

Grand Forks - East Grand Forks Metropolitan Planning Organization

Agenda

TECHNICAL ADVISORY COMMITTEE MEETING WEDNESDAY, AUGUST 9TH, 2017 – 1:30 P.M. EAST GRAND FORKS CITY HALL TRAINING ROOM

MEMBERS

Lang _____	Laesch/Konickson__	West _____
Ellis _____	Johnson/Hanson _____	Magnuson _____
Bail/Emery _____	Kuharenko/Williams/Yavarow _____	Sanders _____
Gengler/Erickson _____	Bergman/Rood _____	
Riesinger/Audette _____	Christianson _____	

1. CALL TO ORDER
2. CALL OF ROLL
3. DETERMINATION OF A QUORUM
4. MATTER OF APPROVAL OF THE JULY 12TH, 2017, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE
5. MATTER OF 2045 STREET/HIGHWAY ELEMENT UPDATE A.T.A.C.
 - a. 2015 Travel Demand Model
 - b. AirSage Origin Destination Data
6. MATTER OF APPROVAL OF FY2018-2021 MINNESOTA SIDE T.I.P. HAUGEN
 - a. Public Hearing
 - b. Committee Action
7. OTHER BUSINESS
 - a. 2017 Annual Work Program Project Update
8. ADJOURNMENT

ANY INDIVIDUAL REQUIRING A SPECIAL ACCOMMODATION TO ALLOW ACCESS OR PARTICIPATION AT THIS MEETING IS ASKED TO NOTIFY EARL HAUGEN, MPO EXECUTIVE DIRECTOR AT (701) 746-2660 OF HIS/HER NEEDS FIVE (5) DAYS PRIOR TO THE MEETING. ALSO, MATERIALS CAN BE PROVIDED IN ALTERNATIVE FORMATS: LARGE PRINT, BRAILLE, CASSETTE TAPE, OR ON COMPUTER DISK FOR PEOPLE WITH DISABILITIES OR WITH LIMITED ENGLISH PROFICIENCY (LEP) BY CONTACTING THE MPO EXECUTIVE DIRECTOR (701) 746-2667 FIVE (5) DAYS PRIOR TO THE MEETING.

**PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE
Wednesday, July 12th, 2017
East Grand Forks City Hall Training Conference Room**

CALL TO ORDER

Earl Haugen, Chairman, called the June 14th, 2017, meeting of the MPO Technical Advisory Committee to order at 1:36 p.m.

CALL OF ROLL

On a Call of Roll the following members were present: Michael Johnson, NDDOT-Bismarck (via conference call); David Kuharenko, Grand Forks Engineering; Stephanie Erickson, Grand Forks Planning; Dustin Lang, NDDOT-Grand Forks District; Nancy Ellis, East Grand Forks Planning; Brad Bail, East Grand Forks Consulting Engineer; Paul Konickson, MnDOT-District 2; Nels Christianson, BNSF; and Dale Bergman, CAT.

Staff present: Earl Haugen, GF/EGF MPO Executive Director; Jairo Viafara, GF/EGF MPO Senior Planner; and Peggy McNelis, GF/EGF Office Manager.

Guest(s) present: Brandon Bourdon, Kimley-Horn; Scott Mareck, WSB Engineering; Jane Williams, Grand Forks Engineering; and Al Grasser, Grand Forks Engineering.

INTRODUCTIONS

Haugen introduced Ethan Bialik, GF/EGF MPO Intern, and asked that he give a brief introduction of himself.

DETERMINATION OF A QUORUM

Haugen declared a quorum was present.

MATTER OF APPROVAL OF THE JUNE 14, 2017, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

Kuharenko referred to Page 5 of the minutes, paragraph 3, where he had asked for clarification on the amendment process, and asked that the process actually be included as part of the minutes.

MOVED BY KUHARENKO, SECONDED BY LANG, TO APPROVE THE JUNE 14TH, 2017, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE, AS AMENDED.

MOTION CARRIED UNANIMOUSLY.

MATTER OF NORTH DAKOTA FREIGHT PLAN UPDATE

Haugen reported that with the passage of FAST, the freight program was authorized and appropriated funds; and that as part of this each State was tasked with identifying routes of the state and local street network that would be included in the National Freight Network. He explained that NDDOT enlisted the assistance of Upper Great Plains to help identify the added mileage, and they in turn requested the three MPOs identify their respective candidate routes by June 30th.

Haugen stated that the State and local segments would be identified as Rural Critical Freight Corridors or Urban Critical Freight Corridors, and even though we are more interested in the Urban side we still have our study area responsibilities that include possible rural designations as well.

Haugen commented that the MPO staff developed a draft map displaying potential candidate roadways and convened a meeting consisting of Les Noehre from the Local District Office; David Kuharenko, Grand Forks Engineering Department; Nick West, Grand Forks County; Mark Walker, Grand Forks Engineering; and MPO staff to review it, and the map shown is the result of that review. He added that the Urban Critical Freight Corridors are now under the review of the NDDOT.

Haugen reported that on a similar timeframe, the NDDOT, along with Upper Great Plains, also requested the MPOs to help define the North Dakota Strategic Freight System inside our MPO areas, and although this is a State derived designation, the MPO and local jurisdictional staff attempted to maintain consistency between the two designations, with the main difference being that the State was not limited by mileage or a specific geography.

Haugen referred to the map illustrating the designation of the Urban Critical Freight Corridor, and went over it briefly:

Level 1 – Critical Rural Freight Corridors (International/Interstate include Interstate and Interregional Highways, Congressional Designated High Priority Corridors, STRAHNET, National Truck Network, Energy/Agricultural Access Corridors, and High Truck Volume Principal Arterials.

Highway 2 (Gateway Drive) and I-29 Corridors

Level 2 – Regional/Intrastate – State Corridors, District Corridors, Limited County Major Collectors, and City Principal Arterials.

Washington Street

Level 3 – Local – District Collectors; Some County, City, Township, and Tribal Roads.

All Other Roadways

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Lang asked who designated these as 1, 2, or 3. Haugen responded that this was determined at the meeting with Les Noehre, David Kuharenko, Nick West, Mark Walker, and MPO staff. Lang asked if any consideration had been given to designating the east/west portion of DeMers as Level 2. Haugen responded that there was, but ultimately they felt it was a Level 3.

Grasser referred to the map and commented that something they might need to consider is the increased usage of 69th by LM to get to their new blade staging development, and by traffic to and from the landfill.

Discussion on the additional usage of 69th, and other adjacent roadways, ensued.

Haugen agreed that this area is something that should be considered and explored further.

Haugen asked, is this tied to the funding program, yes, but in reality the funding will tend to follow where development is causing the need to improve transportation routes.

Kuharenko asked, even though funding is associated, will we have measures and goals that will connect with this as well; and are there separate freight programs or will this be added to the Urban/Rural pot and split. Johnson responded that as of now it will be one pot and split.

MATTER OF 2045 STREET/HIGHWAY ELEMENT UPDATE

Brandon Bourdon, Kimley-Horn, and Scott Mareck, WSB were present for a brief update and presentation (a copy of which is included in the file and available upon request).

Mareck gave a brief overview of the existing conditions.

Pavement Conditions:

Kuharenko referred to the Pavement Trends by Pavement Condition Index slide, and stated that he feels that the numbers shown in 2003 may be skewed by our flood recovery efforts. Haugen responded that the 2003 report recognizes that.

Kuharenko referred to the Pavement Conditions Comparison slide and questioned the need for the “very poor” column. He then referred to the Pavement Conditions Map, and pointed out that Columbia, from 11th to 13th, is rated “good condition” but in reality it is in terrible condition, so he feels this information should be looked at further.

Mareck asked that everyone make note of the pavement areas they are concerned about and submit them for further consideration.

Crash Rates/Types:

Mareck referred to the Crash Rate map and pointed out that locations where there were a higher than expected number of crashes are shown with red stars, and locations where there were a lower than expected number of crashes are shown with green circles.

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Williams asked if he could cite what the “below expected crash rate” is based on, is it a million vehicle miles, or is it exposure, or whatever it is could you just put that in. Mareck responded that they would put a disclaimer in there and provide that. He said that it is an average rate that their traffic staff came up with and he isn’t sure if it is from NDDOT or MnDOT, but they will get that information and include it.

Mareck summarized that this does not totally cover everything, but it does cover a vast majority of the existing condition information that you will find in the report. He added that, again, keep in mind that this is somewhat raw data that they are inviting everyone to provide input on so please let Mr. Haugen know if you see any glaring errors so that they can look into them and they will make sure that they incorporate the comments made today as well.

Bourdon referred to the presentation and explained that he will touch briefly on Goals, Objectives and Performance Measures.

Bourdon stated that they will review the 2040 Transportation Plan’s performance measures and will update goals and performance measures to be in adherence with the FAST Act; and in order to do that they will need to get feedback from the Technical Advisory Committee

Bourdon referred to a slide listing the 2040 Plan Goals on the left side and the FAST Act Required Goals on the right side, and stated that as they move forward they will look at these to make sure that all of those goals are tackled.

Bourdon referred to a slide of the MPO 2045 Draft Vision Statement, and explained that, based on comments from the last meeting this is the statement they came up with: “The Grand Forks-East Grand Forks Long Range Transportation Plan envisions a community that provides a variety of complementary transportation choices for people and goods **that is fiscally constrained**”.

Grasser said that he is just wondering if, so that it doesn’t get confused with only the federal fiscal constraint; if we should just list out, fiscally constrained at the local, state and federal, because each one kind of has little bit different priorities and might run into different types of constraints. Bourdon responded that they can look at writing that in here, or as we could cover it in the financial section. Grasser said that that is possible, he just wants to make sure that people don’t misconstrue that we are only talking federal constraint because one of the drivers with the last transportation plan was federal fiscally constrained projects.

Bourdon pointed out that we have basically the same eight goals that there were before, but they added a couple more as well; resiliency and tourism.

Williams asked if all of the goals are required. Bourdon responded that we need to tie it back to the FAST Act required goals, and some can be variations that will tie back very well. Williams said, then, that the FAST Act goals are the required goals for a Long Range Transportation Plan. Haugen responded that that is correct, and added that what our current goals are are what are called Planning Factors, which we have to address and which are very similar to goals. Williams asked, then, if they would come up with another title for the planning factors rather than using

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“goal” again. Haugen explained that we are doing a multi-modal transportation plan so we have other goals that we are planning for so that is why we were focusing on the factors, which are from the combined planning regulations.

Bourdon stated that there will be just one list of goals. He explained that they first have to show how it is tied to the FAST Act required goals, and then they will combine all of the goals into just one list.

Discussion ensued.

Williams commented that she would like to have this consistent with what the feds have so if someone is looking at this they are able to see it directly reflected in our plan. Bourdon said that what is going to be important is how we communicate this as we move forward.

Haugen reported that when we get audited by our federal partners, they ask specifically about each one of these individually, how we address them, so we could combine them, but we are trying to show distinctly how each one is individually addressed per what are required by the regulations.

Williams said, then, that the goals that are shown on the slide right here are the specific goals that the feds would audit on, is that correct. Haugen responded that that is correct. Williams stated that that is where the clarification needs to come in, that this is required because you have FAST required and then you have multi-modal required, so she thinks that would clarify it.

Bourdon commented that as we get into performance measures they will walk through them and get information to Mr. Haugen that can be presented to you as they will be presenting this to the public and the plan at this point was to add a public meeting to focus on this, but they are planning on presenting this sometime in November, so between then and now they will be doing different iterations of things that will be communicated to you.

Bourdon went over the project timeline briefly.

Haugen commented that at our next Technical Advisory Committee meeting Diamo and ATAC will be presenting on the 2015 Base Travel Demand Model. Williams asked if they would have time to go over that in our standard timeframe that we have for the TAC meeting. Haugen responded they would as it is in draft form, so it isn't the final product.

Haugen stated that we also have communications going on with both City Staff about future road networks, and trying to get those identified, so as soon as we have 2015 out of the way we will jump into 2030 and 2045, the existing plus committed type of transportation network improvement designs.

Williams asked that if there is anyway MPO staff can get information out to the TAC members the Friday before the meeting it would be much appreciated as that would give them more time to look the information over. Haugen agreed that he would try to get the information out as early as possible.

OTHER BUSINESS

a. 2017 Annual Work Program Project Update

Erickson stated that she had a question on the Near South Neighborhood project, specifically about the training that had been discussed earlier, and when that might be taking place. Haugen responded that they are waiting to see if we should wait until the summer recess is done or not. He added that it seems like we are leaning more towards waiting until fall to hold it.

Erickson pointed out that the completion date for the Bike/Ped Plan Update is still showing as being May 2016, but since that is no longer the case she is wondering what the new completion date might be. Viafara responded that it would not be before September 2017.

b. INFRA Grant Program

Haugen reported that recently the Feds released their solicitation for the INFRA Grant Program, which used to be called the FASTLANE Grant. He said this is a two year solicitation with the second year funding still not sure about the amount available. He added that the more one can show a private partner in the application, the likelier it might be to be chosen for funding. He commented that if anyone plans on submitting anything in the MPO area you will need the standard MPO support letter that says how it works with the MPO plans and program.

Williams asked if they would be getting a solicitation letter from the NDDOT on this. Haugen responded that this is the only notification you will be receiving, and added that it is a national solicitation. Williams asked, then, if they would submit their application to the MPO. Haugen responded that they would not, that they should submit it GOVS.com. He added that this is the same type of solicitation as for the TIGER, Tinder, etc., grants.

c. NDDOT Director Position

Johnson reported that a new NDDOT Director has been hired. He stated that his name is Thomas Sorel, and he is scheduled to start August 7th. He said that some may recognize his name as he was the former Minnesota Department of Transportation Commissioner, and has extensive federal highway experience as well.

ADJOURNMENT

MOVED BY BERGMAN, SECONDED BY LANG, TO ADJOURN THE JULY 12TH, 2017, TECHNICAL ADVISORY COMMITTEE MEETING AT 3:14 P.M.

MOTION CARRIED UNANIMOUSLY

Respectfully submitted by,

Peggy McNelis,
Office Manager



GRAND FORKS EAST GRAND FORKS 2015 TRAVEL
DEMAND MODEL UPDATE

DRAFT REPORT

Draft Update Presented to the Grand
Forks East Grand Forks MPO TAC

August 9th 2017

Diomo Motuba, PhD
Advanced Traffic Analysis Center
Upper Great Plains Transportation Institute
North Dakota State University
Fargo, North Dakota 58102

1. INTRODUCTION

The Grand Forks East Grand Forks MPO's (The GF-EGF MPO) Travel Demand Model (TDM) is updated every five years to reflect new ground truths/data and the advancements in the state-of-the-art in transportation modeling techniques and methods. The current update reflects base year 2015 data. The model is a four-step TDM including trip generations, trip distributions, modal split and trip assignment. The update process involves calibrating the model input parameters and validating the model output with ground truths. The model calibration is a cyclical process as shown in Figure 1. This memo shows the current model update efforts and is a preliminary report. It does not reflect in any way the final output of the model. Several of the tables and results shown will definitely change as the validation and calibration process is completed.

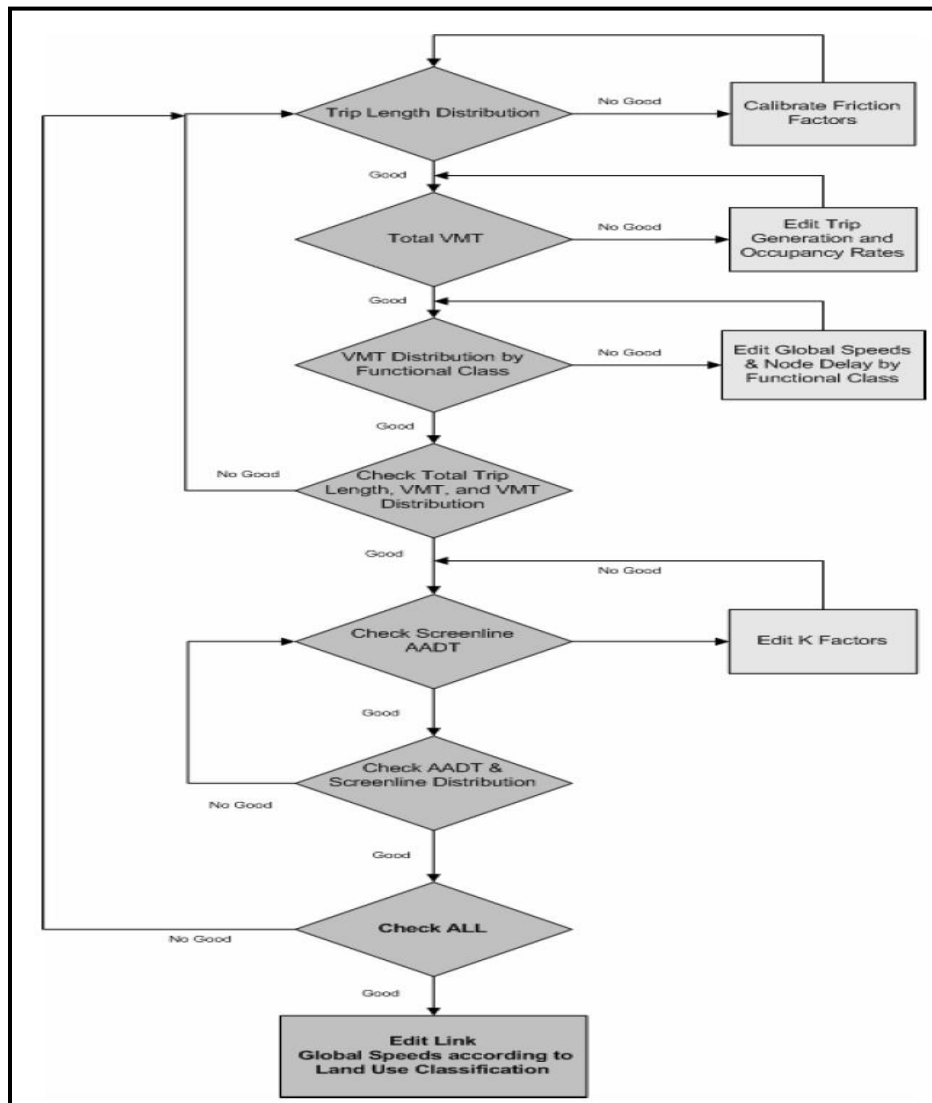


Figure 1 GF-EGF TDM Calibration Flow Chart

2. IMPROVEMENTS TO THE 2015 TDM

For the 2015 base year model, several updates were made to the model to reflect the availability of new and improved data, new and advanced methods in modeling software and the inclusion of long-haul freight movements as part of the model. New data that was used for 2015 model update included: Origin Destination Data (Obtained from Airsage), the traffic analysis tool data, incorporation of truck counts and FAF data to model freights.

