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Anatomy of a RAISE Grant Win: HWY 197 Safety & Mobility Improvement Project

Ian Butler-Severson, AICP (Candidate) | KLJ Engineering
Joe DeVore, PE, PTOE, RSP | KLJ Engineering

In each issue, the INCITER features articles coordinated by NCITE's advertisers.

This article is a contribution from KLJ Engineering.

Minnesota Hwy 197 in Bemidji from Hannah Avenue to Gillett Drive (carries approximately 15,000-20,000 vehicles per day). The project, once completed, will remedy the existing and projected capacity, safety, and mobility issues by reconstructing an existing roadway with concrete pavement, three 2x1 hybrid multilane roundabouts, one signal replacement, and an urbanized cross section with trails and lighting on both sides of Hwy 197. The project will also reconstruct two city roadways on Hannah Avenue and Middle School Drive; adding sidewalk connections, two compact roundabouts, and improve safe routes to Bemidji Middle School as part of the City of Bemidji's multimodal plan. Project completion will result in improved safety at three sustained crash locations, incorporate multi-modal traffic operations, improve access to businesses, replace aging infrastructure, and construct pedestrian and bicycle pathways along and across the corridors to improve safety and access for active transportation users to reach heavily used commercial area destinations.



Existing Hwy 197 Intersection and Rendering of Proposed Project Improvements

Introduction:

It is no secret that the highly competitive *Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant* program proposal process is a challenging one; perhaps even considered a daunting process for some. Among the total 166 RAISE grants awarded in 2022, KLJ's MnDOT and City of Bemidji sponsored winning proposal for the *Hwy 197 (Paul Bunyan Drive) Safety and Mobility Improvement Project* was one of six MN grant wins. This is from a total of 935 total grant submissions nationwide. So, what, if anything, does the project team attribute to the success of their winning proposal?

(Continued on page 12)

JOB OPENINGS

Visit the NCITE website for current job openings | nc-ite.org

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PRESIDENT'S MESSAGE

Greetings! This year marks NCITE's 60th anniversary! In 1963, NCITE was officially established as the 16th Section of ITE with an initial membership of 20 members. Today, there are over 70 Sections in ITE and NCITE's membership has grown close to 500 members. Over the last 60 years, NCITE has continued to remain a strong professional organization because of the outstanding contributions of our members to organize section meetings, committee events, and professional development opportunities. I want to thank all those who have volunteered their time to help NCITE succeed in the past, present, and into the future. We had a great Executive board last year (led by outgoing president **Natalie Sager**) and I am looking forward to continuing these initiatives and events in 2023!

As NCITE President, I'm excited to help form the 2024-2026 ITE Strategic Plan which will help shape our Section, District, and International ITE for years to come. As part of this Strategic plan, an all-member survey was sent out on February 13th to help gather member input. In line with international ITE, one of NCITE's focus areas this year will be the Transportation Planning Professional Initiative. Throughout 2023, Planning Professionals will receive a free membership. A special welcome to the 26 new Planning Professionals who have joined NCITE since the start of the promotion!



Jeremy Melquist
2023 NCITE President

Our January Section Meeting featured a presentation on the Hennepin Avenue Downtown Reconstruction Project by **JoNette Kuhnau** (Kimley-Horn) and **Don Elwood** (City of Minneapolis). This project won the 2022 NCITE Transportation Achievement Award, which recognizes a project that has made a significant impact on the transportation industry. Our [February 24th Section meeting](#) will be at Jax Café. **KC Atkins** and **Derek Sunstrom** will be presenting on the Hennepin County ADA Transition Plan.

The NCITE Section-wide meeting schedule this year includes:

- Six Section Meetings (a mix of breakfast, lunch, and happy hour meetings)
- Summer Social
- Transportation Symposium (first one since 2019!)
- Annual Meeting

NCITE's committees also plan technical presentations, roundtables, walking tours, and social events throughout the year. You can review the committee descriptions and sign up for committee email lists [here](#). If you'd like to become more involved with NCITE, please reach out to myself or any other board member. Committees are a great way to get involved - we are currently looking for a co-chair for our Intersection Traffic Control Committee. Also, if you have any ideas for future section or committee meetings, we welcome your input! To stay up-to-date on NCITE activities, please visit www.nc-ite.org, [LinkedIn](#), and [Twitter](#).

Upcoming District/International Conferences to also keep on your calendar:

- [ITE Great Lakes District Annual Meeting: June 11-13 in Grand Rapids, MI](#)
- [ITE International Annual Meeting: August 13-16 in Portland, OR](#)

I am looking forward to another great year as we continue to add benefit to our membership. I'd like to close by introducing your 2023 NCITE Executive Board!

Vice President: **Phil Kulis**, SRF

Secretary: **Nik Costello**, Washington County

Treasurer: **Joe DeVore**, KLJ

Director: **Cade Botten**, Hennepin County

Director: **Caitlin Wotruba**, KLJ

Past President: **Natalie Sager**, HDR

Section Representative: **Nick Erpelding**, Hennepin County

Jeremy Melquist, 2023 NCITE President

UPCOMING EVENTS

ite Calendar

ITE Calendar for District, Section, & Chapter Meetings

Stay Connected with NCITE & ITE Events
Online & In Person | Dates Vary

**NCITE Calendar**
Online & In Person | Dates Vary**GLITE Annual Meeting**
Grand Rapids, MI | June 11-12, 2023**Attend an Upcoming NCITE Technical Committee Meeting!
Check out upcoming topics [here](#).**

For more information on the committees and how you can get involved:

https://nc-ite.org/Committee_Listing

For professional development opportunities:

http://nc-ite.org/content.php?page=Professional_Development_Meetings

MEET THE 2023 EXECUTIVE BOARD

Get to know the 2023 board!!

