Major Highway Projects

Transportation Advisory Board
October 20, 2021
Major Highway Projects

Topic requested by TAB members:
1. Planning stage or partial funding: Jon Haukaas, City of Blaine
2. Highway projects in the Transportation Policy Plan: Sheila Kauppi, MnDOT
3. Recently completed highway project: Lisa Freese, Scott County
1. Planning Stage or Partially Funded

- Highway 13 Environmental Assessment (Savage to Burnsville)
- Highway 10 Ramsey Gateway
- Highway 212 (Norwood Young America to Cologne)
- Highway 120 (Ramsey/Washington County border)
- Dakota Co 42 Corridor Study
- Highway 77 Study
- Highway 47/65 Planning and Environmental Linkage (PEL)
- Highway 65 PEL
  - Jon Haukaas, City of Blaine
2. Highway Projects in the TPP

- I-494 E-ZPass
- Highway 252/I-94
- I-35W Gateway (Roseville to Minneapolis)
- Highway 10 (Anoka)
- Highway 212 (Cologne to Carver)
- Highway 169 (Elk River)
- Rethinking I-94
  - Sheila Kauppi, MnDOT Metro District (TAB Alternate)
3. Recently Completed Highway Projects

- I-35W North E-ZPass (Roseville to Lino Lakes)
- I-35W and I-94 Downtown to Crosstown (Minneapolis)
- I-35W Minnesota River Bridge
- I-94 Maple Grove to Rogers (nearly complete)
- Highway 169/Highway 41/Scott Co 78 Interchange (Jackson and Louisville Township)
  - Lisa Freese, Scott Co (former TAC Chair)
Moving from Planning to TPP to Construction

- Major preservation projects identified by MnDOT through their pavement and bridge models; mobility, safety, multimodal elements added onto preservation projects
- Project identified in a regional prioritization study such as the MnPASS system studies
- Projects funded through the Regional Solicitation
- Projects secure full funding through other sources and request a TPP amendment if adding capacity or an interchange to a principal arterial, or lane of one mile or more to an A-minor arterial

TPP amendment before TAB next month: projects must show consistency with the TPP, public involvement, air quality conformance, and full funding. Then, projects must be amended into the Transportation Improvement Program (TIP).
Contact Information

Steve Peterson, Metropolitan Council
Steven.Peterson@metc.state.mn.us
651-602-1819
The Future of Highway 65

Planning and Environmental Study
The Minnesota Department of Transportation and partners are planning the future of Highway 65 from between Bunker Lake Boulevard in Ham Lake and County Road 10 / Mounds View Boulevard in Spring Lake Park.

Problems and Considerations
In Spring 2019, the Highway 65 community identified the primary transportation problems and considerations for the corridor. This shared understanding will guide the development and selection of design options for the future.

The primary transportation problems are:

- **VEHICLE SAFETY**
- **VEHICLE CONGESTION**

The secondary transportation problem is:

- **WALKING / BIKING ACCESS**

Other considerations include:

- **MAINTAINING TRANSIT SERVICE**
- **IMPLEMENTATION COST**
North TH 65 Corridor Coalition

MnDOT
- Metro District

Counties
- Anoka
- Isanti
- Kanabec

Cities
- Blaine
- Bracham
- Cambridge
- East Bethel
- Ham Lake
- Spring Lake Park
- Oak Grove

Townships
- Arthur
- Athens
- Brunswick
- Cambridge
- Ford
- Isanti
- Knife Lake
2017-2018:
I35W @ 95th Ave
= 59,000 AADT
TH65 @ 109th Ave
= 65,000 AADT
Hwy 65 - Bike & Pedestrian Crash Map
Calls for Service on Hwy 65

From 2013-2017 (five years)
- 953 reported crashes from 81st to Bunker Lake Blvd.
- 1,000 calls for service in the past eight years
  - 946 were in the past seven
  - Calls were related to road and driving altercations, congestion related driving behavior

Thus far in 2021
- 102 accidents, 270 traffic citations
Planning and Environment Linkages

What is PEL?

