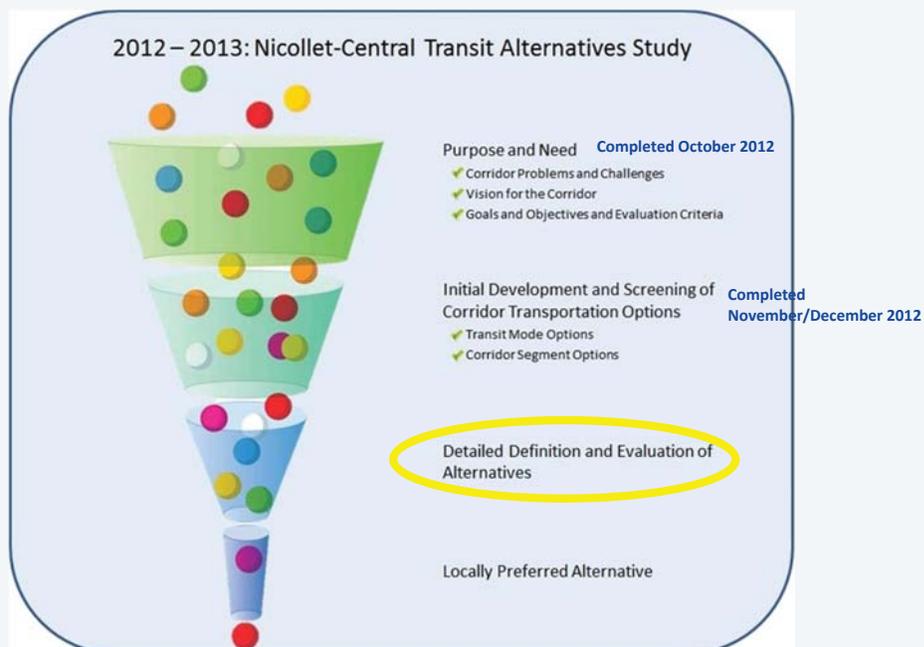


TCAC Meeting #05

January 22, 2013

Project Phases/Schedule

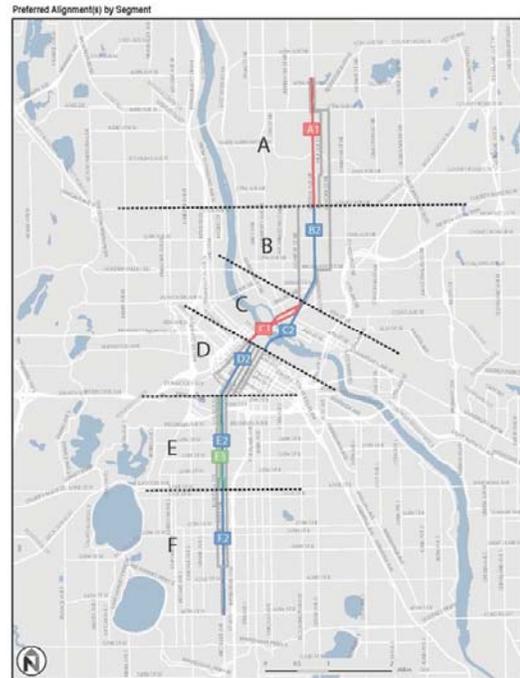


Results of Initial Screening

- Recommended Transit Modes
 - Local Bus (No-Build)
 - Enhanced Bus
 - Modern Streetcar
- Recommended Alignments
 - Central Avenue, Nicollet Mall and Nicollet Avenue
 - Two River crossing options
 - Two options at Lake Street



Nicollet-Central Transit Alternative



Meeting Purpose and Expectations

- Define Alternatives for Detailed Evaluation (Next Phase)
 - Assumptions to estimate potential costs and ridership
 - Elements defined at December 2012 meeting
 - Major cost items
 - Typical section concepts based on street design considerations and priorities from December 2012 meeting
 - Begin discussion of potential streetcar starter line
 - Review information to present at February 2013 open house meetings



Nicollet-Central Transit Alternatives | January 22, 2013

3

Elements of Defining Alternatives

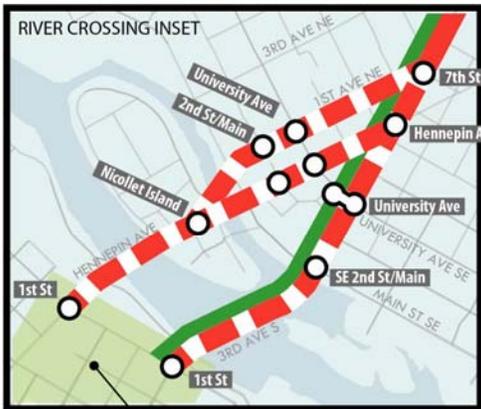
- Stop locations and service and operations
- Runningway
 - Combination of mixed operations and Nicollet Mall transit lanes
 - *Maintain existing curb for majority of alignment*
- Vehicles
 - Looking at 40' and 60' hybrid articulated buses and streetcars like Portland's
- Stops and amenities
 - Type of boarding (near-level vs. level), shelter design, integrated stops?
- Technology
 - Transit Signal Priority, real-time signs
- Fare collection
 - Proof of payment with Smart card option



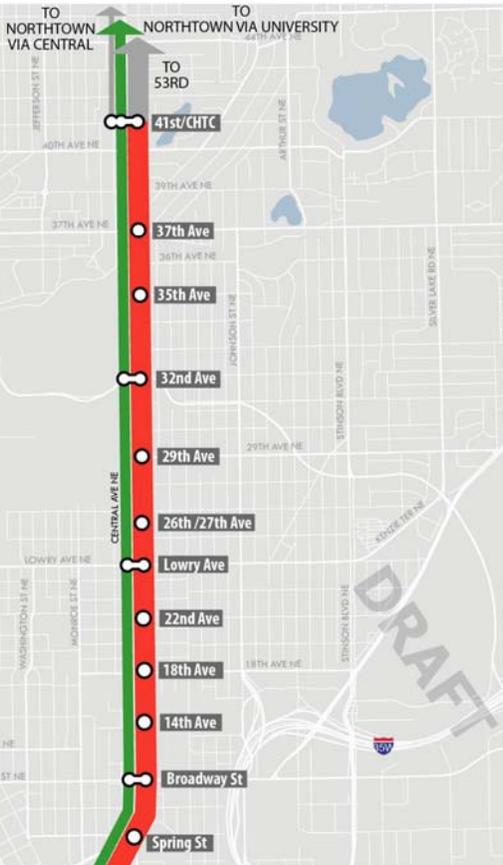
Summary Description of Alternatives

| Alternative | No-Build | Enhanced Bus | Modern Streetcar |
|--|--|---|--|
| Stop Spacing | One-eighth mile | One-quarter mile | One-quarter mile |
| Frequency (in minutes) | Similar to today: 7.5-12 | 7.5 peak/10 off-peak | 7.5 peak/10 off-peak |
| Proposed Changes to Bus Network | None | Local bus replaced with limited-stop bus service between Columbia Heights Transit Center and 46 th Street | Local bus replaced with limited-stop bus service between Columbia Heights Transit Center and 46 th Street |
| Runningway (All mixed traffic operations) | Same as today: Right lane (curb side) | Right lane (curb side) | Central Ave: Left lane or right lane Hennepin/First Ave: Left lane Nicollet: Right lane |
| Vehicle | 40' long bus 8' wide | 60' long hybrid articulated bus 8' wide | 67' long streetcar 8' wide |
| Stops and Amenities | Same as today | Near-level/level boarding Curb extension Branding Potential to integrate stops with local and limited-stop buses | Near-level/level boarding Curb extension Branding TBD: Integrate stops with local and limited-stop buses |
| Technology | Same as today: TSP Along Central Ave | TSP along 9.2-mile Study corridor Real-time signs | TSP along 9.2-mile Study corridor Real-time signs |
| Fare Collection | Pay on bus Single-door boarding | Off-board with Smart card option Multiple-door boarding/deboarding | Off-board with Smart card option Multiple-door boarding/deboarding |





Routing between river crossing and Nicollet Mall TBD



Routing between river crossing and Nicollet Mall TBD

SEE RIVER CROSSING INSET

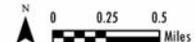


Routing between 28th St. and Lake St. TBD

Enhanced Bus Alternative Nicollet Central Transit Alternatives

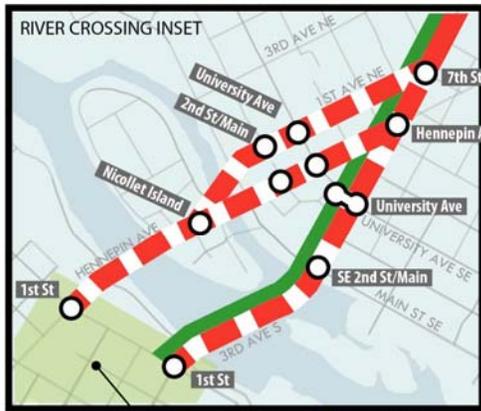
| LEGEND | | Frequencies Peak/Off Peak (in minutes) | |
|--------|-------------------------|--|--------|
| | Enhanced Bus | Central | 7.5/10 |
| | Limited Bus* | Nicollet | 15/15 |
| | Local Bus | | 30/30 |
| | Grand Avenue Circulator | | 30/30 |
| | Alignment Options | | |
| | Other Transitways | | |
| | Other Bus Routes | | |

Data Source: MetroGIS



* Limited bus stops approximately every half-mile where enhanced bus doesn't operate.



