Overcoming Barriers Strengthening Connections

Grand Forks - East Grand Forks Metropolitan Planning Organization

Ensuring Opportunities Planning One Community

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

TECHNICAL ADVISORY COMMITTEE MEETING

WEDNESDAY, FEBRUARY 12TH, 2020 – 1:30 P.M.

EAST GRAND FORKS CITY HALL TRAINING ROOM

MEMBERS

Kadrmas/Peterson _____	Graham/Hopkins_____	West _____
Ellis _____	Zacher/Johnson _____	Magnuson _____
Bail/Emery _____	Kuharenko/Williams _____	Sanders _____
Gengler/Halford _____	Bergman/Rood _____	Christianson _____
Riesinger/Audette _____		

1. CALL TO ORDER

2. CALL OF ROLL

3. DETERMINATION OF A QUORUM

4. MATTER OF APPROVAL OF JANUARY 8TH, 2019, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

5. MATTER OF APPROVAL OF U.S.#2/U.S.81 SKEWED INTERSECTION STUDY..... KOUBA

6. MATTER OF DRAFT AMENDMENT TO TRANSIT DEVELOPMENT PLAN..... KOUBA

7. MATTER OF DRAFT T.I.P. PROCEDURAL MANUAL..... HAUGEN
   a. MPO Draft Manual
   b. Minnesota Side T.I.P./S.T.I.P. Review

8. MATTER OF 2020 FLOOD FORECAST AND COORDINATION ..... HAUGEN

9. MATTER OF UPDATE ON DOWNTOWN TRANSPORTATION STUDY ..... HAUGEN

10. OTHER BUSINESS
    a. 2020 Annual Work Program Project Update

11. 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 ISABILITIES 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, January 8th, 2020
East Grand Forks City Hall Training Conference Room

CALL TO ORDER

Earl Haugen, Chairman, called the January 8th, 2020, meeting of the MPO Technical Advisory Committee to order at 1:30p.m.

CALL OF ROLL

On a Call of Roll the following members were present: David Kuharenko, Grand Forks Engineering; Jane Williams, Grand Forks Engineering; Dale Bergman, Cities Area Transit; Patrick Hopkins, MnDOT-District 2; Nancy Graham, MnDOT-District 2; Ryan Riesinger, Airport Authority; Stephanie Halford, Grand Forks Planning; Jason Peterson, NDDOT-Grand Forks District; Nancy Ellis, East Grand Forks Planning; Steve Emery, East Grand Forks Engineer; Michael Johnson, NDDOT-Local Government; and Wayne Zacher, NDDOT-Local Government.

Absent: Brad Bail, Jesse Kadrmas, Richard Audette, Dustin Lang, Ryan Brooks, Brad Gengler, Lane Magnuson, Lars Christianson, and Rich Sanders.

Guest(s) present: Jim Mertz, Bolton and Menk.

Staff: Earl Haugen, GF/EGF Executive Director and Peggy McNelis, GF/EGF Office Manager.

DETERMINATION OF A QUORUM

Haugen declared a quorum was present.

INTRODUCTIONS

Haugen asked that everyone please state their name and the organization they represent as well.

MATTER OF APPROVAL OF THE DECEMBER 11TH, 2019, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

MOVED BY BERGMAN, SECONDED BY KUHARENKO, TO APPROVE THE DECEMBER 11TH, 2019, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE, AS PRESENTED

MOTION CARRIED UNANIMOUSLY.

PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE
Wednesday, January 8th, 2020

MATTER OF APPROVAL OF PROPOSED T.I.P. AMENDMENT

Haugen reported that MnDOT has asked us to amend our T.I.P. for the project that extends out beyond the MPO study area but does include some portion of the MPO study area. He explained that it is essentially rehab work on U.S.#2, but it does include the intersection of U.S.#2/U.S.Bus#2.

Haugen stated that MnDOT is simply requesting that the Federal Fiscal Year be switched to 2022 instead as currently shown in 2021. He said that the project will still occur in 2021, but the funding will be programmed in 2022.

Haugen opened the public hearing.

There was no one present from the public present to speak on this item. Haugen reported that they did advertise that written comments could be provided up to noon, none were received, nor were any oral comments provided.

Haugen closed the public hearing.

Haugen referred to the packet and pointed out that it does include the project listing. He explained that none of the other financial details changed with the exception of shifting the year into FY2022, but again the project will still be done in FY2021, just the financing timeline is changing.

Haugen referred to a drawing of the project and pointed out where the project is located and explained that it is an improvement that will be done that includes the U.S.#2/U.S.Bus#2 intersection.

Haugen stated that staff is recommending that the Technical Advisory Committee approve forwarding a recommendation to the MPO Executive Policy Board that they approve this proposed T.I.P. amendment, as presented.

MOVED BY KUHARNEKO, SECONDED BY EMERY, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE PROPOSED T.I.P. AMENDMENT, AS PRESENTED.

Voting Aye:	***Riesinger, Bergman, Zacher, Kuharenko, Emery, Halford, Peterson, and Graham.***
Voting Nay:	***None.***
Abstain:	***None.***
Absent:	***Kadrmas, Rood, Bail, Ellis, Gengler, Brooks, Audette, Magnuson, Sanders, and Christianson.***

MATTER OF APPROVAL OF CANDIDATE PROJECTS FOR 2021-2024 T.I.P.

a. Minnesota Side

Haugen reported that MnDOT submitted one application for FY2024 project consideration. He explained that the project entails replacing traffic signals on DeMers Avenue at 2nd and 4th. He stated that originally the project was scoped to include a 3rd signal but that has been dropped from this project application, that 3rd signal was located out on U.S.Bus#2 and 2nd Avenue, so it is just two signals, and the cost estimate is $1.12 million with a $0 dollar federal request as the State of Minnesota is currently considering paying for it with 100% State funds. He added that the construction costs are $900,000 and then there is some right-of-way purchase costs and design costs and such that brings it up to the $1.12 total project cost.

Haugen said that staff finds that it is consistent with our plan; the only slight difference is that our plan identified three signals but the project is now just doing two signals; the third signal is still being pursued but it has a little more nuances to it and they didn't want to delay the other two thus they decided to program those now.

Haugen commented that we do note that as this project has been moving through the process we have been discussing with MnDOT that we hope that this will be an opportune time to better coordinate their signals with the Grand Forks signals, to bring the Minnesota signals up to par with the Grand Forks signals and we are hoping that the Downtown Transportation Study that we are doing will help flesh that out a little better to get that accomplished.

Haugen stated that included in the packet was the information provided on the Minnesota forms; and he did strike out the 2nd Avenue N.E. location on the form just to make it consistent. He pointed out that the detailed cost breakdown is also included as well as the scoring sheet.

Emery said that he is assuming that the local funds are for the City of East Grand Forks, and he is wondering if that is something that MnDOT will be approaching the City Council about, getting a resolution. Graham responded that she thought that the project manager had already talked to the City about this. Emery said that he knows that Matt approached the City about the stop lights on 220 and 14th, but he doesn't remember this one coming to the City Council. Hopkins stated that this project isn't technically in the T.I.P. yet, so that request might be coming in the next cycle.

Kuharenko said that he has one question; right now this cost estimate looks like it was developed based on three signals but knowing one was removed, is this cost estimate still valid. Graham responded that the cost estimate was revised so it is correct for the two signals.

MOVED BY BERGMAN, SECONDED BY EMERY, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE MINNESOTA SIDE T.I.P. CANDIDATE PROJECT FOR THE FY2021-2024 T.I.P. AS BEING CONSISTENT WITH THE METROPOLITAN TRANSPORTATION PLAN AND GIVE PRIORITY RANKING.

Voting Aye: ***Riesinger, Bergman, Zacher, Kuharenko, Emery, Halford, Peterson, and Graham.***
Voting Nay: ***None.***
Abstain: ***None.***
Absent: ***Kadrmas, Rood, Bail, Ellis, Gengler, Brooks, Audette, Magnuson, Sanders, and Christianson.***

b. North Dakota Side

Haugen reported that there are several programs to go over for the North Dakota side candidate projects. He added that we have already addressed the H.S.I.P., the Transportation Alternatives and the General Crossing programs and are now addressing Urban Grant and Urban Road local portion and Urban Road regional portion; in that order.

(1) Urban Grant Program

Haugen stated that as indicated in the staff report we received one application for the Urban Grants from the City of Grand Forks. He explained that the project is to reconstruct North 4th Street between DeMers Avenue and 1st Avenue. He said that the full application was included in the packet as well, and staff believes the project is consistent with the transportation plan. He added, however, that we do note that we are studying the transportation in the downtown and as part of that there might be some nuances that are recommended and could perhaps become part of the project. He said that they also note that it doesn't really talk about the state of amenities for transit or bike facilities other than bike racks, so that is something that the transportation study is zeroing in on for opportunities in the downtown; and depending on the outcome of the transportation study, this project might have the opportunity to include some of those things.

Haugen commented that, as in the past, even though this is one agenda item we have addressed these programs independently or individually so he would entertain any questions or comments on this application.

Johnson said that he has one point of clarification; you are correct in that most of the programs we are talking about today are 2024, but this one is actually 2022.

MOVED BY KUHARENKO, SECONDED BY BERGMAN, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE NORTH DAKOTA URBAN GRANT PROJECT FOR THE FY2021-2024 T.I.P. AS BEING CONSISTENT WITH THE METROPOLITAN TRANSPORTATION PLAN AND GIVE PRIORITY RANKING.

Voting Aye: ***Riesinger, Bergman, Zacher, Kuharenko, Emery, Halford, Peterson, and Graham.***
Voting Nay: ***None.***
Abstain: ***None.***

Absent: ***Kadrmas, Rood, Bail, Ellis, Gengler, Brooks, Audette, Magnuson, Sanders, and Christianson.***

(2) Urban Roads – Local Grant

Haugen stated that these are the non-state highways in Grand Forks; and just as last year the Columbia Road Overpass Rehab was submitted again as the project was not awarded funding in the last T.I.P. cycle so the City is attempting to get it funded in this T.I.P. cycle.

Haugen commented that the project description is the same, the information that was attached essentially is the same with the exception of the removal of the word "draft" on the report. He said that the cost estimate was inflated to reflect the Year 2024, since it was not funded in Year 2023 request, so it does have another year of expenditure added to it.

Haugen stated that they are noting that this project is consistent with the MPOs Transportation Plan, and just as we noted last year there is some financial differences between the Transportation Plan's financial plan and this one if awarded funds, there may have to be some reconciliation worked out on that. He added that another thing they noted is that a purpose and needs statement is missing on the scoping worksheet. Kuharenko commented that maybe Mr. Johnson or Mr. Zacher can speak on this a little bit, but he knows that within the application itself he did include information based on all of the question that were indicated, so he is wondering if that is the information they are looking for or is there more information that is required than that. Johnson responded that in terms of actual information; you provided all of the back-up documentation that had the report data and probably helps feed your purpose and need but do you actually have a written-up detailed purpose and need based off of that information or are you just relying on that information. Kuharenko said that what he is asking is if in the purpose and need section he actually answered a lot of those questions that it is asking for so he has that information in there, what other documentation or information does he need to include. Johnson responded that they just want an overall purpose and needs statement beyond those questions, just a detail on why you are proposing this project today, what are the needs, why are you asking for this money. Grasser said, then, that we aren't looking at the definition of purpose and need like you would under an EIS or something like that. Johnson responded that it is based on what you know today what is your purpose and need. He added that we can't go all the way to NEPA yet because we don't know for sure yet, you haven't done all of your field work and all of your detailed stuff, you have this report, which probably actually helps you get a lot closer to the NEPA purpose and need than you would normally at this stage but it is more of, for lack of a better word, using the same terminology for purpose and need to get us what they want to know.

Haugen reported that, as Mr. Kuharenko discussed, we actually aren't submitting these applications to the State until later this month so there is some time to clean up some of these missing things.

MOVED BY HALFORD, SECONDED BY KUHARENKO, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE NORTH DAKOTA URBAN ROADS LOCAL GRANT PROJECT APPLICATION FOR THE FY2021-2024 T.I.P. AS BEING CONSISTENT WITH THE METROPOLITAN TRANSPORTATION PLAN AND GIVE PRIORITY RANKING, SUBJECT TO INCLUSION OF A PURPOSE AND NEEDS STATEMENT.

Voting Aye:	***Riesinger, Bergman, Zacher, Kuharenko, Emery, Halford, Peterson, and Graham.***
Voting Nay:	***None.***
Abstain:	***None.***
Absent:	***Kadrmas, Rood, Bail, Ellis, Gengler, Brooks, Audette, Magnuson, Sanders, and Christianson.***

(3) Urban Roads – Regional Grant

Haugen reported that these are the roads in Grand Forks that are on the State system. He said that for this program we received a total of three projects, but are really only acting on one today. He explained that North Dakota always asks, on their submittals, for a plus one-year for the T.I.P. four years, and that is in order to give them a heads up as to what might be coming in the next T.I.P. cycle, so that is why we have it labeled as 2024 and then T.I.P. + 1.

Haugen stated that there is only one project for Year 2024, it is the reconstruction of U.S.Bus#81 or S. Washington Street between Hammerling and 8th Avenue South. He said that the estimated cost is just shy of $6 million, the federal request is just over $4.5 million.

Haugen commented that we note that this is consistent with our transportation plan; we also noted that a purpose and need statement is also missing from this application and there are not any detailed cost estimates included for the three projects.

Haugen said that they also noted that the stretch of Washington where we did a corridor study a few years ago identified a lot of necessary improvements were needed to address a lot of the deficiencies along the corridor, and the application scoping worksheet doesn't make a direct reference to them; there are some things there that we might consider a part of the total multi-model transportation plan for consideration of the project.

Haugen commented that the last question; you know that there is an ADA project going on this summer but they aren't sure how this reconstruction of the street will interact with the improvement of the sidewalk ADA system along the corridor, so it would nice to identify how the two projects are not conflicting with each other and work together.

Haugen stated that this is the one project that staff is asking the Technical Advisory Committee to take action on today.

Haugen reported that for the T.I.P. + 1 year there are two candidate projects that were submitted. He said that the first one is continuing reconstruction of South Washington from 8th Avenue South further north to include DeMers Avenue. He said, however, that it isn't quite clear if this project is actually going to reconstruct the intersection of DeMers Avenue or because we have to identify logical termini it is just listing DeMers Avenue. He stated that the cost is just shy of $6 million dollars, with the federal portion being just over $4.7 million. He added that, just like the other reconstruction on Washington, this scoping worksheet didn't make much reference to the corridor study and how that will incorporated, and also the DeMers Avenue intersection and the deficient capacity issue is not mentioned in the scoping worksheet either.

Haugen said that the second +1 project is a concrete panel replacement on Gateway Drive between North Columbia Road and the Kennedy Bridge with a total estimated cost of $1.56 million with a federal request of $1.25 million. Haugen commented that it is noted that this application does make reference to the current Skewed Intersection Study, and also the Traffic Signal Rehab Project is going on and there are a couple of signals included in this stretch so there will have to be a decision later showing that they meet warrants so as this project moves forward for official submittal maybe we can use some of the higher ranking alternatives as we work through them.

Haugen commented that he failed to mention that they had work sheets for several projects that were already in the T.I.P.; those were kind of follow ups to projects that we already have in the T.I.P. but we didn't have the full applications and/or worksheets so those have all been submitted and they now have a complete package for those projects. He added that there are also two projects that are sort of on a different track through the approval cycle and those are the 32nd Avenue Capacity Issue, the NEPA document and a possible interchange.

Haugen reiterated that, again, there is one application for the South Washington Street Reconstruction between Hammerling and 8th Avenue South, and we note that there is a Purpose and Need statement missing and detailed cost estimates missing for that project, and that there are some multi-modal issues that we might like that application to address. Bergman asked if this is the same area that we had a corridor study done on before that had cut-outs. Haugen responded that they looked at access management, intersection guidelines, transit cut-outs, showing how sidewalks could be provided with accessible routes without impediments.

Grasser asked how old that study was. Haugen responded that he believes it was done in early 2010s, somewhere before 2012. Grasser said it is probably older than that. Johnson stated that he thinks it was done in 2011. Haugen agreed that it was done in 2011 and finalized in 2012. Grasser said that it was probably finalized in 2012 but the work was probably done in 2010 and 2011, and we are going to go through another project development phase, how far back do you grab old studies and how much weight do you put on them, is that old study going to circumvent stuff that you are going to discover during the project development phase, he knows it is kind of a rhetorical question, but at some point these studies get kind of dated. Haugen responded that Mr. Kuharenko and himself had that discussion, but from his perspective the conditions on the corridor haven't changed dramatically, the volumes aren't going to be all that radically different from what they were in then, crash reports aren't all that different than what they were in that

study, so it also goes hand-in-hand with the cost estimating, you know there isn't a detailed cost estimate on this project so the review of what was to be done for the corridor, as part of the application and scope of work sheet, and he thinks that they had a discussion back before we announced the solicitation that there was an issue in North Dakota where you get scoping worksheets that have a cost estimate that isn't refined and then we end up with a federal commitment that is considerably more than what originally goes in the T.I.P., and there is only a certain amount of federal dollars available so projects have to give and take through that process, so there was an attempt this go around to try to refine cost estimates right from the get-go.

Ellis reported present.

Bergman asked if we want to approve this with all of those items missing. Haugen responded that, again, as he stated before there is still time before we officially have to submit them to the State so there is an opportunity to clean this up; the MPO Executive Policy Board is the entity that will actually take the final action from the MPO perspective, and their meeting is still seven days away, and there are a couple days beyond that before the MPO has to give them a complete package.

Bergman asked if seven days is enough time to get all that information together. Grasser stated that they are processing some of the paper work but a lot of the cost estimates are going to have to come through the DOT, and if you are going to ask how to reconcile past and future studies with ADA compliance and construction of this year's project he is probably going to be looking across the table and ask Bismarck to figure that one out, quite frankly. He added that he thinks they are pushing some of the envelope about the information, it is almost getting to be a catch-22, when you need to do a preliminary project development investigation in order to be able to get to this level of detail. He said that he understands the idea of trying to get refinement, that is a valid goal, but when you're putting projects together three and four and five years ahead of an actual construction, they don't even know what federal rules they will be complying with at that point in time compared to where we are at today, they do the best they can but if we are going to try to compare and contrast a study that is eight years old that raises questions.

Johnson commented that the cost information has to come from the applicant, because you are providing that information to us now. He said that in this case, and some of the regional ones you can kind of work with the district to try to come up with the cost. Grasser responded that those are the ones he is talking about, their regional ones, the local ones they are doing studies five years in advance. Johnson stated that he thinks in terms of the studies, sometimes conditions change, sometimes they don't really and that you will determine when you start the project; you'll do a new traffic operations report, you'll collect traffic, use whatever information the MPO has and you will get crash data, and then you can look at that and determine whether or not that differs from what the corridor study said because there were good improvements and data in that corridor study. He added that the correcting of those off-set intersections, the access management especially, was real good in that study, and some of those things still rise to the top regardless of what the conditions are so he thinks those are some of the ties you can tie back to this future project as you are writing up this scope. He said that he also thinks that just in terms of "a study was done and now we want to do a project", there are parallels there either way

acknowledging the work, acknowledging the study, everyone was involved, it was completed, it had recommendations in it, it is a starting point, it is a lot of recognition of what has been done. Grasser stated that it is easy just to reference a study in there someplace it isn't always easy to carry that concept. Johnson said that if there is a corridor study that says xyz and you are going to do lmnop, something else probably needs to happen before you even ask for that project because what changed from there to there, so a guess that you are trying to do at the end of the day isn't that far of a stretch from what the original corridor study said, there is probably a way to tie it together. Bergman commented that this is thing is awfully low on cost estimate, you have to do intersection alignments. Johnson responded that they were pretty minor, such as by Paradiso where they are off very slightly. Bergman said, though that you still have to buy land or shift land or whatever, but it adds to the cost.

Johnson commented that the stuff Mr. Haugen is referring to is; they gave a presentation at the last MPO Directors meeting on project costs and how they affected their urban program. He said that he doesn't have those numbers in front of him but he gave four example projects across the state and one was in Fargo where, at this time when the project was applied for the total project cost, including federal, state and local funds, which also included water and sanitary funds was about $9 million dollars, but by the time they bid it it was at $23 million, and if you think about the fact that their urban program is $38 million dollars total, and the impact that that additional $11 million had on it in one fiscal year, it was enormous. He added that they had another one at the west end of the state in Dickinson as well that went from $5 million to $18 million, and that was more of a change in scope and requests from the City and they actually moved it three years out to adjust it, where the Fargo example stayed in the fiscal year it was in. He said there were a couple others as well, and it showed why it is so important to get as close as we can right now to what we think the impact will be because that is the number they have to hold to, they have to hold to something and if it goes crazy then it affects all the other projects and a city might not get a project.

Grasser stated that he recognizes the problems, but it's the resolution of it that he just cannot grasp, some of the detailed comments always can get us through that, but they will work with the local district here and see if they can get some additional language and dollar comments in there.

Halford asked if the meeting you were just talking about, does that information at that meeting ever get shared to the agencies here; are there minutes or anything so that they can get that information too. Johnson responded that they don't really prepare minutes, but actually the MPOs lead the meeting, there is a chair that rotates every two years and they kind of lead the meeting and there are agenda topics provided by the MPOs, DOT, Federal Highway, Federal Transit, and they have discussions. He added that the transit providers are always invited to them but they don't have a lot of heavy transit talks so there hasn't been a lot of attendance from the transit providers, but they continue to include them because of their 3-C process and they are partners to that agreement. Haugen commented that the MPO did relay the message to the TAC; although they didn't hand out the exact examples that the DOT provided them, they did discuss the parameters and did cite an example at the December Technical Advisory Committee meeting.

Halford asked if beside Transit is anybody else allowed or able to attend these meetings. Johnson responded that they never talked about it. He stated that they have another one coming up on March 31st, and without just inviting everybody here at the table he wouldn't see any issues with it but they never talked about it, so maybe that it something they talk about at that meeting to see if they want to open it up to others to sit in and listen in. He added that a lot of the discussion is more detailed interaction between the States and the MPOs that may be good information for you but that cost estimate thing is a very detailed thing that they went into that they don't necessarily always get into at these meetings. Grasser commented that there could be an advantage to attending those meetings, more direct contact, project detail processed can mean a whole lot of different things; it's like the conversation on purpose and need, that can mean a number of different things, so seeing what is going on behind those words would sometimes be helpful and he thinks there is a local responsibility.

Johnson explained that what is happening is that they are seeing a pattern of things like: "it is a recon for this amount of distance and it is exactly $10 million dollars" and they ask; "are you sure about that, is it exactly $10 million dollars" and then next year it is .2 miles longer so now it is $12 million, you can tell that the jurisdiction is just throwing a number at it so what they want to see is that you put some kind of effort into determining the estimate; you've got a project, you can lump some traffic control, you can lump some storm sewer, some of those bigger items, but the big ticket items like aggregate base, concrete, asphalt etc., you can look at Google Earth and get some aerial photos, generic quantities and get some numbers going to get you close to where if you do add contingencies in, just to that level, he doesn't want to see every 15-inch pipe or every traffic control, but somewhat of a detail that provides them some certainty that this was just looked at. He explained that they have one jurisdiction that just throws a number at a project and it is an astronomical number that doesn't even make sense with the scope that is provided; and they have done ten projects similar to this one and they weren't even close to that number so how did you get to that number, why is that number being used, and what ends up happening is that those projects never get picked because they can't fund them, the cost is way too big.

MOVED BY KUHARENKO, SECONDED BY HALFORD, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE NORTH DAKOTA URBAN ROADS REGIONAL GRANT PROJECT APPLICATIONS FOR THE FY2021-2024 T.I.P. AS BEING CONSISTENT WITH THE METROPOLITAN TRANSPORTATION PLAN AND GIVE PRIORITY RANKING, SUBJECT TO INCLUSION OF A PURPOSE AND NEEDS STATEMENT AND A DETAILED COST ESTIMATE.

Voting Aye:	***Riesinger, Bergman, Zacher, Kuharenko, Emery, Halford, Ellis, Peterson, and Graham.***
Voting Nay:	***None.***
Abstain:	***None.***
Absent:	***Kadrmas, Rood, Bail, Gengler, Brooks, Audette, Magnuson, Sanders, and Christianson.***

Haugen reported that there is only one program left to solicit and that is the North Dakota Recreational Trails Program. Halford asked if there was a date for when solicitation might be opened for this program. Haugen responded that it is usually in the January timeframe.

PUBLIC COMMENT

None.

OTHER BUSINESS

a. 2020 Annual Work Program Project Update

Haugen reported that our monthly report on progress of the work program scopes. He pointed that it is listed as 2020, most of the activities identified in it are 2019 projects. He said that there are three projects that are being carried over into 2020: ITS Regional Architecture is carrying over; the Skewed Intersection Study is 90% complete but it still needs to go before the City Council and then for approval in February; and the other big study that is being carried over is the Downtown Transportation Study.

Haugen commented that next month you will see some projects drop off and the Future Traffic Impact Bridge Study and the two Land Use Plans, but they aren't scheduled to start until later in the year.

Information only.

ADJOURNMENT

MOVED BY BERGMAN, SECONDED BY HALFORD, TO ADJOURN THE JANUARY 15TH, 2020, TECHNICAL ADVISORY COMMITTEE MEETING AT 2:13 P.M.

MOTION CARRIED UNANIMOUSLY.

Respectfully submitted by,

Peggy McNelis,
Office Manager

Overcoming Barriers Strengthening Connections

Grand Forks - East Grand Forks Metropolitan Planning Organization

Ensuring Opportunities Planning One Community

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

MPO Staff Report
Technical Advisory Committee: February 12, 2020
MPO Executive Board: February 19, 2020

RECOMMENDED ACTION: Approval of the US-2 & US-81 Skewed Intersection Study.

Matter of Approval of the US-2 & US-81 Skewed Intersection Study.

Background:
This study examined issues and conflicts of the intersections of US-2/Gateway Dr & US-81/N Washington St and US-2/Gateway Dr & US-Bus 2/N 5th St/Mill Rd. Due to the freight, rail, passenger vehicle, transit, bicycle, and pedestrian activity, this study looked to:

- improve safety;
- reduce existing and future traffic congestion;
- provide efficient access for existing and future development; and
- improve mobility and connectivity for all transportation modes.

The Study was conducted through the partnership among NDDOT, City of Grand Forks and the Forks MPO. A Steering Committee composed of neighborhood representatives, property owners, business owners, State Mill staff, BNSF staff and local staff. In addition to the Steering Committee engagement and the public engagement, the MPO TAC and Executive Board were regularly informed of the Study process. KLJ served as consultant for the Study.

The Steering Committee met 3 times to review the following:

1. An existing and future conditions report the highlighted the current safety issues, train conflicts, forecasted growing congestion, the traffic signals at N. 2oth and N. 3rd St not meeting warrants, and gaps in multi-modal networks.
    a. A Public Input Meeting was held to present this information and receive feedback.

2. An alternative analysis report presented a range of alternative improvements to address the existing and forecasted issues. The range considered low cost to very high cost improvements. Interestingly, there is no one alternative that solves all issues and many alternatives trade relieving congestion with improved reliability.
    a. A Public Input Meeting was held to present this information and receive feedback.

3. From both the Steering Committee's input and the public's input, a draft report was presented to the Steering Committee. With the engagement of businesses in the area, there were concern about access to their businesses and buy outs of the properties under

some alternatives. The alternatives were also presented to the Near North Neighborhood Association, who had no disagreeing concerns. Because of the business concerns and the higher costs, alternatives like the grade separation alternatives were dismissed as not serving the Study purpose and need. Alternatives that made overall conditions worse were also were eliminated.

4. The steering committee accepted the document. A "base improvement alternative was identified that address much of the safety and multi-modal gaps in the area. The highest-ranking alternative (including the base) involved re-aligning (removing) the Mill Spur line. The Committee had inserted into the report the need for more in-depth negotiation between private rail and BNSF rail to better determine the possibility of Mill Spur re-alignment. In addition, with the N. 3rd St intersection traffic signal not fully warranted, the Committee also inserted that the underpass for Wilder School is not always available to use to be identified as an issue.

Possibility exists to implement some of the alternatives in projects that are scheduled to be programmed in the mid-2020s. Also, the Local Road Safety Improvement Program has identified this area to be one of the highest-ranking area for safety improvements. As those projects proceed, consideration should be made to ensure those projects don't address the results of this Study.

Grand Forks Engineering Department brought forward feedback when the Study was presented to the Grand Forks Committee of the Whole. This feedback was not explicitly commented upon during the COW meeting. The feedback and how it is being addressed for the Study Report are as follows:

- The BNSF representative did not provide feedback regarding the presented alternatives.
  - BNSF stated at the steering committee meeting that they attended that they have a policy of not giving a lot of feedback at this stage of the process. They did say that a realignment was possible.

- BNSF has not approved or provided authorization for any of the alternatives which impact the railroad tracks.
  - As stated above, BNSF has a policy of not giving feedback at this stage of the process and not giving authorization or approval at this stage of the process. Through the study process, other agencies commented on similar position BNSF takes on other projects at this planning stage.

- Based on previous conversations with BNSF, it is Engineering's opinion that at this time BNSF would likely be unwilling to abandon the tracks on the Mill Spur.
  - During Steering Committee meetings, the only feedback provided by BNSF was that a realignment was possible. As identified in the report, additional conversations are necessary with all parties participating. Other benefits of closed/unused crossings might be available.

- It is understood that the consultant used consistent unit prices in developing the construction cost estimates to determine proportional cost between the alternatives. After reviewing the unit prices used, the unit prices appear substantially lower than what we have seen locally.
  - The unit prices that were used were from the beginning of 2019. The newer, higher prices were not available at the time. This has been updated by the consultant for the highest ranking alternatives. The result, together with the response below, increased the total cost estimate from approximately $7M to slightly over $11M. The report has been updated to reflect this. An appendix has been added to show the alternatives considered and their respective cost components.

- The cost estimates provided in the report do not include the costs for design engineering, or construction engineering.
  - Most planning level cost estimates do not include pre-engineering. The current costs have been updated to include this.

- With the lack of railroad work completed in the past, Engineering cannot validate the costs associated with railroad work.
  - For the most part we have kept the same pricing because the unit pricing came from NDDOT. Without further guidance we can only go with the best we have at this time.

- The study has not explicitly identified the required property acquisition required for the alternatives; Engineering cannot validate the costs associated with the property acquisition based on the information available at this time. However, the amount identified is likely low compared to what staff has seen for recent property acquisition.
  - Explicitly identifying what property is needed to be acquired comes at the design stage of a project. That is clearly an Engineering level analysis that Federal Guidance does not allow planning to account for at this level. The concepts generated provided the planning level of detail possible to allow individual property owners to have some sense of potential impact upon their property each alternative concept could have. Costs shown in the report reflect the best information available at the time. As certain alternatives are further refined, more informed property impacts will be known and more current cost estimates can be identified. All alternatives reflect similar cost components and are therefore consistent.

Findings and Analysis:

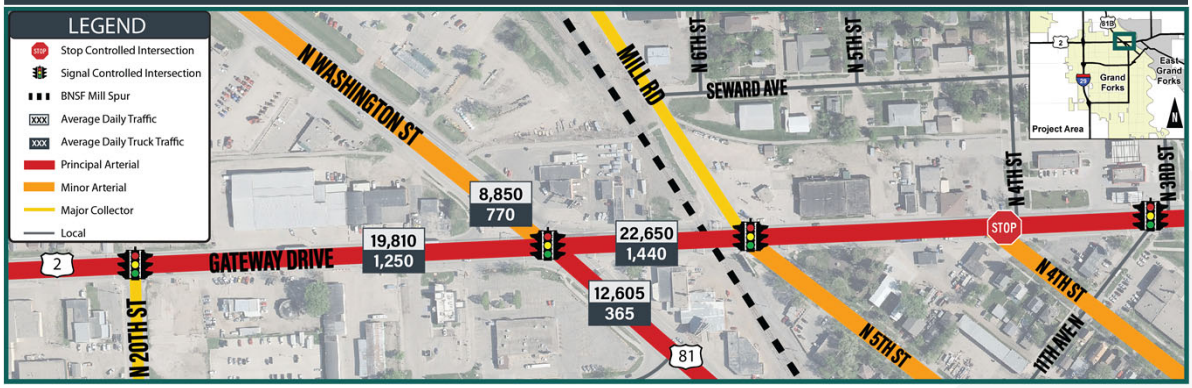
- Information on the Study, including steering committee meetings, can be found at: https://theforksmpo.com/the-forks-mpo/u-s-2-u-s-81-skewed-intersection-study/.
- Feedback from Grand Forks Engineering has been included in the update. The cost of the popular alternative has been updated to reflect Engineering concerns.

Support Materials:

- Study Summary Presentation

1

Study Purpose

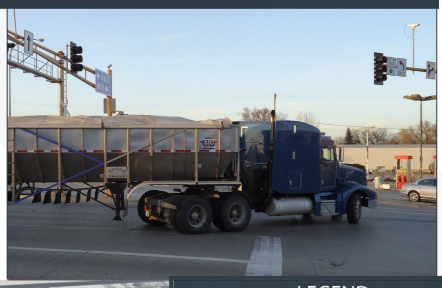


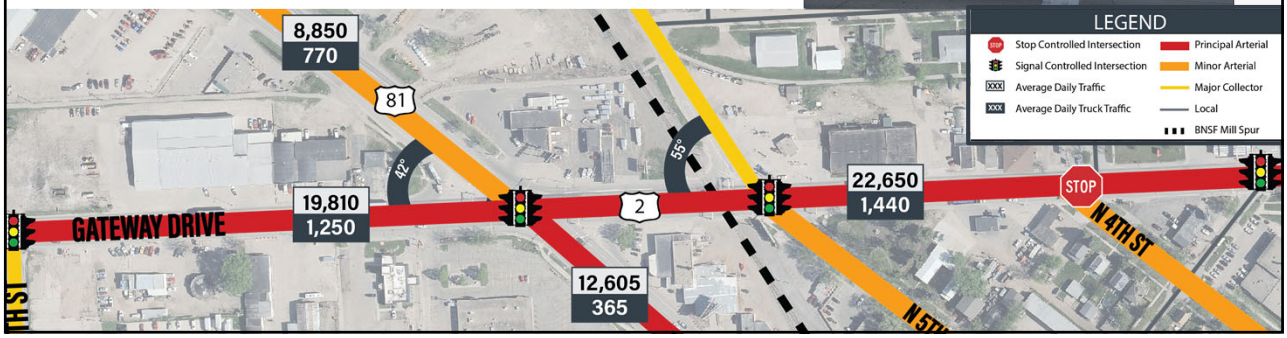
- Resolve the Following Known Issues and Conflicts;
  - Crash prevalence and concerns
  - Mill spur railroad crossing creates traffic blockages and queueing issues.
  - Intersection skew makes turning movements for trucks difficult.
  - Opportunities for improved pedestrian, bicycle and transit conditions.

2

Traffic Issues

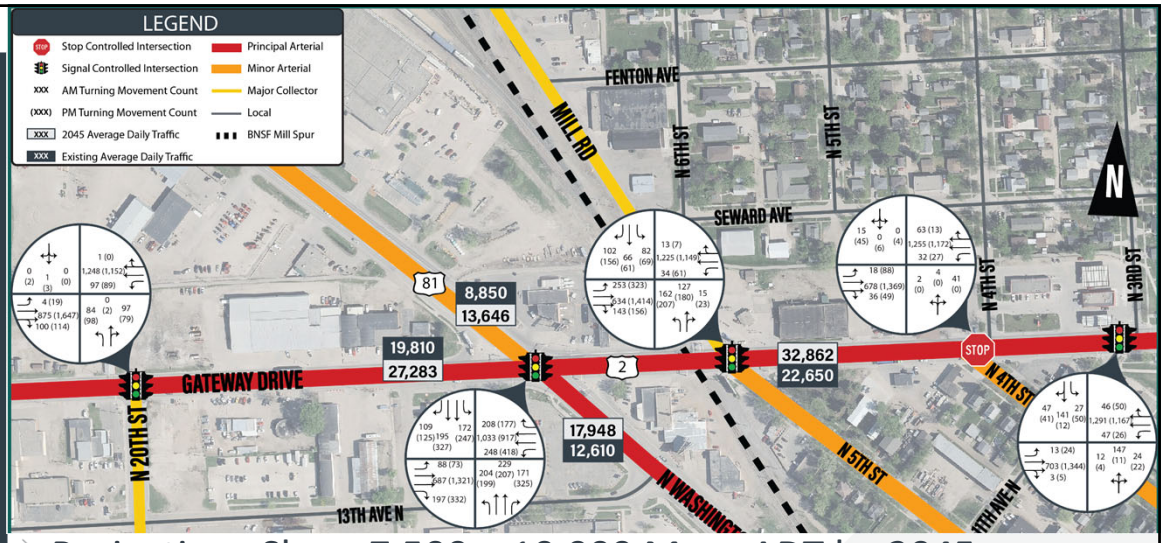
- 19,800 – 22,600 Vehicles Per Day
- 1,200-1,500 trucks per day
  - In 2016, NDSM increased capacity 33%, looking to expand another 22% in 5 years
- Skewed Turning Movements





3

Existing and Future Traffic Volumes



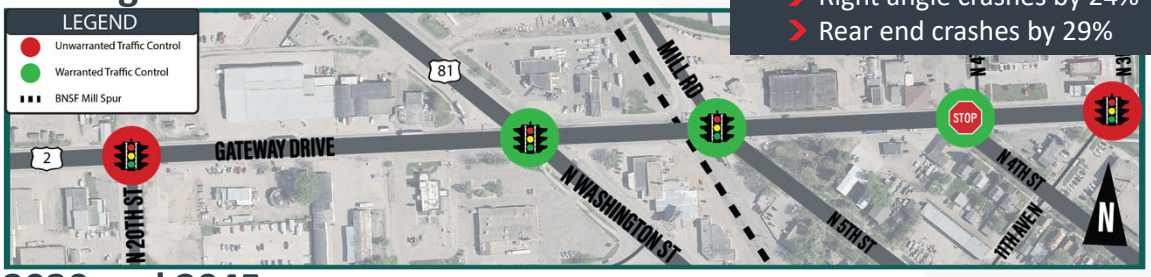
- Projections Show 7,500 – 10,000 More ADT by 2045 on Gateway/US 2
- By Comparison; Historic Traffic Volumes Show Reduced Traffic Volumes over the Past 10 Year

4

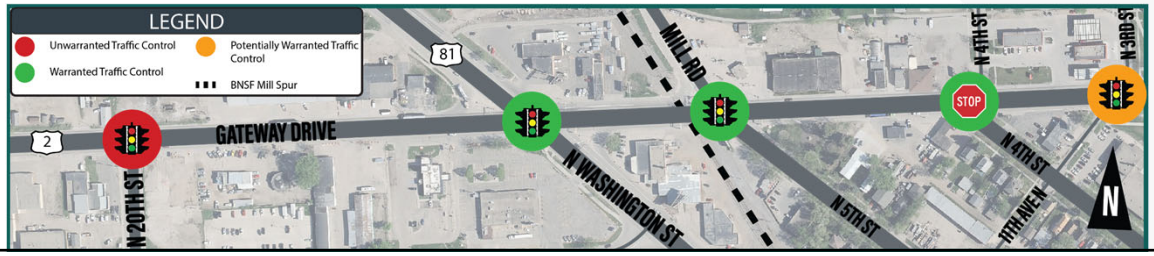
Existing Traffic Control Analysis

- Generally, removal of unwarranted signals reduces
  - All crashes by 24%
  - Injury crashes by 54%
  - Right angle crashes by 24%
  - Rear end crashes by 29%

Existing

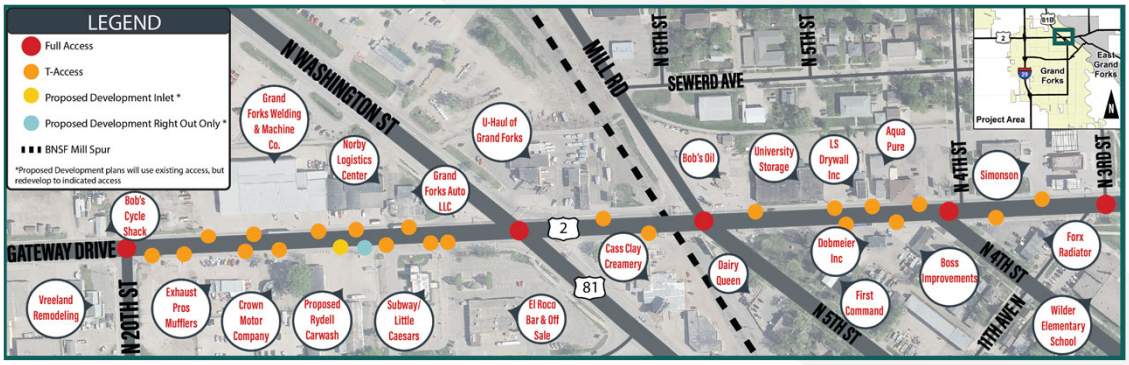


2030 and 2045



5

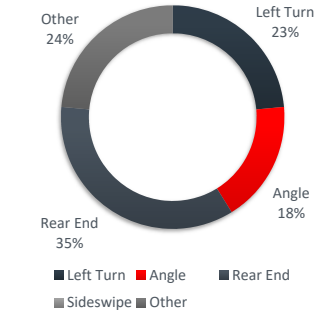
Access Management



- Unsignalized driveways
  - Increase crash rate by 2%
  - Reduces corridor travel speed by 0.25 MPH
- Desired Access Spacing
  - 660 feet
  - 8 access/mile
- Existing Access Spacing
  - 33 accesses
  - 66 access/mile (8x Standard)

6

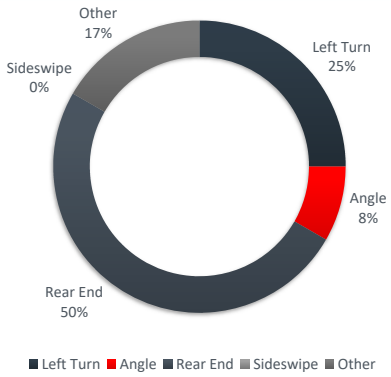
20th Street to Washington Street



- 17 crashes in last five years
- Above critical crash rate
- 41% during AM/PM peak hours
- Long queues and dense access spacings
- Queues block sight lines

7

20th Street Intersection

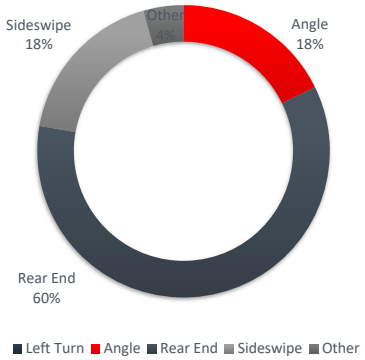


- 12 crashes in last five years
- 33% rear end crashes on east approach
- 25% westbound left-turn crashes (Protected/Permitted)

- Generally, unwarranted signal control increases
  - All crashes by 24%
  - Injury crashes by 53%
  - Right angle crashes by 24%
  - Rear end crashes by 29%

8

US 81/Washington Street Intersection



- 45 crashes in last five years
- 60% rear end crashes
  - 30% during AM or PM peak hour
  - 30% between 11 AM to 1 PM
- 8 crashes involving trucks
- 0 Crashes involving Pedestrians or Bikes

9

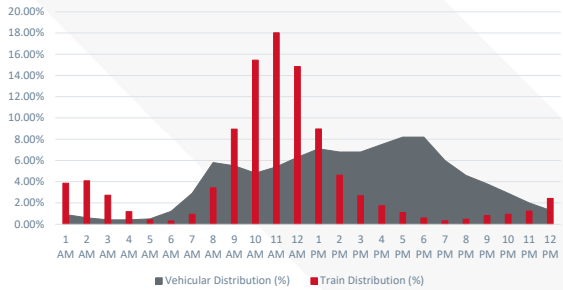
Mill Spur Crossing

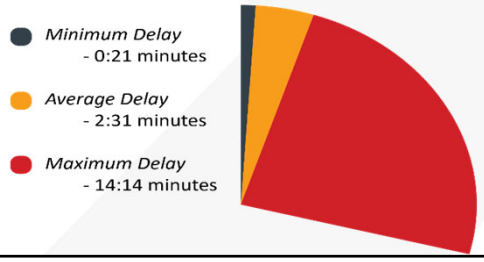
- Safety
  - 12 crashes between 1975-1994
  - No crashes since 1994
- Crash Prediction
  - 0.028 crashes per year (FRA)
  - 5th highest rate in City
  - 7th highest rate in County

10

Train Issues

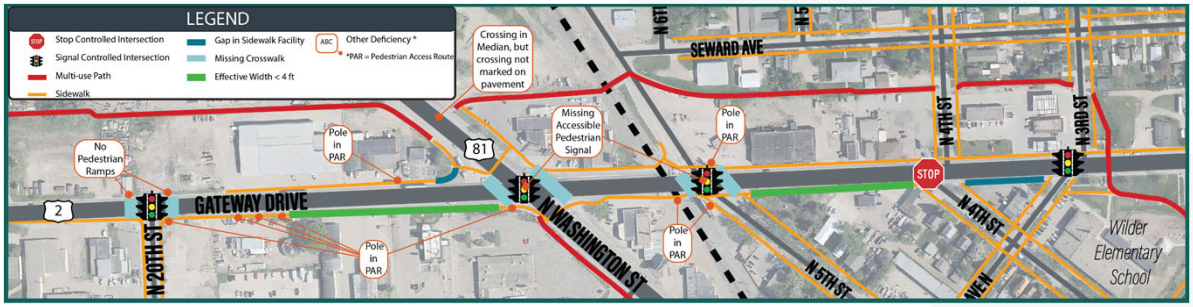
- 4 to 5 blockages per day
  - 10 MPH or Less
- Safety
  - No Crashes Since 1994
  - 7th Highest Predicted Rail Crash Rate in the County
- Unit Trains
  - 4 times longer than current trains
    - All crossings will be blocked at the same time
  - 10 – 17 minutes of delay at crossings
  - 0 – 4 blockages per month





