Meeting Agenda

• Introductions
  • Agenda Review
  • Meeting #1 Minutes
  • Study Questions

• Study Overview

• Evaluation Process
  • SAC Objectives
  • Fatal Flaws and Screening Evaluation

• Concept Development
  • Approach and Phasing/Staging
  • Design Considerations
  • One-Way Concepts
  • Two-Way Concepts

• Next Steps
Study Overview

• Evaluate existing transportation system and range of alternatives along the Hennepin and First Avenue corridors

• City leading in coordination with County, Metro Transit, and MnDOT

• Examine one-way, two-way, and hybrid roadway configurations

• Identify potential roadway concepts and document impacts (pros and cons) associated with potential implementation

• Consideration for quality of life, access, safety, connectivity, and mobility for all modes

• Currently no improvements are programmed, nor has any funding been identified for such improvements*

*MnDOT Projects:
University/4th Ped Improvements (2016-18)
Central Avenue Bridge (2019-20)
Study Overview

General Study Area

Study Area

One-Way Streets
Study Overview

Approach

- Setting Values and Goals
- Understanding Problems
- Criteria and Measures of Effectiveness
- Developing and Screening Alternatives
- Identifying Tradeoffs and Balancing Goals

Process

- Develop Concepts
- Criteria and Stakeholder Guidance
- Develop Corridor Alternatives
- Detailed Evaluation and Summary

One-Way

Hybrid

Two-Way
Study Overview

Key tasks:
- Data Collection
- Existing Conditions Inventory and Analysis
- Concept Development and Screening
- Develop Corridor Alternatives
- Detailed Evaluation and Summary
- Documentation and Final Report

Outreach to Date:
- Neighborhood Associations:
  - Nicollet-Island/East Bank
  - Marcy Holmes
- Northeast Business Association
- Nicollet-Central Modern Streetcar Team
- Study Advisory Committee Meetings:
  - SAC #1: October
  - SAC #2: December
  - SAC #3: TBD
Evaluation Process

SAC Objectives and Evaluation Categories

• SAC’s objectives adapted into qualitative and quantitative technical metrics

<table>
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<tr>
<th>Category</th>
<th>Objectives</th>
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| Pedestrian/Biking | • Improve connectivity for pedestrian, bicycling, and transit throughout the corridor  
                     • Bicycle facilities should not be overlooked, part of greater network of connectivity to downtown, regional park system, and University of Minnesota campus  
                     • Evaluate opportunities to address “free-flowing” right turns that encourage speeding and present conflicts with bicyclists and pedestrians |
| Mobility/Safety   | • Allow emergency access and truck operations for businesses  
                     • Enhance non-motorized and motorized safety conflicts  
                     • Reduce the number of complex intersection to increase safety  
                     • Improve sight distances for non-motorized users  
                     • Seek opportunities to address complex intersections (5th/Hennepin/Central, 7th/1st/Central, and 7th/Hennepin) |
| Streetcar/Transit | • Encourage transit use  
                     • Streetcar is important improvement for the neighborhood and should be implemented in a way that maintain consistency with local and regional visions |
| Quality of Life   | • Expand the pedestrian and bicycling facility  
                     • Improve pedestrian and biking by using traffic calming techniques  
                     • Influence travel behavior to reduce speeds before it enters the study area (e.g., Hennepin Bridge and Central Ave)  
                     • Address signal timing that encourages speeding |
| Economic Development | • Parking will be accessible for residents and visitors  
                         • Improve connections to businesses with access to and from destinations  
                         • Limit speeding  
                         • Promote traffic calming |
| Operations        | • Reduce complexity of the transportation network  
                         • Address mixture of one-way and two-way streets  
                         • Motorized throughput and congestion should not be driving factor  
                         • Evaluate inconsistencies with parking bays and bump-outs |
Evaluation Process

Technical and Design “Fatal Flaws”

- All day no-parking both sides
- Less than 2 travel lanes (one-way concepts)
- Shared bicycle facilities only
- Less than 11 foot travel lane (through lanes)
- Hennepin and First Avenue bridges two-way operation
- Does not maintain streetcar “couplet” alignment
- Minimum dimensions for all modes of travel (i.e., vehicle/transit, bicycle, and parking)
- Reduction of space in pedestrian zone
Evaluation Process

Screening Evaluation Process

• Converted SAC Objectives to Technical Criteria (Qualitative/Quantitative)

