Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

TECHNICAL ADVISORY COMMITTEE MEETING

WEDNESDAY, JULY 14TH, 2021 – 1:30 P.M.

East Grand Forks City Hall Training Room/Zoom

PLEASE NOTE: Due to ongoing public health concerns related to COVID-19 the Grand Forks/East Grand Forks Metropolitan Planning Organization (GF/EGF MPO) is encouraging citizens to provide their comments for public hearing items via e-mail at info@theforksmpo.org. The comments will be sent to the Technical Advisory Committee members prior to the meeting and will be included in the minutes of the meeting. To ensure your comments are received and distributed prior to the meeting, please submit them by 5:00 p.m. one (1) business day prior to the meeting and reference the agenda item your comments addresses.

MEMBERS

Peterson/Kadrmas _____
Ellis _____
Bail/Emery _____
Brooks/Halford _____
Riesinger _____

Mason/Hopkins_____
Zacher/Johnson _____
Kuharenko/Williams _____
Bergman _____

West _____
Magnuson _____
Sanders _____
Christianson _____

1. CALL TO ORDER

2. CALL OF ROLL

3. DETERMINATION OF A QUORUM

4. MATTER OF APPROVAL OF THE JUNE 9, 2021, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

   MATTER OF APPROVAL OF THE JUNE 23, 2021, MINUTES OF THE SPECIAL TECHNICAL ADVISORY COMMITTEE

5. MATTER OF UPDATE ON FUTURE BRIDGE TRAFFIC IMPACT STUDY ..... ALLIANT

6. MATTER OF APPROVAL OF NORTH DAKOTA SIDE FUNCTIONAL CLASSIFICATION UPDATE..... KOUBA

7. MATTER OF APPROVAL OF CONTRACT WITH KIMLEY HORN FOR TRANSIT DEVELOPMENT PLAN UPDATE..... KOUBA

8. MATTER OF PRELIMINARY APPROVAL OF PROPOSED AMENDMENTS TO 2045 METROPOLITAN TRANSPORTATION PLAN .....HAUGEN

9. OTHER BUSINESS
    - A. 2021 Annual Work Program Project Update
        1) East Grand Forks Land Use Plan Update
        2) Grand Forks Land Use Plan Update
        3) Aerial Photo Update
        4) Pavement Management Update

10. ADJOURNMENT

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

PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE
Wednesday, June 9th, 2021

CALL TO ORDER

Earl Haugen, Chairman, called the June 9th, 2021, meeting of the MPO Technical Advisory Committee to order at 1:40 p.m.

CALL OF ROLL

On a Call of Roll the following members were present: David Kuharenko, Grand Forks Engineering. The following members were present via Zoom: Ryan Brooks, Grand Forks Planning; Wayne Zacher, NDDOT-Local Government; Ryan Riesinger, Airport Authority; Steve Emery, East Grand Forks Engineering; Jon Mason, MnDOT-District 2; and Dale Bergman, Cities Area Transit.

Absent: Brad Bail, Stephanie Halford, Jason Peterson, Jesse Kadrmas, Michael Johnson, Nick West, Lane Magnuson, Lars Christianson, and Patrick Hopkins.

Guest(s) present: Kristen Sperry, FHWA-Bismarck and Jane Williams, Grand Forks Engineering.

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

DETERMINATION OF A QUORUM

Haugen declared a quorum was not present.

DISCUSSION

Haugen said that, as he noted to some earlier, we are going to have a Special Technical Advisory Committee meeting on Wednesday, June 23rd, at 1:30 p.m., again with the option of attending in person or via Zoom, and additional information will be forthcoming.

Haugen stated that since we don't have a quorum approval of a consultant for the Pavement Management System update will go before the MPO Executive Policy Board at their meeting next Wednesday without a Technical Advisory Committee recommendation. He added that, so everyone is clear, there is going to be a change to the staff recommendation on that item as well. He asked Ms. Kouba to clarify that change.

Kouba commented that in the staff report we have the recommended action for the Technical Advisory Committee to approve forwarding a recommendation to the MPO Executive Policy

Board to approve the contract for the Pavement Condition Analysis and Report with GoodPointe Technology, with Grand Forks Local Road approval given by the Grand Forks City Council, but Grand Forks Engineering provided an update that they do not have to bring this before their City Council so it can be approved just as it is, without City Council approval. Haugen stated that they would make that change to the staff report.

Dale Bergman joined that meeting via Zoom, thus a quorum was now present.

MATTER OF APPROVAL OF THE MAY 12TH MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

MOVED BY KUHARENKO, SECONDED BY BERGMAN, TO APPROVE THE MAY 12TH, 2021 MINUTES OF THE TECHNICAL ADVISORY COMMITTEE, AS SUBMITTED.

MOTION CARRIED UNANIMOUSLY.

SUSPEND AGENDA

Haugen stated that in order to accommodate Mr. Brooks, who has to leave for a 2:00 meeting, he would like to suspend the agenda to hold discussion on Agenda Item 7.

MATTER OF APPROVAL OF CONSULTANT FOR PAVEMENT MANAGEMENT SYSTEM UPDATE

Kouba referred to the information in the packet and explained that it is the contract we have for our Pavement Conditions and Analysis Report. She stated that we only received one quote, and that was from GoodPoint Technology, and that is the one before you today.

Kouba said that they did ask the NDDOT if there was anything else we needed to do besides following the QBS process, and they said that there wasn't anything and that we should just continue on with that so we did follow those procedures with this specific quote. She added that the Selection Committee did meet and she asked if they had found anything that they viewed as disqualifying and they didn't feel there was anything.

Kouba commented that there was some question as to whether or not the local roads needed council approval, and she did receive notification today that that wasn't necessary for the local road part of the contract so staff is recommending that the Technical Advisory Committee forward a recommendation to the MPO Executive Policy Board that they approve the contract with GoodPointe Technology, as presented.

Zacher said that he had sent an email earlier noting that he thinks this contract has the fewest number of hours that he has ever seen, so he is wondering of there is any concern from the MPO's standpoint that there is less than 70 hours for this project. Kouba responded that there really isn't a concern. She explained that we have had a lot of experience with GoodPointe Technology in the past; they have pretty much been the only contractor that we have worked

with on the pavement management. She said that most of the hours that you are probably used to seeing are built into that Centerline Mile Corruption, so that is one of the reasons you may not be seeing actual direct hours for people, but there are labor hours connected to the centerline miles as well, so that can be per mile rates that they have put in, but other than that previous contracts have been very similar.

Kuharenko asked if Ms. Kouba received an email from Mr. Grasser stating that they do not have to take the local streets to their City Council for approval. Kouba responded that she had.

MOVED BY KUHARENKO, SECONDED BY EMERY, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE CONTRACT WITH GOODPOINTE TECHNOLOGY TO DO THE PAVEMENT CONDITIONS AND ANALYSIS REPORT, SUBJECT TO INCLUSION OF THE CORRECTION THAT THE GRAND FORKS CITY COUNCIL DOES NOT HAVE TO APPROVE THE LOCAL STREETS.

ROLL CALL WAS DONE BUT MR. BROOKS HAD SIGNED OFF SO A QUORUM WAS NO LONGER PRESENT.

ADJOURNMENT

HAUGEN ADJOURNED THE MAY 12TH, TECHNICAL ADVISORY COMMITTEE MEETING AT 1:50 P.M.

Respectfully submitted by,

Peggy McNelis, Office Manager

PROCEEDINGS OF THE
TECHNICAL ADVISORY COMMITTEE SPECIAL MEETING
Wednesday, June 23, 2021
Zoom Meeting

CALL TO ORDER

Earl Haugen, Chairman, called the June 23, 2021, Special Meeting of the MPO Technical Advisory Committee to order at 12:31 p.m.

CALL OF ROLL

On a Call of Roll the following members were present via Zoom: Nick West, Grand Forks County Engineer; Nancy Ellis, East Grand Forks Planning; Steve Emery; East Grand Forks Engineering; David Kuharenko, Grand Forks Engineering; Rich Sanders, Polk County Engineer; Jason Peterson, NDDOT-Grand Forks District; Dale Bergman, Cities Area Transit; Wayne Zacher, NDDOT-Local Government; Jon Mason, MnDOT-District 2; Ryan Brooks, Grand Forks Planning; Ryan Riesinger, Airport Authority; and Rich Sanders, Polk County Engineer

Absent: Brad Bail, Stephanie Halford, Jesse Kadrmas, Michael Johnson, Lane Magnuson, Lars Christianson, and Patrick Hopkins.

Guest(s) present: Kristen Sperry, FHWA-ND; Tim Burkhardt, Alliant Engineering; and Mike Kondziolka, Alliant Engineering.

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

DETERMINATION OF A QUORUM

Haugen declared a quorum was present.

MATTER OF FUTURE BRIDGE TRAFFIC IMPACT STUDY UPDATE

Haugen reported that everyone has a copy of the presentation and the Tech Memo in your packet, and that is essentially what we will be going over today, so with that he will turn the screen over to Tim Burkhardt with Alliant.

Burkhardt stated that they are going to cover traffic operations and safety, which is our future no-build condition, or the last thing we need to understand before we move forward and develop and evaluate alternatives, so Mr. Kondziolka will be presenting that information in a minute and he will be presenting sort of a high level overview of the draft purpose and need of the project.

Burkhardt referred to the slide presentation (a copy of which is included in the file and available upon request), and gave an update on where they are at with the project. He stated that they are getting closer to holding a public event, which will follow the next meeting of the Ad Hoc Group which is now scheduled for July 20th, so they are looking to begin their on-line public comment period, public open house, approximately July 26th, a week after that Ad Hoc meeting, which gives us a little time to address any comments and/or new issues that might come up at that meeting.

Zacher commented that he just wanted to mention that you need to be aware of the required MPO policies in terms of when to place an announcement of upcoming events in the paper prior to or being available on-line; making sure you have the 15 to 21 days needed for the comment period, and such. He said that he wanted to bring this up, even though he is sure you are already aware of it, but they have run into issues with other projects whereby they had to extend the comment period because they didn't have it advertised long enough. Burkhardt thanked Mr. Zacher for the information, adding that he wasn't aware of the specifics, though he knows there are several requirements. Zacher said that he knows that they do, from a DOT standpoint, but he isn't sure what Mr. Haugen's requirements are for the advertisement timeframe. Haugen responded that they have different timelines depending on the type of meeting that is being held; it would either be 5 to 10 days prior. Burkhardt said that there would be advance notice and then the duration of the comment period to follow. Haugen responded that that is correct, adding that it is pretty much laid out in the Public Participation Plan that was just recently adopted, as we all on the Technical Advisory Committee are aware of. Burkhardt said that they would review that document as well.

Burkhardt referred to the Tasks and Deliverables Status slide and commented that it allows us to keep track of what they have done, what is in progress, and what is upcoming on the schedule. He pointed out that the middle column shows things that are in progress, which includes this meeting; planning for the public event, maintain a website, Tech Memo 3-B is what Mr. Kondziolka will be talking about today, draft purpose and needs is what he will be talking about later. He said that looking ahead will be the next meeting of the Ad Hoc Group July 20th, and the public meeting to follow, and Tech Memo 3-C is where they will look at the traffic performance of the two alternate bridge corridors, the 32nd Avenue and Elks Drive. He added that that will then be followed by putting that information on paper, and then subsequently working into the evaluation. He stated that it has been a little bit of a slow build to get to this point and to get all the traffic information well documented, and really they can now begin moving more quickly, though now subject, certainly, to the constraint of bringing the public along at the appropriate time. He said that the open house they are talking about holding in July, and the comment period, is not on the alternatives it is on sort of the background information, that specifically are most interesting to people will be this traffic; so what is the problem that we are looking to solve and what are those conditions.

Kondziolka stated that he will be talking about the traffic analysis project. He said that this is just a recap so Tech Memo 3-A was a summary of the traffic volume development and methodology for traffic forecasts. He added that we did discuss this at a prior meeting, so he just wanted to retouch on it briefly to lay the foundation for the next Tech Memo 3-B that we will be

talking about today that discusses the traffic operations and safety analysis for the existing conditions and the future no-build conditions for a conditional bridge.
Kondziolka stated that Tech Memo 3-B discusses volume changes between the existing conditions in 2030 and 2045; really just showing some graphics to help visualize what those changes are. He added that they walked through the five-year safety analysis and then the traffic operations analysis, which looks both from a segment level and also from an intersection standpoint.

Kondziolka referred to slides and commented that they are just a couple of graphics to kind of visualize where the changes are happening and where we would expect the greatest changes in traffic volumes, going from 2015 to 2030 and then from 2015 to 2045. He stated that this is traffic data supplied by A.T.A.C. from the Travel Demand Model link. He said that it really just kind of help to visualize where we are expecting the greatest traffic increases; you can see the Point Bridge has a thicker blue line indicating a greater increase in traffic from current to 2030 conditions and that 4th and DeMers and Washington corridors are also seeing some of the greatest increases in anticipated traffic volume increases in the 2030 forecast year, and we can see the expansion of that going from 2015 to 2045, so looking at a further horizon year where we would expect more of that traffic growth to happen, and along with the locations from 2030 the 2045 also has some greater increases on Belmont and on U.S. 2 and U.S. 2B.

Kondziolka commented that the next piece of this was the Safety Analysis. He said that they conducted a safety analysis for East Grand Forks and Grand Forks within the study area, looking at crash history for the past five years, using available data from 2016 to 2020, and the slide shows two components, one being a safety analysis of the intersections of the study area and the other being the segment crashes within the study area. He stated that when they are looking at the crash analysis they are trying to identify locations where the crash history would indicate a statistically significant crash problem based on average crash rates for similar facilities but also at similar volume levels, so the big items to point out, and there are two pieces to this; the center section tier is the total crash section looks at overall volume of crashes, and then the K/A crashes (which stands for fatal and severe injury crashes) looks more specifically at locations that have maybe not a total volume issue in terms of greater number of crashes overall but have more severe crashes specially, and those two aren't mutually exclusive.

Kondziolka stated that what is indicated with the highlighted locations are areas where the critical crash index is 1 point or greater, so the red highlighted areas are locations that have a statistically significant crash issue documented and the yellow highlighted areas are locations that have a crash rate that is greater than the State average crash rate.

Kondziolka said that the result of the intersection analysis here indicates some issues on 32nd Avenue and Washington Street, really along Washington Street at multiple intersections; DeMers, 24th Avenue and 32nd Avenue, and then also those are all total crash issues whereas for Bygland Road and Greenway Boulevard are severe crash issues, as indicated in the right section of columns, so based on the volumes there, there was an incapacitating injury crash.

Burkhardt commented that he knows they didn't do an in-depth safety analysis, given the scope of this project, but do we know anything about potential causes at the different locations. Kondziolka responded that not specifically for each of these, but we can see kind of where the greatest concentration of crashes are, but to get into causes somewhat requires really digging into the narratives for each of these locations, especially when we are looking at crashes on Washington where we have north of 300 crashes for a particular segment, we would need a greater level of detail. Burkhardt said that likely some of them are related strictly to volume or congestion, but not necessarily all of them. Kondziolka added that somewhat indicated in this total crash column; the critical crash rate takes the average crash rate for similar facility types, but then it normalizes based on the entering volume, so it tries to weight the crashes that are experienced at a particular intersection with the total amount of entry traffic because crashes are really a function of vehicle exposure, so that is the way we get our above critical index value of 1, but we know that there are more crashes happening for this particular volume.

Kondziolka stated that moving to the segments, same crash analysis but just looking at it from a segment perspective rather than at a particular intersection, and there were some locations that indicated issues between 2016 and 2020. He said that we had four locations that had total vehicle crashes that were greater than 1, indicating a higher volume of crashes at the locations shown, and then we also had three locations that had severe crash issues on segments on 32nd, DeMers and 4th and then U.S. 2 as well. He added that some of these are lower volume, it may only take one severe injury crash or fatality to indicate an issue here, but statistically that would stand out as an issue at these locations.

Kuharenko commented that one question he has is; he knows that in the scope of work schedule you have it showed that there were going to be pedestrian crossings at schools that would be analyzed as well as reviewing crash data and conducting an analysis at all intersections identified with crash issues, which looks like that is part of what you have here, is that something that we can expect to see in Tech Memo 3-B. Kondziolka responded that they did look through, within the intersections analysis there are specifically intersections along city corridors that have pedestrian crossings near schools, those are all specifically listed with the crash table, so the result of those are provided in Tech Memo 3-B. He added that this presentation was just listing locations that had an identified statistically significant issue, so the info on those locations are provided, however none of them had a statistically significant issue so those aren't shown here. He said that there is also some detail within that memo that goes into; for the locations where we have indicated issues, we are looking at what is triggering the issue and what was the cause with just a little bit additional in the memo; for instance Bygland and Greenway, where we had the critical severe and fatal crash index that was higher than average, it was discussed as a single crash, but it was of a certain type and based on what we are seeing for averages that is why we are indicating an issue at that location, so that is all included in a little more detail in the report, this is just a summary of the highlights of that.

Mason stated that a previous slide mentioned U.S Highway 2 and 180th Street, and he wanted to mention that there is a project on Highway 2 this summer that is primarily a west-bound lane resurfacing project, and the element of that project does include constructing a reduced conflict intersection at Highway 2/Highway 2-E Intersection, that J-turn may help some of the crash

issues out there, which also has some permanent extensions within that vicinity as well. Kondziolka said that this good to know before we get into this, and it should certainly support a safety improvement. He added that he knows that probably part of that came out as a result of the fact that there was at least a single severe crash at this location. Burkhardt asked if there was any documentation on that project, what stage is the project at. Mason responded that it has been designed and it is planned for construction this summer.

Haugen asked if a graphic of the U.S. 2 segment could be shown as not too many people are familiar with where 180th Street S.W. is located. Kondziolka referred to a slide of the area and commented that it is just the segment to the north of the intersection on U.S. #2 and U.S. #220, so it is essentially the northern leg of the intersection on U.S. #220.

Kristen Sperry, FHWA-Bismarck, and Jason Peterson, NDDOT-Grand Forks joined the meeting.

Kondziolka explained that the next three slides are going to just recap both components of the Traffic Operation and Mobility Study. He pointed out that the one on the left is the Segment Analysis, which is looking at volume to capacity kind of a planning level look at operations and anticipated volume levels versus what the current roadway configuration would be able to handle as they get towards capacity, and this is highlighted on a scale that indicates level of service for the segment. He stated that once we get to that 90% to 100% of the roadway capacity, we are starting to see a level of service E and F, which indicated that a significant amount of congestion could be anticipated, so looking at the existing conditions within the study area, Washington Street is within that 80% to 90% for the volume to capacity and is starting to get to a point where it isn't quite at capacity but getting close. He said that that kind of summarizes the segment, but we also have an Intersection Traffic Analysis that was conducted to look at operations using traffic modeling to look at the A.M. and P.M. Peak Hour operations for each of the locations to try to indicate where we have operations that are either near level of service E and F, which is kind of the threshold where we consider operations being unacceptable, or better than that so highlighting within the table anything that is operating at level E or F and that is considered an operational issue or anticipated operational issue, and then just another note, the control that is shown here for these intersections, these are overall intersection level of service results here; when we get to a two-way stop controlled intersections, where we have stop signs on side streets, it would be overall intersection level of service, this is just from metric or measure of effect that missed there because we do have three volume traffic on the main line there, on the main approaches, so what they are showing here is the level of service at the worst approach there, which would be one of the stop controlled side streets.

Kondziolka said that to summarize, we are seeing issues in traffic volumes at Belmont and 4th Avenue is in the A.M. Peak Hour operating at a level of service E, indicating there is some congestion that is already occurring there, and that is an all-way stop controlled intersection, so the delay certainly get substantial during the A.M. Peak Hour; then when we look down a little bit at Bygland Road and Rhinehart, that is a side street stop controlled intersection here, the northbound approach being stop controlled, it is operating at a level of service D during the A.M. Peak Hour, so we are starting to see backup during the A.M. Peak here.

Kondziolka stated that, going to the 2030 No Build, and what the traffic analysis is saying here; looking at the segment analysis, Washington, which was previously at the level of service D now at a level of service E, where we are starting to anticipate approaching or reaching capacity at that roadway segment and thus expecting to experience some significant congestion there. He said that similarly we have a couple of segments that have moved from the level of service C or better to a level of service D, we've got DeMers and 4th, where we are starting to see some additional congestion and then also 32nd to the west of Washington and Washington south of 32nd, so we are starting to see some additional locations that are kind of creeping up there towards capacity by the 2030 No-Build, on those northern and western roads.

Kondziolka commented that capacity issues are going to be generally reflected here when we start to look at the intersection level of services as well. He stated that a couple of additional locations are cropping up with operational issues in the 2030 No Build scenario. He added that on Belmont and 4th, where it was just the A.M. Peak Hour that had an operational issue we are seeing more level of service happening in the A.M. and P.M. Peak Hours by 2030, and then along Washington at DeMers we are seeing the A.M. Peak Hour is expected to operate at a level of service E, along with Cherry Street at 32nd, so a couple of additional locations showing up here, and as we saw in the Existing, Bygland and Rhinehardt was starting to operate at a level of service E on that northbound approach and that would degrade to a level of service F. He said that one thing to note, at this intersection there is a programmed round-a-bout that would be constructed by the 2030 No-Build scenario, so this analysis looked at both conditions at this location, one under the existing configuration and the other under the proposed round-a-bout, single land round-a-bout condition, and so both results are presented.

Kondziolka said that looking at the 2045 No Build you can see multiple segments anticipated to have a level of service E or F operations at those shown in orange or red. He pointed out that the Point Bridge is expected to reach capacity by 2045, showing a level of service E; and then Washington Street, which we have seen kind of progressively getting closer and closer to capacity, is not expected to exceed capacity by 2045 No Build condition, and then we have additional roads that are also getting closer to that capacity threshold, but not quite at it yet; they include Belmont, some additional increase along 4th and DeMers and along 32nd and then also on the East Grand Forks side you can see the segments near the Point Bridge are as well.

Kondziolka commented that looking at the intersection traffic operations results we see that where we previously had some level of service E's, which is getting close to capacity but not quite at it, failing, where all intersections that had issues are now operating significantly worse at level of service F, which is failing operation and has significant congestion.

Burkhardt stated that when we add a new bridge, what do we expect to happen to these future operations, and looking out to 2045, and the short answer is we will have a redistribution of traffic based on that new link across the river, and in some cases reducing traffic on these segments where there are issues while some of the other ones will have new traffic, so as we look to evaluate it, we need a baseline to say that we had added that new link, so to what extent are we addressing some of these issues, and he would say it will, but it won't necessarily address every issue, and it will create some new ones that we will be looking to mitigate.

Haugen commented that he would like to explain why we have two different types of traffic control on Bygland and Rhinehart; there has been a request from the City of East Grand Forks to not do the round-a-bout that is in the 2022 Fiscal Year, and the MPO has received that request and are putting together the process of how to engage the public on whether we should amend the Transportation Plan and the T.I.P. to reflect that request, and so that is why we are showing two traffic controls at that particular intersection at this time. He added that they may not have an answer to that amendment process until later this year, and this study is scheduled to be completed at the end of the year, so we are on dual track there.

Kondziolka reported that Tech Memo 3-C is going to cover the Build Traffic Operations Analysis, where we kind of dig into similar metrics for the two different bridge options at 32nd and Elks Drive so there will be more graphics to come; we start to get an idea of anticipated operations in the 2030 and 2045 future years, and then also start to look at what would be needed to mitigate some of the anticipated problem locations into those future scenarios as well.

Haugen commented that at the bottom of the Tech Memo Alliant did do somewhat of a comparison with Appendix C of our 2045 Metropolitan Transportation Plan, which was the more detailed River Crossing Analysis that was done, and he doesn't believe that there were any surprising differences between their analysis and what the River Crossing Analysis showed, there were some differences but nothing that is remarkable. Kondziolka agreed, stating that there are the same takeaways, really, in terms of what they are identifying as unacceptable or acceptable. He added that they did look at the A.M. Peak Hour in this study which was in addition to what was done with the first study, there are slightly different study areas, they have additional intersections included in their study, but for those that overlap, yes same takeaways they are getting out of this analysis versus the prior analysis. Haugen stated that they also included the whole Safety Analysis, which was not part of Appendix C.

Burkhardt stated that everyone has heard of Purpose and Need, and maybe know it very well, or just a little bit, but they are preparing a Draft Purpose and Need to document why we are doing this study. He said that he thinks that the hazard, in some ways, of the purpose and need document is that they follow some prescriptions from the NEPA Process, which do make sense, but aren't always intuitive or don't always translate to what people think it should be, so he does like to explain what it is.

Burkhardt referred to a slide and pointed out that it explains why an agency is undertaking the project; and then the need is the problem or problems that we are trying address; and the purpose is the intended result, what we hope we will get out of it at the end. He said that together we use these essentially to evaluate what we are doing here; the first documents that we have a problem, then we develop alternatives that we hope will address the problems, and then we use that purpose and need to say hey, did these things address our problem and keep us hones and transparent in the process and make sure we don't get off track from where we started.

Burkhardt said that with that they have prepared a Draft Purpose Statement, and he will say that he absolutely welcomes wordsmithing on this, and he regards this as sort of a technical exercise,

and then there is that communication piece that will go forward. He stated that purpose and needs statements tend to change and evolve through a project life span, and this is not the first time that someone is considering what is the purpose of adding a bridge across the river, and probably not the last, so we will use it for the purpose of this study, and we want it to reflect what makes sense to you and what makes sense to the public, but that doesn't mean it is set in stone now and forever, but the draft almost reads what he is showing on the screen: "The Purpose of the Grand Forks-East Grand Forks Future Bridge Project is to improve Mobility and Connectivity between Grand Forks and East Grand Forks by reducing congestion on the Point Bridge and connecting roadways, and by providing a more direct connection for trips between the two cities". He asked for feedback on this statement and stated that it will be presented to the Ad Hoc Group for discussion next month, and then will share it with the public as well for their reactions and comments.

Burkhardt stated that, for the needs, he is using the terminology of Primary Needs and Secondary Needs, which is helpful for the NEPA Process but again can be confusing so he will try to explain what they mean.

Burkhardt said that the primary need is the thing that is driving a project; why, in this case, are we considering a new bridge, what is the problem we are trying to solve, what is the main problem we are trying to solve – transportation problem which led to the initiation of the project; versus secondary need which are essentially other things that are nice to have or related issues that are still important but not the reason we are doing the project – transportation problems or opportunities for system improvements withing the area that may be addressed concurrently.

Burkhardt commented that the primary needs that they are working with for the draft, there are two of them, follow very closely what Mr. Kondziolka presented. He stated that they are congestion on and near the Point Bridge, which we saw is an issue today and certainly by 2045 much more is forecasted, so that is the basic need statement and then to follow underneath that, what we are looking for, or what we hope to accomplish by the alternatives that we would propose is a reduction in that congestion. He said that the second need is most of city to city system linkage is basically the idea of additional bridges in the system, and in this case across the bridge, sort of bridging a major transportation constraint in the area which is the river, and maybe defined better by that second statement; what we are looking for is reduced vehicle miles traveled on the system, understanding now is there trips coming from and/or going to the south part of the cities that are heading north unnecessarily, so if we run the regional model with a new link in there we expect to see more efficiency in the system in the form of vehicle miles traveled.

Burkhardt stated that another pieces of this, in the multi-model reason that is in there is the results for bicycle and pedestrian opportunity and benefit of a new river crossing, which is assumed to have a bike/ped facility on it, is while there are ways to get across the river today, and there is a bike/ped facility around 17th, that is closer than the Point Bridge, it is still pretty far away if you are on a bike and it is very far away from anything in the south within the city, so that is a little easier in terms of how to measure this; are we creating that or are we not creating that, so looking for an improved bicycle and pedestrian facility over the river.

Burkhardt said that this covers the primary needs of things that are driving the project, and in the memo that will support these, that is where they present the evidence, if you will, which in this case is mostly what Mr. Kondziolka discussed already from the traffic operation standpoint.

Burkhardt stated that he will move on to secondary and then pause for questions since they kind of go together. He said that secondary needs were defining traffic safety, and essentially that is what Mr. Kondziolka presented; study area is either road segments or intersections that have safety issues today. He added that they talked about some of the traffic circulation issues around schools, which on one hand is a separate site-specific issue for the tool, but to the extent that there are public streets adjacent to schools that are over capacity, or maybe over capacity, the bridge project can impact those either positively or negatively.

Burkhardt commented that the reason traffic safety is a secondary need isn't because safety isn't important; as you saw there are safety concerns that exist today, but a secondary need is not a key reason why we are doing a project, but it could certainly be a benefit and it is probable that they will look at it as they evaluate alternatives and look at potential mitigation at an intersection.

Burkhardt stated that the other secondary need of social and economic factors is a little bit of a catch-all, but it is important to the region and also to neighborhoods and individuals for quality of life and is a general statement and most likely looking at increases or decreases in traffic adjacent to those central streets with a common way to measure that, sort of a semi-quantitative way, if not quantitatively, so it is not to say that just because there is traffic it doesn't mean that a defined transportation problem is an issue, but it may be an issue from a neighborhood livability quality of life.

Burkhardt said that the second bullet is also through general, in terms of how we evaluate it, but there economic development is always a factor directly linked to transportation, especially when we have congestion or auto direction travel that sort of prevents people from making a direct connection, it can hamper economic development and in this case we define it as supporting development for the other plans such as land use, not trying to create some new development plan in relation to the bridge, but more by providing that linkage and addressing the transportation issue there are related benefits to implementing or realizing the other plans we have.

Burkhardt commented that he was going to stop here but he is going to show one more slide because they all kind of wrap together and then pause for questions and comments.

Burkhardt summarized, saying that we have purpose and need, we've got alternatives, and we will evaluate alternatives at the end; when we do that evaluation, we are doing two things, one is asking if we have solved the problem that we defined in the purpose and need. He added, though, that the evaluation, as you know how the project is more than just to satisfy purpose and need, there are other issues that are important to people that are concerned; and mostly he thinks of quality of life, neighborhoods, environmental issues, so this is sort of a high level list to forecast where we are headed once we have alternatives, we are trying to say yes, how well are we meeting the purpose and needs, but that isn't the only thing we are going to look at in the

evaluation process. He added that cost will also be part of our evaluation, understanding comparison of what we have and then he left "other" in there because there are items buried in here and then there may be something else that immerges that becomes an important factor that we will want to make sure to talk about in the evaluation.

Zacher commented that it seems like they bring this up with every project in his past life, as well as recently, but we need to be very very careful what the safety qualifier is here. He stated that you used on your last slide, you use the qualifier that it isn't to say it is unsafe, but that is how the public reads it, no matter how we do it, so we are always better off getting away from this and calling it something else. He added that this also isn't a safety project, so again, from the DOT standpoint we don't like using the term "safety" or "safer" because from a transportation design standpoint we can design the safest road on the planet, ever, and we could still have issues due to driver behavior, or other factors, so we need to be very careful using the terms "safety, safer" and he advises you to be very careful with it. Burkhardt responded that he appreciates this information. He asked if Mr. Zacher had any specific recommendation. Zacher responded that we basically need to define it, we need to have definable words or whatever we put in we need to be able to define; so traffic safety, are we able to define it, what is the safety we are looking for in the purpose and need, is it the crash rate, is it this or that, and so just state it that way instead of using the old "safety" term. Burkhardt agreed, adding that they can identify what the existing safety problems are, but unless we are really doing something like safety modeling, which we aren't, the evaluation is not so quantitative. Zacher added that because what they have run into in the past is that they have always engineered their way into a corner based on what they have written in the environmental document; by using terms that aren't quite definable, that are open to interpretation, and then they are kind of forced down the road, and it came up more after the 34-W Bridge and that kind of issue, and it make them really consider their word usage carefully.

Burkhardt stated that Mr. Haugen and himself have been discussing the safety, a slightly different spin but the same issue of realizing that people, especially the public interprets that, and understandably so, to mean whatever it is they are concerned about often, and that is okay except if they are implying that we are going to address issues that we aren't able to or they aren't evaluated. He said that in looking at this, the public perception and concern about traffic is complicated and is on every project, but we know that it exists already and it will be associated with alternatives, especially anyone who is concerned about a new bridge location bringing more traffic the first thing you say is how is that safer; understanding if there is an increase or decrease in traffic volume along a segment, we can do that if it is a segment or intersection which is in our study area, which captures the major well, it isn't safety, but traffic volume, and then we can sort of answer that question is there more traffic, is there less traffic, and in a way people can do with that what they will; we can also look at intersections and indicate, based on what we're seeing, do we recommend a change at this intersection in terms of intersection control; that is sort of indirectly about safety, but it's not. Zacher responded that is true, but if we call it out as safety, and then we chose not to go forward for one reason or another, the public is going to take it as you are designing an unsafe roadway for them, so, again, that is why we need to be very careful with how we use that term, and when we use it because at this point this project isn't using safety dollars; and it may seem like something little, but it does end up trying to bite us later it seems.

Burkhardt asked if Ms. Sperry had anything to add to this. Sperry responded that Mr. Zacher has a really good grasp on this. She stated that they have worked on quite a few projects together.

Burkhardt commented that Mr. Haugen can work on this more off-line, but this information is causing him to rethink how we communicate this. He added that, again, our analysis of existing intersections with histories of safety issues or crashes, that is good and makes sense, and it is important for them to understand it as we go forward, but it wasn't a primary need but as Mr. Zacher said it is a secondary need and as a secondary need he thinks it is a hazard, as implied it is a measurement evaluation issue for sure. Zacher added that maybe it isn't so much the safety, it is us saying that we are going to make it safer; and that is where the public is going to say, make this roadway safer for me, well okay, how do we do that, what is considered safer, could more traffic actually be safer, yes, could reducing the number of turn lanes be safer, absolutely because you are getting rid of weaving actions, and he has been involved in projects where they want to add turn lanes on every intersection, thinking that would make the roadway or highway safer, but you can get to that point of making a turn where it is actually not safer.

Burkhardt stated that one thing is that this study has a focus on the bridge and the bridge crossing issues; once you open up a project like that you sort of open up other things that you should think about, so that's fair, but there is sort of a hazard of opening the door too wide and then the project becomes about other things that we really can't address.

Kuharenko commented that he is in full agreement that we definitely need to be careful as to using safety. He said it all boils down to we get the public's perception of safety, especially if we've got information that is going to pertain to school crossings and those sorts of things, and people are very sensitive about safety, school children, and all of that, so he is 100% behind what Mr. Zacher is saying. Burkhardt responded that he agrees, adding that we haven't started talking about the school crossing issue, but he knows it is on the table and he gets why and believes they can be helpful and look for a way to use some different wording here so that can be more focused and not open the door to so many issues by calling it a safety problem or finding a safety problem then we are not addressing.

