

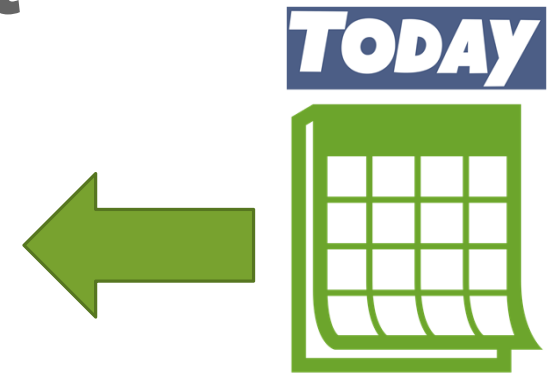


# Transit Investment Direction and Plan Introduction

Transportation Advisory Board – TPP Workshop  
August 16, 2017

# Today's Topics - Transit

- Where are we now, what are the current issues?



- Where do we want to go?
- How will we get there?



- What are the changes expected in this plan update?



# What Feedback are We Looking for Today?

- Messages that are important to highlight in TPP Overview (“tell a good story”)
- Important messages that you think are missing (“story isn’t there yet”)
- Your ideas on potential changes to the TPP that are not covered here (“change the story”)



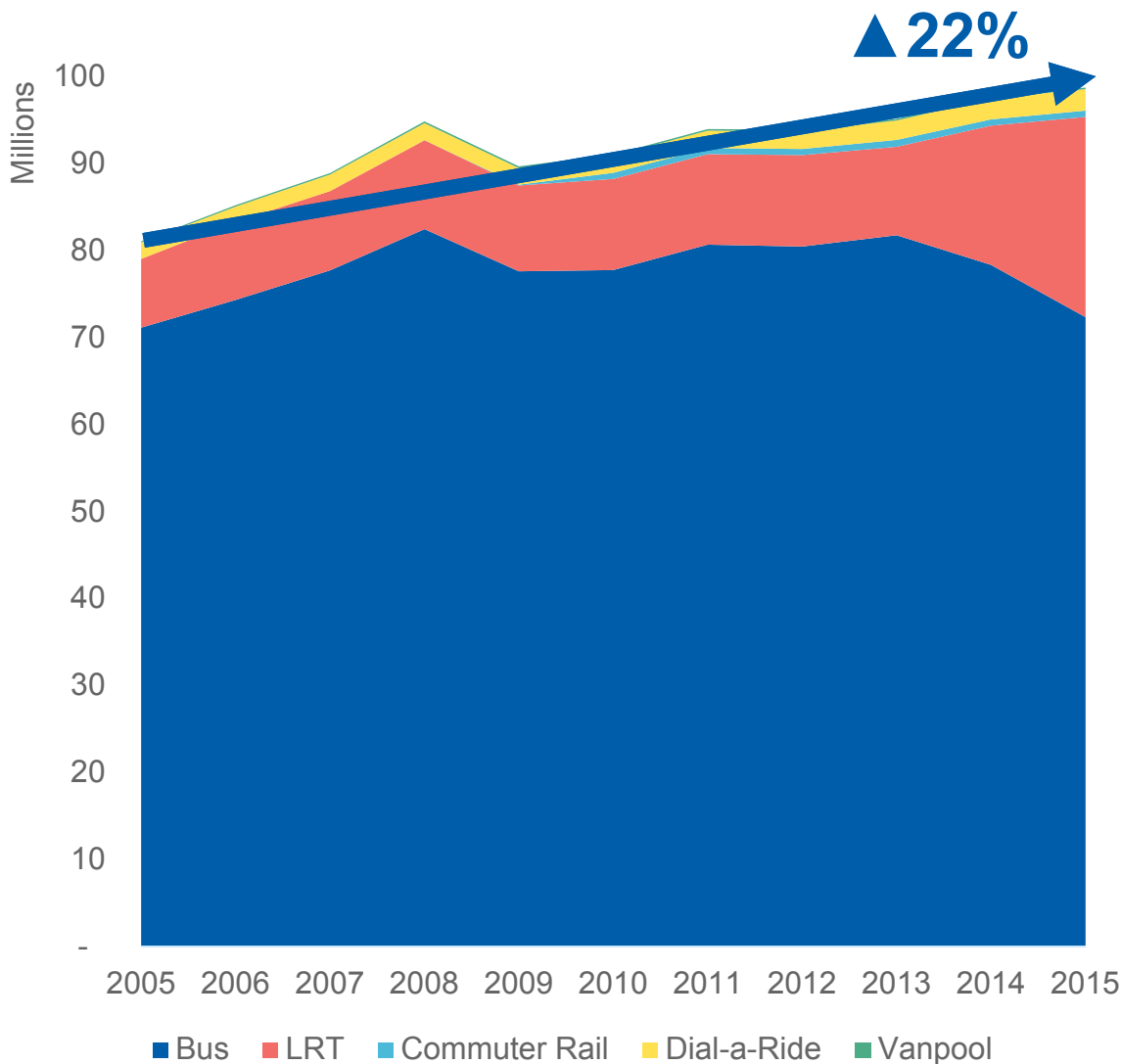
**TRANSPORTATION**  
POLICY PLAN

# Where are We Now?

## Transit Trends and Issues

# Where are We Now?

## *Ridership*



- Ridership up in the last decade
- Investment are paying ridership dividends

Recent major investments:

- 2013 – 1<sup>st</sup> Highway BRT
- 2014 – 2<sup>nd</sup> Light Rail
- 2016 – 1<sup>st</sup> Arterial BRT

# Where are We Now?

## *Return on Investment*

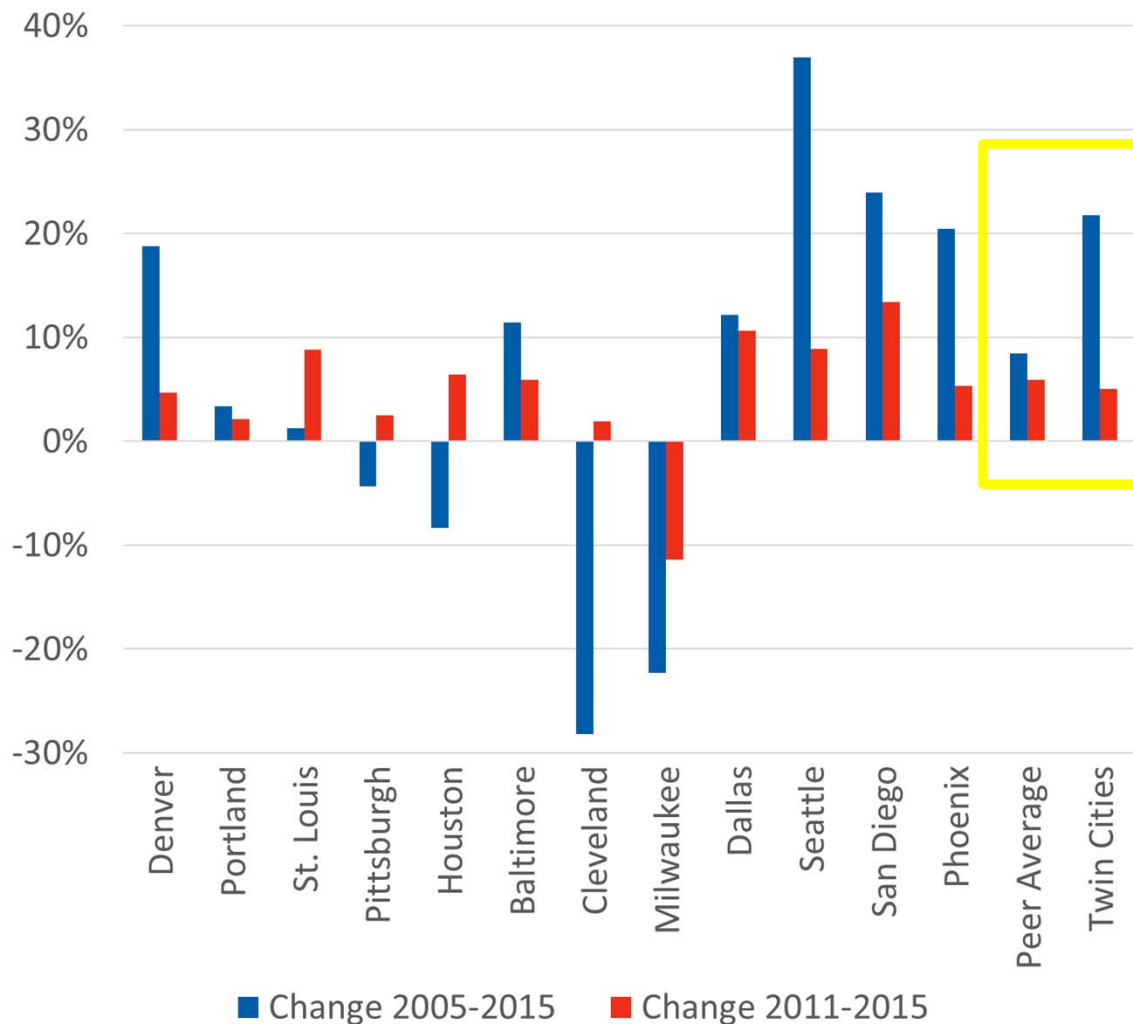
### Recent Case Studies:

