Streetcar Context in the Twin Cities Region

Transportation Committee - May 13, 2013

METROPOLITAN COUNCIL

Modern Streetcar vs. Light Rail

Modern Streetcar

- Mixed-traffic lanes with cars
- Single car trains (~70’ long)
- ¼ mile stop spacing
- Short /circulator trips
- $30-$60 million/mile

Light Rail

- Tracks separated from cars
- 2-3 car trains (each ~90’ long)
- ½ to 1 mile stop spacing
- Longer trip distances
- $80-$125 million/mile

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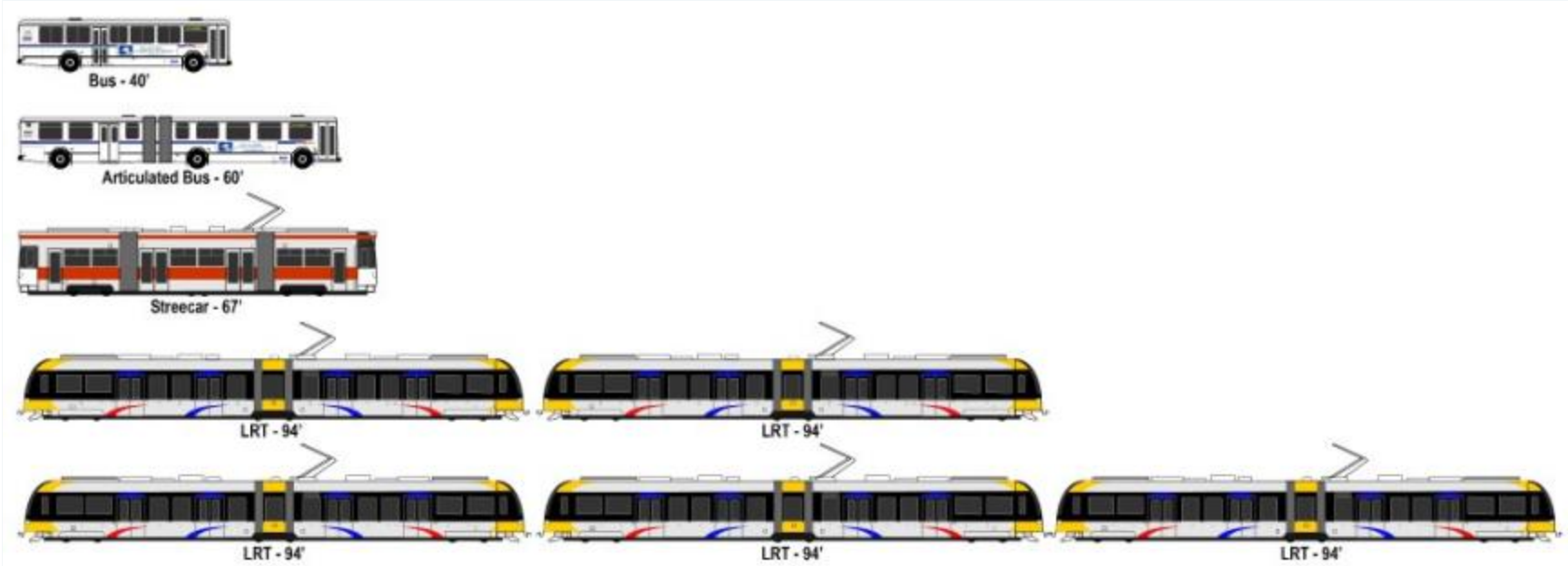
Modern Streetcar vs. Light Rail



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Transportation Policy Plan

Current language on streetcars (Page 151):

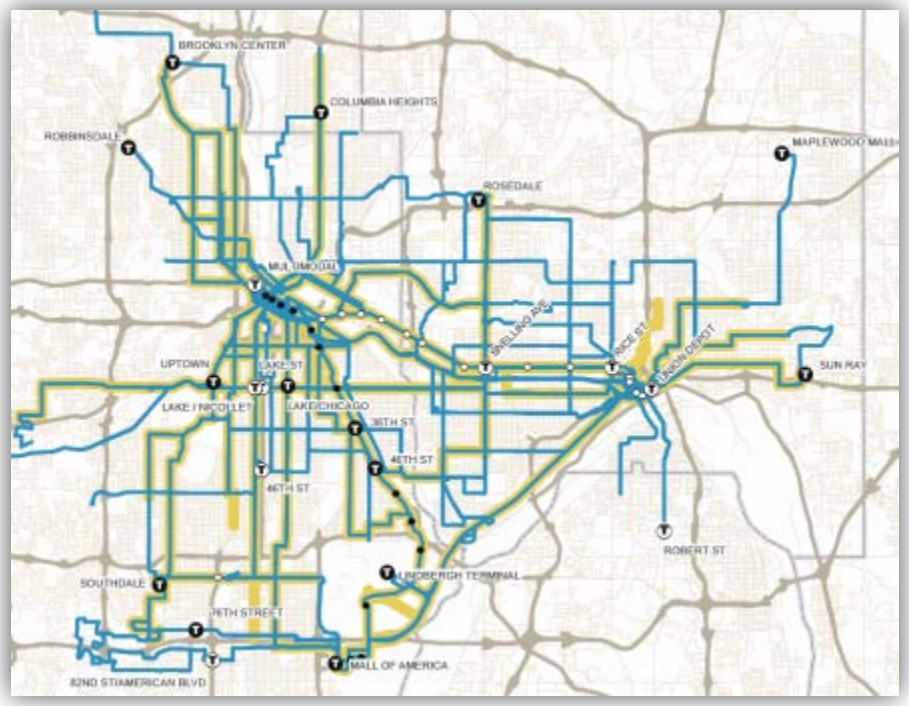
- …high-density areas with short average passenger trip lengths…
- …shoppers and visitors…
- …development tool for local units of government…