Haugen stated that he has two things; one is that the school referendum vote for Grand Forks did not pass last night, so neither the north end consolidation of schools nor the individual projects that were identified at two of our schools, have now funds to implement those projects. He said that Kelly/Schroder schools had some on-site traffic, as did Phoenix, and they no longer have a funding source, so the School Board is back to the drawing board. He stated that the second thing is just to recap, again, that we are meeting today, and we will have our regular meeting in July where we will go over this information again. He explained that we are doing that because we now have that third Ad Hoc Group meeting, and we are presenting the Tech Memo 3-A and 3-B, and then the Tech Memo we haven't seen yet other than the few slides we saw today, and that is Purpose and Need, so the Technical Advisory Committee will have one more meeting for sure in July, to provide feedback on the information that is being shared prior to the Ad Hoc meeting, and then after the July Ad Hoc Group meeting is when they will hold the public engagement opportunity, so just to recap the sequence of what is going on with the schedule.

Mason stated that he is curious if transit could or should be referenced somewhere in this process; he doesn't know exactly what that would look like, but it seems like bicycle and pedestrian user groups, and a lot of probably single occupant motor vehicles, are probably the primary user of this potential new bridge, so he is just throwing that out there for consideration. Burkhardt responded that that is a good question, which he has asked himself but hasn't addressed it directly except more or less to think about it the way Mr. Mason did, but it may be an omission that it doesn't say transit anywhere in here, he thinks probably mostly just to acknowledge that the facility will accommodate transit, which is a good thing. He asked if anyone else has any input on this, in terms of best practices or if there is any specifics devoted to existing or planned transit that would suggest a more specific evaluation. Ellis commented that she is just thinking that sometimes when you look at the level of service, it may affect the routes efficiency in the future, so it is something for us to be mindful of. Burkhardt said that that makes sense; if there is congestion it applies to transit vehicles as well, so he thinks just finding a way to call it out, to include transit as part of the vehicle operations is good practice. Bergman said that Ms. Ellis is exactly right, if you start making traffic changes transit should be brought into the system, he has not seen that in any of the documents yet; as Ms. Ellis stated about traffic, it creates an issue every time for them. Burkhardt commented that they will include that; he knows that they did include the basic transit information on the reviewed existing conditions but not that level of detail and he thinks it certainly adds more weight to the need so it should be in there as it could shift traffic in a way that impacts something that isn't impacted today; whether we need to call that out separately for evaluation or not is something we need to look into further.

Peterson said that he just has a couple of things; talking about the purpose and need statement that you have, and he just had a question; is one of the targets the purpose of this particular study, are we looking at corridors. He stated that at the beginning Mr. Kondziolka was going through a bunch of information on level of service and intersections and traffic patterns, etc., so would it be of value to state that by doing this, by providing this project in the future we are going to address the congestion on X corridor or Y corridor, and so forth; how this traffic moves throughout the City and how it is linked to Minnesota from North Dakota and vice-versa, for example 32nd Avenue is actually US 81 so it would be an extension of US 81 corridor and on the Minnesota side he would assume we are talking about Hwy 220/US 2 and so forth and of course downtown would be US 2B for us, so he is wondering because he doesn't see that in the presentation, but maybe it is addressed somewhere, but that was one of his questions and the other comment was, and this is obviously that we are looking at a future bridge project at some point down the road, and them at the DOT, and specifically in the district as well as the City Of Grand Forks, and he remembers bringing this up at past meetings where we discussed that we can build a bridge across the Red River, and then in order to realize the full value of it the whole system would have to support it, meaning, as we talked about these intersections and that the level of service continues to decline to the point where it is no longer viable in its current state, so himself and Mr. Kuharenko and others need to start looking at targeting in the short-range, mid-range, long-term plans future projects so it wouldn't just be this bridge it would be other things that the City would have to prepare for in order to realize a project such as this so to him it is a domino effect, where we are looking at one thing and then we have to look at another thing and that is a natural progression of a project like this in any event, but he would like to bring it to everyone's attention that this could actually cause a lot of different things that will have to be

planned for in the future, it isn't just a bridge, there are a lot of things that will need to be addressed prior to the bridge, and maybe Mr. Kuharenko can give us the City's perspective on this.

Kuharenko commented that he agrees that if a bridge goes in there will definitely be impacts to other things. He added that another thing will be that we make sure that we have all of our priorities in order as well; he knows right now the City of Grand Forks has three major priorities that are going on right now, there is the I-29 Interchange, a 42nd Street Underpass, and we have these bridges, those are three large projects that they are kind of looking at, and it isn't just a bridge, there are all these supporting infrastructures and supporting build-outs that would have to go with that as well. He said that if we need to start signalizing some of these intersections, then there will be padded costs that we would need to look into as well.

Burkhardt stated that this has been a good discussion, and if he had two reactions, one is in terms of what we are doing as a consultant team in their deliverables, they are doing the study which is a traffic impact study, and then what they hope is that at the end of it we will have some understanding and agreement between the corridors as to which one is preferred, and then we will also, at a sort of high level, indicate exactly that if you build a bridge, what else needs to be done at the segment and intersection level within our study area to be acceptable for traffic operations, so, yes, it isn't just the bridge, it will be a package of stuff. He added that the comments made him think about, again, the public and how they perceive this; on one hand they will warn you about the issues in the areas that they are worried about, but on the other hand they will require some reminding that if this is to go forward, it would be a bridge plus the other things which add up to money, and then there was the point about priorities. He said that the benefit of doing a study like this allows us to advance the discussion and hopefully help people come together in agreement and say, yes, we should do this but at the same time it raises expectations, which is maybe partly what you are reflecting, so, yes we can be happy at the end of the study, but then we have to come back to reality and say that now we have to pay for this, and what would that really mean in terms of priorities and such. He added that he hears all of this, and he is open to recommendations in terms of communication points so that we don't get off track.

Burkhardt said, going back to Mr. Peterson's comment about corridors, he isn't sure he understood one thing he heard in that question; the bridge, so far we have been communicating it as sort of a local bridge, it is providing a connection between the two cities, and that is sort of the purpose and that is what it says in the document at this point, the purpose and need or the need statement, except it says that we are looking at problems on the Point Bridge and on the roadways leading up to it but he thinks you are making a point about how a new bridge would provide some connectivity or connections to more regional facilities in terms of MnDOT or NDDOT facilities, so it is an interesting point because, yes, it would do that, its purpose is maybe not defined as extending US 81 per say, even though maybe that is a possibility. Peterson responded that that is fine if we are talking about local traffic and supporting the two communities, and that obviously can be completely explained to the public, but we also know the reality is that it would be a supported structure to a corridor because obviously people would figure it out and would gravitate to it and use it. He said that if we move forward with that

explanation to the public that it is for that purpose, then he is fine with that, but he just didn't know if that was one of the goals of this study or not. Burkhardt agreed that that is a good point; yes, supporting facilities to regional facilities, and if we believe our traffic modeling, which hopefully we do, its accounting for how that link might affect traffic more broadly.

Kuharenko commented that he talked about crash data previously, and about the contributing factor analysis, but he thinks that will be discussed more in Tech Memo 3-B, along with pedestrian crossings, which is covered quite well. He said that intersection traffic control warrants at the impacted intersections he is anticipating will be in Tech Memo 3-B or 3-C. Kondziolka responded that that will be included in Tech Memo 3-C.

Sanders stated that both bridge locations don't fall within the City Limits of East Grand Forks so it will involve Rhinehart Township, Huntsville Township, Polk County, and MnDOT in order to get it connected so it would be interesting to see how jurisdictionally they would see that happening over the next 25 or 45 years, maybe East Grand Forks decides to annex south of the bridges; it is a mute-point, but all the traffic affects the City of East Grand Forks locally, but adding a bridge at 32nd would also affect Polk County and MnDOT because people from the region would want to use it versus the Point Bridge, DeMers, or Trunk Highway 2 bridge to get to the mall area, and then how do you connect that to Trunk Highway 220, so that is one thing he has been thinking of. He added that he doesn't know if Mr. Haugen can answer this, but he had one commissioner bringing up the North By-Pass, when we were trying to figure out whether to go North of Highway 2 with a By-Pass, or to Merrifield, but he still thinks the North By-Pass would be better, so he is wondering if you will have a statement in this document stating anything about the North By-Pass or Merrifield, and how they will or won't affect the traffic within the study area. Haugen responded that the statement that we would make on the North By-Pass is that it is documented in the Metropolitan Transportation Plan as something that is beyond the horizon of the MTP as a need, so it is under further study. He added that Merrifield is the "By-Pass" route preferred planned route. Burkhardt commented that, again, for the question on Merrifield, the traffic demands are mostly independent between the two, and that is a point that we will have to keep reinforcing when people ask, the people being the public, how does this relate to, why would we do this instead of a bridge at Merrifield, and those kinds of questions. Sanders responded that he would agree but he just wanted to make sure that it was brought up so that everybody understood that they are two separate bridges with two separate functions.

OTHER BUSINESS

None.

ADJOURNMENT

MOVED BY ELLIS, SECONDED BY BERGMAN, TO ADJOURN THE JUNE 23RD, 2021 SPECIAL MEETING OF THE TECHNICAL ADVISORY COMMITTEE AT 2:58 P.M.

MOTION CARRIED UNANIMOUSLY.

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

July 14, 2021

RECOMMENDED ACTION: Update on Future Bridge Traffic Impact Study

Matter of the Update on Future Bridge Traffic Impact Study.

Background: Alliant Engineering will be participating in the TAC meeting. The focus of the meeting is to finalize Tech Memo 3B, which focuses on the Existing and Future No Build (no added bridge at either Elks or 32nd) safety and traffic operations. Changes and comments are highlighted in the slide presentation.

The second focus will be on the draft Tech Memo 4 Purpose and Need. This was also emailed ot the TAC earlier. After presenting this, we are asking our local/state/federal partners to review and provide feedback on this memo. The next Ad Hoc Group meeting is scheduled for July 20th in the morning. Tech Memos 3A and 3B and Tech Memo 4 will be the focus of that meeting.

The presentation will also provide some details of the first general public wide engage opportunity coming during the last week of July..

Findings and Analysis:

- NONE

Support Materials:

- Presentation.
- Draft Tech Memo on Traffic Counts.
- Draft Tech Memo of Purpose and Need.

Future Bridge Traffic Impact Study

TAC Meeting #5

JULY 14, 2021 (1:30-3:00)

Agenda

TIME	TOPIC
1:30	Welcome and Introductions (Earl Haugen/Tim Burkhardt)
1:35	Schedule, Tasks and Deliverables Update (Tim Burkhardt)
1:40	Traffic Operations and Safety Memo (Mike Kondziolka) • Additional questions or discussion?
1:50	Project Purpose and Need (Tim Burkhardt)
2:10	Public Open House (Online): Starting July 26
2:20	End

Schedule Overview

Task	F	M	A	M	J	J	A	S	O	N	D
1. Project Management											
2. Public Involvement											
3. Existing/Future Conditions											
4. Traffic Analysis											
5. Issues and Needs											
6. Alternatives Development											
7. Alternatives Evaluation											
8. Implementation Plan											
9. Study Report											

Tasks & Deliverables Status

Task	Completed Deliverables	In Progress	Upcoming
1. Project Management	TAC Update #1, #2, #3	TAC Update #4	Monthly TAC Updates
2. Public Involvement	Public Involvement Plan Committee Decision Process Ad Hoc Group #1, #2	Maintain Web Site Planning for Public Event #1	Ad Hoc Group #3 (July) Public Event #1 (July/Aug)
3. Existing and Future Conditions	Tech Memo #2		
4. Traffic Analysis	Tech Memo #3-A	Tech Memo #3-B	Tech Memo #3-C
5. Issues and Needs	N/A	Draft Purpose and Need	
6. Alternatives Development	N/A	N/A	
7. Alternatives Evaluation	N/A	N/A	
8. Implementation Plan	N/A	N/A	
9. Study Report	N/A	N/A	

Existing and Future No Build Traffic and Safety

Tech Memo #3-B – Existing and Future No Build Traffic Operations and Safety

Topics include:

- Forecast volume changes to 2030 and 2045
- 2016-2020 Safety Analysis
- Traffic Mobility and Operations Analysis
  - Scenario Years
    - Existing (2021) Conditions
    - 2030 No Build Conditions
    - 2045 No Build Conditions
  - Segment volume-to-capacity and LOS
  - Intersection LOS

Tech Memo #3-B – Existing and Future No Build Traffic Operations and Safety

Topics include:

- Forecast volume changes to 2030 and 2045
- 2016-2020 Safety Analysis
- Traffic Mobility and Operations Analysis
  - Scenario Years
    - Existing (2021) Conditions
    - 2030 No Build Conditions
    - 2045 No Build Conditions
  - Segment volume-to-capacity and LOS
  - Intersection LOS

Additional questions or comments?

Comments/Additions

City of Grand Forks – David Kuharenko

- Contributing factor analysis for intersections with identified crash issues
  - Expanded on analysis of issue intersections—added contributing factor and crash type/severity breakdown information to memo (next slides)
- Pedestrian crossing locations and historical safety performance
  - School crossings on study roads provided in Technical Memorandum #3-B: Section 3, Table 3-1
- Intersection traffic control warrants analysis
  - Will be covered in Technical Memorandum #3-C

MnDOT – Jon Mason

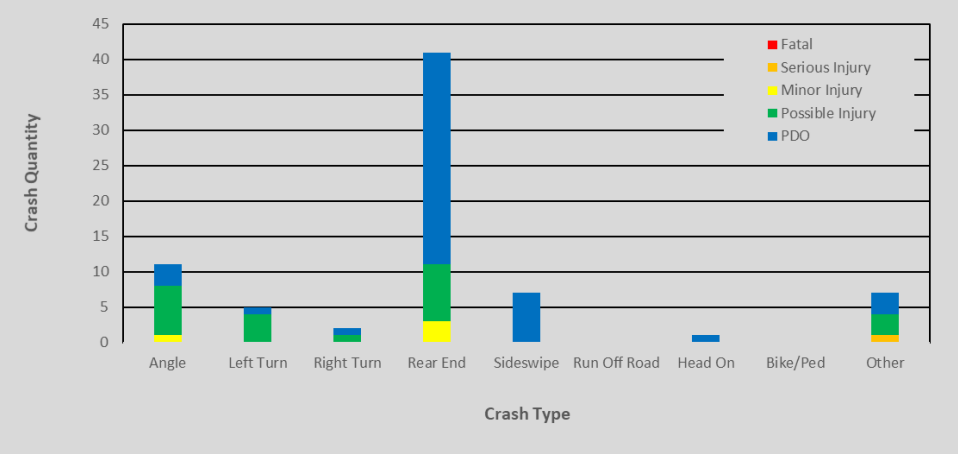
- US 2/US 2B Intersection Improvement
  - Referenced improvement within memo

Contributing Factors

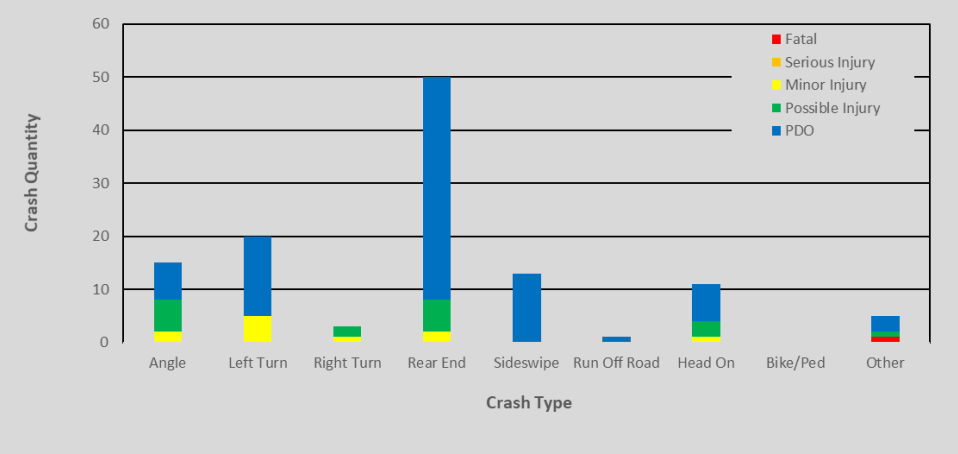
Contributing Factor	32nd Avenue S & S Washington St	24th Avenue S & S Washington St	DeMers Avenue & S Washington St	Bygland Rd SE & Greenway Blvd SE
No Clear Factor	61.2%	60.1%	62.0%	55.6%
Following Too Close	10.9%	12.3%	8.3%	33.3%
Ran Red Light	6.8%	0.7%	3.7%	11.1%
Careless/Reckless Driving	5.4%	2.9%	2.1%	-
Weather	4.8%	7.2%	5.8%	-
Failure To Keep In Proper Lane	3.4%	1.4%	2.9%	-
Too Fast For Conditions	3.4%	0.7%	2.5%	-
Speed	1.4%	0.7%	0.8%	-
Improper Turn	1.4%	0.7%	2.5%	-
Wrong Way	-	0.7%	0.8%	-
Failed To Yield	0.7%	11.6%	7.4%	-
Defective Equipment	0.7%	-	0.4%	-
Improper Overtaking	-	-	0.4%	-
Other	-	0.7%	0.4%	-

Crash Type/Severity Breakdowns

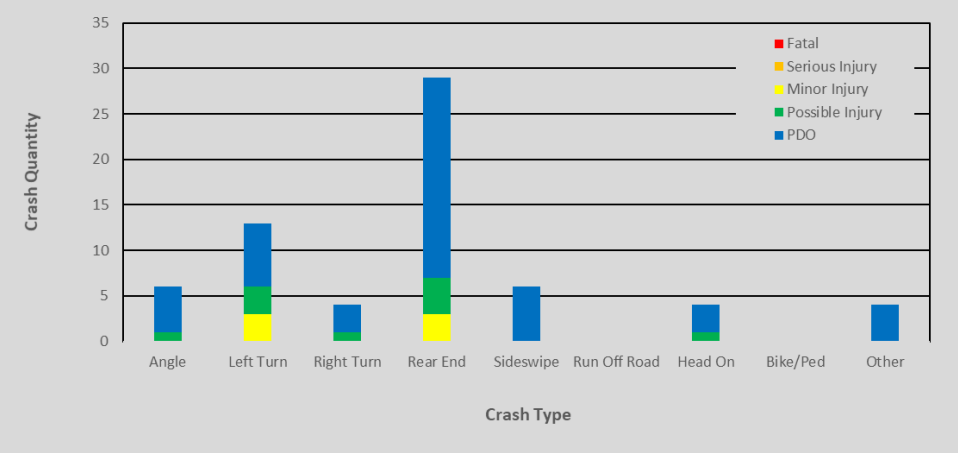
32nd Avenue S & S Washington Street



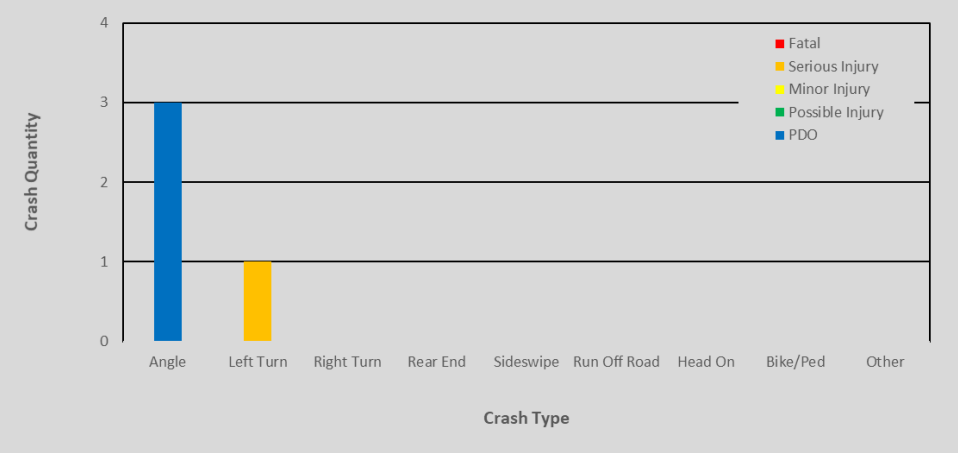
DeMers Avenue & S Washington Street



24th Avenue S & S Washington Street



Bygland Road SE & Greenway Blvd SE



Purpose and Need

Draft Purpose and Need

- Explains why the MPO is undertaking this project and describes main objectives
- “Need” = transportation problems to be addressed by the project
- “Purpose” = a broad statement of the intended transportation results
- Together, the purpose and need are a way to measure and understand to what extend the alternatives being considered meet the project needs

Draft Purpose and Need

- Draft purpose statement:

> *The purpose of the Grand Forks-East Grand Forks Future Bridge Project is to **improve mobility and connectivity** between Grand Forks and East Grand Forks by **reducing congestion** on the Point Bridge and connecting roadways and by providing a **more direct connection** for trips between the two cities.*

Draft Purpose and Need

Primary needs

- Transportation problems which led to the initiation of the project

Secondary needs

- Transportation problems or opportunities for system improvements within the area that may be addressed concurrently

Draft Purpose and Need

Primary Needs

- Congestion on and Near the Point Bridge
  - Looking for: reduced congestion on Point Bridge and selected roadways
- Multimodal System Linkage
  - Looking for: reduced vehicle miles traveled on the system (using regional model) and improved bike/ped connectivity across the river

Draft Purpose and Need

Secondary Needs

- Crashes
  - Looking for: reduced crash potential on study area road segments and intersections
    - Includes some road segments and intersections that are adjacent to schools
- Social and Economic Factors
  - Quality of life related to disproportionately high traffic volumes
    - Looking for: improved balance on system; volumes conistent with functional classification
  - Supporting development, consistent with approved plans
    - Looking for: improved regional mobility and access

Evaluation Factors

Advantages/Disadvantages

- Traffic Performance
- Potential for Crash Reduction
- Environmental Impact
  - Natural Environment
  - Social and Economic Factors
- Cost
- Other?

Public Open House (Online)

Public Open House (Online)

Purpose

- Share study background and goals
- Gather input on Draft Purpose and Need
- Share future No Build traffic and safety information

Public Open House (Online)

Logistics

- Host on project web site (Social Pinpoint)
  - Background information
  - Survey
  - Open for comment for 3 weeks (July 26-August 15)
- Live online presentation (proposed: Tuesday, July 27, 6:30-7:30)
  - Accept input via chat and facilitate discussion
  - Make recording available afterwards

Public Open House (Online)

Advertising

- Public notice (5 days in advance)
- MPO and project email list
- Facebook Ad
- Ask Ad Hoc members to share with respective organizations and groups (in-person, meetings, emails, social media)

Questions/Discussion

www.forks2forksbridge.com/info

Tim Burkhardt

tburkhardt@alliant-inc.com

Transmittal Information	
To:	Earl Haugen (Grand Forks-East Grand Forks MPO)
From:	Tim Burkhardt, AICP, MPH (Alliant Engineering) Mike Kondziolka, PE, PTOE (Alliant Engineering)
Date:	7/9/2021
Subject:	Technical Memorandum #3-B: Existing and Future No Build Traffic Operations and Safety

1. Introduction

This is the fourth in a series of technical memoranda for the Grand Forks-East Grand Forks Future Bridge Traffic Impact Study. It presents the second portion of the traffic analysis—a summary of the Existing and Future No Build traffic operations and safety analysis.

2. Existing and Future Area Characteristics

Refer to Technical Memorandum #2 for documentation of the transportation system and infrastructure, the built and natural environment, and land uses for existing and planned future conditions.

3. Traffic Analysis

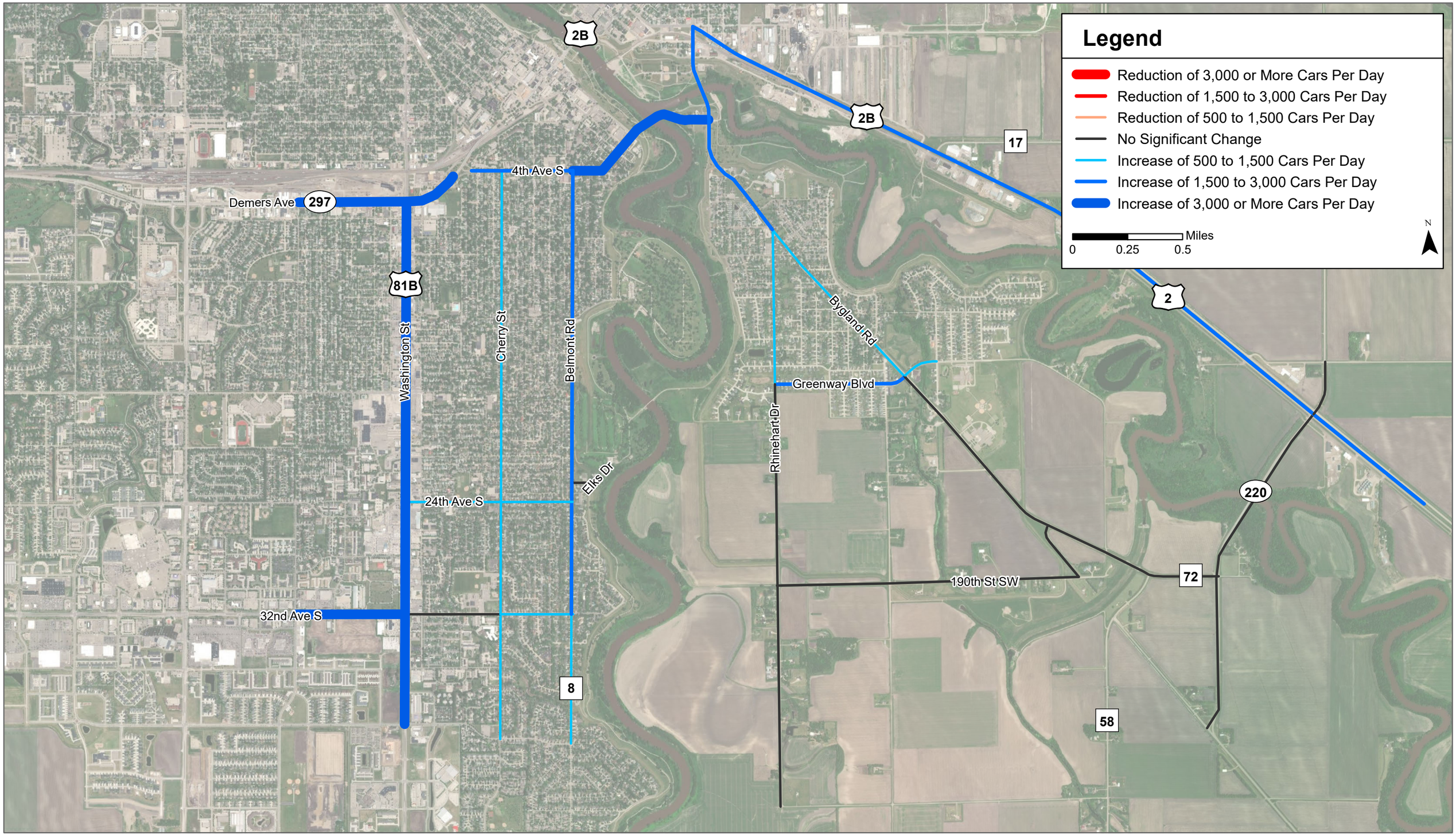
A traffic analysis was completed to assess the traffic operations and safety performance of the roadway network on both sides of the Red River in Grand Forks and East Grand Forks to assess existing conditions, forecast 2030 conditions, and forecast 2045 conditions under scenarios with no new bridge (No Build). Scenarios under the same analysis years that include a new river bridge at Elks Dr (Elks Dr Bridge), or at 32nd Ave S (32nd Ave Bridge) will be completed and documented in Technical Memorandum #3-C.

3.1 EXISTING AND FORECAST TRAFFIC VOLUMES AND PATTERNS

Refer to Technical Memorandum #3-A for documentation of the existing and forecast future traffic volumes, data sources, and volume development and forecasting methodology.

The changes in traffic volumes from Existing Conditions (2015, see below) to forecast 2030 No Build and forecast 2045 No Build Conditions were illustrated to show the magnitude of the anticipated volume changes on the study area road network with only background traffic growth and no additional river crossing. The average daily traffic (ADT) volume data used was from travel demand modeling provided by the Advanced Traffic Analysis Center (ATAC). The base year of the travel demand modeling was 2015, which are the volumes that are represented for Existing Conditions in the comparison graphics.

A map showing the forecast volume changes from 2015 to 2030 No Build Conditions is provided in **Figure 3-1**, and one showing the forecast volume changes from 2015 to 2045 No Build Conditions is provided in **Figure 3-2**.



Future Bridge Traffic Impact Study

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Figure 3-1
2015 to 2030 No Build Traffic Volume Change

Source: ESRI World Imagery Basemap

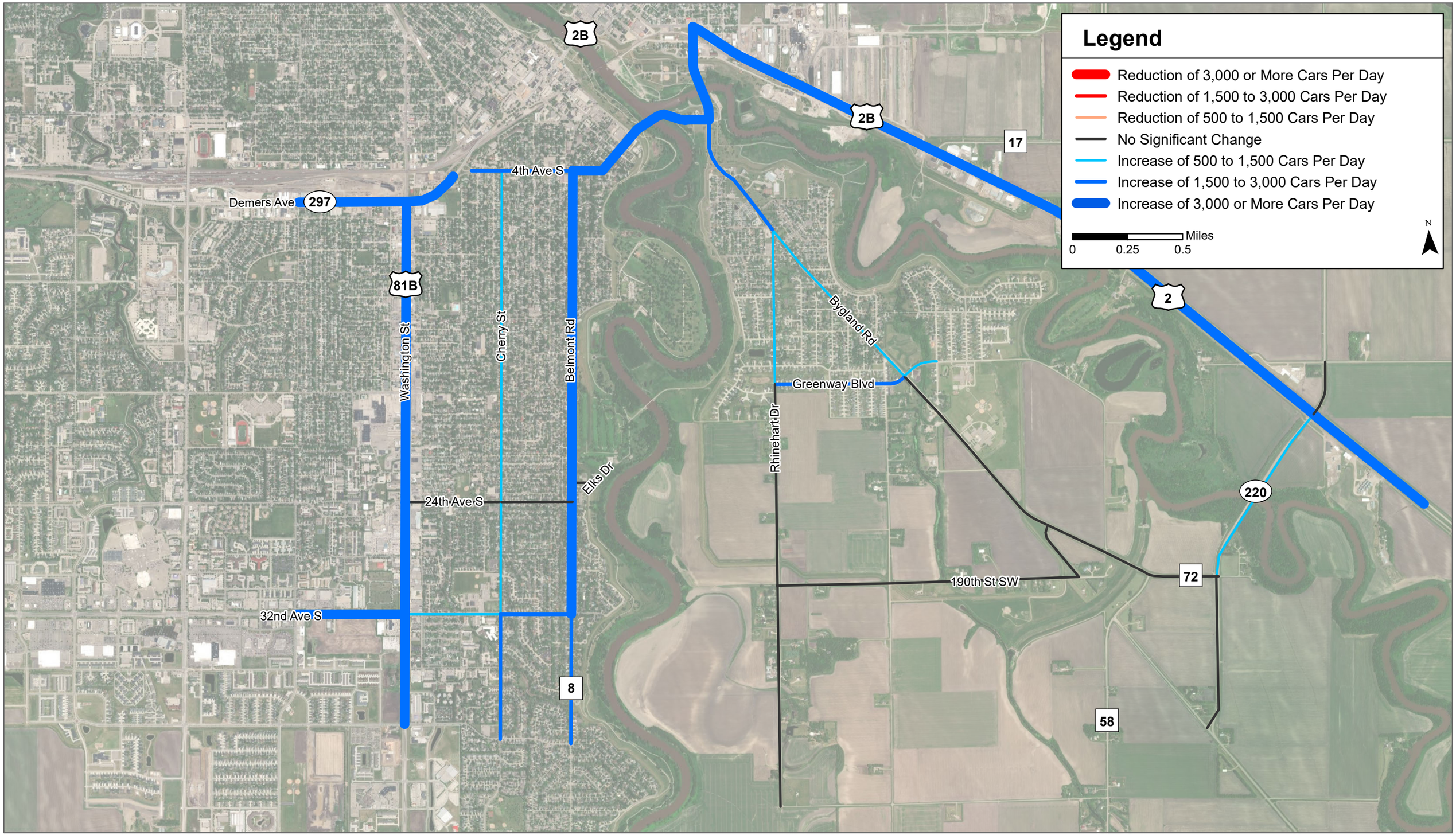

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Figure 3-2
2015 to 2045 No Build Traffic Volume Change

Source: ESRI World Imagery Basemap

3.2 TRAFFIC SAFETY

A historical crash analysis was completed to identify locations within the study area that have experienced higher than average crashes. Historical crash data from the most recent five years of data available (2016 through 2020) was obtained from the MnDOT Crash Mapping Analysis Tool (MnCMAT2) for East Grand Forks roads and was provided by the Grand Forks-East Grand Forks MPO for Grand Forks roads. The safety analysis will be used along with the results of traffic operations analysis to identify where safety mitigation may be appropriate in addition to mobility mitigation at locations where over-capacity conditions are identified.

In examining the crash data obtained, two key factors were considered: (1) crash rate, (2) fatal and severe crash rate. Statistically significant locations are identified from these factors, and are indicated by comparing crash rates and fatal/severe crash rates to statewide averages for roadways or intersections with similar characteristics.

Crash Rate

History has proven that crashes are a function of exposure. Roadways with higher traffic volumes experience more crashes than similar roadways with lower volumes. Rather than simply documenting the number of crashes that occur at an intersection or over a segment, crash rates must be considered. Crash rates normalize different locations with varying traffic volumes—intersections with high volumes can be compared to intersections with low volumes using the intersection crash rate—providing a useful tool in making comparisons across multiple locations with respect to safety. Intersection crash rates are defined as the number of crashes occurring per million entering vehicles (MEV). Segment crash rates are defined as the number of crashes occurring per million vehicle miles traveled (MVM), which accounts for the volume and length of roadway being analyzed. Observed crash rates at specific locations can also be compared to statewide average or typical values for an intersection or roadway of the same type.

Crash occurrence is somewhat random by nature. Identifying every intersection or segment with a crash rate above the statewide average value in an analysis would produce a large amount of data that may not be statistically relevant with respect to safety deficiencies. The critical crash rate identifies locations that have a crash rate higher than similar facilities by a statistically significant amount. The critical crash rate is calculated by adjusting the system-wide average based on the amount of exposure and a statistical constant indicating level of confidence.[1] The critical crash rate is calculated using a statistical level of confidence of 99.5 percent. For ease of comparison, a critical crash index is utilized, which is the ratio of the observed crash rate to the critical crash rate. All critical crash index values over 1.0 would be considered statistically significant, indicating a historical crash issue.

Fatal and Severe (K/A) Crash Rate

Fatal and severe (K/A) crash rate, the second key factor, quantifies the fatal and incapacitating injury crashes at a location. The purpose for analyzing this statistic is to identify locations that may experience a low crash rate

[1] MnDOT Traffic Safety Fundamentals Handbook, August 2015.

but have a high percentage of fatal or severe injury crashes, which may be the case at high-speed, low-volume rural intersections. Reported crashes are generally categorized into the following severity types:

- Fatal (Type K)
- Incapacitating Injury (Type A)
- Non-Incapacitating Injury (Type B)
- Possible Injury (Type C)
- Property Damage Only (Type PDO)

Due to the lower number of fatal and severe crashes compared to total crashes, the K/A crash rate is calculated per 100 million vehicle miles (100 MVM). Critical K/A rate is based on the same statistical method as critical crash rates but with a lower confidence level of 90 percent as a more conservative cut-off for statistical significance. The critical K/A rate index, which is the ratio of the observed K/A rate to the critical K/A rate, is also utilized for an easier comparison of an intersection or roadway versus the statewide average for similar facility types. All values over 1.0 would be considered statistically significant.