Jeremy Melquist, 2023 NCITE President

Job Title and Employer: Traffic Engineer (City of Bloomington)

Past Work: KLJ, Bolton & Menk. Internships at MnDOT, MTO, Xcel Energy.

Education: Bachelor of Civil Engineering, University of Minnesota-Twin Cities

Where You Live: New Brighton, MN

Family: Wife (Jess)

Pets: Goldendoodle (Murphy)

Hometown: Woodbury, MN

Hobbies: Sports, Hiking/Camping, Exercising

Interesting Facts:

- If you see me outside of work, it may not be me - I have an identical twin. Our Past President, Natalie Sager, is also an identical twin.
- Early in college my emphasis was Structural Engineering, but I switched to Traffic Engineering after taking an interesting class and internship.
- I'm coming up on my 10-year college graduation date. I had 15 total roommates throughout college, 3 of which were in my wedding.
- I've lived in the Twin Cities my whole life, but I enjoy visiting other places. I've been to 10+ countries, 25+ states, and 75+ national/state parks.
- I enjoy visiting new breweries and have tried over 650 different beers.

Best Vacation: We took two trips last year – Banff National Park (my new favorite national park) and New Zealand (I enjoyed the area around Queenstown the most).

Favorite Sports Team: Minnesota Vikings - I was at the Vikings vs Colts game this past year (biggest comeback in NFL history!) I'm also a Gopher football fan, my favorite game was when they upset #4 Penn State in 2019 and we got to storm the field!

Favorite TV Show: The Office

Favorite Radio/Podcast show: KFAN Powertrip Morning Show

Favorite Restaurant: Raising Canes, it reminds me of Gopher football gamedays



Jeremy Melquist
President

Phillip Kulis, 2023 NCITE Vice President

Job Title and Employer: Project Manager at SRF Consulting Group

Past Work: Transportation Analyst at Kittelson and Associates

Education: MS Penn State University, BS Rochester Institute of Technology (Rochester, NY)

Where You Live: St Louis Park, MN

Pets: Cali the cat

Hometown: Ithaca, NY

Hobbies: Golfing, biking, hiking, skiing, photography, and home improvement projects.

Interesting Facts:

- I've had the joy of spending Christmas morning in the emergency room.
- Prior to moving to Minnesota, I lived in the hottest part of the country, Arizona.
- I've never broken a bone.
- I rewired my bathroom and wired my new home office and I'm still here to talk about it.

Best Vacation: I just got back from Jamaica and I must say it's nice getting out of the cold Minnesota winter for bit.

Favorite TV Show: Suits – thought about becoming a lawyer prior to engineering.

Favorite Food: Buffalo chicken pizza

Favorite Restaurant: Birch's on the Lake

Desired Superpower: Who doesn't want to be able to fly?

What is the strangest food combination you enjoy?: Although not unusual in Minnesota, beer with olives in it is pretty tasty.



Phil Kulis
Vice President

MEET THE 2023 EXECUTIVE BOARD

Nik Costello, 2023 NCITE Secretary

Job Title and Employer: Engineer III, Washington County Public Works Department (currently working full time at the Metro Transit Gold Line BRT Project Office)

Past Work: Assistant Traffic Engineer, Washington County Public Works Department

Education: University of Minnesota

Where You Live: St Paul, MN

Family: Wife, Kelly & daughter Ruth (almost 4)

Pets: dog Karl (15)

Hometown: Stillwater, MN

Hobbies: Golfing, fishing, camping, skiing, curling, traveling

Interesting Facts:

- My wife and I met in kindergarten, but didn't end up dating till after college.
- I was a varsity cheerleader in high school.
- I took a semester off of college and backpacked through western Europe, visiting 10 countries.
- I've never broken a bone.
- I joined a curling league five years ago and have been hooked ever since.

Favorite TV Show: Twin Peaks

Favorite Podcast: Tumblehome

Favorite Music: I like most genres. Some of my favorite artists are David Bowie, New Order, Pavement, and Modest Mouse.

Favorite Food: Mexican

Favorite Restaurant: Mucci's

Favorite Book: Out Stealing Horses

Favorite Car: I owned a 1998 Honda Civic that made it to 301,000 miles before the body started falling apart. I'm convinced the engine would have made it another 300,000 miles.

Instruments Played: Alto Saxophone back in the day



Nik Costello
Secretary

Joe DeVore, 2023 NCITE Treasurer

Job Title and Employer: Project Manager at KLJ Engineering

Past Work: Traffic Engineer at SRF Consulting Group

Education: University of Minnesota (Go Gophers!)

Where You Live: Lino Lakes, MN

Family: Laura (Wife)

Pets: Two Lionhead Lop Bunnies named Coffee and Clover

Hometown: Hugo/Forest Lake, MN

Hobbies: Golf, Baseball, Softball, Hockey, and going to the North Shore

Five Interesting Facts About Yourself:

- I was the bullpen catcher for the University of Minnesota Baseball Team.
- I like to DIY everything from my deck and patio to bathroom and basement renovations.
- I like to help out with my wife Laura's art fair events (I have no artistic talent myself).
- I have only owned one model of vehicle my whole life. Currently a 2011 Ford Ranger.
- I have lived 4 different spots in the Twin Cities, but never lived outside of the twin cities area.



