Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

TECHNICAL ADVISORY COMMITTEE MEETING

WEDNESDAY, SEPTEMBER 8TH, 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 _____	Mason/Hopkins_____	West _____
Ellis _____	Zacher/Johnson _____	Magnuson _____
Bail/Emery _____	Kuharenko/Williams _____	Sanders _____
Brooks/Halford _____	Bergman _____	Christianson _____
Riesinger _____		

1. CALL TO ORDER

2. CALL OF ROLL

3. DETERMINATION OF A QUORUM

4. MATTER OF APPROVAL OF THE AUGUST 11, 2021, MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

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

6. MATTER OF UPDATE ON EAST GRAND FORKS LAND USE PLAN ..... KOUBA

7. MATTER OF UPDATE ON GRAND FORKS LAND USE PLAN .....HAUGEN

8. MATTER OF POTENTIAL AMENDMENT TO METROPOLITAN TRANSPORTATION PLAN (MTP) .....HAUGEN

9. MATTER OF T.I.P. SOLICITATION .....HAUGEN

10. OTHER BUSINESS
    - A. 2021 Annual Work Program Project Update
        1) Aerial Photo Update
        2) Pavement Management Update
        3) Transit Development Program Update
        4) NDDOT Freight And Rail Plan Update

11. 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, August 11th, 2021

CALL TO ORDER

Earl Haugen, Chairman, called the August 11th, 2021, meeting of the MPO Technical Advisory Committee to order at 2:03 p.m. (Technical problems caused delay of start of the meeting)

CALL OF ROLL

On a Call of Roll the following members were present: Wayne Zacher, NDDOT-Local Government; Steve Emery, East Grand Forks Engineering; Nancy Ellis, East Grand Forks Planning; Jane Williams, Grand Forks Engineering; and Dale Bergman, Cities Area Transit. The following members were present via Zoom: Ryan Brooks, Grand Forks Planning; Jon Mason, MnDOT-District 2; and Jason Peterson, NDDOT-Grand Forks.

Absent: Brad Bail, Stephanie Halford, Jesse Kadrmas, David Kuharenko, Rich Sanders, Ryan Riesinger, Michael Johnson, Nick West, Lane Magnuson, Lars Christianson, and Patrick Hopkins.

Guest(s) present: Kristen Sperry, FHWA-North Dakota; Anna Pierce, MnDOT-Central Office; Tim Burkhardt, Alliant Engineering; and Mike Kondziolka, Alliant Engineering; and Troy Schroeder, NWRDC.

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 APPROVAL OF THE JULY 14TH MINUTES OF THE TECHNICAL ADVISORY COMMITTEE

MOVED BY BROOKS, SECONDED BY BERGMAN, TO APPROVE THE JULY 14TH, 2021 MINUTES OF THE TECHNICAL ADVISORY COMMITTEE, AS SUBMITTED.

MOTION CARRIED UNANIMOUSLY.

MATTER OF UPDATE ON FUTURE BRIDGE TRAFFIC IMPACT STUDY

Haugen reported that included in the packet was a copy of today's presentation, the new Tech Memo on the build options, and the Draft Purpose and Need memo. He then turned the screen over to Alliant for a brief update.

Burkhardt stated that this is update number six and the main topic will be a recap on the public open house that is still underway online; where we are with the documentation of Project Purpose and Need and then the real meat is, as Mr. Haugen mentioned, the traffic results for the build alternatives.

Burkhardt said that you are probably generally familiar with what they are up to, which is really to get engagement, sort of number one, a lot of information out in terms of this is why we are doing the study, and then sort of the base information that we call "no build"; and next time around will be input on the options and the comparison.

Burkhardt stated that where we are, or a recap, they did do some pretty decent advertising, and the core of the open house is the online site that is on the platform they call "Social Pinpoint", which hopefully you have visited. He said they also did a live online presentation on July 27th, and people were able to provide input via chat. He added that they did record that and it is available on the website.

Burkhardt commented that they do have some statistics on the open house participation, which he would like to share. He said that they are getting good online participation, but low participation in terms of that live online meeting, 13 participants, so that was not successful so would be interested in feedback on why and/or how we can do that better, there are probably lots of reason, including the usual ones.

Burkhardt stated that in terms of the online visits you can see the numbers here; total site visits, and then the unique users, which means people that are here for the first time as opposed to people coming back multiple times, so brand new users since they put up the public open house information, 1300 visits, that is all good; they do have a survey in there and a map that you can comment on specific to issues around the schools, but there are pretty low numbers on those as well, but he would say that the comments they are getting there are definitely useful and good.

Burkhardt commented that just to summarize what they are hearing at the live event; a very small number of people, and as we know, typically people that have more to say are going to show up and maybe have more concerns, so the number one discussion of question and comment type was about traffic on 32nd Avenue and traffic around the schools, in terms about increased traffic.

Burkhardt stated that the online comments, we do get some nice output so he would like to present this graph, but keep in mind this is a small sample size so don't take it to the bank. He said that we see, not surprisingly, if you just look at where the comment activity is on the topics, there are more comments about concerns like I'm worried about as opposed to hey this is great. He stated that they asked people on these topics; traffic volumes, safety, etc., and also other,

which again was sort of back to neighborhood impacts, and that wasn't surprising, but certainly as we go forward there will be a challenge to make sure we are communicating well, responding to questions and to get people to see the facts as we see them as opposed to only their concern, both of which are valid.

Burkhardt stated that they asked people what they thought about their Purpose and Need Statement, and again not a lot of responses, but more in the strongly agree comment then elsewhere, which is good, and that is essentially more for information about how people are reacting to the messaging in his opinion, purpose and need is essentially a factual document. He said that they did ask people to provide comments, and so he thinks again, not surprising, but for him, as Project Manager, and thinking about our communications and messaging, sort of one side of the river versus the other, or one neighborhood versus the other, not surprising but something that he would like to try to focus more on the big picture on what the need is and how we can best accommodate it so that will be what we focus on as we go forward.

Burkhardt referred to a graphic of the Comment Map, specifically focused on school impacts, understanding that is sort of an overlap with the bridge study, and it can be useful for the study, and useful otherwise at individual school sites. He said that, again, there aren't a lot of comments here, but it is a useful tool; probably the most comments, shown in purple, were again about 32nd Avenue and again concerns about traffic increases. He said that he is glad to see some comments on the Elks Drive location, just in terms of people thinking about how that location works, and again if you go on the website, you can see these comments, and they will continue taking comments through August 15th.

Williams stated that she has one comment, it is actually further on in the study but you kind of touched on it so it might be wise to bring it up here. She said that on the last page of the memo, Page 4, it is about the socio and economic factors, and it has neighborhood quality of life, but then the summary says that it would support; now are you talking about the overall community is going to be okay, it is kind of confusing from the standpoint that if you are going to put more traffic into a neighborhood, she doesn't think that is improving their quality of life, but then if you are taking something away from another and balancing it out then that could be an improvement, so she thinks it is kind of a misnomer to call it "neighborhood quality", because the groups there look at themselves as entirely different entities, it may be more appropriate to call it "community". Burkhardt responded that he thinks that is an excellent comment as that was the intent, they are looking at tradeoffs and less traffic at one place and more somewhere else, but is it more balanced as an example. Williams agreed, adding that those are two different neighborhoods. Burkhardt responded that he was thinking in terms of, my neighborhood quality of life, and that feeds into one versus the other which he doesn't want to do, so he is very happy to make that change in that document.

Burkhardt referred to the Draft Purpose and Need slide and commented that there are a lot of words on here, so the comment period is open, as he said, through August 15th. He stated that this is a living document that evolves as understanding evolves through the comment period.

Burkhardt stated that the next part of the slide is about something you are all familiar with; the study is identified as a Planning and Environmental Linkage (PEL) Study; the intent of which is to, as a project for Mr. Emery in the Environmental phase to be able to use the work we are doing now in the environmental document. He said that there are a lot of ins and outs to that, and technicalities, depending on lead agencies; Minnesota or North Dakota, complying with the federal process. He explained the summary that we have is for an informal PEL process, North Dakota does not have a formal PEL process and North Dakota is the lead agency when it comes to that issue; Minnesota does have a formal PEL process which goes well beyond the steps we are taking in this study so they have had conversations just to clarify what we are doing and how the study relates to those two states and their processes, and this has come up, in part related to the last bullet, which is where we are asking, as part of a formal PEL or NEPA process, there is an opportunity to ask and get input from all the ranges of environmental agencies and we are doing that and for those of you that have been advising on that he is about to send out that request, but then the question is how does that relate, what is the process that is feeding back into.

Williams pointed out that it says that NDDOT is the Lead Agency; who is the main contact person, is it the Lead Agency or is it going to be the Lead Agency. Zacher responded that NDDOT is the Lead Agency and since he is the MPO Coordinator, he would be the main contact person. He explained that it is a study, so it is still going through the MPO, but NDDOT is the Lead Agency for the Bi-State MPO. Williams asked if there might be somewhere in the document that we can summarize what the differences are between the two agencies so that the public and everyone will know what they are that we could cut and paste in the document, even if it is a chart that says yes and no and what the different things are that are covered. Haugen responded that there isn't anything that exists that compares North Dakota to Minnesota so that would have to be created. Williams asked what more do we need to do to make this okay for both agencies. Haugen responded that the short answer is that essentially North Dakota has to approve a formal PEL process, and we have discussed this internally with NDDOT, and we are where we are. Burkhardt added that they are doing as much as they possibly can to try to make this study compliant and therefore valuable and to not have to repeat the work if we were to go into the environmental process, but because it is not an official PEL process there is no sign-off that guarantees that and he thinks, unfortunately, that is the best we can do and this is not the only study or agency, it is an age old process with NEPA and the PEL process tries to improve on that and in the formal process it does but in the informal process it is better but there is still some risk of having to go back on some things in the NEPA process.

Mason said he had a question about the letters. He said that he knows MnDOT provided some revised sample language, and he is just curious if the letters being sent out will be including that language or what is the final plan for those. Burkhardt responded that they will, and added that Mr. Mason might have also answered his question which was does he bother you all who were in that loop with another review; he has a draft ready to go out so why doesn't he send that back out to the group to look at it again and make sure you are okay with how they addressed that.

Burkhardt commented that one thing he wanted to say as he reviews this and thinks back to that public involvement is, actually two things he wants to say; 1) as you may have noticed, while we

have this information on how the different alternatives perform, what we don't have yet and haven't done yet is a really nice concise comparison or evaluation that summarizes no build versus Elks versus 32nd in terms of performance and some of the other criteria, so that is coming next so if you are wondering how does this compare, that is coming and he just wanted to share that; and 2) between the information that we have on the intersection level of service performance and the graphics is ultimately how we judge the performance from that engineering traffic professional perspective. He added that they also have a bunch of graphics that show the forecast change in traffic volumes. He said that they are very interesting, and the public will either like or dislike them depending on the answer they are interested in, but they are interesting. He stated that he does want to work on them a bit when we get to our public input phase because as you see 3,000 vehicles more or 1,500 less it is hard for people to know what that means and they assume that 3,000 is very bad and results in something negative, and it might for them personally, but again if you look at performance from a level of service perspective and how we intend for that street to operate those are different so he just wanted to preempt that as you look at those graphics, that is certainly something that comes up; which is more important and what does that mean so that is what they will be interpreting that when we do the comparison that is coming up. Williams asked if the actual numbers can be put in when the final report is done rather than over 3,000 or under 3,000, are we talking 10,000 or are we talking 3,001 type thing. Burkhardt responded that he thinks that that would be a good addition. He added that Mr. Kondziolka and himself had talked about that even the weighting of the lines, while kind of useful it is also a little bit, like in the case of that 3,001, it could exaggerate so they had a version of these with colors and not weights, and he thinks they will do a different version of these for the public, and yes, the numbers is another good thing.

Kondziolka stated that he is going to discuss the Future Build Alternative Traffic Operations Analysis. He added that this analysis is for the Elks Drive and 32nd Avenue bridge options, these are looking at the years 2030 and 2045, as the no build analysis also did. He said that they are looking at both segment and intersection performance in terms of traffic mobility, and then they also conducted warrants and analysis for traffic signal warrants and for all way stop control warrants with this analysis and then after concluding that looked at mitigation options for the different scenarios at locations that were expected to operate unacceptably.

Kondziolka said that, as Mr. Burkhardt just stated we are going to go through the volume changes, and we have an exhibit showing the difference for each of the Elks Drive and 32nd Avenue bridge options. He noted that these show the difference between the no build and the bridge alternative volumes for the same year, so this is 2030 no build versus the Elks Drive 2030 and then for the 2045 no build versus the 2045 bridge alternative.

Kondziolka stated that these graphics are really just showing what our anticipated differences in traffic volumes along this network are with each of the alternatives as compared to the no build option. He said that as you can see, and as expected traffic on the northern portion of the study area is anticipated to be reduced while we are increasing traffic around the bridge on the southern portion of the area, and so we can see some more significant reductions along DeMers and 4th and on Washington Street and then increases are taking place on the southern section so 32nd and 24th and then across the bridge.

Kondziolka commented that these somewhat speak for themselves, so he won't go into too much detail on them but the big takeaway for all of them is kind of more so after we look at the difference between the Elks Bridge option and the 32nd Avenue Bridge option. He pointed out that the Elks Bridge option has a little bit more of a balance between 24th and 32nd and between Greenway and 190th, so given the location of the bridge being slightly further north than the 32nd Avenue Bridge there is a little bit more of a balance in terms of traffic volume draw whereas the 32nd Avenue Bridge option does concentrate more on the traffic that is shifted off the northern roadways to the more southern roadways so to 32nd and to 190th as compared to the Elks Drive Bridge option. He said that if you go to 2045 you will see a similar pattern.

Williams stated that she has one comment, and you kind of touched on it; but in your slide it says what the slides actually are, they are forecasted volumes and then the differences between them, and she but she doesn't think that really comes across on these slides; it says forecast volumes changes between no build and build for 2030 or 2045, depending upon, could you actually make the title of the slides say that. She explained that she asked somebody about this, and they said that they couldn't figure out what this was, just based on that title. Kondziolka responded that he can, just to further clarify that it is a comparison of forecasted volumes. Williams said that would clarify that you are comparing the no build and its volume changes and such.

Kondziolka referred to the 2030 Elks Drive Bridge option slide and stated that this is a similar presentation to the no build synopsis we went through previously. He said that in terms of, and he guesses these graphics more so, the graphics on the left are kind of summarizing everything we have found for the mobility and congestion analysis, but for the Elks Drive Bridge option we have in 2030 none of the roadway segments, which would be colored green to red are operating at an unacceptable level so the orange or red would be considered unacceptable, however there are multiple intersections that are expected to either fail at a Level of Service F or approach capacity so the orange or yellow intersections are approaching capacity and those that are red are expected to exceed capacity. He added that a big disclaimer for this analysis is that this is all done assuming just traffic growth but no changes to the traffic control, these are the existing conditions in terms of analyzing future volume with turn lanes and traffic control that is currently out there plus any programmed improvements, so similar to the no build scenario.

Kondziolka stated that, just a note on the Rhinehart and Bygland intersection they evaluated that as they did in the no build, with both with the existing traffic control and with the proposed round-about control. He said that it is shown with the hatch marks there because we have two different sets of results that are expected to operate acceptably with the round-about but would have issues without it.

Kondziolka said that looking at the 2045 Elks Drive Bridge option you will see similar results, you might have noticed the intersection at Bygland and Greenway had a star previously, but it went away here and that is because it was analyzed with the programmed traffic signal that is expected by the Year 2045. He stated that is the biggest change here; we see a little bit of yellow on Washington Street, so there are slightly degraded operations but still operating within what is considered acceptable, and then we have kind of a concentration of intersections that are

operating above capacity or would be expected to operate above capacity near Elks Drive at Belmont and then 32nd at Cherry and Belmont as well.

Kondziolka said that moving on to the 32nd Avenue option, going through it similarly, again we don't have any roadway segments that are expected to exceed capacity of function, no orange or red for the roadway segments, however we do have a few intersections that are expected to exceed capacity; again at Cherry and 32nd, Belmont and 32nd, Greenway and Bygland, and at 4th and Belmont and Bygland and Rhinehart.

Kondziolka commented that in 2045 we see similar conditions; the same condition for Greenway, the traffic control was changed to a signal, so the traffic control issue goes away. He said that there is an additional intersection at Washington and 32nd that will be expected to reach Level of Service E and D at peak hours.

Williams stated that she thinks that maybe by actually putting the numbers on the streets, the volume numbers, it will make it clearer but it is showing that Belmont and 4th isn't improving above a Level of Service E with the new bridges, and she is sure that is based on some of the existing numbers and it just doesn't improve it enough, but she is wondering if even with the new bridge it will still be at that level because she thinks the neighborhood in that area is expecting to almost have all the traffic go away so she doesn't want them to get their hopes up that all their problems will be solved, so maybe just an explanation can be put in when you do the analysis you said you will be doing so they know that even though the traffic will be reduced it will still not bring it to an acceptable level of service. Kondziolka responded that that is accurate and this again is the unmitigated scenario, so without any changes, this is an all-way stop intersection, so without any changes, looking out to 2045, even with a new bridge, the traffic growth that is anticipated it would still result in failing operations at that intersection, so that would be a location where we would want to recommend some kind of intersection improvement no matter what the scenario is, that would be between the no build, the Elks Drive Bridge or the 32nd Avenue Bridge that intersection would require some type of improvement by 2045. Williams said that that would probably answer the questions the neighborhood might have. Burkhardt added that the point is that the all-way stop control can only do so much, so it is partly what you would like it to be, or what makes sense from an engineering standpoint, what that four way can actually do.

Kondziolka said that the next piece of this analysis was to look at, for each of the intersections that had unacceptable operations, or a Level of Service E or F, the did a warrants analysis, so this is looking at either warrants for installing a traffic signal or there are also warrants for installing an all-way intersection control if you are looking to move from a two-way stop or side street stop and going to an all-way stop control. There aren't specific warrants for a round-about because round-abouts can be considered anywhere regardless of volume conditions, round-abouts are considered as a potential mitigation option and there are not specific warrants. He said that in looking through this, really the primary information here is not whether warrants were met, so we are mostly summarizing here for the intersections that reach unacceptable levels by 2045 for each of the scenarios, what are the potential options that we should consider for mitigation, and for most of these we will see that both a signal or all-way stop control would be able to consider

based on traffic warrants; but at a couple of these intersections there were no warrants met, specifically the 4th and Belmont, as we were discussing under the Elks Bridge and 32nd Avenue Bridge alternatives, and that really is probably an important point relative to the previous comment, the volumes do change there, the volumes are reduced at that intersection however it is still expected to operate poorly and this kind of exemplifies that there are volume changes with those bridge scenarios but not enough to correct operations without additional mitigation.

Williams commented that, just a little information, you probably didn't gather these counts because of various different things that we have not been able to get really good counts, but Belmont and 4th does warrant a traffic signal if you use the school crossing, so it does meet a warrant. She added that she is sure they will look at that with the pedestrian thing and all that, but she can verify that it does meet that warrant. Kondziolka responded that that is probably an important point of verification, there are nine warrants that can be considered and for the purposes of this analysis some of them are more unique to particular applications, the volume based warrants are what was analyzed for this study here so this is looking at just turning movement volumes, that is warrants 1, 2, and 3, there is a slow base warrant and that may be met here as well. Williams asked if that also applies to Cherry and 32nd. Kondziolka responded it does.

Kondziolka stated that the Mitigation Analysis Methodology is just kind of an overview of what the process was to establish a hierarchy or process of looking at the mitigation in order to look at these consistently and in order to select an option consistently. He said that the outline of this process for identifying mitigation was to first look at just what the addition of turn lanes could do without a change in traffic control, so just adding turn lanes to improve conditions. He stated that the next would be if we are starting from a side street stop condition to convert to an all way stop control if all of the acceptable warrants are met and then to add just the minimum turn lane additions that would be required to reach acceptable operations. He said that if that wasn't enough to reach acceptable operations the next would be to convert to signalized control with minimum turn lane additions, and then finally converting to a single lane roundabout was the last step in the process, and these are really looking at what is the minimum amount of mitigation required in order to reach acceptable operations and to most cost effectively mitigate the intersection. He added that that is the general methodology, there were some additional considerations for locations near schools on 4th and Belmont and 32nd and Cherry where we know the pedestrian crossings are a priority and for crash issue intersections.

Kondziolka referred to the Mitigation Summary slide and commented that there is a lot going on so he will just kind of walk us through what they are showing in the table. He said that for each of the scenarios they are showing what, at each intersection that had unacceptable operations into the future, type of level of service and which warrants were met for that intersection. He added that there are a couple of columns for school adjacent and then for identified crash issues, which is what he was just discussing; those are locations where we took in additional considerations outside of the hierarchy in that step wise process where we are evaluating potential mitigation functions.

Kondziolka stated that the next column of acceptable mitigation control options, this is of those options that were warranted, which of them resolved the intersection to an acceptable operation, so only those that were able to be effective enough to reduce local service below a level E are shown in that column. He said that the last three columns; that last section, the assumed mitigated control option is the option that first satisfied the criteria in the hierarchy we discussed, so this would be the option that would effectively mitigate and would be the first to achieve acceptable operations on the list of four steps.

Williams commented that, in our transportation plan we have Level of Service C as the Level of Service we want to achieve. Haugen responded that that isn't correct. Williams asked if we are going for a Level of Service D in this study. Haugen responded that our transportation plan now has a Level of Service D as the level we want to achieve.

Burkhardt stated that that is it in terms in their presentation today, but again, next steps, in terms of their work will be that comparative evaluation really summarizing, there isn't a lot of new technical information on the traffic side but summarizing that so we can see it as a side by side comparison and then bringing in some of the other factors in terms of environmental issues. He added that they will also be creating some graphics illustrating these alternatives, in particular the crossing itself on the intersections, they will do those in a concept drawing and then a map that also summarizes the mitigation that would be needed that would go along with each of those options including the no build to make them whole to address any intersection or operation issues.

Williams said that she thinks we are all aware of this, but it is very confusing for some people; when we are talking about traffic and vehicles, we are only doing this for passenger type vehicles, right, this is not for trucks, or is it going to be for trucks. Haugen responded that for the bridge itself the concept has always been described as mimicking or mirroring the Point Bridge. Williams said that she actually had somebody ask her that question and they were getting all upset that there were going to be trucks running through there, so if we just iterate this at the beginning, that we are talking about passenger vehicles, she thinks that would cut out a lot of comments. Burkhardt suggested maybe calling it a local bridge with passenger vehicle traffic. Williams added that you might have to carry that over from one memo to the next, and repeat it, but she thinks it will sooth some ruffled feathers. Burkhardt agreed that we should repeat that everywhere. He added that he is hopeful that their illustrations of the bridge will help people see that it is like the Point Bridge and not like an interstate or multi-lane bridge.

Burkhardt asked if there was anything else that Mr. Haugen would like to add. Haugen commented that he thinks we need to establish some deadline for Technical Advisory Committee on Tech Memo 3C, it is in draft form, and we have had some comments today, and he would ask that any other comments you may have on it be submitted to staff by Friday, August 20th. He added that the Open House Comment period is open until August 15th, so at our next Technical Advisory Committee meeting we should have more or less a cleaned-up Tech Memo 3C and then the results of our initial public engagement process to report. He said that he isn't sure if Alliant has another work item to present as a draft to us then as well. Burkhardt responded that he can't quite answer that but he thinks we are at the point where, given where we are at the end

of year, and our next public engagement he want to move us on relatively quickly, at least from a technical standpoint now that we have the traffic information established to do the concept drawings and the evaluation, whether that will be ready in advance of next months meeting, probably not, but he will lay out the schedule to get to that detail. He added that we also have the next Ad Hoc meeting in there as well.

Information only.

MATTER OF FINAL FY2022-2025 T.I.P.

Haugen commented that we did advertise a public hearing for this time and date and we allowed people to provide written comments prior to it, there is no one in the audience today and we did not receive any oral or written comments prior to the deadline.

Haugen stated that included in your report is the full draft that was out for public comment. He said that since then we did have some comments from MnDOT and then also a couple things on the North Dakota side that we will cover in our discussion.

Haugen said that if you noticed, the T.I.P. looks considerably different than in the past, MnDOT and North Dakota provided a template for us to use to help improve the document, and we did the best we could to implement it. He added, though, that there are still a lot of comments on how we can improve it, there is, though, one specific comment as it relates to the actual T.I.P. tables themselves that MnDOT expressed we needed to address; a lot of them centered on transit on the Minnesota side. He said that he knows that Ms. Ellis and MnDOT were trying to have a conversation on this. Ellis responded that she hasn't heard anything from MnDOT yet.

Haugen stated that the difference that is going on, as you can see, is through the T.I.P. process there are several iterations of cost estimates that take place, and, he doesn't remember the exact date, but sometime in July he believes, the two transit operators finalized their cost allocation model that showed how they were splitting out costs between fixed route and demand response, that changed the numbers one more time, and so what was shown in the public document for review were the 2020 cost estimates from the Cities Area Transit showing primarily increased costs in demand response; if you would have seen these numbers last year you would have seen less dollars going into demand response than you would have fixed route, and then the out years are then taking this 2020 as a base and year of expenditure and inflating them out to 2025. He said that MnDOT is asking us to consider not using this cost allocation model, but he believes a reflection is more accurate using the current T.I.P. dollars, because if you look in 2023 and you see the numbers they have listed underneath, those are the numbers that are in the current T.I.P. document versus the numbers that we were deriving using the latest cost estimate. He added that he isn't sure there is an opportunity between now and the MPO Executive Policy Board meeting next Wednesday to iron out these differences.

Haugen commented that there were a couple of other projects; the first one on the Minnesota side is a project that they term ELLA, a MnDOT acronym for Early Let Late Encumbrance, so the project is actually taking place right now, physically out there you will see it in 2021, but the

financing year is 2022; the numbers that we show are the numbers that were in the current T.I.P. document and we didn't convert them to the actual let amount and MnDOT has informed us what those amounts are.

Haugen stated that the next project is the Roundabout, and our current T.I.P. document, and the past three T.I.P. documents have shown this cost estimate which includes things other than construction and he believes MnDOT is asking us to just use construction costs.

Haugen said that those were the principal comments that MnDOT wants us to address in this document, they have a lot of other editorial improvements and suggestions that are under consideration as well.

Haugen stated that on the North Dakota side; you noticed in the Draft T.I.P. that was out, and last year we started to have grouped project listings for the right-of-way, preliminary engineering, utilities, in the draft that was out for public comment; those cost estimates are still blank although he believes North Dakota has the numbers calculated now, and will be sharing them with us soon but they were not available in time to meet the publication.

Haugen referred to a table and commented that this is the Fiscal Year 2022, and these are the four grouped project listing that you can see we have "x's" in the columns for now so we will have to amend the T.I.P. once those numbers do come in. He added that they are aware that there is a bit of a lag from when we adopt the T.I.P. this month and when we can first offer amendments to both States, and the Feds have to get funds transferred from this year's T.I.P./S.T.I.P. into next year's T.I.P./S.T.I.P. before they want to start adding in amendments, so it will be a couple of months, so shooting for November.

Haugen commented that the NDDOT also recently identified a project that wasn't previously known, it has to do with revamping the lights on the Interstate System and there is one system at the 32nd Avenue Interchange that is included in their Statewide, so we have that as a new listing and it will require more public involvement, so the will add that in as well in November, it is a total of $10,000 with a 90/10 assumed split.

Haugen stated that the last project that North Dakota commented on is a high tension median cable guardrail on I-29, it is a total dollar amount, it isn't broken down into just our MPA area that he is aware of, but the previous cost estimate was $4.1 million and that is now at about $4.4 million. Zacher commented that he didn't calculate in the MPA area he just sent the overall project so we have to figure out and come up with a ratio what is in the MPA. He said he wanted to make Mr. Haugen aware of the project because it was listed from Fargo to Grand Forks at one time but they actually split it out into a number of projects. Haugen stated that the cost increase doesn't reach our threshold of requiring additional public comment so we can take action without needing additional public comment.

Haugen said that he isn't aware of any other comments particular to the T.I.P. listings themselves and he would like to thank everyone for getting their projects to the MPO. He stated that we do have this item before us of what, as a staff and Technical Advisory Committee would we

recommend for the Minnesota T.I.P. tables regarding transit. Mason said he has a question on this; you mentioned that you have this question out here and you question that there is enough time to have it all ironed out before the Board meets, and he thinks you know a little bit about how MnDOT adopts its transit, it is more or less kind of the MnDOT face for the programming working with the transit operator and the MPO, so he is curious what you might need from him or maybe Anna Pierce or maybe specifically our Transit Office to resolve any questions lingering concerns. Haugen responded that his first reaction would be to ask why wouldn't we use the cost estimates that the two transit operators will be using for their cost, their contractual obligation, one towards the other and then inflate that for year of expenditure, and if Office of Transit is not willing to identify at this time any additional State Award that we would use the current State Awards that is in our current T.I.P. for those out years and just increase the local match and know that this is an annual update that at least the 2022 is reflecting what is identified as the best cost estimate between the two entities. He added that he isn't sure what else we can do on that end. Mason responded that it is sort of out of his wheelhouse with the demand response model and year of expenditure things that you guys have in to play; he would like to see this resolved, do we need to have another meeting with MnDOT's Office of Transit, the MPO, and Ms. Ellis. Haugen responded that, again, that has been asked for. Ellis commented that she did visit with Vonnie, her project manager, and based on the 2022 she was told that even though we are using our NTD cost per passenger for Dial-A-Ride, that was a five year estimate, and then based on our predicted ridership, at this point in time their applications were only accepting what our cost was, what was in the T.I.P. last year at a 2% increase, so that was what she was told as far as 2022, so she can't figure out why 2023 was less, or at a smaller amount, and that was what her questions are. She added that it looks like a 2% increase after that, but 2023 went down from 2022, which was less than what they asked for in their application to begin with, and then it shows no local match and so she is trying to flesh out where they got their numbers and why they are the way they are because when we do our reporting we have to report actuals so she doesn't understand why if we have to report actuals they aren't using actuals for our application. She added that she hasn't had a chance to catch up with Vonnie to discuss this yet.

Haugen referred to a slide and commented that he has blown it up to illustrate the difference between what the public comment T.I.P. was at and what MnDOT is requesting us to consider. He pointed out that for the fixed route there is just a difference of a decimal point or rounding factor, for the total cost there is no change in the federal or the other for fixed route; where it comes into play is on the demand response and you can see that it is a roughly $25,000 difference, and then there is no number that tells is how, backing up here, on the Minnesota side federal funds aren't used on the demand response side, and so it is either funded using a split of state funds and local dollars and MnDOT is identifying one number and so it would be nice that if we are going to agree with the $117,045 that we also agree to the $108,000 and the $10,000. Pierce stated that she can explain the one number; they only have one number in their A.T.I.P., and it is just listed as "other" and in your document you seem to break it out there with the local split and they don't have that in their document so she doesn't know what that would be and that is why she leaves it up to you to fill it out so whenever in any of these columns it says other and local and they are crossed out and there is one number underneath it is the total between those two so it is however your split is done. Haugen explained that to give a history of why this "other" is not under the State is because the District, awhile ago, wanted the State funds to only

reflect highway dollars and any other State funds were to be reflected under "other", and then you see the note under remarks that it is transit.

Haugen pointed out that you will notice that the big difference comes in at about $100,000 on the fixed route. He stated that this number is reflecting the new cost allocation in 2022 at $550,000; in 2023 they are asking us to use a $620,000 estimate, which is what the current T.I.P. has for 2023, but we are trying to use a new year of expenditure estimate based on the 2022 project cost. He stated that the demand response gets even less than it is in 2022. Ellis said that the question is that it gets a little confusing for her as to what she should be applying for, should she be applying for the numbers that you are putting in the T.I.P., or should she be applying for the numbers that they are actually getting in their cost allocation models because she is kind of at a loss. She added that there are ways that they can report differently to get their numbers closer to the demand response service in the T.I.P. and the fixed route, because right now she is splitting her salary between the two and she is splitting training and other items between the two so if their fixed is going to go up quite a bit more than that percentage, based on what their cost allocation model is, is this something that you want her to charge admin all to one and not the other, so there are just a lot of things that she doesn't know until she sees the numbers and then she kind of doesn't know where the numbers are coming from, not that she isn't okay with it, she is never going to say no to the numbers she is receiving because she doesn't want to say no to funding, she just doesn't know what she is supposed to do with the changes. Pierce responded that she apologizes, she doesn't know specifics on what you should be reporting or how you should be breaking out that funding that is a Vonnie and Office of Transit specific question and coordination; just when she spoke to Vonnie about the discrepancies between the T.I.P. and the Final A.T.I.P. numbers she had just said that even though you had applied for $147,000, here, for the demand response you are only going to get $115,000 so wouldn't it be better to show the lower number of whatever the lower number is and she said that she wasn't totally sure and then Vonnie said to put it in that way, so she said she would bring the issue up, but she thinks we can have a conversation in the next couple of days and she would hope we can get this ironed out so she would suggest Earl, Nancy, Vonnie and Jon and herself just sit down so we are all on the same page. Ellis responded that she understands how she got it, it is actually $117,000, she understands how she got that she took the last T.I.P. amount and then took it times a 2% inflation, which is what they said they were looking at on the application, she still applied for what she think she needs, that is what you should always be applying for rather than just taking your last number and taking it times 2% because you really don't have a way to justify getting that number compared to what your actual statements are, that being said she gets where the number is but then she doesn't understand why then in 2023 it actually goes down $2,000.00, and how you're getting that number, but then the fixed route is going up quite a bit, so those are where her questions are, it's not so much, she gets this is what we're giving you based on this answer for next year, its kind of the out years and how you're getting those numbers and how we're going to move from here, so she kinds of knows if we should be adding money to the local part of it or what we should be doing, that is where her confusion is. Pierce stated that she completely understands your confusion, because she honestly doesn't know so she will have to follow up with Vonnie on the specifics here. Ellis said that she is out next week, unfortunately, so if we are going to tackle this it would have to be by the end of this week or we may just have to have the Board approve it and then knowing that 2022 is what they are going to give me a

contract for and look to change the out years after that November time period because she doesn't know if we are necessarily going to get an answer or change before next Wednesday. Pierce responded that she will send an e-mail out to see what peoples availability is for tomorrow and Friday.

Haugen commented that a recommended motion would be to approve the Draft T.I.P. as submitted with the North Dakota side cost for the tension guardrail increase from 4.1 to 4., to identify that some amendments are necessary for the group projects once the cost estimates are provided, and then also for the timeframe for the light project on 32nd Avenue Interchange to be amended; and on the Minnesota side to accept the ELLA actual let amounts, identify only the costs only for the roundabout, and to ask MnDOT, the Transit Operator, and MPO to work out the transit issues before the MPO Board meeting.

MOVED BY ELLIS, SECONDED BY WILLIAMS, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE FINAL DRAFT FINAL FY2022-2025 T.I.P., SUBJECT TO THE NORTH DAKOTA SIDE COST FOR THE TENSION CARD INCREASE FROM 4.1 TO 4., TO IDENTIFY THAT SOME AMENDMENTS ARE NECESSARY FOR THE GROUP PROJECTS ONCE THE COST ESTIMATES ARE PROVIDED, AND THEN ALSO FOR THE TIMEFRAME FOR THE LIGHT PROJECT ON 32ND AVENUE INTERCHANGE TO BE AMENDED; AND ON THE MINNESOTA SIDE TO ACCEPT THE ELLA ACTUAL LET AMOUNTS, IDENTIFY ONLY THE COSTS ONLY FOR THE ROUNDABOUT, AND TO ASK MNDOT, THE TRANSIT OPERATOR, AND MPO TO WORK OUT THE TRANSIT ISSUES BEFORE THE MPO BOARD MEETING.

