

# SWLRT Business Advisory Committee Meeting

March 27, 2013















# **Today's Topics**

- Approve January meeting minutes and February meeting summary
- Transit Return on Investment Study
- Station Area Action Plans (TSAAP) Update
- Operations and Maintenance Facility (OMF) Technical Issue #23 Workshop
- Freight Rail Co-location/Relocation Technical Issue #21 Workshop
- Member and Committee Reports
- Public Forum



Business Advisory Committee March 27, 2013

**TSAAP** Overview – Station Outreach Activities





### Transitional Station Area Action Plans (TSAAP)

- Intended to promote opening day readiness by bridging the gap between current conditions and future needs by addressing:
  - Station platform locations
  - Park and ride sites
  - Future development potential
  - Access and circulation planning
  - Infrastructure planning
  - Creative stormwater management solutions





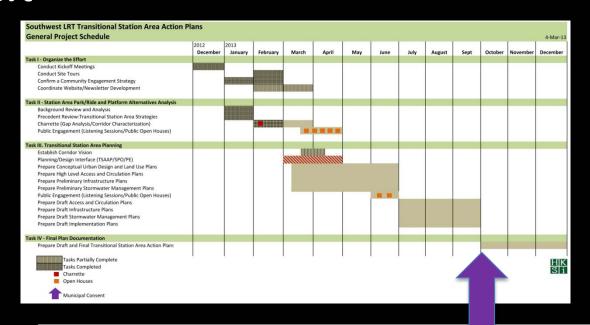
# TSAAP and SPO/PE Teams – a Coordinated Effort

- TSAAP and SPO/PE teams have weekly coordination meetings.
- SPO/PE teams attended TSAAP charrettes.
- TSAAP/SPO/PE teams had debrief meeting postcharrette.
- PE Teams each have community liaisons that interact regularly with the TSAAP team and local community staff members.





# TSAAP and SPO/PE Teams – a Coordinated Effort







# **Initial Station Area Concepts**





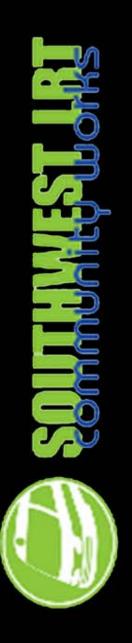




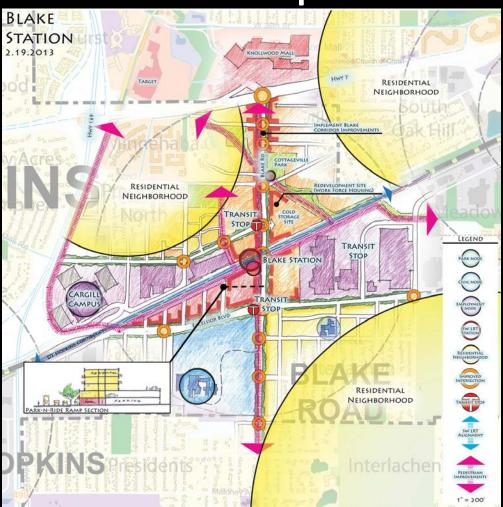


# **Initial Concepts**



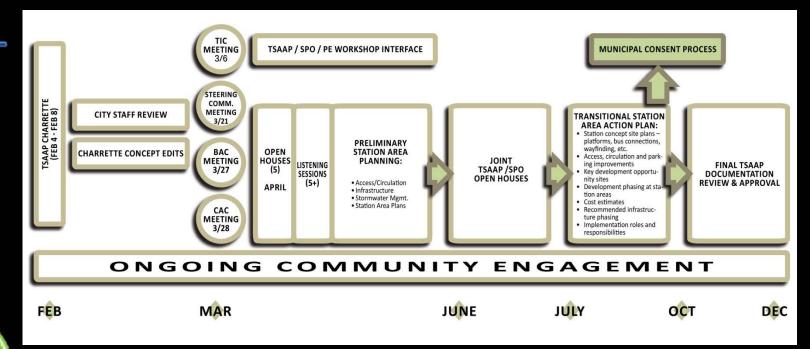


**Initial Concepts** 



# Hopkins

# **TSAAP Process**





# **Public Engagement**





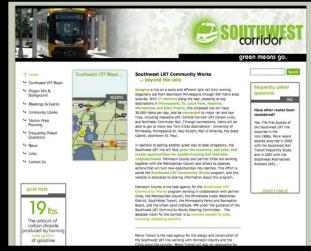
# Public engagement activities included as part of the Transitional Station Area Action Plans (TSAAP)

- Charrette results open houses (5 one in each community)
- Listening sessions (8 total)
- Joint TSAAP/SPO open houses (2 east and west portions of corridor)
- Meetings with city councils, boards and commissions (10 two per community)
- CAC meetings
- BAC meetings
- Steering Committee meetings
- Corridor Management Committee
- TIC meetings
- Business Investment Partnership meeting



