

Joint

**Counties Transit Improvement Board
&
Metropolitan Council Transportation Committee**

Workshop

Program of Projects Study

June 20, 2012

Our partners share our goal of More transitways

Corridors of Opportunity goal

“Accelerate the expansion of transit to enhance the region’s ability to compete in the global economy.”

Business wants more transit

Regions with robust transit systems work better. Those regions are choice destinations for employers and employees, because business has wider access to labor, and workers enjoy a higher quality of life.

Our competitor regions understand this, and are increasing their investments in transit. For us to remain competitive and attain our regional economic goals, our region must continue to strengthen our transit system.

- the Chambers of Commerce

Public wants more transit

Statewide

76% agree “Minnesota would benefit from having an expanded and improved public transportation system, such as rail and buses.”

69% agree “I would like to use public transportation such as rail or buses more often, but it is not convenient or available from my home or work.”

7-county metro

67% say public transportation has a positive impact on our ability to attract businesses to the Twin Cities region.

73% say public transportation has a positive impact on jobs.

71% say public transportation has a positive impact on the quality of life in Minnesota.

74% say public transportation has a positive impact on the amount of traffic congestion.

Public supports specific investments in transit

79% felt the following statement was a convincing reason to support funding for Southwest Light Rail Transit: “Transit ridership in the region keeps growing, and we need to continue to meet the need for a reliable way to school and work.”

77% felt the following statement was a convincing reason to support funding for Southwest Light Rail Transit: “One million more people are projected to live in the Twin Cities area in the next 25 years. If we do not invest in providing more transportation options now, we'll have more traffic and clogged roads, more pollution and a worse quality of life.”

Purpose of the Program of Projects Study

Determine the feasibility of accelerating development and construction of multiple transitways to serve the region.

Why are we investing in transitways? Why are we working to build more?

- **We are growing:** In the next 30 years, 893,000 more people will live in the Twin Cities area. We need additional mobility and access.
- **We need to compete:** Businesses and employees expect a comprehensive transit system. Without one, they will go elsewhere.
- **We want to protect our quality of life:** With a growing population, we want and need to:
 - Efficiently add mobility
 - Reduce air pollution
 - Serve and create places

Transit lets us prosper:

A day in September 2011



Twins + Vikings + “Wicked”	100,000 people
State Fair	155,000 people
rush hour for two downtowns	200,000 workers
<u>Central Corridor “eds & meds”</u>	<u>67,000 workers</u>
	522,000

Transit is the only way to serve these numbers!

**Transit makes possible a world-class region
(a region that can do more than one thing at a time)**

Transit lets us prosper /2

- Lack of transit capacity limits job growth in downtowns *and* suburbs.

Major HQs in downtowns *and* suburbs say:

“We need transit to add substantial jobs.”



Parking lot is full. Not cost-effective to build a ramp.

SUPERVALU

We need transit to compete for workers



Transit allows us to attract the future

Transit makes us a region that draws
the future's workers and jobs

“Companies are recruiting and targeting the next generation of talented workers, the Generation Y and millennials who increasingly prefer urban lifestyles with mass transit.”