3.2.1 Crash Summaries

The intersection crash analysis for study intersections and locations where school driveways or crossings are present on study roadways are summarized in **Table 3-1**. Cells are highlighted yellow where the crash rate exceeds the statewide average crash rate but is lower than the critical crash rate, and are highlighted red where the crash rate exceeds the critical crash rate. As previously noted, only locations with a crash rate that exceeds the critical crash rate (critical index values greater than 1.0) represent statistically significant crash problems.

Table 3-1 – 2016-2020 Intersection Crash Analysis Summary

Intersection	Traffic Control	Total Entering Volume[2]	Total Crashes[1]	Crash Rate per MEV	State Average Crash Rate[3]	Critical Crash Rate[4, 5]	Critical Crash Index	K/A Crashes	K/A Rate	State Average K/A Rate	Critical K/A Rate[4, 5]	Critical K/A Index
32nd Avenue S & S Washington Street	Signalized (XS, HV)	57,601,563	74	**1.28**	**0.70**	**0.99**	**1.29**	1	**1.74**	**0.76**	**3.10**	**0.56**
24th Avenue S & S Washington Street	Signalized (LS, HV)	55,721,813	66	**1.18**	**0.70**	**1.00**	**1.19**	0	0.00	0.76	3.15	0.00
DeMers Avenue & S Washington Street	Signalized (LS, HV)	82,216,250	118	**1.44**	**0.70**	**0.94**	**1.52**	1	**1.22**	**0.76**	**2.60**	**0.47**
4th Avenue S & Cherry Street	Signalized (LS, LV)	15,366,500	11	**0.72**	**0.52**	**1.03**	**0.70**	0	0.00	0.42	5.79	0.00
1st Street SE & 3rd Avenue SE	Signalized (LS, LV)	22,173,750	8	0.36	0.52	0.94	0.39	0	0.00	0.42	4.44	0.00
32nd Avenue S & Cherry Street	All-Way Stop	13,158,250	7	**0.53**	**0.35**	**0.81**	**0.66**	0	0.00	0.57	7.04	0.00
32nd Avenue S & Belmont Road	All-Way Stop	10,448,125	2	0.19	0.35	0.87	0.22	0	0.00	0.57	8.35	0.00
24th Avenue S & Cherry Street	All-Way Stop	8,080,188	0	0.00	0.35	0.95	0.00	0	0.00	0.57	10.16	0.00
4th Avenue S & Belmont Road	All-Way Stop	17,748,125	13	**0.73**	**0.35**	**0.74**	**0.99**	0	0.00	0.57	5.68	0.00
24th Avenue S & Belmont Road	Thru/Stop (Urban)	10,762,938	2	**0.19**	**0.18**	**0.56**	**0.33**	0	0.00	0.33	7.22	0.00
Belmont Road & Elks Road	Thru/Stop (Urban)	9,636,000	2	**0.21**	**0.18**	**0.58**	**0.36**	0	0.00	0.33	7.89	0.00
Bygland Road SE & Rhinehart Drive SE	Thru/Stop (Urban)	12,181,875	2	0.16	0.18	0.53	0.31	0	0.00	0.33	6.54	0.00
Rhinehart Drive SE & Greenway Boulevard SE	Thru/Stop (Urban)	2,217,375	0	0.00	0.18	1.14	0.00	0	0.00	0.33	27.82	0.00
Rhinehart Drive SE & 190th Street SW	Thru/Stop (Urban)	365,000	0	0.00	0.18	3.36	0.00	0	0.00	0.33	149.51	0.00
Bygland Road SE & Greenway Boulevard SE	Thru/Stop (Urban)	6,259,750	4	**0.64**	**0.18**	**0.70**	**0.92**	1	**15.98**	**0.33**	**11.26**	**1.42**
Bygland Road SE & Bygland Road SE/ 190th Street SW	Thru/Stop (Rural)	3,695,625	0	0.00	0.25	1.06	0.00	0	0.00	1.05	21.41	0.00
TH 220 & Harley Drive	Thru/Stop (Rural)	2,536,750	0	0.00	0.25	1.26	0.00	0	0.00	1.05	29.01	0.00
TH 220 & US 2	Thru/Stop (Rural)	11,060,413	2	0.18	0.25	0.68	0.26	0	0.00	1.05	9.52	0.00
32nd Avenue S & S 10th Street (near Schroeder Middle School)	Thru/Stop (Urban)	13,692,063	5	**0.37**	**0.18**	**0.51**	**0.71**	0	0.00	0.33	5.97	0.00
Cherry Street & J Nelson Kelly Elementary School North Driveway	Thru/Stop (Urban)	5,657,500	0	0.00	0.18	0.73	0.00	0	0.00	0.33	12.26	0.00

Table 3-1 – 2016-2020 Intersection Crash Analysis Summary (continued)

Intersection	Traffic Control	Total Entering Volume[1]	Total Crashes[2]	Crash Rate per MEV	State Average Crash Rate[3]	Critical Crash Rate[4, 5]	Critical Crash Index	K/A Crashes	K/A Rate	State Average K/A Rate	Critical K/A Rate[4, 5]	Critical K/A Index
Cherry Street & Schroeder / J Nelson Kelly Elementary School Driveway	Thru/Stop (Urban)	5,657,500	0	0.00	0.18	0.73	0.00	0	0.00	0.33	12.26	0.00
24th Avenue S & Oak Street (near Viking Elementary School)	Thru/Stop (Urban)	4,991,375	0	0.00	0.18	0.77	0.00	0	0.00	0.33	13.64	0.00
4th Avenue S & Chestnut Street (near Phoenix Elementary School)	Thru/Stop (Urban)	12,172,750	4	**0.33**	**0.18**	**0.53**	**0.61**	0	0.00	0.33	6.55	0.00
Belmont Road & Phoenix School Driveway	Thru/Stop (Urban)	9,636,000	2	**0.21**	**0.18**	**0.58**	**0.36**	0	0.00	0.33	7.89	0.00

[1] AADT obtained from MnDOT Traffic Data Map and North Dakota Traffic Data Web App.

[2] East Grand Forks crash data obtained from MnCMAT2 and Grand Forks crash data was provided by the Grand Forks-East Grand Forks MPO.

[3] MnDOT's 2015 Green Sheets were used to determine the state average crash rate.

[4] The critical rate is a statistically adjusted crash rate to account for random nature of crashes.

[5] A 99.5% confidence level was assumed for critical crash rate and an 90% confidence level was assumed for critical K/A rate.

The intersection crash analysis shows large volumes of crashes at the three study intersections along S Washington Street, resulting in crash rates that exceed the critical crash rate for each intersection. S Washington Street is a major arterial that provides a north-south connection to a large catchment area, and as such these intersections experience the greatest volumes of any within the study corridor. While the critical crash index indicates an issue with the total volume of crashes occurring at these intersections, the critical K/A index is less than 1.0 at each intersection, indicating that the vast majority of crashes do not result in a severe injury or death to the people involved. Of the K/A crashes, the one at 32nd Avenue S & S Washington Street was an incapacitating injury, and the one at DeMers Avenue & S Washington Street was a fatality. S Washington Street is programmed for reconstruction by 2030; however, this project does not include expansion or capacity improvements to S Washington Street.

The intersection of Bygland Road SE & Greenway Boulevard SE has a K/A rate that exceeds the critical K/A rate, indicating that it has experienced more crashes resulting severe injury or death than other intersections with similar characteristics. The K/A crash at this intersection was an incapacitating injury.

The last five intersections in **Table 3-1** show intersections near schools or at school driveways. There have been no fatal or severe injury crashes at these intersections in the past five years between 2016-2020. The crash rates at 32nd Avenue S & S 10th Street (5 crashes), 4th Avenue S & Chestnut Street (4 crashes), and Belmont Road & Phoenix School Driveway (2 crashes) have crash rates exceeding the statewide average, but do not exceed the critical crash rates, and thus do not represent statistically significant crash issues.

It should be noted that there is a programmed improvement to add a traffic signal at the Bygland Road SE & Greenway Boulevard SE intersection by the 2045 horizon year. Additionally, the intersection of Bygland Road SE & Rhinehart Drive SE is currently programmed to install a single-lane roundabout by the forecast 2030 year; however, this improvement is currently in consideration of being removed from the program. These intersection traffic control changes would influence the safety performance at each of these intersections, and both would be expected to provide improvements to both safety and mobility. North of the study area in East Grand Forks, MnDOT is reconstructing the intersection of US 2 and US 2B to be a Reduced Conflict Intersection (RCI). While

this improvement is not expected to impact a future river crossing, it is identified here in the context of the overall system.

3.2.2 Contributing Factors

An analysis of crash type and contributing factors was conducted for the study intersections with critical indices greater than 1.0. The contributing factors reported for each crash were extracted by category for each intersection with critical index issues. While the majority of the time there are no clear contributing factors reported, contributing factors for the next highest categories can help to show trends in crashes at the intersection. This information along with the breakdown of crashes by type/severity provides additional insight into safety issues at intersections with statistically significant crash issues. **Table 3-2** shows the contributing factor proportions for the four intersections with critical crash or critical K/A crash issues. The breakdowns of crashes by type/severity for these four intersections are provided in **Figure 3-3** through **Figure 3-6**.

The most common contributing factor at the three intersections on S Washington Street was "following too close", which corresponds with the highest proportion of crashes being rear end crashes. These attributes are common for crashes at signalized intersections, and generally go hand-in-hand. Contributing factor and crash type trends cannot be derived at the Bygland Road SE & Greenway Boulevard SE intersection due to the low number of crashes during the analysis period (4 crashes).

Table 3-2 – Contributing Factors at Issue Intersections

Contributing Factor	32nd Avenue S & S Washington St	24th Avenue S & S Washington St	DeMers Avenue & S Washington St	Bygland Rd SE & Greenway Blvd SE
No Clear Factor	61.2%	60.1%	62.0%	55.6%
Following Too Close	10.9%	12.3%	8.3%	33.3%
Ran Red Light	6.8%	0.7%	3.7%	11.1%
Careless/Reckless Driving	5.4%	2.9%	2.1%	-
Weather	4.8%	7.2%	5.8%	-
Failure To Keep In Proper Lane	3.4%	1.4%	2.9%	-
Too Fast For Conditions	3.4%	0.7%	2.5%	-
Speed	1.4%	0.7%	0.8%	-
Improper Turn	1.4%	0.7%	2.5%	-
Wrong Way	-	0.7%	0.8%	-
Failed To Yield	0.7%	11.6%	7.4%	-
Defective Equipment	0.7%	-	0.4%	-
Improper Overtaking	-	-	0.4%	-
Other	-	0.7%	0.4%	-

Figure 3-3 – 32nd Avenue S & S Washington Street Crash Type/Severity Breakdown

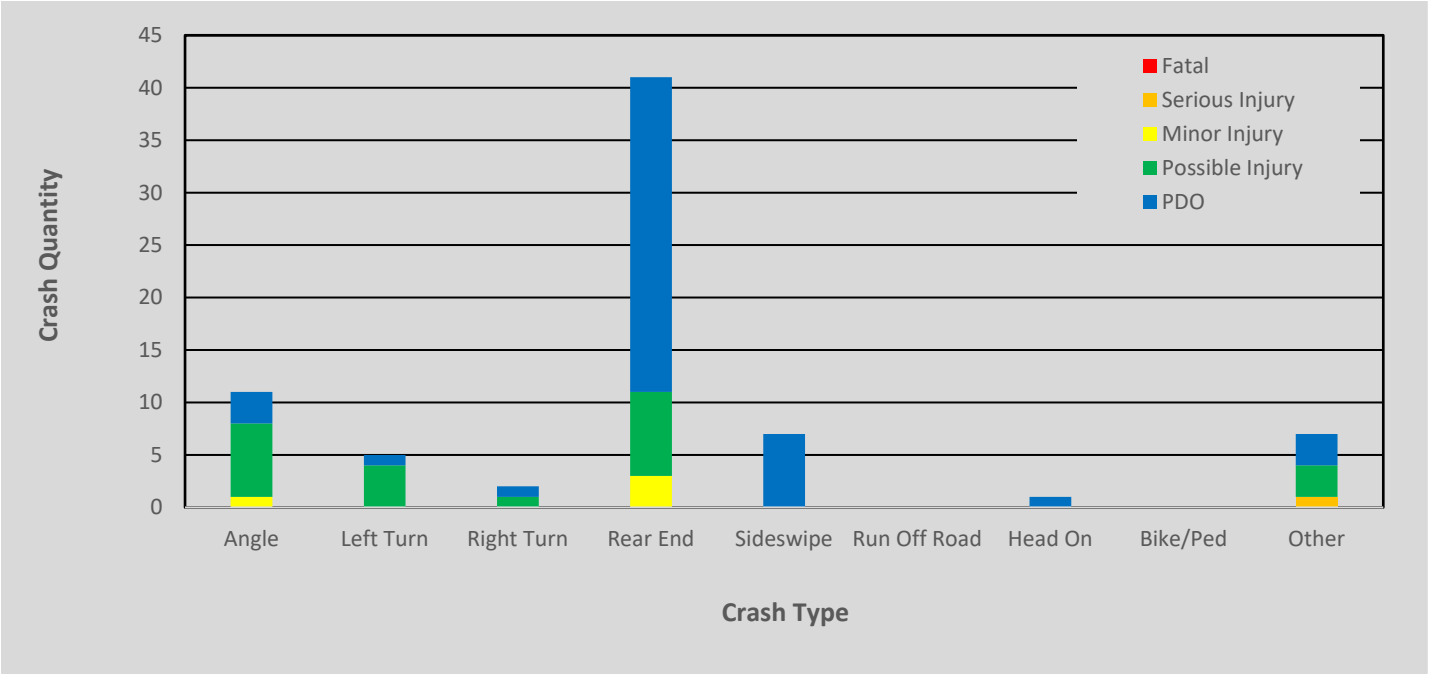


Figure 3-4 – 24th Avenue S & S Washington Street Crash Type/Severity Breakdown

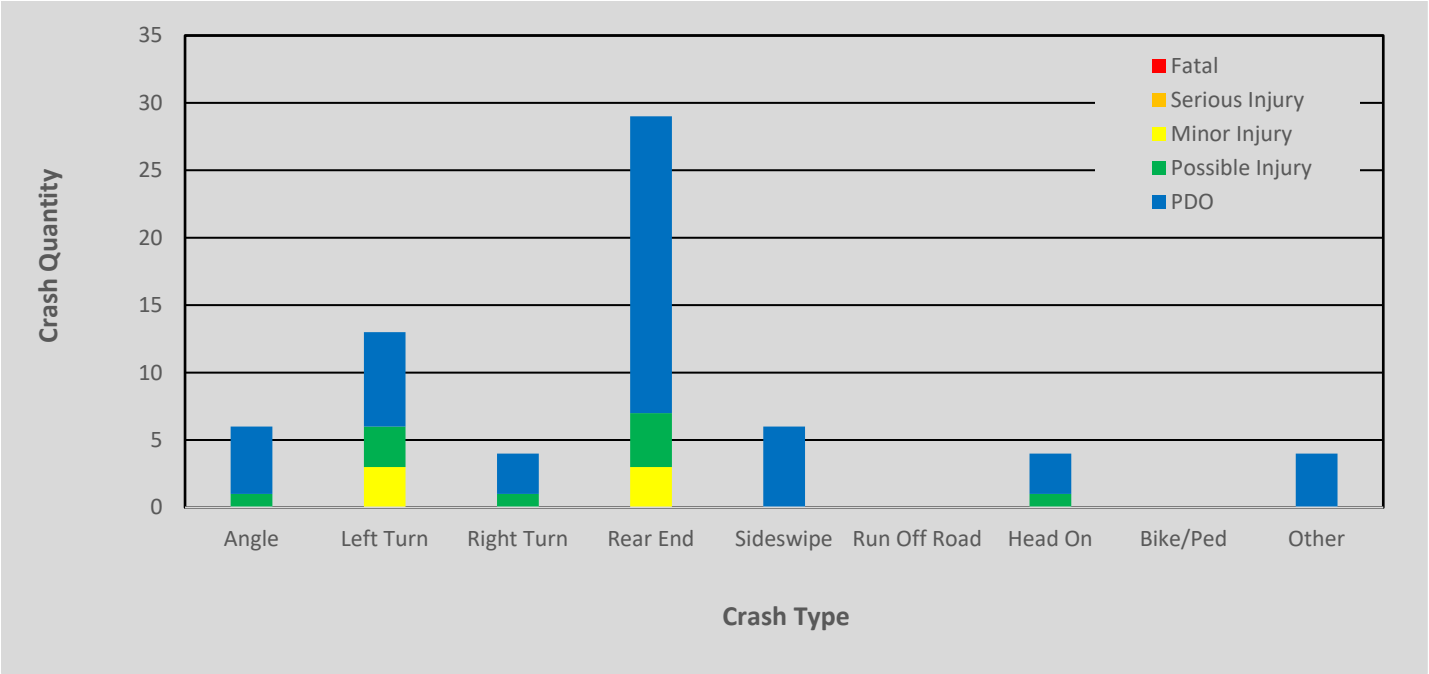


Figure 3-5 – DeMers Avenue & S Washington Street Crash Type/Severity Breakdown

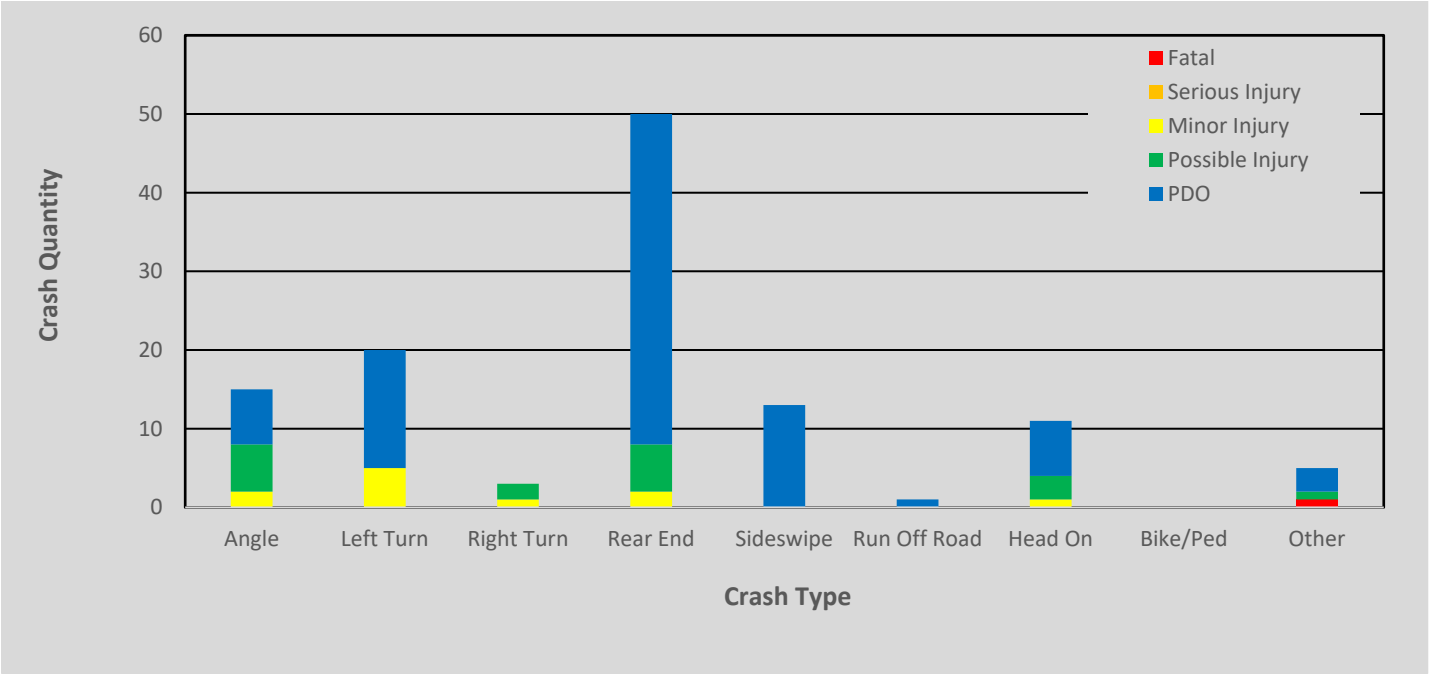


Figure 3-6 – Bygland Road SE & Greenway Boulevard SE Crash Type/Severity Breakdown

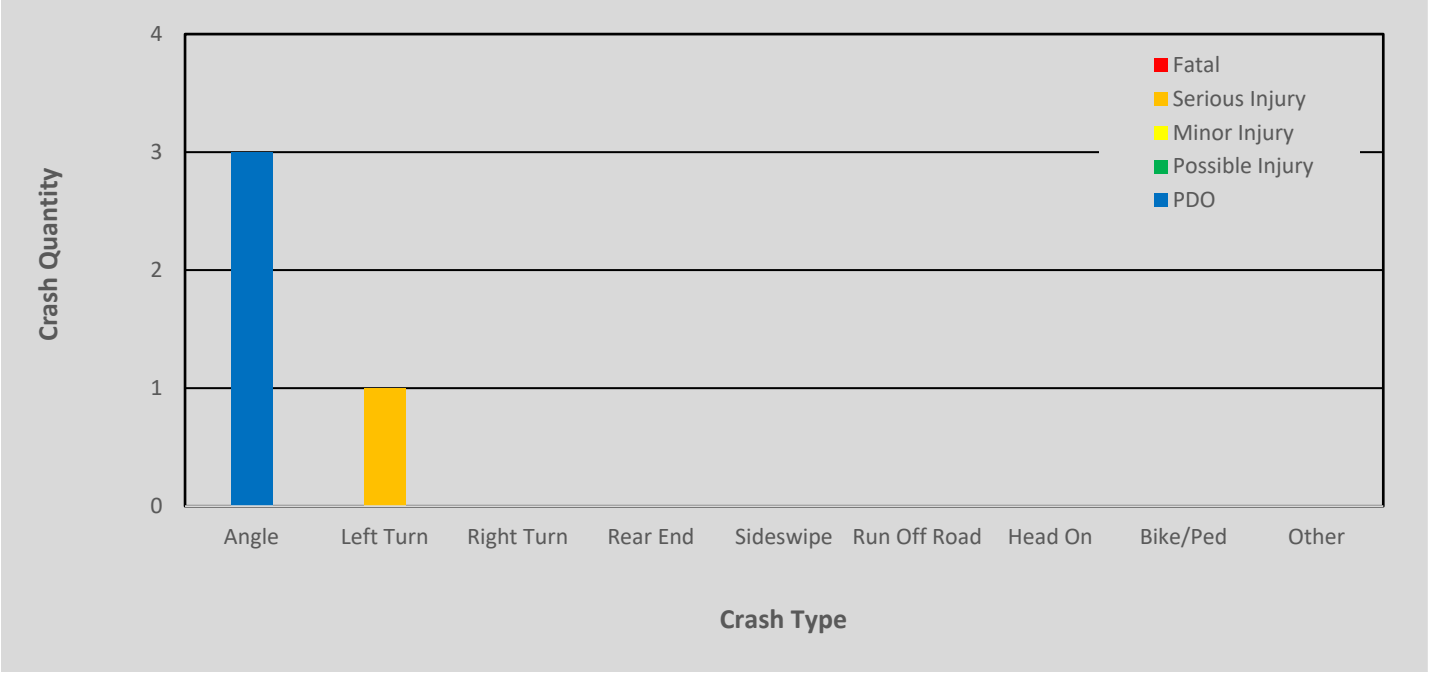


Table 3-3 summarizes the study roadway segment crash analysis.

Table 3-3 – 2016-2020 Segment Crash Analysis Summary

Segment	Segment Extent	Cross-Section	Total VMT[1]	Total Crashes[2]	Crash Rate per MVMT	State Average Crash Rate[3]	Critical Crash Rate[4, 5]	Critical Crash Index	K/A Crashes	K/A Rate	State Average K/A Rate	Critical K/A Rate[4, 5]	Critical K/A Index
32nd Avenue S	S 20th Street to S Washington Street	Urban 4-lane Divided	16,185,925	28	1.73	2.76	3.86	0.45	2	**12.36**	**2.91**	**11.43**	**1.08**
	S Washington Street to Cherry Street	Urban 2-lane (1500-4999 AADT)	3,884,513	7	**1.80**	**1.32**	**2.95**	**0.61**	0	0.00	2.87	26.76	0.00
	Cherry Street to Belmont Road	Urban 2-lane (1500-4999 AADT)	2,306,800	2	0.87	1.32	3.48	0.25	0	0.00	2.87	38.85	0.00
24th Avenue S	S Washington Street to Cherry Street	Urban 2-lane (1500-4999 AADT)	3,374,425	17	**5.04**	**1.32**	**3.08**	**1.64**	0	0.00	2.87	29.51	0.00
	Cherry Street to Belmont Road	Urban 2-lane (<1500 AADT)	730,000	2	**2.74**	**1.46**	**5.79**	**0.47**	0	0.00	10.19	126.58	0.00
DeMers Avenue	S 20th Street to S Washington Street	Urban 4-lane Divided	17,611,250	17	0.97	2.76	3.81	0.25	0	0.00	2.91	10.96	0.00
DeMers Avenue/ 4th Avenue S	S Washington Street to Cherry Street	Urban 4-lane Divided	15,665,800	30	1.91	2.76	3.87	0.49	3	**19.15**	**2.91**	**11.63**	**1.65**
4th Avenue S	Cherry Street to Belmont Road	Urban 2-lane (5000-7999 AADT)	3,124,400	11	**3.52**	**1.80**	**3.92**	**0.90**	0	0.00	2.77	30.83	0.00
4th Avenue S/ 1st Street SE	Belmont Road to 3rd Avenue SE/ Bygland Road SE (Point Bridge)	Urban 2-lane (5000-7999 AADT)	9,723,600	40	**4.11**	**1.80**	**2.96**	**1.39**	1	**10.28**	**2.77**	**14.74**	**0.70**
2nd Avenue NE	US 2 (Business) to 1st Street SE	Urban 2-lane (>8000 AADT)	5,672,100	2	0.35	2.24	3.94	0.09	0	0.00	2.56	20.00	0.00
Bygland Road SE/ 3rd Avenue SE	1st Street SE to Rhinehart Drive SE	Urban 2-lane (>8000 AADT)	10,575,875	5	0.47	2.24	3.47	0.14	0	0.00	2.56	13.60	0.00
	Rhinehart Drive SE to Greenway Boulevard SE	Urban 2-lane (5000-7999 AADT)	9,154,200	11	1.20	1.80	3.00	0.40	0	0.00	2.77	15.27	0.00
	Greenway Boulevard SE to Bygland Road SE/ 190th Street SW	Urban 2-lane (1500-4999 AADT)	6,060,825	1	0.16	1.32	2.60	0.06	0	0.00	2.87	19.94	0.00
	Bygland Road SE / 190th Street SW to TH 220	Urban 2-lane (<1500 AADT)	1,481,535	1	0.67	1.46	4.36	0.15	0	0.00	10.19	77.56	0.00
US 2	180th Street SW to TH 220	Rural Expressway	3,952,950	2	0.51	0.66	1.84	0.28	1	**25.30**	**1.60**	**22.40**	**1.13**
	TH 220 to 410th Street SW	Rural Expressway	6,168,500	1	0.16	0.66	1.58	0.10	0	0.00	1.60	16.23	0.00
S Washington Street	DeMers Avenue to 24th Avenue S	5-lane Undivided	64,532,000	327	**5.07**	**2.59**	**3.11**	**1.63**	3	**4.65**	**2.89**	**6.38**	**0.73**
	24th Avenue S to 32nd Avenue S	Urban 4-lane Divided	19,162,500	40	2.09	2.76	3.77	0.55	0	0.00	2.91	10.51	0.00
	32nd Avenue S to 40th Avenue S	Urban 4-lane Divided	12,501,250	11	0.88	2.76	4.01	0.22	0	0.00	2.91	13.09	0.00

Table 3-3 – 2016-2020 Segment Crash Analysis Summary (continued)

Segment	Segment Extent	Cross-Section	Total VMT[1]	Total Crashes[2]	Crash Rate per MVMT	State Average Crash Rate[3]	Critical Crash Rate[4, 5]	Critical Crash Index	K/A Crashes	K/A Rate	State Average K/A Rate	Critical K/A Rate[4, 5]	Critical K/A Index
Cherry Street	4th Avenue S to 24th Avenue S	Urban 2-lane (1500-4999 AADT)	7,391,250	40	**5.41**	**1.32**	**2.48**	**2.19**	0	0.00	2.87	17.62	0.00
	24th Avenue S to 32nd Avenue S	Urban 2-lane (1500-4999 AADT)	2,600,625	5	**1.92**	**1.32**	**3.35**	**0.57**	0	0.00	2.87	35.57	0.00
	32nd Avenue S to 40th Avenue S	Urban 2-lane (1500-4999 AADT)	3,120,750	3	0.96	1.32	3.16	0.30	0	0.00	2.87	31.19	0.00
Belmont Road	4th Avenue S to 24th Avenue S	Urban 2-lane (1500-4999 AADT)	13,550,625	26	**1.92**	**1.32**	**2.16**	**0.89**	0	0.00	2.87	12.46	0.00
	24th Avenue S to 32nd Avenue S	Urban 2-lane (1500-4999 AADT)	4,151,875	4	0.96	1.32	2.89	0.33	0	0.00	2.87	25.57	0.00
	32nd Avenue S to 40th Avenue S	Urban 2-lane (1500-4999 AADT)	3,983,975	3	0.75	1.32	2.93	0.26	0	0.00	2.87	26.30	0.00
Elks Drive	East of Belmont Road	Urban 2-lane (<1500 AADT)	54,750	0	0.00	1.46	23.91	0.00	0	0.00	10.19	1098.32	0.00
Rhinehart Drive SE	Bygland Road SE to Greenway Boulevard SE	Urban 2-lane (1500-4999 AADT)	2,455,538	2	0.81	1.32	3.41	0.24	0	0.00	2.87	37.09	0.00
	Greenway Boulevard SE to 190th Street SW	Rural 2-lane (<1500 AADT)	166,075	0	0.00	0.61	8.58	0.00	0	0.00	3.97	367.71	0.00
Greenway Boulevard SE	Rhinehart Drive SE to Bygland Road SE	Urban 2-lane (<1500 AADT)	525,600	2	**3.81**	**1.46**	**6.71**	**0.57**	0	0.00	10.19	161.76	0.00
190th Street SW	Rhinehart Drive SE to Bygland Road SE	Rural 2-lane (<1500 AADT)	496,400	0	0.00	0.61	4.48	0.00	0	0.00	3.97	140.94	0.00
TH 220	180th Street SW to US 2	Rural 2-lane (<1500 AADT)	78,840	0	0.00	0.61	14.14	0.00	0	0.00	3.97	729.12	0.00
	US 2 to Harley Drive	Rural 2-lane (<1500 AADT)	1,667,138	0	0.00	0.61	2.48	0.00	0	0.00	3.97	53.74	0.00
	Harley Drive to Bygland Road SE	Rural 2-lane (<1500 AADT)	1,360,538	0	0.00	0.61	2.71	0.00	0	0.00	3.97	62.61	0.00

[1] AADT obtained from MnDOT Traffic Data Map and North Dakota Traffic Data Web App.

[2] East Grand Forks crash data obtained from MnCMAT2 and Grand Forks crash data was provided by the Grand Forks-East Grand Forks MPO. Crashes at non-study intersections are included in segment analysis.

[3] MnDOT's 2015 Green Sheets were used to determine the state average crash rate.

[4] The critical rate is a statistically adjusted crash rate to account for random nature of crashes.

[5] A 99.5% confidence level was assumed for critical crash rate and an 90% confidence level was assumed for critical K/A rate.

Similar to the intersection crash analysis table, cells are highlighted yellow where the crash rate exceeds the statewide average crash rate but is lower than the critical crash rate, and are highlighted red where the crash rate exceeds the critical crash rate. Only locations with a crash rate that exceeds the critical crash rate (critical index value greater than 1.0) represent statistically significant crash problems.

The following segments were identified as having a greater volume of crashes than segments with similar characteristics, as indicated by a critical crash index greater than 1.0:

- 24th Avenue S between S Washington Street and Cherry Street
- 4th Avenue S / 1st Street SE between Belmont Road and 3rd Avenue SE / Bygland Road (Point Bridge)
- S Washington Street between DeMers Avenue and 24th Avenue S
- Cherry Street between 4th Avenue S and 24th Avenue S

While there are issues with the high volume of crashes at these locations, the severity of the crashes generally resulted in minor or no injuries to those involved, and none of these locations have a critical K/A index exceeding 1.0.

The following three road segments have a K/A rate that exceeds the critical K/A rate, indicating that they have experienced more crashes resulting severe injury or death than other intersections with similar characteristics:

- 32nd Avenue S between S 20th Street and S Washington Street
- DeMers Avenue / 4th Avenue S between S Washington Street and Cherry Street
- US 2 between 180th Street SW and TH 220

Of the two K/A crashes on 32nd Avenue S, one was a fatality and the other was an incapacitating injury. The segment on DeMers Avenue / 4th Avenue S includes a 4-lane divided section on DeMers Avenue east of S Washington Street and a 3-lane undivided section on 4th Avenue S west of Cherry Street, with entry/exit ramps connecting the two. Of the K/A crashes on DeMers Avenue / 4th Avenue S, two of the three were fatalities and the third was an incapacitating injury. All three of these crashes occurred on the Demers Avenue portion of the segment. The US 2 K/A crash was an incapacitating injury.

3.3 EXISTING AND NO BUILD TRAFFIC OPERATIONS AND MOBILITY

To identify the need for improvements and understand the performance of potential bridge options, a baseline must be first established for comparison. This “No Build” traffic operations analysis assesses the existing and projected future mobility in the study area with only the programmed improvements and no additional bridge. Where vehicle mobility is discussed, it is assumed to apply to transit vehicles as well as cars and trucks.

The programmed improvement to convert the existing two-way stop-controlled intersection at Bygland Road SE & Greenway Boulevard SE to a signalized intersection was included in the 2045 No Build Conditions modeling. The programmed conversion of the Bygland Road SE & Rhinehart Drive SE intersection from its current condition as a side street stop-controlled intersection to a single-lane roundabout was evaluated for both 2030 and 2045 No Build Conditions. Because this project is in consideration of being removed from the program, the intersection was also analyzed under its existing geometry and control configuration. The results for both conditions are provided in the 2030 and 2045 No Build Conditions intersection traffic operations analysis tables.

