inciter
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INSTITUTE OF TRANSPORTATION ENGINEERS
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INSIDE THIS EDITION

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Cortney Falero
Newsletter Editor

Intelligent Traffic Signal Optimization: Harnessing Probe-Based Signal Performance Measures

Justin Effinger PE, PTOE | Mead & Hunt

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

Source: Adobe Stock

Today's arterial operations face several significant challenges that hinder the efficiency, safety, and overall effectiveness of urban transportation networks. One of the approaches that can improve traffic signal operations is through optimized traffic signal timing plans. The process typically follows six steps. First, comprehensive data collection on traffic volumes, speeds, and patterns is conducted. Next, a field review is performed to observe traffic flow and intersection performance, validating the collected data. Using this information, traffic engineers create detailed models and simulations of the traffic network, replicating real-world conditions and testing various scenarios. The traffic network is optimized using research methodologies and software tools, balancing the needs of different transportation modes such as vehicles, pedestrians, and cyclists. The optimized signal timing plans are implemented in the field, either manually or through a central signal system. Finally, field calibration is carried out through field visits to fine-tune the signal timings, ensuring they work as intended and making any necessary adjustments.

(Continued on page 10)

JOB OPENINGS

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

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Secretary — **Justin Sebens,** SRF Consulting Group, jsebens@srfconsulting.com

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University of Minnesota— Duluth — **Julie Olson**, President, dtso@d.umn.edu

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Great Lakes ITE District NCITE Officer — **Morgan Nelson**, Kimley Horn, Morgan.Nelson@kimley-horn.com

PRESIDENT'S MESSAGE

Nik Costello
2025 NCITE President

Hello NCITE Members!

I hope you've been enjoying the great weather this spring – it's hard to believe it's already May! NCITE has continued our strong start to 2025, with several recent technical committee meetings and two recent section meetings. Our **April Section Meeting** was held on April 24th and featured a technical tour of the Metro Transit Gold Line Bus Rapid Transit Project, followed by a happy hour at Gambit Brewing Company in St. Paul. For our **May Section Meeting** we teamed with our neighbors in the ITE Wisconsin Section to host a virtual joint section meeting on May 13th. Faculty from UW-Madison and UW-Milwaukee gave a presentation on using vehicle telematics to improve real-time traffic operations. Special thanks to our presenters and meeting sponsors!

The executive board has been working hard planning other upcoming events for our members, including the following:

- **Summer Social (July 22 at CHS Field)** – Similar to the past few years, NCITE will be teaming with MSES, WTS, and ITS MN to host a joint summer social event at a St. Paul Saints game at CHS Field in St. Paul. This event is always a blast and typically averages over 200 attendees. Look for a registration email in early June.
- **2nd Annual Golf Event (Early August at Cedarholm Golf Course)** – This event proved to be a great success last year so we're bringing it back again! It will be an afternoon event at Cedarholm Golf Course in Roseville, MN, and will feature a 9-hole scramble, fun contests, and raffle prizes.
- **Transportation Symposium (October 9 at McNamara Alumni Center)** – In conjunction with the University of Minnesota Center for Transportation Studies, NCITE will be hosting our biennial Transportation Symposium again in 2025, which is an all-day event featuring technical presentations on a variety of transportation topics. This year's symposium will be held at McNamara Alumni Center on the UMN Twin Cities campus. The symposium is a great opportunity to learn new things, meet new colleagues, and earn PDHs! Watch for a Call for Abstracts announcement in the coming weeks, with registration planned to open later this summer.

In addition to the NCITE events mentioned above, there are also upcoming Great Lakes District and International events:

- **ITE Great Lakes District Annual Meeting (June 8-10 – Indianapolis)** – The Great Lakes District and WTS Central Region will be hosting their joint Annual Meeting at the Crown Plaza Downtown in Indianapolis, IN. There are five technical tracks for this year's meeting, so there promises to be a wide variety of presentation topics with something for everyone. There are also several interesting tours being offered, including one at the Indianapolis Motor Speedway! Registration closes on June 1st. More information can be found here: https://greatlakesite.org/annual-meeting-2025/
- **ITE International Annual Meeting and Exhibition (August 10-13 – Orlando)** – ITE International and the Florida Puerto Rico District will be hosting their joint Annual Meeting at the Hyatt Regency Orlando in Orlando, FL. This year's meeting theme is "Innovative Pathways to Safer Transportation". Early bird registration closes on June 27th. More information can be found here: https://www.iteannualmeeting.org/

Many of you are aware that ITE has undertaken a rebranding effort to align identity across all levels of our organization – more information can be found here: https://www.ite.org/about-ite/ite-brand-evolution/. This process includes adopting new naming conventions, choosing new logo icons, and then updating our website and digital and printed materials to reflect the new branding. Our executive board is currently working with the Great Lakes District to explore potential options for our new district and section logos. We value your input and will be reaching out to membership in the coming weeks with an opportunity to provide feedback on this process. The goal is to have this rebranding effort completed by the end of 2025!

