



Transit Investment Direction and Plan Introduction

Transportation Advisory Board October 18, 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?

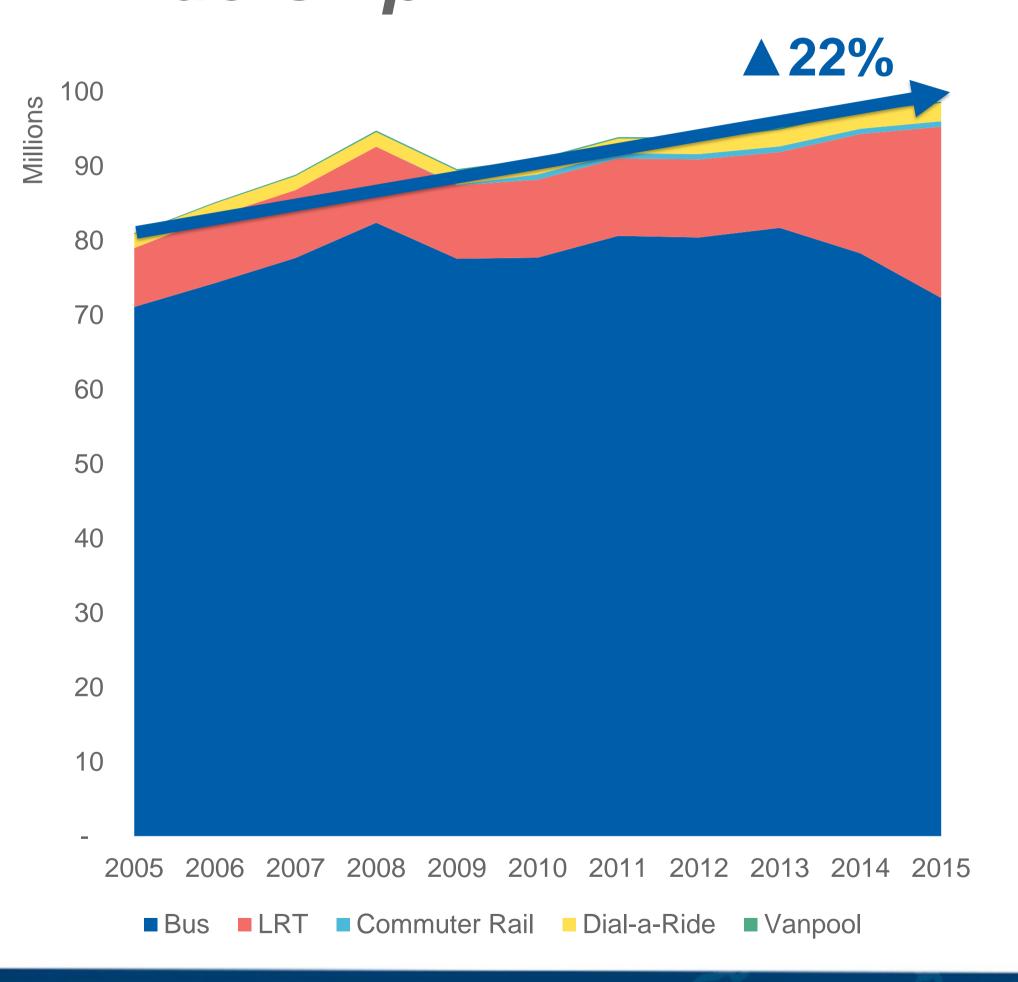
- Messages that are important to highlight in TPP Overview ("tell a good story")
- Important messages that you think are missing ("story isn't there yet")
- Your ideas on potential changes to the TPP that are not covered here ("change the story")





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 1st Highway BRT
- 2014 2nd Light Rail
- 2016 1st 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







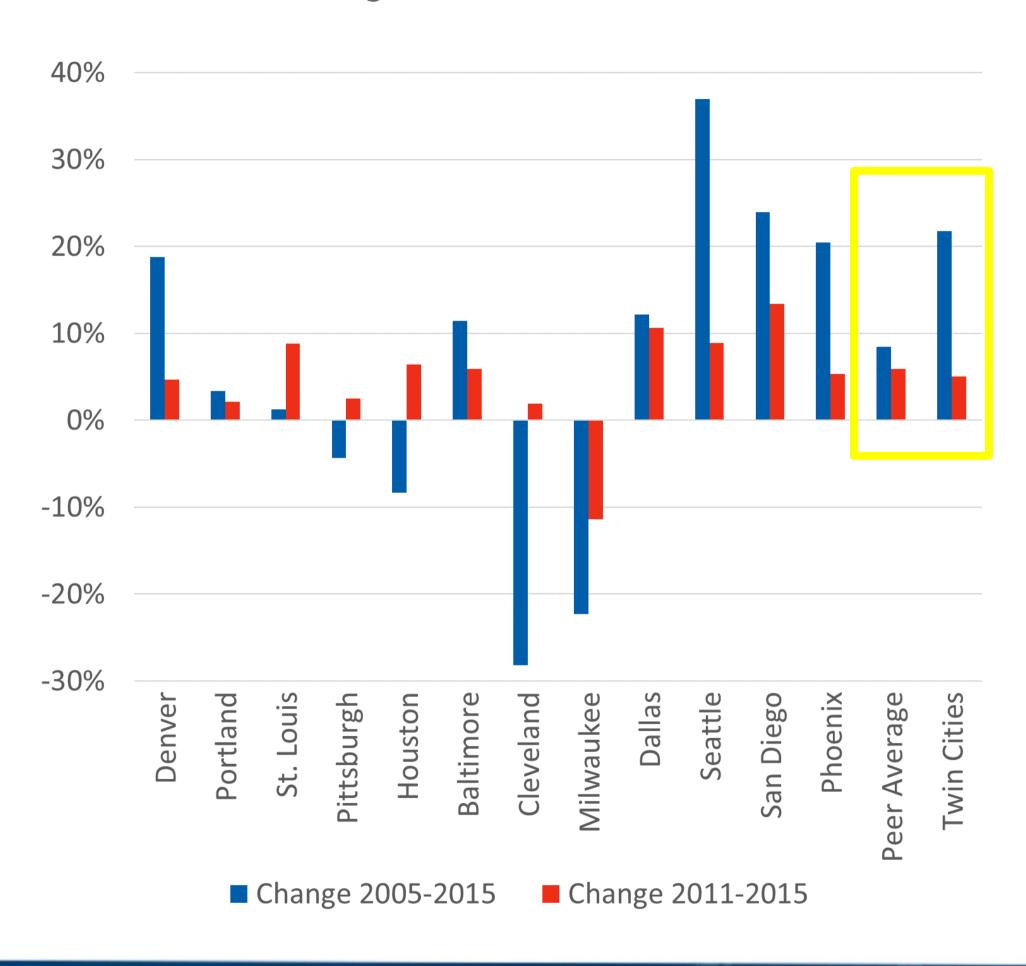






Where are We Now?