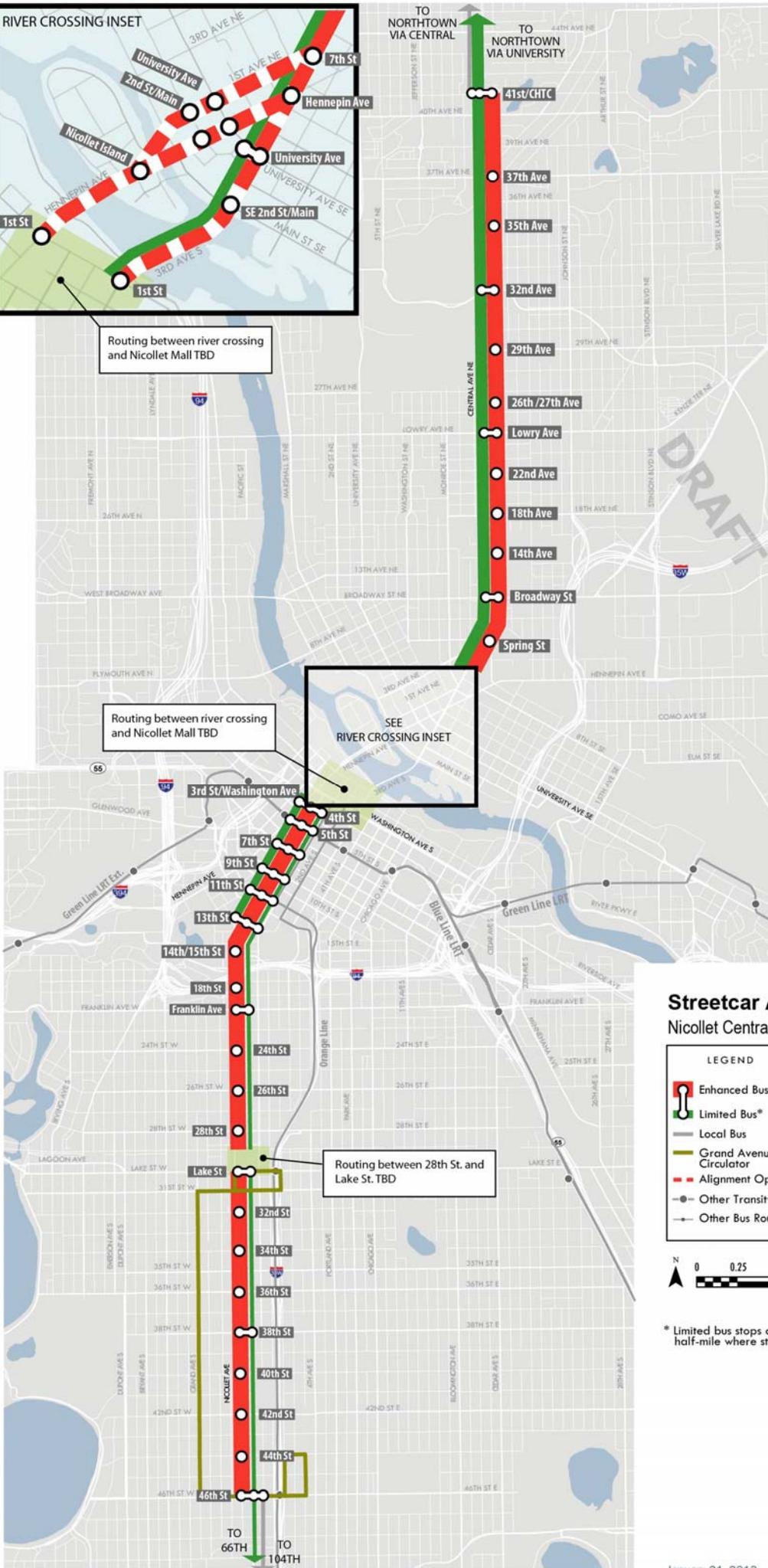


Routing between river crossing and Nicollet Mall TBD

SEE RIVER CROSSING INSET

Routing between river crossing and Nicollet Mall TBD

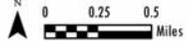
Routing between 28th St. and Lake St. TBD



Streetcar Alternative Nicollet Central Transit Alternatives

| LEGEND | | Frequencies Peak/Off Peak (in minutes) | |
|--------|-------------------------|--|--------|
| | Enhanced Bus | Central | 7.5/10 |
| | Limited Bus* | Nicollet | 10/15 |
| | Local Bus | | 30/30 |
| | Grand Avenue Circulator | | 30/30 |
| | Alignment Options | | |
| | Other Transitways | | |
| | Other Bus Routes | | |

Data Source: MetroGIS



* Limited bus stops approximately every half-mile where streetcar doesn't operate.



Draft Typical Sections

- Right lane running (curb side) apply to both Enhanced Bus and Streetcar
- Left lane running apply to Streetcar (doors on both sides)
- Incorporate comments from December 2012 workshop on priorities



Summary of Comments from December 2012 TCAC Meeting

- Discussed to determine how to “reprogram” the street based on various uses:
 - *Maintain existing curb for majority of alignment*
 - Traffic, bike, pedestrian, transit stop, parking
- Common themes
 - Level boarding preferred over near-level boarding
 - Nicollet/28th – Near Northeast
 - Enhance pedestrian experience
 - Focus on bikes
 - Minimize focus on auto trips
 - Minimize construction disruption
 - Leverage transit infrastructure for other features/amenities



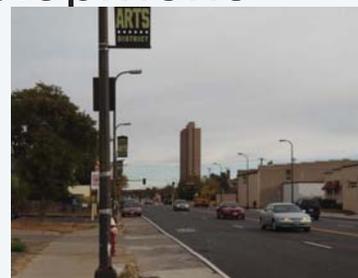
Summary of Comments from December 2012 TCAC Meeting

- Central Avenue
 - Scale down to improve pedestrian and bike experience and attract business patronage
 - Strengthen neighborhood identity
- Downtown/Loring Park
 - Don't pit bikes against parking
- Nicollet Avenue
 - Preserve access to businesses (center left-turn lane)
 - Generally, businesses can take care of their own [parking](#)



Segment Still under Development

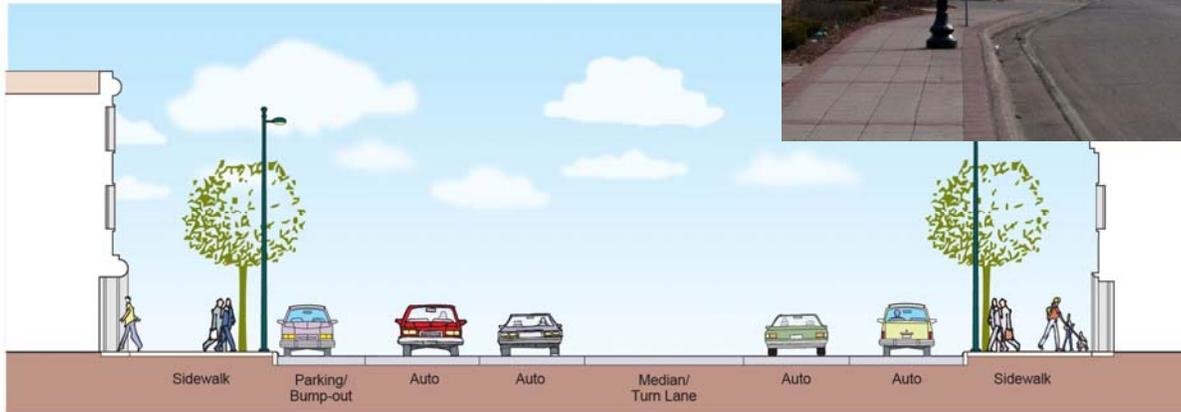
- Central Avenue between Main St to 18th Ave NE
- Section varies throughout this segment
- Based on available information, challenging to accommodate bike, traffic and parking without further discussions with agencies
 - Would like to have more information at open house
 - Typically done during advanced concept design, preliminary engineering