I look forward to seeing you at upcoming events!

Nik Costello, *2025 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

NCITE Calendar
Online & In Person | Dates Vary

ite WTS ANNUAL MEETING 2025 INDIANAPOLIS, IN | JUNE 8-10

GLITE Annual Meeting
Indianapolis, IN | June 8-10, 2025

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

SECTION MEETING UPDATE

The January Section Meeting was held on February 17th, 2025 at Jax Café in Minneapolis, MN. **Nate Kabat** from the City of Chaska with **Bob Meurer** & **Jake Bongard** of Bolton & Menk presented on the **Hwy 41 Reconstruction in Chaska**.

Source: City Engineers Association of Minnesota

The February Section Meeting was held on February 18th, 2025 at MnDOT Waters Edge in Roseville, MN. **Khani Sahebjam** MnDOT Metro District Engineer, presented a **Metro District Update**.

Image courtesy of Tyler Krage

SECTION MEETING UPDATE

The April Section Meeting was held on April 24th, 2025 as a **Gold Line BRT Tour** along the Gold Line BRT Route lead by **Nik Costello** with Washington County and **Morgan Abbott** with Metro Transit.
Highlights of the tour included:

- Stories of the 10+ private developments along the route.
- At the intersection of Mounds/Kellogg the group jumped off to inspect a station and the nearby 5-legged signalized intersection at the start of the dedicated guideway.
- In Oakdale, the group stopped off for a 2nd time to view another unique intersection along the corridor. At this location, the guideway transitions from side-running to center-running. After seeing the end of the line, the group returned to St Paul via the freeway before venturing to Gambit Brewing Company for a happy hour with appetizers.

Image courtesy of Nick Erpelding

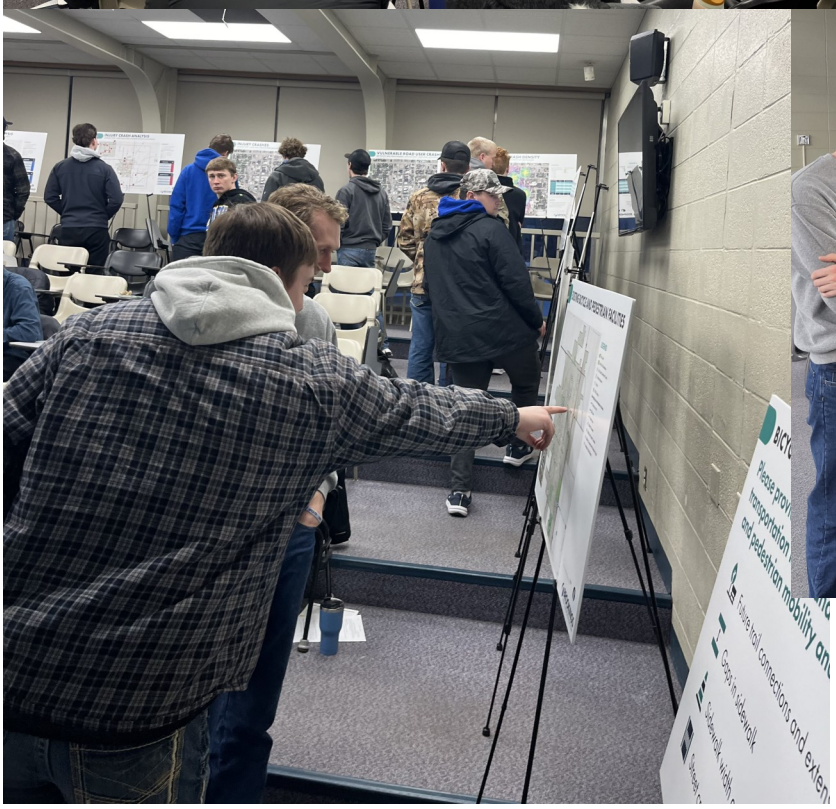
YMC UPDATE

The Younger Members enjoyed a beautiful Earth Day picking up trash along the Mississippi River at Sheridan Memorial Park. Blake Andert won the award for most unique find, picking up a whole part of a rusty muffler and tailpipe! The trash pickup was rewarded with refreshments and trivia at Broken Clock Brewing. Keep an eye out for more information coming soon about this summer's annual YMC Bike & Brew event!