Transportation Policy Plan

Current language on streetcars (Page 151):

- Council collaborate with local units of government to determine where and when streetcars are appropriate
- …(if) positive, significant, and cost-effective transportation benefits beyond bus, BRT…local, regional, federal funding
- …(if) pursued primarily for development outcomes…primarily local funded
- Regardless, streetcars should integrate seamlessly

Urban Context – Arterial Corridors



Source: Metropolitan Council 2030 Transportation Policy Plan (2010)

Transportation Policy Plan Recommends:

- Expanded and improved arterial routes
- Arterial BRT improvements where beneficial

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Policy Considerations for Role of Streetcars in the Region

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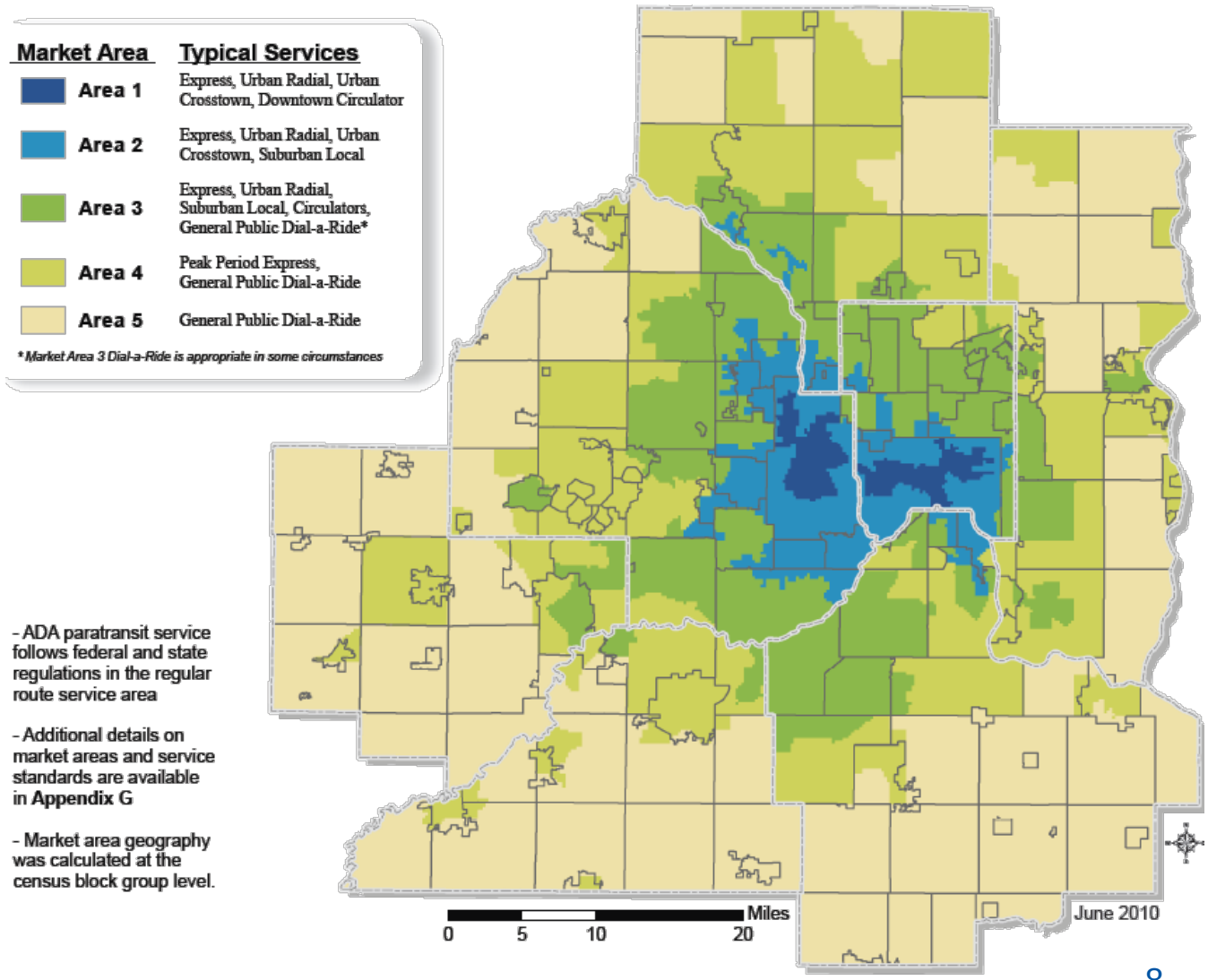
Transportation Policy Plan – Transit Market Areas