The traffic operations analysis evaluates capacity at the roadway segment and intersection levels to identify locations that are currently or are projected to reach or exceed capacity. Using Level of Service (LOS) methodology, the quality of traffic flow and mobility was measured for the study area under Existing (2021) Conditions, forecast 2030 No Build Conditions, and forecast 2045 No Build Conditions. The traffic volumes used for the traffic operations analysis are from recent peak hour turning movement counts which were adjusted to reflect current 2021 and forecast 2030 and 2045 traffic volume levels. The existing and forecast volume sets and development methodology are documented in Technical Memorandum #3-A. A discussion of the capacity, including LOS, is included in the following sections.

3.3.1 Level of Service Methodology

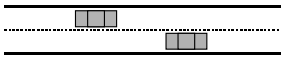
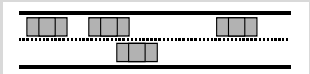
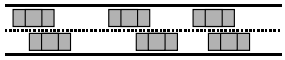
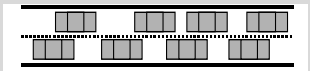
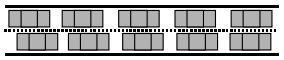
LOS is a concept used to estimate the quality of vehicular traffic flow through intersections and along roadway segments. In general, the capacity of a street is a measure of its ability to accommodate a certain volume of moving vehicles. Typically, street capacity refers to the maximum number of vehicles that can be expected to be accommodated in a given time period under the prevailing roadway characteristics and conditions. The LOS methodology is standardized by the Transportation Research Board (TRB) and is applied uniformly regardless of jurisdictional boundaries. The LOS method for arterial streets assigns an LOS grade based on delay and driver expectations of acceptable delay for the intersection control type.

LOS results are categorized on an A-F scale. LOS A represents high-quality traffic operations where motorists experience little or no delay (i.e., free flow conditions). Conversely, LOS F corresponds to low-quality operations with significant delays and potentially congestion.

The overall intersection LOS grade is based on the weighted average delay of each movement. The delays can vary greatly based on traffic volume, lane geometry, and intersection traffic control (i.e., traffic signal, through-stop, all-way stop). Grades are different at unsignalized and signalized intersections due to drivers' expectations of longer delays at signalized intersections.

Although the measure of effectiveness used in determining LOS for different facility types (e.g., arterial street, rural highway, signalized intersection) may differ, the concept of the LOS grade is the same. The general relationship between capacity and LOS is displayed in **Table 3-4**.

Table 3-4. Level of Service Grade Definitions

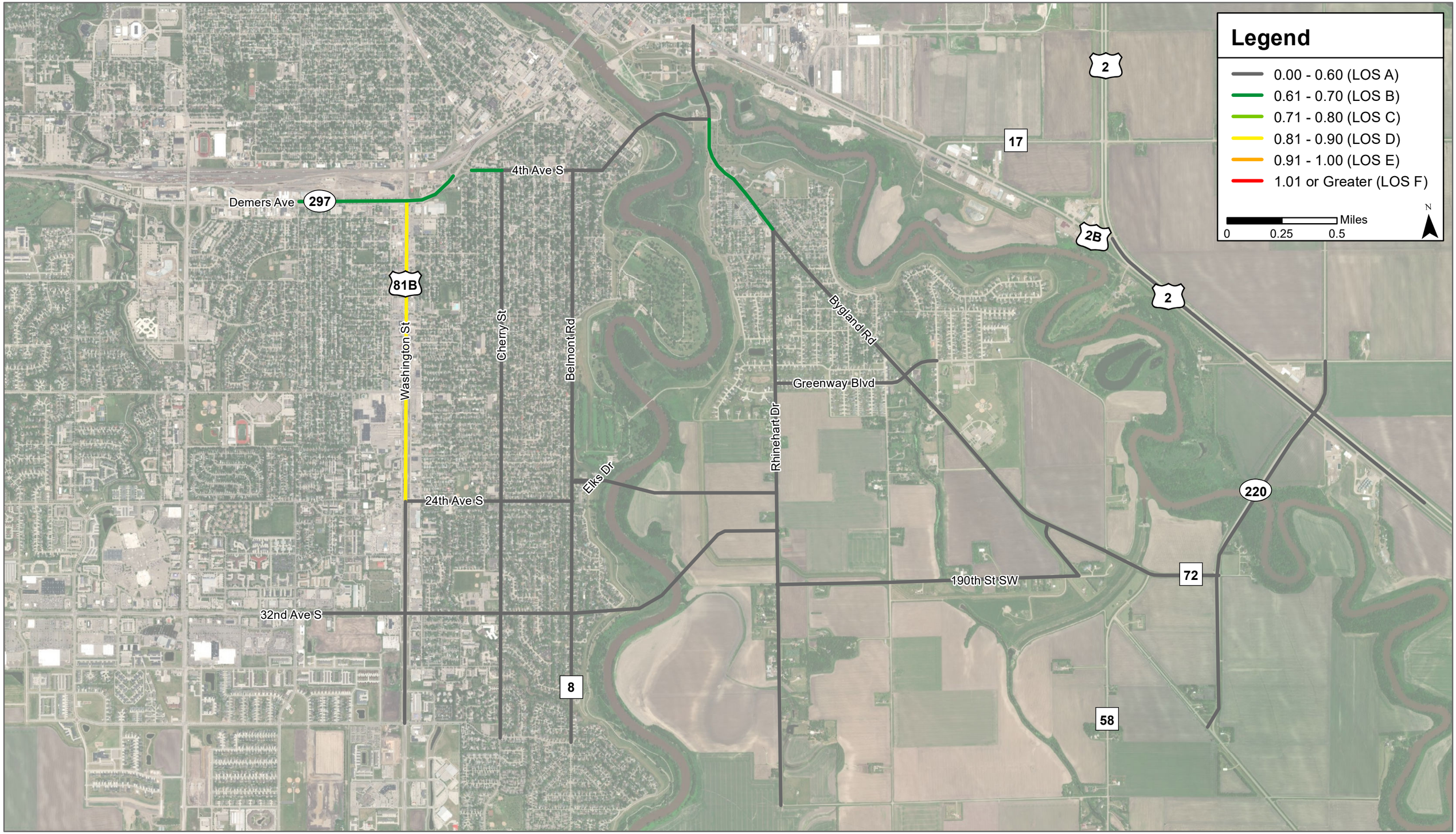
LOS	Description		Volume to Capacity Ratio	Signalized Intersection	Unsignalized Intersection
				Intersection Delay (Seconds / Vehicle)	Intersection Delay (Seconds / Vehicle)
A		**Free Flow.** Low volumes and little to no delays.	0 - 0.6	0 - 10	0 - 10
B		**Stable Flow.** Speeds restricted by travel conditions, minor delays.	0.61 - 0.7	>10 - 20	>10 - 15
C		**Stable Flow.** Speeds and maneuverability closely controlled due to higher volumes.	0.71 - 0.8	>20 - 35	>15 - 25
D		**Stable Flow.** Speeds considerably affected by change in operating conditions. High density traffic restricts maneuverability, volume near capacity.	0.81 - 0.9	>35 - 55	>25 - 35
E		**Unstable Flow.** Low speeds, considerable delay, volume approaching or at capacity.	0.91 - 1.0	>55 - 80	>35 - 50
F		**Forced Flow.** Very low speeds, volumes exceed capacity, long delays with stop and go traffic.	> 1.0	> 80	> 50

Sources:
1. Highway Capacity Manual, 6th Edition (Published 2016), Transportation Research Board, Exhibit 18-1 for Signalized Intersections, and Exhibit 19-8 for Unsignalized Intersections, and Chapter 16 for Urban Street Facilities.
2. Transportation Research Board (TRB), Highway Capacity Manual, Special Report 209

3.3.2 Roadway Segment Analysis

The study network consists of varying typical sections and intersection control types. In order to evaluate the mobility of the roadway segments that make up the study network, an assessment was completed to determine whether the capacities of the current facilities are enough to accommodate the existing and projected future traffic volumes. The assessment is a planning-level comparison of the existing and forecast ADT volumes against estimated capacity for each facility type. All information used in the volume-to-capacity (V/C) analysis, including existing and forecast ADTs and roadway capacities, were provided by ATAC. This information included the volume and capacity data from the travel demand modeling of the Grand Forks and East Grand Forks area for the base year (2015), forecast year 2030, and forecast year 2045. The modeling included changes associated with programmed improvements within the study area in the future forecast years.

The segment LOS based on volume-to-capacity ratio for the study road segments under 2015 Existing Conditions, forecast 2030 No Build Conditions, and forecast 2045 No Build Conditions are provided in **Figures 3-7**, **3-8**, and **3-9**, respectively.



Future Bridge Traffic Impact Study

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Figure 3-7
2015 Existing Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap

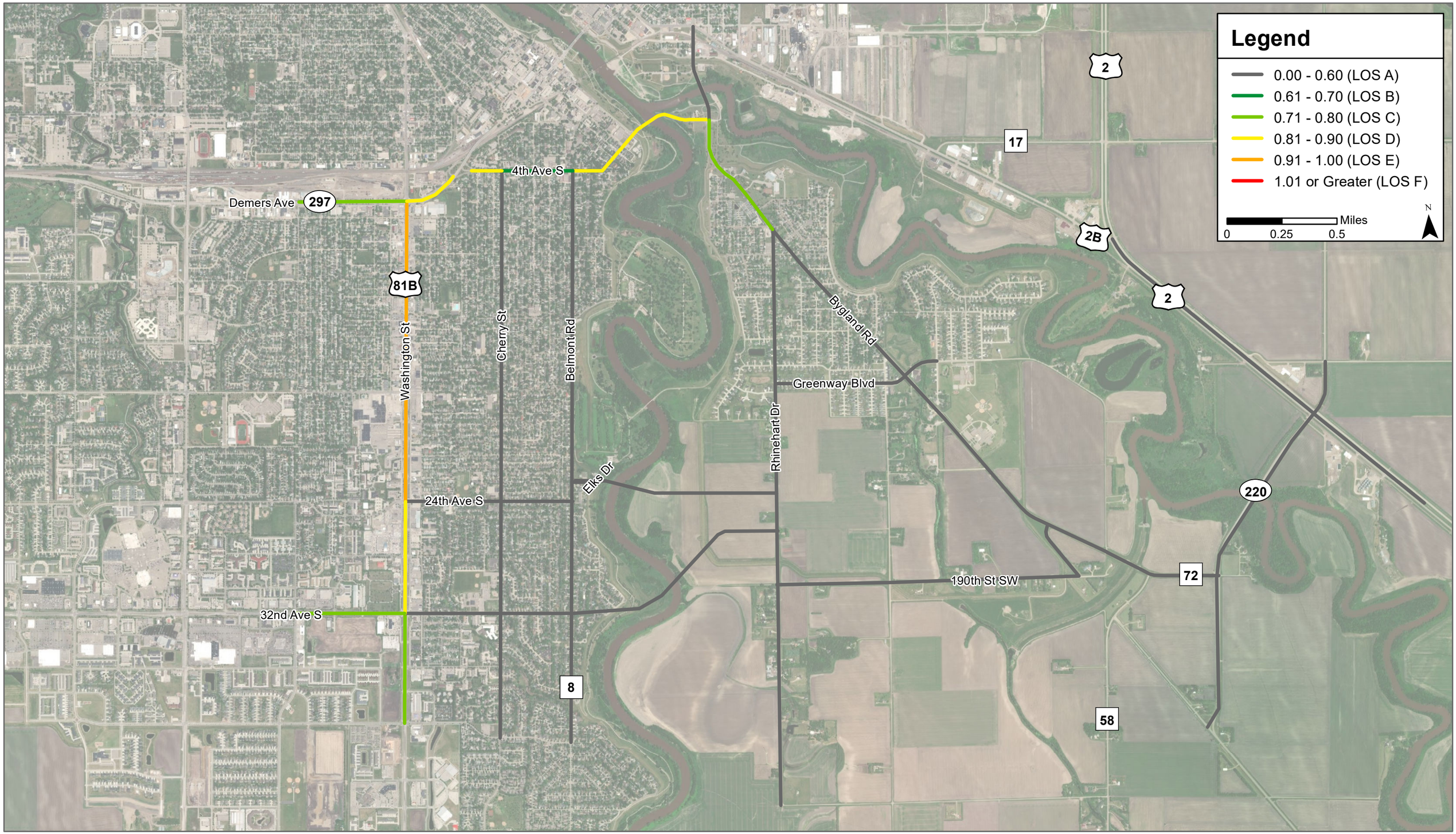

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Figure 3-8
2030 No Build Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap

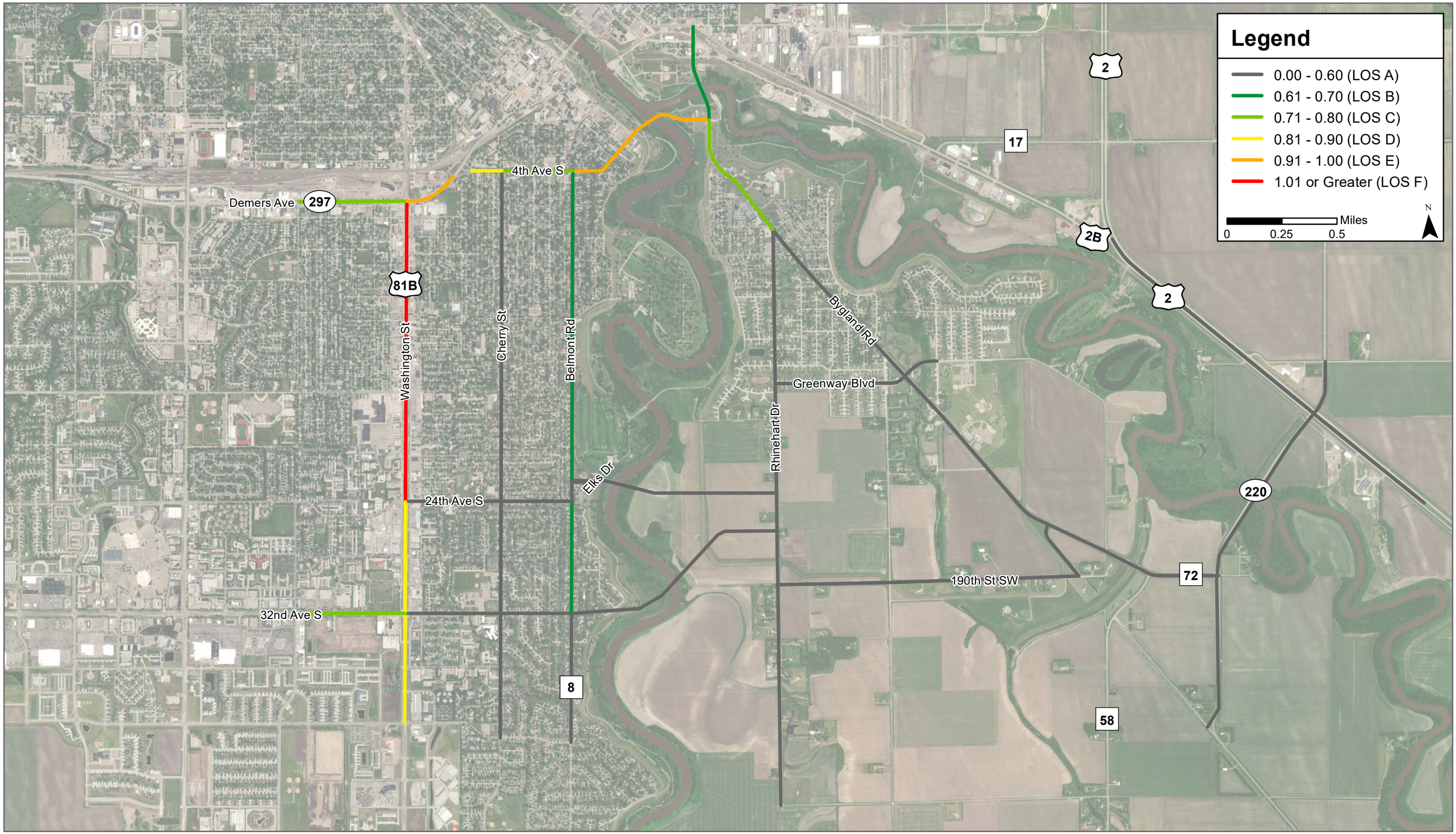

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Figure 3-9
2045 No Build Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap

Based on the existing and forecast ADTs and segment capacities, all roads within the study area currently operate within capacity and are expected to continue to operate within capacity through the 2030 forecast year. The S Washington Street segment between DeMers Avenue / 4th Avenue S and 24th Avenue S is expected to begin to approach capacity in 2030 No Build Conditions, and is forecast to operate at LOS E. By 2045 under No Build Conditions, this segment would be expected to exceed capacity and operate at LOS F, leading to significant congestion and increased safety problems. Additionally, the segments on DeMers Avenue between S Washington Street and 4th Avenue S and on 4th Avenue S / 1st Street SE (Point Bridge) between Belmont Road and 3rd Avenue SE are expected to reach LOS E in the 2045 No Build conditions, approaching their capacity levels.

There are multiple factors that influence segment capacity. These primarily include facility type, number of through lanes, presence of turn lanes, and the presence of and type of median. While intersection capacity plays a critical and often controlling role in the capacity of a roadway network, providing adequate roadway capacity for the anticipated volume levels is critical to providing adequate vehicle mobility.

The following section will discuss the intersection traffic operations analysis.

3.3.3 Intersection Traffic Operations Analysis

The intersection traffic operations analysis for this study uses LOS methodology to assess the quality of each study intersection's performance with respect to vehicular mobility. An overall intersection grade of LOS E indicates an intersection is approaching or is at capacity, and a grade of LOS F indicates an intersection which has exceeded capacity and experiences significant delays. Intersections operating at an unacceptable level (LOS E and F) are identified in the traffic operations analysis. The results of the intersection operations analysis will be used along with the segment analysis to identify locations that are anticipated to exceed capacity, and options for improving the intersections to an overall intersection LOS D or better will be provided in Technical Memorandum #3-C for all of the No Build and Build alternatives.

Trafficware's Synchro 10 software was used to perform the traffic operations analysis at the study intersections using HCM 6th Edition for roundabout results and HCM 2010 for signalized and stop-controlled intersections. The existing signal timings at the signalized study intersections were taken from the Synchro files used for the most recent retiming studies. Signal timings were optimized while maintaining existing cycle lengths for the future year models on S Washington Street.

Unsignalized intersections with high-volume mainlines will frequently perform at an overall LOS A while their side street through and left turn movements perform at a worse LOS. This occurs because mainline traffic does not stop, and thus incurs little to no delay. Overall intersection LOS is the weighted average delay of all movements using the intersection, so the negligible delay experienced by the high mainline volumes skews the weighted average to show minimal delay. Some motorists, especially on the side street, are likely to experience much longer delays. Because of this, the delay and LOS for the worst approach is reported at two-way stop-controlled intersections rather than for the overall intersection.

3.3.3.1 Existing (2021) Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under Existing (2021) Conditions are provided in **Table 3-5**.

Table 3-5 – Existing (2021) Conditions Intersection Delay and LOS

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Delay (s/veh)	LOS	Delay (s/veh)	LOS
S Washington St & 32nd Ave S	Signal	33.7	C	38.2	D
Cherry St & 32nd Ave S	AWSC	17.9	C	11.3	B
Belmont Rd & 32nd Ave S	AWSC	13.0	B	13.0	B
S Washington St & 24th Ave S	Signal	20.1	C	30.2	C
Cherry St & 24th Ave S	AWSC	9.0	A	9.0	A
Belmont Rd & 24th Ave S	TWSC	14.1	B	15.4	C
Belmont Rd & Elks Drive	TWSC	11.8	B	13.9	B
S Washington St & DeMers Ave	Signal	45.7	D	50.2	D
Cherry St & 4th Ave S	Signal	6.3	A	5.5	A
Belmont Rd & 4th Ave S	AWSC	49.8	E	21.5	C
3rd Ave SE & 1st St SE	Signal	8.4	A	6.7	A
Bygland Rd SE & Rhinehart Dr SE	TWSC	47.3	E	16.5	C
Rhinehart Dr SE & Greenway Blvd SE	TWSC	8.6	A	8.7	A
Bygland Rd SE & Greenway Blvd SE	TWSC	24.6	C	11.9	B
Bygland Rd SE & 190th St SW	TWSC	9.6	A	9.5	A
Bygland Rd SE/Harley Dr & TH 220	TWSC	9.6	A	9.0	A
TH 220 & US 2	TWSC	12.5	B	12.8	B
Rhinehart Dr SE & 190th St SE	AWSC	7.0	A	7.0	A

Note: Delay and LOS for TWSC intersections reflect the worst approach

Under Existing (2021) Conditions, all study intersections operate acceptably at LOS D or better other than the Belmont Road & 4th Avenue S and Bygland Road SE & Rhinehart Drive SE intersections. Belmont Road & 4th Avenue S operates at intersection LOS E in the AM peak hour, which is primarily attributed to the all-way stop-control intersection control type. The side-street stop-controlled intersection of Bygland Road SE & Rhinehart Drive SE operates at LOS E on its worst approach, which is the stop-controlled northbound approach on Rhinehart, in the AM peak hour.

3.3.3.2 2030 No Build Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under 2030 No Build Conditions are provided in **Table 3-6**.

Table 3-6 – 2030 No Build Conditions Intersection Delay and LOS

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Delay (s/veh)	LOS	Delay (s/veh)	LOS
S Washington St & 32nd Ave S	Signal	29.1	C	43.4	D
Cherry St & 32nd Ave S	AWSC	41.0	E	12.6	B
Belmont Rd & 32nd Ave S	AWSC	20.0	C	20.7	C
S Washington St & 24th Ave S	Signal	20.8	C	30.9	C
Cherry St & 24th Ave S	AWSC	9.7	A	9.6	A
Belmont Rd & 24th Ave S	TWSC	17.7	C	21.7	C
Belmont Rd & Elks Drive	TWSC	13.2	B	17.3	C
S Washington St & DeMers Ave	Signal	58.0	E	41.9	D
Cherry St & 4th Ave S	Signal	7.1	A	5.9	A
Belmont Rd & 4th Ave S	AWSC	121.0	F	69.9	F
3rd Ave SE & 1st St SE	Signal	11.3	B	7.3	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	211.0	F	23.1	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	14.8	B	7.3	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	9.0	A	9.1	A
Bygland Rd SE & Greenway Blvd SE	TWSC	34.6	D	12.3	B
Bygland Rd SE & 190th St SW	TWSC	9.7	A	9.6	A
Bygland Rd SE/Harley Dr & TH 220	TWSC	9.9	A	9.1	A
TH 220 & US 2	TWSC	13.6	B	14.0	B
Rhinehart Dr SE & 190th St SE	AWSC	7.0	A	7.1	A

Note: Delay and LOS for TWSC intersections reflect the worst approach

The programmed roundabout at Bygland Road SE & Rhinehart Drive SE would be expected to improve the worst approach at the intersection from LOS E under Existing (2021) Conditions AM peak hour to an overall intersection LOS B or better in both peak hours under 2030 No Build Conditions. If no improvements were made to this intersection and the existing geometry and traffic control were maintained, significant delay would be expected on the Rhinehart Drive SE approach, which would be anticipated to operate at LOS F in the AM peak hour under 2030 No Build Conditions.

Operations at the Belmont Road & 4th Avenue S intersection are expected to degrade from LOS E in the Existing (2021) Condition AM peak hour to LOS F in both peak hours under 2030 No Build Conditions. The segment analysis also shows worsening conditions on 4th Avenue S in the future years from increased volumes using the Point Bridge, and by 2030 the all-way stop-control intersection traffic control does not appear to have sufficient capacity to service the projected traffic volumes acceptably.

Two intersections degrade from LOS D or better to LOS E under 2030 No Build Conditions in the AM peak hour: Cherry Street & 32nd Avenue S and S Washington Street & DeMers Avenue. The all-way stop-control at the Cherry Street & 32nd Avenue S intersection is expected to operate unacceptably in the AM peak hour by 2030

with the anticipated traffic growth. The roadway segments surrounding the intersection showed sufficient capacity for the forecast 2030 volumes, so the unacceptable level of service can be attributed the all-way stop-control intersection control type.

The signalized intersection of S Washington Street & DeMers Avenue degrades from LOS D in Existing (2021) Conditions to LOS E in 2030 No Build conditions in the AM peak hour. The segment analysis indicated several of the surrounding roads would be expected to approach or reach capacity by 2030.

3.3.3.3 2045 No Build Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under 2045 No Build Conditions are provided in **Table 3-7**.

Table 3-7 – 2045 No Build Conditions Intersection Delay and LOS

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Delay (s/veh)	LOS	Delay (s/veh)	LOS
S Washington St & 32nd Ave S	Signal	31.7	C	42.2	D
Cherry St & 32nd Ave S	AWSC	119.1	F	16.1	C
Belmont Rd & 32nd Ave S	AWSC	56.0	F	57.4	F
S Washington St & 24th Ave S	Signal	22.1	C	30.9	C
Cherry St & 24th Ave S	AWSC	10.6	B	10.3	B
Belmont Rd & 24th Ave S	TWSC	23.5	C	32.9	D
Belmont Rd & Elks Drive	TWSC	16.6	C	23.0	C
S Washington St & DeMers Ave	Signal	85.1	F	56.1	E
Cherry St & 4th Ave S	Signal	8.6	A	6.5	A
Belmont Rd & 4th Ave S	AWSC	202.1	F	132.4	F
3rd Ave SE & 1st St SE	Signal	18.1	B	7.8	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	462.9	F	34.2	D
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	23.1	C	8.2	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	9.2	A	9.3	A
Bygland Rd SE & Greenway Blvd SE	Signal	9.0	A	5.5	A
Bygland Rd SE & 190th St SW	TWSC	9.8	A	9.6	A
Bygland Rd SE/Harley Dr & TH 220	TWSC	10.4	B	9.2	A
TH 220 & US 2	TWSC	16.1	C	17.0	C
Rhinehart Dr SE & 190th St SE	AWSC	7.0	A	7.2	A

Note: Delay and LOS for TWSC intersections reflect the worst approach

Traffic operations at the Bygland Road SE & Greenway Boulevard SE intersection improve from LOS D and B on the highest delay approaches under 2030 No Build Conditions in the AM and PM peak hours, respectively, to overall intersection LOS A in both peak hours under 2045 No Build Conditions with the programmed installation of a traffic signal at the intersection. By 2045, the single-lane roundabout at Byland Avenue SE & Rhinehart Drive

SE included as a programmed improvement by 2030 would be anticipated to continue to operate at an acceptable LOS in both the AM and PM peak hours. However, if no improvements were made to this intersection and the existing geometry and traffic control were maintained, it would be expected to operate with severely high delays (LOS F) on the Rhinehart Drive SE approach in the AM peak hour under 2045 No Build Conditions.

The intersection of Belmont Road & 4th Avenue S was expected to operate at LOS F under 2030 No Build Conditions, and is expected to continue to operate at LOS F with significantly more delay under 2045 No Build Conditions. The segment analysis shows 4th Avenues S / 1st Street SE over the Point Bridge at LOS E, nearing or reaching capacity by 2045. A combination of insufficient roadway capacity and intersection control type (all-way stop-control) are expected to result in substantial delays and unacceptable operations at this intersection by 2045.

The all-way stop-controlled intersections on 32nd Avenue S at Cherry Street and at Belmont Road are anticipated to operate at LOS F in one or both of the peak hours by the 2045 due to traffic volume growth. The segment analysis does not show the surrounding roadways surrounding these intersections at or near capacity. The excessive delay at these intersections can be attributed to the all-way stop-control intersection control type not providing sufficient capacity for future projected volumes.

The intersection of S Washington Street & DeMers Avenue is anticipated to degrade from LOS E and D under 2030 No Build Conditions to LOS F and E under 2045 No Build Conditions in the AM and PM peak hours, respectively. The segment analysis shows multiple approaches at this intersection reaching or exceeding capacity by 2045, indicating that the existing roadway geometry near and at the intersection would be expected to be insufficient to accommodate the forecast 2045 No Build traffic volume levels.

The Red River Crossing Alternatives Analysis in Appendix C of the Grand Forks-East Grand Forks MPO 2045 Street Highway Plan Update completed in 2018 analyzed many of the same intersections in the PM peak hour through 2045 No Build Conditions. While the results of the studies may vary due to different data sources and data dates, analysis methodologies, and signal timing optimization, both studies identify anticipated unacceptable operations at the S Washington Street & DeMers Avenue, 4th Avenue S & Belmont Road, and 32nd Avenue S & Belmont Road intersections under projected 2045 No Build Conditions. The 2018 study also indicates unacceptable operations (LOS E) at the S Washington Street & 32nd Avenue S intersection in the 2045 No Build PM peak hour, while the results of this analysis indicate acceptable operations at LOS D.

Transmittal Information	
To:	Earl Haugen (Grand Forks-East Grand Forks MPO)
From:	Tim Burkhardt, AICP, MPH (Alliant Engineering) Hannah Johnson, EIT (Alliant Engineering)
Date:	7/02/2021
Subject:	Technical Memorandum #4: Purpose and Need

1. Introduction

This technical memorandum for the Grand Forks-East Grand Forks Future Bridge Traffic Impact Study presents the project Purpose and Need. Other technical memoranda produced for this study are listed below.

2. Existing and Future Area Characteristics

Refer to Technical Memorandum #2 for documentation of the transportation system and infrastructure, the built and natural environment, and land uses for existing and planned future conditions.

3. Traffic Analysis

Refer to Technical Memoranda #3-A and 3-B for a description of the traffic analysis methodology and the future No Build traffic operations and safety performance. Traffic analysis with a new bridge will be completed and documented in Technical Memorandum #3-C.

4. Purpose and Need

4.1 INTRODUCTION

A Purpose and Need Statement explains why an agency or agencies are undertaking a project and describes the main objectives of the project. The “need” describes the transportation problems to be addressed by the project. The “purpose” is a broad statement of the intended transportation results. Together, the purpose and need are a way to measure and understand to what extent the alternatives being considered meet the project needs.

Alternatives that do not address the transportation needs of the project and do not meet the purpose of the project are documented as such and are not studied further. This Purpose and Need statement, like other products being developed during this planning study, may be adopted or used during a subsequent environmental review process.

5. Purpose

The following draft purpose statement has been prepared for the project.

> *The purpose of the Grand Forks-East Grand Forks Future Bridge Project is to improve mobility and connectivity between Grand Forks and East Grand Forks by reducing congestion on the Point Bridge and connecting roadways ~~and by~~ while providing a more direct connection for trips between the two cities.*

6. Need

The project needs discussion identifies transportation deficiencies that currently exist or are reasonably expected to occur within the project area. The needs section discusses the transportation problems which led to the initiation of the project (primary needs). In addressing these needs, the agencies involved also look for other transportation problems or opportunities for system improvements within the area that may be addressed concurrently (secondary needs).

6.1 PRIMARY NEEDS

The desire for a new multimodal connection between the Cities of Grand Forks and East Grand Forks across the Red River has been under discussion for many years. A key issue identified in the 2045 Metropolitan Transportation Plan (MTP) is the need for an additional southern Red River crossing. An updated review of existing and proposed transportation conditions has identified the following primary needs related to mobility and congestion and system linkage.

6.1.1 Mobility/Congestion

Forecast No Build travel demand in years 2030 and year 2045 shows performance (level of service) and congestion on the Point Bridge and on roadway segments and at intersections leading to the bridge.

- The following roadway segments on or near the Point Bridge are expected to operate at or near capacity by 2045:
  - Washington St
  - DeMers Ave
  - Point Bridge
- The following intersections, including those on or near the Point Bridge, are expected to operate at or near capacity by 2045:
  - Washington & 32nd Ave S
  - Cherry St & 32nd Ave S
  - Belmont Rd & 32nd Ave S
  - Washington St & DeMers Ave
  - Belmont Rd & 4th Ave S
  - Bygland Rd SE & Rhinehart Dr SE (if not improved previously)

6.1.2 Multimodal System Linkage

Travel demand modeling demonstrates the travel constraint created by the limited number and location of bridges across the Red River between Grand Forks and East Grand Forks for both motorized and non-motorized traffic.

- There is a demonstrated travel demand south of the Point Bridge on both sides of the river, resulting in longer trips and/or out-of-direction travel due to vehicles, including transit vehicles, traveling north to cross at the Point Bridge and then south again on both sides of the river.
- There is a lack of non-motorized crossings of the Red River in the southern portion of Grand Forks and East Grand Forks. The southmost pedestrian/bicycle facility across the river connects approximately 17th Avenue in Grand Forks with 11th St SE in East Grand Forks. This crossing is primarily a recreational facility and is long and meandering. There are no other crossings south of this point that support multimodal travel between the two cities.

6.2 SECONDARY NEEDS

Secondary needs are transportation problems or opportunities for improvements within the study area that may be able to be addressed, if feasible, at the same time the primary needs are addressed.

6.2.1 Crashes

Review of crash history on study area roadway segments and intersections shows locations that have a crash rate that exceeds the critical crash rate or have a K/A (fatal and severe injury) rate that exceeds the critical K/A rate.

- The following segments have critical crash concerns:
  - 24th Avenue S between S Washington Street and Cherry Street
  - 4th Avenue S / 1st Street SE between Belmont Road and 3rd Avenue SE / Bygland Road (Point Bridge)
  - S Washington Street between DeMers Avenue and 24th Avenue S
  - Cherry Street between 4th Avenue S and 24th Avenue S
  - 32nd Avenue S between S 20th Street and S Washington Street
  - DeMers Avenue / 4th Avenue S between S Washington Street and Cherry Street
  - US 2 between 180th Street SW and TH 220
- The following intersections have critical crash concerns:
  - 32nd Ave S & Washington St S
  - 24th Ave S & Washington St S
  - DeMers Ave & Washington St S
  - Bygland Rd SE & Greenway Blvd SE

6.2.2 Social and Economic Factors

The following social and economic issues are important community drivers for the future bridge study.

- Neighborhood Quality of Life: Traffic volumes in some locations are high due to out of direction traffic from the limited number of river crossings between the two cities. Achieving a more balanced distribution of trips on the system would support neighborhood quality of life.
- Support for Economic Development: Significant growth is anticipated in the southern areas of Grand Forks and East Grand Forks. Improving the quality of access between the cities, and improving mobility and safety at key intersections, is expected to benefit area businesses and provide for redevelopment and economic growth, consistent with approved land use and transportation plans.

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

July 14, 2021

MPO Executive Board:

July 21, 2021

RECOMMENDED ACTION: Approve Final Update to the Urban and Rural Functional Classification Maps.
TAC RECOMMENDED ACTION:

Matter of Approval of Final Update to the Functional Classification Map.

Background:
In 2019 the TAC worked through the update to the Functional Classification Map. In September 2019, the MPO Executive Board approved the recommended changes from the TAC. NDDOT sent back a list of clarifications to the MPO request to the functional classification map in early June 2021.