Central Avenue

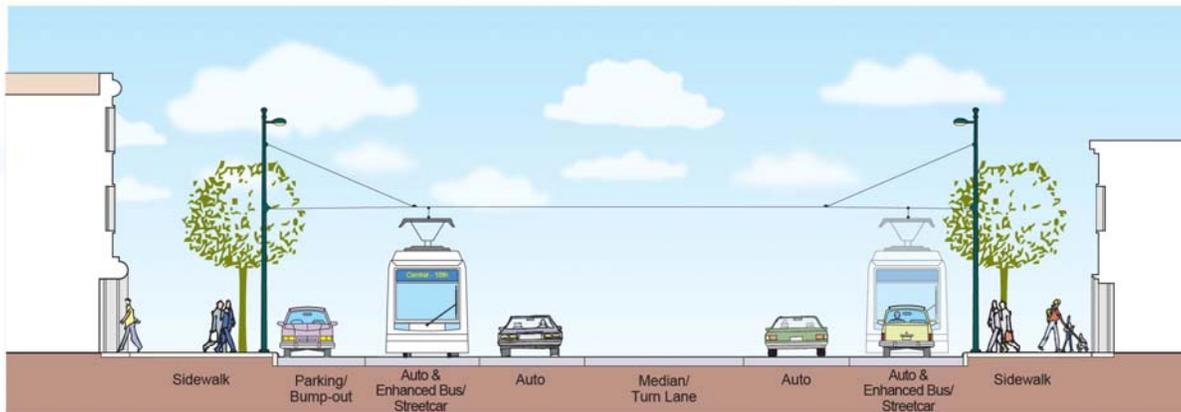
37th Ave NE to 41st Ave NE

EXISTING SECTION

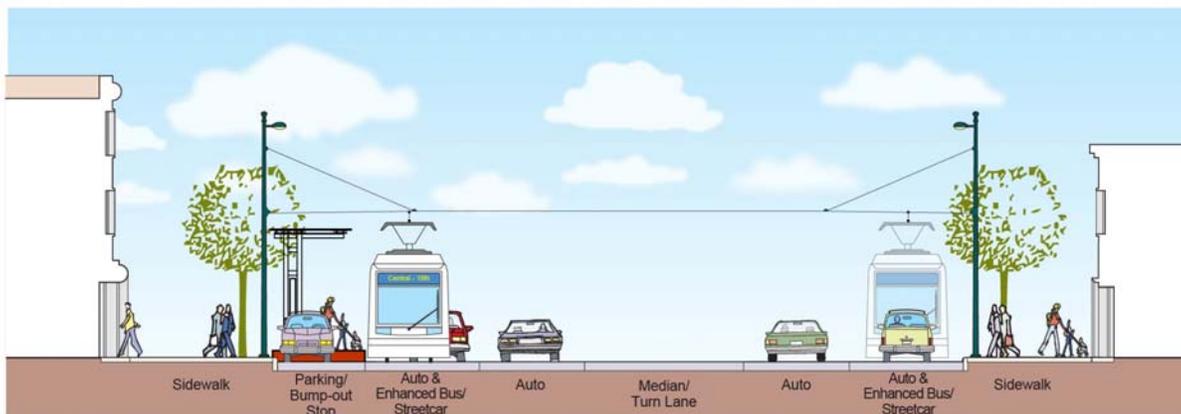


Existing ROW width: 90'
(Need to confirm existing sidewalk widths)

RIGHT-LANE RUNNING ENHANCED BUS OR STREETCAR



RIGHT-LANE RUNNING ENHANCED BUS OR STREETCAR AT STOP

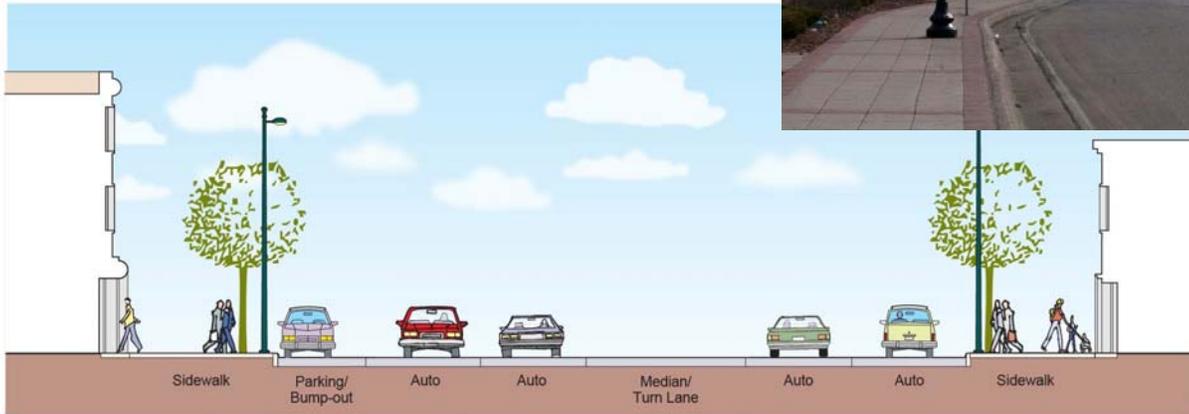


Central Avenue

37th Ave NE to 41st Ave NE



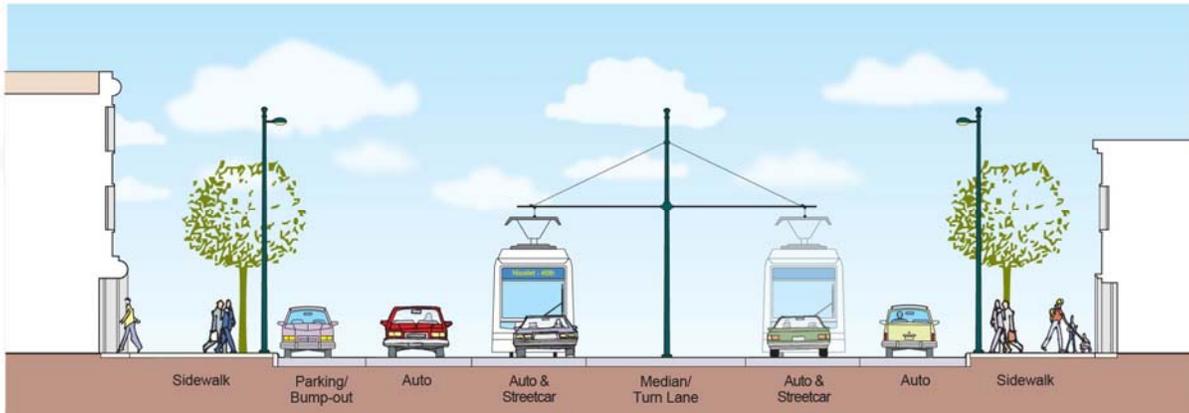
EXISTING SECTION



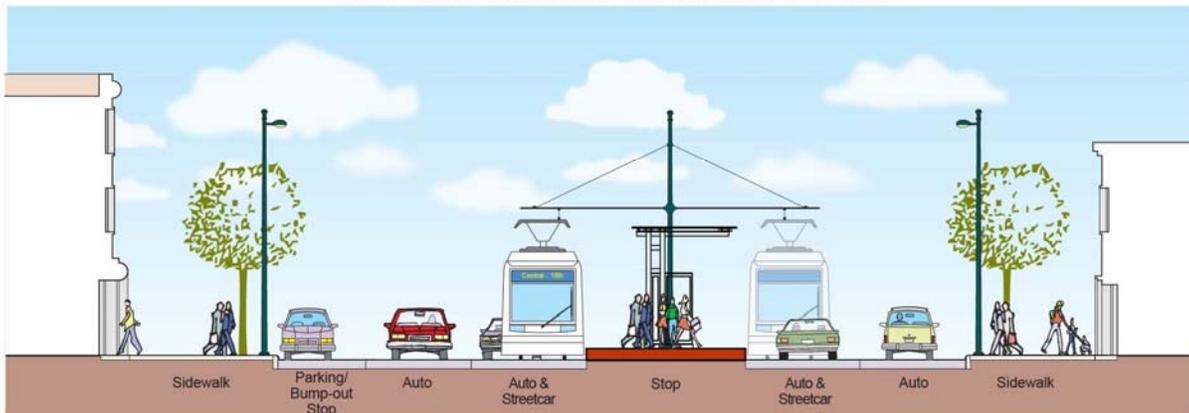
Existing ROW width: 90'