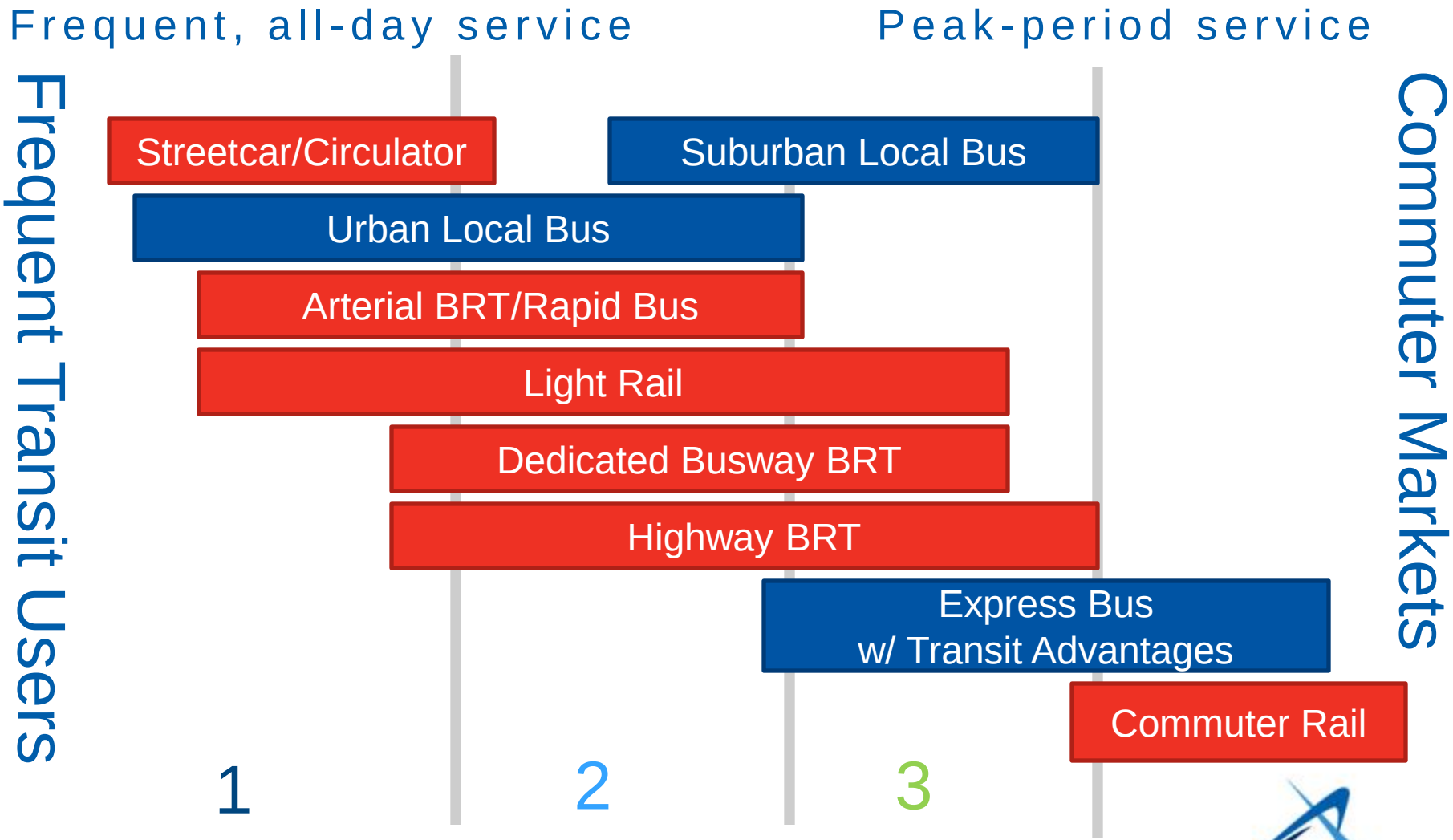
- ADA paratransit service follows federal and state regulations in the regular route service area

- Additional details on market areas and service standards are available in **Appendix G**

- Market area geography was calculated at the census block group level.

Source: Metropolitan Council 2030 Transportation Policy Plan (2010)

Matching Transit Modes to Markets?



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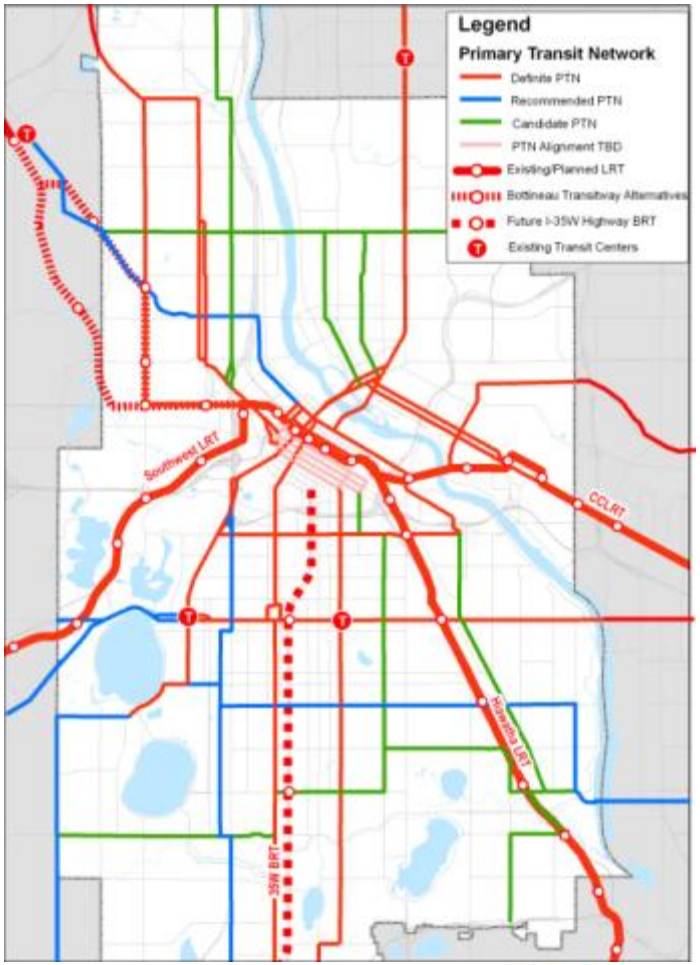
Access Minneapolis Primary Transit Network