The MPO worked with NDDOT on the changes they needed to see in the maps and the tables. The changes that happened were:

- The table of changes needed a column for noting the reason for the change.
- A more precise terminus.
- The exclusion of county/rural changes. The rural changes go through a different process than the urban. Due to the separation of Rural process the MPO needs to approve a separate County/Rural map. Grand Forks County Engineer already submitted paperwork for the changes to NDDOT.

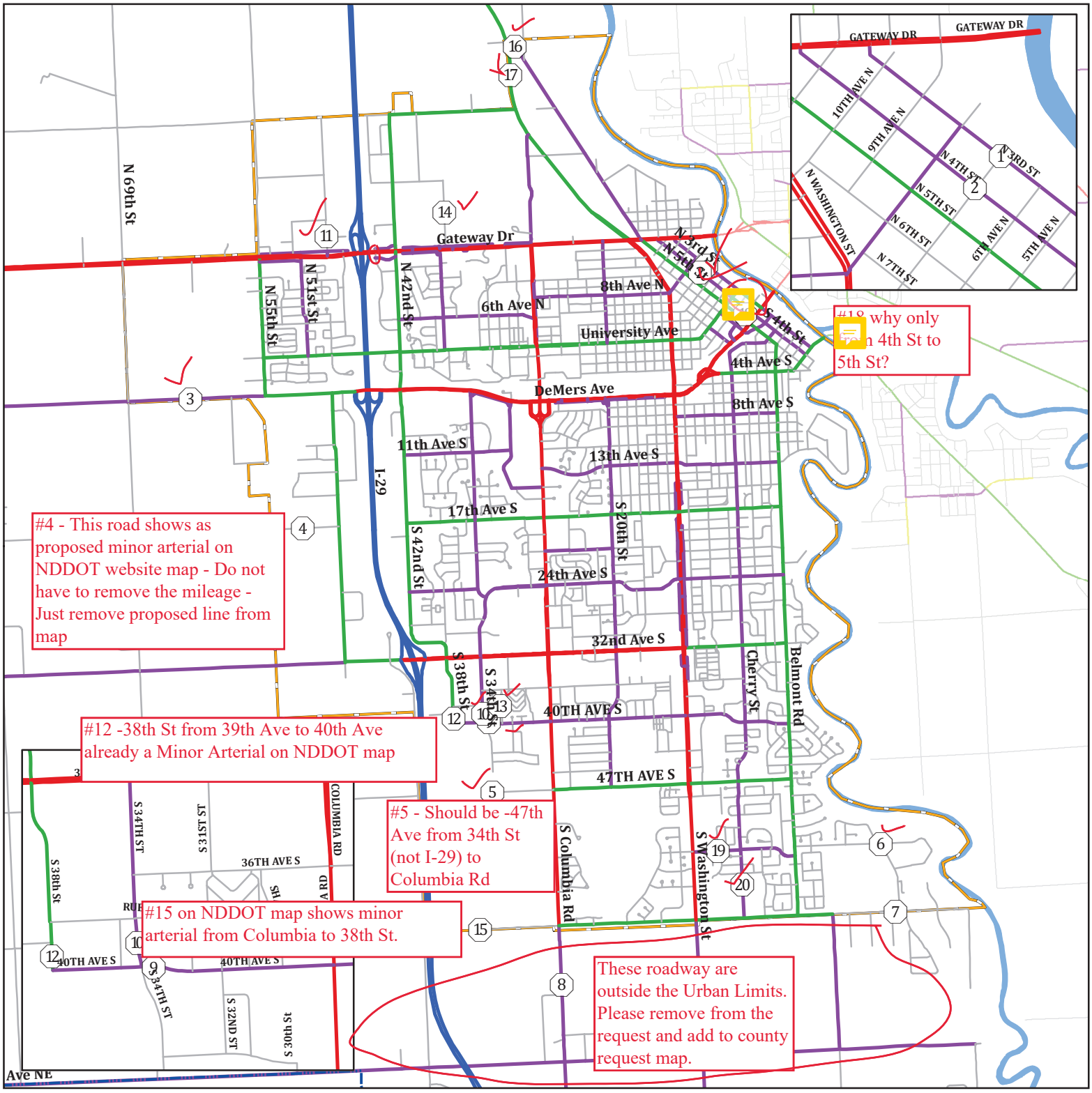
Findings and Analysis

- NDDOT comments do not change the intent of what the TAC and Executive Board approved.
- Staff recommends of the Functional Classification for the Urban and Rural areas of the MPO area..

Support Materials:

- Map with NDDOT Comments
- Final Functional Classification Map
- Table of Changes
- Table of Mileages and Percentages
- County Engineer Functional Classification submittal.

2019 Functional Classification
Grand Forks, North Dakota



Interstate
Principal Arterial
Minor Arterial
Collector/Major County Collector
Local
XX Table Number

MPO Study Area
Adjusted Federal Aid Urbanized Area
Water

0 0.5 1 1.5 2 Miles

N
W E
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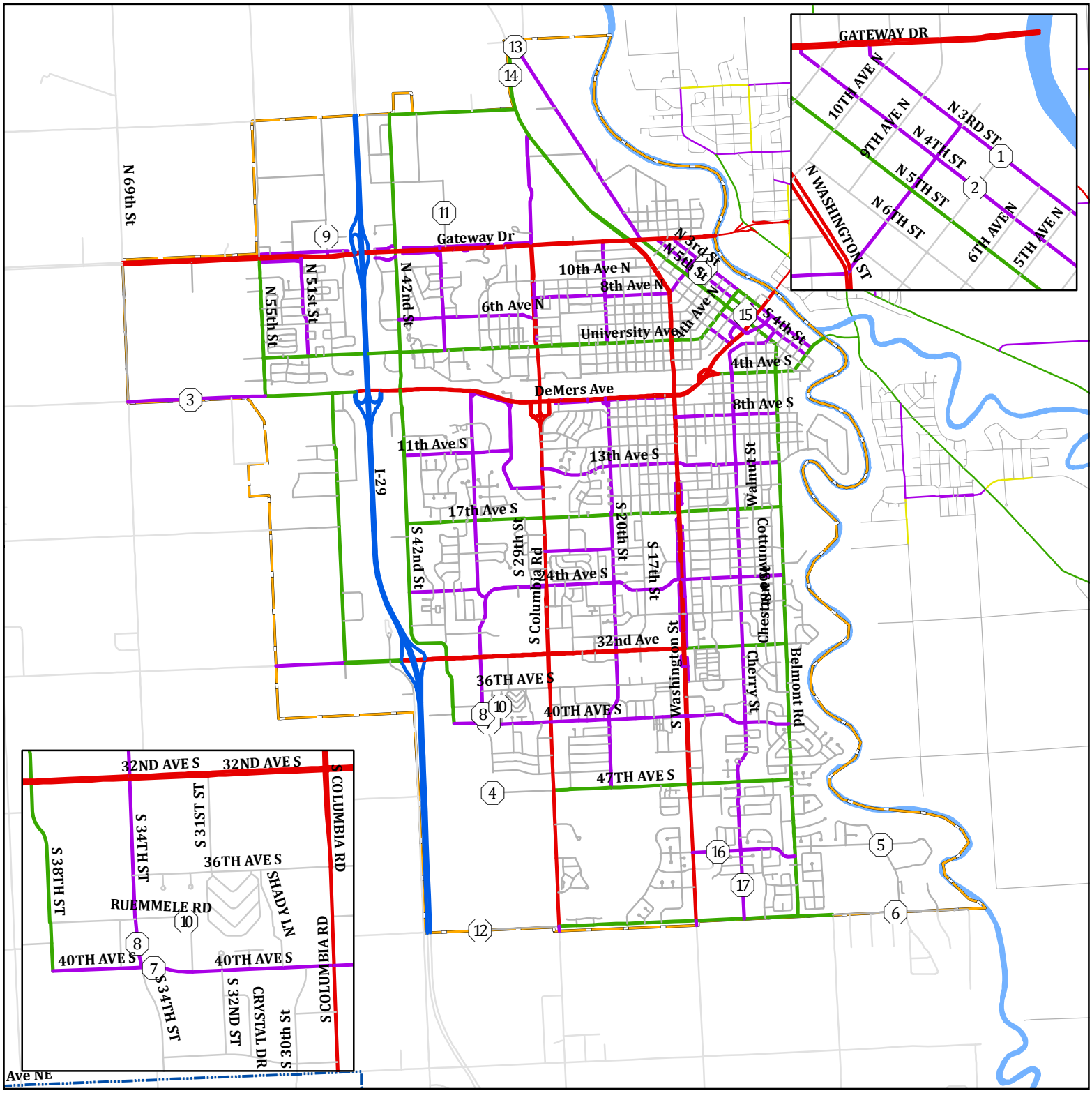
Overcoming Barriers Strengthening Connections
Grand Forks - East Grand Forks Metropolitan Planning Organization
Ensuring Opportunities Planning One Community

2021 Urban Functional Classification
Grand Forks, North Dakota



Interstate
Principal Arterial
Minor Arterial
Major Collector
Local
Other
XX Table Number
MPO Study Area
Adjusted Federal Aid Urbanized Area
Water

0 0.5 1 1.5 2 Miles

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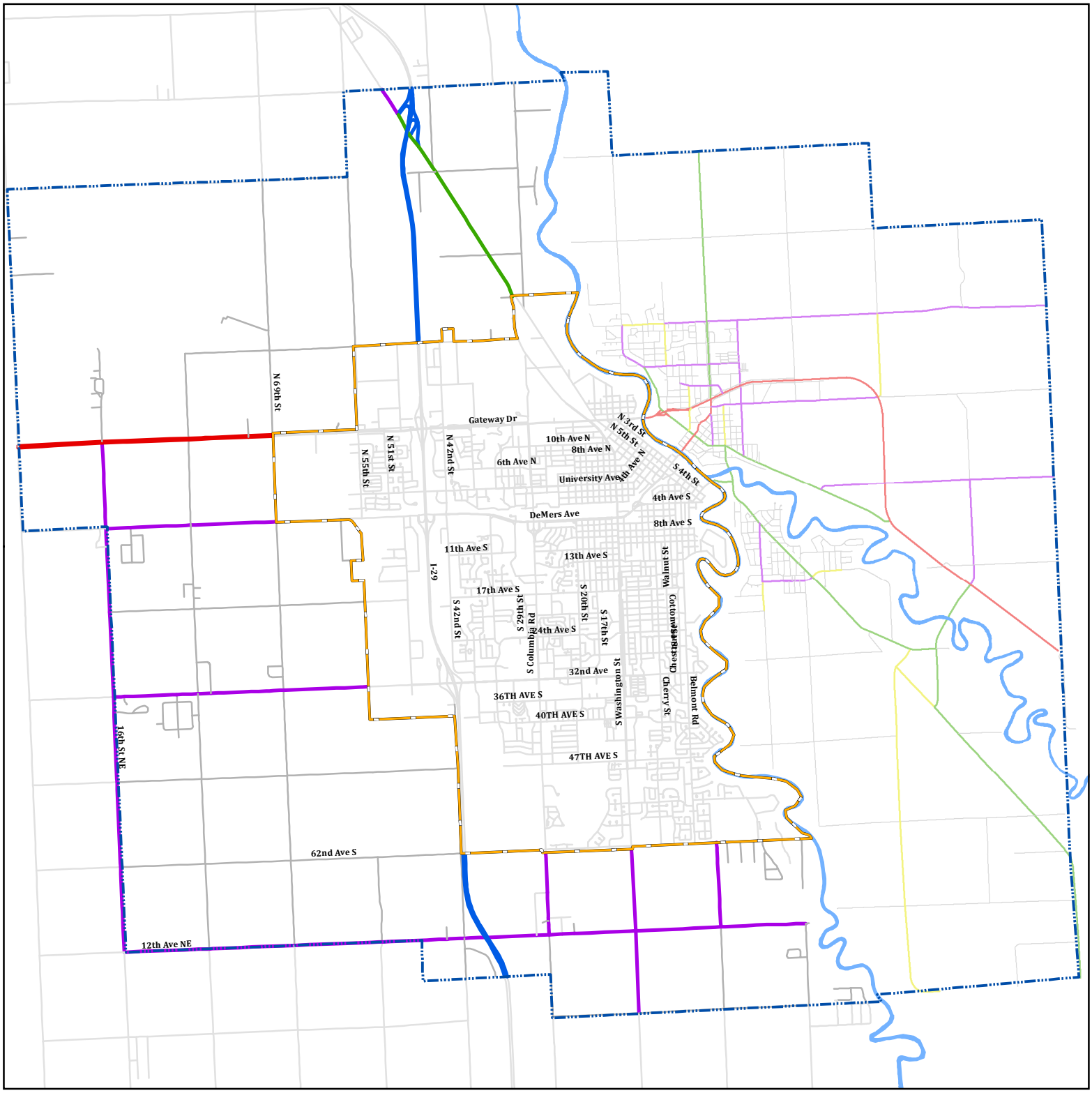
W E
S

Metropolitan Planning Organization

ID	Road	From	To	Changes From	Final Classification	Surface	Justification	Segment Length (In Miles)
1	N 3rd St	Gateway Dr	Univesity Ave	Minor Arterial	Collector	Paved	This section is a one way mostly residential roadway with collector level traffic volumes.	0.608
2	N 4th St	Gateway Dr	Univesity Ave	Minor Arterial	Collector	Paved	This section is a one way mostly residential roadway with collector level traffic volumes.	0.711
3	DeMers Ave	N 55th St	S 69th St	Minor Arterial	Collector	Paved	Rural in nature and has collector level traffic volumes	1.507
4	47th Ave S	S Columbia Road	S 34th St	Minor Arterial	Local	Gravel	Gravel road that does not connect to another roadway.	0.543
5	Adam's Drive	Belmont Road	62nd Ave S	Collector	Local	Paved	Access to the roadway functions as a local roadway.	1.166
6	62nd Ave S	Belmont Road/9th St NE	16th St SE	Minor Arterial	Local	Paved	Rural in nature and access to the roadway functions as a local roadway.	1.001
7	40th Ave S	S 38th St	Rummele Road	Local	Collector	Paved	Once roadway was built it needed to be added.	0.360
8	S 34th St	Rummele Road	40th Ave S	Local	Collector	Paved	Extension of collector classification.	0.499
9	N 48th St	17th Ave N	Gateway N Frontage Road	Collector	Local	Paved	No connection to a functionally classified roadway.	0.236
10	Ruemmelle Road	S 34th St	40th Ave S	Collector	Local	Paved	Functions as a local road with multiple driveway access.	0.265
11	N 36th St	Gateway Dr N Frontage Road	20th Ave N	Collector	Local	Paved	No connection to a functionally classified roadway.	0.471
12	62nd Ave S	S Columbia Road	S 38th St	Minor Arterial	Local	Gravel	Gravel road that does not connect to another roadway.	0.719
13	State Mill RD	N WashingtonSt/US-81	N Columbia Rd/11th St NE	Local	Collector	Paved	State had it as a local. Once in the urban area roadway section could be classified.	0.033
14	N Washington St/US-81	State Mill Rd	27th Ave N	Local	Minor Arterial	Paved	State had it as a local. Once in the urban area roadway section could be classified.	
15	1st Ave N	N 4th St	N 5th St	Collector	Local	Paved	The City requested this due to part of the roadway being vacated for an addition to Central High School.	
16	55th Ave S	Cherry St	S Washington St/US-81	New	Collector	Paved	New roadway that is an extension of a currently classified roadway.	
17	Cherry St	55th Ave S	62nd Ave S	New	Collector	Paved	New roadway that is an extension of a currently classified roadway.	

2021 Rural Functional Classification
Grand Forks, North Dakota



Interstate
Principal Arterial
Minor Arterial
Major Collector
Local
Other

MPO Study Area
Adjusted Federal Aid Urbanized Area
Water

0 0.5 1 1.5 2 Miles

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Metropolitan Planning Organization

GRAND FORKS COUNTY
HEART OF THE RED RIVER VALLEY

County Highway Department

June 16, 2021

Mr. Bryon Fuchs
Local Government Engineer
NDDOT
608 East Boulevard Avenue
Bismarck, ND 58505-0700

Re: CMC Revision Request - County Road 17 / S. Columbia Rd

Dear Mr Fuchs:

Please find enclosed a request form to add approximately 1-mile of roadway to Grand Forks County Federal Aid County Major Collector system on County Road 17 / S. Columbia Rd. This request was formalized by the July 6, 2010 Board of County Commissioners. The request would begin at CMC 1824 and terminate at the City limits of Grand Forks, or approximately 200-feet south of the intersection of 62nd Ave S.

Sincerely,

Grand Forks County

Nick West, PE
County Engineer

Enclosure(s): CMC Revision Request Form, Maps, Meeting Minutes
Project #: na
cc: Earl Haugen

1700 N. Columbia Rd | PO Box 5682 | Grand Forks, ND 58206-5682
www.gfcounty.org (701) 780-8248 | Office (701) 780-8403 | Fax

North Dakota LPA Federal Aid Route
Revision Request

Origination of Request: Grand Forks County	Current LPA Route Number/Street Name: County Road 17, S. Columbia Rd
LPA: Grand Forks County — Date: 6/16/2021	
What is the proposed revision? (Addition) Extension Removal	Have you attached a map of the proposed revision? (Yes) No

Current Functional Classification: none	Proposed Functional Classification: County Major Collector
Current Route Jurisdiction: Grand Forks County	Proposed Route Jurisdiction: Grand Forks County
Distance to closest parallel Federal Aid Route: 1-Mile	Proposed mileage to be reclassified: Approx 1-Mile (end at City limits)

Please describe the justification for the proposed revision:
Provide logical termini and connectivity of Federal Aid System by connecting Urban Principal Arterial to County Major Collector. As the City expands, this segment will become an Urban Principal Arterial, it is prudent the County Major Collector system supports this trend.

Is this a stub route? If yes, please describe what traffic generators would make it eligible for addition:
no

Please provide the most recent traffic information, including year counted:
Total: 1750 Passenger: not known Trucks: not known Year: 2018

Please list the NBI Bridge Number, Sufficiency Rating, and Load Limit of any structures along the revision:
none

[signature] County Engineer
Local Public Agency Signature

6-16-21
Date

This section will be filled out by NDDOT

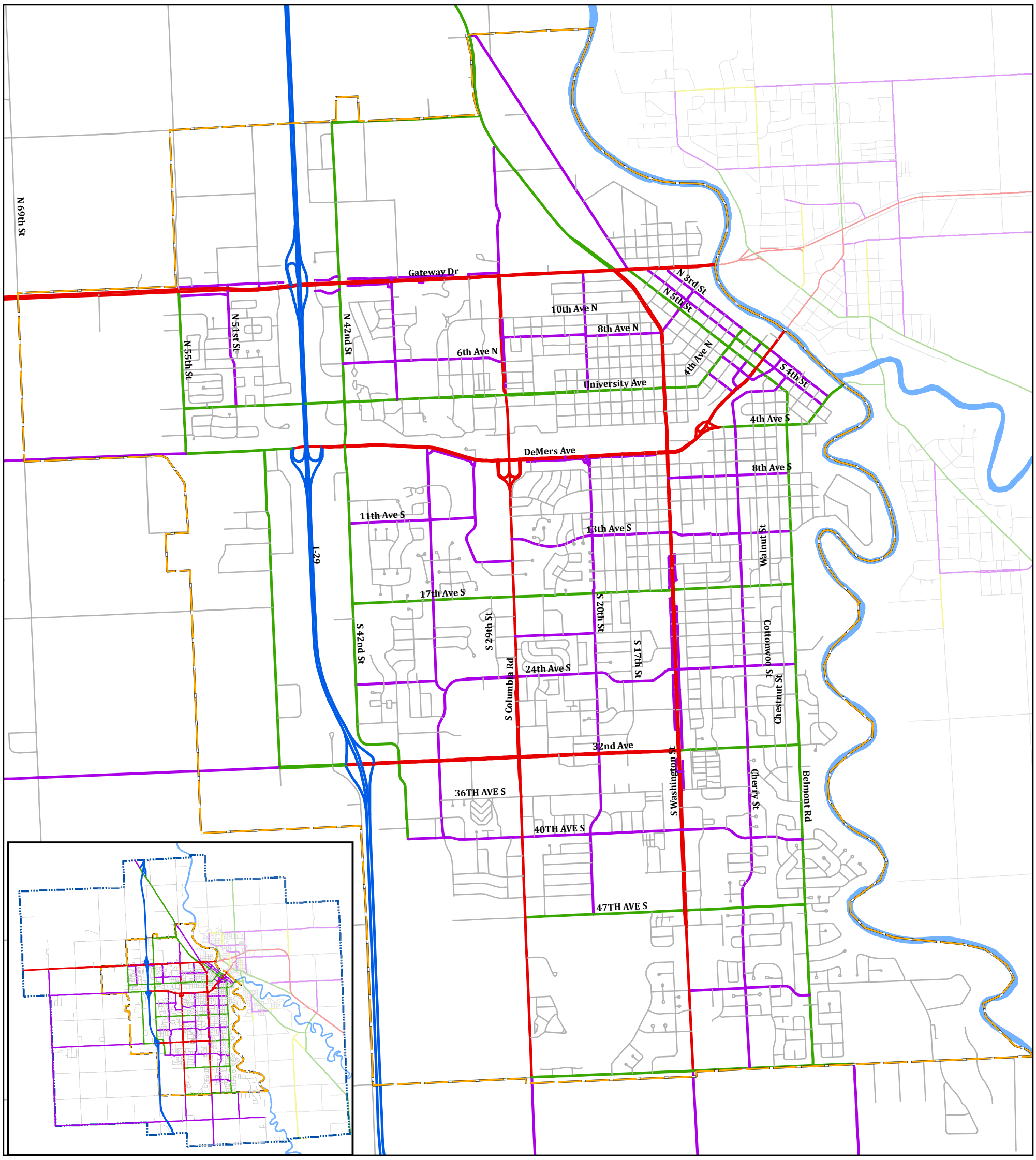
LPA Federal Aid Route Number:

NDDOT Local Government Division Recommendation: Approve Disapprove

Local Government Division Contact:

Local Government Division Signature

2021 Functional Classification
Grand Forks, North Dakota



Interstate

Principal Arterial

Minor Arterial

Collector/Major County Collector

Local

MPO Study Area

Adjusted Federal Aid Urbanized Area

Water

0 0.5 1 Miles

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W E
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Grand Forks - East Grand Forks
METROPOLITAN PLANNING ORGANIZATION

MPO Executive Director Date

North Dakota Department of Transportation Date

Road Mileage Difference Grand Forks Urban Area			
Functional Classification Type	**2010**	**2021**	**Changes**
Interstate	10.0	10.0	0.0
Principal Arterial	21.4	21.4	0.0
Minor Arterial	33.9	30.9	-3.0
Collectors	38.0	39.8	1.8
Local	160.3	171.0	10.7
Total	263.6	273.1	9.5

Road Mileage Difference Grand Forks MPO Area			
Functional Classification Type	**2010**	**2021**	**Changes**
Interstate	16.4	16.2	-0.2
Principal Arterial	24.4	24.4	0.0
Minor Arterial	37.0	33.0	-4.0
Collectors	52.4	63.2	10.8
Local	224.5	234.4	9.9
Total	354.6	371.2	16.6

Road Percentage Difference Grand Forks Urban Area				
Functional Classification Type	**2010**	**2021**	**Changes**	**Federal Range**
Interstate	3.8%	3.7%	-0.1%	1% to 3%
Principal Arterial	8.1%	7.8%	-0.3%	4% to 9%
Minor Arterial	12.9%	11.3%	-1.5%	7% to 14%
Collectors	14.4%	14.6%	0.2%	3% to 16%
Local	60.8%	62.6%	1.8%	62% to 74%
Total	100.0%	100.0%	0.0%	

Road Percentage Difference Grand Forks MPO Area			
Functional Classification Type	**2010**	**2021**	**Changes**
Interstate	4.6%	4.4%	-0.3%
Principal Arterial	6.9%	6.6%	-0.3%
Minor Arterial	10.4%	8.9%	-1.5%
Collectors	14.8%	17.0%	2.3%
Local	63.3%	63.1%	-0.2%
Total	100.0%	100.0%	0.0%

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

July 14, 2021

MPO Executive Board:

July 21, 2021

RECOMMENDED ACTION: Approve Contract with Kimley-Horn for the Transit Development Plan Update.
TAC RECOMMENDED ACTION:

Matter of Approval of Contract for the Transit Development Plan.

Background:
The Transit Development Plan (TDP) is developed under a defined five-year planning horizon and functions as a sub-element of the Metropolitan Transportation Plan (MTP). It was adopted in December 2016; it was updated in June 2017; and was again updated in April 2020. The current TDP covered a five-year planning horizon from 2017 through 2021. Development and adoption of the TDP is recommended by FTA for the purposes of establishing a transit agency's vision for public transportation, assessing needs, and identifying a framework for program implementation. The consideration of both long-range and short-range strategies and actions to better enable the development of an integrated multimodal transportation system that efficiently moves people and addresses transportation demands. As program implementation largely depends on funding, grants, and participation from FTA and/or other state agencies, there is a vital need for a comprehensive TDP to guide considerations and policy decision related to operations, maintenance, infrastructure, and capital under a defined planning horizon.

The TDP update will analyze a wide range of service, route evaluation, capital, and financial alternatives. The consultant shall evaluate the existing transit systems in place, gauge opportunities for improved transit coordination in the region, identify the most efficient approach to meet the needs of the public, and carefully consider where transit resources should be devoted over the planning period. The final product will guide the provision of services over the next 10-year period within the financial revenues projected and include an implementation plan to accomplish TDP recommendations.

The MPO received five (5) proposals by the June 18th deadline. They were from Kimley-Horn, SRF, Bolton-Menk; Nelson-Nygaard, and Stantec. The five proposals were scored by the selection committee based solely on the written proposals. The top three (Kimley - Horn, SRF and Bolton-Menk) were interviewed. The selection committee interviewed

and met after to discuss the choices to score each one final time. The top score was Kimley-Horn.

The RFP requested that a transit input group be formed. The desire was that the steering committee and/or the human services transportation coordination group would have several people represented that could be the beginning of the input group. CAT wanted a group of people to gain feedback from on a regular basis about all aspects of the transit service and system. The question *"How will you suggest setting up the transit input committee/group?"* was asked of all interviewed firms. All firms had something brief in their proposals and answered the question based on what they had in their proposals while adding a little more detail in the interview. In Kimley-Horn's proposal they had working with the steering committee to develop a framework for the input group. In their interview they stated that a neutral chair would work in conjunction with the framework set up with the steering committee would start the input group for future work. A clarification on how the input group would be part of the human service transportation coordination was asked when the cost estimate was gone over because the scope of work was unclear if the input group being part of the human service transportation coordination would be part of the budget given. Kimley-Horn stated it would be part of the estimate given.

The budget has $225,000 available for a consultant. The contracted amount for Kimley-Horn was $224,890.

Findings and Analysis

- UPWP identifies the completion of the Transit Development Plan.
- Consultant's scope of work accomplishes the work laid out in the RFP scope of work.
- Kimley-Horn's budgeted amount is under the MPO budget.
- Staff recommends approval of contract.

Support Materials:

- Contract Scope of Work
- Contract Cost Estimate

NAME	PROJECTS	END DATE	AVAILABILITY %
WADE KLINE*	Columbia Falls Long-Range Transportation Plan (LRTP)	September 2021	45%
	Whitefish LRTP	June2022	
	Veterans Boulevard Corridor Extension	September 2021	
	Fargo Public Works Master Plan - Phase II	December 2021	
CHRIS WEYER *	Trunk Highway (TH) 77 Congestion Mitigation Study	January 2022	50%
	Rethinking I-94	November 2021	
	TH 47 Railroad Crossing	April 2023	
CASSIE MCNAMES *	Jackson Hole Airport - Hangar 3 and GSE Building	August 2021	40%
	Ground Transportation Center (GTC) Exterior Renovations	December 2021	
	Fargo Public Works Master Plan (Phase II)	December 2021	
DAVE WIOSNA *	Columbia Falls LRTP	September 2021	60%
	Whitefish LRTP	June 2022	
	Veterans Boulevard Corridor Extension	September 2021	
	Meade County Master Transportation Plan	June 2022	
ZACH CHAPPELL*	Columbia Falls LRTP	September 2021	55%
	Whitefish LRTP	June 2022	
	Veterans Boulevard Corridor Extension	September 2021	
	Meade County Master Transportation Plan	June 2022	

**KLJ*

APPROACH

TASK 1: Project Management and Quality Control

With Chelsey Hendrickson leading the Kimley-Horn team, she will make sure that milestones are met and that communication, coordination, and work products are delivered on time and within budget. All deliverables will be thoroughly reviewed in our quality control/ quality assurance process and will include one draft and one final version, addressing one consolidated set of comments (with conflicts resolved) between them. The Kimley-Horn team believes the key to successful project management is communication. Our team will promptly answer questions, provide materials, or address any issues

Chelsey will draw on Kimley-Horn tools for production and financial management. She will use our management information system to monitor project progress against the project schedule. To help identify and adjust for issues in a timely manner, she will submit monthly progress reports and invoices.

PROJECT KICK-OFF MEETING

The Kimley-Horn team will coordinate a kick-off meeting with Grand Forks-East Grand Forks MPO staff to clarify and finalize the scope, schedule, and budget; answer potential questions; and review the proposed project approach.

PROGRESS MEETINGS

Chelsey will provide regular updates to Teri Kouba and other appropriate MPO and Cities Area Transit (CAT) staff. We anticipate bi-weekly 30-minute Microsoft Teams meetings. In progress updates, we will discuss project status, identify potential issues and the proposed approach to resolving them, and coordinate reviews of draft materials. In addition to the progress meetings, we will provide monthly progress reports and invoices.

DELIVERABLES:

- Designated consultant project manager/point of contact
- Detailed project work plan
- Detailed project schedule
- Project kick-off meeting
- Bi-weekly email/phone updates (up to 35 bi-weekly updates)
- Monthly progress reports and invoices (up to 14 progress reports and invoices)

TASK 2: Community Engagement

The Kimley-Horn team is known for excellence in community engagement and the ability to tailor an engagement process to reflect the needs of the community. Engagement is integral to the success of planning processes, and we strategically structure activities to inform and enhance planning tasks and empower the community.

Our public engagement activities will:

- Provide the MPO and CAT with actionable information to use in shaping the TDP
- Help develop awareness, support, and consent around the TDP or issues it is trying to address
- Provide meaningful opportunities for community members to influence the development of the plan

The Kimley-Horn team will focus on connecting with historically underserved and excluded communities, including older adults, people of color, immigrants, people with disabilities, people with limited English proficiency, youth, people with low incomes, and organizations that serve these populations. In order to effectively connect with these communities, we will focus on going to where people are and connecting with community organizations and leaders.

PUBLIC ENGAGEMENT PLAN

The Kimley-Horn team will develop a public engagement plan that will outline who we will engage in this project, the questions that will be asked, and how we will connect with the public and stakeholders. The public engagement plan will also include a schedule that documents when the engagement will take place and how the timing coincides with other aspects of the project.

Throughout the planning process, the Kimley-Horn team will provide multiple opportunities for the public to learn about the study and provide meaningful input. Kimley-Horn will employ its standard of high-quality materials that are easy to understand, highly graphical, and visually appealing. Public and stakeholder engagement materials will be made available in accessible formats to share on the project website.

Our public engagement approach includes two phases of engagement. The engagement at the beginning of the project will focus on the existing system, lay groundwork for the project, and seek to understand what aspects of the transit system are working well and what aspects need improvement. The second round of engagement will focus on recommendations for the system and the results from the Title VI analysis. Community members will be able to learn about the recommendations and provide feedback regarding whether the recommendations will address their issues.

The specific techniques to be used for the transit development plan (TDP) fall into three primary categories: stakeholder meetings, communications, and surveys.

Focus group with SMILES Center for Independent Living as part of the MnDOT Statewide Pedestrian System Plan

MEETINGS

Meetings will be used to share information about the project and discuss specific topics with the general public and stakeholder groups.

STEERING COMMITTEE


MANKATO
Transit Development Plan

As the Mankato area continues to grow, the demands on the region's transit and transportation system are changing.

PLAN OVERVIEW

The Mankato Transit Development Plan (Mankato TDP) provides recommendations for how the Greater Mankato Transit System can better serve riders and the community. The plan makes recommendations for:

- New or improved bus routes and transit services
- Investments in capital improvements like buses, transit hubs, and support equipment
- Transit information availability and accessibility
- Ways to fund increased and improved transit service

These recommendations address factors that help make transit a feasible transportation option for residents and visitors, including fares, schedules, routes, and marketing.

In 2012, Mankato embarked on an ambitious restructuring of the bus system, and since then the number of people riding transit has more than doubled. Now, the City of Mankato has produced the region's first transit development plan that identifies opportunities for continued improvement in service and operations to meet a wider variety of transit customer needs in the Mankato area. Learn more about the recommendations from community stakeholders and technical experts in the Mankato Transit Development Plan.

Review the recommendations and share your thoughts:

mankatotransitstudy.com

MARKETING AND BRANDING RECOMMENDATIONS

- Create a trip planning tool
- Create and utilize a consistent brand across all marketing materials including on a systemwide map and route schedules

INFRASTRUCTURE RECOMMENDATIONS

- Develop a fare payment card that can be used by all users throughout the system
- Install shelters, benches, and lighting at transfer locations

Project handout from the Mankato Transit Development Plan

The 2050 Transit Development Plan Update (2050 TDP) will be guided by a Steering Committee, which will provide oversight and input into the development of the plan and a new Transit Advisory Committee. The Kimley-Horn team will develop an effective framework for working with this committee that can continue beyond the planning process. Four meetings will take place at strategic times throughout the planning process. At the beginning of the project, we will gather information and feedback on operations and engagement and engage in a goalsetting exercise; at midpoints, we will share data analysis, public and stakeholder feedback, and draft recommendations; and finally, we will meet toward the end of the project to discuss the final plan and implementation strategies. The Kimley-Horn team will schedule and lead the meetings, prepare the materials, and provide meeting summaries and follow-up. All materials will be shared with the Steering Committee at least one week in advance, and the Kimley-Horn team will record meeting minutes that will be submitted to the MPO within one week of the meeting.

Public involvement meeting for the Mankato Transit Development Plan

FOCUS GROUPS

Up to four focus groups will be held throughout the project and will seek to hear from students, businesses, non-profit organizations, and those living, working, and studying in Grand Forks-East Grand Forks (particularly those already riding the CAT system). Focus groups have been particularly useful as these representatives have been able to share more detailed insight. In order to increase access and accessibility, two of the focus groups will be held via an online platform, such as Microsoft Teams or Zoom.