Joe DeVore
Treasure

Favorite Podcast: The New York Times Daily

Favorite Food: Proud Member of the Twin Cities (Pizza) Pie Chasers

Favorite Restaurant: Mario's Pizza in St Paul

Desired Superpower: Able to clone myself.

Do you collect anything? No. My parents on the other hand hoard everything so that is telling.

What is the strangest food combination you enjoy? Optimal Pizza toppings are bacon, pineapple, and jalapeno. I will die on that hill.

MEET THE 2023 EXECUTIVE BOARD

Cade Botten, 2023 NCITE Director

Job Title and Employer: Professional Engineer, Hennepin County Public Works

Education: University of Minnesota Twin Cities

Where You Live: Bloomington

Family: I married my wife Lauren last summer. We met in 2016 while in college.

Pets: We have a two year old Australian Cattle Dog named Rupert.

Hometown: Hermantown, Minnesota

Hobbies: I love sports, whether it is playing them or watching them. I play a ton of video games in my free time, and I enjoy doing little projects at my new house.

Five Interesting Facts About Yourself:

- I recently bought my first ever LEGO set (Harry Potter and the Chamber of Secrets).
- For my honeymoon, I went to South Africa and went on a safari.
- I ate a meal in the Eiffel Tower.
- When I started college, I planned on majoring in Actuarial Science. Calculus II changed my mind very quickly.
- I enjoy spending time outside and I dream of owning a cabin on a lake.



Cade Botten
Director

Favorite TV Show: Game of Thrones (besides the last season)

Favorite Podcast: The Basement Yard

Favorite Music: Alternative or Rap/Hip Hop

Favorite Food: Gyro

Favorite Restaurant: Manny's Steakhouse

Best Vacation: South Africa (Cape Town, Eswatini, and Johannesburg)

What is something on your bucket list? Visit Japan

Caitlin Wotruba, 2023 NCITE Director

Job Title and Employer: Civil Engineer in the Transportation Group at KLJ

Past Work: Kimley-Horn

Education: Civil Engineering and Surveying Engineering at Michigan Technological University

Where You Live: Burnsville, MN

Hometown: Hudson, WI

Hobbies: Sea Kayaking, Mountain Biking, Cross Country Skiing, Snowboarding

Five Interesting Facts About Yourself:

- I can roll my kayak and am working on learning a few different types of rolls.
- I got to tour the Mackinac bridge in college, including going inside the bridge and seeing where all the cables connect.
- I dehydrate most of my own food for backpacking and kayaking trips.
- I have never broken a bone.
- I was on the Men's Ultimate club team in college.



Caitlin Wotruba
Director

Favorite Podcast: Radiolab

Favorite Music: County/Folk

Favorite Food: Ice Cream

Favorite Restaurant: Mucci's Italian

Favorite Book: Anything by Mary Higgins Clark

Desired Superpower: Teleportation

Biggest Accomplishment: Passing the PE exam

Most Embarrassing Moment: Running to catch the bus in High School and being taken out at the knees by my Chocolate Lab that was chasing after me. It all happened right in front of the bus and as I got on, the driver was trying to hold in his laughter while asking if I was alright.

Best Vacation: Packrafting in Alaska.

What is something on your bucket list? To go sea kayaking through the Faroe Islands.

MEET THE 2023 EXECUTIVE BOARD

Natalie Sager, 2023 Past President

Job Title and Employer: Assistant Traffic Section Manager, HDR

Past Work: Student Internships at Alliant and Scott County

Education: Bachelor's of Civil Engineering from University of MN, Twin Cities

Where You Live: Maple Grove, MN

Family: Husband (Todd) and Son (Evan)

Pets: Siberian Cat (Maya)

Hometown: Shoreview, MN

Hobbies: Hiking, Camping, Travel

Interesting Facts:

- I'm married to my high school sweetheart.
- I was a surprise identical twin born on Friday the 13th.
- I was born and raised in the Twin Cities region.
- I emphasized in structural engineering in college, but found the light with transportation engineering.
- If I had more free time, I'd love to learn how to woodwork.

Favorite Food: Comfort foods during the winter... Chicken Pot Pie.

Favorite Restaurant: Smack Shack

Desired Superpower: Teleportation!

Instruments Played: Flute (in high school/college)

Best Vacation: 2-week honeymoon in England/Scotland/Ireland.

What is your useless talent? Being able to grab pringles from the bottom of the container.

What is something on your bucket list? To visit every continent, Antarctica optional.