- A Line
  - 33% more riders in corridor
- METRO Green Line
  - \$5+ billion in development
  - 50%+ more riders in corridor
- Route 11 High-Frequency
  - 20% more riders on route
- METRO Red Line Cedar Grove Station
  - Lower cost, faster trip, more riders



# Where are We Now?

## *Transit System: Peer Ridership*



- Ridership growth has outpaced the peer average since 2005
- Twin Cities: 3rd
- Ridership growth in peer regions has outpaced Twin Cities since 2011
- Twin Cities: 8th

# Where are We Now?

## *Return on Investment*



Optimal Investments:

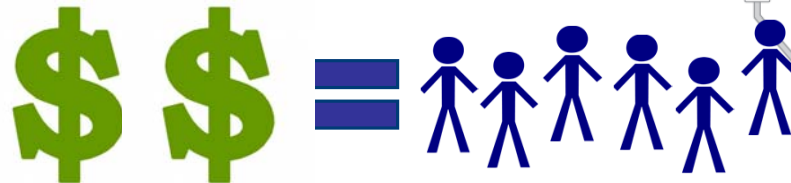
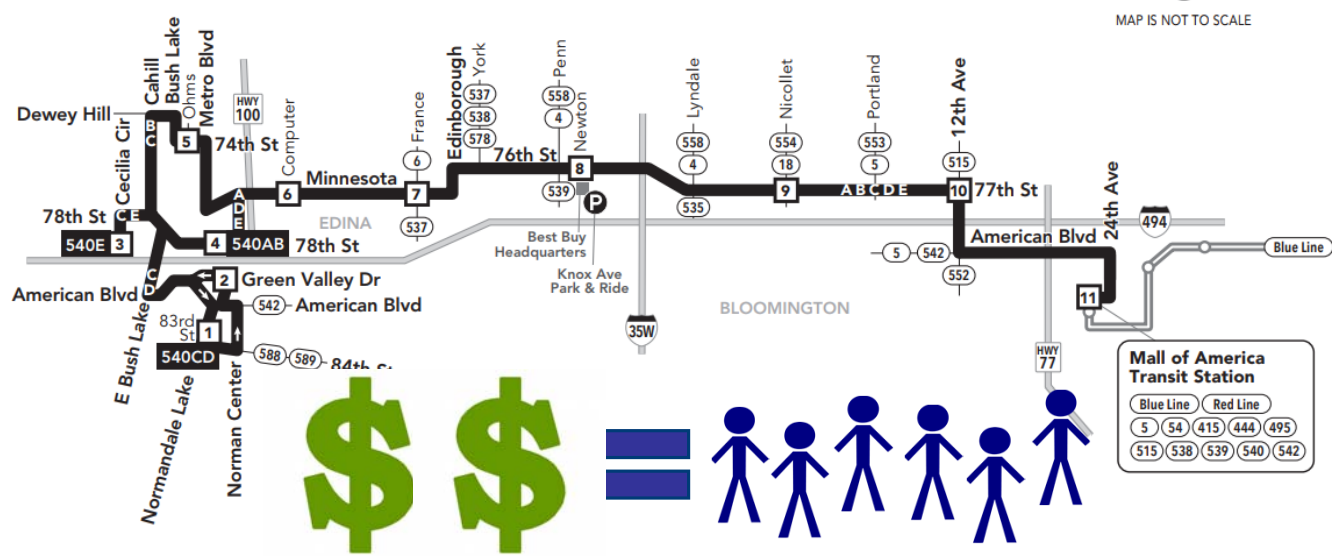
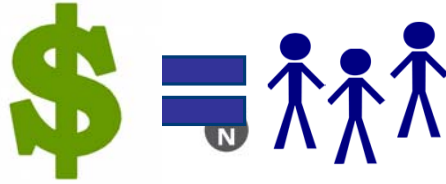
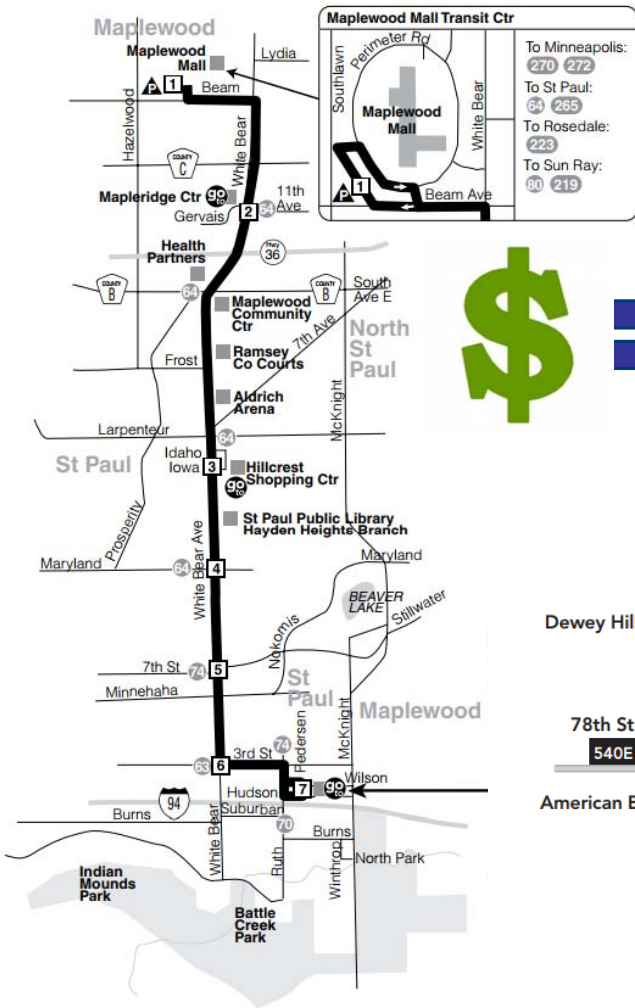




# Where are We Now?

## Return on Investment

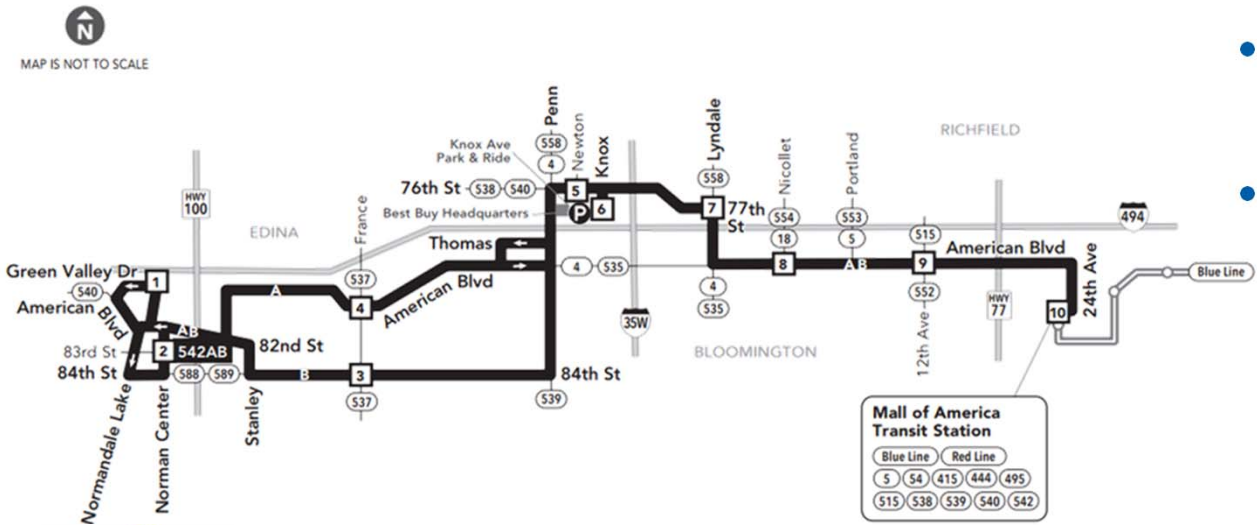
- Same subsidy per passenger
- One route carries 2x as many passengers