PUBLIC INVOLVEMENT MEETINGS + VIRTUAL PRESENTATIONS

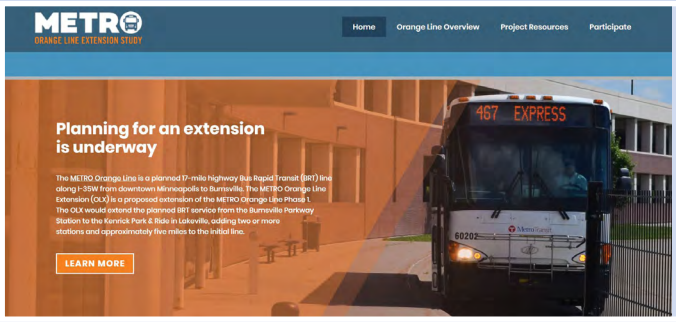
Public involvement meetings will be opportunities for people to learn about the project and provide input regarding the transit system. There will be two public meetings during each phase of engagement in transit accessible locations such as the Midtown Transit Center/Grand Cities Mall, Metro Transit Center, East Grand Forks Library, University of North Dakota, Northland Community & Technical College, or Red River State Recreation Area. To supplement the public meetings, the Kimley-Horn team will create a virtual presentation for people to click through on the project website on their own time to learn about the project and provide feedback.

STAKEHOLDER COMMUNICATIONS

The following methods are proposed to facilitate and maintain communications throughout the course of the project.

WEBSITE

A project website will be live throughout the duration of the project. This website can be integrated into the MPO's website or a standalone website. Website content will be ADA accessible and available in multiple languages. The website will be a central place for people to find information about the project, surveys, or any other project materials.



Orange Line Extension project website

ADDITIONAL MATERIALS

Additional materials will be prepared that are easily understood by a wide range of project stakeholders. These materials will use nontechnical language to present project information and custom graphics and figures to present information graphically where possible.

This will include a project brochure or handout that will be distributed. Two updates to the initial brochure/handout are planned: the first update prior to the second round of engagement and a second update at the end of the project for use by MPO staff and project partners. The final brochure will summarize final study results and maintain a consistent message.

We also will develop a project poster, which includes project contact information and a link and QR code to the project website. This poster will be hung at transit facilities and distributed to community organizations and housing complexes.

NOTIFICATIONS AND ONLINE MEDIA

For both rounds of public meetings, we will prepare and provide a general media release for distribution to local media outlets. An email notification will be provided to the entire project contact list. Social media packages will be provided to the MPO and each stakeholder group to be posted to each entities' website and social media accounts, and social media ads will be utilized to advertise the public survey and interactive map.

Mankato Transit Development Plan business card

SURVEYS

Surveys will be essential for gathering information from various stakeholders at the beginning of the project as well as for gathering feedback on project recommendations. Surveys will be distributed to current transit riders and non-riders as well as decision makers and operators.

Arizona State University Shuttle Study business card

PUBLIC SURVEY

Surveys will be administered to both current riders of the system and non-riders. In order to achieve increased participation, these surveys will focus on a few key questions rather than an extensive list of questions and will offer an incentive for participation. While the exact questions for the surveys will be discussed with MPO staff, they will focus on what is currently working well and any issues with the current system as well as barriers

to using the system, changes that could be made to make the transit system work for their travel needs, and demographic information.

Posters will be distributed and strategically posted to direct people to take the surveys online, and paper surveys with prepaid postage will also be distributed to locations connected to people who may be less likely to take an online survey. We have found this strategy to be particularly effective with older adults during COVID-19.

A specific effort will be made to reach people who are traditionally underrepresented in planning processes. Rather than trying to create new networks of relationships for this project, existing networks will be leveraged to reach people. Surveys and project materials will be distributed to community members through local organizations.

OPERATOR SURVEYS

Transit operators know the system better than anyone due to their interaction with customers and experience driving the existing routes. Therefore, we have found it very beneficial to collect surveys from operators to gain insight on existing issues. These surveys are available at the garage for operators to complete either before or after their shift and give the operators an opportunity to voice issues within the system.

DECISION MAKER SURVEYS

A survey will also be distributed to decision makers throughout the service area to collect information from them regarding issues with the existing system as well as their priorities for the system. Constituents often contact decision makers when systems are not working well, so they are great resources for this information. Decision makers also influence the distribution of resources and make choices that affect the system, so it is important to understand their perspective of the system at the beginning of the study.

INTERACTIVE MAP

The Kimley-Horn team will develop an interactive map that will be used for both gathering information at the beginning of the project as well as sharing the proposed recommendations for enhanced services and gathering public feedback on the recommendations.

ENGAGEMENT TRACKING AND ADJUSTMENTS

Kimley-Horn will track and analyze the input received and the effectiveness of our outreach and engagement efforts. As we are hosting meetings and collecting surveys, we will track who we are hearing from and who we are not hearing from. This will allow us to adjust our methods and communication as necessary to reach a better representation of people within the community. Adjustments may include connecting with additional community and cultural leaders or utilizing targeted social media advertisements.

DELIVERABLES:

- Public engagement plan
- Steering Committee meetings (up to four)
- Focus groups (up to four)
- Public meetings (up to four)
- Project website
- Project handout, with up to two updates
- Project poster
- Media releases and social media packages (up to two)
- Social media ads
- Public survey
- Operator survey
- Decision maker survey
- Interactive map
- Public engagement summaries (up to two)

TASK 3: Data Collection and Analysis of Existing Conditions

The Kimley-Horn team will gather and analyze existing conditions relative to CAT service. This information will be compiled into a draft and final Existing Conditions Report. The report will include:

Transit Safety Performance Measures: We will work with CAT to evaluate safety performance measures as required by the FAST Act.

Transit Asset Management Inventory: We will detail all CAT assets, including their condition, useful life, replacement schedule, and associated costs, to be compliant with FTA Asset Management Plan requirements and to keep CAT in a state of good repair.

Route System: We will document existing routes (including those recently carried over from UND), including frequencies, spans of service, and efficiency/performance. This analysis will provide a foundation for improving inefficiencies and constraints throughout the system.

Grand Cities Mall (Midtown) Transit Center

Evaluation of On-Demand Transit: We will analyze current CAT on-demand transit service to evaluate the ridership demand as well as understand how this type of service might be well suited for other underserved areas.

Fare Structure: We will utilize our national experience to provide CAT and the MPO with an analysis of peer and national fare averages as well as fare medias and methods, including the benefits and drawbacks of these medias and methods.

Ridership Evaluation: We will analyze ridership trends based on data provided by CAT. The outcomes of this analysis will inform recommendations for maintaining existing ridership while also attracting new riders.

Transit Hub: A system hub analysis will be developed to include the Midtown transit center located at Grand Cities Mall and the Metro Transit Center located downtown. Based on recommendations developed by the Kimley-Horn team in the current TDP, Midtown has become an enhanced hub element of the overall system.

Existing Plan Integration: We will review, summarize, and incorporate the recommendations of all relevant reports and transit-related studies and documents undertaken since development of the 2016-2020 TDP.

Demographics and Transit Propensity Analysis: We will analyze the existing and forecasted population and employment densities for the CAT service area. We will also analyze employment commute data and transit propensity measures, such as people with low incomes, low wage jobs, people with disabilities, youth, older adults, and people with less access to a vehicle.

DELIVERABLES:

- ✔ Draft and final Existing Conditions Report

The following analysis will be completed to support the hub analysis:

- **Existing Conditions & Projected Conditions Assessment:** Document current conditions of both hubs with a focus on useful, deferred maintenance and needed upgrades. Based on Future System Needs, develop a projected level of demand anticipated for both facilities.
- **Operational Concept Development:** Develop operational concepts for both hubs to support longer term operations for CAT. Concept development based on options to meet both existing and projected needs for both hubs based on Future System Needs.
- **Final Hub Strategy Plan:** Refined set of final recommendations covering both hubs to support existing and projected CAT operations. Final Hub Strategy Plan includes a set of cost estimates to integrate in the Future System Needs and Financial Plan elements of the 2050 TDP.

Grand Forks Transit Center

TASK 4: Coordinated Public Transit - Human Services Plan

A Coordinated Public Transit - Human Services Transportation Plan (Coordinated Plan) will be developed to support programmatic balance between fixed route, Senior Rider, and ADA paratransit service operated by CAT. System profiles and user trends will be developed for both paratransit and Senior Rider. These profiles provide a look at major users and ridership trends within those service areas.

We will then review and revise a series of Program Guidance to improve efficiency of both Senior Rider and paratransit service. These programmatic recommendations will be developed to support system balances between fixed route, paratransit, and Senior Rider.

Program guidance to support the Coordinated Plan will be developed through direct outreach to affected agencies and human service groups as part of the public outreach and engagement process of the 2050 TDP.

DELIVERABLES:

- ✓ Draft and final Coordinated Public Transit - Human Services Transportation Plan

TASK 5: Goals, Policies, Priorities, and Performance Measures

The community engagement process will provide a basis for updating the CAT goals, objectives, and performance measures. Broad support for the goals and objectives will provide a strong foundation from which CAT can successfully implement the plan over the next 10 years.

GOALSETTING EXERCISE

As part of the community engagement efforts described in Task 2, the Kimley-Horn team will engage the Steering Committee, stakeholders, and the public in goalsetting exercises to provide broad support for the system's updated goals, objectives, and performance measures. The outcomes of this effort will provide a connection to existing system issues, needs, and gaps and tracking mechanisms for addressing them.

REVIEW EXISTING GOALS AND OBJECTIVES

Building off the goalsetting exercises in Task 2 and the performance evaluation in Task 3, the Kimley-Horn team will review existing goals, objectives, and policies as well as prioritize those to be used for leading system decision making moving forward.

UPDATE GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

The Kimley-Horn team will develop recommendations for updated goals, objectives, and performance measures based on the goalsetting exercises and the evaluation of existing measures. The recommended measures will be presented to MPO and CAT staff as well as to the Steering Committee for their review.

After our team has received feedback on the recommendations, we will work with MPO and CAT staff on tools to develop, track, and report on internal performance measures. We will also share best practices for reporting and sharing this information with the public, such as King County Metro's performance documentation.

DELIVERABLES:

- ✓ Draft and final Goals, Objectives, and Performance Measures Report

TASK 6: Future System Needs

The Kimley-Horn team will provide innovative and comprehensive fixed-route, on-demand transit, and paratransit service recommendations based on our analyses and our experiences with emerging transit technologies. The recommendations will be realistic and implementable and will use creative solutions to remain within CAT's existing and/or expected transit resources.

IDENTIFY AND EVALUATE POTENTIAL SERVICE CHANGES

Through our analysis of system existing conditions, the Kimley-Horn team will identify unserved and underserved populations, in terms of service coverage and levels of service. The service gaps will be identified by day of the week, time of day, and will include an analysis of ridership demand, based on transit propensity measures. Our existing conditions analysis will also identify routes or aspects of the system that are currently working well and those that are in need of improvement. The community engagement process will also be critical in identifying the need for potential service changes and/or expansions.

Kimley-Horn recently worked on a microtransit pilot study with Gwinnett County, Georgia

Given the growth in the region, our analysis will also integrate recommendations of studies that have occurred in the last five years, as documented in Task 3, so that the system is prepared to grow as development expands and travel patterns change.

The Kimley-Horn team will also review and investigate expansion of on-demand transit services. This analysis will evaluate service alternatives for unserved or underserved markets. This analysis will consider both the existing transit service area as well as potential service expansion areas. We will consider existing service delivery model options as well as others that have been effective for our other clients.

DEVELOP RECOMMENDED SERVICE PLANS

We will then build upon the identification of necessary service changes to develop systemwide service recommendations. We will design creative alternatives and solutions, which will include both revised and new transit route alignments and level of service improvements. The recommendations will focus on the region's growth without compromising on-time performance and connectivity throughout the system. Ultimately, every effort will be made to improve upon the rider experience and route and system usability. Service recommendations will include service costs as well as impacts to personnel, facilities, fleet, riders, and operations. We will outline recommendations based on two scenarios: budget neutral and budget expansion.

The draft recommendations will be vetted through our community engagement process and will include the Steering Committee, current riders, non-riders, operators, and decision makers. These collaborative meetings play a significant role in attaining agreeable and implementable recommendations.

We will assess all recommendations against ADA and Title VI requirements to assure that all recommendations meet these standards. This analysis will include creating maps that will detail level of service changes within the CAT service area to identify any disparate impacts or disproportionate burdens. If issues are identified through this analysis, we will make the necessary modifications to the recommendations. Following the analysis, we will create route sheets to outline the new and revised services and will include comparison maps and tables and justifications for all planning decisions.

PARATRANSIT RECOMMENDATIONS

Based on the proposed recommendations, the Kimley-Horn team will identify impacts to the paratransit system, including the service area and hours of service.

CAPITAL IMPROVEMENT PLAN

The Kimley-Horn team will deliver a capital improvement plan that addresses the system's existing and planned assets. Existing and planned assets include buses, paratransit vehicles, demand response/microtransit vehicles, vehicle maintenance facilities, bus stop amenities, transit centers, customer parking, information systems, and other technologies.

The capital planning process will consist of identifying existing assets, their age, and scheduled service life, along with anticipated capital revenues. The Kimley-Horn team will work with you to identify deficiencies, priorities, and growth expectations by asset type. We will translate these needs into capital cost estimates for replacement, expansion, and introduction of new technologies. The process will conclude with identifying a series of recommendations that include:

- Capital investments that can be made within anticipated capital revenues
- Schedule for the investments
- Unfunded capital investment needs

DELIVERABLES:

- ✓ Draft and final Service Evaluation and Needs Report
- ✓ Draft and final Recommended Service Plans
- ✓ Draft and final Recommended Services Route Sheets
- ✓ Capital Improvement Plan

TASK 7: Fiscally Constrained 10-Year Financial Plan and Implementation

A comprehensive financial plan is essential for creating financially constrained recommendations that can be implemented in the planning horizon of this TDP. For this task, the Kimley-Horn team will develop a detailed 10-year financial plan that forecasts operating and capital expenses and revenues.

BASELINE FUNDING ASSUMPTIONS

A Baseline Funding and Assumptions memorandum will be developed early in the planning process. This initial memorandum will be used to gather consent on existing funding inputs and demonstrate historic variability and trends in funding for CAT. The baseline analysis provides the starting point for developing and analyzing a range of potential future funding needs and options to support CAT and the 2050 TDP.

SYSTEM PROJECTIONS AND SCENARIOS

A set of system 10-year funding projections and scenarios will be developed. System projections and scenarios start from the Baseline Funding Assumptions and assess future scenarios for implementing the 2050 TDP. These projections and scenarios will illustrate the financial capacity of the MPO and CAT to implement the 2050 TDP recommendations.

System projections and scenarios will coordinate directly with operational and capital needs identified in the Future System Needs and will account for variability in both local, state, and federal funding, with a focus on a 10-year horizon. Special attention will be paid to understanding one-time funding currently entering the system (i.e., stimulus money) as well as more stable and long-term funding with passage of the pending FAST Act reauthorization.

Emphasis will be placed on understanding the changes needed in local funding to meet fiscal constraint of anticipated state and federal funding projections. Analysis will demonstrate system shortfalls between projected fiscally-constrained revenues and the financial cost of the operational vision for the 2050 TDP.

IMPLEMENTATION STRATEGY

We will use the system projections and scenarios to develop a detailed strategy for implementation of the recommendations. The implementation strategy will demonstrate a clear connection between the Transportation Improvement Program (TIP) and the financial plan. This will include a table that MPO and CAT staff can use to track project information for the TIP approval process.

DELIVERABLES:

- ✔ Draft and final Financial Plan

TASK 8: Final Plan and Executive Summary

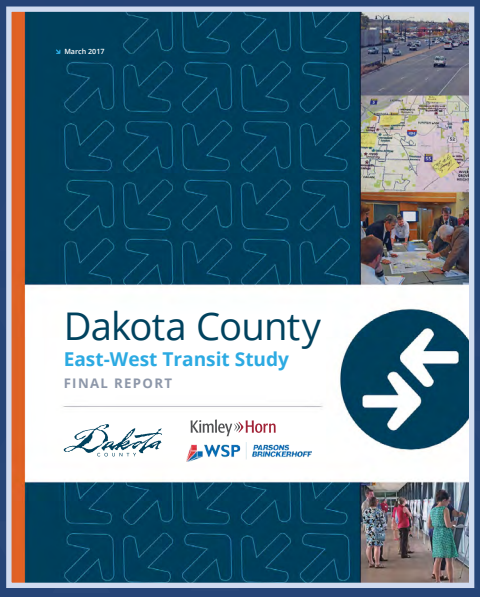
The Kimley-Horn team will compile information from the previous tasks into an executive summary and final report. These documents will be attractive and polished documents that are ADA accessible and highly graphical so that they are easy to understand for people from all backgrounds and of all abilities. The Kimley-Horn team will provide the 2050 Transit Development Plan Update report to the project team and Steering Committee at least one month before the approval process is set to begin. The draft final report will be available to public for review after project team and Steering Committee approval. We will then make revisions to the draft based on public feedback and provide a final TDP to be brought forward for adoption by the City of Grand Forks, City of East Grand Forks, and the MPO Executive Policy Board. We will provide all electronic files in addition to the final plan and executive summary.

DELIVERABLES:

- Draft Final Plan for project team and Steering Committee review
- Draft Final Plan for public review
- Final Plan
- Executive Summary
- All electronic project files

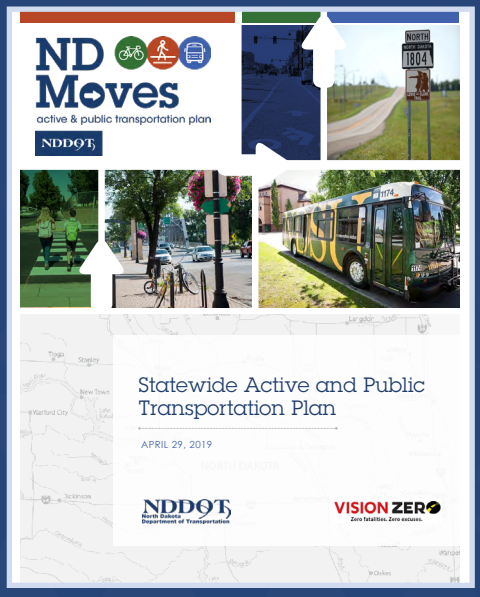
1. A draft document by noon April 1st, 2022 (for staff review)
2. A draft final document by noon June 1st, 2022
3. The final bound document by September 30th, 2022

CLICK THE IMAGES BELOW TO VIEW OUR WRITING EXAMPLES! These documents are also included as separate attachments to this proposal.



Dakota County East-West Transit Study

Red Rock Southeast Corridor Implementation Plan

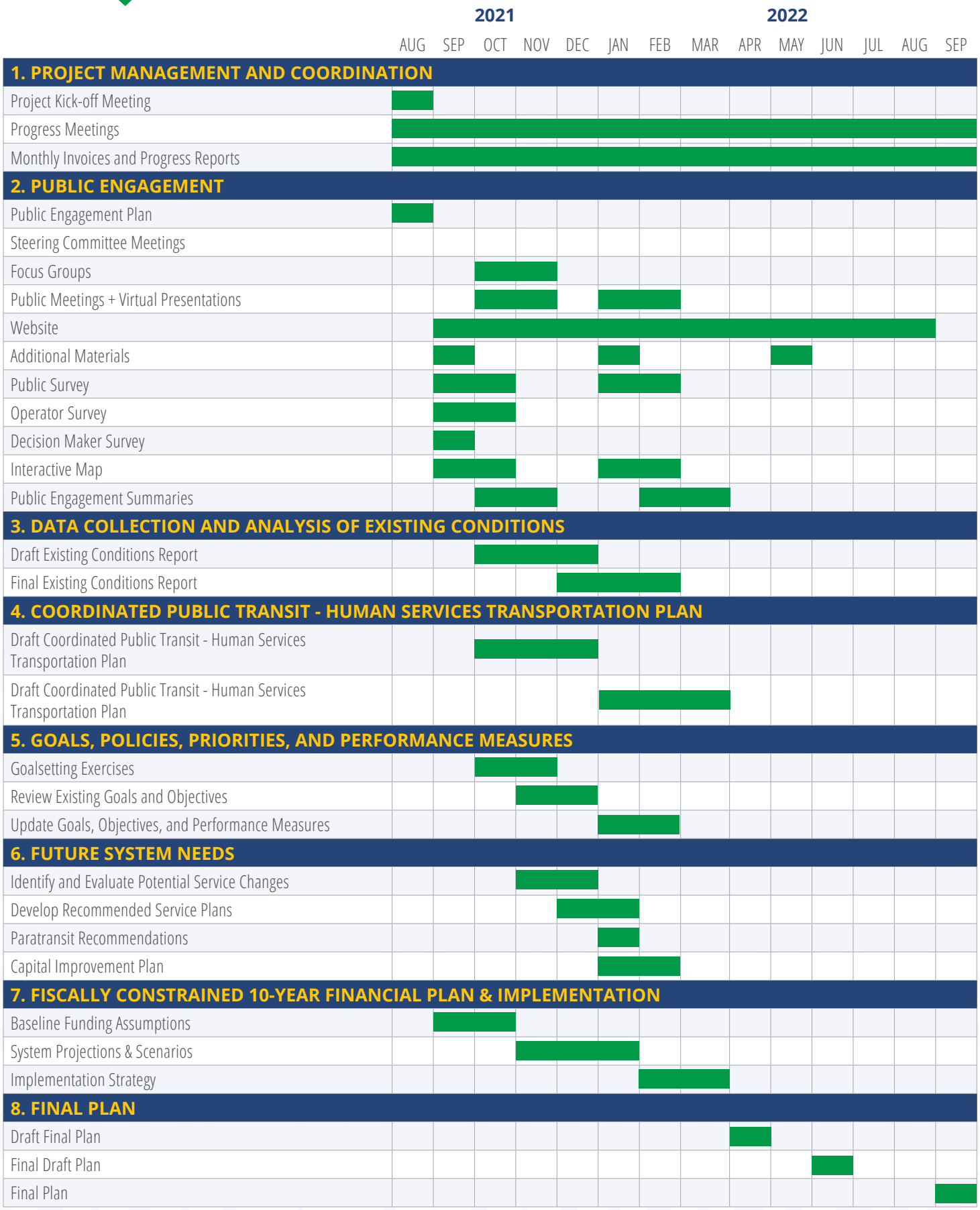


ND Moves, Statewide Active and Public Transportation Plan

DELIVERABLES

All deliverables will be thoroughly reviewed in our quality control/quality assurance process and will include one draft and one final version, addressing one consolidated set of comments (with conflicts resolved) between them.

DELIVERABLES		
TASK 1: PROJECT MANAGEMENT AND QUALITY CONTROL	▸ Designated consultant project manager/point of contact ▸ Detailed project work plan ▸ Detailed project schedule ▸ Project kick-off meeting	▸ Bi-weekly email/phone updates (up to 35 bi-weekly updates) ▸ Monthly progress reports and invoices (up to 14 progress reports and invoices)
TASK 2: COMMUNITY ENGAGEMENT	▸ Public engagement plan ▸ Steering Committee meetings (up to four) ▸ Focus groups (up to four) ▸ Public meetings (up to four) ▸ Project website ▸ Project handout, with up to two updates ▸ Project poster	▸ Media releases and social media packages (up to two) ▸ Social media ads ▸ Public survey ▸ Operator survey ▸ Decision maker survey ▸ Interactive map ▸ Public engagement summaries (up to two)
TASK 3: DATA COLLECTION AND ANALYSIS OF EXISTING CONDITIONS	▸ Draft and final Existing Conditions Report	
TASK 4: COORDINATED PUBLIC TRANSIT - HUMAN SERVICES PLAN	▸ Draft and final Coordinated Public Transit - Human Services Transportation Plan	
TASK 5: GOALS, POLICIES, PRIORITIES, AND PERFORMANCE MEASURES	▸ Draft and final Goals, Objectives, and Performance Measures Report	
TASK 6: FUTURE SYSTEM NEEDS	▸ Draft and final Service Evaluation and Needs Report ▸ Draft and final Recommended Service Plans	▸ Draft and final Recommended Services Route Sheets ▸ Capital Improvement Plan
TASK 7: FISCALLY CONSTRAINED 10-YEAR FINANCIAL PLAN AND IMPLEMENTATION	▸ Draft and final Financial Plan	
TASK 8: FINAL PLAN AND EXECUTIVE SUMMARY	▸ Draft Final Plan for project team and Steering Committee review ▸ Draft Final Plan for public review	▸ Final Plan ▸ Executive Summary ▸ All electronic project files


2021
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1. PROJECT MANAGEMENT AND COORDINATION
Project Kick-off Meeting
Progress Meetings
Monthly Invoices and Progress Reports
2. PUBLIC ENGAGEMENT
Public Engagement Plan
Steering Committee Meetings
Focus Groups
Public Meetings + Virtual Presentations
Website
Additional Materials
Public Survey
Operator Survey
Decision Maker Survey
Interactive Map
Public Engagement Summaries
3. DATA COLLECTION AND ANALYSIS OF EXISTING CONDITIONS
Draft Existing Conditions Report
Final Existing Conditions Report
4. COORDINATED PUBLIC TRANSIT - HUMAN SERVICES TRANSPORTATION PLAN
Draft Coordinated Public Transit - Human Services Transportation Plan
Draft Coordinated Public Transit - Human Services Transportation Plan
5. GOALS, POLICIES, PRIORITIES, AND PERFORMANCE MEASURES
Goalsetting Exercises
Review Existing Goals and Objectives
Update Goals, Objectives, and Performance Measures
6. FUTURE SYSTEM NEEDS
Identify and Evaluate Potential Service Changes
Develop Recommended Service Plans
Paratransit Recommendations
Capital Improvement Plan
7. FISCALLY CONSTRAINED 10-YEAR FINANCIAL PLAN & IMPLEMENTATION
Baseline Funding Assumptions
System Projections & Scenarios
Implementation Strategy
8. FINAL PLAN
Draft Final Plan
Final Draft Plan
Final Plan

Appendix B

Cost Quote Form

(Include completed cost form in a separate page labeled "Cost Form- Vender Name" and submit with technical proposal as part of overall response.)

Cost Quote Form

The cost estimated should be based on a not to exceed cost as negotiated in discussion with the most qualified contractor. Changes in the final contract amount and contracted extensions are not anticipated.

Required Budget Format
Please Use Audited DOT Rates Only

1. Direct Labor	Hours	X	Rate	=	Total
Chelsey Hendrickson, AICP, Project Manager	289	X	45.39	=	$13,117.48
Mary Karlsson, P.E., Project Director/Quality Manager	56	X	65.53	=	$3,669.64
Jessica Choi, AICP, Service Planning Lead	86	X	45.90	=	$3,947.23
Liz Morice, Engagement Lead	457	X	31.74	=	$14,503.53
Emma Pickett, Engagement Specialist	138	X	28.24	=	$3,896.90
Lydia Statz, AICP, Financial Planner	24	X	38.75	=	$930.09
Justin Woffinden, P.E., Capital Planning Lead	26	X	56.10	=	$1,458.48
Mary Kate Morookian, Capital and Fare Planner	34	X	45.39	=	$1,543.23
Administrative or Technical	14	X	26.86	=	$376.05
1. Subtotal- Direct Labor					$43, 442.62
2. Overhead					$84,478.51
3. General & Administrative Overhead					$127,921.13
4. Subcontractor Costs					$70,617.37
5. Materials and Supplies Costs					$2,500.00
6. Travel Costs					$8,500.00
7. Fixed Fee					$15,350.54
8. Miscellaneous Costs					-
Total Cost					$224,889.03

Certification of Final Indirect Costs

Firm Name: Kimley-Horn and Associates, Inc.

Proposed Indirect Cost Rate: 194.46%

Date of Proposal Preparation (mm/dd/yyyy): 06/18/2021

Fiscal Period Covered (mm/dd/yyyy to mm/dd/yyyy): 01/01/2020 to 12/31/2020

I, the undersigned, certify that I have reviewed the proposal to establish final indirect cost rates for the fiscal period as specified above and to the best of my knowledge and belief:

1. All costs included in this proposal to establish final indirect cost rates are allowable in accordance with the cost principles of the Federal Acquisition Regulations (FAR) of title 48, Code of Federal Regulations (CFR), part 31.

2. This proposal does not include any costs which are expressly unallowable under the cost principles of the FAR of 48 CFR 31.

All known material transactions or events that have occurred affecting the firm's ownership, organization and indirect cost rates have been disclosed.

Signature:

Name of Certifying Official (Print): Mark Bishop

Title: Senior Vice President

Date of Certification (mm/dd/yyyy): 06/18/2021

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

July 14, 2021

MPO Executive Board:

July 21, 2021

RECOMMENDED ACTION: Recommend Preliminary Approval of Proposed Amendments to 2045 MTP and Begin 60 Day Public Participation Process.

TAC RECOMMENDED ACTION:

Matter of the Proposed Amendments to 2045 MTP.

Background: The 2045 Metropolitan Transportation Plan (MTP) was adopted in January 2019. From time to time, amendments are needed to reflect changes that are necessary for a variety of factors. The Transit Element, for example, has been amended a couple of times since its original adoption. The amendments proposed affect primarily the Street/Highway Element with a minor amendment to the Bike/Ped Element.

There are proposed amendments that are located wholly on one side of the Red River. As such, there are being identified by which side of the River the proposed amendment is located. Assuming the MPO grants preliminary approval, that allows the Public Participation Process for possible amendments to the TMP to be engaged. Just as the original 2045 MTP adoption process engaged both communities as a whole, these proposed amendments are being presented for consideration to each side of the River whether it has a direct affect or not. Essentially, this is an up to 60 days review process in which each City is requested to consider these changes to their individual City Plans. At these City consideration, additional formal public hearings are held.

Assuming approval of these amendments to the MTP, the MPO TIP will also need to be amended as soon as possible after the MPO Board Action. Two particular amendments will need that consideration; therefore, additional information of those two amendments are included a this time as part of the consideration. The two projects are one from each side of the River:

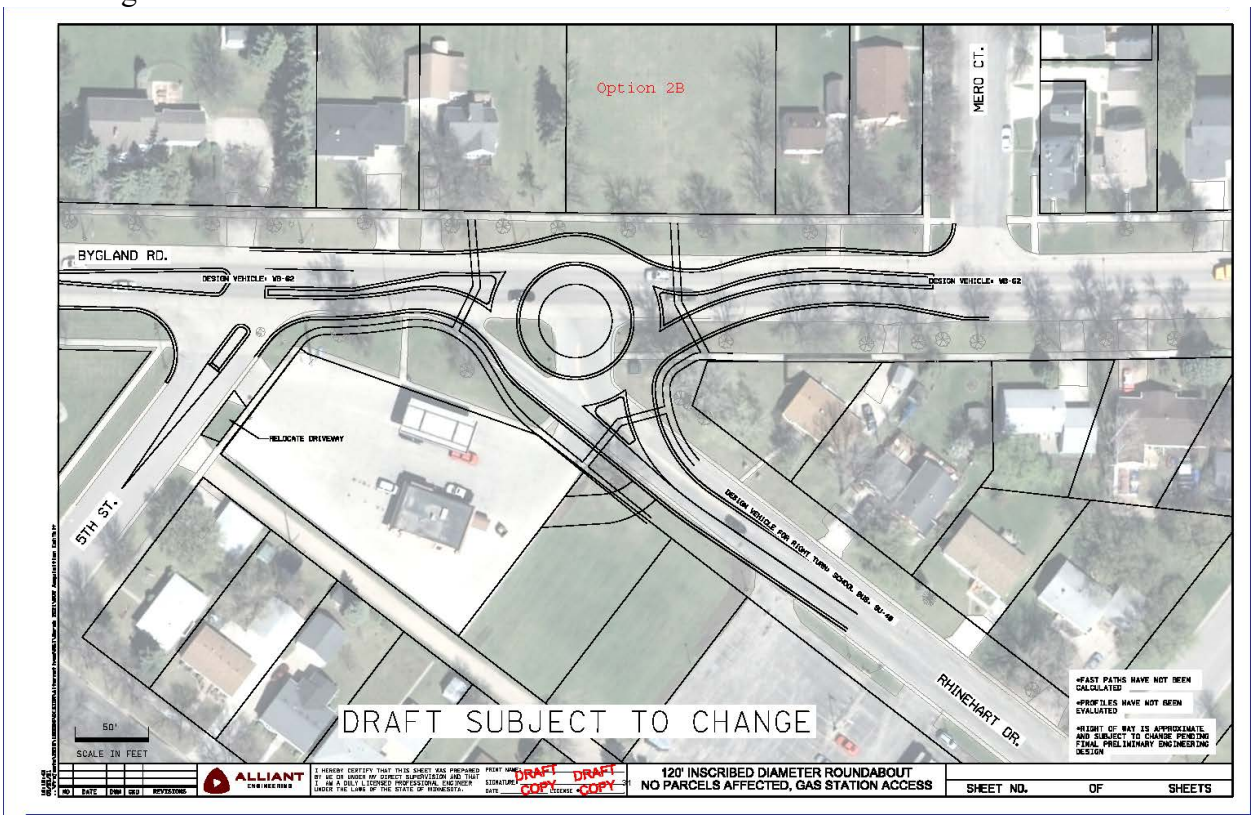
- 10th St NE reconstruction in East Grand Fork
- Mill Road mill and overlay in Grand Forks.

MINNESOTA SIDE

The City of East Grand Forks is requesting that the MTP/TIP proposed roundabout at Rhinehart/Bygland intersection be removed from being a funded project and instead be considered an illustrative project within the MTP. The roundabout was originally programmed in the TIP for FY2018. The City delayed the implementation until FY2022 so that some further consideration could take place. The MPO agreed to this request and the roundabout is programmed for FY2022.

The roundabout improvement resulted as a recommendation from the Bygland Road Study 2015 as the high priority improvement to traffic flow, speed, and conflicting movements. Further, the City completed an Intersection Control Evaluation (ICE) analysis that also concluded that a roundabout would be the best traffic control at this intersection. These results were similar whether an added "intra-city" bridge was built or not.

As the project development has occurred, the concept of the roundabout has evolved. Originally, it was a "compact" concept with a reduced radius that was fully mountable island. The current concept is a "standard" concept with a "standard" radius with only partially mountable island. As the radius has grown, the impact on adjacent properties has increased. In an effort to minimize impacts, concepts have been designed to address those concerns. An example of one such design is shown below.

