also presents each project cost in a range, with costs shown for the first year of the implementation period and the last year of the implementation period. This approach is consistent with Federal regulations allowing “optional use of cost ranges/cost bands”.

- Based on the annual 4 percent growth in construction costs assumed, application of the methodology resulted in the following escalation values for projects assigned to each of the implementation periods:
 - Short-term: 10 percent cost increase over the 2007 base year.
 - Mid-term: 51 percent cost increase over the 2007 base year.
 - Long-term: 137 percent cost increase over the 2007 base year.

Comparison of Plan Costs and Funding Capacity

The plan development process has focused on providing a financially-constrained (i.e. fundable) recommended plan. The cumulative project costs of the recommended plan need to be summarized in terms of anticipated year of expenditure and weighted against the anticipated funding capacity of the region through 2035.

As documented in the previous section outlining the funding forecasts, it is anticipated that the Grand Forks – East Grand Forks MPO will have the following total funding levels for street and highway expansion projects for the region through 2035:

- North Dakota funding: \$150,706,000
- Minnesota funding: \$27,411,000, including the additional ATP allocation, this total is anticipated to be \$28,741,000

The current year project cost estimates were provided in each of the above project descriptions. A summary of the cost estimates in 2007 dollars and by implementation period is shown in Table 6. The table also includes summaries of anticipated funding levels.

As shown in Table 6, the year of expenditure cost estimates are relatively consistent with (within 3 percent) anticipated street and highway funding levels through 2035. As noted in the table, alternative funding sources have been assumed for two different projects:

- The Merrifield Bridge project is within Polk and Grand Forks Counties’ jurisdictions, and would be funded through sources identified by the counties.
- The new East-West Arterial connecting Bygland Road to 32nd Avenue Bridge project would require East Grand Forks City funding.

Projects Included	Cost Estimate			Project Cost by Expenditure Period		
	2007	Short-Term (0-5 Years)	Mid-Term (6-15 Years)	Long-Term (16-28 Years)	Minnesota	North Dakota
Short-Term Projects						
TIP1	48th Street Extension, Reconstruction	\$8,750,000	\$8,750,000			\$8,750,000
TIP2	5th Avenue NE / Gateway Drive Intersection	\$1,300,000	\$1,300,000		\$1,300,000	
4A	CBD Traffic Signal System Upgrade	\$500,000	\$600,000		\$300,000	\$300,000
5B	Channelize 29th St at 24th Ave	\$50,000	\$100,000			\$100,000
13A	11th Ave / 14th St Parking Restrictions	\$0	\$0			\$0
14A	Gateway Drive Access Management	\$200,000	\$200,000		\$200,000	
Mid-Term Projects						
1I	Widen 42nd Street to 4 Lanes, 17th Ave to 29th Ave	\$3,900,000		\$5,900,000		\$5,900,000
1K	Merrifield Road Red River Crossing	\$16,900,000		\$25,500,000	\$12,750,000	\$12,750,000
3H	Merrifield Road Interchange	\$7,100,000		\$10,700,000		\$10,700,000
3K	17th Ave S Overpass of I-29	\$5,800,000		\$8,800,000		\$8,800,000
18D	3-Lane 47th Ave South, Columbia Rd and Washington St	\$2,500,000		\$3,800,000		\$3,800,000
18E	Widen Central Ave: 17th St to 23rd St	\$1,400,000		\$2,100,000	\$2,100,000	

Projects Included	Cost Estimate				Project Cost by Expenditure Period	
	2007	Short-Term (0-5 Years)	Mid-Term (6-15 Years)	Long-Term (16-28 Years)	Minnesota	North Dakota
Mid-Term Projects (continued)						
1A Add 3rd SB Columbia Rd lane between DeMers on-ramp and 13th Ave	\$300,000		\$500,000			\$500,000
1C Columbia / 17th: Add dual left-turn lanes for all approaches	\$2,500,000		\$3,800,000			\$3,800,000
1E 20th Ave S Extension to Columbia Road	\$400,000		\$600,000			\$600,000
2H DeMers / Washington: Add Eastbound and Westbound Through Lanes	\$8,000,000		\$12,100,000			\$12,100,000
22D WB Left-Turn Lane at Bygland Rd / CR 58	\$100,000		\$200,000		\$200,000	
3M Realign 42nd St / Reconfigure NB I-29 / 32 nd Ave Ramps	\$7,000,000		\$10,600,000			\$10,600,000
3O SB Right-Turn Lane at 34 th Street / 32 nd Ave intersection	\$100,000		\$200,000			\$200,000
5A Roundabout at 34th St / 24th Ave	\$400,000		\$600,000			\$600,000
6A Bygland Road Turn Lanes	\$350,000		\$500,000		\$500,000	
10A Signalize 36th / Columbia and 3/4 access at Wal-Mart SuperOne Driveway	\$300,000		\$500,000			\$500,000
20A Extend NB I-29 DeMers Ramp	\$150,000		\$200,000			\$200,000