If you are not receiving the YMC StarChapter emails, please reach out to Olivia Polinsky-Rose Olivia.Polinsky@hdrinc.com to get on the mailing list.
If you or a co-worker are interested in joining the Young Member Committee please visit the YMC Page on the NCITE Website here.

STUDENT CHAPTER UPDATE - SDSU

SDSU hosted **Tom Cook** of HDR on February 5th. He presented on the **Brookings Area Transportation Plan** which resonated well with the students as Brookings is where SDSU is located. Following the presentation a mock open house was put on with many display boards and comment maps which was a great experience to learn how the public can be involved in civil engineering plans. We had over 50 students attend the meeting.



STUDENT CHAPTER UPDATE - UMN TWIN CITIES

Throughout the Spring 2025 semester, our student chapter has had many successful events. In our **TranspoTalks**, we learned about the new, free-to-ride Link BRT set to start construction this spring from **SRF**, transportation insecurity from the **Center of Transportation Studies, University of Minnesota (CTS)**, and freight rail design with the **American Railway Engineering and Maintenance-of-Way Association (AREMA)**. Furthermore, we held an ADA Design Info Session with the **Engineering Education Foundation of America of the American Council of Engineering Companies (ACEC)** and a tour of the Green Line Extension with **Metro Transit**. We will visit the Twin Cities Model Railroad Museum later this May.

Link

University of Minnesota
Driven to Discover

CENTER FOR TRANSPORTATION STUDIES

AREMA
AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCIATION

ACEC
American Council of Engineering Companies

METRO
Green Line

Probe-Based Signal Performance Measures

Probe data is collected from GPS-enabled devices or connected vehicle technology in vehicles to provide real-time or historical information about traffic conditions. Analysis of probe data allows agencies to make better informed decisions in support of traffic operations and planning. Probe-based data included in signal analytics technologies and platforms have improved data collection and analysis, allowing agencies access into traffic conditions. Such access can improve various traffic engineering processes and, consequently, solve traffic issues more efficiently with less cost and time. By providing a wider range of traffic data and signal performance metrics at higher accuracies, processes such as signal timing optimization are becoming more efficient.

Leveraging Probe-Based Signal Performance Measures in Signal Optimization

Probe-Based Signal Performance Measures (PBSPMs) are becoming more popular in optimizing traffic signals due to their lower costs and ability to provide detailed and accurate data on various aspects of traffic flow and signal operations. The probe data helps traffic engineers generate turning movement counts over longer durations (**Figure 1**), identify patterns and trends in vehicle movements, and identify targeted improvement areas for improved traffic signal operations.

PM PEAK	MacArthur Blvd NW Southbound				Arizona Ave NW Westbound				MacArthur Blvd NW Northbound				Arizona Ave NW Eastbound				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
15:00	1	136	31	0	16	121	6	0	51	130	21	0	65	108	50	0	736
15:15	4	129	41	0	20	138	5	0	48	115	16	0	63	115	37	0	731
15:30	1	131	52	0	12	127	4	0	54	145	14	0	65	106	33	0	744
15:45	4	139	57	0	16	158	7	0	60	142	21	0	82	114	29	0	829
Total Volume	10	535	181	0	64	544	22	0	213	532	72	0	275	443	149	0	3040
% App. Total	1.38	73.7	24.9	0	10.2	86.3	3.49	0	26.1	65.1	8.81	0	31.7	51.1	17.2	0	
PHF	0.63	0.96	0.79	0	0.8	0.86	0.79	0	0.89	0.92	0.86	0	0.84	0.96	0.75	0	0.92
App. PHF	0.91				0.87				0.92				0.96				