Natalie Sager
Past President

Nick Erpelding, 2023 ITE District Director

Job Title and Employer: Traffic Operations Division Manager, Hennepin County

Past Work: SRF (2011-2022), Westwood (2007-2011), RLK (2001-2007)

Education: University of Notre Dame

Where You Live: Minnetonka

Family: wife Lara, sons Nolan (12; 7th grade) and Everett (9; 3rd grade)

Hometown: Minnetonka

Hobbies: bridge, curling

Interesting Facts About Yourself:

- Joined curling league in Blaine after learning to play at NCITE Annual Meeting
- Love to spend time waterskiing at family cabin in Park Rapids (Bad Axe Lake)
- Run one foot race (a 5k) every year on the 4th of July
- Enjoy reading a hard copy newspaper every day
- Worked as a golf caddie at Oak Ridge CC in junior high

Favorite TV Show: Ozark

Favorite Podcast: ESPN College Football Podcast

Favorite Food: Sausage and Pepperoni Pizza

Favorite Restaurant: Chick-Fil-A

Favorite Book: Into the Wild

Desired Superpower: Ability to be in two places at once

Biggest Accomplishment: Achieved Life Master ranking in bridge in 2017

Bucket List: I'm planning to visit my 50th state for spring break this year: New Mexico!



Nick Erpelding
ITE District Rep

SECTION MEETING UPDATES

The Annual Meeting was held on November 17th, 2022 at Whirly Ball in Bloomington. Congratulations to all the award winners!

Awards

Transportation Professional of the Year Award **Sue Zarling**

Young Transportation Professional of the Year Award **Phil Kulis**

Transportation Achievement Award **Hennepin Avenue Downtown Reconstruction Project (City of Minneapolis, Kimley-Horn, Alliant)**

Scholarships

Undergraduate Scholarship (\$1,000 each):

Payton Gehloff, Minnesota State University-Mankato

Julie Olson, University of Minnesota-Duluth

Intern Scholarship (\$1,000 each):

Grey Severson, Alliant Intern

Ian McPhee, Alliant Intern



SECTION MEETING UPDATES



The January Section Meeting was held on January 31, 2023 at Lucky's Pub in Roseville, MN. **JoNette Kuhnau & Don Elwood** presented on the Hennepin Avenue Downtown Reconstruction project which received the **2022 NCITE Transportation Achievement Award**, recognizing a project that has made a significant impact on the transportation industry. The **City of Minneapolis**, **Kimley-Horn**, and **Alliant Engineering, Inc.** were all part of the project team that led this innovative project. Also thank you to our meeting sponsor **Kimley-Horn**!

Watch the Presentation [here](#).

We continue to iterate the way we complete these meetings, and this time has been a perfect opportunity to try out some new things. However, if you have anything that may make these meetings work better or enhance the value for the section, we'd love to hear your thoughts! Please let any of your thoughts be known to a member of the board.

YMC UPDATE

Meet the YMC Co-Chairs for 2023!

Name: Mike Odell

Job Title and Employer: Graduate Traffic Engineer at Alliant Engineering

Past Work: I interned at Minneapolis Traffic and Parking Services in 2018 and 2019.

Education: I graduated with a bachelor's in Civil Engineering from the U of M in 2021.

Where You Live: I live in Minneapolis, near the Walker Art Center.

Family: Parents and one sister

Pets: Currently, I have six houseplants and a kombucha SCOBY.

Hometown: I grew up in Andover, Minnesota.

Hobbies: I like brewing beer, playing board games, and biking.

Three Interesting Facts About Yourself:

- I play on the Alliant broomball team.
- I have an extra vertebrae.
- I crashed into a couch on I-35.



Name: Bryce Statz

Job Title and Employer: Civil Analyst at Kimley-Horn

Past Work: Civil Intern at MSA Professional Services for 4 years

Education: Bachelor's in Civil and Environmental Engineering at the University of Wisconsin-Madison (Go Badgers!)

Where You Live: South Minneapolis

Family: Mom, Dad, and three brothers

Pets: None currently but had many growing up.

Hometown: Waunakee, WI

Hobbies: Rock climbing, skiing and traveling

Three Interesting Facts About Yourself:

- I had been on 4 continents by the time I was 16 and haven't left the country since.
- I've dislocated both shoulders (wouldn't recommend).
- I've been vegan for 8 years.



Recent Agenda Items: Planning of the February curling event at Sociable Cider Werks.

Future Agenda Items: February curling event, Planning of future events.

Next Meeting: 4:30 PM – 7:00 PM, Location Sociable Cider Werks, Thursday February 23rd.

If you would like to be added to the YMC email list, or know of any new hires/coworkers that would enjoy our events, please send email addresses to **Michael Odell** (modell@alliant-inc.com)

The Benefits of Existing Study Information

The corridor was last reconstructed in the 1960's with the last roadway resurfacing occurring in 2008. Over the past decade, a critical crash rate along the corridor prompted the need for safety improvements. Identified improvements from the *2018-2019 Hwy 197 Corridor Study*, *2020-2021 Community Review Panel*, and *2021 Middle School Drive and Hannah Avenue Corridor Study*, were coordinated into an implementation plan to improve the safety, pavement conditions, operations, and multimodal connections in the project. Overall, the process spanned four years of discussions with stakeholders, businesses, and community leaders to finalize the implementation plan resulting in a community-supported plan to create a more multimodal, community accessible, transportation corridor.

Essential to the success of the RAISE grant proposal was the ability to fully address the key merit criteria set forth in the RAISE grant requirements which included Safety, Environmental Sustainability, Quality of Life, Mobility and Community Connectivity, Economic Competitiveness, State of Good Repair, Partnership and Collaboration, and Innovation. For this particular RAISE grant, the project was able to meet all RAISE primary merit criteria because of the work and effort completed on the corridor study. As project differentiators, KLJ also incorporated a Benefit Cost Analysis with a positive BCA ratio of 1.52 mainly from addressing fatal and serious injury crash types, in addition to the incorporation of US DOT Justice40 data which made the case for the project even stronger. Justice40 data was utilized to identify transportation-based equity disadvantages, both within the study area and at a wider regional level in a very high percentage native American community.