– Urban Land Institute

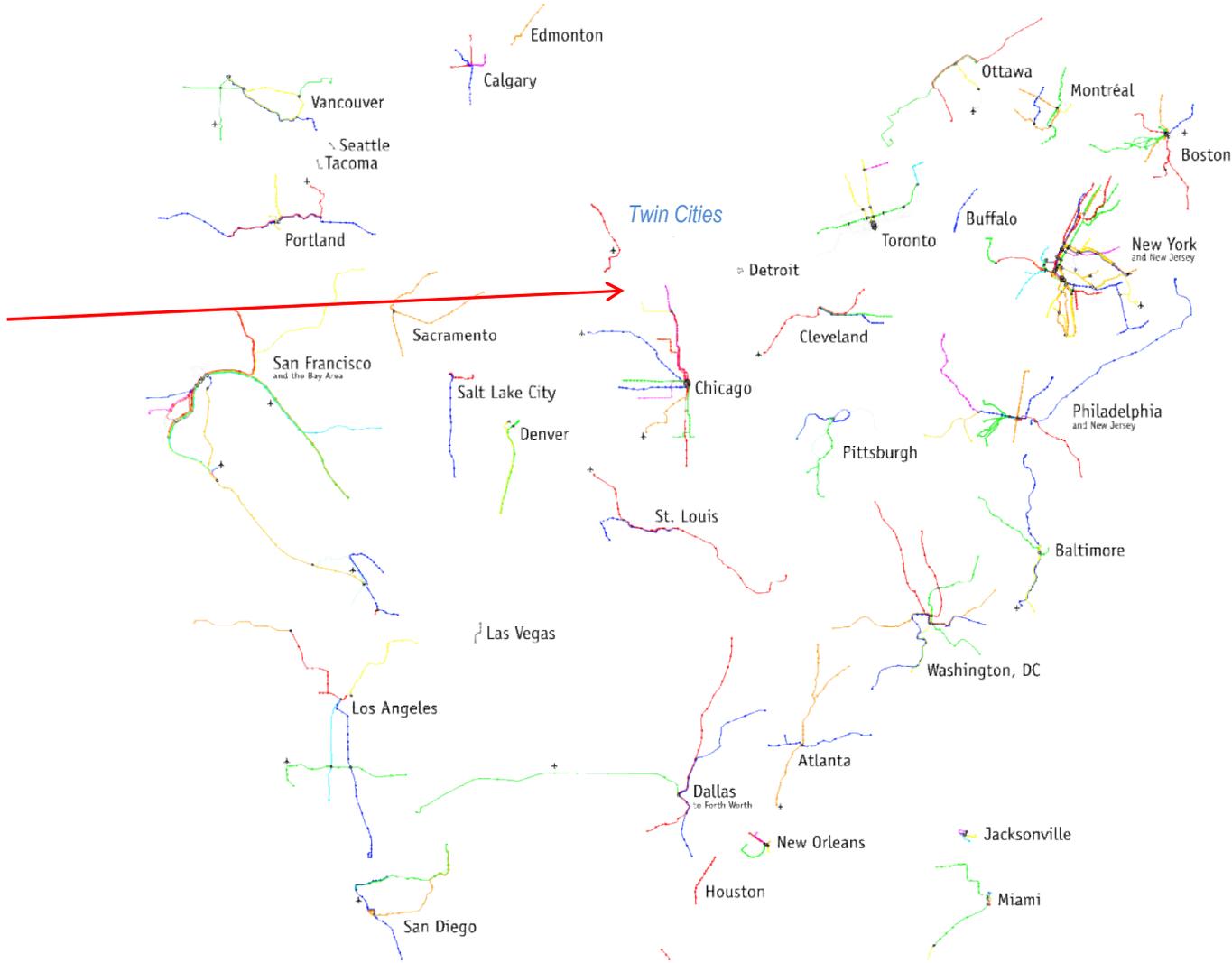


Source: Jeffrey Spivak, “Urban Office Momentum”, *Urban Land*, September 14, 2011

Uncertainty delays development

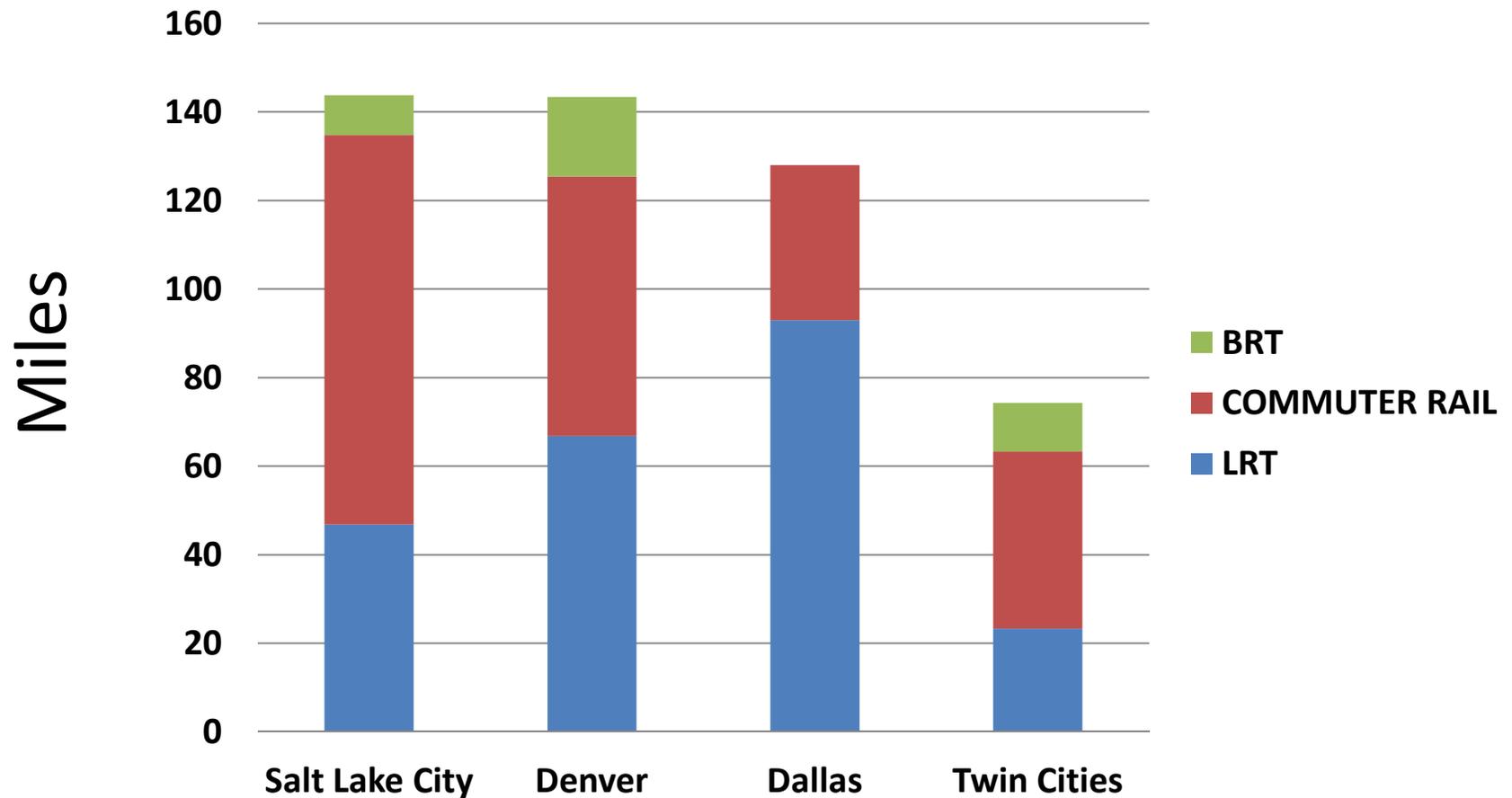
- Uncertainty about funds
 - delays transit construction,
 - delays jobs,
 - delays development.
- Businesses wait to see where transitways will go before building and investing.
 - Southwest LRT
 - Northstar Ramsey Station
 - Central Corridor LRT