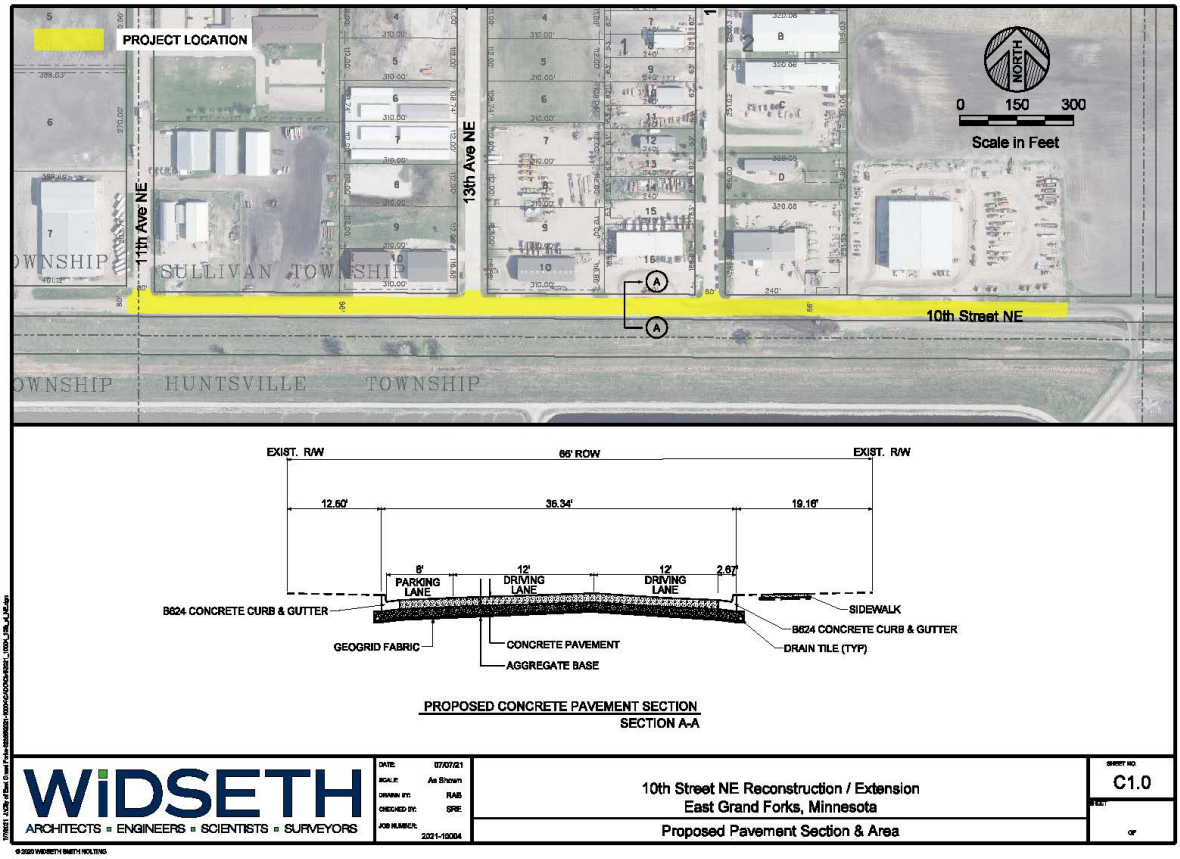


The current Future Bridge Traffic Impact Study continues to identify this intersection as having capacity issues now and projected to get worse in the future. One difference now being discovered in the future analysis is that previously an added northbound through lane on Bygland was assumed to be needed; this added through lane would need additional right of way to be accommodated. The current forecasts being analyzed do not indicate this need. The analysis of how a future "intra-city" bridge affects this has yet to be completed.

Concerns about purchasing properties and impact on existing businesses has caused some EGF Council members to seek an alternative project for the FY2022 federal funds. City staff and elected officials reviewed the existing condition of city streets. They identified options for alternative projects. The options narrowed down to either continuing the roundabout or reconstructing a portion of a street within the Industrial Park. This potential project was not considered nor vetted during the development of the 2045 MTP. Several other candidate

projects were considered during the 2045 MTP; some of the alternatives considered with this more recent review where fully vetted during the 2045 MTP. The 10th St NE project was not part of the vetting of candidate projects for the 2045 MTP.

The proposed reconstruction is a portion of the functionally classified Major Collector street of 10th St NE between its intersection of 11th St NE and extended eastward of its intersection with 15th St. ND. 10th St NE extends essentially from DeMers at the west end to US#2 at the east end. Significant portions of this are either gravel road or at its eastern end not much of a one lane minimally surfaced road. The graphic below shows the segment being considered as an alternative project.



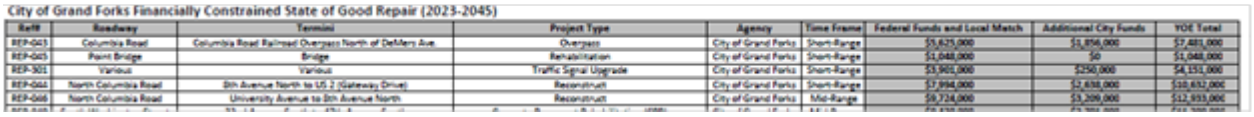
With a looming decision on the federal funds for FY2022, the City Council was requested to choose either continuing with the roundabout or switch to 10th St NE. The full EGF City Council voted 4-3 to keep the roundabout as the FY2022 federal project. The Mayor vetoed that vote. The next EGF City Council vote occurred with only 6 of 7 members present to vote. The vote was a 3-3 tie. The Mayor then votes to break the tie. The Mayor voted to move the priority to the 10th St NE reconstruction project.

The additional information provided on the Proposed Amendment document provides additional information about the affect this switch could have on the 2045 MTP. Please carefully consider that information. Being a complete remove and replace amendment with a project not previously

vetted through the process, this proposed amendment requires more review.

NORTH DAKOTA SIDE

The proposed amendments on the North Dakota side are less substantial in potential impact to the 2045 MTP due to mainly affecting already vetted candidate projects. The first proposed amendment simply switches the timeband between two similar projects. As such, the amendment has very little impact. The reconstruction projects on N. Columbia Rd were initially time with the northern segment first and then the sourthern segment. The amendment merely switches the timing of these projects.



City of Grand Forks Financially Constrained State of Good Repair (2023-2045)

Ref#	Roadway	Termini	Project Type	Agency	Time Frame	Federal Funds and Local Match	Additional City Funds	YOE Total
REP-043	Columbia Road	Columbia Road Railroad Overpass North of DeMers Ave	Overpass	City of Grand Forks	Short-Range	$5,625,000	$1,856,000	$7,481,000
REP-045	Point Bridge	Bridge	Rehabilitation	City of Grand Forks	Short-Range	$1,048,000	$0	$1,048,000
REP-301	Various	Various	Traffic Signal Upgrade	City of Grand Forks	Short-Range	$3,901,000	$250,000	$4,151,000
REP-044	North Columbia Road	8th Avenue North to US 2 (Gateway Drive)	Reconstruct	City of Grand Forks	Short-Range	$7,994,000	$2,638,000	$10,632,000
REP-046	North Columbia Road	University Avenue to 8th Avenue North	Reconstruct	City of Grand Forks	Mid-Range	$9,734,000	$3,209,000	$12,933,000

The second proposed amendment has more potential impact on the 2045 MTP. The addition of the pavement rehabilitation project on 32nd Ave S. does involve the delaying of a reconstruction project of S. Washington St. A recent project was done on S. Washington St that is allowing this change to have little impact. The reconstruction is still being planned for as a funded project; just being delayed until the next timeband. This project is already proposed for programming in the next TIP.

The third proposed amendment takes a vetted candidate project from the 2045 MTP process that wasn't prioritized for funding to now be identified as being funded when a new revenue source was identified to fund it. With COVID-19 funds, the Mill Road mill and overlay project can be moved form the "illustrative" list into the list of fiscally constrained projects.

The last amendment affects the Bike/Ped by identifying certain existing gravel surfaced multi-use paths as being considered for conversion to paved segments.

Again, the additional information provided on the Proposed Amendment document provides additional information about the affect this switch could have on the 2045 MTP. Please carefully consider that information.

Findings and Analysis:

- The 2045 MTP list of projects with the fiscally constrained Plan needs some amendments.
- Proposed amendments have been submitted from both sides of the Red River.
- As part of the MPO MTP Amendment Policy, if given preliminary approval, the proposed amendments will be processed under a 60 day public participation process.

Support Materials:

- Proposed Amendments to 2045 MTP.
- Candidate Project Applications to fully vet projects for MTP/TIP consideration

Grand Forks - East Grand Forks

METROPOLITAN PLANNING ORGANIZATION

RE: Metropolitan Transportation Plan Amendment Policy

As detailed in 23 CFR 450.322, there are instances when the MPO may need to amend its long range transportation plan.

Amendments are completed to accommodate:

1. A major change to a project or projects described in the MTP, including:

    a. The addition or deletion of a regionally significant project
    b. A major change in the project cost or project/project phase initiation dates
    c. A major change in project design concept or design scope (e.g. changing project termini or number of through lanes)

2. A change that requires:

    a. Public review and comment (as described in the Public Participation Plan)
    b. A re-demonstration of fiscal constraint (e.g., moving a project from the illustrative list of the fiscally constrained list or a significant change in anticipated revenues)

If concerns/issues remain, the MPO should consult with NDDOT/MnDOT and FHWA/FTA to determine if an amendment is necessary.

If an amendment is required:

- Depending on the complexity of the possible amendment, the MPO may need to amend its UPWP to allocate appropriate resources to prepare the possible amendment for consideration. Resources may include reliance on consultants to review the complexity of the possible amendment. UPWP amendment must be approved by the Board and submitted to NDDOT/MnDOT and FHWA/FTA approval prior to undertaking possible amendments

- The MPO will follow the plan amendment process identified in the MPO's Public Participation Plan. Although more involvement is done during the consideration of an amendment, the basic timeline once the MPO has preliminarily approved an amendment is the amendment is submitted to member jurisdictions for review and comment and consideration of adopting the amendment into their Comprehensive Plans. The MPO allows 60 days for this review before it will consider final adoption of the proposed amendment.

- The MPO will prepare a memo that addresses the items below under Amendment Memo Contents. For items 1-3, the MPO will share the memo with NDDOT/ MnDOT and FHWA/FTA prior to any meetings with its TAC and/or Policy Board to ensure the memo contains a sufficient level of information.

- The MPO will submit the memo to NDDOT/MnDOT, FHWA and FTA for information purposes once the MPO's Policy Board officially adopts the plan amendment.

<u>Amendment Memo Contents</u>

1. Background

    a. Explain why the amendment is needed. What changed? Be specific.
    b. If the amendment is adding or removing projects, or moving projects from the illustrative list to the fiscally constrained list or vice versa:
        i. The project wording must exactly match the wording in the plan.
        ii. Avoid the use of "replaced" or "inserted."
        iii. Example text:
            1) Removed project ID #, project description, from the list of constrained projects;
            2) Added project ID # (new number), project description, to the illustrative list.
    c. If the amendment is adding a project(s), including supporting documentation (e.g. links to the project study).
    d. Explain how the amendment affects the plan's overall performance management.

2. Financial Constraint

    a. Discuss the amendment's impact on fiscal constraint.
        i. Note: If the amendment is adding a project without removing a project of similar cost, fiscal constraint must be demonstrated.
        ii. Example text for simple amendments: The proposed amendment is cost neutral to the financial constraint of the plan. (added) Project ID# has an estimated cost of $XXX. (removed) Project ID# has an estimated cost of $XXX.

iii. Example text for simple amendments: The proposed amendment causes no net impact to the financial constraint of the plan and has no estimated project costs at this moment. If projects related to this amendment are amended into the plan or TIP, financial constraint will be addressed at that time.

3. Public Involvement

   a. Discuss the public involvement process used.
      i. Must include an analysis of EJ impact.
   b. Identify the dates the amendment was available for public comment.
   c. Discuss any public comments received.

4. Resolution

   a. Identify when the MPO's Policy Board officially adopted the amendment.
   b. Include a copy of the resolution in the transmittal package.

Proposed Amendments to 2045 Metropolitan Transportation Plan

MINNESOTA SIDE

1.) Background:

a) The proposed amendments to the Metropolitan Transportation Plan are needed. The City of EastGrand Forks has elected to request being allowed to utilize their 2022 Federal Subtarget dollars to complete a Reconstruction / Extension project on 10th St NE and 10th St NE was not identified in the Metropolitan Transportation Plan. Therefore, the following amendments are necessary:

b) Project Related Adjustments:

I. Remove Project FY2022 TIP MN #5, Bygland Road at Rhinehart Drive Roundabout from the STIP and move to the Illustrative list. Estimated Project Cost: $1,400,000. $860,000in Federal Subtarget Dollars.

II. Remove Project Short-term MTP REF-209, Bygland Road, 6th St to 8th Street from the list of financiallyconstrained to the Illustrative list. Estimated Project Cost: $980,000

III. Remove Project Short-term MTP REF-210, Bygland Road, Heartsville Coulee Crossing from the list offinancially constrained to the Illustrative list. Estimated Project Cost: $710,000

IV. Add Project Short-term MTP REP 213, 10th ST NE from 11th Ave NE to approximately 800 Linear Feeteast of 15th Ave NE to the TIP. Estimated Project Cost $1,781,310, FY2022 Federal Subtarget Dollars: $860,000.00

c) Supporting Documentation:

In the Metropolitan Transportation Plan, 10th St NE was overlooked and not included. However, based on a review of projects in the plan and a review of project options eligible for Federal Funding with the EGF City Council and City Public Work Director, 10th St NE stoodout as a priority project. The City Council therefore approved 10th St NE for use of the City's 2022 Federal Subtarget dollars and requested an amendment to the Metropolitan Transportation Plan.

The Pavement Management Study survey which was completed in 2014 of this corridor provided a Pavement Condition Index (PCI) rating of 37 with an estimate PCI rating today of 10. The PCI rating score supports the need for the project and the existing conditionsobserved.

d) How does the amendment affect the plans overall performance management:

The goal with 10th St NE is system preservation, if this section of roadway is not reconstructed the City may be required to close the road down for safety of the public and those entities providing goods and services to the existing businesses. The extension of 10th St NE furthermore provides for improved accessibility to existing businesses as the current roadway is nearly impassable during wet conditions and or during spring thaw. As part of the project a sidewalk / multi-use trail will be considered to provide accessibility for pedestrians using the area and furthermore provide for improved safety for the pedestrians.

The Future Bridge Traffic Study is on-going and the needs or improvements to the Point area are still not entirely known. Then the bigger question yet is, does the bridge get built?? With all of these unanswered questions, the City Council choose to move forward with 10th St NE for the 2022 Federal Project in lieu of the Bygland / Rhinehart Drive Roundabout. The other two potential projects (REF-209 & REF 210) were reviewed again with City Public Works director and it was determined that these road segments are still in overall good condition and did not require complete reconstruction at this time thus the justification to moving these projects to the illustrative list of projects.

The East Grand Forks City Council is committed to improving the existing infrastructure within the industrial park and is pursuing additional funding sources to improve additional roads and infrastructure within this area to support the economic growth of existing and future businesses.

2.) Financial Constraint:

Discuss the amendments impact on fiscal constraint.

I. Removal of the above projects results in a savings of $3,090,000.00
II. Adding the 10th ST NE Project adds $1,781,310.00
III. The proposed amendments result in a net savings of $1,308,690.00

The 10th Street NE will utilize a combination of funding sources including Federal Subtarget Dollars, State Aid Allocation Funds and Assessments to adjacent properties. The East Grand Forks City Council is committed to completing the project and if not able to assess all of the benefitted properties, the City will utilize their State Aid Allocation dollars and or bond for the project.

NORTH DAKOTA SIDE

3.) Background:

e) The proposed amendments to the Metropolitan Transportation Plan are needed. The City of Grand Forks, with one project also involving NDDOT GF District, has requested several amendments to the 2045 MTP. Most either swap projects between short-term and mid-term timing, move from illustrative listing to being within fiscal constraint, or identifying certain segments of currently gravel surfaced multi-use paths to be eligible for federal funds towards installing a harder surface. Therefore, the following amendments are necessary:

f) Project Related Adjustments:

I. Swap Project Short-term MTP REF-044 reconstruction of N. Columbia Rd between 8th Ave N and Gateway Drive with Project Mid-term MTP REF 046 reconstruction of N. Columbia Rd between University Ave and 8th Ave N, making the REF 046 project now short-term and the REF 044 project now mid-term.

II. Remove Project Short-term MTP REF-268, reconstruction of S. Washington St from the list to the mid-term. In its place in the Short-term MTP REF 214 32nd Ave S pavement rehabilitation project.

III. Add Project Illustrative MTP REF-188, Mill Road mill and overlay to the Project Short-term list due to COVID-19 new revenue. (programmed for FY2022)

IV. Add Project Short-term TA Program gavel to paved path conversions:
- 32nd Ave S (Heartland Dr to S 48th St) (programmed for FY 2022)
- S 48th St (32nd Ave S to 17th Ave S)
- Adams Dr (Courtyard Dr to Shady Ridge Ct)

g) Supporting Documentation:

Since the Metropolitan Transportation Plan adoption, The City of Grand Forks has determined that the reconstruction of N. Columbia Rd made better sense continuing the reconstruction from the south making its way north to Gateway Dr. Currently, the road is being reconstruction between the Overpass and University Ave. The swap of segments between MTP timebands is the only thing being changed. All other project details remain the same.,

The City of Grand Forks and the NDDOT Grand Forks District have inspected the pavement of 32nd Ave S and have determined that a pavement rehabilitation projects needs to be done sooner than the mid-term reconstruction project. With the HSIP project currently being done on 32nd Ave S, the request is to address the pavement to ensure the safety improvements are more effective. The delaying of S. Washington from the short-term listing was chosen over other a Gateway Dr project partly in due to Gateway Dr being more of a national route for traffic, including critical freight network.

h) How does the amendment affect the plans overall performance management:

The swapping of timing has not affect on the plan other than the timeband which the project fails within. Thus, no overall change in performance management.

The addition of the 32nd Ave S pavement rehabilitation improves the pavement condition. It will address the concern that the pavement will fail premature and have negative relationship to the HSIP improvement. The delaying of the reconstruction of S. Washington is within reason due to the recent overlay and ADA curb ramp work done of this segment of S. Washington.

The addition of Mill Road overlay will have a positive affect by improving the pavement condition of this significant length of important roadway for delivery and transport of freight within the metro area.

Converting gravel to paved surface will provide a positive affect by making these multi-use paths more attractive to users.

4.) Financial Constraint:

Discuss the amendments impact on fiscal constraint.

A. The base reconstruction cost estimate of N. Columbia Rd between 8th Ave N and Gateway Dr is $6M; the base cost of N. Columbia Rd between University to 8th Ave N is $5.5M. The difference is cost estimate between the two is within reasonable forecasts plus/minus percentage difference to not materially affect fiscal constraint considering the cost estimate is based upon the mid point of the timebands; so projects earlier in the timeband will be less or within the fiscal constraint.

B. The addition of 32nd Ave S pavement rehabilitation project cost is $3.4M and the delaying of S. Washington St reconstruction base cost is $6.1M so the project being added costs estimate is less than the project being moved out.

C. The adding of the Mill Road mill/overlay cost estimate of $810,000is being financed with new revenue coming into the financial plan. These COVID-19 funds are not displacing any revenue assigned to any of the fiscally constrained list of projects.

D. The gravel to paved surface segments, as part of the Transportation Alternatives funding program, are not bound to the fiscal constraint requirement as the Street/Transit programs are. Therefore, the fiscal constraint is not the same issue of concern.

5.) Public Involvement:

a) Discuss the Public Improvement Process:

The amendment process will follow the MPO Public Participation Plan including an analysis ofEnvironmental Justice Impact.

b) Dates Amendment is available for Public Comment:

Assuming preliminary approval by the GF / EGF MPO Board during its July 21st meeting, the amendment will be available for public comment during the following time periods with public hearings provided at the following meetings:

MPO 60 Day Comment Period: July 22 – September 22, 2021
EGF Planning and Zoning Public Hearing: August 12, 2021
EGF City Council Public Hearing: September 7, 2021
Grand Forks Planning and Zoning Public Hearing: August 4, 2021
Grand Forks City Council Public Hearing: September 7, 2021
MPO TAC Meeting: October 13, 2021
MPO Board Meeting: October 20, 2021

c) Public Comments Received

All public comments received will be brought back to the MPO TAC and MPO Board Meeting for finalapproval and consideration of the amendment.

6.) Resolution

The MPO will provide a resolution when the MPO Policy Board has officially adopted the amendment.

NORTHWEST MINNESOTA ATP CITY STP FUNDS
PROJECT NOMINATION FORM

PROJECT IDENTIFICATION

Proj/Rdwy Name and/or No. 10th Street NE

Project No. 119-102-011

Federal Project No. _____

Proposer(s) City of East Grand Forks

Time Frame (color/bold) SFY 2020 SFY 2021 **SFY 2022**

Project Ready Date: February 2022
Project letting Date: March 2022

Location

Township: Sullivan
City Name/Population: EGF / 8500
County: Polk
MPO: Grand Forks / East Grand Forks

RDC Region: _____
Mn/DOT Dist: 2
Legis Dist: 01B
Congress Dist: 7

Instructions: Fill in all information. Attach 8 1/2" x 11" Location

CONTACT PERSON

Name: Steven R. Emery **Title:** City Engineer
Address: 1600 Central Ave NE, EGF, Mn 56721
Phone No.: 218-773-5626

Instructions: Also include phone number and address of contact person if different.

INTENT OF PROJECT Reconstruction / New Construction **(Select)**

- Reconstruction/New Const.
- Preservation/Repair/Rehabilitation
- Roadway Strengthening (1 0 Ton)
- Safety Improvement (Roadway or Rail)
- Capacity Improvement
- Transit Capital (New, Replacement or Service)
- Add Bike way
- Improve Air Quality
- Intermodal Improvement
- Economic Development
- Enhancement

Instructions: Select the primary intent of the project from the list and write it in the space provided.

PROJECT JUSTIFICATION

10th St NE located within the EGF Industrial Park which is classified as a Major Collector is the only East West Road wthin the Industrial Park which connects the entire Industrial Park area from 5th Ave NE to 15th Ave NE. The existing concrete street located between 11th Ave NE and 15th Ave NE is approximately 47 years old and is severely deteriorated and broke up which has affected the surface drainage of the roadway with water not even able to get to the curb and gutter or storm sewer in numerous locations. The existing curb and gutter and storm sewer have also reached the end of their useful life are in need of replacement to provide for overall drainage within the Industrial Park area. In 2014 when this stretch of roadway was surveyed as part of the Pavement Management Study, this section of roadway had a Pavement Condition Index (PCI) of 37 with todays estimated PCI at 10. Without reconstruction of this roadway in the near future the City of East Grand Forks may be forced to close the roadway.

10th St NE going east of 15th Ave NE is a gravel roadway with insufficient drainage and gravel base to even allow for traffic during spring thaw or wet conditions and existing traffic using the roadway to get to the existing businesses is required to drive onto private properties thus the need for contructing a new roadway to provide year around access to these businesses. In order for the EGF Industrial Park to continue to develop and grow, good infrastructure and a good street network is absolutely necessary.

A majority of the properties along 10th St NE do not have frontage along 10th Street and the property on the south side of the 10th Street NE is currently owned by Burlington Northern Santa Fe Railroad but the railroad tracks have been removed. Due to current lot configurations and the street providing no benefit to the railroad a majority of the project costs will need to assessed or paid by the City of East Grand Fork utilizing State Aid or Local Funds. Being able to utilize the City Subtarget dollars will help offset some of these potential costs to the City or adjacent property owners.

Supporting Data

	Existing	Proposed
AADT:	380	456
HCADT:	190	228
Lane Width:	12	12
Shldr. Width:	NA	NA
Shldr. Type:	NA	NA

	Existing	Proposed
Surf. Type:	Conc	Conc
Spring Load:		
PQI:		
Roadway Suff. Rating:		
Bridge Suff. Rating:		

Instructions: **Describe why this project is justified. Include major deficiencies to be corrected. Indicate age, mileage, and estimated service life of transit vehicles being replaced. Use additional pages or maps if needed. If using accident data to support purpose of the project, include number of accidents and the reduction that the proposed improvement is anticipated to prevent.**

PROJECT DESCRIPTION

The proposed project will include reconstruction of 10th ST NE from 11th Ave to 15th Ave NE including replacement of Catch Basins and Storm Sewer Leads. The project will further include contruction of new urbanized roadway from 15th Ave NE to the east on 10th Street for approximately 820 Linear feet which shall also include installation of Catch Basins and Storm Sewer Leads .

Location /	**10th ST NE – 11th Ave NE to approx. 1100 LF East of 15th**	**Beg. Ref. Pt.**	
Service Area:	**NA**	**End. Ref. Pt.**	

Project Length: **Miles: 0.51** **Kilometers:**

Roadway Type: MSAH **(Select)**

Interstate	**Local Street**
MN Trunk Highway	**County Road**
C.S.A.H.	**Township Road**
M.S.A.H.	

Functional Class: Major Collector (Select)

Principal Arterial	**Rural Minor Collector**
Minor Arterial	**Urban Collector**
Rural Major Collector	**Local**

Market Artery Route?	Yes	☐	No	☒	**Please refer to Market Artery study.**
Existing or Planed Bike Way?	Yes	☐	No	☒	
Transit Route?	Yes	☐	No	☒	
Cooperative Venture?	Yes	☐	No	☒	
Right of Way?	Yes	☐	No	☒	
Other Federal Grants Applied For?	Yes	☐	No	☒	

If yes, what Federal Program?

Instructions

Nature of Project: **Describe the project being proposed and what it intends to accomplish.**

Location/ **What is the projects termini or location? Fill in Ref. Pts. if available. Include distances to major intersections.**

Service Area **What is the service area (Transit projects)?**

Questions **Answer all questions that are applicable to project. Cooperative venture is circled "YES" if more than one government unit is proposing the project.**

PROJECT COSTS

	FEDERAL FUNDS	STATE FUNDS	STATE AID FUNDS	LOCAL FUNDS	TOTAL
CONSTRUCTION COSTS	860,000.			580,765	1,440,765
PRELIMINARY ENGINEERING			83,107	74,067	157,174
RIGHT~OF-WAY					
OTHER NON-CONSTRUCTION COSTS			141,817	41,553	183,370
TOTAL PROJECT COST	860,000.00		224,924	696,385	1,781,310
TYPE OF FEDERAL FUNDS:	2022 Subtarget				
SOURCE OF MATCHING FUNDS:	Assessments (Local Funds) / State Aid Funds				

BENEFITS (PLEASE DESCRIBE):

The proposed project will provide for a new street section with improved drainage and functionality to help promote new businesses opportunities within the industrial park and provide a quality street to support existing businesses and promote new business opportunities.

CATEGORY / TYPE OF WORK

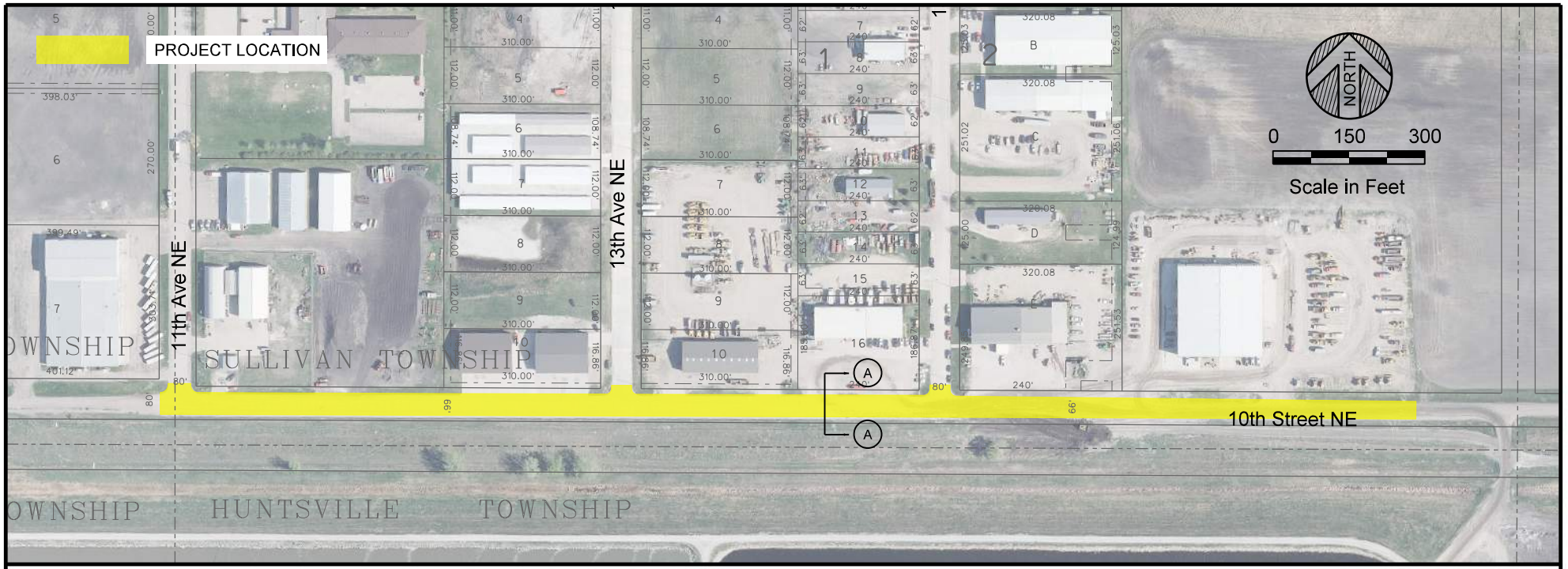
Category of Work: Major Investment **(Select One)**

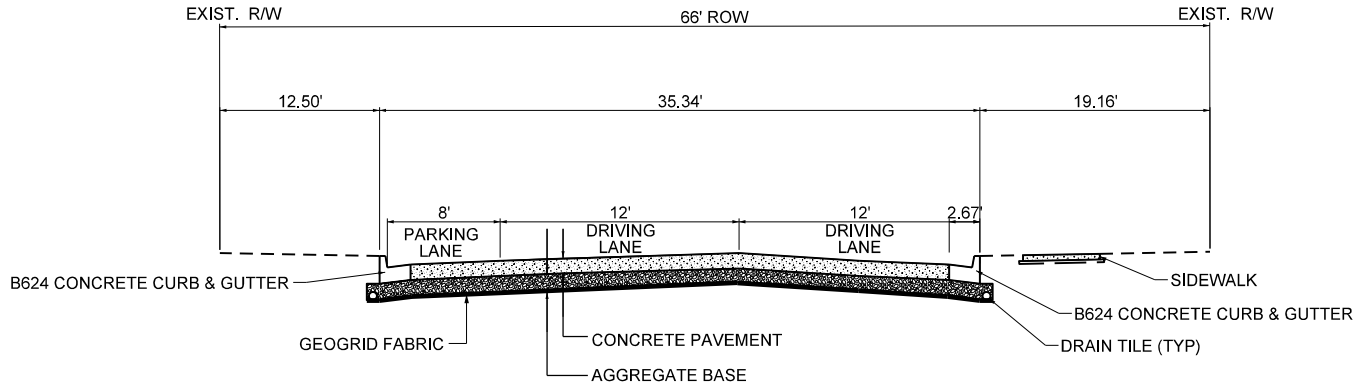
Safety	Non-Roadway
Preservation	Enhancements
Bridge Replacement	Transit
Major Investment	Rail Crossing

Type of Work: Reconstruction / New Const.

Examples:			
	Grading	Guard Rail	Surfacing
	Resurfacing	Signing	Widen Shoulders
	Paving Shoulders	Bikeway Improvement	New Bridge
	Bridge Rehabilitation	Rail Improvement	Bridge Replacement
	Rest Areas	Transit Capital Improvement	Culvert Replacement
	Turn Lanes	Transit Vehicle Replacement	Traffic Signals
	Conc. Pavement Rehab.	Historic Preservation	Lighting
	Pedestrian Trail	Landscaping	Waysides

Instructions: Fill in the blank for Category of Work with one of the seven possible categories, Indicate the work type that best describes the project.