Voting Aye:	***Peterson, Ellis, Emery, Williams, Mason, Zacher, and Bergman.***
Voting Nay:	***None.***
Abstain:	***None.***
Absent:	***Kadrmas, Brooks, Bail, Halford, Hopkins, Johnson, West, Magnuson, Kuharenko, Riesinger, and Christianson.***

MATTER OF APPROVAL OF FTA 5310 ND SIDE CANDIDATE PROJECT

Kouba reported that prior to June the NDDOT had been receiving emergency funds through the CARES ACT and America Rescue Plan and various other COVID related bills and new funding sources, so they decided to, in June, put out a solicitation under the 5310 Program, which focuses on the elderly and individuals with disabilities. She said that there is a bit more focus on certain groups of people who need extra transportation so Cities Area Transit put in an application for the Mobility Manger position for those funds, they put in for both wages and benefits, and with these funds it would be 100% federally funded so there would be no local match required.

Kouba commented that the T.I.P. you just approved does show partial funding for this position with previous 5310 funds, so we would be looking at moving the actual spending year from FY 2022 to FY 2023. She added that the timing overlaps the adoption of the FY2022-2025 T.I.P.

and the actual award of this candidate project so if we are awarded the funds, we will need to do an amendment to the T.I.P. at a later time. Staff is looking for approval of the application.

Bergman stated that just as a reminder those previous funds we applied for were 2020 funding. Kouba added that it was an 80/20 split for the previous funds. Bergman said that after talking to the NDDOT, they had mentioned that the CRRSAA funds are ARP funds.

Haugen stated that we are recommending approval of the regular funding at 80/20 that is shown in the T.I.P. as having already been awarded to us and available, and we are taking action now on saying that this candidate project is meeting our local plans and is a priority, and it will go into the hopper and whatever award announcement is, if any, we will have to revisit our T.I.P. to show the new award and how it may or may not adjust this award, so today's action is purely on whether this is a candidate project that meets our plan and is a priority.

MOVED BY WILLIAMS, SECONDED BY ELLIS, TO APPROVE FORWARDING A RECOMMENDATION TO THE MPO EXECUTIVE POLICY BOARD THAT THEY APPROVE THE CITIES AREA TRANSIT FY2022-5310 MID-YEAR GRANT APPLICATION AS MEETING OUR PLANS, AND TO GIVE IT PRIORITY RANKING.

Voting Aye:	***Peterson, Ellis, Emery, Pierce (Proxy For Mason), Zacher, Williams, and Bergman.***
Voting Nay:	***None.***
Abstain:	***None.***
Absent:	***Kadrmas, Bail, Brooks, Halford, Mason, Hopkins, Johnson, West, Magnuson, Kuharenko, Riesinger, and Christianson.***

MATTER OF WORK PROGRAM DISCUSSION (POSSIBLE AMENDMENT TO 2022 WORK PROGRAM)

Haugen reported that this is an informational item. He stated that last month MnDOT announced that there was this August redistribution of funds, that if they weren't going to be used in Minnesota they would be turned back, so a request went out to all MPOs asking if they had any use for additional funding. He said that the original request was based on the original distribution formula for the planning funds in Minnesota so our initial award was around $300.00. He added that originally the timeline was to have the Technical Advisory Committee and the MPO Executive Policy Board vet this through our August timeframe, but due to the short timeframe it ended up that some of the Minnesota MPOs did not have as great a use or need for the funds so our amount ended up being closer to $25,000 and the timeframe changed to the end of July so the MPO Executive Policy Board acted on this in July and so our work program has been amended and it is adding $25,000 to the revenue. He added that to show the use of the funds in the easiest and quickest manner, that staff identified, we placed it all in increasing the consultant costs for the Bike/Ped Plan Update, and that action has been taken, submitted to the State DOTs, the work program amendment has been approved and the money has already been requested for transfer so that amendment process has all been taken care of. He said, then, that we have additional funds and we currently have it in the work program that it would go toward

consultant costs for the Bike/Ped Plan, however since then there has been some discussion on the Minnesota side whether we should take on another study on the transportation networks in the Industrial Park area, but to be fair, if there are any other studies that people would like us to consider, and again there is only $25,000 so it won't go far unless someone wants to augment the funding with more local dollars, let us know as soon as possible. He added that if we don't hear by the end of this month, and East Grand Forks formally submits a request, then we know what we will be working with. He thanked MnDOT for the additional funding.

Zacher said, just to give an update on where this funding is at, his understanding is that it has gone from Minnesota Federal Highway and it is on its way to North Dakota Federal Highway, but they haven't been told that that money is there yet so that is where they are sitting at right now, waiting for verification from North Dakota Federal Highway that the funds are there. Haugen commented that we aren't going to be able to spend it until 2022 so there is time to get it to North Dakota.

Haugen explained that if we are going to do another study with these funds that will require another work program amendment process, so that takes 30 days, 60 days to process depending on the study involvement and everything else; so it isn't just let's do a study and we do it, we have to go through a formal amendment process to make it happen before we can start soliciting any responses to a study.

Information only.

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
5) Transit Development Program Update

Haugen reported that we do have all the work program activities currently underway; we have a signed contract for the Transit Development Program Update and the consultant is scheduling some initial meetings soon. Kouba commented that she will be talking with the consultant this week to get together a list of people they want for staff for this project and then they will decide how they will move forward with the update.

Haugen stated that he would encourage those that can to take a look at the two websites for the Land Use Plan Updates, there is lots of good material on there.

Information only

B. 2020 Census Update

Haugen commented that, just as a side note, tomorrow the redistricting census data from 2020 is being released so we will be getting our first initial glance at what the Census says our population was in 2020 and compare that to our current estimates and our current forecasts in the Land Use Plans. He said that East Grand Forks is sort of centered on an annual increase of 0.75% per year and Grand Forks is looking at roughly 1% currently as annual growth out to 2050, but we will see what the 2020 Census identifies tomorrow.

Information only.

ADJOURNMENT

MOVED BY ELLIS, SECONDED BY BERGMAN, TO ADJOURN THE AUGUST 11TH, 2021 MEETING OF THE TECHNICAL ADVISORY COMMITTEE AT 3:29 P.M.

Respectfully submitted by,

Peggy McNelis, Office Manager

MPO Staff Report

Technical Advisory Committee:

September 8, 2021

MPO Executive Board:

September 15, 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 3C, which focuses on the Future Build (added bridge at either Elks or 32nd) traffic operations.

The second focus will be on the details of the first general public wide engage opportunity between July 27th with open comment period which lasted until August 15th.

The next Ad Hoc Group meeting is scheduled for Friday, September 17th starting at 12:30 to 2:00 pm. Location to be determined.

Findings and Analysis:

- NONE

Support Materials:

- Presentation.
- Revised Tech Memo on Build Traffic Operations.

Future Bridge Traffic Impact Study

TAC Meeting #7

SEPTEMBER 7, 2021 (1:30-2:30)

Agenda

TIME	TOPIC
1:30	Welcome and Introductions (Earl Haugen/Tim Burkhardt)
1:35	Schedule, Tasks and Deliverables Update (Tim Burkhardt)
1:40	Updates • Summary - Public Open House #1 • Tech Memo 3C - Revisions
2:20	Additional Questions/Discussion
2:30	Rest of TAC Agenda

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											

Meeting	Date	Agenda/Deliverables	Draft to MPO	MPO Sends Out
TAC #7	9/8	• Final TM 3C (response to comments) • Open House summary	8/30	9/3
Ad Hoc #4	9/17	• TM 3C • Open House summary • Possible draft evaluation matrix and sample concept drawing depending on timing	9/9	9/13
TAC #8	10/13	• TM #5 (Layouts) • TM #6 (Evaluation Results + Cost) • Final Purpose and Need (public/agency comments?)	10/4	10/8
AD Hoc #5	Mid to late Oct	• TM #5 (Layouts) • TM #6 (Evaluation Results + Cost)	TBD	TBD
Open House #2	Late oct/early Nov	• Alternative Concepts and Evaluation Results	TBD	TBD
TAC #9	11/10	• Finalize layouts and evaluation results • TM #7 – Implementation Plan	11/1	11/5
Ad Hoc #6	Mid to late Nov	• Final concepts and evaluation results • Implementation plan	TBD	TBD
Open House #3	Late Nov to early Dec (combine OH and Ad Hoc?)	• Final concepts and evaluation results • Implementation plan	TBD	TBD
TAC #10	12/8	• Draft Report (final will be via email)	11/29	12/3

Tasks & Deliverables Status

Task	Completed Deliverables	In Progress	Upcoming
1. Project Management	TAC Updates 1-6	TAC Update #7	Monthly TAC Updates
2. Public Involvement	Public Involvement Plan Ad Hoc Group 1,2,3 Public Event #1	Maintain Web Site	Ad Hoc Group #4 (9/17) Public Event #2 (Oct?)
3. Existing and Future Conditions	Tech Memo #2		
4. Traffic Analysis	Tech Memo #3-A, 3-B	Tech Memo #3-C	
5. Issues and Needs	N/A	Draft Purpose and Need SOV Letters	
6. Alternatives Development	N/A	Alternatives Development	
7. Alternatives Evaluation	N/A	Alternatives Evaluation	
8. Implementation Plan	N/A	N/A	
9. Study Report	N/A	N/A	

Summary - Public Open House (Online)

Public Open House (Online)

What We Did

- Shared study background and goals
- Shared Draft Purpose and Need and No Build Traffic and Safety information
- Got input on both

Public Open House (Online)

What We Did

- Advertising
  - Public notice (5 days in advance), MPO and project email list, Facebook Ad, Both Cities Social Media sites, Asked Ad Hoc members to share with respective organizations and groups
- Host on project web site (Social Pinpoint)
  - Open for comment for 3 weeks (July 26-August 23 - kept open an extra week)
- Live online presentation (Tuesday, July 27, 6:30-7:30)
  - Accept input via chat and facilitate discussion
  - Recording of presentation was available for 3 weeks

Public Open House (Online)

Participation

- Live Online
  - Low - 13 participants (2 Ad Hoc Group members)
- Web Traffic
  - Good – see table
  - 40 have viewed the recording of the presentation.

WEB TRAFFIC	Before (7/26)	During (as of 8/9) *This data was shown at previous meeting*	Final (as of 8/23)
Total Site Visits	2,186	3,512 (+1,326)	6,605 (+3,093)
Unique Users	445	747 (+302)	1796 (+1,049)
Survey Responses	--	23	301 (+278) *Includes email sign-ups*
Map Comments	--	27	48 (+21)

Public Open House (Online)

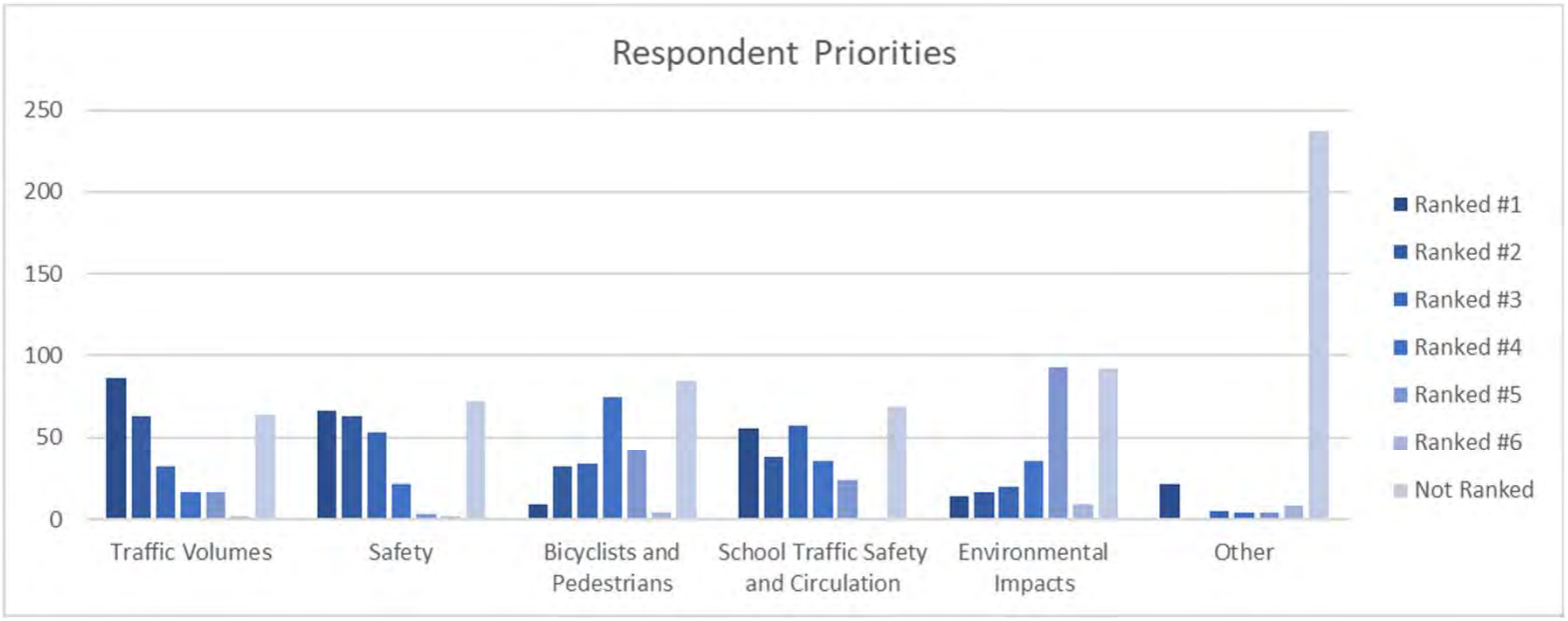
Discussion/Comments

- Live Event
  - Understanding of traffic forecasting, safety methodologies; why are we not studying Merrifield (a few comments)
  - 32nd Avenue traffic increase, school crossing safety and traffic flow, residential street/driveway/access (most comments)
- Online
  - See next slides

Public Open House (Online)

Priorities

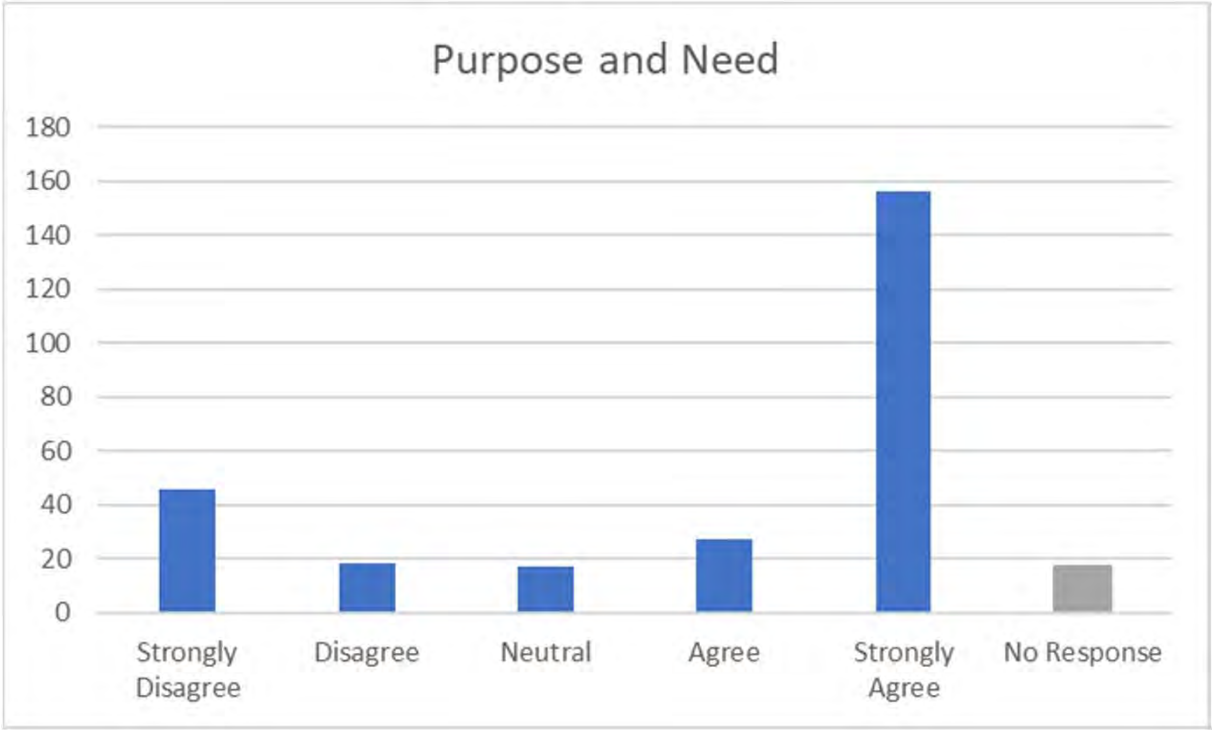
- 253 responses
- 40 respondents wrote in a comment for “other” priority:
  - Impact on neighborhood character/quality of life
  - Impact on property values
  - Added option for flooding
  - Convenience/access across river



Public Open House (Online)

Purpose and Need

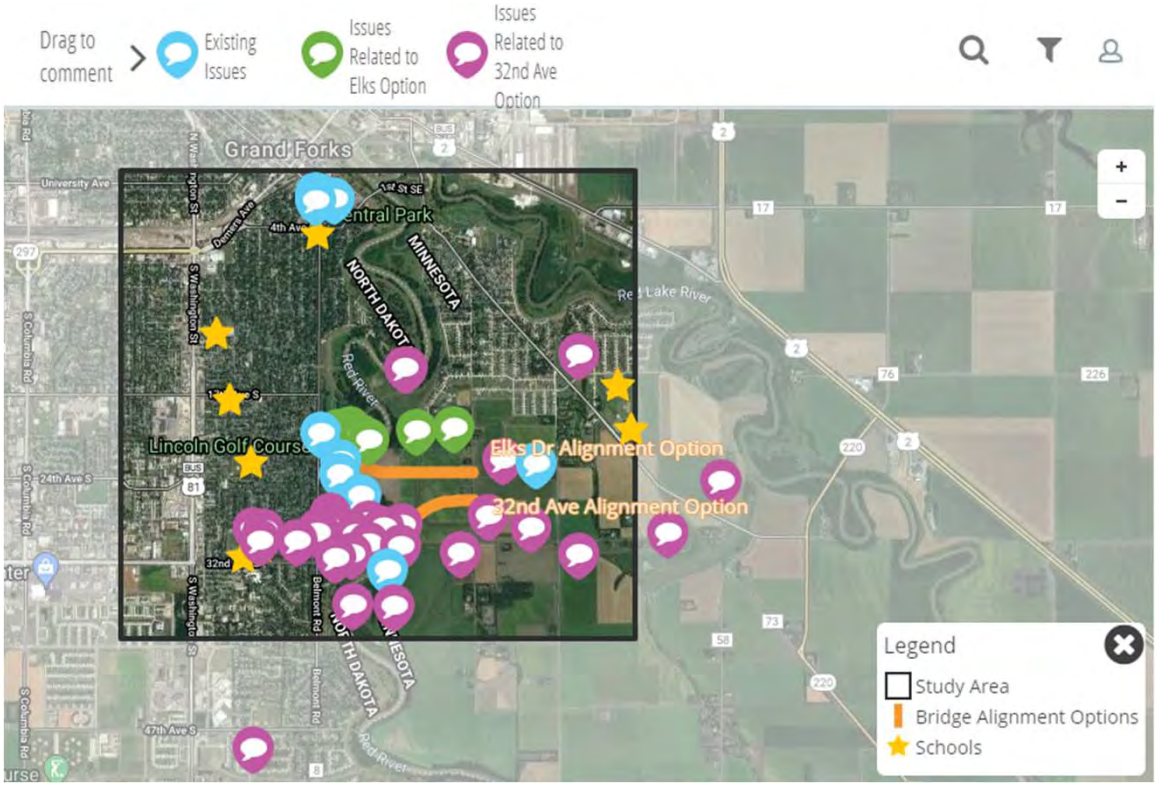
- 264 responses (181 with comments)
- Comment themes include:
  - Strongly Agree (156)
    - Added convenience
    - Reduction in traffic/congestion, especially on other bridges due to redistribution
    - Both cities are growing south, also adds incentive for EGF to grow more
  - Strongly Disagree (46)
    - Benefit for EGF only
    - Negative impact to neighborhoods around 32nd
    - Preference for a bridge farther south (Merrifield)
    - Increased traffic around schools



Public Open House (Online)

Schools Map

- Small sample size (32 respondents)
  - 48 total comments
  - No individual IP address left more than 3 comments
- Any map visitor could like/dislike comments
  - 248 likes / 113 dislikes
- Comment themes
  - Existing Issues (10)
    - Top comment theme: Currently, drivers speed past schools
  - Issues Related to Elks Option (8)
    - Top comment theme: Elks Option provides convenient access to more parts of Grand Forks
  - Issues Related to 32nd Ave Option (30)
    - Top comment theme: 32nd Ave has two schools right on corridor with many young students walking and biking



Revisions –
Tech Memo #3C: Future Build Alternatives Traffic Operations

Tech Memo #3-C – Future Build Alternatives Traffic Operations

Topics include:

- Forecast volume changes between No Build and Build for 2030 and 2045
- Traffic Mobility and Operations Analysis
  - Scenario Years
    - 2030 Elks Drive Bridge Conditions
    - 2045 Elks Drive Bridge Conditions
    - 2030 32nd Avenue Bridge Conditions
    - 2045 32nd Avenue Bridge Conditions
  - Segment volume-to-capacity and LOS
  - Intersection LOS
- Warrants Analysis
- Mitigation Option Analysis

GRAND FORKS-EAST GRAND FORKS
FUTURE BRIDGE TRAFFIC IMPACT STUDY

PAGE 1

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:	8/2/2021
Subject:	Technical Memorandum #3-C, Future Build Alternatives Traffic Operations

1. Introduction

This is the fifth in a series of technical memoranda for the Grand Forks-East Grand Forks Future Bridge Traffic Impact Study. It presents a summary of the traffic operations analysis for the future bridge "Build" alternatives at Elks Drive and 32nd Avenue S, as well as the traffic control warrants analysis and mitigation options for the No Build and Build scenarios.

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). Refer to Technical Memorandum #3-B for documentation of the Existing and No Build Conditions analysis.

3.a FORECAST TRAFFIC VOLUMES AND PATTERNS

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

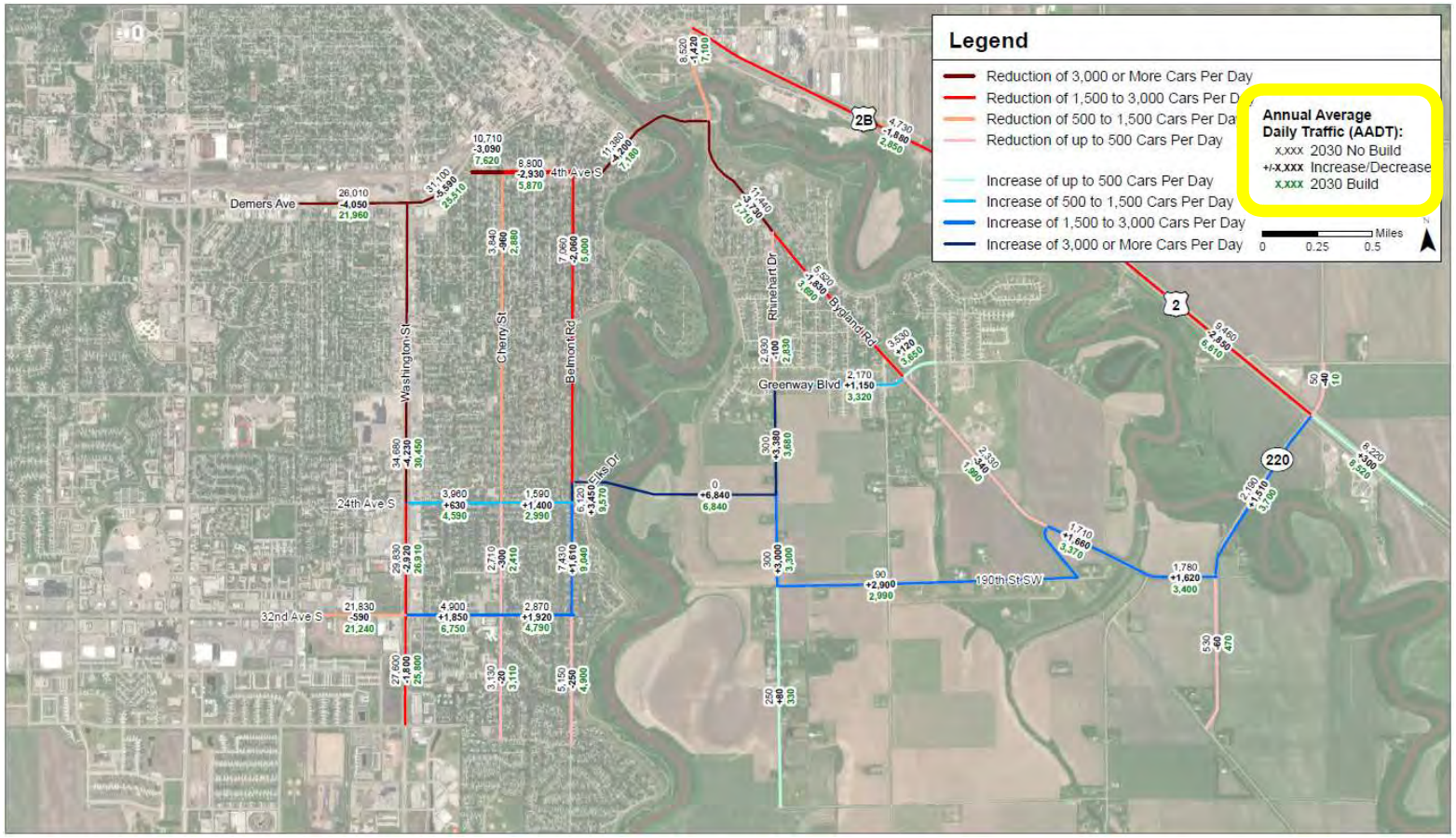
The changes in traffic volumes from the forecast 2030 and 2045 No Build scenarios to 2030 and forecast 2045 Build Conditions were illustrated to show the magnitude of the anticipated volume changes on the study area road network with each river crossing alternative compared to if no new river crossing was constructed. The average daily traffic (ADT) volume data for all scenarios was provided by the Advanced Traffic Analysis Center (ATAC) from travel demand modeling in the Grand Forks / East Grand Forks region completed for the Grand Forks-East Grand Forks Metropolitan Planning Organization (MPO).

Maps showing the forecast volume changes between the No Build vs. Elks Drive Bridge Conditions for 2030 and 2045 are provided in **Figure 3-1** and **Figure 3-2**, respectively. Maps showing the forecast volume changes between the No Build vs. 32nd Ave Bridge Conditions for 2030 and 2045 are provided in **Figure 3-3** and **Figure 3-4**, respectively.

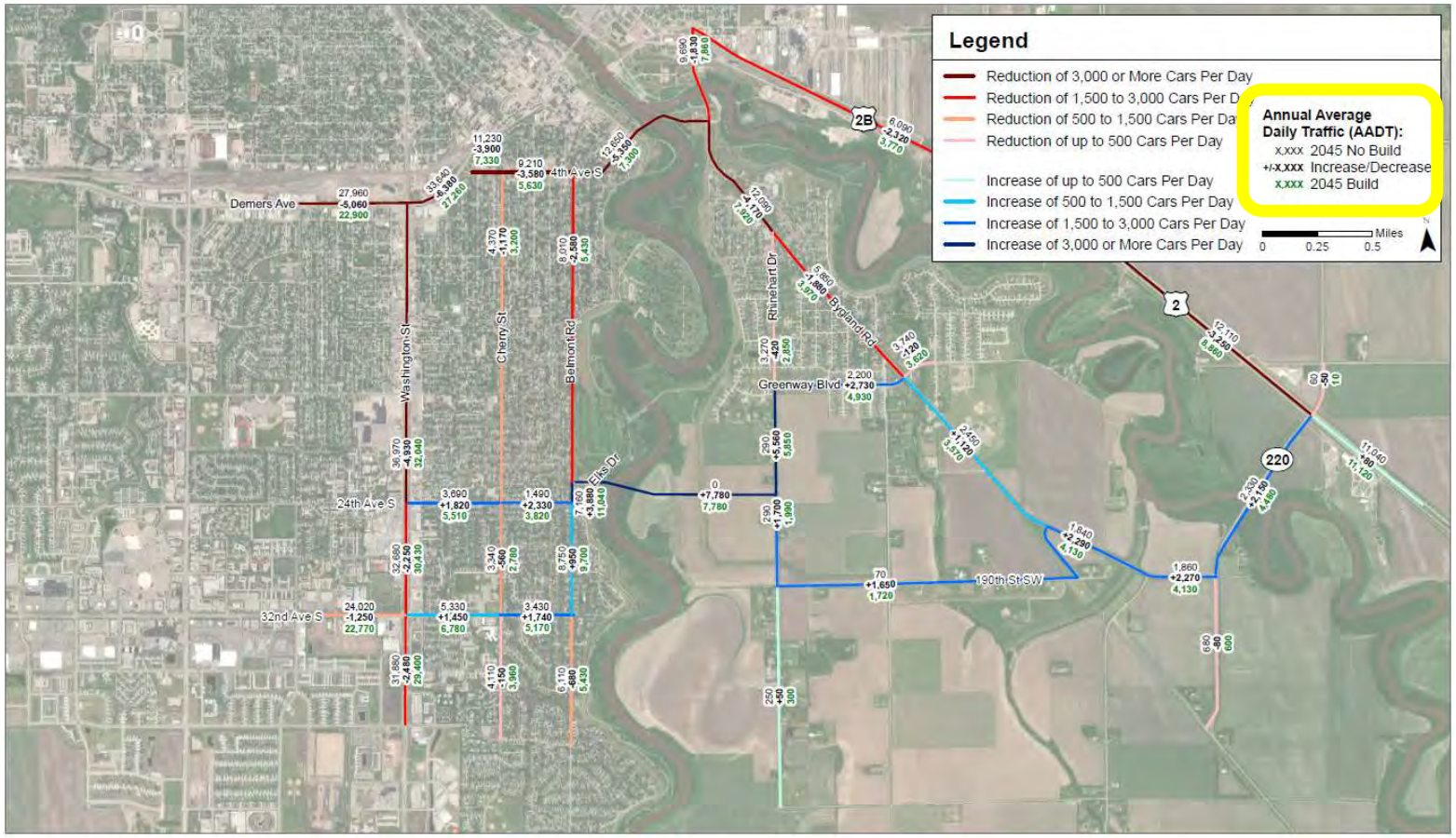
ALLIANT

Alliant No. 121-0015

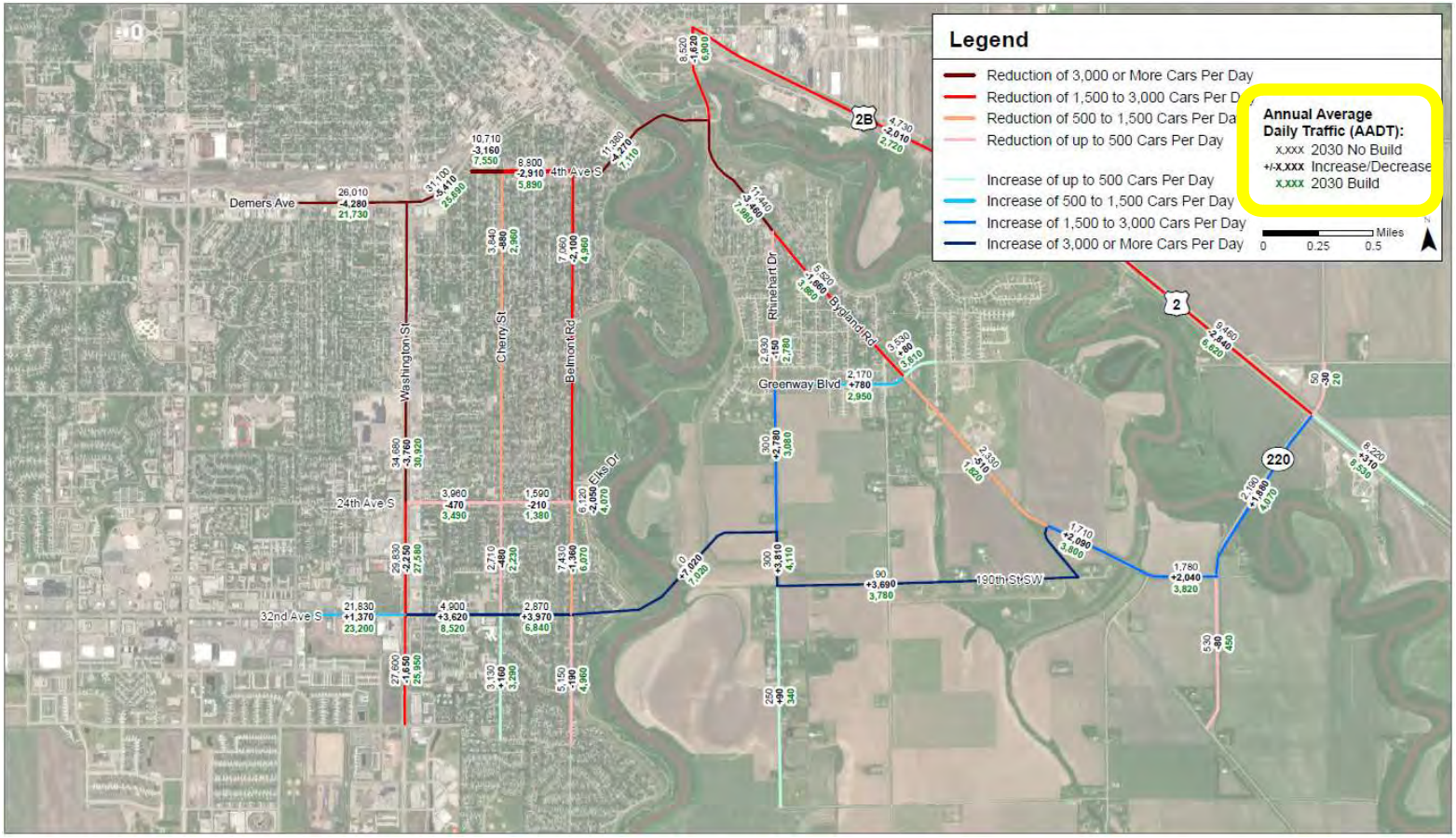
No Build 2030 to Elks Drive Bridge 2030 Volume Changes