Other regions are ahead & are building faster



Maps to same scale. Source: <http://www.radicalcartography.net/?subways> (2006)

Our competitors are far ahead



Source: Adapted from Fresh Energy, 2012

Other regions know transit matters, and
Are investing more



Adapted from TLC, 2011

A background image of a city street scene. In the foreground, a yellow tram is stopped at a station platform. A group of people, including a man in a white shirt and a woman in a dark jacket, are standing on the platform. The background shows tall buildings and utility poles with power lines. The image is overlaid with a semi-transparent grey box containing text.

Summary of why CTIB invests in transitways

A thriving region is the product we are making.

Transit is an essential component.

If we leave it out, or put in too little, we'll get a different, less competitive, product.

Main Questions for Program of Projects

1. Is it possible:

- To complete our shared vision given *current funding practices* and policy?
- To build our vision more quickly given *current funding practices* ?

Sneak peak at the answers: No

2. How have other cities accelerated their building?

3. What might work in our region? What are our options?

Overview of the Workshop

- 8:30** 1. Welcome and Introduction
2. Basic Technical and Financial Assumptions (*Reports 1 & 2*)
• Q&A
- 9:15** 3. Financial Analysis Under Current Law and Practice (*Report 2*)
4. Challenges Identified (*Report 2*)
• Q&A
- 9:30** 5. Funding and Financing Sources (*Report 3*)
6. PoP Peer Cities Findings (*Report 4*)
• Q&A
- 9:45** BREAK
- 10:00** 7. Lessons Learned (*Report 2*)
8. NEXT STEPS
• Q&A/*Discussion*
- 11:00** Adjourn

Basic Assumptions

(Report 1 - Baseline Assumptions for the Program of Projects Study,
Report 2 - Financial Analysis of Program of Projects Under Current Law and
Practice)

How is the “Program of Projects” Defined?

Focus is on Transitway Expansion

- Transit Modes Considered
 - Light Rail Transit
 - Commuter Rail
 - Bus Rapid Transit (BRT) on highways
 - Exclusive BRT
 - Three generic arterial BRT
- Did not consider expansion of basic bus service or Arterial BRT beyond the three generic Arterial BRT

Definitions

- “Core Project”

Approved alignments and modes (LPAs) and are in Preliminary Engineering , construction or operation

- “Generic Project” or “Expansion Project”

Additional transitways for which cost and timing assumptions have been developed based on defined characteristics of a mode without geographic specificity

Definition of the PoP Scenarios

	Number of Corridors
Core Projects	6
Expansion Projects	9
Total Corridors	15

Six Core Projects in All Scenarios

- Hiawatha LRT
- Northstar Commuter Rail
- Cedar Avenue BRT (all phases)
- Central Corridor LRT
- Southwest LRT
- I-35W South BRT (all phases)