Note:
Existing
Sidewalk
Width TBD

LEFT-LANE RUNNING STREETCAR



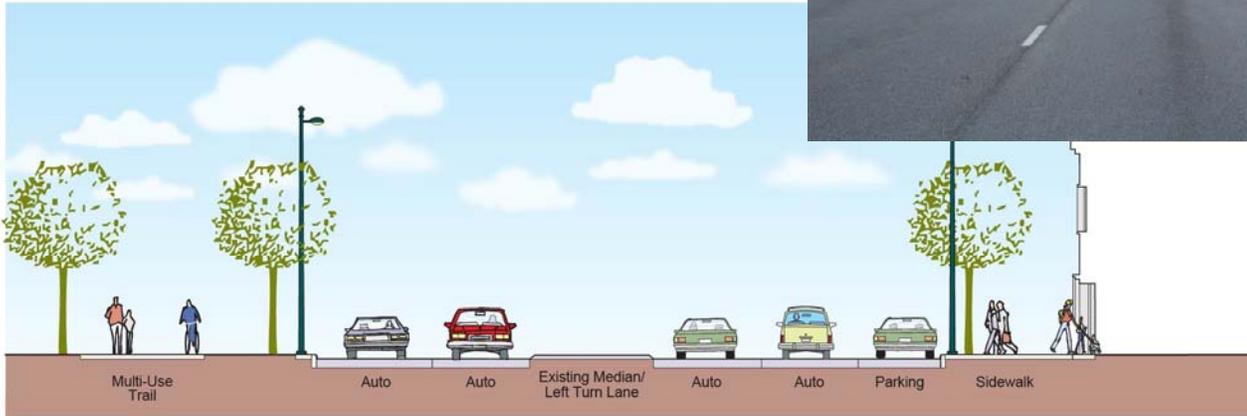
LEFT-LANE RUNNING STREETCAR AT STOP



Central Avenue

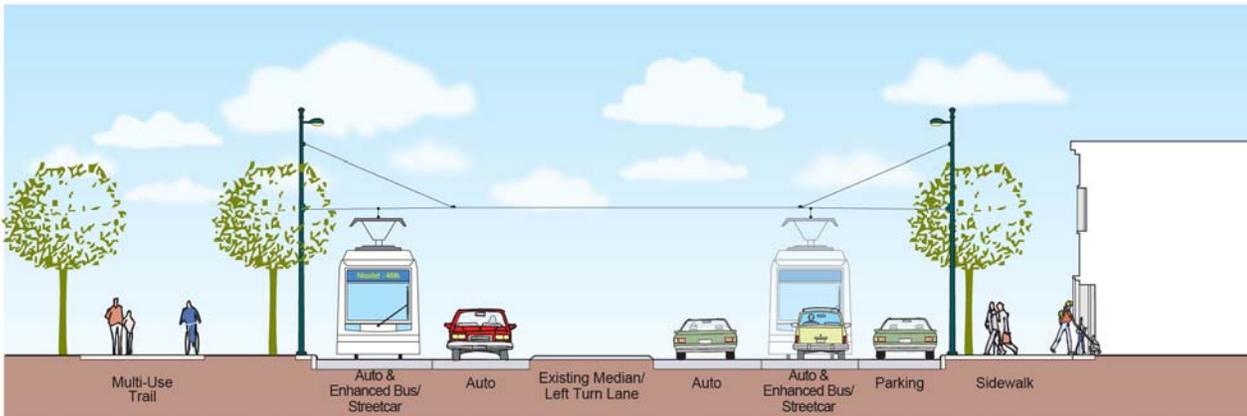
27th Ave NE to 37th Ave NE

EXISTING SECTION

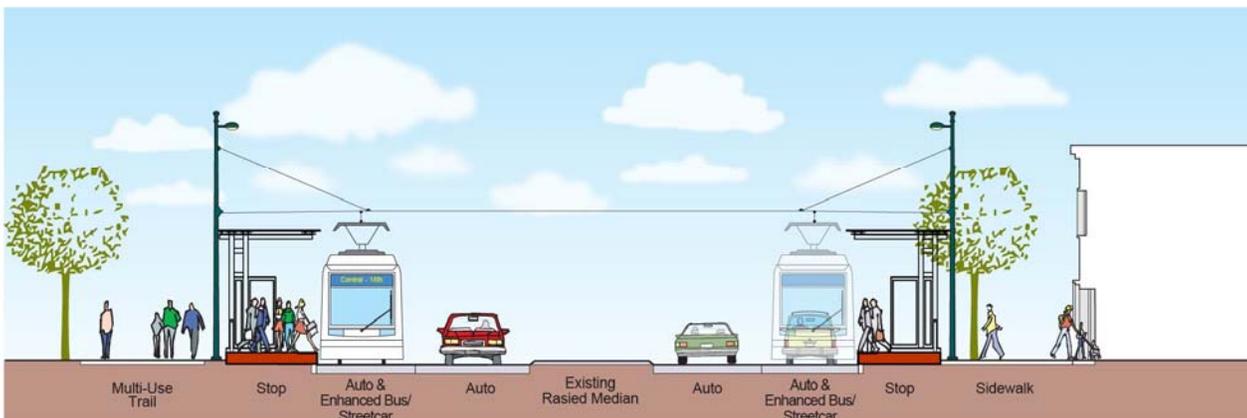


Existing ROW width: 100'

RIGHT-LANE RUNNING ENHANCED BUS OR STREETCAR



RIGHT-LANE RUNNING ENHANCED BUS OR STREETCAR AT STOP

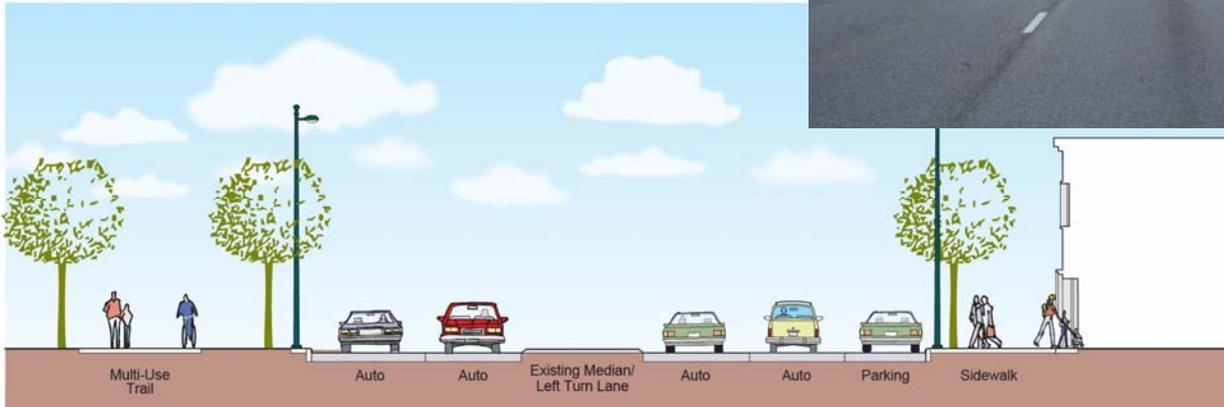


Central Avenue

27th Ave NE to 37th Ave NE

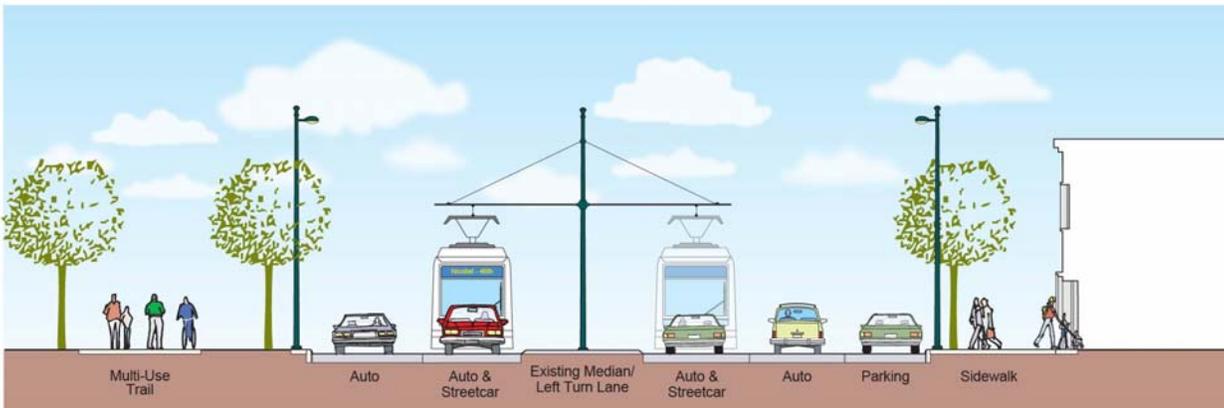


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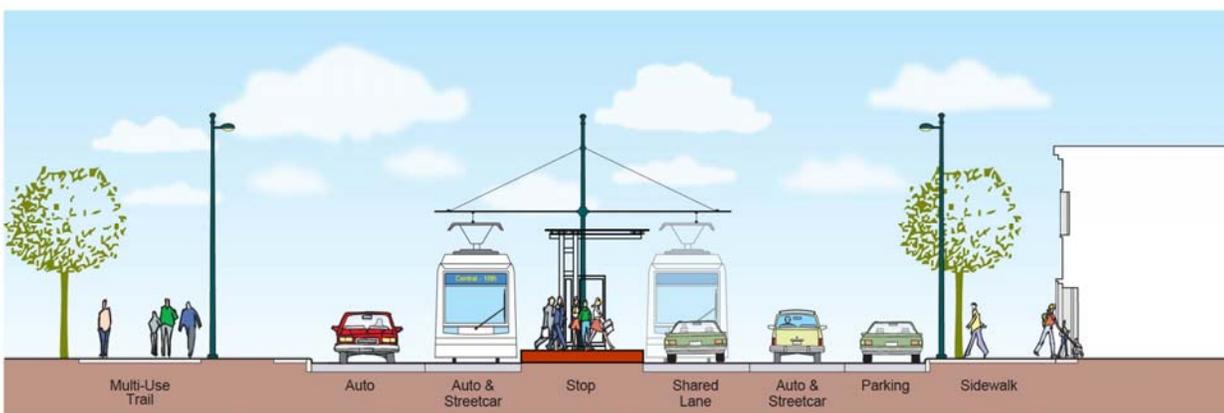


Existing ROW width: 100'