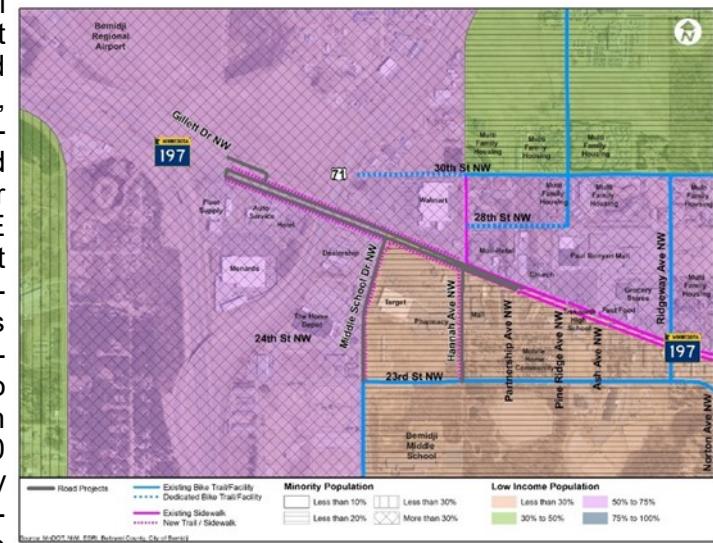
Due to the strong local and state DOT support, the groundwork laid by the multiple previous planning studies, the completion of the pre-environmental corridor study in 2019, and the expected completion of National Environmental Policy Act (NEPA) Categorical Exclusion determination (CATEX) in 2022-2024, the project was shovel-ready. Additionally, the project had a strong history of community engagement. Integral to previous studies, community discussions with stakeholders, businesses, and community leaders had been held to gain meaningful input and identify the proposed implementation plan. The completion of, and ability to draw on information and data from the details provided by these previous studies and project milestones, played a critical role in providing the rationale, need, and feasibility of the project, and ultimately its successful RAISE grant selection.

Solutions for Project Challenges

Surrogate Safety Analysis:

Existing and future surrogate safety was studied to identify causes of the historical crash and severity rates along the corridor. An existing conflict report was completed using MicroTraffic to identify causes of existing conflicts for a three-day period in November 2018 at Hwy 197 and Hannah Avenue. This analysis identified that 29 conflicts with a post-encroachment time under five seconds occurred between the northbound-left vs southbound-through and southbound-left vs northbound-through movements, with 12 of those including a vehicle over 22 miles per hour. These surrogate safety factors helped show the benefits of the hybrid roundabouts and provided existing details for quantifying the safety benefits expected from safety modeling.

An FHWA Surrogate Safety Assessment Model (SSAM) conflict analysis was completed along the Hwy 197 corridor to identify conflict potential between scenarios that may differ from the crash analysis along the corridor. Based on the SSAM conflict analysis comparing the No Build conditions and Build conditions, an expected crash cost reduction of 79 percent is expected in the study area as the result of the inclusion of the



USDOT Justice40 Analysis

HWY 197 Safety & Mobility Improvement Project (continued from page 12)

roundabouts and the reduced risk of fatal and serious injury right-angle crashes. Roundabouts throughout Minnesota have reduced fatal and serious injury crashes by 78 percent for hybrid roundabouts and 83 percent for multilane roundabouts based on A Study of the Traffic Safety at Roundabouts in Minnesota (2017) which added more justification for the high calculated safety benefit.

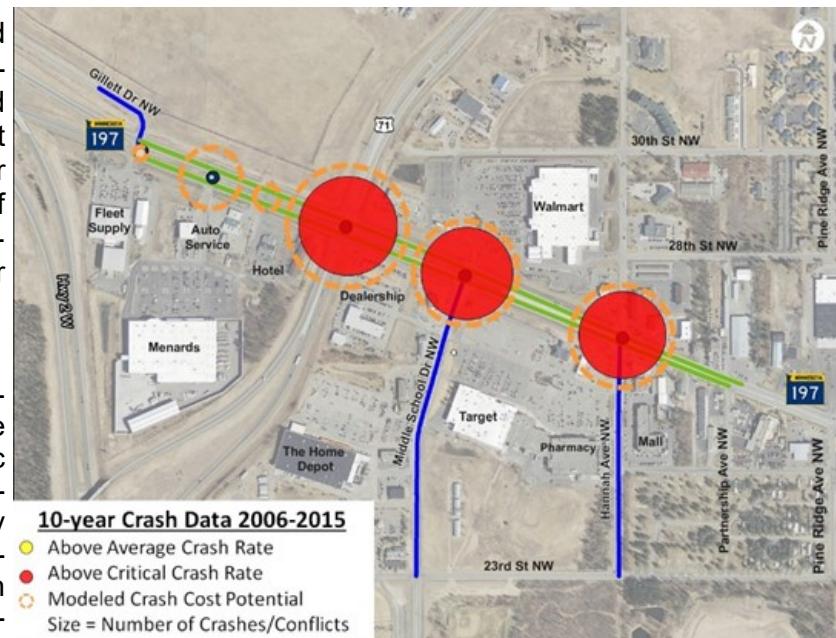
Innovative Processes and Design Features

The project identified innovative ways to reduce internal combustion vehicle trips on the corridor by prioritizing multimodal and electric vehicle infrastructure. The district is also exploring options for innovative project delivery and construction. Innovative project opportunities included public/private partnerships with existing businesses, improved vehicular access to EV charging stations already being implemented in the project area, and access to active transportation opportunities while EVs charge. Creative detour and construction staging solutions were also identified including two-stage multi-modal crossings and roundabouts to help reduce high corridor speed that has led to injury related crashes; and installation of traffic signal confirmation lights to provide extra red-light infraction enforcement.