2.1. Origin Destination Data Obtained from Airsage

Origin-destination (OD) data were obtained from a commercial vendor Airsage. Airsage is a company that aggregates cell phone cellular-signal data points anonymously in partnership with the nation's largest wireless carriers. Origin Destination data were collected for the entire North Dakota and external locations rather than for the GF/EGF MPO area only. Overall, a total of 301 OD TAZs were used. OD TAZs are defined as TAZs that were used in the OD survey data collection. Of the 301 OD TAZs, 61 were TAZs internal to the GF/EGF MPO area. The internal OD TAZs were an aggregation of the TAZs in the GF/EGF TDM which had a total of 584 TAZs. Figure 2 shows the overall OD TAZs and the GF/EGF MPO TAZs geographies.

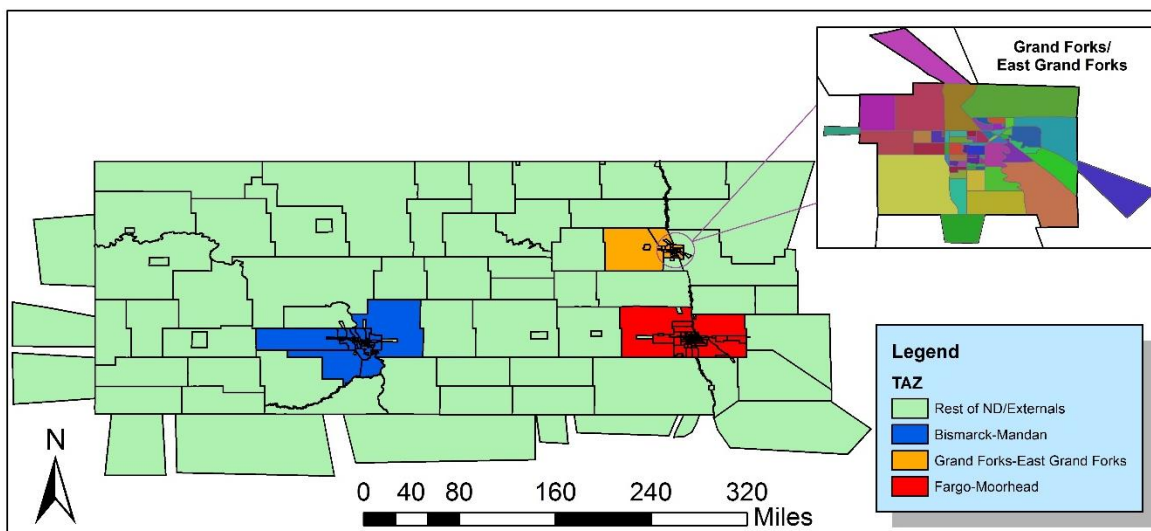


Figure 2 OD TAZs

Different datasets were provided by Airsage reflecting temporal, socioeconomic and weekday/weekend data and included the following tables:

1. Average Weekday 24 Hour trip matrix reflecting the total 24 hour Origin-Destination by trip purposes (HBW, HBO, NHB). Four Matrices were provided for different socioeconomic variables including age (5 year cohorts), income (\$10,000 increments), and vehicle attributes (0->5 for rent/owner households).
2. Average Weekday Peak Hour matrices (7:00AM-10:00AM, 10:00AM-4:00PM, 4:00PM-7:00PM) by trip purposes. Four Matrices were provided for different socioeconomic variables including age (5 year cohorts), income (\$10,000 increments), and vehicle attributes (0->5 for rent/owner households).

3. Weekend matrices for each of the weekends of October 2015 by trip purposes (HBW, HBO, NHB). Four Matrices were provided for different socioeconomic variables including age (5 year cohorts), income (\$10,000 increments), and vehicle attributes (0->5 for rent/owner households) for each weekend.
4. Long Distance ODs, showing external-external trips for the full day for both weekday averages and each weekend for HBW, HBO and NBH trips. No socioeconomic data were provided for these matrices.

The OD data is very useful in differentiating trips that are internal to the GF-EGF MPO area: internal-internal (II) trips, trips that pass through the GF-EGF MPO area: external-External (E-E) trips, and trips that start/end in the MPO area with the other end outside the MPO area: internal-external/external-internal (IE/EI) trips.

2.1.1. Internal-Internal OD Trip Summary

For HBW trips for the GF/EGF MPO TAZs, the late-morning to early-evening period had the highest proportion of trips (30%) followed by the AM Peak and Night periods (25% each) and the PM Peak period (20%). The late-morning to early-evening period had the highest proportion of HBO trips (36%), followed by the Night period (27%), PM peak (21%) and AM Peak 17%. This is expected and possibly because fewer non-work trips originate from homes during the morning peak period. Trip activity locations such as malls, schools, walk-in hospitals, banks, typically open after 8:00AM. For NHB trips, the late-morning to early-evening period again has the highest proportion of trips (45%), followed by the PM Peak (23%), AM Peak (17%) and the Night period (17%).

The data were further disaggregated to reflect the different proportions of trips by purpose and type for different external locations. The external locations were distinguished as North, South, East and West with Interstate 94 and U.S. Highway 2 the main highways trips used for entry/exit to the GF/EGF MPO area. This was done to evaluate whether trips from the North (which included trips from Canada) had different Peak AM proportions for HBW for example. It was found that the different external locations followed similar trends to that shown in Table 1.

summarizes the OD data by trip purpose and by time periods. The % overall column reflects the percentage of trips that had at least one end in the Grand Forks East Grand Forks MPO area with respect to the entire dataset. 23% of HBW, 14 % of HBO, and 9% of NHB, of total trips in the overall North Dakota data had trip ends in the GF-EGF MPO area. The data shows the trip purposes by time of day, Peak AM, Peak Afternoon, Peak PM and Night trips. For HBW trips for the GF/EGF MPO TAZs, the late-morning to early-evening period had the highest proportion of trips (30%) followed by the AM Peak and Night periods (25% each) and the PM Peak period (20%). The late-morning to early-evening period had the highest proportion of HBO trips (36%), followed by the Night period (27%), PM peak (21%) and AM Peak 17%. This is expected and possibly because fewer non-work trips originate from homes during the morning peak period. Trip activity locations such as malls, schools, walk-in hospitals, banks, typically open after 8:00AM. For NHB trips, the late-morning to early-evening period again has the highest proportion of trips (45%), followed by the PM Peak (23%), AM Peak (17%) and the Night period (17%).

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Table 1 Summary of Internal-Internal OD Data from Airsage

Grand Forks/East Grand Forks MPO TAZ OD Trips						
	7-10AM	10AM-4PM	4-7PM	Night	Total	% of Overall
HBW	11,206	13,594	8,938	10,965	44,703	23%
HBO	18,554	38,865	22,485	28,979	108,883	14%
NHB	16,482	43,878	22,195	15,373	97,928	9%
Total	46,242	96,337	53,618	55,317	251,514	12%
Proportions by Trip Purpose and Time of Day, GF/EGF MPO TAZs Only						
	7-10AM	10AM-4PM	4-7PM	Night	Total	% of Overall
HBW	25%	30%	20%	25%	100%	23%
HBO	17%	36%	21%	27%	100%	14%
NHB	17%	45%	23%	16%	100%	9%
NHCRP 718 Time-of-day Distributions by Purpose						
	7-10AM	10AM-4PM	4-7PM	Night	Total	
HBW	25%	22%	26%	27%	100%	
HBO	15%	38%	26%	21%	100%	
NHB	15%	53%	21%	11%	100%	

2.1.2. Internal-External/External-Internal Origin Destination Data

Table 2 shows the IE and EI trip data and the proportions of IE/EI trips to the total trips for each trip purpose and time period. The table shows OD trips that had at least one trip end in the study area. Overall, IE/EI trips made up 15% of the total trips for the GF/EGF MPO OD study area. For HBW trip purposes, the proportions of EI/IE 12% of the total trips and ranged from 10% to 15% for the different time periods. For HBO trips, the IE/EI made up 13% of total trips and ranged from 11% to 15% for the different time periods. The NHB trips were for IE/EI where 18% of the total GF/EGF NHB trips and ranged from 14% to 16% for the different time periods.

Table 2 IE and EI Trips from OD Data for the GF-EGF MPO Area

Total IE Trips					
	7-10AM	10AM-4PM	4-7PM	Night	Total
HBW	1,313	1,384	984	1,627	5,308
HBO	2,316	4,465	2,793	4,484	14,058
NHB	3,556	7,549	3,687	2,767	17,559

Total	7,185	13,398	7,464	8,878	36,925
Percentage of IE Trips to Total Trips for GF/EGF Data					
	7-10AM	10AM-4PM	4-7PM	Night	Total
HBW	12%	10%	11%	15%	12%
HBO	12%	11%	12%	15%	13%
NHB	22%	17%	17%	18%	18%
Total	16%	14%	14%	16%	15%

2.1.3. External-External OD Data

External-External (EE) OD data shows the trips that pass through the GF/EGF MPO area without stopping. Transient locations were not included in the OD dataset provided by Airsage which would have simplified the task of obtaining EE trips. The data itself does not inform us if a trip between two OD pairs possibly passed through the GF/EGF MPO area. The implication was that EE data had to be estimated using an algorithm that took into account the possibility that trips between OD pairs passed through the GF MPO area. The methodology developed incorporated the use of real time travel data between OD pairs and was developed using an online mapping application APIs. The method assumed that trips between OD pairs will use the shortest travel time path between the OD pairs. The methodology to estimate EE OD pairs that passed through the GF/EGF MPO area was as follows

1. Select all OD pairs that are not part of the internal GF/EGF MPO OD TAZs i.e. not part of the 61 GF OD TAZs. 240 OD TAZs fit this category.
2. Calculate average shortest travel path between all OD pairs using API algorithm developed for online mapping application for each time period.
3. Evaluate whether any portion of the route between each OD pair included a spatial location point within the GF/EGF MPO area (longitude/latitude).
4. If yes to 3, trips between those OD pairs were considered as EE trips for the GF/EGF MPO area.

Table 3 shows the percentages of EE trips that pass through the GF/EGF MPO area by trip type and by trip purpose. Table 3 also shows the proportion of each EE trip type as the overall proportion of EE and EI trips. Overall, EE trips made up about 17% of total EE and EI/IE trips. This was a lot higher than the typically used 10-12% through trip percentages.

The percentage of EE only trips ranged from 21% for the AM Peak period to 37% for the late-morning to early-afternoon period. For HBW, the majority of trips occurred during the Night period (30%) with the least amount of trips occurring during the PM Peak period. This could be because this time period includes the early morning (6:00AM to 7:00 AM) and late evening (7:00PM to 9:00PM). Trips passing through the GF/EGF MPO area for work may typically leave early and arrive later due to comparatively longer travel times. For HBO trips, the pattern is similar to the HBW trips with 35% of trips occurring at night and 17% of trips occurring during the AM Peak period. For NHB trips, the late-morning to early-afternoon period had the highest percentage of trips (43%) followed by the AM Peak period (23%), and the Peak PM and Night periods (17% each).

Table 3 EE Trips from OD Data

EE Trips passing through GF-EGF MPO					
	7-10AM	10AM-4PM	4-7PM	Night	Total
HBW	148	186	110	194	638
HBO	351	571	380	708	2,010
NHB	814	1,540	613	595	3,562
Total	1,313	2,297	1,103	1,497	6,210
Percentage of EE Trips passing through GF-EGF MPO					
	7-10AM	10AM-4PM	4-7PM	Night	Total
HBW	23%	29%	17%	30%	100%
HBO	17%	28%	19%	35%	100%
NHB	23%	43%	17%	17%	100%
Total	21%	37%	18%	24%	100%
Percentage of EE Trips to Total EE/EI Trips					
	7-10AM	10AM-4PM	4-7PM	Night	Total
HBW	11%	13%	11%	12%	12%
HBO	15%	13%	14%	16%	14%
NHB	23%	20%	17%	21%	20%
Total	18%	17%	15%	17%	17%

2.1.4. Use of Airsage OD Data in the TDM

The OD data were used to calibrate and validate the trip generation and trip distribution steps of the model. Prior models could not distinguish between EE trips for HBW and HBO trips for the AM Peak period for example. Ultimately, it leads to more precise and accurate models.

2.1.4.1. Trip Generation

For trip generation, the data were used primarily to disaggregate daily trips into peak and off peak periods for the different trip purposes and for different trip types (II/IE/EI and EE trips). UND trips were also enhanced and developed using the OD data. This created a more refined and more accurate output

that was used for later parts of the model. The refinement greatly enhanced the ability of the model to replicate ground truths.

2.1.4.2. Trip Distribution

Trip distribution assigns trips generated in the trip generation step between origin and destination pairs. The typical output of the trip distribution step in TDMs is a matrix showing the origins and destination of each trip. For the GF/EGF MPO TDM, the gravity model was used to distribute trips. The gravity model uses the trip generation outputs (production and attractions by trip purpose for each zone), a measure of travel impedance between each zonal pair (travel time), and socioeconomic/area characteristic variables (“K-factor”) variables as input. The K-factor is used to account for the effects of variables other than travel impedance in the model. The OD data were used to develop K-factor matrices imputed in the trip gravity model that were used for distributing trips for each time period and purpose.

2.1.5. Evaluating the OD Data for UND, Columbia Mall and Altru Hospital

UND, Columbia Mall and the Altru Hospital are some of the “Special” trip generators within the GF-EGF MPO area. An analysis of the OD data for trips attracted to these TAZs was performed to show how the data can be used to visually show the OD data. Figures 3, 4 and 5 show trip attractions to UND, the mall and the Altru Hospital.

Figure 3 shows the weekday trip attractions to UND for 18-25 olds. It shows that most trips that end up in UND for this age group originate from within the UND TAZs (11-25%). TAZs South of Demers, East of Washington, North of 32nd Ave S and East of the River produced between 6-10% of trips made by 18-24 year olds that end in the UND TAZs. The Grand Forks Airforce base (TAZ) to the West of the Metro area produces between 2 and 3 % of trips that were attracted to UND. Figure 4 shows the percentage of trips attracted to the mall for the different TAZs. TAZs around UND generates the highest percentage of trips that end up in the mall (5-10%). TAZs South of Demers, East of Washington, North of 32nd Ave S and East of the River produced between again generate a good proportion of trips that end up at the Columbia Mall (3-5%). The rest of the trips are fairly evenly distributed amongst the other TAZs. Figure 5 shows the trips that are attracted to the zone that includes the Altru Hospital. Zones around UND provide the highest number of trips to the Altru hospital. The Grand Forks Air Force Base generates a good proportion of trips that end up in the Hospital. TAZs South of Demers, East of Washington, North of 32nd Ave S and East of the River produced between 0.5 and 1% of trips that ended at the Altru Hospital. Overall, the data shows some interesting trends with respect to where trips originate and terminate for some of the major trip generators in the area.

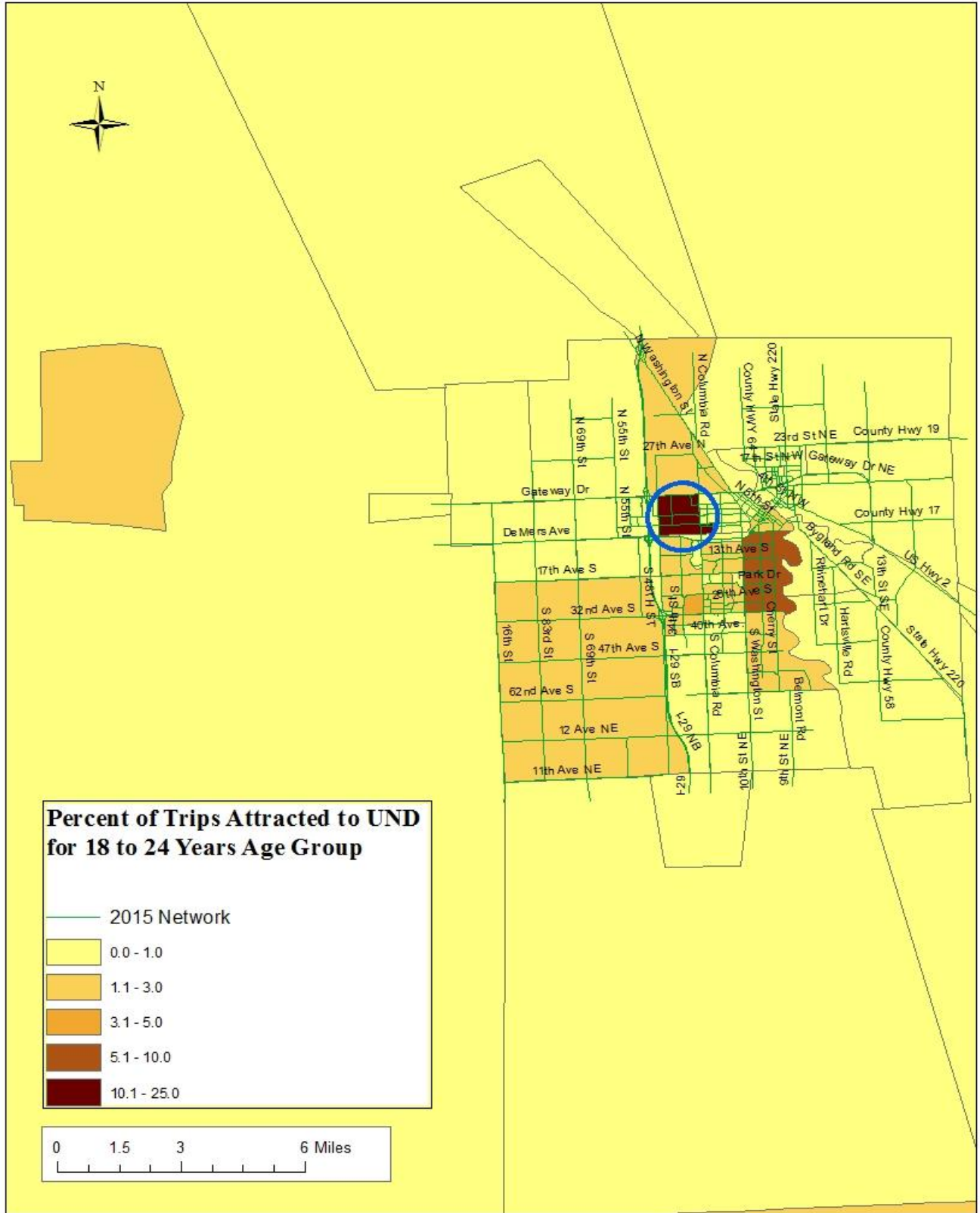


Figure 3 Origin Percent of Trips Attracted to UND for 18-24 Year Olds from Airsage OD Data