LEFT-LANE RUNNING STREETCAR



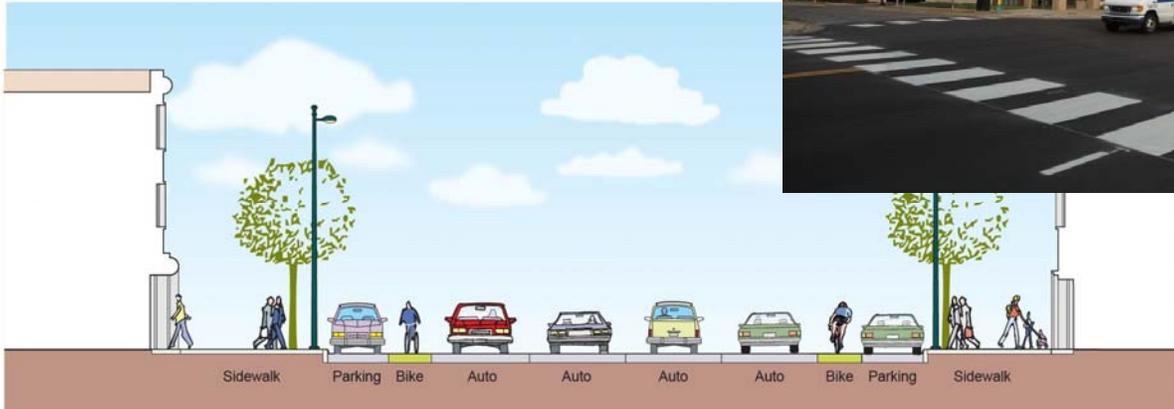
LEFT-LANE RUNNING STREETCAR AT STOP



Central Avenue

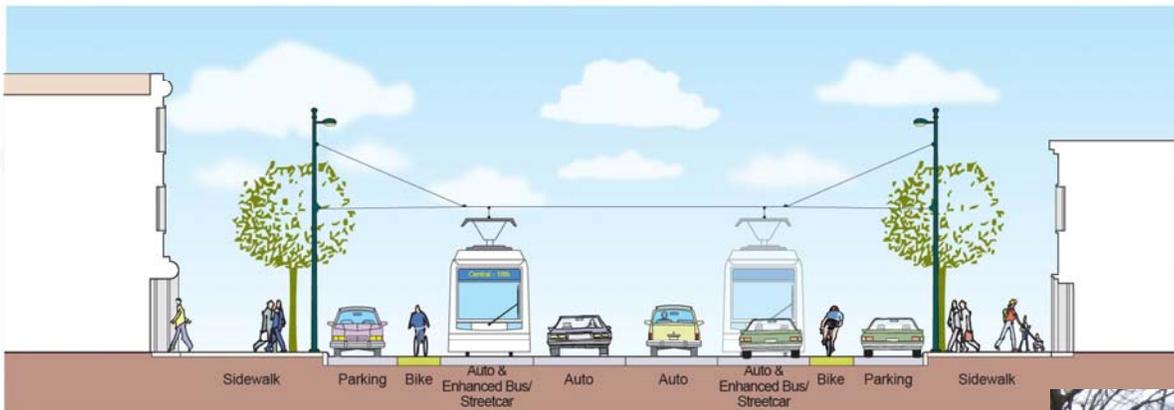
18th Ave NE to 27th Ave NE

EXISTING SECTION

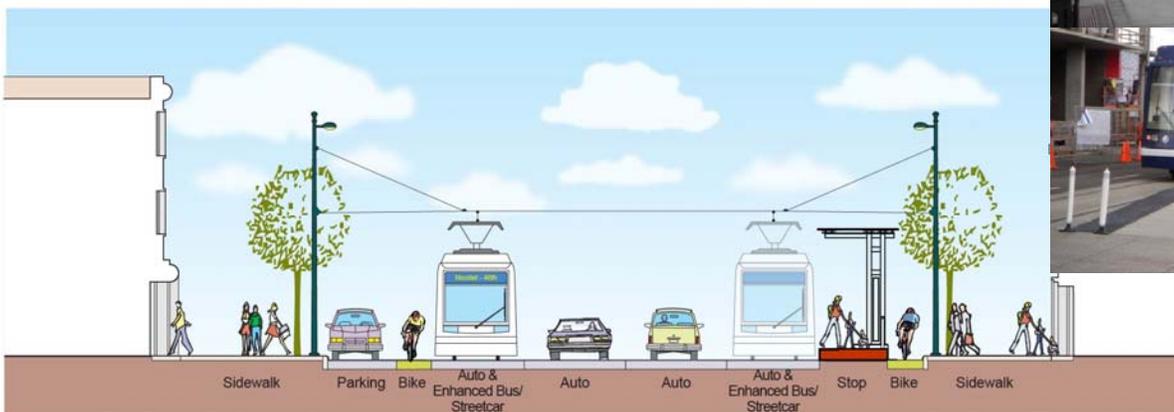


Existing ROW width: 100'

RIGHT-LANE RUNNING ENHANCED BUS OR STREETCAR



RIGHT-LANE RUNNING ENHANCED BUS OR STREETCAR AT STOP

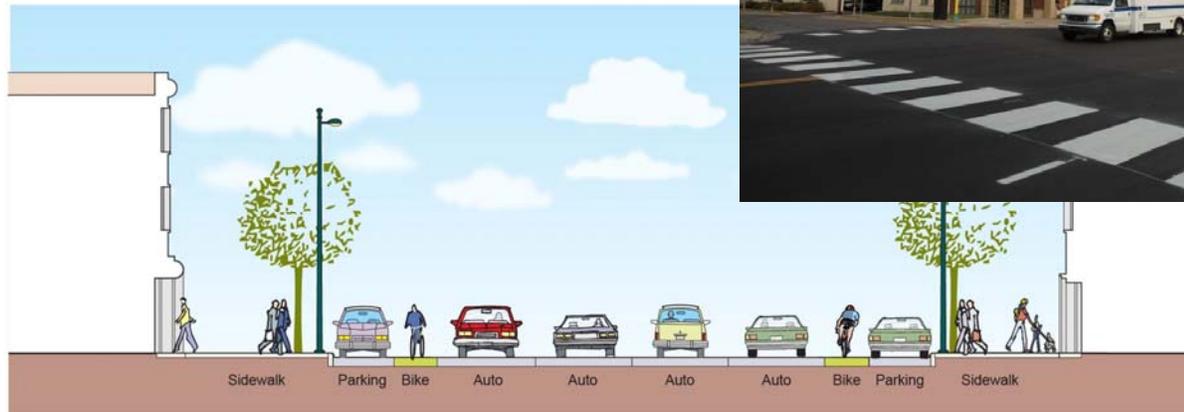


Central Avenue

18th Ave NE to 27th Ave NE

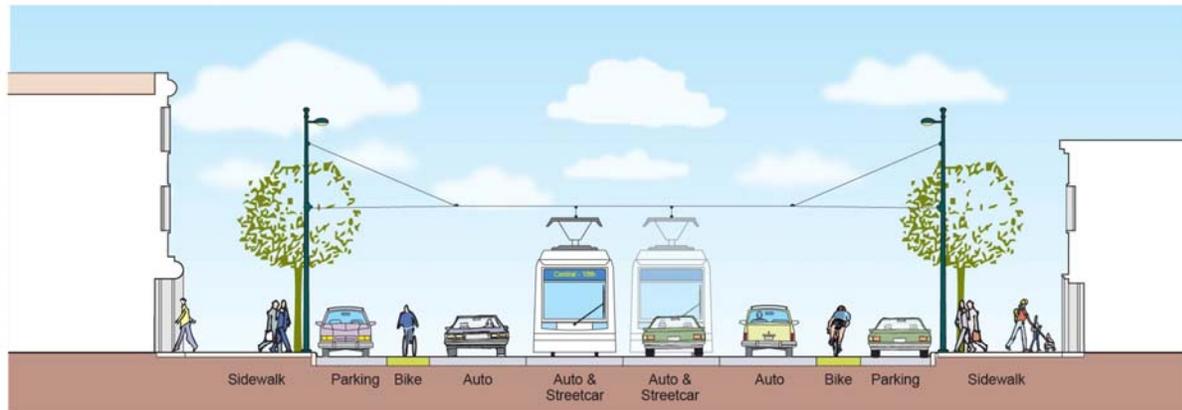


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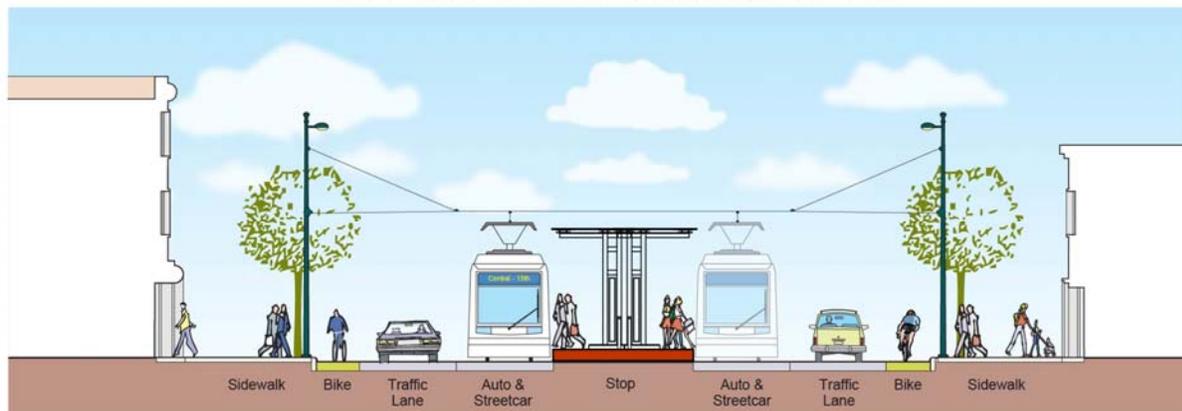


Existing ROW width: 100'