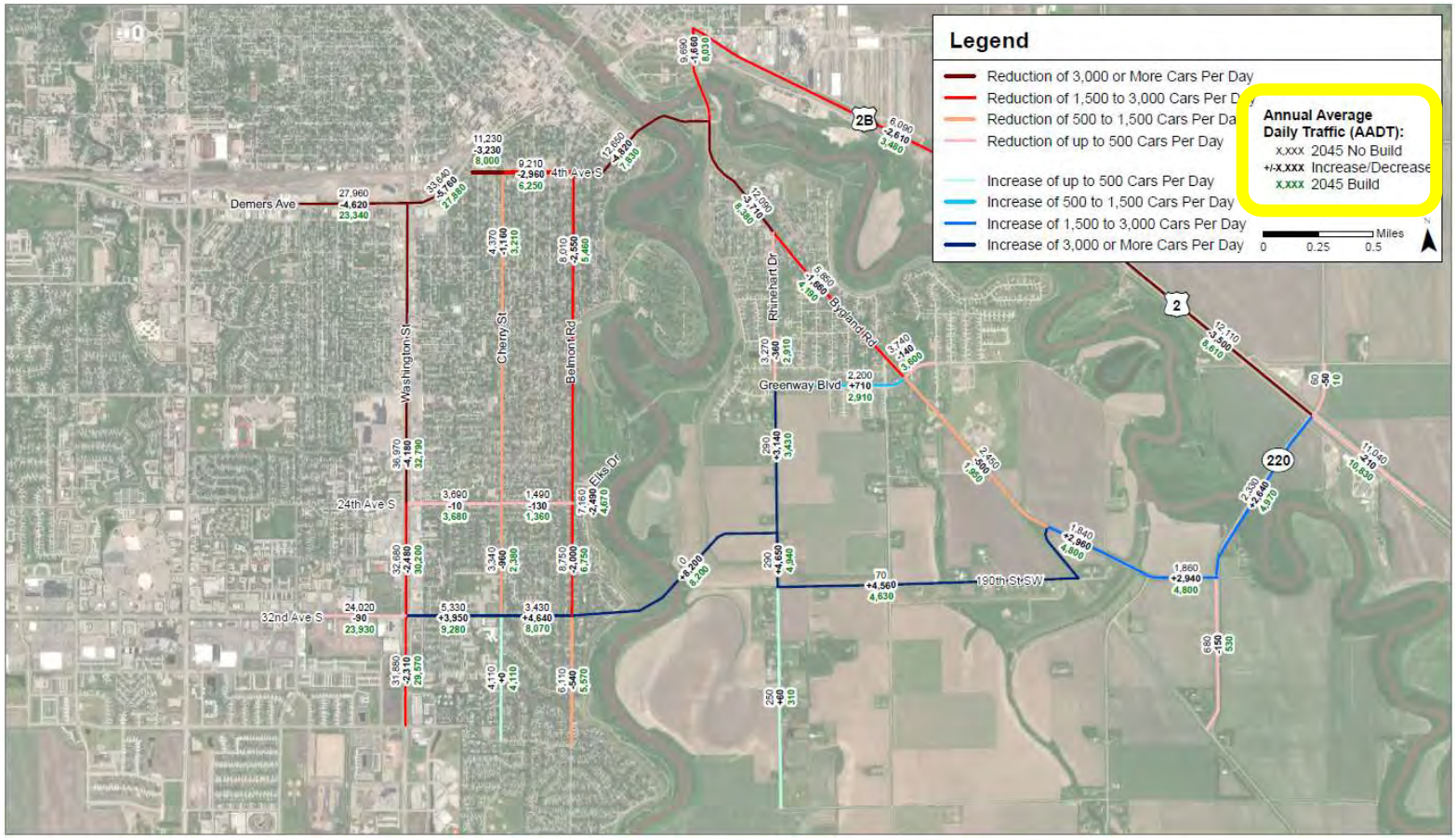
No Build 2045 to Elks Drive Bridge 2045 Volume Changes



No Build 2030 to 32nd Avenue Bridge 2030 Volume Changes



No Build 2045 to 32nd Avenue Bridge 2045 Volume Changes



Traffic Operations & Mobility
2030 Elks Drive Bridge

Intersection	Control Type	AM Peak Hour	PM Peak Hour
		LOS	LOS
S Washington St & 32nd Ave S	Signal	C	D
Cherry St & 32nd Ave S	AWSC	F	C
Belmont Rd & 32nd Ave S	AWSC	D	E
S Washington St & 24th Ave S	Signal	C	C
Cherry St & 24th Ave S	AWSC	B	A
Belmont Rd & 24th Ave S	TWSC	D	F
Belmont Rd & Elks Drive	TWSC	F	D
S Washington St & DeMers Ave	Signal	D	D
Cherry St & 4th Ave S	Signal	A	A
Belmont Rd & 4th Ave S	AWSC	E	C
3rd Ave SE & 1st St SE	Signal	A	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	F	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	A	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	B	B
Elks Dr Bridge & Rhinehart Dr SE	TWSC	B	B
Bygland Rd SE & Greenway Blvd SE	TWSC	F	B
Bygland Rd SE & 190th St SW	TWSC	B	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	B	A
TH 220 & US 2	TWSC	B	B
Rhinehart Dr SE & 190th St SE	AWSC	A	A

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

Traffic Operations & Mobility
2045 Elks Drive Bridge

Intersection	Control Type	AM Peak Hour	PM Peak Hour
		LOS	LOS
S Washington St & 32nd Ave S	Signal	D	D
Cherry St & 32nd Ave S	AWSC	F	C
Belmont Rd & 32nd Ave S	AWSC	F	F
S Washington St & 24th Ave S	Signal	C	D
Cherry St & 24th Ave S	AWSC	B	B
Belmont Rd & 24th Ave S	TWSC	F	F
Belmont Rd & Elks Drive	TWSC	F	E
S Washington St & DeMers Ave	Signal	D	D
Cherry St & 4th Ave S	Signal	A	A
Belmont Rd & 4th Ave S	AWSC	E	C
3rd Ave SE & 1st St SE	Signal	A	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	F	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	A	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	B	B
Elks Dr Bridge & Rhinehart Dr SE	TWSC	C	C
Bygland Rd SE & Greenway Blvd SE	Signal	B	A
Bygland Rd SE & 190th St SW	TWSC	B	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	B	A
TH 220 & US 2	TWSC	C	C
Rhinehart Dr SE & 190th St SE	AWSC	A	A

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

Traffic Operations & Mobility
2030 32nd Avenue Bridge

Intersection	Control Type	AM Peak Hour	PM Peak Hour
		LOS	LOS
S Washington St & 32nd Ave S	Signal	D	D
Cherry St & 32nd Ave S	AWSC	F	C
Belmont Rd & 32nd Ave S	AWSC	F	F
S Washington St & 24th Ave S	Signal	B	C
Cherry St & 24th Ave S	AWSC	A	A
Belmont Rd & 24th Ave S	TWSC	B	C
Belmont Rd & Elks Drive	TWSC	B	B
S Washington St & DeMers Ave	Signal	D	D
Cherry St & 4th Ave S	Signal	A	A
Belmont Rd & 4th Ave S	AWSC	E	C
3rd Ave SE & 1st St SE	Signal	A	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	F	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	A	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	B	B
32nd Ave Bridge & Rhinehart Dr SE	TWSC	B	B
Bygland Rd SE & Greenway Blvd SE	TWSC	F	B
Bygland Rd SE & 190th St SW	TWSC	B	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	B	A
TH 220 & US 2	TWSC	B	B
Rhinehart Dr SE & 190th St SE	AWSC	A	A

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

Traffic Operations & Mobility
2045 32nd Avenue Bridge

Intersection	Control Type	AM Peak Hour	PM Peak Hour
		LOS	LOS
S Washington St & 32nd Ave S	Signal	E	D
Cherry St & 32nd Ave S	AWSC	F	F
Belmont Rd & 32nd Ave S	AWSC	F	F
S Washington St & 24th Ave S	Signal	C	C
Cherry St & 24th Ave S	AWSC	A	A
Belmont Rd & 24th Ave S	TWSC	C	C
Belmont Rd & Elks Drive	TWSC	B	C
S Washington St & DeMers Ave	Signal	D	D
Cherry St & 4th Ave S	Signal	A	A
Belmont Rd & 4th Ave S	AWSC	F	C
3rd Ave SE & 1st St SE	Signal	A	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	F	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	B	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	B	B
32nd Ave Bridge & Rhinehart Dr SE	TWSC	C	B
Bygland Rd SE & Greenway Blvd SE	Signal	A	A
Bygland Rd SE & 190th St SW	TWSC	B	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	B	A
TH 220 & US 2	TWSC	B	C
Rhinehart Dr SE & 190th St SE	AWSC	A	A

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

Warrants Analysis

2045 Warrants Analysis Summary

Scenario	Intersection	Warrants Met	Signal Warrants			All-Way Stop Control Warrants			
			Warrant 1 - 8-Hour Vehicle Volumes	Warrant 2 - 4-Hour Vehicle Volumes	Warrant 3 - Peak Hour	Criteria A - Signal Justified	Criteria C - Minimum Volumes	Criteria C - Minor Approach Max Delay	School Pedestrian Crossing[1]
No Build	4th Ave & Belmont Rd	Signal, AWSC	NOT MET	NOT MET	MET	MET	MET	MET	MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	32nd Ave & Cherry St	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	MET	MET	MET	MET	NOT MET	NOT MET	NOT MET
Elks Bridge	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	24th Ave & Belmont Rd	Signal, AWSC	MET	MET	MET	MET	NOT MET	MET	NOT MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	NOT MET
	32nd Ave & Cherry St	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	MET
	Elks Dr & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
32nd Bridge	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	NOT MET
	32nd Ave & Cherry St	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET

Notes:

(1) Multiway stop control may be considered at locations where pedestrian crossings for a school are present, per the "Optional" consideration items in the Manual on Uniform Traffic Control Devices (MUTCD)

Mitigation Analysis Methodology

- Mitigation Hierarchy
  1. Add turn lanes without changes in traffic control
  2. Convert to all-way stop-control with minimum turn lane additions
  3. Convert to signalized control with minimum turn lane additions
  4. Convert to a single-lane roundabout
- Additional considerations at schools and crash issue intersections

Mitigation Summary

Scenario	Intersection	Existing Traffic Control	2030 Unmitigated LOS	2045 Unmitigated LOS	Traffic Control Warrants Met	School Adjacent	Identified Crash Issues	Acceptable Mitigation Control Options[2]
No Build	4th Ave & Belmont Rd	AWSC	F/F	F/F	Signal, AWSC	X		Signal/RAB (mini)
	32nd Ave & Belmont Rd	AWSC	C/C	F/F	Signal, AWSC			AWSC/Signal/RAB
	32nd Ave & Cherry St	AWSC	E/B	F/C	AWSC	X		RAB
	DeMers Ave & Washington St	Signal	E/D	F/E	Signal, AWSC		X	Signal
	Bygland Rd & Rhinehart Dr[1]	TWSC	F/C	F/D	Signal, AWSC			Signal/RAB
Elks Drive Bridge Build	4th Ave & Belmont Rd	AWSC	E/C	E/C	AWSC	X		AWSC/RAB (mini)
	24th Ave & Belmont Rd[1]	TWSC	D/F	F/F	Signal, AWSC			Signal/RAB
	32nd Ave & Belmont Rd	AWSC	D/E	F/F	Signal, AWSC			AWSC/Signal/RAB
	32nd Ave & Cherry St	AWSC	F/C	F/C	Signal, AWSC	X		Signal/RAB
	Belmont Rd & Elks Dr[1]	TWSC	F/D	F/E	Signal, AWSC			Signal/RAB
	Bygland Rd & Rhinehart Dr[1]	TWSC	F/C	F/C	Signal, AWSC			Signal/RAB
32nd Ave Bridge Build	4th Ave & Belmont Rd	AWSC	E/C	F/C	AWSC	X		AWSC/RAB (mini)
	32nd Ave & Belmont Rd	AWSC	F/F	F/F	Signal, AWSC			Signal/RAB
	32nd Ave & Cherry St	AWSC	F/C	F/F	Signal, AWSC	X		Signal
	32nd Ave & Washington St	Signal	D/D	E/D	Signal, AWSC		X	Signal
	Bygland Rd & Rhinehart Dr[1]	TWSC	F/C	F/C	Signal, AWSC			Signal/RAB

Notes:

(1) Results for worst approach are reported for two-way stop-controlled intersections

(2) Mitigation options that were warranted and would be expected to result in acceptable intersection level of service

Mitigation Summary

Scenario	Intersection	Existing Traffic Control	Assumed Mitigation Option for Cost Estimate				
			Assumed Traffic Control for Cost Estimate	2045 LOS with Assumed Mitigation	Mitigation Description	Consider Additional Pedestrian Accommodations	Notes and Considerations
No Build	4th Ave & Belmont Rd	AWSC	Signal	B/B	Signalized intersection with no additional turn lanes	X	Intersection was previously signalized until 2015. May consider adding turn lanes if signalized based on prior signalized operations observations.
	32nd Ave & Belmont Rd	AWSC	AWSC	C/C	Maintain AWSC and add SB right and NB left turn lanes		May impact ROW
	32nd Ave & Cherry St	AWSC	RAB	B/A	Single-lane RAB	X	May impact ROW
	DeMers Ave & Washington St	Signal	Signal	E/D	No lane additions feasible—consider CFI		Additional lanes likely infeasible, CFI design recommended in prior study showed operational improvements[1]
	Bygland Rd & Rhinehart Dr[1]	TWSC	RAB	C/A	Single-lane RAB		Based on detailed 2015 Bygland Road Study results and 2016 Intersection Control Evaluation
Elks Drive Bridge Build	4th Ave & Belmont Rd	AWSC	Mini-RAB	A/A	Single-lane mini-RAB	X	AWSC may be considered based on vehicle/pedestrian conflicts
	24th Ave & Belmont Rd[1]	TWSC	Signal	A/B	Signalized intersection with no additional turn lanes		
	32nd Ave & Belmont Rd	AWSC	AWSC	C/D	Maintain AWSC and add SB right, NB left, and EB left turn lanes		May impact ROW
	32nd Ave & Cherry St	AWSC	Signal	B/A	Signalized intersection with restriped NB approach to include a left turn storage lane and thru/right lane	X	
	Belmont Rd & Elks Dr[1]	TWSC	Signal	B/A	Signalized intersection with EB left turn lane and right turn storage lane		
	Bygland Rd & Rhinehart Dr[1]	TWSC	RAB	A/A	Single-lane RAB		Based on detailed 2015 Bygland Road Study results and 2016 Intersection Control Evaluation
32nd Ave Bridge Build	4th Ave & Belmont Rd	AWSC	Mini-RAB	A/A	Single-lane mini-RAB	X	AWSC may be considered based on vehicle/pedestrian conflicts, though left and right turn lanes would be needed on all approaches
	32nd Ave & Belmont Rd	AWSC	Signal	C/C	Signalized intersection with additional NB left turn lane		May impact ROW
	32nd Ave & Cherry St	AWSC	Signal	D/A	Signal with WBL/EBL turn lanes	X	Single-lane RAB expected to operate at LOS F in AM peak hour. Additional turn lanes may impact ROW.
	32nd Ave & Washington St	Signal	Signal	D/D	Existing signalized control with new SB and WB left turn lanes		Additional WB left turn lane may not be feasible due to limited ROW
	Bygland Rd & Rhinehart Dr[1]	TWSC	RAB	B/A	Single-lane RAB		Based on detailed 2015 Bygland Road Study results and 2016 Intersection Control Evaluation

Notes:

(1) Additional lanes are likely infeasible due to right-of-way constraints. Prior studies showed potential operational improvements with a Continuous Flow Intersection (CFI) design (Washington St. Corridor Study, 2012).

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Questions and Discussion

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Transmittal Information	
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From:	Tim Burkhardt, AICP, MPH (Alliant Engineering) Mike Kondziolka, PE, PTOE (Alliant Engineering)
Date:	9/2/2021
Subject:	Technical Memorandum #3-C: Future Build Alternatives Traffic Operations

1. Introduction

This is the fifth in a series of technical memoranda for the Grand Forks-East Grand Forks Future Bridge Traffic Impact Study. It presents a summary of the traffic operations analysis for the future bridge "Build" alternatives at Elks Drive and 32nd Avenue S, as well as the traffic control warrants analysis and mitigation options for the No Build and Build scenarios.

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). Refer to Technical Memorandum #3-B for documentation of the Existing and No Build Conditions analysis.

3.1 FORECAST TRAFFIC VOLUMES AND PATTERNS

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

The changes in traffic volumes from the forecast 2030 and 2045 No Build scenarios to 2030 and forecast 2045 Build Conditions were illustrated to show the magnitude of the anticipated volume changes on the study area road network with each river crossing alternative compared to if no new river crossing was constructed. The average daily traffic (ADT) volume data for all scenarios was provided by the Advanced Traffic Analysis Center (ATAC) from travel demand modeling in the Grand Forks / East Grand Forks region completed for the Grand Forks-East Grand Forks Metropolitan Planning Organization (MPO).

Maps showing the forecast volume changes between the No Build vs. Elks Drive Bridge Conditions for 2030 and 2045 are provided in **Figure 3-1** and **Figure 3-2**, respectively. Maps showing the forecast volume changes between the No Build vs. 32nd Ave Bridge Conditions for 2030 and 2045 are provided in **Figure 3-3** and **Figure 3-4**, respectively.

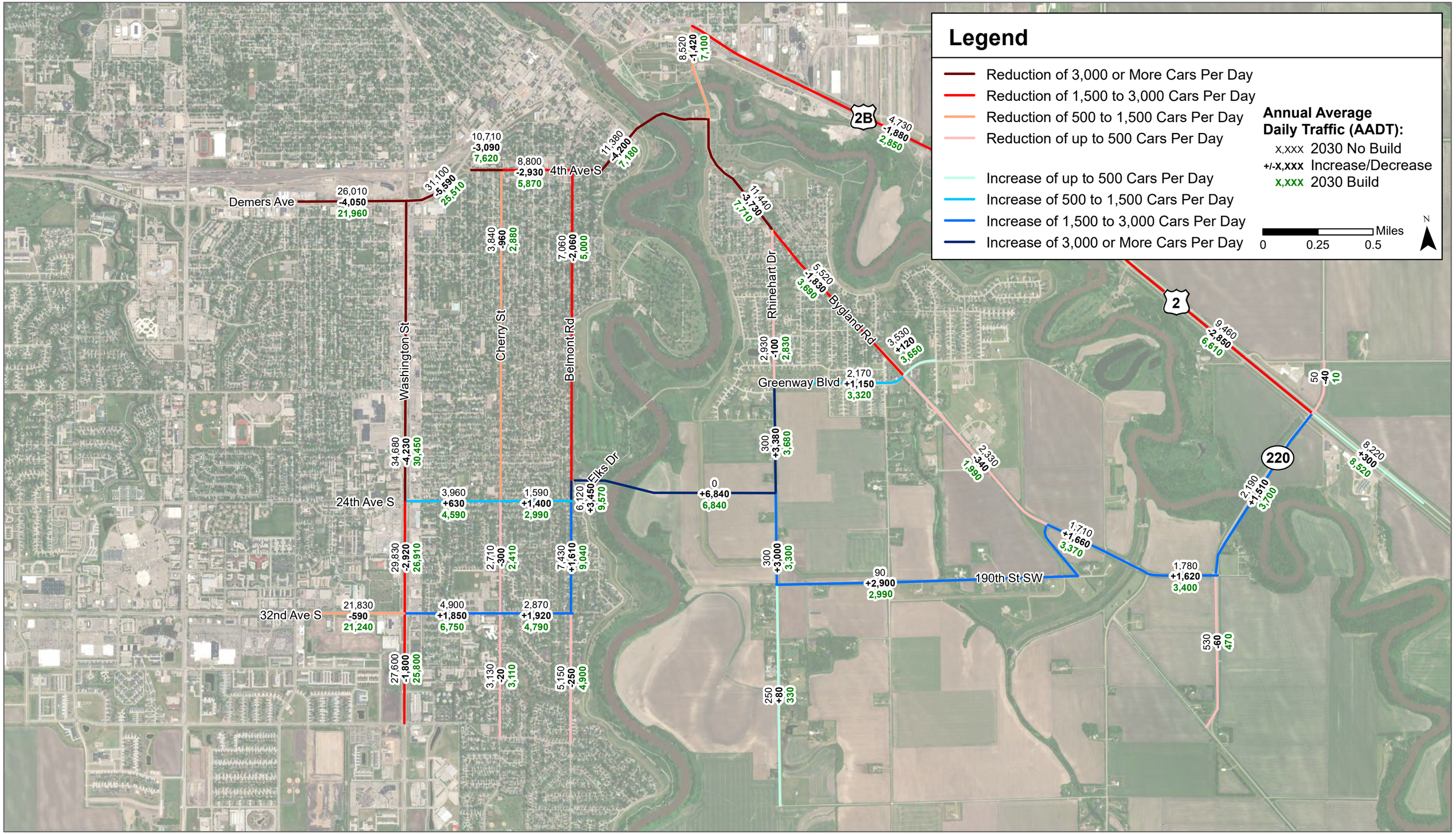

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Figure 3-1

Changes in Forecast Traffic Volumes between 2030 No Build and 2030 Elks Drive Bridge Conditions

Source: ESRI World Imagery Basemap

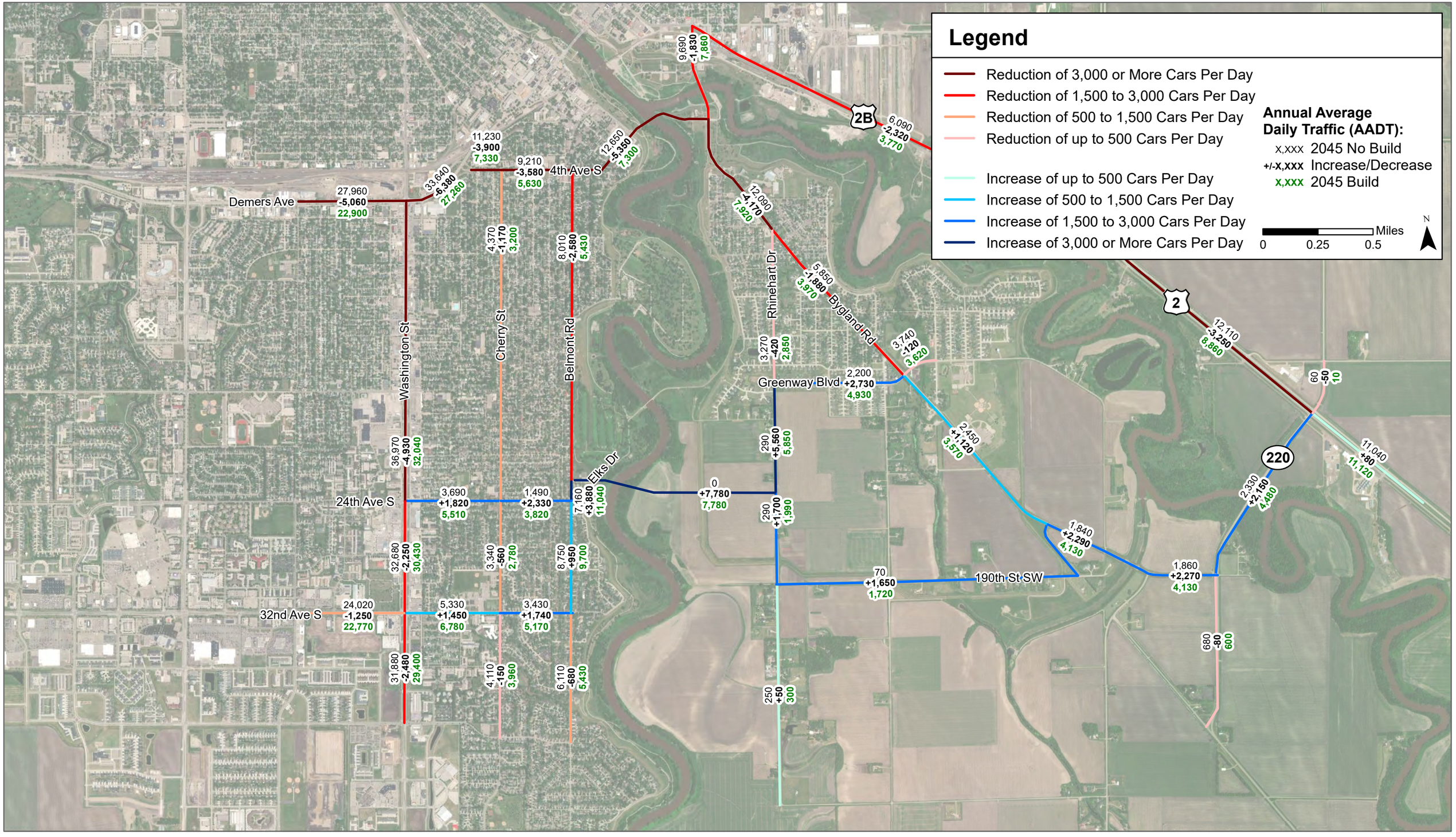

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Figure 3-2

Changes in Forecast Traffic Volumes between 2045 No Build and 2045 Elks Drive Bridge Conditions

Source: ESRI World Imagery Basemap

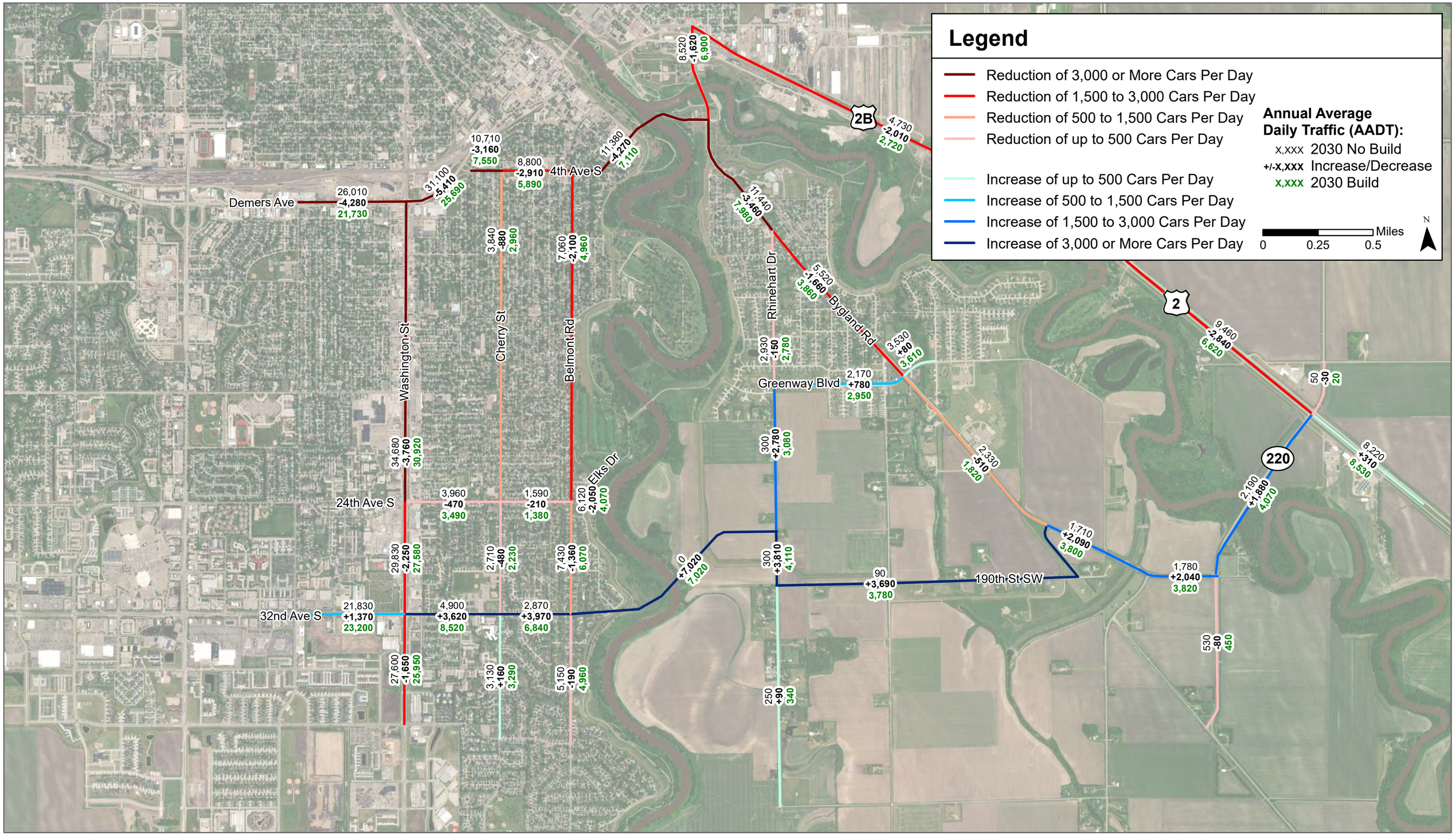

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Figure 3-3

Changes in Forecast Traffic Volumes between 2030 No Build and 2030 32nd Ave Bridge Conditions

Source: ESRI World Imagery Basemap

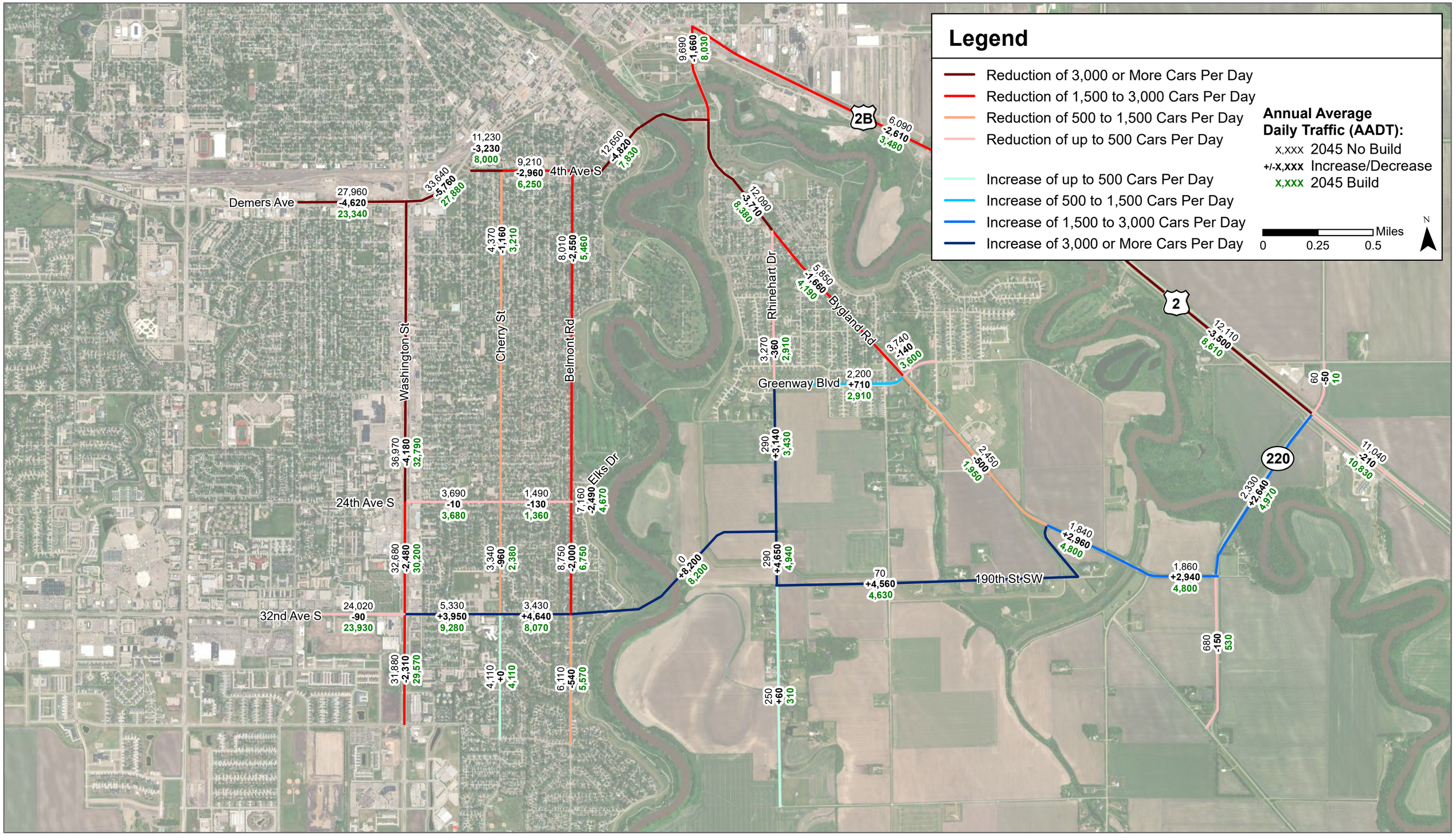

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Figure 3-4

Changes in Forecast Traffic Volumes between 2045 No Build and 2045 32nd Ave Bridge Conditions

Source: ESRI World Imagery Basemap

As shown in the figures, the two bridge options would be expected to significantly reduce traffic in the northern half of the study area, with the most significant reductions occurring along S Washington Street, DeMers Avenue/4th Avenue S, Belmont Road, Minnesota Avenue/1st Street SE across the Point Bridge, Bygland Road SE north of Greenway Boulevard SE, and on US 2. These reductions are important because the roadway segments on S Washington Street, DeMers Avenue/4th Avenue S, and Minnesota Avenue/1st Street SE across the Point Bridge were forecast to approach or exceed capacity by 2045 under No Build conditions (without an additional bridge).

The most significant increases in traffic associated with the bridge options would be expected to occur in the southern half of the study roadway network along Greenway Boulevard SE, Rhinehart Drive SE south of Greenway Boulevard SE, Bygland Road SE south of Greenway Boulevard, 190th Street SW, TH 220, and along 24th Avenue S and 32nd Avenue S. The Elks Drive bridge option spreads the volume increases between the parallel east-west roads of Greenway Boulevard SE and 190th Street SW on the East Grand Forks side of the bridge, and between 24th Avenue S and 32nd Avenue S on the Grand Forks side. The 32nd Avenue S bridge option has more concentrated volume growth along 32nd Avenue S and 190th Street SW. Both bridge options would primarily serve passenger vehicle traffic and not truck traffic.

3.2 FUTURE BUILD TRAFFIC OPERATIONS AND MOBILITY

A traffic operations analysis was conducted to identify the need for improvements and understand anticipated traffic operations with the potential bridge options. This Build Conditions traffic operations analysis assesses the projected future mobility in the study area with a new bridge at either Elks Drive or 32nd Avenue S.

The programmed improvement to convert the existing two-way stop controlled (TWSC) intersection at Bygland Road SE & Greenway Boulevard SE to a signalized intersection was included in the 2045 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 (RAB) was evaluated for both 2030 and 2045 Build Conditions. Because this project is in consideration of being removed from the program, the intersection was also analyzed under its existing geometry and intersection control configuration. The results for both conditions are provided in the 2030 and 2045 Build Conditions intersection traffic operations analysis tables.

The baseline conditions for the Build alternatives assumed no changes from the 2030 and 2045 No Build conditions other than the addition of the proposed bridges with minimal traffic control and geometric changes at the intersections where the proposed bridges would terminate. The assumed baseline conditions for the new intersections where the proposed bridges would connect to Rhinehart Drive SE included stop control on the new eastbound approach with a left turn lane and a right turn storage lane (same under both options). The intersection on Belmont Road where the Elks Drive Bridge would connect was also assumed to include a left turn lane and a right turn storage lane on the bridge approach, and maintained the current side-street stop control on Elks Drive. The bridge connection for the 32nd Ave Bridge option was assumed to maintain the all-way stop control (AWSC) currently in place at the 32nd Avenue S and Belmont Road intersection and included a single shared left/through/right lane on the westbound bridge approach. The lane geometry and traffic control on all approaches at the new bridge connection intersections other than the new bridge approaches were kept the same as existing conditions.

3.2.1 Roadway Segment Analysis

Using the same methodology as outlined in Technical Memorandum #3-B, a roadway segment analysis was completed for the study area under each of the alternative bridge conditions. The roadway segment analysis is a planning-level comparison of the forecast ADT volumes against the estimated capacity for each facility type. All information used in the volume-to-capacity (V/C) analysis, including 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 2030 and 2045 forecast year Build Conditions for each bridge alternative.

The segment LOS based on V/C ratio for the study road segments under forecast 2030 Elks Drive Bridge Conditions, 2045 Elks Drive Bridge Conditions, 2030 32nd Ave Bridge Conditions, and 2045 32nd Ave Bridge Conditions are provided in **Figures 3-5** through **3-8**.