- Performance Criteria
  - At least every 15 minutes, 18 hours a day, 7 days a week
  - Reliable, on-time
  - At least 30% of speed limit
- Bus or rail
- Land Use/Transit Coordination
  - Direct growth/density to transit
  - Grow/improve transit through density



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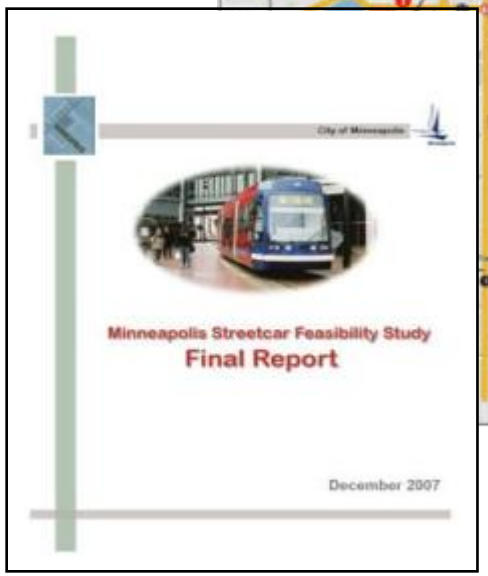
2007 Streetcar Feasibility Study

- Based upon Primary Transit Network
- Streetcar Study Goals:
  - Increase transit ridership, especially near downtown
  - Increase the attractiveness of transit to new markets
  - Provide connections and between regional transit and neighborhoods
  - Catalyze and organize development around a permanent transit investment



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2007 Streetcar Feasibility Study

- 7 corridors recommended for long-term network
  - Central
  - 4th/University
  - Chicago
  - Nicollet
  - Hennepin
  - West Broadway/Washington
  - Midtown Corridor

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Preferred Transit Network
St. Paul Comprehensive Plan (2010)

- Streetcar Feasibility Analysis currently underway in St. Paul
- Corridor recommendations and priorities this summer-fall (2013)

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National Streetcar Experience

- Growing interest but still only a few examples
- Short corridors, 1-4 miles
- $50-$200 million capital cost
- High capacity, high-frequency service
- Rarely replaces local bus
- Primarily connects major destinations (downtown, entertainment, universities, major redevelopment sectors)

Role of Arterial BRT?

More Effective

- Focus on improving speed and service frequency
- Reinforce broader urban transit network
- Enhance experience for many bus riders
- Lower cost allows for widespread, nearer-term, and faster implementation

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Role of Arterial BRT?

Less Effective

- Less visible improvement for non-users or infrequent users
- Incremental development and limited funding resources may lead to shortcuts that undercut performance and quality
- Less likely to generate intense site- or sub-corridor private development
- Less intensive public policy and development subsidy support

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Role of Streetcars?

More Effective

- Circulator for short trips
- Easily recognized and generally well used
- Increases capacity (larger vehicles)
- Concentrates public and private investment in urban development forms
- Can assist economic development and investment

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Role of Streetcars?

Less Effective

- May not integrate well with existing bus rider patterns
- High cost leads to longer implementation timeline, limited resources elsewhere
- Increased parking and traffic impacts
- May not achieve transportation goals for regional or local arterial networks

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Role of Streetcar in the Region

"Council collaborate with local units of government to determine where and when streetcars are appropriate"

- Determine appropriate mix of bus and streetcar that could meet travel and local development opportunities
- Questions for policy-makers:
  - How should streetcars be funded? Federal? Regional? Local?
  - How might short-term improvements or broader corridor improvements advance, in the interim?
  - How will Thrive play a role in the potential for streetcar and economic development / regional growth?

Midtown Corridor Alternatives Analysis

Metropolitan Council Transportation Committee
May 13, 2013

Michael Mechtenberg
Transit Planner, Metro Transit

Study Area

Why do an Alternatives Analysis?

- Identify and analyze the **benefits, costs, and impacts** associated with transit alternatives.
- Select a locally preferred alternative (LPA) that best meets project purpose.
- Develop information to enter federal funding process.

Purpose Statement

The purpose of the Midtown Corridor Transitway Project is to provide transit service that meets current and future **travel needs**, attracts **new riders**, connects users with **job centers and key destinations**, and supports sustainable **growth and development**.