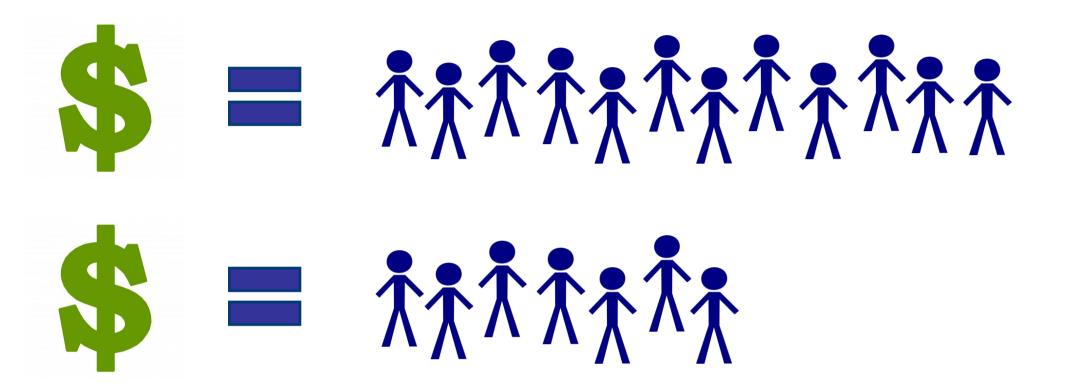
Transit System: Peer Ridership



- 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

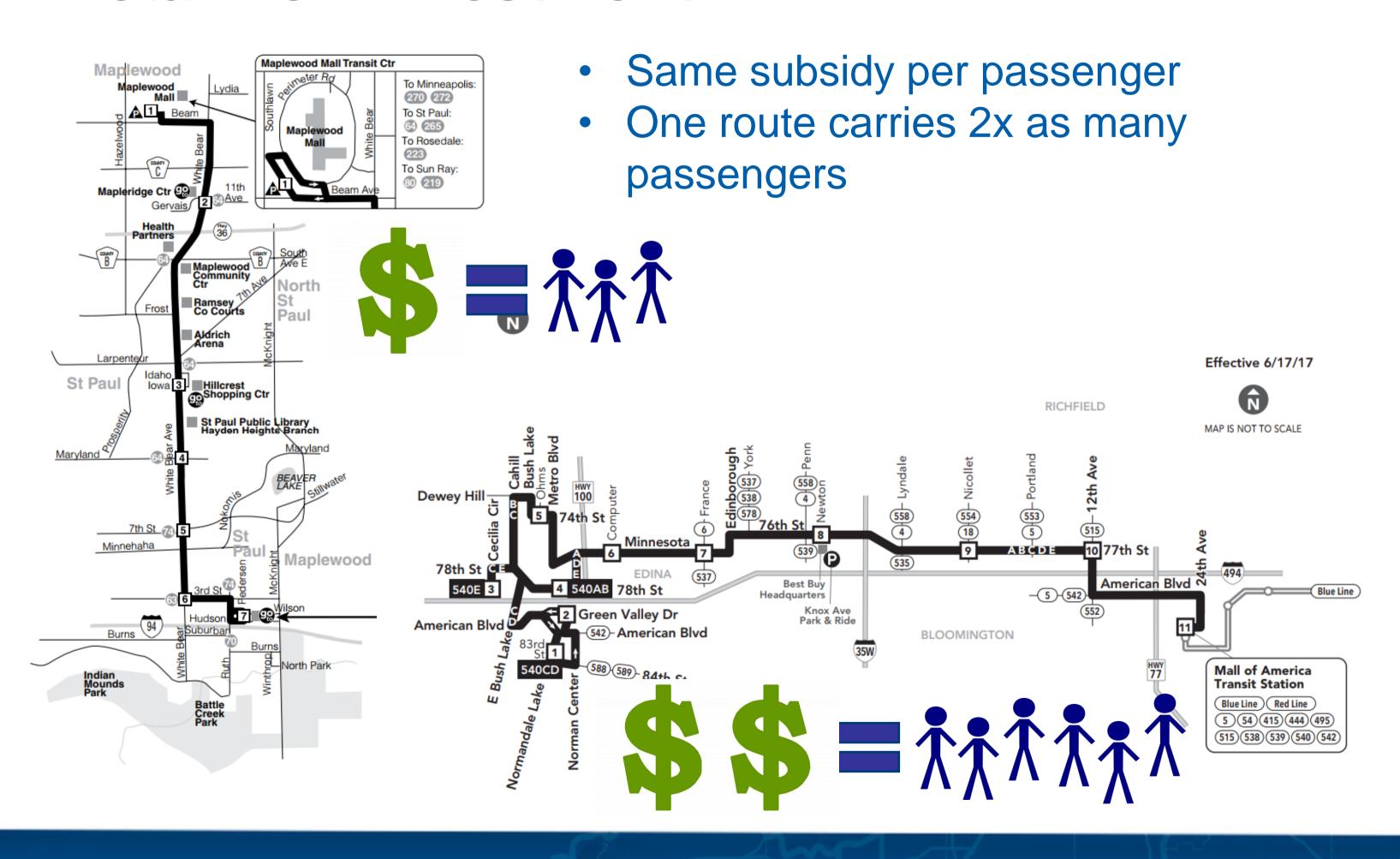
Where are We Now?