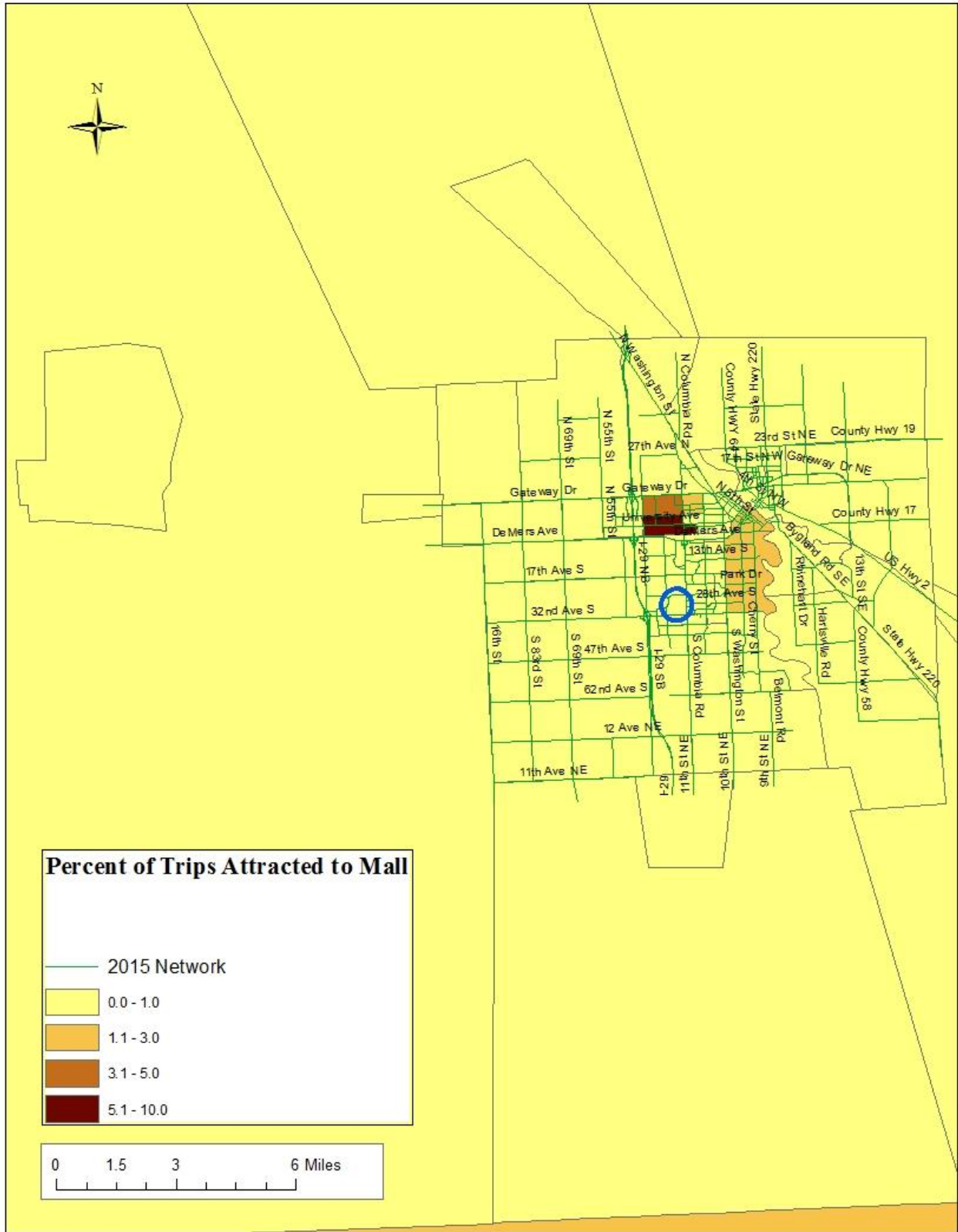


Figure 4 Origin Percent of Trips Attracted to the Columbia Mall from AirSage OD Data

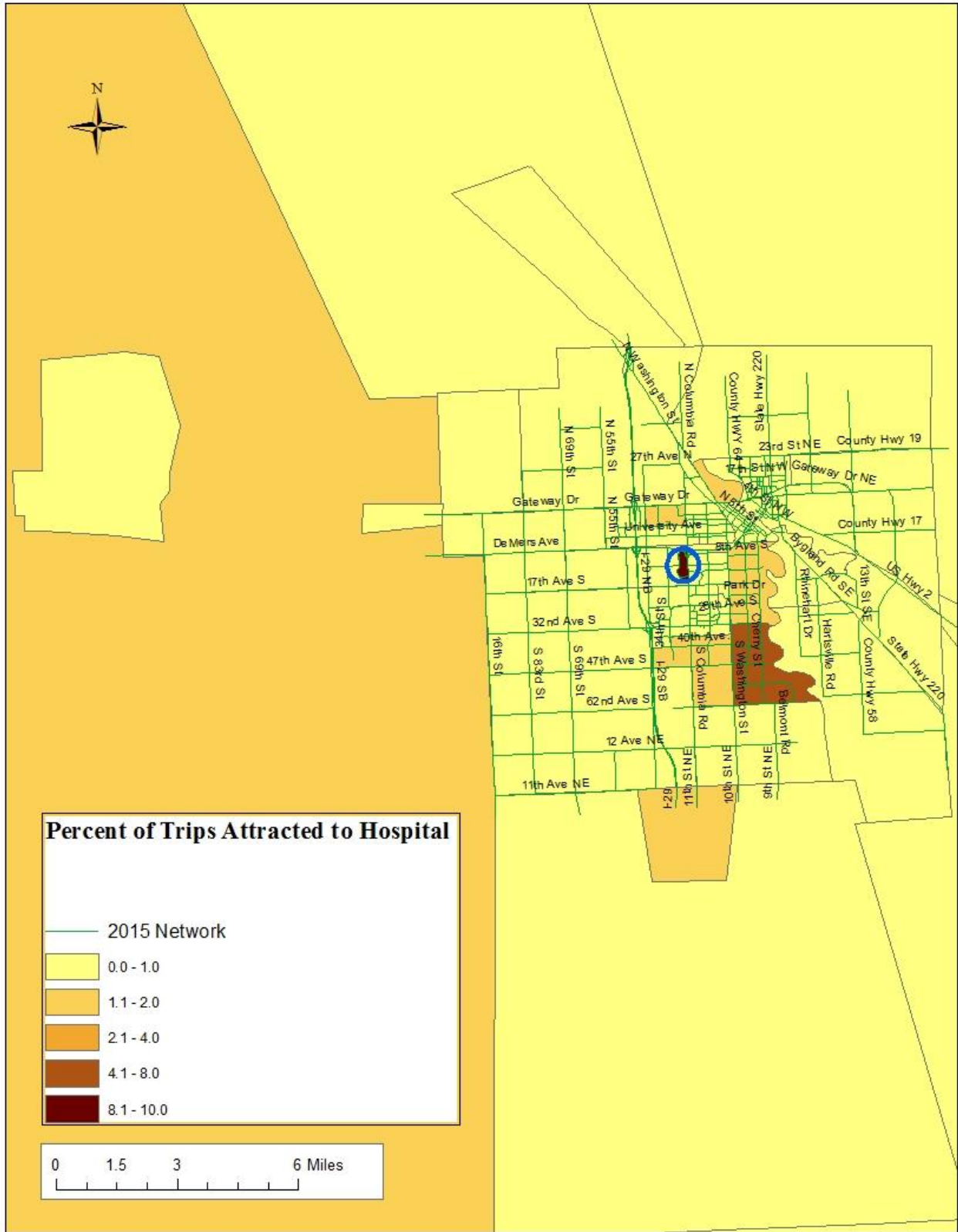


Figure 5 Origin Percent of Trips Attracted to the Altru Hospital TAZ from Airside OD Data

2.1.6. Comparing Peak AM and Peak PM Data to the Traffic Data Analysis Tool

To validate the OD data with locally collected data it was compared to the Traffic Data Analysis tool which collect traffic volumes for several intersections in the City of Grand Forks. Table 1 shows the percentage of AM, Afternoon, PM and Night periods for the OD data and the traffic data analysis intersection tool data from October 2010. The difference ranged from -3% for the Afternoon and PM Peak periods to 3.3% for the AM peak period. Figure Overall, the OD data seems to fairly reflect observed data.

Table 4 Comparison of Temporal Airsage OD Data and Traffic Analysis Intersection Data

	7AM-10AM	10AM-4PM	4PM-7PM	7PM-7AM	Total
Airsage OD	18.5%	39.0%	21.8%	20.7%	100%
Intersection Tool Data	15.2%	42.0%	24.7%	18.0%	100%
Difference	3.3%	-3.0%	-3.0%	2.6%	0%

For Visualization purposes, Figure 1Figure 6 shows the comparison of the Airsage OD data and the Traffic Analysis Intersection Data. The percentage differences are very small and the OD data is representative of the intersection data. The only difference is that the OD data can be differentiated into trip purposes whereas the intersection data contains overall trips. The OD data can be used to however differentiate the intersection data into different trip purposes.

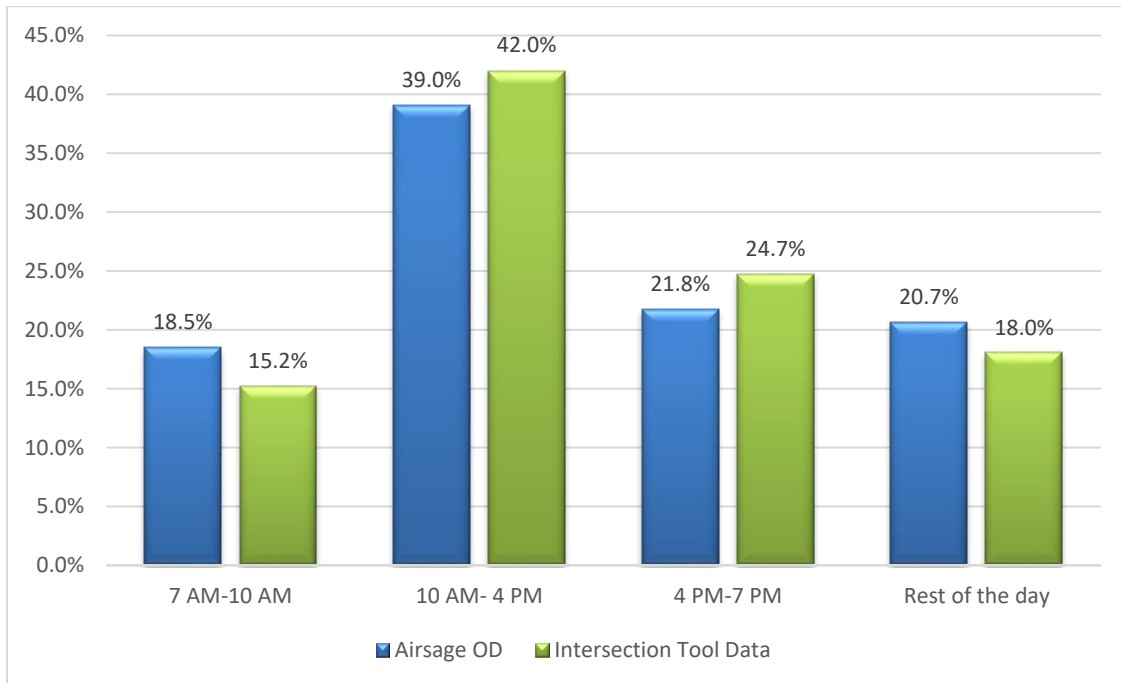


Figure 6 Comparison of Temporal Airsage OD Data and Traffic Analysis Intersection Data

2.1.7. Shortcomings of the OD Data

Although the OD data provides unique opportunities to improve on the TDM, there were some deficiencies in the data.

1. By nature of the data being collected on cell phone tower pings, some zones did not show any ODs. For example the Grand Forks Airport did not attract or produce any trips. This is because all of the trips to the Grand Forks Airport were shown in the TAZ East and Adjacent to the airport.
2. The data did not show transient locations only Origins and Destinations. Paths between OD pairs can be estimated using network data.
3. The data does not include all cell phone networks and could suffer from cell phone provider biases. For example, low income earners might use different networks from the major networks for cost savings.
4. The raw data collected is anonymous and does not contain the demographic data that is provided with the dataset. The provider uses an algorithm to create the profile for average users (age, gender etc) based on their socioeconomic data. We cannot verify the veracity of the algorithm or the socioeconomic data that was used for this process.
5. Truck Data is not included in the dataset.

2.2. Freight Analysis Framework Data

The Freight Analysis Framework (FAF) data integrates data from various sources to create a comprehensive freight movement data among states and major metropolitan areas for all transportation modes. The data provides estimates for tonnage (thousand tons) and value (million dollars) by regions of origins and destinations, commodity type, and mode. Data are available for the 2012 base years, years 2012-2015, and forecasts from 2020 to 2045 in five-year increments.

The FAF data for North Dakota is aggregated for the entire state. For Minnesota, the data is aggregated into two zones: The twin Cities Metropolitan area and the rest of the state. A methodology was necessary to disaggregate the data to the MPO level. Data for Grand Forks came from the North Dakota FAF aggregate data while data for East Grand Forks came from the aggregate Minnesota FAF Data. A regression model was developed to disaggregate the statewide data to the MPO level. The model used the employments as the explanatory variable. Overall, the model had very good fit with R-square ranges from 42-89 %.

The output of the regression models were the tonnage of freight produced and attracted to each of the Cities in the MPO (Grand Forks and East Grand Forks respectively). The Tonnage was then distributed to each TAZ proportionally based on the employment for that TAZ. Tonnages were then converted to truck trips using the commodity type characteristics (typical weight and size).

2.3. Traffic Analysis Intersection Data Archival

The Grand Forks-East Grand Forks MPO (MPO) and the City of Grand Forks (City) intend to utilize the already existing traffic detection cameras for traffic data collection. The intersection turning movement counts when collected over significant amount of time (e.g. a year) can be then used in various traffic operations, transportation planning, and highway design applications. This data is being used as an additional tool to validate AM and PM model output and turning movement output of the model.

2.4. Capacity Enhancements

For the 2015 base year model, network-wide capacities were updated to reflect most recent Highway Capacity Manual HCM 6th Edition. The calculation of capacities took into accounts several variables including the functional classification, the number of through links, the number of turn lanes, the location of the intersection (rural, urban, CBD, suburban), the intersection control and effective green ratios, heavy vehicle adjustment factors and the speeds. The capacities used for the 2015 model were slightly different from the 2010 models and represent the state-of-the-art in capacity calculations in TDM.

The next sections will discuss the model output for each of the four steps. Chapter 3 will discuss the input data used in the model, Chapter 4 will discuss trip generations, Chapter 5 will discuss the Trip Distribution and Modal Splits, Chapter 6 will discuss trip assignments and Chapter 7 will discuss the model validation.

3. MODEL INPUT DATA

The main data used as input to the model are the network and socioeconomic data. The two datasets were developed through a collaborative effort between MPO staff and ATAC. These data are summarized next.

3.1. Transportation Network Data

The transportation network is an abstract representation of the transportation system that has essential data describing the the available transportation supply. The network is maintained in GIS as a geodatabase that contains four feature classes. These feature classes included: links which represent the roadway, nodes which represent intersections, centroids which are the trip origin/destination points for transportation analysis zones (TAZ) and external centroids which are external loading trip points. The network was updated by ATAC and the MPO to represent 2015 base year conditions.

The main attributes of the network that are used in the model include the network geometries (number of lanes and turn lanes), posted and Free Flow Speeds, functional classification, length of links, link ADTS (passenger and truck counts), link location area type and the intersection control.

3.2. Socioeconomic Data

Socioeconomic data are used to generate the total number of trips produced and attracted by each TAZ in the TDM. The TAZ geographies and the socioeconomic data included within each TAZ were developed by a collaborative effort between MPO staff and the ATAC. The socioeconomic data that was used in the model is described next.

3.2.1. TAZ Geography files:

584 internal total TAZs were used for the 2015 model. Several TAZs were modified (split or merged) based on input from both the MPO and ATAC.

3.2.2. Socioeconomic Data TAZ Attributes

The socioeconomic data within the TAZ contained the following fields

3.2.2.1. Number of Persons per household in each TAZ according to the following categories (attributes)

1. # of one person households
2. # of two person households
- # of three person households
3. # of four person households
4. # of five person households
5. > # five person households
6. Total number of households

3.2.2.2. Vehicles per household in each TAZ¹

1. # of zero vehicle households

¹ Data was not in the 2010 model

2. # of one vehicle households
3. # of two vehicle households
4. # of three vehicle households
5. # of four vehicle households
6. > 4 vehicle households

3.2.2.3. School age children per household in each TAZ in four categories²

1. # of Grade school age children
2. # of Middle age school children
3. # of High school age children
4. # of College age (18-23)

3.2.2.4. Employment data (# for each TAZ)³

1. Manufacturing (NAICS 31-33)
2. Construction and resources (NAICS 21, 23)
3. Retail (NAICS 44-45)
4. Service (NAICS 52,53,55,56,56,51,,62,71,81,99)
5. Agriculture (NAICS 11)
6. Wholesale Trade, Trans Utilities (NAICS:22,48-49,42)
7. Education (NAICS 61) with the following additional fields
 - a. Elementary school enrollment for each TAZ
 - b. Middle school enrollment for each TAZ
 - c. High school enrollment for each TAZ
 - d. College enrollment data
 - e. Number of on campus students for each college
 - f. Number of off campus students for each college
 - g. Number of parking spots reserved for college students
 - h. Number of parking spots reserved for staff

² Data was not in the 2010 model

³ Data has been disaggregated (Previously, it included retail, other and service jobs)

3.2.2.5. Enplanements

7. Yearly enplanements for 2015

3.2.2.6. Special generators

8. Special generator TAZS (hospitals, wholesale distributors, large retail stores, top ten employers to start with)

3.2.2.7. ADT at external locations

Used as estimates of trips that have at least one trip end outside of the MPO area.

4. TRIP GENERATION

Trip generation is the initial step of the TDM and estimates the number of trips produced and attracted to each TAZ. The socioeconomic data discussed in Chapter 3 was used together with regression parameters to estimate the trips produced and attracted to each TAZ. Trips Produced are typically a function of the household characteristics for each TAZ, while trips attracted are a function of the employment of each TAZ. As mentioned previously, an improvement of this model was the inclusion of long-haul freight movements. The next sections describe in detail, the different trip generation procedures that were used and their results.

4.1. Internal-Internal Passenger Vehicle Trip Productions and Attractions

The Internal-Internal Passenger Vehicle Trip Generations (II Trips) represent the passenger vehicle trips that originate and terminate within the MPO area. These trips are classified into five main trip purposes including (Home Based Work) HBW, Home-Based Shop (HB-Shop), Home Based Other (HBO), Home Based School K-12 (HBSchool K-12), Home Based University (HBU) and Non Home Based (NHB) trips.