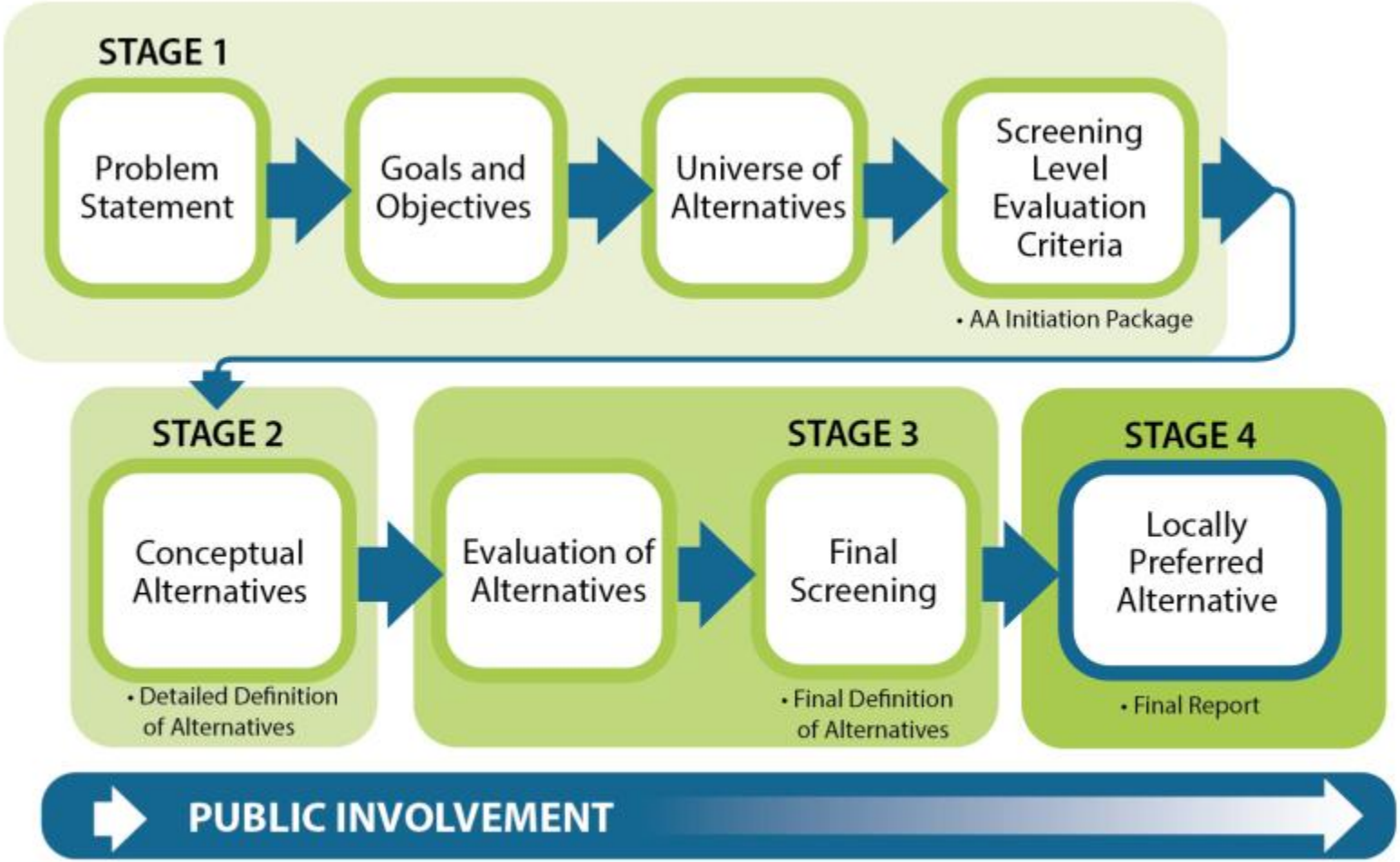
Runningway Options

Lake Street

Midtown Greenway

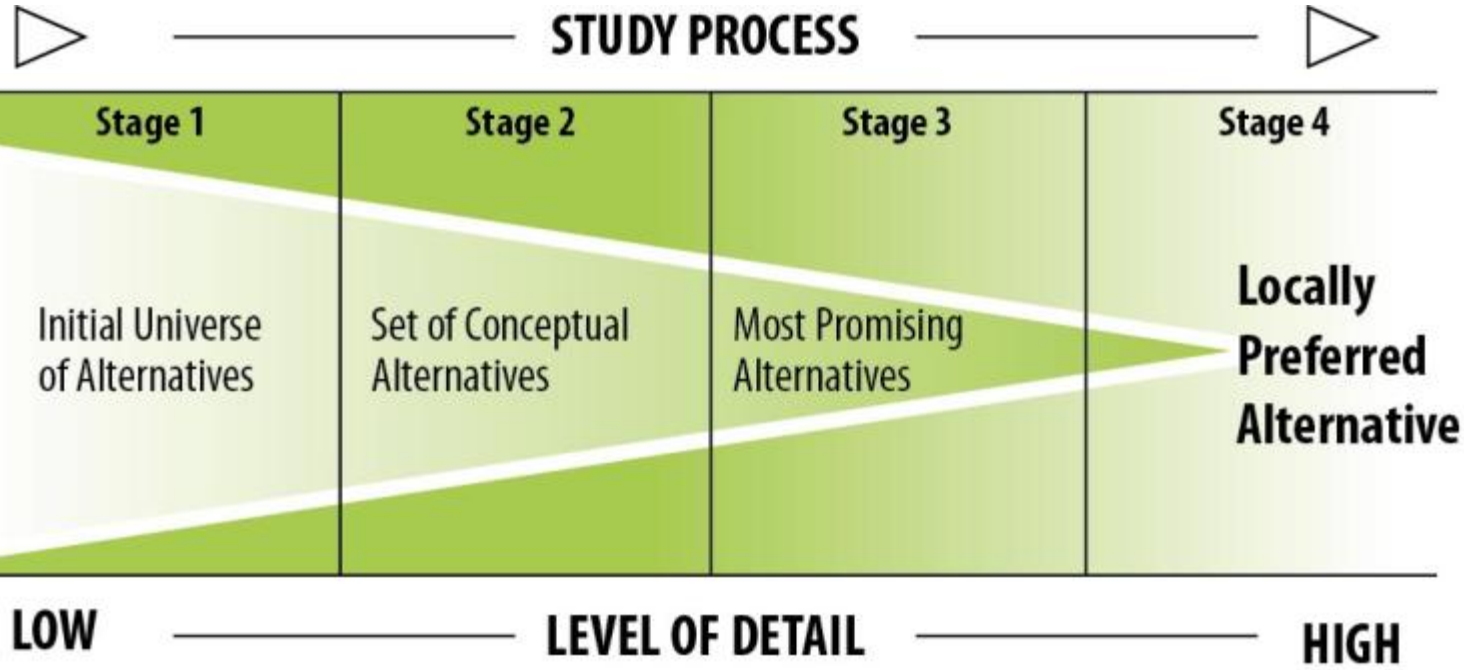
Possible Modes

Study Process



Purpose of Initial Screening

- To evaluate the full range of alternatives against project development criteria.
- Only alternatives that meet the overall project purpose and need will be advanced to the next level of analysis



