1. **Call Meeting to Order**
   Joe called the meeting to order at 8:23 am. A buffet style breakfast preceded the business meeting.

2. **Introductions**
   All attendees introduced themselves, stated their employer, and NCITE involvement. The total attendee count was 51. The breakdown is as follows:
   - 48 in-person attendees (including 2 speakers)
   - 3 online attendees

3. **Technical Presentation: I-35E Cayuga Project**
   Jacob introduced Mike Martinez from HDR to present on the I-35E Cayuga Project.
   - The project limits are approximately 1.5 miles along I-35E between the system interchange with I-94 and Maryland Avenue.
   - The project had $116M budgeted for improvements and was Design-Bid-Build.
   - There were several deficiencies within the limits of the project:
     - Significant congestion resulting from almost 150,000 VPD (2009).
     - Weaving movements due to closely spaced southbound interchanges at Pennsylvania, University and I-94.
     - Substandard NB acceleration lane from Pennsylvania Ave.
     - Several bridges on the Chapter 152 list for replacement.
     - Lack of managed lane strategies that encourage high occupancy travel.
     - No direct access from Pennsylvania/Phalen to SB I-35E/I-94.
   - The project included the following improvements and benefits:
     - Replacement of bridges and pavements which were nearing the end of their useful life.
     - Improved interchange separation.
     - Safer merging.
     - Improved traffic flow.
     - Improved local access.
     - 1st Phase of I-35E MnPASS Express Lanes.
     - Gateway Trail extension.
   - The project is scheduled to be completed this upcoming spring/summer.

4. **Technical Presentation: MnPass Express System**
   Jacob introduced Brad Larsen and Morrie Luke from MnPass to present on the MnPass Express System.
   - I-35E North Corridor:
     - Phase 1 (Little Canada Road to Cayuga) is open. A MnPass Lane was added in this phase.
MEETING MINUTES  
NCITE February Section Meeting  
Tuesday, February 23, 2016; 7:30 AM– 9:30 PM

- Phase 2 will open in December 2016. A MnPass lane will be added in this phase.
- Phase 3 will open in December 2016. Conventional MnPass lanes will be added through the I-35E/I-694 commons area.

- Other funded MnPass corridor improvements:
  - I-35W south (46th St to 26th St) scheduled for construction in 2017.
  - I-35W (TH 36 to Lexington) is funded in 2019/2020.
  - I-94 Corridor Study between downtown Minneapolis and St. Paul (I-394 to TH 61).

- MnPass projects in planning/development phase:
  - NB TH 77 (Apple Valley to Bloomington).
  - I-494/TH 62 (Eden Prairie to MSP).
  - TH 169 to TH 55 transitway (Shakopee to Plymouth
  - EB TH 36 (I-35W to I-35E)

- New MnPass features:
  - Larger digital price signs.
  - New Transcore Type 6B tag readers (similar to TX and LA) enabling future interoperability with other state toll systems.
  - Interoperability with MSP airport parking and Minneapolis A, B, C garages being looked at.

- MnPass has 2 tag reader types: switchable tag and sticker tag
  - Switchable tag can be moved between cars. Costs $15. Has paid MnPass and free HOV modes controlled by a switch. 80% of users are getting these types of readers.
  - Sticker tag is affixed to a single vehicle. Free of charge for as many vehicles as you want. It is always on regardless of HOV. 20% of users are getting these types of readers.

- MnPass Enforcement
  - Current contract is through FY 2016. State Patrol is paid OT for enforcement.
  - New 3 year pilot program starts in August 2016. 6 State Trooper team dedicated to enforcement.

5. Announcements
   Joe made the following announcements:
   - Joe introduced John Maczko, from City of St. Paul, who discussed the latest MN2050 goals and precinct caucus information which will take place on March 1.
   - The March section meeting will likely be an update on MnDOT funding. The speakers and exact date are still being worked out.
   - The NCITE Professional Development Committee is working on an Engineering Ethics presentation. The tentative date for this is March 24.
   - The 2016 NCITE budget was recently finalized. Dues income NCITE receives from ITE international has decreased since the new ITE International Dues structure has been in place. At the same time, costs for food at section meetings have continued to increase. Therefore, members will notice a small increase in section meeting registration costs.