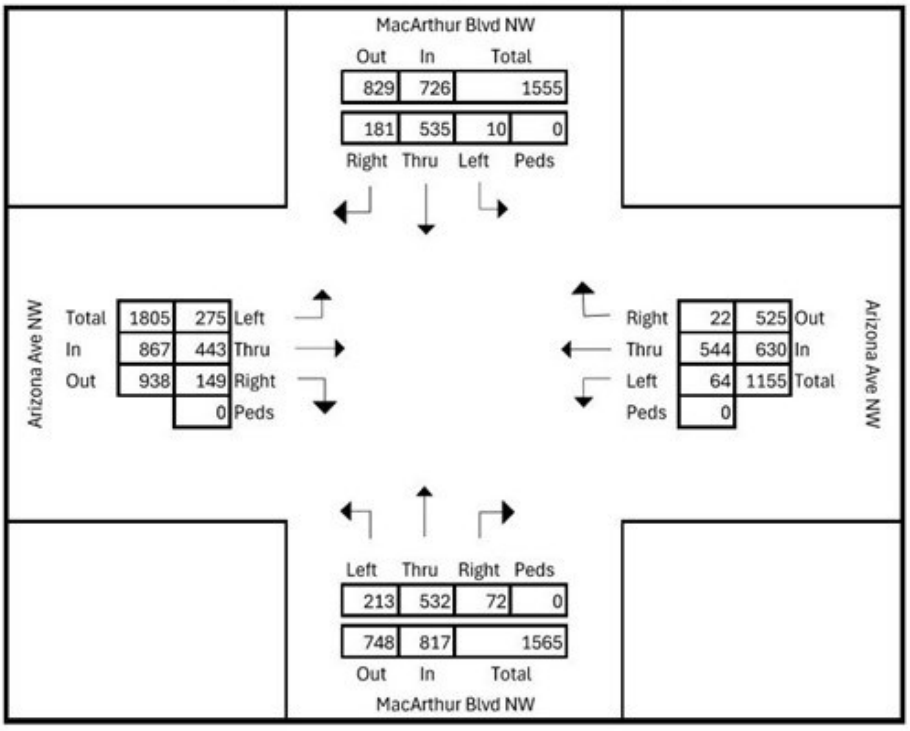


Figure 1: Example Turning Movement Count (PM Peak) generated from Probe-Based Data (Data Source: Flow Labs)

The biggest disadvantages of using probe-based data over high-resolution data enumerations in the traffic signal controller for signal performance measures are the lack of integration with the traffic signal and the lower penetration rate of probe-based vehicles. However, probe-based data can overcome some common issues with the point detection that is used to generate the performance metrics from high-resolution data enumerations in the traffic signal controller. Some common performance measures are included in Table 1.

Table 1: Advantages of Using Probe-Based Data over Point Detection for Signal Performance Measures.

Control Delay	Probe Data: Provides continuous tracking of vehicle movements, offering a comprehensive view of delays experienced throughout the entire journey, not just at specific points. Point Detection: Only captures delay at specific locations, potentially missing delays that occur between detection points.
Arrival on Green	Probe Data: Tracks the exact times that vehicles approach and arrive at intersections, allowing for precise calculation of arrival on green percentages. Point Detection: Limited to detecting vehicles at fixed points, which may not accurately reflect the overall arrival patterns at intersections or capture vehicles that haven't arrived at the fixed points.
Queue Length	Probe Data: Offers estimates of queue lengths by monitoring vehicle positions and movements, providing a dynamic and accurate picture of queuing conditions. Point Detection: Relies on fixed sensors and estimation calculations that may not capture the full extent of queues, especially if they extend beyond the detection area.
Split Failures	Probe Data: Identifies split failures by tracking vehicles that experience delays and can track a vehicle that takes multiple cycles to get through the intersection. Point Detection: Limited to an assumption of detector occupancy of the green interval and the first five seconds of the red interval and can't capture how many cycles it takes a vehicle to make it through the intersection.

PBSPMs can enhance the traffic signal optimization process by providing larger data sets on traffic volumes, speeds, and signal performance. This data can be used to calibrate accurate models and simulations, allowing traffic engineers to replicate real-world conditions and test various signal timing scenarios. By using advanced data analytics, traffic engineers can merge different datasets and analyze multiple performance metrics simultaneously, ensuring that the models and optimization processes are based on high-quality data. This ensures a reliable and supplemental dataset to traditional Automated Traffic Signal Performance Measures (ATSPMs) that use high-resolution data from traffic signal controllers. During the signal timing review before signal optimization and during the fine-tuning period, PBSPMs can supplement or replace manual observations by identifying specific issues like queuing, delays, coordination, and split failures that may not be evident through manual observation alone.

Finally, PBSPMs enable the potential for continuous improvement. As more data is collected over time, traffic models become increasingly accurate, leading to better optimization strategies. The iterative process of collecting data, refining algorithms, and implementing adjustments promotes an active management of traffic signals philosophy. The ongoing improvement cycle ensures that traffic management systems keep pace with technological advances and changing urban mobility needs.

In conclusion, effective management of traffic signal operations relies on data-driven methodologies to optimize traffic signal control and improve mobility. By collecting extensive probe-based data over time, traffic models become increasingly accurate, leading to better strategies for managing traffic flow and reducing congestion. The continuous process of data collection, algorithm refinement, and implementation of adjustments supports an active approach to managing traffic signals. The continuous improvement ensures that traffic systems remain resilient to technological advancements and evolving urban needs, promoting efficient and effective traffic signal operations.