Return on Investment





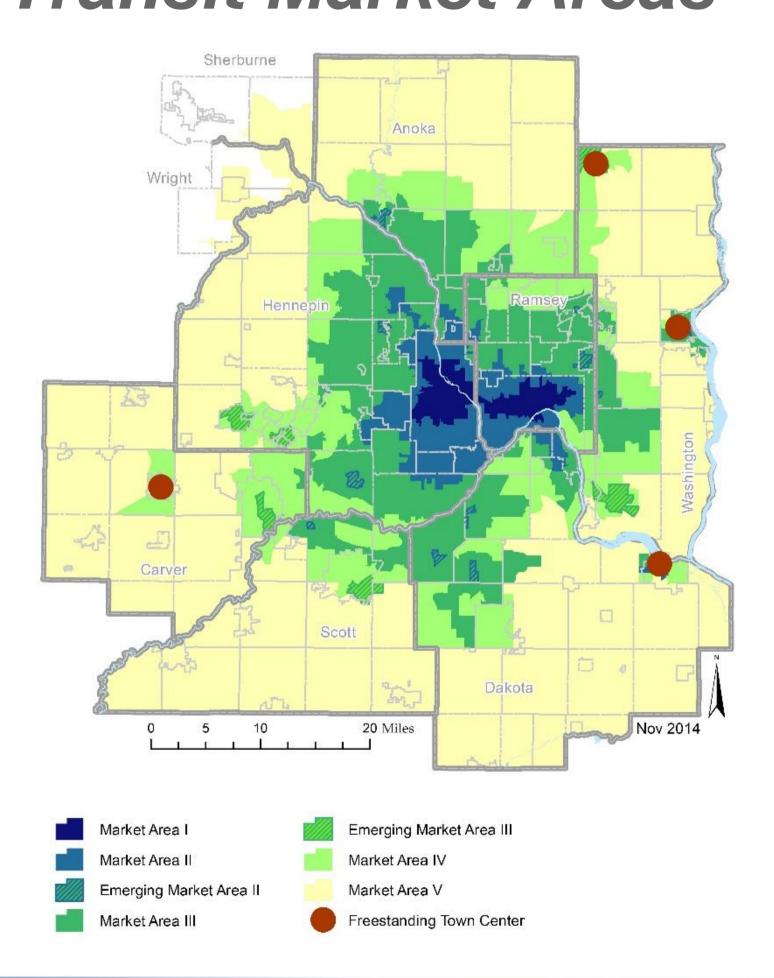
Where are We Now? Return on Investment



Where are We Now? Return on Investment

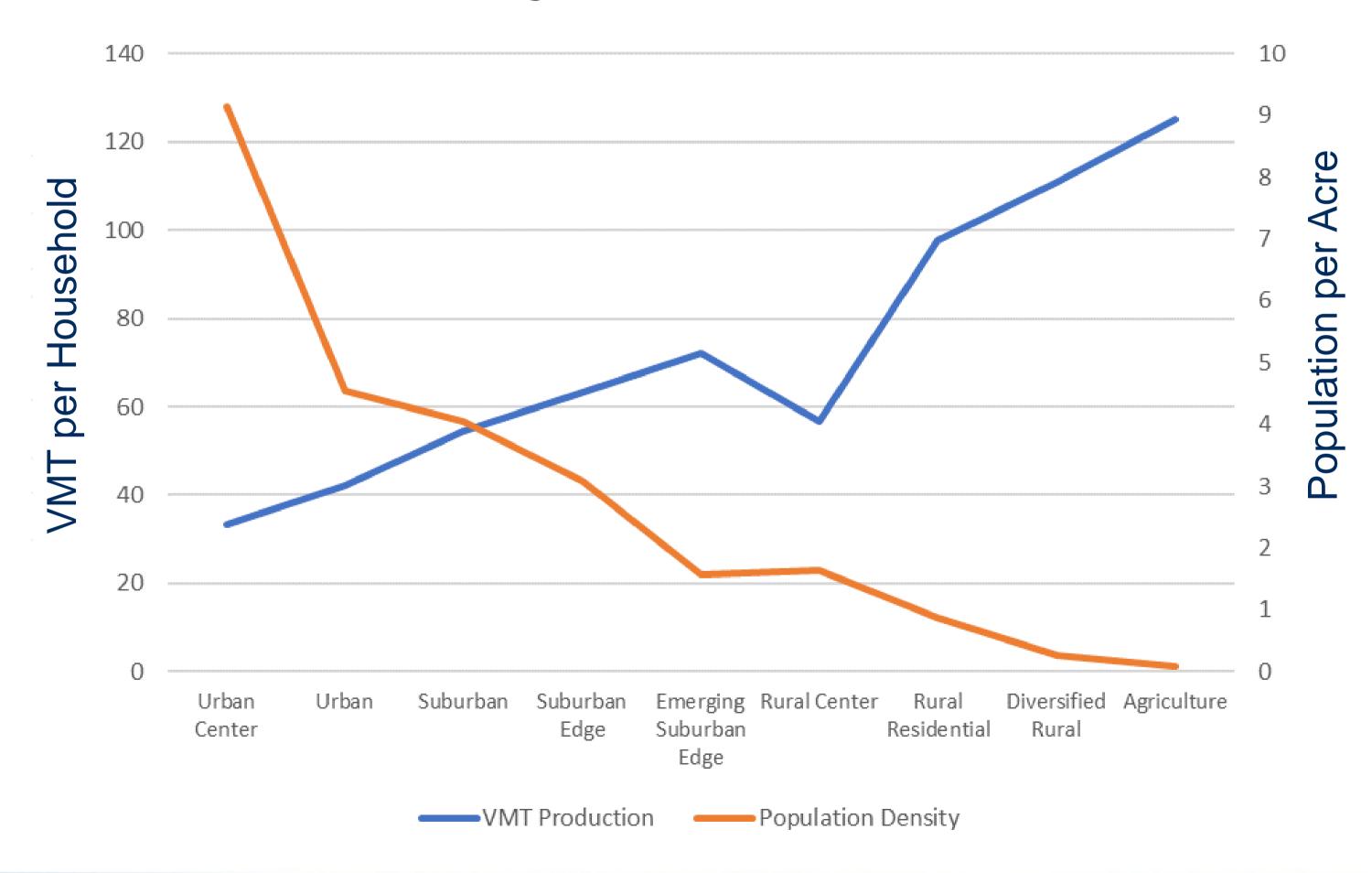
Effective 6/17/17 One route subsidy per MAP IS NOT TO SCALE passenger about 2x RICHFIELD One route carries 3x 76th St -(538) (540) **EDINA** American Blvd as many passengers, Green Valley Dr (535) American but costs 50% more 82nd St 2 542AB BLOOMINGTON 84th St Mall of America **Transit Station** Blue Line Red Line 5 (54) (415) (444) (495) (515)(538)(539)(540)(542) Effective 6/17/17 **RICHFIELD** MAP IS NOT TO SCALE 78th St 📮 American Blvd N 540E 3 540AB 78th St 2 Green Valley Dr American Blvd **BLOOMINGTON** Mall of America 5 (54) (415) (444) (495)