Projects Included	Cost Estimate				Project Cost by Expenditure Period		
	2007	Short-Term (0-5 Years)	Mid-Term (6-15 Years)	Long-Term (16-28 Years)	Minnesota	North Dakota	
Long-Term Projects							
1L	32nd Ave S Red River Crossing	\$20,200,000			\$47,900,000	\$23,950,000	\$23,950,000
18A	4-Lane 32nd Ave: 52nd St to 48th St	\$1,100,000			\$2,600,000		\$2,600,000
18B	4-Lane Columbia Rd: 34th Ave to 50th Ave	\$5,300,000			\$12,600,000		\$12,600,000
18C	4-Lane Washington St: 48th Ave to 57th Ave	\$2,900,000			\$6,900,000		\$6,900,000
3B	32nd / Columbia: NB and WB Dual Lefts	\$150,000			\$400,000		\$400,000
8A	Signalize 48th / DeMers and I-29 / DeMers Ramps	\$700,000			\$1,700,000		\$1,700,000
22B	New East-West Arterial Connecting the 32nd Ave Bridge to Bygland Rd	\$4,000,000			\$9,500,000	\$9,500,000	
22E	Signalize TH 220 / US 2	\$300,000			\$700,000	\$700,000	
19A	DeMers / 42 nd / BNSF Grade Separation	\$16,900,000			\$40,100,000		\$40,100,000
	North Dakota Costs by Expenditure Period		\$9,150,000	\$71,050,000	\$88,250,000		\$168,450,000
	Minnesota Costs by Expenditure Period		\$1,800,000	\$15,550,000	\$34,150,000	\$51,500,000	
	Total Regional Costs by Period		\$10,950,000	\$86,600,000	\$122,400,000		
Anticipated MPO Funding Levels						\$27,411,000	\$150,706,000
Anticipated ATP Expansion Fund Increase						\$1,330,000	\$0
Anticipated County Funding Contributions (For Merrifield Bridge)						\$12,750,000	\$12,750,000
Anticipated East Grand Forks City Funding Contribution (For Bygland - 32nd Ave Bridge Arterial)						\$9,500,000	\$0
Total Anticipated Total Funding Level						\$50,991,000	\$163,456,000

TRANSIT FINANCIAL ANALYSIS

This chapter presents the metropolitan financial analysis for the fixed route, dial-a-ride, and senior rider operating systems for the five-year planning period (2007 through 2012). The analysis includes both forecasted revenues, and expenses, as anticipated by Grand Forks and East Grand Forks, and is based on Section 3.4 Alternatives Analysis and projected public subsidies. Public subsidies for both systems are primarily through the United States Department of Transportation Federal Transit Administration (FTA). The current federal funding mechanism is the Transportation Equity Act for the 21st Century (TEA-21), which needs to be re-authorized and has been extended until re-authorization occurs. *In late 2005, reauthorization occurred with the adoption of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). With passage, updated financial information is known and this analysis must be updated.*

Table 7 summarizes the projected federal operating funding for the urbanized area through 2009. Federal funding for transit service is expected to remain steady each successive year during the five-year planning period. Potential re-authorization bills considered by Congress suggested healthy increases; however, these bills have not been passed and new revenue projections place doubt whether the healthy increase can materialize. Therefore, we predict a continuation of the most recent trend, which was a steady funding stream at the federal level. Funding has actually decreased for the last couple of years but, the percentage is less than -0.01%. *SAFETEA-LU authorized a 5% increase in funding levels during the later years of its authorization. The bill is pending renewal in 2009. The following table has been updated to reflect these increases. The Table has been extended through 2012.*

TABLE 7

Table 7a U.S. Department of Transportation Federal Transit Administration Grand Forks, ND-MN Urbanized Area Funding (5307 Urban Formula Program)						
Category	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
GF Funding Level	\$748,274	\$785,687	\$824,971	\$866,220	\$909,531	\$955,008
Change from Previous Year	n/a	\$37,414	\$39,284	\$41,249	\$43,311	\$45,477
Percent Change from Previous Year	n/a	+5%	+5%	+5%	+5%	+5%

Table 7b U.S. Department of Transportation Federal Transit Administration Grand Forks, ND-MN Urbanized Area Funding (5307 Urban Formula Program)						
Category	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
EGF Funding Level	\$100,558	\$105,586	\$110,865	\$116,408	\$122,228	\$128,339
Change from Previous Year	n/a	\$5,028	\$5,280	\$5,543	\$5,820	\$6,111
Percent Change from Previous Year	n/a	+5%	+5%	+5%	+5%	+5%

Table 7c U.S. Department of Transportation Federal Transit Administration Grand Forks, ND-MN Urbanized Area Funding (5307 Urban Formula Program)						
Category	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Metro Fund Level	\$848,832	\$891,273	\$935,836	\$982,628	\$1,031,759	\$1,083,347
Change from Previous Year	n/a	\$42,442	\$44,564	\$46,792	\$49,131	\$51,588
Percent Change From Previous Year	n/a	+5%	+5%	+5%	+5%	+5%