4.1.1. Trip Productions

Table 5 shows the trip generation equations that were used to develop the II trip production tables. The numbers in bold show the actual regression parameters used while the number underneath each one shows the p-value for each of the regression equations. The model parameters were developed from a household travel survey that was done in the Fargo-Moorhead area. These parameters are the starting equations that were used, the final equations were adjusted during the calibration process to reflect different area types and to match the observed traffic counts in the trip assignment step

Table 5 Internal-Internal Passenger Trip Generation Equations

Purpose	Persons per Household				Overall
	1	2	3	4+	
HBW	1	1.72	2.56	2.42	1.75
	14.9	19.82	13.61	17.15	30.45
HBO	1.09	2.4	2.51	4.8	2.46
	11.9	21.04	9.64	9.74	20.81
NHB	1.57	2.4	2.89	3.57	2.43
	11.44	17.78	7.39	10.1	22.49
HB-HiSch	0	0	0.47	0.46	0.16
	.	.	4.65	4.66	6.64
HB-GrSch	0	0.13	0.8	2.4	0.62
	0.88	5.09	6	12.52	11.94
HB-Sch	0	0.13	1.27	2.86	0.77
	0.88	5.09	8.38	14.21	13.29
IE	0.05	0.3	0.18	0.31	0.21
	2.25	6.71	2.8	3.52	7.71
Total	3.72	7	9.52	14.04	7.66
	27.77	35.97	18.52	19.59	35.69

Table 6 shows the total number of households for each household type (PHH1 = 1 person Households etc) that were used for the 2015 GF-EGF TDM. A total of 27,326 households were modeled for the 2015 base year TDM.

Table 6 Total Households per Household Type for the 2015 GF-EGF TDM

	PHH1	PHH2	PHH3	PHH4	PHH5	PHH6
Total # of Households	9,357	8,956	4,332	2,939	1,133	609

Applying the equations from Table 5 to the household data from each TAZ, the trip productions shown in Table 1. HB-Shopping and HBO were added together and are shown in the HBO Column. HBO trips represented the highest number of trips followed by HBO and HBW trips. The Elementary schools trips were more than twice the Middle school trips.

Table 7 Total Trips Produced by Purpose for the 2015 TDM

Purpose	HBW	NHB	HBO	Elem	Mid	High
Total	41,573	117,472	47,010	8,630	3,793	5,308

4.1.2. Trip Attractions

Trip attractions represent the number of trips attracted to each zone based typically based on employment the size of the school for school trips. Table 8 shows the trip attraction rates (from NCHRP 718) that were used to develop trip attraction tables. Although the socioeconomic data showed several different job types, these aggregated to represent the categories shown in Table 8.

Table 8 Trip Attraction Rates

Purpose	Retail	Service	Other
HBW	1.2	1.2	1.2
HBO	8.1	1.5	.2
NHB	4.7	1.4	.5

Table 9 shows the school trip attraction rates that were used for the model. These trip rates were obtained from the ITE Trip Generation Manual.

Table 9 School Trip Attraction Rates

School	Rate
Elementary	1.88
Middle	1.88
High	1.88

Table 10 shows the total employment by NAICS category for the base 2015. A total of 44,116 jobs were used for the model

Table 10 Total Employment by NAICS Category

Category	Agriculture	Manufacturing	Industrial	Retail	Service	Wholesale	Education	TOTAL
Grand Forks	81	2,762	2,223	6,407	20,807	2,506	2,949	37,735
East Grand Forks	26	3,188	283	571	1,672	215	471	6,426

The trip rates from Table 8 and Table 9, where applied to the jobs and school data in Table 10 to develop the trip attraction rates shown in Table 11.

Table 11 Trip Attraction Rates

Purpose	HBW	NHB	HBO	Elem	Mid	High
Total	41,573	117,472	47,010	8,630	3,793	5,308

4.1.3. Converting Daily trips to Peak Hour Trips

To convert daily trips to peak hour trips, the Airsage data was used to estimate the proportions of trips for each purpose for Peak AM, Peak PM and off Peak periods respectively. Table 4 percentages were applied to the productions and attractions respectively to obtain the temporal trip generation rates

4.2. External-Internal/Internal-External and External-External Trips

Trip productions and attractions were calculated differently for IE and EI. For IE trip productions (origins of trips within the GF/EGF MPO area) and EI trip attraction (destination location of trip that started out of the study area), the proportion of IE trips to the total trips from Table 2 were applied to total trip production table (Table 7). The trip production tables were developed using trip production parameters applied to the base year 2015 socioeconomic data that included household and employment characteristics. Using this method, a proportion of 12% of total trips generated were EI/IE trip productions and attractions respectively.

For EI trip productions (origins outside the study area but terminating within the study area) and IE trip attractions (trips that are attracted to locations outside the study area), EI/IE trip proportions were applied to vehicle traffic counts (ADT) at external locations. These proportions were reflective of the overall IE and EE trips at each external location from Table 2.

The assumption was that the ADT reflected the actual number of trips entering and leaving the study area. Directional ADT were available only for interstate locations. For all other external locations, ADT were split proportionally to obtain directional ADT.

For EE trip productions and attractions, the proportion of EE trips from Table 3 were applied to the traffic counts at each location in a manner similar to EI productions and IE trip attractions described previously.

Table 12 shows the total number of EI/IE and EE trip productions and attractions that were generated for the model by trip purpose and per different times of the day. The K-12 school trips were assumed to occur only during the Peak AM and Peak PM time periods.

Table 12 Total EI/IE Productions and Attractions

EI/IE Total Trip Productions and Attractions				
	AM Peak	PM Peak	Off-Peak	Total
HBW	1,763	1,407	3,864	7,035
HBO	2,920	3,538	10,676	17,134
NHB	2,594	3,493	9,324	15,410
EE Total Trip Productions and Attractions				
	7-10AM	4-7PM	Night	Total
HBW	194	144	497	835
HBO	459	496	1672	2,628
NHB	1,065	802	2792	4,658

4.3. UND Student Trip Productions and Attractions

For student trips to UND, special trip production and attraction rates were developed to account for students going to school. The methodology took into account the population of on-campus vs off campus students, the number of available parking spots, the distance of each TAZ to UND campuses, the 18-25 age population within the MPO area, and the distance from each TAZ to the UND campuses. Trip attractions were developed into UND using airtage data. For every attraction, the trip has to be produced from somewhere. The trip productions were assumed to be equal to the attractions. To calculate the trip productions by purpose, a methodology that used the percentage of 18-24 year age population for each TAZ with respect to the total number of 18-25 year olds, and a weighted average of the proportion of trips from the Airtage OD TAZ were used. Overall, 6,952 UND vehicle trips were produced from TAZs outside of UND zones. These trips were attracted to the UND zones.

4.4. Freight Trip Productions and Attractions

Using regression equations to disaggregate FAF data for both North Dakota and Minnesota datasets, the kilo tonnage of freight for Grand Forks and East Grand forks shown in **Error! Reference source not found.** was developed. A total of 1,661 Kilo tons of freight was produced in Grand Forks with east Grand Forks producing a total of 790 Kilo tons. The industrial NAICS group produced the highest freight kilo tonnage for Grand Forks while the Manufacturing NAICS group generated the highest freight for East Grand Forks.

With respect to freight attractions, 6,600 kilo tonnage for the MPO area. Grand Forks attracted a total of 5,482 kilo tonnage of freight compared to 1,118 kilo tonnage for East Grand Forks. For Grand Forks, wholesale had the highest attraction rate at with 2,367 kilo tonnage. For East Grand Forks, wholesale had the highest attractions with over half of the total tonnage attracted.

The results indicate that with respect to freight produced and generated, the MPO area is a net importer of freight. More freight is attracted to the metro area than is generated. It should be noted that the models developed accounted only for freight that was transported by the truck mode and not

other modes. It is very likely that freight models developed for the TDM underestimate the actual freight tonnage since it only takes into account long truck movements.

Table 13 Total Kilo tonnage of Freight Generated for Grand Forks and East Grand Forks by NAICS Code

Productions			
NAICS Category	Grand Forks	East Grand Forks	Total
Manufacturing and Agriculture	108	122	229
Manufacturing	459	530	990
Industrial	1,084	138	1,222
Total	1,651	790	2,441
Attractions			
NAICS Category	Grand Forks	East Grand Forks	Total
Wholesale	2,367	753	3,121
Industrial	1,902	200	2,103
Manufacturing,	102	66	168
Retail	520	46	566
Retail, Wholesale	590	52	642
Total	5,482	1,118	6,600

5. TRIP DISTRIBUTION

The trip distribution step takes the trip productions and attractions developed in the trip generation step and assigns them between Origin-Destination pairs. The gravity model assigns trips based on the number of productions, attractions, a friction factor (F), and a scaling factor (K). The friction factor is a value that is inversely proportional to distance, time, or cost which is a measure of the travel impedance between any two zonal pairs. The k factor is a scaling factor that is used during calibration and it limits or increases the volume of traffic that crosses sections of the network. Equation 5.1 shows the gravity model formulation that was used.

$$T_{ij} = P_i \frac{K_{ij} A_j F_{ij}}{\sum (K_j A_j F_j)} \quad \text{Equation 5.1}$$

T_{ij} = Number of trips assigned between Zones i and j;

P_i = Number of Productions in Zone i;

A_j = Number of Attractions in Zone j;

F_{ij} = Friction Factor; and

K_{ij} = Scaling factor used in calibration to influence specific ij pairs

The typical output of the trip distribution step in TDMs is a matrix showing the origins and destination of each trip. The gravity model uses the trip generation outputs (production and attractions by trip purpose for each zone), a measure of travel impedance between each zonal pair (travel time), and socioeconomic/area characteristic variables (“K-factor”) variables as input. The K-factor is used to account for the effects of variables other than travel impedance in the model. The OD data were used to develop K-factor matrices imputed in the trip gravity model that were used for distributing IE/EI trips. For the TDM, trips were distributed separately for the different periods.

To develop K-factors, it was necessary to aggregate the external portions of these trips into four main external super zones. For example, all the trips that originated from zones to the North of the MPO area were aggregated to one “super TAZ”. The proportions of trips from every internal GF/EGF OD TAZ to the “super TAZ” was calculated and used as the K-Factor for the trip distribution of trips. The K-factors used in this way enabled the model to distribute trips more efficiently.

For EE trips, the OD data were used to develop K factors in a similar manner to those described for EI/IE trips. This were then used in the EE trip distribution step for the TDM.

For K-12 school trip distribution, school zones were used to assign trips for Grand Forks Public Schools. For East Grand Forks Schools and for Private schools, the gravity model was used to distribute K-12 school trips. The K-factor matrix used ensured that no Public school trips could go from Grand Forks To East Grand Forks.

6. TRIP ASSIGNMENT

Trip assignment is computationally the last step in travel demand modeling. The trip assignment step develops route paths that each trip will be choosing on the network when going from its origin to its destination. Trip assignments were carried out for three origin destination matrixes; AM peak, PM peak and off peak periods.

The user equilibrium traffic assignment method has been used so far for trip assignment. However, several different methods will be tested for optimality.. In the user equilibrium method, road users of the system choose the route that would minimize their cost (or travel time) without consideration to the overall average travel time on the system. In system-equilibrium, system users would behave cooperatively in choosing their own route to ensure the most efficient use of the system, thus optimizing the overall average cost of travel on the system.

7. PRELIMINARY ASSIGNMENT RESULTS

7.1. Screenline Comparison

Screenlines are natural barrier to travel such as rivers, mountains and man-made barriers like interstate. Only certain routes like bridges can be typically used to cross screenlines. Screenlines are a good measure of how well a model is performing. The Preliminary results for the I-94 and the River crossings are shown in Table 14. Overall, the model is under representing the traffic counts. The results are only a preliminary result and indication that the model needs further calibration. Trip generations will have to be adjusted to reflect the lower number of trips. The friction factors will also be adjusted accordingly until the model replicates the screenline and observed volumes satisfactorily.

Table 14 Preliminary Screenline Comparison

	Modeled	ADT	Difference
Gateway	13,481	18,700	-5,219
Sorlie	13,227	14,815	-1,588
Point	6,406	7,585	-1,179
Gateway/I-94	15,174	21,595	-6,421
University/I-94	5,164	5,705	-541
Demers/I-94	12,378	10,865	1,513
32nd/I-94	19,179	16,325	2,854

7.2. VMT Comparison

VMT comparison also show how well the model compares to observed VMTs. Overall, the preliminary model is underestimating the VMTs by over 117,000. This is not unusual as the model is still under development. The VMTs will be calibrated to reflect the observed VMTs.

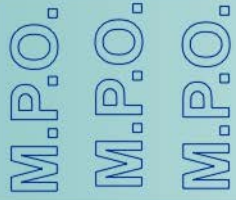
Table 15 VMT Comparisons

	Modeled	Observed	Difference
Interstate	46,923	56,880	(9,957)
Principals	157,298	204,953	(47,655)
Minor	62151	93636	(31,485)
Collectors	85883	114728	(28,845)
Total	352,255	470,197	(117,942)

8. CONCLUSIONS

The base model for the GF EGF TDM is under construction. All the model elements have been developed. However, the model has not yet been fully calibrated/validated. The model parameters and modeling process have been improved significantly through the availability of OD data and the inclusion of a freight model. The model will be more precise and accurate in comparison to previous model.

The final steps will be to calibrate and validate the model to represent ground truths.



Grand Forks - East Grand Forks Metropolitan Planning Organization

MPO Staff Report **Technical Advisory Committee: August 19, 2017** **MPO Executive Board: August 16, 2017**

RECOMMENDED ACTION: Recommend the Adoption of draft Final FY2018-2021 Minnesota side TIP to the MPO Executive Board,

Matter of the Public Hearing on Draft Final FY2018-2021 Minnesota side TIP.

Background: Annually, the MPO, working in cooperation with the state dots and transit operators, develop a Transportation Improvement Program (TIP), which also serves as the transit operators' Program of Projects (POP). The TIP covers a four period and identifies all transportation projects scheduled to have federal transportation funding during the four year period. The process runs over an eleven month period with several public meetings ranging from solicitation of projects for specific programs and comments on listed projects. This point in the process is the documenting of the draft TIP.

Draft TIPs were approved earlier this year; Minnesota side was done in April and the North Dakota side was a release of the draft STIP done in May. However, only Minnesota is prepared to move forward with adopting a final TIP. The attached TIP addresses the Minnesota side only and there were no significant changes from the draft adopted in April.

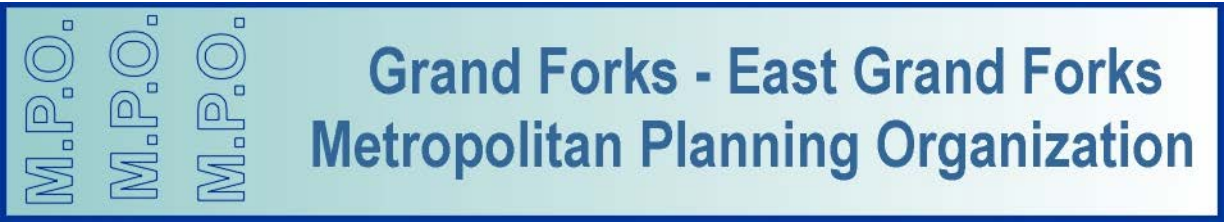
A public hearing notice has been published. The notice identified that the draft was available for review and written comments are to be received by 12:00 am on August 9th. All comments received will be documented and distributed at the meeting. The TAC and MPO Executive Board will be requested to adopt the draft Final TIP for 2018-2021 for the Minnesota side.

Findings and Analysis:

- The projects listed are consistent with the MPO's Long Range Transportation Plan.
- The projects listed are consistent with the draft MPO draft TIP.
- The projects listed are consistent with the draft NWATP ATIP
- The projects have identified funding and therefore the TIP is fiscally constrained.
- No projects are being listed as "Illustrative".

Support Materials:

- Public Notice
- Copy of draft Final 2018-2021 TIP Submitted to Public Comment
- Copy of Public Hearing Notice



PUBLIC NOTICE

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) will hold a public hearing on the Minnesota Side Final MPO 2018 to 2021 Transportation Improvement Program (TIP). The TIP also incorporates the local transit operators' Program of Projects (POP). The hearing will be held in the Training Room of East Grand Forks City Hall, 600 DeMers Ave., East Grand Forks, Minnesota. The hearing will start at 1:30 PM on August 9th. The public, particularly special and private sector transportation providers, are encouraged to attend.

The final TIP lists all transportation improvement projects programmed to be completed between the years of 2018 to 2021 on the Minnesota side of the Red River. A separate draft for the North Dakota side will be done later and notice will be given when it is ready. A copy of the final TIP is available for review and comment weekdays between 8 AM and 5 PM at the MPO Offices in Grand Forks City Hall and East Grand Forks City Hall. Comments on the final TIP can be submitted to either MPO Office until noon on August 9th.

For further information, contact Mr. Earl Haugen at 701/746/2660. The GF-EGFMPO will make every reasonable accommodation to provide an accessible meeting facility for all persons. Appropriate provisions for the hearing and visually challenged or persons with limited English Proficiency (LEP) will be made if the meeting conductors are notified 5 days prior to the meeting date, if possible. To request language interpretation, an auxiliary aid or service (i.e., sign language interpreter, accessible parking, or materials in alternative format) contact Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.

Materials can be provided in alternative formats: large print, Braille, cassette tape, or on computer disk for people with disabilities or with LEP by Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.

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Grand Forks - East Grand Forks
Metropolitan Planning Organization

MINNESOTA SIDE TRANSPORTATION IMPROVEMENT PROGRAM

2018 - 2021

August, 2017

The preparation of this report was partially financed by FHWA/FTA Planning funds through the North Dakota Department of Transportation and Minnesota Department of Transportation.