Where are We Now? Transit Market Areas

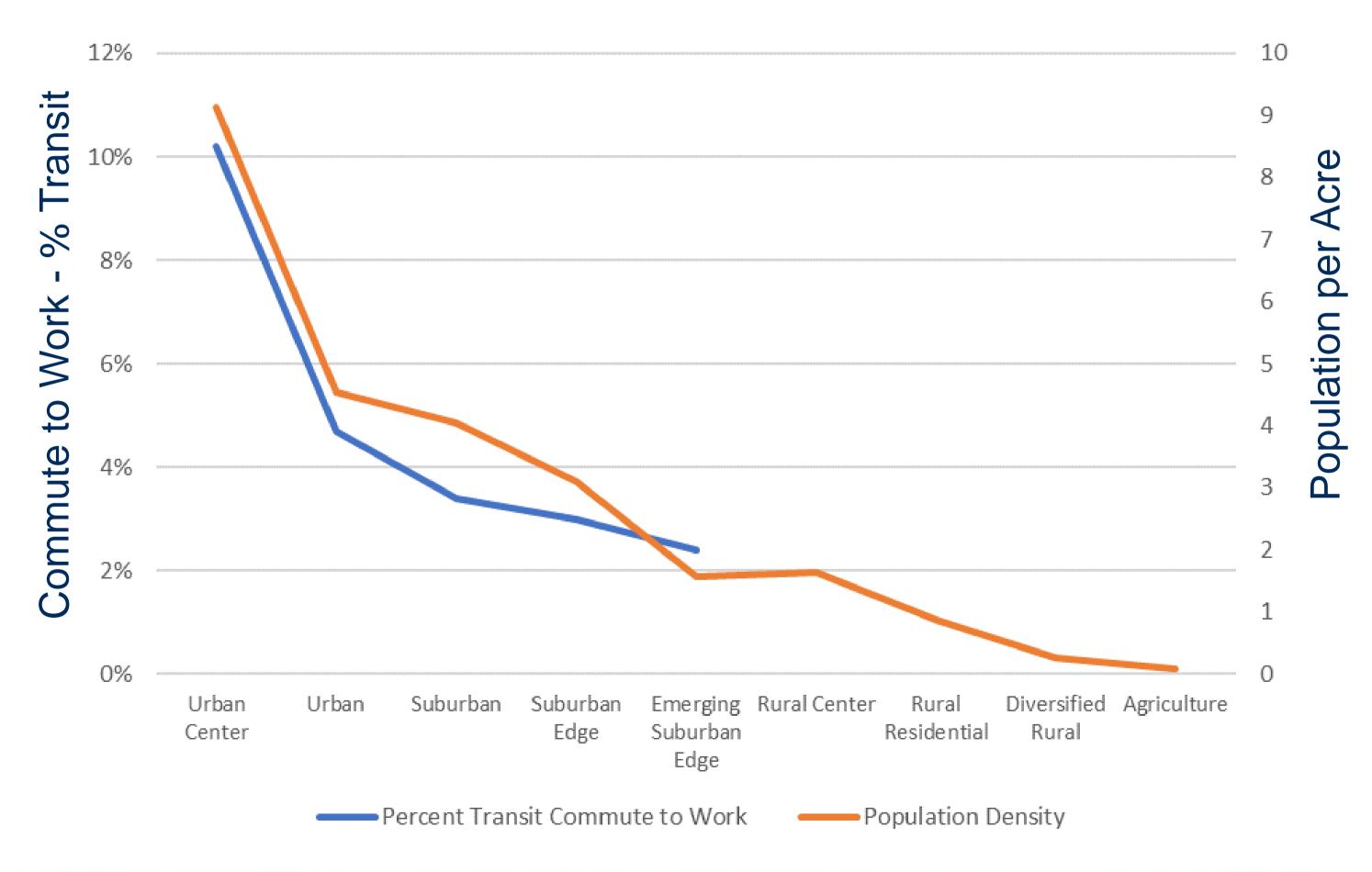


- Market Areas broadly quantify & estimate transit demand
- Return on investment;
 Guiding investment
 levels relative to demand
- Much of the region currently not well suited for high-level of service
- ...BUT land use is changing! Opportunities exist, implementation takes time!