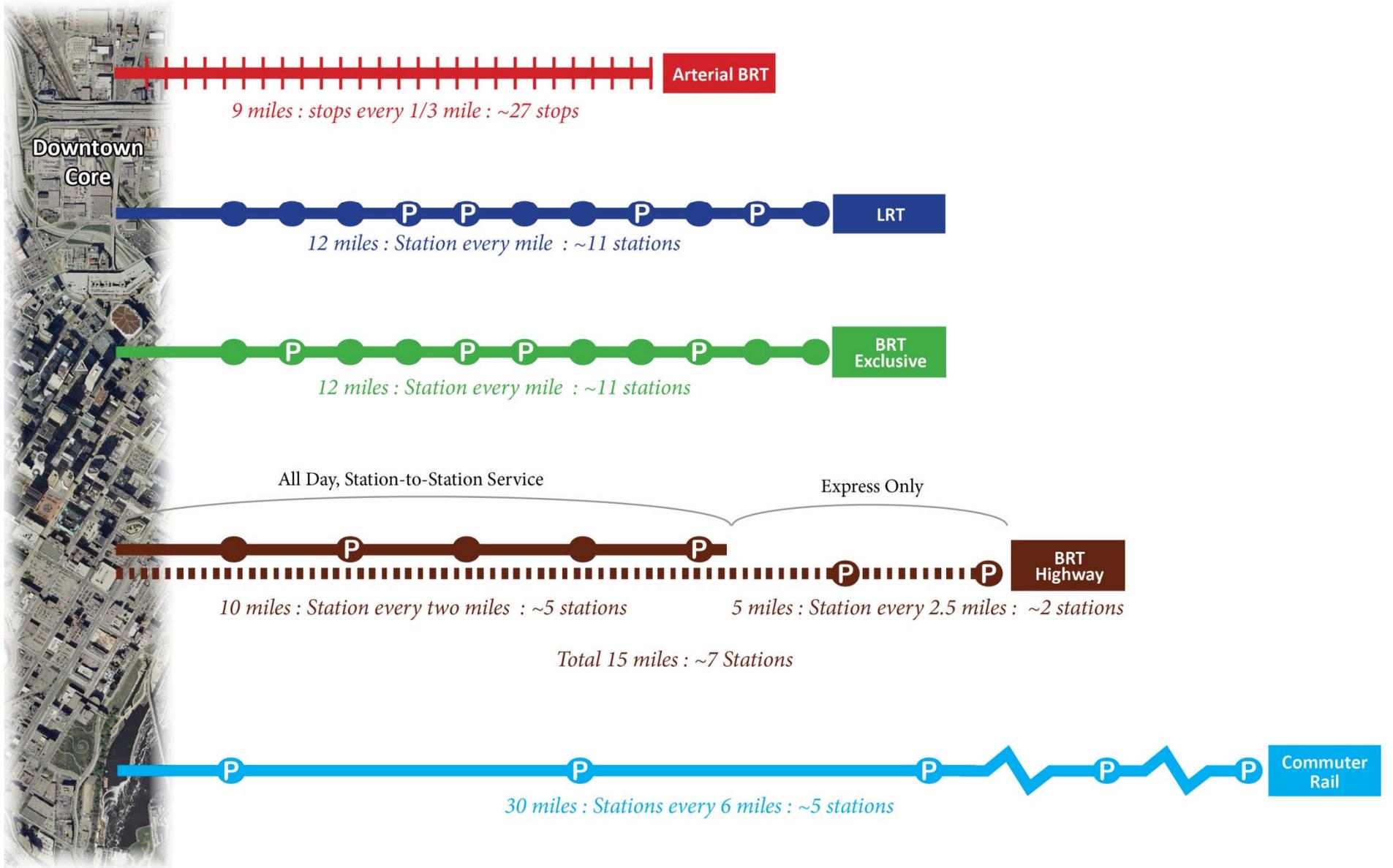
Core Projects have approved alignments and modes (LPAs) and are in Preliminary Engineering , construction or operation.