Planning and Environment Linkages (PEL) is a valuable tool for creating efficiency in transportation project development and supporting agencies to accelerate project delivery.

- Minimize Duplication of Effort
- Documentation
- Decisions & Analysis to inform NEPA
- Enhanced Community Involvement
- Improved Relationships & Coordination
The FAST Act & PEL
The Fixing America’s Surface Transportation Act (FAST Act) continues efforts to streamline project delivery:
  » Efficient environmental reviews for project decisionmaking (Section 1304),
  » Integration of planning and environmental review (Section 1305), and
  » Development of programmatic mitigation plans (Section 1306)

» Learn more about the FAST Act at environment.fhwa.dot.gov/legislation/authorizations/FASTact.aspx

One Federal Decision & PEL
In accordance with Executive Order 13807, USDOT and other Federal departments signed a memorandum of understanding in April 2018 to implement a process that delivers environmental reviews and authorization decisions for major infrastructure projects as One Federal Decision (OFD).

A key goal of OFD is to reduce the average time to complete environmental review processes to two years. Using a PEL approach can facilitate this accelerated review process timeline.

» Learn more about OFD at environment.fhwa.dot.gov/nepa/oneFederal_decision.aspx
The Planning and Environmental Linkages (PEL) study identifies transportation issues AND environmental concerns along a road. Since PEL studies are used to make planning decisions and identify/prioritize future projects, it is important to understand the developed and natural environments within which these changes may be made. Based on previously completed studies of the road and an existing conditions analysis recently completed for Highway 65, the PEL Study will specifically address the following environmental and community resources:

- **High Concentration of Low Income and Minority Populations**
- **Publicly-owned Recreation Area**
- **Wetlands**
- **Floodplains**
- **Contaminated Properties**
Problem Statement

**Primary Problems**

**Vehicle Safety**
Does it reduce the number and severity of crashes?

**Vehicle Congestion**
Does it improve travel time & decrease delay compared to doing nothing (today and 2040 conditions)?

**Secondary Problem**

**Walking/Biking**
Does it improve access and safety?
Evaluation Process

Level 1 Analysis
- Identify the universe of alternatives
- Yes/No screening
- Drop alternatives with fatal flaws

Level 2 Analysis
- In-depth analysis on remaining alternatives
- Evaluation criteria
- Recommend alternatives that BEST address the primary problems

Level 3 Analysis
- Assemble two to three corridor-wide alternatives
- In-depth analysis on corridor-wide alternatives
- Evaluation criteria
- Results of analysis included in final PEL study to guide future decision making
PEL Identified Alternatives

SECTION 1
- Add new signals at key intersections.
- Add mediatrix to improve safety.

SECTION 2
- Hybrid Pedestrian: Grade separated Pedestrian crossing at all major intersections.

SECTION 3
- Freeway Interchanges at CR 120 and Burner Lake Rd.

SECTION 4
- Additional Interchanges at US 19 and SR 450.

Additional Notes:
- All changes are subject to further planning and design.
- Community feedback is welcome.

[Map with detailed sections and annotations]
What happens after the study?

Identify funding

Environmental review & design

Construct projects

2021

2022

2024

The PEL study helps to streamline this work.

This is an aggressive schedule!!
| Funding Secured: |
|------------------|------------------|
| **City of Blaine - Capital Improvement Program** | $2,000,000 |
| 2020 State Grant to Anoka Co | $1,500,000 |
| • Environmental Review & Preliminary Design | |
| Met Council TAB Regional Solicitation | $10,000,000 |
| • Strategic Capacity 2024 | |
| MnDOT Highway Safety Improvement Program (HSIP) | $1,530,000 |
| • East side Frontage Road Improvements 2022 | |
| MnDOT Local Partnership Program (LPP) | $624,000 |
| • West side Frontage Road - 99th to the north | |
| 2021 Transportation Bonding Bill | |
| • TH65 NEPA & Prelim Design, R/W | $7,000,000 |
Funding Requested:

US Senate Community Directed Projects
- $40.7M Construction Funding Request

2022 Transportation or Capital Investment Bonding Bill
TH65 Construction Cost Gap Funding:
- 99th Ave - 2024 $18,000,000
- 117th Ave - 2024-2026 $25,000,000
- 109th Ave - Future Anoka County Requests
Additional Funding:

- Request Trunk Highway Bonds every Year til Secured.
- Reapply for MN Freight Program Grant Program
- Corridors of Commerce Grant Program
- Federal Requests
  - Direct Legislation Request
  - USDOT TIGER and/or BUILD Grant programs
  - USDOT INFRA Grant
The PEL process is the future of Transportation Project Development

It is critical that we make the first one a SUCCESS
Rethinking I-94 and Related Initiatives Update

Transportation Advisory Board (TAB)

October 20, 2021
Rethinking I-94
MEPA/NEPA Process Update and Schedule
MEPA/NEPA

Scoping

- Combined MEPA/NEPA process
  - First step in environmental process
  - Establishes – purpose and need for project, evaluation criteria to be used, additional goals, project limits
  - Evaluates – universe of alternatives
  - Recommends – a range of alternatives to be further evaluated in the Tier 1 EIS document, including No-Build
  - Documents produced:
    - Scoping Document / Draft Scoping Decision Document
    - Scoping Decision Document

Tier 1 EIS

- Combined MEPA/NEPA process
  - Second step in environmental process
  - Refines – a more detailed examination of alternatives and impacts is undertaken
  - Establishes – a preferred mainline alternative and a range of potential alternatives at access and/or frontage road locations
  - Recommends a program of projects to be carried out in Tier 2 documents
  - Documents produced:
    - Draft Tier 1 EIS
    - Final Tier 1 EIS
    - Record of Decision
Activities to date:

- Published notice of intent (NOI)
- Identified and engaged Cooperating and Participating agencies
- Draft logical termini

MEPA/NEPA - Scoping
Activities to date:

Transportation Needs:
- Pavement, bridge, retaining wall, and infrastructure condition
- Safety on I-94 and intersecting streets
- Mobility
- Walkability and bikability
- Drainage capacity

Purpose Statement: Projects within the Rethinking I-94 program will accomplish the following -
- Improve asset conditions of I-94 bridges, pavement and supporting infrastructure
- Enhance safety for people and goods on, along, and across the I-94 corridor
- Improve mobility for people and goods on, along and across the I-94 corridor
MEPA/NEPA - Scoping

Activities to date:
- Draft evaluation criteria
Activities to date:

- Draft goals

  - Incorporate the livability framework through the process to identify opportunities for establishing a sense of place, community connections, economic vitality, equity, safety, trust, and a healthy environment for the communities that live, work and play along I-94 between Minneapolis and St. Paul.

  - Develop and execute a community-based approach focused on reconnecting neighborhoods, revitalizing communities and ensuring residents have a meaningful voice in transportation decisions that affect their lives.
MEPA/NEPA - Scoping

Activities to date:

- Generating/identifying potential ideas to be considered as part of an alternative
- Testing of some ideas to be considered as part of an alternative
- Agency and community engagement
Overall Project Schedule

Phase 1
Community Engagement
2016 - 2018

Phase 2
Environmental Process
2018 - 2024

Tier 2 Project(s)
Approvals & Design
2024+

Project(s)
Construction
2025+

Environmental Process

Government Agency Engagement
2020 - Spring 2024

Public Engagement
Spring 2021 - Spring 2024

Scoping Document / Scoping Decision Document
Fall/Winter 2021 - Spring/Summer 2022

Draft Tier 1 EIS & Formal Comment Period
Summer 2022 - Summer 2023

Approval of Tier 1 FEIS/ROD
Winter 2023 - Spring 2024

We Are Here

Schedule subject to change
Rethinking I-94 Livability Initiative
Community members are interested in **issues beyond the freeway**

Community members value **involvement** early and continuously, and want accurate, timely **information**

Community members want their **values and visions** to be reflected in designs
By making Livability a separate initiative from Rethinking I-94 NEPA Process

* Addresses impacts not within the normal environmental project activities
* Addresses matters beyond traffic safety, speed and reliability
* Consistent with MnDOT facilitator and partner
* Collaborative in nature
* Replicable for other projects
Livability Initiative Pillars

- Health and Environment
- Economic Vitality
- Sense of Place
- Safety
- Connectivity
- Equity
- Trust
• Develop Livability Papers around each “Pillar” of Livability to provide background, current practices and develop recommendations.