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FISCAL YEARS 2018 – 2021

MINNESOTA SIDE

TRANSPORTATION IMPROVEMENT PROGRAM

FOR THE
GRAND FORKS - EAST GRAND FORKS
METROPOLITAN AREA

PREPARED BY:
THE GRAND FORKS - EAST GRAND FORKS
METROPOLITAN PLANNING ORGANIZATION

METROPOLITAN PLANNING ORGANIZATION
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REPRESENTING:
GRAND FORKS COUNTY
COMMISSION

Warren Strandell

REPRESENTING:
POLK COUNTY COMMISSION

Jeannie Mock

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COUNCIL

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Dr. Michael Brown

REPRESENTING:
MAYOR OF GRAND FORKS
Non-voting Ex Officio

Steve Gander

REPRESENTING:
MAYOR OF EAST GRAND
FORKS
Non-voting Ex Officio

**A RESOLUTION APPROVING FY 2018 - FY 2021
MINNESOTA SIDE
TRANSPORTATION IMPROVEMENT PROGRAM FOR THE
GRAND FORKS-EAST GRAND FORKS METROPOLITAN AREA**

WHEREAS, the U.S. Department of Transportation requires the development and annual updating of a Transportation Improvement Program (TIP) for each urbanized area under the direction of a Metropolitan Planning Organization; and

WHEREAS, projects must be included in the TIP in accordance with 23 CFR 450.326 (f) (1); and

WHEREAS, local transit projects utilizing Federal Transit Administration Section 5307 funds must be listed in a Program of Projects (49 U.S.C. 5307 c); and

WHEREAS, local projects of regional significance without federal funding are included; and

WHEREAS, the Grand Forks-East Grand Forks Metropolitan Planning Organization has been designated as the urban policy body with responsibility for performing urban transportation planning and required reviews; and

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

WHEREAS, Presidential Executive Order 12372 gave state government the flexibility to design their own review process and select federal programs and activities to be subject to the process. Wherein, North Dakota Executive Order 1984-1 establishes the North Dakota Federal Program Review process and exempts the Transportation Improvement Program (TIP) from said process; and

WHEREAS, the projects contained in the TIP are located in an area where both the North Dakota and Minnesota State Implementation plans for Air Quality are not required to contain any transportation control measures. Therefore, the conformity procedures do not apply to these projects; and

WHEREAS, projects contained in the TIP were developed in cooperation with the North Dakota and Minnesota Departments of Transportation, the local public transit operators and the MPO; and

WHEREAS, the Technical Advisory Committee has recommended approval of the TIP after having held a public hearing on the TIP on August 9, 2017.

NOW, THEREFORE, BE IT RESOLVED, that the Grand Forks-East Grand Forks Metropolitan Planning Organization adopts the Grand Forks-East Grand Forks Metropolitan Area Minnesota Side Transportation Improvement Program for the FY 2018 to FY 2021

program period as being consistent with the Long Range Transportation Plan and the area's plans and program included therein.

Date

Ken Vein, Chairman

Date

Earl Haugen, Executive Director

**A RESOLUTION CONFIRMING THE
METROPOLITAN TRANSPORTATION PLAN
AS BEING CURRENTLY HELD VALID**

WHEREAS, the **23 U.S.C. 134** requires that the Metropolitan Planning Organization (MPO) designated with the authority to carry out metropolitan transportation planning in a given urbanized area shall prepare a transportation plan for that area; and

WHEREAS, the Grand Forks-East Grand Forks Metropolitan Planning Organization has been designated by the Governors of the States of Minnesota and North Dakota as the MPO for the Grand Forks-East Grand Forks Metropolitan Area; and

WHEREAS, the Grand Forks - East Grand Forks MPO has a Transportation Plan composed of a Metropolitan Transportation Plan (adopted December 18, 2013); and

WHEREAS, the Technical Advisory Committee of the Grand Forks - East Grand Forks MPO has recommended that this Transportation Plan be considered currently held valid and consistent with current transportation and land use considerations.

NOW, THEREFORE, BE IT RESOLVED THAT, the Grand Forks-East Grand Forks Metropolitan Planning Organization certifies that the Transportation Plan for the Grand Forks-East Grand Forks Urbanized Area is currently held valid and consistent with current transportation and land use considerations.

Date

Ken Vein
Chairman

Earl T. Haugen,
Executive Director

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INTRODUCTION

The Minnesota side Transportation Improvement Program (TIP) for the Grand Forks - East Grand Forks area lists the significant transportation system improvements to be implemented during the next four years. The 2018-2021 TIP is submitted under the Fixing America's Surface Transportation (FAST) Act. This Act was adopted in 2015 to authorize federal transportation programs through 2020.

The Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA) require that in order for certain projects to be funded with federal assistance, those projects must be included in a Transportation Improvement Program (TIP) approved by the appropriate Metropolitan Planning Organization (MPO). In the Grand Forks-East Grand Forks Metropolitan Area, the Grand Forks-East Grand Forks Metropolitan Planning Organization is the designated MPO. FHWA and FTA require federally funded projects located within the boundaries of the "Study Area" (see map in Appendix III), and funded from any of the categories of federal aid to be in a MPO approved TIP.

Federal requirements stipulate each state must develop a Statewide Transportation Program (STIP), and project selection must be performed in cooperation with the MPOs. Similarly, local TIP's must be developed in cooperation with the State. The TIP is updated annually, and encompasses a 4-year time period. In order to remain consistent with these requirements, projects programmed for 2018 are considered the Annual Element, and Program Years 2019, 2020 and 2021 are designated as Future Year projects.

The projects which comprise the TIP were developed, studied, and evaluated as part of the Metropolitan "3C" Transportation Planning Processes, which has been established in the Grand Forks - East Grand Forks Area. The TIP may be modified at any time, consistent with procedures established for its development, and consistent with the Transportation Plan. Each year the TIP process is unique. However, there are some common "significant differences" during the development of each TIP. The addition of a project, or expansion of its scope, not on the advance review material would constitute a difference that would require additional public input before final adoption. The deletion or combining of projects would not require additional input because each project proponent should have reasonably foreseen this possibility given the limited amount of funds available. If a project's local share is increased by over 25% the amount identified in advance, the difference would require additional public input. A decrease, on the other hand, would not. Changing the source of state or federal funds would constitute a significant difference. The modification criteria are identified in the MPO's TIP Process Manual.

The MPO staff worked with the local communities and State Departments of Transportation to prepare the FY 2018-2021 Minnesota side Transportation Improvement Program for the Grand Forks-East Grand Forks Metropolitan Area. The MPO has utilized its project prioritization process as documented in its TIP Process Manual.

TRANSPORTATION PLAN

The 2040 Long Range Transportation Plan documents the multi-modal transportation planning process, which is established in the area to identify, evaluate, and implement transportation system improvements. System improvements comprise all highway, transit, bikeway, and pedestrian walkway improvements designed to meet travel demands during the next 20+ years. In the Grand Forks - East Grand Forks area, the Transportation Plan contains several sections, which address street and highway, transit, bikeway, and pedestrian projects.

Street and Highway Section

The street and highway section emphasizes project effectiveness. Each project was evaluated to identify deficiencies in terms of delay, level-of-service, network connectivity, safety, or other measures of effectiveness. In addition, evaluations were performed to determine each project's ability to meet environmental justice standards.

This section identifies major reconstruction or reconstruction projects. Minor maintenance projects are not specifically identified; rather they are covered under Plan policy, objectives and standards. Further, this section provides recommendations on number of lanes, and other geometrics of the projects. Recommended projects are identified for construction in three different time periods. The first time-frame is for the next five years. Projects included in this time-frame address current problems identified. Projects in this TIP document should come from this listing.

The second time-frame focuses more on problems projected into the near future. As the metropolitan area grows, additional traffic will create problems that do not exist today. These projects should not appear in this TIP document. Projects can be moved into the first time-frame after additional studies are made, and the Plan is amended. Additionally, the Plan is updated every five years so a project can shift based upon the best available data and analysis. The last time frame covers the remaining years out to 2040.

Transit Section

The Transit Section establishes the long-range public-transportation-system improvement strategy. This section is found in the MPO's Alternative Transportation Mode Plan, and focuses on both the operation of the fixed route and demand response, and the capital equipment for those two services. This section identifies several capital purchases necessary for the current operations – most are replacement of rolling stock. It also identifies that as the metropolitan area grows, expansion of the services will have to take place. That expansion will require both additional operational and capital funds. This TIP reflects expansion of the service to include continued operation of one additional bus, which adds two routes. This expansion serves the growing south and west areas of Grand Forks. The continued operation of earlier Saturday transit service is being programmed.

An important aspect of public transportation is the provision of transportation services to the disabled. In 1992, the Cities of Grand Forks and East Grand Forks adopted the Americans with Disabilities Joint Paratransit Plan. The plan outlines a program of improvements to make the fixed-route transit system accessible to the disabled, and to revise the paratransit Dial-a-Ride Program to attain full compliance with the Americans with Disabilities Act of 1991 (ADA). The requirement to annually update this plan has expired. However, the recommendations are carried forward with the Transit Section.

Bikeway Section

The Bikeway Section identifies a network of facilities that support traveling by bicycle as an alternative mode to vehicular travel. This section is found in the MPO's Alternative Transportation Mode Plan, and involves a system of paths, lanes, and shared roadways which are mapped to create a network bicyclists can take to get around the metropolitan areas. With the use of federal transportation funds to build streets comes the requirement to consider facilities appropriate to accommodate bikes.

For the built-up area, this section identifies whether bike lanes can be accommodated with the existing street width. If a lane could be striped, then this section would recommend that be done, however, if not enough street is available, the recommendation would be to sign it as a shared roadway.

This section does recognize that all streets are used by bicyclists, unless otherwise prohibited. Education and enforcement strategies are identified to make biking a safer and more enjoyable activity in the metropolitan area.

Pedestrian Section

The Pedestrian Section plans for the provisions of sidewalks in the metropolitan area. This section is found in the MPO's Alternative Transportation Mode Plan. Grand Forks has a long history of requiring the construction of sidewalks in all new developments in the City, which has led to a very well connected system of sidewalks. East Grand Forks had a similar history, however it was interrupted for several decades, and is only recently, through this Section, again being required in new developments.

The MPO is working on updating the ADA Curb Cut Ramps Transition Plan for the metropolitan area. An important item in this update was the requirement for the installation of truncated domes. This was an original ADA standard design that was placed on hiatus until additional studying could be done. The hiatus status was allowed to expire without any modifications to the original standard. Truncated domes are now required although an exception is allowed for ramps constructed during a specific period of time. Please refer to the ADA regulations for further information.

PLANNING FACTORS

The MPO is required to plan and programmed based upon the following identified planning Factors. Since this is required, the MPO has adopted these factors as its goals for its Metropolitan Transportation Plan. The following narrative describes some the transportation projects as examples of how the MPO addresses each factor.

Factor 1 - Support the Economic Vitality of the United States:

All projects listed support this factor. Without a well-designed, well-maintained, and well-coordinated transportation system, the economic vitality of the metropolitan area would be in jeopardy. Projects listed are making an improvement to the system in order for the transportation of people and goods to move more efficiently, effectively and safely.

Factor 2 - Increased Safety of the Transportation System for Motorized and Non Motorized Users:

The Bridge project for the Kennedy Bridge is expected to improve a safer crossing for all users. Transportation Alternative funds ae being programmed for Safe Routes to School educational and promotional activities for East Grand Forks students..

Factor 3 – Increase the Ability of the Transportation System to Support Homeland Security and to Safeguard the Personal Security of all Motorized and Non-Motorized Users:

The Transit system has an annual program of replacing and/or renovating shelters along the bus routes. These projects provide added security for the users of the system.

Factor 4 - Increase in Accessibility and Mobility Options Available to People and Freight:

The proposed Kennedy Bridge major rehabilitation project is expected to provide accommodation for bicyclists and pedestrians whereas currently these two modes are severely underserved by this structure. All street projects included provisions for pedestrian and bicyclists.

The purchase of additional transit vehicles will add additional options for transit dependent people to use, and will provide additional capacity during peak periods. The East Grand Forks transit service will expand to now include night service for both fixed route and paratransit operations.

Factor 5 - Protect and Enhance the Environment, Promote Energy Conservation and improvement of the Quality of Life, and Promote Consistency Between Transportation Improvements and State and Local Planned Growth and Economic Development Patterns:

Transit operations are programmed to provide both fixed route and demand

response service. These choices for alternative transportation provide opportunities for energy conservation and improvement to quality of life. Transit fares are prepaid by student government for both UND and NCTC.

Factor 6 - Enhance the Integration and Connectivity of the Transportation System Across and Between Modes for People and Freight:

Transportation Alternative Program funds under MAP-21/FAST help the area to take an aggressive approach to expanding and improving bicycle and pedestrian facilities. A sidewalk connecting a neighborhood to an elementary school will be done with these funds in 2021. In 2018, several projects are being done to install multi-use trails further advances this Factor.

Transit vehicles have had bike racks installed in the front of the bus. Implementation of this program will continue with each replacement vehicle purchased.

Factor 7 - Promote Efficient System Management and Operation:

All projects programmed support this factor as it is intended to improve the system, the projects promote more efficient management and operations. The US 2 westbound lane pavement project in 2021 is programmed to modify the intersection of US 2 and US Bus 2. The modification will may provide an acceleration lane for traffic turning from US Bus 2 onto the eastbound lane of US 2. The project development phase of this programmed project will further study this intersection and make final decision on the type of modification.

Factor 8 - Emphasize the Preservation of the Existing Transportation System:

Several projects programmed in the TIP support this factor. Additionally, the Kennedy Bridge over the Red River is programmed to have work done to it that will preserve the vital crossing for the transportation system. East Grand Forks will be reconstructing a portion of Rhinehart Drive and improving the east approach to the Point Bridge.

Environmental Justice (EJ):

Presidential Executive Order 12898 states: “Each Federal agency shall make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Though the Order was issued in 1994, the spirit of environmental justice dates back at least to Title VI of the 1964 Civil Rights Act. The Federal Highway Administration has identified three fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

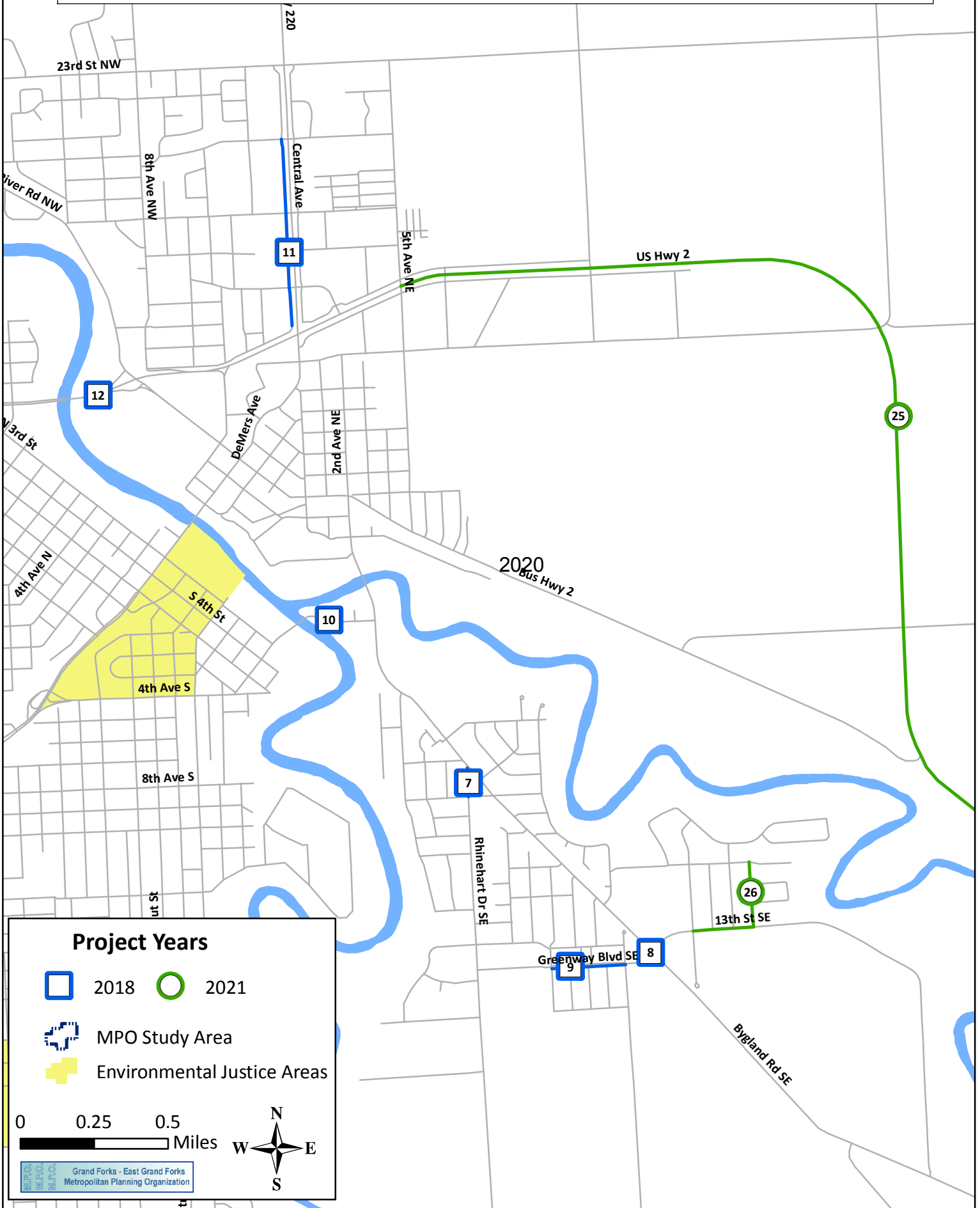
By incorporating these principles into the transportation planning process, the MPO will be able to make better transportation decisions to meet the needs of all people, improve the public involvement process, and improve data collection and monitoring, all of which lead to better design of transportation facilities that fit more harmoniously into communities.

It should be noted here that most TIP projects are construction projects, which do have adverse impacts to the nearby area during the time of construction, such as increased congestion, delays, detours, noise, or dust. It should also be noted that TIP construction projects can result in positive benefits to the traveler (including those who live nearby) such as increased capacity or level-of-service, lower commute times, or increased safety at intersections. For purposes of the EJ analysis in the TIP, the MPO will identify the spatial relationships that exist between projects and minority or low-income populations (MLIPs).

Map 1 displays the locations of the 2018-2021 Minnesota side TIP projects and their spatial relationship to metropolitan populations (census block groups) that have been identified as MLIPs. A situation of particular concern from an EJ standpoint would be a grouping of projects in or around a MLIP, or a particular MLIP being impacted in more than one year, which may be an indication of disproportionately adverse health or environmental effects on that neighborhood.

Overall, the TIP projects for 2018-2021 appear to be well dispersed temporally and spatially throughout the metropolitan area. Thus, any negative impacts resulting from the implementation of these projects should also be well dispersed throughout the neighborhoods of the metro area.

2017- 2020 Transportation Improvement Program



FEDERAL URBAN ASSISTANCE AND FINANCIAL FUNDING SOURCE SUMMARY

EAST GRAND FORKS, MINNESOTA

Highway Funding

The City of East Grand Forks continues to work with the Minnesota Department of Transportation through the designated Area-wide Transportation Partnership¹ (ATP) to develop the list of transportation capital and operating assistance projects. Local funding for East Grand Forks projects has been assured by the City Administrator's Office.

The City of East Grand Forks utilizes gas tax revenues received from the State of Minnesota to fund the bulk of its transportation improvements, and to supplement local property taxes for roadway maintenance. Each year approximately \$350,000 for capital items is received. These funds may be directly used, combined with another source, or used to make bond payments to extend the revenue source. East Grand Forks uses State Aid for maintenance only as needed. Any unspent monies are left to accumulate to fund capital improvements. To extend its revenues for transportation improvements, special assessments may be used in combination with federal and state revenues.