11

Pedestrian/Bicycle Network Issues

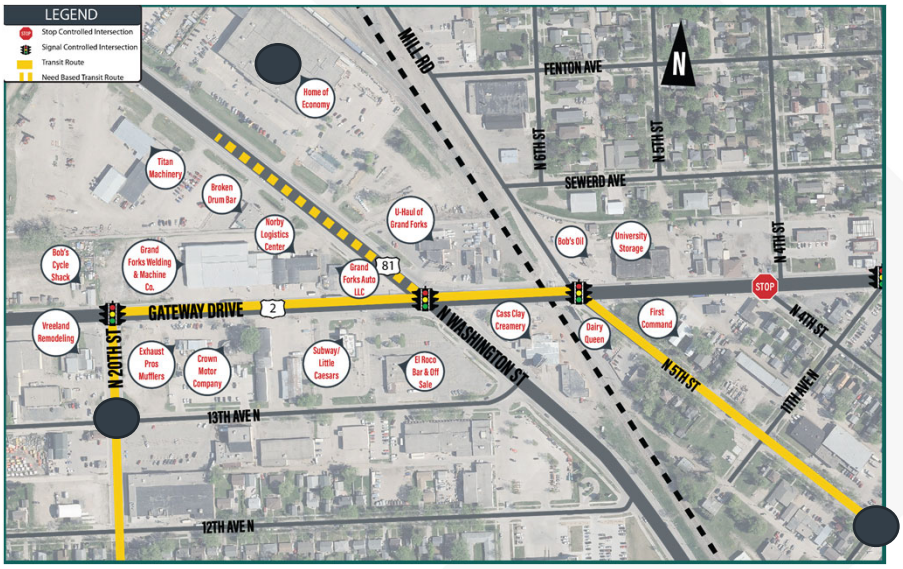


- Only controlled crossing at 3rd Street underpass
- ADA conflicts at crosswalks, utilities and driveways
- Minimal to no buffer
- Bikes allowed on all streets

12

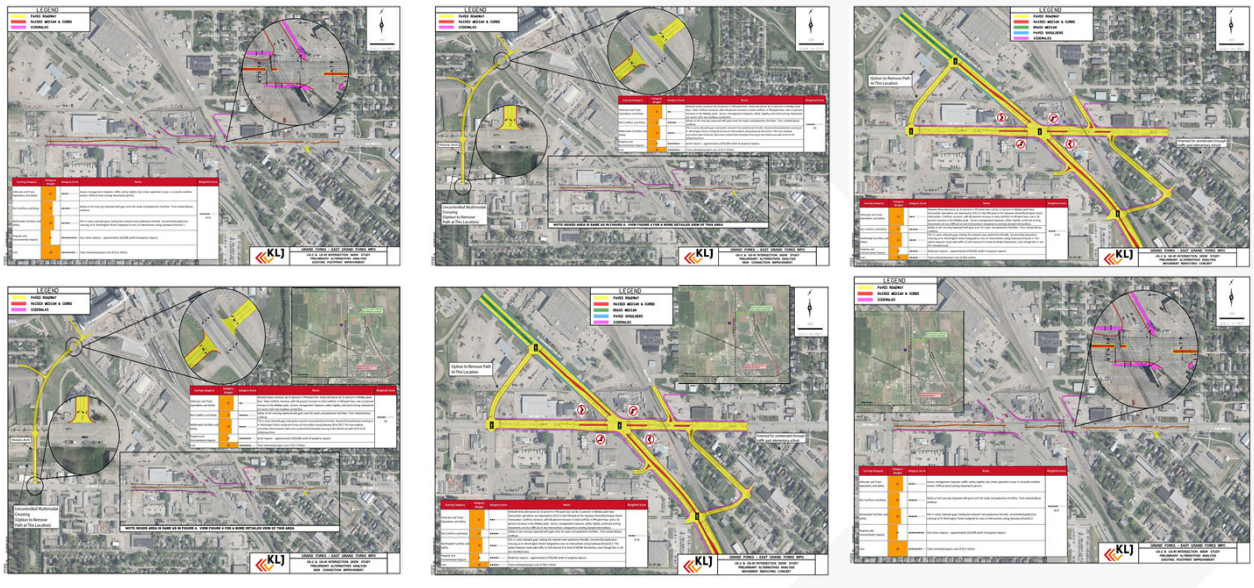
Transit Network

- CAT Route 2
  - Hourly service
- CAT Route 13
  - Night Route
- Stops
  - 5th Street/10th Ave
  - Hugo's on 20th St
  - Home of Economy when scheduled in advance



13

Possible Alternatives



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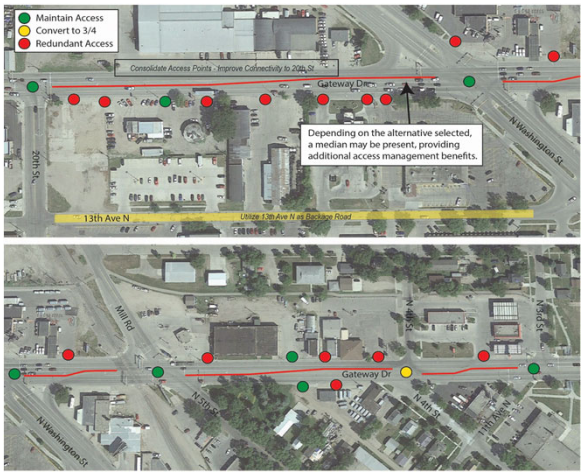
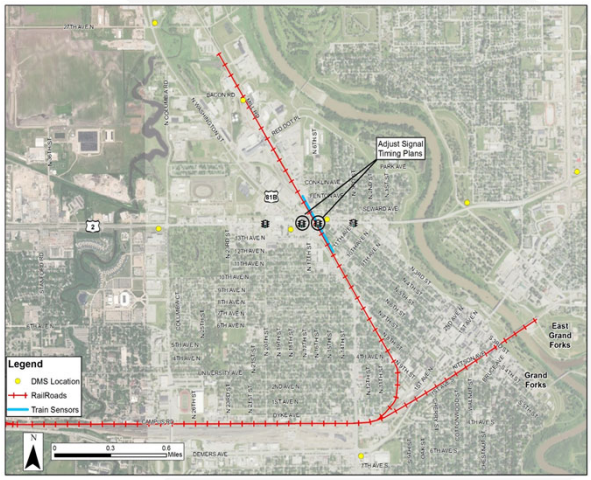
Other Options

Access Management



ITS Routing



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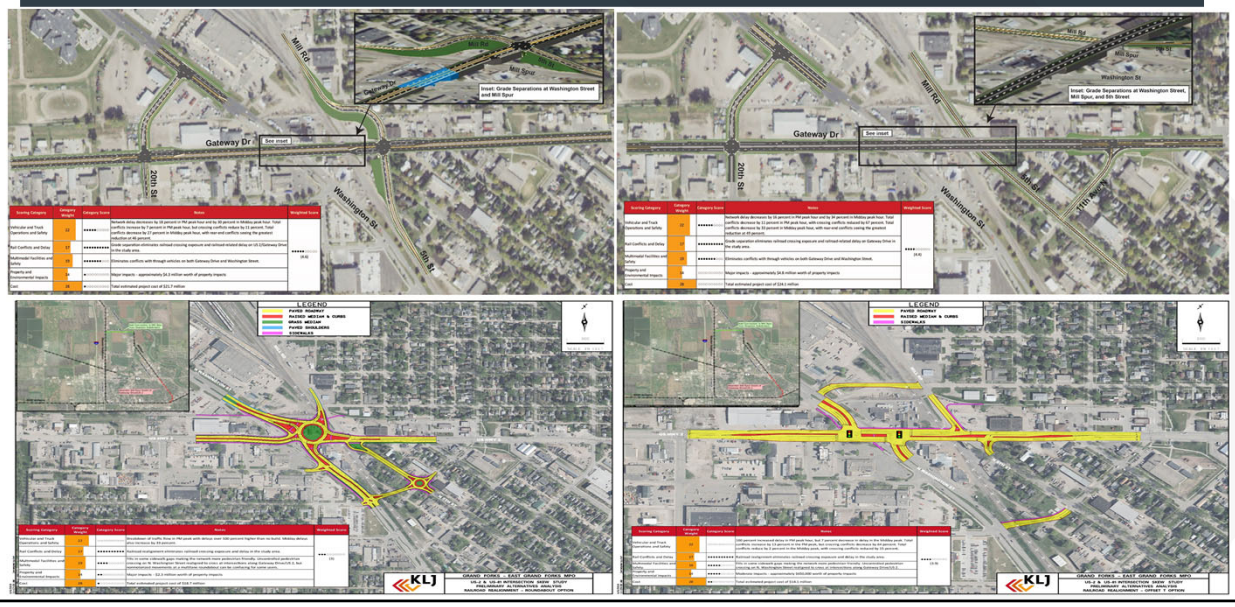
Alternatives Not Serving Study



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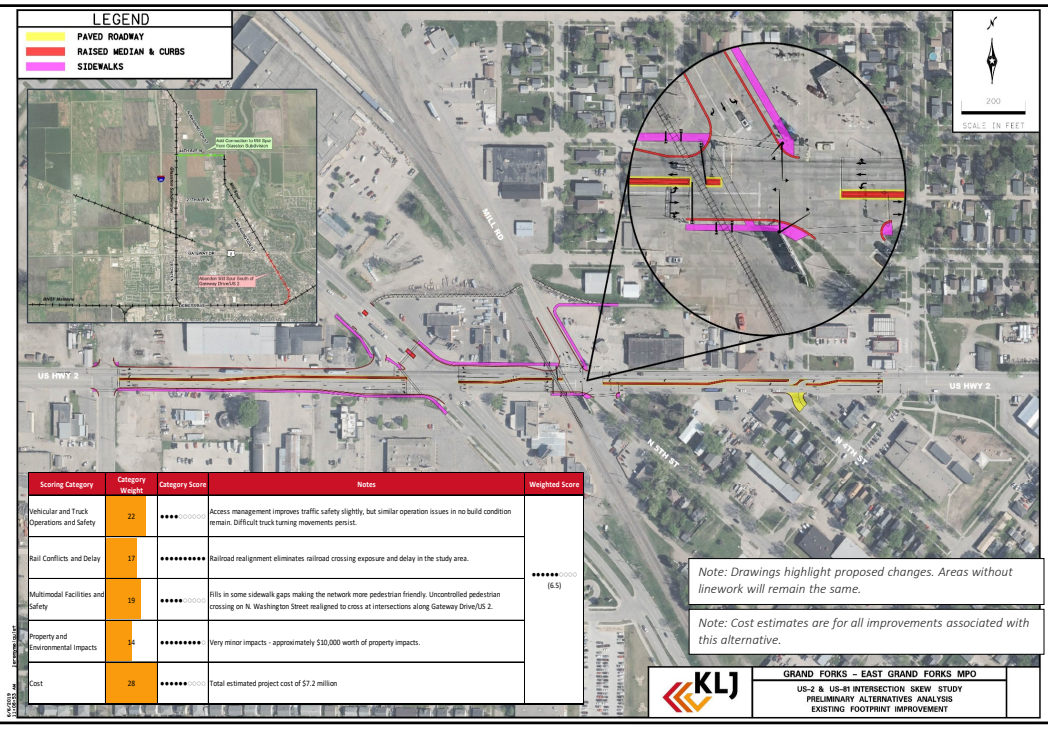
Alternative Feedback

- Specific Feedback:
  - Realigning Mill Spur was the Best Improvement Option
  - Several Additional Benefits of Realigning Mill Spur Beyond What was Included in This Study
  - Realignment will benefit the neighborhood and traffic.
  - Alternative EF+R Existing Footprint with Railroad Realignment Preferred

17

Alt EF+R: Existing Footprint With Realignment



Scoring Category	Category Weight	Category Score	Notes	Weighted Score
Vehicular and Truck Operations and Safety	22	●●●●○○○○○○	Access management improves traffic safety slightly, but similar operation issues in no build condition remain. Difficult truck turning movements persist.	●●●●●○○○○○ (6.5)
Rail Conflicts and Delay	17	●●●●●●●●●●	Railroad realignment eliminates railroad crossing exposure and delay in the study area.	
Multimodal Facilities and Safety	19	●●●●●○○○○○	Fills in some sidewalk gaps making the network more pedestrian friendly. Uncontrolled pedestrian crossing on N. Washington Street realigned to cross at intersections along Gateway Drive/US 2.	
Property and Environmental Impacts	14	●●●●●●●●●○	Very minor impacts - approximately $10,000 worth of property impacts.	
Cost	28	●●●●●○○○○○	Total estimated project cost of $7.2 million	

18

Cost Estimate

- $6M of $11.03M for Railroad Realignment
- Cost Refinements Based on GF Engineering feedback:
  - Refined Alignment
  - Cost Increased from $7.25M presented at the COW to the $11.03M in the table.

KLJ

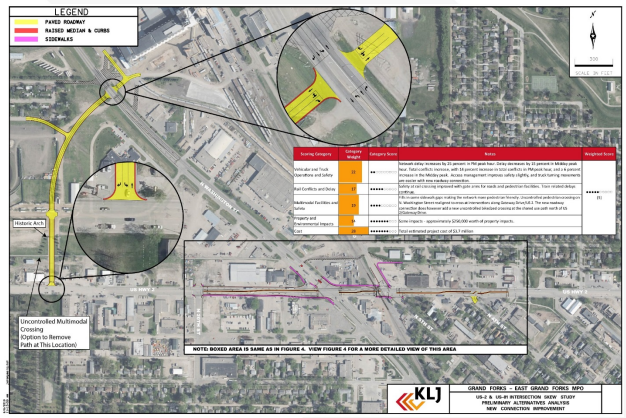
US 2 & US 81: EXISTING FOOTPRINT IMPROVEMENT PLAN + RAIL REALIGNMENT PRELIMINARY COST ESTIMATE

ITEM DESCRIPTION	UNITS	UNIT BID PRICE	ESTIMATED QUANTITY	ESTIMATED PRICE
ROADWAY ITEMS				
REMOVE CURB & GUTTER	LIN FT	$8.00	3,400	$27,200.00
REMOVE RAILROAD TRACK	LIN FT	$20.00	6,900	$138,000.00
REMOVE PAVEMENT	SQ YD	$17.00	3,358	$57,086.00
GRANULAR EMBANKMENT	CU YD	$45.00	3,259	$146,655.00
AGGREGATE BASE	CU YD	$45.00	1,402	$63,090.00
10" CONCRETE PAVEMENT	SY	$150.00	1,155	$173,250.00
CONCRETE WALK	SQ FT	$10.00	16,801	$168,010.00
CONCRETE CURB & GUTTER	LIN FT	$34.00	7,468	$253,912.00
CONCRETE MEDIAN	SQ YD	$90.00	709	$63,810.00
SUBTOTAL				**$1,091,013.00**
LUMP SUM ITEMS				
TRAFFIC CONTROL	LUMP SUM	5%	1	$54,600.00
SIGNING & STRIPING	LUMP SUM	2%	1	$21,900.00
LIGHTING	LUMP SUM	10%	1	$109,200.00
EARTHWORK	LUMP SUM	15%	1	$163,700.00
TURF AND EROSION CONTROL	LUMP SUM	1%	1	$11,000.00
DRAINAGE	LUMP SUM	20%	0.5	$109,200.00
REVISE SIGNAL SYSTEM	SYSTEM	$150,000.00	2	$300,000.00
SUBTOTAL				**$769,600.00**
PROJECT ITEMS				
MOBILIZATION	LUMP SUM	10%	1	$186,061.30
CONTRACT BOND	LUMP SUM	1%	1	$18,606.13
CONTINGENCY	LUMP SUM	20%	1	$413,056.09
RAILROAD REALIGNMENT (WITH ROW)	LUMP SUM	$6,000,000.00	1	$6,000,000.00
DESIGN ENGINEERING	LUMP SUM	15%	1	$1,271,750.48
CONSTRUCTION ENGINEERING	LUMP SUM	15%	1	$1,271,750.48
REAL ESTATE (ROADWAY ONLY)	LUMP SUM	$10,000	1	$10,000.00
COST ESTIMATE (CONSTRUCTION ONLY)				**$8,488,336.52**
COST ESTIMATE (WITH 30% ENGINEERING)				**$11,031,837.48**

19

Key Takeaways

- Eliminating skewed turning movements comes at a heavy cost either financially, environmentally or to operations
- It's more expensive and impactful to grade separate then realign the railroad
- Traffic forecasts on Gateway Drive are high and make solutions without added capacity challenging. Forecasts should be monitored.
- Consolidating Washington with 5th/Mill Spur is not likely accomplished with acceptable operations.



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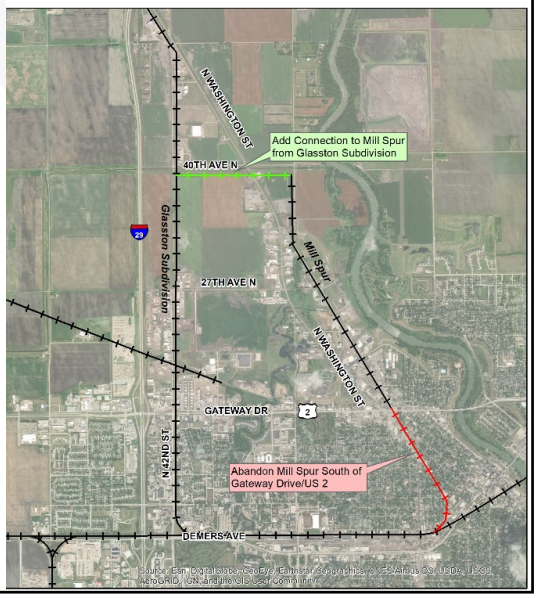
Next Steps

- Establish Connection to other Mill Spur Users
- Expand Benefit/Cost Analysis to the Entire Mill Spur
- Identify Funding Strategies
- Additional Refinement of Access Management Plan
- Refine and Assess Environmental Impacts



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Potential Funding Mechanisms

- Consider Incorporating At-Grade Improvements with Planned Short-Term Pavement Preservation Project on Gateway Drive/US 2
- Planned Signal Improvements in 2023/2024 at Potentially Unwarranted Traffic Signals
- Highway Safety Improvement Program Funds (HSIP)
  - Noted As High Priority Corridor in Local Road Safety Program
- Local Funds Such as Future Local Sales Tax or Special Assessments
- Prairie Dog Funds
- Federal Grants (I.e. BUILD)

22

Overcoming Barriers Strengthening Connections

Grand Forks - East Grand Forks Metropolitan Planning Organization

Ensuring Opportunities Planning One Community

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

MPO Staff Report
Technical Advisory Committee: February 12, 2020
MPO Executive Board: February 19, 2020

RECOMMENDED ACTION: Preliminarily Adopt the Amendment of the Transit Development Plan Alternatives & Financial Chapters.

Matter of Amendment of the Transit Development Plan Alternatives & Financial Chapters.

Background: The Transit Development Plan (TDP) covers a defined five-year planning horizon, currently 2017 to 2022. It functions as a sub-element of the 2045 Metropolitan Transportation Plan (MTP). Development and adoption of the TDP is recommended by FTA for the purposes of establishing a vision for public transportation, assessing needs, and identifying a framework for program implementation. Program implementation largely depends on funding, grants, and participation from FTA and/or other state agencies. In July 2017, the Cities of Grand Forks and East Grand Forks and the MPO adopted the current TDP. In November 2018 the TDP was updated to include changes in cost of service due to the route changes, the addition/remodel of the bus facility, and additional funding for East Grand Forks route changes. After the update was complete, the MPO was approached to do a feasibility study for Cities Area Transit (CAT) to provide UND with their Campus Shuttle service.

In the originally approved TDP, the cost of CAT providing Campus Shuttle service was far more than UND could agree to. Highly variable costs for UND changed the picture for the feasibility. With the feasibility study done, UND and CAT came to an agreement that CAT would provide the Campus Shuttle service. CAT had also decided to have the City provide drivers for the Dial-A-Ride service the was being contracted out. Both changes impacted the cost allocation model and the cost of services for all parties.

The UND Campus Shuttle being provided by CAT was included in the Alternatives Chapter of the updated TDP. The updated costs to Grand Forks and East Grand Forks, as well as the inclusion of UND costs, was added to the Financial Chapter. An update of the capital programming was included in the Financial Chapter as well.

Findings and Analysis:

- Staff recommends Preliminary Approval
- If the MPO grants preliminary approval, the amendment will be presented to both Cities.

Support Materials:

- Updated alternatives & financial chapters

7)ALTERNATIVES ANALYSIS

Some of the 12 current regular routes operate very effectively and efficiently, while other routes have low ridership and a high cost. New route alternatives were based on the performance of the existing route alignments and issues identified through the Existing Systems Analysis, Public Input and Issues Analysis. These alternatives have been vetted by the public, bus operators, city staff and other stakeholders and revised based on their feedback.

PROPOSED ROUTE ALTERNATIVES

Operational Construct

Fixed Route alternatives were developed for weekday and Saturday service and weeknight and Saturday night service. Routes were also explored for an industrial park route and a Sunday service route but are not recommended at this time. Figure 7-1 shows the overview of the proposed Weekday and Saturday routes. Figure 7-2 shows the overview of the proposed Weeknight and Saturday night routes. Figure 7-3 shows route concepts for future consideration.

Weekday and Saturday Routes

Route 1

Route 1 is proposed to operate between the Grand Cities Mall and the 13th Avenue N. Hugo's via the Metro Transit Center (MTC) and Home of Economy. The proposed route shortens and consolidates the current Routes 1 and 2. The proposed Route 1 would also provide connections to other routes at the MTC and Grand Cities Mall. Two of these proposed connections include Route 1, Route 1SE and Route 1SW. To maintain 60-minute circuity of the interlined Routes 1SE and 1SW, 30-minute service is recommended on Route 1. The Route 1 concepts are shown in Figure 7-4.

ROUTE 1U

Route 1U would be a part of the overall interlined systems recommended for Routes 1, 1SE and 1SW. The Route 1U portion of the route would provide service between the Downton and the UND campus on a 60-minute headway. With the proposed interline for the Route 1 systems developed as part of the TDP, Route 1U would provide a one-seat ride between the UND campus, downtown, Grand Cities Mall and destinations on the southside depending on if it were lined with the Route 1SE or 1SW.

ROUTE 1SE

The proposed Route 1SE is a circulator in the southeast area of Grand Forks. The route would serve Grand Cities Mall, Altru South, Walmart and the 32nd Avenue Hugo's. The route is proposed to interline with every other trip of the Route 1, alternating with Route 1SW.

ROUTE 1SW

The proposed Route 1SW is a circulator in the southwest area of Grand Forks. The route would serve Grand Cities Mall, the 32nd Avenue Hugo's, Columbia Mall, Target and 32nd Avenue Walmart. The route is proposed to interline with every other trip of the Route 1, alternating with Route 1SE.

Route 3

Route 3 is proposed to operate between Altru and Northland Community College via Grand Cities Mall, the MTC and the East Grand Forks Hugo's. The route merges the most productive elements of the current Routes 10 and 11 with the current Route 3. The Route 3 concept is shown in Figure 7-5.

Route 4

Route 4 is proposed to operate between the MTC and the Gateway Drive Walmart via the University of North Dakota (UND). This route is a modification and consolidation of the current service on Routes 4 and 6. The Route 4 concept is shown in Figure 7-6.

UND SHUTTLE SERVICE PROVIDED BY CAT- 2019 UPDATE

BACKGROUND

During the academic year, the University of North Dakota (UND) operates a shuttle service for the purposes of providing safe and effective campus area transportation for students, faculty and staff. The primary intent of the service is to connect university residential areas with campus and to connect campus origins-destinations with longer walk distances than can be made during the passing period between classes.

In the System Needs and Issues Chapter 5 (Pg 5-15 to 5-22), Coordination with UND was reviewed. It also touched on the cost for UND to provide the service and how CAT was serving UND. With the information UND was willing to provide on the cost for them to provide the service it was concluded that CAT could not provide the service at a comparable cost. With a more thorough review done in 2019 UND was able to see the long-term benefit of CAT providing the UND Shuttle service.

In 2019 the MPO was asked to analyze the feasibility of CAT providing the UND Shuttle Service and to see what changed between when the original analysis was done and now. Cost of providing the service and better coordination between the two services were highlighted in Chapter 5 table 5-7. What changed?

Volatility in quarter-to-quarter costs, the typical lease period for a vehicle (15-plus years) and the daily management responsibility of providing transportation service that are somewhat outside the university's main mission, led administrators in Transportation and Parking to inquire about Cities Area Transit (CAT) taking over operation of the shuttle service. Addressing questions regarding the benefits and costs for the university and the city/CAT associated with a merger is the primary purpose of conducting the merger study. When you compare table 5-7 costs and table 7-13 costs you can see the change in cost coming closer to what CAT can provide.

Establishing a more predictable academic year cost for the shuttle service is a primary reason for initiating study of the CAT-operated service concept. Through developing a partnership with Cities Area Transit (CAT) to operate the shuttle, the university is anticipating the potential quarter-to-quarter cost volatility would be eliminated, which substantially improves budgeting for the service.

The secondary concern stated in Chapter 5 is the need for more coordination between the UND Shuttle and CAT routes. With CAT providing the UND Campus Shuttle service that coordination is evaluated with the rest of CAT service routes. These evaluations happen yearly when CAT reviews ridership and requests from the riders. They also get evaluated every five years when the Transit Development Plan does a more in-depth analysis.

ANALYSIS

The primary purpose of this analysis is to determine whether it is reasonable and sustainable for CAT to operate the university shuttle routes on days and hours consistent with the current university operated service. For the merger to be successful and sustainable, making a change must create positives for both the university and the City of Grand Forks/CAT. The city and university both entered the analysis with the expectation there are benefits to consolidating shuttle routes into CAT's operations. While both entities look at consolidation as a potential win-win, there are unique goals and requirements of a merger for each partner. Table 7-12 highlights the key goals for the university and the city considered throughout the merger analysis.

Table 7-12: Merger Goals/Requirements by Participant

University Requirements to Advance Merger	Grand Forks Requirements to Advance Merger
Cost: Comparable to Current	Cost: UND Pays Equitable Share
Coverage: Comparable to Current	Do Not Raise Local Matching Funds from Grand Forks
Service Hours: 7 AM to 10 PM	UND: Pays Local New Capital Match
Retain Fare Free (Add Faculty/Staff)	No Impact to Paratransit: Service Hours remain within 6:00 AM to 10 PM Span
Service Days: Monday-Friday	Ability to Count Ridership
Only Pay for In-session Periods	
Service Frequency:	
– 15 Minute Bi-directional on University	
– 20 Minute to Medical/Arena	
– 30 Minute Night Service	

Cost

UND SHUTTLE OPERATIONAL COST

Driver and administration costs are relatively consistent year to year, as long as the number of routes operated is similar. Vehicle rent costs are more variable as maintenance costs influence the hourly rate charged for vehicles. Figure 7-10 displays hourly rates charged from 2012 through 2019. Over the period, the hourly rate charged for each vehicle ranged from $23.00 to $52.00, for essentially the same vehicle pool. Higher hourly rates reflect periods immediately following significant maintenance (i.e. engine or transmission replacements) activities.

Understanding the influence vehicle rent charges have on total operating cost, an estimate of annual cost associated with the trending hourly estimate was also prepared. The trending hourly rate represents the rate derived through establishing a trend line associated with the 2012 through 2019 actual charged rates. The current trending rate is approximately $37.50 per hour, which results in an 2017-2018 academic year cost of approximately $361,800 compared to the actual annual cost of approximately $440,200.

Rates are reviewed throughout the year and, as demonstrated in Figure 7-10 information, can change within an academic year. The hourly rental rate for much of the 2017-2018 academic year was $52.00 per hour, the highest in the seven-year period. Rates set for the beginning of the 2019-20 academic year are $26.00 perhour. As rent changes, overall system cost changes. To characterize the impact the variable lease rate has on overall cost, academic year 2017-2018 costs (a high rental cost level) and the beginning of the 2019-2020 academic year are displayed in Table 7-13. The lease rate proposed for the beginning of the 2019-2020 academic year is lower than the trendline rate developed using information in the 2012-2019 period.

Figure 7-10: UND Shuttle Hourly Rent Per Vehicle by Year (2013-2019)

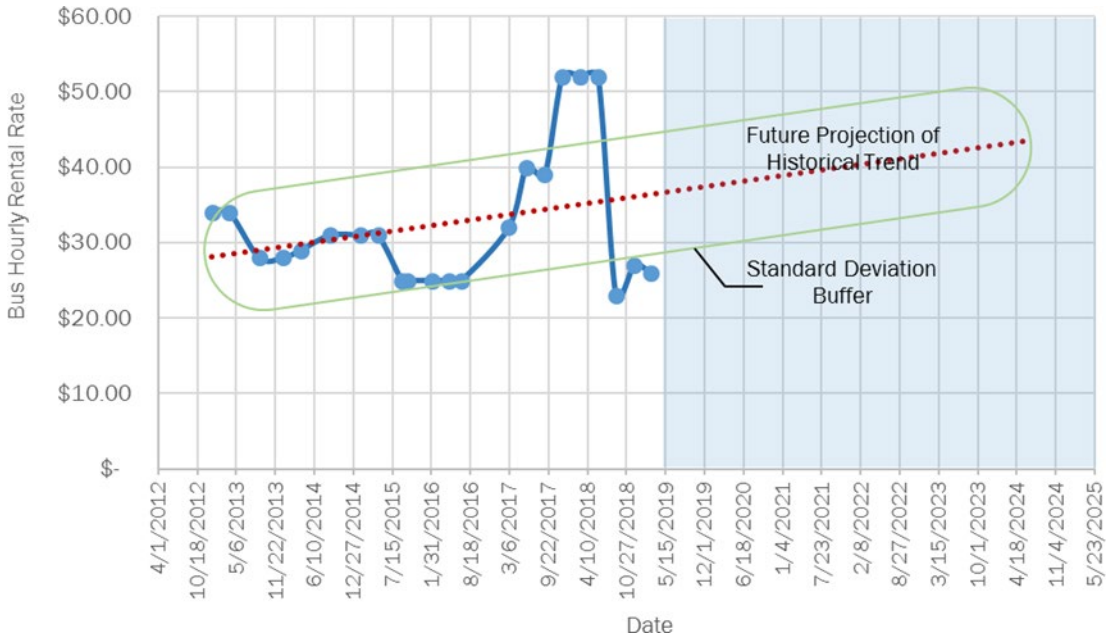

Table 7-13: UND Shuttle Operational Expenditures

Source	2017-2018 Expenses	Estimated 2019-2020 Expenses
Vehicle Cost	$281,253	$140,600
Operating Cost	$156,059	$156,100
Miscellaneous & Communication Costs	$2,931	$3,000
Total	$440,243	$299,700

CAT OPERATIONAL COSTS

CAT developed a cost allocation model for determining an appropriate and agreeable method of consistently estimating the cost of providing service in East Grand Forks. The cost allocation model was developed working with the City of East Grand Forks and is used annually to equitably divide CAT operating costs between Grand Forks and East Grand Forks based on the level of service provided.

The cost allocation model employs a three-part the formula to estimate cost responsibility for specific services. Parameters included are:

- Vehicle hours of service: This measure is a surrogate for estimating the annual cost of drivers assigned to routes. Driver labor accounts for approximately 70 percent of the cost of the part of service people see on the street. While drivers are required to complete annual training and there are mandatory meetings throughout the year, approximately 95 percent of the time drivers are working, they are on the street providing service. Thus, there is a direct two-way relationship supporting the use of revenue hours as a surrogate for drivercosts.

- Vehicle miles of service: Maintenance costs are reflective of the level of use of each bus while in service. There are two primary measures of use: revenue miles and revenue hours. As a moving bus incurs more wear and tear than a

stationary bus, revenue miles are likely the most appropriate measure of the level of use tied to maintenance costs.

- Peak buses in service: This parameter is used to estimate the administrative costs associated with providing service. The number of buses in peak operation reflects the maximum number of people required to provide service, including drivers, dispatchers, mechanics. As the number of people required to drive, maintain and make sure buses are where they should be increases, the number of administrative staff needed to manage recruiting and training drivers, setting schedules, reporting activity to the state and FTA, insurance costs, etc. increase proportionately. Thus, using peak buses as a measure of the level of administrative demand is logical.

CAT applies the model structure assumptions to the line item annual operating budget, which results in an intermediate model subtotal of costs by category of:

- Driver/Operator costs
- Maintenance costs
- Administration costs

Intermediate subtotals are then divided by the applicable annual value of revenue hours, revenue miles and peak buses in use for the system to derive a rate to apply to the level of service/personnel by jurisdiction. Table 7-14 documents the anticipated 2020 budget for CAT fixed route service. The costs of paratransit will not be included in the cost analysis because there is not an expected change in paratransit service level or paratransit service costs with shuttle operations brought under CAT management.

Table 7-14: Estimated 2020 CAT Fixed Route Operating Budget by Model Component

Cost Element	Allocation Model Unit	2020 Budget Amount	Units	Rate Per Unit
Driver Cost	Vehicle Hours	$1,452,019	33,597	$43.22
Maintenance/Mechanic Costs	Vehicle Miles	$630,625	372,563	$1.69
Administration Cost	Peak Buses in Operation	$757,853	9	$84,206.00
Total		$2,840,497		

Incorporating UND shuttle route service into CAT will impact costs in the following ways:

- Driver Costs: Adding shuttle routes would result in CAT adding four full-time driver equivalents to cover the routes over the anticipated span.
- Mechanic Costs: Assume only a small change in the labor. Potentially, a part time mechanic could be needed to address the needs of adding three vehicles.
- Administration: No new personnel would be added however, the administration element of the cost allocation model also includes the cost of benefits, vehicle insurance and other minor items. Adding shuttle routes to CAT operations would increase administration costs a modest amount.

Table 7-15 documents anticipated 2020 costs with shuttle operations added to CAT fixed operating service. Adding UND shuttle operations is anticipated to increase CAT overall fixed route service operating costs by approximately $253,400

through impacting the following elements:

- Driver Costs: $173,400 to account for the labor costs of four added drivers.
- Maintenance/Mechanical: $43,200 in added overall vehicle maintenance costs.
- Administration: $36,800 which addresses increases in vehicle insurancecosts, employee benefits, and some facility costs.

Table 7-15: Estimated 2020 CAT Fixed Route Operating Budget- Including Shuttle

Cost Element	Allocation Model Unit	2020 Budget Amount	Units	Rate Per Unit
Driver Cost	Vehicle Hours	$1,625,493	38,693	$42.01
Maintenance/Mechanic Costs	Vehicle Miles	$673,804	422,880	$1.59
Administration Costs	Peak Buses in Operation	$794,606	12	$66,217.00

CAPITAL COSTS

The campus shuttle is managed by staff in Parking and Transportation Services. Management through the university, a state entity, requires acquisition of service vehicles through State Fleet Services, which results in benefits and limitations for effective operations. Table 7-16 provides a summary of the key benefits and limitations associated with acquiring vehicles through the state.

Table 7-16: Benefits and Limitations of State Fleet Vehicle Acquisition

Benefits	Limitations
Assistance with purchasing. State purchases vehicles that university pays for through a lease for a specified period. Thus, reducing upfront cost.	Vehicle configuration is limited to a “school bus” which is not the optimal vehicle for shuttle operation.
State addresses larger maintenance items (engine rebuild/replacement, tire replacement, transmission rebuild/replacement).	Adjust lease rate quarterly. If need to recoup maintenance costs from previous quarter, increase lease amount – Lease rate can be volatile over the life of the vehicle making academic year budgeting difficult

One key benefit of merging shuttle operations with CAT is an enhanced vehicle for shuttle service. Vehicles currently leased through the State Fleet are school buses configured with dual rows of seats. High floors and narrow aisles slow boarding and alighting. CAT buses are designed to speed boarding and alighting through both sets of doors (if needed) and seating can be configured to reflect the type of service (for example: more standing capacity for shorter trips).

For CAT to continue the UND shuttle as it is today three (3) buses would need to be purchased. Federal Transit Funds could be applied for to paid for 80% of a new bus. Negotiation would need to take place between CAT and UND to decide how the 20% local share would be paid. Table 7-17 documents the cost breakdown for each of the three shuttle vehicles.

Table 7-17: Vehicle Cost Estimate

Item	Item Cost	Vehicle Cost	# Vehicles	Total Purchase	Federal Funds	Local Funds
Specified Bus Model	$480,000					
Syncromatics AVL	$17,000					
Farebox	$16,500					
Wrap	$8,000					
Totals		$521,500	3	$1,564,500	$1,216,800	$347,700

CONCLUSIONS

Adding the UND shuttle service to the CAT fixed route results in some costs borne in the current condition by Grand Forks and East Grand Forks to be shared between all three partners in public transportation for equitable costs between each entity. Table 7-18 lists the pros and cons of then transfer of shuttle operations.

Table 7-18: Transferring Shuttle Operations to CAT- Pros and Cons

Pros of Transferring Service	Cons of Transferring Service
Greater level of consistency of driver training with CAT.	Operating cost is greater.
More appropriate vehicle· Vehicles can be designed to better support access/egress, seating, standing capacity, etc.	Capital cost is not directly integrated into overall operating cost.
Time spent addressing complaints· UND will forward complaints received to CAT, not address them internally.	Less control over decisions. The expectation is the university and CAT will work jointly to develop schedules, routing, stops, etc., but CAT will need to coordinate with other routes in the area.
Year·to·Year (Quarterly·to·Quarterly) cost stability. CAT would likely negotiate a cost annually. Presently, costs can change (and change substantially) quarterly reflecting actual maintenance costs.	Still have some university·based costs as the intent is to retain some buses for specific event service.
Reduced university staff administrative time· The time UND expends (and staff positions required to manage part·time drivers) will be greatly reduced, either lowering university costs or freeing up time for other duties.	
More opportunity for cost control while maintaining level of service. When costs increase for UND, service has been reduced to address budget. CAT already has service through most of the UND shuttle area and can integrate to retain level·of·service with fewer overall buses (relative to today's separate services).	
Better integration of transit service between campus and Grand Forks· Routes can be modified to provide more access between campus and adjacent housing. One provider will benefit from more marketing how service also connects to other locations in the city.	

Service likely operates during worse inclement weather· Days where the university might shut down service due to weather that closes the campus, CAT will likely still operate routes.
Reduce maintenance staff demand· Frees time for other work or could result in staff reduction.

CAPITAL NEEDS ANALYSIS

As part of developing the Operational Analysis an assessment was conducted of the current inventory of CAT Fixed Route Vehicles. Table 7-19 demonstrates the current inventory of the Fixed Route vehicles operated by CAT. Based on this current inventory, CAT currently operates a fleet of 11 total Fixed Route vehicles.

Table 7-19: CAT Fixed Route Inventory Summary

Veh. #	Year	Make	Programming	Owner
103	2010	New Flyer	Replace 2022	GF
104	2010	New Flyer	Replace 2022	GF
105	2010	New Flyer	Replace 2022	GF
106	2010	New Flyer	Replace 2022	GF
976	1997	New Flyer	2017 (Programmed)	GF
42	2004	Gillig	2018 (Programmed)	GF
31	2003	Gillig	2017 (Programmed)	GF
91	2009	Chevy Arboc	2017 (Programmed)	GF
112	2011	Chevy Arboc	2018 (Programmed)	GF
161	2016	Ford Starcraft	2021	GF
162	2016	Chevy Arboc	2021	EGF
Pending	2018	40' Coach	2018	EGF

SPARE RATIO ANALYSIS

Table 7-20 below demonstrates the CAT Fixed Route fleet analysis relative to each Operational Scenario. These scenarios assume peak vehicle requirements with and without the HC Tripper and assume the addition of zero to two new Fixed Route vehicles.

Fixed Route Assessment

Based on the existing CAT fleet inventory

- Zero (0) new buses are needed to operate the Cost Constrained Scenario.
- With the 2018 purhcase of the 40' coach, zero (0) new buses are needed to operate the Cost + Scenario.
- One (1) new buses are needed to operate the Cost ++ Scenario.

These assumptions are based on the discontinuation of the HC Tripper before any of the Fixed Route concepts are implemented.

Evening Route Assessment

Based on the existing CAT fleet inventory

- If the Cost Constrained evening routes are implemented, it will add an additional 15,000 miles annually, or a total of 71,000 miles over the five-year life of this TDP, to the current CAT fleet. Based on this assumption, no additional rolling stock needs are suggested to support the Cost Constrained evening service.
- If the Cost + Scenario evening routes are implemented it would add 29,000 service miles annually, or a total of 142,000 miles over the five-year life of this TDP. Based on this assumption, no additional rolling stock needs are suggested to support Cost + evening service.
- If the Cost ++ Scenario for evening service is implemented, it would add 75,000 service miles annually, or a total of 376,000 miles over the five-year life of this TDP. Therefore, one additional expansion vehicle would be recommended midway through the planning horizon if the Cost ++ Evening service were implemented.

Table 7-20: Spare Ratio Analysis

Spare Ratio Analysis (No HC Tripper)		
	Fleet Requirement	Spare Ratio
Total Fleet (Fixed)	12	X
Peak - Existing Condition	7	71.4%
Peak - Cost Constrained	8	50.0%
Peak - Cost +	9	33.3%
Peak - Cost ++	10	20.0%

Spare Ratio Analysis (No HC Tripper) + 1 Vehicle		
	Fleet Requirement	Spare Ratio
Total Fleet (Fixed)	13	x
Peak - Existing Condition	7	85.7%
Peak - Cost Constrained	8	62.5%
Peak - Cost +	9	44.4%
Peak - Cost ++	10	30.0%

Spare Ratio Analysis (No HC Tripper) + 2 Vehicle		
	Fleet Requirement	Spare Ratio
Total Fleet (Fixed)	14	x
Peak - Existing Condition	7	100.0%
Peak - Cost Constrained	8	75.0%
Peak - Cost +	9	55.6%
Peak - Cost ++	10	40.0%

2019 Update

In table 7-17 it was established the need for three additional buses to provide the UND Campus Shuttle service. CAT would purchase the needed buses with federal fund and UND would pay the local cost for the buses. With the Campus Shuttle included the number of peak vehicles running will be 12. There would be a need for at least two spare vehicles. To have a 75% spare ratio four spare vehicles would be needed.

SHELTER NEEDS

SHELTERS FOR RELOCATION

As part of the development of new route alternatives, bus shelter locations along existing routes were studied to determine whether they are still beneficial to the system and to evaluate more appropriate locations, if necessary. With the proposed route structure, there are seven shelters that are no longer adjacent to a route, as shown in Table 7-21. Orphaned shelters can be seen in Figure 7-11 below.

Costs associated with the relocation and realignment of shelters should be coordinated with public works and engineering to ensure accommodations for adjacent sidewalk improvements and stop related amenities such as lighting. CAT's share of these costs should be considered part of the annual Miscellaneous capital and safety line in their financial plan.

10) FINANCIAL PLAN

INTRODUCTION

This section provides an overview and summary of the five-year (2018-2022) financial analysis related to implementation of the recommended operational strategy for CAT. The fiscally constrained implementation of the TDP would result in the implementation of the Cost Constrained Scenario for Grand Forks and East Grand Forks.

This plan provides guidance to move towards implementing the Cost Constrained Scenario by the 2nd Quarter of 2018. The system restructure proposed by the TDP allows for a new route structure to be implemented, with varying levels of new revenue investment by each major CAT funding partner. However, based on existing funding projected to be available, it is recommended that the Cost Constrained Scenario be implemented as outlined in Alternatives Analysis element of the TDP.

ASSUMPTIONS

Assumptions used in the development of this element of the TDP are as follows.

- Implementation of the TDP starts April 1, 2018, and therefore cost for calendar year 2018 are assumed at ¾ of those shown in the Operational Analysis in the Alternatives Analysis chapter above. Operations costs were initially inflated in the Operational Analysis, so for this element of the TDP, they again grown four percent annually from 2019 on. Revenue projections match those discussed below.
- The selection of April 1, 2018 as the implementation window was developed to match recent funding provided by MnDOT to support CAT service improvements in East Grand Forks.
- Revenue assumptions were based on the current approved 2017-2020 Grand Forks – East Grand Forks Transportation Improvement Program (TIP). These revenue assumptions were augmented to account for recent 100 percent State funding provided to the East Grand Forks by MnDOT. Revenue projections for East Grand Forks also assume slightly elevated annual revenue as reported by MnDOT for the years 2020 and 2021 (and extrapolated to 2022) to support with TIP and STIP development.
- The tripper service should be discontinued and reevaluated in coordination with area agencies and human service stakeholders.

OPERATIONS

Operational costs are broken out by system. Based on MnDOT funding provided to East Grand Forks, the Cost Constrained Scenario is fully fundable through the year 2019 in East Grand Forks. Implementation of the Cost Constrained Scenario for Grand Forks is essentially cost neutral through the five-year planning horizon.

Grand Forks

Table 10-1 shows the overall operation analysis for the Grand Forks portion of the TDP for the years 2017 to 2022. No new funds are needed for the Grand Forks portion of the CAT system to implement the Cost Constrained Scenario over the life of the TDP. If Grand Forks were wishing to reach the Cost + Scenario, total new Grand Forks revenue to support implementation of the Cost + Scenario is projected to be between $225,000 and $330,000 annually over the five-year life of the TDP. Not moving forward with the Cost + Evening Service implementation would reduce this by between $97,000 and $150,000 annually over the life of the TDP.

2018 Update

Table 10-1 has been updated to reflect the most current cost of service and estimated incoming revenue. Grand Forks has implemented the Cost+ Scenario of the proposed new route alternatives. The City was also to find some cost savings when implementing this new route structure. The final routes look different from the ones proposed in this plan due to test runs

and on the ground verification of current ridership. The riders had a month and multiple meeting opportunities to provide input. This input also change routing and time tables that are part of the final route structure.

2019 Update

Table 10-1 has been updated to reflect the most current cost of service and estimated incoming revenue. Grand Forks has made changes to the 2018 route changes after a performance review of the 2018 changes. UND Campus Shuttle service will also be provided by Cities Area Transit (CAT) starting the 2020- 2021 school year. CAT has also decided to bring all parts of the Dial-A-Ride under city control. With these additions there will be a change in the cost allocation model and total cost of transit service.