2020 South Dakota Decennial Interstate Corridor Study

Peter M. Lemke, PE, PTOE, RSP1 | FHU
Mark Meisinger, PE, PTOE | FHU
Lyle DeVries, PE, PTOE | FHU

In each issue, the INCITER features articles coordinated by NCITE's advertisers.
This article is a contribution from **Felsburg Holt & Ullevig.**

One thing I'm looking forward to in summer 2025 is our family's annual trip to Rapid City to watch our daughter play tennis in the Midland Scientific Open. Driving across South Dakota (when I can take my mind off all the Wall Drug signs), I often catch myself thinking about traffic topics such as speed limits, signing, construction crew staffing and emergency response times given the remoteness, and interchange spacing. South Dakota's "THINK" signs marking fatality locations really tug at my heart because these events are something we all work to avoid. I think about what might have happened and what more can be done to drive these life-changing events to zero. One way the South Dakota Department of Transportation (SDDOT) is working on this, and other transportation goals, is through the Decennial Interstate Corridor Study (ICS). Now in its third iteration, the study helps to ensure South Dakota's interstate system meets current safety and performance standards and can accommodate varied levels of traffic and diverse types and sizes of vehicles now and into the future.

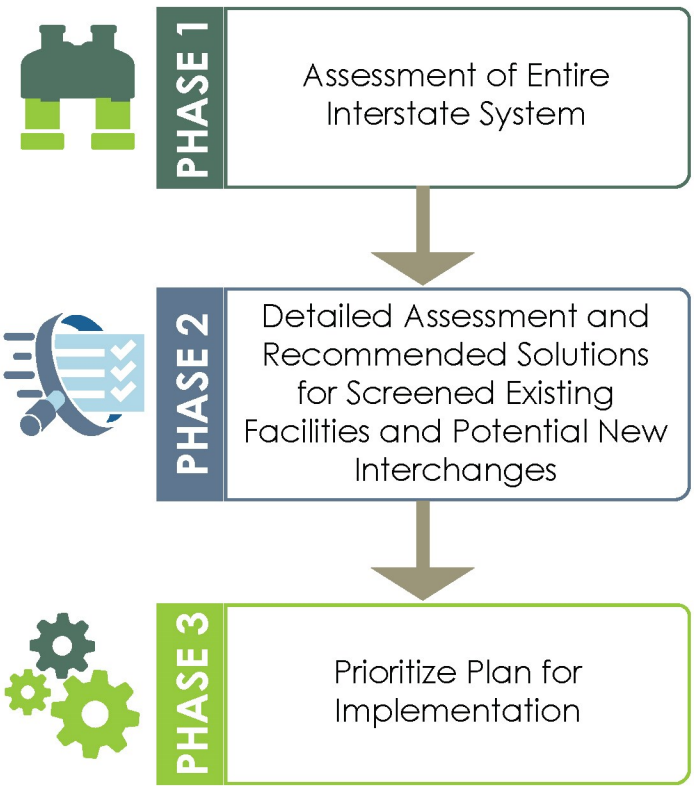
A Forward-Looking Interstate System Plan

Every 10 years, the SDDOT performs a comprehensive study of its interstate highway system to accomplish the following:

- Analyze traffic level of service for existing and future conditions
- Identify bridge replacement needs (within 15 years out)
- Develop feasible solutions to address Interstate deficiencies for existing and future conditions
- Create a final report for use by SDDOT to guide implementation of recommended improvements

This statewide planning and engineering study includes the entire mainline interstate network (I-90, I-29, I-190, and I-229) and all interchanges. The Felsburg Holt & Ullevig team (FHU), which included Engineering Associates and DiExSys, completed the ICS in the following three integrated phases and as illustrated on Figure 1:

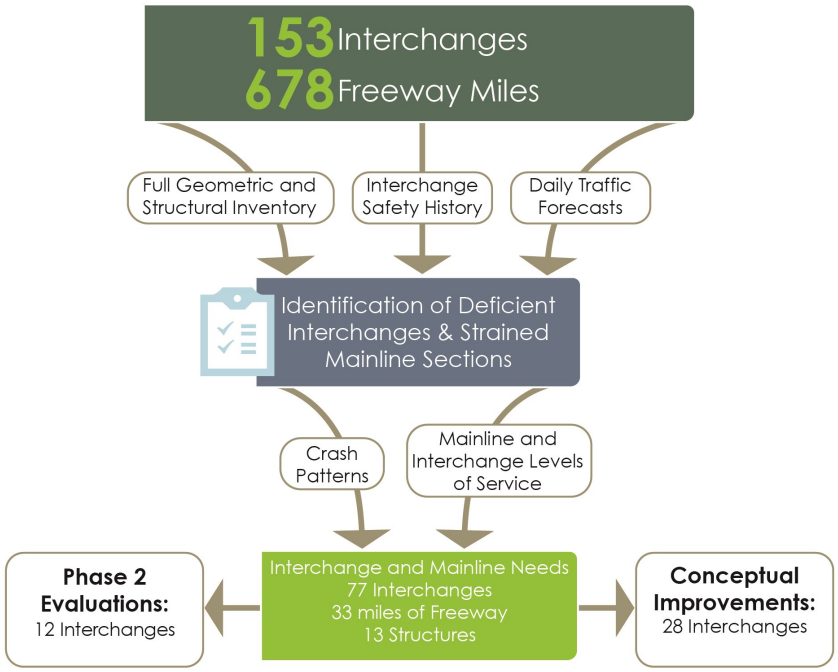
- Analyzing current conditions and forecasted needs (Phase 1)
- Identifying issues and solutions (Phase 2)
- Prioritizing recommendations and improvements (Phase 3)