Programming of capital items is based on a 5-year capital improvements program, which provides adequate time to seek out alternative revenue sources to eliminate funding shortfalls. This provides the City with a long-range view of capital needs. However, on an annual basis, the City compares anticipated revenues with current, future, and past commitments to determine whether sufficient funding is available for new projects. Adjustments may be made based on fluctuations in revenue, additional capital requests, or changes in the costs of programmed capital improvements.

In ATP Area II (Northwestern Minnesota), federal funding for street and highway improvements for cities' over 5,000 (and for various other partnership members: MnDOT, counties, tribal councils, and forest service) is distributed according to targeted-funding amounts established by the ATP. Each ATP, in turn, receives a total target amount as determined by MnDOT central office. Similarly, MnDOT districts receive funding through each ATP with its partnership determining its own process for distributing transportation funding.

The Area II ATP has developed a process to distribute sub-targeted, federal funding amounts to its partnership members. Sub-committees representing the various recipient groups determine how the sub-targeted amounts are distributed. For large urban areas, federal funding is rotated each year among the cities. East Grand Forks is scheduled to receive federal funding in 2018 for City Sub-Target allocations.

¹The Areawide Transportation Partnership is the local committee designated by MnDOT with the responsibility for the development of the Area Transportation Improvement Program for northwestern Minnesota. The Committee consists of the representatives from regional development commissions, counties, cities, MnDOT, transit operators, Bureau of Indian Affairs, and the MPO.

Bikeway Funding

Similar to highway funding, bikeway improvements are funded with ATP STP Transportation Alternative Program funds. The ATP sub-targets around \$500,000 per year for the region to compete for. East Grand Forks has been successful in obtaining funds from this program in the past. Typically, local match funds are provided through the state aid account.

Transit Funding

Funding for the East Grand Forks City Bus is provided from 4 sources: Urbanized Area Formula Program - Section #5307 (formally Section 9) Operating Assistance, Minnesota State Aid, farebox revenues, and local funding from the City's General Fund.

Minnesota funding is based on a formula, which provides a proportion of the total operating costs. Adjustments are made on an annual basis to determine the percentages of each type of funding anticipated.

Funding and programming summaries of funding sources are shown in Table 1 and anticipated revenues and expenditures of local funds for the East Grand Forks' area are shown in Table 2. The individual project listing shows the actual project cost and funding splits.

Table #1				
Minnesota Side Funding Sources				
2018-2021				
(shown in \$1,000)				
TOTAL	FEDERAL	STATE	OTHER	LOCAL
\$15,344.75	\$10,026.00	\$2,160.00	\$2,684.00	\$475.75

TABLE 2					
Minnesota Side Finances 2018-2021					
Revenues					
<i>(shown in \$1,000)</i>					
		2018	2019	2020	2021
Transit	Operations	\$475.00	\$659.00	\$440.00	\$451.00
Transit	Capital	\$610.00	\$0.00	\$0.00	\$180.00
Street	P.E.	\$284.00	NA	\$0.00	\$0.00
Street	R.O.W.	\$0.00	\$0.00	\$0.00	\$0.00
Street	CONSTR.	\$1,237.00		\$0.00	\$11,008.75
	TOTAL	\$2,606.00	\$659.00	\$440.00	\$11,639.75
Expenditures					
<i>(shown in \$1,000)</i>					
		2018	2019	2020	2021
Transit	Operations	\$475.00	\$659.00	\$440.00	\$451.00
Transit	Capital	\$610.00	\$0.00	\$0.00	\$180.00
Street	P.E.	\$284.00	NA	\$0.00	\$0.00
Street	R.O.W.	\$0.00	\$0.00	\$0.00	\$0.00
Street	CONSTR.	\$1,237.00		\$0.00	\$11,008.75
	TOTAL	\$2,606.00	\$659.00	\$440.00	\$11,639.75

OPERATIONS AND MAINTENANCE FINANCIAL SUMMARY

For purposes of transportation operations and maintenance (O&M), the financial summary shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways. Federal-aid highways are essentially the streets within the metro area that are state highways. So a very small percentage of the total street system needs to be included in these O&M financial summaries.

Within each City, agreements are in place with the respective agencies that has the responsibility of O&M issues in the respective City. Since the TIP covers the Minnesota side of the MPO Study Area versus just the city limits of East Grand Forks, this O&M summary has to include information from both the City and MnDOT. The basic method to calculate the O&M revenues and costs was to determine the pro rata share of federal aid system miles compared to the total miles within the respective area. Polk County in the Minnesota side of the MPO Study Area has no responsibilities for the federal aid system.

O&M revenues and costs are identified separately from capital costs to demonstrate that operation and maintenance costs of the existing and planned system are identified over the life of the TIP and STIP. O&M costs are typically those costs related to maintaining and operating a facility once it is completed and open to traffic.

EAST GRAND FORKS, MINNESOTA

The City of East Grand Forks has a total of approximately 78 centerline miles of streets within its city limits. Of these, approximately 7.5 miles are part of the Minnesota State Highway System. Therefore, roughly 10% of the miles are to be reported.

Due to the previously mentioned agreements in place, the financial information for the O&M comes from the City Budget. The City's Public Works Department is the responsible local unit in charged with the street system. The percentage of federal aid streets was used as the method to calculate the O&M information for this TIP. This information is shown in Table #3.

The revenue sources are basically from two funds: general fund and fees. The two biggest sources for the general fund come from property taxes and state aid. The two biggest fees are from the water and light and from snow removal.

STATE OF MINNESOTA

MnDOT District #2 covers the northwestern corner of Minnesota, which includes the MPO Study Area. The District has a total of approximately 3887 lane miles of streets within its boundary. Of these, approximately 51 miles are within the MPO Study Area. Therefore, roughly 1.3% of the miles are to be reported.

The financial information for the O&M comes from the Budget. The percentage of federal aid streets was used as the method to calculate the O&M information for this TIP. This information is shown in Table #3. The revenue sources are basically from the Minnesota Highway User Tax Distribution Fund.

				Table #3							
				Operations and Maintenance Financial Plan							
				Federal Aid System							
				REVENUES	Year	Year	Year	Year			
					2018	2019	2020	2021			
Minnesota Federal Aid System											
	MnDOT			\$	245,582	\$	252,949	\$	260,538	\$	268,354
	East Grand Forks	total		\$	200,276	\$	206,284	\$	212,473	\$	218,847
		General Fund		\$	189,838	\$	195,533	\$	201,399	\$	207,441
		Fees		\$	10,438	\$	10,751	\$	11,074	\$	11,406
				EXPENDITURE	Year	Year	Year	Year			
					2018	2019	2020	2021			
Minnesota Federal Aid System											
	MnDOT			\$	245,582	\$	252,949	\$	260,538	\$	268,354
	City of East Grand Forks			\$	189,838	\$	195,533	\$	201,399	\$	207,441

PROJECT LISTINGS - TRANSPORTATION PROJECT FORMAT

The Transportation projects listed in the TIP are shown in chart form, and grouped by project location/jurisdiction for the Grand Forks and East Grand Forks areas. North Dakota projects are listed first, and Minnesota projects second. Projects include all modes and are listed in priority by year.

A separate section contains Illustrative projects, which are projects that the member jurisdictions would like to complete; however, funding for them has not been identified at this time. If funding does become available for these projects, the TIP will need to be amended before the project can proceed. Additional projects are scheduled by the member jurisdictions but do not appear in this document due to their small size or localized impact. The reader should contact any member jurisdiction for a listing of any additional projects.

All projects are listed in chronological/prioritized order. In addition, separate listings by “Responsible Agency” (East Grand Forks or MnDOT) have been combined into sub-area listings for the Minnesota side of the MPO Study Area. An explanation of each item title follows.

The following items are generic to all projects:

Urban Area/Project Number:

Urban Area refers to whether the project is located on the Grand Forks or East Grand Forks side of the river. Project numbers are used primarily for reference and only indicate a project priority within a competing funding source. A lower project number indicates a higher priority project only for projects that compete for the same funds. All projects are listed chronologically, with first year projects considered higher priority than second or third year projects; with the exception of certain ongoing programs such as transit operating assistance. Projects designated as "Entitlement" under "Funding Status" generally do not compete with other projects.

Project Location:

The project location places the project within the legal boundaries of the stated jurisdiction. In cases where the project shares jurisdictional land, the two or three jurisdictions are listed, or the jurisdiction that is taking the lead in the project is listed.

Responsible Agency:

The responsible agency usually initiates the project, requests funding, and processes the paper work necessary for project completion.

Project Description:

Project description further identifies the project to be carried out on the previously stated "facility" by describing the limits and types of improvements.

Estimated Cost and Funding:

The total estimated cost of the described project is listed in this section with anticipated funding agency participation by categories of federal, state, other and local. The listed estimated costs for highway, enhancement, safety, and bridge projects include preliminary engineering, right-of-way, and construction costs for each project.

Funding Sources:

Federal

The federal funding categories indicate the anticipated source of federal revenue. The categories listed below are the current funding categories of FAST:

Surface Transportation Block Grant Program (STBGP)
STBGP set-aside formally known as Transportation Alternatives Program (TAP)
National Highway Performance Program (NHPP)
Highway Safety Improvement Program (HSIP)
Section 5307 Transit Operating Assistance
Section 5339 Transit Capital Assistance
Other - Funding sources not listed above will be identified by their proper name.

Under the North Dakota Urban Program street and highway construction and maintenance funds are distributed according to whether the roadway is classified as part of the statewide regional system or urban system. Urban Program funds are available to cities with populations over 5,000 persons to be spent on federal-aid eligible streets.

Highways designated as part of the state system are classified as either Primary or Secondary roadways. Projects on the Primary System are funded with 80 percent federal and 20 percent state funding. Regional Secondary projects are funded with 80 percent federal, 10 percent state, and 10 percent local funding.

Minnesota County State Aid

The State of Minnesota has established a system of state-aided highways, which may or may not be part of the federal assistance system. Projects located on the federal/state-aid system may be funded by federal dollars with state-aid revenue utilized as local matching funds. Projects off the federal assistance system may be funded entirely with Minnesota County State Aid Funds provided it is on a county state highway.

Minnesota Urban State Aid

Similar to Minnesota State Aid, this is funding allocated to cities in Minnesota for maintenance, construction, or reconstruction of local streets.

The following are relevant to highway, enhancement, bridge, or safety projects:

Project Type:

Describes the type of project by the characteristic of the project. For example roadway replacement projects of existing facilities are labeled as "Reconstruction" and new facilities are indicated as "New."

Facility:

The facility is the roadway or route on which the project will be completed.

Classification:

The classification is the functional classification of that roadway or route as defined by the Grand Forks-East Grand Forks Metropolitan Planning Organization.

The definitions of the Functional Classification are as follows:

Interstate

An interstate highway provides for expeditious movement of relatively large volumes of traffic between arterials with no provision for direct-access to abutting property. An interstate, by design, is a multi-lane highway with grade separations at all crossroads and full control of access. Parking, except for emergencies and no more than 72 hours, within the roadway is prohibited.

Principal Arterial

Principal arterials are roads or streets that provide for expeditious movement of relatively large volumes of traffic between land areas and other arterials. A principal arterial should, by design, provide controlled access to abutting land with intersection spacing limitations. Principal arterials usually are multi-lane divided roadways with no provision for parking.

Minor Arterial

Minor arterials include roads or streets that provide for through-traffic movements between areas to link collectors with other arterials. There is direct access to abutting property, but roadway access is typically controlled by limiting the number of intersections and curb cuts. A minor arterial, by design, usually has two lanes in rural areas, and four or more in urban areas. It is an undivided road with little or no provision for parking within the roadway.

Collectors

Collectors provide for traffic movement between local service roads, other collectors, and arterial roads. Collectors also provide a higher degree of direct access to abutting property than arterials. A collector, by design, is usually a two-lane with parking permitted within the roadway for the older sections of Grand Forks. The newer sections in Grand Forks have parking prohibited.

Local Roads

The primary function of local roads or streets is to provide direct access to abutting property. As such, local streets channel traffic to higher-volume collectors and arterials. Typical design usually consists of a two-lane road with parking permitted as signed.

Funding Status:

Funding Status indicates whether a project is funded in part with federal funds or entirely with local funds. For projects partially funded with federal dollars, a "Discretionary" or "Entitlement" designation is indicated.

Discretionary funding identifies those federal projects with funding that requires prioritization and prior approval by a primary review agency. This would include projects funded with any type of federal funding distributed on a competitive basis, such as projects in North Dakota on the National Highway System, the North Dakota Primary or Regional State Highway Systems. In Minnesota, federal highway is primarily distributed on a competitive basis.

Entitlement funding refers to projects eligible for funding under the North Dakota Urban Roads Program (URP). Under URP, urban cities are given the principal responsibility to select and prioritize projects. Each receives a targeted amount of federal funding on an annual basis.

Staging:

The staging section depicts the latest estimate for work toward a project's completion. The stages are listed as: Preliminary Engineering (PE); which includes the post-planning, pre-construction engineering work on the project; right-of-way (R.O.W.), which is the arrangement for and purchase of land/or building for the construction of a roadway; and Construction (Const.) which is the actual carrying out of the project.

The following are relevant to Fixed-route or Dial-A-Ride transit services or projects:

Project Type:

Project Type differentiates between Fixed-route, Senior Service and Dial-A-Ride (paratransit) service.

Funding Status:

Funding Status indicates whether a project which is funded in part with federal funds or entirely with local funds. For projects partially funded with federal dollars, a "Discretionary" or "Entitlement" designation is indicated.

Discretionary funding indicates that federal project funding would require prioritization and prior approval by a primary review agency. This would include projects, which are funded with any type of federal funding distributed on a competitive basis. In North Dakota, this would include transit projects funded under Sections #5307 and #5309. In Minnesota, Surface Transportation Program funding and Sections #5309 and #5311 monies are used for the purchase of capital items and are distributed on a competitive basis.

Transit entitlement funding refers to services or projects eligible under the Section #5307 Program. Urban areas receive Section #5307 funds annually from the Federal Transit Administration to provide fixed-route and paratransit services. These funds are distributed on a formula basis and do not directly compete with other projects.

Staging:

The project type states whether it is a capital or operating assistance project.

**EAST GRAND FORKS
PROJECT LISTINGS**

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION
TRANSPORTATION IMPROVEMENT PROGRAM
FISCAL YEARS 2018-2021

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS) AND SOURCE OF FUNDING					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES				
										2018	2019	2020	2021		
PROJECT NUMBER	RESPONSIBLE AGENCY	CLASSIFICATION	PROJECT TYPE	FUNDING STATUS	TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations					
					FUNDING SOURCE					Capital					
					FUNDING SOURCE					P.E.					
					TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
					FUNDING SOURCE					CONSTR.					
					FUNDING SOURCE					TOTAL					
East Grand Forks #1	East Grand Forks	NA	Operating subsidy for proposed East Grand Forks fixed-route transit service. The service will operate 6 days a week and averages 62.5 hours of revenue service daily. Bus for the period January 1, 2018 to December 31, 2018 (Costs for fixed-route service are estimates).	TRF-0018-18B	REMARKS: Contract fixed route services with City of Grand Forks Estimated payment to GF is \$328,900										
	East Grand Forks	Operations			Estimated fare is \$13,800					Operations	350.00				
	Fixed-Route Transit Service	Entitlement			Other is MN Transit Formula Funds					Capital	0.00				
						TOTAL	FEDERAL	STATE	OTHER	LOCAL	P.E.	NA			
					350.00	85.00	0.00	180.00	85.00	R.O.W.	NA				
					FTA 5307					CONSTR.	NA				
										TOTAL	350.00				
East Grand Forks #2	East Grand Forks	NA	Operating subsidy for demand response service for disabled persons and senior citizens covering the period January 1, 2018 to December 31, 2018. The paratransit service operates the same hours of operation as the fixed-route transit service (costs for paratransit service are estimates)	TRF-0018-18A	REMARKS: Contract demand response service Estimated fare is \$13,260										
	East Grand Forks	Operations			Other is MN Transit Formula Funds					Operations	68.00				
	Paratransit Service for Disabled Persons	Entitlement								Capital	0.00				
						TOTAL	FEDERAL	STATE	OTHER	LOCAL	P.E.	NA			
					68.00	0.00	0.00	57.00	11.00	R.O.W.	NA				
					State Transit Funds					CONSTR.	NA				
										TOTAL	68.00				
East Grand Forks #3	East Grand Forks	NA	Purchase of a Class 500 vehicle for Demand Response	TRF-0018-18C	REMARKS: Cities Area Transit will cover the local match										
	East Grand Forks	Capital			Other is MN Transit Formula Funds					Operations	0.00				
	Paratransit Vehicle	Discretionary								Capital	150.00				
						TOTAL	FEDERAL	STATE	OTHER	LOCAL	P.E.	NA			
					150.00	0.00	0.00	120.00	30.00	R.O.W.	NA				
					FTA #5307					CONSTR.	NA				
										TOTAL	150.00				

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2021

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS)					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES			
	RESPONSIBLE AGENCY	CLASSIFICATION		TOTAL	FEDERAL	STATE	OTHER	LOCAL		2018	2019	2020	2021	
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS		AND SOURCE OF FUNDING					Operations					
									Capital					
									P.E.					
									R.O.W.					
									CONSTR.					
				FUNDING SOURCE					TOTAL					
East Grand Forks #7	East Grand Forks	Rhinehart Dr	reconstruct the isegment of Rhinehart Drive between Bygland Dr and 6th St SE. Includes a sidewalk.	REMARKS:										
	East Grand Forks	Collector		Other is Municipal State Aid										
	Reconstruction	Discretionary	Project # 119-129-002 covers several projects as individually listed	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				430.00	280.00		150.00		CONSTR.	80.00				
								TOTAL	350.00					
								TOTAL	430.00					
East Grand Forks #8	East Grand Forks	Bygland Dr.	construct/install pedestrian safety improvmeent at the intersection with 13th St SE.	REMARKS:										
	East Grand Forks	Minor Arterial		Other is Municipal State Aid										
	Safety	Discretionary	Project # 119-129-002 covers several projects as individually listed	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				282.00	180.00		102.00		CONSTR.	57.00				
								TOTAL	225.00					
								TOTAL	282.00					
East Grand Forks #9	East Grand Forks	Greenway Bvl	install sidewalk/safe route to school along Greenway Bvl and modify the median to allow more vehicular access	REMARKS:										
	East Grand Forks	Collector		Other is Municipal State Aid										
	Construction	Discretionary	Project # 119-129-002 covers several projects as individually listed	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				364.00	237.00		127.00		CONSTR.	64.00				
								TOTAL	300.00					
								TOTAL	364.00					

