

# *Citywide Ten-Year Transportation Action Plan and Streetcar Feasibility Study*



Public Meetings  
October 2007



# Four Components

- Downtown Action Plan – **APPROVED**
- Citywide Action Plan – **DRAFT** - public review and comment in October
- Streetcar Feasibility Study – **DRAFT** – public review and comment in October
- Sidewalk and Street Design Guidelines – still working on draft – public review in Spring 2008

# Nine Public Meetings in October

Oct 9	5:30-7:30	North Regional Library
Oct 10	6:30-8:30	3 <sup>rd</sup> Precinct Conference Room
Oct 11	5:30-7:30	Northeast Library
Oct 15	4:00-6:00	Central Library
Oct 16	6:30-8:30	North Commons Rec Center
Oct 17	6:30-8:30	Lake Nokomis Rec Center
Oct 23	6:30-8:30	Martin Luther King Rec Center
Oct 24	6:30-8:30	Van Cleve Rec Center
Oct 25	6:30-8:30	Bryant Square Rec Center



# *Citywide Ten-Year Transportation Action Plan (**draft** for public review)*



# Long-Term Vision

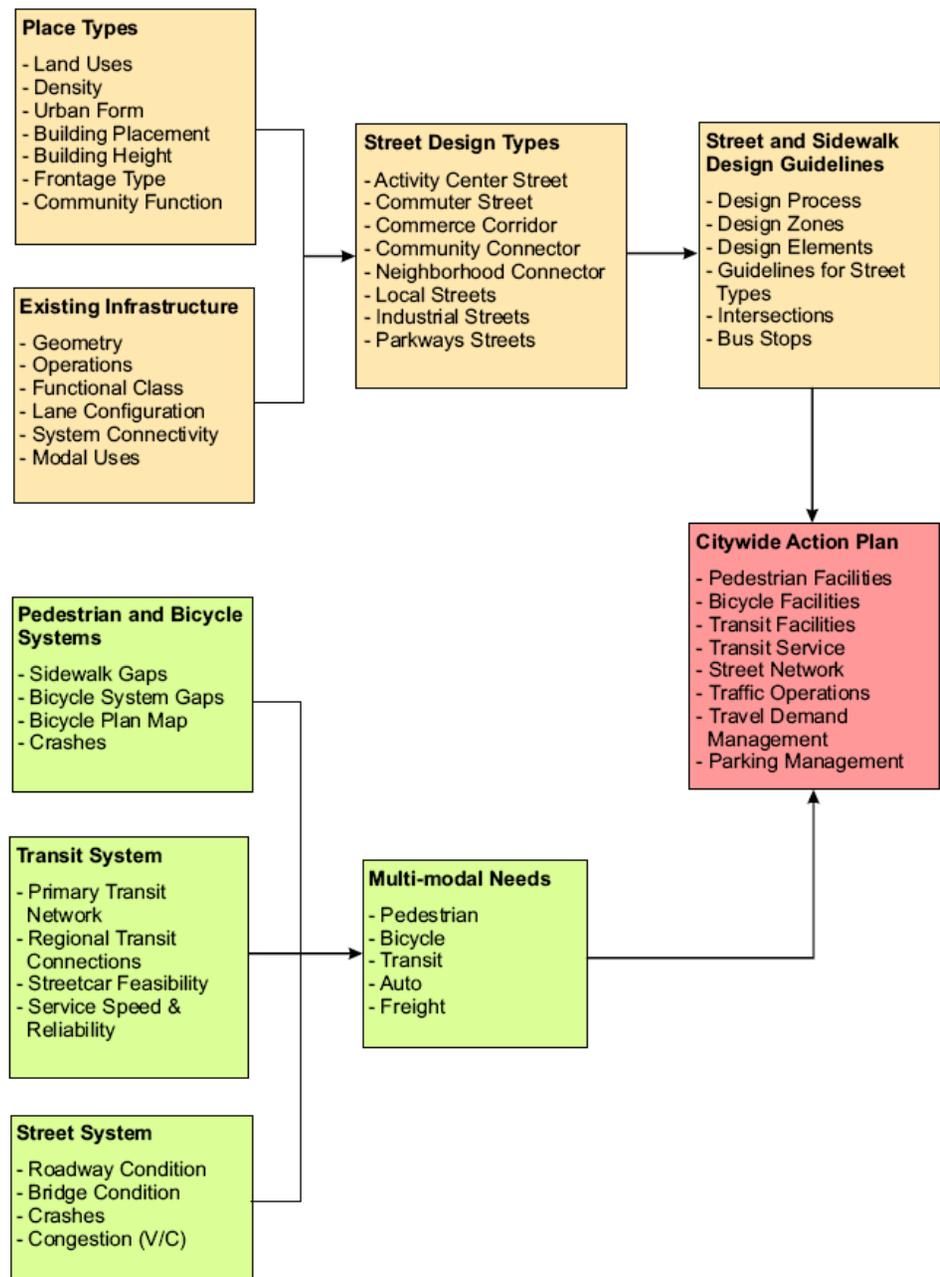
- Vital and thriving metropolitan urban center.
- People have reasonable transportation choices.
- Transportation system serves future growth with access to destinations by all modes.
- Transit is mode of choice downtown and realistic option citywide.
- City is livable and walkable.