Table 10-1: Grand Forks Financial Analysis

	2017	2018	2019	2020	2021	2022
~~Other~~	~~$338.4~~	~~$345.20~~	~~$352.10~~	~~$359.14~~	~~$366.33~~	~~$373.65~~
~~Local~~	~~$1,765.1~~	~~$1,800.37~~	~~$1,836.38~~	~~$1,873.11~~	~~$1,910.57~~	~~$1,948.78~~
~~State~~	~~$253.1~~	~~$258.18~~	~~$263.35~~	~~$268.61~~	~~$273.99~~	~~$279.46~~
~~Federal~~	~~$1,112.0~~	~~$1,134.21~~	~~$1,156.89~~	~~$1,180.03~~	~~$1,203.63~~	~~$1,227.70~~
~~Total Revenue~~	~~$3,468.6~~	~~$3,538.0~~	~~$3,608.7~~	~~$3,680.9~~	~~$3,754.5~~	~~$3,829.6~~
~~Existing Service~~						
~~Existing Cost~~	~~$3,468.6~~	~~$3,538.0~~	~~$3,608.7~~	~~$3,680.9~~	~~$3,754.5~~	~~$3,829.6~~
~~New Service~~						
~~Cost Constrained (Day)~~	~~$0.0~~	~~-$18.0~~	~~-$24.0~~	~~-$25.0~~	~~-$26.0~~	~~-$27.0~~
~~Cost Constrained (Night)~~	~~$0.0~~	~~$9.0~~	~~$12.0~~	~~$12.5~~	~~$13.0~~	~~$13.5~~
~~Total Cost~~	~~$3,468.6~~	~~$3,529.0~~	~~$3,596.7~~	~~$3,668.4~~	~~$3,741.5~~	~~$3,816.1~~
~~Total Shortfall/Surplus~~	~~$0.0~~	~~$9.0~~	~~$12.0~~	~~$12.5~~	~~$13.0~~	~~$13.5~~

*~~All values shown as $1,000s~~

2018 Operational Costs Table- Grand Forks

	~~2017~~	~~2018~~	~~2019~~	~~2020~~	~~2021~~	~~2022~~
~~Other~~	~~$338.4~~	~~$345.20~~	~~$372.20~~	~~$379.64~~	~~$387.24~~	~~$394.98~~
~~Local~~	~~$1,765.1~~	~~$1,703.57~~	~~$1,615.3~~	~~$1,669.7~~	~~$1,725.6~~	~~$1,783.1~~
~~State~~	~~$250.0~~	~~$210.0~~	~~$255.0~~	~~$255.0~~	~~$255.0~~	~~$255.0~~
~~Federal~~	~~$1,112.0~~	~~$1,134.2~~	~~$1,155.5~~	~~$1,178.6~~	~~$1,202.2~~	~~$1,226.2~~
~~***Total Revenue***~~	~~***$3,465.5***~~	~~***$3,393.0***~~	~~***$3,398.0***~~	~~***$3,483.0***~~	~~***$3,570.0***~~	~~***$3,659.3***~~
~~*Cost of Service*~~	~~*$3,468.6*~~	~~*$3,393.0*~~	~~*$3,398.0*~~	~~*$3,483.0*~~	~~*$3,570.0*~~	~~*$3,659.3*~~
~~**Total Shortfall/Surplus**~~	~~**$0.0**~~	~~**$0.0**~~	~~**$0.0**~~	~~**$0.0**~~	~~**$0.0**~~	~~**$0.0**~~

*~~All Values Shown as $1,000s~~

2019 Operational Costs Table- Grand Forks

Grand Forks						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Other	$338.4	$345.20	$372.20	$489.00	$498.78	$508.76
Local	$1,765.1	$1,703.57	$1,615.3	$1,352.3	$1,401.8	$1,452.8
State	$250.0	$210.0	$255.0	$205.0	$205.0	$205.0
Federal	$1,112.0	$1,134.2	$1,155.5	$1,217.3	$1,241.6	$1,266.4
Total Revenue	***$3,465.5***	***$3,393.0***	***$3,398.0***	***$3,263.5***	***$3,347.2***	***$3,433.0***
Cost of Service	*$3,468.6*	*$3,393.0*	*$3,398.0*	*$3,222.2*	*$3,302.8*	*$3,385.4*
Total Shortfall/Surplus	**$0.0**	**$0.0**	**$0.0**	**$41.3**	**$44.4**	**$47.7**

*~~All Values Shown as $1,000s~~

East Grand Forks

Table 10-2 shows the overall operational analysis for the East Grand Forks portion of the TDP for the years 2017 to 2022. For years 2018 and 2019, East Grand Forks can meet anticipated revenue needs to support the Cost Constrained Scenario. Even with the assumption in increased revenues from MnDOT over life the planning horizon, East Grand Forks will run between $135,000 and $150,000 deficit following loss of the one-time MnDOT money. Therefore, Table 10-2 shows the investment in new services ending at the end of 2019. New funds would be needed to operate the Cost Constrained Scenario following the end of the two year MnDOT funding.

2018 Update

Table 10-2 has been updated to reflect the most current cost of service and estimated incoming revenue. MnDOT has committed to increasing the funding to East Grand Forks from MnDOT. Initially, MnDOT was only going to fund the additional service for a two year period. MnDOT is now indicating they will fund the added service for the remaining years as well. With the implementation of the new routes, a new cost allocation model was produced. This allowed for an easier understanding of the division of the cost and fare box revenue.

2019 Update

Table 10-2 has been updated to reflect the most current cost of service and estimated incoming revenue. With the change in the cost allocation model due to UND's Campus Shuttle Service and the Dial-A-Ride service being completely staffed by CAT, East Grand Forks' costs have changed as well. East Grand Forks is also allocating more of their 5307 funds to operating costs.

Table 10-2: East Grand Forks Financial Analysis

	2017	2018	2019	2020	2021	2022
~~Local~~	~~$99.3~~	~~$101.3~~	~~$103.3~~	~~$98.5~~	~~$106.0~~	~~$108.1~~
~~State~~	~~$226.5~~	~~$288.0~~	~~$523.8~~	~~$234.8~~	~~$263.0~~	~~$268.3~~
~~Federal~~	~~$80.6~~	~~$82.2~~	~~$83.9~~	~~$186.7~~	~~$191.0~~	~~$194.8~~
~~Total Revenue~~	~~$406.4~~	~~$471.6~~	~~$711.0~~	~~$520.0~~	~~$560.0~~	~~$571.2~~
~~Existing Service~~						
~~Existing Cost~~	~~$406.4~~	~~$414.6~~	~~$422.8~~	~~$431.0~~	~~$439.7~~	~~$448.4~~
~~New Service~~						
~~Cost Constrained (Day)~~	~~$0.0~~	~~$28.5~~	~~$114.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~
~~Cost Constrained (Night)~~	~~$0~~	~~$28.5~~	~~$116.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~
~~Total Cost~~	~~$406.4~~	~~$471.6~~	~~$652.8~~	~~$431.0~~	~~$439.7~~	~~$448.4~~
~~Total Shortfall/Surplus~~	~~$0.0~~	~~$0.0~~	~~$58.2~~	~~$89.0~~	~~$120.3~~	~~$122.8~~

**All values shown as $1,000s*

2018 Operational Costs Table- East Grand Forks

	~~2017~~	~~2018~~	~~2019~~	~~2020~~	~~2021~~	~~2022~~
~~Local~~	~~$99.3~~	~~$105.6~~	~~$101.2~~	~~$103.2~~	~~$105.3~~	~~$107.5~~
~~State~~	~~$226.5~~	~~$294.0~~	~~$448.8~~	~~$457.8~~	~~$466.9~~	~~$476.3~~
~~Federal~~	~~$80.6~~	~~$85.0~~	~~$85.0~~	~~$86.7~~	~~$88.4~~	~~$90.2~~
~~***Total Revenue***~~	~~***$406.4***~~	~~***$484.6***~~	~~***$635.0***~~	~~***$647.7***~~	~~***$660.7***~~	~~***$674.0***~~
~~*Cost of Service*~~	~~*$406.4*~~	~~*$414.6*~~	~~*$550.0*~~	~~*$563.8*~~	~~*$577.8*~~	~~*$592.3*~~
Total Shortfall/Surplus	$0.0	$70.0	$85.0	$84.0	$82.8	$81.7

**All Values Shown as $1,000s*

2019 Operational Costs Table- East Grand Forks

East Grand Forks						
	2017	2018	2019	2020	2021	2022
Local	$99.3	$105.6	$101.2	$111.0	$113.2	$115.6
State	$226.5	$294.0	$448.8	$400.0	$408.0	$416.2
Federal	$80.6	$85.0	$85.0	$120.0	$120.0	$135.0
Total Revenue	***$406.4***	***$484.6***	***$635.0***	***$631.0***	***$641.2***	***$666.7***
Cost of Service	*$406.4*	*$414.6*	*$550.0*	*$445.4*	*$456.6*	*$468.0*
Total Shortfall/Surplus	$0.0	$70.0	$85.0	$185.6	$184.7	$198.8

**All Values Shown as $1,000s*

UND

UND and CAT did a feasibility study and went through a process of negotiations that lead to CAT providing the Campus Shuttle Service for UND. With their inclusion in the cost allocation model they now have a full understanding of the cost of service and is better connected to CAT routes to the rest of the Cities. The table below is UND's cost of service:

UND Campus Shuttle						
	2017	2018	2019	2020	2021	2022
UND	$0.0	$0.00	$0.00	$376.00	$383.52	$391.19
Bus Reimbursement	$0.0	$0.00	$0.00	$66.00	$66.00	$66.00
	$0.0	$0.00	$0.00	$0.00	$0.00	$0.00
Total Cost	***$0.0***	***$0.0***	***$0.0***	***$442.0***	***$449.5***	***$457.2***

**All values shown as $1,000's*

CAPITAL

Grand Forks

Table 10-3 shows the current projected capital expenditures needed to support the Grand Forks side of the CAT System over the life of this TDP through year 2022.

SHORT-TERM NEEDS

Over the life of the TDP Grand Forks will face an estimated need for $4.0 million in capital funding to meet short-term capital needs. Nearly $1.4 million of these funds are currently programmed, with another $700,000 currently submitted for 2018 Federal funding through NDDOT. The largest chunk of this unfunded need will be four large vehicle replacements in 2022.

LONG-TERM NEEDS

The Grand Forks capital analysis is not inclusive of needed ongoing upgrades and expansion to the CAT Bus Garage. The full expansion and upgrade of the CAT Bus Garage is estimated at $8.0 million. A multi-year funding strategy for this facility is needed, and should consider the potential for a MnDOT share in the eligible portions of the facility.

Based on the Asset Management analysis developed as part of the TDP, it is suggested that an additional $1.25 million in new capital revenues are needed per year to maintain a backlog of roughly 50 percent for the next 15 years. Some of this backlog may already be addressed through capital replacements included in Table 10-3. Given the current split in overall service and revenue miles of the CAT System, approximately 85 percent of this backlog, or $1.062 million would be Grand Forks' burden.

2018 Update

Table 10-3 has been updated to reflect the most current capital investment schedule. In 2018 Grand Forks was awarded 5339 competitive grant funding for the expansion and remodel of the Transit Administration and Maintenance facility for a total cost $4.87 million. This is a one-time funding for a project that this plan could not see being done with current traditional funding sources. CAT had the floor plans redone so that the new cost of the expansion/renovation will be covered by the awarded grant amount. There have been additional 5339 formula funds being solicited for projects. CAT has a list of projects that will start working on the Transit Assets that are need of being brought back into a state of good repair. CAT will use this list to apply for future 5339 formula funds.

2019 Update

Table 10-3 has been updated to reflect the most current investment schedule and what has been programmed. The main changes that have happened are projects that were listed as Candidate/Illustrative have been moved to Programmed if that has happened.

Table 10-3: Grand Forks Capital Investment Schedule

Grand Forks							
Item	Status	2017	2018	2019	2020	2021	2022
~~Replace Fixed Route (976)~~	~~Programmed~~	~~$368.0~~					
~~Replace 2 Fixed Route (Replace 31 & 91)~~	~~Programmed~~	~~$416.0~~					
~~Replace 2 DAR Vehicles (Replace 109 & 121)~~	~~Candidate - 5310~~		~~$107.0~~				
~~Replace 3 DAR Vehicles (153-154)~~	~~Illustrative~~				~~$120.0~~		
~~Replace Fixed Route (Replace 42 & 112)~~	~~Programmed~~		~~$480.0~~				
~~Replace 1 Fixed Route (161)~~	~~Illustrative~~					~~$68.0~~	
~~Replace 4 Fixed Route (103-106)~~	~~Illustrative~~						~~$1,600.0~~
~~Misc. Capital + Safety~~	~~Programmed - 5307~~	~~$35.0~~	~~$15.0~~	~~$15.0~~	~~$15.0~~	~~$15.0~~	
~~Fixed Route Video System~~	~~Candidate - 5339~~		~~$60.0~~				
~~GFI Ticket Vending Machines~~	~~Candidate 5339~~		~~$38.0~~				
~~Shop Maintenance Software~~	~~Candidate - 5339~~		~~$100.0~~				
~~Ticket Vending Machine~~	~~Illustrative~~			~~$98.0~~			
~~Transit Garage Upgrades~~	~~Candidate 5339~~		~~$387.0~~				
~~Replace Shop Vehicles (2)~~	~~Illustrative~~			~~$64.7~~			
~~Grand Cities Mall Shelter Improvements~~	~~Illustrative~~			~~$100.0~~			
~~Programmed~~		~~$819.0~~	~~$495.0~~	~~$15.0~~	~~$15.0~~	~~$15.0~~	~~$0.0~~
~~Illustrative/Candidate~~		~~$0.0~~	~~$692.0~~	~~$262.7~~	~~$120.0~~	~~$68.0~~	~~$1,600.0~~
~~Total - Grand Forks~~		~~$819.0~~	~~$1,187.0~~	~~$277.7~~	~~$135.0~~	~~$83.0~~	~~$1,600.0~~

**All values shown as $1,000s*

2018 Capital Investment Schedule- Grand Forks

~~Grand Forks~~							
~~Item~~	~~Status~~	~~2017~~	~~2018~~	~~2019~~	~~2020~~	~~2021~~	~~2022~~
~~Fixed Route Vehicles~~	~~Programmed~~	~~$784.0~~	~~$480.0~~	~~$490.0~~	-	-	-
~~Paratransit Vehicles~~	~~Programmed~~	-	~~$107.0~~	~~$110.0~~	-	-	-
~~Safety & Security~~	~~Programmed - 5307~~	~~$35.0~~	~~$15.0~~	~~$15.0~~	~~$15.0~~	~~$15.0~~	~~$15.0~~
~~Fixed Route Video System~~	~~Programmed~~	-	~~$60.0~~	-	-	-	-
~~Shop Mtce. Software~~	~~Programmed~~	-	~~$100.0~~	-	-	-	-
~~Shop Tools/Equipment~~	~~Programmed~~	-	-	~~$16.0~~	-	-	-
~~Digital Way Signs~~	~~Programmed~~	-	-	~~$25.0~~	-	-	-
~~Destination Signs~~	~~Programmed~~	-	-	~~$20.0~~	-	-	-

~~Transit Admin/Garage Upgrades~~	~~Programmed~~	-	~~$387.0~~	~~$4,784.4~~	-	-	-
~~Bus Stops/Buildings Improvements/Maintenance~~	~~Programmed~~	-	-	~~$10.0~~	-	-	-
~~Paratransit Vehicles~~	~~Candidate - 5310/Illustrative~~	-	-	-	~~$160.0~~	-	~~$80.0~~
~~Fixed Route Vehicles- Replacement~~	~~Candidate - 5339/Illustrative~~	-	-	-	-	~~$1,060.0~~	~~$1,250.0~~
~~Fixed Route Vehicles- Expansion~~	~~Candidate- 5339/Illustrative~~	-	-	~~$1,521.0~~	-	-	-
~~Non-Revenue Vehicles~~	~~Candidate - 5339/Illustrative~~	-	-	~~$63.0~~	-	~~$30.0~~	-
~~Capitalized Vehicle Maintenance~~	~~Candidate - 5339/Illustrative~~	-	-	-	~~$80.0~~	-	-
~~Shop Tools/Equipment~~	~~Candidate - 5339/Illustrative~~	-		~~$20.0~~	-	~~$80.0~~	-
~~Bus Fare Boxes~~	~~Candidate - 5339/Illustrative~~	-	-	~~$200.0~~	-	-	-
~~Fare Collection Vault/Software & Servers~~	~~Candidate - 5339/Illustrative~~	-	-	~~$106.3~~	-	-	-
~~Transit Admin/Garage Upgrades~~	~~Candidate - 5339/Illustrative~~	-	-	~~$150.0~~	-	-	-
~~Bus Stops/Buildings Improvements/Maintenance~~	~~Candidate - 5339/Illustrative~~	-	-	~~$186.0~~	~~$20.0~~	~~$45.0~~	~~$20.0~~
~~*Programmed*~~	-	~~$819.0~~	~~$1,149.0~~	~~$5,470.4~~	~~$15.0~~	~~$15.0~~	~~$15.0~~
~~*Candidate/Illustrative*~~	-	~~$0.0~~	~~$0.0~~	~~$2,246.3~~	~~$260.0~~	~~$1,215.0~~	~~$1,350.0~~
~~**Total - Grand Forks**~~	-	~~**$819.0**~~	~~**$1,149.0**~~	~~**$7,716.7**~~	~~**$275.0**~~	~~**$1,230.0**~~	~~**$1,365.0**~~

**All Values Shown as $1,000s*

2019 Capital Investment Schedule-Grand Forks

Grand Forks							
Item	**Status**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Fixed Route Vehicles	Programmed	$784.0	$480.0	$490.0	$160.0		
Paratransit Vehicles	Programmed		$107.0	$110.0			
Safety & Security	Programmed -5307	$35.0	$15.0	$15.0	$15.0	$15.0	$15.0
Fixed Route Video System	Programmed		$60.0				
Shop Mtce. Software	Programmed		$100.0				
Shop Tools/Equipment	Programmed			$16.0			
Digital Way Signs	Programmed			$25.0			
Destination Signs	Programmed			$20.0			
Transit Admin/Garage Upgrades	Programmed		$387.0	$4,784.4			
Bus Stops/Buildings Improvements/Maintenance	Programmed			$10.0			
Fare Collection Vault/Software & Servers	Programmed			$106.3			
Transit Admin/Garage Upgrades	Programmed			$150.0			
Fixed Route Vehicles- Expansion	Programmed			$1,521.0			
Capitalized Vehicle Maintenance	Programmed				$80.0		
Paratransit Vehicles	Candidate - 5310/Illustrative						$80.0
Fixed Route Vehicles- Replacement	Candidate - 5339/Illustrative					$1,060.0	$1,250.0
Non-Revenue Vehicles	Candidate - 5339/Illustrative			$63.0		$30.0	
Shop Tools/Equipment	Candidate - 5339/Illustrative			$20.0		$80.0	
Bus Fare Boxes	Candidate - 5339/Illustrative			$200.0			
Bus Stops/Buildings	Candidate - 5339/Illustrative			$186.0	$20.0	$45.0	$20.0
Programmed		*$819.0*	*$1,149.0*	*$7,247.7*	*$255.0*	*$15.0*	*$15.0*
Candidate/Illustrative		*$0.0*	*$0.0*	*$469.0*	*$20.0*	*$1,215.0*	*$1,350.0*
Total - Grand Forks		**$819.0**	**$1,149.0**	**$7,716.7**	**$275.0**	**$1,230.0**	**$1,365.0**

**All Values Shown as $1,000s*

East Grand Forks

Table 10-4 shows the current projected capital expenditures needed to support the East Grand Forks side of the CAT System over the life of this TDP through year 2022.

SHORT-TERM NEEDS

Over the life of the current TDP, East Grand Forks has a total capital need of $1.23 million. Of this amount, $610,000 is currently programmed. The unfunded elements of the East Grand Forks capital analysis relate to vehicle needs in 2021 for replacement of vehicles 142 and 162.

LONG TERM NEEDS

The East Grand Forks capital analysis is not inclusive of needed ongoing upgrades and expansion to the CAT Bus Garage. Based on current services provided by CAT, MnDOT may potentially consider funding some portion of this facility. These discussions should be included in future investment planning for upgrade and expansion of the CAT Bus Garage.

The East Grand Forks capital analysis is not reflective of the needed additional investments to maintain a state of good repair. Based on the earlier discussion of the Asset Management analysis for CAT, an additional $187,000 in revenue is needed from East Grand Forks to maintain their proportional share (based on percent of system revenue miles) of the current CAT capital infrastructure.

2018 Update

Table 10-3 has been updated to reflect the most current capital investment schedule. This reflects the change in year when a bus replacement will happen. There has been added card/ticket vending machines to help the system improve the ability for customers to access new fare cards or reload current ones.

2019 Update

Table 10-4 has been updated to reflect the most current capital investment schedule. The State of Minnesota moved the vehicle purchases to years beyond the time span of this Transit Development Plan. The need for additional card vending equipment was reevaluated when additional federal funds were needed to go toward operational costs.

Table 10-4: East Grand Forks Capital Investment Schedule

East Grand Forks							
Item	Status	2017	2018	2019	2020	2021	2022
~~Replace DAR Vehicle (Replace 141 w/cutaway)~~	~~Programmed~~		~~$150.0~~				
~~Replace DAR Vehicle (142)~~	~~Illustrative~~					~~$220.0~~	
~~Replace 1 Fixed Route (162)~~	~~Illustrative~~					~~$400.0~~	
~~Expansion Fixed Route (MnDOT 100% $)~~	~~Programmed~~		~~$460.0~~				
~~Programmed~~	-	~~$0.0~~	~~$610.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~
~~Illustrative/Candidate~~	-	~~$0.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~	~~$620.0~~	~~$0.0~~
~~Subtotal - East Grand Forks~~	-	~~$0.0~~	~~$610.0~~	~~$0.0~~	~~$0.0~~	~~$620.0~~	~~$0.0~~

**All values shown as $1,000s*

2018 Capital Cost Investment Schedule- East Grand Forks

~~East Grand Forks~~							
~~Item~~	~~Status~~	~~2017~~	~~2018~~	~~2019~~	~~2020~~	~~2021~~	~~2022~~
~~Paratransit Vehicle~~	~~Programmed~~	-	~~$150.0~~	-	-	-	~~$170.0~~
~~Fixed Route Vehicles~~	~~Programmed~~	-	-	-	-	~~$170.0~~	-
~~Safety & Security~~	~~Programmed~~	-	~~$3.8~~	-	-	-	-
~~Ticket Vending Equipment~~	~~Programmed~~	-	-	~~$220.0~~	-	-	-
~~Bus Stops/Buildings Improvements/Maintenance~~	~~Programmed~~	-	-	-	~~$200.0~~	-	-
~~Card Vending Equipment~~	~~Programmed~~	-	-	-	-	-	~~$250.0~~
~~Expansion Fixed Route (MnDOT 100% $)~~	~~Programmed~~		~~$460.0~~	-	-	-	-

~~Programmed~~	-	~~$0.0~~	~~$613.8~~	~~$220.0~~	~~$200.0~~	~~$170.0~~	~~$420.0~~
~~Illustrative/Candidate~~	-	~~$0.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~	~~$0.0~~
~~Subtotal - East Grand Forks~~	-	~~$0.0~~	~~$613.8~~	~~$220.0~~	~~$200.0~~	~~$170.0~~	~~$420.0~~

~~All Values Shown as $1,000s~~

2019 Capital Cost Investment Schedule- East Grand Forks

East Grand Forks							
Item	Status	2017	2018	2019	2020	2021	2022
Paratransit Vehicle	Programmed		$150.0				
Fixed Route Vehicles	Programmed						
Safety & Security	Programmed		$3.8				
Ticket Vending Equipment	Programmed			$220.0			
Bus Stops/Buildings Improvements/Maintenance	Programmed				$200.0		
Expansion Fixed Route (MnDOT 100% $)	Programmed		$460.0				
Programmed		**$0.0**	**$613.8**	**$220.0**	**$200.0**	**$0.0**	**$0.0**
Illustrative/Candidate		$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Subtotal - East Grand Forks		**$0.0**	**$613.8**	**$220.0**	**$200.0**	**$0.0**	**$0.0**

All Values Shown as $1,000s

Overcoming Barriers **Strengthening Connections**

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

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Ensuring Opportunities **Planning One Community**

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

MPO Staff Report
MPO Technical Advisory Committee: February 12, 2020
MPO Executive Board: February 19, 2020

RECOMMENDED ACTION: Update on FHWA-MN STIP/TIP Coordination Review.

Matter of the FHWA-MN STIP/TIP Coordination Review.

Background: The MPO's TIP Procedural Manual is being updated to reflect current legislation. It is also being update because the draft Public Participation Plan identifies that it is the place for informing the public about participation in the TIP process.

Originally, the Manual was developed as part of the change in the way projects were prioritized. This is when the scoring sheets for the various programs were required by FHWA-ND. With this new method, the manual was published to assist everyone in how the changes were being implemented.

No major changes have been done. Minor changes such as when the then separate Safe Routes to School program was incorporated into the Transportation Alternative Program. The scoring sheet was updated but none of the rest of the manual.

MAP-21 and FAST advanced the performance based planning and programming requirements. They also changed the funding programs. So, because of these items, the update to the TIP Procedural Manual was drafted.

ANALYSIS AND FINDINGS OF FACT:

- The MPO must adopt a TIP.
- Legislation has changed requirement for TIP.
- The PPP changed how participation was identified for TIP.
- An update to the Manual was needed..

SUPPORT MATERIALS:

- Draft TIP Procedural Manual.

Overcoming Barriers Strengthening Connections

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

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Ensuring Opportunities Planning One Community

Transportation Improvement Program (TIP)
Policies And Procedures

For The

Grand Forks/East Grand Forks
Metropolitan Planning Area

Final Document

Approved By The Grand Forks/East Grand Forks Metropolitan Planning Organization Executive Policy Board
February 2020

TABLE OF CONTENTS

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1. DOCUMENT OVERVIEW

This document establishes the process for developing the Transportation Improvement Programs (TIP) for the Grand Forks/East Grand Forks Metropolitan Planning Organization (GF/EGF MPO). It provides an overview of the process, and then describes how each step of the process will be accomplished. Finally, the procedures that will be followed to revise the TIP after it has been adopted are also established. Many Federal requirements are outlined in the Fixing America's Surface Transportation Act (FAST) and codified in Title 23 Part 450 of the Code of Federal Regulations (23 CFR 450).

It is intended that this document be revised periodically as the needs of the GF/EGF MPO and pertinent Federal requirement changes. Up-to-date *Policies and Procedures* will be distributed to the members of the MPO Boards and Committees as well as the NDDOT, the MNDOT, the Federal Highway Administration and the Federal Transit Administration. The document shall also be available for public review including being posted on the MPO website.

2. OVERVIEW OF THE METROPOLITAN PLANNING PROCESS

[23 CFR 450.300 and 23 CFR 450.306(b)]

Federal law requires every urbanized area with a population over 50,000 to have a designated Metropolitan Planning Organization (MPO) to qualify for receipt of federal highway and transit funds. The GF/EGF MPO is the designated MPO for the Grand Forks/East Grand Forks urbanized area. (See map in Appendix I.) Roadways eligible for federal funds are identified on the maps in Appendix II. Basically, roadways need to be functionally classified and there is a distinction between urban and rural classification. Individual programs have unique eligibilities so any proposers of any potential candidate project should contact the MPO early for determination of eligibility for any possible program.

The Grand Forks/East Grand Forks Metropolitan Planning Organization (GF/EGF MPO) is a forum for the Cities of Grand Forks and East Grand Forks, as well as for Grand Forks County, North Dakota and Polk County, Minnesota. The GF/EGF MPO is an intergovernmental forum that provides for the discussion of local and regional transportation issues and for the development of transportation policies and programs. As the metropolitan planning organization (MPO), the GF/EGF MPO is responsible for surface transportation planning in the GF/EGF MPO. This includes developing the long term (minimum of 20 years horizon) Metropolitan Transportation Plan (MTP) and the short-term Transportation Improvement Program (TIP). To that end, the GF/EGF MPO staff work with members of local government staff, the North Dakota Department of Transportation (NDDOT), Minnesota Department of Transportation (MNDOT), all local transit providers, as well as with other local agencies. The GF/EGF MPO is committed to carrying out a continuing, cooperative, and comprehensive transportation planning process (3C process). The development process is accomplished under the direction of the MPO Executive Policy Board (Executive Board), which serves as the governing body of the GF/EGF MPO.

To fully understand the Federal Regulations, four definitions are noted below [23 USC 101(a)]:

> ***"Consideration*** means that one or more parties takes into account the opinions, action, and relevant information from other parties in making a decision or determining a course of action."
>
> ***"Consultation*** means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken."
>
> ***"Cooperation*** means that the parties involved in carrying out the transportation planning and programming processes work together to achieve a common goal or objective."
>
> ***"Coordination*** means the cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate."

a. Metropolitan Transportation Plan (LRTP) and Relation to the TIP

[23 CFR 450.324]

The MTP is a minimum twenty year horizon, intermodal, multimodal transportation plan that provides a framework for development of the TIP. The current recommended practice as guided by FHWA is to have a twenty-five year horizon. The MTP must be updated every five years. Decisions regarding the roadways, bike and pedestrian ways, enhancements, and public transit services in the GF/EGF MPO area are determined by the MTP, which identifies specific transportation needs for the area. Those needs are translated into fundable projects and programmed for Federal funds (and other regionally significant projects) by means of the TIP. While the MTP establishes goals and a framework, the TIP serves as a tool for program implementation.

3. TIP BASICS

[23 CFR 450.326-334]

The TIP is a list of federally funded projects to be initiated within a given four-year period. The TIP programs the timing and funding of all transportation improvements within the GF/EGF MPO involving federal funds over a four-year period. The current practice with both states is to have a new TIP developed and adopted every year. The federal minimum is adoption every four years and there are rare occasions when a new TIP is not developed and adopted in a particular year. The GF-EGF MPO is a bi-state MPO that typically adopts a unified TIP covering both states. There are rare occasions when one particular state is not able to adopt a new STIP, the GF-EGF MPO may develop and adopt a state specific TIP. Federal regulations require that transit, highway and other transportation improvement projects within the GF/EGF MPO be included in the TIP if these projects are to be eligible for Federal funding. The program must also include non-Federally funded projects that are regionally significant.

The TIP is developed by the GF/EGF MPO staff and the Technical Advisory Committee (TAC) utilizing the process established in this document. The TIP is adopted by the Executive Board after considering the recommendation of the TAC, and after the public has been provided an opportunity to comment on the draft document. The goal of this process is to achieve a program that takes into account the following factors:

1) consensus regarding the regional priorities of projects; and
2) consensus regarding the application of available Federal funds to the regional priorities.

Following the development and approval of the TIP, projects are selected for implementation in accordance with the project selection procedures identified in section 9 of this document. [23 CFR 450.330]

4. LEAD AGENCIES - PROJECT SPONSORS - MPO

a. Lead Agency Eligibility and Project Sponsorship

The NDDOT, the MNDOT, Grand Forks County, Polk County, the Cities of Grand Forks and East Grand Forks, the Cities Area Transit, public transit operators, Federal or State land management agencies (i.e. National Park Service, U.S. Forest Service, Bureau of Land Management, Department of Natural Resources, etc.), and certain other public authorities and agencies are eligible to propose transportation projects for the TIP. Other entities, such as neighborhood associations, environmental or pedestrian safety organizations, school districts, and beautification committees may also be eligible to propose a transportation project with a governmental jurisdiction acting as fiscal agent. However, all projects proposed for inclusion in the TIP must be supported by the appropriate governmental jurisdiction prior to submission.

All agencies are required to submit projects within the GF/EGF MPO that are anticipated to be funded with Federal dollars as well as state or locally funded regionally significant projects. While there is no limit on the number of project proposals an applicant may submit for consideration, fiscal constraint requirements cause some reality on a limit to project proposals. As long as fiscal ability can be shown, there is not a limit on project proposals.

b. Lead Agency - Project Sponsor Responsibilities

Project sponsors (lead agencies) have a number of responsibilities once a project has been programmed. These include completing the project or project phase in a timely manner to assure that programmed funds can be accessed, project-level public involvement, meeting project eligibility requirements, keeping commitments made during the project development and programming process, and notifying the GF/EGF MPO staff when the project will not meet program funding deadlines.

When a proposed project is programmed in the TIP, the project sponsor makes a commitment to complete it as defined in the project proposal. Substantive amendments to the scope of the project or the project cost as originally submitted could cause the project to be reevaluated. This could cause the project to be reduced in priority and thus lose the programmed funds.

Lead agencies are responsible for ensuring timely completion of the project as described in the project proposal for the programmed project funds. To access the programmed funds for a project, sponsors must meet all Federal requirements. Sponsors should work with the GF/EGF MPO, NDDOT, MNDOT, FHWA, FTA or other Federal funding agency to ensure that Federal requirements are met in a time frame that will assure programmed funds can be authorized. The GF/EGF MPO acts as a resource to member governments to facilitate the project development process. If projects are unable to proceed to funding obligation according to the schedule

outlined in the TIP, this information should be brought to the attention of the GF/EGF MPO staff at the earliest opportunity.

Lead agencies must submit a written request for all TIP revisions. Revision requests will be reviewed by the GF/EGF MPO staff to determine whether they will be processed as Amendments or Administrative Modifications. Funds programmed for a project are committed to the project for a lead agency when the FHWA obligates the funds or the FTA awards a grant. If the project is not able to be completed, or if funds already programmed become available for any reason, the funds will be reprogrammed through the TIP development/revision process.

In summary, the key responsibilities of lead agencies are:

- Provide complete information for project proposals.
- Provide periodic updated project information as requested by the MPO.
- Meet all deadlines established by these procedures.
- Obtain necessary environmental clearances and meet the requirements of the National Environmental Policy Act (NEPA) and any state and local laws.
- Obtain any necessary permits required for the project.
- Meet any other necessary project development requirements for the project.
- Submit funding applications to the appropriate Federal or State agency.
- Meet any special requirements for the project's fund source(s).
- Provide any data and information requested to demonstrate program eligibility requirements. An agency's lack of providing all the requested data or information may jeopardize the project's programming in the TIP.
- Provide any matching funds required for the project's fund source(s).
- Assure that all of its departments proposing projects meet any approval requirements established by the municipal or tribal government.
- Take all necessary steps to assure that the project is consistent with the regional ITS architecture (if applicable).
- Notify the MPO if there is a change in the scope or termini of the project.
- Notify the MPO if there is a change in the project schedule.
- Notify the MPO if Federal funds cannot be obligated in the Federal fiscal year they are programmed.
- Request TIP revisions in writing in order to assure all necessary information is provided.
- Provide a list of Federal funds obligated during the previous FY, for that lead agency's projects, with date(s) of obligation, amount(s) obligated, and the funding category of the funds obligated.

c. The GF/EGF MPO Responsibilities

The GF/EGF MPO will fulfill the following responsibilities.

- Send notification to all eligible governments and jurisdictions within the

GF/EGF MPO, and other organizations and agencies requesting notification, of the TIP development process.

- The GF/EGF MPO will adhere to the stipulated deadlines.
- Provide lead agencies with assistance in completing the project proposal forms and project revisions.
- Provide lead agencies with electronic files of the approved TIP and approved TIPs following revisions.
- Lead Agency applicants will be given the opportunity to answer questions about their proposals during at least one TAC meeting.
- Maintain on the GF/EGF MPO website:
    - The current, effective TIP updated as necessary;
    - proposed TIP amendments with public comment information;
    - TIP Revision Proposal forms; and
    - TIP Policies and Procedures document.

5. Financial Plan

The TIP shall include a financial plan that demonstrates how the approved TIP can be implemented. The financial plan is the mechanism for demonstrating financial constraint in the TIP. Fiscal constraint is a demonstration that there will be sufficient funds to implement proposed improvements, and to operate and maintain the transportation system, by comparing costs with available financial resources. Each year of the TIP shall be fiscally constrained. The financial plan in the TIP must be consistent with the financial plan in the MTP.

As part of the TIP Financial Plan, estimates of available funds will be developed in accordance with Federal regulations. [23 CFR 450.324(h)] The GF/EGF MPO, the NDDOT, the MNDOT and public transit operators will cooperatively develop estimates of funds that are "reasonably expected to be available" [23 CFR 450.326(j)] for the TIP from all fund sources. The following definitions established by Federal regulations shall be used. [23 CFR 450.104]

> ***Available funds*** *means funds derived from an existing fund source dedicated to or historically used for transportation purposes. For Federal funds, authorized and/or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered "available". A similar approach may be used for State and local funds that are dedicated to or historically used for transportation purposes.*
>
> ***Committed funds*** *means funds that have been dedicated or obligated for transportation purposes. For State funds that are not dedicated to transportation purposes, only those funds over which the Governor has control may be considered "committed." Approval of a TIP by a Governor is considered a commitment of those funds over which the Governor has control. For local funds or private sources of funds not dedicated to or historically used for transportation purposes (including donations of property), a commitment in writing (e.g. letter of intent) by the responsible official or body having control of the funds may be considered a commitment. For projects involving 49 U.S.C. 5339 funding, execution of a Full Funding Grant Agreement (or equivalent) or a Project Construction Grant Agreement with the USDOT shall be considered a multi-year commitment of Federal funds.*

Only projects for which funds can reasonably be expected to be available may be included in the TIP. In the case of new funding sources, strategies for ensuring their availability shall be identified. For purpose of transportation operations and maintenance, the financial plan shall contain a system-level estimate of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain federal aid highways and transit. The TIP will use the ratio of federal aid miles to all miles of roadway to determine the operation and maintenance costs for each City and State DOT.

The TIP shall use an inflation rate(s) to reflect "year of expenditure" (YOE) [23 CFR 450.326 (j)], based upon reasonable financial principles and information, developed cooperatively by the MPO, State(s) and transit operator(s). The YOE should be consistent with the

YOE used in the financial plan for the MTP.

The estimates shall be distributed to the TAC and Executive Board. These estimates may be revised during the project evaluation and refinement process of TIP development, based on updated information. Development of accurate funding estimates is critical to the completion of a TIP that can be effectively implemented.

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 [23 CFR 450.326 (j)]. 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. Federal-aid highways are essentially the streets within the metro area that are functionally classified. So a very small percentage of the total street system needs to be included in these O&M financial summaries.

After a TIP has been approved and determined to be fiscally constrained, the TIP financial plan needs to be amended if a revenue source is subsequently removed or substantially reduced. The original determination of fiscal constraint will not be withdrawn; however, no amendment nor update to the TIP will be considered by FHWA or FTA until the financial plan is modified to reflect the changed revenue situation.

6. PROGRAMMING INFORMATION

a. Federally Funded Projects Programmed in the TIP

[23 CFR 450.326]

Federally funded projects within the GF/EGF MPO and utilizing FHWA or FTA administered funds must be programmed in the TIP. This includes but is not limited to the following Federal funding sources [23 CFR 450.326(e)] identified in the matrix on the next four pages.

The GF/EGF MPO requests that all member agencies coordinate with MPO staff for initial consultation at the onset of project planning to determine whether a project must be incorporated into the TIP.

1. Regionally Significant Projects Programmed in the TIP

Regionally significant projects within the GF/EGF MPA must be included in the TIP in accordance with current Federal planning regulations. There are generally two types of regionally significant projects. The first are projects, regardless of funding source, that require action by FHWA or FTA [23 CFR 450.326(f)]. These projects will be processed as regular TIP projects are processed and included in the TIP Financial Plan.

The second types of project are those that are funded with federal funds other than those administered by FHWA or FTA, as well as all regionally significant projects to be funded with non-Federal funds [23 CFR 450.326(f)]. These projects are for information purposes only and are included to assist the public in knowing what is happening to the transportation system. While included in the TIP for informational purposes only, these projects will be included in the financial plan when determining fiscal constraint.

The transportation planning regulations have a definition of regionally significant projects:

> *"regionally significant project means a transportation project (other than projects that may be grouped in the TIP or exempt projects as defined in EPA's transportation conformity regulation) that is on a facility which serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments, such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area's transportation network. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel."* (23 CFR 450.104.)

Early Consultation to Determine Regional Significance

In order to comply with all the Federal regulations, the GF/EGF MPO requests that all member agencies coordinate with MPO staff for initial consultation at the onset of project planning to determine whether a project is regionally significant. The following types of projects may be regionally significant and should be discussed with the GF/EGF MPO staff:

North Dakota Federal Aid Program Responsibility Matrix

Fund Source		Maximum % Federal Share (sliding scale may vary percentages)	%Matching Share (sliding scale may vary percentages)	Program Responsibility (Solicitation, Prioritization), 23 CFR 450.314(a); 23 CFR 450.330(a)	State Administrating Agency (Local Govt, Planning, Operations, Etc)	Federal Administrating Agency
FTA 5307-Urbanized Areas Formula Grants		50% on operations; can fund the first 10% of ADA paratransit operations at 80%; 83% on rolling stock that is CAA and ADA; 80% on all other capital. 80% on planning and mobility management	50% operations; 20% on the first 10% of ADA paratransit; 17% on rolling stock that is CAA and ADA compliant; 20% on planning and mobility management	Public Transit Operator submits projects to the MPO as part of TIP solicitiation process. Public Transit Opeartor, in cooperation with MPO and NDDOT, makes project selection through the TIP development process. Public Transit Operator and MPO coordinate the development of the Program of Projects (POP) where relevant; MPO comments on POP in MPO areas where POP is not satisfied through TIP process.	Local Government	FTA
FTA 5339-Bus & Bus Facility Grants & Capital Assistance		83% on rolling stock that is CAA and ADA compliant; 80% on all other capital	17% on rolling stock that is CAA and ADA compliant; 20% on all other capital purchases	NDDOT and MPO annually solicits projects from transit providers from throughout the State of North Dakota. For transit operators which provide service within or adjacent to a Metropolitna area, follow the MPO regarding TIP development.	Local Government	FTA
FTA 5310-Elderly & Person with Disabilities		80%	20%	NDDOT and MPO annually solicits projects from transit providers from throughout the State of North Dakota. For transit operators which provide service within or adjacent to a Metropolitna area, follow the MPO regarding TIP developmentwhich includes coordination with other public transit operators in the MPO area.	Local Government	FTA
FTA 5311-Rural		50% on operations; 80% on capital	50% on operations; 20% on capital	NDDOT and MPO annually solicits projects from Section 5311 providers from throughout the State of North Dakota. For transit operators which provide service within or adjacent to a Metropolitna area, follow the MPO regarding TIP developmentwhich includes coordination with other public transit operators in the MPO area.	Local Government	FTA
Interstate Maintenance Program		Varies by projects - Refer to page 38 of NDDOT Local Government Manual.	Varies by projects - Refer to page 38 of NDDOT Local Government Manual.	The Maintenance type projects follow the solicitation process similar to the Regional Road Program. For expansion type projects, the NDDOT uses the Urban Interstate Priorities Process	Programming & Local Government	FHWA
Urban Roads Local Program		80.93%	19.07%; or 100% above project cap	MPO solicits projects within the MPO area. MPO develops a prioritized list of projects through the "3C" process and submits to NDDOT Local Government. The candidate project list is developed annually through the TIP/STIP development process and is provided to the MPO for comment at the "candidate project" TIP stage. NDDOT submits to MPO a draft program prior to review/approval by NDDOT Managment.NDDOT makes final project prioritization in cooperation with the MPO.	Programming & Local Government	FHWA

North Dakota Federal Aid Program Responsibility Matrix

Fund Source		Maximum % Federal Share (sliding scale may vary percentages)	%Matching Share (sliding scale may vary percentages)	Program Responsibility (Solicitation, Prioritization), 23 CFR 450.314(a); 23 CFR 450.330(a)	State Administrating Agency (Local Govt, Planning, Operations, Etc)	Federal Administrating Agency
Urban Roads Regional Program		80.93%	NDDOT pays 9.07% local match on secondary regional, locals pay 10%; NDDOT pays 19.07% local match on primary regional. Variations do apply, please refer to page 41 of NDDOT Local Government Manual.	MPO solicits projects within the MPO area. MPO develops a prioritized list of projects through the "3C" process and submits to NDDOT Local Government. The candidate project list is developed annually through the TIP/STIP development process and is provided to the MPO for comment at the "candidate project" TIP stage. NDDOT submits to MPO a draft program prior to review/approval by NDDOT Managment.NDDOT makes final project prioritization in cooperation with the MPO.	Programming & Local Government	FHWA
Highway Safety Improvement Program (HSIP)		Varies by projects - Refer to page 45 of NDDOT Local Government Manual.	Varies by projects - Refer to page 45 of NDDOT Local Government Manual.	MPO will annually solicit for HSIP projects within the MPO area using NDDOT guidelines. A prioritized list of projects will be forwarded to the NDDOT Traffic Operations Section for evaluation and statewide ranking. NDDOT is responsible for final project selection in cooperation with the MPO.	Programming & Local Government	FHWA
State Highways - Rural Program		80.93%	NDDOT pays 19.07% local match	MPO solicits projects within the MPO area. MPO develops a prioritized list of projects through the "3C" process and submits to NDDOT Local Government. The candidate project list is developed annually through the TIP/STIP development process and is provided to the MPO for comment at the "candidate project" TIP stage. NDDOT submits to MPO a draft program prior to review/approval by NDDOT Managment.NDDOT makes final project prioritization in cooperation with the MPO.	Programming	FHWA
Bridge Program - mainly rural areas and "off system" bridges		Varies by projects - Refer to page 44 of NDDOT Local Government Manual.	Varies by projects - Refer to page 44 of NDDOT Local Government Manual.	MPO solicits projects within the MPO area. MPO develops a prioritized list of projects through the "3C" process and submits to NDDOT Local Government. The candidate project list is developed annually through the TIP/STIP development process and is provided to the MPO for comment at the "candidate project" TIP stage. NDDOT submits to MPO a draft program prior to review/approval by NDDOT Managment.NDDOT makes final project prioritization in cooperation with the MPO.	Bridge & Local Government	FHWA
Urban Grant Program		80.93%	19.07%; or 100% above project cap	MPO solicits projects from within the MPO area in cooperation with the NDDOT. The MPO develops a prioritized list of projects and makes final prioritization of projects in cooperation with NDDOT.	Local Government	FHWA
County Road Program		80.93%	19.07%; or 100% above project cap	MPO solicits projects from the County which would be within the MPO area and develops a prioritized list of projects. MPO makes final prioritization of projects in cooperation with NDDOT.	Local Government	FHWA

North Dakota Federal Aid Program Responsibility Matrix

Fund Source		Maximum % Federal Share (sliding scale may vary percentages)	%Matching Share (sliding scale may vary percentages)	Program Responsibility (Solicitation, Prioritization), 23 CFR 450.314(a); 23 CFR 450.330(a)	State Administrating Agency (Local Govt, Planning, Operations, Etc)	Federal Administrating Agency
Transportation Alternatives Program (TAP)		80%	20%; or 100% above project cap	This combines the SAFETEA-LU TE and SR2S Programs. MPO solicits projects (using NDDOT guidelines) within the MPO area. MPO ranks and prioritizes projects and submits to NDDOT. NDDOT makes project selection. NDDOT submits to MPO a draft program. NDDOT makes final project prioritization in cooperation with the MPO.	Local Government	FHWA
Recreational Trails		80%	20%	MPO solicits projects (using Rec Trails application) within the MPO area. MPO ranks and prioritizes projects and submits to ND Parks and Recreation. ND Parks and Recreation makes project selection in cooperation with the MPO. ND Parks and Rec submits to MPO a draft program prior to review/approval by ND Parks and Rec Managment. ND Parks and Rec makes project Prioritization in cooperation with the MPO.	ND Parks and Recreation	FHWA

Minnesota Federal Aid Program Responsibility Matrix

Fund Source	% Federal Share (sliding scale may vary percentages)	%Matching Share (sliding scale may vary percentages)	Est. Avail. of Funding for Current FY, 23 CFR 450.324(h)	Program Responsibility (Solicitation, Prioritization), 23 CFR 450.314(a); 23 CFR 450.330(a)	~~Project Selection Responsibility from year-two, three, or four of an approved Metropolitan TIP, 23 CFR 450.330(b)~~	State Administrating Agency (Office of Transportation Management, Transit and Active Transportation, Etc)	Federal Administrating Agency
FTA 5307-Urbanized Areas Formula Grants	***50% on operations; can fund the first 10% of ADA paratransit operations at 80%; 83% on rolling stock that is CAA and ADA; 80% on all other capital. 80% on planning and mobility management***	***50% operations; 20% on the first 10% of ADA paratransit; 17% on rolling stock that is CAA and ADA compliant; 20% on planning and mobility management***	Meeting held annually at start of TIP/ATIP process between MPO and transit operator to determine funding levels for upcoming solicitation.	Public Transit Operator submits projects to the MPO as part of TIP solicitiation process. Public Transit Opeartor, in cooperation with MPO and MnDOT Transit, makes project prioritization though the TIP development process. Public Transit Operator and MPO coordinate the development of the Program of Projects (POP) where relevant; MPO comments on POP in MPO areas where POP is not satisfied through TIP process.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Transit Section	FTA Denver
FTA 5339-Bus & Bus Facility Grants & Capital Assistance	***83% on rolling stock that is CAA and ADA compliant; 80% on all other capital***	***17% on rolling stock that is CAA and ADA compliant; 20% on all other capital purchases***	??	Not aware of how this system works	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Transit Section	FTA Chicago
FTA 5310-Elderly & Person with Disabilities	***80%***	***20%***	??	Not aware of how this system works	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Transit Section	FTA Chicago
Flexed STP Transit	80% on capital	20% on capital	??	Not aware of how this system works	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Transit Section	FTA/FHWA
State Transit	80% on capital 100% on operations	20% on capital 0% on operations	??	Not aware of how this system works	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Transit Section	FTA Denver
District Risk Management Program	80.00%	20% funded by state	Meeting held annually at start of TIP/ATIP process between MPO and MnDOT District 2 to determine funding levels for upcoming solicitation.	MPO solicits projects within the MPO area. MPO develops a prioritized list of projects in cooperation with MnDOT (District 2) and submits to MnDOT District 2 ATP. The candidate project list is developed annually through the TIP/ATIP development process and is provided to the MPO for comment at the "candidate project" TIP stage. MnDOTDistrict 2 ATP submits to MPO a draft program prior to review/approval by MnDOT Managment. MnDOT makes final project prioritization in cooperation with the MPO.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2	FHWA
County Off-System Bridge Sub-Target	80%	20%; or 100% above available funding apportionment	Meeting held annually at start of TIP/ATIP process between MPO and MnDOT District 2 to determine funding levels for upcoming solicitation.	MPO will annually solicit for County on-system and off-system projects (based on a list of eligible structures, as provied by MnDOT District 2) with in the MPO area. Projects will be forwarded to MnDOT District 2 ATP. MnDOT makes final project prioritization in cooperation with the MPO.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2 -	FHWA
Highway Safety Improvement Program (HSIP)	90%	10%	Solicitation announcement posted online by September outlines local/trunk highway HSIP by ATP for up to five years out	MnDOT OTE solicits for projects annually with applications due end of November. Both trunk highway projects and local projects have separate solicitations. MPO provides review of any applications received within MPA to confirm the project aligns with long-range plans. MPO does not play active scoring roll on selection committee at this time. Projects are scored based on impact to fataland serious injury crashes with an emphasis on low-cost, systematic planning.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Office of Traffic Engineering	FHWA
Statewide Performance Program	80.00%	20% funded by state	Meeting held annually at start of TIP/ATIP process between MPO and MnDOT District 2 to determine funding levels for upcoming solicitation.	MPO solicits projects within the MPO area. MPO develops a prioritized list of projects in cooperation with MnDOT (District 2) and submits to MnDOT District 2 ATP. The candidate project list is developed annually through the TIP/ATIP development process and is provided to the MPO for comment at the "candidate project" TIP stage. MnDOTDistrict 2 ATP submits to MPO a draft program prior to review/approval by MnDOT Managment. MnDOT makes final project prioritization in cooperation with the MPO.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2	FHWA

Minnesota Federal Aid Program Responsibility Matrix							
Fund Source	% Federal Share (sliding scale may vary percentages)	%Matching Share (sliding scale may vary percentages)	Est. Avail. of Funding for Current FY, 23 CFR 450.324(h)	Program Responsibility (Solicitation, Prioritization), 23 CFR 450.314(a); 23 CFR 450.330(a)	~~Project Selection Responsibility from year-two, three, or four of an approved Metropolitan TIP, 23 CFR 450.330(b)~~	State Administrating Agency (Office of Transportation Management, Transit and Active Transportation, Etc)	Federal Administrating Agency
Cities (>5000) Sub- Target	80.00%	20%; or 100% above available funding apportionment	Meeting held annually at start of TIP/ATIP process between MPO and MnDOT District 2 to determine funding levels for upcoming solicitation.	MPO solicits projects from within the MPO area in cooperation with the MNDOT District 2. The MPO develops a prioritized list of projects and makes final prioritization of projects in cooperation with MnDOT District 2 ATP.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2	FHWA
County Roads Sub- Target	80.00%	20%; or 100% above available funding apportionment	Meeting held annually at start of TIP/ATIP process between MPO and MnDOT District 2 to determine funding levels for upcoming solicitation.	MPO solicits projects from the County which would be within the MPO area and develops a prioritized list of projects. MPO makes final prioritization of projects in cooperation with MnDOT District 2 ATP.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2	FHWA
Transportation Alternatives	80%	20%	Meeting held annually at start of TIP/ATIP process between MPO and MnDOT District 2 to determine funding levels for upcoming solicitation.	MPO solicits projects (using MnDOT District 2 ATP application) within the MPO area. MPO ranks and prioritizes projects and submits to MnDOT District 2 ATP. MnDOT District 2 ATP makes project prioritization in cooperation with the MPO.	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2	FHWA
National Freight Program	80%	20%	Solicitations held approximatelyevery 2 years. MnDOT Office of Freightand Commercial Vehicle Operations publishes an announcement when funding is available	MnDOT solicits projects within Minnesota when funding is made available. Selected projects are funded with federal freight funds and are amended into the State Freight Plan. A statewide freight investment committee with representation from MnDOT, greater Minnesota cities, MPOs, RDOs and the MFAC is assembled to rank and score projects		MnDOT Office of Freight and Commercial Vehicle Operations.	FHWA
SRTS (Safe Routes to School Program)	***0%***	80% State 20% local		Not aware of how this system works	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT Safety Division	FHWA
Rail Safety	80%	20%		Not aware of how this system works	~~Cooperative TIP amendment/revision procedures that allow for process outlined in 23 CFR 450.330 (b)~~	MnDOT District 2 & MnDOT Rail Safety Division	FHWA

TYPE #1 Projects subject to full TIP procedures including financial plan;

- all projects requiring an action by FHWA or FTA regardless of funding source on existing roadways that are functionally classified as *urban collector(MN side splits into major collector and minor collector)* or *rural major collector* and above that add capacity or provide other operational improvements (i.e., traffic signals, round-a-bouts, ITS, etc.), such as;
  - new interchanges on an Interstate highway [23 CFR 450.326(f)];
  - projects on National Highway System;
  - NEPA documents for transportation projects.