# Where are We Now?

## *Return on Investment*

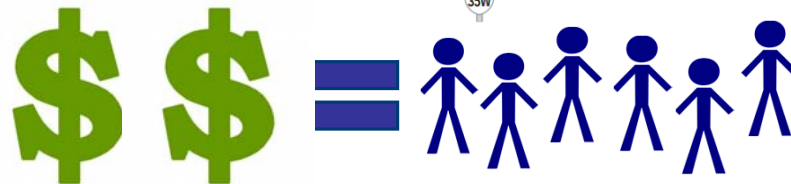
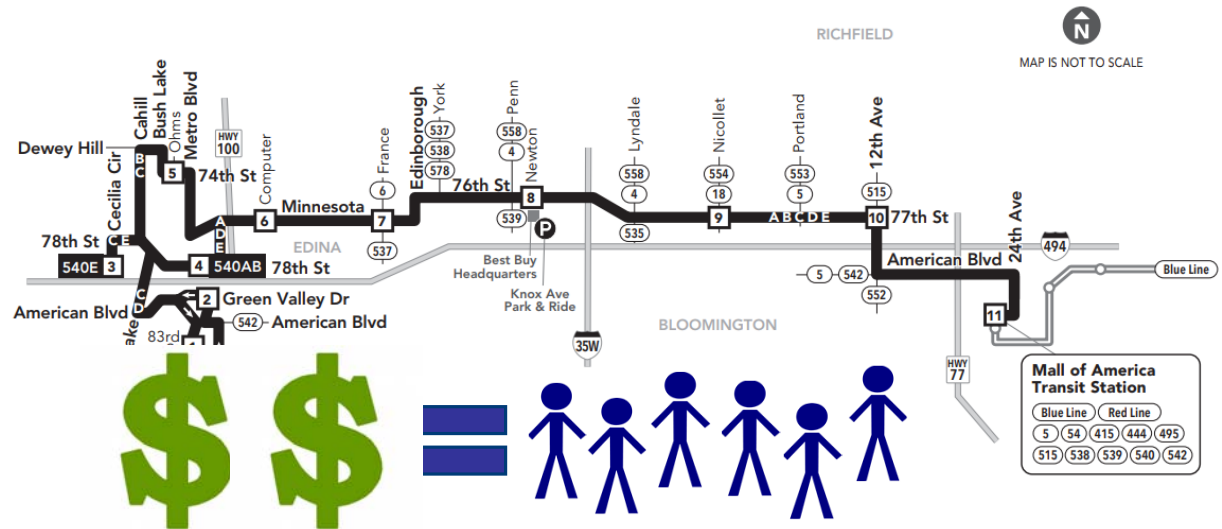
Effective 6/17/17



- One route subsidy per passenger about 2x
- One route carries 3x as many passengers, but costs 50% more

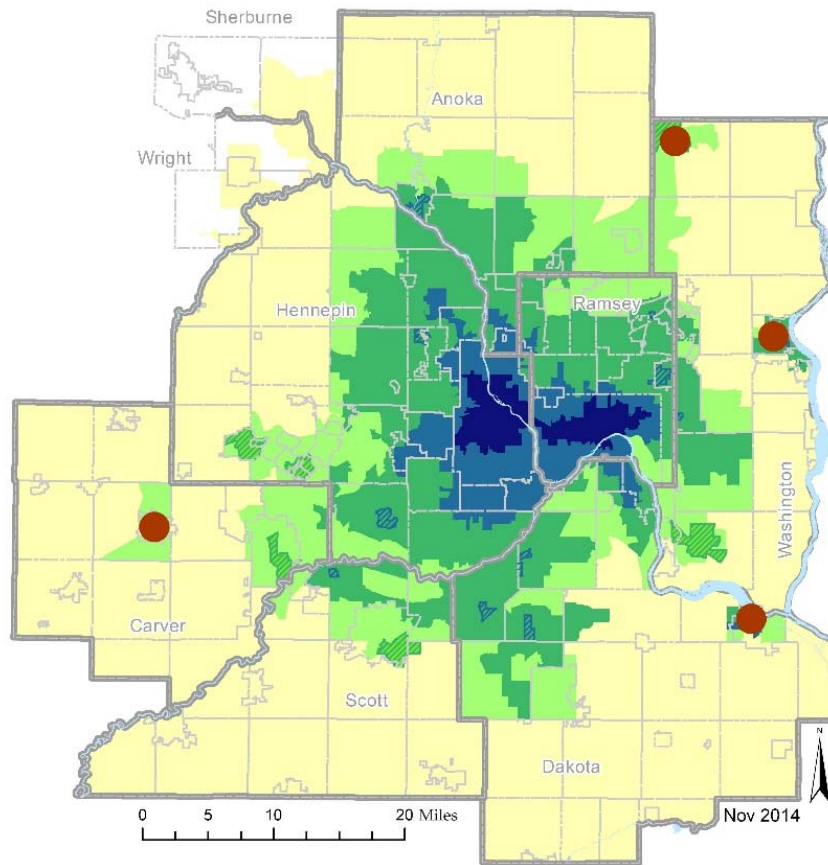


Effective 6/17/17



# Where are We Now?

## *Transit Market Areas*



- Market Areas broadly quantify & estimate transit demand
- Return on investment; Guiding investment levels relative to demand
- Much of the region currently not well suited for high-level of service
- ...BUT land use is changing! Opportunities exist, implementation takes time!

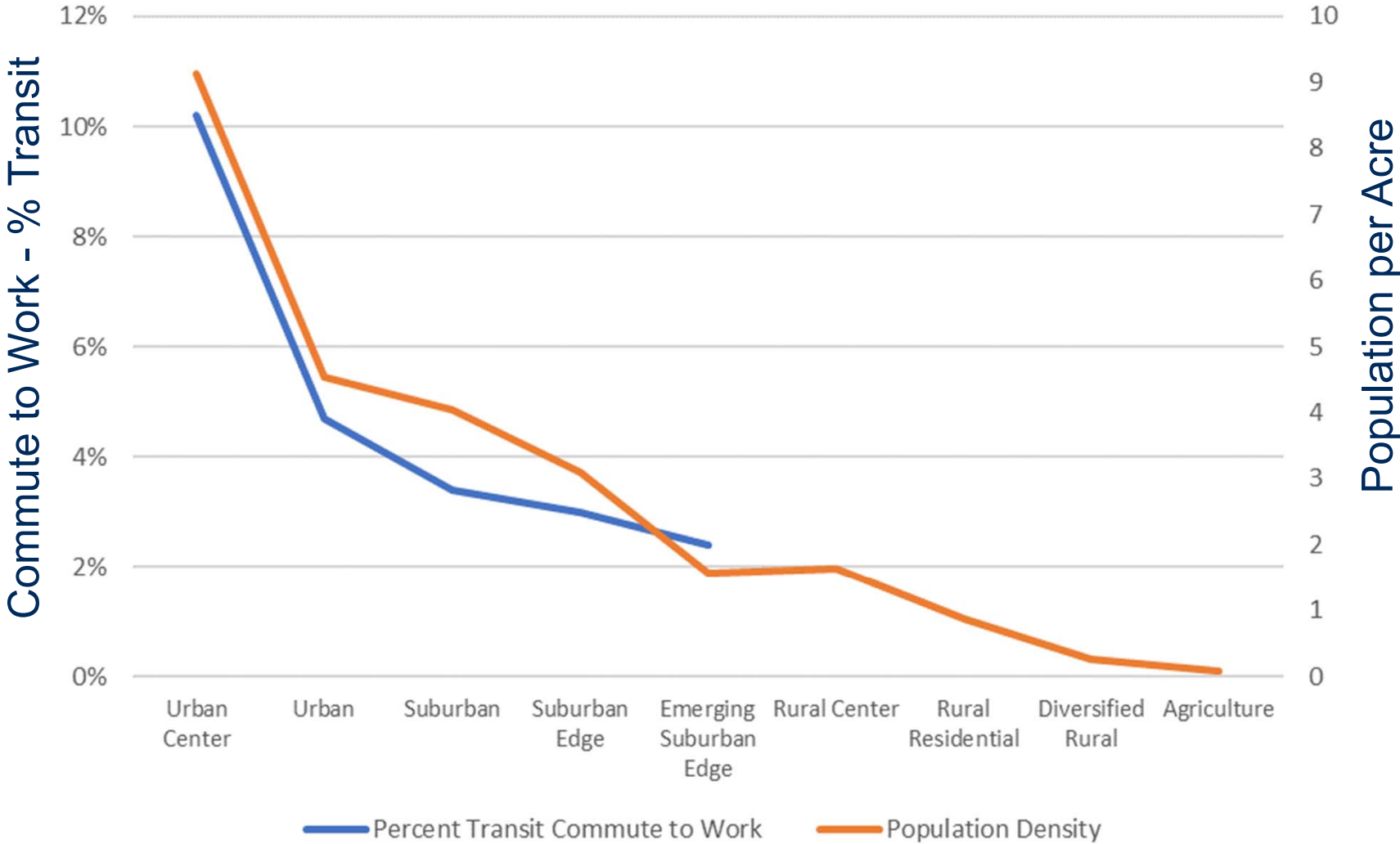
# Where are We Now?