Conclusions and Next Steps

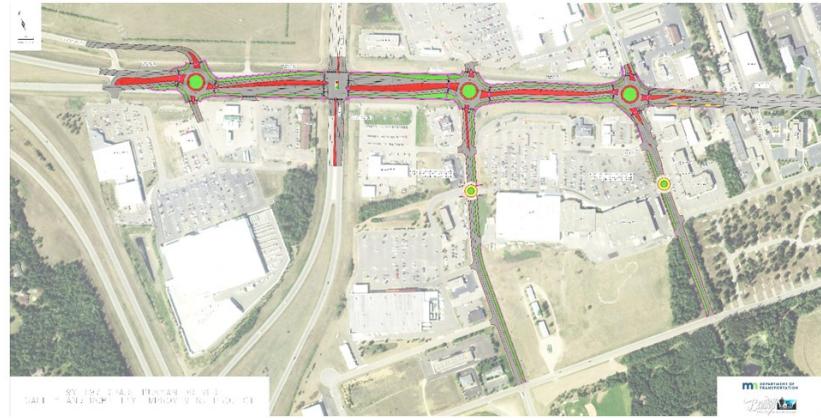
As MnDOT and the City of Bemidji move forward with design plans to utilize their RAISE Grant funding opportunity, the winning elements of the process become clear. First is that having community support through letters of support from City, County, Legislators, and Community Groups were imperative to showing the need for this community driven project. While four years of community engagement is not needed in most situations, almost every business and community group were engaged in Bemidji that had a stake in the Hwy 197 project. Secondly, having a wealth of technical information from the corridor study also helped to identify if the project would meet USDOT BCA requirements and quickly quantify the project's overall benefits for the narrative. Integrating in specific technical results helped identify the benefit of the project to federal reviewers. And the last differentiator was the incorporation of public-private partnerships with this project. MnDOT implemented a Community Review process for the corridor study to give businesses and community advocates a voice to design this segment of corridor to match Bemidji's specific community needs.

Over the next 2-3 years, MnDOT and the City of Bemidji will be pulling together final design plans for the implementation of this complete streets focused project. Implementing this project incorporating two separate projects (MnDOT and City led) under one Raise Grant will continue to be a unique challenge, but also the strong partnership was a major reason for the success of the RAISE grant application. More info: [US DOT RAISE Grants FY2022](#)



Historic and Surrogate Crash Potential Graphic

Creative detour and construction staging solutions were also identified including two-stage multi-modal crossings and roundabouts to help reduce high corridor speed that has led to injury related crashes; and installation of traffic signal confirmation lights to provide extra red-light infraction enforcement.



Final Project Design Layout

Geometric Design

KC Atkins, PE | Hennepin County
Amanda Vetter, PE | Apex Engineering

In each issue, the INCITER features an article coordinated by one of NCITE's technical committees.
This article is a contribution from the **Geometric Design Committee**.

The NCITE Geometric Design Committee is excited to start back up and get meetings scheduled for the year. We're working on contacting people for presentations we think may be relevant, but you may have presentation ideas we don't know about yet!

We currently have the following two presentations scheduled and are looking for more!

April – 4th Street and University Avenue protected bikeways project, presentation by Alliant Engineering, Inc. on protected bikeway design, including floating bus stops and outside mountable truck aprons

June – 1st Avenue S reconstruction project, presentation by Toole Design Group on an urban street reconstruction, including protected bikeways and converting a two-way roadway to one-way

We're looking for presentations on the following topics, and are interested in topics you have as well:

- Americans with Disabilities Act (ADA) design
- Roundabouts
- Bus only lanes
- Taper rates and design flexibility
- Access control
- Innovative intersection design
- Federal Aid process
- Pedestrian crossing innovations or applications
- Rural geometric design

Differences in design guidance across states to be aware of

If you'd like to present to the Geometric Design Committee or have topic ideas, please reach out to KC Atkins (kc.atkins@hennepin.us) or Amanda Vetter (Amanda.vetter@apexenggroup.com). Meetings will be virtual to start, then move to hybrid and can be presented from anywhere, including Minnesota, North Dakota, or South Dakota!



Source: FHWA



TECHNICAL COMMITTEE UPDATE



Geometric Design Technical Committee

Co-Chairs: **KC Atkins** KC.Atkins@hennepin.us, **Amanda Vetter** amanda.vetter@apexenggroup.com

Recent Agenda Items: None

Future Agenda Items: 1st Avenue S reconstruction project, presentation by Toole Design

Next Meeting: June 2023



Intersection Traffic Control Technical Committee

Co-Chairs: **Catlin Wotruba** wotruba@kljeng.com

Recent Agenda Items: Brainstorming session for future meeting topics.