TYPE #2 Projects for informational purposes (but still included in financial plan);

- all projects on existing roadways that are functionally classified as *urban collector* or *rural major collector* and above that add capacity or provide other operational improvements (i.e., traffic signals, round-a-bouts, ITS, etc.) ;
- new structures that will provide newly created connectivity across a physical barrier (ex. bridges across a river, highway, railroad track, drainage channel, etc.);
- Federally funded transportation projects not funded under 23 U.S.C. or 49 U.S.C. Chapter 53 [23 CFR 450.324(f)];
  Examples: Community Development Block Grant (CDBG) funds improving sidewalks and curb ramps and Department of Energy (DOE) funds purchasing traffic signal equipment
- projects on a facility that provides access to and from the area outside the Federal urban Aid Boundary (see map in Appendix I) and are included in the modeling of the metropolitan area's transportation network;
- projects on facilities serving major activity centers and major planned developments (ex. malls, sports complexes, large employment centers, transportation terminals) and are included in the modeling of the metropolitan area's transportation network; and

Coordination on these projects has the added benefit of allowing the GF/EGF MPO to update regional land use and transportation models used to support local agency planning.

b. Projects NOT Programmed in the TIP

[23 CFR 450.326(e)(1-7)]

The following projects do not need to be programmed in the TIP:

- Emergency relief projects resulting from either a federally declared emergency or state declared emergency (except those involving substantial functional, locational, or capacity changes)
- Those projects described in the Federal regulations involving metropolitan planning, state planning and research, national planning and research, and project management oversight unless these are funded through certain types of funding, such as STP or FTA 5307 programs
- Federal transportation funds not utilized for surface transportation (ex. Federal Aviation Administration funds not involving road improvements)

7. TIP PROJECT LEVEL DEVELOPMENT

a. TIP Project Information Required

[23 CFR 450.326(g)]

For each project in the TIP, sufficient information must be provided to:

- identify each project: type of project, scope, termini, length, route number, and other basic project location information;
- identify the project development phase(s) for which funding is requested to be programmed (environmental/NEPA document preparation, preliminary engineering, design, right-of-way, construction, other);
- estimated total project cost (which may extend beyond the time period of the TIP) from all fund sources, Federal and non-Federal;
- amounts of federal, state and local funds proposed to be obligated for each project phase during the program period in each fiscal year;
- designate the requested type of Federal funds to be used by the project;
- identify the source for any applicable matching funds;
- indicate the source of the cost estimate (ex. scoping document, design report, etc.);
- indicate how year of expenditure (YOE) inflation is being considered in the development of cost estimates beyond the first fiscal year of the TIP if different than MPO suggested YOE;
- identify the lead agency responsible for project implementation;
- identify a lead agency contact person who can answer questions
- indicate whether the project has any ITS elements, and if so, that it is consistent with the regional ITS architecture; and

- Projects submitted for inclusion in the TIP must be consistent with the current, approved MTP. [23 CFR 450.324(i)]

- The TIP shall include a project, or phase of a project, only if full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project.

- Only projects for which funds can reasonably be expected to be available may be included in the TIP. [23 CFR 450.326(j)]

- Projects submitted must also meet any eligibility requirements outlined in Federal regulations and any requirements necessary to secure the proposed funding source(s).

8. TIP DEVELOPMENT PROCESS

a. Process Overview

Currently, a new TIP is developed every year. The GF/EGF MPO has the responsibility to initiate each new TIP cycle. Generally, this cycle begins in August with approval from the Executive Board of the TIP. The TIP is then given final approval from the FHWA and FTA. Appendix III establishes a generic *TIP Development Schedule*. During the annual TIP development cycle, revisions are made to the TIP schedule.

The GF/EGF MPO will drive project solicitation and prioritization. Project solicitation will be based on a GF/EGF MPO application developed cooperatively through the metropolitan planning process that allows projects to be locally evaluated by the Technical Advisory Committee (TAC) and prioritized by the GF/EGF MPO Executive Policy Board. This will typically occur in December/January. Prioritized projects will be added to the TIP as "candidate projects." The GF/EGF MPO staff is responsible for developing the TIP,

Once MPO Staff has developed the draft TIP, it is submitted to the TAC for their review, comments and recommendations. Public review will also occur prior to and including the TAC meeting. TAC actions will be taken based on group consensus, unless timely decisions cannot be made, at which time a majority vote of members will be required. Nonvoting advisory members will be encouraged to attend all meetings and provide full input to TAC discussions.

The recommended TIP is submitted to the Executive Board for approval. Upon completion of the GF/EGF MPO prioritization process; applications will be forwarded to each respective State Agency for additional review and vetting, as per normal procedures. The GF/EGF MPO will make final project prioritization in cooperation with each respective State Agency based on the estimated availability of federal funds. This is a two step process. First a draft TIP is prepared for public comment, typically in April. A final TIP is prepared for public comment, typically in August. Following Executive Board approval, the TIP is forwarded to each respective State Agency for approval, and inclusion, without modification, into their Statewide Transportation Improvement Program (STIP). On the Minnesota side, the TIP is given to the District 2 ATP for first inclusion into their ATIP, and then it is forwarded for inclusion in their STIP. The STIPs (with the TIP incorporated) are then submitted to the FHWA and FTA for approval [23 CFR 450.328(b)]

b. TIP Development Milestones

Step 1. Review TIP Development Process

Action 1-a. August or September – The GF/EGF MPO Staff Presents an Overview of the TIP Development Process to the TAC and Executive Board. GF/EGF MPO staff will review the TIP development process with appropriate groups.

Step 2. Determine Existing TIP Projects' Status

Before new projects are considered, existing TIP projects will be evaluated and summarized to assure that TAC members have the information necessary for assessing how new projects will complement or supplement the previously approved program of projects.

All project sponsors are required to provide accurate updates for all projects in the current TIP approximately thirty (30) days prior to the beginning of the TIP development process. This information will provide the basis for identifying programmed projects, which are not anticipated to be able to access the funds at the time they are currently programmed. It will also be used to identify projects, which will be identified as "carry-over projects" and will not be required to compete for funding in the new TIP.

If a project is included in the currently adopted TIP, but has experienced significant changes in project scope or funding, a new project proposal may be required. This decision will be made by the GF/EGF MPO staff prior to the TAC discussion and identification of carry-over projects. The thresholds for "significance" will be the same as those used to determine whether a TIP amendment would have been required if the change had occurred during the TIP program period (see criteria in Section #12).

Action 2-a. August – The GF/EGF MPO Distributes Existing Project Status Update Sheets

These are distributed to all lead agencies for existing TIP projects in August. Lead agencies provide updated project information. In particular, whether the project's existing funding schedule has/will be met and whether current fiscal year Federal funds have been obligated or will be obligated by September 30th. In addition to the annual development of the TIP, this report will be distributed every year to update project information and determine what project funding will be "rolled-over" into the next fiscal year. Return date will be in mid-September.

Action 2-b. September – The GF/EGF MPO Prepares Existing Projects Status Report

This information is analyzed by the GF/EGF MPO staff who will prepare an Existing Projects Status Report for presentation at the October TAC & Executive Board meetings.

Step 3. Issue Call for Project Proposals

Action 3-a. Mid-September – The GF/EGF MPO Staff Distributes "Call for Proposals" packet

The GF/EGF MPO will mail a "Call for Proposals" packet to each jurisdiction in the GF/EGF MPO to the jurisdiction's TAC member, notifying them of the opportunity to submit project proposals. The packet will include all necessary forms, deadlines and schedules. Packets will also be mailed to other agencies that are eligible to sponsor Federal-aid transportation projects, such as the NDDOT, the MNDOT, public transit operators, city engineering staffs, Federal land management agencies, and to private citizens or private sector organizations that have requested TIP notification. Copies will be provided at the same time to all TAC members.

Action 3-b. Mid-Sept. thru Mid-Nov. - Lead Agencies Prepare Project Proposals

Agencies/project sponsors shall have at least sixty (60) days to complete and submit project proposals.

Lead agencies may request additional funds for carry-over projects. However, these requests must be submitted during the project proposal step and the projects will be evaluated in relation to the new project proposals.

New projects that are the result of a TIP-funded study will be subjected to the same evaluation process and criteria as other new project proposals. Study recommendations will not be automatically funded for implementation.

The GF/EGF MPO staff will provide assistance in completing project proposals when requested.

Action 3-c. Early December – Deadline for Submission of Project Proposals

The period for receiving project proposals will end at 12:00 p.m. on the date of the deadline, approximately sixty (60) days from the date of the Call for Proposals. Project proposals must be received at the GF/EGF MPO offices or postmarked by that time. Any project proposals received after that date will be marked "late" and may not be considered. There is a possibility that they will be deferred until the next TIP cycle if significantly late.

Action 3-d. First Two Weeks of December – Initial Screening the GF/EGF MPO Staff Review of Proposals

GF/EGF MPO staff will review all project proposals for completeness and clarity. Staff will communicate with the designated project contact person should questions or issues need to be addressed. Any project proposal that remains incomplete or has unresolved issues after this review period may not be considered and could be deferred until the next TIP cycle.

Initial Screening – Each project must meet certain minimum requirements. These screening criteria (see Section 9) are posed as "yes/no/not applicable" questions

and no points are assigned. A “no” answer precludes the project from further consideration.

Step 4. Establish Funding Estimates

As part of the TIP Financial Plan, estimates of available funds will be developed in accordance with Federal regulations. [23 CFR 450.326(j)] The GF/EGF MPO, the NDDOT, the MNDOT and public transit operators will cooperatively develop estimates of funds that are “reasonably expected to be available” for the TIP from all fund sources. [23 CFR 450.326(j)]

The estimates shall be distributed to the TAC and Executive Board. These estimates may be revised during the project evaluation and refinement process of TIP development, based on updated information. Development of accurate funding estimates is critical to the completion of a TIP that can be effectively implemented.

Action 4-a. September to December –The GF/EGF MPO Staff, The NDDOT, The MNDOT & Public Transit Operators Meeting

On or before September 1st the GF/EGF MPO, the NDDOT, the MNDOT, and public transit operators will meet and cooperatively develop estimates of funds that are “reasonably expected to be available” for the TIP from all fund sources. [23 CFR 450.326(j)]

Step 5. Evaluation of Projects

For all proposed projects meeting the “initial screening” criteria, further evaluation shall be performed.

- The MPO staff shall distribute to TAC members copies of all project proposals submitted (those meeting initial screening criteria) by the various agencies proposing projects including any supporting documents, and make them available for public review and comment.
- Agencies proposing projects will be allowed to make a brief presentation on their set of proposed projects to the TAC. Agencies wishing to make a presentation should notify the GF/EGF MPO Executive Director at least 10 days prior to the December TAC meeting. The TAC and/or Executive Director of the MPO shall discuss the relative merits of all project proposals. As well, the TAC members may request that the GF/EGF MPO staff provides quantitative analyses of like projects to assist in the programming and prioritization of projects.

Please refer to Section 9 and Appendix IV for the Project Scoring Criteria, which parallels this step.

Representatives from agencies proposing projects are strongly encouraged to attend

these TAC meetings and be prepared to answer these and other questions regarding their proposals.

Step 6. Prepare 1st Draft TIP

The TAC will program proposed projects to form the first draft TIP. Using the project application and completed scoring sheets, the TAC will attempt to fund all projects with available resources by funding category, in accordance with Federal and state eligibility requirements. All projects programmed must be consistent with the current MTP or the MTP being developed concurrently with the TIP.

Step 7. Analyze & Refine Draft TIP and Prepare Final Draft TIP

After a 1st draft TIP has been developed, the GF/EGF MPO staff will analyze the draft TIP to determine whether it conforms to air quality requirements, plans and regulations, environmental justice, and financial constraint.

The results of each analysis and any recommended revisions, along with the impacts of the proposed revisions, will be provided to the TAC for their consideration. Refinements to the draft TIP will be made as appropriate. If refinements are made, the GF/EGF MPO staff will complete additional analyses as appropriate to assure that these Federal requirements and local goals have been met.

Action 7-a. End of March/April – Prepare Final Draft TIP

Based on any refinements needed, the GF/EGF MPO staff shall prepare the Final Draft TIP.

Step 8. Committee Review & Recommendations

The Final Draft TIP will be presented to the TAC for their recommendations to the Executive Board. The Final Draft TIP will also be sent to the MNDOT District 2 ATP for their review, comment, and inclusion in their ATIP. Concurrently, the Final Draft TIP will be provided to the NDDOT and the MNDOT for inclusion, in its entirety, in their Draft Statewide Transportation Improvement Programs (STIPs). Following this work, the document will be released for formal public review.

Action 8-a. March – TAC Meeting(s)

On or before April 30th, the TAC shall make a recommendation to the Executive Board based on its review of, and any comments submitted by affected government agencies and other parties on the Final Draft TIP.

Step 9. Public Involvement

The GF/EGF MPO undergoes a continuous outreach process. Projects for the TIP are recommended by local governments, the GF/EGF MPO, the NDDOT, and the MNDOT. Primary programming concerns at the TIP development level are related to addressing regional issues, the establishment of project priorities, and the assurance that projects are consistent with the MTP.

Action 9-a. Local Public Involvement

Citizen input should be accomplished at the earliest point in time when the sponsoring agency approves a list for projects to be submitted to the GF/EGF MPO for funding. The project sponsor is responsible for providing appropriate citizen involvement at this level. Each local government has its own public involvement process for transportation issues. Since local governments submit projects to the GF/EGF MPO for review and inclusion in the GF/EGF MPO TIP, members of the public should take advantage of opportunities to provide input at the local level.

Action 9-b. Committee Updates & Public Information Meetings

Status reports will be provided to the TAC and Executive Board at each of their meetings throughout the entire TIP development process, generally from September through June every Federal fiscal year. In addition to the formal public review period, selected meetings will be utilized to encourage earlier public involvement by the MPO. Selected meetings will be advertised as public information meetings and TIP information will be presented and comments will be received. These may be in conjunction with public information meetings for the developing MTP.

Action 9-c. March & April – Formal Public Review

The GF/EGF MPO will also provide an opportunity for public review of the draft TIP. The draft TIP will be released for public review and comment for at least ten (10) days. Copies of the document(s), along with a comment form will be distributed to various agencies and locations and posted on the MPO website (www.theforksmpo.org). Details about the GF/EGF MPO's public involvement efforts can be found in *Public Participation Plan for the Grand Forks/East Grand Forks Metropolitan Planning Organization*

The GF/EGF MPO staff will review all comments and make any necessary recommendations regarding appropriate ways to address concerns that have been raised. Comments received will be summarized and/or distributed to the Executive Board. Finally, time will be allotted at that Executive Board meeting for public comment on the TIP. Each member of the public who comments on the draft TIP and provides their name and address or an email address, will receive a written or email response describing how the Executive Board responded to their input.

Step 10. July/August – MPO Approval of the TIP

Action 10-a. April – Approval by the GF/EGF MPO Executive Policy Board

The Executive Board of the GF/EGF MPO shall vote on approval of the Transportation Improvement Program (and any concurrently developed amendment to the existing TIP) for the GF/EGF MPO. (Should the Executive Board not approve the TIP or delay action on the TIP, the GF/EGF MPO staff shall proceed as directed by the Executive Board)

Action 10-b. July/August – Send Approved TIP to the NDDOT and the MNDOT

Following the vote to approve the TIP, the MPO staff will incorporate any final revisions made by the Executive Board and formally send the approved TIP to the North Dakota Department of Transportation, the Minnesota Department of Transportation, and the MNDOT District 2 ATP planner, with a request to forward the document for approval by each Governor's designee and incorporation into their Statewide Transportation Improvement Programs (STIPs).

Step 11. June – August – State Actions (NDDOT is the *Lead State Agency* and the timelines reflect ND schedules. MN typically month or two later)

Action 11-a. July/August – Incorporation of the TIP into the STIP

Following approval by the NDDOT and the MNDOT, the NDDOT and the MNDOT shall, by reference or inclusion, incorporate the GF/EGF MPO TIP into the STIP without modification [23 CFR 450.216(b) & 450.326(b)]. (Should either State Governor's designee not approve the TIP or delay action on the TIP, the GF/EGF MPO staff shall confer with respective State DOT staff.)

Action 11-b. July/August – Send Approved TIP/STIP to FHWA and FTA

Both the NDDOT and the MNDOT shall be responsible to inform the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) that the TIP has been approved. The Federal Highway Administration and the Federal Transit Administration review and approve the TIP as part of its inclusion in the respective STIPs.

Step 12. August/September – Review by the FHWA and FTA

Upon receipt of the STIP (which will have the TIP incorporated into it either directly or by reference) the FHWA and FTA shall review the TIP as noted in Federal regulations [23 CFR 450.328]. The FHWA and FTA shall review the process to assure that *"the TIP is consistent with the MTP produced by the continuing and comprehensive transportation process carried on cooperatively by the GF/EGF MPO, the State, and public transportation operators in accordance with 23 U.S.C. 134 and 49 U.S.C. 5303. This finding shall be based on the self-certification statement submitted by the State and the GF/EGF MPO under 23 CFR 450.336, a review of the MTP by the FHWA and FTA, and upon other reviews as deemed necessary by the FHWA and the FTA."*

Action 12-a. August/September (approx.) – Approval by FHWA and FTA

Both agencies will send the NDDOT and the MNDOT their results of their review.

Action 12-b. August/September (approx.) – Notification from the DOTs of FHWA & FTA Decisions

The NDDOT and the MNDOT shall notify the GF/EGF MPO of the decisions made by the FHWA and FTA.

Step 13. October 1st – Effective Date of the "New" TIP

The TIP, after approval by the Executive Board, the Governor's designee, the FHWA, and the FTA becomes effective at the beginning of the new Federal Fiscal Year on October 1st.

Action 13-a. October 1st – Distribution of the New TIP

MPO staff will make any necessary changes to the TIP data base to reflect the approved new TIP and distribute the TIP and post it on the MPO website.

9. TIP PROJECT PRIORITIZATION and SELECTION for IMPLEMENTATION

Project Screening

Each project must meet certain minimum requirements. These screening criteria are posed as “yes/no/not applicable” questions and no points are assigned. A “no” answer precludes the project from further consideration.

Is the proposed project consistent with the MTP (current MTP or the draft MTP under development) in terms of scope, termini, and timing?

Does the proposed project include a reasonable cost estimate and a funding plan?

Is the proposed project eligible for the requested Federal aid program?

If the proposed project is in the first four years of the TIP (Federal TIP) can the project meet NEPA, design, right-of-way and/or construction letting milestones within the TIP time frame?

Will the completed project comply with ADA requirements?

Will the project comply with Title VI and environmental justice requirements?

Project Prioritization

As a management tool for monitoring progress in implementing the MPO’s MTP [23 CFR 450.324 (n)], the MPO staff will evaluate, based upon established criteria, each project’s ability to fulfill the goals of the MPO’s MTP. The criteria (see Appendix IV) provide a series of yes/no questions which indicate how the proposed project will incorporate the goals of the MPO’s MTP.

Each funding program has individualized criteria but each has a total scoring value of 100 points. The criteria are essentially the same for each program; however, the criteria are weighted differently to ensure the individual program has the appropriate focus for that program. While all funding programs support the multi-modalism of the MTP, a classic example of the weighting system is: the transportation enhancement program is weighted more towards providing non-motorized transportation than another program that is more focus on motorized traffic while programs which traditionally focus on motorized transportation receives additional points by providing facilities or improvements to the non-motorized transportation. Ideally, projects being programmed into the TIP will receive a score of 60 or above to support the multi-modalism of the MTP.

Agencies are encouraged to use the evaluation system while they are preparing their projects for submission as a checklist to ensure their projects are fulfilling the goals of the MTP. Evaluation considerations shall include, but are not limited to:

- Support the economic vitality through enhancing the economic competitiveness of the metropolitan area by giving people access to jobs, education services as well as giving business access to markets.
- Increase security of the transportation system for motorized and non-motorized uses.
- Increase the accessibility and mobility options to people and freight by providing more transportation choices.
- Protect and enhance the environment, promote energy conservation, and improve quality of life by valuing the unique qualities of all communities - whether urban, suburban, or rural.
- Enhance the integration and connectivity of the transportation system, across and between modes for people and freight, and housing, particularly affordable housing located close to transit.
- Promote efficient system management and operation by increasing collaboration among federal, state, local government to better target investments and improve accountability.
- Emphasize the preservation of the existing transportation system by first targeting federal funds towards existing infrastructure to spur revitalization, promote urban landscapes and protect rural landscapes.
- Increase safety of the transportation system for motorized and non-motorized uses.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- Enhance travel and tourism.
- Factors of local or regional importance.

Project Selection

Selection of projects for implementation from the list of projects in the approved TIP is necessary to decide which projects actually receive funding in any particular fiscal year. It is recognized that even with the best design and scheduling efforts, projects may not be ready to receive funding for a particular phase or a jurisdiction's shifting priorities may require one project to be advanced over another.

Most projects shall be selected by the NDDOT and the MNDOT, in cooperation with the GF/EGF MPO. For transit project selection, the NDDOT and the MNDOT, along with the transit operators, will work cooperatively with the GF/EGF MPO. During project selection, all agencies, working cooperatively, will compare these projects to others in the same funding category based on the criteria listed in the Project Selection Criteria section.

Federal Regulations provide a definition of project selection [23 CFR 450.104]:

> "**Project Selection** means the procedures followed by MPOs, States, and public transportation operators to advance projects from the first four years of an approved

TIP and/or STIP to implementation."

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a. Project Selection and the Four-Year TIP

[23 CFR 450.332(a)]

1. Projects In the 1st Year of the TIP

In accordance with Federal regulation the first year of the TIP shall constitute an "agreed to" list of projects for project selection purposes. Therefore, any project in the first year of the TIP is automatically considered "selected" and no further action is needed. During development of the TIP, projects to be included in the first year of the TIP shall be selected based on the criteria noted in the Project Selection Criteria section.

2. Projects In the 2nd, 3rd, and 4th Years of the TIP [23 CFR 450.332(a)]

In accordance with Federal regulation, projects in any of the years of the TIP may be advanced in place of another project. To proceed with any project in the 2nd, 3rd, or 4th year of the TIP, specific project selection procedures must be followed. Project selection must be undertaken for several reasons. With time, the 2nd year of the TIP becomes the new current fiscal year, and some projects in the outer years are ready to be advanced, and some projects in the current fiscal year of a TIP are delayed resulting in "rolled-over" funds. As a result, project selection becomes a necessity for managing the TIP and maintaining fiscal constraint. Projects to be selected from the 2nd, 3rd, and 4th year of the TIP shall be selected based on the criteria noted in the Project Selection Criteria section.

b. Project Selection Criteria

These criteria will serve as guidance to the GF/EGF MPO and lead agencies for selecting projects for inclusion into the first year of the TIP. These criteria shall also apply to selecting projects for inclusion in the 2nd, 3rd, and 4th years of the TIP to serve as a prioritized list of projects to advance as necessary. Projects will be selected from those already programmed in the TIP. Newly proposed projects may be considered, provided they are consistent with the MTP, meet all other TIP project requirements and are process through the TIP revision process.)

a. is it likely that the funds programmed for the project will be

obligated/awarded by the end of the FY?

b. Will any necessary State/local agreement be approved in time?
c. Will design/development of the project be at a stage to allow the next funding to be obligated?
d. Will the procurement process (ex. vehicle purchases) be at a stage to allow for the funding to be acquired?
e. Will all local government approvals be received to allow for the obligation/award of the funds?

10. TIP Performance Measures Discussion

The TIP shall be designed such that once implemented, it makes progress toward achieving the performance targets established under 23 USC 450.306(d). [23 CFR 450.326(b)] The TIP shall include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets. [23 CFR 450.326(d)]. The metropolitan transportation plan also identifies additional performance measures and targets beyond the federally required ones. The discussion in the TIP should reflect those performances as well.

a. Introduction

The introductory paragraph(s) should include a broad discussion of the performance measures, including a brief discussion of how applicable MPO plans support achievement of the targets. This discussion provides a link between short-term management (TIP)and long-range decisions (MTP) about policies and investments that the MPO makes for its transportation system.

MAP-21 and FAST place increased emphasis on performance management within the Federal-aid highway program Federal transit program, including development of national performance measures to be used by State DOTs and MPOs in setting targets.

Specifically, they are as follows:

- ***National Performance Management Measures for the Highway Safety Improvement Program*** (23 CFR 490, Subpart B)
- ***National Performance Management Measures for Assessing Pavement Condition*** (23 CFR 490, Subpart C)
- ***National Performance Management Measures for Assessing Bridge Condition*** (23 CFR 490, Subpart D)
- ***National Performance Management Measures to Assess Performance of the National Highway System*** (23 CFR 490, Subpart E)
- ***National Performance Management Measures to Assess Freight Movement on the Interstate System*** (23 CFR 490, Subpart F)
- ***Transit Asset Management*** (49 CFR 625)
- ***Transit Safety*** (49 CFR 673) (not due to be set until October 2020)

b. Anticipated Effect

The ultimate connection between the TIP and the performance measures is analyzing how the TIP impacts progress towards the targets. The intent of the discussion is not to focus on project by project examination of its individual affect. Rather, it is to take a holistic approach to look at the TIP projects in groups and how collectively they achieve progress towards targets.

The following information shall be discussed:

- What is the anticipated effect of the TIP with respect to performance target categories?
- How will this year's TIP help the MPO, State DOTs and transit providers achieve, or make progress toward achieving, the performance targets?
- Are targets the MPOs set themselves? If so, greater discussion is needed.
- Are targets the MPOs will be supporting State DOTs? If so, less discussion is needed, but this discussion should focus on efforts in MPO Study Area.

The TIP shall note any areas of concern, either within or beyond the MPO's control, that could hinder target achievement. This could include staffing levels, data gaps, MPO influence, local priorities, or otherwise.

c. MPO Investment Priorities

In setting targets, the MPO must make decisions the prioritizes projects by inserting the projects into the TIP. These investments should be initially identified in the MTP and the TIP should carry forward the projects meeting these investment priorities; and, thus achieving progress towards performance targets.

The following information shall be discussed:

- Has the MPO adopted a strategy to meet the performance targets?
    - Is it working?
    - How has that strategy shifted (or not shifted) over time?
- Is there currently enough revenue to meet the performance targets? If not, will investment priorities need to be reevaluated?
- What, if anything, is the MPO doing beyond federal funds to support the targets?

d. **Conclusion**

The TIP discussion should have a concluding paragraph(s) that provides information on:

- Are there any major takeaways the MPO has gathered working with the performance measures?

- What is the MPO's intended direction forward? What is working overall, and what may need reexamination?

Note - after several TIPs, the discussion should shift to how the projects programmed in previous TIPs "moved the needle". Earlier TIPs will focus less on this due to data lag.

11. TIP MANAGEMENT and INTERIM TIP YEARS

A new TIP is developed every year. Both NDDOT and MNDOT have established checklists (see Appendix V) for the MPO to use and submit. The checklists provide a quick summary of the key requirements of the TIP document and process. A completed checklist will ensure the MPO TIP is compliant with the requirements of 23 CFR 450.326.

As projects develop, they may experience delays or advancement which require changes in the TIP. In addition, the TIP must be fiscally constrained for each of the fiscal years of the TIP. This requires the TIP to be managed, and revised accordingly.

a. Project Status Update

Prior to the December deadline for submission of TIP project proposals, lead agencies shall provide the GF/EGF MPO with an assessment of the status of those projects in the current TIP. In early September of each year a status report will be provided by each lead agency. Failure by a lead agency to provide this information may jeopardize the priority of their project(s) in the TIP.

The following information shall be provided:

- Do the funds programmed in the current fiscal year of the TIP have a reasonable expectation of being obligated or secured (based on the "project readiness" criteria)?
- Does the project's total programmed funding...
  - ...meet the total estimated project cost?
  - ...significantly exceed the total estimated project costs?
  - ...fall significantly short of the total estimated project costs?
- How is any shortfall of programmed funds being addressed?
- Are there any other project situations that affect timing, amount, or category of the programmed funds?
- Have the project's scope and termini changed from what is noted in the TIP?
- A status report on Federal funding for each project including
  - ...What amount of Federal funding has been obligated in this FY?
  - ...What amount of Federal funding is expected to be obligated in this FY?
  - ...What is the date(s) of obligation?
  - ...What funding category(ies) was obligated?
  - ...How much was not obligated and needs to "roll-over" into the next FY?

Based on the information provided and other information, the TIP will be revised, if necessary, according to procedures for TIP Revisions.

12. TIP REVISIONS

All projects or particular phase of the project included in the adopted TIP will be programmed to the amount needed to complete the project or phase and in a time frame that allows all project requirements to be met by the obligation authorization deadline. Unfortunately, project costs may rise or fall as a result of forces outside the project sponsor's control. In the same way, projects may not be able to be completed in the time frame originally estimated. For these and other reasons, sponsors may find it necessary to request revisions to the adopted TIP.

According to Federal regulations [23 CFR § 450.328] TIP *Revisions* are changes made to a TIP; these are further classified into two categories:

- TIP *Amendments* are major revisions which require official approval by the Executive Board. This is followed by submission to either the NDDOT or the MNDOT for approval, and then for subsequent approval by the FHWA and FTA.
- TIP *Administrative Modifications* are minor revisions, which can simply be made by the GF/EGF MPO staff after proper notification and verification that the change(s) falls into this category.

a. Criteria Differentiating TIP Amendments and TIP Administrative Modifications

Amendments are required for:

- addition or deletion of any project (except as noted in the *Administrative Modifications* section below);
- substantial changes to the scope of a project (e.g. changing the number of through traffic lanes, changing the type of project such as from rehabilitation to reconstruction);
- changes in the availability (adding or deleting funds by Congressional action) of earmarked (special appropriation) funds;
- moving a project into or out of the TIP;
- changes in a project's total programmed amount greater than 25%;
- changes in a project's fund source(s) from non-Federal to Federal and changes in a project's fund source(s) from Federal to non-Federal (the disposition of the "freed-up" Federal funds needs to be addressed as it impacts the TIP Financial Plan) ; and
- changes in the termini of a project.

Administrative Modifications can be made for:

- any revisions that do not meet the Amendment criteria listed above, such examples as:
    - changes in a project's programmed amount less than 25%;
    - minor changes to the scope of a project;
    - adding or deleting a project development phase of a project (Env. Doc, PE, Design, ROW, Constr. or Other) without major changes to the scope to the project;

- minor changes to funding sources of a project in the TIP;
- changing a project's lead agency when agreed upon by the two agencies affected.
- changes made to an existing project's amount of local or state **non-matching funds provided** no other funding, scoping or termini changes are being made to the project;

b. When can revisions be made to the TIP

TIP revisions can be made at any time throughout the TIP process. Each State DOT has allowed revisions to be presented to them for consideration at any time. The MPO has monthly meetings that allow revisions to be made during these monthly meetings.

For all TIP Amendments the opportunity for public participation will be provided in accordance with *Public Participation Plan for the Grand Forks/East Grand Forks Metropolitan Planning Organization*. TIP Amendments will be available for public comment, via a public notice, at least ten (10) days prior to their consideration by the TAC in addition to the time allotted for public comment at the TAC meeting. A public hearing will be held during the TAC.

After approval by the Executive Board, the amendment is forwarded to the District 2 Engineer who forwards it to the MNDOT for approval and inclusion, without modification in their STIP; or to the NDDOT for approval and inclusion, without modification in their STIP. It is then forwarded to FHWA and FTA for approval as well.

For all TIP Administrative Modifications, the opportunity for public participation will be provided in accordance with *Public Participation Plan for the Grand Forks/East Grand Forks Metropolitan Planning Organization*. TIP modifications will be available for public comment at least ten (10) days prior to their consideration by the TAC in addition to the time allotted for public comment at the TAC meeting. No public notice is published; rather, the published agenda and related agenda packet provide the notification to the public.

After approval by the Executive Board, the modification is forwarded to the District 2 Engineer who forwards it to the MNDOT for approval and inclusion, without modification in their STIP; or to the NDDOT for approval and inclusion, without modification in their STIP. It is then forwarded to FHWA and FTA for approval as well.

13. REVISING TIP POLICIES and PROCEDURES

Administrative Changes This document may be revised by GF/EGF MPO staff in order to incorporate changes in Federal legislation and/or regulations. All MPO committees, the Executive Board and all lead agencies shall be notified of such changes with appropriate explanation. Revised documents will be distributed and posted on the GF/EGF MPO website.

Appendices Changes The GF/EGF MPO staff may update the appendices to this document as necessary. All MPO committees, the Executive Board and all lead agencies shall be notified of such changes with appropriate explanation. Revised documents will be distributed and posted on the GF/EGF MPO website.

Substantive Changes All other changes shall be brought before the TAC for their review and recommendations. The Executive Board shall approve all substantive changes. Revised documents will be distributed and posted on the GF/EGF MPO website.

APPENDIX I

GF-EGF Metropolitan Planning Area

Map of MPO Area

APPENDIX II

Map of Federally Eligible Roads

APPENDIX III

PROJECT SCORING SHEETS

APPENDIX IV

TIP CHECKLISTS

Overcoming Barriers **Strengthening Connections**

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

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Ensuring Opportunities **Planning One Community**

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

MPO Staff Report
MPO Technical Advisory Committee: February 12, 2020
MPO Executive Board: February 19, 2020

RECOMMENDED ACTION: Update on FHWA-MN STIP/TIP Coordination Review.

Matter of the FHWA-MN STIP/TIP Coordination Review.

Background: The MPO's TIP Procedural Manual is being updated to reflect current legislation. The legislation may cite one way and yet the local practice is different. Our review and actions on the TIP Procedural Manual should proceed to match the legislation.
FHWA-MN has determined that better coordination is needed between MnDOT and MPOs on the development of the STIP/TIP. With the recent approval of the STIP, FHWA-MN made a "finding" that action needed to take place in this regards.

Recommendations

Recommendation #1: MnDOT Project Coordination with MPOs

Observation: During the past few years, project coordination between MnDOT and the MPOs has undergone noticeable strain. This includes TIP communication and programming issues with Highway Safety Improvement Program (HISP) projects, Rail Grade Safety Program projects, and public transit capital purchases. Additionally, MnDOT STIP development does not correlate well with the respective MPO TIP update cycles, leading to further coordination and programming issues. Finally, there is MPO concern over their ability to influence TIP project programming within their jurisdiction, a primary responsibility for an MPO.

Finding: MnDOT is already considering efforts to improve the issues cited above, and should continue to do so. In concert with these efforts, FHWA will be initiating a Process Review of MnDOT's MPO coordination, with a focus on TIP project programming. Working closely with MnDOT, this review will focus on staff interviews (MnDOT, MPO, and ATPs), TIP programming data collection and analysis, and relevant document evaluation. Detailed recommendations for MnDOT/MPO TIP coordination improvements will be offered in the final report. The review is scheduled for completion in the summer of 2020.

Also attached is a presentation made by FHWA-MN to outline the process that will be done to resolve this finding. As shown, the outcome will be sometime later this year.

With the Public Participation Plan being adopted sooner rather than later (and the PPP identifying the TIP Procedural Manual for specific public participation regarding the TIP), we are advising to proceed with the update to the TIP Procedural Manual yet also informing you that this other review will be taking place. Later this year some revisions to the Manual may result.

ANALYSIS AND FINDINGS OF FACT:

- The MPO must adopt a TIP
- The State inserts the TIP, by reference and without any changes, into the STIP.
- The "3C" planning and programming process requires better coordination.
- FHWA-MN is conduction a STIP/TIP Coordination Review.

SUPPORT MATERIALS:

- STIP/TIP Process Review outline presentation.

FHWA Minnesota Division

MnDOT Project Coordination with MPOs – FHWA Process Review

MPO Director's Meeting

2/4/20

U.S. Department of Transportation
Federal Highway Administration

ANDREW EMANUELE, AICP
Community Planner

FHWA Process Reviews

- Typically one per year
- 2019 Focused on MPO TIP Public Engagement
- At FHWA MN's discretion, but open to ideas

Origin

- 4 Years of MnDOT/MPO Project Coordination Strain
  - HSIP & Rail Grade Safety Programming
  - Public transit capital purchases
  - TIPs not matching STIPs
- Not limited to any MPO/MnDOT District
- STIP Federal Planning Finding

2020 Process Review

- Joint Effort - FHWA/MnDOT
- Purpose:
  - Explore MnDOT/MPO TIP Project Coordination Process/Procedures
  - Understand how MPOs were consulted; determine MPO influence
  - Identify any regulatory and opportunity gaps

Activities

- Guidance/Literature Review
- MPO Questionnaire Distribution
- Interviews
  - MPOs
  - District Planners
  - ATP Staff
  - MnDOT CO Staff

MPO Role

- **MPO Questionnaire**
  - Data-Driven Questions
  - Open-Ended Questions
  - Results Anonymous
  - Indicate willingness for one-on-one conversation with FHWA
- **FHWA MPO Interviews**
  - Phone or In-person
  - Executive Director or Pertinent Staff
- **Provide any other relevant information**

Deliverables (Late Summer 2020)

- High-level summary of process
- Flow chart of MnDOT / MPO project coordination touch points
- Anonymous summary of questionnaire data and interviews (MPOs, Districts, ATPs, CO)
- Determination of effective procedures
- Recommendation for improvement, including timeline

Questions?

Andrew Emanuele, AICP

Community Planner

Federal Highway Administration

Minnesota Division

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651-291-6124

Overcoming Barriers **Strengthening Connections**

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

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Ensuring Opportunities **Planning One Community**

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

MPO Staff Report
MPO TAC: February 12, 2020
MPO Executive Board: February 19, 2020

RECOMMENDED ACTION: Discuss Flood Forecast And Phone Contacts

Matter of Discussion On Flood Forecast And Phone Contacts.

Background: Since the flood event of 1997, a couple of floods caused two of the three bridges to be closed to traffic. The MPO has agreed to have, as an agenda item at TAC meetings, discussion on possible flood caused closures. The intent of this discussion is for the respective agencies to begin preparation, if necessary. A copy of the contact information is attached.

There is chance for a significant flood for our area. Following pages contain info as of January 28th. There are subject to change as weather changes.

Findings and Analysis:

- Phone Contact lists are to be maintained.
- The MPO agreed to have as an agenda item possible closures due to floods.

Support Materials:

- Contact Page

Red River and Devils Lake Basin - 2020 Spring Flood Outlook

Discussion Points 1/23/2020

prepared by

NWS - Weather Forecast Office, Grand Forks ND
NWS - North Central River Forecast Center, Chanhassen MN

This outlook is for the U.S. portion of the basin and is based on conditions through Tuesday, 1/21/2020. All graphics, probabilities, and related discussions are available at **weather.gov/fgf**. The next update will be issued by 2/13/2020.

Bottom Line up Front!

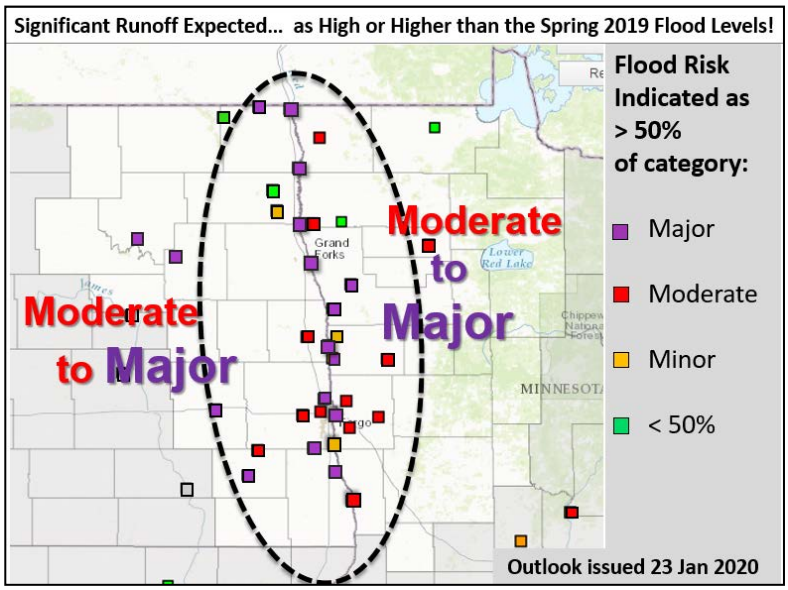
- It's early, but… this outlook starts with a threat for *significant* snowmelt flooding that could meet or exceed the level of flooding seen in 2019.

- Follows record wettest Fall Period, and record fall floods. Excess water remains in soggy soils, high streamflows, and parked water on the landscape.