## A Collective Effort...

- Website re-focus on Community
   Works
- Support for each city's outreach
  - Materials (e.g. Station Area Profiles)
  - Mobile displays
  - Online tools
  - Social media
  - Others
- Outreach to media through Hennepin County Public Affairs and city protocols











### A Coordinated Effort...

- Coordinate with LRT Project (SPO)
  - Work with existing Community Advisory
     Committee (CAC) and Business Advisory
     Committee (BAC)
  - Coordinate major outreach efforts including open houses, listening sessions, etc.
  - Ongoing communications about messages
    - Work through Communications Committee
- Coordinate with Corridors of Opportunity (CoO)
  - Work with Community Engagement
     Team
  - Work with Grantees









# **Activities**





# **Open Houses**

- Community-wide event
- Information stations (TSAAP and PE)
- One-on-one interactions





# SOMMUNKES





# SOMMUNITE JUSTE



# **Listening Sessions**

- Ten to fifteen participants
- Deeper, more detailed conversations
- Additional opportunity to engage underrepresented populations











# Sommunite









# **Support Community Events**













# Websites and Media







### green means go.

### 

- Southwest LRT Maps
- Project Info & Background
- Meetings & Events
- Community Works
- Station Area Planning
- Frequently Asked Questions
- News
- Links
- Contact Us



### Southwest LRT Community Works

### ... beyond the rails

Imagine a trip on a quick and efficient light rail train running diagonally out from downtown Minneapolis through SW metro area suburbs. With 17 stations along the way, stopping at key destinations in Minneapolis, St. Louis Park, Hopkins, Minnetonka and Eden Prairie, this proposed line will have 30,000 riders per day, and be connected to major rail and bus lines, including Hiawatha LRT, Central Corridor LRT (Green Line), and Northstar Commuter Rail. Through connections, riders will be able to get to many key Twin Cities destinations - University of Minnesota, Minneapolis-St. Paul Airport, Mall of America, the State Capitol, downtown St. Paul.

In addition to adding another great way to beat congestion, the Southwest LRT line will help grow the economy, add jobs, and create opportunities for quality housing and walkable neighborhoods. Hennepin County and partner cities are working together with the Metropolitan Council and others to catalyze actions that will turn new opportunities into realities. This effort is called the Southwest LRT Community Works program, and this website is dedicated to sharing information about this program.

Hennepin County is the lead agency for the Southwest LRT Community Works program working in collaboration with partner cities, the Metropolitan Council, the Minnehaha Creek Watershed District, SouthWest Transit, the Minneapolis Parks and Recreation Board, and the Urban Land Institute- MN under the guidance of the Southwest LRT Community Works Steering Committee. The adopted vision for the corridor is to connect people to jobs, housing, shopping and fun.

Metro Transit is the lead agency for the design and construction of the Southwest LRT line working with Hennepin County and the Cities along the corridor, Metro Transit will also be responsible for Seorch

### frequently asked

cac

### Have other routes been considered?

Yes. The first studies of the Southwest LRT line occurred in the mid-1980s. More recent studies occurred in 2002 with the Southwest Rail Transit Feasibility Study and in 2007 with the Southwest Alternatives Analysis (AA)....

(more) | read all

### quick facts

19<sub>lbs.</sub>

The amount of carbon dioxide produced by burning one gallon of gasoline

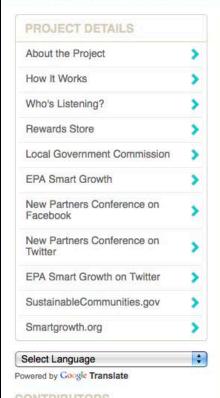


What are communities doing to implement smart growth? Show us!













information or ideas you have learned about at the conference! What's the most interesting thing you...

My idea is...

139 48 # 14 Days Remaining

Add Idea

Sort By: LATEST POPULAR

Status: CURRENT ARCHIVED



Lessons Learned

Add your Ideas

Visit this Topic -



Revitalizing Neighborhoods

Add your Ideas



# Other Media

- News Releases and Media Alerts
  - Media list established in previous stages of this project
  - Local and regional news outlets, websites and public access outlets
- Community Newsletter Articles
  - For all communities in corridor
- News Organizations
  - Many outlets have been following the news about SW LRT



**We want your opinions!** Please use the box below for comments and thoughts regarding station concepts and open house materials. THANK YOU.