- System Planning Process

- Place Types
- Street Types
- Needs Analysis

- Design Guidelines

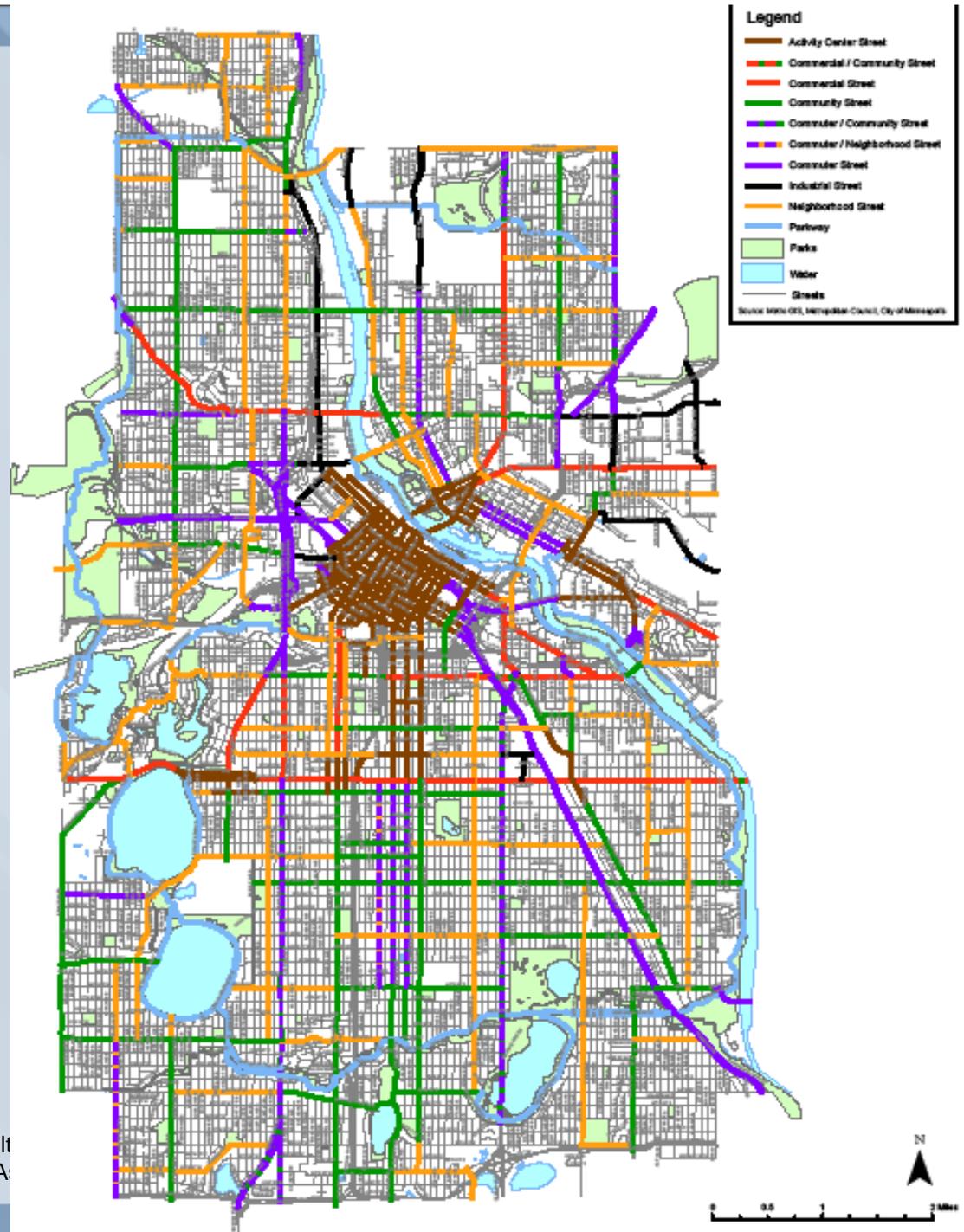
(public review – early 2008)



# Street Design Types

- Commuter Street
- Commerce Street
- Community Connector
- Neighborhood Connector
- Activity Center Street
- Parkway Street
- Industrial Street

Meyer, Mohaddes Associates | Nelson\Nygaard Consult  
Short Elliott Hendrickson Inc. | Richardson, Richter & A