6. Adjournment
   Jacob thanked the speaker and adjourned the business meeting at 9:27 AM
MEETING MINUTES
NCITE February Section Meeting
Tuesday, February 23, 2016; 7:30 AM– 9:30 PM

Respectfully submitted,

[Signature]

Scott Poska
2016 NCITE Secretary

Date: March 10, 2016
Cayuga Project
NCITE February Section Meeting
2/23/2016
Agenda

- Existing Conditions
- Project Description/Benefits
- Project Scope
- Project Timeline
Project Location

- I-35E north of Downtown Saint Paul
  - Approximately 1.5 miles between the system interchange with I-94 and Maryland Avenue
  - Includes portions of Pennsylvania Ave, Phalen Blvd, L’ Orient St, and Cayuga St.
**System Deficiencies**

- Significant congestion resulting from almost 150,000 VPD (2009)
- Weaving movements due to closely spaced southbound interchanges at Pennsylvania, University and I-94
- Substandard NB acceleration lane from Pennsylvania Ave
- Bridges on the Chapter 152 list for replacement
- Lack of managed lane strategies that encourage high occupancy travel
- No direct access from Penn/Phalen to SB I-35E/I-94
Project Purpose & Benefits

- Replaces bridges and pavements nearing the end of their useful life
- Better Interchange Separation
- Safer merging
- Improved traffic flow

- Improved Local Access
- Initiates 1st Phase of MnPASS express Lanes
- Extends Gateway Trail

- $116M budgeted for the improvements
- Design-Bid-Build
Project Scope:
Preliminary Design

- Traffic Forecasting (CUBE) w/ teaming partner Cambridge Systematics
  - 9 Scenarios
- Traffic Simulation (CORSIM & Synchro)
  - 9 Scenarios
- Air Quality Analysis
- Noise Analysis
- ESAL Calculations
- Cost/Benefit Analysis
- Permitting
Project Scope:
Preliminary Design

- Completion of Staff Approved Layout
- Preliminary Bridge Design for 12 Bridges

- Interchange Access Modification Requests:
  - New Cayuga Interchange
  - Widening of Bridge from SB I-35E to WB I-94
Project Scope: Preliminary Design

- Interchange Configuration Alternatives Analysis of Maryland Ave (VISSIM)
  - Diamond (preferred alternative)
  - SPUI
  - DDI
- Staff Approved Layout of Preferred Alternative
Project Scope:

Preliminary Staging

- (w/ teaming partner Cambridge Systematics)
  - Deliverable was a RID document similar to that found in Design Build contracts.
  - More than conceptual
    - Scenario development ranging from full closure to 3-lanes in each direction
    - Pinch point analysis
Final Design: Project Team

(Prime Consultant)

Final Design: Agency Partners

(Owner)
**Project Scope:**

**Final Design**

- Project Management
- CPM Scheduling
- Roadway
- Bridge
- Drainage
- Noise Walls
- Retaining Walls
- Utilities

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**Project Scope**

**Final Traffic Design**

- Permanent Signing
- Pavement Markings
- Permanent Traffic Signals (x4)
- Temporary Traffic Signal
- Lighting
Project Scope:
Final Design and Construction

- Public & Stakeholder Engagement Support
  - HDR supported MnDOT through:
    - Open house logistics
    - Meeting Management
    - Meeting Summary
  - Developed Talking Points For Consistent Messaging
  - Created Visual Graphics
Original Project Timeline

**Project Schedule**

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We are here were

**Scoping of MnPASS Express Lane from downtown St. Paul to Little Canada Road**

Further development of the MnPASS Express Lane is dependent on securing full funding for the project.
Project Timeline: Items Left to Complete

- Complete Cayuga interchange
- Open Ramps to/from SB I-35E at Cayuga
- Complete west frontage
- Complete local roads

Source: MnDOT
Thank you
Mike Martinez, PE
HDR Engineering
Michael.martinez@hdrinc.com
612.715.9278
MnPASS Express Lane System

- MnPASS Corridor Development
  - I-35E North
  - Other Corridors

- MnPASS Operations Update
  - New MnPASS Features
  - Enforcement
I-35E North Corridor

- **Phase I** - New MnPASS Express Lanes on northbound and southbound I-35E between Little Canada Rd and Cayuga St in St. Paul opened Nov. 30