Where are We Now? Travel and Density

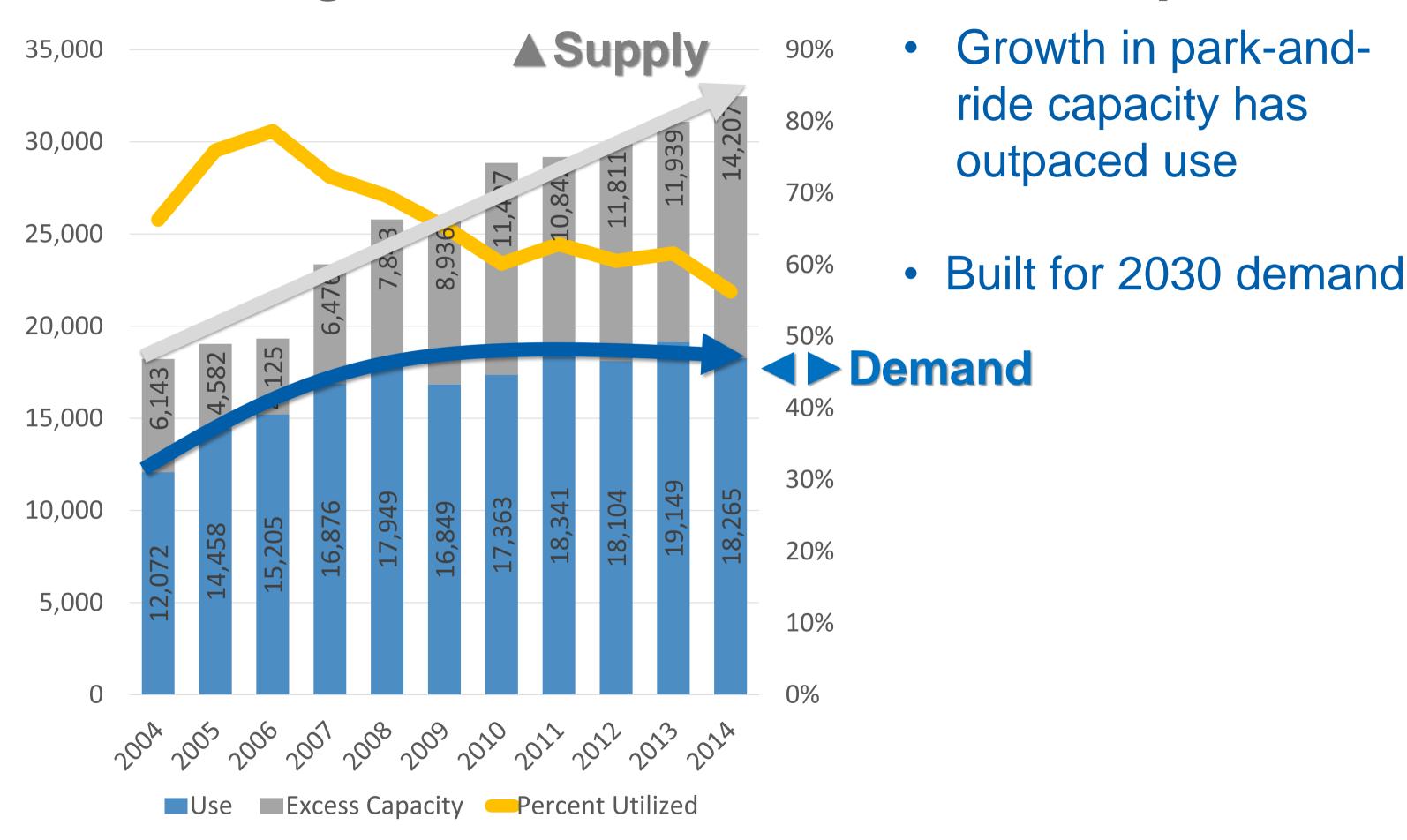


Where are We Now? Travel and Density



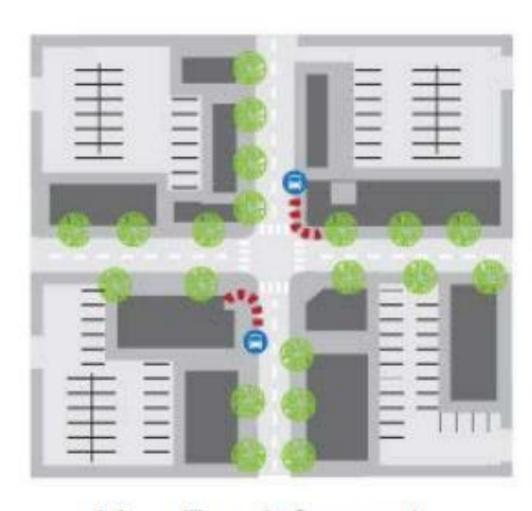
Where are We Now?

Diminishing Returns, Park-and-Ride Example

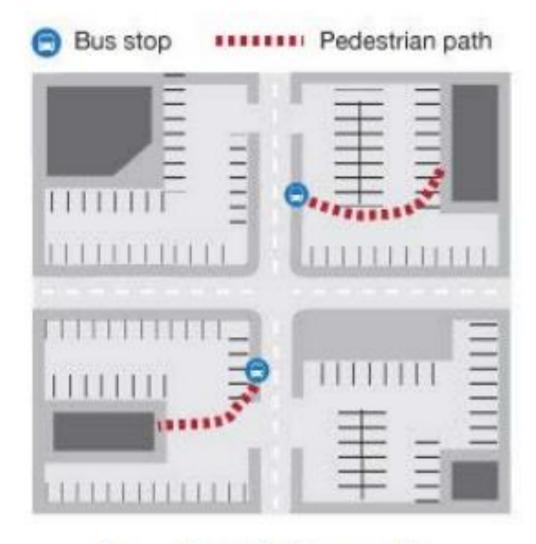


Design for a pedestrian-friendly environment

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.

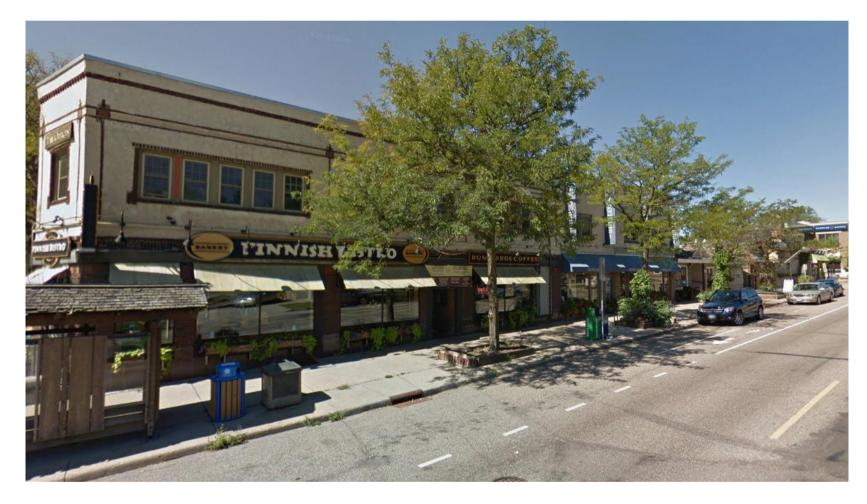


More Transit Supportive



Less Transit Supportive

Design for a pedestrian-friendly environment



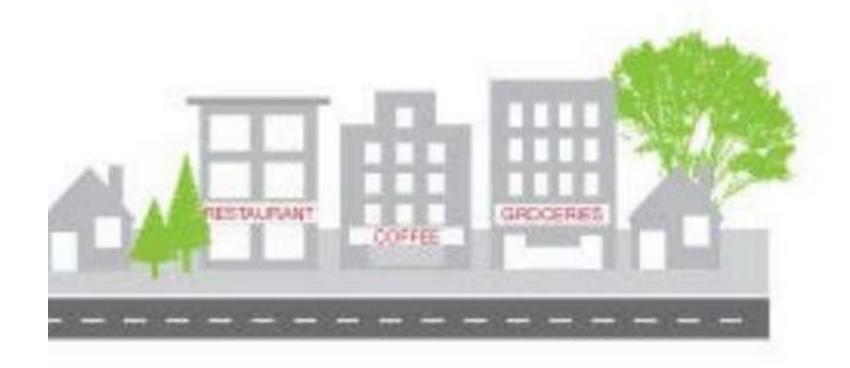
More transit supportive

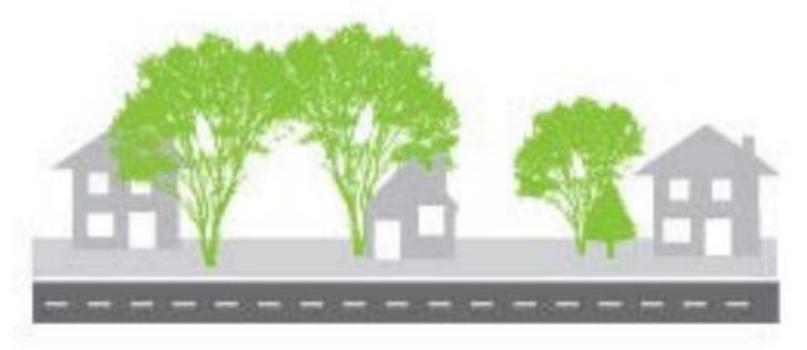


Less transit supportive

Encourage a mixed-use land use pattern

Transit is most effective when it serves a variety of trip purposes and destinations. Mixeduse 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