## *Travel and Density*



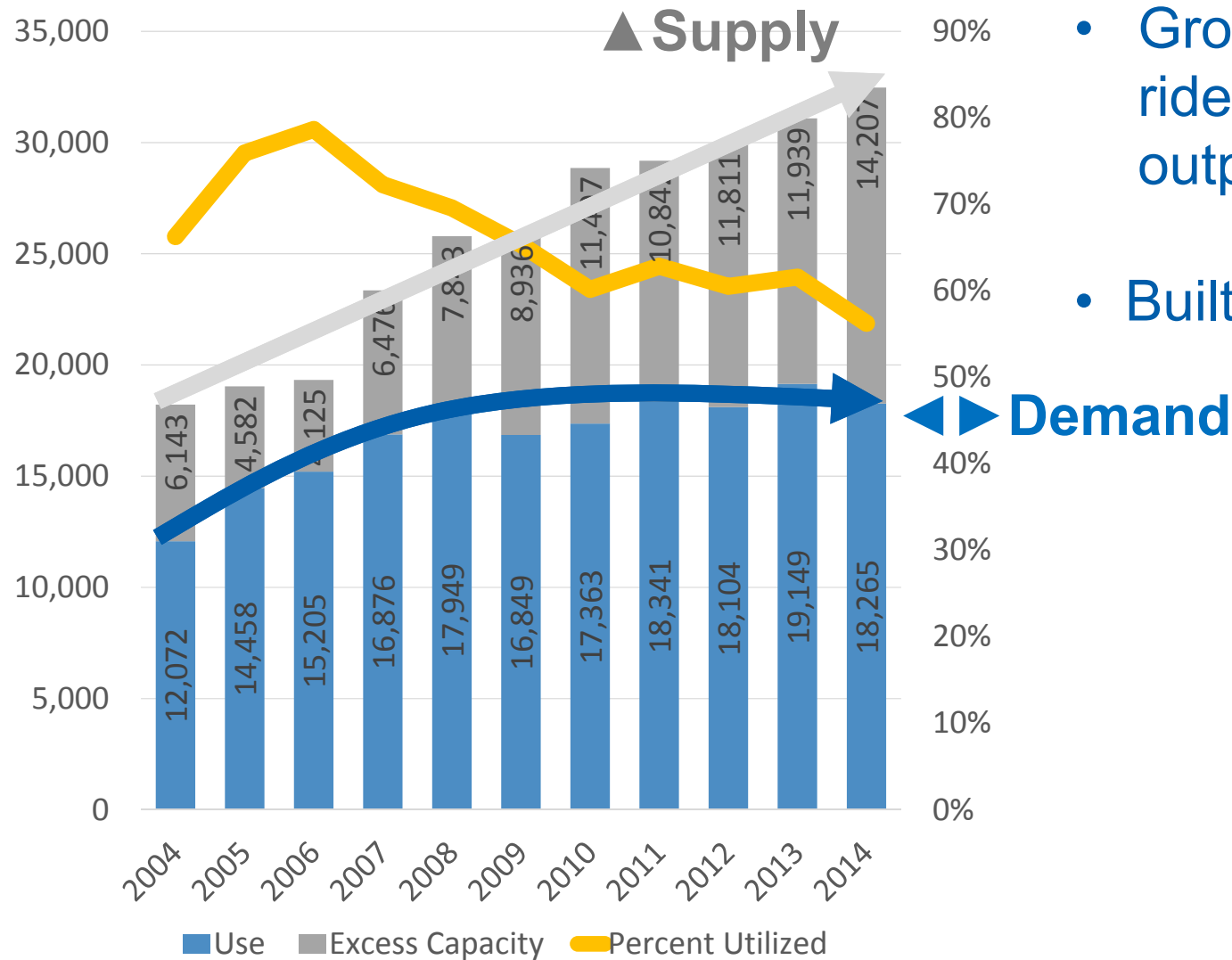
# Where are We Now?

## *Travel and Density*



# Where are We Now?

## *Diminishing Returns, Park-and-Ride Example*



- Growth in park-and-ride capacity has outpaced use
- Built for 2030 demand

# Where are We Now?

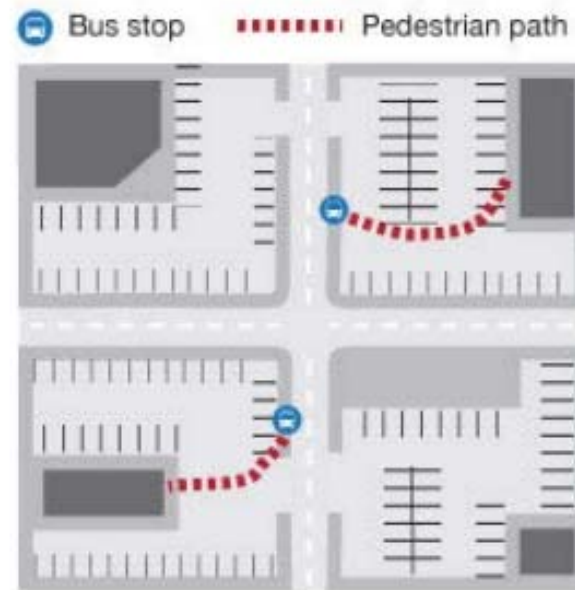
## *Land Use Planning Coordination*

### Design for a pedestrian-friendly environment

All transit users are pedestrians for at least some portion of the beginning and end of their trip. A pedestrian-friendly environment encourages transit use by providing a comfortable walking environment and minimizing the walking distance from the transit stop to front doors.



*More Transit Supportive*



*Less Transit Supportive*

# Where are We Now?

## *Land Use Planning Coordination*

Design for a pedestrian-friendly environment



*More transit supportive*



*Less transit supportive*

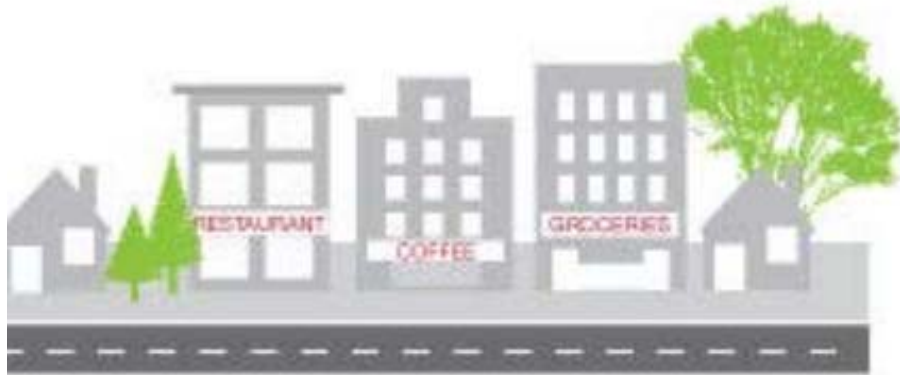


# Where are We Now?

## *Land Use Planning Coordination*

### Encourage a mixed-use land use pattern

Transit is most effective when it serves a variety of trip purposes and destinations. Mixed-use development patterns encourage travel patterns with many origins and destinations throughout the day, making transit more effective and easy to provide for a variety of purposes.