• Utilize community leaders to build a pilot workshop series

• Each livability workshop was based around an individual livability pillar

• Seek input on proposed livability recommendations from stakeholder groups
Livability Initiative Goals

Develop policy recommendations to guide evaluation criteria for Rethinking I-94 environmental process

Establish a process to guide future MnDOT Metro major project design and development in the future
Rondo Land Bridge
The Rondo Land Bridge is an effort being undertaken by a community-based organization.

Funding has been identified to flow through MnDOT to ReConnect Rondo.

The proximity and shared airspace with MnDOT facilities will required close coordination.

It is not a MnDOT project.
Yes, the land bridge is a big undertaking

<table>
<thead>
<tr>
<th>Pre-Planning: Phase 0</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Planning &amp; Engagement</td>
<td>$200K</td>
</tr>
<tr>
<td>Assessment &amp; Analysis, Environmental &amp; Master Planning</td>
<td>$3.6M</td>
</tr>
<tr>
<td>Organizational &amp; Ecosystem Capacity Building</td>
<td>$1.2M</td>
</tr>
<tr>
<td>Anti-displacement/Restorative Development Modeling</td>
<td>$1.2M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6.2M</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction: Phase 1, 2 &amp; 3</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge &amp; Infrastructure (Land/Roadway Bridges)</td>
<td>$247M</td>
</tr>
<tr>
<td>Building, Utilities &amp; Park &amp; Open Space</td>
<td>$167M</td>
</tr>
<tr>
<td>Design &amp; Engineering</td>
<td>$45M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$459M</strong></td>
</tr>
</tbody>
</table>
Thank you

For any questions, please feel free to contact:

- Sheila Kauppi – MnDOT Metro Deputy District Engineer
  - Sheila.Kauppi@state.mn.us
  - 612.499.9923

Project website:  [Rethinking I-94 - MnDOT (state.mn.us)](http://state.mn.us)
TH 169 & TH 41 Project: Implementing a Shared Vision

LISA FRESE | SCOTT COUNTY
Transportation Services Director
Transportation Advisory Board - October 20, 2021
TH 169 & TH 41 Interchange Project

Jackson & Louisville Townships
Scott County, MN

**Project Goals:** Mobility, Safety, Access Management, Economic Development

**Project Scope:** Diverging Diamond Interchange at TH 169 and TH41/CH 78 including pedestrian trails and noise walls, Trails, hybrid Interchange at CH 14 including one mile of new county roadway, 3 miles of frontage road system, stormwater and drainage improvements, an improved at-grade rail crossing, expansion of CH 78 from 2 to 4 lanes, replacement of Box Culverts at Pica Creek, project included 22 access closures (20 commercial or residential driveways & 2 public roads)
Why this is an important regional project:

• TH 169 in an important interregional corridor connection Mankato and greater Minnesota to the Twin Cities.

• TH 41 is a major river crossing carrying 20k trips daily across the river.

• TH169 is an important freight corridor carrying nearly 20 percent truck traffic through this intersection which is the 3rd busiest intersection in Scott County.

• In the fall, TH 169 becomes a major destination to visit orchards and other seasonal attractions.
Project Location
Scott County, MN
- Jackson Township
- Louisville Township

South of Shakopee, across the Minnesota River from Chaska
Project Context

- First signalized intersection on TH 169 south of I-494
- Connection to a regional river crossing (TH 41)
- High percent of heavy commercial traffic
- Multiple at-grade intersections and driveways
- Crash rates above statewide average and critical crash rates
- Long-term vision for a major regional river crossing – study completed within the previous 5 years
- Variety of land uses and special events
Project Area Context