Encourage a mixed-use land use pattern





More transit supportive

Less transit supportive





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	 State of good repair (<u>Maintain</u> what we have!) Operate <u>efficiently and cost-effectively</u>
Safety and Security	Improve <u>safety</u> and <u>security</u>
Access to Destinations	 More multimodal options (esp. in congested corridors) Increase <u>reliability</u> and <u>predictability</u> Increase <u>transit ridership</u> and transit mode share
Competitive Economy	 Improve multimodal <u>access to job</u> concentrations Invest in multimodal to <u>attract and retain</u> businesses and residents
Healthy Environment	 Reduce <u>air emissions</u> Increase availability and <u>attractiveness</u> of transit, encourage <u>healthy communities</u> and <u>car-free</u> lifestyles
Leveraging Investments to Guide Land Use	 Focus growth to support multimodal travel Encourage local land use to integrate all modes

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

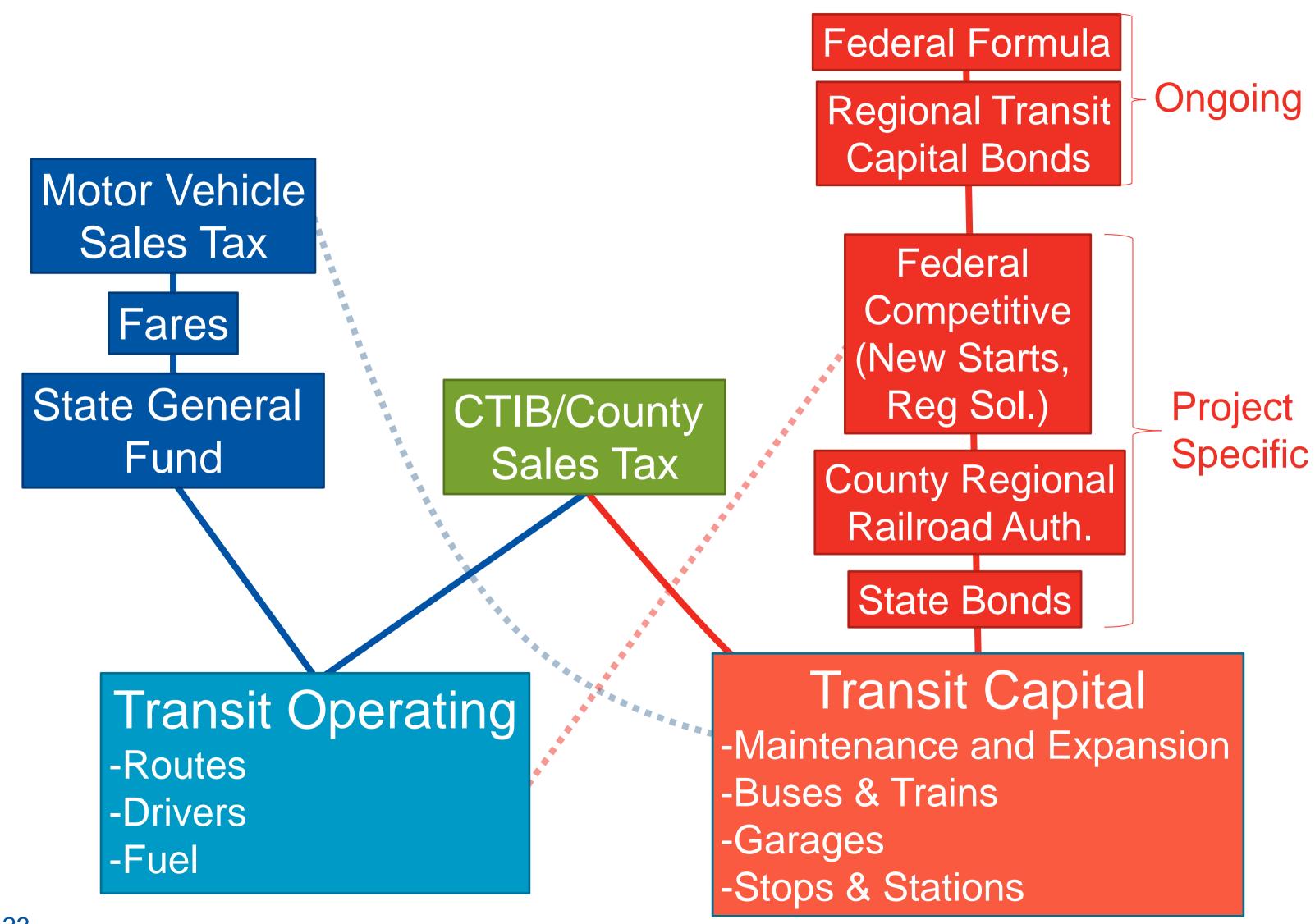
Support Equity, Clean Air, and Healthy Communities





Transit System Investment Direction and Plan

Metro Area Transit Funding



Transit Investment Direction and Plan

Regional Solicitation Transit Criteria

Solicitation Criteria	Key Transit Outcomes
Role in the Regional Transportation	Access to Jobs
System and Economy	
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

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

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 <u>efficient</u> and <u>cost-effective</u>
 - Provide service alternatives to regular route bus in lower demand areas





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 <u>investment factors</u>:
 - Cost-effectiveness
 - Access to destinations and people served
 - Equity
 - Peak-period transportation benefits

Transit Investment Direction and Plan

Bus and Support System





Tweaking Services and Harvesting and Reinvesting Inefficiencies

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

Expand and Modernize System

2015-2040

\$18.5 Billion

\$0.6 Billion

(Through Regional Solicitation)