SAFETEA-LU also authorized new federal funding programs or dramatically altered how some funding programs appropriated money. Two programs of significance to the metro area are the New Freedom Program (5316) and the Job Access/Reverse Commute (JARC) Program (5317). With these new programs, FTA ignited the process for all Metropolitan Planning Organizations (MPO) to look at their transit needs and current services. Of utmost importance was the desire to assess the current transportation environment, to see where the coordination of services is in place, and to assess where there might be opportunities for additional improvements. The SAFETEA-LU legislation mandates that all urbanized areas must adopt a “locally developed” coordinated transportation plan in order to receive these program grants beginning in the Federal fiscal year of 2007. The Cities of Grand Forks and East Grand Forks, together with the MPO, prepared and adopted a plan earlier this year. The Coordinated Plan is hereby incorporated, by reference, into this Transit Development Plan. The intent of the coordination requirement ensures that communities coordinate transportation resources and services provided through multiple Federal programs. Ultimately a coordinated plan should minimize duplication of Federal services and encourage the most cost-effective transportation possible.

New Freedom is a new formula program appropriated to the states of Minnesota and North Dakota as the designated recipient of the funds and the MPO applies to each state. The MPO will then enter with other small urban areas in the two states into a competitive selection process.

Projects eligible for New Freedom funding must be new public transportation services and beyond those required by ADA. The project must target people with disabilities and remove barriers to transit. For instance, if ADA requires complementary service with a range of ¾ mile on each side of fixed route, service beyond that distance would be eligible for New Freedom funding. New service can be additional routes primarily for the disabled or renovations to existing transportation facilities. The renovations can not be part of an already planned renovation or alteration.

Eligible Projects: New Service (routes or service); environmental modifications (signage, curb cuts) beyond required in ADA; technologies to enhance customer access; Beyond ADA: expanded hours for paratransit, beyond ¾ mile, same day service, door through door, flex route for commuter bus; administration of vouchers, administration of volunteer programs, travel training, and mobility management.

The Job Access Reverse Commute grant program has been historically a discretionary program but recently was changed to a formula grant program. The purpose of this program is to improve transportation services designed to serve those below 150 percent of the federal poverty level.

Emphasis is put on projects that use mass transportation. States receive money for large urban areas (population over 200,000), small urban areas (population between 50,000-200,000), and rural areas. The match is set at 50/50 for operating expenses and 80/20 for capital expenses. The local match can be met with other federal funds.

Eligible Projects: Late-night and weekend service, guaranteed ride home services, shuttle service, expanding fixed-route transit routes, demand-responsive van service, ridesharing and carpooling activities, bicycling, local car loan programs, and promotion through marketing efforts of use of transit by workers with non-traditional work schedules, use of transit vouchers, development of employer-provided transportation such as shuttles, and ridesharing.

Funding from these programs is appropriated to the State. As shown in Table 3.3.1a, the funding became available in 2006 and has authorized levels until 2009. Any project funded from these programs are competitively selected across the States, with more likelihood of significant funding coming from the North Dakota side of our metro area. Therefore, the Minnesota funds are not shown.

TABLE 8

Table 8a U.S. Department of Transportation Federal Transit Administration Grand Forks, ND-MN Urbanized Area Funding (5316 New Freedom Program)						
Category	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
ND Funding Level	\$90,928	\$98,225	\$103,838	\$109,030	\$114,481	\$120,205
Change from Previous Year	n/a	\$7,297	\$5,613	\$5,192	\$5,451	\$5,724
Percent Change from Previous Year	n/a	+8%	+5.7%	+5%	+5%	+5%

Table 8b U.S. Department of Transportation Federal Transit Administration Grand Forks, ND-MN Urbanized Area Funding (5317 Job Access Reverse Commute Program)						
Category	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
ND Funding Level	\$174,497	\$189,038	\$199,338	\$209,305	\$219,770	\$230,760
Change from Previous Year	n/a	\$14,541	\$10,300	\$9,967	\$10,465	\$10,990
Percent Change from Previous Year	n/a	+8.3%	+5.5%	+5%	+5%	+5%

ND State Funding

Another significant change occurred since the original adoption of this Transit Development Plan impacting the financial analysis section. During the 2005 Legislative Session, North Dakota increased the fee on vehicle registrations. These registration fees are distributed to various accounts and entities. The transit operations through out the state had an increase in the amount per vehicle registration going to the transit. For Grand Forks, the increase was from around \$50,000 received annually from this North Dakota program to over \$230,000. This is not a one-time windfall; but an annual increase. These funds can be used to match the increase in federal funds or fund any other transit related service item, including capital.

3.7.3 RECOMMENDED PLAN OPERATING FINANCIAL ANALYSIS

Table 9 reveals the financial forecast as a result of implementing the recommendations of this plan. As can be seen the system begins to accumulate funds immediately if all of the recommendations are in place; in other words, the financial crisis is resolved immediately. The recommendations are transferring the Trippers services to outside providers, negotiating a new cost basis for demand response, and combining the Senior Rider and Dial-A-Rider into one demand response service.