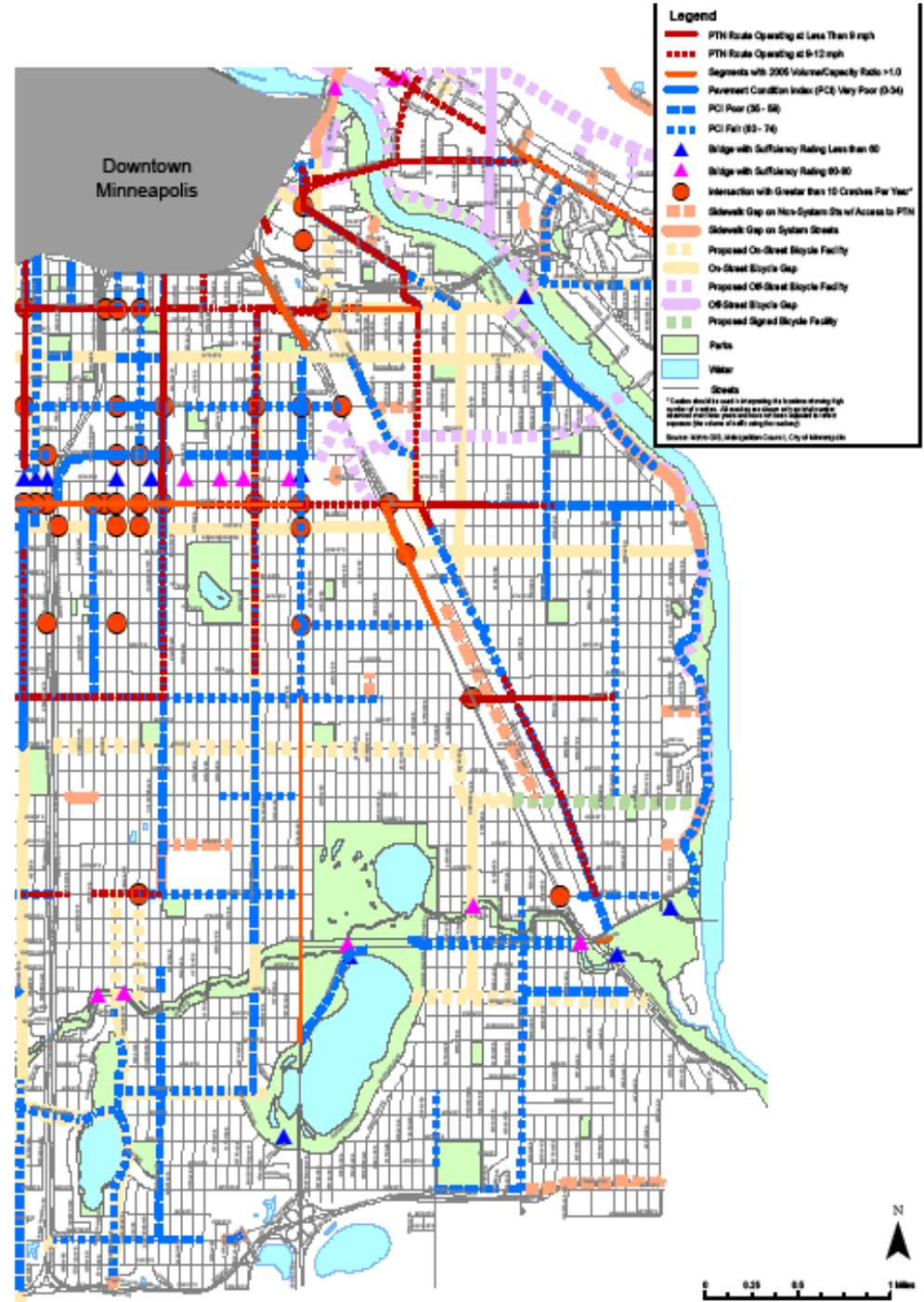
# Street Characteristics

- Target operating speed
- Maximum # through lanes
- Transit service (Primary Transit Network)
- Appropriate types of bicycle facilities
- Turn lanes
- Curb parking/curb extensions
- Driveway access
- Truck use

# Needs on Existing Street System (affects all modes)

- Sidewalk Gaps
- Bicycle Facility Gaps
- Transit Speeds
- Safety (crashes)
- Pavement Condition (Pavement Condition Index – PCI)
- Bridge Condition (Bridge Sufficiency Ratings)
- Congestion (volume/capacity)

# Maps Prepared for Each Quadrant of City



# Seven Objectives (no priority order)

- Make transportation design decisions based on place type in addition to street function
- Ensure that all streets in the City are safe, convenient and comfortable for walking
- Provide a well-connected grid of bike lanes
- Provide the best possible transit service on the Primary Transit Network
- Encourage people to walk, bike and take transit rather than drive
- Optimize the use, safety and life of the street system
- Make consistent decisions for curbside uses

# Recommended Pedestrian Actions

- Pedestrian Master Plan – 2008
  - Safety and connectivity
  - Directness and continuity (gaps and barriers)
  - Sidewalk width and condition
  - Sidewalks on bridges
  - Walking environment
  - Maintenance and snow removal
  - Incentives and activities to encourage walking
- Street Furniture Program
- Tree Planting and Streetscape Design Guidelines
- Seek funding for pedestrian projects