- Snowfall/SWE at mid-January was near/above long term winter season normal amounts.

- Somewhat less excessively wet and less overall snowpack north of a Devils Lake-Grafton-Roseau line… so somewhat less threat in northern tributaries.

- Frost is less deep than normal, especially in the far southern RRV, so some infiltration may be possible… *if* the thaw cycle allows.



- Climate outlooks currently indicate an increased risk for cooler and wetter late winter early spring period, which increases our risk for rapid and/or rainfall enhanced runoff.

Long Story Short: The risk for significant snowmelt flooding is quite substantial, running above long-term historical averages across the Red River and Devils Lake Basins (U.S. portions).

Key Snowmelt Flood Components:

1. Base Streamflow: At or near record high levels for this time of year. USGS analyses indicate that the Red River and most of its ND and MN tributaries (south of Grafton-Argyle) are moderate-thin ice covered and/or flowing at 95th percentiles or greater [link: https://waterdata.usgs.gov/nwis/rt]. Tributaries north of Grafton-Argyle at 76% to 95%.

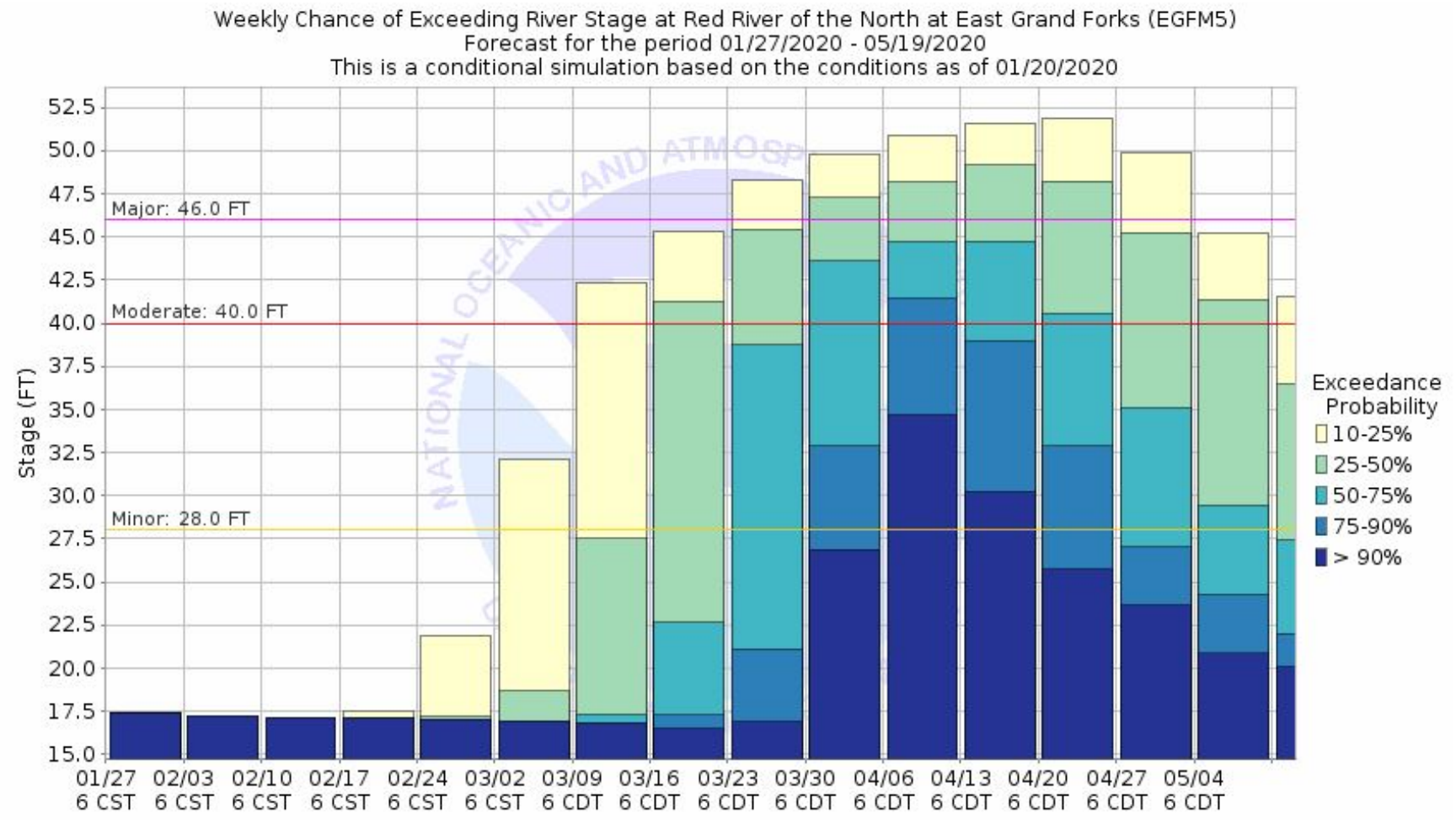
2. Soil Moisture at Freeze-up: Much above normal throughout. Standing water frozen into some ditches. [Link: https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml]

3. Frost Depth: Shallower than normal. Heavy snowcover most of the season has kept frost depth somewhat shallow across the far southern RRV, at 6-12 inches. Frost at most locations north of Fargo is 14 to 30 inches deep. Lake/River ice thicknesses less-than normal and are quite variable. [Link: https://www.weather.gov/ncrfc/LMI_FrostDepthMap]

4. Winter Snowpack/SWE: above normal. Since Dec 1st, snowfall runs from 150-300 percent of normal, SWE ranges from 2.5 to 5.0 inches - least across far northeast ND and far northwest MN. [Link: https://www.nohrsc.noaa.gov/nsa/]

5. **Precipitation, Sep 1st to Jan 21st sets Record High.** Total precipitation (rain and snow-water) measured across the Basin from Sep 1st thru Jan 21st ranged from 4-8 inches above the long-term normal for most of Red River Basin. [Links: https://www.ncdc.noaa.gov/sotc/national/201913; https://water.weather.gov/precip/index.php?location_type=wfo&location_name=FGF]

New! Along with our flood partners, we've developed a display graphic which relates the current flood outlook to our historical flood levels, now available for all our forecast locations! ***Check it out at:*** https://www.weather.gov/fgf/PFOS


Weekly Chance of Exceeding River Stage at Red River of the North at East Grand Forks (EGFM5)
Forecast for the period 01/27/2020 - 05/19/2020
This is a conditional simulation based on the conditions as of 01/20/2020
Stage (FT)
52.5
50.0
47.5
45.0
42.5
40.0
37.5
35.0
32.5
30.0
27.5
25.0
22.5
20.0
17.5
15.0
Major: 46.0 FT
Moderate: 40.0 FT
Minor: 28.0 FT
01/27 6 CST
02/03 6 CST
02/10 6 CST
02/17 6 CST
02/24 6 CST
03/02 6 CST
03/09 6 CDT
03/16 6 CDT
03/23 6 CDT
03/30 6 CDT
04/06 6 CDT
04/13 6 CDT
04/20 6 CDT
04/27 6 CDT
05/04 6 CDT
Exceedance Probability
10-25%
25-50%
50-75%
75-90%
> 90%

DEVILS LAKE & STUMP LAKE...

Long-Range Probabilistic Outlook
Valid January 20, 2020 - September 30, 2020

LOCATION	95%	90%	75%	50%	25%	10%	05%
CREEL BAY	1450.7	1450.8	1451.1	1451.6	1452.2	1452.8	1453.2
EAST STUMP LAKE	1450.7	1450.8	1451.1	1451.6	1452.2	1452.8	1453.2

The current heights of Devils Lake and Stump Lake are ~1449.03 ft. MSL.

Color code: **Below** **Minor** **Moderate** **Major** ***Flood of Record***

RED RIVER AND TRIBUTARIES...

Long-Range Probabilistic Outlook
Valid January 27, 2020 – May 19, 2020

LOCATION	95%	90%	75%	50%	25%	10%	05%
WAHPETON	11.9	12.3	13.1	14.2	15.7	17.4	17.5
HICKSON	26.6	27.6	30.4	32.8	34.7	36.4	36.9
FARGO	27.6	31.9	34.1	35.9	37.6	39.6	40.6
HALSTAD	31.5	36.1	38.0	39.0	39.7	40.2	40.8
GRAND FORKS	43.4	44.6	46.6	48.8	51.2	53.1	55.4
OSLO	36.7	37.0	37.4	37.8	37.9	38.0	38.1
DRAYTON	40.7	41.3	42.4	43.2	44.4	45.1	45.6
PEMBINA	50.0	50.5	52.1	53.0	54.0	54.6	54.9
Minnesota Tributaries:							
South Fork Buffalo River.....							
SABIN	15.0	15.6	16.1	16.8	17.8	18.5	19.7
Buffalo River.....							
HAWLEY	8.5	9.1	9.7	10.2	10.8	11.2	11.9
DILWORTH	20.8	22.0	22.9	23.6	24.7	25.2	26.7
Wild Rice River.....							
TWIN VALLEY	8.8	9.4	10.5	12.0	13.1	14.6	15.2
HENDRUM	28.0	29.8	31.2	32.3	32.8	33.6	34.5
Marsh River.....							
SHELLY	13.2	14.8	17.4	19.2	21.3	22.5	24.0
Sand Hill River.....							
CLIMAX	21.2	24.4	28.2	30.5	33.2	35.5	37.0
Red Lake River.....							
HIGH LANDING	9.7	10.4	11.4	12.8	13.1	13.3	13.5
CROOKSTON	19.3	19.7	21.5	24.0	25.5	28.2	28.5
Snake River.....							
ABOVE WARREN	65.1	65.3	65.5	66.3	67.5	69.8	71.4
ALVARADO	105.9	106.6	107.8	109.2	109.6	110.0	110.9
Two Rivers River.....							
HALLOCK	804.5	805.3	807.0	807.8	808.6	809.7	810.3
Roseau River.....							
ROSEAU	12.7	13.7	14.9	15.6	18.1	18.4	18.8
North Dakota Tributaries:							
Wild Rice River.....							
ABERCROMBIE	16.8	19.3	22.0	24.2	25.7	27.6	28.5
Sheyenne River.....							
VALLEY CITY	13.8	15.3	16.8	19.6	21.8	24.4	27.4
LISBON	14.9	15.6	17.3	19.4	22.8	27.4	30.5
KINDRED	19.6	20.2	20.8	21.2	21.2	21.2	21.2
WEST FARGO DVRSN	19.3	20.9	21.3	21.3	21.3	21.3	21.3
HARWOOD	90.3	91.2	91.6	92.0	92.1	92.2	92.3
Maple River.....							
ENDERLIN	11.0	11.8	12.6	13.1	13.7	14.5	15.0
MAPLETON	21.5	22.1	22.4	22.8	23.3	23.9	24.1
Goose River.....							
HILLSBORO	9.9	11.8	13.2	14.0	14.9	16.0	17.1
Forest River.....							
MINTO	4.6	5.2	5.7	6.7	7.5	9.0	9.2
Park River.....							
GRAFTON*	10.0	10.2	10.8	11.4	13.5	15.3	15.8
Pembina River.....							
WALHALLA	8.9	9.5	10.9	12.1	14.1	15.5	15.8
NECHE	16.4	17.3	19.7	20.9	21.4	21.5	21.6

Notes

1. Devils Lake Basin Runoff Risk is quite high. An additional rise of 2 to 3 feet is expected (75% to 25% risk range). A ½ to 1 ft. rise on Devils Lake is considered about normal.

Note: Devils Lake is currently about a foot higher than this time last year.

2. Red River Basin Runoff Risk is overall quite high. All Red River main-stem points will see significantly high flows.

- heavily influenced by excess flow and soil moisture now.

- coupled with higher winter snowpack and SWE.

- exacerbated by a potentially delayed thaw cycle.

3. Above normal snowpack and runoff potential is evident in most all MN tributaries.

The northern-most tribs have the wettest soils but a somewhat lesser snowpack.

4. ND Wild Rice, Sheyenne, and Maple Rivers are at a much Higher Runoff Risk.

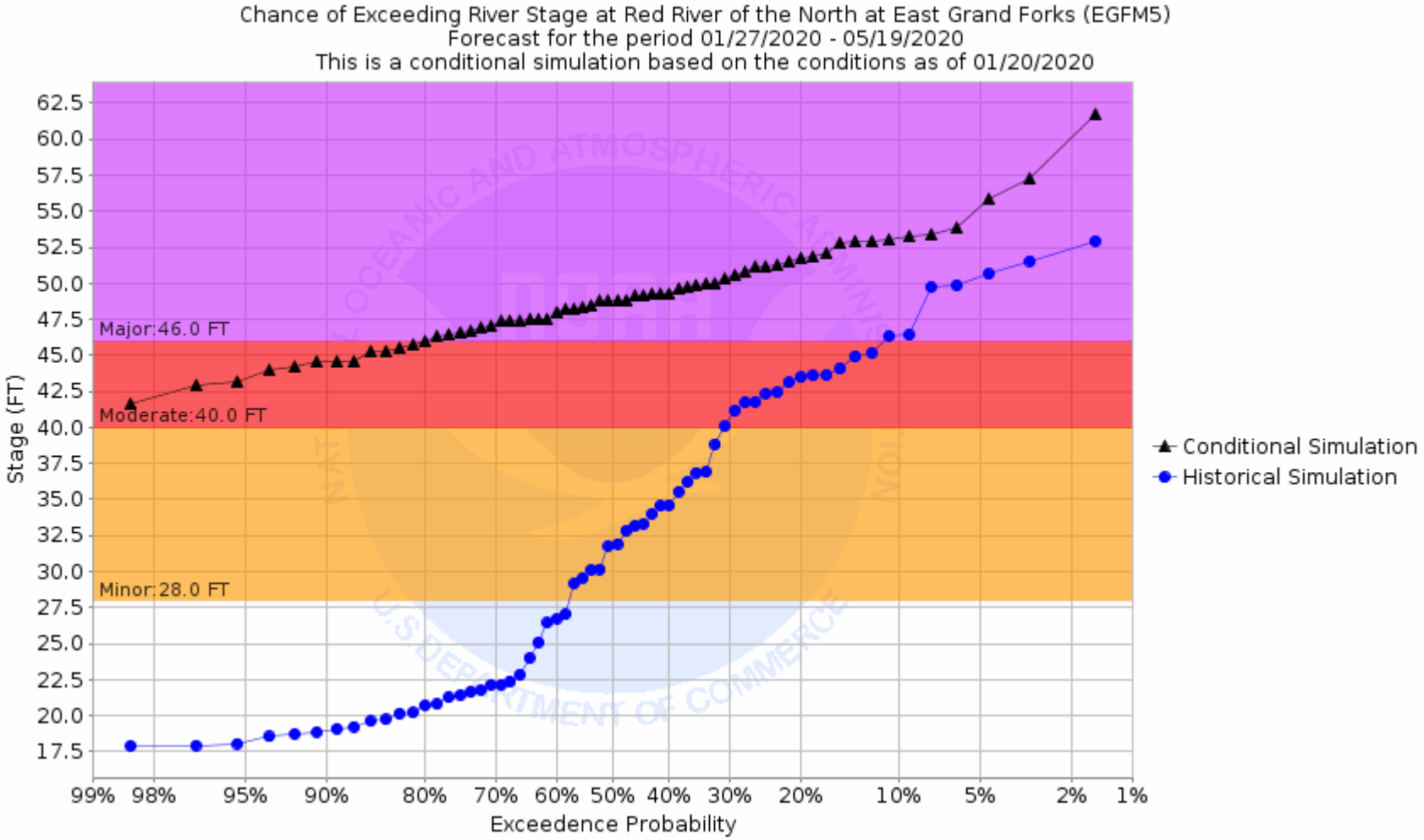
Mid and Upper Sheyenne is carrying substantial soil moisture and snowpack with potential for both early and later crest issues.

Lower Sheyenne through east-central ND tribs are also at an exceptionally elevated risk.

Northeast ND is mixed, with lesser runoff at the upper basins of the Pembina, Forest, and Park Rivers.

Note: Reduced risk expected for areas now protected by new Grafton Bypass!

Red River at Grand Forks-East Grand Forks: Major
(flood wall closures, rail bridge?)



New! Probabilistic Flood Outlook Summary (PFOS)

An *Experimental* Product

***Now* for <u>all</u> Red River mainstem and Tributary locations.**

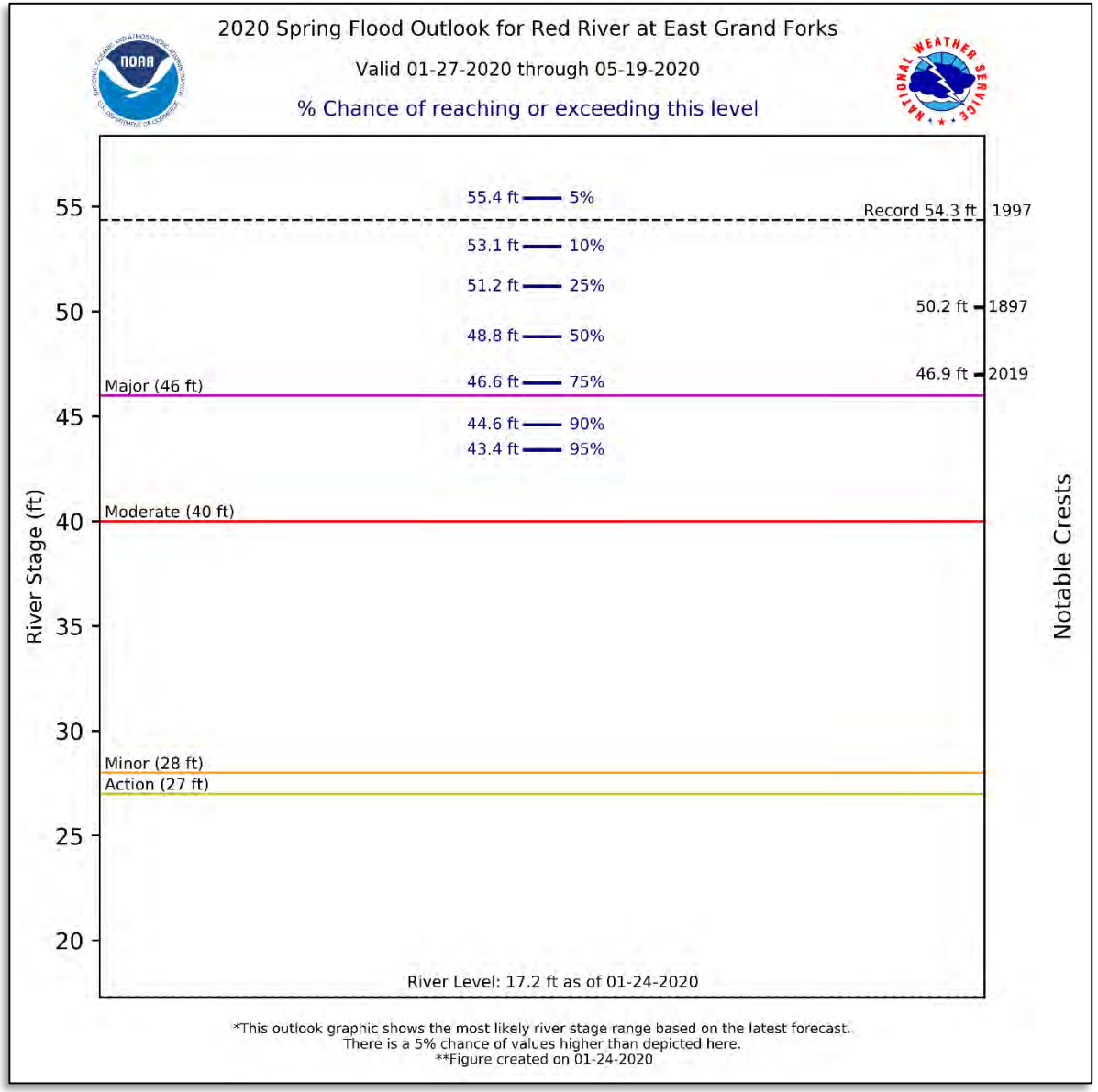
At a Glance,

- relates risk to recent years,

- to flood stages, and

- to floods of record.

Let us know what you think!



https://www.weather.gov/fgf/PFOS

Bridge Closure Contact List

Contact information, including agency, position name, and telephone number is provided below. If changes are required in the future, the appropriate agency should provide the remaining agencies with the updated information, which should include the revision date.

Agency	Telephone Number
City of Grand Forks	
City Engineer	(701) 746-2640
Traffic Engineer	(701) 787-3720
GF City-County Emergency Management	(701) 780-8217
Public Works – Streets	(701) 738-8740
Public Works – 24-Hour Emergency Line	(701) 746-2595
Has cellphone numbers to call	
North Dakota Department Of Transportation	
Grand Forks District Engineer	(701) 787-6500
ND State Radio (Use After Normal Business Hours)	(800) 472-2121
Has cellphone numbers to call	
City of East Grand Forks	
City Emergency Manager	(218) 773-2403
City Engineer	(218) 773-1185
Public Works – Streets	(218) 773-1313
Police Department (Use After Normal Business Hours)	(218) 773-1104
Has cellphone numbers to call	
Minnesota Department Of Transportation	
Mn/DOT District 2 Engineer	(218) 277-7962
Mn/DOT District 2 Traffic Engineer	(218) 755-6574
Mn/DOT District 2 Maintenance Engineer	(218) 755-6519
Mn/DOT District 2 Bridge Engineer	(218) 277-7963
MN State Patrol, Thief River Falls	(218) 681-0943
24-Hour Emergency Line Has cellphone numbers to call	
BNSF Railway	
Grand Forks Terminal Manager	(701) 795-1255 (701) 213-0531 cell
Grand Forks Roadmaster	(320) 444-4150 cell
Grand Forks County	
Grand Forks County Highway Department	(701) 780-8248
After Regular Business Hours Call Central Dispatch Has Cellphone numbers to call	(701) 746-2589
Polk County	
Polk County Dispatch Has Cellphone numbers to call	(218) 281-0431

Revision Date: March 2019

Overcoming Barriers **Strengthening Connections**

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

Grand Forks - East Grand Forks
Metropolitan Planning Organization

Ensuring Opportunities **Planning One Community**

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

MPO Staff Report
MPO Technical Advisory Committee: February 12, 2020
MPO Executive Board: February 19, 2020

RECOMMENDED ACTION: Update on Downtown Transportation Study.

Matter of the Update for Downtown Transportation Study.

Background:

Our Work Program has identified that the MPO will conduct a study of a downtown transportation. Attached is proposed scope of work. The proposed work activity will be to retain a consultant to conduct an analysis of several key elements of downtown transportation. The Study is being coordinated with consultants developing a Grand Forks Downtown Action Plan, a Grand Forks Downtown Parking Plan, Greater Minnesota Mobility Plan and is including elements that cross over into East Grand Forks.

The study will include the coordination/integration with separate planning efforts. Considering impact of infill projects anticipated in the next 5-10 years, considering the DeMers Ave reconstruction project on the North Dakota side not providing capacity for the forecasted traffic (augmented by the decision not to replace the Sorlie Bridge, and MnDOT's Greater Minnesota Mobility Plan identified DeMers Ave as having mobility issues today, the MPO will study downtown traffic flow to include but not be limited to signal coordination on both sides of river; smart transportation technology, promote mode shift, train detection, Kittson and 1st Avenue as diverter to DeMers Ave traffic and the possibility of a downtown bus circulator.

KLJ has been hired and have released an Existing Conditions Report. This report was presented to the Steering Committee in December 2019.

ANALYSIS AND FINDINGS OF FACT:

- The MPO will complete a study on Downtown Transportation
- A Steering Committee will help guide the TAC and MPO Board.
- KLJ iss assist in the Study.
- An Existing Conditions Report has been released and presented to the Steering

Committee.

SUPPORT MATERIALS:

- Draft summary of meeting and presentation.

Overcoming Barriers Strengthening Connections

Grand Forks - East Grand Forks Metropolitan Planning Organization

Ensuring Opportunities Planning One Community

"A community that provides a variety of complementary transportation choices, that are fiscally constrained, for people and goods."

Grand Forks – East Grand Forks Downtown Transportation Study

Date: 12/9/2019
Time: 1:00 PM
Location: East Grand Forks City Hall Training Room – 600 DeMers Avenue
Attendees: Brandon Baumbach, Grand Forks Region EDC; Matt Bonzer, DDA; Dale Helms, East Grand Forks City Council; David Kuharenko, Grand Forks Engineering; Brad Gengler, Grand Forks Planning; Dale Bergman, Cities Area Transit; Jason Peterson, NDDOT Grand Forks; Jane Croeker; Corey Birkholz, Options; Earl Haugen, Forks MPO; Sandy Zimmer, FHWA North Dakota; Wayne Zacher, NDDOT; Nancy Graham, MnDOT; Steve Emery, East Grand Forks Engineering; Bret Weber, Grand Forks City Council; Bethany Brandt, KLJ; Mike Bittner, KLJ

Meeting Minutes

E. Haugen kicked off the meeting with a brief overview of the project. M. Bittner began introductions and explained the role of the Steering Committee. The Steering Committee will review the technical analysis and provide guidance to the study team and recommendations to the MPO's Policy Board.

M. Bittner presented the study area and discussed the purpose of the project to balance the different needs across the two downtowns. The process includes three phases including identifying needs and opportunities, develop and assess improvement strategies, and formulate implementation strategies with steering committee and public input meetings throughout.

M. Bittner then reviewed the previous studies and how they will impact the Downtown Transportation Study. He reviewed the infrastructure investments anticipated through 2045 and noted the opportunities to implement improvements.

Q. S. Emery: Why were 5th, 6th, and 7th Street NW in East Grand Forks ignored for key intersections? E. Haugen noted previous studies didn't identify any issues. M. Bittner added that it does not mean concepts would not be developed for those locations.

M. Bittner began the technical review with the safety analysis. He noted nearly 40 percent of all crashes occur on DeMers Avenue and nearly 40 percent of crashes on 3rd Street involve parked cars.

Q. D. Helms: Does alcohol play a part in crashes downtown? B. Brandt said that while there were a few, there were not enough to indicate a trend.

Q. D. Helms: Do you think some of the rear end crashes have to do with cell phone use? M. Bittner said it's possible but there are a lot of factors that can result in rear-end crashes.

M. Bittner then discussed traffic patterns through downtown, including daily traffic volumes, truck, traffic, and mode choice. He discussed how 87% of trips ending in either downtown were less than one mile, which may encourage people, with the right facilities, to walk, bike, or transit.

Q. J. Peterson: Does the data account for this year's construction season? B. Brandt noted that most of the data was collected before construction began.

M. Bittner then discussed travel time and reliability, noting how the closely spaced signals start to impact travel time.

Q. B. Weber: Is there coordination between signals across MnDOT and NDDOT. E. Haugen said both sides use different signal systems, but MnDOT is going to update their system, so can potentially bridge the gap.

M. Bittner moved the discussion to the pedestrian and bicycle environment. He noted the pedestrian environment is great, but it's challenging to bike around the two downtowns.

Finally, M. Bittner summarized the multimodal operations. He highlighted reliability is a challenge for vehicles on DeMers Avenue, limited bicycle connectivity through downtown for bicycles, and transit access generally requires walking a few blocks.

Q. S. Zimmer: On the pedestrian info, there was a brief discussion about ADA accessibility. Does the multimodal analysis account for ADA? M. Bittner said no. He also noted there's no data on the Grand Forks side. D. Kuharenko noted that recent projects throughout downtown have upgraded ADA.

M. Bittner discussed the final section on the existing conditions for parking conditions, discussing the low occupancy in both Grand Forks and East Grand Forks. He quickly summarized ride-hailing and car services in Grand Forks.

M. Bittner then opened the floor for the Steering Committee to discuss their key issues.

- Several areas where pedestrian and bicycle travel were considered challenging were identified, including a note about few connections between the two downtowns. M. Bittner added the old railroad pier has been previously identied as an opportunity for a pedestrian and bicycle bridge connection in past studies.
- Bike share will be up and running in the spring, which may increase bike traffic.
- Improved coordination across the two states.
- The ramps in downtown are challenging to park in.
- Need for some public education for parking. M. Bittner said can tie in some of the solutions from the Downtown Parking Study. Members of the Steering Committee discussed parking operations and enforcement.

- Can transit service be improved during evening service? D. Bergman noted that they currently only have very few people using the evening bus route.
- The East Grand Forks ADA survey was really thorough. The City of Grand Forks could follow their lead.
- Is a downtown shuttle to/from UND campus feasible?
- More stop signs on the side streets, including more all-way stops, and reducing speed limits.
- The one-way pairs north of the study area in Grand Forks. It seems like the one-way pairs unofficially extend to DeMers Avenue.
- M. Bonzer discussed traffic control at N 3rd Street and 1st Street in Grand Forks and noted that this should be returned to all-way stop control. J. Peterson noted that the City requested that it stay as a two-way stop control. D. Kuharenko said he'd look into this closer.
- D. Kuharenko mentioned that he was interested in ways to reduce crashes such as bump-outs for pedestrians and traffic control.
- Don't make plans for accommodating cars and traffic, because downtowns are multimodal.
- Consider ways to improve driver behavior.
- Once south of US 2 in EGF, there is a lack of facilities to connect to downtown. He also noted that the lack of sidewalks on the North side of the Riverwalk Center was a concern.

M. Bittner then presented some preliminary discussion on future conditions. The discussion included the redevelopment concepts from the Downtown Action Plan and previous concepts developed for East Grand Forks.

- S. Emery: Unlikely the two large parking lots will be redeveloped because they won't want to lose that much parking.
- E. Haugen: There is some interest in the 4th Street NW and DeMers Avenue.
- D. Helms: Does a new bridge change the projections along DeMers Avenue? E. Haugen said recent studies show that another bridge has little effect on DeMers Avenue traffic.

M. Bittner added that forecasts will consider multimodal impacts.

M. Bittner summarized the meeting with the next steps.

Grand Forks-East Grand Forks

Downtown Transportation Study

Steering Committee Meeting #1

December 9, 2019

Overcoming Barriers · Strengthening Connections

Grand Forks - East Grand Forks Metropolitan Planning Organization

Ensuring Opportunities · Planning One Community

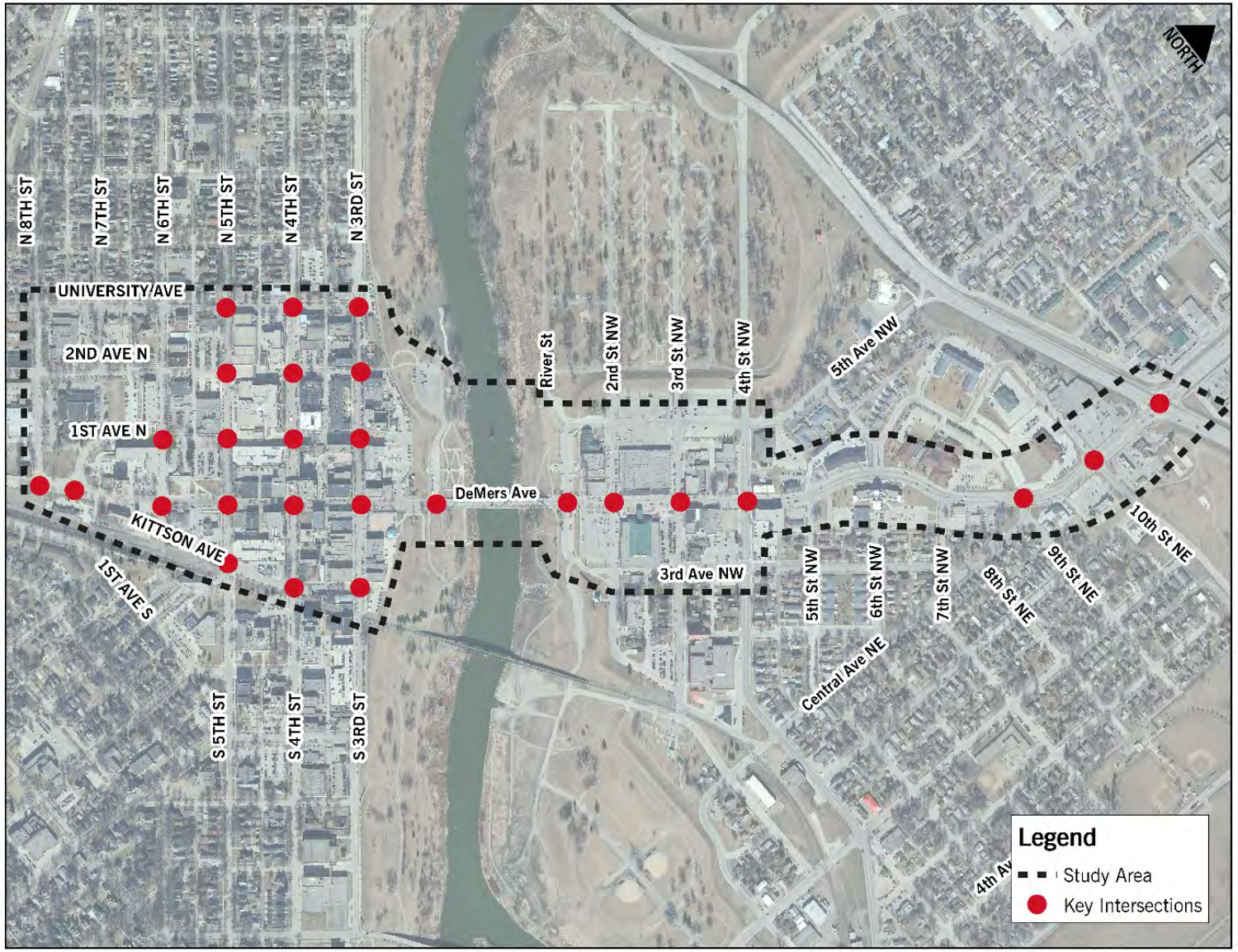
KLJ

ENGINEERING, REIMAGINED

Background

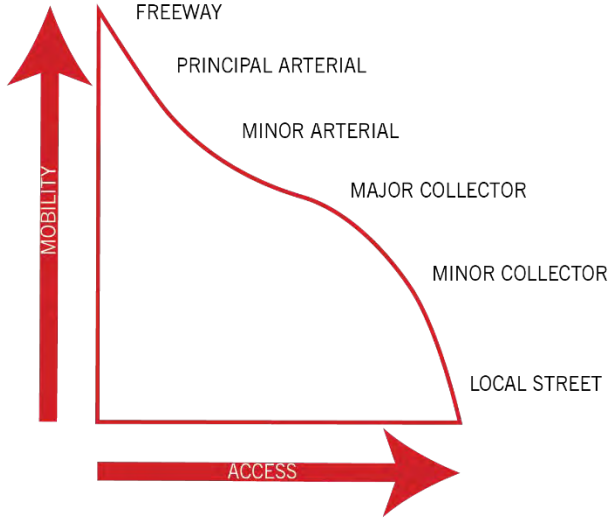
Study Area and Purpose

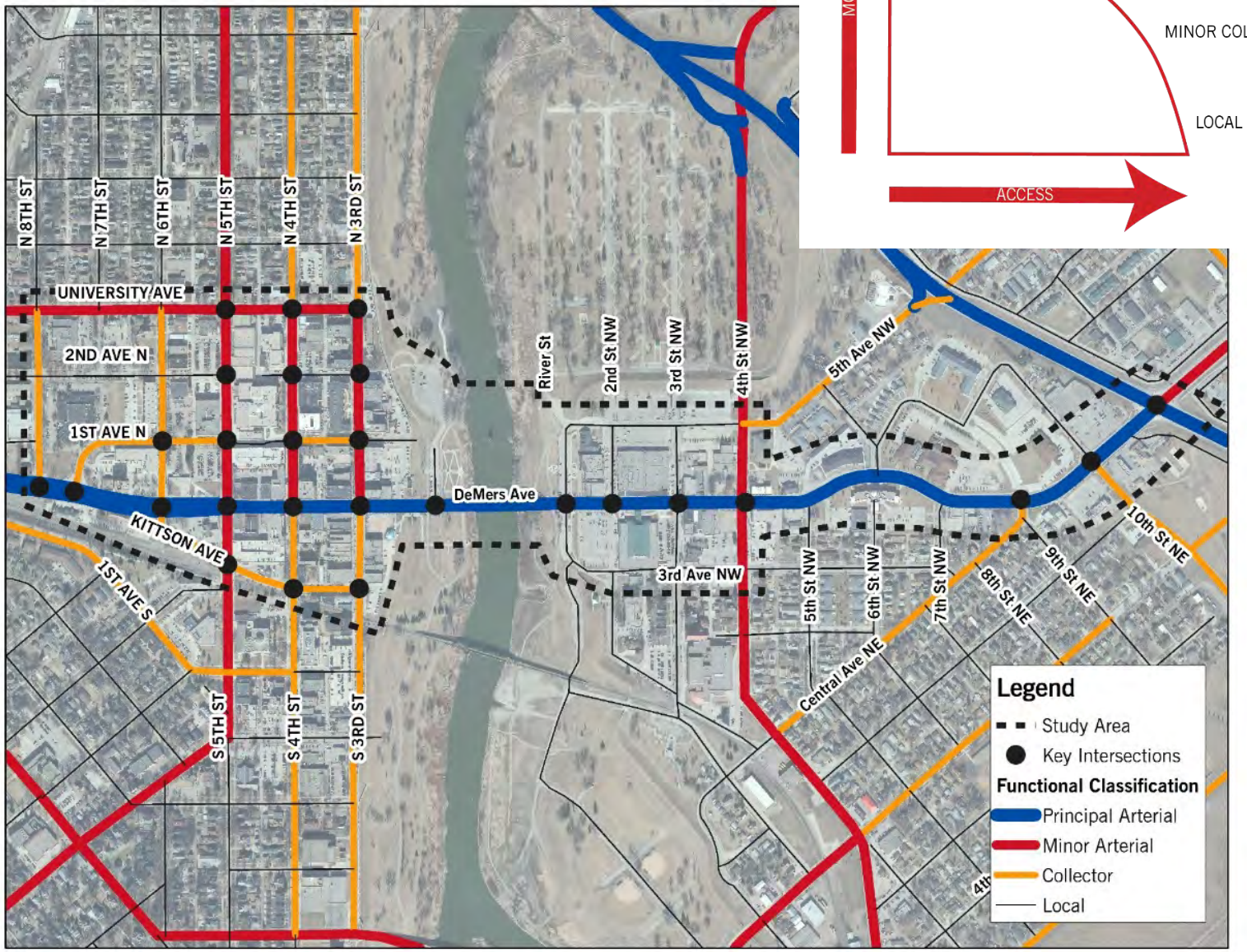
- Balance
  - Downtown Business Traffic and Parking
  - Regional Traffic and Trucks on DeMers Avenue
  - Transit
  - Bicycles
  - Pedestrians
  - Taxis and Ride-Hailing



Study Area and Purpose

- Balance
  - Livability and Downtown Growth
  - Functionality of DeMers and Red River Crossings



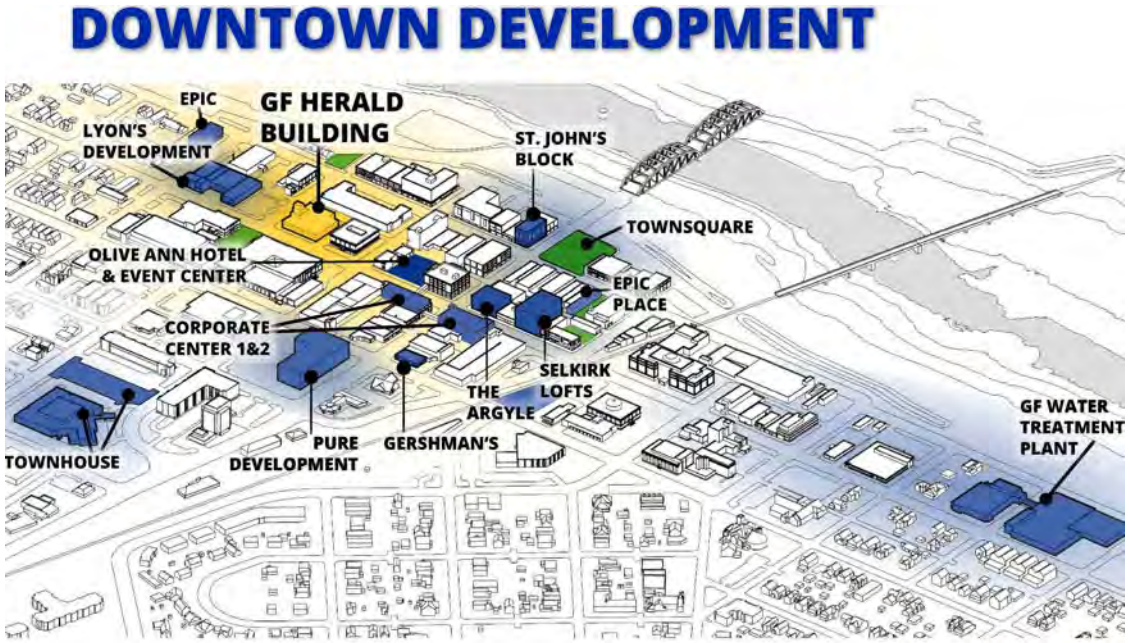


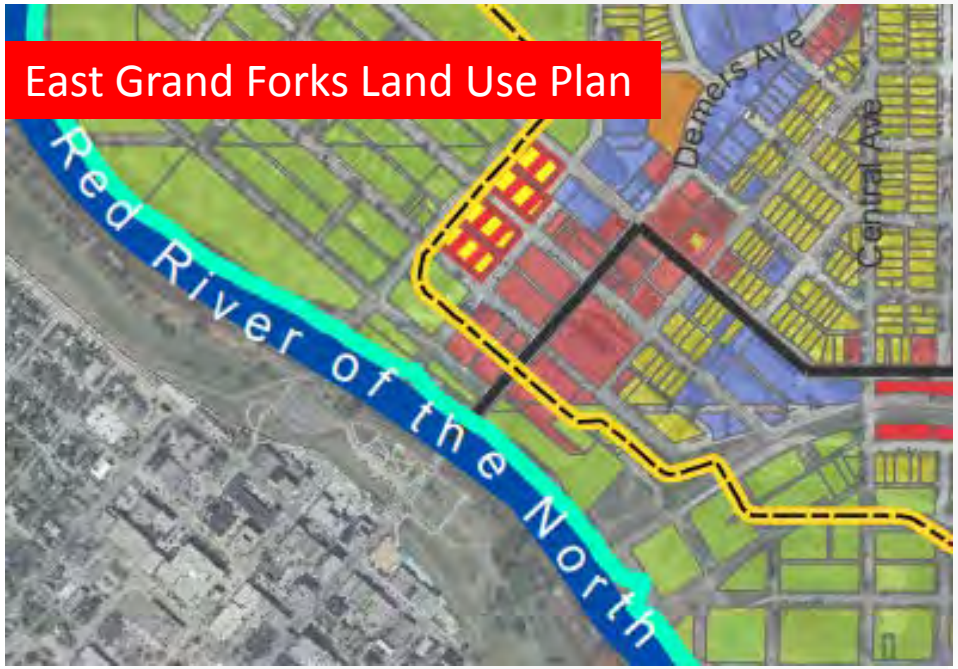
Process

SCM – Steering Committee Meeting
PIM – Public Input Meeting

Previous Studies

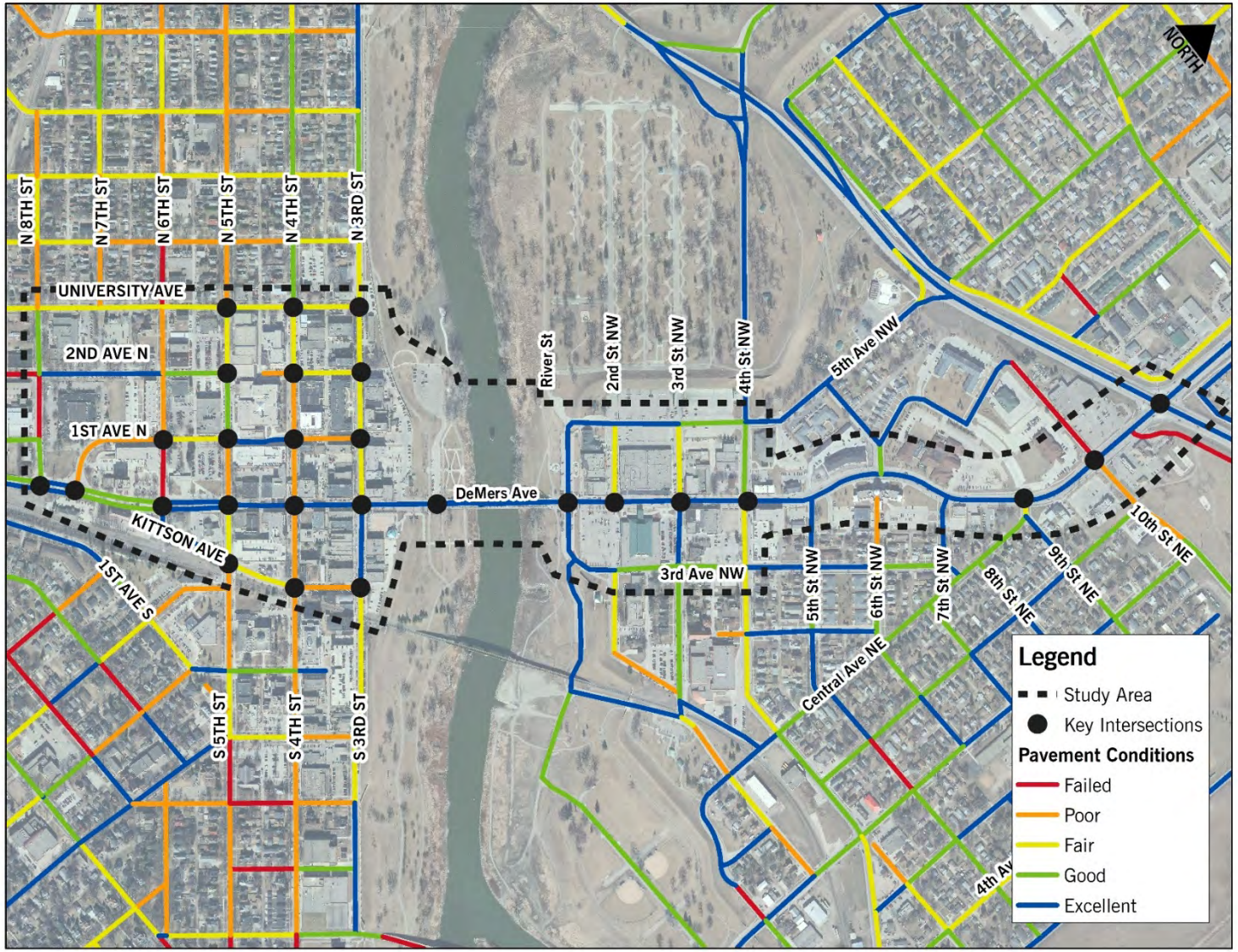
- Downtown Action Plan
- Grand Forks Parking Study
- East Grand Forks 2045 Land Use Plan
- River Forks Downtown Plan Update
- 2045 Metropolitan Transportation Plan
- DeMers Avenue Reconstruction
- Sorlie Bridge Rehabilitation
- University Avenue Corridor Study
- MnDOT Mobility Report