The plan recognizes that as the metropolitan area grows, the services must grow as well. The recommended actions place the Cities Area Transit in a position of having built up revenues that could allow the services to grow, specifically the fixed route system. The possibility of adding two additional routes seems real. One would serve the area south of 32nd Avenue South in Grand Forks, and the other would serve the growing areas on the western edge of Grand Forks, i.e. 42nd Street corridor and Industrial Park expansion.

A study was conducted in FY2007 to establish the recommended service for the possible expansion. The Study Report for the CAT Service Expansion more fully documents the analysis and other service options considered. A serious attempt was made to expand into the Grand Forks Industrial Park. Several opportunities and service options were detailed to the area's employers. A trial route was offered for free rides. However, extremely few employees used the service despite the heavy marketing of the service. The result was to focus on expansion along S. 42nd Street and the growing area south of 32nd Ave. The new expansion route is known as "Route 12/13" See map on next page.

TABLE 9
Financial Forecast As A Result Of Implementing Transit Plan

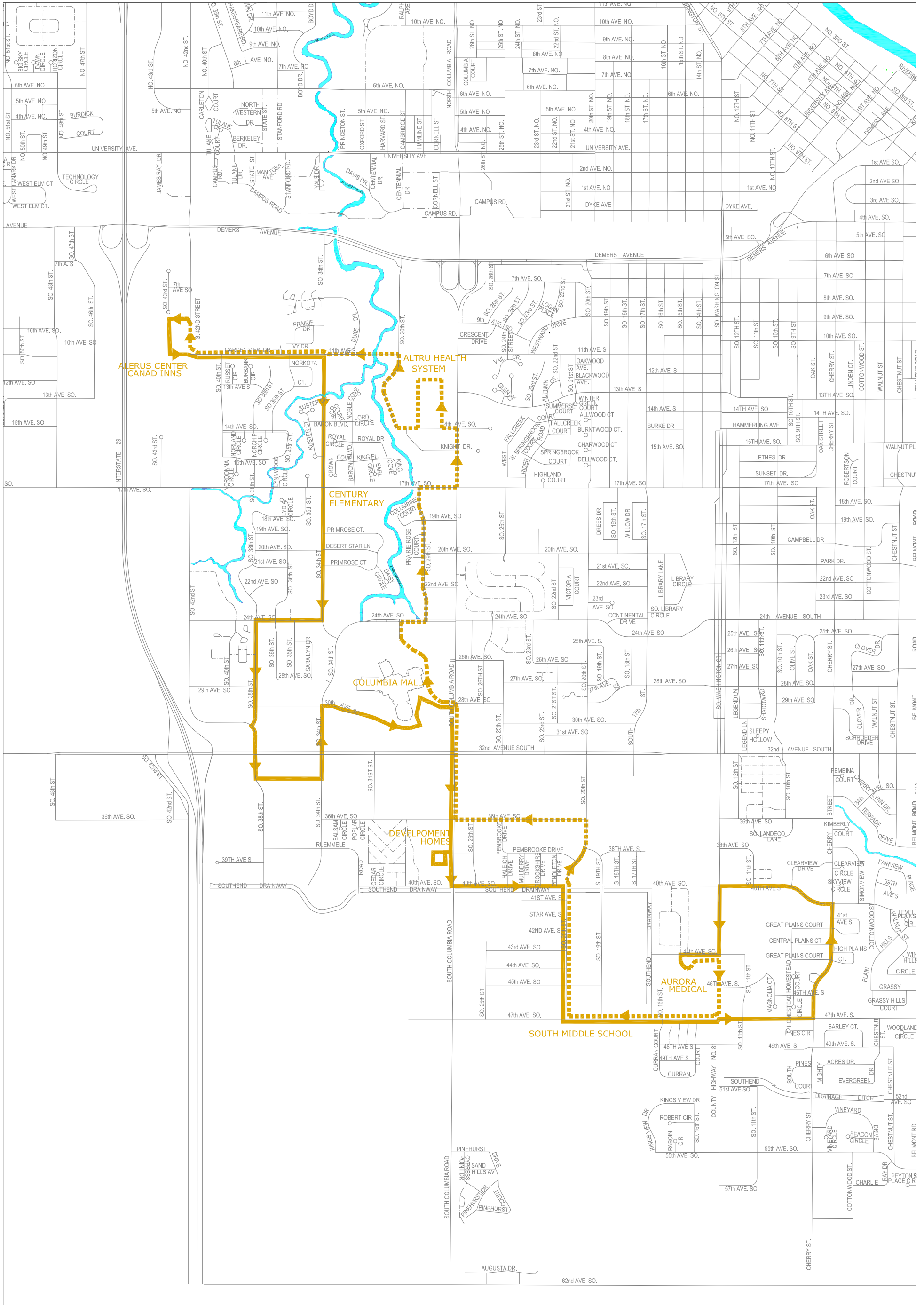
City of Grand Forks Public Transit Budget							
		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Expenses	City Bus	1,486,510.00	1,560,835.50	1,638,877.28	1,720,821.14	1,772,445.77	1,825,619.15
	DAR/SR	364,671.00	371,964.42	379,403.71	386,991.78	398,601.54	410,559.58
	Capital	36,200.00	60,000.00	115,600.00	102,000.00	102,000.00	102,000.00
	JARC/NF	200,000.00	200,000.00	200,000.00	NA	NA	NA
	Total	\$ 2,087,381.00	\$ 2,192,799.92	\$ 2,333,880.98	\$ 2,209,812.92	\$ 2,273,047.31	\$ 2,338,178.73
Revenues	City Bus	356,836.08	360,404.44	364,008.49	367,648.57	378,678.03	390,038.37
	DAR/SR	8,896.31	8,985.27	9,075.13	9,165.88	9,440.85	9,724.08
	Federal*	746,704.00	784,039.20	823,241.16	864,403.22	907,623.38	953,004.55
	State	252,000.00	264,600.00	277,830.00	291,721.50	306,307.58	321,622.95
	Local Mill	705,147.00	\$740,404	\$777,425	\$816,296	\$857,111	\$899,966
	JARC/NF	100,000.00	100,000.00	100,000.00			
Total	\$ 2,169,583.39	\$ 2,258,433.26	\$ 2,351,579.34	\$ 2,349,234.96	\$ 2,459,160.42	\$ 2,574,356.06	
Deficit/Surplus		\$82,202.39	\$65,633.34	\$17,698.36	\$139,422.04	\$186,113.11	\$236,177.34
				carryover	\$304,956.13	\$408,866.85	\$579,410.84