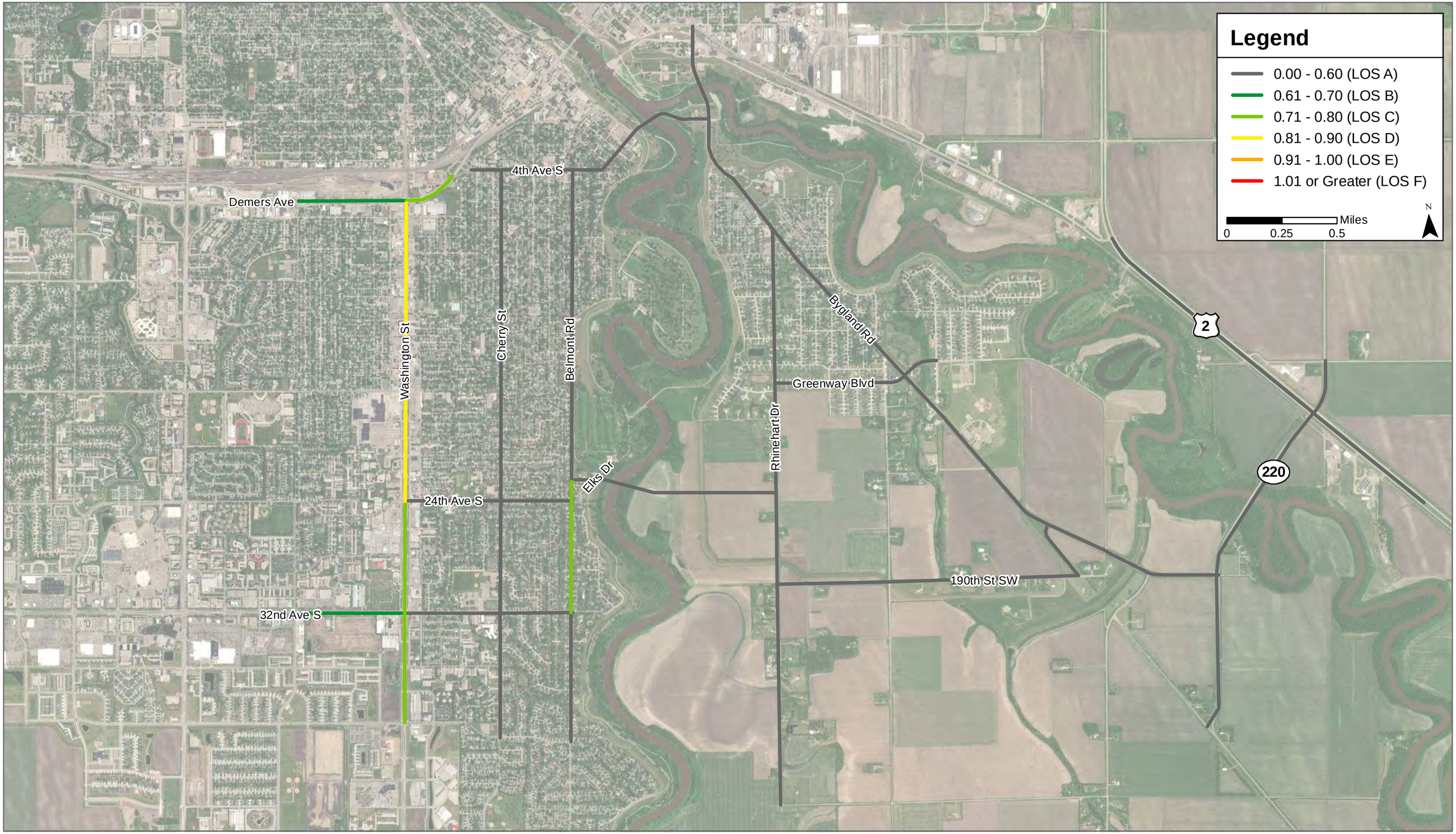

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Figure 3-5

2030 Elks Drive Bridge Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap

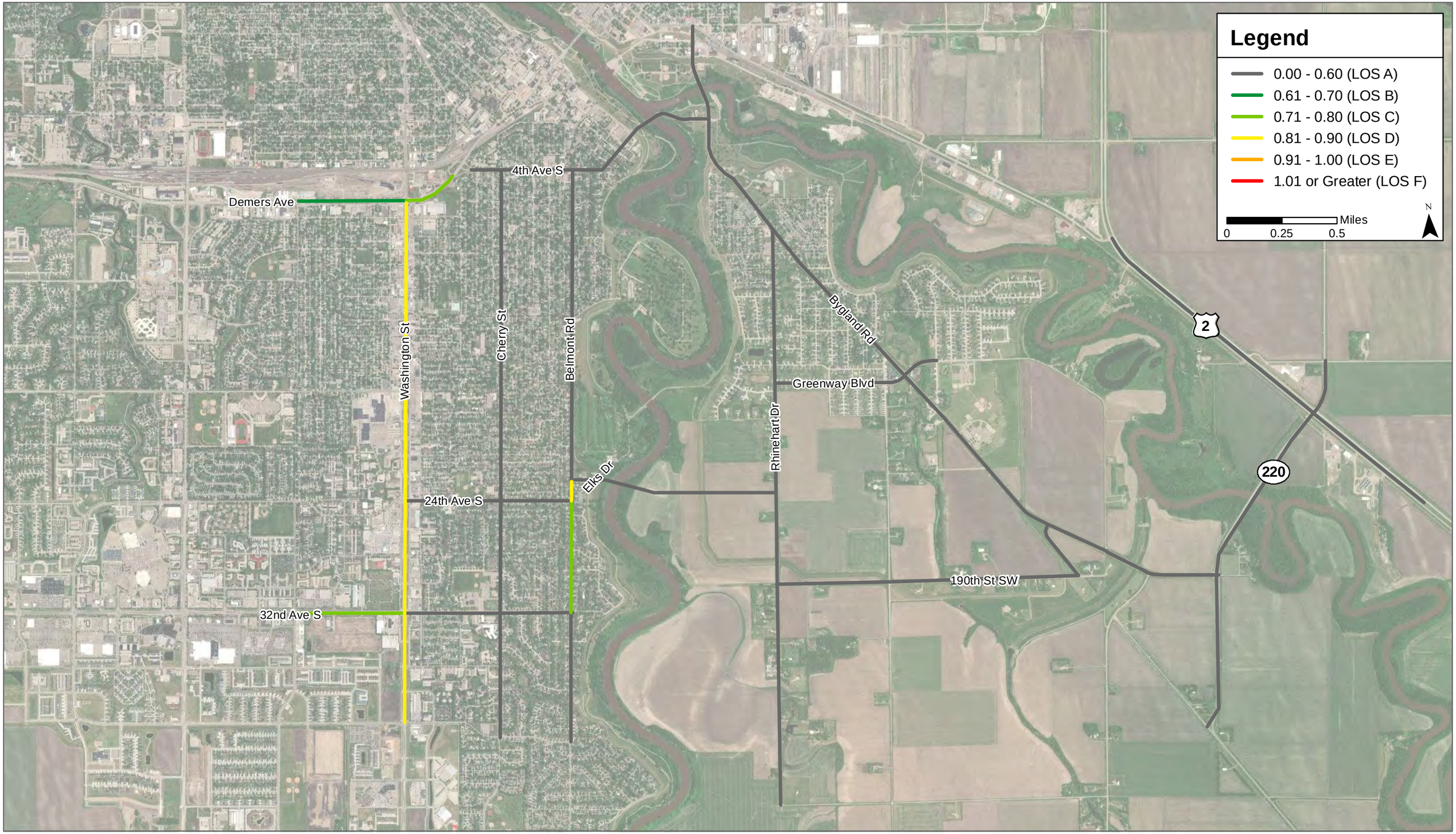

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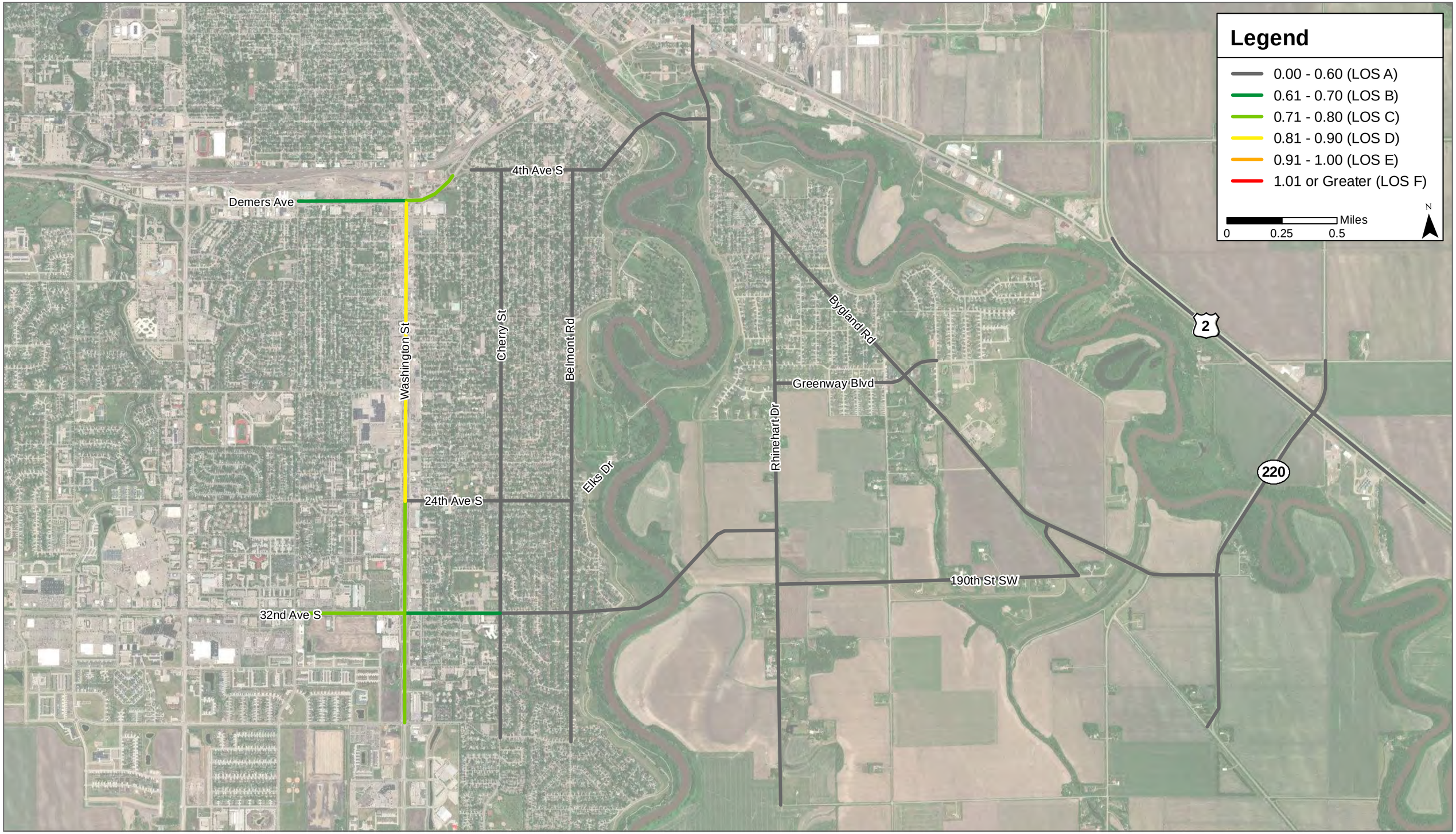
Figure 3-6

2045 Elks Drive Bridge Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap



Future Bridge Traffic Impact Study

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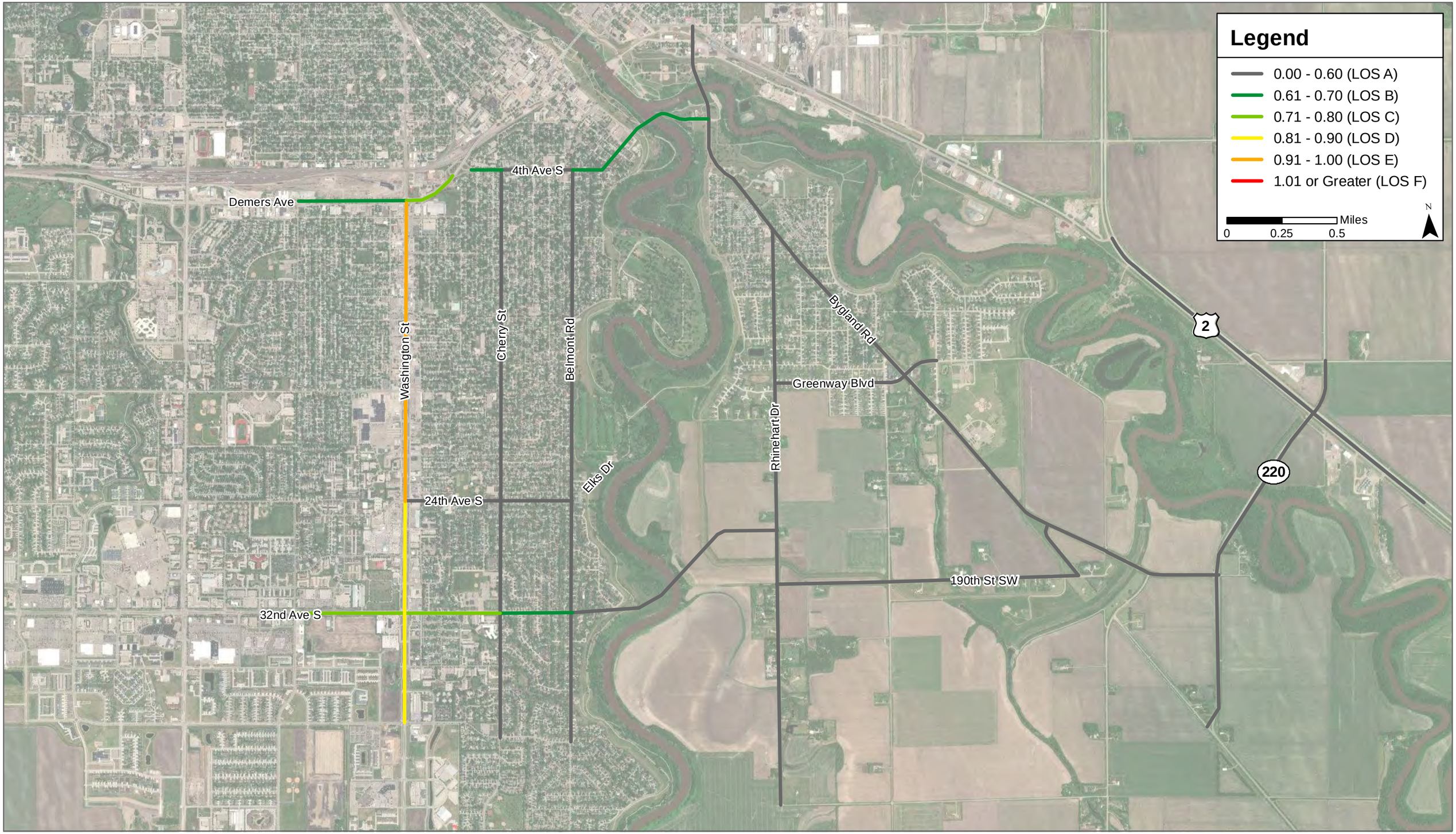
Figure 3-7

2030 32nd Ave Bridge Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap



Future Bridge Traffic Impact Study

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Figure 3-8

2045 32nd Ave Bridge Segment Volume/Capacity and Level of Service

Source: ESRI World Imagery Basemap

Based on the forecast ADTs and segment capacities, all roads within the study area would be expected to operate within capacity through the 2030 forecast year under both bridge alternatives. All roads would be expected to operate within capacity in 2045 under the Elks Drive Bridge alternative; however, the S Washington Street segment between DeMers Avenue / 4th Avenue S and 24th Avenue S would be expected to begin to approach capacity under 2045 32nd Ave Bridge Conditions, when it would be expected to operate at LOS E.

There are multiple factors that influence segment capacity. Some of these 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.

3.2.2 Intersection Traffic Operations Analysis

The Build Conditions intersection traffic operations analysis was conducted using the same methodology as was used for the Existing and No Build Conditions analysis. Refer to Technical Memorandum #3-B for details on the analysis methodology.

3.2.2.1 2030 Elks Drive Bridge Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under 2030 Elks Drive Bridge Conditions are provided in **Table 3-1**.

Table 3-1 – 2030 Elks Drive Bridge 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	33.2	C	46.6	D
Cherry St & 32nd Ave S	AWSC	96.9	F	15.1	C
Belmont Rd & 32nd Ave S	AWSC	28.3	D	43.9	E
S Washington St & 24th Ave S	Signal	21.8	C	31.7	C
Cherry St & 24th Ave S	AWSC	10.4	B	9.8	A
Belmont Rd & 24th Ave S	TWSC	25.8	D	52.4	F
Belmont Rd & Elks Drive	TWSC	105.8	F	27.5	D
S Washington St & DeMers Ave	Signal	40.5	D	38.2	D
Cherry St & 4th Ave S	Signal	6.2	A	5.5	A
Belmont Rd & 4th Ave S	AWSC	38.2	E	18.2	C
3rd Ave SE & 1st St SE	Signal	7.8	A	6.4	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	63.3	F	20.0	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	9.4	A	6.2	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	10.2	B	10.4	B
Elks Dr Bridge & Rhinehart Dr SE	TWSC	14.0	B	12.7	B
Bygland Rd SE & Greenway Blvd SE	TWSC	78.8	F	11.8	B
Bygland Rd SE & 190th St SW	TWSC	10.4	B	10.4	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	10.2	B	9.4	A
TH 220 & US 2	TWSC	13.1	B	13.9	B
Rhinehart Dr SE & 190th St SE	AWSC	8.2	A	8.6	A

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

Given the expectation of traffic shifting from the Point Bridge to the new bridge at Elks Drive, operations at Belmont Road & 4th Avenue S are expected to improve in the Elks Drive Bridge scenario. In 2030 No Build Conditions this intersection was expected to operate at LOS F in both peak hours, but with the traffic diversion to the proposed Elks Drive bridge, the current all-way stop design would be expected to operate at LOS E in the AM peak hour and LOS C in PM peak hour.

Multiple intersections along Belmont Road see degradation in operations compared to the No Build alternative in this scenario. The side-street stop controlled intersections at 24th Avenue S and Elks Drive would be expected to operate unacceptably on the stop controlled approaches, with 24th Avenue S failing (LOS F) in the PM peak hour and Elks Drive failing (LOS F) in the AM peak hour due to the additional traffic using the bridge.

The new intersection on Rhinehart Drive SE with the proposed Elks Drive Bridge would be expected to operate efficiently (LOS B on the stopped approach) with the assumed turn lane and side-street stop control on the eastbound bridge approach. The low northbound and southbound through volumes on Rhinehart Drive SE at this intersection would result in minimal conflicts with the turning movements going to and from the bridge.

The all-way stop controlled intersections on 32nd Avenue S at Belmont Road and Cherry Street would also be expected to reach or exceed capacity with the Elks Drive Bridge. This indicates that the anticipated traffic pattern changes would require improvements in traffic control or additional turn lanes at these intersections.

On the East Grand Forks side of the bridge, AM peak hour operations at the Bygland Road SE and Greenway Boulevard SE intersection would be expected to operate at LOS F in the 2030 Elks Bridge scenario due to increased volume using Greenway Boulevard SE to access the bridge. Operations at Bygland Road SE & Rhinehart Drive SE would be expected to improve with the Elks Drive Bridge, as both the stop control option and roundabout option improve from No Build Conditions in the AM peak hour. However, 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 Elks Drive Bridge Conditions.

3.2.2.2 2045 Elks Drive Bridge Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under 2045 Elks Drive Bridge Conditions are provided in **Table 3-2**.

Table 3-2 – 2045 Elks Drive Bridge 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	36.6	D	48.2	D
Cherry St & 32nd Ave S	AWSC	222.4	F	23.2	C
Belmont Rd & 32nd Ave S	AWSC	78.8	F	110.3	F
S Washington St & 24th Ave S	Signal	28.5	C	36.4	D
Cherry St & 24th Ave S	AWSC	14.1	B	11.6	B
Belmont Rd & 24th Ave S	TWSC	89.2	F	405.7	F
Belmont Rd & Elks Drive	TWSC	154.6	F	41.3	E
S Washington St & DeMers Ave	Signal	47.7	D	37.2	D
Cherry St & 4th Ave S	Signal	6.5	A	5.7	A
Belmont Rd & 4th Ave S	AWSC	38.3	E	18.6	C
3rd Ave SE & 1st St SE	Signal	7.8	A	6.4	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	88.9	F	21.8	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	9.6	A	6.1	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	12.1	B	12.2	B
Elks Dr Bridge & Rhinehart Dr SE	TWSC	17.1	C	16.7	C
Bygland Rd SE & Greenway Blvd SE	Signal	14.1	B	6.4	A
Bygland Rd SE & 190th St SW	TWSC	10.8	B	10.9	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	11.1	B	9.8	A
TH 220 & US 2	TWSC	15.1	C	16.2	C
Rhinehart Dr SE & 190th St SE	AWSC	7.4	A	7.7	A

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

Anticipated traffic operations in the Elks Drive Bridge alternative operate similarly in the 2045 condition as they did in the 2030 condition, though with increased delay due to additional traffic growth. No additional intersections are expected to experience unacceptable operations in 2045 beyond those that did in 2030 with the Elks Drive Bridge. However, where only one peak hour was expected to operate at LOS E or F in the 2030 conditions, both peak hours would be expected to operate unacceptably on Belmont Road at the intersections with Elks Drive, 24th Avenue S, and 32nd Avenue S under 2045 conditions.

The Bygland Road SE and Greenway Boulevard SE intersection is programmed to be signalized by the 2045 forecast year, which would be expected to improve operations at the intersection from unacceptable levels (LOS F in the AM peak hour) with the Elks Drive Bridge in 2030 to LOS B or better in 2045.

3.2.2.3 2030 32nd Ave Bridge Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under 2030 32nd Avenue Bridge Conditions are provided in **Table 3-3**.

Table 3-3 – 2030 32nd Avenue Bridge 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	37.6	D	48.5	D
Cherry St & 32nd Ave S	AWSC	175.6	F	19.9	C
Belmont Rd & 32nd Ave S	AWSC	173.3	F	78.8	F
S Washington St & 24th Ave S	Signal	19.7	B	29.4	C
Cherry St & 24th Ave S	AWSC	9.3	A	9.2	A
Belmont Rd & 24th Ave S	TWSC	14.9	B	16.9	C
Belmont Rd & Elks Drive	TWSC	12.0	B	14.2	B
S Washington St & DeMers Ave	Signal	41.1	D	38.1	D
Cherry St & 4th Ave S	Signal	6.3	A	5.5	A
Belmont Rd & 4th Ave S	AWSC	38.4	E	18.1	C
3rd Ave SE & 1st St SE	Signal	7.9	A	6.4	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	70.6	F	20.5	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	9.1	A	6.1	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	10.0	B	10.1	B
32nd Ave Bridge & Rhinehart Dr SE	TWSC	14.2	B	12.5	B
Bygland Rd SE & Greenway Blvd SE	TWSC	67.8	F	11.8	B
Bygland Rd SE & 190th St SW	TWSC	11.4	B	10.7	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	10.3	B	9.4	A
TH 220 & US 2	TWSC	13.1	B	13.9	B
Rhinehart Dr SE & 190th St SE	AWSC	8.7	A	9.1	A

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

Similar to the Elks Bridge Scenario, the expectation of traffic shifting from the Point Bridge to a new bridge at 32nd Avenue S would be expected to result in improved operations at Belmont Road and 4th Avenue S compared to 2030 No Build Conditions. The current all-way stop control at this intersection would be expected to operate at LOS E in the AM peak hour and LOS C in PM peak hour with the proposed 32nd Avenue Bridge, versus LOS F in both peak hours under 2030 No Build Conditions.

Traffic at the unsignalized study intersections on 32nd Avenue S would be expected to operate unacceptably in this scenario. The Cherry Street and 32nd Avenue S intersection would be expected to fail (LOS F) in the AM peak period, as would the Belmont Road and 32nd Avenue S intersection in both the AM and PM peak hours. Compared to the LOS C operations at these intersections in under 2030 No Build Conditions, these intersections would be expected to operate worse due to the expected shift in traffic from 4th Avenue S / DeMers Avenue to 32nd Avenue S.

Similar to the Elks Drive Bridge scenario, the intersection at Bygland Road SE and Greenway Boulevard SE would be expected to operate at LOS F in the AM peak period in 2030 with the 32nd Avenue Bridge maintaining the current two-way stop control condition on Greenway Boulevard SE. Similarly, the Bygland Road SE and Rhinehart

Drive SE intersection would be expected to operate at LOS F on the stop controlled Rhinehart Drive SE approach under the 32nd Avenue Bridge alternative in 2030 if no improvements were made to the intersection.

3.2.2.4 2045 32nd Ave Bridge Conditions

The intersection delay and LOS for the study intersections during the AM and PM peak hours under 2045 32nd Avenue Bridge Conditions are provided in **Table 3-4**.

Table 3-4 – 2045 32nd Avenue Bridge 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	63.2	E	53.6	D
Cherry St & 32nd Ave S	AWSC	448.8	F	72.0	F
Belmont Rd & 32nd Ave S	AWSC	275.1	F	177.5	F
S Washington St & 24th Ave S	Signal	20.4	C	29.7	C
Cherry St & 24th Ave S	AWSC	9.5	A	9.4	A
Belmont Rd & 24th Ave S	TWSC	16.7	C	19.5	C
Belmont Rd & Elks Drive	TWSC	12.7	B	15.5	C
S Washington St & DeMers Ave	Signal	51.4	D	38.3	D
Cherry St & 4th Ave S	Signal	6.6	A	5.7	A
Belmont Rd & 4th Ave S	AWSC	53.4	F	21.2	C
3rd Ave SE & 1st St SE	Signal	8.0	A	6.6	A
Bygland Rd SE & Rhinehart Dr SE (Stop Control)	TWSC	118.7	F	23.7	C
Bygland Rd SE & Rhinehart Dr SE (Roundabout)	RAB	10.3	B	6.3	A
Rhinehart Dr SE & Greenway Blvd SE	TWSC	10.5	B	10.7	B
32nd Ave Bridge & Rhinehart Dr SE	TWSC	17.4	C	14.2	B
Bygland Rd SE & Greenway Blvd SE	Signal	9.0	A	6.0	A
Bygland Rd SE & 190th St SW	TWSC	12.3	B	11.3	B
Bygland Rd SE/Harley Dr & TH 220	TWSC	11.2	B	9.8	A
TH 220 & US 2	TWSC	14.8	B	16.0	C
Rhinehart Dr SE & 190th St SE	AWSC	9.4	A	10.0	A

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

Traffic operations under the 32nd Avenue Bridge alternative in 2045 would be expected to function similarly to the 2030 scenario, with general increases in vehicle delays throughout the network. All intersections that were expected to reach or exceed capacity in 2030 with the 32nd Avenue Bridge would continue to fail. The PM peak hour would be expected to degrade to LOS F at the Cherry Street and 32nd Avenue S intersection by 2045, and the Belmont Road and 4th Avenue S intersection would be expected to degrade from LOS E to LOS F in the AM peak hour between 2030 and 2045. The S Washington Street and 32nd Avenue S intersection would be expected to approach capacity in the AM peak hour under the 2045 32nd Avenue Bridge alternative.

The Bygland Road SE and Greenway Boulevard SE intersection was programmed to be signalized by the 2045 forecast year, which would be expected to improve operations at the intersection from unacceptable levels (LOS F in the AM peak hour) with the 32nd Avenue Bridge in 2030 to LOS A during both peak hours in 2045.

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 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 during the PM peak hour under 2045 Elks Drive Bridge Conditions at the intersections on Belmont Road at Elks Drive, 24th Avenue S, and 32nd Avenue S. The 2018 study also indicated expected LOS E operations at the S Washington Street and 32nd Avenue S intersection, whereas this study indicates that the intersection could operate at LOS D with signal timing optimization with the forecast volumes. Additionally, the 2018 study identified the Bygland Road SE and Greenway Boulevard SE intersection as failing in the 2045 Elks Drive Bridge PM peak hour scenario, which was improved in this study with the programmed signalization of the intersection by the forecast 2045 horizon year.

Under the forecast 2045 32nd Avenue Bridge PM peak hour conditions, both the 2018 study and this study identified expected unacceptable operations at the Belmont Road and 32nd Avenue S intersection. Cherry Street was not included in the prior analysis, but was also shown to have expected failing operations in this study. The intersections on S Washington Street at DeMers Avenue and 32nd Avenue S were shown to operate unacceptably in the 2018 study during the PM peak hour; however, the analysis for this study indicates that both the intersections would be expected to operate at LOS D with signal timing optimization in the PM peak hour with the forecast 32nd Avenue Bridge traffic volumes.

3.3 TRAFFIC CONTROL WARRANTS ANALYSIS

After determining expected intersection delays and level of service in the Existing, No Build, Elks Drive Bridge, and 32nd Avenue Bridge scenarios, a traffic control warrants analysis was conducted to determine possible alternatives for traffic control at locations that exhibited intersection LOS E or F operations in either peak hour in each scenario. All-way stop control warrants and traffic signal warrants were analyzed for existing conditions, 2030 conditions, and 2045 conditions using the existing and forecast traffic volumes for the study intersections. The intersections on S Washington Street where operations are expected to reach LOS E or F were not evaluated for warrants because they are already fully signalized, high-capacity intersections, and would be assumed to remain signalized into the future.

The FHWA Manual on Uniform Traffic Control Devices (MUTCD) outlines thresholds for traffic volumes and delay conditions, among other criteria, that must be met for all-way stop control and traffic signal control to be warranted at a given intersection. Additionally, if an intersection is located next to a school and has significant schoolchildren crossings, all-way stop control may be considered. To meet the warrants for a signalized intersection, any one of the warrants must be met. The volume-based signal warrants (1-3) were evaluated for this analysis. If signal warrants are met for an intersection, all-way stop control is also warranted for the intersection. In order to satisfy all-way stop control warrants where signal warrants are not met, both a minimum volume criterion and delay criterion must be met.

There are no definitive warrants for converting an intersection to a roundabout. Roundabouts were considered as a potential mitigation measure at all intersections where all-way stop control warrant or traffic signal warrants were satisfied. Additionally, roundabouts were considered as a potential mitigation measure at locations where no warrants were met where they may provide a benefit to intersection or segment traffic operations or safety.

Table 3-5 through **Table 3-7** summarize the signal and all-way stop control warrants for Existing, 2030, and 2045 conditions.

Table 3-5 – Existing Signal and All-Way Stop Warrant Analysis Summary

Scenario	Intersection	Warrants Met	Signal Warrants			All-Way Stop Control Warrants			
			Warrant 1 - 8-Hour Vehicle Volumes	Warrant 2 - 4-Hour Vehicle Volumes	Warrant 3 - Peak Hour	Criteria A - Signal Justified	Criteria C - Minimum Volumes	Criteria C - Minor Approach Max Delay	School Pedestrian Crossing[1]
Existing	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	32nd Ave & Belmont Rd	-	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET

Notes:
(1) Multiway stop control may be considered at locations where pedestrian crossings for a school are present, per the "Optional" consideration items in the Manual on Uniform Traffic Control Devices (MUTCD)

Table 3-6 – 2030 Signal and All-Way Stop Warrant Analysis Summary

Scenario	Intersection	Warrants Met	Signal Warrants			All-Way Stop Control Warrants			
			Warrant 1 - 8-Hour Vehicle Volumes	Warrant 2 - 4-Hour Vehicle Volumes	Warrant 3 - Peak Hour	Criteria A - Signal Justified	Criteria C - Minimum Volumes	Criteria C - Minor Approach Max Delay	School Pedestrian Crossing[2]
No Build	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	MET
	32nd Ave & Cherry St	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	MET	MET	MET	MET	NOT MET	NOT MET	NOT MET
Elks Bridge	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	24th Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	NOT MET
	32nd Ave & Cherry St	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	Elks Dr & Belmont Rd	Signal, AWSC	NOT MET	NOT MET	MET	MET	NOT MET	MET	NOT MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	Bygland Rd & Greenway Blvd[1]	Signal, AWSC	NOT MET	NOT MET	MET	MET	NOT MET	MET	NOT MET
32nd Bridge	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	NOT MET	MET	MET	NOT MET	MET	NOT MET
	32nd Ave & Cherry St	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	Bygland Rd & Greenway Blvd[1]	Signal, AWSC	NOT MET	NOT MET	MET	MET	NOT MET	MET	NOT MET

Notes:
(1) Intersection programmed to be signalized by the 2045 horizon year
(2) Multiway stop control may be considered at locations where pedestrian crossings for a school are present, per the "Optional" consideration items in the Manual on Uniform Traffic Control Devices (MUTCD).

Table 3-7 – 2045 Signal and All-Way Stop Warrant Analysis Summary

Scenario	Intersection	Warrants Met	Signal Warrants			All-Way Stop Control Warrants			
			Warrant 1 - 8-Hour Vehicle Volumes	Warrant 2 - 4-Hour Vehicle Volumes	Warrant 3 - Peak Hour	Criteria A - Signal Justified	Criteria C - Minimum Volumes	Criteria C - Minor Approach Max Delay	School Pedestrian Crossing[1]
No Build	4th Ave & Belmont Rd	Signal, AWSC	NOT MET	NOT MET	MET	MET	MET	MET	MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	32nd Ave & Cherry St	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET	MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	MET	MET	MET	MET	NOT MET	NOT MET	NOT MET
Elks Bridge	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	24th Ave & Belmont Rd	Signal, AWSC	MET	MET	MET	MET	NOT MET	MET	NOT MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	NOT MET
	32nd Ave & Cherry St	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	MET
	Elks Dr & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET
32nd Bridge	4th Ave & Belmont Rd	AWSC	NOT MET	NOT MET	NOT MET	NOT MET	NOT MET	MET	MET
	32nd Ave & Belmont Rd	Signal, AWSC	NOT MET	MET	MET	MET	MET	MET	NOT MET
	32nd Ave & Cherry St	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	MET
	Bygland Rd & Rhinehart Dr	Signal, AWSC	NOT MET	MET	MET	MET	NOT MET	MET	NOT MET

Notes:
(1) Multiway stop control may be considered at locations where pedestrian crossings for a school are present, per the "Optional" consideration items in the Manual on Uniform Traffic Control Devices (MUTCD)

3.4 INTERSECTION MITIGATION

After the intersection traffic operations and traffic control warrants were evaluated, intersections that presented insufficient traffic operations were evaluated for potential mitigation options. Possible traffic control alternatives were identified at each intersection based on warrants met. Any mitigation must be adequate to acceptably serve projected traffic volumes through the 2045 horizon year, so the intersection mitigation analysis was completed using the 2045 volume conditions for the No Build and Build alternatives. The intersection mitigation analysis is summarized in **Table 3-8.** The summary table presents the unmitigated LOS, warrants met, special considerations for schools or crash history, and identifies options for mitigation that are warranted and would be expected to provide acceptable traffic operations.

Table 3-8 – Intersection Mitigation Summary

Scenario	Intersection	Existing Traffic Control	2030 Unmitigated LOS	2045 Unmitigated LOS	Traffic Control Warrants Met	School Adjacent	Identified Crash Issues	Acceptable Mitigation Control Options[2]
No Build	4th Ave & Belmont Rd	AWSC	F/F	F/F	Signal, AWSC	X		Signal/RAB (mini)
	32nd Ave & Belmont Rd	AWSC	C/C	F/F	Signal, AWSC			AWSC/Signal/RAB
	32nd Ave & Cherry St	AWSC	E/B	F/C	AWSC	X		RAB
	DeMers Ave & Washington St	Signal	E/D	F/E	Signal, AWSC		X	Signal
	Bygland Rd & Rhinehart Dr[1]	TWSC	F/C	F/D	Signal, AWSC			Signal/RAB
Elks Drive Bridge Build	4th Ave & Belmont Rd	AWSC	E/C	E/C	AWSC	X		AWSC/RAB (mini)
	24th Ave & Belmont Rd[1]	TWSC	D/F	F/F	Signal, AWSC			Signal/RAB
	32nd Ave & Belmont Rd	AWSC	D/E	F/F	Signal, AWSC			AWSC/Signal/RAB
	32nd Ave & Cherry St	AWSC	F/C	F/C	Signal, AWSC	X		Signal/RAB
	Belmont Rd & Elks Dr[1]	TWSC	F/D	F/E	Signal, AWSC			Signal/RAB
	Bygland Rd & Rhinehart Dr[1]	TWSC	F/C	F/C	Signal, AWSC			Signal/RAB
32nd Ave Bridge Build	4th Ave & Belmont Rd	AWSC	E/C	F/C	AWSC	X		AWSC/RAB (mini)
	32nd Ave & Belmont Rd	AWSC	F/F	F/F	Signal, AWSC			Signal/RAB
	32nd Ave & Cherry St	AWSC	F/C	F/F	Signal, AWSC	X		Signal
	32nd Ave & Washington St	Signal	D/D	E/D	Signal, AWSC		X	Signal
	Bygland Rd & Rhinehart Dr[1]	TWSC	F/C	F/C	Signal, AWSC			Signal/RAB

Notes:
(1) Results for worst approach are reported for two-way stop-controlled intersections
(2) Mitigation options that were warranted and would be expected to result in acceptable intersection level of service

For the purposes of developing a cost estimate for each bridge option, a sing le mitigation option is assumed for each location requiring mitigation. For the purposes of the cost estimate, the lowest-cost option that the traffic modeling showed would provide acceptable traffic operations was selected. When determining the mitigated control option assumed for cost estimating, the following hierarchy of changes was followed:

1. Add turn lanes without changes in traffic control
2. Convert to all-way stop control with minimum required turn lane additions (if existing TWSC)
3. Convert to signalized control with minimum required turn lane additions
4. Convert to a single-lane roundabout

Locations near schools with pedestrian crossings and intersections where the safety analysis identified a safety issue (see Technical Memorandum #3-B) were identified and considered when evaluating mitigation options. At these locations, mitigation options with additional lanes (which would increase crossing distances) and stop controlled operations (as opposed to higher levels of traffic control) were deprioritized over signal or roundabout options that would provide improved pedestrian crossing conditions by providing controlled crossings, shorter crossing distances, reduced vehicle speeds, and/or median pedestrian refuge areas. Crash issues, right-of-way availability, and previous study recommendations were also factored into design feasibility and potential effectiveness. For consistency of approach, the "assumed mitigation for cost estimate" reflects the lowest-cost option that would be expected to provide acceptable operations and address pedestrian/safety issues where identified. This would be the would be the first option on the established hierarchy that would provide acceptable intersection operations. The mitigation options assumed for cost estimating are summarized in **Table 3-9**.