*More Transit Supportive*



*Less Transit Supportive*

# Where are We Now?

## *Land Use Planning Coordination*

Encourage a mixed-use land use pattern



*More transit supportive*



*Less transit supportive*



# TRANSPORTATION POLICY PLAN

## Where Do We Want to Go? Outcomes of the Transit System

# Where are We Headed?

## *Current TPP Planning Framework*

Goals	Objectives (Transit-related Only)
Transportation System Stewardship	<ul style="list-style-type: none"> <li>• State of good repair (<u>Maintain</u> what we have!)</li> <li>• Operate <u>efficiently and cost-effectively</u></li> </ul>
Safety and Security	<ul style="list-style-type: none"> <li>• Improve <u>safety</u> and <u>security</u></li> </ul>
Access to Destinations	<ul style="list-style-type: none"> <li>• More multimodal options (esp. in congested corridors)</li> <li>• Increase <u>reliability</u> and <u>predictability</u></li> <li>• Increase <u>transit ridership</u> and transit mode share</li> </ul>
Competitive Economy	<ul style="list-style-type: none"> <li>• Improve multimodal <u>access to job</u> concentrations</li> <li>• Invest in multimodal to <u>attract and retain</u> businesses and residents</li> </ul>
Healthy Environment	<ul style="list-style-type: none"> <li>• Reduce <u>air emissions</u></li> <li>• Increase availability and <u>attractiveness</u> of transit, encourage <u>healthy communities</u> and <u>car-free</u> lifestyles</li> </ul>
Leveraging Investments to Guide Land Use	<ul style="list-style-type: none"> <li>• <u>Focus growth</u> to support multimodal travel</li> <li>• Encourage local land use to <u>integrate all modes</u></li> </ul>

← Equity Throughout! →

# Key Transit Outcomes

**Efficient**

**Cost Effective**

**Reliable, Predictable, Attractive, and Safe**

**Attract More Transit Riders**

**Provide More Access to Jobs**

**Attract Businesses and Residents**

**Support Focused Growth that Integrates Modes**

**Support Equity, Clean Air, and Healthy Communities**

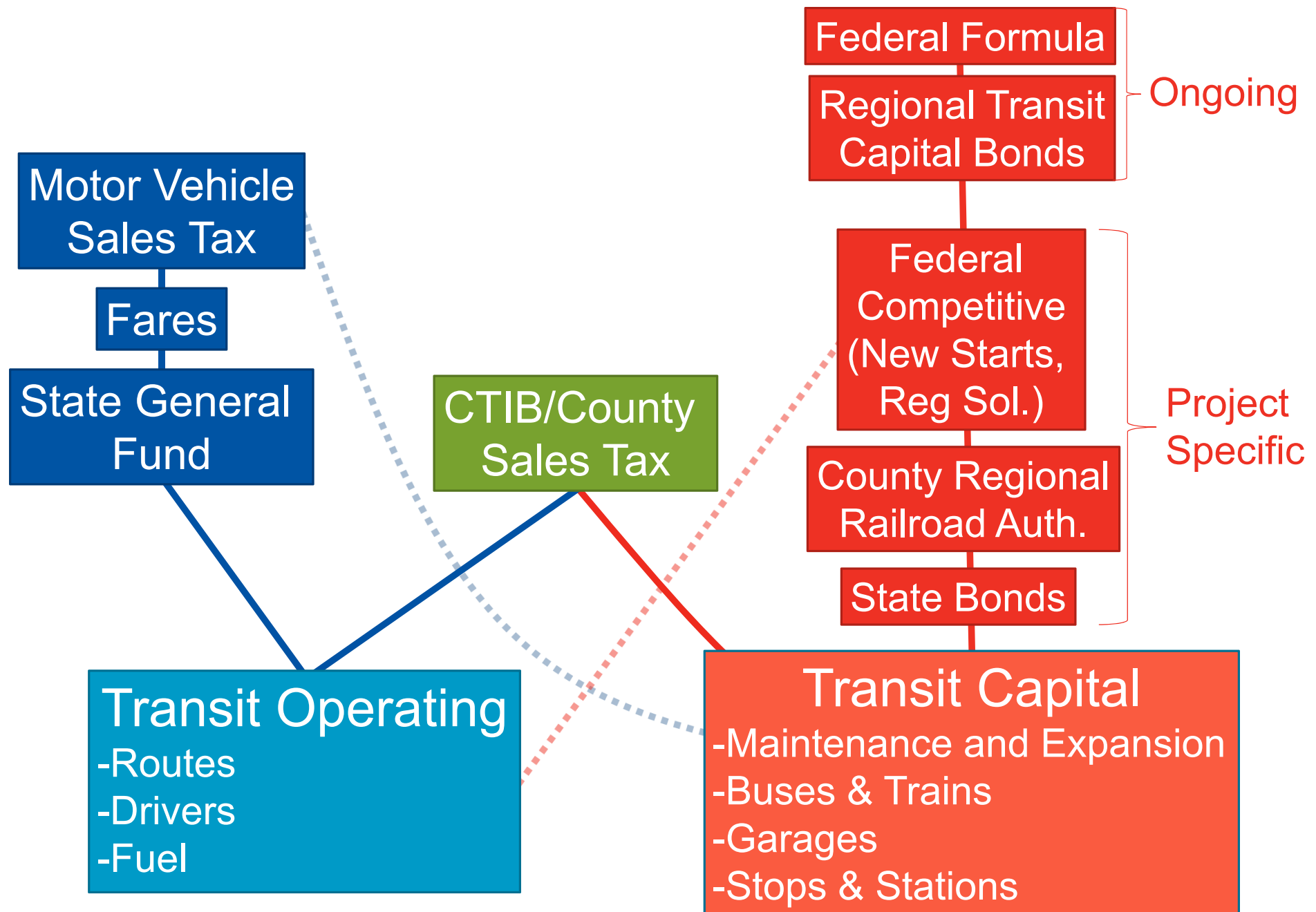


**TRANSPORTATION**  
POLICY PLAN

# How Will We Get There?

**Transit System Investment  
Direction and Plan**

# Metro Area Transit Funding



# How Will We Get There?

## *Transit Investment Direction and Plan*

- **Regional Solicitation Transit Criteria**

<b>Solicitation Criteria</b>	<b>Key Transit Outcomes</b>
Role in the Regional Transportation System and Economy	Access to Jobs
Usage	Attract More Transit Riders
Equity and Housing Performance	Equity and Healthy Communities
Emissions Reduction	Clean Air
Service and Customer Improvements	Reliable, Predictable, and Attractive
Multimodal Elements and Existing Conditions	Integrate Modes
Risk Assessment	
Cost Effectiveness	Cost Effective



# How Will We Get There?

## *Transit Investment Direction and Plan*

- **Build a Common Understanding:**
  - Transit Planning Basics – Principles for understanding transit and land use relationship
  - Transit Market Areas – Framework for evaluating potential return on investment
  - Regional Transitway Guidelines – Build out a transitways system that is consistent for the user and equitable across the region

# How Will We Get There?

## *Transit Investment Direction and Plan Bus and Support System*

- **Manage Performance on the Transit System:**
  - Appendix G: Regional Transit Design Guidelines and Performance Standards
  - Route Performance Analysis – Evaluate regular route service to ensure it is efficient and cost-effective
  - Provide service alternatives to regular route bus in lower demand areas



# How Will We Get There?

## *Transit Investment Direction and Plan Bus and Support System*

- **Identify Opportunities to Expand Service:**
  - Service Improvement Plans
  - Transit providers responsible for coordinating input on service improvement opportunities
  - Regional Service Improvement Plan will prioritize short-term expansion opportunities with investment factors:
    - Cost-effectiveness
    - Access to destinations and people served
    - Equity
    - Peak-period transportation benefits

# How Will We Get There?

## *Transit Investment Direction and Plan Bus and Support System*



Tweaking Services and  
Harvesting and Reinvesting  
Inefficiencies

# How Will We Get There?

## *Transit Investment Direction and Plan Bus and Support System*

- **Strategically Expand and Modernize Facilities:**
  - Regional solicitation funding available: ≈\$21 M/year + inflation
  - Modernize
    - Improved amenities at bus stops
    - Improved maintenance and care of facilities
    - Upgraded transit centers
    - Technology improvements
  - Expand
    - Expansion of bus shelters
    - New or expanded capacity at transit centers or park-and-rides
    - Expanded garage or maintenance facilities

# How Will We Get There?

## *Transit Investment Direction and Plan Bus and Support System*

Maintain and Operate  
Existing System\*

2015-2040

**\$18.5 Billion**

Expand and Modernize  
System

2015-2040

**\$0.6 Billion**

(Through Regional Solicitation)

\*Includes Metro Mobility

# How Will We Get There?

## *Transit Investment Direction and Plan Transitways*

- Transitways are investments in existing and potential high-demand transit corridors:
  - Bus Rapid Transit (BRT)
    - Dedicated BRT
    - Highway BRT
    - Arterial BRT
  - Light Rail
  - Commuter Rail
  - Potential future modes (Streetcar)

# How Will We Get There?

## *Transit Investment Direction and Plan Transitways*

- **Set Expectations for Regional Transitway Priorities**

- Technical Factors:

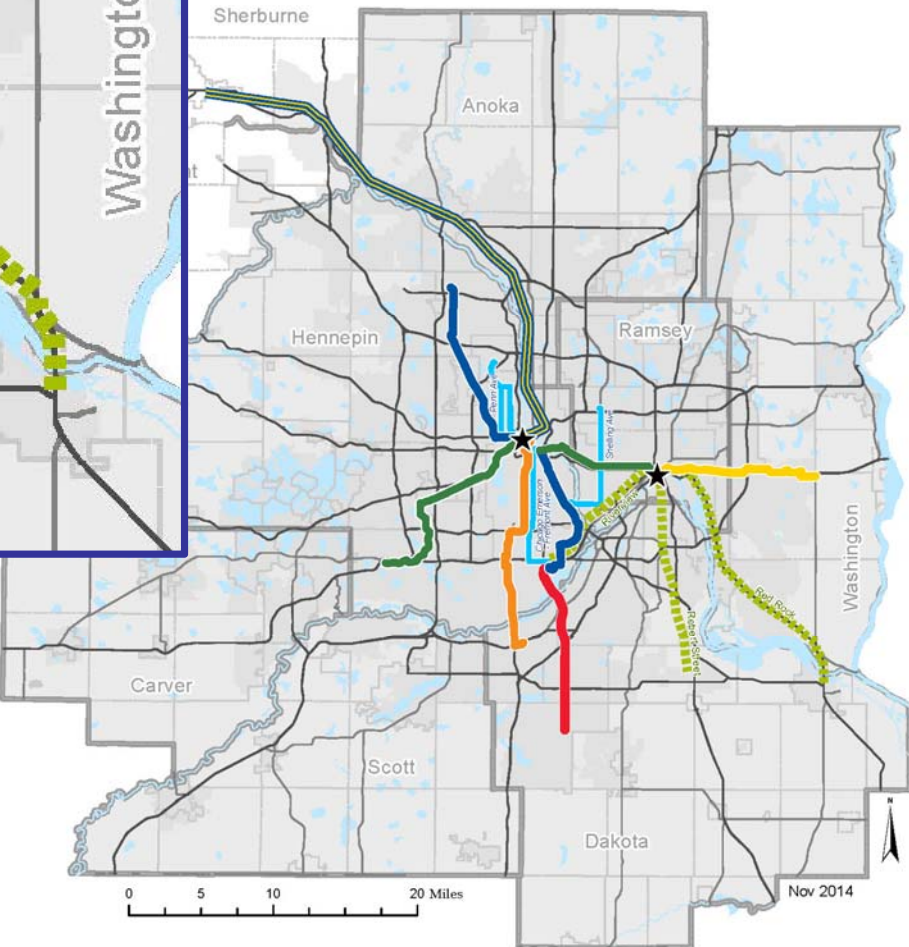
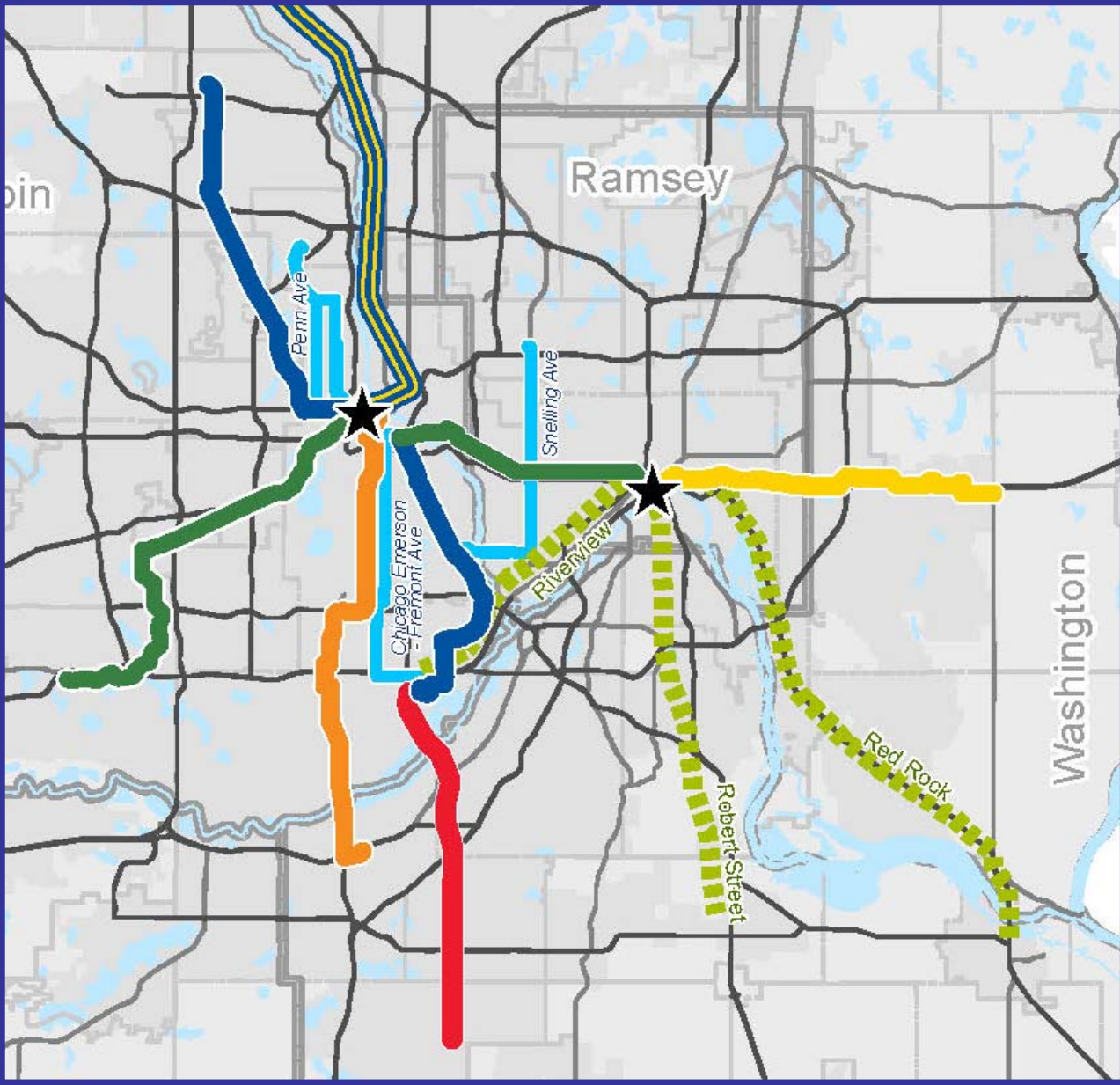
- Ridership
- Access to Jobs and Activity
- Cost-Effectiveness
- Existing Land Use
- Future Land Use and Development
- Equity
- Environment










- Policy Factors:

- Regional Balance
- Funding Viability
- Community Commitment
- Risk Assessment and Technical Readiness



# Current Revenue Scenario Transitways (Funded Projects In the Plan)



-  Northstar Line
-  Blue Line
-  Green Line
-  Arterial BRT
-  CTIB Phase I Program of Projects under study mode and alignment not yet specified
-  Regional Multimodal Hub
-  Red Line
-  Orange Line
-  Gold Line

# How Will We Get There?

## *Transit Investment Direction and Plan Transitways*

- Gold Line Dedicated BRT (**new**)
  - Highway BRT
    - Red Line (existing)
    - Orange Line (**new**)
  - Arterial BRT
    - Snelling Ave (**new**/now existing)
    - Penn Ave (**new**)
    - Chicago-Emerson-Fremont (**new**)
  - Light Rail
    - Blue Line (existing) and Blue Line Extension (**new**)
    - Green Line (existing) and Green Line Extension (**new**)
  - Northstar Commuter Rail (existing)
- CTIB Priority Corridors under study:
- Riverview  
Red Rock  
Robert Street

# How Will We Get There?

## *Transit Investment Direction and Plan Transitways*

- **Other Transitway Considerations:**

- Current plan has aggressive assumptions for competitive federal funding
- There are opportunities to do more, faster:
  - Lower-cost Arterial BRT
  - Modern Streetcar local funding (City of Minneapolis)
- A number of corridors under study, but uncertain funding moving forward

# How Will We Get There?

## *Transit Investment Direction and Plan*

### *Transitways*

Maintain and Operate  
Existing System

Build and Operate  
Expanded System

2015-2040

2015-2040

**\$3.6 Billion**

**\$8.5 Billion**

\*Includes \$2.5 B undesignated CTIB revenue

# How Will We Get There?

## *Transit Investment Direction and Plan Bus and Transitways*

- **Increased Revenue Scenario**

- Originated with Governor's Transportation Finance Advisory Committee (TFAC) analysis in 2012
- Identified a need for transit system that would keep the region economically competitive