# Recommended Bicycle Actions

- Bicycle Master Plan – 2008
  - Safety
  - Directness and continuity (gaps and barriers)
  - Bike facilities on bridges
  - Bike use of transit lanes and PTN corridors
  - Parking
  - Maintenance and snow removal
  - Incentives and activities to encourage bicycling
- Construct bicycle facilities in Capital Improvement Program (CIP) and funded by Non-Motorized Transportation Program
- Seek funding for bicycle projects

# Recommended Transit Actions

- Implement Primary Transit Network (Hi-Frequency Network) concept
- Evaluate each definite PTN corridors
  - Causes of delay, reliability problems and loading issues.
  - Frequency, span and coverage of service on PTN corridors.
  - Transit passenger facilities
  - Pedestrian/bicycle access
  - Safety and security.
- Develop and implement passenger information approach, including ITS applications
- Develop and implement marketing programs
- Improve maintenance and snow removal

# Proposed PTN

Local Bus Element  
(assumes LRT,  
BRT and commuter  
rail in place)

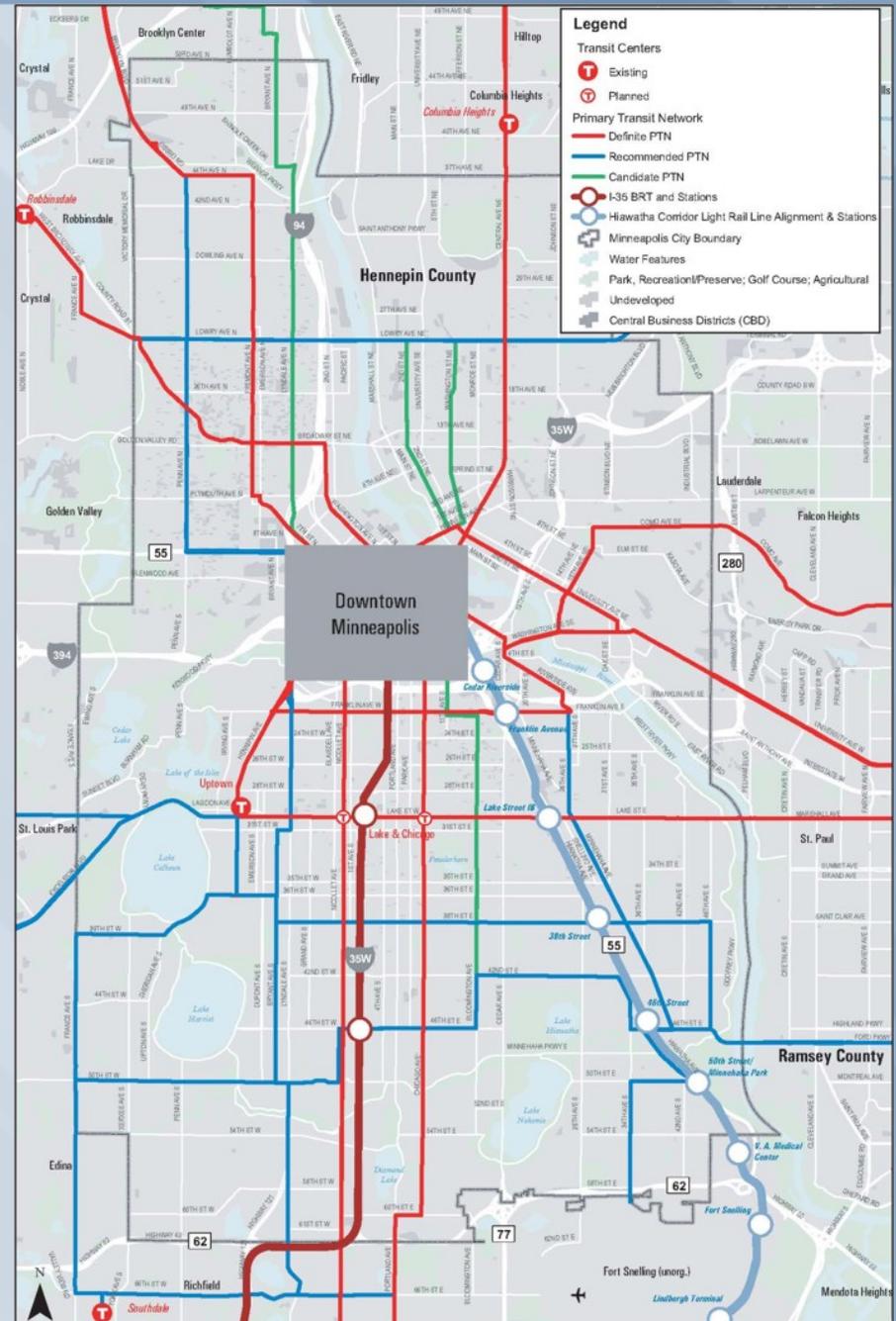
## Tiers

**RED = Definite**  
*(Justified today.)*

**BLUE = Recommended**  
*(Justified by projected  
growth.)*

**GREEN = Candidate**  
*(Possible, but requires  
further work.)*

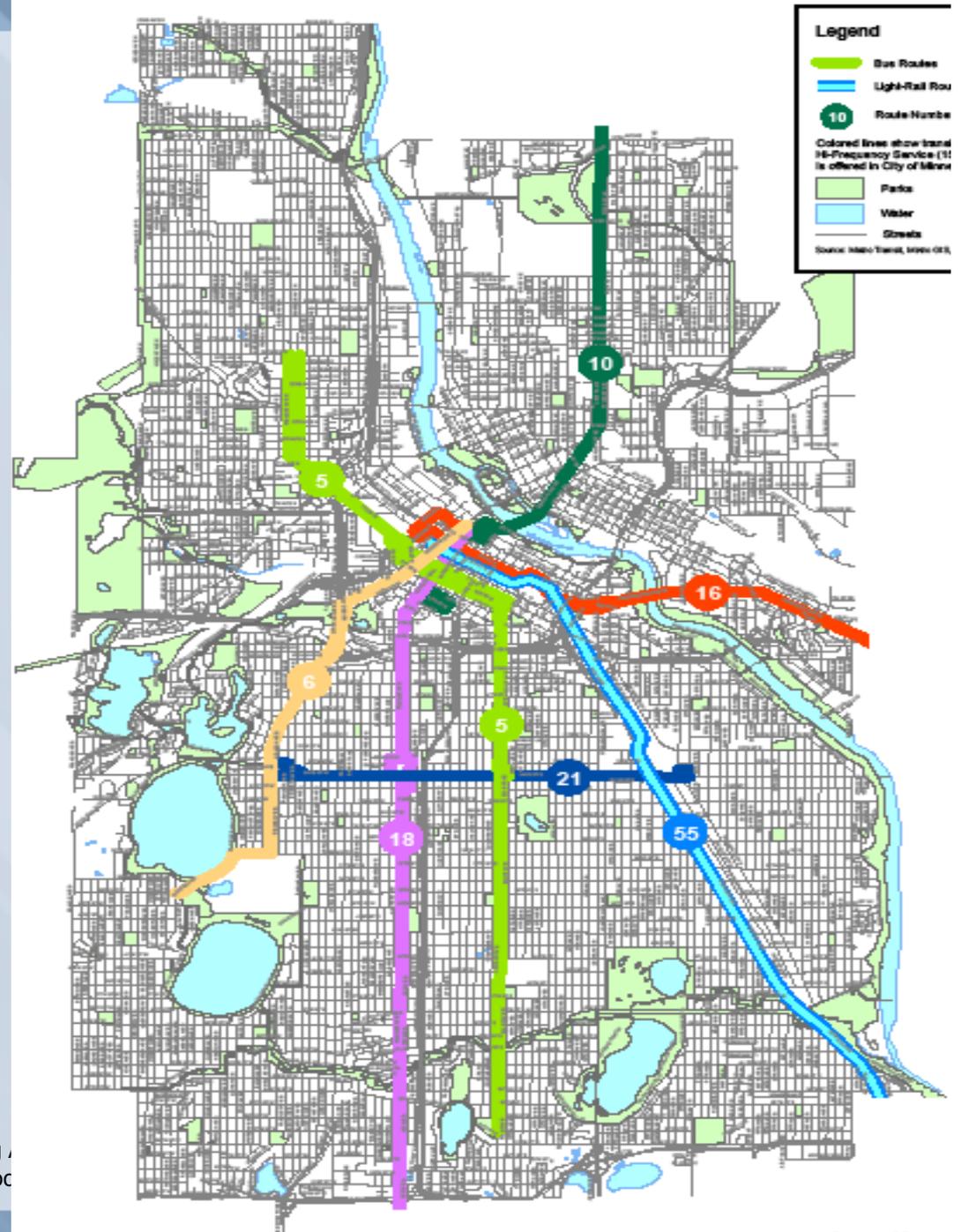
Meyer, Mohaddes Associates | Nelson\Nygaard Consulting Associates  
Short Elliott Hendrickson Inc. | Richardson, Richter & Associates



# Hi-Frequency Network

- Service at least every 15 minutes
  - 6 a.m. – 7 p.m. M-F
  - 9 a.m. – 6 p.m. Saturdays
  - Less frequent other times/days
- Service 18-24 hours/day
- Service 7 days/week

Meyer, Mohaddes Associates | Nelson\Nygaard Consulting  
Short Elliott Hendrickson Inc. | Richardson, Richter & Assoc