Existing Infrastructure Conditions

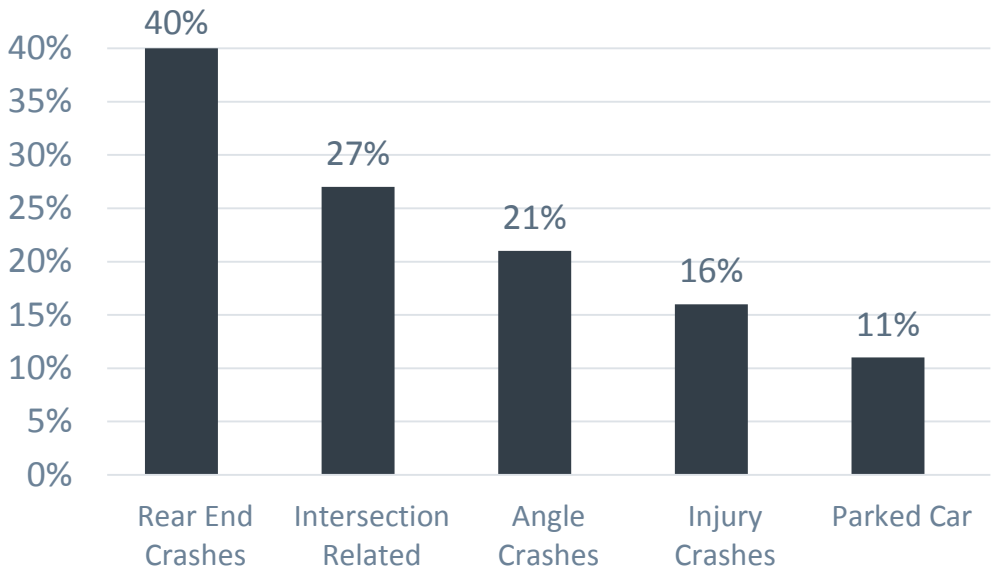
- Study Can Directly Influence Many Planned Projects
- 7 Funded Short-Term Projects Through Downtown
  - Ranging from Full Reconstruction to Pavement Rehabilitation
- 13 Other Mid to Long Range Projects Planned Downtown
  - Ranging from Revitalization to Full Roadway Improvements

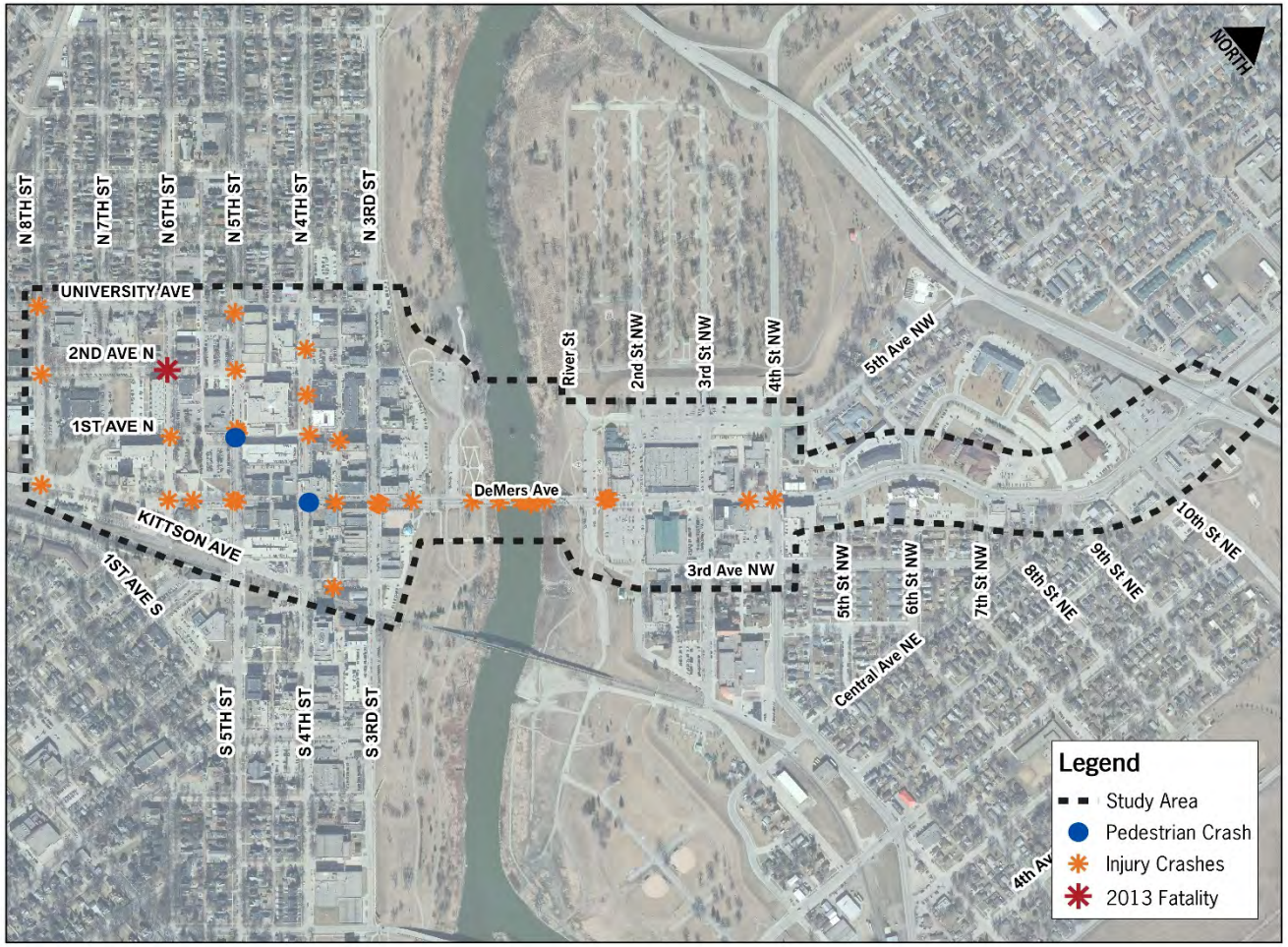


Safety

Safety

- 86 Crashes per Year (2016-2018)
  - 13 Injury Crashes per Year
  - 2 Pedestrian Crashes
  - 0 Bicycle Crashes



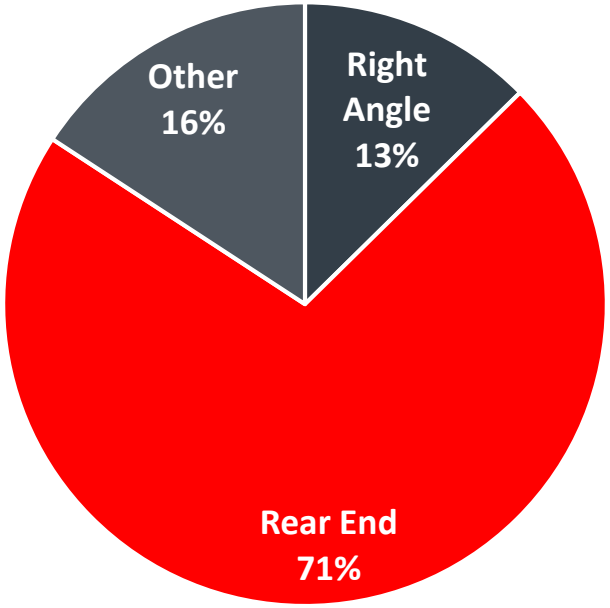


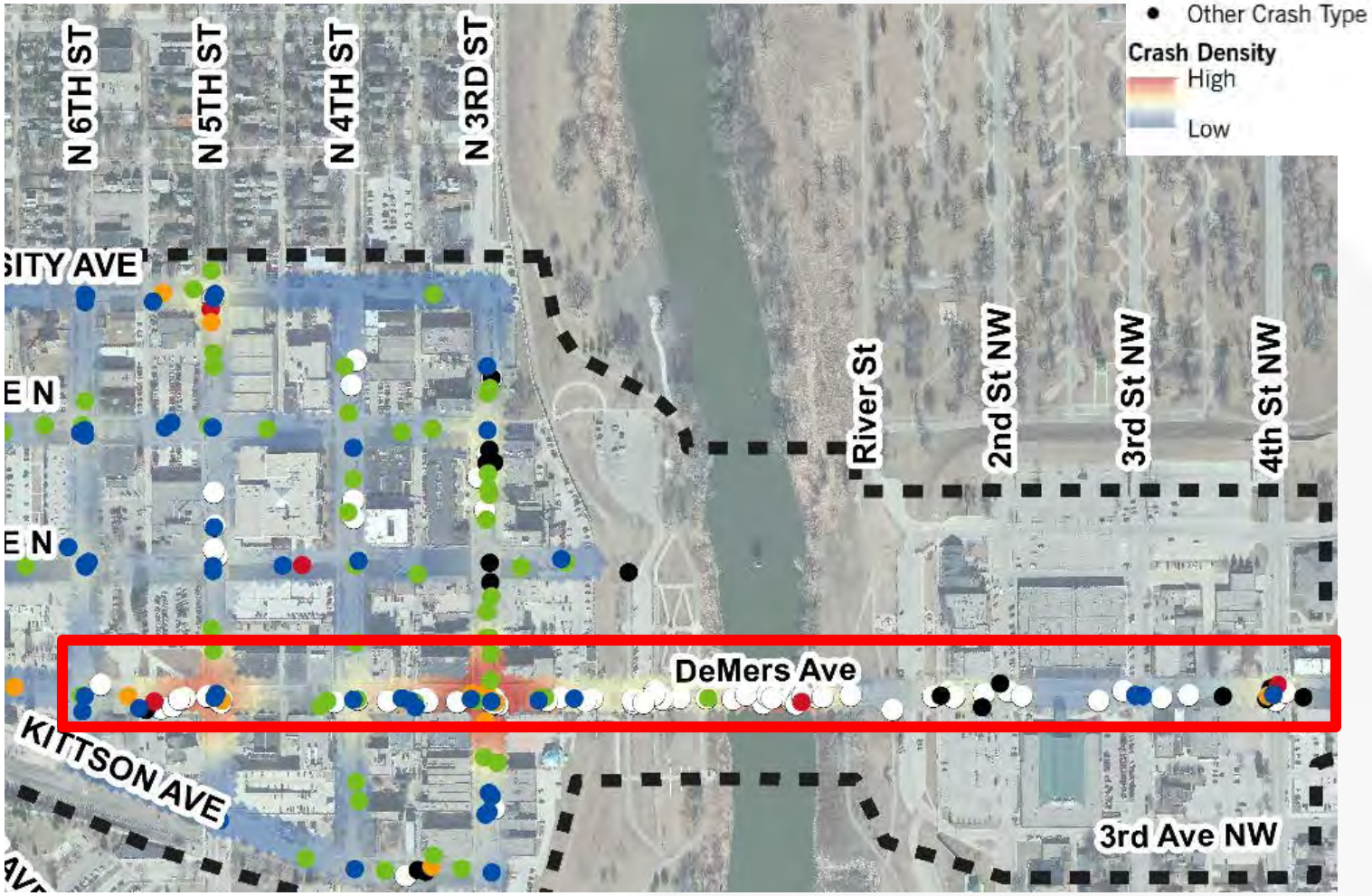
Safety

- Studied Crash Volumes and Rates
- Critical Crash Rate Analysis:
  - 4 Intersections
  - 2 Links

DeMers Avenue (6th St. in GF to 4th St. in EGF)

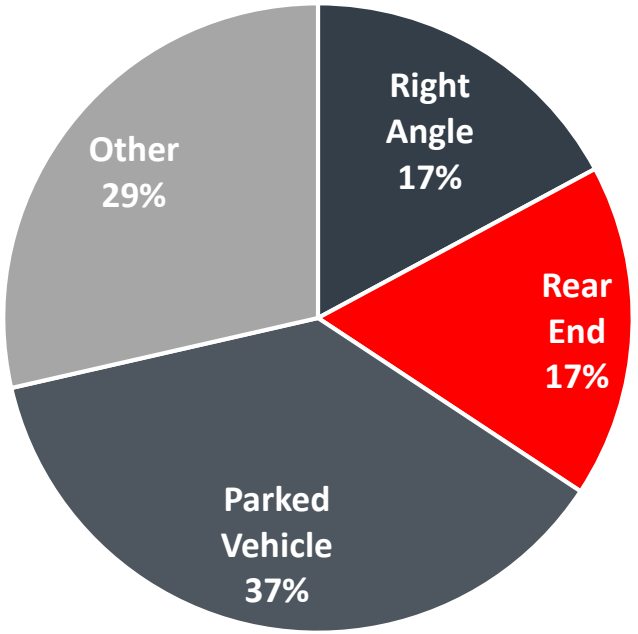
- 95 Total Crashes
  - 37% of All Study Area Crashes
  - 71% Rear End Crashes
  - 30% Occurred On Bridge
    - 70% Westbound

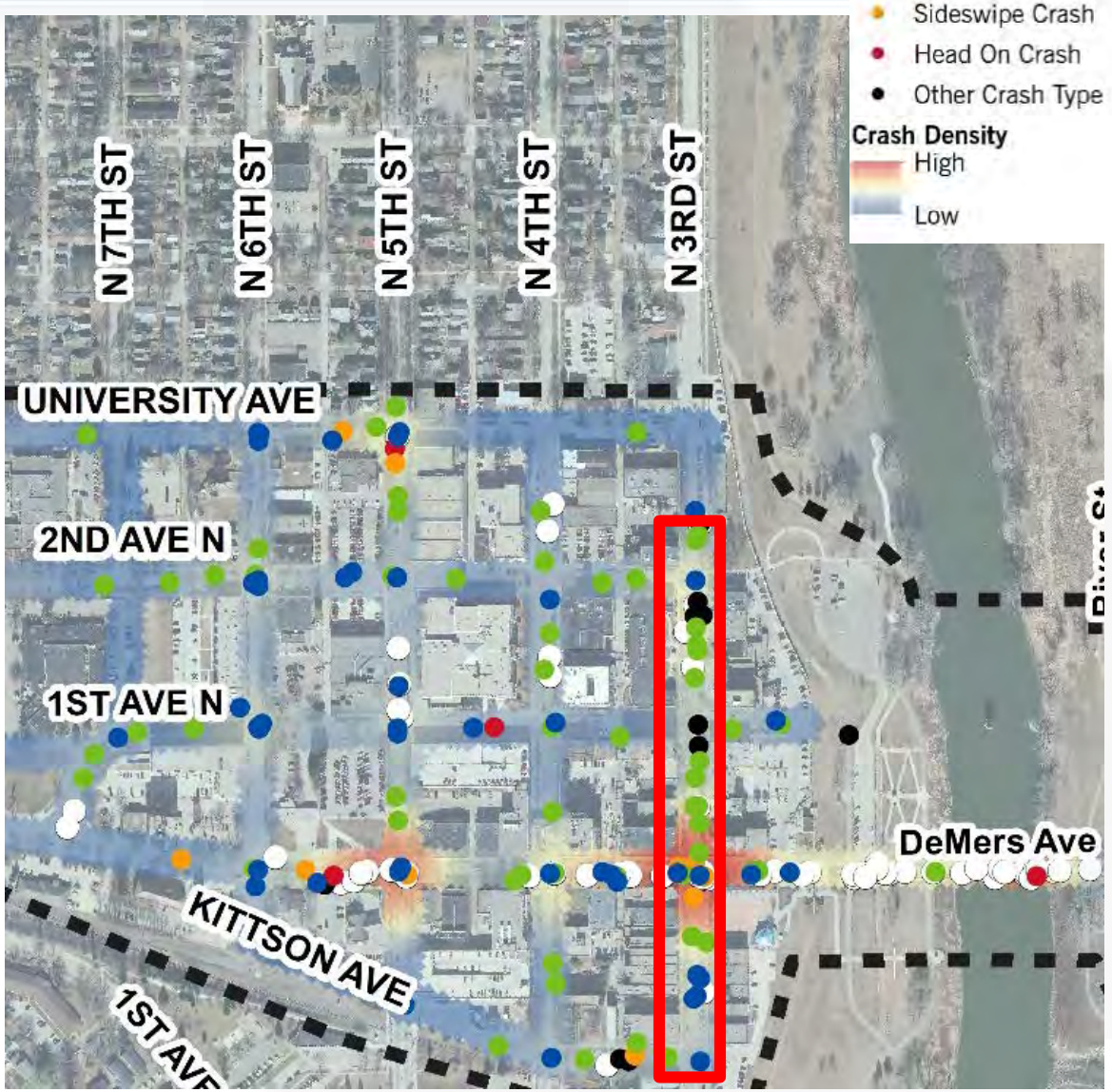




3rd Street from 2nd Avenue to Kittson Avenue

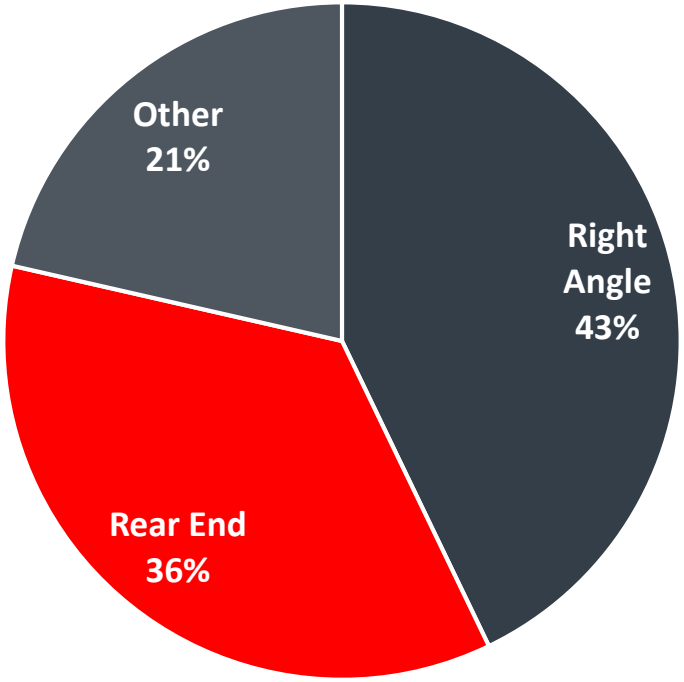
- 35 Total Crashes
  - 37% Involved Parked Vehicles
  - 17% were Angle Crashes
  - 17% were Rear End Crashes
  - 70% North of DeMers Avenue

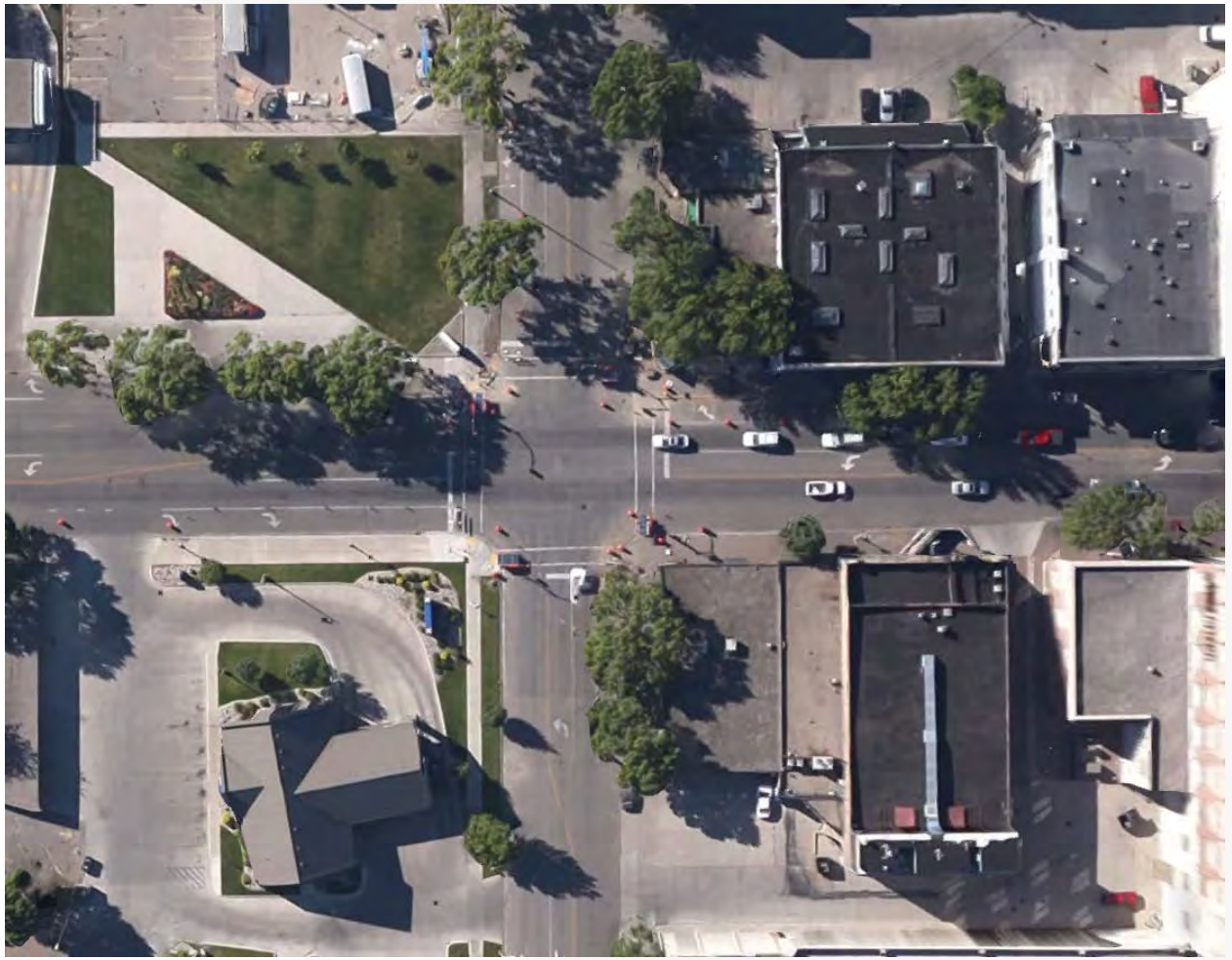




DeMers Avenue and 5th Street (Grand Forks)

- 64% Crashes on DeMers Avenue
  - 43% Eastbound
- First Signalized Intersection in Nearly a Mile for Eastbound Traffic
- Speeds an Issue on the West Approach





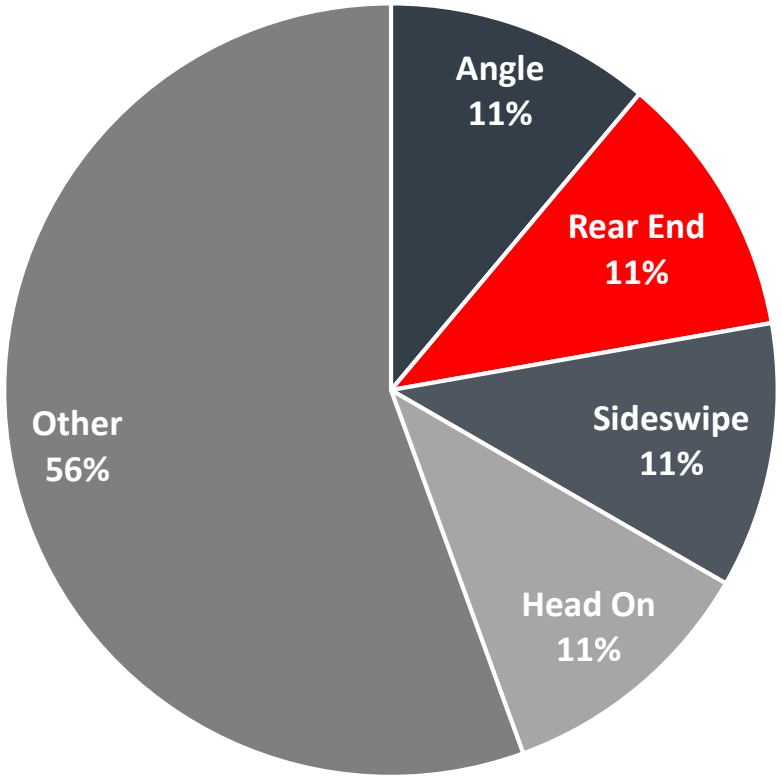
6th Street (Grand Forks)

- 6th Street and 1st Avenue
  - 57% Crashes were Angle Crashes
  - 71% Crashes Occurred on 6th Street
  - Limited Sight Distance
- 6th Street and 2nd Avenue
  - 50% Crashes were Angle Crashes
    - Failed to Yield on 6th Street
  - Past Death Involving GF Central Student
  - Limited site distance

6th Street and 1st Avenue

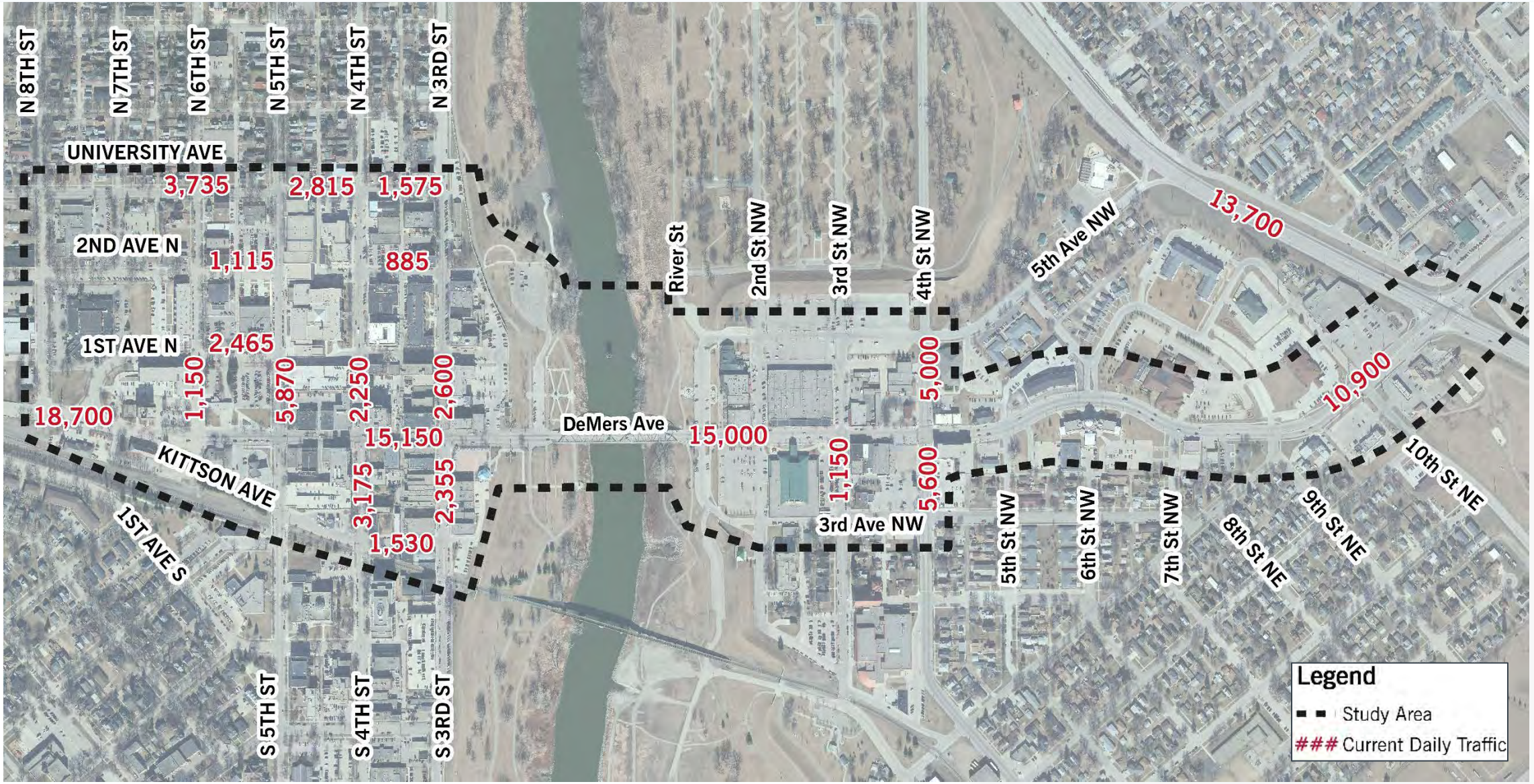
6th Street and 2nd Avenue

DeMers Avenue and 4th Street NW (East Grand Forks)



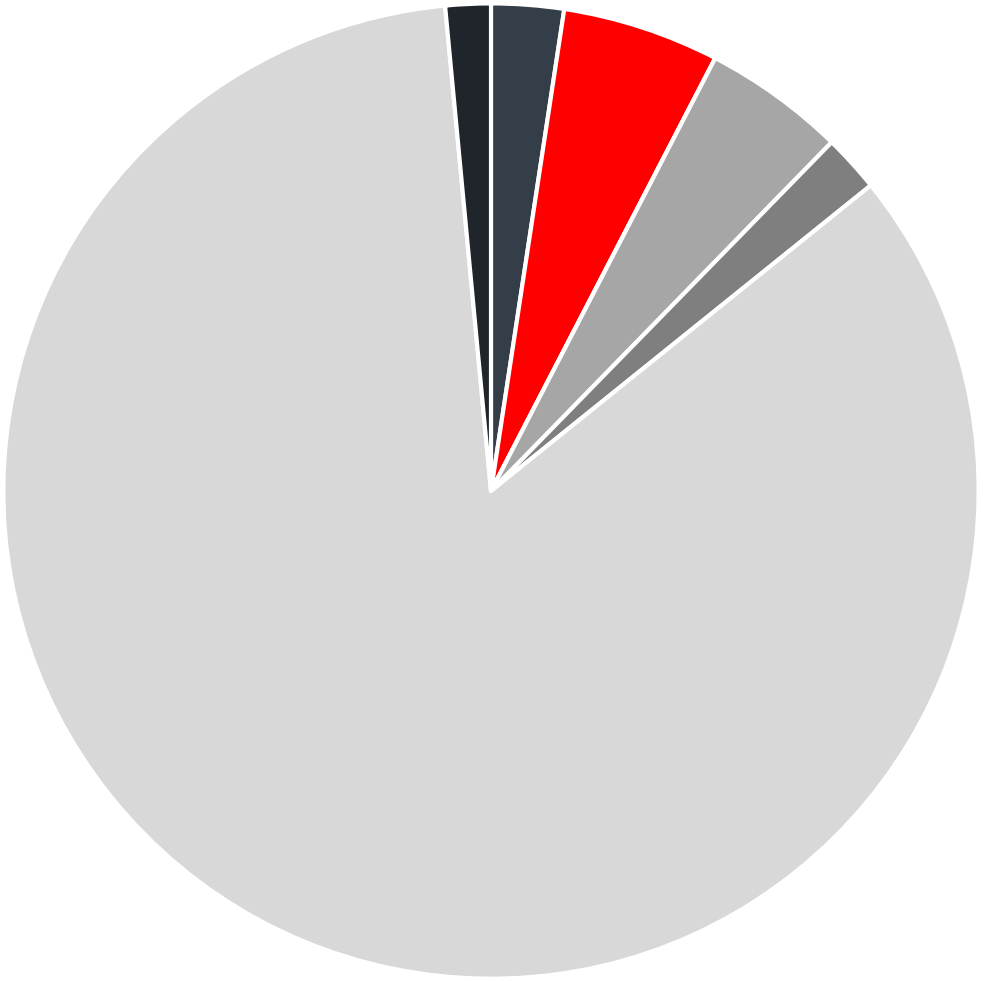
Traffic Patterns

Traffic Patterns

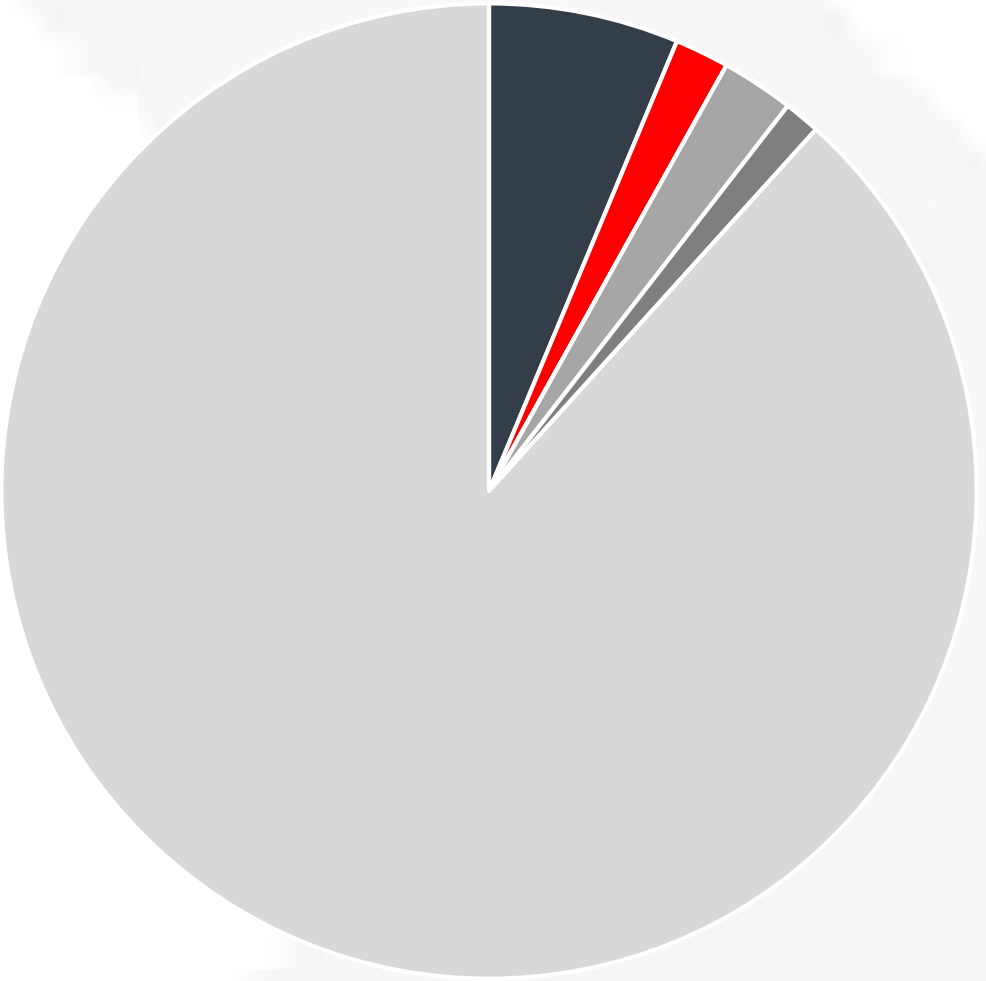


Mode Choice

Downtown Grand Forks

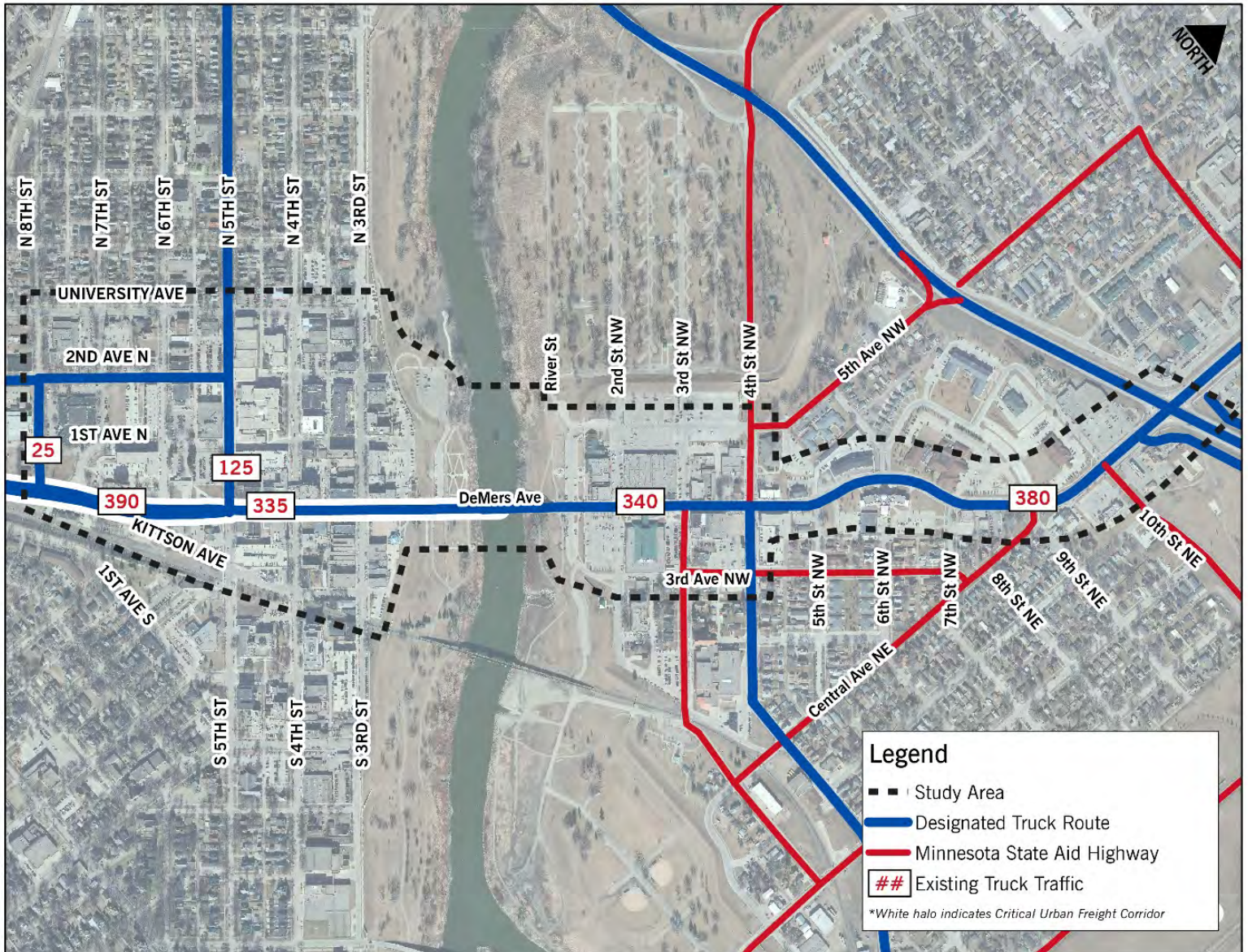


Downtown East Grand Forks



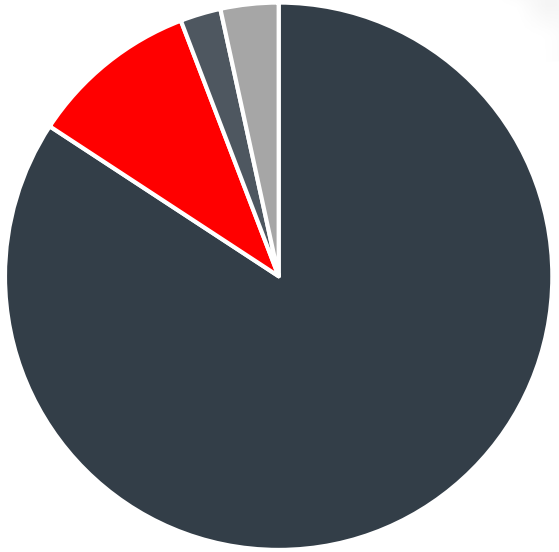
Truck Traffic

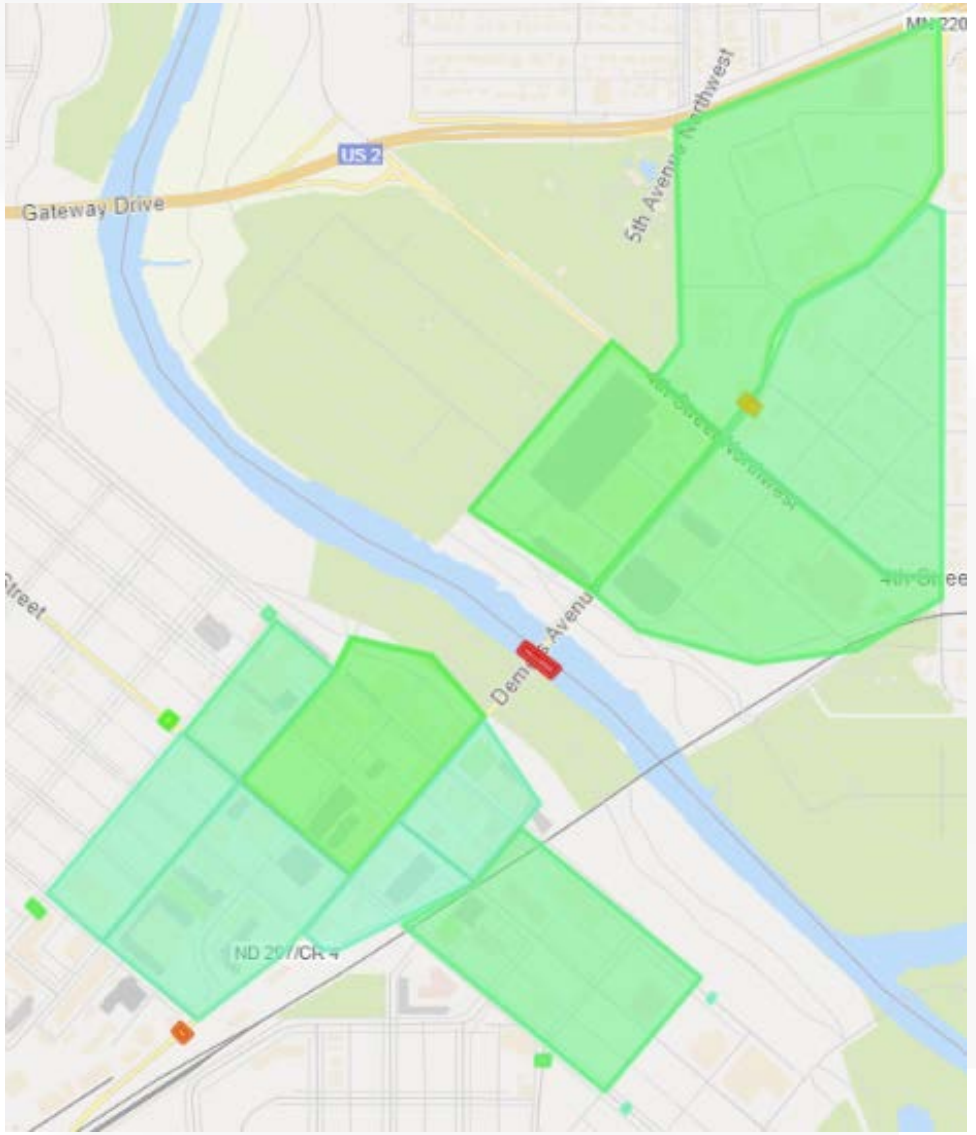
- Typical Truck Traffic 1-2%
- Approaches 6% During Beet Harvest
- 19% of 4th Street NW During Beet Harvest



Travel Patterns

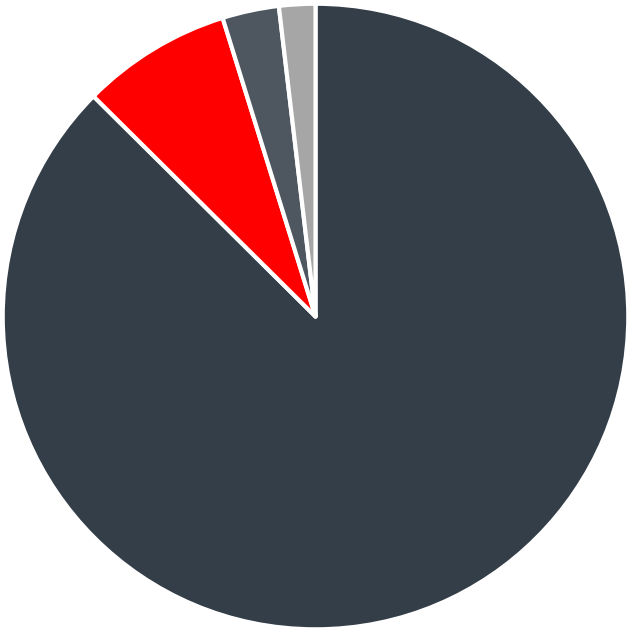
- Used Cellphone/ Bluetooth Tracking To Track Origins and Destinations
- 84% of All Trips Took Less than 5 Minutes
- 21-28% of Traffic is Traveling Through Both Downtowns without Stopping