Universe of Alternatives

Lake Street

1. Arterial BRT
2. Streetcar
3. LRT
4. Dedicated Busway

Midtown Greenway

5. Double/Single-Track Streetcar
6. Full Double-Track LRT/Streetcar
7. Dedicated Busway
8. Personal Rapid Transit
9. Commuter Rail
10. Streetcar Lake Street/Greenway Loop

Screening Conclusions

Recommended for Further Study	Not Recommended for Further Study
• Arterial BRT on Lake Street • Single/double-track streetcar in Midtown Greenway • Potential alignment combinations	• Streetcar on Lake Street • LRT on Lake Street • Dedicated busway on Lake Street • Full double-track LRT/Streetcar in Midtown Greenway • Dedicated busway in Midtown Greenway • Streetcar loop in Midtown Greenway and Lake Street • Commuter rail in Midtown Greenway • PRT in Midtown Greenway

Upcoming Public Meetings

- To present initial screening results to the public
- Two meetings in the study area:
  - May 21, 6-8 p.m. at the Colin Power Center
  - May 23, 6-8 p.m. at the Whittier Clinic

Questions?

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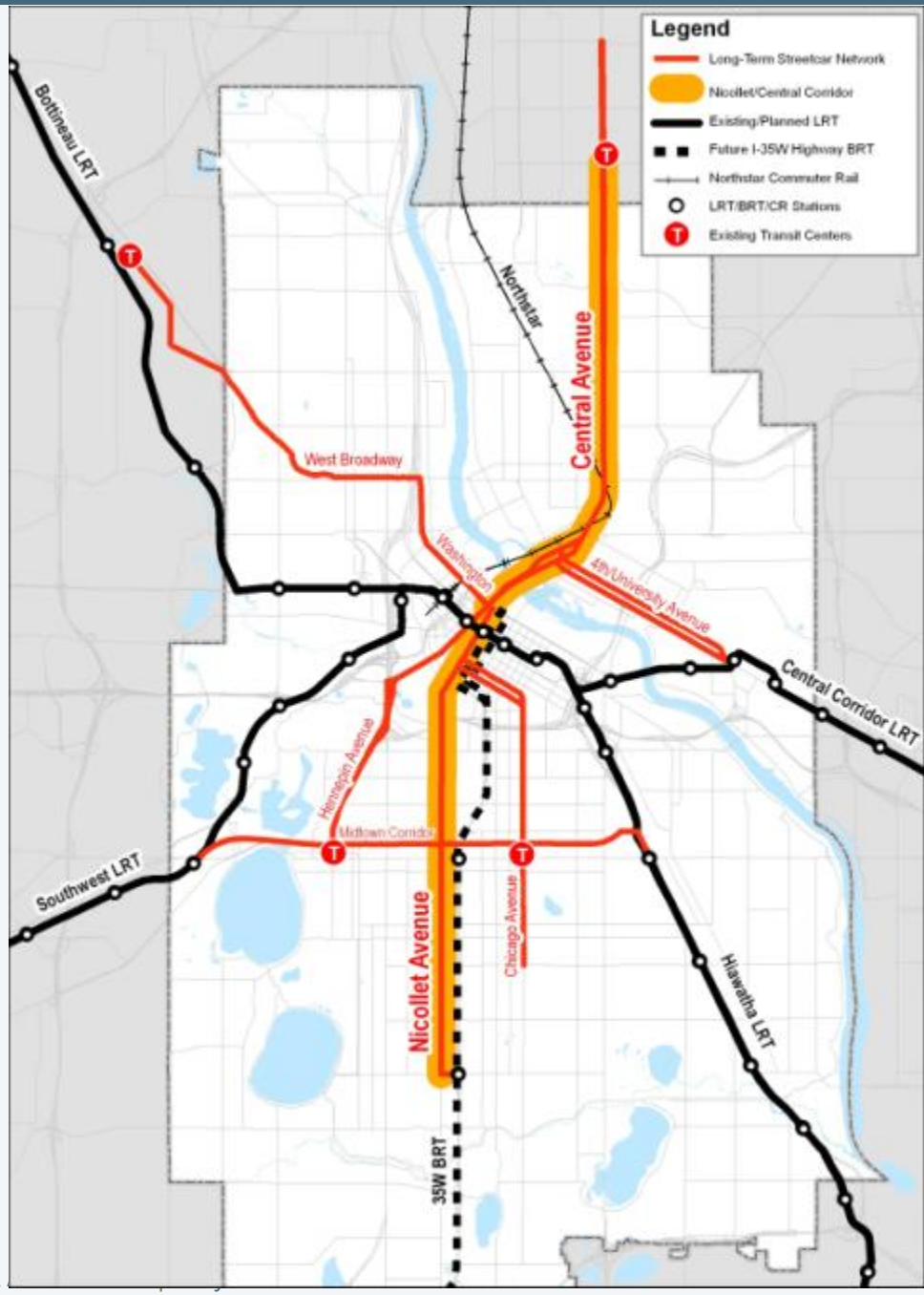
Nicollet-Central Transit Alternatives