Table 3-9 – Summary of Intersection Mitigation Assumed for Cost Estimate

Scenario	Intersection	Existing Traffic Control	Assumed Mitigation Option for Cost Estimate				
			Assumed Traffic Control for Cost Estimate	2045 LOS with Assumed Mitigation	Mitigation Description	Consider Additional Pedestrian Accommodations	Notes and Considerations
No Build	4th Ave & Belmont Rd	AWSC	Signal	B/B	Signalized intersection with no additional turn lanes	X	Intersection was previously signalized until 2015. May consider adding turn lanes if signalized based on prior signalized operations observations.
	32nd Ave & Belmont Rd	AWSC	AWSC	C/C	Maintain AWSC and add SB right and NB left turn lanes		May impact ROW
	32nd Ave & Cherry St	AWSC	RAB	B/A	Single-lane RAB	X	May impact ROW
	DeMers Ave & Washington St	Signal	Signal	E/D	No lane additions feasible—consider CFI		Additional lanes likely infeasible, CFI design recommended in prior study showed operational improvements[1]
	Bygland Rd & Rhinehart Dr[1]	TWSC	RAB	C/A	Single-lane RAB		Based on detailed 2015 Bygland Road Study results and 2016 Intersection Control Evaluation
Elks Drive Bridge Build	4th Ave & Belmont Rd	AWSC	Mini-RAB	A/A	Single-lane mini-RAB	X	AWSC may be considered based on vehicle/pedestrian conflicts
	24th Ave & Belmont Rd[1]	TWSC	Signal	A/B	Signalized intersection with no additional turn lanes		
	32nd Ave & Belmont Rd	AWSC	AWSC	C/D	Maintain AWSC and add SB right, NB left, and EB left turn lanes		May impact ROW
	32nd Ave & Cherry St	AWSC	Signal	B/A	Signalized intersection with restriped NB approach to include a left turn storage lane and thru/right lane	X	
	Belmont Rd & Elks Dr[1]	TWSC	Signal	B/A	Signalized intersection with EB left turn lane and right turn storage lane		
	Bygland Rd & Rhinehart Dr[1]	TWSC	RAB	A/A	Single-lane RAB		Based on detailed 2015 Bygland Road Study results and 2016 Intersection Control Evaluation
32nd Ave Bridge Build	4th Ave & Belmont Rd	AWSC	Mini-RAB	A/A	Single-lane mini-RAB	X	AWSC may be considered based on vehicle/pedestrian conflicts, though left and right turn lanes would be needed on all approaches
	32nd Ave & Belmont Rd	AWSC	Signal	C/C	Signalized intersection with additional NB left turn lane		May impact ROW
	32nd Ave & Cherry St	AWSC	Signal	D/A	Signal with WBL/EBL turn lanes	X	Single-lane RAB expected to operate at LOS F in AM peak hour. Additional turn lanes may impact ROW.
	32nd Ave & Washington St	Signal	Signal	D/D	Existing signalized control with new SB and WB left turn lanes		Additional WB left turn lane may not be feasible due to limited ROW
	Bygland Rd & Rhinehart Dr[1]	TWSC	RAB	B/A	Single-lane RAB		Based on detailed 2015 Bygland Road Study results and 2016 Intersection Control Evaluation

Notes:
(1) Additional lanes are likely infeasible due to right-of-way constraints. Prior studies showed potential operational improvements with a Continuous Flow Intersection (CFI) design (Washington St. Corridor Study, 2012).

The S Washington Street and DeMers Avenue intersection was not able to be feasibly mitigated in the 2045 No Build scenario with conventional improvements such as signal timing/phasing changes, additional through lanes, or additional turn lanes. The Washington Street Reconstruction Traffic Operations Report completed in 2020 recommended adding one though lane in the northbound and southbound directions on S Washington Street. While these improvements would mitigate traffic operations at the intersection, they may not be feasible due to the limited available right-of-way and large costs and impacts associated with acquiring it to expand the road. The Washington Street Corridor Study completed in 2012 showed operational benefits to reconstructing the intersection as a Continuous Flow Intersection (CFI) at this location. The CFI design was also included as an alternative in the Metropolitan Transportation Plan (MTP). The North Dakota Department of Transportation, in conjunction with local agencies, is planning to conduct a Road Safety Review (RSR) for the S Washington Street and DeMers Avenue intersection that will evaluate safety conditions further and will provide recommendations based on its findings.

The 4th Avenue S and Belmont Road intersection does not meet signal or all-way stop control warrants under the 2045 Elks Drive Bridge or 2045 32nd Avenue Bridge options; however, removing the all-way stop control and converting to a two-way stop controlled intersection would be anticipated to operate unacceptably and would result in degraded conditions for pedestrian crossings. While a traffic signal isn't warranted based on traffic volumes, a single-lane mini-roundabout would be expected to mitigate the delay issues and operate at LOS A in both peak hours for both bridge alternatives. This option would also provide traffic calming by forcing vehicles to slow down to traverse the roundabout, which would be beneficial due to the proximity to Phoenix Elementary School. A mini-roundabout would provide improved pedestrian crossing conditions by providing a single lane in each direction and providing a median refuge at the crosswalks, allowing pedestrians to cross one direction of traffic at a time.

Locations with high pedestrian traffic near schools should consider additional pedestrian accommodations such as curb extensions (to reduce crossing distance), signalized pedestrian crossings, and/or adding median pedestrian refuges to improve crossing conditions. These may be considered at any location where pedestrian demand substantiates a need for safer crossing conditions, but particularly should be considered at the intersections adjacent to schools. This includes the intersections at 4th Avenue S and Belmont Road and at 32nd Avenue S and Cherry Street. This level of intersection design is not being conducted as part of this system-level planning study. It is assumed that more detailed design of options would be conducted as next steps beyond this planning study.

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

Sept. 8, 2021

MPO Executive Board:

Sept. 15, 2021

RECOMMENDED ACTION: Informational
TAC RECOMMENDED ACTION:

Matter of Update of the East Grand Forks Land Use Plan.

Background:
An up-to-date Land Use Plan is vital in the process to update the MPO Metropolitan Transportation Plan (MTP). The Land Use Plan will establish the current population and the percent growth per year for the future for the MTP. The Land Use Plan will also establish the areas of the City that will be used to accommodate the growth of the City whether it is residential or employment. This vision of how and where the City grows will establish the transportation network of the City in the future. The transportation network is established in the Metropolitan Transportation Plan, which will plan how people get to and from these new areas of growth.

In July of 2020 WSB was contracted to complete the update to the East Grand Forks Land Use Plan. The rest of 2020 was spend gathering data for population and employment estimates, identifying existing conditions of the City, and putting together surveys to gather public input on the conditions and vision for the future.

In 2021, the first public meeting was in February. Once the public input was gathered, it was combined with the future population and employment estimates to create a future land use map with growth phases. The input also influenced the priority of the goals and policies. In order to implement the goals and policies, the heads of East Grand forks Parks & Recreation, the Downtown Development Association, and the East Grand Forks Economic Development Authority (EDA) were asked for their input on the goals & policies and implementation chapters. The head of the EDA brought the future land use and economic development goals and policies implementation to the EDA Board for their input. The Planning and Zoning Commission was briefed as wel.

The input from the public, stakeholders, steering committee, department heads, and leaders in the City (boards, commissions, and council) informed all chapters of the

document. All groups were vital in telling us the current and future needs of the City and where the priorities should be focused. They also informed us on where growth should happen. Where motorized and non-motorized transportation and recreation amenities should be focused were feedback given. All this input and data was combined into the Draft 2050 East Grand Forks Land Use Plan that will go before the public.

With a draft plan completed, the public will get a chance to give their input. A virtual open house will be held on Sept. 15th starting at 6:00 PM. The public is being asked to register for the meeting, the link (***https://bit.ly/egfnewplan***) is available on the plan website www.egfplan.org.

Findings and Analysis

- Information

Support Materials:

- Presentation

East Grand Forks Land Use Plan Update

TAC: SEPTEMBER 8, 2021

EXECUTIVE BOARD: SEPTEMBER 15, 2021

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

Schedule

August 5, 2020 | Kick Off Meeting (Public Engagement Plan and Land Use Plan Scope)

September 29, 2020 | Steering Committee Meeting #1 (Community Background)

January 4, 2021 | Steering Committee Meeting #2 (Population and Growth Projections)

February 22, 2021 | Open House #1 (Population and Growth Projections)

June 24, 2021 | *Steering Committee Meeting #3 (Land Use Map, Goals, and Policies)*

August 2021| Steering Committee Meeting #4 (Implementation)

August/September 2021 | Open House #2 (Land Use Plan)

September/October 2021 | Steering Committee Meeting #5 (Land Use Plan)

October/November 2021 | Planning Commission and City Council Meeting (Land Use Plan)

Schedule

Virtual Open House: September 15th starting at 6:00 PM

Registration is needed to participate – ***https://bit.ly/egfnewplan***

Steering Committee Meeting: September 27th at 3:30 PM

Planning Commission: Draft presented Oct.14th

City Council Work Session: Draft presented October 26th

Planning Commission: Final presented Nov. 10th

City Council: Final presented Nov. 16th

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

Population

Year	East Grand Forks Pop.	Change	% Change	Annual Rate
1960	6,998	1,949	38.60%	3.86%
1970	7,607	609	8.70%	0.87%
1980	8,537	930	12.23%	1.22%
1990	8,658	121	1.42%	0.14%
2000	7,609	-1,049	-12.12%	-1.21%
2010	8,604	995	13.08%	1.31%
2020	9,176	572	6.65%	0.66%

Source: US Census Bureau

East Grand Forks Historic Population

Year	Historic Average of 0.5%	20 SFR units/year + 36 MFR units/5 years
2020	9,176	9,176
2025	9,177	9,307
2030	9,387	9,642
2035	9,602	9,978
2040	9,822	10,314
2045	10,047	10,649
2050	10,277	10,985
Annual Growth Rate (2020-2050)		0.75%

Note: SFR assumes 2.73 pph; MFR assumes 1.74 pph (2015 TAZ data)

Source: US Census Bureau (2020 Population)

East Grand Forks Population Projection

ZATION

Employment

From 2015 TAZ	
SFR Person per Household (pph)[1]	2.73
MFR pph[1]	1.74
Commercial Jobs per Acre[2]	9.7
Commercial Jobs per 1,000 People[3]	425
Industrial Jobs per Acre[2]	3.9
Industrial Jobs per 1,000 People[3]	123
2045	10,649
2050	10,985
Acreage Projections	
SFR Units per Year	20
SFR Density	2.25 du/ac[4]
MFR Units per Five Years	36
MFR Density	16 du/ac[4]
SFR Net to Gross	125%
MFR Net to Gross	N/A
C/I5 Net to Gross	125%
Parks Acre per 1,000 People	7
Institutional per 1,000 People	9

1 Includes all TAZs located with East Grand Forks current boundaries
2 From the 2015 GF/EGF MPO TDM methodology memorandums
3 Includes all TAZs within the 2015 GF/EGF MPO TDM
4 dwelling units per acre
5 commercial/industrial
Source: GF-EGF MPO 2015 TDM

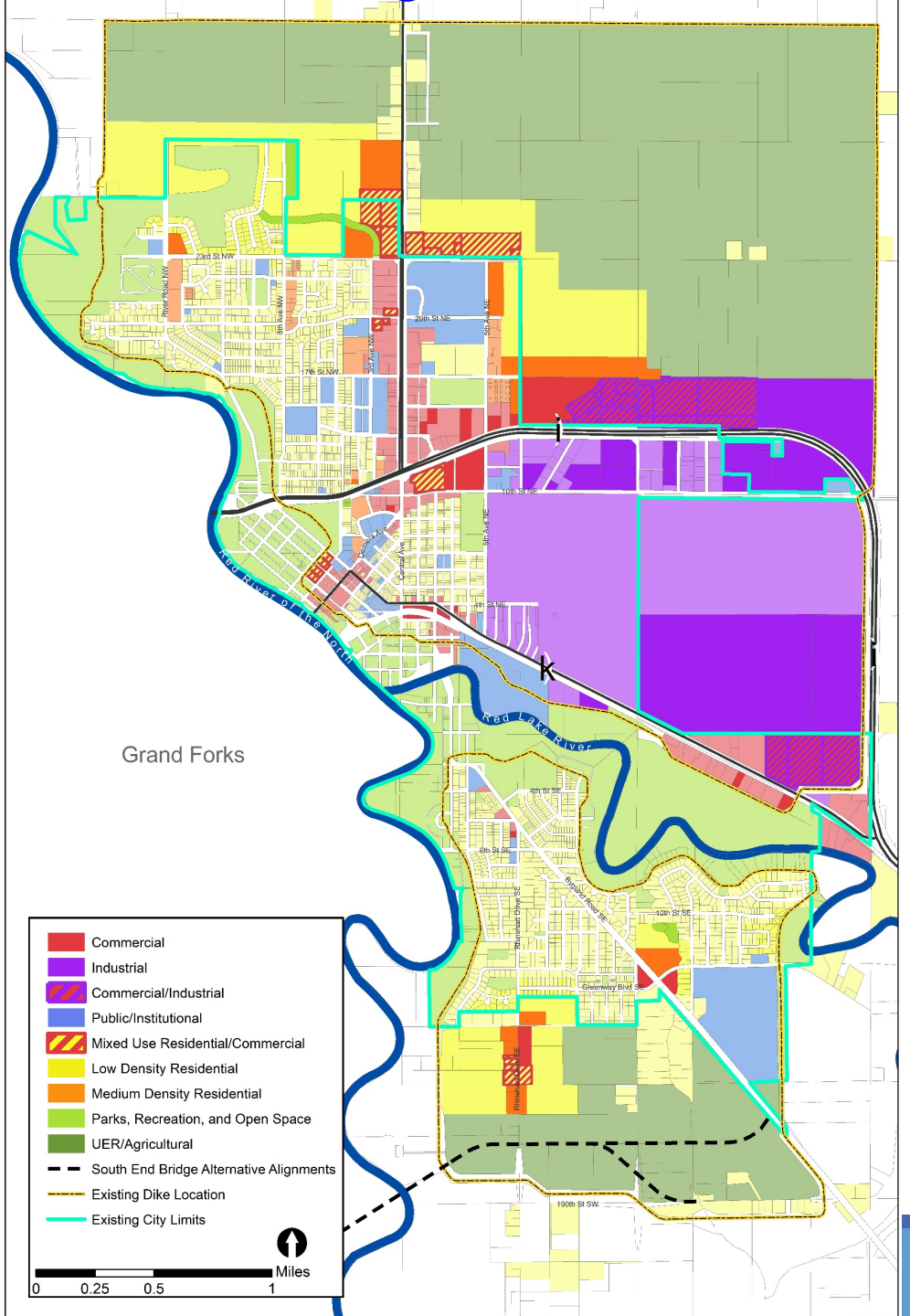
After calculating factors that descried the number of jobs per commercial and industrial acre and those that describe residential densities, the acreage of each land use demand created by the projected population can be determined. These demands for jobs are highlighted in blue.

Year	2020	2025	2030	2035	2040	2045	2050
SFR Population	-	273	546	819	1,092	1,365	1,638
SFR Units	-	100	200	300	400	500	600
SFR Net Acres	-	44.4	88.9	133.3	177.8	222.2	266.7
SFR Gross Acres	-	55.6	111.1	166.7	222.2	277.8	333.3
MFR Population	-	63	125	188	251	313	376
MFR Units	-	36	72	108	144	180	216
MFR Net Acres	-	2.3	4.5	6.8	9.0	11.3	13.5
MFR Gross Acres	-	6.8	9.0	11.3	13.5	15.8	18.0
Total Units Population[1]	-	278	671	1,007	1,343	1,678	2,014
Total Units[2]	-	136	272	408	544	680	816
Total Units Net Acres[3]	-	46.7	93.4	140.1	186.8	233.5	280.2
Total Units Gross Acres[4]	-	62.3	120.1	177.9	235.7	293.5	351.3
Commercial Jobs	0	118	285	428	571	713	856
Commercial Net Acres	0	12.2	29.4	44.1	58.8	73.5	88.2
Commercial Gross Acres	0	15.2	36.8	55.1	73.5	91.9	110.3
Industrial Jobs	0	34	83	124	165	206	248
Industrial Net Acres	0	8.8	21.2	31.8	42.3	52.9	63.5
Industrial Gross Acres	0	10.9	26.5	39.7	52.9	66.2	79.4
Total C/I[5] Jobs	0	152	368	552	736	920	1,104
Total C/I Net Acres	0	20.9	50.6	75.9	101.2	126.5	151.7
Total C/I Gross Acres[6]	0	26.1	63.2	94.8	126.5	158.1	189.7
Park Acres	-	1.9	4.7	7.0	9.4	11.7	14.1
Institutional Acres	-	2.5	6.0	9.1	12.1	15.1	18.1
Total Net Acres	-	72.0	154.7	232.1	309.4	386.8	464.1
Total Gross Acres[7]	**-**	**92.9**	**194.1**	**288.9**	**383.7**	**478.5**	**573.2**

1 Total Units Population = SFR Population + MFR Population
2 Total Units = SFR Units + MFR Units
3 Total Units Net Acres = SFR Net Acres + MFR Net Acres
4 Total Units Gross Acres = SFR Gross Acres + MFR Gross Acres
5 C/I = Commercial Industrial
6 Total C/I Gross Acres = Commercial Gross Acres + Industrial Gross Acres
7 Total Gross Acres = Total Units Gross Acres + Total C/I Gross Acres

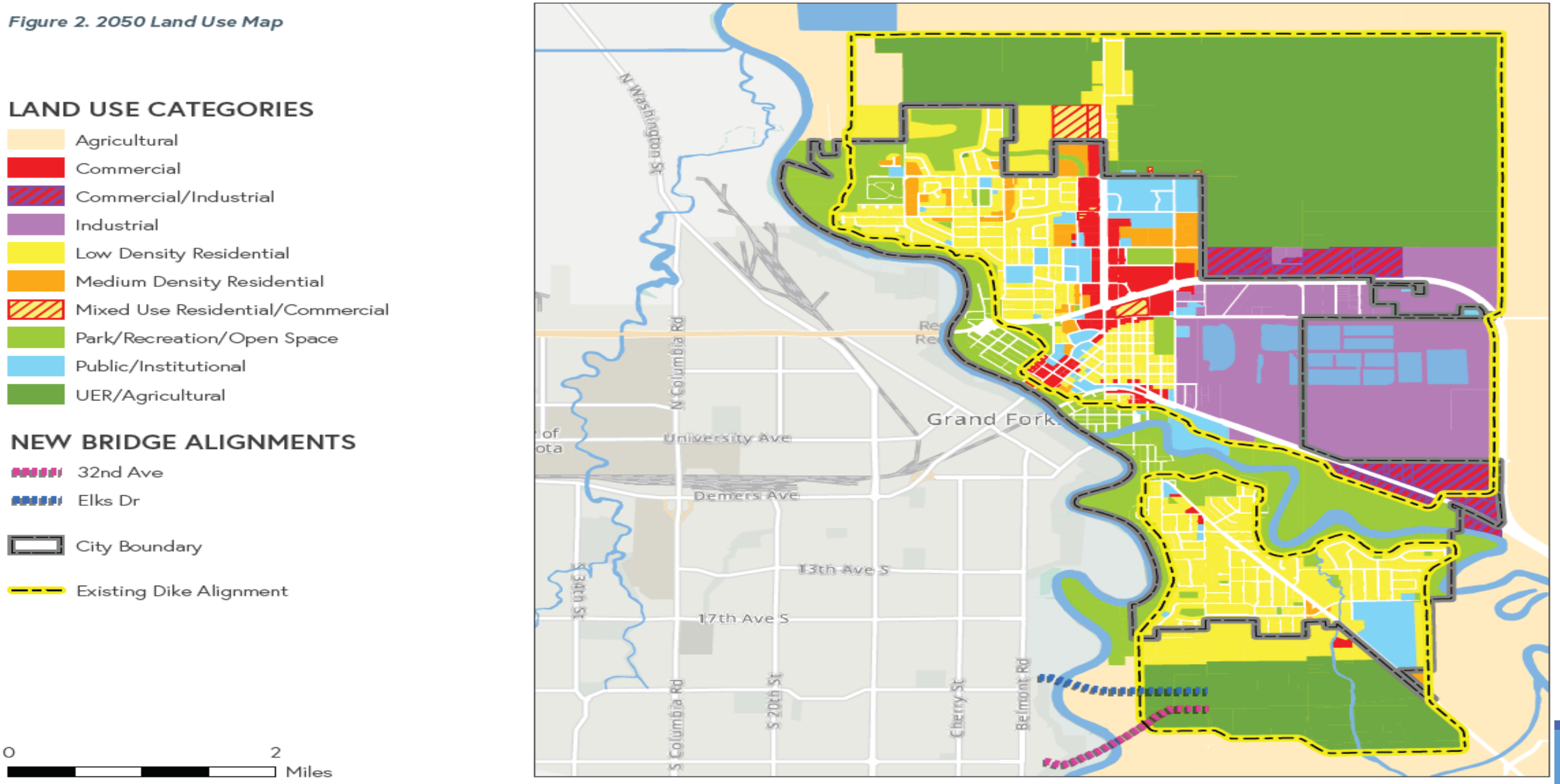
Factors used in employment projections.

Future Land Use- 2045 Plan



Future Land Use

Figure 2. 2050 Land Use Map



Goals & Policies

HOUSING / RESIDENTIAL

The residential area goals and polices are intended to support the development of a diverse housing stock with options suited for all portions of the City's population.

1. **Promote the development and expansion of neighborhoods with individual character and sufficient access to urban services.**
   - 1.1 Enhance neighborhood value with quality housing options, densities and types at all price points that offer a wide range of housing alternatives and affordability including mixed use, while supporting projects that are well designed, add value to the community landscape, and are located in area connected to transit ways and other community amenities.
   - 1.2 Revitalize and enhance the quality of the housing stock so that it is attractive and appropriate for new buyers.
   - 1.3 Employ flexible zoning for property redevelopment to meet broader housing goals such as density, open space and lot size.
   - 1.4 Meet increased demand for senior housing and opportunities for residents to age in place.

ECONOMIC DEVELOPMENT

The economic development goals and polices focus on continued economic growth for the community while increasing employment opportunities and variety of jobs. Polices will support business retention and attraction, in a manner that is fiscally responsible for both the City and the developer/business owner.

1. **Encourage investments that support economic development.**
   - 1.1 Utilize land use planning to enhance job growth and continued economic health throughout all areas of the City.
   - 1.2 Expand industrial opportunities by establishing programs that use public/private partnerships to acquire strategic sites and that also develop funding sources and partnerships to allow for the successful acquisition of additional projects.
   - 1.3 Identify the types of land uses and related building types that promote job generation and retention to encourage economic growth. Identify barriers to investments that deter the construction of those building types and deter the use of underutilized properties. Encourage development of building types that are adaptable to evolving demands. Establish a process by which the preservation or creation of job producing land uses is reviewed periodically by City staff.
   - 1.4 Manage growth and development in a manner that is fiscally responsible.
   - 1.5 Support opportunities that benefit livability and will improve social and economic needs of all community members by improving transportation network connections, providing more transportation choices, and increasing development density near transit stops and routes.
2. **Encourage redevelopment and preservation within the longstanding key downtown.**
   - 2.1 Develop and implement a comprehensive downtown master plan for all improvements, which promotes/encourages future investment and business growth in the downtown area.
   - 2.2 Make downtown visually interesting at a small-town scale.
   - 2.3 Create user friendly edges and provide more form to downtown.
   - 2.4 Create and/or implement programs to facilitate the redevelopment and preservation of the identified sites through private/public partnerships.

Goals & Policies

URBAN EXPANSION AREA

These goals and polices emphasize logical development within the plan's near, mid- and long-term planning time frames. These polices outline mechanisms for planning and managing future growth.

1. **Plan for a logical expansion of urban growth beyond the existing municipal service boundaries.**
   - 1.1 Plan for logical expansion of urban growth beyond the existing municipal service boundaries while preserving the urban growth expansion area for future urban development.
   - 1.2 Establish a link between housing and employment opportunities to provide a connection as growth occurs.
   - 1.3 Preserve a corridor for mixed used development with The Point to facilitate the future new south river crossing.

PARKS, RECREATION & OPEN SPACE

The parks, recreation, and open space goals and polices strive to promote opportunities for active and passive recreation within the community and greater region.

1. **Create and maintain a park system with a variety of recreational opportunities throughout the community.**
   - 1.1 Provide a coordinated system of City, County and State park and recreation open space facilities and services which meets the needs of current and future East Grand Forks area residents.
   - 1.2 Create a well-connected and easily accessible system of parks, open space, trails, pathways, community connections, and facilities that links neighborhoods and provides opportunities for residents and others to gather and interact.
   - 1.3 Maintain a sufficient park and trails system to provide adequate passive and active and recreation opportunities, including compliance with the Americans with Disabilities Act (ADA), for the current and future residents of East Grand Forks.
   - 1.4 Continue to review and maintain existing parks in order to establish an inclusive environment that caters to all abilities.
   - 1.5 Add new parks and facilities to achieve equitable access to add neighborhoods, accommodate the needs of redeveloping areas, and meet residents' desires for a range of recreation opportunities serving all ages, abilities, and cultures.
   - 1.6 Examine opportunities for improved crossings and connections across roadways and in relation to the school system.
   - 1.7 Create a diverse array of sizes and types of gathering places throughout the City to promote community, art, and culture.
   - 1.8 Complete and implement the Facilities Master Plan.

Goals & Policies

TRANSPORTATION

The transportation goals and policies are intended to support existing and future transportation needs within the community.

1. **Provide a transportation system that is integrated with land use and development while enhancing safety for all users and modes of transportation.**
   - 1.1 Create a Downtown Parking Plan to address transportation and multi-model needs utilizing the October 2020 Downtown Transportation Study.
   - 1.2 Create functional and aesthetic transit stops which encourage transit use and compliment the area.
   - 1.3 Provide opportunity between compatible land uses by establishing suitable connections that integrate various modes of transportation.
2. **Advocate development that is accompanied by a sufficient level of support services and facilities (roads, utilities, infrastructure, storm water management systems, parking, access, non-motorized transportation facilities, electrical vehicle charging stations, transit facilities/stations, smart transportation facilities, etc.).**
   - 2.1 Continue to develop a multimodal transportation system that enhances access to various types of land uses, developments, economic growth opportunities, and affordable housing that would help meet social and economic needs of East Grand Forks residents.
   - 2.2 Continue efforts to eliminate gaps and expand the existing non-motorized transportation network to enhance connectivity between neighborhoods, communities, and various land uses.
   - 2.3 Continue to consider freight activities within areas with freight generating activities and in high-density areas.
   - 2.4 Create a highly efficient transportation system by promoting connectivity, enforcing access management, exploring and implementing advanced transportation technology, and utilizing other transportation planning practices throughout the development review process for motorists, non-motorists, and freight activities.
3. **Plan for the current and future transportation needs of the community as growth occurs.**
   - 3.1 Build an environment that helps promote transportation corridor safety for motorized and non-motorized users and freight activities.
   - 3.2 Promote roadway connectivity across and between modes for people, goods (i.e. freight), and services, through the implementation of the East Grand Forks planned maps for motorist and non-motorists (i.e. trails, bike lanes, sidewalks, etc.).
   - 3.3 Continue the installation of non-motorized transportation facilities along new roadways in accordance with existing ordinances.
   - 3.4 Promote the use of various modes of transportation (i.e. passenger vehicles, freight, non-motorized transportation, etc.) for all age groups. Develop livable neighborhoods, communities, and other land uses that incorporate non-motorized connectivity consistent with Safe Routes to School and other transportation initiatives. Use "complete streets" policies as a guide for developing safe, reliable, and economical transportation systems, while also maintaining or improving the natural environment.
   - 3.5 Incorporate transportation network resilience by being aware of potential risks and management strategies to be prepared for disasters, including extreme weather events, that could impact the transportation infrastructure and the ability of the public to travel.

Livability Principles

Livability Principles	Goal Area	Housing/ Residential	Economic Development		Urban Expansion Area	Parks, Recreation, & Open Spaces	Transportation		
	Goal	*Promote the development and expansion of neighborhoods with individual character and sufficient access to urban services.*	*Encourage investments that support economic development.*	*Encourage redevelopment and preservation within the longstanding key downtown.*	*Plan for a logical expansion of urban growth beyond the existing municiple service boundaries.*	*Create and maintain a park system with a variety of recreational opportunities throughout the community.*	*Provide a transportation system that is integrated with land use and development while enhancing safty for all users and modes of transportation.*	*Advocate development that is accompanied by a sufficient level of support services and facilities.*	*Plan for the current and future transportation needs of the community as it grows.*
	Provide more transportation choices. Develop safe, reliable and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions and promote public health.	1.1	1.5		1.2, 1.3	1.2, 1.6	1.1, 1.2, 1.3	2.1, 2.2, 2.4	3.1, 3.2, 3.3, 3.4, 3.5
	Promote equitable, affordable housing. Expand location- and energy- efficient housing choices for people of all ages, incomes, races and ethnicities to increase mobility and lower the combined cost of housing snd transportation.	1.1, 1.2, 1.3, 1.4	1.3, 1.5	2.3	1.2, 1.3	1.1, 1.3, 1.4, 1.5		2.1, 2.2	3.2, 3.3, 3.4
	Enhance economic competitiveness. Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers as well as expanded business access to markets.		1.1, 1.2, 1.3, 1.4, 1.5	2.1	1.1, 1.2	1.1, 1.5, 1.7	1.2, 1.3	2.1, 2.2, 2.3, 2.4	3.1, 3.2, 3.3, 3.4, 3.5
	Support existing communities. Target federal funding toward existing communities- through such stratagies as transit-oriented, mixed-use development and land recycling- to increase community revitalization, improve the efficiencty of public works investments, and safeguard rural landscapes.	1.2, 1.3	1.2, 1.3, 1.4	2.1, 2.2, 2.3, 2.4	1.1	1.2, 1.3, 1.4, 1.7, 1.8	1.1, 1.2, 1.3	2.1, 2.2, 2.4	3.1, 3.2, 3.4, 3.5
	Coordinate policies and leverage investment. Align federal policies and funding to remove barriers to collaboration, leverage funding to increase the accountability and effectiveness of all levels of government to plan future growth, including making smart energy choices such as locally generated renewable energy.		1.3	2.1, 2.4	1.1, 1.3	1.8	1.2, 1.3	2.4	3.2, 3.3, 3.4, 3.5
	Value communities and neighborhoods. Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods- rural, urban, or suburban.	1.1, 1.3	1.5	2.2, 2.3		1.3, 1.4, 1.5, 1.7	1.1, 1.2, 1.3	2.1, 2.2, 2.4	3.1, 3.2, 3.3, 3.4, 3.5

Ladders of Opportunity

Ladders of Opportunity									
	Goal Area	**Housing/ Residential**	**Economic Development**		**Urban Expansion Area**	**Parks, Recreation, & Open Spaces**	**Transportation**		
	Goal	*Promote the development and expansion of neighborhoods with individual character and sufficient access to urban services.*	*Encourage investments that support economic development.*	*Encourage redevelopment and preservation within the longstanding key downtown.*	*Plan for a logical expansion of urban growth beyond the existing municiple service boundaries.*	*Create and maintain a park system with a variety of recreational opportunities throughout the community.*	*Provide a transportation system that is integrated with land use and development while enhancing safty for all users and modes of transportation.*	*Advocate development that is accompanied by a sufficient level of support services and facilities.*	*Plan for the current and future transportation needs of the community as it grows.*
	Expresses the strong ties between land use and transportation.	1.1	1.1, 1.5	2.1, 2.3	1.2, 1.3	1.2, 1.8	1.3	2.1, 2.2, 2.4	3.4
	Recognizes that for certain neighbohoods, socio-ecnomic cahracteristics can hinder "climbing up ladder".	1.1, 1.2, 1.3	1.1, 1.3	2.1, 2.3	1.2	1.2, 1.6, 1.8	1.1, 1.3	2.1, 2.2, 2.4	3.3, 3.4
	Locating residents with in or in close proximity to employment centers, educational and training opportunities, and other basic needs.	1.1, 1.3	1.5	2.1, 2.3	1.1, 1.2, 1.3	1.2, 1.8	1.3	2.1, 2.2	3.4
	Strengthening the connection between sustainable land development and sustainable transportation.	1.1, 1.3	1.5	2.1, 2.3	1.1, 1.2, 1.3	1.2, 1.3, 1.8	1.3	2.1, 2.2, 2.4	3.2, 3.3, 3.4

Transportation Planning Factors

Transportation Planning Factors	Goal Area	Housing/ Residential	Economic Development		Urban Expansion Area	Parks, Recreation, & Open Spaces	Transportation		
	Goal	*Promote the development and expansion of neighborhoods with individual character and sufficient access to urban services.*	*Encourage investments that support economic development.*	*Encourage redevelopment and preservation within the longstanding key downtown.*	*Plan for a logical expansion of urban growth beyond the existing municiple service boundaries.*	*Create and maintain a park system with a variety of recreational opportunities throughout the community.*	*Provide a transportation system that is integrated with land use and development while enhancing safty for all users and modes of transportation.*	*Advocate development that is accompanied by a sufficient level of support services and facilities.*	*Plan for the current and future transportation needs of the community as it grows.*
	Support the ecconomic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.	1.1	1.1, 1.2, 1.5	2.1, 2.4	1.1, 1.2, 1.3	1.1, 1.2, 1.8	1.3	2.1, 2.3	
	Increase safety of the transportation system for motorized and non-motorized users.		1.5		1.2, 1.3	1.2, 1.6, 1.8	1.1	2.2, 2.3	3.1, 3.3, 3.5
	Increase security of the transportation system of motorized and non-motorized users.				1.3	1.3		2.2, 2.3, 2.4	3.2, 3.5
	Increase accessibility and mobility of people and freight.	1.1, 1.3	1.3, 1.5	2.1, 2.3	1.2, 1.3	1.1, 1.2, 1.3, 1.5, 1.8	1.1, 1.2, 1.3	2.2, 2.3, 2.4	3.1, 3.2, 3.3, 3.4
	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistancy between transportation improvements and State and local planned growth and economic development patterns.	1.2, 1.3	1.2, 1.3, 1.5	2.1, 2.2, 2.3, 2.4	1.1, 1.2, 1.3	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8	1.1, 1.2, 1.3	2.4	3.2, 3.4
	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	1.1	1.5	2.1, 2.2, 2.3	1.2	1.1, 1.2, 1.6, 1.8	1.1, 1.2, 1.3	2.1, 2.2, 2.3	3.1, 3.2, 3.3, 3.4
	Promote efficient system management and operation.	1.1	1.4, 1.5	2.1	1.1	1.3, 1.4, 1.8	1.1	2.4	3.3, 3.4, 3.5
	Emphasize the preservation of the existing transportation system.	1.1, 1.2		2.1		1.4, 1.6, 1.8			
	Improve the resiliency and reliability of the transportation system and reduce or midigate stormwater impacts of surface transportation.			2.1		1.8		2.4	3.5
	Enhance travel and tourism.	1.1	1.5	2.2, 2.3		1.1, 1.2, 1.3, 1.5, 1.7, 1.8	1.1, 1.2	2.1	3.2, 3.3, 3.4

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

September 8, 2021

MPO Executive Board:

September 15, 2021

RECOMMENDED ACTION: Update on Grand Forks 2050 Land Use Plan

Matter of the Update on Grand Forks 2050 Land Use Plan.