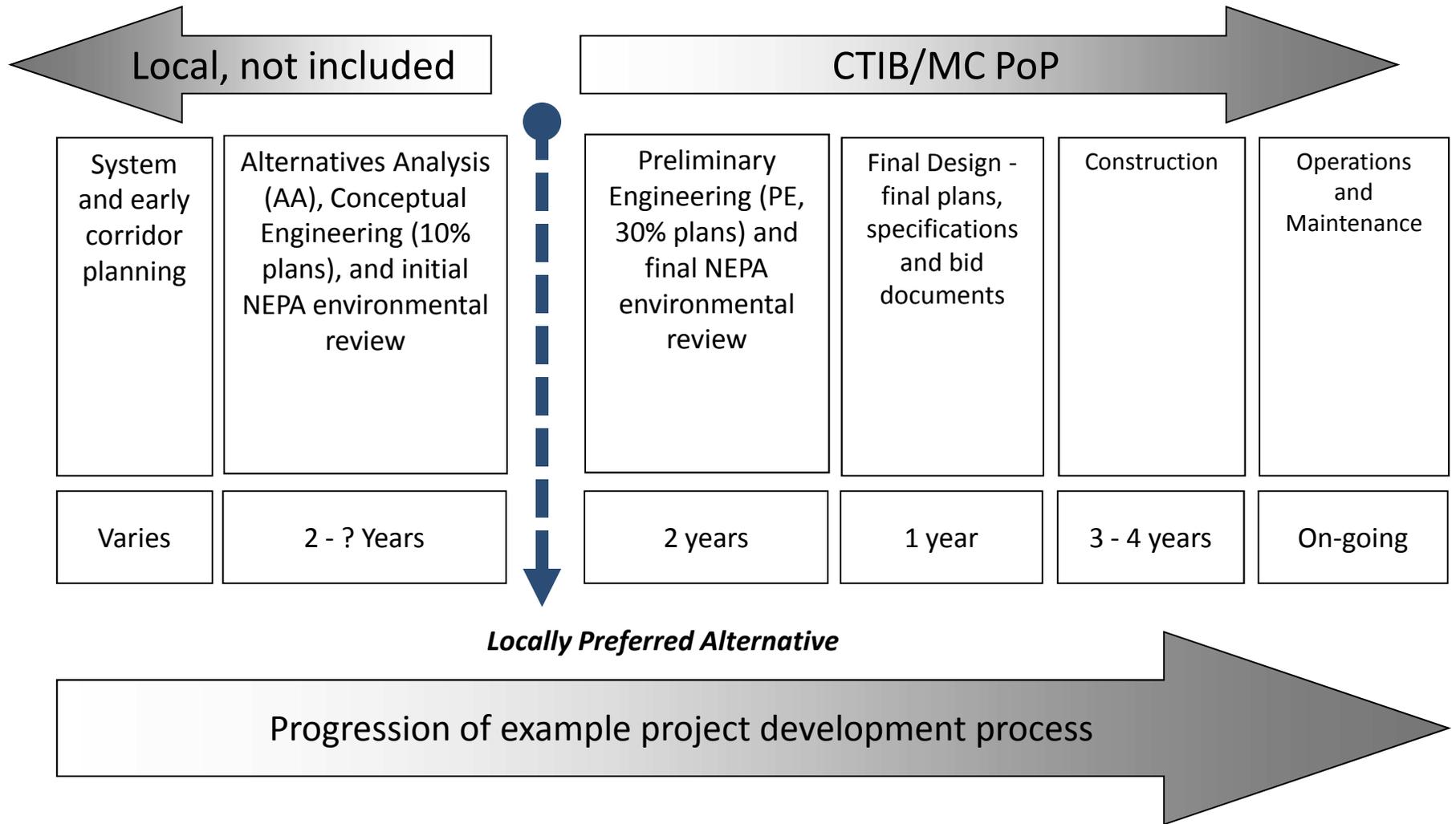
3 PoP Scenarios w/9 Expansion Projects

Mode	BRT	BRT plus 1 Rail	BRT plus 3 Rail
LRT BRT – Exclusive	None 2 projects	1 line 1 project	2 lines None
BRT – Highway Commuter Rail	4 projects None	4 projects None	3 projects 1 line
Arterial BRT	3 lines	3 lines	3 lines
Number of additional Expansion Projects	9	9	9

Generic Project Characteristics



Project Development Process



Basic Assumptions

Generic Project Costs

Project		LRT	BRT Exclusive	Highway BRT	Commuter Rail	Arterial BRT
Capital Cost Per Mile		\$91M	\$34M	\$19M*	\$19M	\$5M
Operating Cost Per Mile		\$2.15M	\$1.0 M	\$0.30M	\$0.44M	\$0.90M
Project Duration [yrs] (PE to Operation)		7.25	5.25	5.25	6.75	3.5
Total Costs	Capital	\$1,095M	\$409M	\$290M	\$574M	\$41M
	Gross Operating /Yr	\$25.8	\$12.0	\$4.5M	\$13.1	\$8.1M

*Includes an allowance for a highway widening improvements

Capital Costs

(in billions of 2011 dollars)

	BRT	BRT plus 1 Rail	BRT plus 3 Rail
6 Core Projects	\$1.9*	\$1.9*	\$1.9*
9 Expansion Projects	\$2.1	\$2.8	\$3.8
Total Capital Costs	\$4.0	\$4.7	\$5.7

*Remaining cost of core projects post 2012 fiscal year, including \$336M for Central Corridor

Aggregate Annual Operating Subsidy (in millions of 2011 dollars)

2012 <u>Current</u> Operating Subsidy			
	\$33		
Projected Additional Operating Subsidy	BRT	BRT + 1 Rail	BRT + 3 Rail
Core – new*	\$33	\$33	\$33
Expansion Projects	\$46	\$54	\$69
Total New Operating Subsidy	\$79	\$87	\$102

* Growth in operating lines (Cedar, Hiawatha, I35 S, Northstar) and added operation of Central and Southwest.