LEFT-LANE RUNNING STREETCAR



LEFT-LANE RUNNING STREETCAR AT STOP

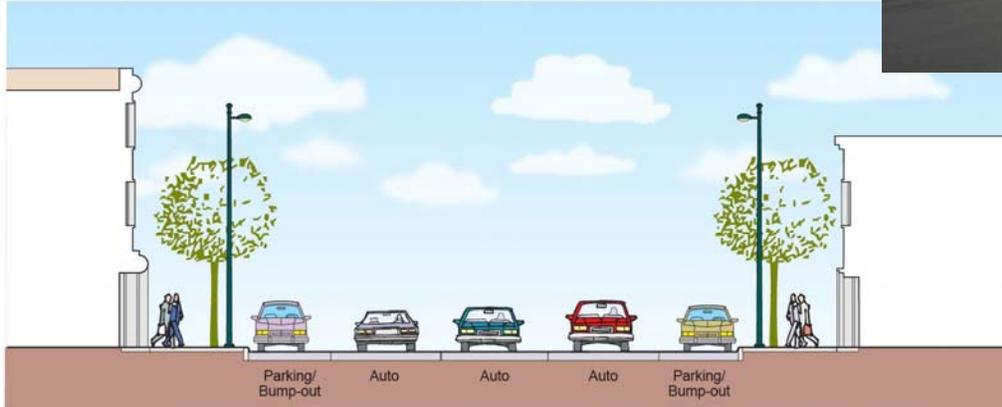


Hennepin/First Avenues

Main St SE to Central Ave



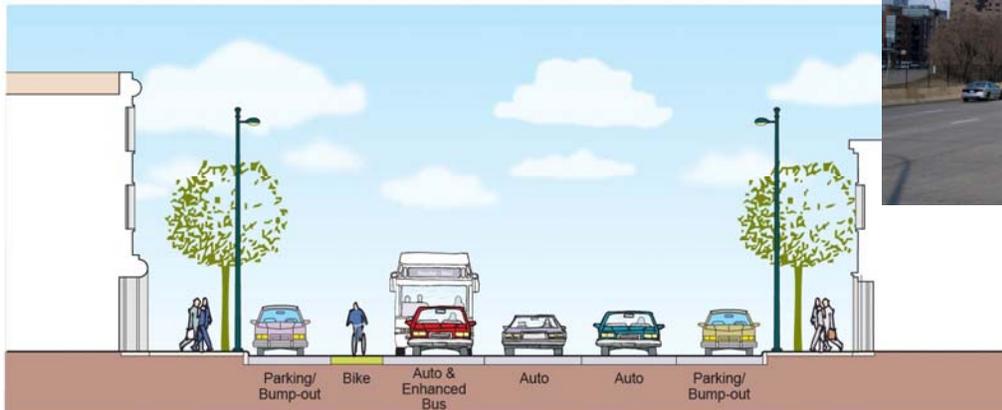
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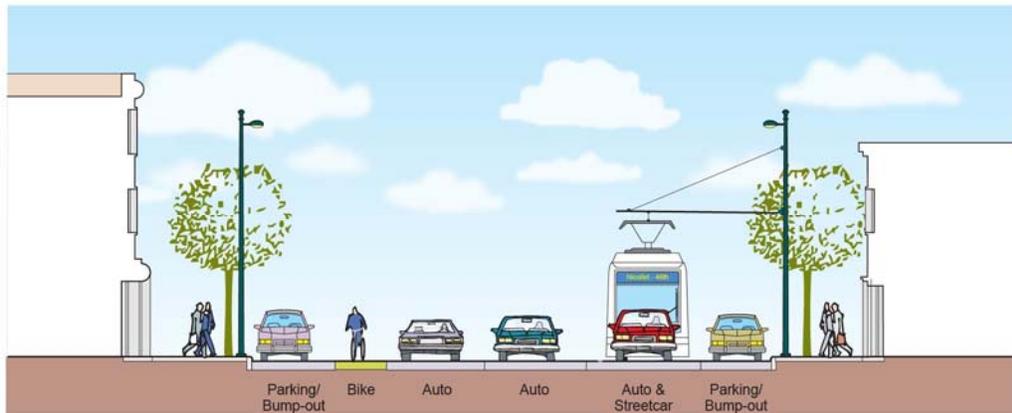
Existing ROW width: 80'

Note:
Planned On-Street
Bicycle Facility Plan

RIGHT-LANE RUNNING ENHANCED BUS



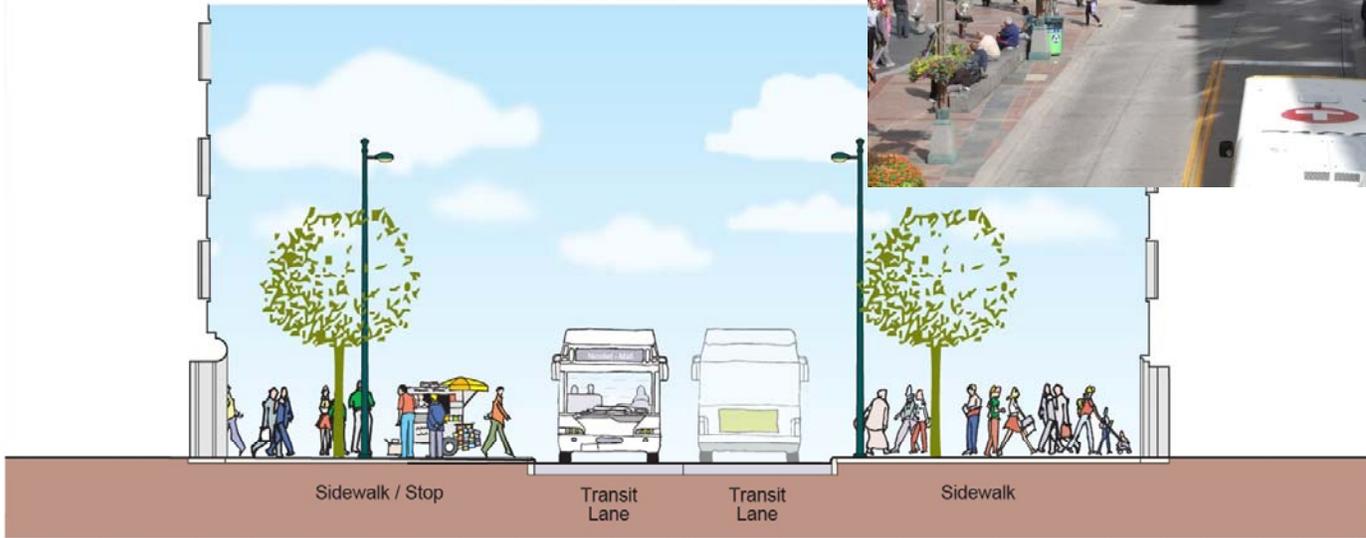
LEFT-LANE RUNNING



Nicollet Mall

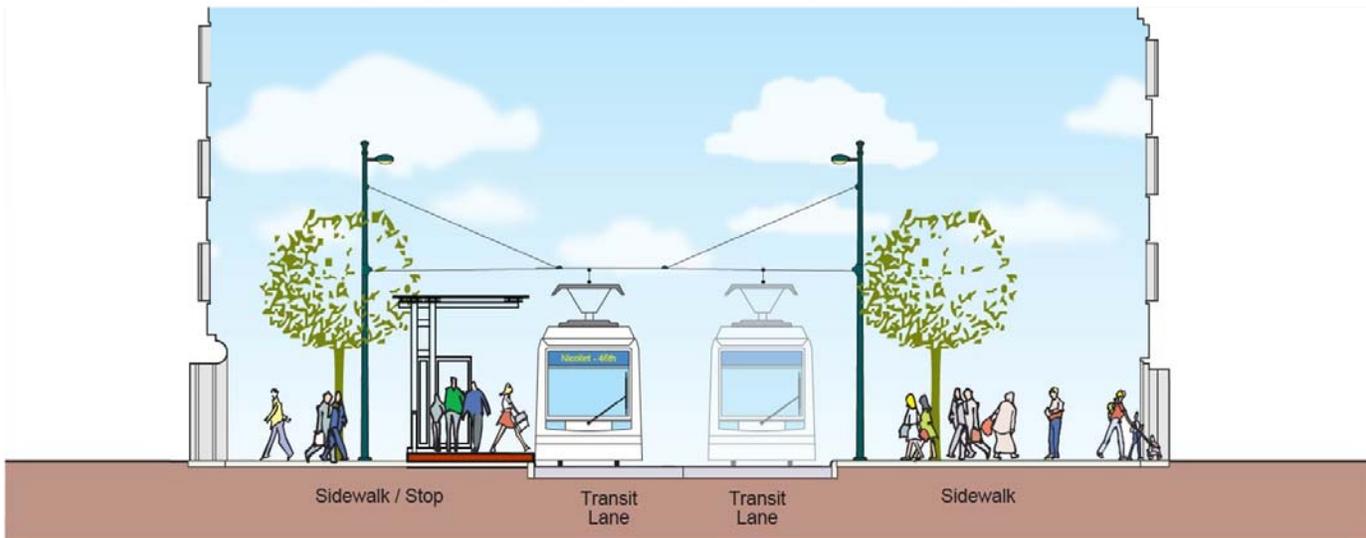


EXISTING SECTION



Existing ROW width: 80'