In Phase 1, the FHU team assessed road design and geometry, traffic operations, and safety performance of the Interstate system under both 2020 and projected 2050 conditions, as illustrated on Figure 2. The assessment revealed system-wide needs and opportunities for improvement that would be carried into Phase 2 for additional study and development of solutions

(Continued on page 13)

2020 South Dakota Decennial Interstate Corridor Study (continued from page 12)



In Phase 2, the FHU team further narrowed the list of locations identified in Phase 1 to those with the highest need or greatest potential impact. The FHU team then examined these priority areas in more detail to develop viable solutions. Our team created drawings depicting proposed geometric and traffic control requirements and analyzed traffic operations based on 2030 and 2050 forecasted traffic. We also developed planning-level cost estimates for each option evaluated. Figure 3 (Table 1.1 from the Phase 2 report) identifies the evaluation factors and performance characteristics that the FHU team used to evaluate and prioritize recommendations.

Table 1.1 Option Performance Categories

Evaluation Factors		Measures and/or Items Addressed	Rating System: Better Performance / Lesser Impacts and Cost	Rating System: Moderate Performance, Mid-Level Impacts and Cost	Rating System: Poor Performance, Higher Impacts and Cost
Physical Environment Impacts		Hazardous sites, 4(f)/6(f) sites, wetlands impacts, flood and drainage impacts	Minimal environmental impacts	Moderate environmental impacts	Multiple environmental impacts
Development Compatibility		Level of accessibility provided to developed and developable land	Opens up developable land and local access	Maintains current development and access	Detracts from development and access opportunities
Multimodal Compatibility		Effectiveness for nonmotorized and transit modes, including sidewalks, crossings, bike and transit facilities, conflict points and routing	Enhanced accommodations	Few/no added accommodations	Reduced accommodations
Geometric Design		Conformity of preliminary concept design to SDDOT road design standards, including control of access, curvature, etc.	Addresses all current geometric deficiencies	Some geometric deficiencies anticipated/remain due to design constraints	Does not address current substandard geometrics and/or introduces geometric deficiencies
Safety		Improvement of existing hazardous conditions, Interstate incident/emergency response	High potential for crash reduction and/or reduces emergency response times	Low potential for crash reduction and/or maintains current emergency response times	Increased crash potential and/or emergency response times
Constructability		Degree of complexity of utility relocations, construction phasing, haul routes, or scheduling	Minor/typical degree of complexity	Moderate degree of complexity	High degree of complexity
Traffic Level of Service	**2030**	Critical intersection and/or ramp merge/diverge LOS vs. SDDOT Criteria (LOS C or better)	Better than criteria	At criteria	Worse than criteria
	2050				
Right-of-Way		Area (SF) of additional ROW required	No property impacts	Moderate ROW needs (1–150 KSF)	Significant ROW needs (150 KSF plus)
# of Properties Impacted (take or access)		# of parcels taken and/or impacted	No parcels impacted	Few parcels impacted (1–3)	Multiple parcels impacted (4 plus)
Construction Costs		Estimated construction cost relative to other Phase 2 options	Relatively low cost (<$3M)	Moderate cost ($3M to $11M)	Higher cost ($11M plus)

(Continued on page 14)

2020 South Dakota Decennial Interstate Corridor Study (continued from page 13)

In Phase 3, the FHU team delivered what SDDOT needed most: a prioritized roadmap of projects, ranked by urgency and the value of potential improvements. The study served not only as a planning document but also as a practical, data-driven decision-making tool for long-term investment.

The methodology for the ranking included two primary components:

A. Significance and severity of the need

The FHU team used the interchange evaluations performed in Phase 1 to identify the significance and severity of need as summarized in these five categories:

- **Geometrics** – Identification of geometric deficiencies
- **LCV Movements** – Serviceability of interchange ramp terminal intersections for Long Combination Vehicles (LCVs)
- **Structures** – Condition of existing interchange bridges
- **Safety** – Patterns based on 5-year crash analysis
- **Operations** – Existing and year 2050 operations at ramp terminals or merge/diverge areas

B. Timing of need

The second component of the ranking process involved the timing of the improvement needs at an interchange, with the goal of using the data and analysis from study efforts to adjust the interchange prioritization based on quantifiable measures. The FHU team used safety and operations to develop a parameter to inform the timing rankings, with more severe conditions contributing to a more urgent project need. The goal was to recognize that locations showing existing safety issue(s) should be addressed sooner than locations with a low safety ranking.