Background: SRF Engineering has been working with the City and MPO on updating the 2045 City Land Use plan to be updated to become the 2050 Plan. Each of the past monthly meetings, we have kept the TAC and Board informed of the activities; we did this primarily by highlighting the activity within the monthly work summary and stressing the website. Enough activity has taken place to do a more complete update.

The Land Use Subcommittee has met 3 times to help steer the work. One community engagement activity took place along with online surveys. The summary is attached.

Recent 2020 Census results have provided a better basis to forecast future population. With this and the feedback to date, initial growth alternatives have been created. The alternatives can be described as:

1. Alternative #1 – focus on outward growth with infill focus on vacant/agricultural land within city limits.
2. Alternative #2 – focus on infill with redevelopment/repurpose of existing land uses along with vacant/agricultural land within City limits.

These two alternatives were discussed at a September 1st Land Use Sub-committee meeting with input that is causing some subtle changes to the proposed land use alternatives. It is hoped that by the TAC meeting, newly revised map graphics can be provided.

Findings and Analysis:

- NONE

Support Materials:

- Presentation.
- Engagement Summary

Grand Forks 2050 Land Use Plan

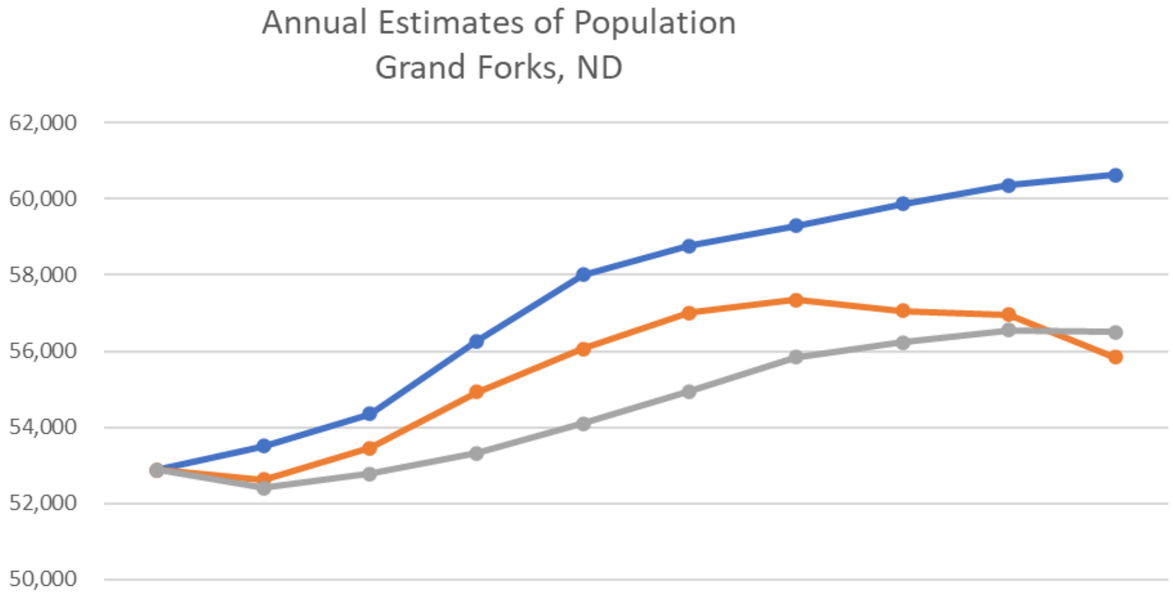
Land Use Subcommittee
Alternative Land Use Review

Wednesday, September 1, 2021 | 4:30 pm

Zoom

AGENDA

1. Review of plan progress to date
2. Summary of community survey and focus group input
3. Land use opportunities and constraints
5. Future land use changes (discussion)
6. Next Steps



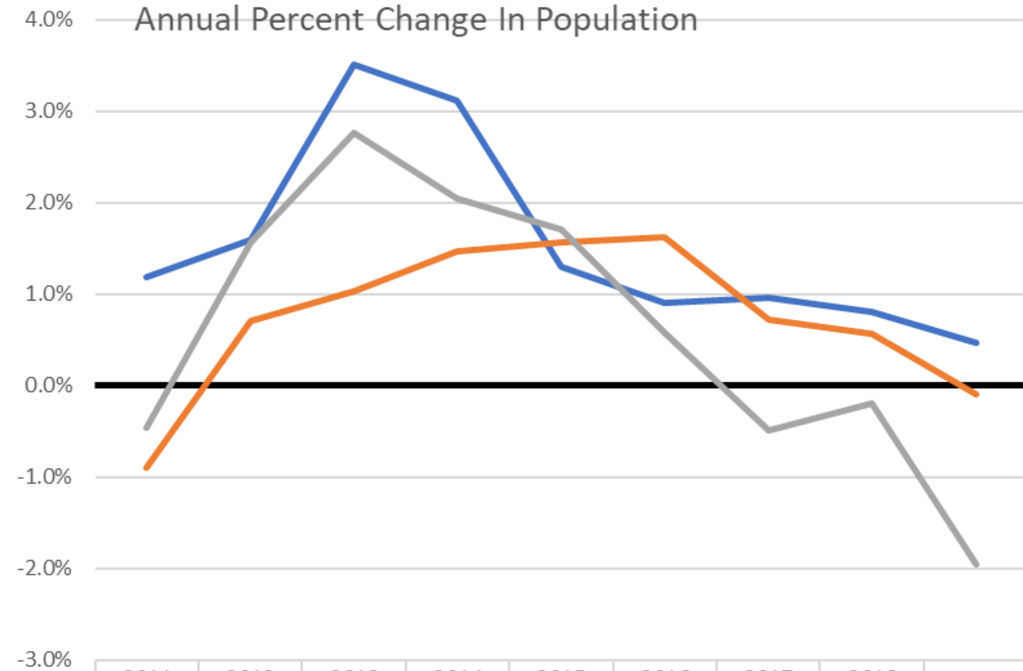
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MPO	52,875	53,502	54,358	56,262	58,012	58,766	59,299	59,871	60,351	60,636
Census Annual Est.	52,875	52,631	53,456	54,932	56,057	57,011	57,339	57,056	56,948	55,839
Census ACS	52,875	52,403	52,773	53,315	54,095	54,944	55,831	56,236	56,556	56,500

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

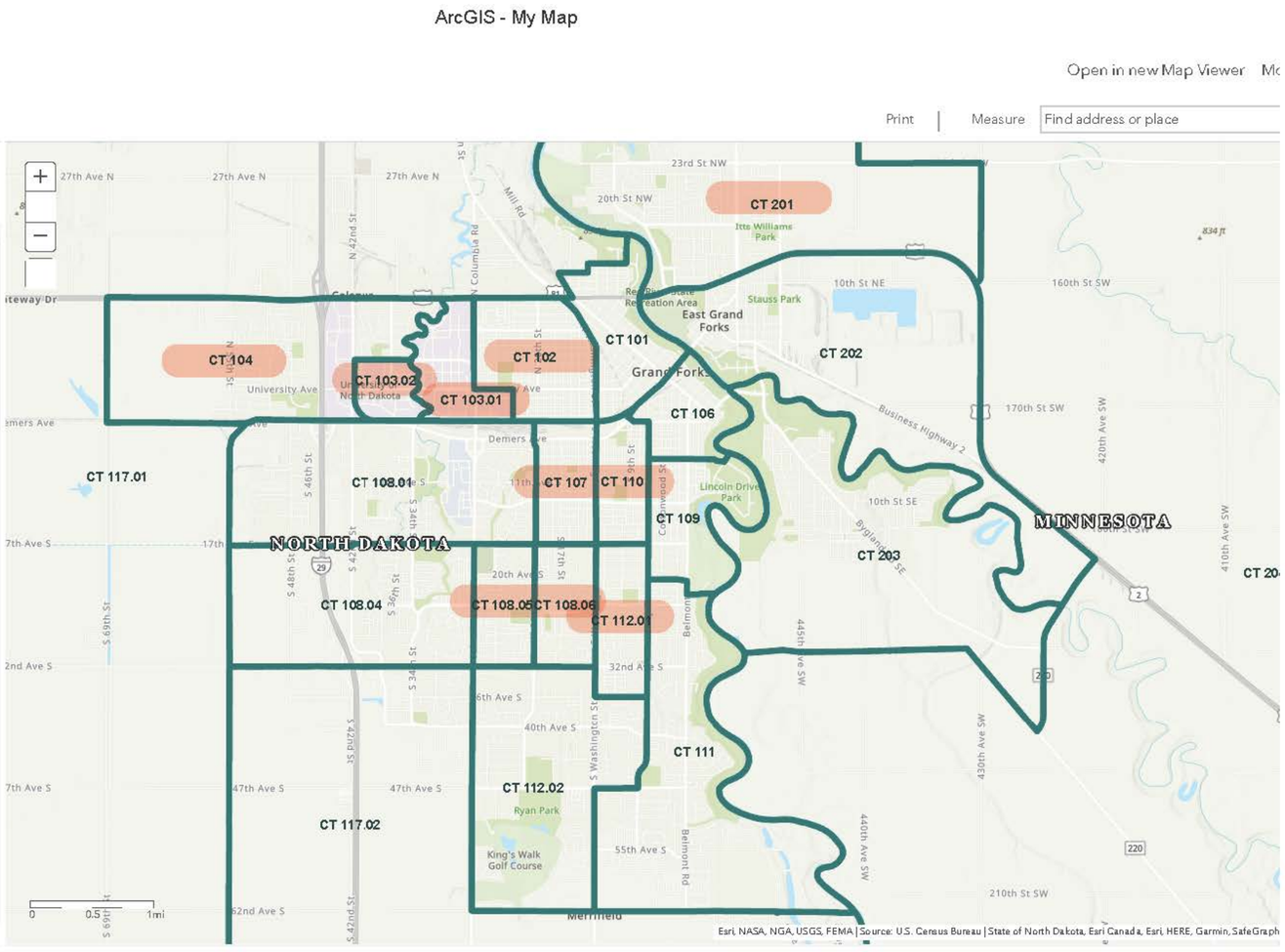
Grand Forks 2050 Land Use Plan

Estimated Growth Was Strong early in the Decade with All Three Sources Estimating Growth

Difference in Initial Estimate and End Estimate Where Both Census Sources Estimated Population Loss



	2011	2012	2013	2014	2015	2016	2017	2018	
MPO	1.2%	1.6%	3.5%	3.1%	1.3%	0.9%	1.0%	0.8%	0.5%
Census ACS	-0.9%	0.7%	1.0%	1.5%	1.6%	1.6%	0.7%	0.6%	-0.1%
Census Annual Est.	-0.5%	1.6%	2.8%	2.0%	1.7%	0.6%	-0.5%	-0.2%	-1.9%



GF-EGF Census Tract Population Change Between 2010 and 2020 Census

GF County Census Tract	2020 Pop	2010 Pop	Change	% Change
101	3,388	3,178	210	6.6%
102	4,248	4,663	-415	-8.9%
103.01	1,588	2,164	-576	-26.6%
103.02	2,396	2,782	-386	-13.9%
104	5,873	6,004	-131	-2.2%
106	2,414	2,365	49	2.1%
107	1,879	1,981	-102	-5.1%
108.01	6,027	4,428	1599	36.1%
108.04	4,824	4,259	565	13.3%
108.05	2,391	2,455	-64	-2.6%
108.06	3,023	3,171	-148	-4.7%
109	2,211	2,145	66	3.1%
110	1,846	1,969	-123	-6.2%
111	6,382	4,619	1763	38.2%
112.01	2,742	2,818	-76	-2.7%
112.02	5,774	2,960	2814	95.1%
Polk County Census Tract				
201	4,732	4,736	-4	-0.1%
202	1,489	1,267	222	17.5%
203	3,199	2,835	364	12.8%

The red highlighted text indicates census tracts that had a decrease in population between the 2010 Census and the 2020 census
The table shows the numbers and percent change for each tract. Growth in the 2 Census Tracts that have downtown as part of
The tract reflect the increased housing that has been built particularly in the downtown of Grand Forks.
Unfortunately, Census Tract 117.02 includes all of the rest of SE Grand Forks County, including Thompson, so difficult to distinguish
Growth just from City of Grand Forks.
East Grand Forks' north end is a bit of a surprise yet the lost is at 4 people.

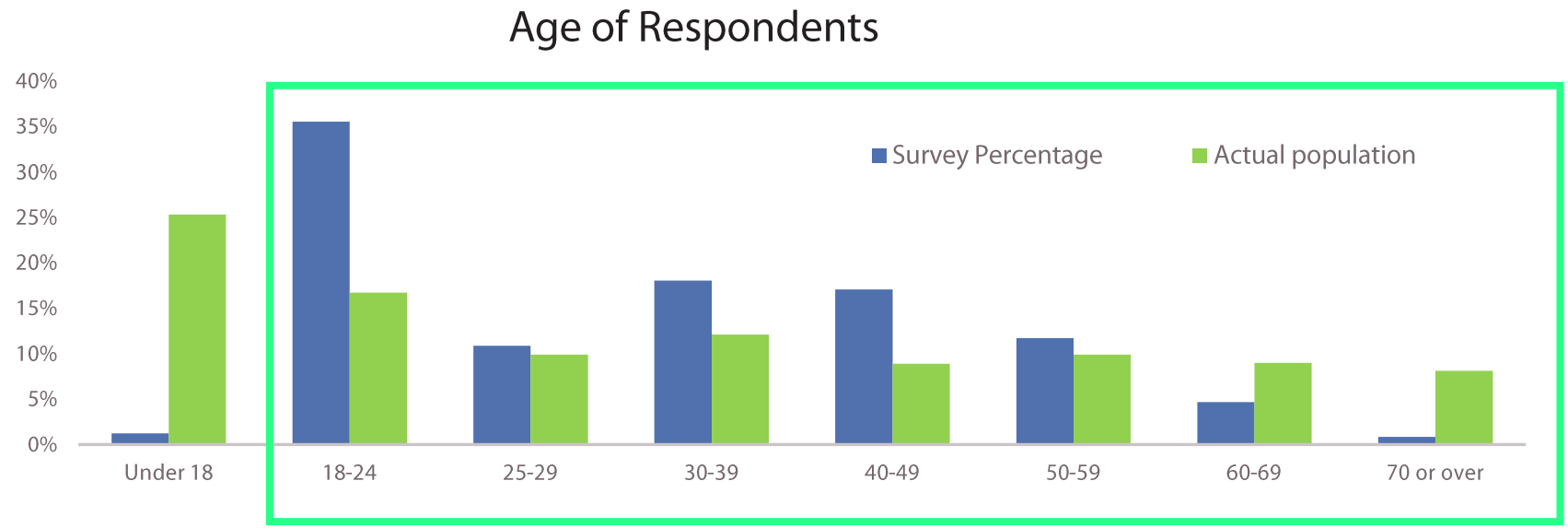
Population Projections

Current Population Projections 2020 - 2050			
	MPO Estimate (1.5% annual)	Historic 1960 (0.9%)	2020 Census (1.2%)
2020	60,543	59,166	59,166
2050	94,634	77,412	84,563
30 Year Gap	34,088	18,246	25,397

**Takes in account no change on 3 UND census tracts*

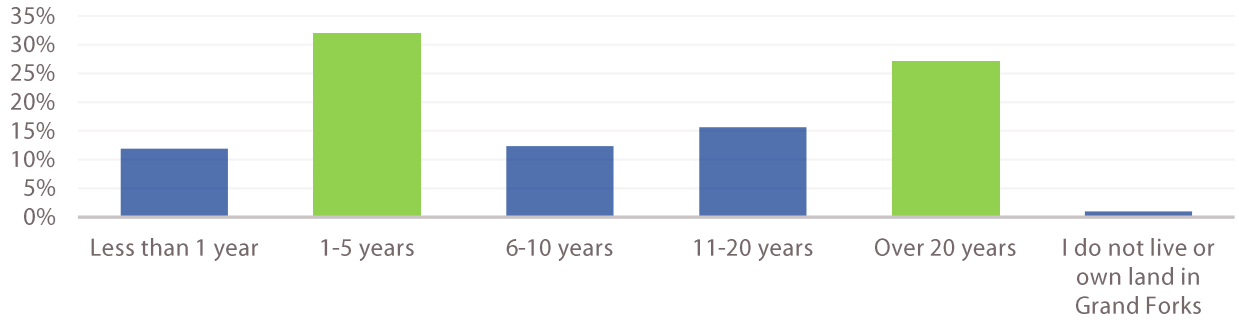
Survey Overview

- May 6 – June 21
- Special outreach efforts through LUS, focus group participants, senior organizations, and UND student body
- 890 responses

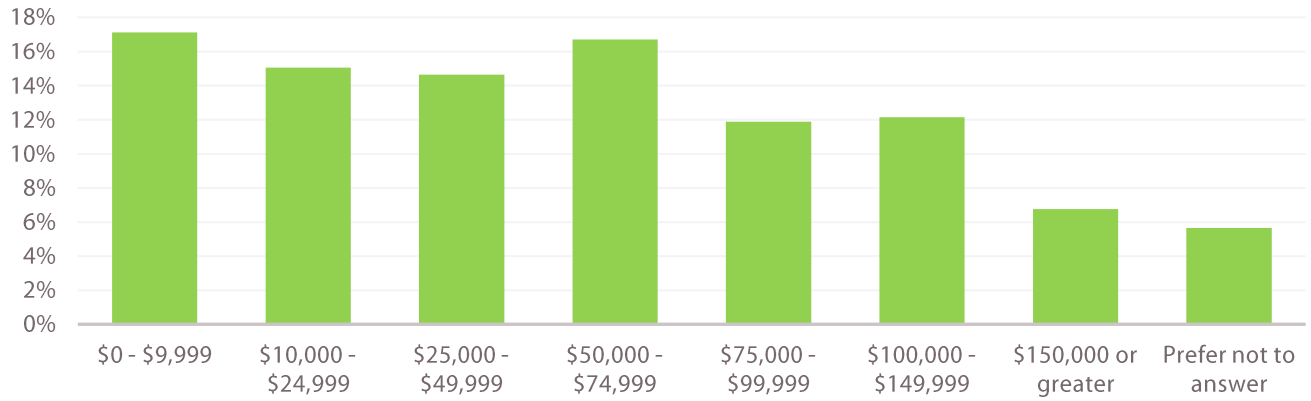


Survey Overview

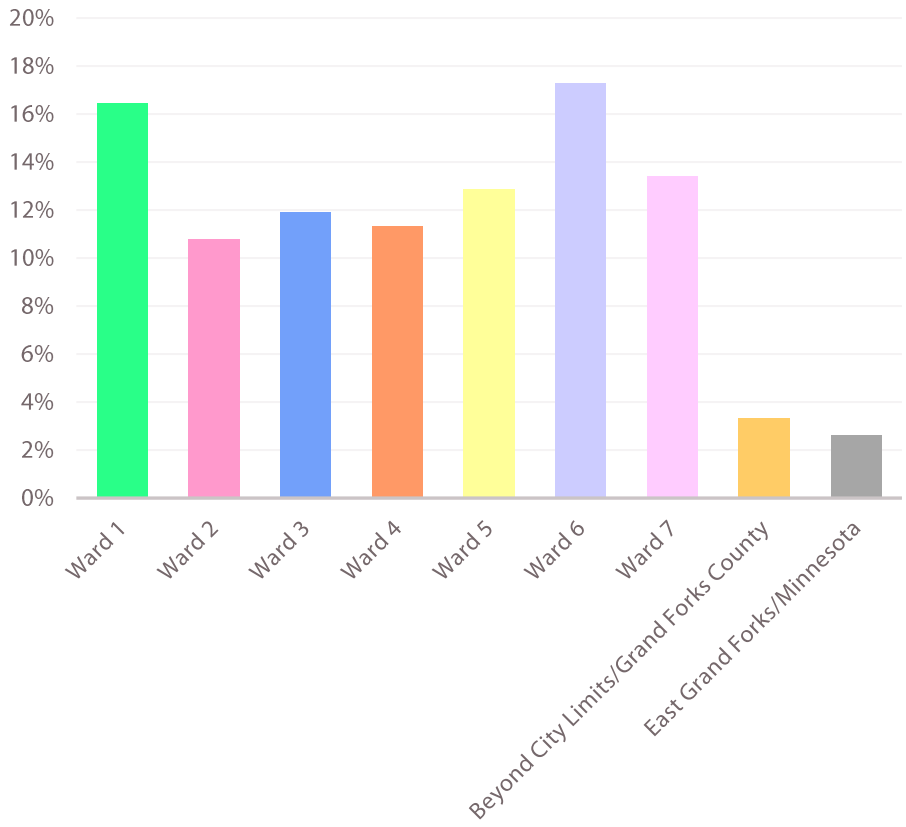
Tenure in Community



Income



Place of Residence



Hear is what we learned…in general

- Think "small town" and "family friendly" – quality of life amenities are important
  - Access to basic services
  - Access to family-friendly amenities
  - "Attractive" community from an amenity standpoint
  - Support for high quality jobs

Hear is what we learned…housing

- Perceived housing gasp include:
  - Household types - singles, new households, workforce, and families with young children
  - Housing types - senior, mixed use, townhome/condominium, and single-family
- Use innovative zoning tools to create space for a greater variety and more affordable housing types (focus groups)
- Neighborhood-level design is important, think beyond the car

Hear is what we learned…infill and fringe

- Agricultural land is important
  - Consider themes that play a role in creating “efficient” fringe development (human-scale design, cost-efficient infrastructure)
- Do not leave old neighborhoods behind
- Need to rethink underutilized and aesthetically-challenged commercial corridors
  - Yet there is a demand for targeted, niche commercial

Hear is what we learned…implementation

- Residents support the pursuit of good jobs and quality of life improvements instead of growth for growth's sake, and *feel that the City should play a strong/active role*
- Need to be visionary and innovative
  - Strong document to move the community forward
  - Innovative zoning tools to create more opportunities for new development and redevelopment
  - Tackle reinvention of underutilized commercial space

Comments from August LUS

Residential

- More recent growth on the fringe has been at higher density than earlier growth
- Newer developments include smaller lots
- Greater focus on common outdoor amenities
- Consider future residential west of the potential 47th Ave. interchange
- Future residential south of the Gateway Dr. Walmart cannot expand
- More coordination with the School District is needed

Comments from August LUS

Commercial & Mixed Use

- Reserve stand-alone commercial for high-traffic locations, such as major intersections and interchanges
- Opportunity remains to continue to fill in some areas that are "over-parked"
- Large undeveloped commercial blocks should be considered for mixed use
- Consider promoting major corridors and nodes for more intensive development – "Activation Areas"
- Consider redevelopment recommendations in the University Avenue Corridor Study and adjacent to UND

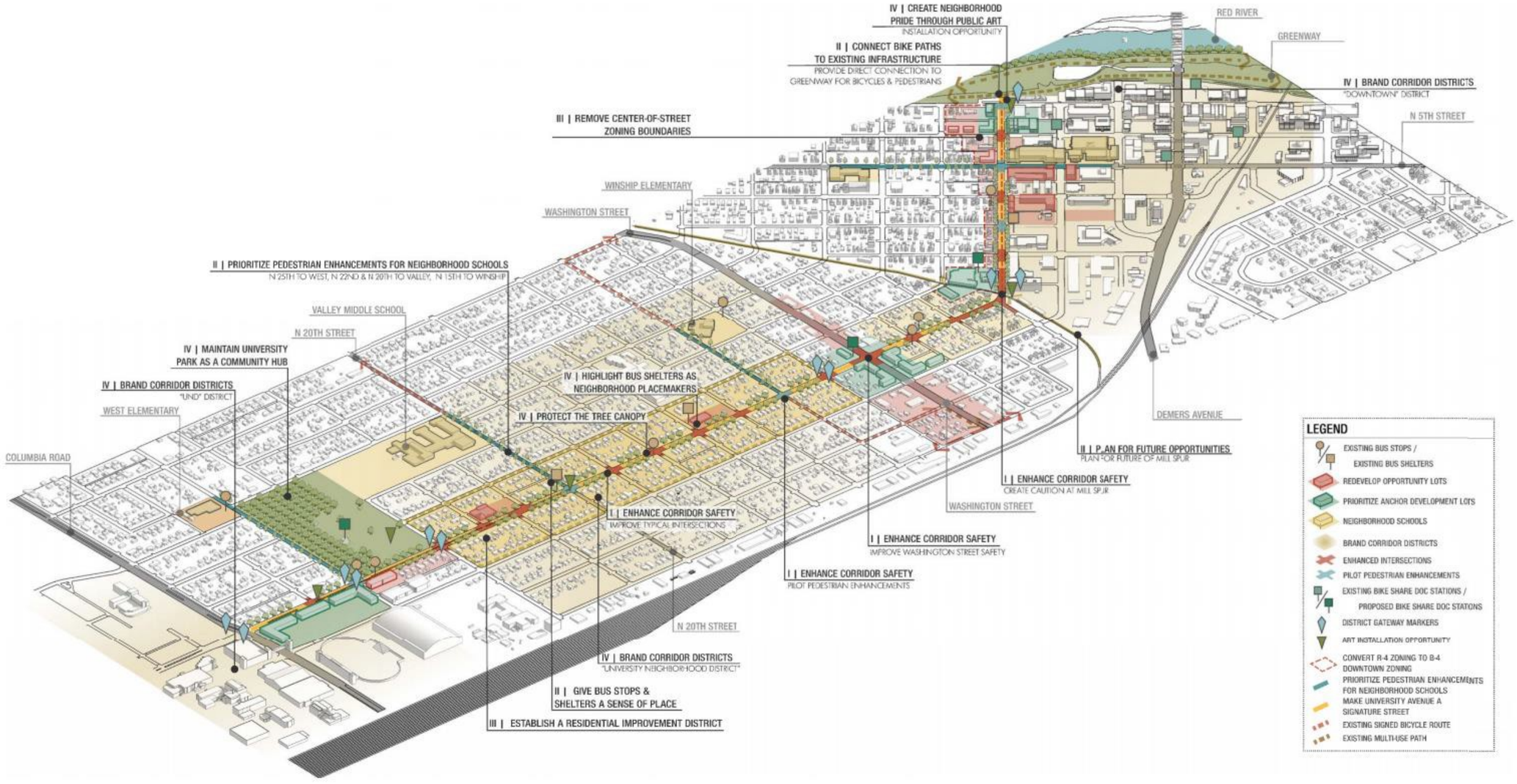
Comments from August LUS

Industrial

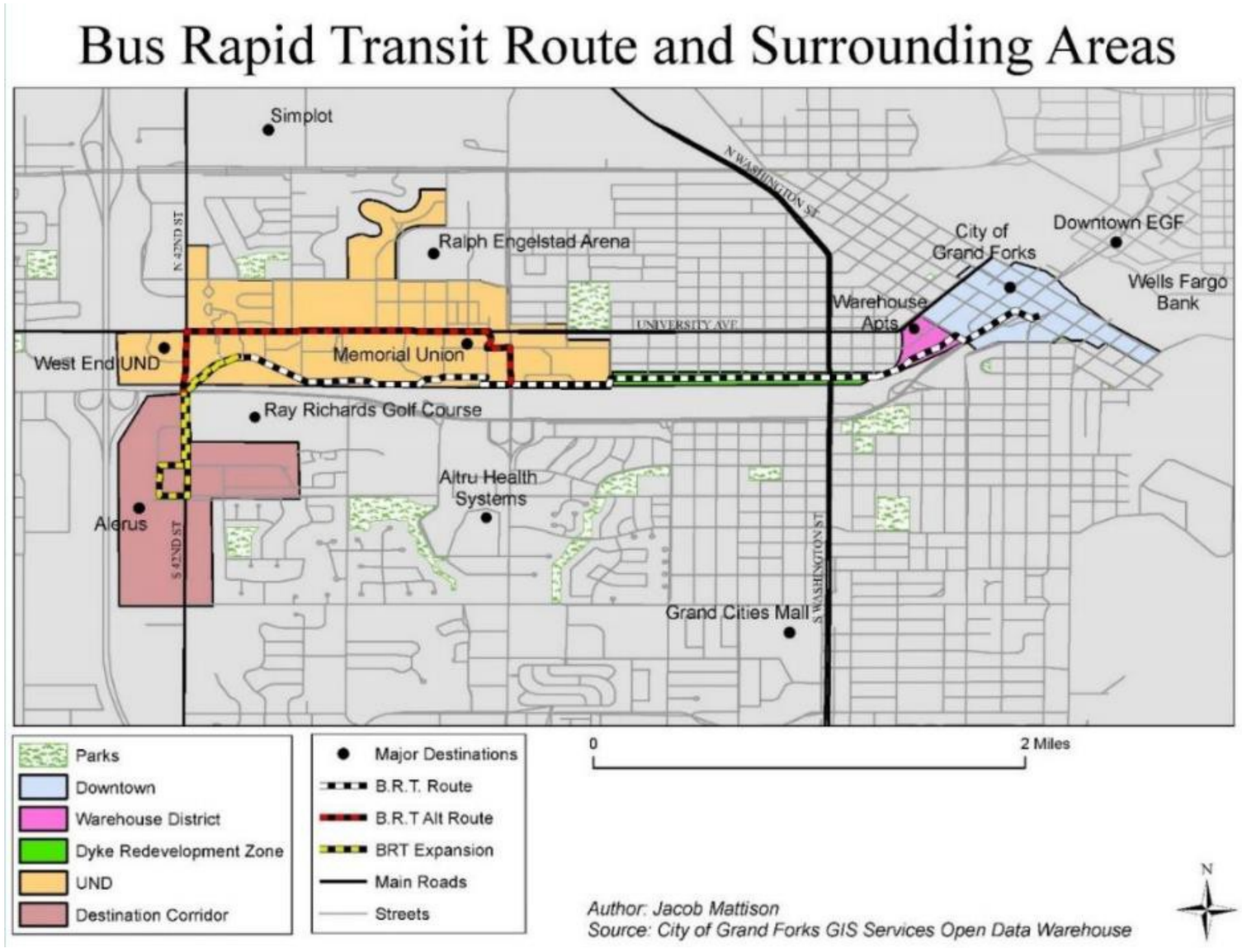
- Consider providing more industrial land use west of 48th St. and north of 32nd Ave. to take advantage of the existing rail spur
- Consider providing more industrial land use on the northern fringe due to proximity to infrastructure

Infill-related Documents

COMPREHENSIVE PLAN



Infill-related Documents



Not trying to achieve BRT; rather showing that this concept suggested the redevelopment potential along the UND to Downtown Corridor

Alternative Maps

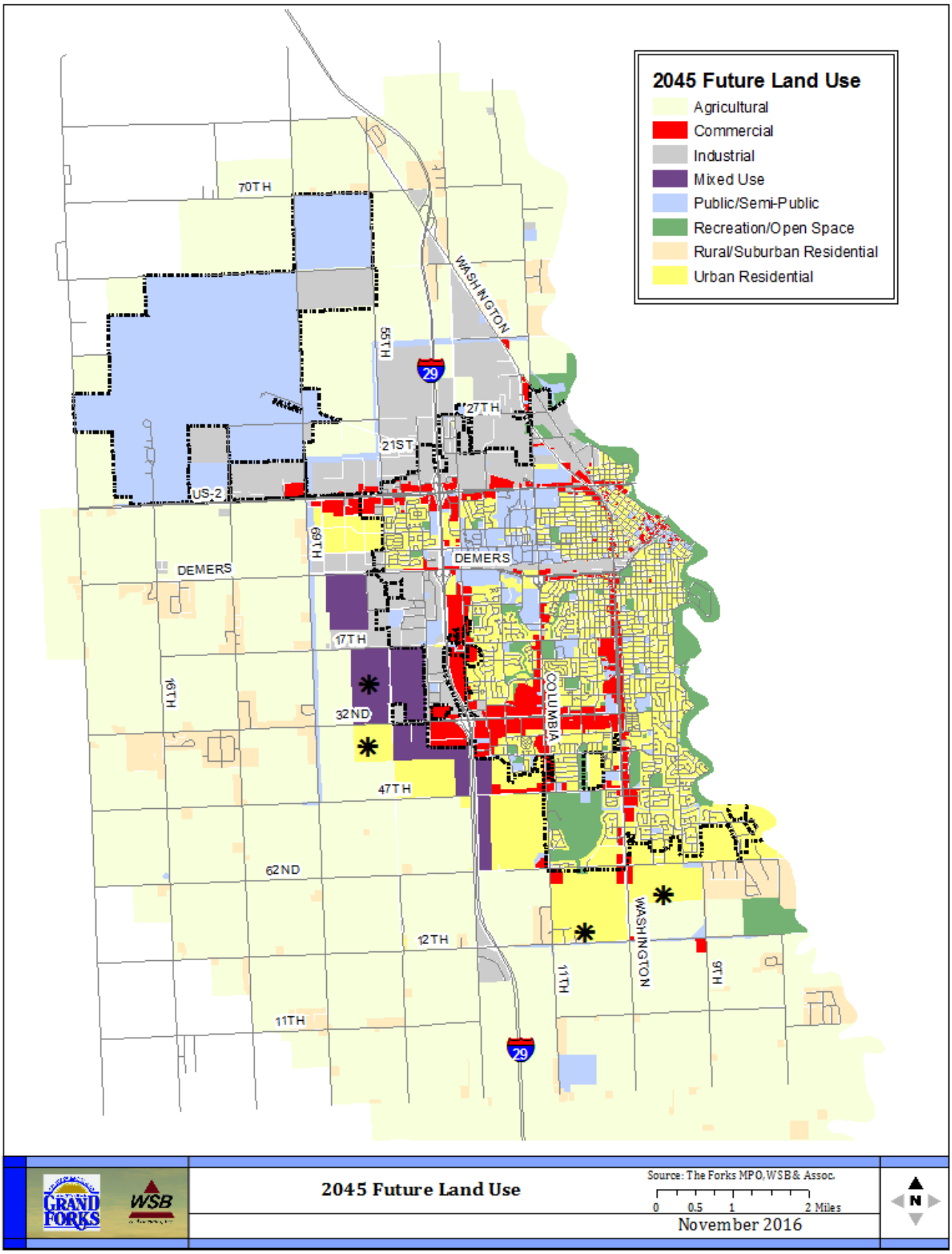


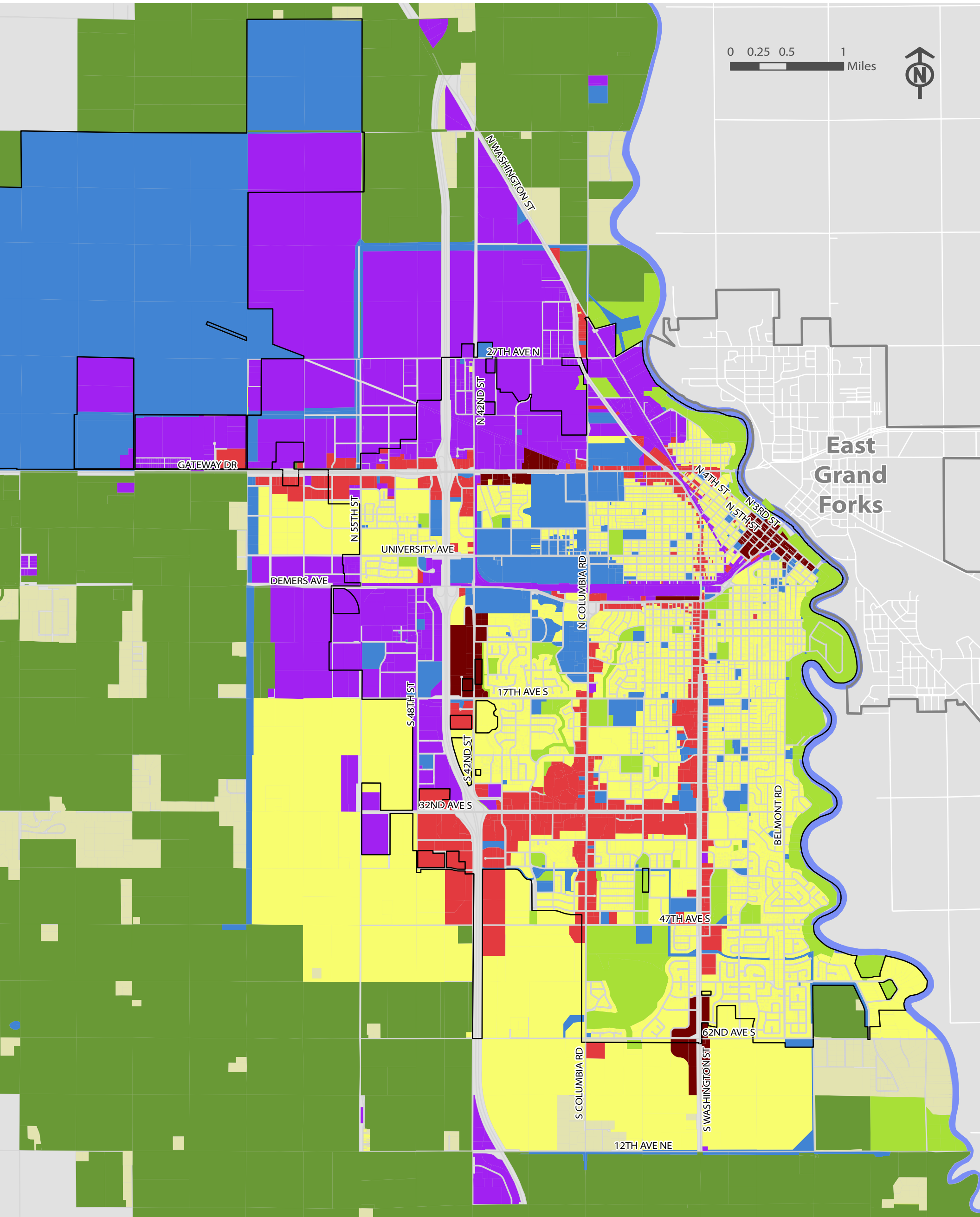
FIGURE 3.12: 2045 FUTURE LAND USE MAP

Future Land Use Alternative 1

Figure X

Future Land Use Category

- Agricultural
- Commercial
- Industrial
- Mixed Use
- Public/Semi-Public
- Recreation/Open Space
- Rural Residential
- Urban Residential
- City Boundary