- **Phase II** – New MnPASS lanes between Little Canada Rd and County Rd J in Lino Lakes planned to open Dec. 2016
  - Southbound between Cty Rd 96 and Little Canada Rd
  - Northbound between Cty Rd E and Cty Rd J
I-35E MnPASS Express Lanes

Phase I.
Added MnPASS lane
Dec 2015

Phase II.
Added MnPASS lane
Dec 2016

Phase II.
Converted MnPASS lane
Dec 2016
Other Funded MnPASS Corridor Improvements

- I-35W South MnPASS Extension (46th St.–26th St.) – part of the I-35W Lake St. Transit Access project
  - Construction begins late CY 2017
- I-35W North Preliminary Design Project (TH 36–Lexington Ave.)
  - Funding available in FY 2019/20
- I-94 Corridor Study (Between the downtowns – I-394–TH 61)
  - Funding available in FY 2021/22
Other MnPASS Corridors in Planning & Development

- TH77 NB MnPASS Lane Study (Apple Valley - Bloomington) - recently completed
- I-494/TH 62 MnPASS Study (Eden Prairie - MSP Airport) - preliminary results anticipated late 2016
- TH169 Transitway/MnPASS Study (Shakopee - Plymouth) - preliminary results anticipated early 2017
- TH36 EB MnPASS Lane (I-35W – I-35E) - project scoping in process
New MnPASS Features

- Larger digital price signs for improved messaging
- New toll reading equipment enabling future interoperability with other state toll systems

HOV 2+ = Vehicles with two or more people
National Interoperability Requirement

- Map-21 required all electronic toll systems to become interoperable by October 2016
- Tolling industry developing recommendation
- MnDOT ready to act when the new interoperability standard and requirements are known

- Multi-protocol readers
  - These are the devices in the field that communicate with the tag in the customer’s vehicle. Multi-protocol readers can read 2-3 different tag types depending on the device.

- Tags (Transponders)
  - MnDOT now uses the SeGO protocol. New readers can still read the old ASTM V6 transponders.
Nationwide Interoperability
Airport Parking Interoperability

- Currently in talks with the Metropolitan Airports Commission to determine feasibility of MnPASS customers accessing the parking ramps using MnPASS tags and airport employees/customers accessing MnPASS with airport tags.
- The airport currently uses Transcore readers and would be able to read MnPASS tags.
New MnPASS Features

- Two “tag” options now available
  - Switchable Tag
    - One-time purchase fee
    - Can be moved between vehicles
    - HOV 2+ (free) mode or MnPASS (fee) mode
New MnPASS Features

- **Sticker Tag**
  - Free
  - Get as many free sticker tags as you have vehicles
  - Always “on” (fee) mode when driving in a MnPASS Express Lane
New MnPASS Features

New MnPASS back-office system using IRIS software (MnDOT developed Traffic Management System software)

- Ramp Metering Algorithm
- Travel Time Algorithm
- Variable Speed Limit Algorithm
- Connectivity to all field devices
- Provides traffic data to MnPASS
- *MnPASS Pricing Algorithm*
- *Develop Roadside System Software in IRIS*
Customer Service Center

Back-Office System

Trip Building Process

Roadside System Software

I-394 Field Equipment

I-35W Field Equipment

I-35E Field Equipment
MnPASS Enforcement

- Current contract goes through FY 2016
- MN State Patrol is paid overtime to enforce MnPASS

- New MnPASS Team begins Aug. 2016
- Dedicated enforcement team to enforce MnPASS
- 6 team members
- 3-year pilot
- MSP is in process of hiring troopers
Get in, get going and get there!

- [www.mnpass.org](http://www.mnpass.org)
- 1-866-397-4334
- **Main MnPASS Customer Service Center**
  - 2055 Lilac Drive N, Golden Valley, MN 55422
- **Satellite MnPASS Distribution Centers**
  - **Metro Transit Service Centers**
    - St. Paul Skyway – US Bank Center, 101 E 5th St
    - Minneapolis – 719 Marquette Ave
  - **MnDOT Metro District headquarters**
    - 1500 W County Rd. B2, Roseville
  - **Move Minneapolis**
    - 505 Nicollet Mall, Suite 100, Minneapolis
Questions and Contacts

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