In Phase 3, we further refined and prioritized projects that had emerged in Phases 1 and 2 to provide an interstate project implementation plan compatible with the SDDOT statewide project planning process. Figure 4 shows the statewide interchange rankings developed in Phase 3 of the ICS.

Region	SortID	Interstate	Exit	Location	Refined Phase 1 Score	Timing Score	Safety	Current Capacity	Current Capacity x 1.5	Future Capacity	75% of Phase 1 Score	25% of Timing Score	Phase 3 Total Score	Phase 3 Rank
Rapid City	090010	I-90	Exit 10	North Avenue / Belle Fourche	4.84	2.50	1.50	0.00	0.00	1.00	3.63	0.63	4.26	1
Aberdeen	029133	I-29	Exit 133	Brookings/Huron	3.80	2.43	0.75	0.67	1.01	0.67	2.85	0.61	3.46	2
Mitchell	029026	I-29	Exit 26	Vermillion/Yankton	3.84	1.75	0.50	0.17	0.25	1.00	2.88	0.44	3.32	3
Rapid City	090067	I-90	Exit 67	Liberty Boulevard / Ellsworth AFB	3.47	2.76	0.75	0.67	1.01	1.00	2.60	0.69	3.29	4
Rapid City	090061	I-90	Exit 61	Elk Vale Road	3.68	2.00	1.00	0.00	0.00	1.00	2.76	0.50	3.26	5
Mitchell	090310	I-90	Exit 310	Stickney/Aberdeen	3.69	1.50	1.50	0.00	0.00	0.00	2.77	0.38	3.14	6
Mitchell	229007	I-229	Exit 7	Rice Street	3.34	2.50	1.50	0.00	0.00	1.00	2.50	0.63	3.13	7
Mitchell	229002	I-229	Exit 2	Western Avenue	3.37	2.33	1.50	0.33	0.50	0.33	2.53	0.58	3.11	8
Rapid City	090048	I-90	Exit 48	Stage Stop Canyon Rd.	3.65	1.25	0.25	0.00	0.00	1.00	2.74	0.31	3.05	9
Rapid City	090058	I-90	Exit 58	Haines Avenue	3.26	1.25	1.25	0.00	0.00	0.00	2.45	0.31	2.76	10

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2020 South Dakota Decennial Interstate Corridor Study (continued from page 14)

FHU supported the Year 2000 version of the ICS and has led South Dakota's Decennial Interstate Corridor Study for 2010 and 2020. In 2020, the study broke new ground by incorporating key components identified by SDDOT, including:

- Impact of blowing snow on traffic safety and potential mitigation opportunities
- Development of a study process that can be used to identify locations for installing median cable barrier as a safety treatment
- Usage of big data sources for:
    - A system travel reliability assessment
    - Commercial vehicle parking demand assessment, identifying the temporal and spatial extent of truck parking locations and patterns
- Functionality of interchanges for LCVs

These innovations ensure that the final recommendations aren't just relevant for today, but also adaptable to tomorrow's challenges for the SDDOT as they manage their Interstate system.

Felsburg Holt & Ullevig is a multidisciplinary team of engineers, scientists, and planners with offices across South Dakota, Iowa, Minnesota, Nebraska, Colorado, and Utah. The 2020 Decennial Interstate Corridor Study aligns with our commitment to connecting and enhancing communities through transportation projects that provide safety, mobility, and accessibility.

*All images taken from 2020 South Dakota Decennial Interstate Corridor Study Phases 1, 2, and 3 final reports.

TECHNICAL COMMITTEE UPDATE

Geometric Design Technical Committee
Committee Chair: **Amanda Vetter** amanda.vetter@apexenggroup.com
Recent Agenda Items: Roundabout Roundtable joint meeting with ITC Committee.
Future Agenda Items: TBD
Next Meeting: TBD
More info here!

Intersection Traffic Control Technical Committee
Co-Chairs: **Tyler Krage** tyler.krage@co.dakota.mn.us **Michael Odell** michael.odell@minneapolismn.gov
Recent Agenda Items: Roundabout Roundtable; Flashing Yellow Arrow, and a discussion from local agencies on POOFYA information, policies, and lessons learned.
Future Agenda Items: MnDOT's Leading Pedestrian Interval (LPI) Study
Next Meeting: June 18th, 2025 at 8am

Emerging Technologies in Transportation Technical Committee
Co-Chairs: **Jake Eisinger** jake.eisinger@washingtoncountymn.gov, **Nathan Wade** nathan@flowlabs.ai
Recent Agenda Items: No Recent Meetings
Future Agenda Items: Red light running warnings with connected vehicle technology.
Next Meeting: May 21, 2025 at 10am
More info here!