• Summarized/Reviewed by Categories
  • Quality of Life, Economic Development, Transit, Bike/Ped, Mobility/Safety, Operations

• TAC Reviewed and Discussed Potential Concepts

• TAC Identified “Leading Concepts”
  • Adherence to SAC Objectives, Ability to Phase Improvements, Engineering Viability, Consistency with Adopted Plans
  • Provide safe and attractive option for all street users, Enhance the public realm, Reduce travel speeds
Concept Development

• “Balanced Approach”
  • Same cross-section for Hennepin and First
  • Provide quality of life, economic development, safety, circulation, and multimodal mobility benefits to both corridors

• Phasing/Staging of Concepts:
  • Align with min. (40’) and max (56’) cross-section envelopes along Hennepin

• Smaller-Scale Solutions:
  • Potential Short-Term Project
  • Retrofit: Maintain Existing Geometry with Restriping

• Larger-Scale Solutions:
  • Potential Mid- to Long-Term Project
  • Reconstruction: Fill Parking Bays, Modify Curb Extensions, Protected Bikeway, Sidewalk Expansion, and/or Signal and Signage Modifications
Concept Development

- Transit and Bicycles Design Considerations
Concept Development

• Bicycle Facility Design Considerations
One-Way Concepts

Concept 1-1A
Two-Lanes (Smaller-Scale)

Summary
- Pedestrian Realm: 12’
- Bicycles: Buffered Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 2
- Parking: Both Sides
- Implementation: Retrofit

Buffer Example:

More Space ▲ Less Space ○ No Change ★ Varies
One-Way Concepts

Concept 1-1B
Two-Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 20’
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 2
- Parking: One Side
- Implementation: Reconstruction

Delineator Post Example:

More Space ▲ Less Space ○ No Change ★ Varies
One-Way Concepts

Concept 1-2A
Three-Lanes (Smaller-Scale)

Summary
- Pedestrian Realm: 12’
- Bicycles: Standard Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: Both Sides
- Implementation: Retrofit
One-Way Concepts

Concept 1-2B
Flexible Peak/Off-Peak Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 12’
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 2 Off-Peak, 3 Peak
- Parking: One Side Peak, Two Sides Off-Peak
- Implementation: Retrofit and Reconstruction

Planter-Protected Example:
One-Way Concepts

Concept 1-2C
Three Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 12'
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: One Side
- Implementation: Retrofit and Reconstruction

Raised Median Examples:
- More Space
- Less Space
- No Change
- Varies
One-Way Concepts

Concept 1-3
One-Way: Two-Lanes (Larger-Scale)

Summary

- Pedestrian Realm: 15’
- Bicycles: Buffered Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 2
- Parking: Both Sides

Implementation: Reconstruction

On-Street Buffer Example:

More Space \hspace{1cm} Less Space \hspace{1cm} No Change \hspace{1cm} Varies
One-Way Concepts

Concept 1-4
One-Way: Three-Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 15’
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: One Side
- Implementation: Reconstruction

Raised Bike Lane Examples:

More Space  ▲  Less Space  ○  No Change  ★  Varies
Two-Way Concepts

Concept 2-1A
Two-Way: Three-Lanes (Smaller-Scale)

Summary

- Pedestrian Realm: 12’
- Bicycles: Standard Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: Both Sides
- Implementation: Retrofit and Reconstruction
Two-Way Concepts

Concept 2-1B
Two-Way: Three-Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 12’
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: One Side
- Implementation: Reconstruction

Planter-Protected Example:

More Space  Less Space  No Change  Varies
Two-Way Concepts

Concept 2-1C
Two-Way: Three-Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 12’
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: Both Side
- Implementation: Reconstruction

More Space ▲ Less Space ○ No Change ☆ Varies
Two-Way Concepts

Concept 2-2
Two-Way: Three-Lanes (Larger-Scale)

Summary
- Pedestrian Realm: 15’
- Bicycles: Protected Bike Lane
- Transit: Streetcar Compatible
- Travel Lanes: 3
- Parking: One Side
- Implementation: Reconstruction

More Space  ▲ Less Space  ○ No Change  ★ Varies
Next Steps

• Develop Corridor Alternatives
  • Prepare Configurations for Corridors
  • One-Way and Two Way Alternatives

• Detailed Evaluation and Summary
  • Conduct Detailed Traffic Analysis
  • Summarize Modal/ROW Accommodations
  • Document Pros and Cons

Develop Concepts

Criteria and Stakeholder Guidance

Develop Alternatives

Detailed Evaluation and Summary