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2021

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS) AND SOURCE OF FUNDING					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES			
	RESPONSIBLE AGENCY	CLASSIFICATION								2018	2019	2020	2021	
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS		TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations					
				FUNDING SOURCE					CONSTR.					
										TOTAL				
East Grand Forks #10	East Grand Forks	1st St SE	pavement rehabilitation of asphalt segment of 1st St SE immediately off the Point Bridge	REMARKS: Other is Municipal State Aid										
	East Grand Forks	Collector		Operations										
	Rehabilitation	Discretionary	Project # 119-129-002 covers several projects as individually listed	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				31.00	20.00		11.00		CONSTR.	25.00				
										TOTAL	31.00			
East Grand Forks #11	East Grand Forks	Central Ave	install multi-use path along Central Ave between Gateway Dr and 20th Ave NW	REMARKS: Other is Municipal State Aid										
	East Grand Forks	Minor Arterial		Operations										
	Construction	Discretionary	Project # 119-129-002 covers several projects as individually listed	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				414.00	144.00		270.00		CONSTR.	337.00				
										TOTAL	414.00			
East Grand Forks #12	East Grand Forks	US #2	REDECKB BR 9090 (CH 152) (KENNEDY BR) OVER THE RED RIVER OF THE NORTH IN EAST GRAND FORKS (MN LEAD)	REMARKS: AC Payback of FY2016 project										
	MnDOT	Kennedy Bridge		Operations										
	Rehabilitation	Discretionary	Project # 6018-02	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				6,949.46					CONSTR.					
										TOTAL				

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

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URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS)					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES			
	RESPONSIBLE AGENCY	CLASSIFICATION		AND SOURCE OF FUNDING						2018	2019	2020	2021	
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS		TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations					
				FUNDING SOURCE					CONSTR.					
										TOTAL				
East Grand Forks #16			Intentionally left blank	REMARKS:										
									Operations					
										Capital				
										P.E.				
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
									CONSTR.					
				FUNDING SOURCE					TOTAL					
East Grand Forks #17			Intentionally left blank	REMARKS:										
									Operations					
										Capital				
										P.E.				
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
									CONSTR.					
				FUNDING SOURCE					TOTAL					
East Grand Forks #18			Intentionally left blank	REMARKS:										
									Operations					
										Capital				
										P.E.				
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.					
				0.00	0.00	0.00	0.00	0.00	CONSTR.					
				FUNDING SOURCE					TOTAL					

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2021

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS)					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES							
				TOTAL	FEDERAL	STATE	OTHER	LOCAL			2018	2019	2020	2021				
PROJECT NUMBER	RESPONSIBLE AGENCY	CLASSIFICATION	PROJECT TYPE	FUNDING STATUS	AND SOURCE OF FUNDING					Operations								
					FUNDING SOURCE					Capital								
					FUNDING SOURCE					P.E.								
									R.O.W.									
									CONSTR.									
									TOTAL									
East Grand Forks #19	East Grand Forks	NA	Operating subsidy for proposed East Grand Forks fixed-route transit service. The service will operate 6 days a week and averages 62.5 hours of revenue service daily. Bus for the period January 1, 2020 to December 31, 2020(Costs for fixed-route service are estimates).	REMARKS: Contract fixed route services with City of Grand Forks Estimated payment to GF is \$338,800														
	East Grand Forks	Operations		Estimated fare is \$14,200					Operations			370.00						
	Fixed-Route Transit Service	Entitlement		Other is MN Transit Formula Funds					Capital			0.00						
						TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.			NA				
					370.00	90.00	0.00	190.00	90.00	CONSTR.			NA					
									FTA 5307					TOTAL			370.00	
East Grand Forks #20	East Grand Forks	NA	Operating subsidy for demand response service for disabled persons and senior citizens covering the period January 1, 2020 to December 31, 2020. The paratransit service operates the same hours of operation as the fixed-route transit service (costs for paratransit service are estimates)	REMARKS: Contract demand response service Estimated fare is \$13,650														
	East Grand Forks	Operations		Other is MN Transit Formula Funds					Operations			70.00						
	Paratransit Service for Disabled Persons	Entitlement							Capital			0.00						
						TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.			NA				
					70.00	0.00	0.00	58.00	12.00	CONSTR.			NA					
									State Transit Funds					TOTAL			70.00	
East Grand Forks #21			Intentionally left blank	REMARKS:														
									Operations			0.00						
									Capital									
						TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.			NA				
						0.00	0.00	0.00	0.00	CONSTR.			NA					
									FTA #5307					TOTAL			0.00	

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2021

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS)					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES					
	RESPONSIBLE AGENCY	CLASSIFICATION		AND SOURCE OF FUNDING						2018	2019	2020	2021			
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS		TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations							
				FUNDING SOURCE					CONSTR.							
										TOTAL						
East Grand Forks #25	East Grand Forks	US 2	WBL - FROM 5TH AVE NW (EAST GRAND FORKS) TO 0.3 MI E OF POLK CSAH 15 (FISHER), RESURFACING	REMARKS: Likely can include alternative concepts currently being considered in US 2 Study												
	MnDOT	Principal Arterial			Operations					0.00						
				Capital						0.00						
	Rehabilitation	Discretionary	Project # 6001-61	P.E.						NA						
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.				NA			
				10,800.00	8,640.00	2,160.00	0.00	0.00	CONSTR.				10,800.00			
										FTA 5307			TOTAL			10,800.00
East Grand Forks #26	East Grand Forks	19th Ave SE	construct a safe routes to school sidewalk 20th Ave SE starting at 10th St SE and 13th St SE and along 13th St SE to connect to school	REMARKS:												
	East Grand Forks	Local			Operations					0.00						
				Capital						0.00						
	Construction	Discretionary	Project # 119-591-006	P.E.						NA						
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.				NA			
				171.25	137.00	0.00	0.00	34.25	CONSTR.				171.25			
										State Transit Funds			TOTAL			171.25
East Grand Forks #27	East Grand Forks	NA	Safe Routes to School educational and encouragement funding for a three year period	REMARKS:												
	East Grand Forks	NA			Operations					0.00						
				Capital						0.00						
	Safety	Discretionary	Project # 119-591-007	P.E.						NA						
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.				NA			
				37.50	30.00		0.00	7.50	CONSTR.				37.50			
										State Transit Funds			TOTAL			37.50

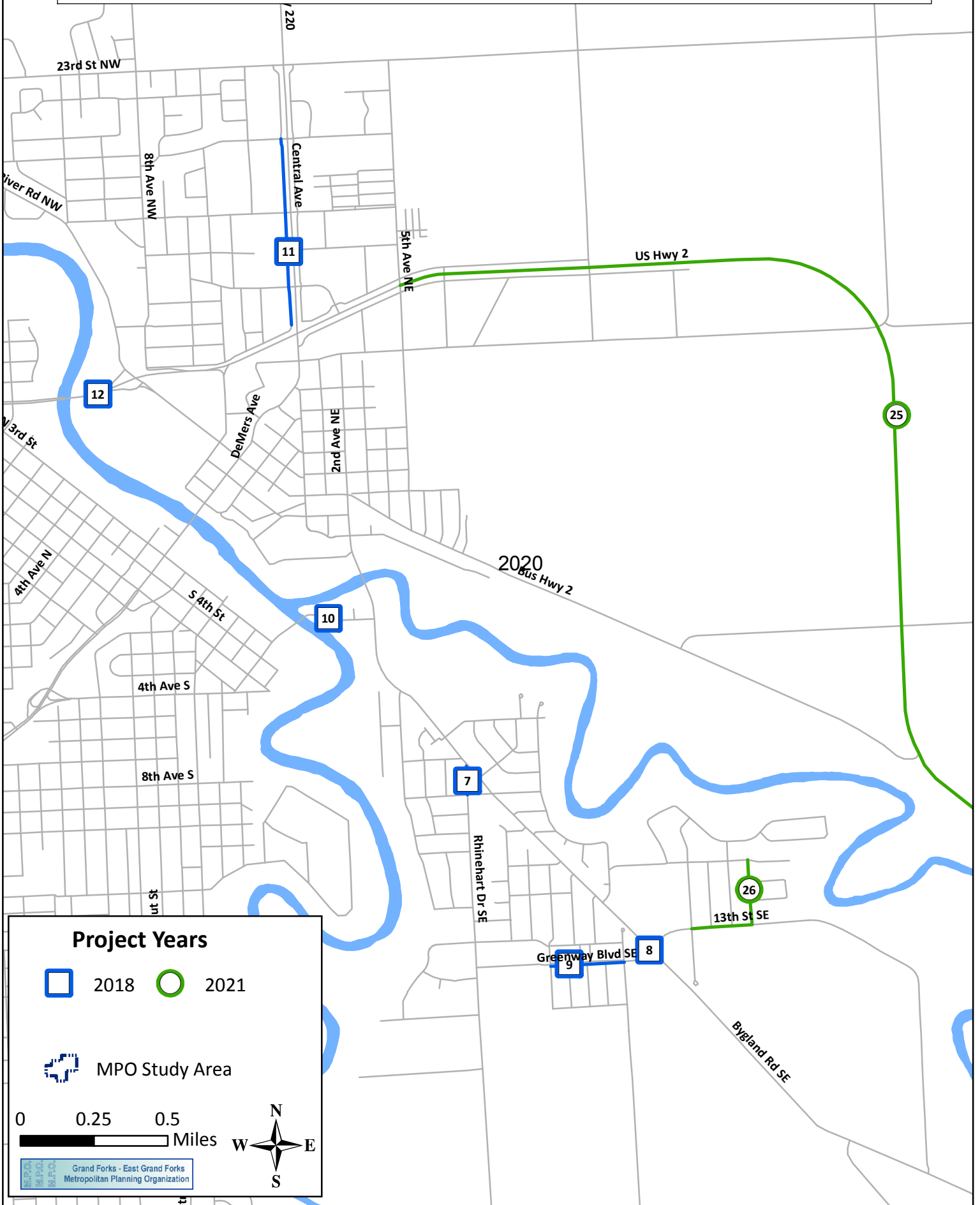
GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

FISCAL YEARS 2018-2021

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS) AND SOURCE OF FUNDING					STAGING	ANNUAL ELEMENT	FUTURE EXPENDITURES			
	RESPONSIBLE AGENCY	CLASSIFICATION								2018	2019	2020	2021	
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS	TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations	Capital	P.E.	R.O.W.	CONSTR.	TOTAL	TOTAL
			FUNDING SOURCE					TOTAL	TOTAL					
			East Grand Forks Totals											
									Operations	475.00	659.00	440.00	451.00	
									Capital	610.00	0.00	0.00	180.00	
									P.E.	284.00	NA	0.00	0.00	
									R.O.W.	0.00	0.00	0.00	0.00	
									CONSTR.	1,237.00		0.00	11,008.75	
									TOTAL	2,606.00	659.00	440.00	11,639.75	
									TOTAL	15,344.75	10,026.00	2,160.00	2,684.00	475.75

2017- 2020 Transportation Improvement Program



**ILLUSTRATIVE
PROJECT LISTINGS**

NONE

APPENDIX I
FY2017 Project Status
And
Obligations

FY 2017 PROJECT STATUS SUMMARY

The following is a general status report of Grand Forks and East Grand Forks 2017 projects listed in the 2017 to 2020 Transportation Improvement Program. As this writing is taking place most of the projects should be under construction or some may even be completed.

The MPO is not aware of any other project undertaken in our Study Area that used federal transportation funds.

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

ANNUAL LISTING OF OBLIGATIONS and STATUS OF 2017 PROJECTS

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS)					STAGING	ANNUAL ELEMENT	Project Status				
				AND SOURCE OF FUNDING						2017					
PROJECT NUMBER	RESPONSIBLE AGENCY	CLASSIFICATION	PROJECT TYPE	FUNDING STATUS	TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations	R.O.W.	CONSTR.	TOTAL		
										Capital				P.E.	
FUNDING SOURCE															
East Grand Forks #1	East Grand Forks	NA	Operating subsidy for proposed East Grand Forks fixed-route transit service. The service will operate 6 days a week and averages 62.5 hours of revenue service daily. Bus for the period January 1, 2017 to December 31, 2017 (Costs for fixed-route service are estimates). Listing of Obligations	TRF-0018-17B	REMARKS: Contract fixed route services with City of Grand Forks Estimated payment to GF is \$328,900 Estimated fare is \$13,800 Other is MN Transit Formula Funds										
	East Grand Forks	Operations										Operations	338.43		
	Fixed-Route Transit Service	Entitlement										Capital	0.00		
												P.E.	NA		
					TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.	NA				
					338.43	80.63	0.00	169.48	88.32	CONSTR.	NA				
					FTA 5307					TOTAL	338.43				
East Grand Forks #2	East Grand Forks	NA	Operating subsidy for demand response service for disabled persons and senior citizens covering the period January 1, 2017 to December 31, 2017. The paratransit service operates the same hours of operation as the fixed-route transit service (costs are estimated). Listing of Obligations	TRF-0018-17A	REMARKS: Contract demand response service Estimated fare is \$13,260 Other is MN Transit Formula Funds										
	East Grand Forks	Operations										Operations	68.00		
	Paratransit Service for Disabled Persons	Entitlement										Capital	0.00		
												P.E.	NA		
					TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.	NA				
					68.00	0.00	0.00	57.00	11.00	CONSTR.	NA				
					State Transit Funds					TOTAL	68.00				
East Grand Forks #3	East Grand Forks	NA	Purchase of Paratransit vehicle Listing of Obligations	TRF-0018-17C	REMARKS:										
	East Grand Forks	Capital										Operations	0.00		
	Paratransit Vehicle	Discretionary										Capital	40.00		
												P.E.	NA		
					TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.	NA				
					40.00	32.00	0.00	0.00	8.00	CONSTR.	NA				
					FTA #5307					TOTAL	40.00				

Amended in April 2017 to be removed; not being pursued

GRAND FORKS - EAST GRAND FORKS METROPOLITAN PLANNING ORGANIZATION

TRANSPORTATION IMPROVEMENT PROGRAM

ANNUAL LISTING OF OBLIGATIONS and STATUS OF 2017 PROJECTS

URBAN AREA	PROJECT LOCATION	FACILITY	PROJECT DESCRIPTION	ESTIMATED COST (THOUSANDS)					STAGING	ANNUAL ELEMENT	Project Status								
	RESPONSIBLE AGENCY	CLASSIFICATION		AND SOURCE OF FUNDING						2017									
PROJECT NUMBER	PROJECT TYPE	FUNDING STATUS		TOTAL	FEDERAL	STATE	OTHER	LOCAL	Operations										
									R.O.W.										
				FUNDING SOURCE					TOTAL										
East Grand Forks #4	East Grand Forks	US #2	REDECKBR BR 9090 (CH 152) (KENNEDY BR) OVER THE RED RIVER OF THE NORTH IN EAST GRAND FORKS (MN LEAD)	REMARKS: Total is for the whole project															
	MnDOT	Kennedy Bridge		Other is NDDOT share; see ND Area listing for breakdown of funding sources in FY2016 MnDOT Federal are Advanced Construction AC Payback in FY2018									Operations	NA	Construction ongoing; project scheduled to end in 2018				
	Rehabilitation	Discretionary	Project # 6018-02	Listing of Obligations					15,662.40	6,949.50	1,737.40	6,975.50	P.E.	0.00					
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.	NA									
			18,000.00	7,200.00	1,800.00	9,000.00	0.00	CONSTR.	18,000.00										
				NHPP/MN Chapter 152					TOTAL	18,000.00									
East Grand Forks #5	East Grand Forks	US #2	Construction Engineering for Kennedy Bridge ReDeck	REMARKS: NDDOT includes this item within the total cost not as a separate item like MnDOT															
	MnDOT	Kennedy Bridge		Listing of Obligations									94.30	0	63.80	30.50	P.E.	1,800.00	Construction ongoing; project scheduled to end in 2018
	Rehabilitation	Discretionary	Project # 6018-02CE	TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.										
				1,800.00	0.00	900.00	900.00	0.00	CONSTR.										
				Chapter 152					TOTAL	1,800.00									
East Grand Forks #6	East Grand Forks	NA	Purchase Security and IT Equipment for Cities Area Transit Bus Facility	REMARKS: Cities Area Transit will cover the local match															
	East Grand Forks	Capital		Amended April 19, 2017									Operations		RFP about to be released				
				Listing of Obligations					54.23	31.88	0.00	22.35	0.00	P.E.		30.00			
				TOTAL	FEDERAL	STATE	OTHER	LOCAL	R.O.W.										
			30.00	24.00	0.00	6.00	0.00	CONSTR.											
				FTA #5307					TOTAL										

APPENDIX II

GF/EGF MPO

SELF-CERTIFICATION

**TRANSPORTATION PLANNING PROCESS
CERTIFICATION STATEMENT**

The Grand Forks – East Grand Forks Metropolitan Planning Organization, the Metropolitan Planning Organization for the Grand Forks, North Dakota and East Grand Forks, Minnesota metropolitan region, hereby certifies that it is carrying out a continuing, cooperative and comprehensive transportation planning process for the region in accordance with the applicable requirements of:

- 23 USC 134 and 49 USC 5303, and 23 CFR Part 450;
- Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- Section 1101(b) of the MAP-21 (Pub. L. 109-59) and 49 CFR part 26 regarding the involvement of Disadvantaged Business Enterprises in USDOT funded planning projects;
- 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
- The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- Section 324 of Title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
- Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

Grand Forks – East Grand Forks
Metropolitan Planning
Organization

Minnesota Department
of Transportation

Signature

Signature

Title

Title

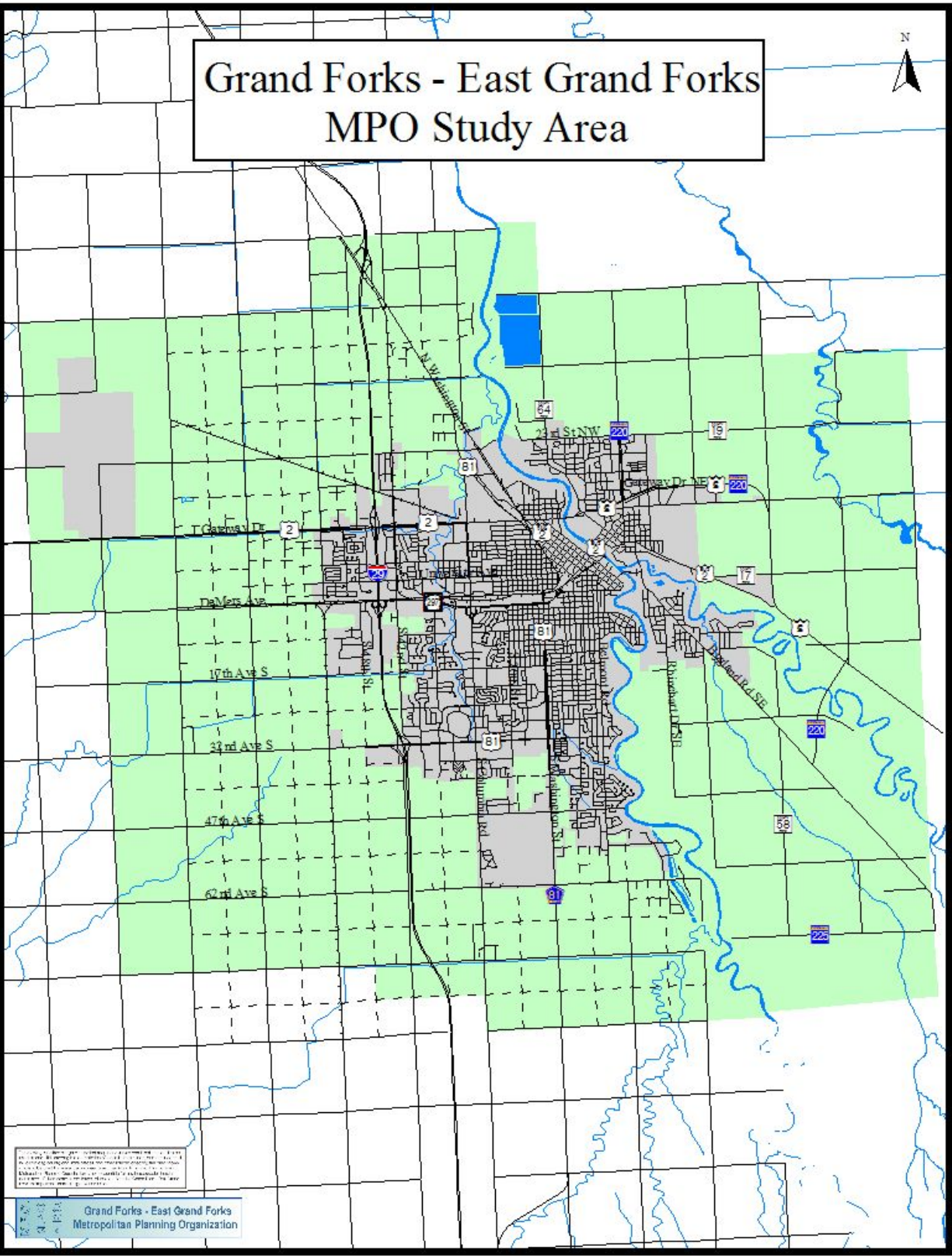
Date

Date

APPENDIX III

GF/EGF MPO AREA MAP

Grand Forks - East Grand Forks MPO Study Area



Map of Grand Forks - East Grand Forks Metropolitan Planning Organization Study Area. The map shows the city of Grand Forks, North Dakota, and the surrounding area. The Red River is shown flowing through the area. The map is titled "Grand Forks - East Grand Forks MPO Study Area".