*Includes Metro Mobility

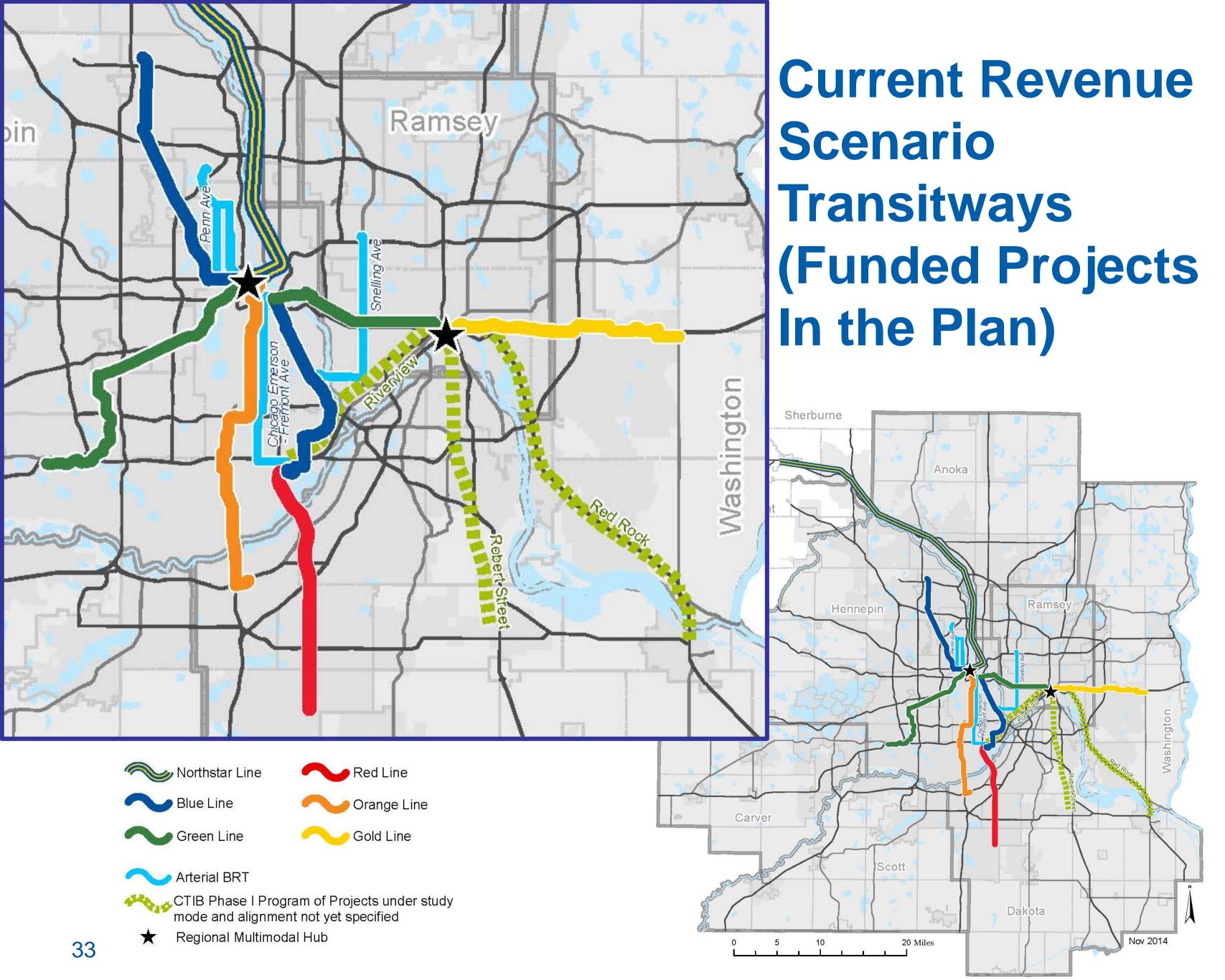
Transit Investment Direction and Plan Transitways

- 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)

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



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

• 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

Transitways

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

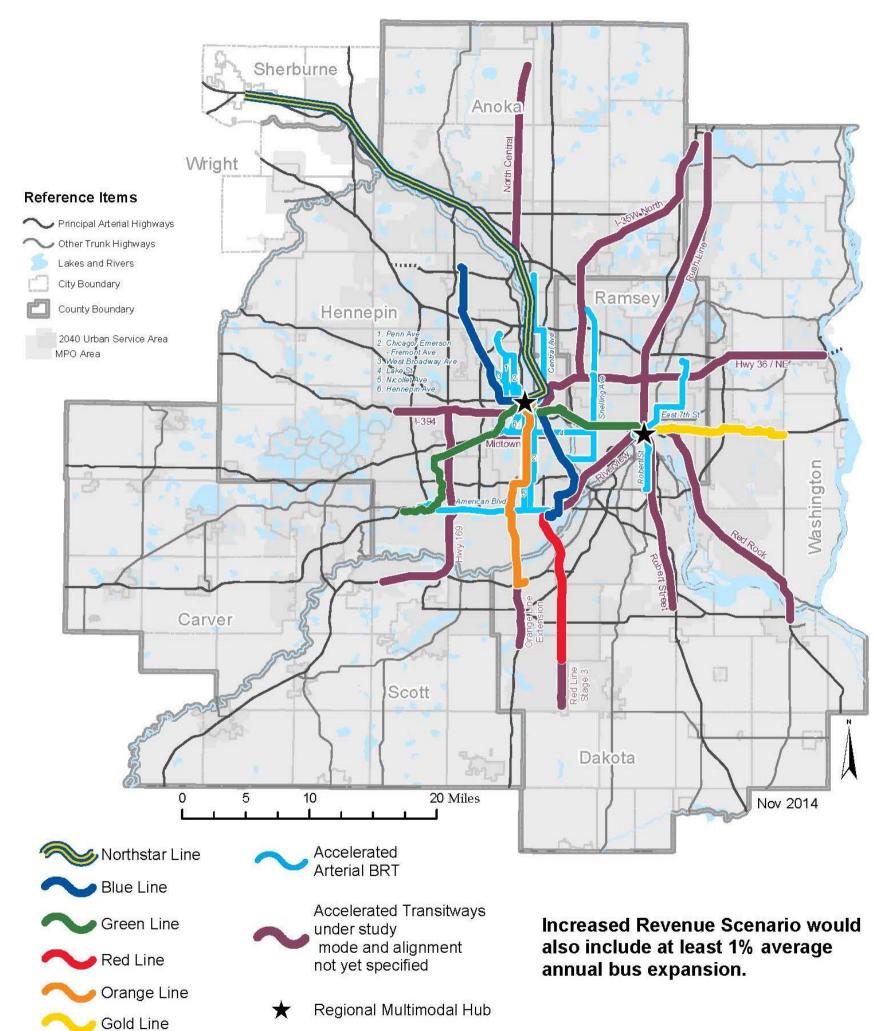
- Increased Revenue Scenario
 - Originated with Governor's Transportation Finance Advisory Committee (TFAC) analysis in 2012
 - Identified a <u>need</u> for transit system that would keep the region economically competitive

Bus Expansion

Transitway Expansion

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	Modernize	Maintain	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?