- Three manufactured home communities within vicinity of the project
- Mining – multiple gravel pits
- Railroad
- Landfill
- US Fish and Wildlife and DNR properties
- Bluff area and drainage
- Renaissance Festival
- Uncompleted remnant activities from TH 169 and CSAH 69 project
- Rural Industrial Area
- City of Shakopee Proposed Annexation Area
Planning and Previous Studies

Scott County and its partners did not just decide one day to build the TH 169/41 project. Years of planning and investment by multiple agencies led to project initiation.
Planning and Previous Studies

- Multiple studies (state and county-level) identified TH 169 as a freeway in the project area since about 2000
- County’s long-range transportation plan identified capacity and safety issues
- MnDOT completed a Tier 1 EIS for a regional river crossing in the area, but no funding for that level of investment has been identified
- 169/41 intersection interchange need identified in 2013 Regional Congestion Mitigation Study-no funding
- MnDOT Planning Pavement project with Reduced Access Intersections through this Segment
- In 2014 the business community reacted and hired a consultant to develop alternate plans
- County applied further developed vision and applied for regional solicitation in 2014 (169/41) & 2016 (CH 14)
Scott County Decision to Lead

• Multiple plans called for improvements in the project area and local residents, businesses and elected officials were demanding something be done due to ongoing congestion and safety problems.

• MnDOT did not have enough money to initiate a large-scale investment in this location. The Metro District had a long list of other investments it needed to make in the region. Smaller investments were identified and budgeted.

• A future regional river crossing on TH 41 was at least 20+ years into the future.

• Development pressure in the area was pushing the city of Shakopee to discuss annexing the townships to accommodate residential and commercial development. Expanded mining operations and industrial developments in the townships needed supporting infrastructure.

• Scott County had a new transportation funding source through a local sales tax that could be used to help fund larger projects on the state highway network.
Partner Agencies

- **Scott County** – project proposer and lead agency
- **Minnesota Department of Transportation (MnDOT)** – partner agency, owner of roadways (TH 169 and TH 41) included in the project. Provided bridge and construction services and funding for the project
- **MnDOT State Aid** – administered project elements related to state and federal standards
- **Jackson and Louisville Townships** – communities in which the project was located and provided input on project development
- **Federal Highway Administration (FHWA)** – approved use of federal funds for the project and contributed to its development and was the official liaison to the US DOT
Project Challenges

- County-led project on two trunk highways
- Funding – multiple sources, shortage of resources, differing deadlines and allowable uses
- Project doubling in size halfway through the process
- Bluff drainage and flooding were brought into the “new project”
- Public engagement
- Changing environmental document type
- Construction staging with trucks and major events
Key Project Activities / Tasks

- Project management
- Grant management
- Agency coordination
- Public engagement- Business & Residents
- Traffic operations and safety
- Environmental investigations and documents
- Preliminary and final design
  - Road
  - Bridge
  - Drainage
  - Trail
- Right of way (property) acquisition
- Visualizations
- Construction
Public and Agency Involvement Tactics

- Multiple open house meetings
- Multiple business only meetings
- One-on-one meetings with residents and businesses
- Meetings with elected officials
- Newsletters
- Project website
- Materials in multiple languages
- Door hangers
- Visualizations
- Noise meeting – on-site
- Taking advantage of dumb luck
- Property acquisition meetings
Public and Agency Engagement – Environmental Justice Populations

- Three Environmental Justice (EJ) neighborhoods
- Challenges with adjacent neighborhoods
- Trust issues
  - Regional river crossing Tier 1 EIS – raids following public meetings
- Efforts to overcome trust issues
  - Met with owners of manufactured home communities to seek input
  - Prepared materials in multiple languages
  - Provided translators at meetings
  - Thoughtfulness in meeting locations
  - Incorporation of food at events
Agency Collaboration –

• MnDOT and MnDOT State Aid Contributions
  • Funding
  • Bridge design
  • Construction inspection
  • Meetings – other agencies, elected officials, public
  • Plan review
  • Public engagement
  • Environmental document review
  • Value engineering
  • Assistance with FHWA coordination
  • Railroad coordination
  • Funding contribution for construction
  • Project administration
  • Construction communications & business liaison consultant
Agency Collaboration