Capital Funding Sources: New Starts

(Under current law and practice)

Mode	Federal	State	CTIB	Local
LRT	50%	10%	30%	10%
BRT – Exclusive	50%	10%	30%	10%
BRT – Highway	30%	30%	30%	10%
Commuter Rail	50%	10%	30%	10%
Arterial BRT	50%	50% (or Met Council)		

Capital Funding Sources: Non-New Starts

(Under current law and practice)

Mode	Federal	State	CTIB	Local
LRT	50%	10%	30%	10%
BRT – Exclusive	50%	10%	30%	10%
BRT – Highway	30%	30%	30%	10%
Commuter Rail	50%	10%	30%	10%
Arterial BRT	50%	50% (or Met Council)		

Operating Funding Sources: Farebox Recovery

Mode	Farebox Share	Gross Operating Cost	Net Operating Cost
LRT	38%	\$25.80	\$16.00
BRT – Exclusive	30%	12.00	8.40
BRT – Highway	30%	4.50	3.15
Commuter Rail	20%	13.08	10.45
Arterial BRT	30%	8.10	5.67

Dollars in millions and reflect cost per mile., however ridership by mode can vary considerably.

Operating Subsidy Sources

(Under current law and practice, after farebox recovery)

	State	CTIB	Met Council
LRT	50%	50%	
BRT – Exclusive	50%	50%	
BRT – Highway	50%	50%	
Commuter Rail	50%	50%	
Arterial BRT			100%

Initial Capacity Assumptions

	Capital - Annual Maximum	Operating - Annual Maximum
Federal - New Starts & competitive	\$150 million	Not applicable
State – G.O. Bonds, Hwy \$\$, Met Council	\$40 million	50% of net operating subsidy
CTIB	\$97 M less debt service & operating subsidies	\$97 M less debt service
Local	Depends on project location	Not applicable

Local Sources of Revenue

(RRA Limited Levy Authority, dollars in millions)

County	Pay 2012 RRA Levy	Est. Pay 2013 Max. RRA Levy
Anoka	\$2.2	\$11.6
Dakota	1.6	17.1
Hennepin	18.0	59.4
Ramsey	19.9	19.0
Washington	0.6	11.6
Total	\$42.4	\$118.6

Levy limited to 0.04835% of TMV. Other commitments, such as debt, may exist. Primarily limited to LRT or commuter rail capital expenditures, with only Dakota able to use funds to develop BRT. Primary source for expenditures up to Preliminary Engineering .

Other Assumptions

- Costs and CTIB revenue inflated for 10 years
 - Capital Costs 3.50%/year
 - Operating Costs 3.15%/year
 - CTIB Sales Tax 2.00%/year

Constraints

- Except for Dakota County, no RRA legal authority to pay BRT capital costs
- RRAs have no legal authority to pay rail operating & maintenance costs*
- RRAs legally can't pay more than 10% of capital costs of LRT or commuter rail*
- CTIB may not pay for capital or operating cost of basic bus service
- State can only pay 10% of LRT capital costs
- CTIB by policy doesn't pay capital or operating for Arterial BRT

*Applies to counties that have imposed the 0.25% Sales Tax

Timing Assumptions

- Construction of one New Starts project at a time (LRT, BRT Exclusive, Commuter)
- Start of construction of other projects is staggered to avoid significant construction overlap
- Early construction of Arterial BRT
- Timing variations were tested: insignificant impact on financial outcomes

Q&A

Initial Financial Analysis

Is it possible to complete our shared vision under
current law & practice?

(Report 2 - Financial Analysis of Program of Projects Under Current Law and Practice)

What defines affordability?

- Each funding partner has enough money to meet its assumed costs
- Available resources permit acceleration of projects

Can PoP be funded under current law and practice?

	BRT	BRT plus 1 Rail	BRT plus 3 Rail
Funding partners have \$\$ when needed?	No	No	No
Permits project acceleration?	No	No	No

Conclusions

- Impediments to PoP funding
 - Not enough CTIB \$\$ under current law
 - Not enough State/Met Council \$\$ based on current practice
 - Uncertain federal funds under current conditions
 - Local funds may or may not be adequate based on project location
- Can't accelerate project delivery

Challenges Identified

What Challenges Did We Identify?