Bus Expansion

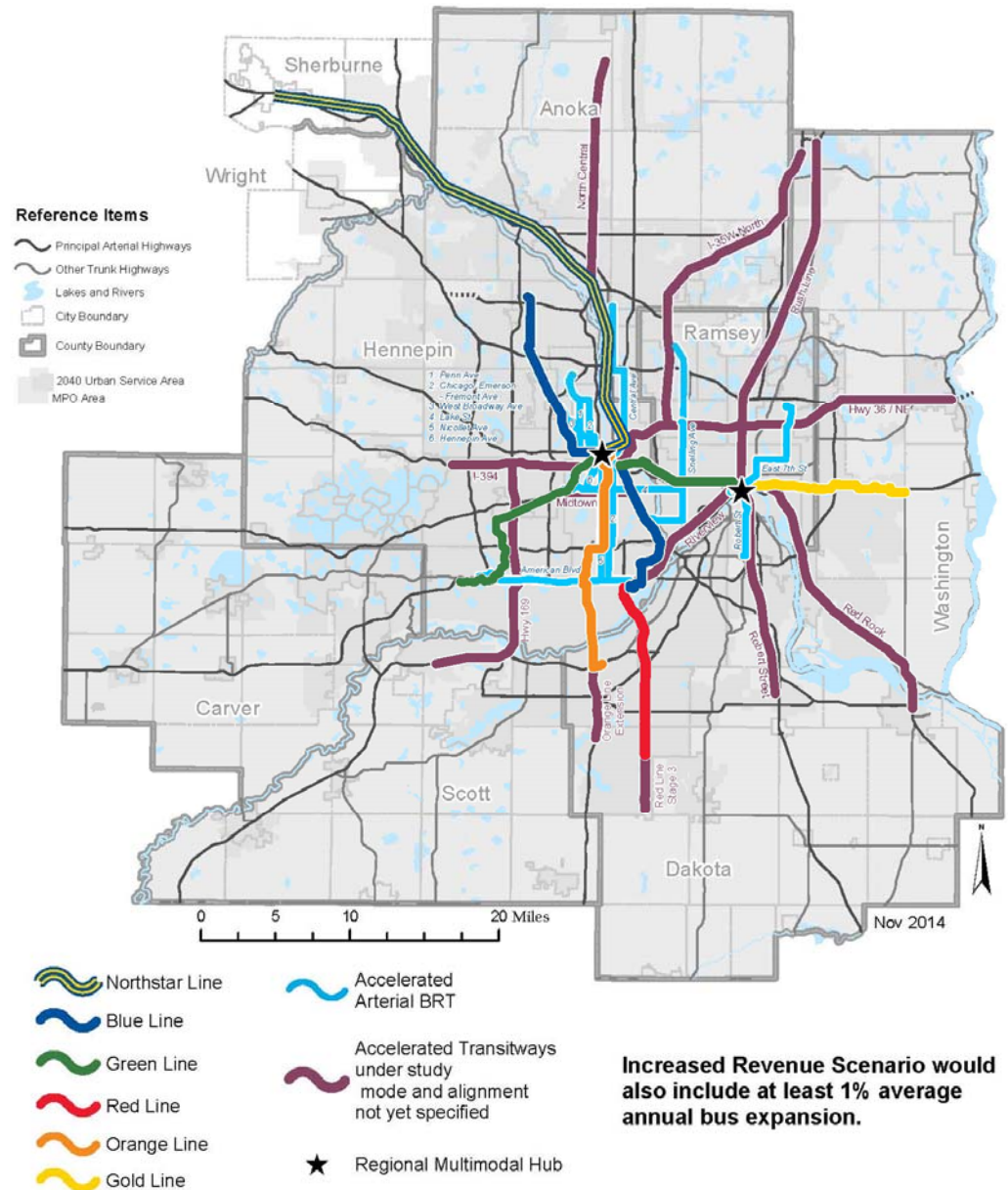
Transitway Expansion

**+\$2-3 Billion**

**+\$5-6 Billion**

# Increased Revenue Scenario

- 1% annual bus expansion
- Additional and accelerated transitway investments
- *Transitways can move from Increased Revenue Scenario to Current Revenue Scenario with viable funding plan*



# How Will We Get There?

## *Transit Investment Summary*

	Operate and Maintain Bus System	Expand and Modernize Bus System	Operate and Maintain Transitways	Operate and Build New Transitways	Total
Current Revenue Scenario 2015-2040	\$18.5 billion	\$0.6 billion	\$3.6 billion	\$8.5 billion	\$31.2 billion
Increased Revenue Scenario 2015-2040	-	+ \$2-3 billion	-	+ \$5-6 billion	+ \$7/\$9 billion

# How Will We Get There?

## *Land Use and Local Planning*

- Residential density requirements supporting transit investment stewardship
  - Depends on community designation level that relates to “stage of development” from Thrive MSP 2040
  - Minimums
    - Rail/Dedicated BRT stations: 20-50 units per acre
    - Highway BRT stations: 10-25 units per acre
    - Arterial BRT: 15 units per acre
  - Targets
    - Rail/Dedicated ROW stations: 40-150+ units per acre
    - Other BRT stations: 20-75+ units per acre
    - Arterial BRT: 15-60+ units per acre
  - Activity guideline of 7,000 people, jobs, or students per station





# What Changes are Expected in the Plan Update?

## Transit System

# What are the Changes Expected in this Plan?

- **Counties Transit Improvement Board Dissolution**
  - 5-county 1/4 cent = \$120 M/year
  - Major current source of capital and operating funding for existing and future transitways
- Counties intend to implement individual sales taxes (1/4-1/2 cent) for transportation, all modes eligible
- Expected to replace unreliable state share of transitway capital
- May allow for additional projects to be funded

# How does a Transitway Get in the Plan?

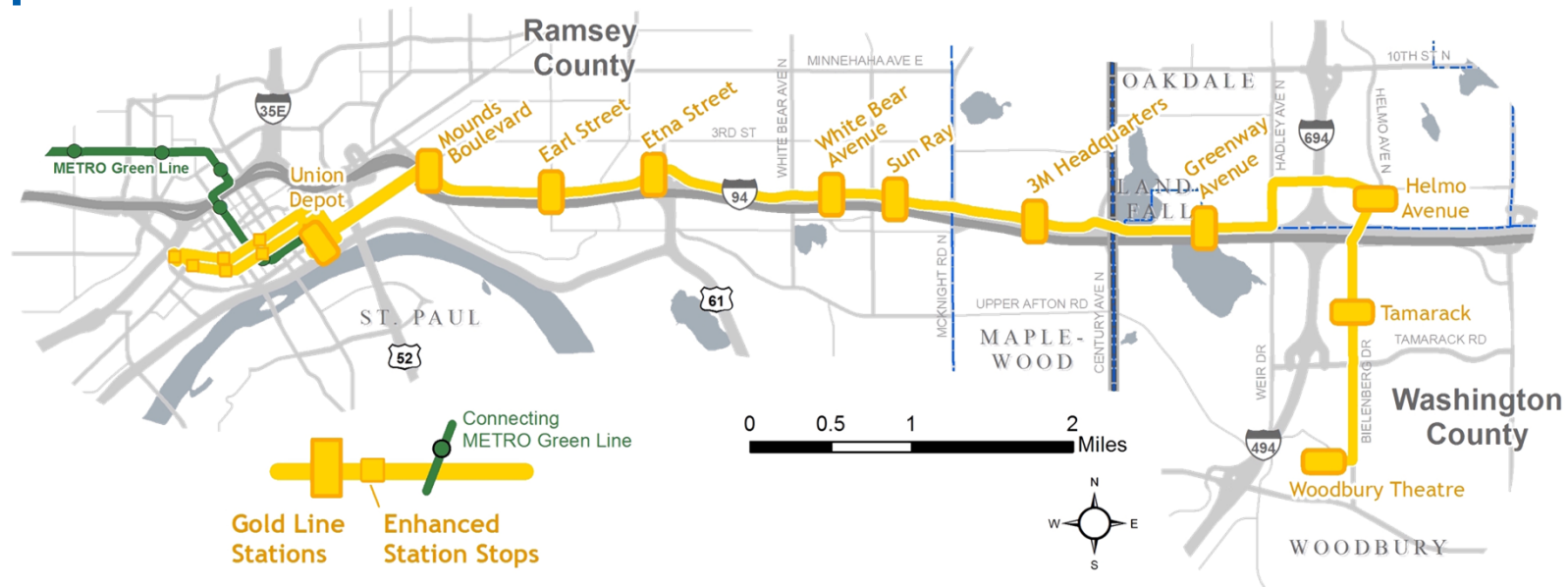
What the Council Requests to be in the TPP:

- Approved LPA recommendation on mode and alignment
- LPA report documenting the project process and merits
- Resolutions of support from local affected communities
- Viable funding plan for capital and operating (for fiscal constraint)
- Viable project schedule