FHWA Contributions
• Meetings
• Plan review
• Environmental document review
• Value engineering participation
• Grant administration assistance

Jackson and Louisville Township contributions
• Meetings
• Plan review
• Public engagement
• Dealing with construction impacts
• Jurisdiction turnback of frontage roads

Other agency involvement
• Watershed
• Scott County Environmental Services
• Scott County Parks
• Scott County Right of Way
• Coordination with Carver County and the City of Chaska
• Coordination with the City of Shakopee
Funding and Other Resources

- Grants – Scott County applied for regional, state and federal grants and received:
  - Regional solicitation (2 grants)
  - TED
  - TIGER
  - Reallocated federal funding from another regionally funded project (CH42 & TH13)
- MnDOT contributions
  - Direct money
  - Bridge design
  - Construction inspection
  - Grant support
Funding and Other Resources

• Challenges of multiple funding sources
  • Differing and overlapping uses
  • Differing deadlines – needed to advance the project a year due to one funding source
  • Secured TIGER grant halfway through the design and environmental process – which doubled the size of the project, but still had to meet the advanced project deadline
• Impacts construction payment and pay items
• Paperwork and monitoring requirements
  • Some measures need to be collected and monitored years after construction
Project Outcomes: Mobility

Delivering What Matters
Transportation

About this measure:
Travel delay costs are calculated by multiplying the estimated delays to personal travel and truck travel caused by the delay from congestion by the unit cost ($/hr) of travel time. The delay reduction from the project resulted in $2,850,000 savings in annual user costs.

Why does this matter?
Mobility along roadways ensures the efficient and safe movement of goods and people on the roadway network within Scott County. Mobility is tracked by indicators such as travel time or elimination of segments or points that cause timely delay. Mobility is often used as an economic development indicator; the greater the growth of a community impacts its access to transportation options which in turns impacts mobility. In Scott County, we continue to strive to improve mobility for our residents and businesses by strategic projects addressing capacity issues. Tracking these indicators allow us to monitor the success of these investments.

Source: Clear Guide Traffic Data/ MnDOT and USDOT Benefit Cost Methodology Guidance

US 169/ TH 41/ CH 78 Annual User Costs Resulting from Delay

- Before: $4,100,000
- After: $1,000,000

$4,000,000
$3,000,000
$2,000,000
$1,000,000
$100,000

Before
After
Project Outcomes: Mobility

About this measure:
This measure reviews speeds in the before condition to understand typical congested conditions on northbound and southbound 169 resulting from the traffic signal.
No congestion was observed after construction was completed, so speeds are assumed to be at or near free-flow at the newly posted speed limit of 65 mph.

Before and After: TH 169 Average Speeds

Source: Iverts Clear Guide Data Set

Why does this matter?
Mobility along roadways ensure the efficient and safe movement of goods and people on the roadway network within Scott County. Mobility is tracked by indicators such as travel time or elimination of segments or points that cause timely delay. Mobility is often used as an
Project Outcomes: Safety
Project Outcomes: Safety

US 169 & TH 41 INTERSECTION AREA CRASH RATE CHANGE

CRASH RATE CHANGE

<table>
<thead>
<tr>
<th>Year</th>
<th>Crash Rate</th>
<th>Severity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1.62</td>
<td>2.40</td>
</tr>
<tr>
<td>2020</td>
<td>0.43</td>
<td>0.43</td>
</tr>
</tbody>
</table>
Project Outcomes: Economic Development

Change in Property Values in Project Area

<table>
<thead>
<tr>
<th>Year</th>
<th>Land</th>
<th>Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$50</td>
<td>$50</td>
</tr>
<tr>
<td>2019</td>
<td>$150</td>
<td>$150</td>
</tr>
<tr>
<td>2020</td>
<td>$200</td>
<td>$200</td>
</tr>
</tbody>
</table>
Questions?

Lisa J. Freese, AICP

Transportation Services Director
Scott County
lfreese@co.scott.mn.us
952-496-8363