Metropolitan Council Transportation Committee

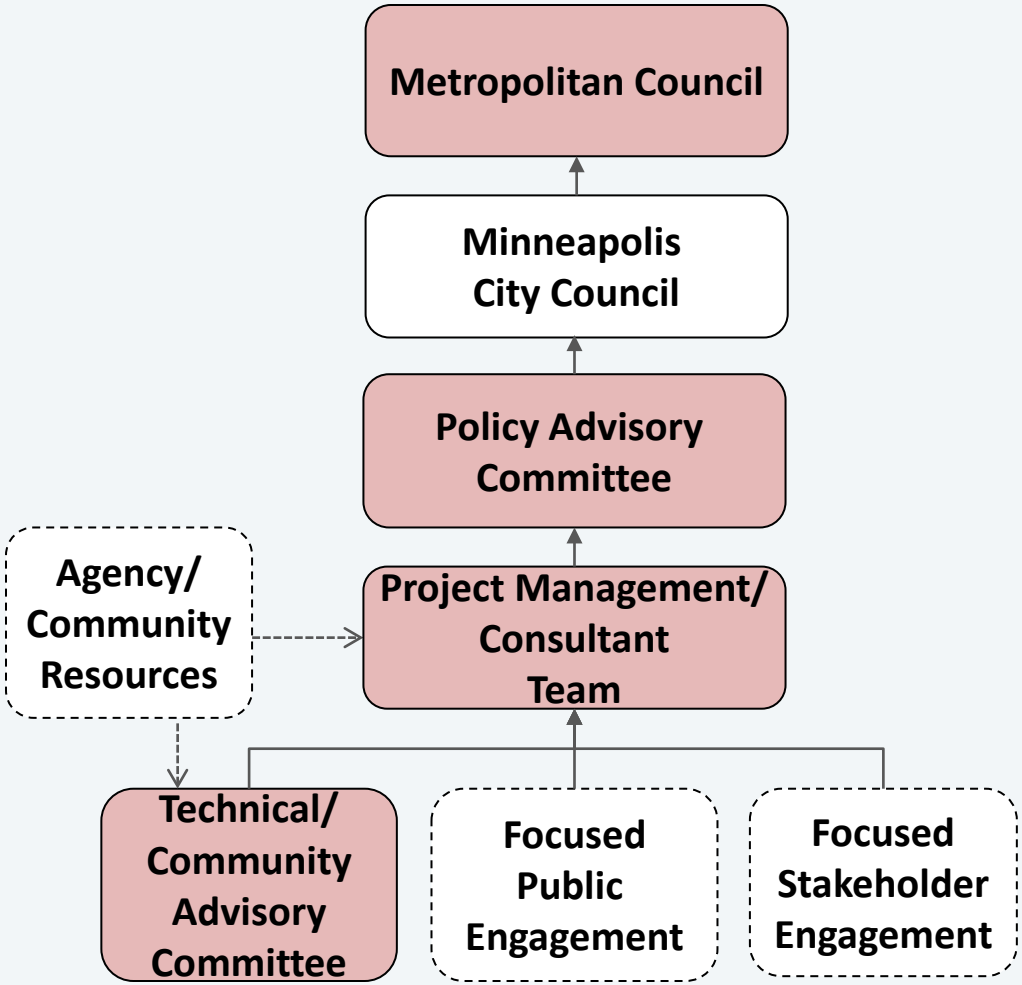
May 13, 2013

Nicollet-Central Corridor

- Prioritized by City Council for further study in 2010
- Best place to start implementation of long-term streetcar network
- Received FTA Alternatives Analysis grant



Decision-Making



Project Purpose

(approved by Policy Advisory Committee 10/25/2012)

- The purpose is to…
  - improve transit connectivity,
  - enhance the attractiveness of transit service, and
  - catalyze development through an investment in transit infrastructure within the Nicollet-Central Corridor.

Current Work

2012 – 2013: Nicollet-Central Transit Alternatives Study

Fall 2012

Late Fall/
Early Winter

Spring 2013

Summer 2013

Purpose and Need

- ✔ Corridor Problems and Challenges
- ✔ Vision for the Corridor
- ✔ Goals and Objectives and Evaluation Criteria

Initial Development and Screening of Corridor Transportation Options

- ✔ Transit Mode Options
- ✔ Corridor Segment Options

We Are Here

Detailed Definition and Evaluation of Alternatives

Locally Preferred Alternative

Alternatives for Detailed Evaluation

No Build
(existing bus)

Enhanced Bus
(9-mile)

Streetcar
(9-mile)

Central Avenue

2 River Crossing Options

Nicollet Mall

Nicollet Avenue

Starter Streetcar Line Concept

Lake St to E. Hennepin

- Densest population and employment today and projected into future
- Connects key activity centers
- Connects key transit services
- More existing riders travelling shorter distances from downtown on Nicollet Avenue than on Central Avenue

Detailed evaluation will evaluate whether these termini are optimal for a starter line.