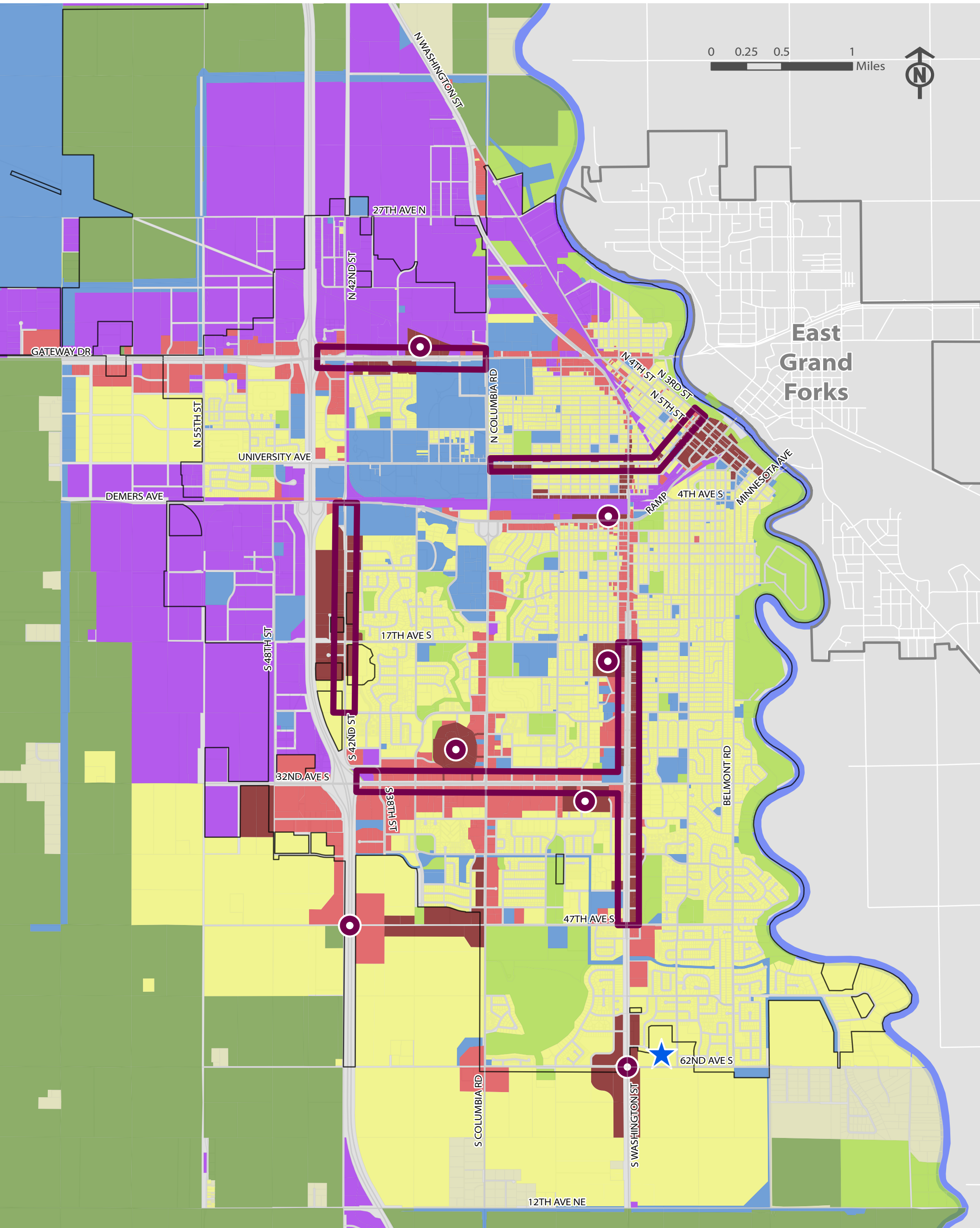


Future Land Use Alternative 2

Figure X

Future Land Use Category

- Agricultural
- Commercial
- Industrial
- Mixed Use
- Public/Semi-Public
- Recreation/Open Space
- Urban Residential
- Rural Residential
- City Boundary
- Activation Corridor
- Activation Site
- Potential Future Elementary School



NEXT STEPS

- Community engagement at French Fry Feed + virtual input opportunity

  September 16th at University Park 4-7 PM

- Land Use Subcommittee #4 – October

Scott Harmstead

Phone: 701-354-2405

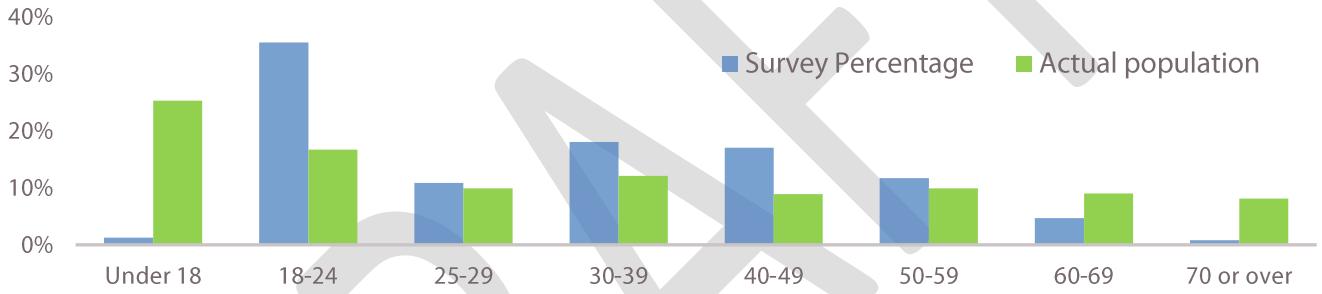
INTRODUCTION

To gather input on the existing conditions and future goals for the City of Grand Forks, a public engagement survey was distributed. The survey consisted of approximately forty questions and was available from May 6th through June 21st, 2021. The goals of the survey included understanding what makes Grand Forks a great place to live, and what opportunities exist for future improvement. A total of 890 responses were collected.

WHO DID WE HEAR FROM?

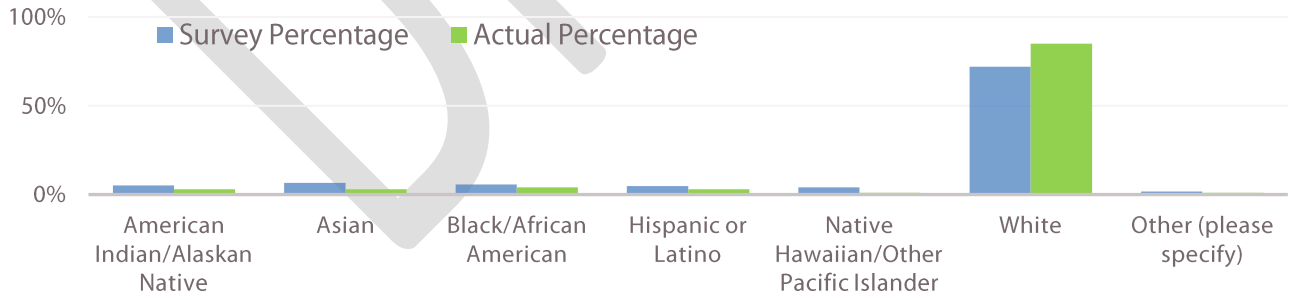
Age

Most responses were from individuals aged 18-24, followed by those aged 30-39 and 40-49. As shown in the graphic below, the distribution of survey responses by age (blue) generally reflects the actual population distribution within the City of Grand Forks (green) for those ages 30 and above. The proportion of responses from those aged less than 24 years is greater in the survey results than the actual population. This may reflect the additional college students at the University of North Dakota, who may not be technically considered part of the population as per the U.S. Census.

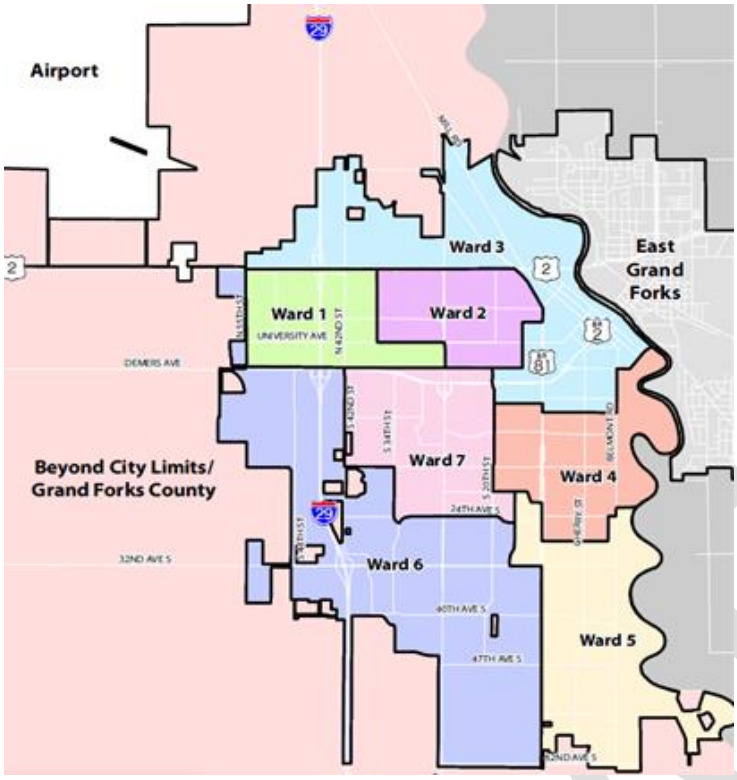


Race and Ethnicity

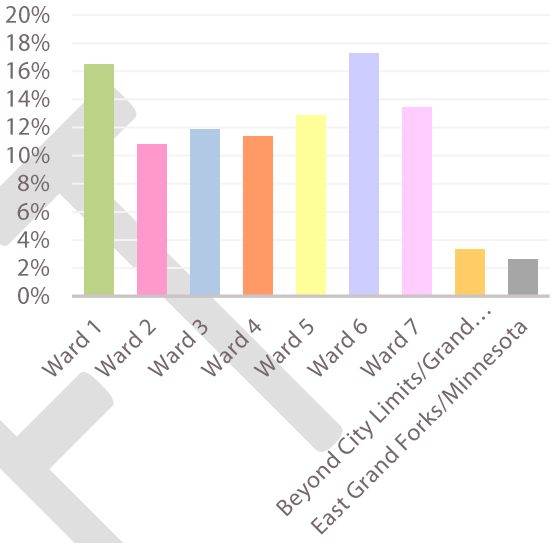
Approximately 80 percent of all survey respondents identified as White, with 6 percent identifying as Asian, 5 percent American Indian/Alaskan Native, 5 percent Black/African American, 4 percent Hispanic or Latino, and 4 percent Native Hawaiian/Other Pacific Islander. This distribution generally reflects the actual population of the city.



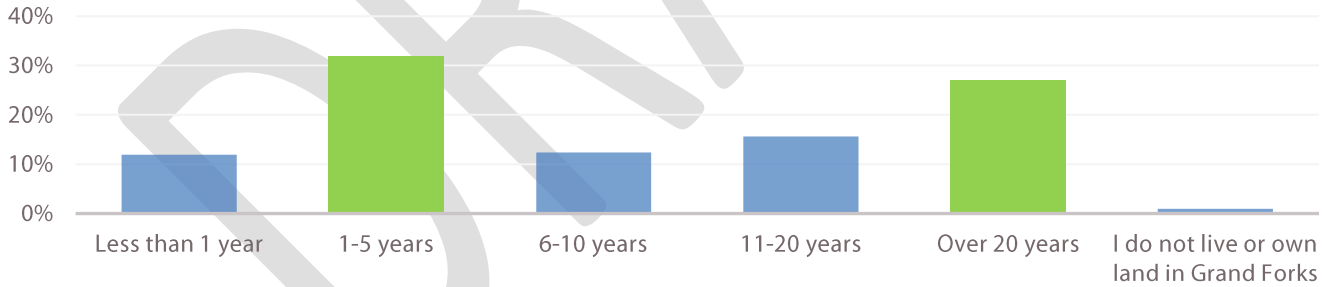
TENURE



Respondents were asked to identify which Ward (as shown on map) they reside within. Results were mostly distributed evenly across the 7 wards, with approximately 5 percent of all respondents living beyond City Limits.

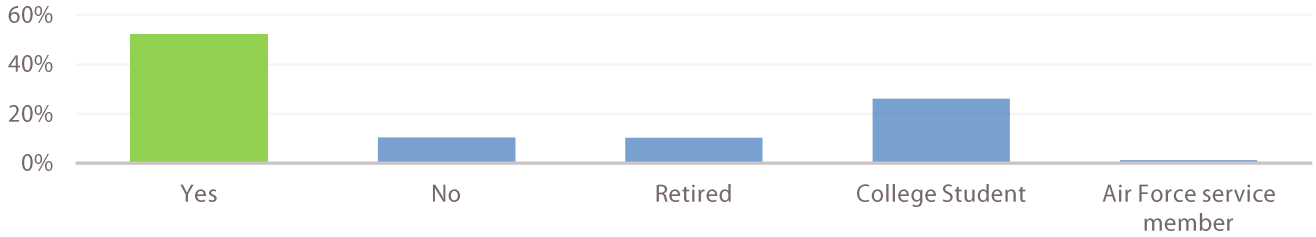


Most respondents have lived in Grand Forks either 1-5 years (32 percent) or over 20 years (28 percent). Approximately 50 percent rent and 50 percent own their residence.



EMPLOYMENT

About half the respondents work within the City of Grand Forks, and for those who do not most are College Students.



Do you work in Grand Forks?

If no, please explain.

Income ranges are distributed relatively evenly from less than $10,000 to over $150,000. The median individual income in the City of Grand Forks is approximately $28,000 meaning approximately 35 percent of those who responded to this survey make less than the median income. Based on the American Community Survey (ACS), about 31 percent of Grand Forks residents make below the median income.

People with Disabilities

Approximately 4 percent of survey respondents identified as having a disability. When asked what barriers they face within Grand Rapids, responses included:

Sidewalks and entrances are not ADA accessible	**Crosswalk timings need to be extended**	**Lack of mental and physical health facilities within the city**

SURVEY RESPONSES

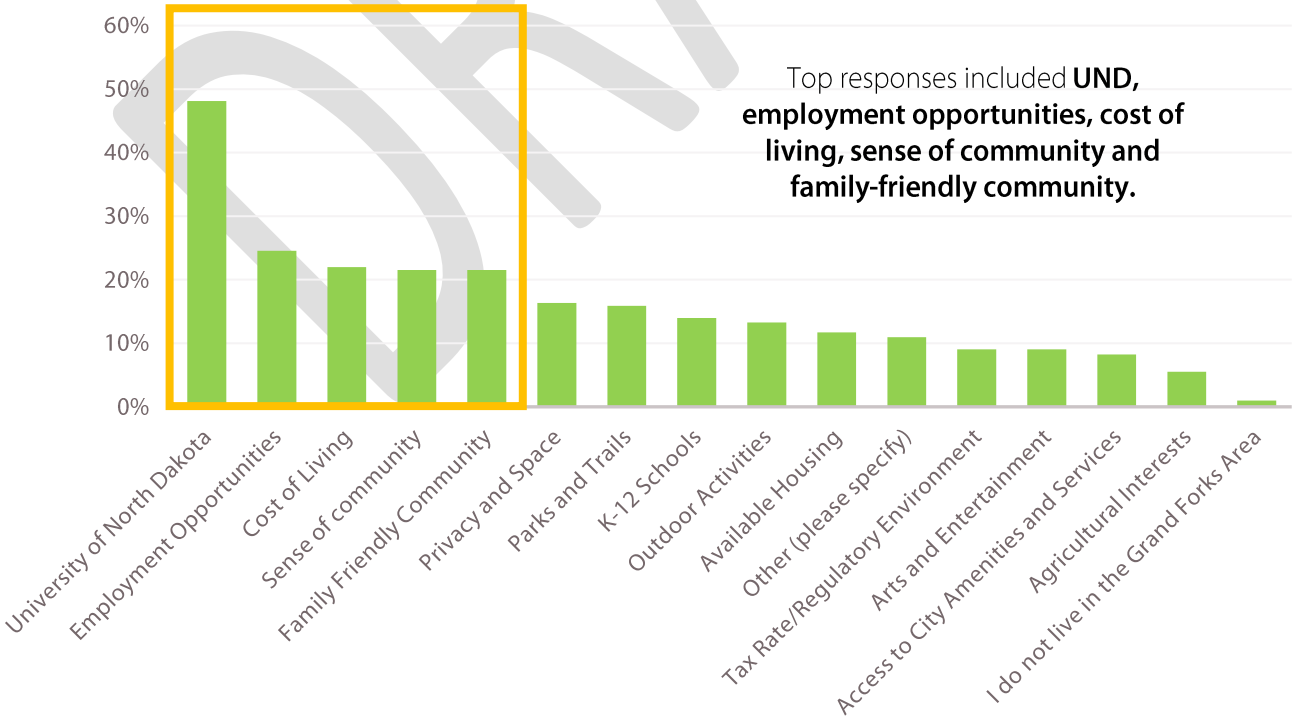
WHAT IS YOUR FAVORITE THING ABOUT GRAND FORKS?

Residents like the **small town, friendly, and safe environment** within Grand Forks.

WHAT WOULD YOU IMPROVE ABOUT GRAND FORKS?

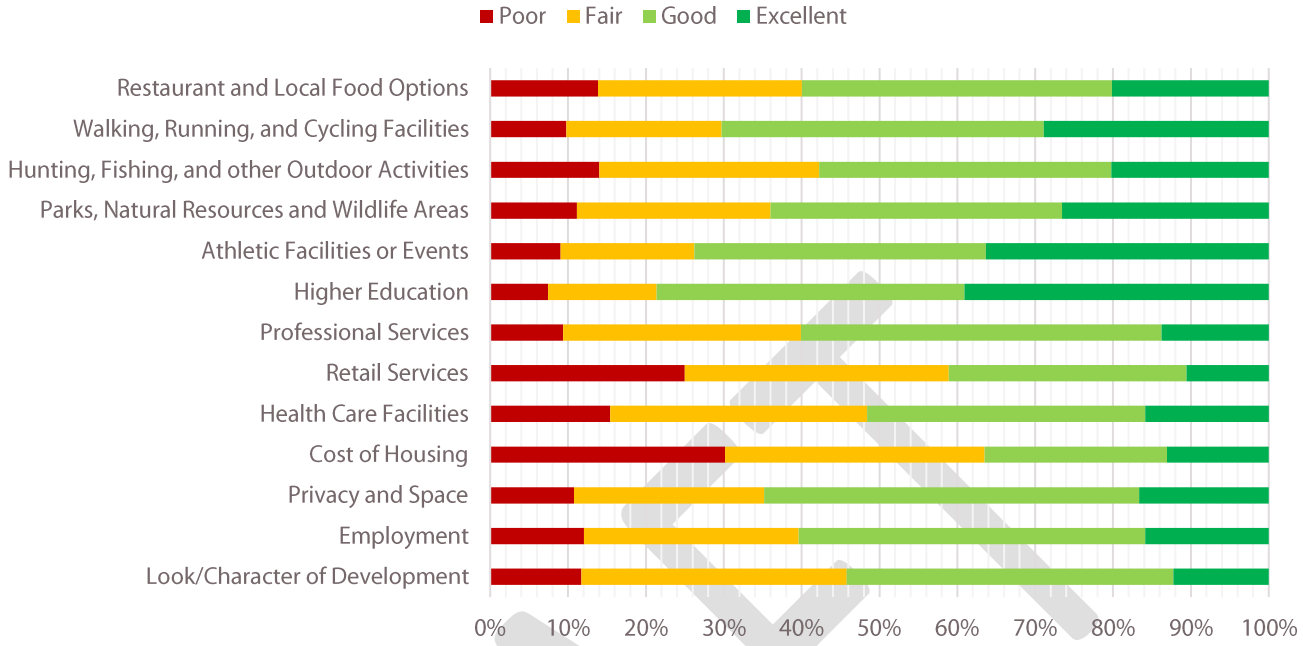
The majority of respondents would like to see **housing costs lowered, and retail and dining opportunities expanded**.

WHY DID YOU CHOOSE TO LIVE IN GRAND FORKS?



Top responses included **UND, employment opportunities, cost of living, sense of community and family-friendly community.**

HOW WOULD YOU RATE THE FOLLOWING COMMUNITY SERVICES?



Immediate Needs

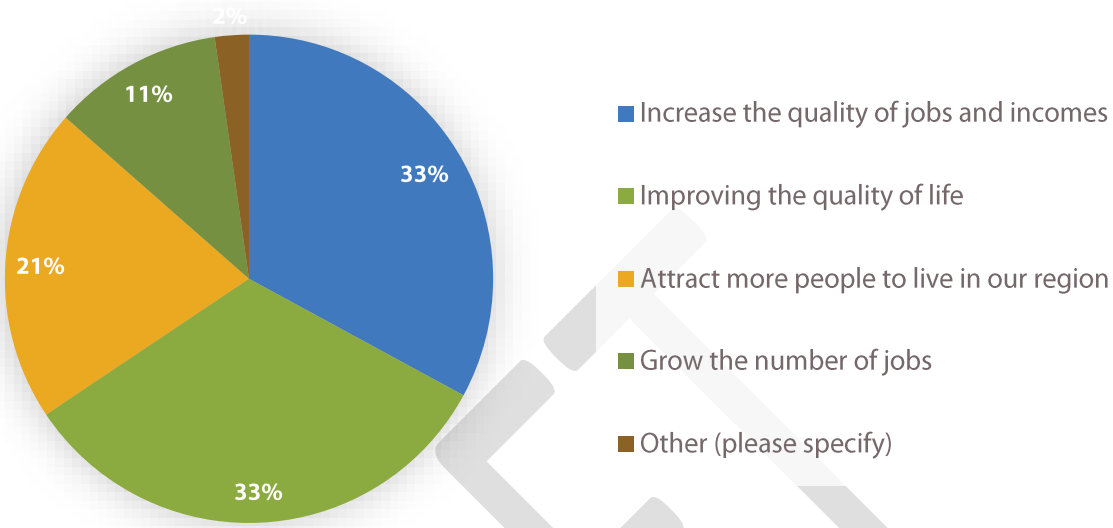
Over 50 percent of people rated **retail services and cost of housing as poor or fair**.

Successful Services

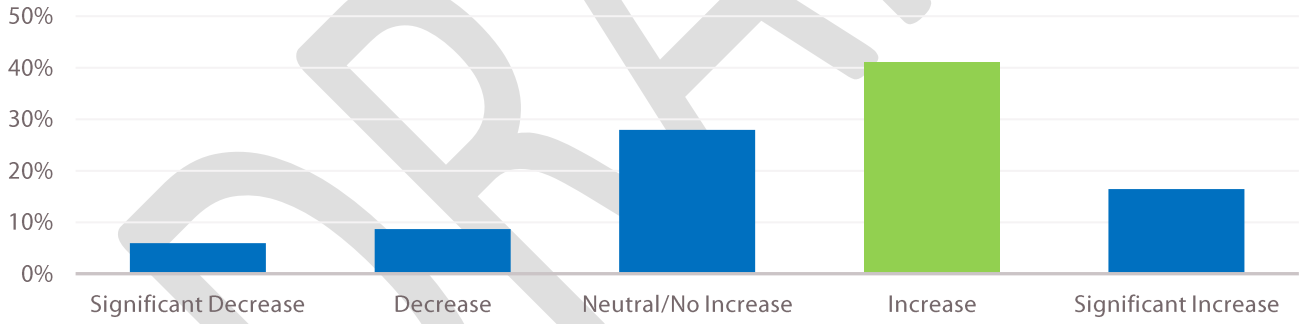
Over 60 percent of people rated **restaurant and local food options, multimodal facilities, parks and wildlife areas, athletic facilities/events, higher education, professional services, privacy and space, and employment good or excellent.**

ECONOMIC DEVELOPMENT

What is the most important goal for our region's economy?



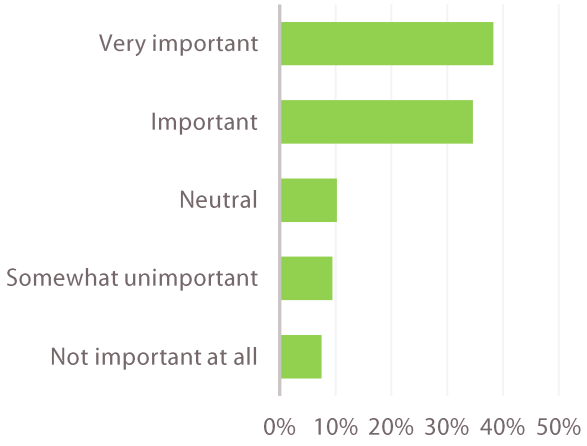
To what extent should the city be involved in contributing efforts and resources to pursue economic development?



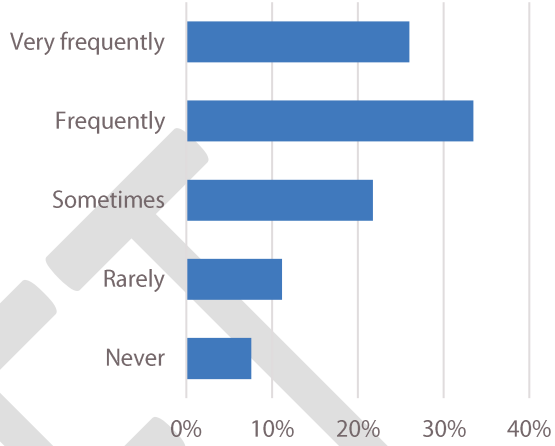
Respondents would like to see Grand Forks increase their resources and efforts to pursue economic development. Specifically focusing on **increasing the quality of jobs and incomes, improving quality of life, and attracting more people to live in the region**.

TRANSPORTATION

How important are sidewalks, trails, and on-street bicycle facilities? These include facilities to walk, bicycle, and roll.

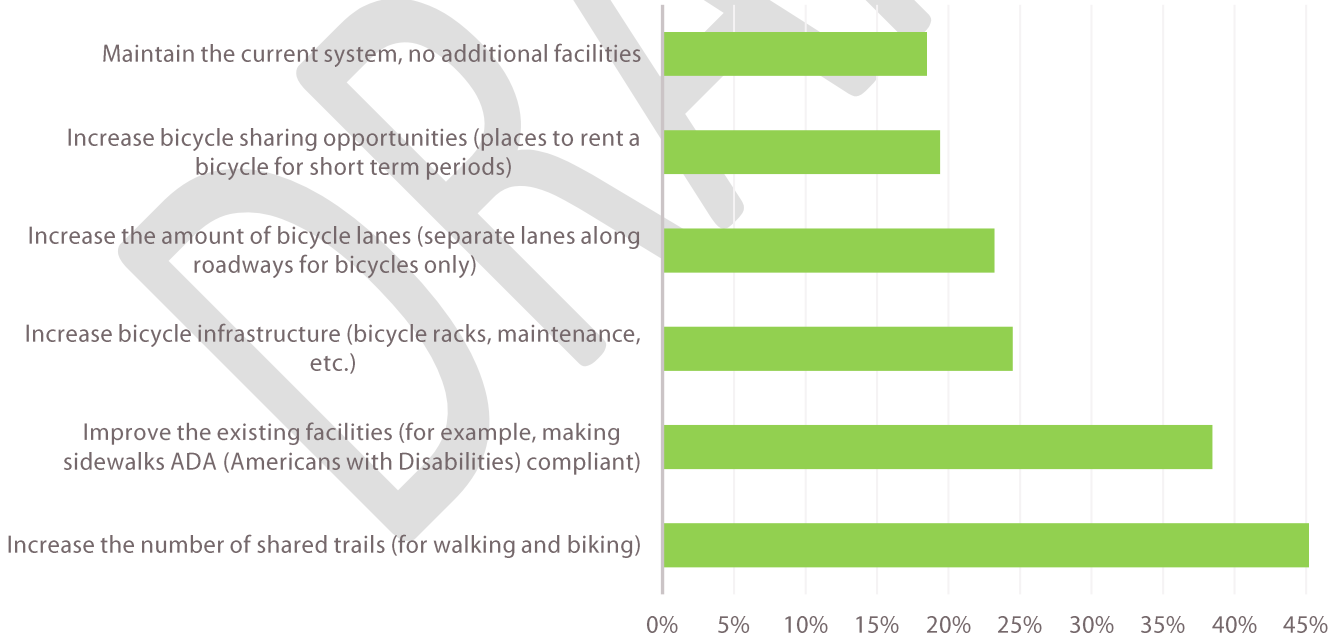


How often do you use the existing sidewalks, trails, and on-street bicycle facilities?



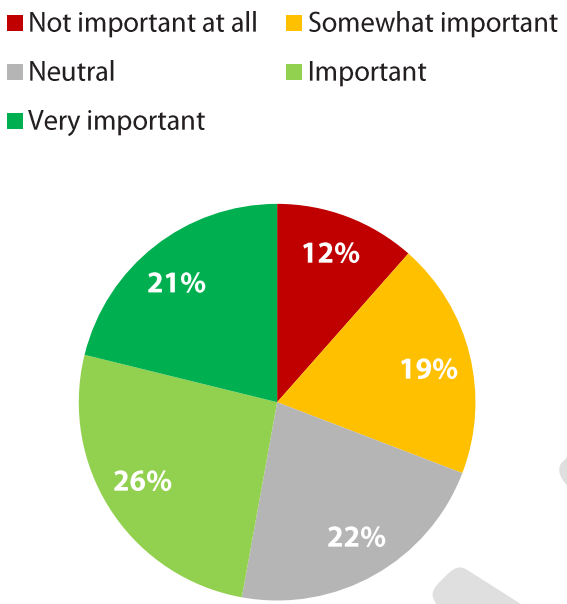
Most respondents see multimodal transportation as important or very important and use them frequently or very frequently.

What would you like the future of multimodal transportation to look like?

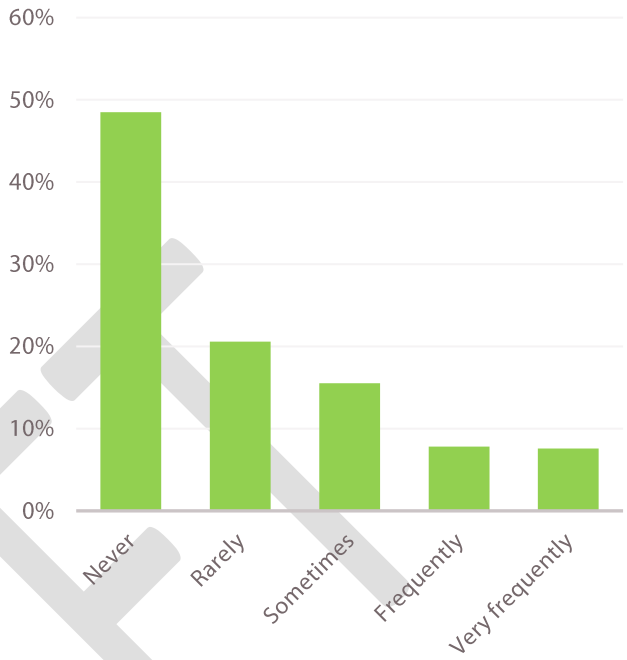


Increasing the number of shared trails and improving the existing facilities were most requested by respondents.

How important is the existing Grand Forks transit system?

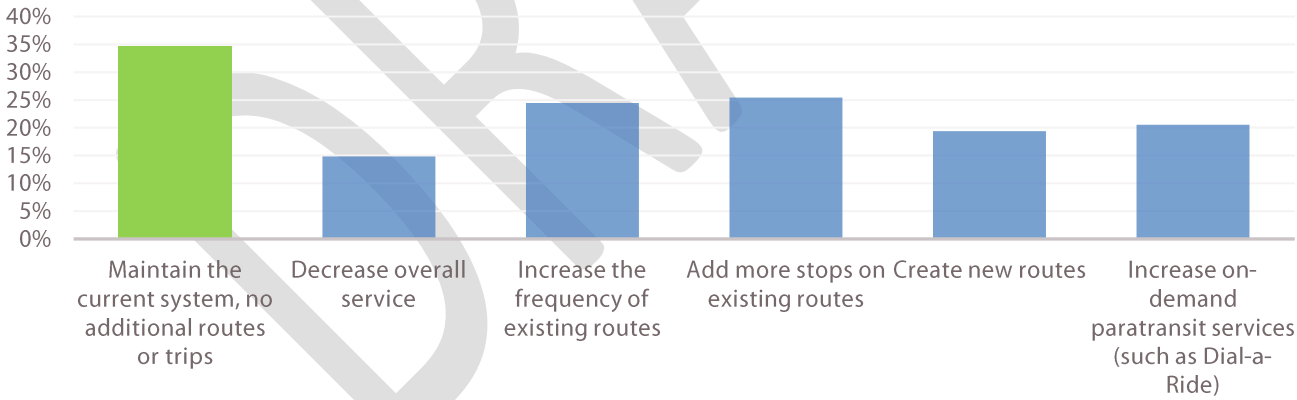


How often do you use the existing transit system?