ENHANCED BUS OR STREETCAR AT STOP

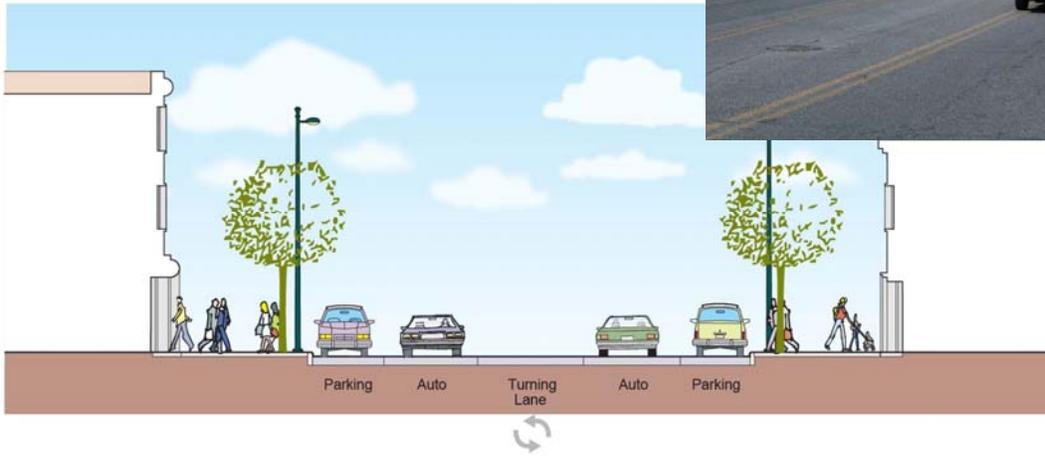


Nicollet Ave

Franklin to 28th St

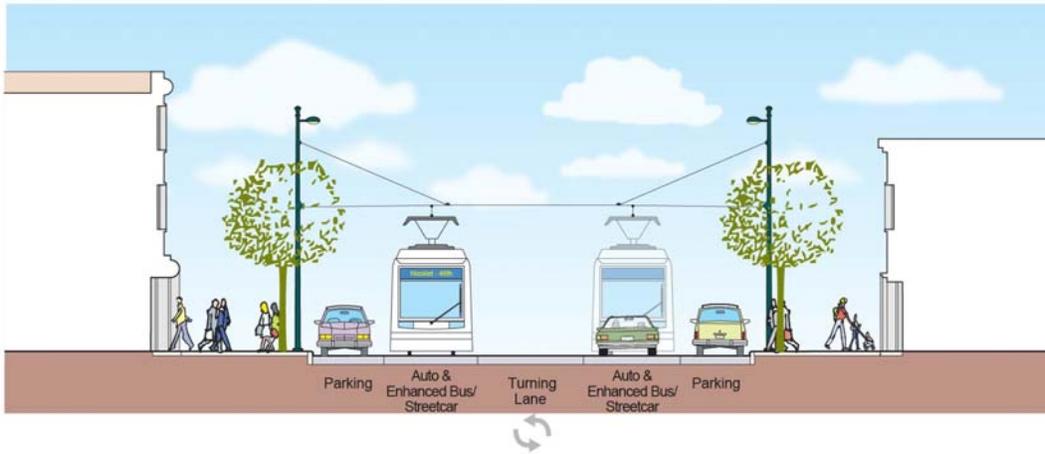


EXISTING SECTION

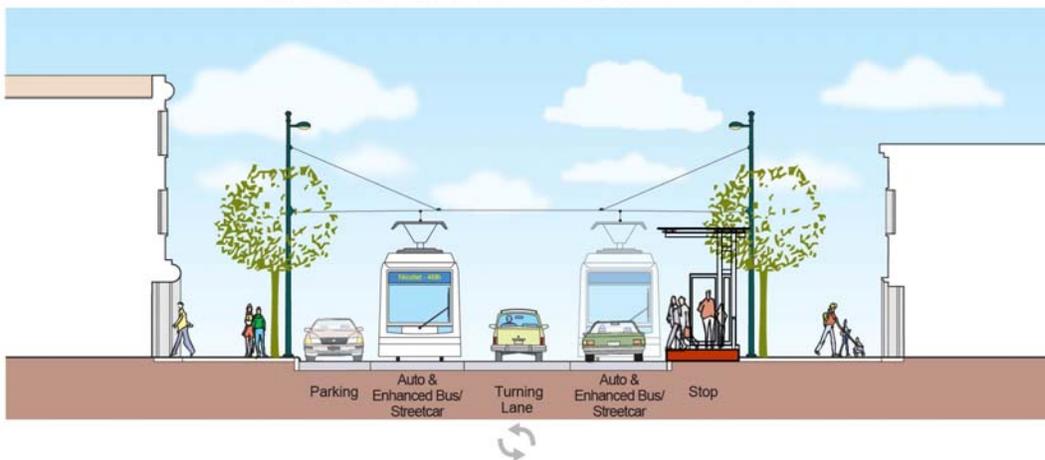


Existing ROW width: 80'

ENHANCED BUS OR STREETCAR



ENHANCED BUS OR STREETCAR AT STOP

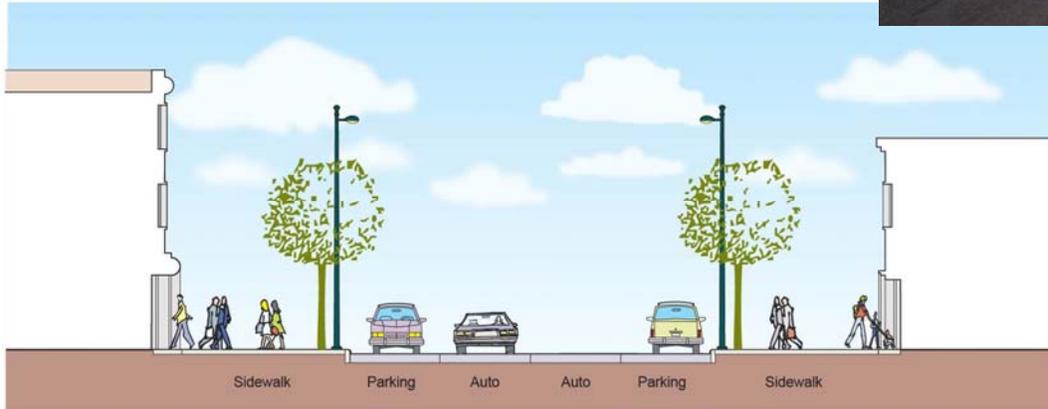


Nicollet Ave

Lake to 40th St

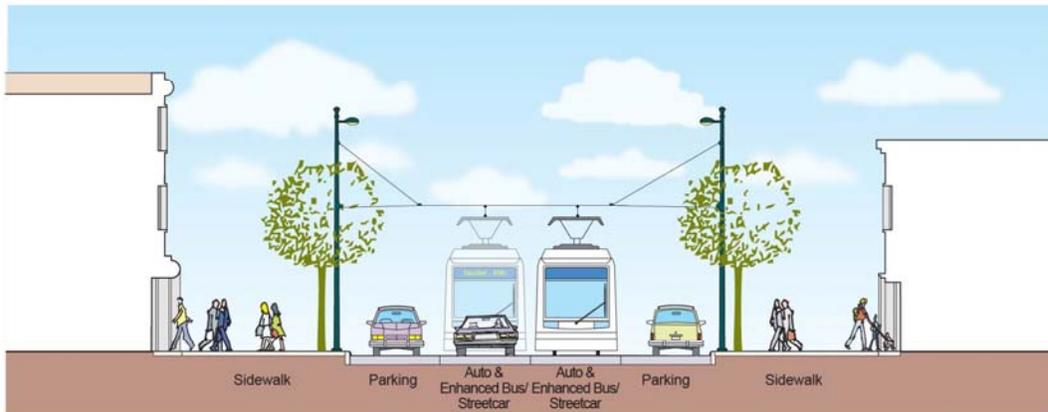


SECTION AFTER 2012/2013 RECONSTRUCTION

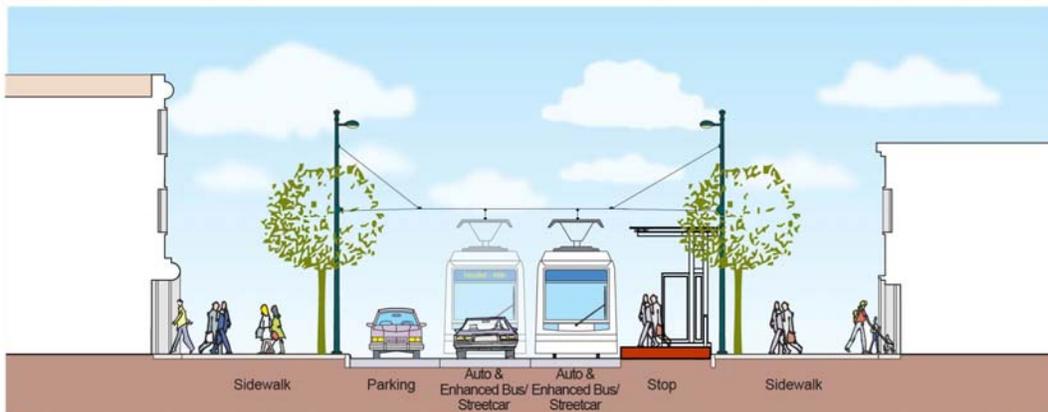


Existing ROW width: 80'