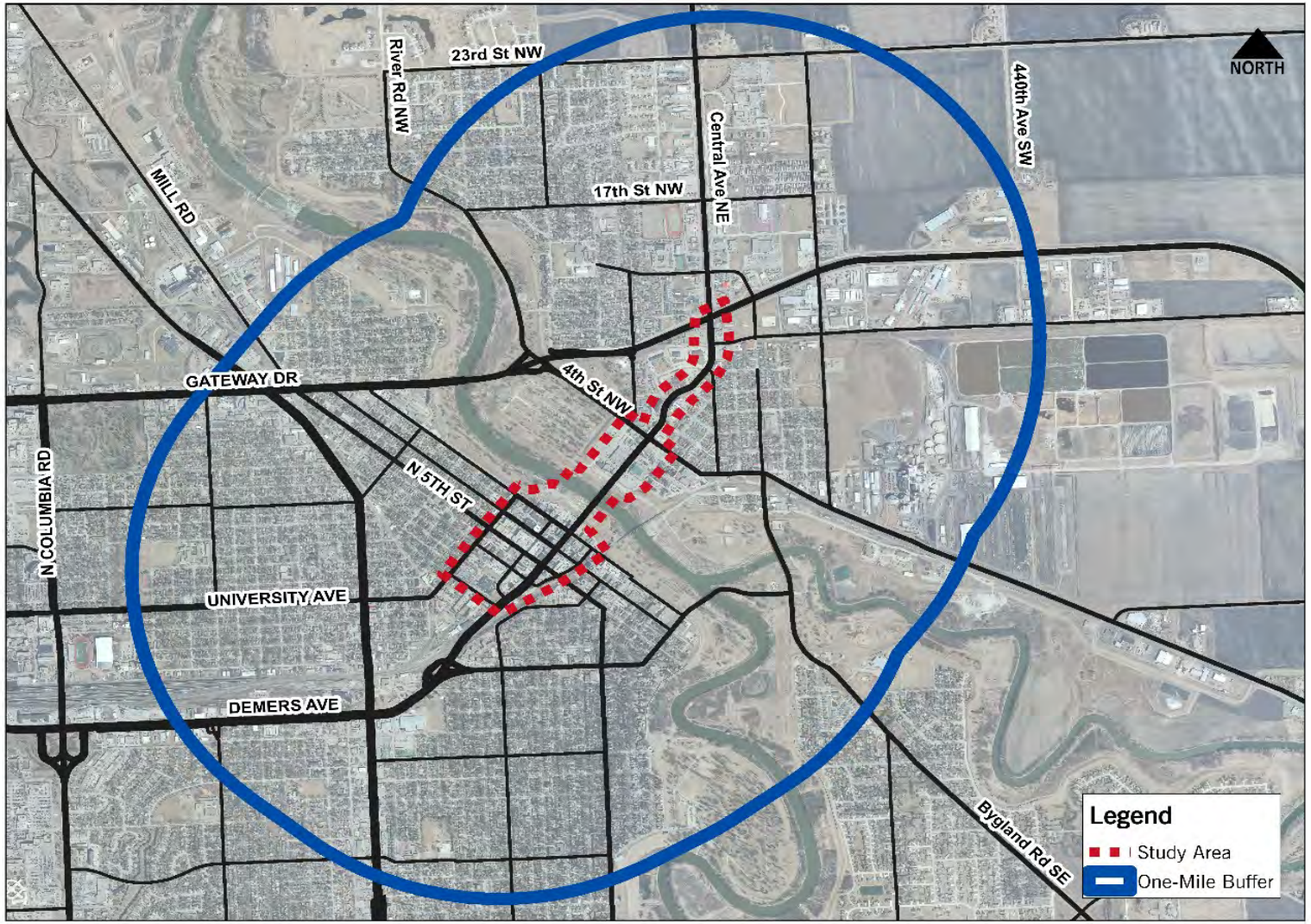




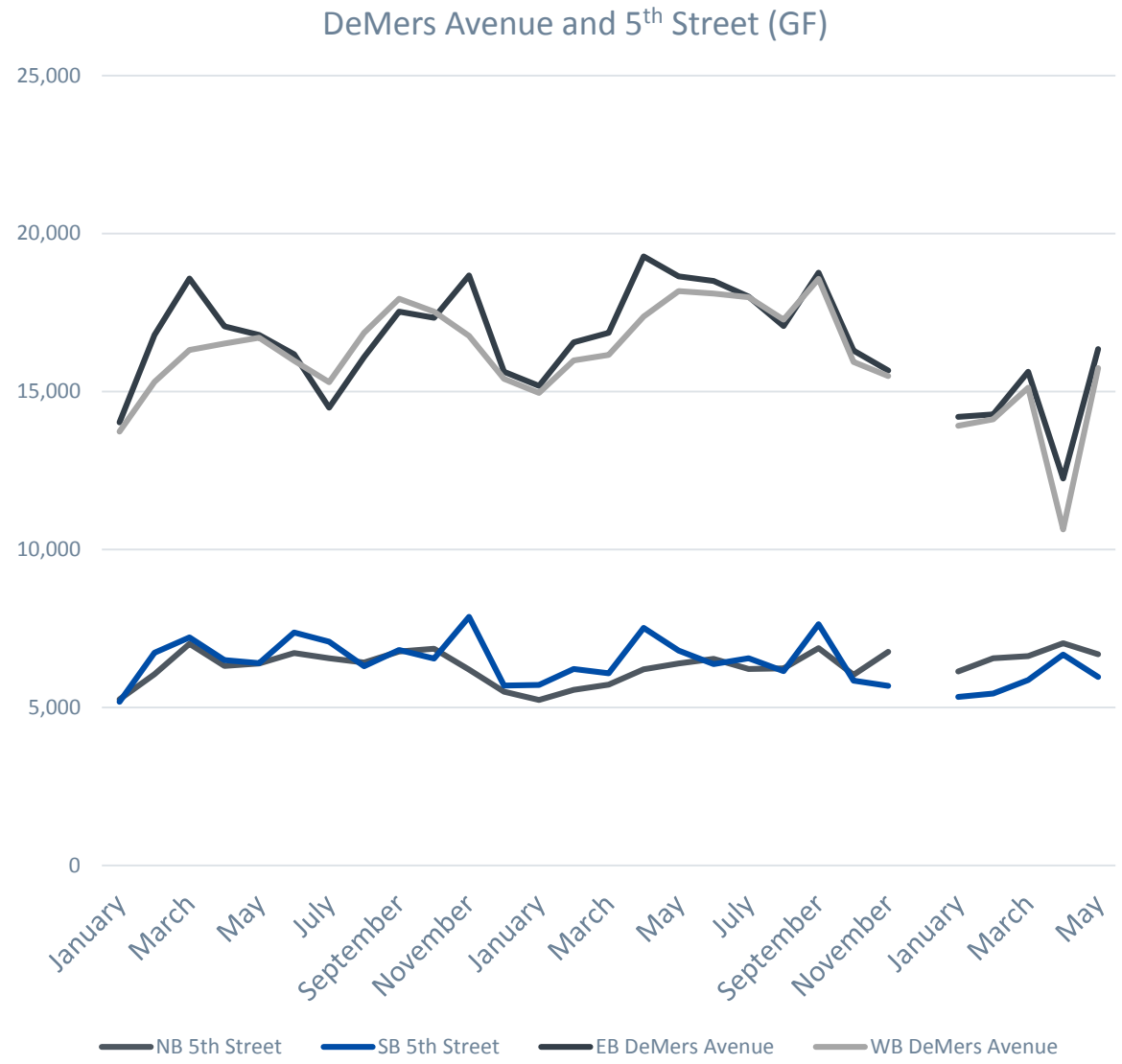
Travel Patterns

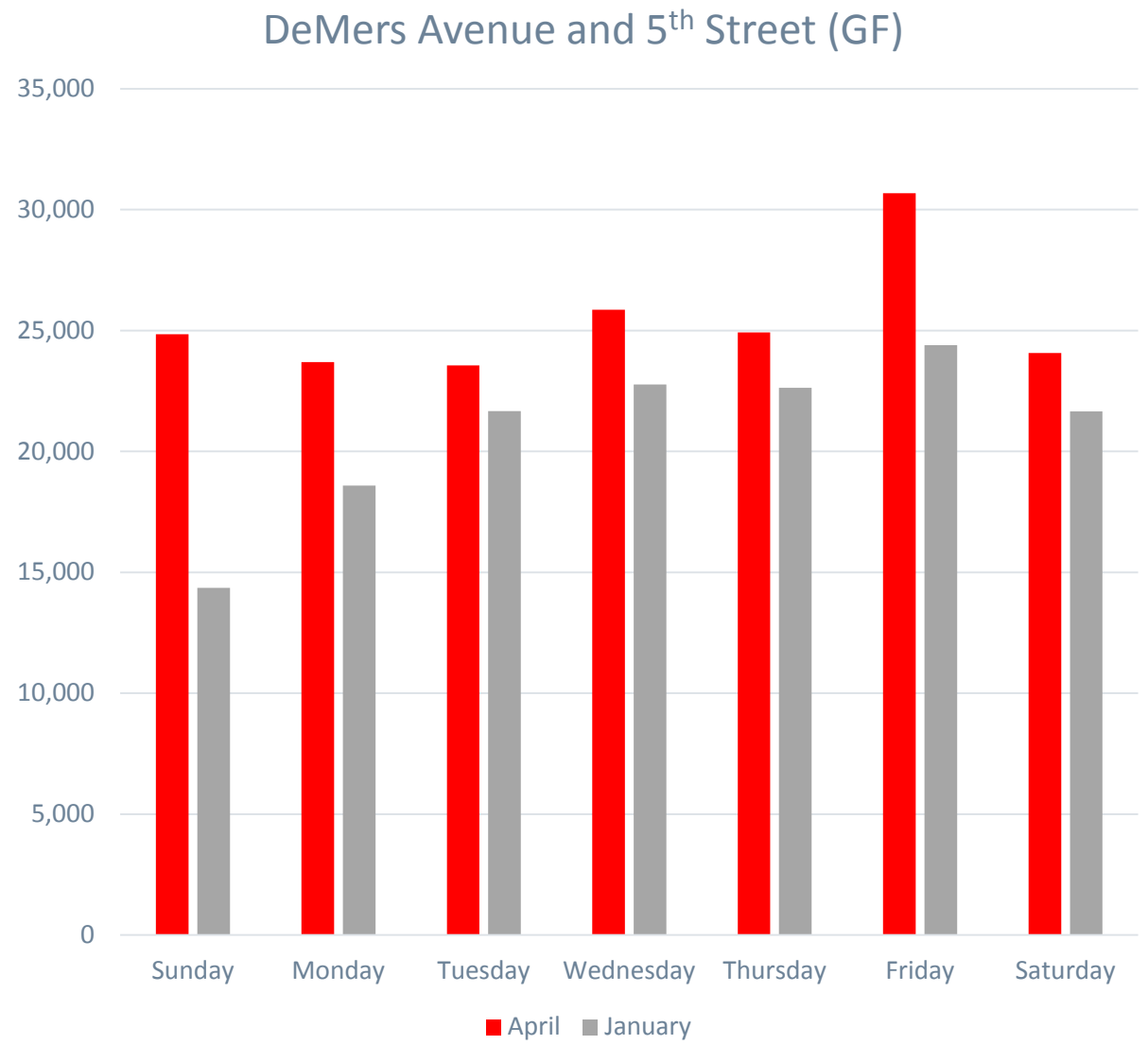
- 87% of All Trips Ending in Either Downtown Were Less than 1 Mile



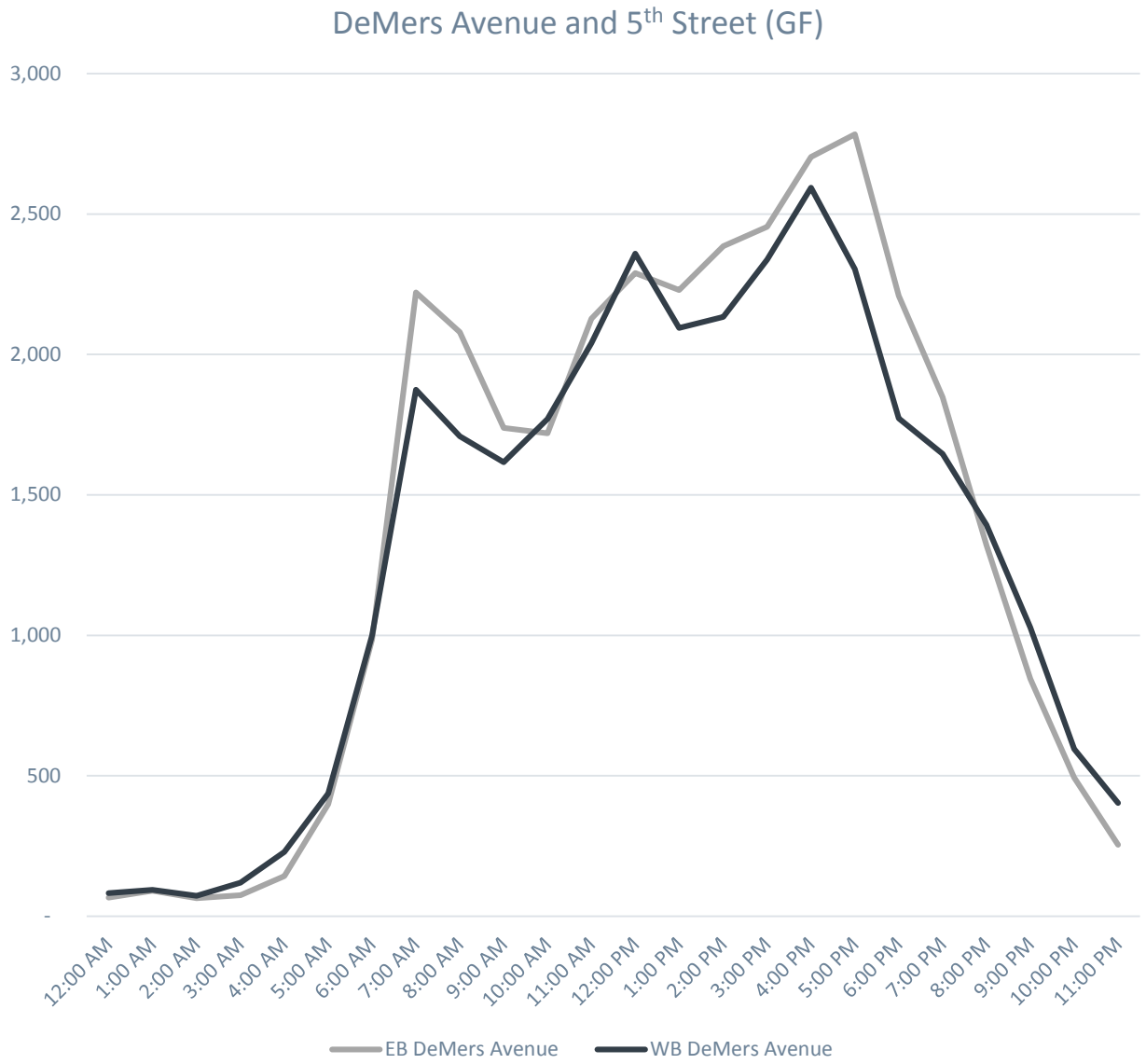


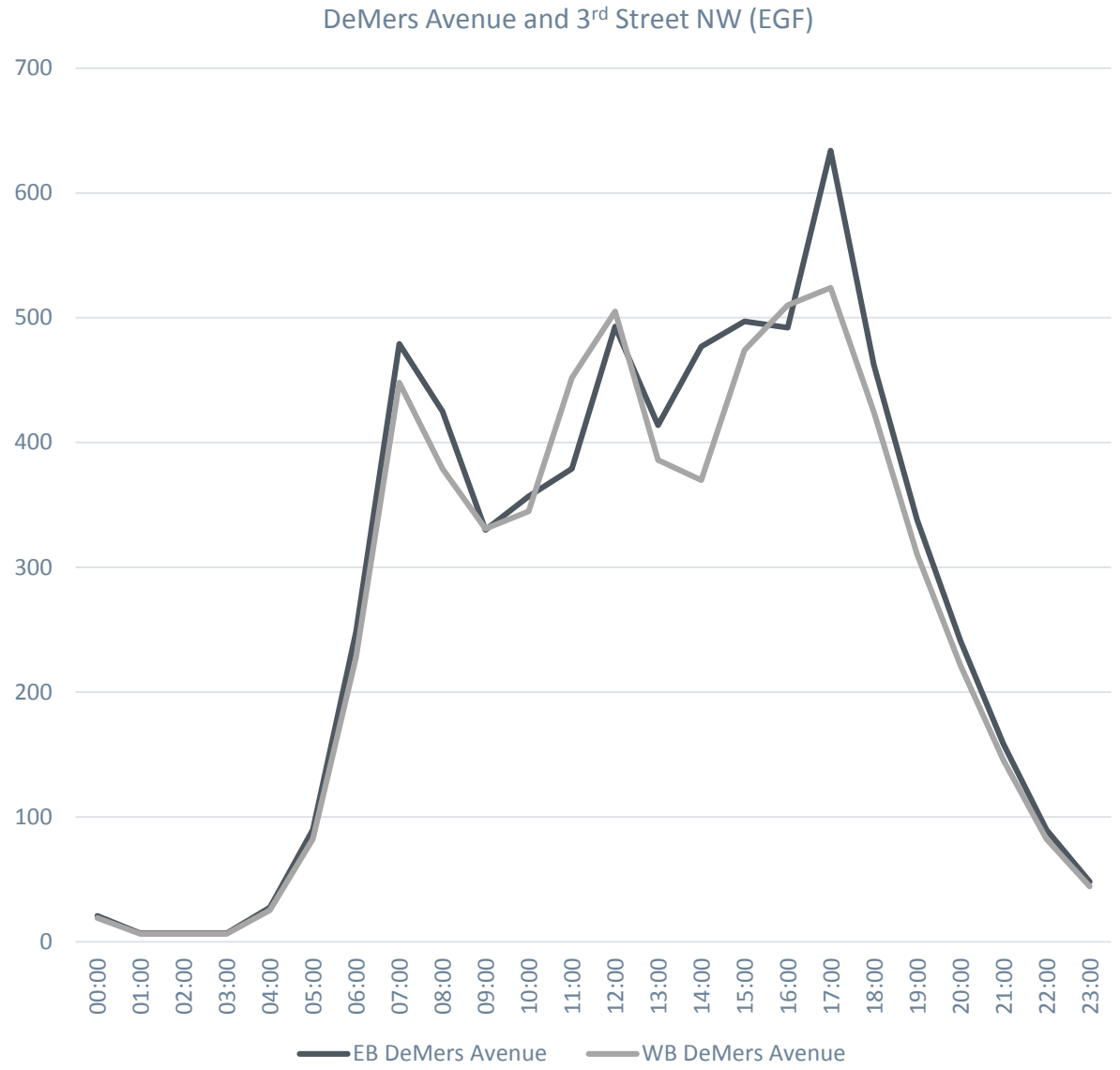
Monthly and Weekly Variability





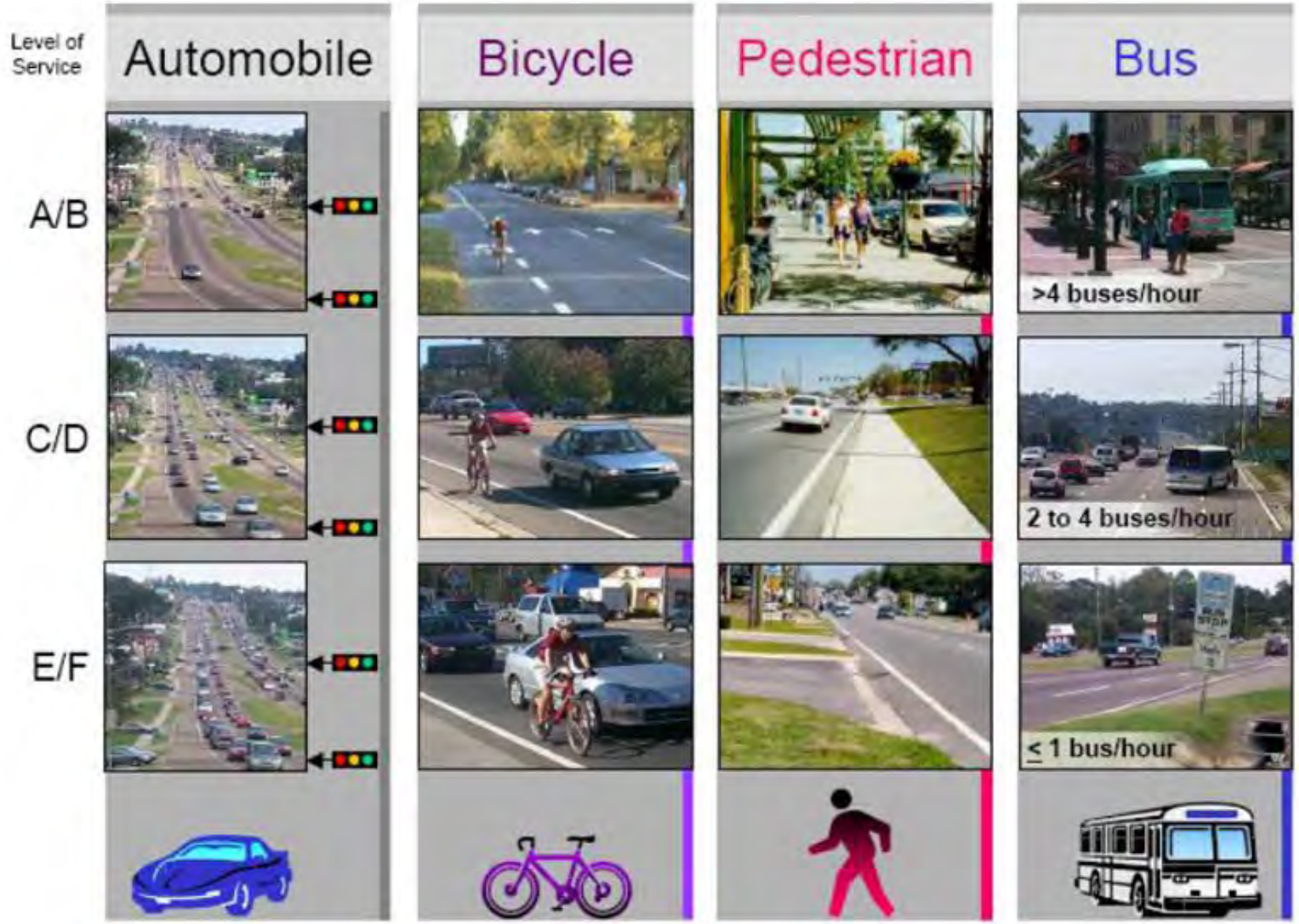
Daily Variability



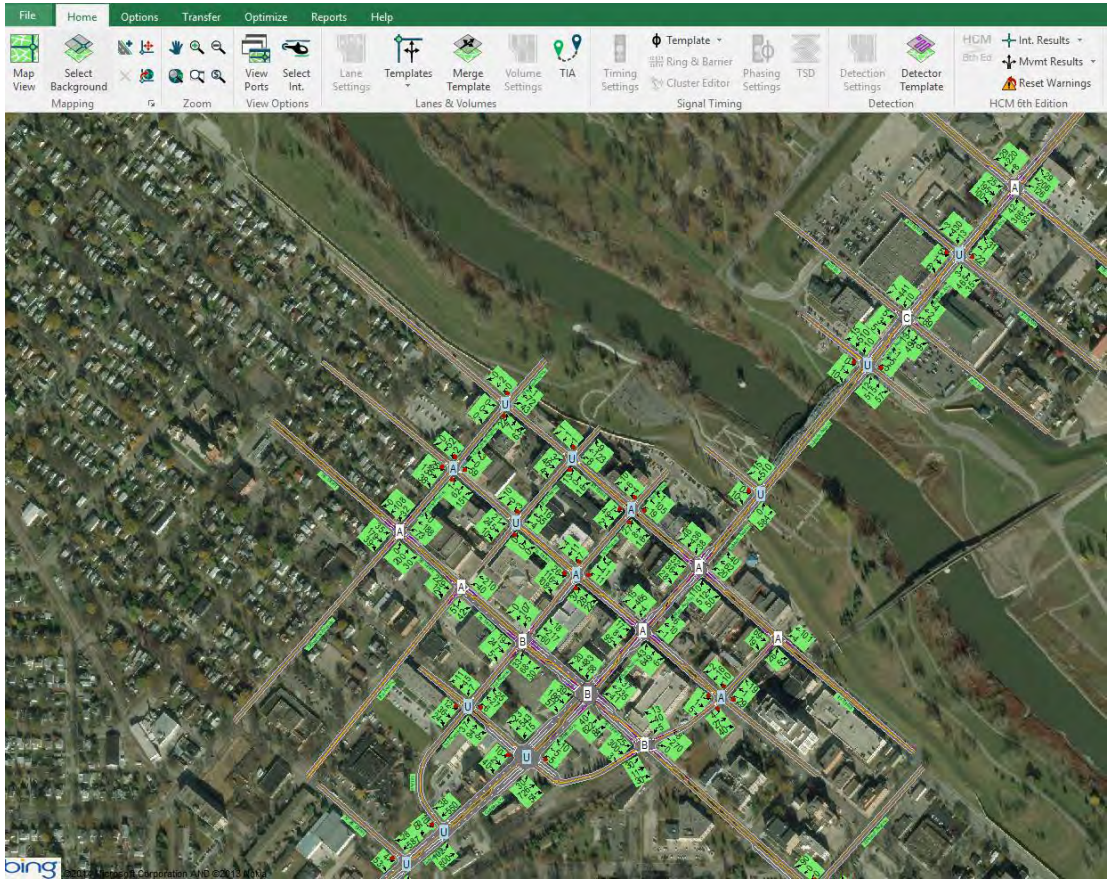


Multimodal Operations

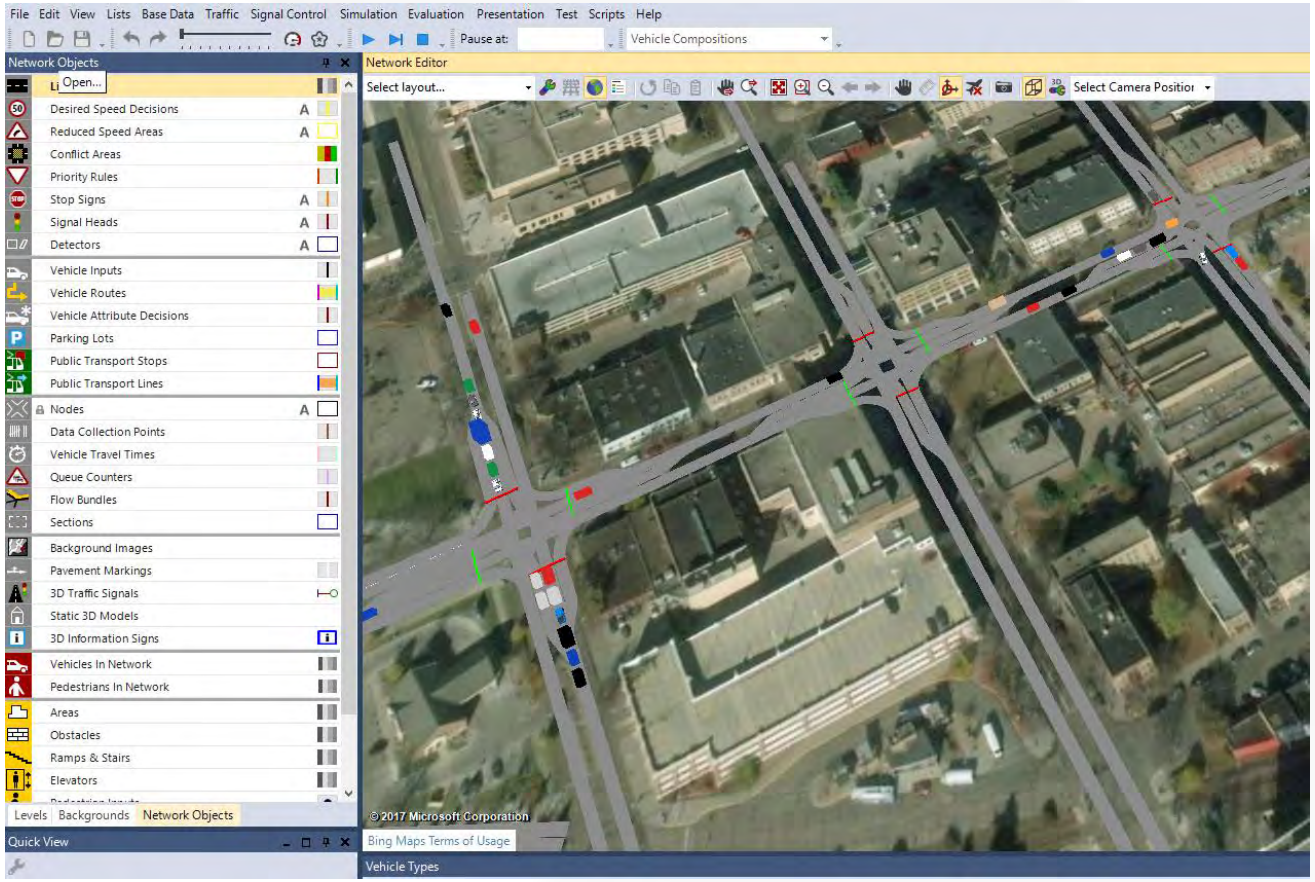
Multimodal Level of Service



Modeling Tools

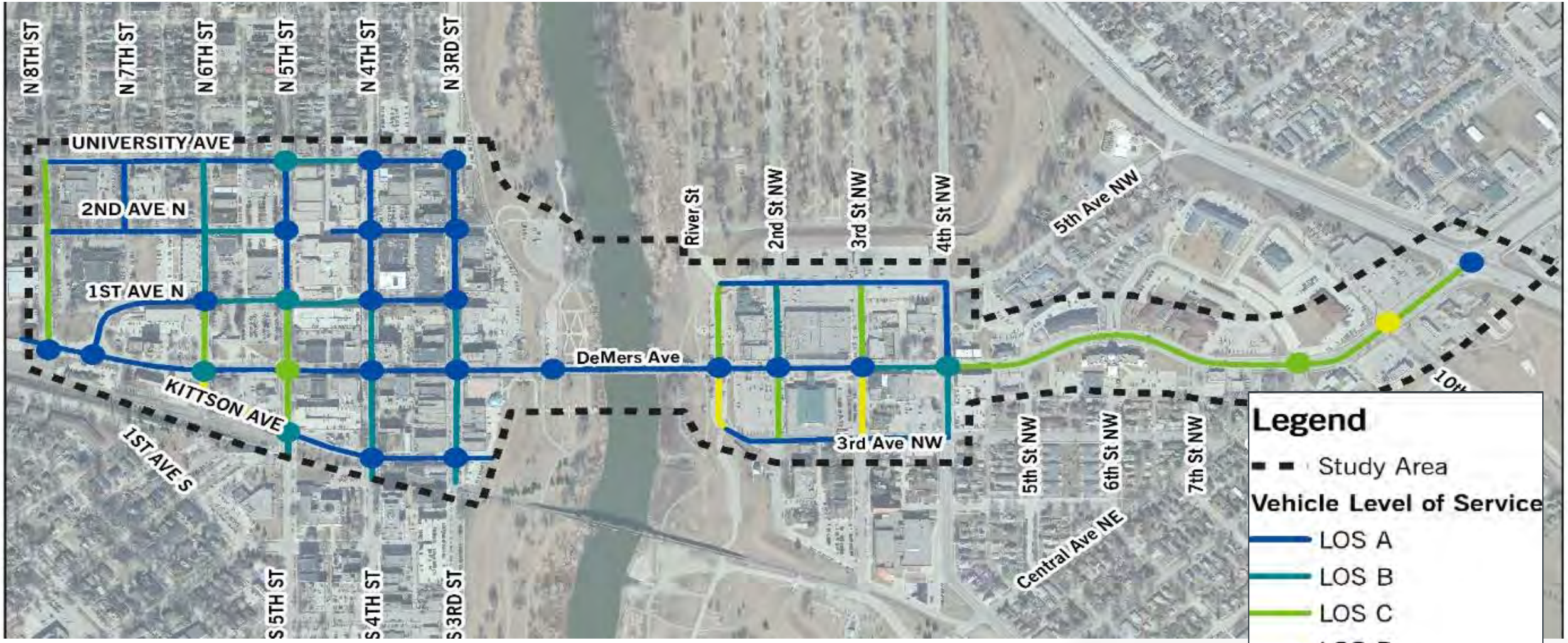


Synchro Software for Intersections off DeMers Avenue, Bicycle, and Pedestrian Level of Service



Vissim Microsimulation Software for DeMers Avenue

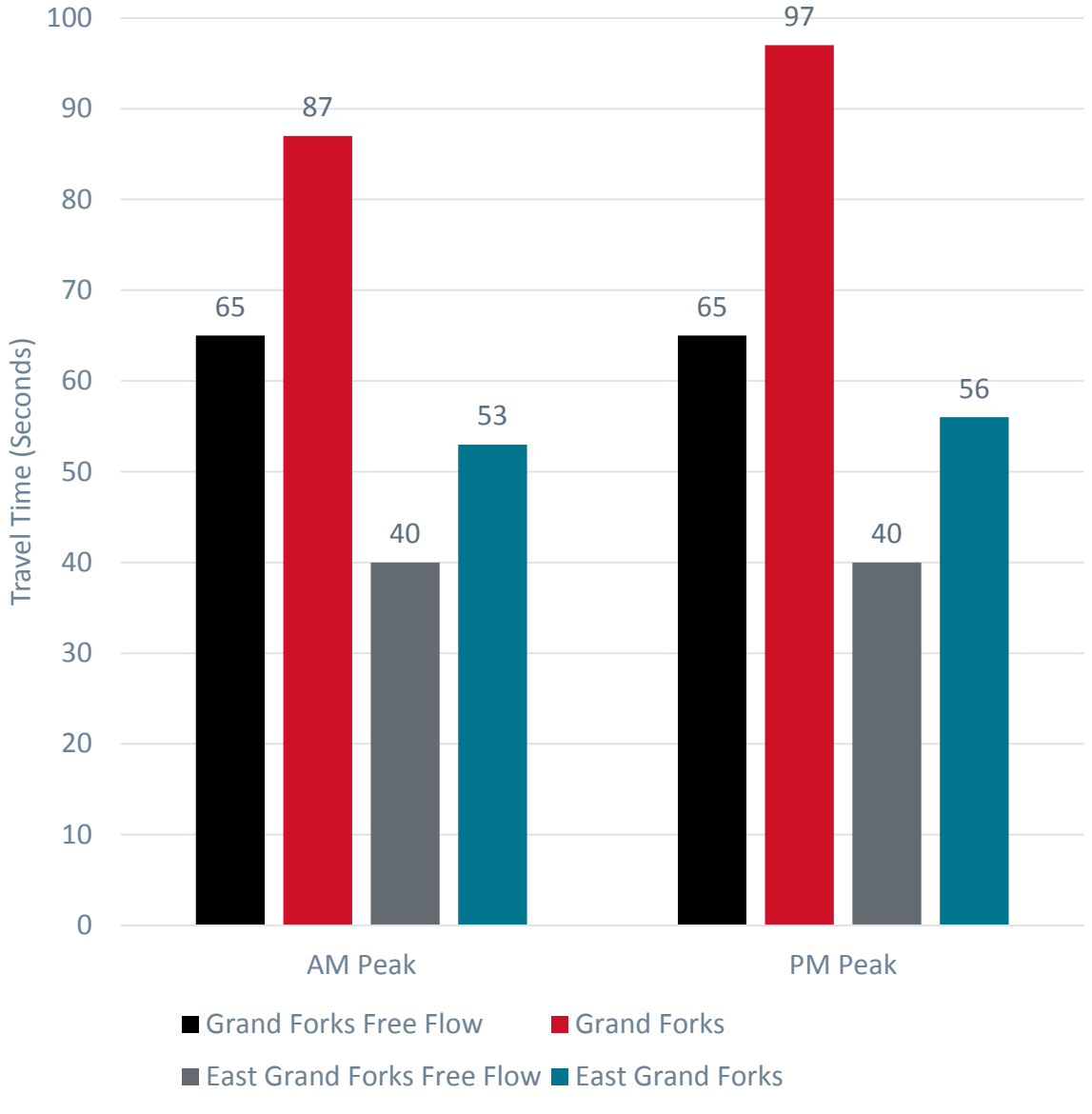
Vehicular Level of Service



- All Intersections Operate at LOS C or Better

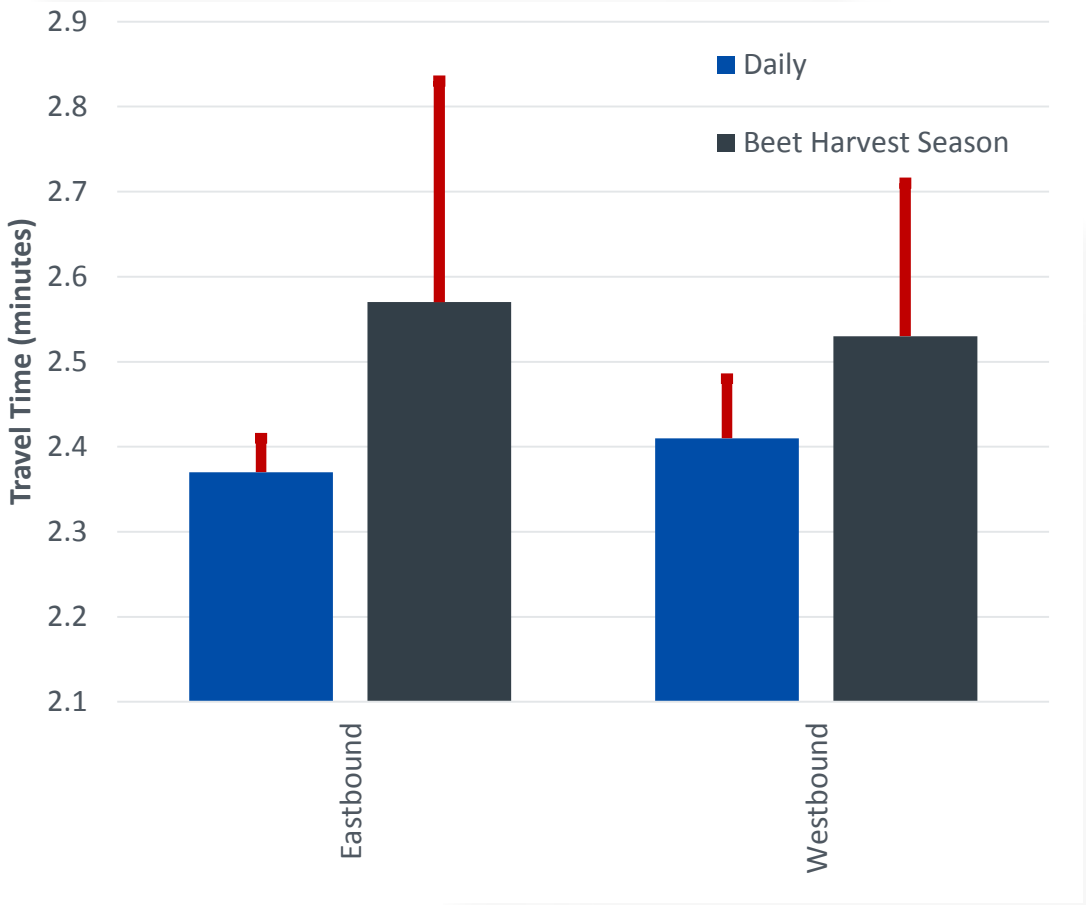
Travel Time

- 5 Signals in 0.6 Miles
- AM Peak Hour = +35% Longer than Free Flow Speed
- PM Peak Hour = +46% Longer than Free Flow Speed
- More Delays on Grand Forks Side of River
- Similar EB vs. WB



Travel Time Realiability

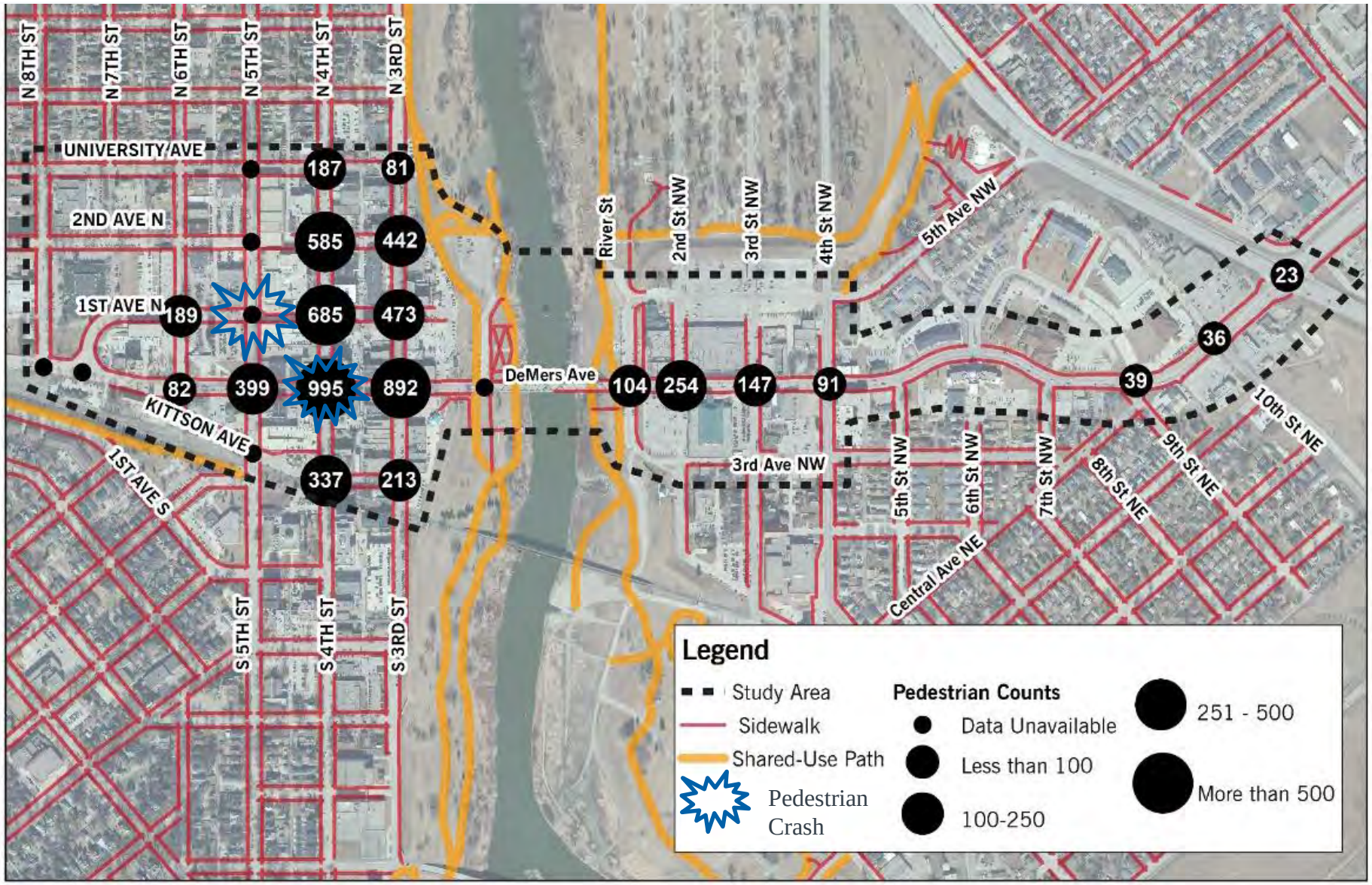
- Very Consistent Travel Times Throughout Normal Day
- During Beet Harvest Reliability Can Become An Issue:
  - 10-40% Longer Than Expected



$$LOTTR = \frac{85th\ Percentile\ Travel\ Time}{50th\ Percentile\ Travel\ Time}$$

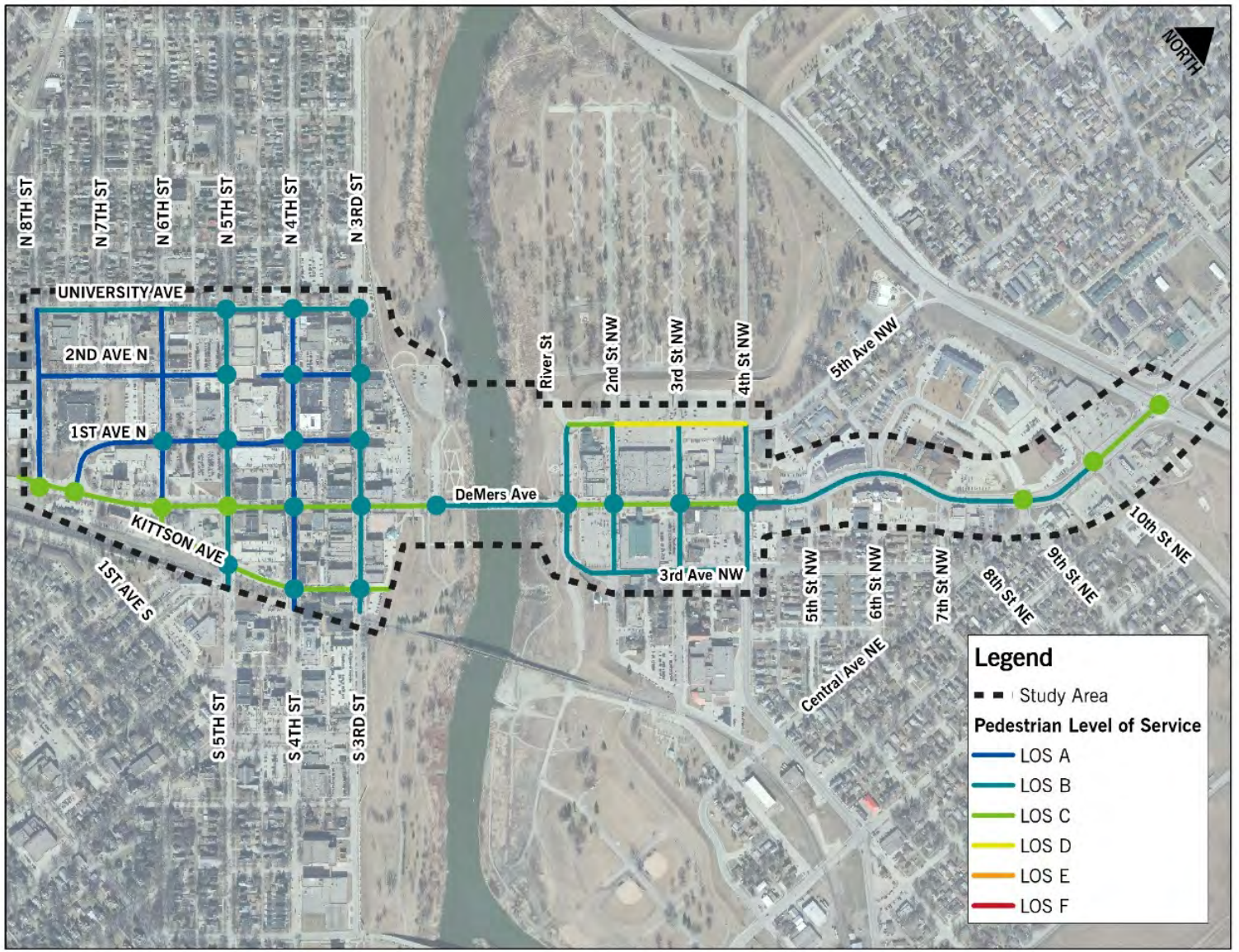
Pedestrian Environment

- Complete Streets have been proven to Improve:
  - Safety
  - Health Outcomes
  - Equity
  - Communities Engagement
- Local and Statewide Emphasis on Complete Streets;
  - Policies
  - Downtown Action Plan
  - Main Street Initiative
  - MnDOT Focus



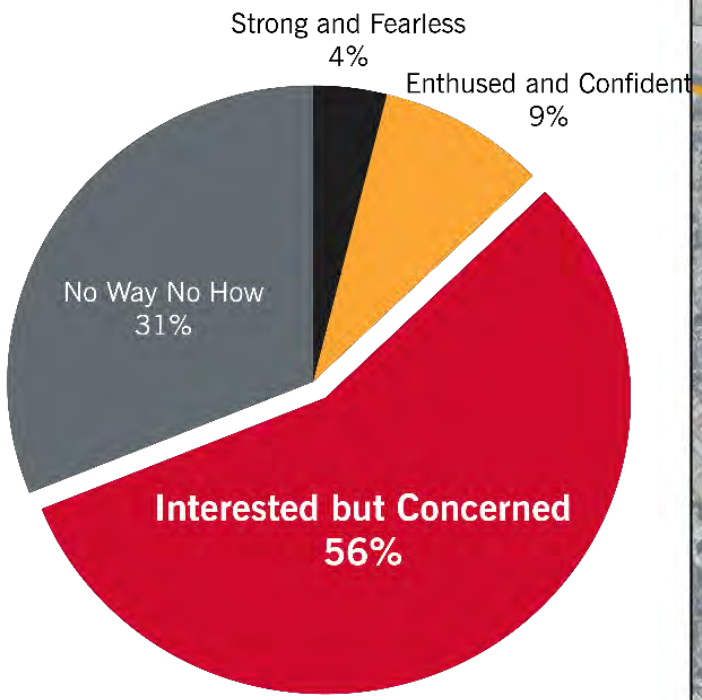
Pedestrian Level of Service

- Most Locations LOS B or Better
- Most of DeMers Avenue LOS C due to high traffic volumes