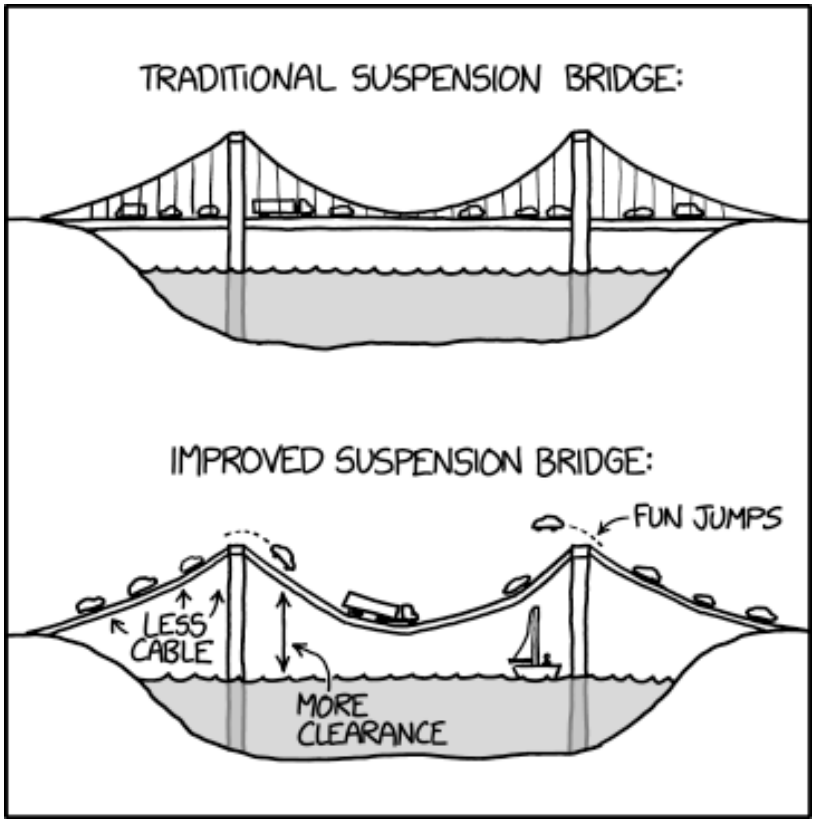
Complete Streets and Safety Committee
Co-Chairs: **Sarah Peterson** sarah.peterson@hdrinc.com **Sri Durga Yada** SriDurga.Yada@hdrinc.com
Recent Agenda Items: TBD
Future Agenda Items: TBD
Next Meeting: TBD
More info here!

Planning Methods and Applications Technical Committee
Committee Chair: **Erik Kappelman** EKappelman@srfconsulting.com
Recent Agendas Items: No recent meetings
Future Agendas Items: TBD
Next Meeting:
More info here!

Traffic Operation and Maintenance Discussion Group
Committee Chair: **Greg Boche** greg.boche@washingtoncountymn.gov
Recent Agenda Items: Street Smart National Work Zone Safety Week Open House – April 25th. Bring your sign truck or trailer and showcase your safety setup to fellow traffic safety crews.
Future Agenda Items: TBD
Next Meeting: June 4th, 2025, location TBD. More info here!

Simulation and Capacity Analysis Technical Committee
Committee Chair: **Sajid Raza** sajid.raza@mbakerintl.com
Recent Agenda Items: No recent meetings
Future Agenda Items: TBD
Next Meeting: TBD
More info here!

ITE LOL



Source: XKCD

MEMBERSHIP UPDATE

New Members

Frank Ticknor, Washington County Public Works

Jacob Rojer, Kimley-Horn

Julieann Swanson, City of Minneapolis

Greg Boche, Washington County Public Works

Ethan Scowcroft, Kimley-Horn

Jordyn Curtis, Hennepin County

Jake Krukowski, Hennepin County

Abdirizak Abdulahi, City of Minneapolis

David Keranen, MnDOT

Justin Beck, MnDOT

Brent Bokemper, SRF Consulting

Moves

Peter Lemke, Felsburg Holt & Ullevig, formerly Michael Baker International

Maria Donnelly, MnDOT, formerly HNTB

Nic Racek, SRF Consulting, formerly City of Minneapolis

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 Michael Gille via phone (612.294.9733) or email (michael.gille@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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