# What are the Changes Expected in this Plan?

## *Project Updates*

- METRO Gold Line
- Revised LPA alignment adopted in early 2017
- Updated costs



# What are the Changes Expected in this Plan?

## *Project Updates*

- METRO Green Line Extension (Light Rail): Updated costs and station locations
- METRO Blue Line Extension (Light Rail): Updated costs
- METRO Red Line Future Stages (Highway BRT): Updated implementation plan
- METRO Orange Line (Highway BRT): Updated alignment and stations
- C Line/Penn Ave (Arterial BRT): Updated alignment and station plan

# What are the Changes Expected in this Plan?

## *Corridor Study Updates*

- Nicollet-Central: Environmental work
- Red Rock: Implementation Plan updates
- West Broadway: LPA recommendation
- Rush Line: LPA recommendation
- Riverview: LPA recommendation
- Highway 169: Transit recommendations

# Changes Expected

## Rush Line LPA Recommendation

### Draft LPA Statistics

Approx. Length: **14 miles**

Dedicated Guideway: **85-90%**

# of Stations: **20**  
(includes Union Depot & Maplewood Mall Transit Center)

Schedule: **5 am to midnight**  
**7 days/week**

Frequency: **Rush hour: every 10 mins**  
**Non-rush hour: every 15 mins**

Travel Time: **14 mins**  
One way, White Bear Lake > Maplewood  
**30 mins**  
One way, Maplewood Mall > Robert/5<sup>th</sup>  
**6 mins**  
One way, Robert/5<sup>th</sup> > Union Depot

Capital Cost (\$2021): **\$420 M**  
(+ \$55 M if other routes in guideway)

Annual O&M Cost (\$2015): **\$7.8 – 8 M**

Average Daily Ridership (2040): **5,700 – 9,700**  
(higher ridership if other routes use guideway)

# People Living below Poverty in Station Areas (2040): **11,700**

# of Jobs in Station Areas (2040): **106,700**

# of Residents in Station Areas (2040): **60,200**



# What Changes are Expected?

## *Arterial Bus Rapid Transit Discussion*

- A Line opening and success story
- Progress on multiple corridors (Penn Ave, Chicago-Emerson-Fremont, Lake St, Hennepin Ave)
- Additional funding secured through Regional Solicitation, other sources
- Incremental phased build-out possible
  - Stations
  - Buses
  - Service
  - Other amenities



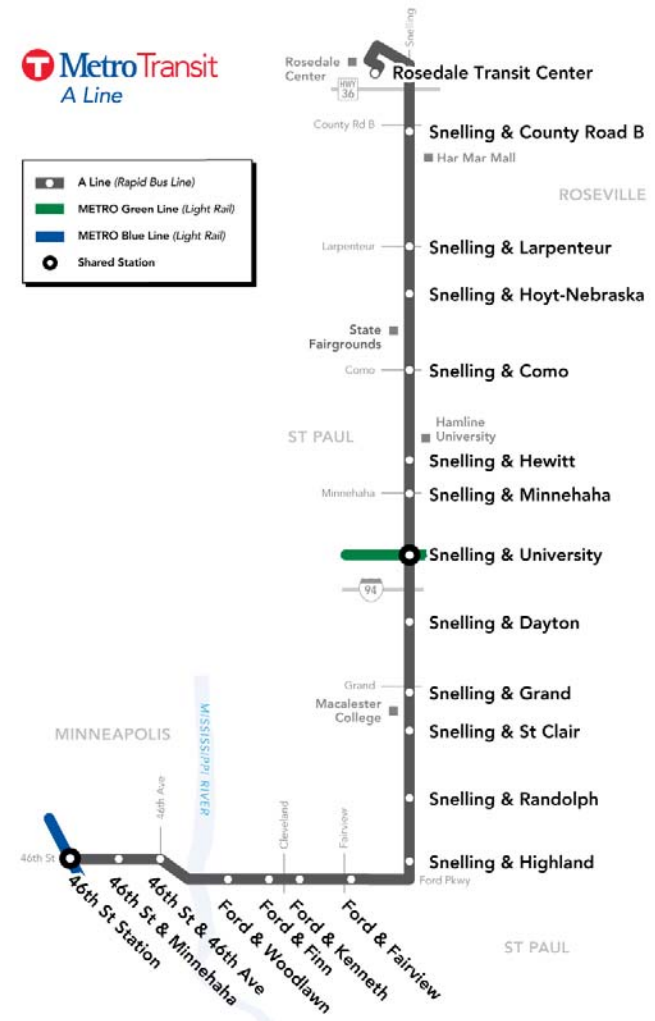
# What Changes are Expected?

## Arterial Bus Rapid Transit Discussion



**MetroTransit**  
A Line

- A Line (Rapid Bus Line)
- METRO Green Line (Light Rail)
- METRO Blue Line (Light Rail)
- Shared Station



# What Changes are Expected?

## *Arterial Bus Rapid Transit Discussion*

- Projects open or with (mostly) full funding plan:
  - Snelling Ave
  - Penn Ave
- Projects with partial funding for elements of Arterial BRT that can be done independently:
  - Chicago-Emerson-Fremont Ave
  - Lake St
  - Hennepin Ave

# What Changes are Expected?

## *Work Program Items*

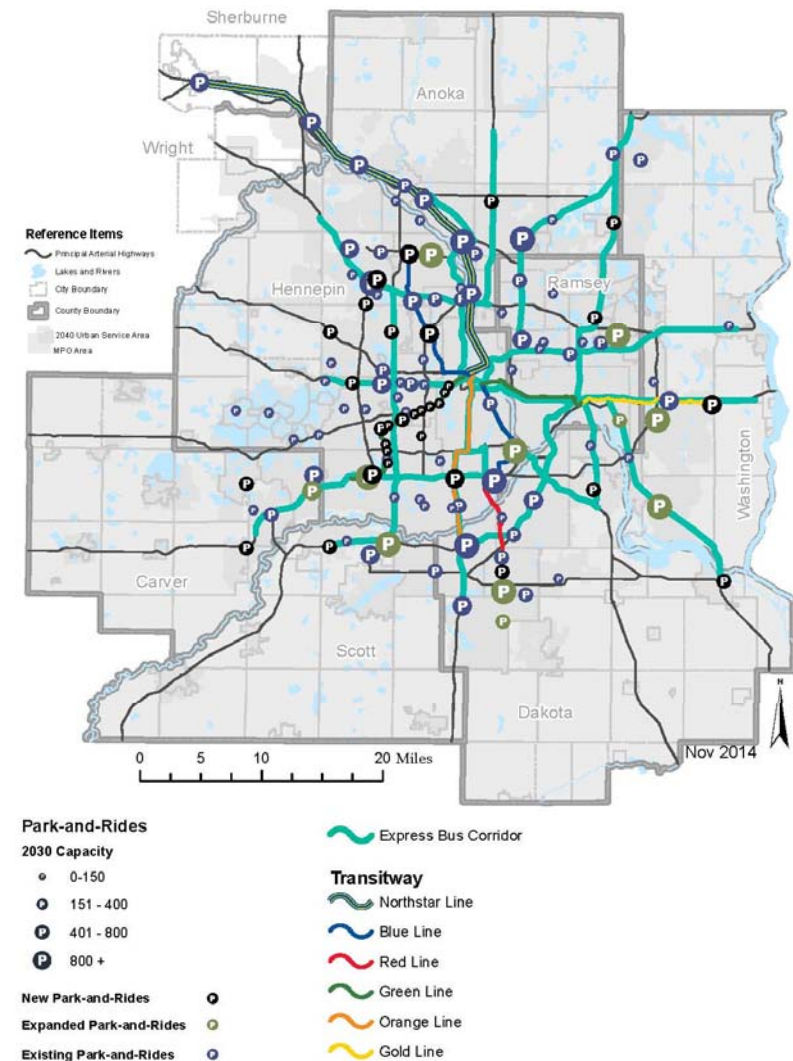
### Changes Expected:

- Park-and-Ride Plan
  - 2040 demographic updates
  - Model refinement
- Bus Stop Facility Guidelines

### Minimal Changes Expected:

- Setting Transitway Priorities
- Streetcar Policy
- Regional Transitway Guidelines
- Regional Service Improvement Plan

2030 Park-and-Ride System and Express Bus Corridors



# What Changes are Expected?

## *Other Transit Items*

### Changes Expected:

- Shared Use/First Last Mile
- Role of Regional Solicitation Funding
- Asset Management/State of Good Repair and Performance Measures

### Minimal Changes Expected:

- Land Use and Local Planning chapter
  - Most communities already in the midst of 2018 Comprehensive Planning process

# What's Next?

## *Future Meeting Schedule (Tentative)*

Topic(s)	TAB Meeting
Transit Overview	August
Highway and Freight Overviews	September
Bike/Ped and Aviation Overviews	October
Transit and Highway Investment Updates	November
Bike/Ped, Aviation, Other Content	December