ENHANCED BUS OR STREETCAR



ENHANCED BUS OR STREETCAR AT STOP

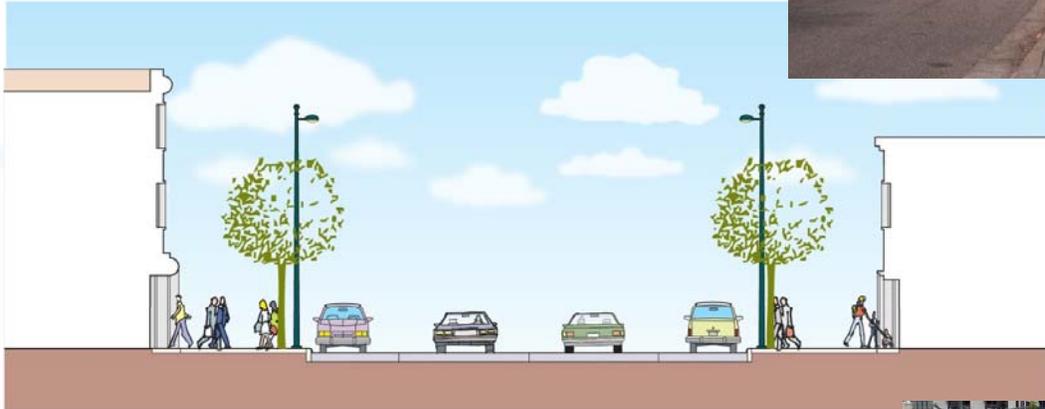


Nicollet Ave

South of 40th

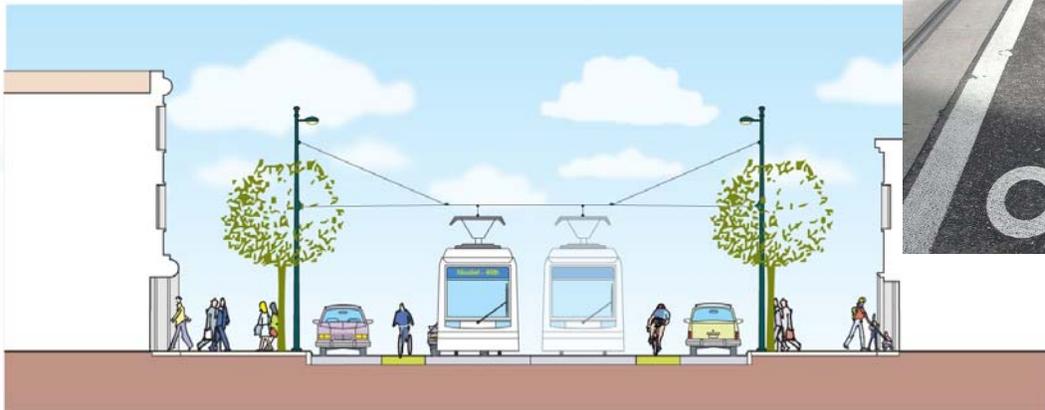


EXISTING SECTION

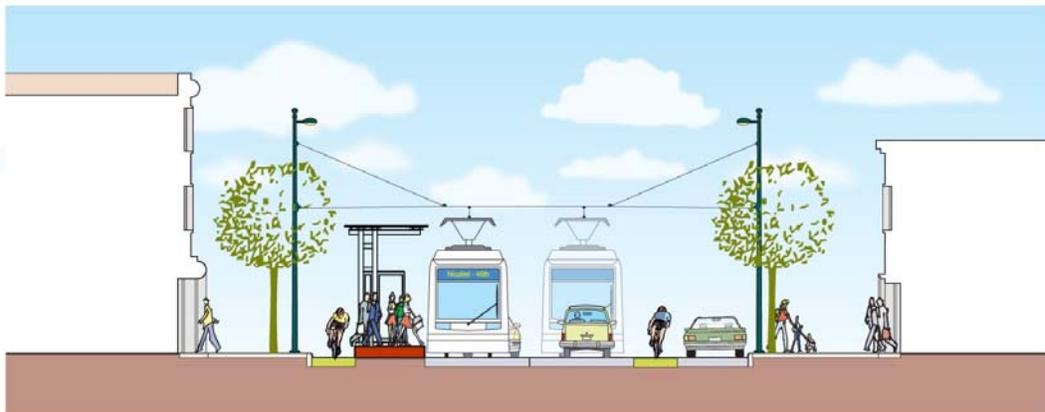


Existing ROW width: 80'

ENHANCED BUS OR STREETCAR WITH PARKING



ENHANCED BUS OR STREETCAR WITH PARKING AT STOP

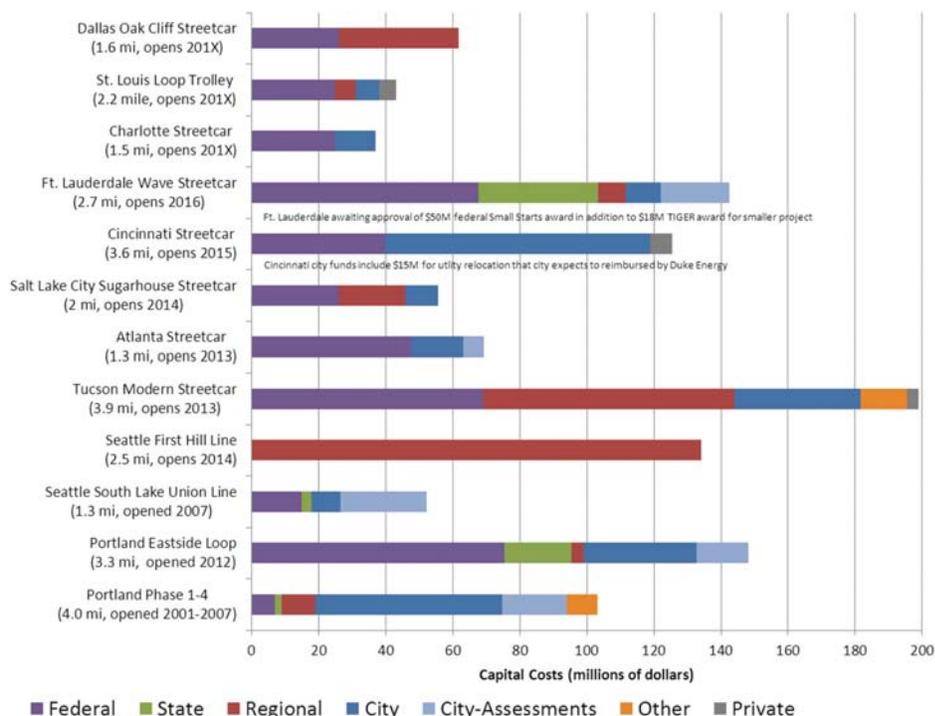


Preliminary Streetcar Starter Line

- Why are we doing this now?
 - Most streetcar projects in the nation are 1 to 4 miles long
 - Define project eligible for Small Starts (max \$250 million)
 - During development of conceptual service plans, it was determined that modifications to the background bus network are different between the 9.2-mile streetcar alternative from a starter line
 - Important to model starter line for ridership and identify potential differences in results



Streetcar Capital Funding - Selected Peer Cities



Preliminary Streetcar Starter Line

- In detailed evaluation phase, we will analyze three Build alternatives
 - Enhanced Bus (9.2 miles)
 - Streetcar (9.2 miles)
 - Starter Streetcar (Lake Street to Central/First Avenues)
- Ridership results will inform most efficient starter line, and preliminary starter line end points may be refined
- Proposed termini based on:
 - Purpose and Need and Goals and Objectives
 - Serve highest employment and population density in the Corridor
 - Public support for priority segments
 - Analysis of Fall 2012 boarding and alighting data from Metro Transit

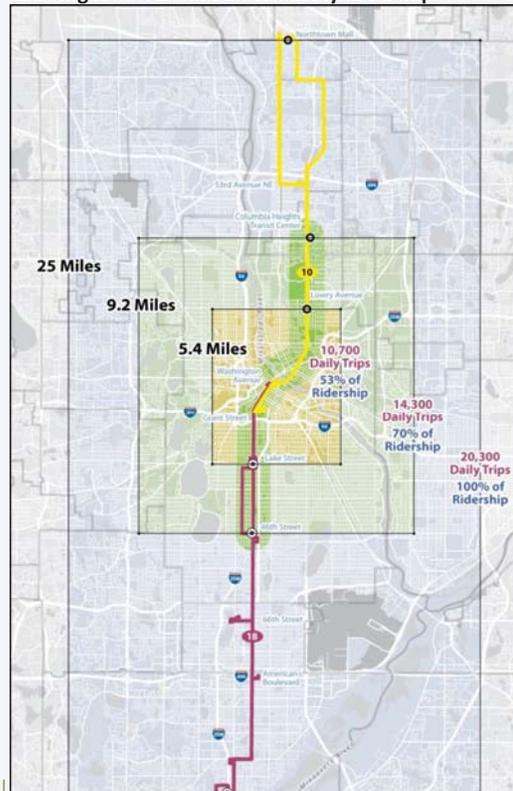


Travel Demand for Short Trips

- 20,300 weekday passenger trips
- 70% (14,300 trips) begin and end entirely in 9.2-mile study corridor
- 53% (10,700 trips) begin and end entirely in 5.4-mile segment between Lake Street and Lowry Avenue
- Route 18 ridership between Lake Street and downtown: 6,000

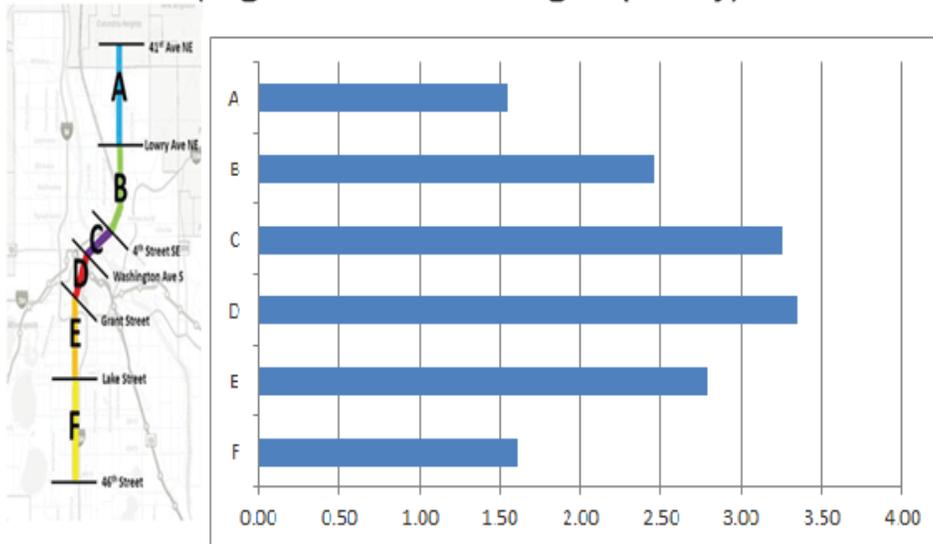


Existing Route 10 and 18 Weekday Ridership



Source: Metro Transit, September 2011 APC and farebox data

What are the highest priority segments for implementing transit improvements in the short term?
(Higher scores mean higher priority)



Average Score

Nicollet-Central Transit Alternatives | January 22, 2013

Preliminary Streetcar Starter Line

- Summary of Service Plan Features
 - Central Avenue: Same as No-Build
 - Downtown: Highest amount of service of all alternatives
 - Nicollet Avenue: More limited-stop bus service than 9.2-mile Streetcar

February 2013 Open House

- February 12th-14th
- Open house with formal presentation
- Topics
 - Purpose and Need and Goals and Objectives
 - Summary of process and results of initial screening
 - Preliminary definition of alternatives
 - What is Enhanced Bus?
 - What is Streetcar?



Upcoming Meetings/Next Steps

- Week of February 18th – T/CAC
- Week of February 25th – PAC