Challenges	Federal	State	CTIB	Local
Uncertain / Insufficient Funding	✓	✓	✓	✓
Competing Demands on Limited Resources	✓	✓	✓	✓
Statutory or Regulatory Constraints	✓	✓	✓	✓

Federal Challenges

Challenges	Federal
Uncertain / Insufficient Funding	✓
Competing Demands on Limited Resources	✓
Statutory or Regulatory Constraints	✓

- No long term transpn. auth. legislation
- New Starts—
 - FTA controls pipeline of projects and funding
 - Has limited our region to one project in construction
 - Has limited funding to \$100M/yr per project
 - Process adds significant time and costs
- Non-New Starts—
 - Funding of competitive programs uncertain (e.g. TIGER)
 - Formula funds – amount and usage in region

State of Minnesota/ Met Council Challenges

Challenges	State
Uncertain / Insufficient Funding	✓
Competing Demands on Limited Resources	✓
Statutory or Regulatory Constraints	✓

- Biennial bonding process:
 - Creates uncertainty and delay
 - Practical cap on \$ available each year
- Recent state budget deficits:
 - Reluctance to fund transitway expansion
 - Uncertainty about state share of operations
- BRT Projects:
 - Need to align with MnDOT's hwy. projects
 - TH\$ not available for transit components
- Must also budget for bus system and maintenance

CTIB Challenges

Challenges	CTIB
Uncertain / Insufficient Funding	✓
Competing Demands on Limited Resources	✓
Statutory or Regulatory Constraints	✓

- Insufficient funds to build Program of Projects
- Competing demands of capital and operating costs
- Vulnerable to state legislative initiatives

Local Challenges

Challenges	Local
Uncertain / Insufficient Funding	✓
Competing Demands on Limited Resources	✓
Statutory or Regulatory Constraints	✓

- Significant pre-preliminary engineering expenditures
- Statutory limitations on use of RRA levies
- Geographic disparity in available resources
- Property tax as revenue source

Q&A

Initial Financial Review & Challenges Identified

Funding and Financing Sources and Peer Cities Findings

(Report 3 -Funding and Financing Sources Technical Memorandum
Report 4 - Peer Cities Case Study for Program of Projects Study)

What are the Potential Sources of Funding for the Program of Projects?

- Evaluated funding & financing sources used for transit around the country
- Sources include
 - Federal
 - State
 - Regional
 - Local

Funding/Financing Mechanism	Description	Used for Operating or Capital	Pros	Cons	Potential Issues/Comments	Impact on Exped Program of Proj
FTA Metropolitan and Statewide Planning (Sections 5303, 5304, 5305)	<ul style="list-style-type: none"> Provide funding for making comprehensive planning 	<ul style="list-style-type: none"> Used for planning activities 	<ul style="list-style-type: none"> Funding for planning activities up to 80% 	<ul style="list-style-type: none"> Funding to MPOs & state Departments <ul style="list-style-type: none"> Allocated by formula to these entities 	<ul style="list-style-type: none"> Available for up to four years <ul style="list-style-type: none"> Projects must come from transportation planning process 	<ul style="list-style-type: none"> Low
FTA Alternatives Analysis	<ul style="list-style-type: none"> Funds a complete alternatives analysis Or specific tasks as part of an on-going analysis 	<ul style="list-style-type: none"> Used for alternatives analysis 	<ul style="list-style-type: none"> Additional funding for up to 80% of study costs 	<ul style="list-style-type: none"> Competitive process 	<ul style="list-style-type: none"> Priority given to projects that foster the six livability initiatives Available for three fiscal years 	<ul style="list-style-type: none"> Low
FTA 5307 Funding	<ul style="list-style-type: none"> Annual allocated funding for capital assets or programs 	<ul style="list-style-type: none"> Used for capital Couple of programs where funds can be flexed to operating 	<ul style="list-style-type: none"> Allocated amount that tends not to be variable year by year 	<ul style="list-style-type: none"> Allocated amount that doesn't allow for much flexibility for major capital programs 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Low
FTA 5309 Funding	<ul style="list-style-type: none"> Discretionary funding for capital programs 	<ul style="list-style-type: none"> Primarily used on capital projects 	<ul style="list-style-type: none"> Provides additional capital funding 	<ul style="list-style-type: none"> Competitive process Requires strong local support and effective lobbying Depending on type of funds could require additional work for application and could make process longer 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Medium
Federal Funding for Operating	<ul style="list-style-type: none"> Use of 5307, JARC, CMAQ on operating expenses 	<ul style="list-style-type: none"> Primarily used for operating 	<ul style="list-style-type: none"> Additional source of revenue for operating expenses 	<ul style="list-style-type: none"> 5307 shift of funds that could be used on capital for three specific programs: Capital Cost of Contracting, 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Low

Lessons Learned: Funding & Financing

- 1. No major untapped funding sources available*
- 2. No financing techniques identified that will significantly improve funding outcomes*
- 3. Financing techniques may expand capacity marginally*

How have Peer Cities Addressed Funding Challenges?