Streetcar
(9-mile)

Streetcar
(3 ½ mile starter line)

Enhanced Bus vs. Streetcar

- Designed to be nearly the same
- For both…
  - Same lanes as cars and trucks
  - Larger, distinct vehicles
  - Curb extensions & raised platforms at stops
  - Stops every other block (1/4 mile)
  - Becomes primary local service (short trip focus)
  - Complemented by limited stop bus (longer trip focus)

Alternatives for Detailed Evaluation

No Build
(existing bus)

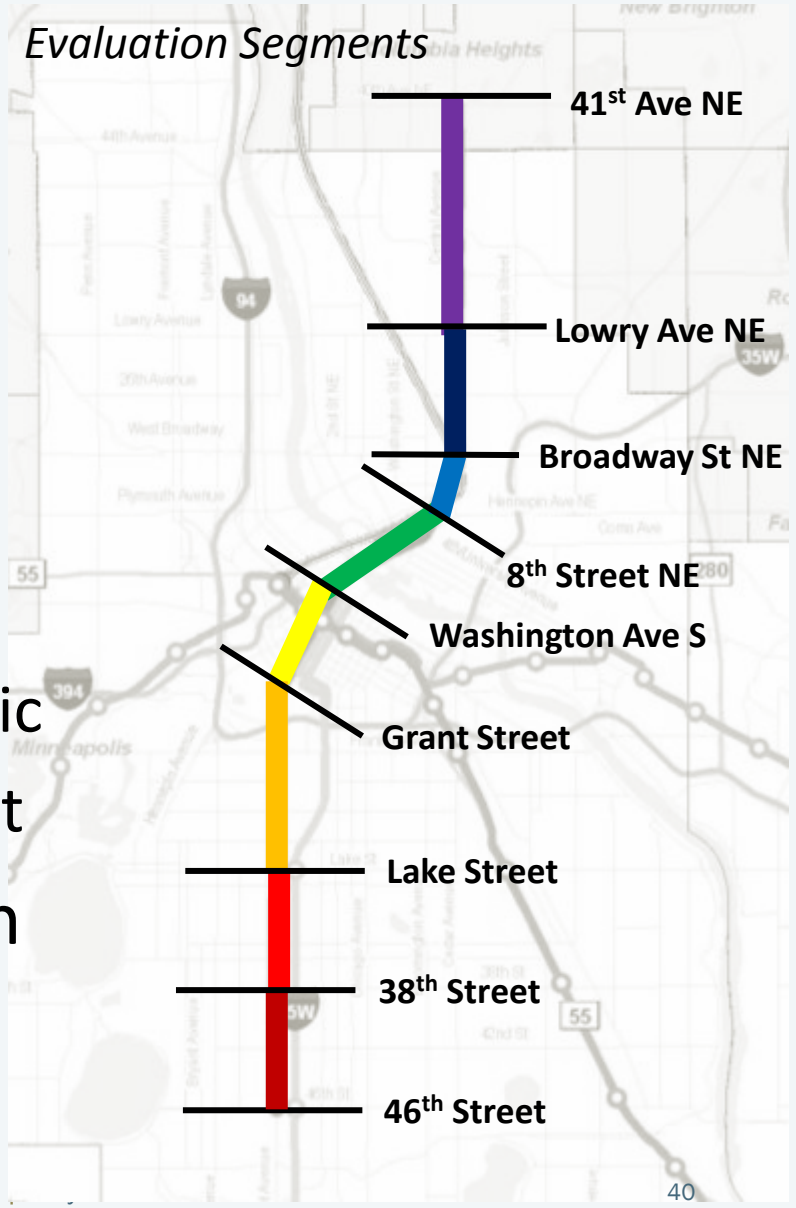
Enhanced Bus
(9-mile)

Streetcar
(9-mile)

Streetcar
(3 ½ mile starter line)

Detailed Evaluation

- Key Measures
  - Cost
  - Ridership
  - Economic development
  - People/destinations served
  - Effects on environment/traffic
  - Public/stakeholder sentiment
- Also prepare some results in greater detail by segment



Modern Streetcar Federal Awards

(in millions)

City	Year Open	Project Cost	Federal Program	Federal Share	Local Share	Federal / Local Split
Portland East Side Loop	2012	$148	Small Starts	$75	$73	51% / 49%
Tucson Modern Streetcar	2013	$199	TIGER (includes $6 million in New Starts "Exempt" Appropriations)	$69	$130	35% / 65%
Atlanta Streetcar	2013	$69	TIGER	$48	$21	70% / 30%
Seattle First Hill Line	2014	$134	n/a	$0	$134	0% / 100%
Salt Lake City Sugar House Streetcar	2014	$56	TIGER	$26	$30	46% / 54%
Cincinnati Streetcar	2015	$125	TIGER & Urban Circulator	$36	$89	29% / 71%
Dallas Oak Cliff Streetcar	?	$62	TIGER	$26	$36	42% / 58%
St. Louis Loop Trolley	?	$43	Urban Circulator	$25	$18	58% / 42%
Charlotte Streetcar	?	$37	Urban Circulator	$25	$12	68% / 32%

Federal Capital Funding Options

- Small Starts
  - Maximum $75 million federal contribution
  - Maximum $250 million total cost
- Discretionary Funding
  - i.e. TIGER, Urban Circulator

Local Capital Funding

- LRT funding
  - 50% federal, 30% CTIB, 10% state, 10% local
- Highway BRT funding
  - 30% federal, 30% CTIB, 30% state, 10% local
- Arterial BRT
  - 50% federal, 50% state/Met Council
- Modern Streetcar
  - ?

Value Capture Pilot Project

- State legislation specific to Nicollet-Central streetcar line
- Approved by Tax Conference Committee on Thursday, May 9!