Future Agenda Items: Assembling schedule of topics for the year including updates to the Signal Timing Spreadsheet from 2020.

Next Meeting: TBD



Emerging Technologies in Transportation Technical Committee

Co-Chairs: **Jake Eisinger** jake.eisinger@co.washington.mn.us, **Christian Mayala** christian.mayala@bolton-menk.com

Recent Agenda Items: Bear Tracks EV Shuttle

Future Agenda Items: Snow Plow signal control, CAV deployment in IL, Pavement marking and vehicle lane control.

Next Meeting: TBD



Complete Streets and Safety Committee

Co-Chairs: **Sarah Irmen** Sarah.Irmen@hdrinc.com **Luis Flores** luis.flores@co.ramsey.mn.us

Recent Agenda Items: No recent meetings.

Future Agenda Items: Potential topics include BRT, pedestrian toolkits, innovative project solutions, statewide pedestrian crash study, ped facility LOS, and more.

Next Meeting: TBD



Planning Methods and Applications Technical Committee

Co-Chairs: **Rachel Wiken** Rachel.Wiken@metc.state.mn.us, **Erik Kappelman** EKappelman@srfconsulting.com

Recent Agendas Items: member updates, upcoming conferences, election of new chair and co-chair, Met Council updates.

Future Agendas Items: Updated regional network, MnDOT model output check for reasonableness and post processing adjustments.

Next Meeting: TBD



Traffic Operation and Maintenance Discussion Group

Committee Chair: **Greg Boche** greg.boche@woodburymn.gov

Recent Agenda Items: Discussion on Flexi Signs, Signal camera cleaning policy/schedule, ATCC signal cabinets and users

Future Agenda Items: Roundtable

Next Meeting: 11:30 AM – 1:30 PM, Location TBD, Tuesday February 28th



Simulation and Capacity Analysis Technical Committee

Co-Chairs: **Kelsey Retherford** Kelsey.Retherford@bolton-menk.com **Sharijad Hasan**, md.s.hasan@ndsu.edu

Recent Agenda Items: Discussion on new software features for Synchro 11, HCS 2023, and Vissim 2023

Future Agenda Items: Bryan Nemeth from Bolton & Menk will be presenting on updates to the latest edition of the Highway Capacity Manual

Next Meeting: 3 – 4PM, Virtual, Wednesday February 22nd.



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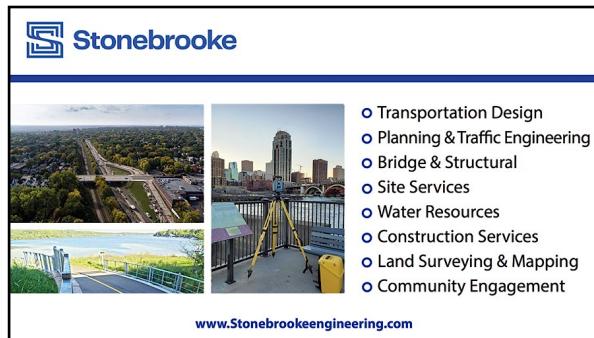
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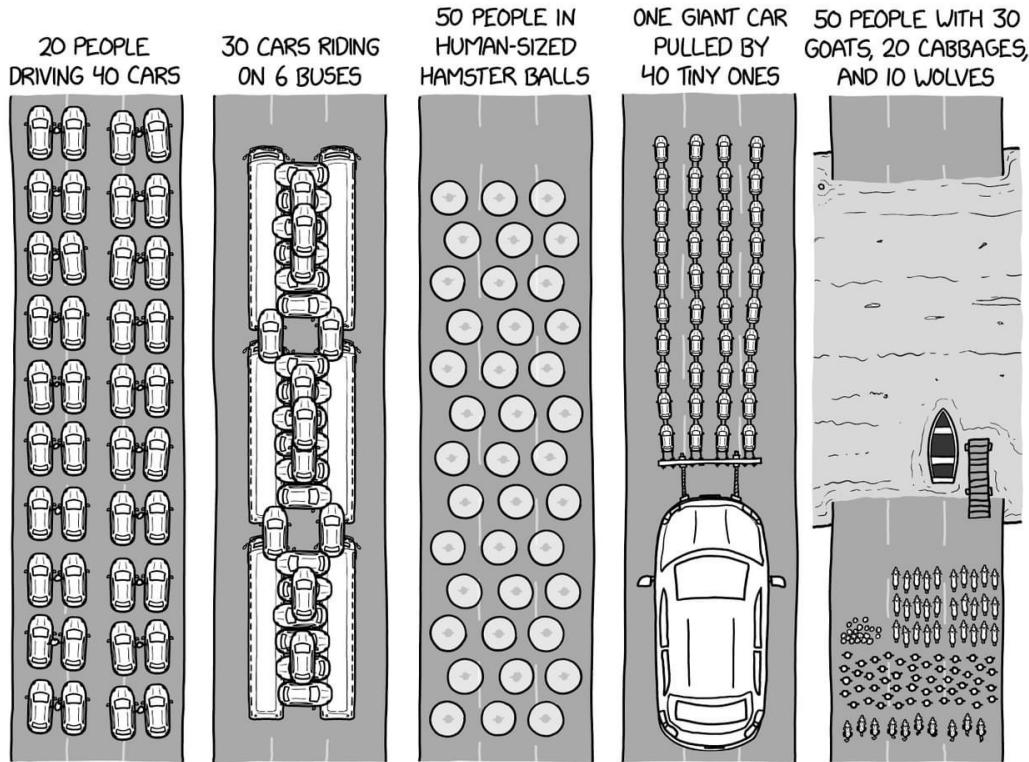
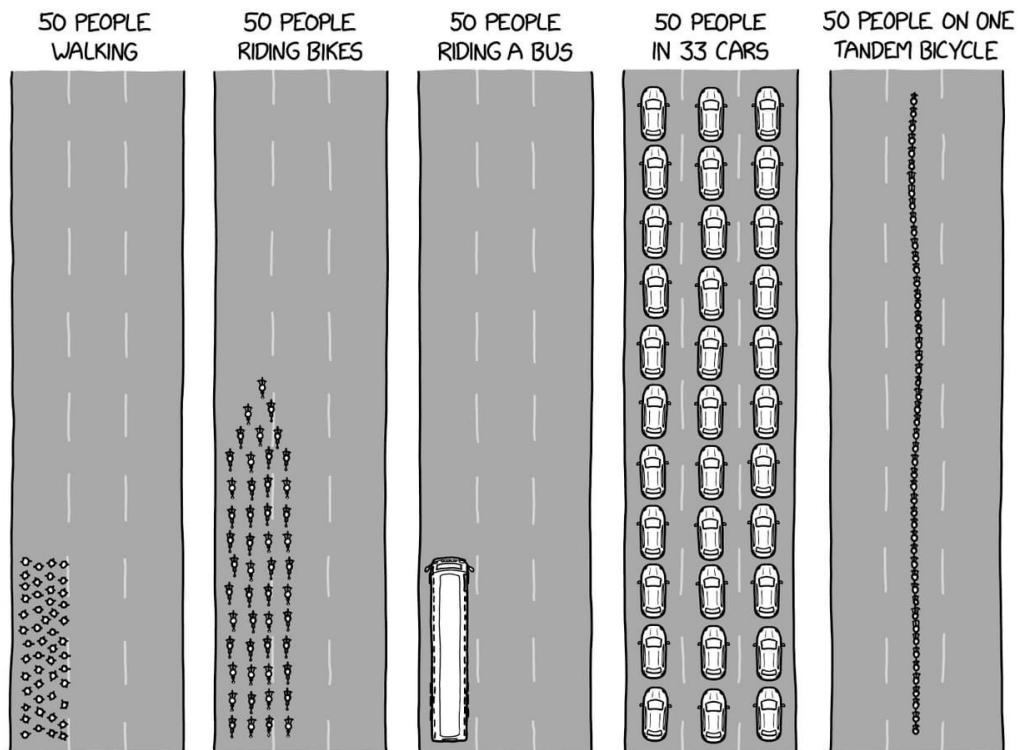