# Recommended Actions Related to Traffic Management

- Retime and update traffic signals and signal systems
- Upgrade crash data base
- Update traffic calming guidance
- Evaluate one-way pairs outside downtown
- Explore and implement applicable new technologies and traffic management strategies
- Encourage carsharing, carpooling, telecommuting, flextime, etc.
- Update policies and procedures related to curbside uses

# Recommended Actions Related to Street Improvements

- Implement projects in 5- year Capital Improvement Program (CIP)
- Complete Sidewalk and Street Design Guidelines
  - Ensure consistency with Comprehensive Plan
  - Update ordinances and guidance for site plan and development approvals for consistency
- Continue regular infrastructure maintenance activities

# Implementation

- Action Items Matrix
- Interagency and Interdepartmental Coordination
  - Transit Coordination Team
  - CPED/Public Works Coordination Team
- Methodology for Evaluating One-Way vs. Two-Way Streets
- Funding Issues
  - Special Assessments
  - Special Service Districts
  - State and Federal Funding

# *Streetcar Feasibility Study* *(draft for public review)*



# Why Consider Streetcars in Minneapolis?

- A national study shows rail attracts up to 40% more riders than bus, all conditions held equal.
  - Rail lines replaced by buses lost as much as 2/3 of their ridership.
  - Rail lines retained as rail remained stable or increased in ridership.
- New rail lines replacing buses in Portland, San Diego and Buffalo doubled previous bus ridership.
- Rail has the ability to attract “choice” riders and tourists.
- Rail helps to catalyze redevelopment (developers often willing to help finance).

# What explains the difference?

## Riders Perceive Better Quality of Service:

- Clearly identifiable and predictable rail route.
- Easily identified stops that are protected.
- More stability in vehicle ride.
- Greater ride comfort; ease of boarding and exiting.
- Freedom from fumes and excessive noise of diesel buses.



# Streetcars do have their drawbacks



- Less flexible than buses.
- Less maneuverable – (i.e., they can get stuck behind a stalled or double parked vehicle).
- Would require a unique maintenance facility.
- Higher capital investment than buses.
  - Vehicles, trackwork, utilities, etc.
- Overhead wires.

# What Is a Streetcar?

- Modern Vehicles
  - Portland, Tacoma, Toronto
- Restored Vintage Cars
  - Often PCC cars (San Francisco, Philadelphia)
  - Nearly exhausted supply
  - Non-ADA accessible
  - Cost to acquire, transport and restore
- New “Replica” Cars
  - Built from blueprints of old cars (Charlotte, Memphis)
  - Can be made ADA accessible



# How Are Streetcars Different from LRT?

- **Typically operate in mixed traffic.**
- Are designed for **local circulation** - shorter distances and more frequent stops.
- Lower capacities than inter-urban commuter trains or multi-car light rail trains.
- Can be **built more rapidly** and with less disruption and far less cost than light rail investments.
- Especially **effective in catalyzing or organizing pedestrian-friendly development** patterns.

# Purpose of Streetcar Study

- Are streetcars physically, operationally and financially feasibility on high use PTN corridors?
- Will streetcars improve transit service and ridership on these corridors?
- Will streetcars help to catalyze redevelopment in these corridors?

# Overall Study Process

- 
- Developed **evaluation criteria**
  - **Field review** of candidate corridors
  - **Phase I and Phase II evaluations:** Screening of candidate corridors and selection of long-term network
  - **Phase III:** Refined long-term network, identified minimal operable segments and refined capital & operating plans
  - **Phase IV:** Identified funding opportunities and owner/operator arrangements
  - **Draft Final Report**