- Capital funding sources?
- Financing tools?
- Project delivery methods?
- Operations and maintenance funding?
- Innovative approaches to fast tracking projects?

Peer Cities Summary

City	Program	Total Program Cost	Base Sales Tax	Sales Tax Increase	Total Sales Tax	Modes	Capital vs O&M	State Funding
Dallas	DART Rail Expansion	\$1.6 billion	1 cent	No, bonding only	1 cent	Transit only	Both	No
Denver	FasTracks	\$6.8 billion	0.6 cent	0.4 cent	1 cent	Transit only	Both	Yes
Houston	METRO Solutions	\$6 billion	1 cent	No, bonding only	1 cent	Transit only	Both	No
Los Angeles	LA 30/10 Initiative	\$17.5 billion	0.0 cent	1.5 cent	1.5 cent	Transit and roadway projects	Both	Yes
Phoenix	Future High Speed Transit Corridors	\$3 billion	0.5 cent Tempe 0.4 cent Phoenix	0.5 cent regional	1.0 & 0.9 cent respectively	Cities for transit only Regional for transit and roadways	Cities Both Regional for rail capital Regional for bus capital and O&M	No
Seattle	ST2	\$17.8 billion	0.4 cent	0.5 cent	0.9 cent	Transit only	Both	No
Salt Lake	FrontLines 2015	\$2.3 billion	0.50 cent	0.25 cent	0.75 cent	Transit only	Both	No

Peer Cities Conclusions

1. *All cities defined and developed a specific program of projects.*
2. *All cities use sales taxes as the primary local funding source.*
3. *All cities use sales taxes for transit and transitway capital and operations.*
4. *All cities use FTA New Starts funding*
5. *Several of the cities are implementing projects using all non-federal funds.*
6. *Most of the cities had to raise their sales tax rate to fund a Program of Projects.*
7. *Only two of the seven cities receive state funding.*

Q&A

Lessons Learned

Lessons Learned

PoP Study Purpose - to determine if an accelerated Program of Projects is feasible

Steps

- 1. What will enable acceleration?*
- 2. What is acceleration?*
- 3. Conclusions*

Back to Basic Question – How do we accelerate transitway development?

1. Explore timing that doesn't impose staggered construction starts
2. Funding needed to overcome financial obstacles
 - Identify more dollars
 - Funding uncertainties, i.e., increase control over timing and delivery of revenue
3. Address other challenges to success

Accelerated Timing

- BRT w/3 Rail scenario
 - Highest cost scenario, but.....
 - if it works, other scenarios will also, and.....
 - gives flexibility to select appropriate mode
- All transitways except commuter rail operational 10 years earlier
- Commuter Rail accelerated 3 years

BRT w/3
6 Core Projects
2 LRT
1 Commuter
6 BRT (incl. 3 Arterial)

What is needed to support acceleration?

- Fix CTIB Revenue shortfall.
- Why?
 - Large funder -pays 30% of capital + 50% of operating subsidy
 - Decreases uncertainty by offering better control of timing and commitment

Increasing CTIB sales tax 0.25% \$100M/yr.

Does this enable PoP acceleration?

	Federal	State	CTIB
Funding partners have \$\$ when needed	No	No	Yes

Why not?

Why not?

- Federal
 - Process: Simultaneous project development
 - \$: Funding terms
- State
 - Process: Biennial process vs. multi-year projects
 - \$\$: \$40M/yr. maximum
 - \$\$: Operating subsidy
- Local
 - \$\$: Property tax based
 - \$\$: Will lines & source align

Conclusions

- A Program of Projects can't be funded under current law and practice
- Peer Cities rely heavily on sales taxes to do transitways and their Programs of Projects
- Existing funding sources are all being accessed and innovative financing will only help on the margin
- Acceleration is possible, but more funding will be needed to accomplish a Program of Projects and resolve related challenges

Financial Options to Address Challenges

- Eliminate federal funding for project/s
- Greater use of federal funds
- Highway funds for BRT development
- Reduce state capital share of transitways
- Reduce local RRA contributions
- Fund state share of transitway operations
- Fund state appropriation for Met Transit bus operations
- Partially fund Arterial BRT
- Others?

Q&A

Discussion