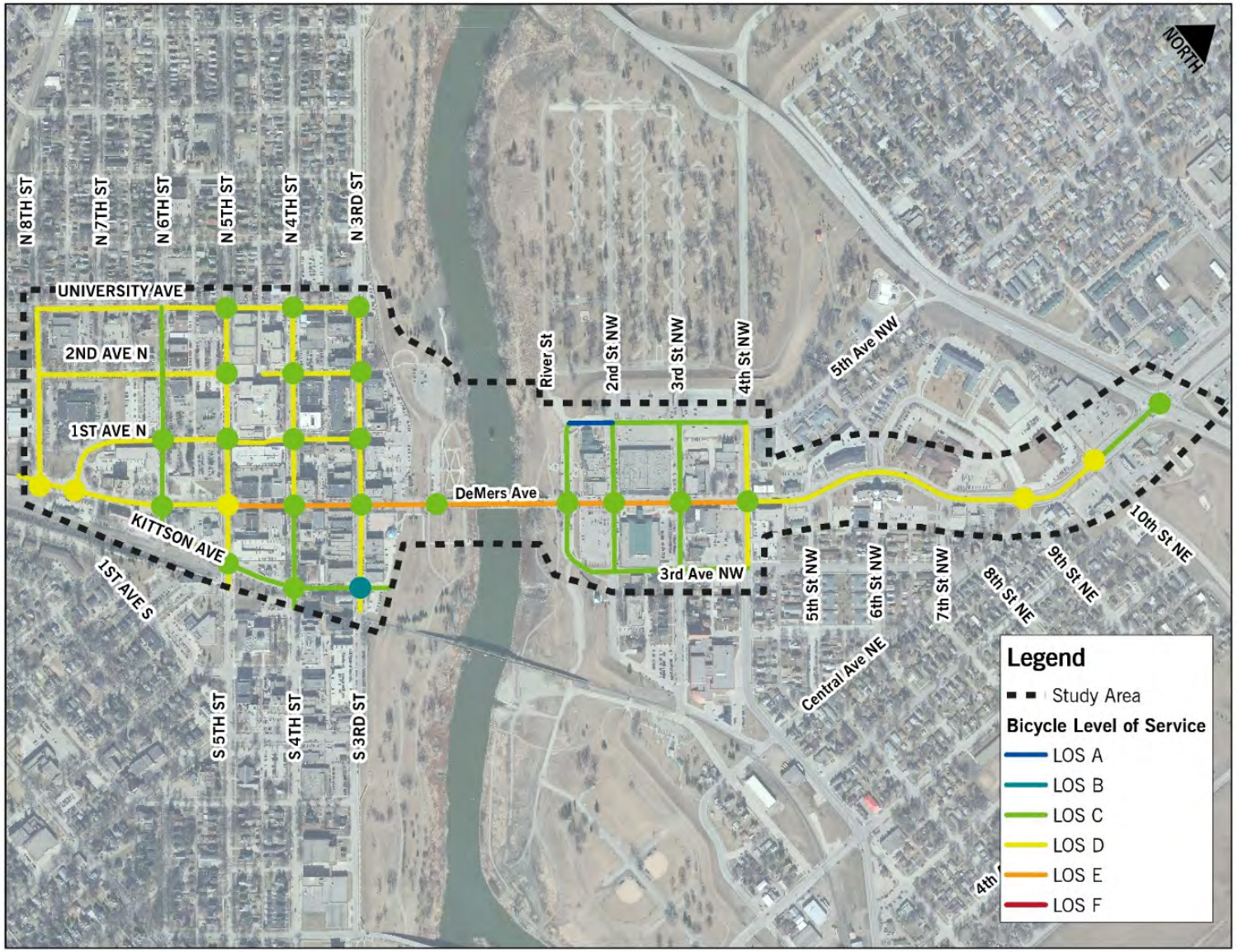
Bicycle Facilities

- Cannot Bike on Sidewalks through Downtown
  - Even Sorlie Bridge



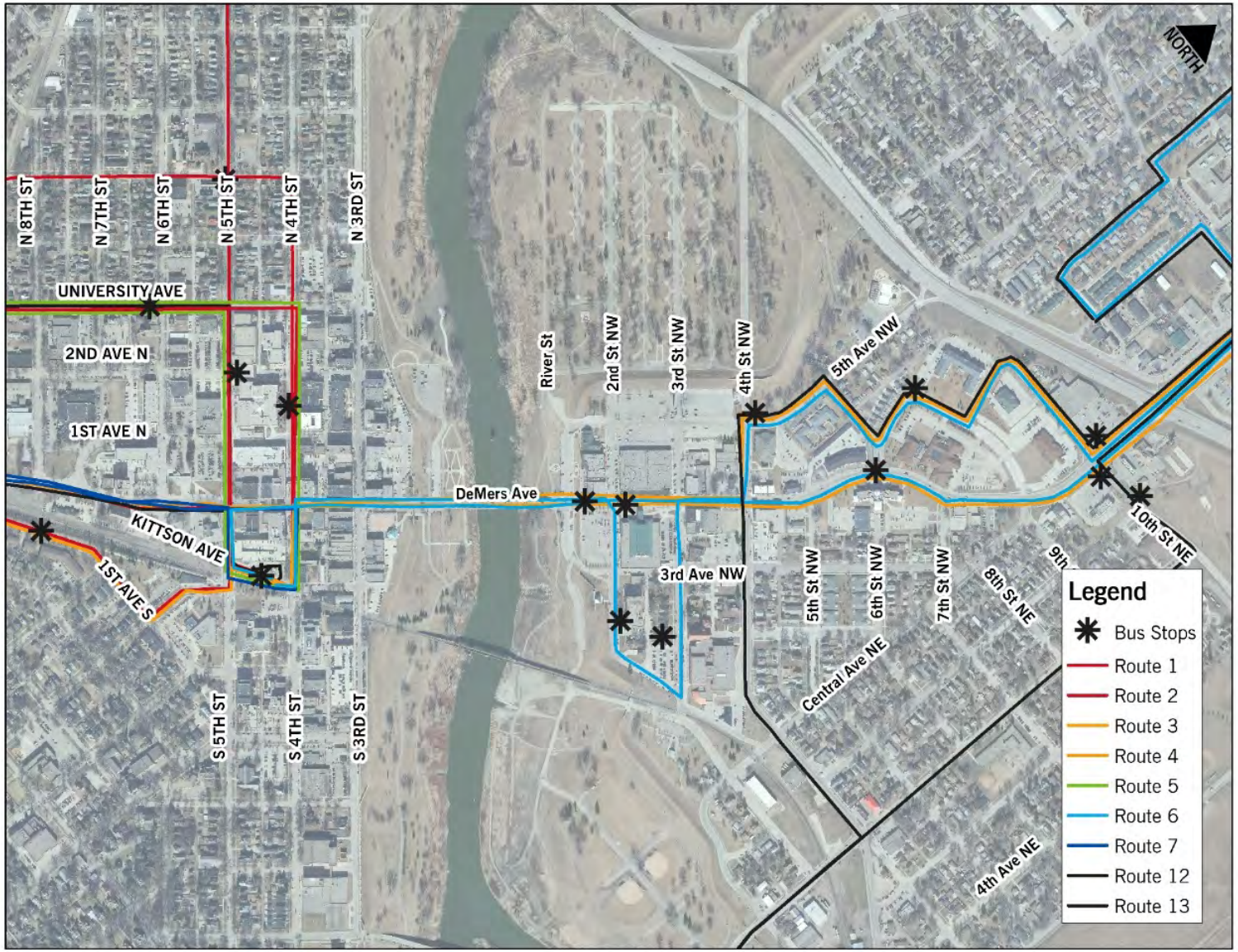
Bicycle Level of Service

- Most Locations LOS D or Worse
- Most of DeMers Avenue LOS E due to high traffic volumes, speeds, and lack of dedicated facilities



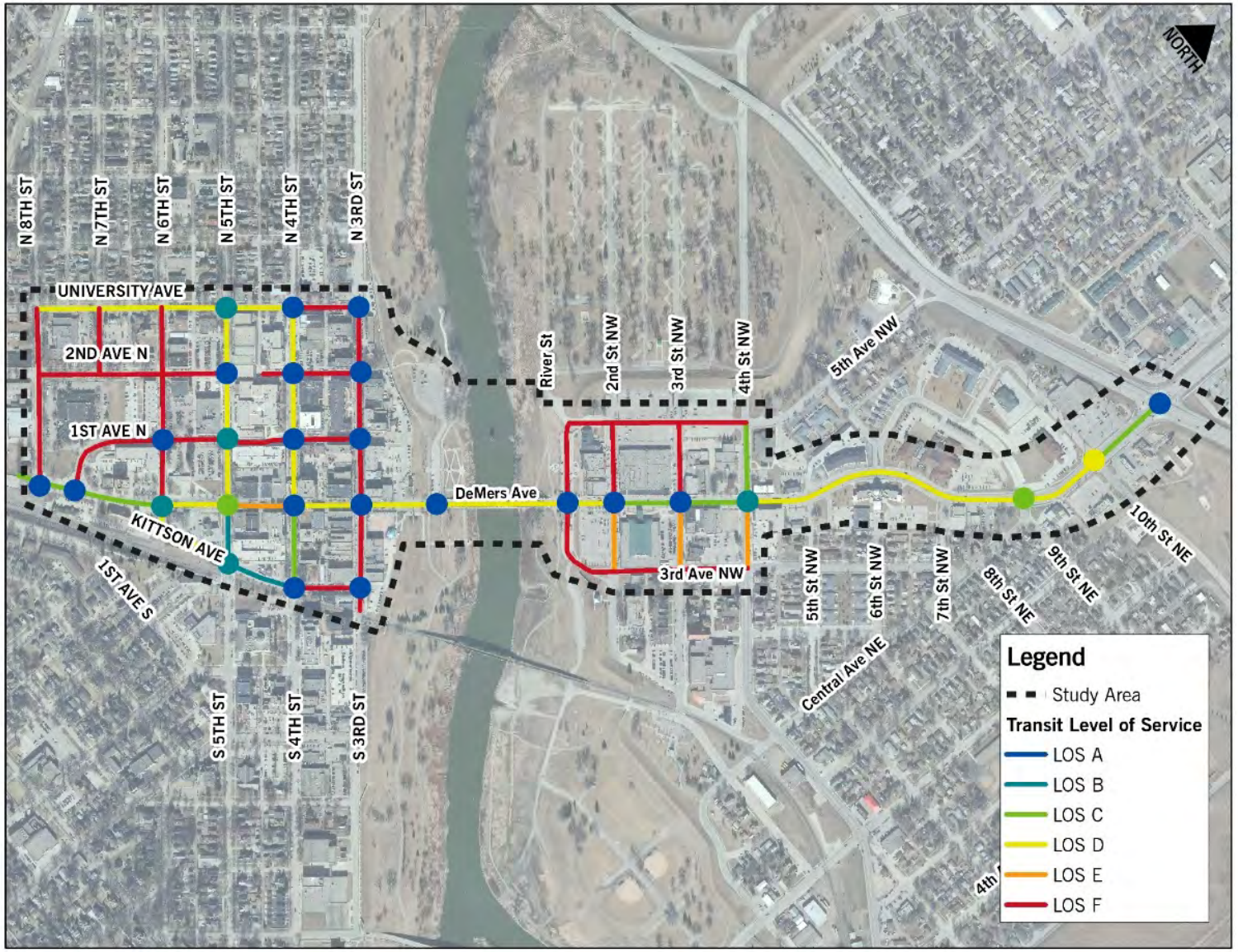
Transit Facilities

- Hourly Routes Staggered to Provide 30-Minute Service
- Metro Transit Center at Kittson Avenue and 4th Street



Transit Level of Service

- Based on Frequency and Availability of Route on Each Road
- Varying Levels of Service Throughout Downtowns



Multimodal Operations

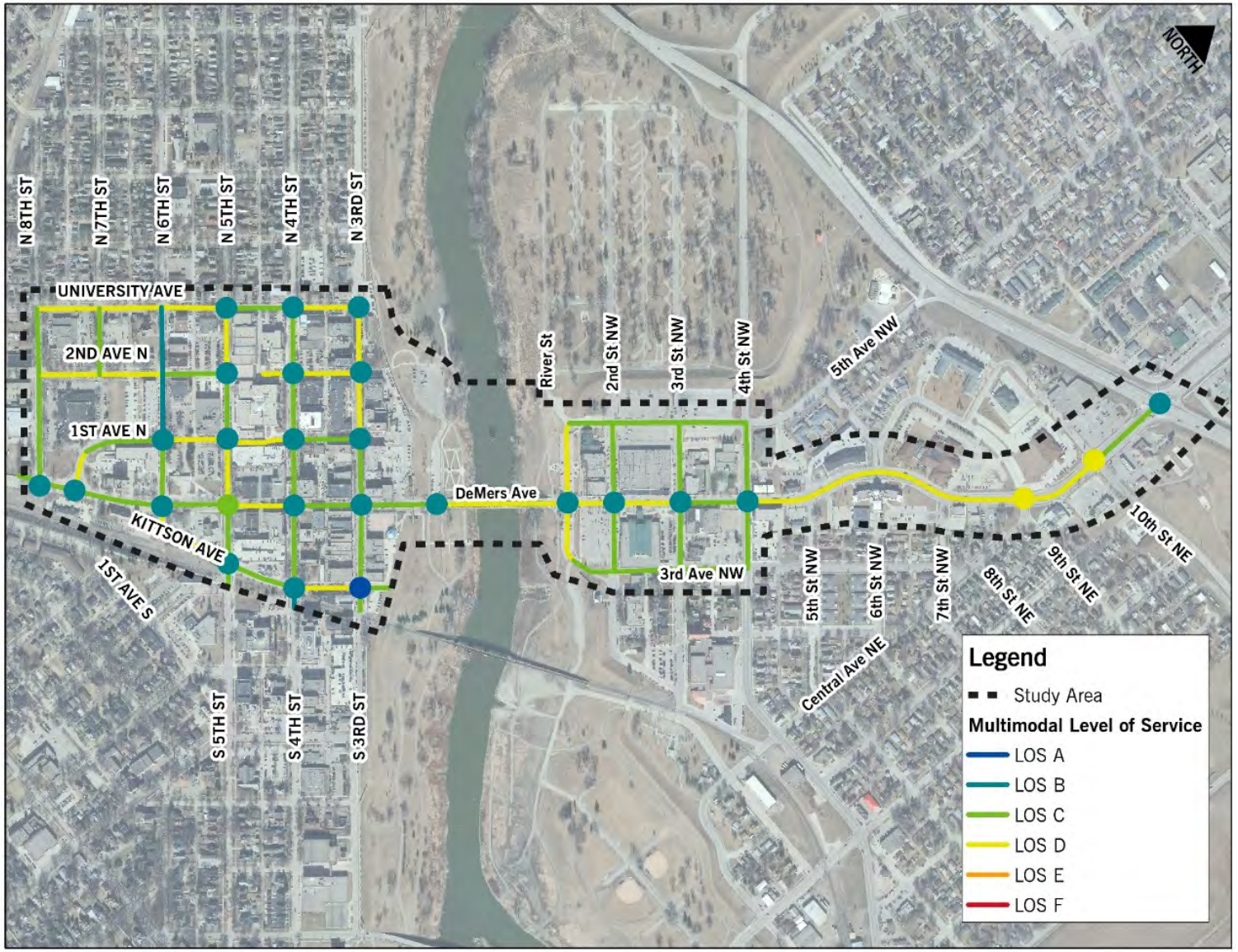
B

B

D

E

C

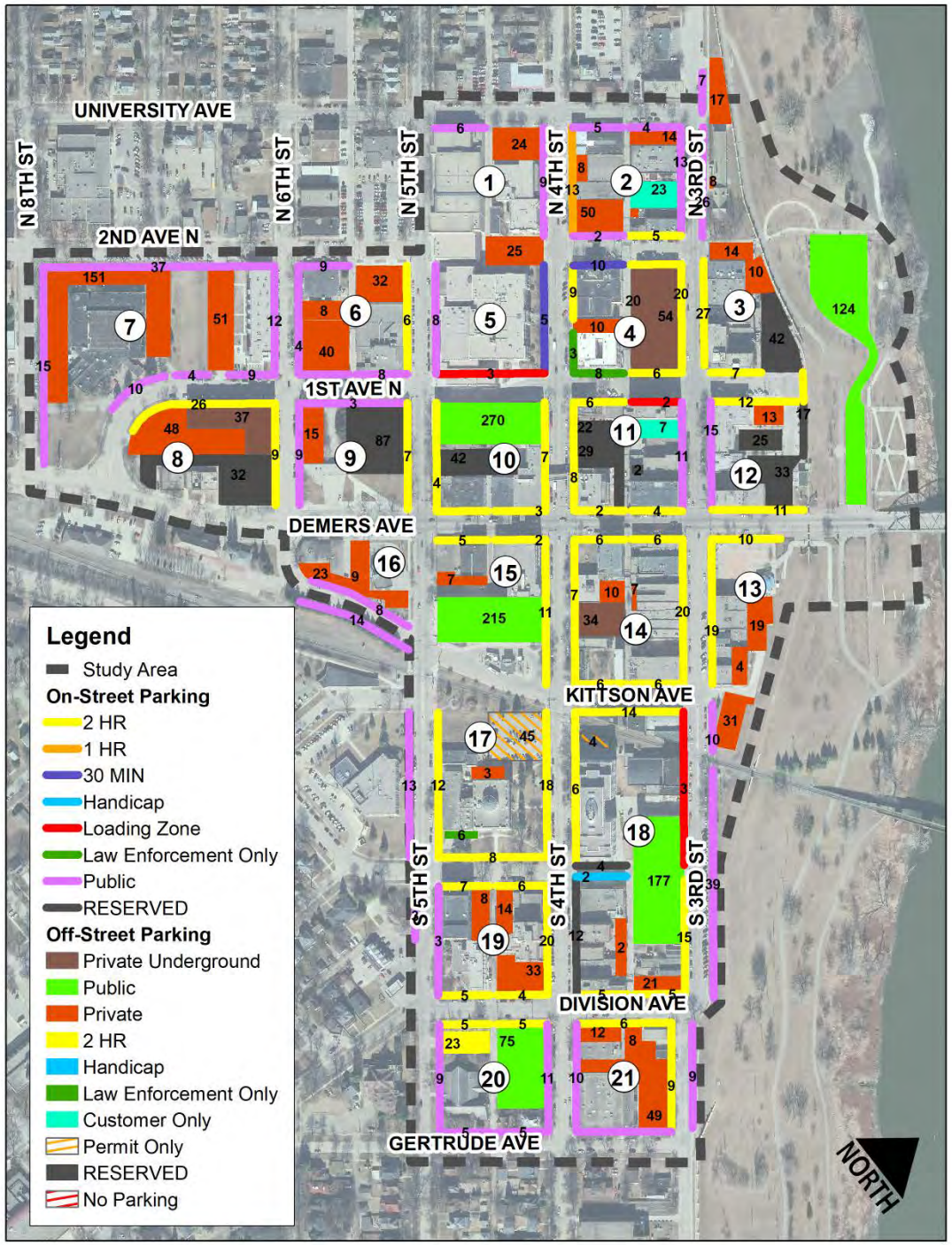


- Reliability is a Challenge on DeMers Avenue to Cars and Trucks
- Limited Bicycle Connectivity Through Downtown
- Transit Access Requires Walking a Few Blocks

Parking Conditions

Existing Grand Forks Parking Supply

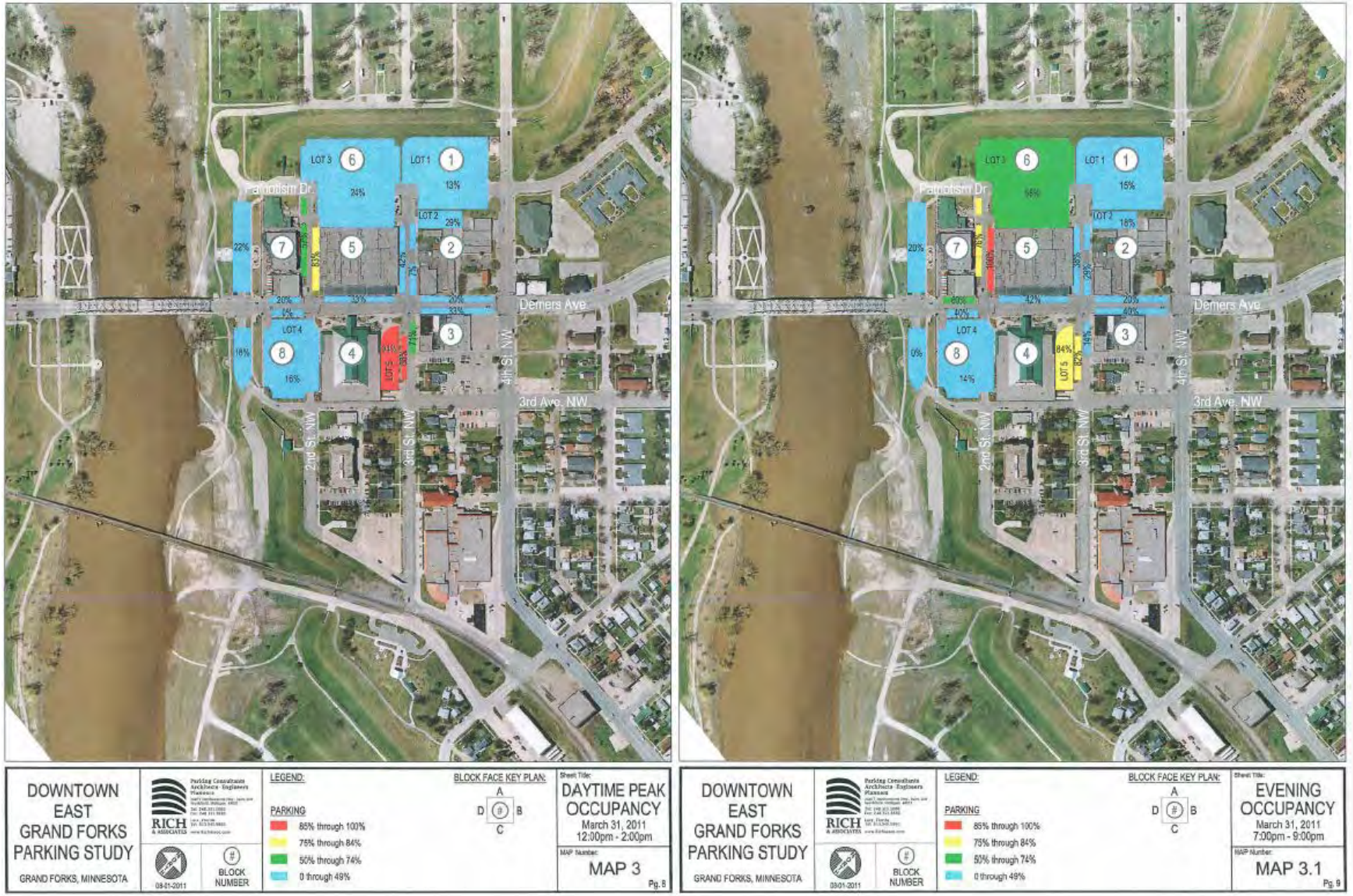
Parking Type	# of Stalls	% of Total
On-Street	960	26.8%
Public Off-Street	1,325	37.0%
Private Off-Street	1,296	36.2%
Total Parking	3,581	100%



Grand Forks Parking Availability

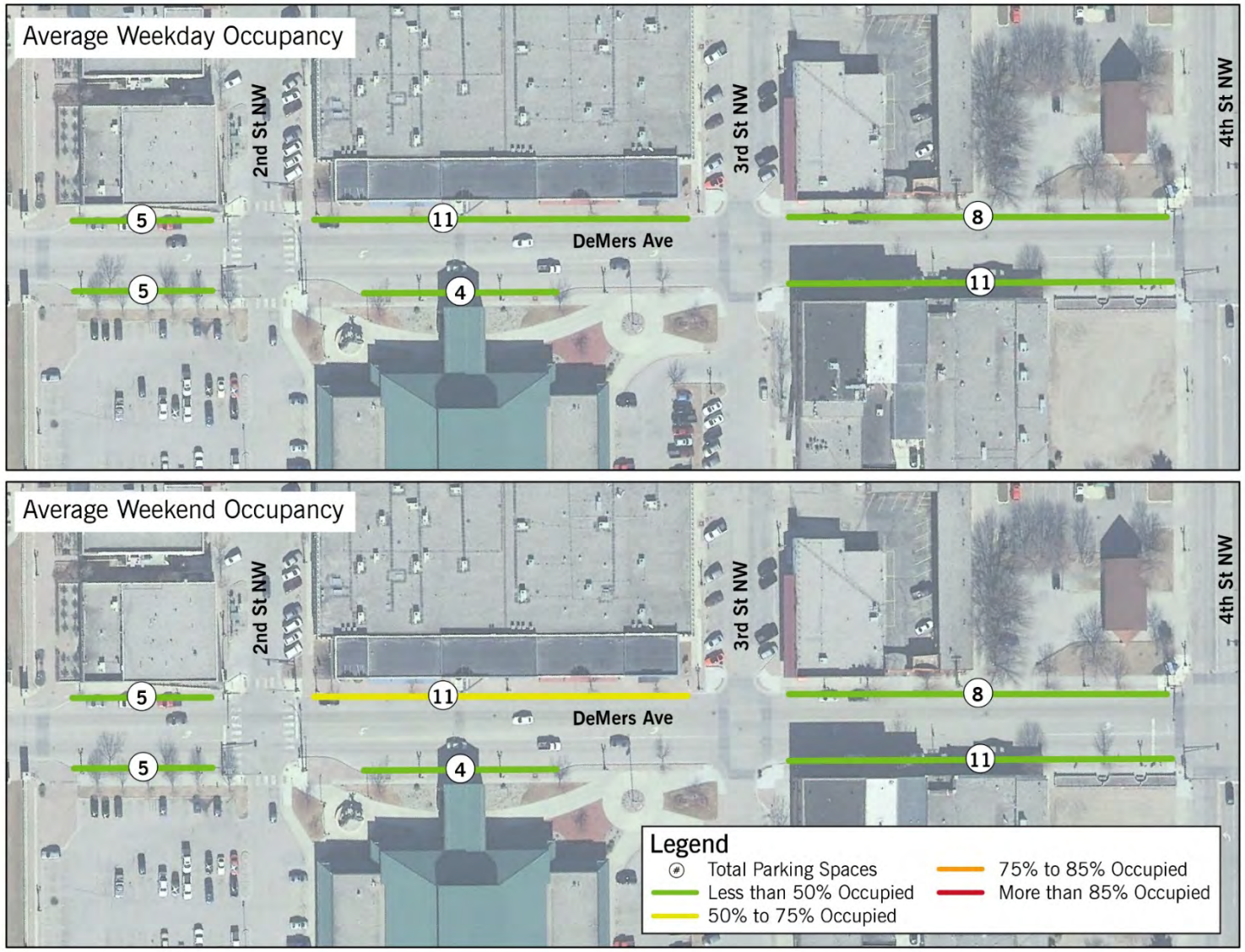
East Grand Forks Parking Occupancy (2011)

- 955 Parking Spaces
  - 142 On-Street
  - 813 Off-Street
- Pockets of High Demand but Overall Low Occupancy



East Grand Forks DeMers Avenue Parking Demand (2019)

- 44 On-Street Spaces
  - Low Occupancy – 5% at 8 AM
  - High Occupancy – 52% at 6 PM
  - Higher Parking Demand on Weekends



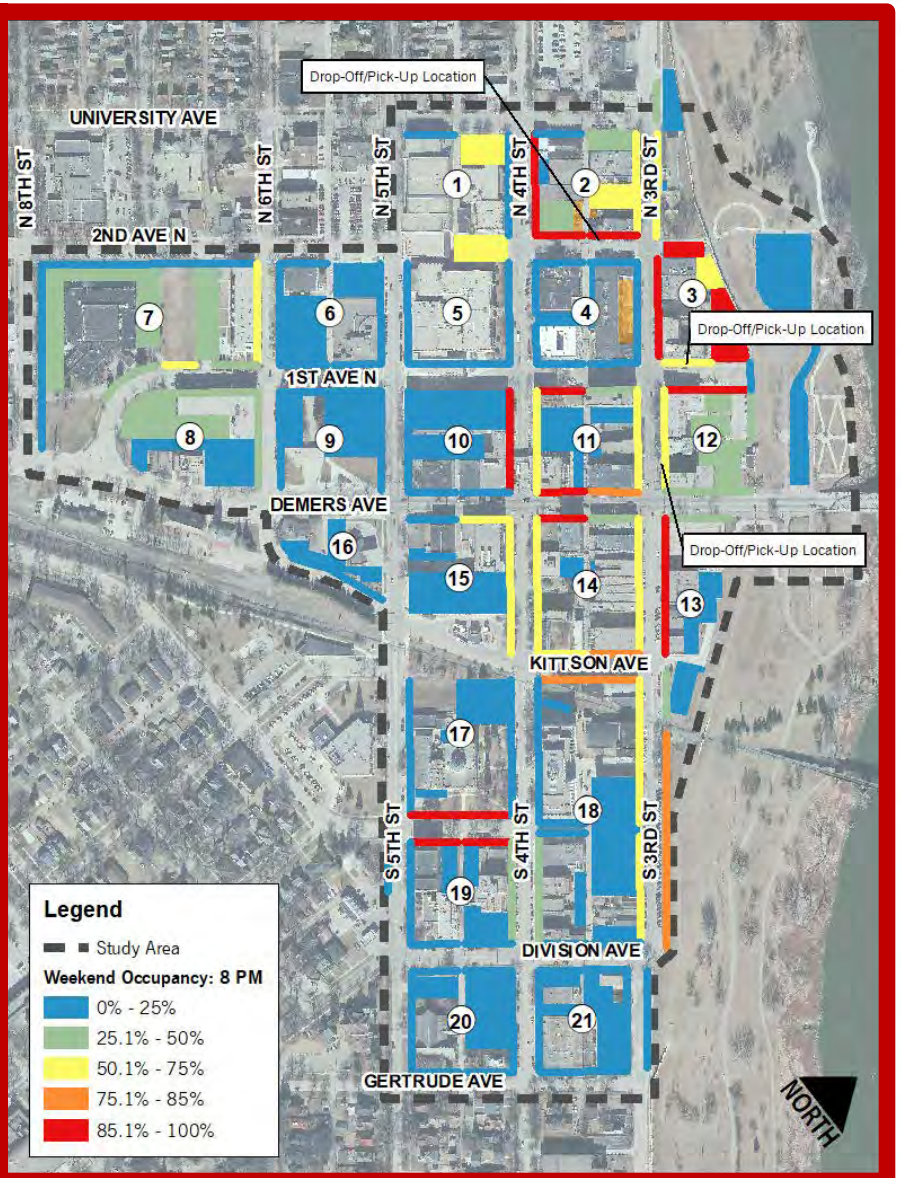
Nationally, 40% of ride-hailing trips would have otherwise been made by walking, biking or transit

Ride-Hailing and Car Services

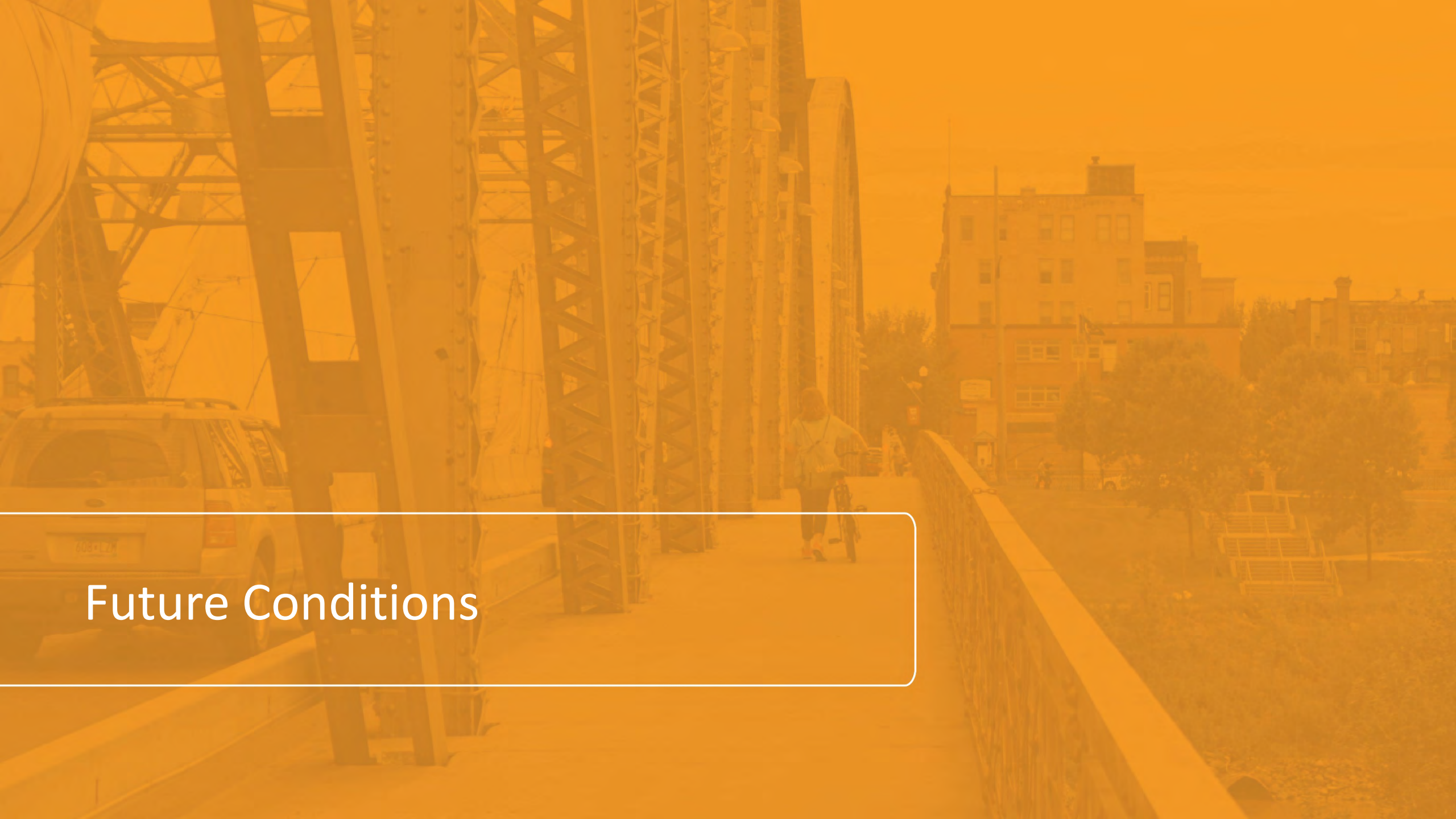
Impacts on Parking

- Less impactful then taxicabs
- Nationally use to supplant taxicabs, walking and biking
- Popular during evening and weekend
- Unlikely to supplant commute trips until parking demand increases
- May increase overnight trips

Weekend Evening Parking Demand and Current Pick-Up/Drop-Off Locations

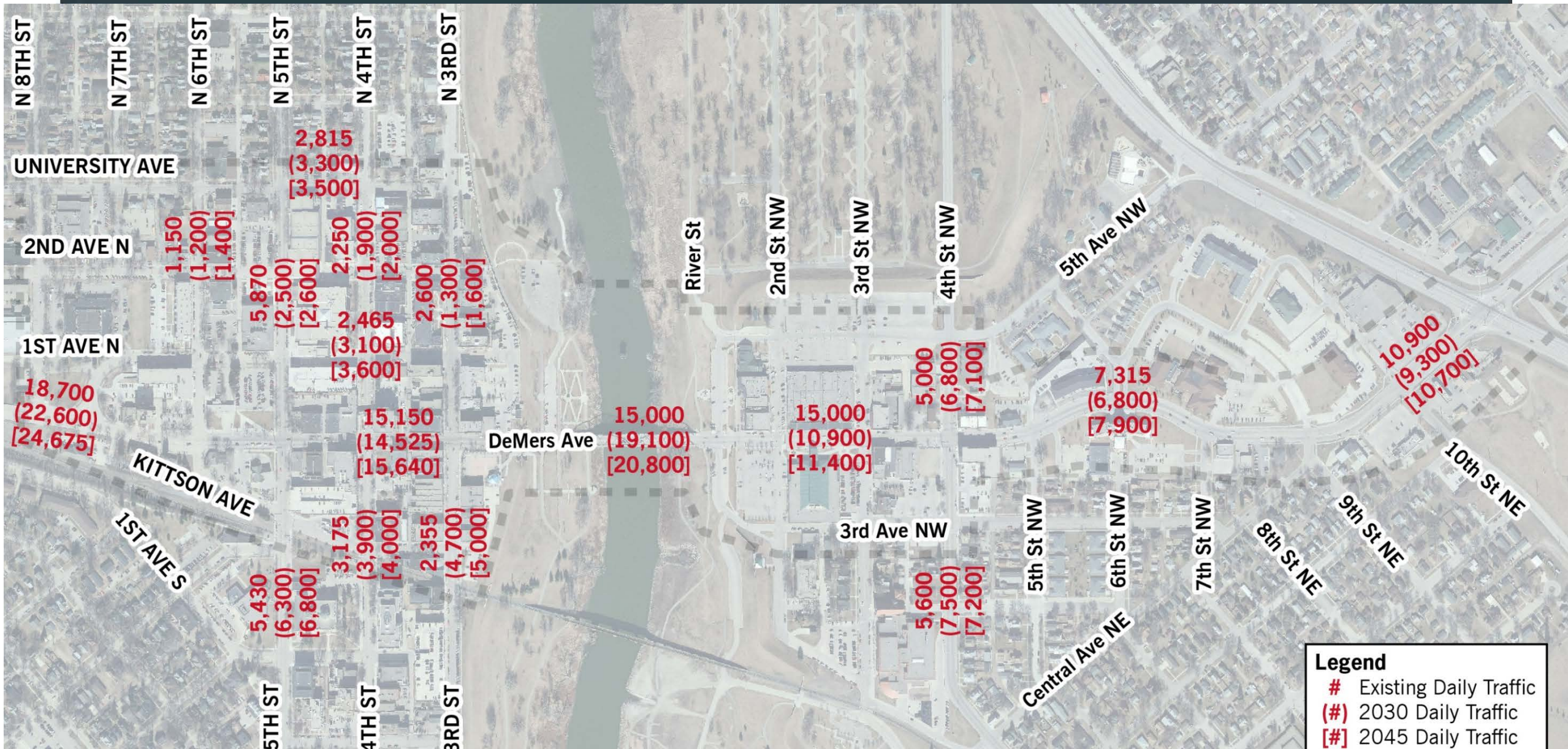


Key Issues Discussion



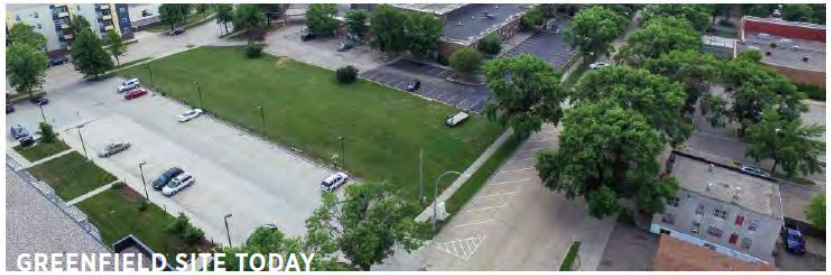
Future Conditions

Future Forecasts



Grand Forks Future Conditions

- DAP Identified Multiple Sites to See Reinvestment within Next 10 Years
  - 300+ Residential Units
  - 37,000 SF of New Commercial



East Grand Forks Future Conditions

- Additional Infill and Mixed-Use Developments
- DeMers Avenue and 4th Street NW
- Parking Lots Behind Riverwalk Center

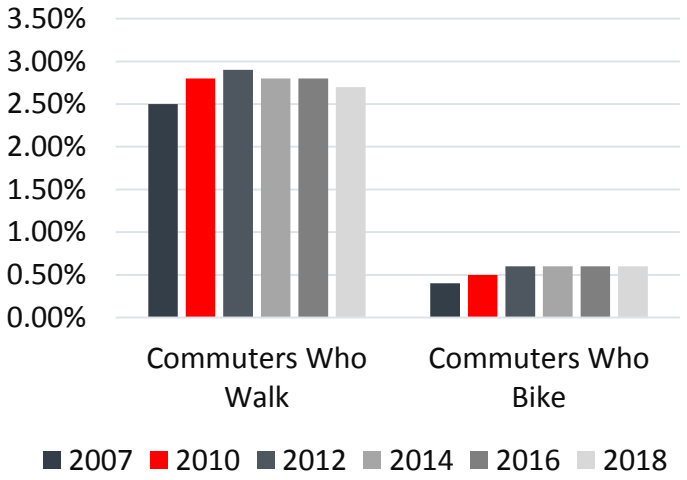
Historic Local Mode Share

Downtown Grand Forks	Transit	Walk	Bike	**Transit/ Walk/ Bike**	Carpool	Taxi, Moto, Other	**Total Ride Share**
2017	2.4%	5.2%	0.0%	7.6%	4.7%	1.9%	6.7%
2016	3.2%	7.9%	0.0%	11.1%	3.8%	2.9%	6.7%
2015	2.9%	10.3%	0.0%	13.2%	4.3%	1.6%	5.9%
2014	4.2%	10.7%	1.9%	16.8%	5.8%	2.2%	8.0%
2013	5.0%	11.7%	2.2%	18.9%	8.8%	2.0%	10.8%

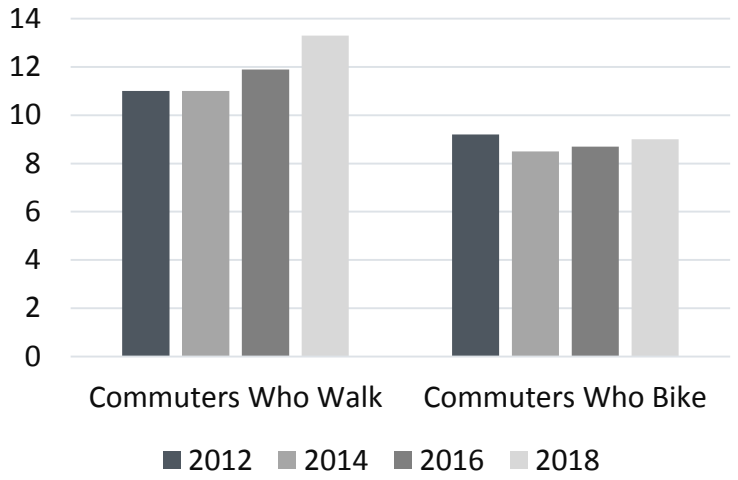
Downtown East Grand Forks	Transit	Walk	Bike	**Transit/ Walk/ Bike**	Carpool	Taxi, Moto, Other	**Total Ride Share**
2017	6.3%	1.8%	0.0%	8.1%	2.4%	1.2%	3.6%
2016	11.3%	1.7%	0.0%	13.0%	0.0%	1.1%	1.1%
2015	7.4%	2.8%	0.0%	10.2%	3.7%	1.5%	5.2%
2014	8.5%	6.9%	0.0%	15.3%	14.9%	2.8%	17.7%
2013	0.8%	6.8%	0.0%	7.6%	15.3%	2.0%	17.3%

Nationwide Trends

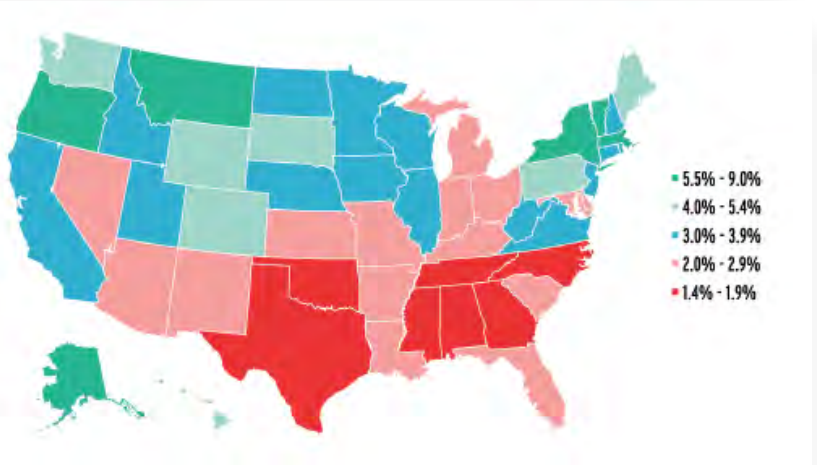
Nationwide Commute Trends



Nationwide Fatalities per 10K Commuters



Share of Commuters Who Walk or Bike to Work



Next Steps

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- Future Conditions Report – January
- Steering Committee Meeting #2 – February
- Public Input Meeting #1 – February
- Study Completion – Fall 2020

MPO UNIFIED PLANNING WORK PROGRAM -UPDATE , 2019

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TRANSPORTATION PLAN UPDATE AND IMPLEMENTATION ACTIVITIES

AREA	TASK	%	ORIGINAL COMPLETION DATE	PROJECTED COMPLETION DATE
Public Participation Plan	MPO Board gave preliminary approval; documents are offically out for 45 day review and comment. Feb 18th end of comment period	90%	31-Dec-19	19-Mar-20
ITS Regional Architecture (Update)	Review has ended. ATAC is drafting up the revisions that were noticed. Expet to have draft materials and meetings schedule for early March 2020	80%	31-Dec-19	19-Mar-20
US 2/US 81 Skewed Intersection Study	Draft final report has been reviewed and approved by the Steering Committee. Final presentations and approval will happen in January	95%	31-Oct-19	28-Feb-20
Grand Forks Land Use Plan Update	Have begun discussions with city staff on timeline for RFP; expected to be released May 2020	5%	31-Dec-20	
East Grand Forks Land Use Plan Update	Have begun discussions with city staff on timeline for RFP	5%	31-Dec-20	
Downtown Transportation Study	The Steering Committee met on Dec 9th to review the Study and Existing Coniditions Report. The draft is out for comment.	50%	30-Jun-20	
Traffic Count Program	Vision Camera Data Collection & Traffic Analysis Enhancements.	60%	On-going	