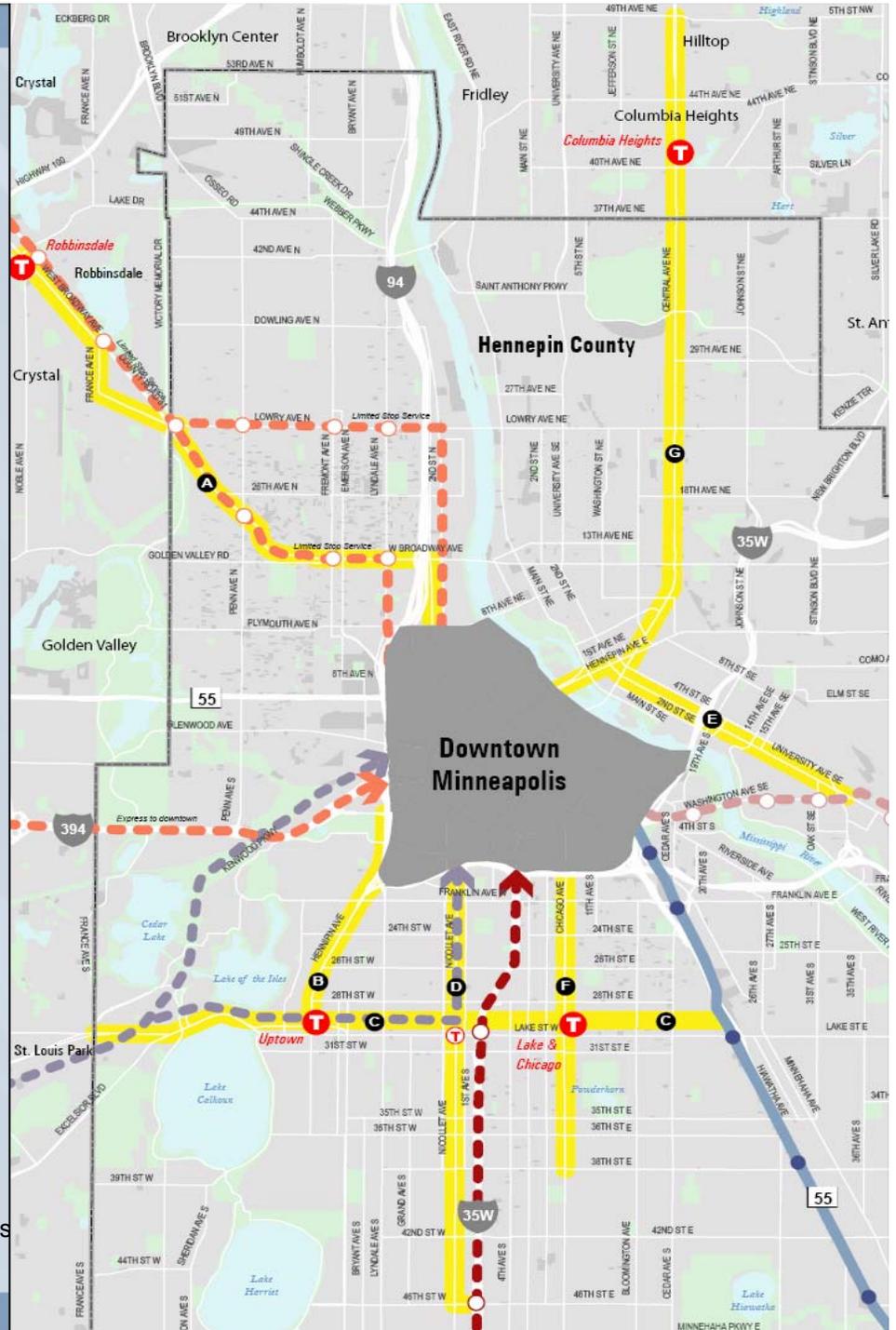
## This Fall...

- **Public meetings**
- **Final presentation to City Council**

# Long-Term Streetcar Network

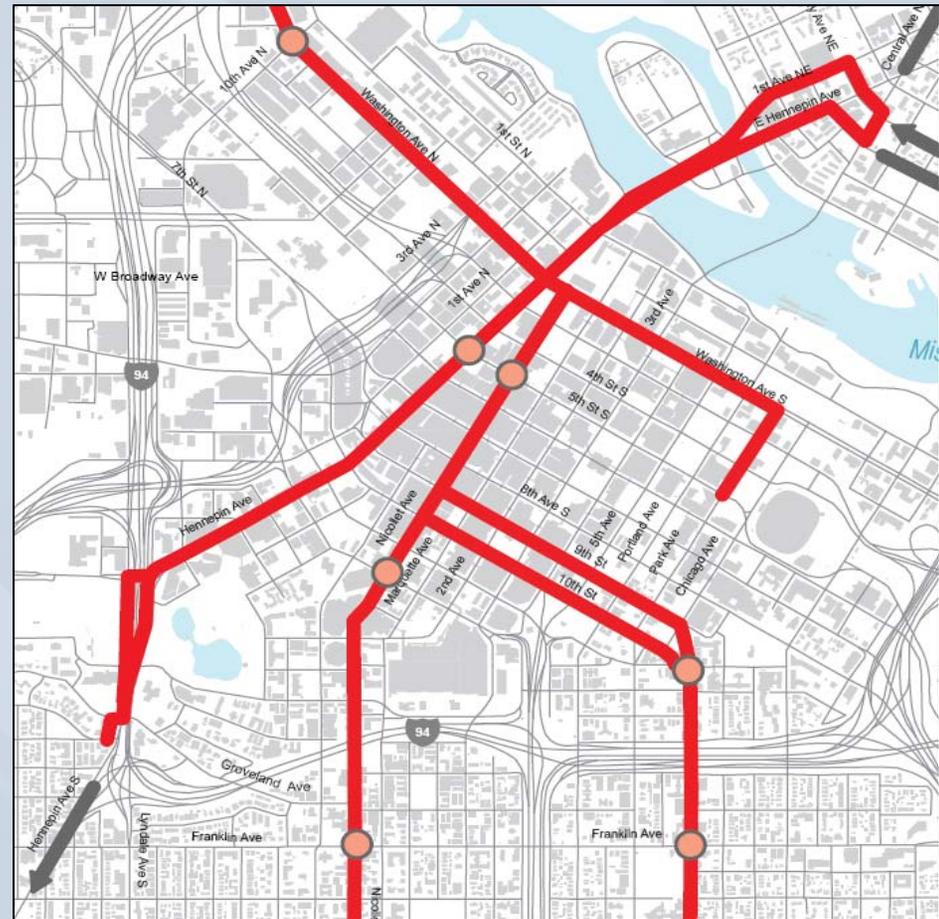
- **W Broadway**
  - To Robbinsdale TC
- **Central Ave NE**
  - To 49<sup>th</sup> Ave NE
- **Chicago Ave S**
  - To 38<sup>th</sup> St
- **University / 4<sup>th</sup>**
  - To Washington Ave at UM
- **Nicollet Ave S**
  - To 46<sup>th</sup> St
- **Hennepin Ave S**
  - To Lake (Uptown)
- **Midtown Greenway**
  - Between SW LRT and Hiawatha LRT