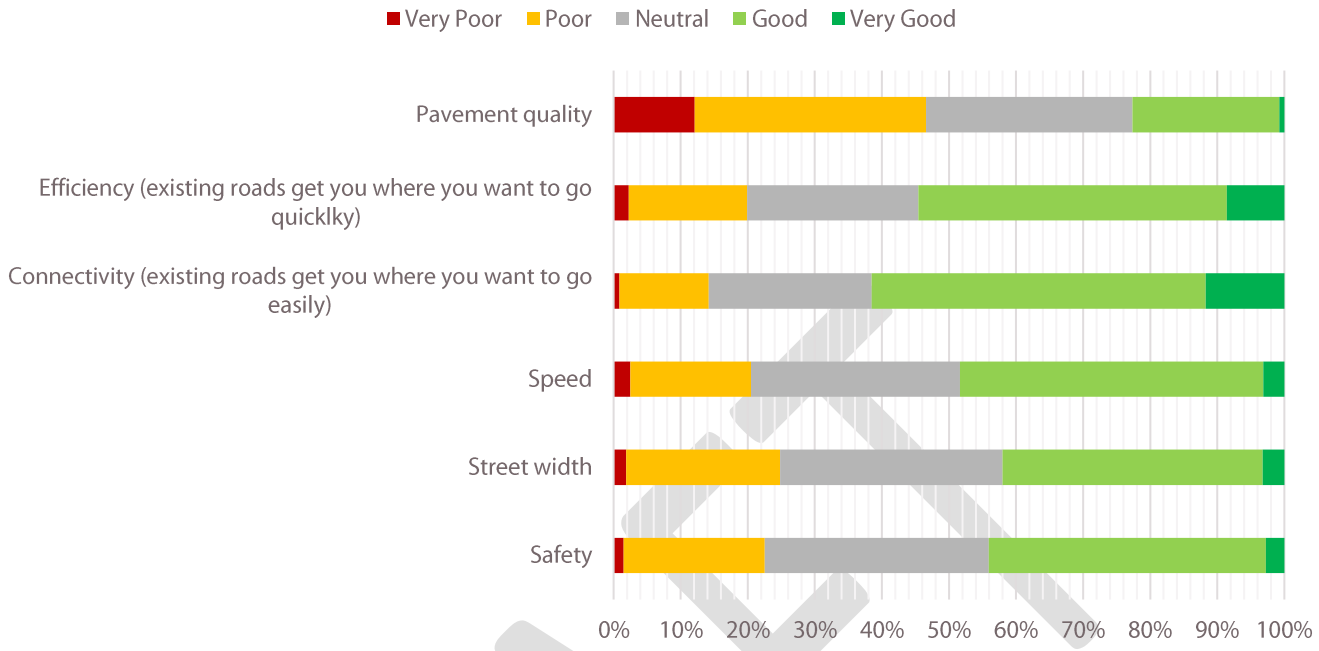
Although most respondents never use the transit system, **almost 50 percent identify it as important or very important.**

How would you like to see the transit system change?



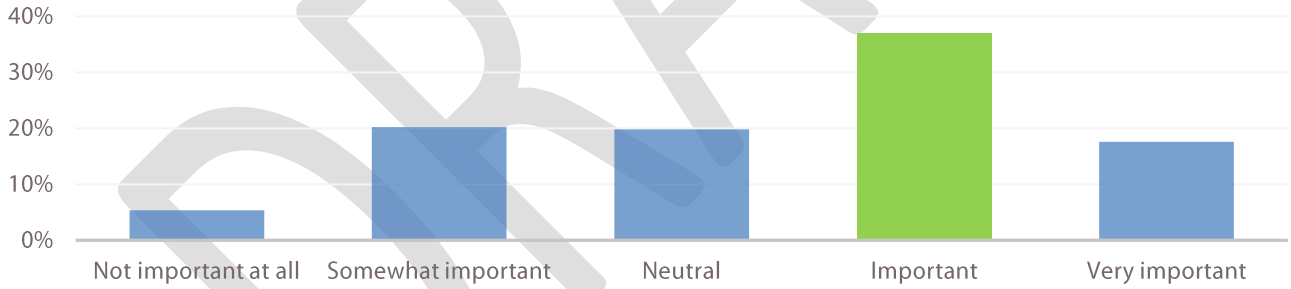
The majority of respondents would like to maintain the current system, followed by increasing frequency and adding stops on existing routes. For those who would like to see increased frequency on existing routes, results were evenly distributed across times of day for desired trips. For those would like to see additional stops on existing routes, stops are preferred mostly near education, retail/entertainment, and healthcare. Requests for new routes included to the industrial/manufacturing park, outlying retail, south end of the city and to the airport.

How would you rate the following factors related to the street network?



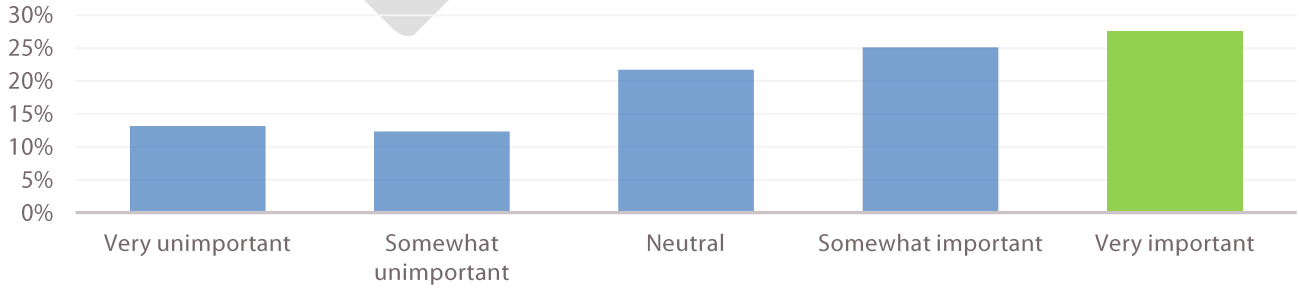
Most street network factors are rated neutral or above, except for **pavement quality which is ranked by almost 50 percent of respondents as very poor or poor.**

How important is streetscaping?

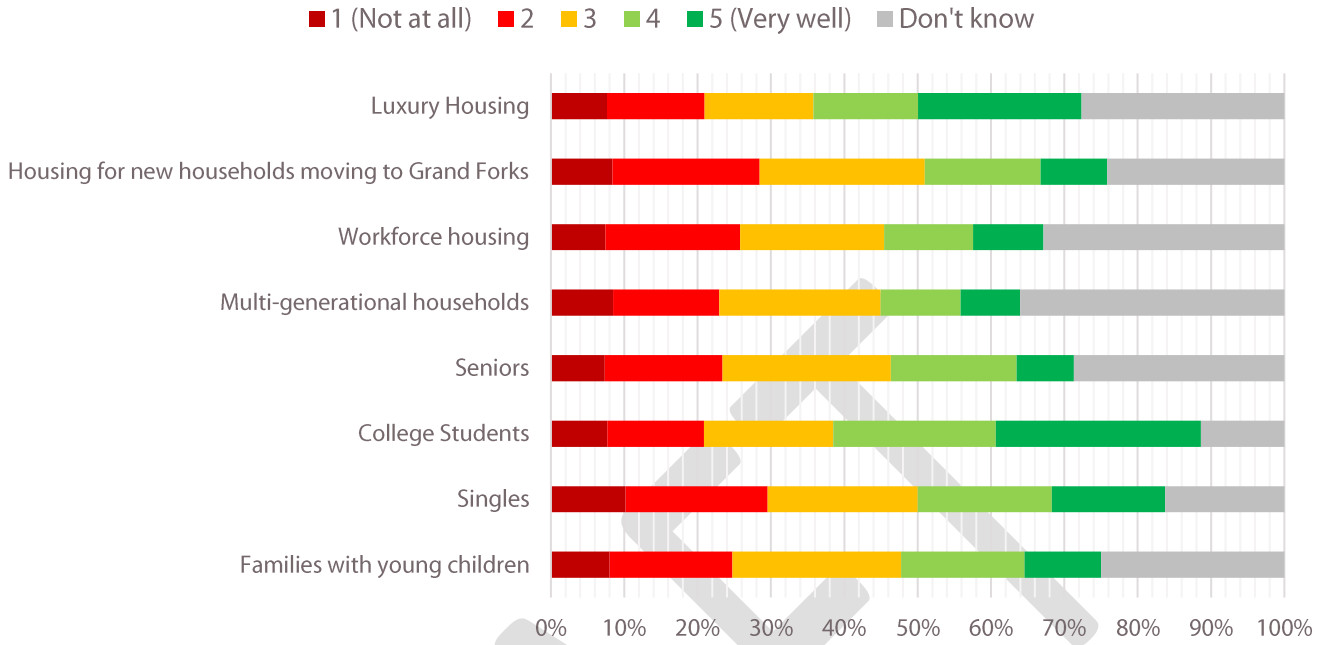


LAND USE

How important is the preservation of prime agricultural land near Grand Forks?

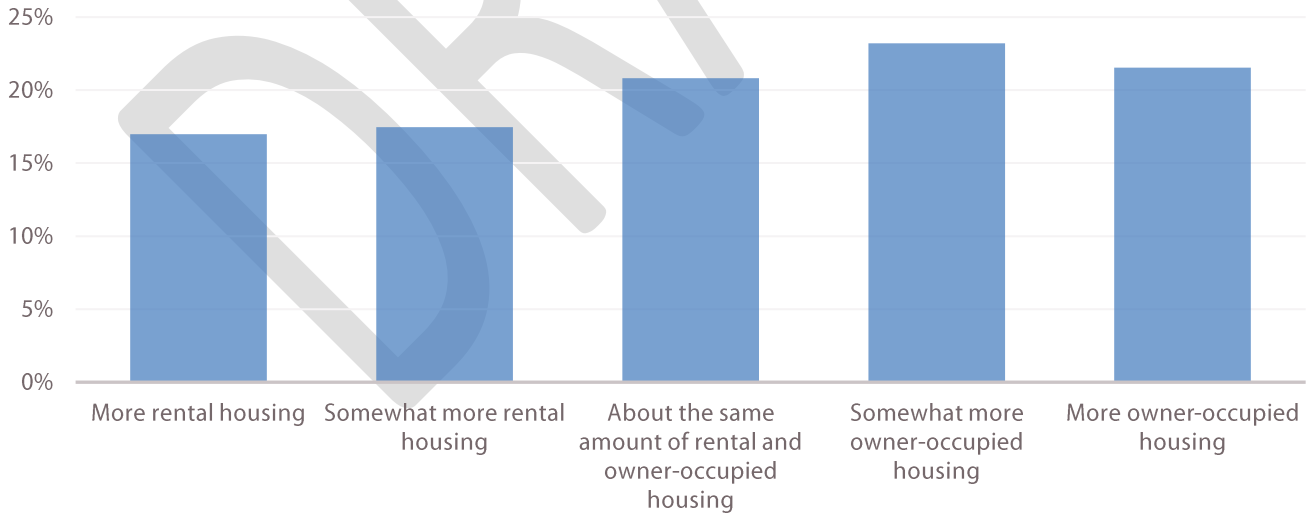


How well is Grand Forks meeting the housing needs for the following household types?



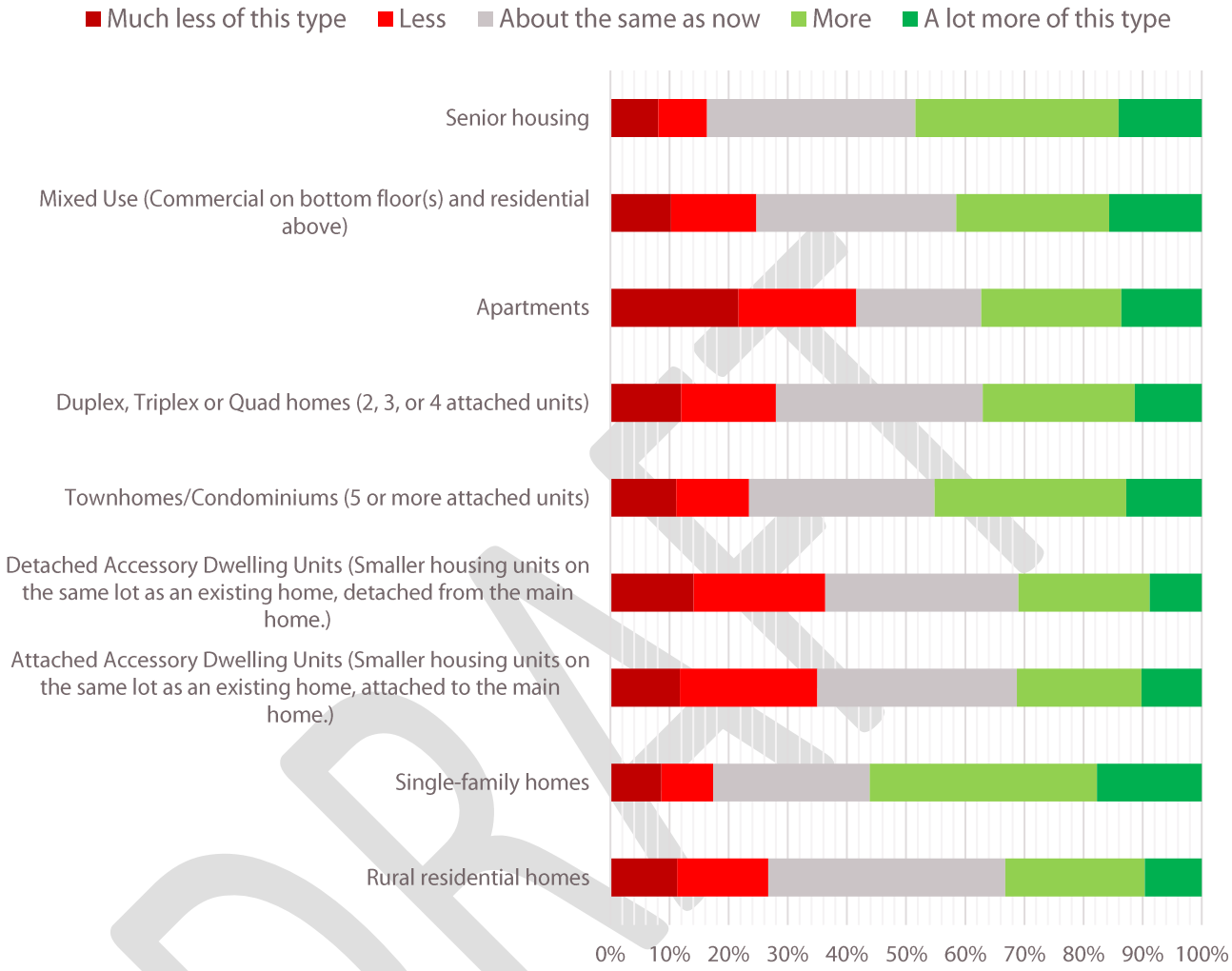
Most household types were rated as a 3 or below, meaning respondents do not think Grand Forks housing is meeting their needs. **Singles, new households, workforce, and families with young children were among the top groups with unmet housing needs.** Housing for college students and luxury rentals were rated to be meeting the needs of residents.

What housing type is needed more?



Slightly more respondents would like to see increased owner-occupied housing, but overall results were relatively evenly distributed.

Consider each housing type in Grand Forks. How do you perceive the need for each type will change in the future?



Based on responses, **more senior, mixed use, townhome/condominium, and single-family housing types are needed.**

OTHER COMMENTS

ANY OTHER COMMENTS OR QUESTIONS?

- Make Gateway Drive an attractive and inviting entrance to the city (especially from the airport)
- Improve housing affordability
- Continue revitalization of downtown
- Provide more community events

INTRODUCTION

To gather topic-specific feedback, four focus group meetings were held in summer of 2021. The focus topics included Assets and Amenities, Economic Development, Housing, and Infrastructure. These focus groups were facilitated by staff from the City of Grand Forks and the Metropolitan Planning Organization as well as staff from SRF Consulting Group.

FOCUS GROUP SUMMARY

ASSETS AND AMENITIES GROUP

General Takeaways:

1. City and community has been a positive driver of growth with leadership of economic development, shepherding of the industrial park, and coordinating new multi-use developments. Very positive view of recent redevelopment work downtown and on UND campus.
2. Need to place more focus on older, more established neighborhoods and continue or increase general focus on redevelopment in general. Adding a "missing middle" of housing could be an opportunity in existing neighborhoods, including the potential for accessory dwelling units. There is currently no regulatory path forward for ADUs at this time. Some perception that older neighborhoods may be trailing with upgrades such as street and sidewalk repairs. "Core neighborhoods" should be viewed as a community asset.
3. There has been lack of action regarding a new south-end river crossing. It is a hot issue that is currently pitting neighborhood vs neighborhood, particularly the 32nd Ave S area vs the near southside area currently bearing the brunt of river crossing traffic.
4. Strong support for "new urbanism," "complete streets," and "smart growth" concepts, and view transit, bicycle, and pedestrian infrastructure as critical. Generally negative view of "sprawl" development.
5. City Planning staff are a strength. Too often planning decisions are short-circuited at the 11th hour or well-researched decisions are reversed in favor of the loudest "NIMBY" concerns instead of what might be best for the city as a whole. More neighborhood-level public discussions by elected officials is welcome. It's critically important to broaden public input process to include as many varying viewpoints as possible.
6. The community generally lacks discrete neighborhood identities.
7. Curiosity about what can done to promote more volunteerism throughout the community. Agreement among the group that more people should be involved in the various local non-profit and government-related organizations that will encourage more grassroots-driven activity.

Key Takeaways Related to Assets and Amenities:

- Community is doing a good job overall with assets and amenities. Physical assets are a strength and Park District does a good job of programming
- The community could benefit from more "destination parks". Most are "neighborhood parks"
- Greenway is a critical asset, with the aim to focus most on "natural" amenities and trail systems vs specific facilities. These more developed facilities may fit better in "destination parks" in the urban area. Note that the Greenaway is managed by City government and parks are managed by the Park District—they are two separate entities. Yet the community should "treat the Greenway like the Alerus," viewing it as a key potential draw to the community. East Grand Forks has no greenway management staff, creating a barrier for collaboration and contributing to the public perception of two separate greenways on each side of the river.

- Perception that the city has been slow to accept regulatory reform for public art. Mural ordinance took years and crosswalk murals denied.
- Some opinion that the community could benefit from more coordination and capacity building for events, whether that be publicly- or privately-led. There is recognition of current City funding programs for events and arts organizations.
- Strong support for continuation of development of new assets and amenities, particularly identifying and supporting local operators and champions that might be new to the space or overlooked before. These include amenities for children and families and indoor opportunities in the winter.
- Need to think regionally when it comes to amenities. The region around Grand Forks has unique amenities that should be promoted as part of the region. For example, Turtle River State Park could be an opportunity to connect Grand Forks, the Air Base, and the State Park with a trail.

Specific Points of Interest:

1. Columbia Mall area of town is viewed as a problem.
2. General support for collaboration with East Grand Forks on development and the Greenway
3. While the new public space to be created as part of The Beacon development is viewed as an opportunity, what does this mean for the future of the current Town Square? The current Town Square is not a welcoming space.
4. Support for the rising economic development strategic focus on high-tech sectors, viewed with promise.
5. Support for flexible zoning changes along University Ave corridor and on mixed-use campus
6. Do not be afraid of "big ideas" such as redevelopment of train yard parallel to Demers Ave, redevelopment of ND State Mill rail spur through town, or bus rapid transit routing concepts linking key destinations.
7. Focus on families is supported, but do not overlook mid-market housing for singles or those without children.
8. Strong interest in water treatment plant site redevelopment.
9. City and development community still planning for auto-dominated transportation systems and development (especially on the south end) that is auto-oriented.

ECONOMIC DEVELOPMENT GROUP

General Takeaways:

1. Support for integrated vision in the plan that has some level of community support, and is not just a document used by City and MPO staff. Participants mentioned examples in other communities where visionary plans catalyzed redevelopment of new districts. Call for public clarity about a big-picture vision for development and a definition of Grand Forks identity.
2. Industrial park, downtown, and south end developments have been successes.
3. Call for form-based code, mixed-use development, and support for flexible zoning policy changes to enable development, especially unique redevelopment and infill opportunities that do not fit the traditional mold of existing zoning. This is true for development that the community is currently missing out on, such as neighborhood commercial, missing middle housing.
4. Support for new housing, particularly mid-market knowing that demographics are skewing younger. Housing at $250k and below is a challenge, anything below $200k is older housing stock that requires major renovation. Extreme home demand at $250k price point. Missing intermediary townhomes or smaller houses. Still feeling the loss of mid-market homes in 1997 flooding, current margins prevent much new construction of lower-priced homes.
5. Be creative with land use, such as designing retention ponds to be useful assets and attractions rather than simply a big cost with one dimension of benefit.

Takeaways Related to Economy and Commercial Development

- Generally positive view of the economy as improving. Note that most participants hail from economic development intermediaries and growing businesses. Many open jobs, and a positive local trajectory. Manufacturing very strong and seeing labor force constraints and higher wages. Workforce challenges are the primary constraint.
- Internship programs are strong, students not having trouble finding part-time employment.
- Vacant large-scale retail spaces will likely need to be converted to other uses. Seeing demand for smaller-footprint office spaces as some renters implement hybrid models, yet most are still seeing a need for some degree of office space.
- May be a potential in the future for smaller, niche manufacturing. This could perhaps be a "lighter" industrial land use.
- Development-ready sites for manufacturing and other industrial use should remain a priority. Growing firms have low tolerance for extended process or navigating pending special assessment costs, making pre-installed infrastructure important. Spec 20,000 square foot industrial space would be filled in a hurry. There is consensus that Grand Forks will need more industrial land in the future. Grand Forks has lost economic development opportunities recently due to lack of land and lack of land with access to rail.
- As technology development becomes a stronger economic development priority, need to have infrastructure in place, including flexible, affordable office locations for young firms. Strong support for industry diversification efforts.
- TIF incentives have been a catalyst, both for real estate projects and some economic development incentives. More redevelopment in targeted areas, incentive programs should be structured to assist target areas of the community.
- There is an opportunity to increase dialogue between economic developers and commercial/industrial land developers. Targeted incentives – such as tax deferrals – could spur development of new land.
- The group believes Grand Forks does need new commercial development, perhaps somewhat surprisingly. This is partially driven by the recognition or perception that the community is light on commercial property, partially from a tax-base perspective. Commercial needs are more targeted and amenity- or niche-focused, such as targets for younger families, recognizing this is an emerging demographic along with university students. There is a desire to develop experiential amenities to attract people to the community.
- Career and technical education efforts are critical. New effort to create a career and workforce center is very important.
- Gap in neighborhood commercial, "not done in North Dakota, ever."

Specific Points of Interest:

1. While numbers don't make sense for new low-priced single family, there may be a potential market for missing middle or mixed-use housing.
2. City or other community leadership should be vocal about establishing a community vision and identity
3. Support for collaborations and unity with East Grand Forks
4. Columbia Mall is viewed as a missing opportunity
5. The train yard parallel to Demers Ave may be a development opportunity, as well as the Mill spur.
6. Strong support for greenways and park design, very positive for real estate and general community.
7. Continue to be aggressive and don't wait for opportunity. Appreciate the "can-do" attitude and reduction of red tape with City and new mayor.
8. GFAFB remains a key asset and partner. GFAFB with a strong desire to partner and connect with community.

9. Success of the education system is important, it impacts economic development and tax base.

HOUSING GROUP

General Takeaways:

1. Community is generally pro-development and city staff is supportive and easy to work with. Planning staff willing to take a progressive approach to making things work. Breath of fresh air and streamlining with the City processes lately. City has been open to new ideas that make sense.
2. Support for form-based code. Mixed-use downtown vs other areas might look different. Form-based code might incentivize creative development. There could be demand for less intense mixed use.
3. Support for flexibility and innovative neighborhood design. Don't prescribe development too much. Strong support for creativity with lot sizes in neighborhood design.
4. General support for proactive vision and aggressive pursuit of opportunities by the community as a whole.

Takeaways Related to Housing:

1. Good jobs with single-family detached housing and multi-family rentals, particularly downtown.
2. City policy of deferring specials did work and is working.
3. Support for TIF incentives and belief that this practice spurs economic development and increases the tax base in the long run.
4. Sense of demand for senior housing, fitting with demographics. Quality options may prevent seniors from retiring outside the region and losing them. Some seniors wish to downsize, but if only options are $400k or more, they will just retire to the lake regions.
5. Affordable housing is a huge need. Yet it is not profitable to build duplex and tri-plex rentals because it cannot be done to scale to generate rents needed to cash flow. May be a worthwhile endeavor to pursue affordable housing using city infrastructure support.
6. Has been considerable focus on south end and downtown, but we now need a concerted focus on the north end for planning, vision, and reinvestment. This could be a path to improving affordable housing. Vibrancy downtown could spill northward.
7. Too few landowners surrounding city constrains development.
8. Vacancy for larger-scale rental housing is cautiously-low. We used to fill buildings overnight or before they were completed. Situation has slowed some, but there is still a market. High-amenity buildings doing well.

Specific Points of Interest:

1. Main constraint in the community is bodies, need more people in town. Need to keep expanding market, construction and development competition is good for growth. Need to attract people to live here.
2. Another I-29 interchange could spur development on the south end.
3. Construction stalling due to current input costs.

INFRASTRUCTURE

General Takeaways:

1. Good foresight with plating and expanding infrastructure, led by private developers.
2. Desire to repurpose and reinvest in key areas of the city. Happy with progress in the city and proactive approach to address issues.

Takeaways Related to Infrastructure:

1. Some areas have challenges with pedestrian planning, some conflicts exist. Paths are sometimes interrupted as streets are extended. Could have better plowing of paths in winter (example of N side of

Demers Ave). Safe routes to school is a good program and well done. Sidewalk system is generally good. Don't give up on sidewalks. Policy should require sidewalks be installed at time of street installation or reconstruction.

2. Great system of recreation trails, but commuter trails are more of a challenge. Would be positive to create multi-use trails connecting to regions outside the city. Interconnect regional destinations such as Thompson or Turtle River State Park. This could use old rail beds. As city builds more multi-use paths, maintenance could become a hurdle.
3. For bicycle commuters, 17th Ave S is risky. Major routes are a tough commute for bicycles, but quieter streets are fine. Some bicycle infrastructure is being added with new construction projects, but there is still a long way to go. Rough ride under South Washington underpass.
4. Very positive utilization of user groups in local decision-making processes.
5. Transit is important. There are issues where lack of snow clearance limits access to bus stations. Grand Cities Mall area is one example. It leads to people walking in the street.
6. Road maintenance has improved in recent years.
7. Key infrastructure future issues include:
    a. South end Red River crossing (peds and bike should be accommodated if new bridge is built)
    b. Additional I-29 interchange
    c. Rail crossing at 42nd Street
8. General support for traffic calming measures. Depending on law enforcement should not be the primary solution.
9. Point bridge is inaccessible for anything except cars. Other bridges are good for ped/bicycle.
10. Underground utilities (water and sanitary sewer) need more press/awareness across the community.
11. Infrastructure installation cost is increasingly an obstacle for new development.

Specific Points of Interest:

1. Western entry to the city along US Highway 2 could use beautification improvements.
2. Some concern expressed about future integration of rural residential housing adjacent to but currently outside city limits.
3. Community lacks indoor public gathering space in winter time.
4. Some frustrations over Red River bridge planning processes. Participant was not in favor of 32nd Ave bridge due to worries about increased traffic in the area.
5. Need to convert empty large-scale commercial spaces.

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

September 8, 2021

MPO Executive Board:

September 15, 2021

RECOMMENDED ACTION: Update on Proposed Amendments to 2045 MTP

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.

UPDATE: The MPO Board preliminarily approved all but one of the proposed amendment. The one not moving forward is the East Grand Forks' request to switch the 2022 project. The remaining amendments to presented to each respective City for consideration. Each City had options of at least processing the amendment as an amendment to their respective city Plan or make a assessment that the proposed amendments did not significantly change their respective City Plan enough to warrant an amendment.

Both Cities determine the proposed amendments were not significant enough. Therefore, the MPO can process the amendments during the month of October. The TAC will hold the required public hearing on the proposed amendment during its October 13th meeting. The MPO Board can then possibly consider final action at its October 20th meeting. As a reminded, these are the amendments

MINNESOTA SIDE

The proposed amendment to the Metropolitan Transportation Plan (MTP) is needed. In the Metropolitan Transportation Plan, MN 220 pavement preservation was overlooked. The Minnesota Department of Transportation is requesting to add a pavement preservation project, with approximately 2 miles of it within the MPO, to the MTP that was not previously identified.

Therefore, the following amendment is necessary:

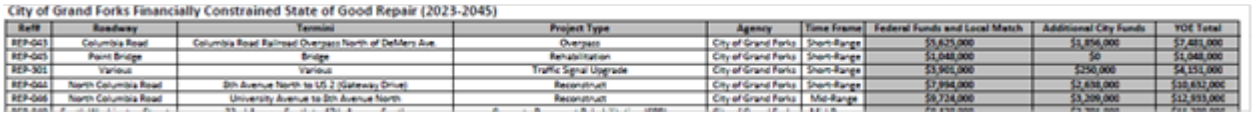
> Add Project Short-term, MN 220 from Polk CSAH 19 (23rd Street NW) to 0.3 miles south of Polk CSAH 22, crack/seat with overlay to the MTP's MnDOT Financially Constrained State of Good Repair Projects (2023-2045) list. Estimated project cost: $6,400,000 of which an estimated $1.5M is within the MPA.

The MN 220 North Corridor Study identified MN 220 from 23rd Street NW to 140th Street SW for Mid Term Improvements (2025-2034) to "construct left and right turn lanes as applicable at public street access as land develops". The extent of improvements being included with this project is yet to be determine as most are dependent upon adjacent land development. The study also identified the MN 220 intersection at 23rd Street NW for Long Term Improvements (2035-2045+) for "intersection control improvements".

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

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 southern 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	$9,724,000	$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.

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.
- Each City has been presented with the proposed amendments; each has determined that they are not significant enough to warrant amending their respective plans. Therefore, the MPO can move forward prior to the end of 60 days.

Support Materials:

- NONE

Grand Forks - East Grand Forks
METROPOLITAN
PLANNING ORGANIZATION

MPO Staff Report

Technical Advisory Committee:

September 8, 2021

MPO Executive Board:

September 15, 2021

RECOMMENDED ACTION: Start Solicitation of 2023-2026 TIP

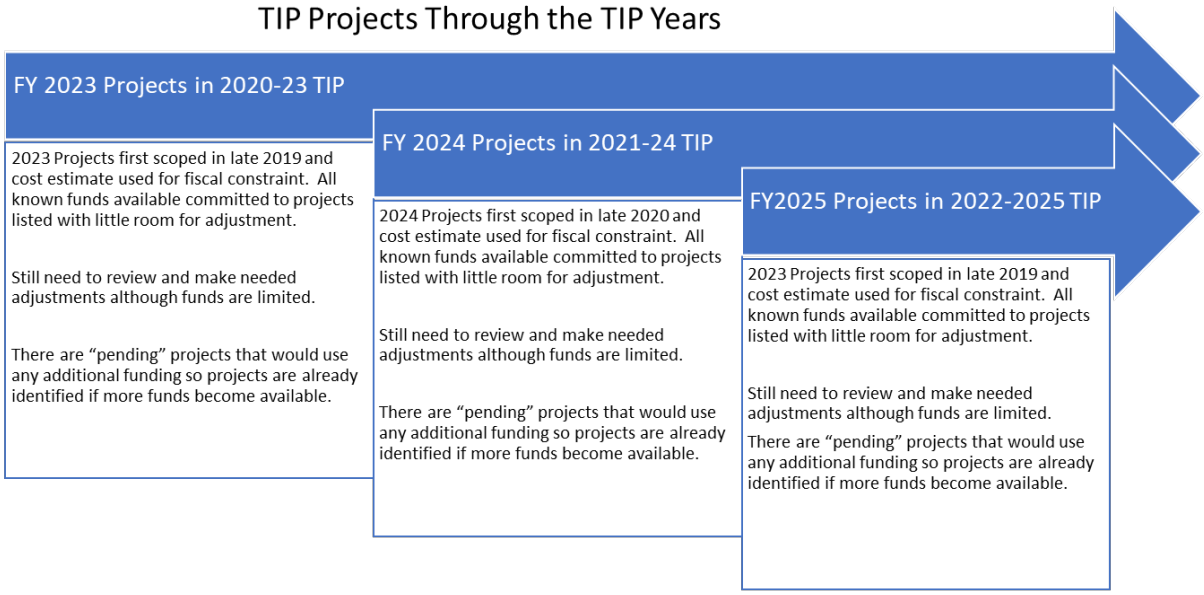
Matter of Solicitation of FY2023-2026 TIP.

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

We are all familiar that this is the best opportunity to add projects to the TIP. We do this TIP annually so that we can make adjustments on a regular set schedule. We have the authority to wait to solicit for a new TIP document every fourth year instead of annually. We continue to believe an annual solicitation and adoption of a new TIP best serves our purposes. With the excitement of opening the TIP up for new projects, we cannot lose sight that we are still required to be consistent with our MTP that contains a financial plan that is fiscally constrained. This financial plan also serves as the financial plan for our TIP programming responsibilities. New projects should focus on being submitted for the last year, or fourth year, of the TIP since no projects have been formally programmed for that year. For this solicitation, that for most programs is 2026.

The recently adopted TIP Procedural Manual identifies the general process for projects for the TIP. TIP Procedural Manual

Prior years (the first three of the four year TIP) projects have been prioritized and selected to be done the year the construction is identified in the TIP. Each of these years are fiscally constraint; basically meaning for every dollar coming in, a project was funded until no dollars are left. Despite that, a careful review of each prior year is needed. The federal amount is the most constrained revenue source since these prior years have been programmed to fiscal constraint since FY2018, see diagram below.



The solicitation of many federal funding programs will soon be opened. FAST has expired with a one year extension ending at the end of September; so there are many unknowns. Congress must take some action by the end of September to continue to both authorize and appropriate funds for surface transportation. Congress has recently debated and is processing re-authorization and economic stimulus bills. The basic commonality among the various versions of these effort is significant increase in funds available. The proverbial "devil in the details" will create an unusual process for this TIP solicitation. Therefore, the process may have changes are we proceed.

Findings and Analysis:

- The 2045 MTP list of projects with the fiscally constrained Plan.
- Programmed projects for 2023, 2024, 2025 already create fiscally constrained funds.
- 2026 is the first year that funds have not been programmed specifically towards projects yet the MTP has identified the priority projects for consideration.
- Each State has a slightly different timeline for consideration of candidate projects from various programs.

Support Materials:

- NONE

MPO UNIFIED PLANNING WORK PROGRAM -UPDATE , 2021

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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 See agenda item	65%	31-Dec-21	30-Mar-22
East Grand Forks Land Use Plan Update	website is: www.egfplan.org See agenda item	85%	30-Jun-21	31-Dec-21
Future Bridge Traffic Impact Study	Ad Hoc Group will meet Setp 17th. Website established: www.forks2forksbridge.com/info Online public event with results being presented during September meetings. See agenda item.	61%	31-Dec-20	30-Dec-21
Pavement Management System Update	Roads photos have been cpatured	44%	31-Dec-21	30-Dec-21
Transit Development Program TDP	Initial Project Team kick-off was held. Data gathering and exchange is taking place.	25%	31-Mar-22	31-Dec-22
Aerial Photo	LiDAR has been captured and distributed to each City; the aerial photo has been captured; processing is now taking place	70%	30-Nov-21	30-Nov-21
Traffic Count Program	On-going	90%	On-going	