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ROAD SPACE COMPARISON



MEMBERSHIP UPDATE

New Members

Steven Poss - 3M
Luke Hanson - City of Minneapolis
Katie White - City of Minneapolis
Stephanie Malmberg - City of Minneapolis
Collin James Schroeder - SRF Consulting
Adam Michael Rocamora - SRF Consulting
Uma Mahesh Babu Pokuri - WSB
Samantha Baker - SRF Consulting
Venkata Sai Naveen Mallipaddi - HR Green Inc.
Zach Larson - Kimley-Horn
Mark Nolan - Short Elliott Hendrickson Inc.
Charles Androsky - SRF Consulting
Ray Hayhurst - Kimley-Horn
Christopher Brown - SRF Consulting
Connor Cox - WSB & Associates
Regina Burstein - WSB Engineering
Samantha McKinney - TKDA
Will Hutchings - Stantec
Karli McElroy - WSB
Tim Thoreen - HR Green
Adrian Diaz - Short Elliot Hendrickson
Heidi Schallberg - Metropolitan Council
Aaron Nelson - City of West Fargo
Connor Schaefer - Washington County

Glen Markegard, City of Bloomington, MN

Lyssa Leitner - Washington County

Anton Jerve - City of Saint Paul

William Dermody - City of Saint Paul

David Peterson - City of Saint Paul

Sara Allen - Washington County

Jennifer Wiltgen - MnDOT

Daniel Elder - Washington County

Madeline Dahlheimer - Washington County

Jarrett Hubbard - Rochester-Olmsted Council of Governments

Jaz Warren - Toole Design Group

Hans Eric Lagerquist - University of MN-Twin Cities

Moves

Jason Gottfried - HNTB, formerly Hennepin County Public Works

Charles Androsky - SRF Consulting, formerly Mankato/North Mankato Area Planning Organization

John Mark Lucas - University of MN, formerly Greenway Transportation Planning

Kristi Sebastian - FHWA, formerly Dakota County

New TCPB Certification Holders:

Luis Flores - PTOE

Victor Lund - PTOE

Kelsey Retherford - PTOE

If you or a friend has changed jobs or moved, we would like to stay in touch. Members, please update your information by visiting https://nc-ite.org/Updating_your_Information. To access this area, you will need to know your membership number. Your "username" is your membership number, and your "password" is the first 6 letters of your last name (e.g. Johnson=Johnso). Non-members please contact Jack Olsson via phone (651.393.6158) or email (Jack.Olsson@kimley-horn.com) for assistance. Please provide you name, title, employer, complete street address (including mailstop, if applicable), telephone number, fax number, and email address.



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