*Fed, State & Local assumed at 5% increase


For East Grand Forks, the plan recommendations directly impact the costs of the required paratransit service. The reduction in the cost basis should reduce East Grand Forks' expenditures. The provision of the Dial-A-Ride is directly contracted by East Grand Forks with the providers; therefore the recommended lower cost basis is a direct impact rather than indirect as fixed route changes are.

ADDITIONAL BUS ROUTE

CITY OF GRAND FORKS



SOURCE: CITY OF GRAND FORKS
 PROJECTION: ND STATE PLANE
 NAME: ARJ
 DATE: JUNE 2007


 SCALE: 1" - 1800'



CAPITAL

Essentially, there are two types of capital items in transit: rolling stock and buildings. Rolling stock includes the fixed route buses and the mini-buses and vans providing the demand response services (DAR and Senior Rider). In addition to these operation vehicles, rolling stock also includes staff vehicles and maintenance vehicles. The other type of capital items are the maintenance facility (Bus Barn), Metro Transit Center and passenger shelters at various locations throughout the metro area.

Funds for capital purchase come from a variety of programs. Although the FTA 5307 program funds can be used for capital, Grand Forks must use these funds for operating expenditures. This is a common trait for the other urban areas of North Dakota. Therefore, the three North Dakota urban areas and the State of North Dakota have implemented a successful campaign to receive FTA 5309 discretionary funds for capital purchases. This funding source has been deemed reliable, and has been identified as the source of federal funds for capital purchases in North Dakota. The one major problem is that the total statewide funding request has typically not been awarded so each transit operator only receives a pro rata share of the request. This pushes back the actual year that the identified capital purchase can be obligated. The federal funds are typically an 83/17 match ratio for vehicles, and 80/20 for other capital. The local match is usually provided through the CAT mill levy or other general revenue sources.

East Grand Forks has more flexibility in securing funding sources for capital purchases. As detailed in the operating section, the FTA 5307 funds for East Grand Forks is enough to allow reliance on some left over for capital after the maximum has been utilized for operating. In addition to these federal funds, the State of Minnesota transfers some federal highway funds towards transit capital. These funds are awarded through the Minnesota area transportation partnership, which East Grand Forks utilized for the last vehicle purchase in 2002.

The long-term (20-year horizon) financial outlook for Cities Area Transit is difficult to forecast accurately. Given the forecast growth discussed in Section 2.4, it can be reasonably assumed that there will be some desire to serve the growing areas. It is anticipated that as many as two new routes/service areas may be added; one to serve the area south of 32nd Avenue in Grand Forks, and the other to serve the western portion of Grand Forks. Fortunately, the recommended route structure should be able to easily accommodate service expansion, with existing facilities serving as mini-transfer locations. Thus, the significant increases in future expenses will be due to adding an additional two buses to the fleet (capital expense), and hiring at least two more bus driver shifts (operating expense). The majority of CAT revenue comes from government subsidy and self generating revenues (i.e., farebox, advertising, etc.). It is impossible to know what funding levels will be available so far into the future, but if the current trend continues after the plan recommendations are implemented, it can be reasonably expected that CAT will be able to maintain financial health.