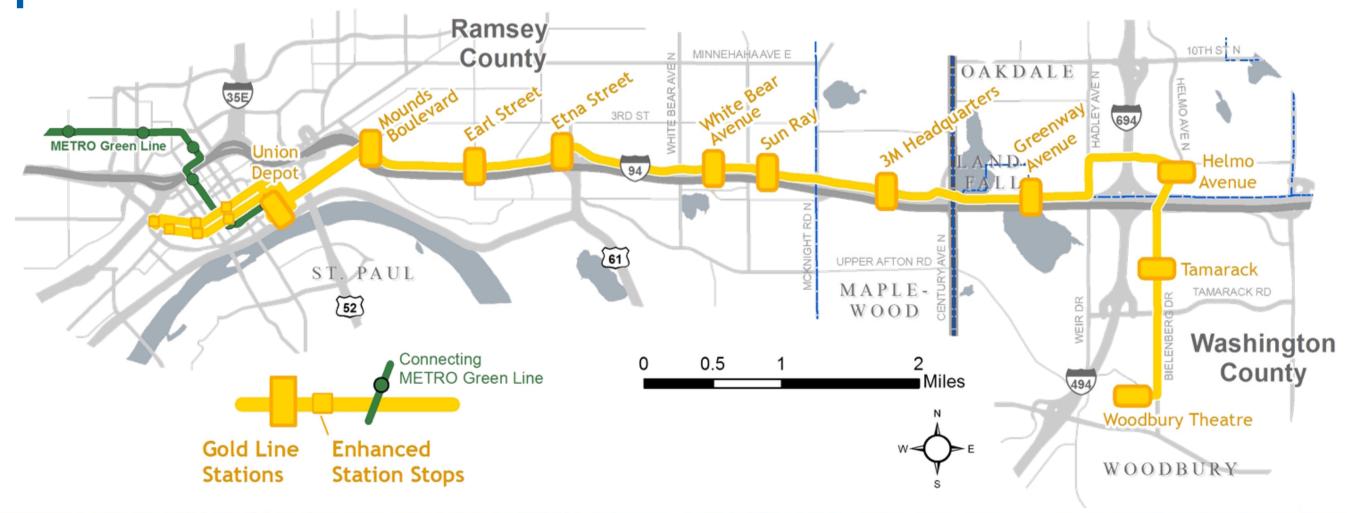
What the Council Requests to be in the TPP:

- 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 85-90% Guideway:

of Stations:

(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/5th

6 mins

One way, Robert/5th > Union Depot

Capital Cost (\$2021):

\$420 M

(+ \$55 M if other routes in guideway)

Annual O&M \$7.8 - 8 M

Cost (\$2015):

Average Daily 5,700 - 9,700

(higher ridership if other Ridership (2040): routes use guideway)

People Living

11,700 below Poverty

in Station

Areas (2040):

of Jobs in 106.700

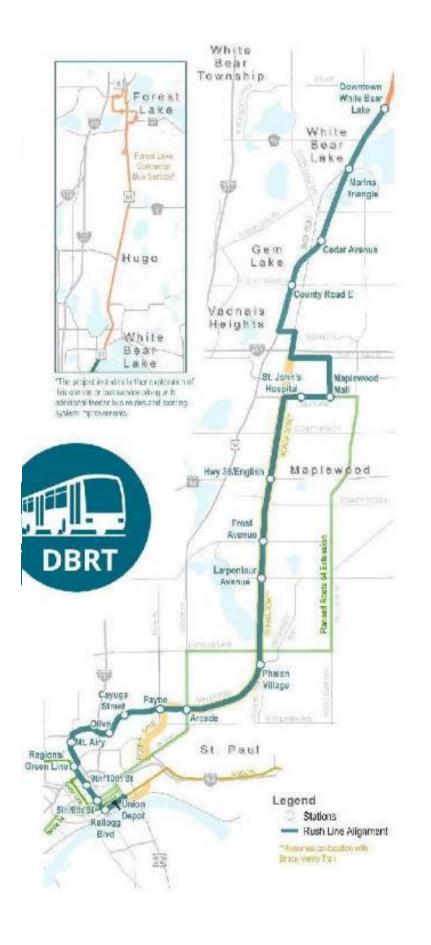
Station Areas

(2040):

of Residents 60,200

in Station

Areas (2040):



37

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







What Changes are Expected? Arterial Bus Rapid Transit Discussion

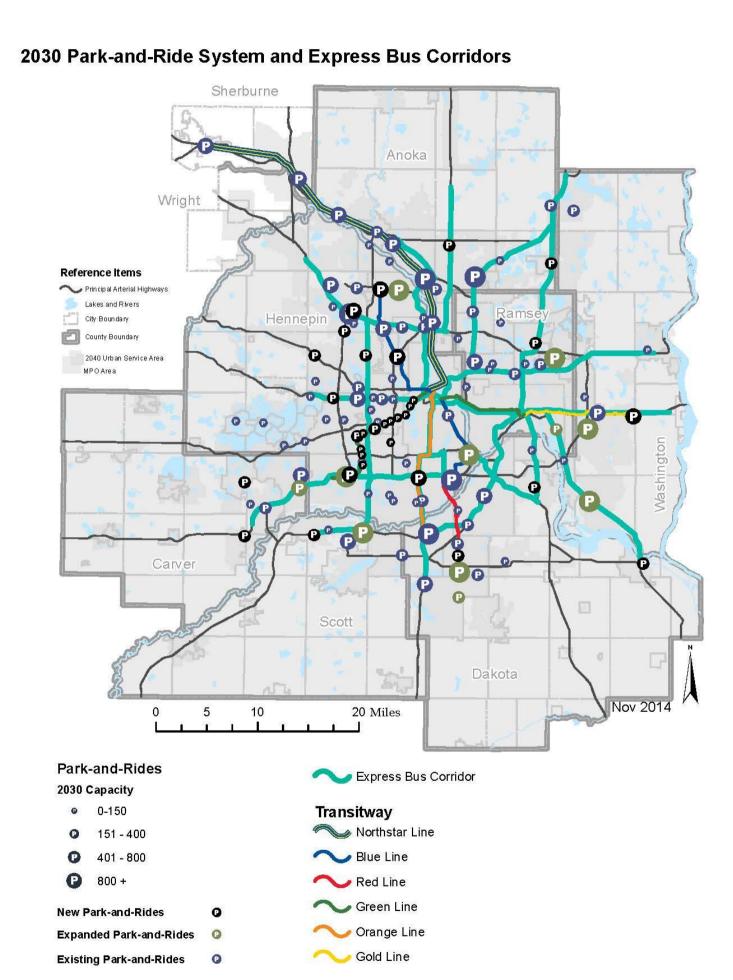
- Projects open or with (mostly) full funding plan:
 - Snelling Ave
 - Penn Ave
- Projects with partial funding for elements of Arterial BRT that can be done independently:
 - Chicago-Emerson-Fremont Ave
 - Lake St
 - Hennepin Ave

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



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