PROPOSED CONCRETE PAVEMENT SECTION
SECTION A-A

WIDSETH
ARCHITECTS ▪ ENGINEERS ▪ SCIENTISTS ▪ SURVEYORS

DATE:	07/07/21
SCALE:	As Shown
DRAWN BY:	RAB
CHECKED BY:	SRE
JOB NUMBER:	2021-10004

10th Street NE Reconstruction / Extension
East Grand Forks, Minnesota

Proposed Pavement Section & Area

SHEET NO. C1.0

SHEET OF

7/7/2021 J:\City of East Grand Forks-32358\2021-10004\CADD\Civil\2021_10004_10th_st_NE.dgn

Setup Scoring Categories & Factors

Score System: Local Roads

Grand Forks - East Grand Forks
METROPOLITAN PLANNING ORGANIZATION

Max. Score 100 (Expected) | Max. Score 100 (Achieved)

Scoring Categories

	Goals	Description	Expected Weight	Expected Points	Achieved Weight	Achieved Points
1	Economic vitality	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.	10 %	10 pts	8 %	8 pts
2	Security	Increase security of the transportation system for motorized and non-motorized uses.	5 %	5 pts	2 %	2 pts
3	Accessibility and Mobility	Increase the accessibility and mobility options for people and freight by providing more transportation choices.	10 %	10 pts	5 %	5 pts
4	Environmental/Energy/QOL	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.	10 %	10 pts	7 %	7 pts
5	Integration and Connectivity	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.	10 %	10 pts	2 %	2 pts
6	Efficient System Management	Promote efficient system management and operation by increasing collaboration among federal, state, local government to better target investments and improve accountability.	10 %	10 pts	6 %	6 pts
7	System Preservation	Emphasize the preservation of the existing transportation system by first targeting federal funds towards infrastructure to spur revitalization, promote urban landscapes and protect rural landscapes.	15 %	15 pts	12 %	12 pts
8	Safety	Increase safety of the transportation system for motorized and non-motorized uses.	15 %	15 pts	4 %	4 pts
9	Resiliency and Reliability	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.	10 %	10 pts	5 %	5 pts
10	Tourism	Enhance travel and tourism.	5 %	5 pts	0 %	0 pts
		TOTAL	100 %	100 pts	51 %	51 pts

TIP SCORING SHEETS

Local Roads

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

0= No
1= Yes

Project Number	REP 213

Project Name	10th Street NE Reconstruction

MPO SCORING SHEET FOR EACH PROJECT

Goal 1		Economic Vitality	Expected Weight (%):	10
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.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Coordinate land use and transportation planning, programming, and investments between agencies to advance smart growth objectives***		
	1.1	***Recognize and identify investments that support current & future street network development plan***	1	1.67
	1.2	***Focus on street network expansion and prime corridors in areas that are contiguous to current and future developed areas and provide new access to jobs***	1	1.67
	2	***Enhance the area's economic competitiveness through the movement of goods and services***	1	1.67
	3	***Support efficient local street and highway, multimodal terminal connections for freight and rail movement***	0	0.00
	4	***Work located on identified truck route or identified in Freight Study***	1	1.67
	5	***Consistent with local, regional or state economic development plans***	1	1.67
			Total	8.333333333

Goal 2		Security	Expected Weight (%):	5
Increase the security of the transportation system for motorized and non-motorized users			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Identify and maintain security of critical street system assets.***		
	1.1	***Coordinate with regional emergency/security/hazardous materials movement***	1	0.71
	1.2	***Evaluate and manage the security of the transportation network, especially in critical areas***	1	0.71
	1.3	***Coordinate/improves Bridge Closure Management Plan***	0	0.00
	1.4	***Coordinate/improves Special Events Management Plan***	0	0.00
	2	***Support state and regional emergency, evacuation, and security plans.***		
	2.1	***Consistent with regional emergency and security planning system (ITS Regional Architecture)***	1	0.71
	2.2	***Provide necessary security training and equipment to improve the security of the transportation infrastructure***	0	0.00
	2.3	***Coordinate with safety/security agencies to prevent harmful activities***	0	0.00
			Total	2

Goal 3		Accessibility and Mobility	Expected Weight (%):	10
Increase the accessibility and mobility options to people and freight by providing more nonmotorized choices			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Mitigate excessive travel delays by improving existing infrastructure to address traffic congestion***	0	0.00
	2	***Provides acceptable LOS for all streets, intersection and facilities as recommended in LRTPs and address any existing LOS deficiency***	1	1.67
	3	***Consider advances in autonomous and connected vehicle technology in the transportation planning and programming processes***	0	0.00
	4	***consistent with local access control regulations***	1	1.67
	5	***Enhances the range of freight service options available to local business***	1	1.67
	6	***Implements recommendations in ADA ROW or any other ROW transition plans***	0	0.00
			Total	5

Goal 4		Environmental/Energy/QOL	Expected Weight (%):	10
Protect and enhance the environment, promote energy conservation, and improve quality of life.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Avoid, minimize, and/or mitigate adverse social, environmental, and economic impacts resulting from existing or new transportation facilities.***		
	1.1	***Implements core context sensitive solutions***	***1***	1.67
	1.2	***Address EJ analysis process***	***1***	1.67
	1.3	***Avoids or minimize impacts to wetlands or other natural habitats or cultural/historic resources***	***1***	1.67
	1.4	***Incorporates innovative stormwater management techniques***	***0***	0.00
	2	***Maintain and improve quality of life along streets and highways.***	1	1.67
	3	***Maintain and improve regional air quality by promoting nonmotorized travel***		0.00
			Total	7

Goal 5		Integration and Connectivity	Expected Weight (%):	10
Enhance the integration and connectivity of the transportation system across and between modes for people and freight.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Effectively coordinate transportation and land use by promoting the sustainability and livability principles, goals, and objectives from local land use plans.***	1	
	1.1	***Increase the use of multi-modal transportation by providing additional transit service and reducing bicycle/pedestrian network gaps.***	0	0.00
	1.2	***Promote transportation improvements that support access to a mix of employment opportunities (e.g. jobs and income levels).***	1	1.67
	2	***Provide an advanced and balanced mix of local, collector, and arterial streets to help meet local and regional travel needs***		
	2.1	***Invest in signage techniques to reduce excessive travel delays***	0	0.00
	2.2	***Maximize direct travel trips between major generators of metropolitan area***	0	0.00
	2.3	***Maintain and update street and highway functional classification consistent with FHWA guidelines***	0	0.00
	2.4	***Address last segment/link of corridor***	0	0.00
			Total	1.666666667

Goal 6		Efficient System management	Expected Weight (%):	10
Promote efficient system management and operation.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Implement best practice programming and innovative financing alternatives***		
	1.1	***Identify potential source of budget for year-round maintenance***	1	1.25
	1.2	***Provide an efficient and cost-effective motorized transport system***	1	1.25
	1.3	***Improving operations without adding through capacity***	1	1.25
	2	***Involve all local partners in the transportation planning process.***	1	1.25
	3	***Cooperate across jurisdictional boundaries to create an integrated transportation network.***	0	0.00
	4	***Maintain and update the regional ITS architecture***		
	4.1	***Enhances interoperability among modal equipment and technologies***	***0***	0.00
	5	***Demonstrates analysis of project risk in implementation***	1	1.25
	6	***Includes specific evaluation method to provide a measurement of effectiveness by collecting traffic data***	0	0.00
			Total	6.25

Goal 7		System Preservation	Expected Weight (%):	15
Emphasize the preservation of the existing transportation system.			Assign score 0 or 1	Achieved Weight (%)
	1	***Cost effectively preserve, maintain and improve the existing transportation network systems and capacity***		

Objectives	1.1	***Utilize pavement management system results***	1	3
	1.2	***Emphasizes system rehabilitation rather than expansion***	1	3
	1.3	***Incorporate cost-effective maintenance and technologies new to the MPO area***	0	0
	1.4	***Preserve railroad ROW or other existing ROW***	1	3
	2	***Identify sufficient funding for the program of projects included in GF/EGF MPO transportation plans.***	1	3
			Total	12

Goal 8		Safety	Expected Weight (%):	15
Increase safety of the transportation system for motorized and nonmotorized uses.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Address locations identified as high crash locations in LRTP and review crash data to improve roadway design and traffic control elements***	***0***	0
	2	***Reduce frequency and severity of crash and intersection conflicts through traffic control and operational improvements in urban areas***	***0***	0
	3	***Consistent with Strategic local street and Highway Safety Plan***		
	3.1	***Improve efficiency and effectiveness of aggressive driving/speed enforcement efforts***	0	0
	3.2	***Ensure that roadway design and traffic control elements support appropriate and safe speeds***	1	1.875
	3.3	***Improve sight distance at signalized and un-signalized intersections***	0	0
	3.4	***Improve the roadway and driving environment to better accommodate drivers' needs***	1	1.875
	3.5	***Improve Sight Distance and/or Visibility Between Motor Vehicles and Pedestrians/Bicyclists***	0	0
	4	***Enhances safe and well-designed route to school zones and college campuses***	0	0
			Total	3.75

Goal 9		***Resiliency and Reliability***	Expected Weight (%):	10
Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Reduce street and highway system vulnerability to snow and storm water***		
	1.1	***Maintain passable streets and highways under all reasonable weather conditions.***	1	1.25
	1.2	***Strategically design and maintain the street and highway system to operate under all reasonable weather conditions.***	1	1.25
	1.3	***Assess and mitigate any possible impacts new roadway construction may have on high water events, including proximity to waterways, construction in w***	1	1.25
	2	***Support the region's resilience and travel reliability through efficient detour and evacuation routes***		
	2.1	***During river flood events, reroute traffic consistent with the Bridge Closure Management Plan, or revised to respond to significant, observed delays or cha***	0	0
	2.2	***Be trained in and use established alternate routes and intelligent transportation systems (ITS) to maintain street and highway operations during incidents***	0	0
	2.3	***Provide auxiliary power sources to operate traffic signals when mainline power is interrupted.***	0	0
	2.4	***Maintain on-time project performance and implementation***	1	1.25
	2.5	***Improve engagement of transportation system, across and between modes, partners and stakeholders***	0	0
			Total	5

Goal 10		***Travel & Tourism***	Expected Weight (%):	5
Enhance travel and tourism.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Maintain convenient and intuitive street and highway access to major activity centers***		
	1.1	***Develop and use event traffic management plans for major activity centers such as the Alerus Center, Ralph Engelstad Arena, and Greater Grand Forks Gr***	0	0
	1.2	***Identify, coordinate, and communicate traffic plans for simultaneous events.***	0	0
	1.3	***Establish partnerships to foster tourism activities within MPO***	0	0
	2	***Enhance safe/easy access to tourist spots, major activity centers, Greenway Trail System and the Red River State Recreation Area***	0	0
	3	***Provides landscaping/streetscaping or similar amenities***	0	0
			Total	0

NDDOT/FORKS MPO URBAN PROGRAM
SUBMITTAL CHECKLIST

Instructions: *Review all tasks and check mark the completed items. Sign and return this checklist with your submittal.*

Tasks

a. ☒ I have reviewed my request to make sure all projects are functionally classified and on the federal-aid system.
b. ☒ I have reviewed my request to make sure all project limits achieve logical termini (must begin and end at a functionally classified route).
c. ☒ I am submitting a signed Scoping Worksheet for each project.
    i. ☐ The District and City have signed all Urban Regional Scoping Worksheets.
    ii. ☒ The City has signed all Urban Roads Scoping Worksheets.
    iii. ☒ I have included a non-NEPA level purpose and need statement for all projects to identify why the projects are important/needed by my jurisdiction.
d. ☒ I am submitting a Detailed Cost Estimate in year of expenditure dollars for each project. The estimate includes totals for all phases (PE, CE, construction, R/W, utilities, structures, Non-participating).
e. ☒ I am submitting a Map of project limits for each project.
f. ☒ I am submitting the proper FORKS MPO scoring sheet for each project.
g. ☒ I am submitting a project consistent with the 2045 MTP.

I hereby certify that I have reviewed all tasks and that submitted materials are complete. I understand that failure to provide complete information by December 31, 2020 may make this submittal ineligible.

City Engineer

6/24/21
Date

URBAN REGIONAL & URBAN ROADS
PROJECT SCOPING WORKSHEET

DATE: 6/21/2021

PRIORITY#1 Regional: Y/(N) Urban Roads: (Y)/N

City: Grand Forks Street: Mill Rd (Gateway Dr to N Washington St)

County: Grand Forks Length: ~9,300 LF or ~1.76 mi

Proposed Improvement: 2" asphalt mill and overlay with spot full depth repair

Cost Estimates Breakdown (in $1,000)							
PE	CE	R/W	Utility	Constr.	Bridges	Non-Participating	Total
120	120			560		10	810

Present Road: Surface Width? 28' Surface Type? Asphalt

On Street Parking Allowed? Yes Present: No (One Side) Both Sides Angle Parallel
Proposed: No (One Side) Both Sides Angle Parallel

Proposed Improvements

ADT Present: 1,449 – 3,683 Yr: 2015
ADT Design: 1,521 – 3,529 Design year 2045
Design Speed: 30mph
Maximum Curve:
Maximum Grade:

Travel Way Width : 24'
No. of Lanes: 2
Roadway Width: 30'
Min. R/W Width: 50'

Right of Way

Will Additional ROW or easement be acquired? Likely No ROW acquisition by: (City) DOT
Has any ROW easements been acquired since 7-1-72: Unknown ROW Condemnation by: City DOT
Est. No. of occupied family dwelling to be displaced? Likely Zero
Est. No. business to be displaced? Likely Zero

Impacts

Will there be any additional Impacts (Cultural and Environmental Resources):
None anticipated

Will there be any impacts to 4(f) or 6(f) properties: None anticipated

Airports: None Public Hearings: None

Environmental Classification (Cat-Ex, EA, EIS): Likely Categorical Exclusion by Definition

Transportation Enhancements: None anticipated

Intermodal: None anticipated

Pedestrian Needs: Updating ADA ramps as needed

Railroads Crossings

RR Name	No. Xings	No. Tracks and Type of Crossing	Daily Train Movements	Train Speed	Present Protection	Proposed Protection
BNSF	1	At Grade	Abandoned		None	None
BNSF	1	At Grade	4	20mph	Crossbuck	Crossbuck

Purpose and Need Statement:

Mill Rd between Gateway Dr and N Washington St was last rehabilitated/reconstructed in 1999, with a seal coat applied in 2009. With the isolated rutting and alligator cracking, this pavement has reached a point in which a mill and overlay with spot full depth repairs will help extend the life of the pavement.

Existing Conditions:

1. When was the current street section built? Has there been any additional maintenance to the street section?
   This street section was last built in 1999 under NDDOT project number SER-6-986(047)050 city project number 4806 where approximately the southern half was an asphalt overlay over concrete and widening, and the northern half was an asphalt reconstruction. In 2009 under NDDOT project number STM-SU-6-986(091)095 city project 6414.2 this segment received a seal coat. In 2018/2019 under city project number 7757 there was some concrete reconstruction work and a new railroad crossing installed on Mill Rd near the intersection on N Columbia Rd.

2. How many driving lanes and turning lanes does the street section currently have and what is the widths of the driving and turning lanes?
   The majority of the roadway is two lanes with 12' driving lanes. Near the Gateway Dr intersection there are a total of four lanes, for southbound this consists of a left turn lane, a through lane, and a right turn lane, with one northbound through lane. Approximate widths are 12'.
3. What is the condition of the pavement section?
   The asphalt pavement has a 2018 PCI ranging from 54 to 81 and an IRI ranging

from 2.18 to 3.75 m/km or 138 to 238 in/mi. There are isolated areas or experiencing rutting and alligator cracking, this is particularly noticeable north of the intersection of 27th Ave N and Mill Rd. There are some asphalt patches with an unknown year of construction.

4. Any existing geometric concerns?
None

5. Are there any access points to adjoining properties that present a special concern?
On the side streets there are railroad crossings. The intent of this project is to mill and overlay the same amount of pavement to minimize any potential grade changes to the side streets.

6. Are there any existing sidewalks or shared use path in place?
There is an existing shared use path crossing located north of Gateway Dr.

7. What is the condition of the existing storm sewer? Will any additional storm sewer work need to be done along with this project?
Storm sewer work was completed under the 2018/2019 State Mill expansion project. No additional storm sewer work is anticipated with this project.

8. What is the condition of the city's water and sewer line? Will any work have to be done to the city's water and sewer lines along with this project?
Watermain located under the pavement appears to have been installed in 2005 or under the 2018/2019 State Mill expansion project. The remaining waterline located in the western ditch was installed in 1966. The gravity sanitary sewer is located on the east side of the road and was installed in 1966. The sanitary sewer forcemain was modified as part of the 2018/2019 State mill Expansion project, the remaining forcemain was originally installed in 1960.

9. Describe the existing lighting system currently in place? What type of standards and luminaires are currently being used?
Existing street lighting consists of Xcel owned street lights on Xcel owned wooden poles spaced approximately one every 300-400'

10. What intersections currently have traffic signals? Are there any locations that have a high accident rate? Are additional turning lanes needed?
The intersection of Gateway Dr and Mill Rd has a traffic signal. This intersection has not appeared on the annual urban high crash list. No additional turn lanes are anticipated to be needed.

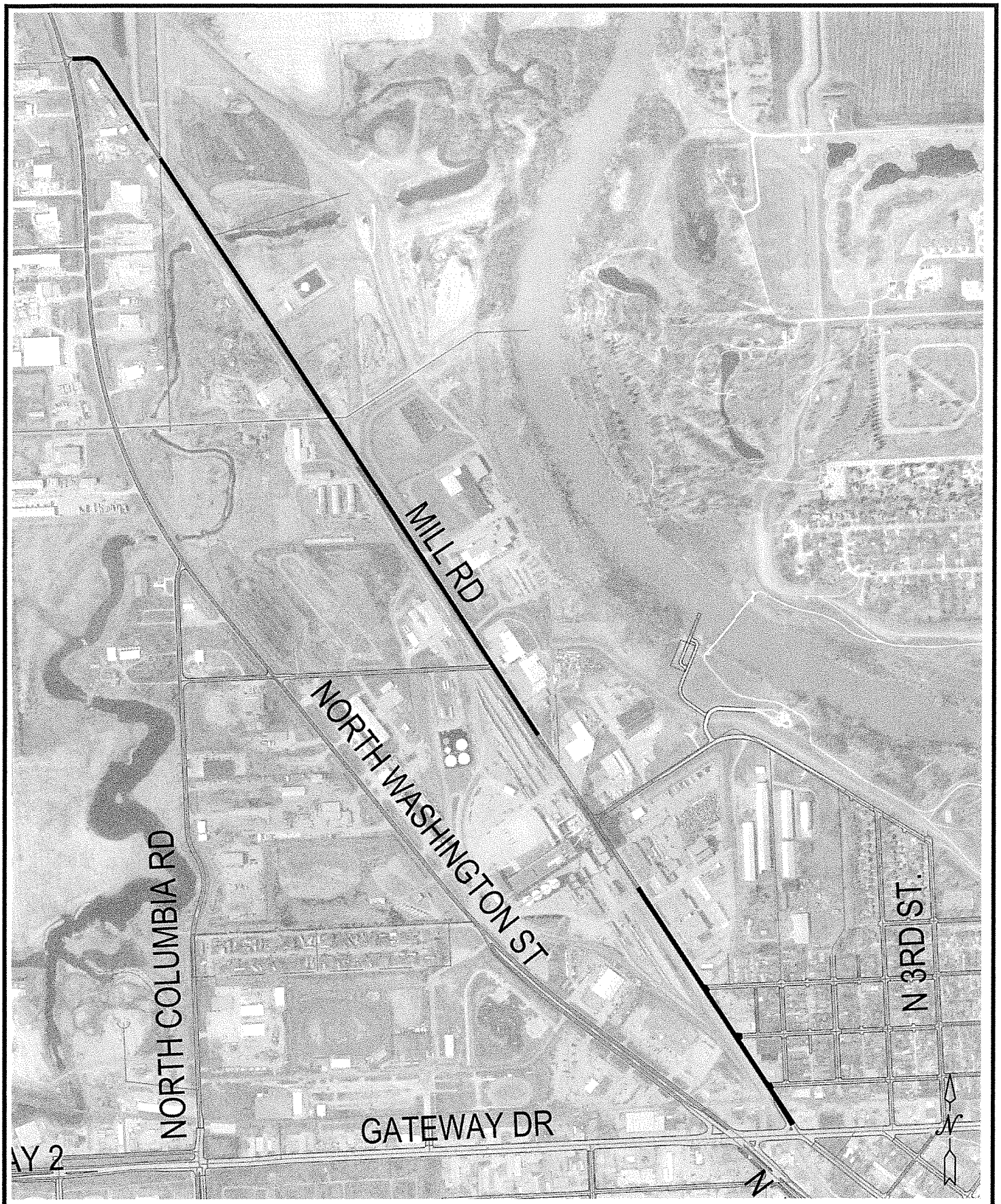
Remarks:

City Engineer: _____ Date: 6/24/24

Note: ***Please attach a map showing location and extent of the project, detailed cost estimate, and any additional supporting documents.***

Preliminary Engineer's Estimate
Mill Rd Mill and Overlay 6/21/2021
2" Mill and Overlay
24' Wide
4% Full Depth Patch (6")

			Unit	Unit Price	Quanitity		Item Cost
702	100	MOBILIZATION	LS	$41,000.00	1	$	41,000.00
103	100	CONTRACT BOND	LS	$5,000.00	1	$	5,000.00
		TRAFFIC CONTROL	LS	$13,000.00	1	$	13,000.00
		EROSION CONTROL	LS	$9,000.00	1	$	9,000.00
411	105	MILLING PAVEMENT SURFACE	SY	$3.00	20556	$	61,668.00
430	45	SUPERPAVE FAA 45	TON	$70.00	2207	$	154,490.00
430	5815	PG 58E-34 ASPHALT CEMENT	TON	$800.00	117	$	93,600.00
202	329	REMOVE RAILROAD RAIL	LF	$50.00	200	$	10,000.00
202	334	REMOVAL OF PAVEMENT	SY	$30.00	830	$	24,900.00
		FULL DEPTH PATCH	TON	$130.00	282	$	36,660.00
401	50	TACK COAT	GAL	$4.00	1550	$	6,200.00
107	100	RAILWAY PROTECTION INSURANCE	LS	$3,500.00	1	$	3,500.00
		STRIPING	LS	$10,000.00	1	$	10,000.00
					Subtotal	$	469,018.00
			20%		Contingencies	$	90,982.00
					Total Construction	**$**	**560,000.00**
			20%		**Design Engineering**	$	120,000.00
			20%		**Const Engineering**	$	120,000.00
					Testing	$	10,000.00
					Project Total	$	810,000.00



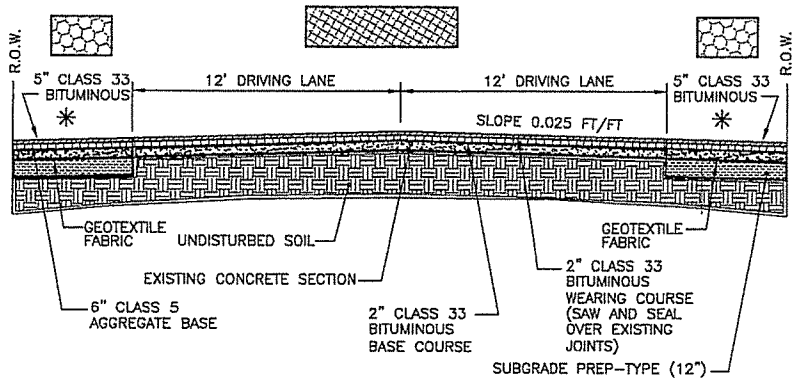
GRAND FORKS	CITY OF GRAND FORKS ENGINEERING DEPARTMENT	COVID FUNDING PROJECT MILL RD ASPHALT MILL AND OVERLAY	DATE 6/21/2021	CITY PROJECT 8366
			SCALE NTS	PAGE 1 of 1

P:\8366_Mill_and_Overlay_Mill_Rd_(Gateway_Dr_to_N_Washington_St)\Design\Reference\EXHIBIT.dwg

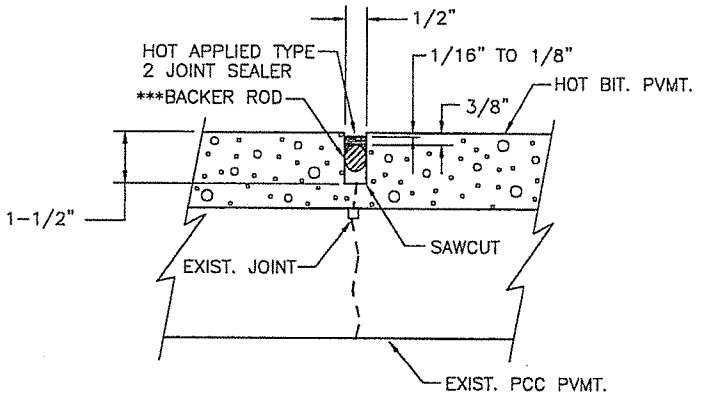
FHWA REGION	STATE	PROJECT NO.	SHEET NO.
8	ND	SER-6-986(047)050	7

TYPICAL SECTIONS

STATION 0+00 TO STATION ~~31+00~~ 39+43



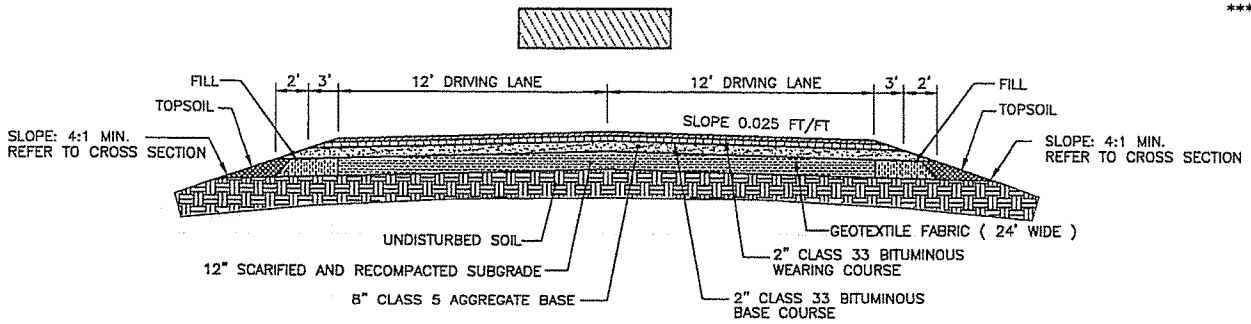
* BITUMINOUS RECONSTRUCTION WILL BE PERFORMED IN ONLY SELECTED AREAS AS SHOWN ON THESE PLANS OR IDENTIFIED IN THE FIELD BY THE ENGINEER.



***SHALL MEET TYPE 1 ROD MATERIAL ASTM D 5249-95 REQUIREMENTS

SAW & SEAL JOINT DETAIL

STATION ~~31+00~~ 39+43 TO 74+40 AND 76+96 TO 93+07.86



TYPICAL SECTIONS

MILL ROAD
GRAND FORKS, NORTH DAKOTA

Setup Scoring Categories & Factors

Score System: Local Roads

Grand Forks - East Grand Forks
METROPOLITAN PLANNING ORGANIZATION

Max. Score 100 | Max. Score 100

Scoring Categories

	Goals	Description	Expected Weight		Expected Points		Achieved Weight		Achieved Points	
1	Economic vitality	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.	10	%	10	pts	10	%	10	pts
2	Security	Increase security of the transportation system for motorized and non-motorized uses.	5	%	5	pts	2	%	2	pts
3	Accessibility and Mobility	Increase the accessibility and mobility options for people and freight by providing more transportation choices.	10	%	10	pts	3	%	3	pts
4	Environmental/Energy/QOL	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.	10	%	10	pts	7	%	7	pts
5	Integration and Connectivity	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.	10	%	10	pts	2	%	2	pts
6	Efficient System Management	Promote efficient system management and operation by increasing collaboration among federal, state, local government to better target investments and improve accountability.	10	%	10	pts	6	%	6	pts
7	System Preservation	Emphasize the preservation of the existing transportation system by first targeting federal funds towards infrastructure to spur revitalization, promote urban landscapes and protect rural landscapes.	15	%	15	pts	9	%	9	pts
8	Safety	Increase safety of the transportation system for motorized and non-motorized uses.	15	%	15	pts	4	%	4	pts
9	Resiliency and Reliability	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.	10	%	10	pts	4	%	4	pts
10	Tourism	Enhance travel and tourism.	5	%	5	pts	0	%	0	pts
		TOTAL	100	%	100	pts	47	%	47	pts

TIP SCORING SHEETS

Local Roads

Grand Forks - East Grand Forks
METROPOLITAN PLANNING ORGANIZATION

0= No
1= Yes

Project Number	CVD-6-986(135) 23231	Project Name	Mill Rd (Gateway Dr to N Washington St) Asphalt Mill & Overlay

MPO SCORING SHEET FOR EACH PROJECT

Goal 1		Economic Vitality	Expected Weight (%):	10
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.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Coordinate land use and transportation planning, programming, and investments between agencies to advance smart growth objectives***		
	1.1	***Recognize and identify investments that support current & future street network development plan***	1	1.67
	1.2	***Focus on street network expansion and prime corridors in areas that are contiguous to current and future developed areas and provide new access to jobs***	1	1.67
	2	***Enhance the area's economic competitiveness through the movement of goods and services***	1	1.67
	3	***Support efficient local street and highway, multimodal terminal connections for freight and rail movement***	1	1.67
	4	***Work located on identified truck route or identified in Freight Study***	1	1.67
	5	***Consistent with local, regional or state economic development plans***	1	1.67
			Total	10.00

Goal 2		Security	Expected Weight (%):	5
Increase the security of the transportation system for motorized and non-motorized users			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Identify and maintain security of critical street system assets.***		
	1.1	***Coordinate with regional emergency/security/hazardous materials movement***	1	0.71
	1.2	***Evaluate and manage the security of the transportation network, especially in critical areas***	1	0.71
	1.3	***Coordinate/improves Bridge Closure Management Plan***	0	0.00
	1.4	***Coordinate/improves Special Events Management Plan***	0	0.00
	2	***Support state and regional emergency, evacuation, and security plans.***		
	2.1	***Consistent with regional emergency and security planning system (ITS Regional Architecture)***	1	0.71
	2.2	***Provide necessary security training and equipment to improve the security of the transportation infrastructure***	0	0.00
	2.3	***Coordinate with safety/security agencies to prevent harmful activities***	0	0.00
			Total	2.14

Goal 3		Accessibility and Mobility	Expected Weight (%):	10
Increase the accessibility and mobility options to people and freight by providing more nonmotorized choices			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Mitigate excessive travel delays by improving existing infrastructure to address traffic congestion***	0	0.00
	2	***Provides acceptable LOS for all streets, intersection and facilities as recommended in LRTPs and address any existing LOS deficiency***	0	0.00
	3	***Consider advances in autonomous and connected vehicle technology in the transportation planning and programming processes***	0	0.00
	4	***consistent with local access control regulations***	1	1.67
	5	***Enhances the range of freight service options available to local business***	1	1.67
	6	***Implements recommendations in ADA ROW or any other ROW transition plans***	0	0.00
			Total	3.33

Goal 4		Environmental/Energy/QOL	Expected Weight (%):	10
Protect and enhance the environment, promote energy conservation, and improve quality of life.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Avoid, minimize, and/or mitigate adverse social, environmental, and economic impacts resulting from existing or new transportation facilities.***		
	1.1	***Implements core context sensitive solutions***	***1***	1.67
	1.2	***Address EJ analysis process***	***1***	1.67
	1.3	***Avoids or minimize impacts to wetlands or other natural habitats or cultural/historic resources***	***1***	1.67
	1.4	***Incorporates innovative stormwater management techniques***	***0***	0.00
	2	***Maintain and improve quality of life along streets and highways.***	1	1.67
	3	***Maintain and improve regional air quality by promoting nonmotorized travel***	0	0.00
			Total	6.67

Goal 5		Integration and Connectivity	Expected Weight (%):	10
Enhance the integration and connectivity of the transportation system across and between modes for people and freight.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Effectively coordinate transportation and land use by promoting the sustainability and livability principles, goals, and objectives from local land use plans.***		
	1.1	***Increase the use of multi-modal transportation by providing additional transit service and reducing bicycle/pedestrian network gaps.***	0	0.00
	1.2	***Promote transportation improvements that support access to a mix of employment opportunities (e.g. jobs and income levels).***	1	1.67
	2	***Provide an advanced and balanced mix of local, collector, and arterial streets to help meet local and regional travel needs***		
	2.1	***Invest in signage techniques to reduce excessive travel delays***	0	0.00
	2.2	***Maximize direct travel trips between major generators of metropolitan area***	0	0.00
	2.3	***Maintain and update street and highway functional classification consistent with FHWA guidelines***	0	0.00
	2.4	***Address last segment/link of corridor***	0	0.00
			Total	1.67

Goal 6		Efficient System management	Expected Weight (%):	10
Promote efficient system management and operation.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Implement best practice programming and innovative financing alternatives***		
	1.1	***Identify potential source of budget for year-round maintenance***	0	0.00
	1.2	***Provide an efficient and cost-effective motorized transport system***	1	1.25
	1.3	***Improving operations without adding through capacity***	1	1.25
	2	***Involve all local partners in the transportation planning process.***	1	1.25
	3	***Cooperate across jurisdictional boundaries to create an integrated transportation network.***	1	1.25
	4	***Maintain and update the regional ITS architecture***		
	4.1	***Enhances interoperability among modal equipment and technologies***	***0***	0.00
	5	***Demonstrates analysis of project risk in implementation***	1	1.25
	6	***Includes specific evaluation method to provide a measurement of effectiveness by collecting traffic data***	0	0.00
			Total	6.25

Goal 7		System Preservation	Expected Weight (%):	15
Emphasize the preservation of the existing transportation system.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Cost effectively preserve, maintain and improve the existing transportation network systems and capacity***		
	1.1	***Utilize pavement management system results***	1	3.00
	1.2	***Emphasizes system rehabilitation rather than expansion***	1	3.00
	1.3	***Incorporate cost-effective maintenance and technologies new to the MPO area***	0	0.00
	1.4	***Preserve railroad ROW or other existing ROW***	0	0.00
	2	***Identify sufficient funding for the program of projects included in GF/EGF MPO transportation plans.***	1	3.00
			Total	9.00

Goal 8		Safety	Expected Weight (%):	15
Increase safety of the transportation system for motorized and nonmotorized uses.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Address locations identified as high crash locations in LRTP and review crash data to improve roadway design and traffic control elements***	***0***	0.00
	2	***Reduce frequency and severity of crash and intersection conflicts through traffic control and operational improvements in urban areas***	***0***	0.00
	3	***Consistent with Strategic local street and Highway Safety Plan***		
	3.1	***Improve efficiency and effectiveness of aggressive driving/speed enforcement efforts***	0	0.00
	3.2	***Ensure that roadway design and traffic control elements support appropriate and safe speeds***	1	1.88
	3.3	***Improve sight distance at signalized and un-signalized intersections***	0	0.00
	3.4	***Improve the roadway and driving environment to better accommodate drivers' needs***	1	1.88
	3.5	***Improve Sight Distance and/or Visibility Between Motor Vehicles and Pedestrians/Bicyclists***	0	0.00
	4	***Enhances safe and well-designed route to school zones and college campuses***	0	0.00
			Total	3.75

Goal 9		***Resiliency and Reliability***	Expected Weight (%):	10
Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Reduce street and highway system vulnerability to snow and storm water***		
	1.1	***Maintain passable streets and highways under all reasonable weather conditions.***	1	1.25
	1.2	***Strategically design and maintain the street and highway system to operate under all reasonable weather conditions.***	1	1.25
	1.3	***Assess and mitigate any possible impacts new roadway construction may have on high water events, including proximity to waterways, construction in w***	0	0.00
	2	***Support the region's resilience and travel reliability through efficient detour and evacuation routes***		
	2.1	***During river flood events, reroute traffic consistent with the Bridge Closure Management Plan, or revised to respond to significant, observed delays or cha***	0	0.00
	2.2	***Be trained in and use established alternate routes and intelligent transportation systems (ITS) to maintain street and highway operations during incidents***	0	0.00
	2.3	***Provide auxiliary power sources to operate traffic signals when mainline power is interrupted.***	0	0.00
	2.4	***Maintain on-time project performance and implementation***	1	1.25
	2.5	***Improve engagement of transportation system, across and between modes, partners and stakeholders***	0	0.00
			Total	3.75

Goal 10		***Travel & Tourism***	Expected Weight (%):	5
Enhance travel and tourism.			Assign score 0 or 1	Achieved Weight (%)
Objectives	1	***Maintain convenient and intuitive street and highway access to major activity centers***		
	1.1	***Develop and use event traffic management plans for major activity centers such as the Alerus Center, Ralph Engelstad Arena, and Greater Grand Forks Gr***	0	0.00
	1.2	***Identify, coordinate, and communicate traffic plans for simultaneous events.***	0	0.00
	1.3	***Establish partnerships to foster tourism activities within MPO***	0	0.00
	2	***Enhance safe/easy access to tourist spots, major activity centers, Greenway Trail System and the Red River State Recreation Area***	0	0.00
	3	***Provides landscaping/streetscaping or similar amenities***	0	0.00
			Total	0.00

MPO UNIFIED PLANNING WORK PROGRAM -UPDATE , 2021

TABLE OF CONTENTS- UPDATE JULY, 2021

TRANSPORTATION PLAN UPDATE AND IMPLEMENTATION ACTIVITIES

AREA	TASK	%	ORIGINAL COMPLETION DATE	PROJECTED COMPLETION DATE
Grand Forks Land Use Plan Update	Website is: www.gf2050plan.com Work by consultant included assembling public comment from survey and developing basic understanding of "greenfield" v. "infill" development costs. The next Land Use Subcommittee meeting is being scheduled for early August.	50%	31-Dec-21	30-Mar-22
East Grand Forks Land Use Plan Update	The Steering Committee met to review the goals and land use map, they are available on the website. Starting work on information for public meeting sometime in August Www.egfplan.org	78%	30-Jun-21	31-Dec-21
Future Bridge Traffic Impact Study	Ad Hoc Group will meet July 20th. Website established: www.forks2forksbridge.com/info Traffic Forecast and Safety TechMemos out for review; draft Purpose and Need Memo out for review.	48%	31-Dec-20	30-Dec-21
Pavement Management System Update	Contract was signed. GoodPointe and the MPO are working with the City's to finalize Drive Maps.	22%	31-Dec-21	30-Dec-21
Transit Development Program TDP	Five submittals were received. Contract with Kimley-Horn being recommended for authorization during July Meeting.	17%	31-Mar-22	31-Mar-22
Aerial Photo	LiDAR has been captured; the aerial photo has been captured; processing is now taking place	60%	30-Nov-21	30-Nov-21
Traffic Count Program	On-going	90%	On-going	