COORDINATION

SAFETEA-LU mandates that all urbanized areas must adopt a “locally developed” coordinated transportation plan in order to receive additional Federal Transit Administration (FTA) grants as of the 2007 Federal fiscal year. The MPO prepared and adopted such a plan for 2006-2009. The plan was developed by involving the metropolitan area’s human services agencies. This Coordinated Transportation Plan makes the metropolitan area of Grand Forks – East Grand Forks eligible for FTA Section 5310, 5316, and 5317 funding grants.

In order to measure the success of the Coordination Plan, the MPO has adopted the following list of desired outcomes:

- coordinated agencies;
- reduced duplication of services;
- increased transit ridership by target groups;
- customer satisfaction;
- available capacity;
- efficient service;
- affordable transportation; and
- accessible transportation.

The intent of the coordination requirement is to ensure that communities coordinate transportation resources and services provided through multiple Federal programs. Ultimately a coordinated plan should minimize duplication of Federal services and encourage the most cost-effective transportation possible.

3.8 RECOMMENDED IMPLEMENTATION

The recommendations identified above have varying lead times toward implementation, and in some cases are dependent upon one another. This section presents a framework for implementing the recommendations for each year within the five-year planning horizon.

Year 2006

- **Purchase replacement vehicles and improvements/upgrades to Bus Barn.**

Continue participation in North Dakota FTA #5309 statewide capital assistance request. Use the standard vehicle replacement schedule with emphasis on low-floor vehicles at medium duty type for fixed route. Continue repair/replacement and upgrades of “Bus Barn”. City of East Grand Forks participates with demand response rolling stock replacement. East Grand Forks begins process of becoming included in Minnesota FTA #5309 statewide capital assistance request.

- **Monitor operations.**

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

Prepare and adopt amendment to this document reflecting the changes required by the new Transportation Reauthorization bill – SAFETEA-LU.

Prepare and adopt the Coordinated Public Transportation/Human Services Transportation Plan. After adoption, amend this TDP to include it by reference.

Apply for funding from the New Freedom and Job Access Reverse Commute programs to extend service to the 42nd Street area and the Industrial Park area, to begin Saturday service at earlier hours, and to provide limited service on Sundays.

- **Upgrade Shelters**

Based upon the study outcome, begin implementing enhancements to identified shelters.

Year 2007

- **Purchase replacement vehicles and improvements/upgrades to Bus Barn.**

Continue participation in North Dakota FTA #5309 statewide capital assistance request. Use the standard vehicle replacement schedule with emphasis on low-floor vehicles at medium duty type for fixed route. Continue repair/replacement and upgrades of “Bus Barn”. City of East Grand Forks participates with demand response

rolling stock replacement. East Grand Forks continues process of becoming included in Minnesota FTA #5309 statewide capital assistance request.

- **Upgrade Shelters**

Continue implementation of Bus Shelter Enhancement Study recommendations

- **Monitor operations.**

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

With funding received from the new FTA programs and the increased apportionment of 5307 program funds, implement the expansion of services (see map of proposed Route 12/13 applied through the 2006 applications. Any capital requirements to implement these services are to come from the FTA 5309 program.

Year 2008

- **Purchase replacement vehicles and improvements/upgrades to Bus Barn.**

Continue participation in North Dakota FTA #5309 statewide capital assistance request. Use the standard vehicle replacement schedule with emphasis on low-floor vehicles at medium duty type for fixed route. Continue repair/replacement and upgrades of “Bus Barn”. City of East Grand Forks participates with demand response rolling stock replacement. East Grand Forks continues process of becoming included in Minnesota FTA #5309 statewide capital assistance request.

- **Upgrade Shelters**

Continue implementation of Bus Shelter Enhancement Study recommendations

- ~~**Adopt Update to Five Year Transit Development Plan**~~

~~Cooperatively work with the MPO and State DOTs to update the Transit Section of the Year 2035 Metropolitan Long Range Transportation Plan.~~

- **Monitor operations.**

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

Year 2009

- ***Purchase replacement vehicles and improvements/upgrades to Bus Barn.***

Continue participation in North Dakota FTA #5309 statewide capital assistance request. Use the standard vehicle replacement schedule with emphasis on low-floor vehicles at medium duty type for fixed route. Continue repair/replacement and upgrades of “Bus Barn”. City of East Grand Forks participates with demand response rolling stock replacement. East Grand Forks continues process of becoming included in Minnesota FTA #5309 statewide capital assistance request.

- **Monitor operations.**

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

Year 2010

- ***Purchase replacement vehicles and improvements/upgrades to Bus Barn.***

Continue participation in North Dakota FTA #5309 statewide capital assistance request. Use the standard vehicle replacement schedule with emphasis on low-floor vehicles at medium duty type for fixed route. Continue repair/replacement and upgrades of “Bus Barn”. City of East Grand Forks participates with demand response rolling stock replacement. East Grand Forks continues process of becoming included in Minnesota FTA #5309 statewide capital assistance request.