Grand Forks - East Grand Forks
Metropolitan Planning Organization

APPENDIX IV

PUBLIC PARTICIPATION

Each year, during the preparation of the T.I.P., the MPO begins the T.I.P. preparation process by soliciting transportation projects from the Cities of Grand Forks and East Grand Forks; Grand Forks and Polk Counties; the North Dakota and Minnesota Departments of Transportation; and other transportation agencies and providers by written notification.

The two local transit operators and the MPO have agreed, as allowed by FTA, to have the required transit Program of Projects (P.O.P) be incorporated into the MPO T.I.P. Therefore, no separate P.O.P. document is published. The public notices clearly indicated that the P.O.P. is included in the T.I.P.

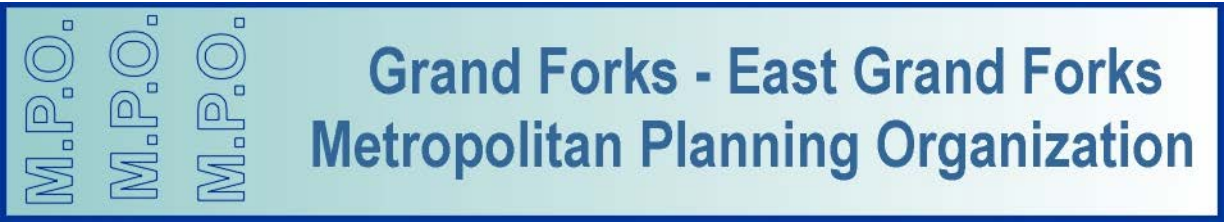
Public meetings were held at various times and dates to invite the public to nominate projects for consideration for funding. Because each state has developed separate timelines for project submission, project nomination meetings begin as early as September, and continue through January. During this time, public meetings are announced and held to allow the public to comment upon the list of projects being submitted for funding consideration.

In December and January, separate public meetings were conducted to allow the public to comment upon the list of projects being proposed for the traditional street and highway funds. This meeting concluded with the MPO approving a list of projects to be submitted to both state DOTs for consideration of funding. The MPO also approved the listed projects as being consistent with the MPO's Long Range Transportation Plan.

Furthermore, a public hearing was held on April 12, 2017, during a Technical Advisory Committee Meeting. The purpose of this hearing was to receive comments on a draft list of transportation improvement projects for 2018-2021 for the Minnesota side. After closing the hearing, at which no comments were received, the document was approved and adopted by the MPO Executive Committee on April 19, 2017 as the Draft 2018-2021 T.I.P.

The final public hearing was scheduled for August 9, 2017, for consideration of a draft final T.I.P. by the MPO Executive Board. No comments were received and the MPO Board approved and adopted the document on August 16, 2017.

Each hearing notice is placed in a non-legal section, in a two-column advertisement format, with a minimum 10-day advance printing prior to the hearing. A copy of the notice is attached at the end of this Appendix. In addition, both the draft T.I.P. document and the final T.I.P. documents were posted on the MPO website prior to the public hearing dates. A copy of the website showing the final T.I.P. document's availability is attached at the end of this Appendix.



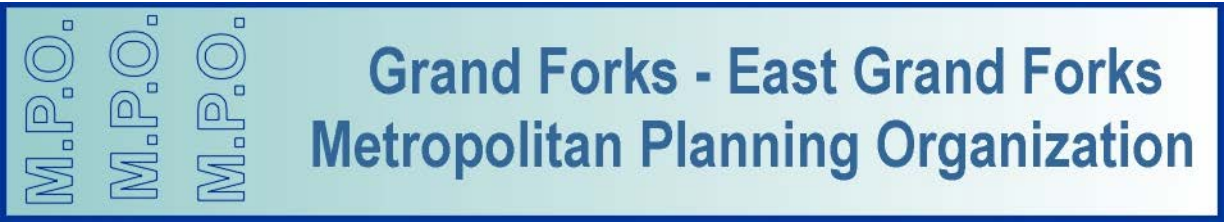
PUBLIC NOTICE

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) will hold a public hearing on the Minnesota Side Draft MPO 2018 to 2021 Transportation Improvement Program (TIP). The TIP also incorporates the local transit operators' Program of Projects (POP). The hearing will be held in the Training Room of East Grand Forks City Hall, 600 DeMers Ave., East Grand Forks, Minnesota. The hearing will start at 1:30 PM on April 12th. The public, particularly special and private sector transportation providers, are encouraged to attend.

The draft TIP lists all transportation improvement projects programmed to be completed between the years of 2018 to 2021 on the Minnesota side of the Red River. A separate draft for the North Dakota side will be done later and notice will be given when it is ready. A copy of the draft TIP is available for review and comment weekdays between 8 AM and 5 PM at the MPO Offices in Grand Forks City Hall and East Grand Forks City Hall. Comments on the draft TIP can be submitted to either MPO Office until noon on April 12th.

For further information, contact Mr. Earl Haugen at 701/746/2660. The GF-EGFMPO will make every reasonable accommodation to provide an accessible meeting facility for all persons. Appropriate provisions for the hearing and visually challenged or persons with limited English Proficiency (LEP) will be made if the meeting conductors are notified 5 days prior to the meeting date, if possible. To request language interpretation, an auxiliary aid or service (i.e., sign language interpreter, accessible parking, or materials in alternative format) contact Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.

Materials can be provided in alternative formats: large print, Braille, cassette tape, or on computer disk for people with disabilities or with LEP by Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.



PUBLIC NOTICE

The Grand Forks - East Grand Forks Metropolitan Planning Organization (MPO) will hold a public hearing on the Minnesota Side Final MPO 2018 to 2021 Transportation Improvement Program (TIP). The TIP also incorporates the local transit operators' Program of Projects (POP). The hearing will be held in the Training Room of East Grand Forks City Hall, 600 DeMers Ave., East Grand Forks, Minnesota. The hearing will start at 1:30 PM on August 9th. The public, particularly special and private sector transportation providers, are encouraged to attend.

The final TIP lists all transportation improvement projects programmed to be completed between the years of 2018 to 2021 on the Minnesota side of the Red River. A separate draft for the North Dakota side will be done later and notice will be given when it is ready. A copy of the final TIP is available for review and comment weekdays between 8 AM and 5 PM at the MPO Offices in Grand Forks City Hall and East Grand Forks City Hall. Comments on the final TIP can be submitted to either MPO Office until noon on August 9th.

For further information, contact Mr. Earl Haugen at 701/746/2660. The GF-EGFMPO will make every reasonable accommodation to provide an accessible meeting facility for all persons. Appropriate provisions for the hearing and visually challenged or persons with limited English Proficiency (LEP) will be made if the meeting conductors are notified 5 days prior to the meeting date, if possible. To request language interpretation, an auxiliary aid or service (i.e., sign language interpreter, accessible parking, or materials in alternative format) contact Earl Haugen of GF-EGFMPO at 701-746-2660. TTY users may use Relay North Dakota 711 or 1-800-366-6888.

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Grand Forks - East Grand Forks Metropolitan Planning Organization

- About the MPO
- Technical Advisory Committee Meeting Agendas/Packets
- MPO Executive Policy Board Meeting Agendas/Packets
- Finance Committee Meeting Agendas/Packets
- Minutes
- Boards and Committees
- Title VI/ADA Forms
- Projects
- Contact Us
- MPO Staff
- JOB OPPORTUNITIES/INTERNSHIPS

PROJECTS/PLANS/REPORTS

- **NEW** [FINAL 2018-2021 MINNESOTA SIDE T.I.P.](#)
 - [Public Hearing Notice – August 9, 2017](#)
- **NEW** [FINAL DRAFT U.S.#2/U.S.BUS#2 STUDY](#)
- **NEW** [TRANSIT DEVELOPMENT PLAN UPDATE](#)
- **NEW** [COMPLETE STREETS WORKSHOP](#)
- **NEW** [BICYCLE/PEDESTRIAN PLAN UPDATE](#)
- [DISCOVERY SCHOOL SAFE ROUTES TO SCHOOL](#)
 - [Discovery-School-Safe-Routes-To-School-Report](#)
- [FINAL 2017-2020 TRANSPORTATION IMPROVEMENT PLAN \(T.I.P.\)](#)

Archived Projects/Studies/News

- www.theforksmpo.org – (Previous Website)

APPENDIX V

EAST GRAND FORKS PROJECTS SHOWN IN NWATP FORMAT

	F	G	H	J	K	L	M	P	Q	R	S	AA	AE	AF	AG	AH	AL	AM	
	Rte_Sys	Projnum	#Year	Who	Agency	MPO	Description	Length	City	County Name	Program	Proposed Funds	STIP Total	Target FHWA	Target AC Payback	FTA	Total TH	Other	
10	BB	TRF-0018-18A	2018	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS DAR TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	LF	68,000	-	-	-	-	68,000	
11	BB	TRF-0018-18B	2018	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS FIXED ROUTE TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	FTA	350,000	-	-	85,000	-	265,000	
12	BB	TRF-0018-18C	2018	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS, PURCHASE PARATRANSIT VEHICLE REPLACEMENT	0.0	EAST GRAND	POLK	B9	FTA	150,000	-	-	120,000	-	30,000	
13	BB	TRF-0018-18Z0	2018	L	EAST GRAND FORKS	2	EAST GRAND FORKS; SFY 2018 GREATER MN NEW SERVICE EXPANSION OPERATING FUNDS (7/1/17-6/30/18)	0.0	EAST GRAND	POLK	TR	LF	57,000	-	-	-	-	57,000	
14	BB	TRF-0018-18ZC	2018	L	EAST GRAND FORKS	2	EAST GRAND FORKS; SFY 2018 GREATER MN NEW SERVICE EXPANSION CAPITAL FUNDS (7/1/17-6/30/18)	0.0	EAST GRAND	POLK	TR	LF	460,000	-	-	-	-	460,000	
15	City	119-129-002	2018	L	EAST GRAND FORKS	2	IN EGF, RHINEHART DR, FROM 6 TH ST SE NORTH 475 FT, RECONSTRUCT; 1ST ST SE, ADJACENT TO POINT BR, M&O; JCT OF BYGLAND RD/13 TH ST SE, PED CROSSING; GREENWAY BLVD, FROM BYGLAND TO RHINEHART SW, MEDIAN RECONSTRUCT	0.0	EAST GRAND	POLK	RD	STBGP 5K-200K	1,236,000	860,000	-	-	-	-	376,000
16	US 2	6018-02AC	2018	S	MNDOT	2	**AC**CHAP 152**SPP** US 2, EB & WB, IN EAST GRAND FORKS, REDECK BR 9090, KENNEDY BR, OVER	0.1	EAST GRAND	POLK	BI	NHPP	6,949,460	-	6,949,460	-	-	-	
17	BB	TRF-0018-19A	2019	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS DAR TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	LF	69,000	-	-	-	-	69,000	
18	BB	TRF-0018-19B	2019	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS FIXED ROUTE TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	FTA	360,000	-	-	89,000	-	271,000	
19	BB	TRF-0018-19Z0	2019	L	EAST GRAND FORKS	2	EAST GRAND FORKS; SFY 2019 GREATER MN NEW SERVICE EXPANSION OPERATING FUNDS (7/1/18-6/30/19)	0.0	EAST GRAND	POLK	TR	LF	230,000	-	-	-	-	230,000	
20	BB	TRF-0018-20A	2020	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS DAR TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	LF	70,000	-	-	-	-	70,000	
21	BB	TRF-0018-20B	2020	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS FIXED ROUTE TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	FTA	370,000	-	-	90,000	-	280,000	
22	BB	TRF-0018-21A	2021	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS DAR TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	LF	71,000	-	-	-	-	71,000	
23	BB	TRF-0018-21B	2021	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS FIXED ROUTE TRANSIT OPERATING ASSISTANCE	0.0	EAST GRAND	POLK	B9	FTA	381,000	-	-	94,000	-	287,000	
24	BB	TRF-0018-21C	2021	L	EAST GRAND FORKS	2	SECT 5307: EAST GRAND FORKS, PURCHASE PARATRANSIT VEHICLE REPLACEMENT	0.0	EAST GRAND	POLK	B9	LF	180,000	-	-	-	-	180,000	
25	LOCAL 999	119-591-006	2021	L	EAST GRAND FORKS	2	EAST GRAND FORKS, SAFE ROUTES TO SCHOOL, SIDEWALK EXTENSIONS ON 20TH AVE SE AND 13TH ST SE (CAPPED \$137,000)	0.0	EAST GRAND	POLK	EN	STBGTAP Statewide	171,250	137,000	-	-	-	34,250	
26	LOCAL 999	119-591-007	2021	L	EAST GRAND FORKS	2	EAST GRAND FORKS, SAFE ROUTES TO SCHOOL, TRAINING AND SUPPLIES, NON-INFRASTRUCTURE (CAPPED \$30,000)	0.0	EAST GRAND	POLK	EN	STBGTAP Statewide	37,500	30,000	-	-	-	7,500	
27	US 2	6001-61	2021	S	MNDOT	2	**SPP**AB** US 2, WBL - FROM 5TH AVE NW (EAST GRAND FORKS) TO 0.3 MI E OF POLK CSAH 15 (FISHER), RESURFACING	15.0	EAST GRAND	POLK	RS	NHPP	10,800,000	8,640,000	-	-	-	2,160,000	
28																			
29													22,010,210	9,667,000	6,949,460	478,000	2,160,000	2,755,750	

TABLE OF CONTENTS* UPDATE AUGUST, 2017

CODE	AREA	PROJECT SCHEDULE/TIMELINE		% COMPLETED	FISCAL YEAR	COMPLETION DATE
		Task(s)	ACTIVITY			
	Introduction					
300.1	PLANNING AND IMPLEMENTATION		ACTIVITIES			
	2045 Street & Highway Plan NEW	1	Consultants Kimley-Horn and WSB are wrapping up the Existing Conditions Report for the 2045 Street and Highway Plan. Consultants are preparing materials for an August 31st open house to present this information to the public.	30%		
300.1	Plan Update (Travel Demand Model)	1	The model development is in the data collection and methodology development stage. Cleaning up & formatting data obtained to represent the employment centers. The data shows the type of employment and the number of employees by NAICS code.	40%	2106	16-Dec
300.1	Bicycle & Pedestrian Planning Element (Update)	2-3-4-5	Facilitated two meetings Advisory Committee Bicycle and Pedestrian Element update. Discussed the Final (Draft) document resulting from the reviews advanced by City's and MPO's staff. The reviews included the versions provided for consideration and comments by various local staff reviewers. Discussed additional Objectives drafted and included in the document necessary to address the need to integrate following areas into Pedestrian and Bicyclist activities: Transit, Safe Routes to School Program, Safety (State Highway Safety Plan) Greenway Trail (Grand Forks) and Parks & Recreation (East Grand Forks) Bikeway Map Critique comments. Currently reviewing Goals and Objectives (Part 1), Barriers (Part 2) and Existing Conditions Report (Part 3). Parts will submitted to Advisory Committee for input once reviewed by MPO staff.	75%	2016	Sep-17
300.1	Transit Development Planning Element (Update)		STUDY COMPLETED IN JULY, 2017	99%	2016	Feb-17
300.2	CORRIDOR PLANNING					
300.2	Traffic Count Program	Ongoing	Resumed data collection setup for the rest of the intersections. Approx.	70%	2015	Ongoing
300.2	Corridor Preservation	Ongoing	Ongoing		2015	Ongoing
	Near South Neighborhood NEW	Task(s) 1	Crash data shapefiles as received from MPO have been reviewed. Request for additional data sent to MPO.	15%	2017	2017
300.3	TRANSPORTATION IMPROVEMENT PROGRAM (TIP) ANNUAL				2016	
300.4	LAND USE PLAN		ACTIVITIES			
300.5	SPECIAL STUDIES		ACTIVITIES			
300.5	MAP-21/FAST (2015)		Ongoing		2015	Ongoing
300.5	I-29 Traffic Operations Study	1	STUDY COMPLETED IN JUNE, 2017	100%	2015	7/30/2016 (Work extended to 2017)
300.6	PLAN MONITORING, REVIEW AND EVALUATION		ACTIVITIES			
300.7	GEOGRAPHIC INFORMATION SYSTEMS (GIS) DEVELOPMENT					
	Geographic Information Systems (GIS) Development	Ongoing	Ongoing in-house		2015	Ongoing

Note: Brief project update review for information only. It does not replace Project Reports.