Meyer, Mohaddes Associates | Nelson\Nygaard Consulting Associates  
 Short Elliott Hendrickson Inc. | Richardson, Richter & Associates



# Minimal Operable Segments

- **W Broadway / Washington** – between 10<sup>th</sup> Ave N and Nicollet/5<sup>th</sup> **OR** Park/5<sup>th</sup> LRT station
- **Hennepin Ave** – between Groveland and East Hennepin/Central Ave NE **OR** 5<sup>th</sup> St. LRT station
- **Nicollet Ave** – between Washington/Nicollet and Franklin Ave **OR** Convention Center/Grant
- **Chicago Ave** – between 5<sup>th</sup>/Nicollet and Franklin Ave **OR** 9<sup>th</sup> /10<sup>th</sup> and Chicago



# Midtown Greenway

- Full Segment – shorter segment not recommended
- Timing dependent on SW LRT decision



# Costs per Corridor (planning level)

- Long-term System Corridors
  - Construction - \$52-120 million/corridor
  - Vehicles - \$18-36 million/corridor
  - Maintenance Facility - \$4+ million
- Minimal Operable Segments
  - Construction - \$10-35 million/segment
  - Vehicles - \$6-9 million/corridor
  - Maintenance Facility - \$4+ million

# Owner/Operator Arrangements

## ■ Three likely options in Minneapolis:

- City of Minneapolis
- Metro Transit
- New non-profit agency (JPA)

## ■ Recommendations

- City as owner and champion
- Metro Transit to operate directly or through a contract

## ■ Experience in other cities

- **Seattle**
  - ROW owned by City
  - Operated by King County Metro
  - Mayor's office crucial
- **Portland**
  - Owned by City of Portland
  - Operated by Portland Streetcar, Inc. (503c3 non-profit)
  - Contracts back to TriMet to operate and City to oversee/manage
- **Memphis**
  - ROW owned by City
  - Operated by MATA transit provider)
  - Primarily a responsibility of MATA, with assistance from the City

# Funding Options

- **Federal**
  - Project Earmarks/Federal Demonstration Projects
  - FTA formula funds (New Starts, Small Starts)
  - Housing and Urban Development (HUD) Grants
  - Congestion Mitigation and Air Quality (CMAQ)
  
- **State/Local**
  - Taxes, Fees (sales tax, hotel tax, parking impact fee, etc.)
  - Benefit Districts (LID, TIF, etc.)
  - Parking Revenues (Meters, Ramps)
  - Streetcar Revenues (fares, advertising, etc.)
  
- **Finance group to explore this issue further**

# Conclusions - Streetcars

- Ridership is likely to increase with streetcars.
- Streetcars do provide a catalyst for redevelopment.
- It is physically feasible to construct streetcars in the recommended corridors.
- It is feasible to operate streetcars in the recommended long-range corridors but buses and streetcars will overlap on some minimal operating segments.
- It is not financially feasible to build and operate streetcars unless new funding sources can be established – a public-private partnership will be required for successful implementation.

# Immediate Next Steps - Streetcars

- Gauge community and developer support
- Develop street design guidelines for streetcar implementation
- Develop a financing strategy
- Further identify site for a maintenance facility
- Determine owner/operator arrangement
- Continue to evaluate impact on underlying bus network (with Metro Transit)

# Discussion Group Topics

- Objectives of Citywide Action Plan and Recommended Actions
- Criteria for Setting Priorities for Streetcar Implementation

## Following Public Meetings

- Summary of Public Comments Prepared
- Revisions by PSC Based on Public Comments
- Presentation to City Council for Approval

# Questions?

For more information:

[www.ci.minneapolis.mn.us/public-works/trans-plan](http://www.ci.minneapolis.mn.us/public-works/trans-plan)

**Charleen Zimmer**

[Charleen.zimmer@ci.minneapolis.mn.us](mailto:Charleen.zimmer@ci.minneapolis.mn.us)

**612-673-3166**