- ***Monitor operations.***

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

Year 2011

- ***Purchase replacement vehicles and improvements/upgrades to Bus Barn.***

Continue participation in North Dakota FTA #5309 statewide capital assistance request. Use the standard vehicle replacement schedule with emphasis on low-floor vehicles at medium duty type for fixed route. Continue repair/replacement and upgrades of “Bus Barn”. City of East Grand Forks participates with demand response rolling stock replacement. East Grand Forks continues process of becoming included in Minnesota FTA #5309 statewide capital assistance request.

- ***Begin Data Collection in order to Update to Five Year Transit Development Plan***
- ***Monitor operations.***

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

Year 2012

- *Adopt Update to Five Year Transit Development Plan*

Cooperatively work with the MPO and State DOTs to update the Transit Section of the Year 2035 Metropolitan Long Range Transportation Plan.

- *Monitor operations.*

Consider adjustments, as necessary, based upon the financial performance of the system and available resources.

Pedestrian and Bicycle Funding

Facilities for pedestrian and bicycle traffic will be evaluated as to the adequate provision of sidewalks, bikeways, separation of modes and the incorporation of such facilities into other modes of transportation. It is estimated that the future trail system, as identified, will cost 10.4 million dollars. Funding for the trails portion of the non-motorized section of the plan will come from revenues expected to be received from TEA-21 enhancement funds, urban road funds for new construction/reconstruction, and the corresponding local match for such funds. Sidewalk construction will be financed through local funding mechanisms and private contributions.

Federal transportation enhancement funds are the prime, but not only funds available for trail development in the MPO study area. Both Minnesota and North Dakota have enhancement committees that review applications annually for qualified trails.

Intelligent Transportation Systems

Technology to enhance the efficiency of the existing transportation system through management practices that uses computer and information technology is developing daily. The use of this technology, Intelligent Transportation Systems (ITS), involves using technology to help improve the flow of traffic through better monitoring of the system, providing up-to-date information to the user about the system conditions and instituting service enhancements similar to what most of us know as signal synchronization on particular streets, but done in a much more sophisticated manner and for entire areas or corridors.

The Grand Forks – East Grand Forks ITS strategy plan and the ITS regional architecture currently under development will be integrated into the LRTP as they are completed. A list and map of the proposed ITS solutions for the Grand Forks – East Grand Forks Metropolitan area is included on page 53.

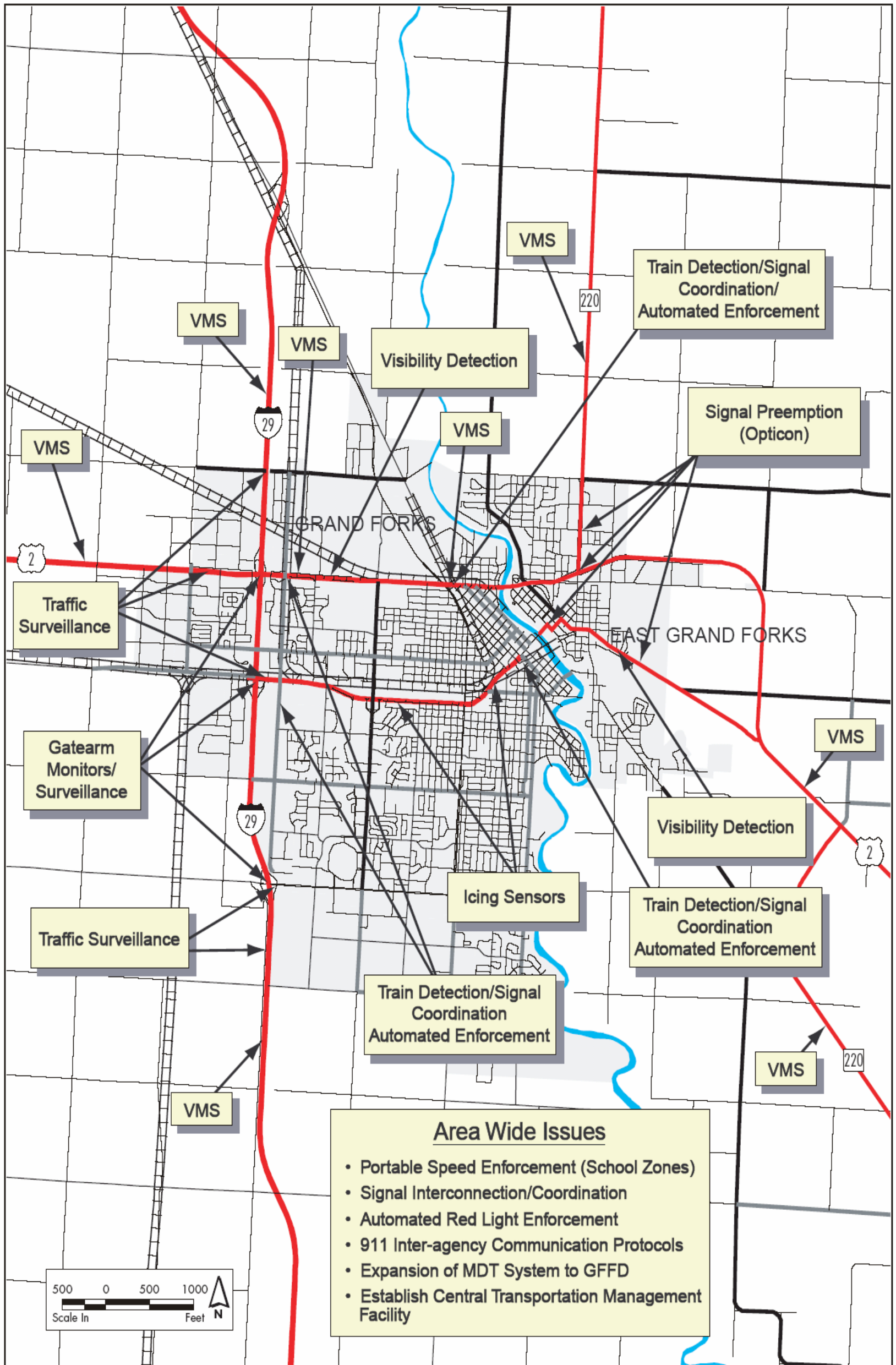
ITS Timeframe

This section briefly outlines the possible time frame for deployment of selected ITS projects in the GF/EGF area. Market Packages are arranged into short, medium, and long-term deployment categories. It should be noted that not all of the planned services for the GF/EGF area have been fully developed into ITS projects yet. Please note that Market Packages are organized in the same order as they appear in the National ITS Architecture.

Market Packages	Time Frame
Network Surveillance	Short
Surface Street Control	Short
Traffic Information Dissemination	Medium
Regional Traffic Control	Short-Medium
Traffic Incident Management System	Medium-Long
Standard Railroad Grade Crossing	Medium-Long
Speed Monitoring	Medium-Long
Roadway Automated Treatment	Short
Winter Maintenance	Short
Transit Vehicle Tracking	Medium
Transit Fixed-Route Operations	Short-Medium
Transit Passenger and Fare Management	Short
Transit Security	Short
Multi-modal Coordination	Medium-Long
Emergency Call-Taking and Dispatch	Short-Medium
Emergency Routing	Short-Medium
Wide-Area Alert	Short
ITS Data Warehouse	Medium

As shown in Table 6, the year of expenditure cost estimates are relatively consistent with (within three percent) anticipated street and highway funding levels through 2035. As noted in the table, alternative funding sources have been assumed for two different projects:

- The Merrifield Bridge project is within Polk and Grand Forks Counties' jurisdictions, and would be funded the rough sources identified by the counties.
- The new East-West Arterial connecting Bygland to 32nd Avenue Bridge project would require City of East Grand Forks funding.



Transportation Plan Amendment Policy and Procedures

The long range transportation plan will be reviewed on a five-year cycle and updated or revised as needed to reflect changes in priorities, socioeconomic and spatial changes, and financial availability. Any and all revision, changes, or amendments shall be subject to the MPO transportation planning process. This process includes review by the MPO Technical Advisory Committee, MPO Executive Policy Board, and public input as defined in the Grand Forks – East Grand Forks MPO public participation plan.

Procedures and actions concerning review and update of this document will conform to all specifications contained under mandates of SAFETEA-LU, ADA, NEPA, and local, state, and federal regulations and ordinances.

MPO Executive Policy Board

The MPO is governed by an eight (8) member board of officials representing both cities and both counties in the MPO study area. The MPO Executive Policy Board handles the day-to-day operations of the MPO staff. Members of the MPO Executive Policy Board include:

Doug Christensen – Grand Forks City Council (Chair)
Dick Grassel – East Grand Forks City Council
Steve Gander – East Grand Forks City Council
Art Bakken – Grand Forks City Council
Steve Adams – Grand Forks Planning Commission
Gary Malm – Grand Forks County
Robert “Punky” Beauchamp – East Grand Forks Planning Commission
Warren Strandell – Polk County

MPO Technical Advisory Committee

Issues dealing with transportation in the MPO Study Area are reviewed by the Technical Advisory Committee (TAC). The TAC provides technical knowledge and proposes content, strategies, and execution of the MPO LRTP. Its recommendations are forwarded to the MPO Executive Policy Board for approval. The members of the MPO Technical Advisory Committee include:

Paul Benning – North Dakota Department of Transportation (Bismarck)
Nancy Ellis – East Grand Fork Planning
Dale Bergman – Cities Area Transit
John Thompson – Grand Forks Engineering
Jim Bittmann – Minnesota Department of Transportation
Les Noehre - North Dakota Department of Transportation (Grand Forks)
Richard Onstad – Grand Forks County Engineering
Brad Gengler – Grand Forks Planning
Rich Sanders – Polk County Engineering
Dean Wieland – East Grand Forks Engineering
Lane Magnuson – Grand Forks County Planning