STATION AREA COMMENTS:			





http://www.southwesttransitway.org/home.html

**BUSINESS ADVISORY COMMITTEE** 

Katie Walker - Transit Project Manager Katie.Walker@co.hennepin.mn.us 6

612.385.5655



# Questions?



# ITASCAproject

# Regional Transit System: Return on Investment Assessment

March 2013



### Today's agenda

- Itasca Project introduction
- Transit ROI objectives
- Results of analysis
- Comments from business leaders
- Conclusion



### **Itasca Project introduction**

### What is Itasca?

An employer-led civic alliance focused on:

- Building a thriving economy and quality of life in the Minneapolis-Saint Paul Metropolitan region
- Reducing and eliminating socioeconomic disparities

### Who is Itasca?

50-plus cross-sector community leaders from Minneapolis-Saint Paul:

- Private sector CEOs
- Public sector leaders: the Governor, the Mayors of Minneapolis and St. Paul, Chair of the Metropolitan Council, the leaders of the University of Minnesota and MnSCU
- Leaders of major foundations and United Way

**Itasca Project priorities** 

1

Generating high-quality job growth

### Itasca project goals

- Raise economic competitiveness and quality of life
- Reduce and eliminate disparities

3

Improving our region's education system

2

Advancing a comprehensive and aligned transportation system



# The transportation system impacts the economic health and vitality of a region...

A comprehensive, integrated, and efficient transportation system is an important driver of economic development and, therefore, job growth because it...

- Connects employers to their workforce and enables employees to access employment; connects businesses to customers; maintains timely movement of goods
- Attracts and retains residents by providing greater diversity of travel options, including more free-flowing roads and affordable transit options
- Enables strategic, efficient investment in long-term infrastructure, e.g., energy grid, water system, housing, commercial and industrial buildings

When employers examine where to locate, strong transportation infrastructure is one of the top 3 considerations, along with workforce quality

# ...Transit is increasingly critical to sustaining the economic vitality of our region

- In Minnesota, transit plays a vital role in connecting jobs and employees today...
  - 40% of downtown Minneapolis and St. Paul commuters use transit
  - According to MetCouncil, transit riders are more than 1/3 of peak hour users of major freeways
- ...and will become more important in the future
  - Building out full transit system would give regional employers access to an additional half a million people within half an hour commute
  - Increasingly, talented millennial generation employees are seeking cities with good transit
- Transit can be a cost-efficient way to add capacity in corridors, improving travel times across the system especially during peak congestion periods
- Competitor regions are investing heavily in transit; these regions include Denver, Salt Lake City and Dallas, all rapidly growing, dynamic regions

# **Transit ROI study**

Objective: Evaluate potential transit impacts to the region using data-driven and transparent approach

- Commissioned by Itasca
- Conducted by Cambridge Systematics, experts in transportation and economic analysis
- Guided by local Technical Advisory Committee

# Itasca asked 3 questions about regional transit investments

- A built-out regional transit system would require substantial investment. What would be the return on that investment?
- Investments can be made more or less quickly. Would accelerating build out change the return on investment?
- Many communities with developing transit systems experience more growth near transit stations. Would such expectations for growth change the return on investment?

### We compared four scenarios

**Base case** 

 Includes current transit options and assumes outstanding commitments are built out (including Central Corridor)

2030 regional plan

 Assumes Metropolitan Council 2030 plan is executed, including expansion of bus service at 1% annually, nine arterial BRTs, four completed BRT corridors, and three new LRT lines

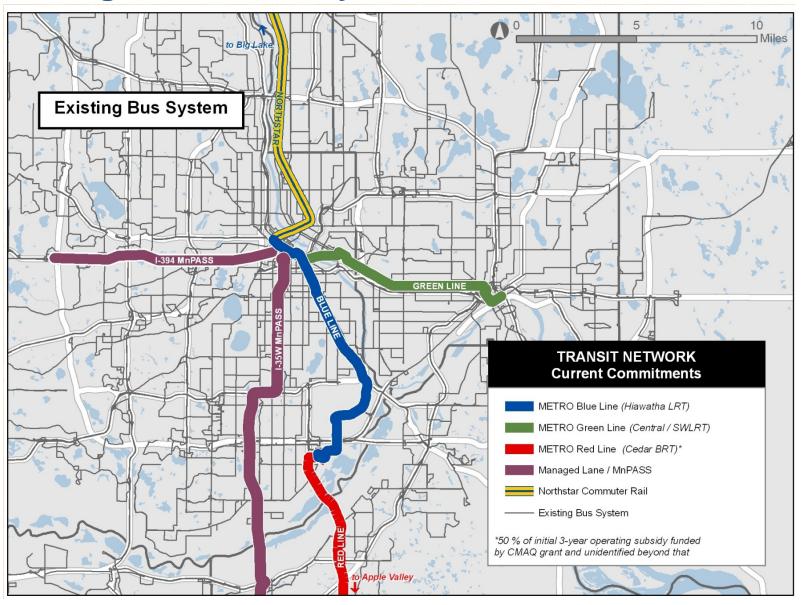
Accelerated regional plan

 Accelerates the regional plan from scenario one to a 2023 completion

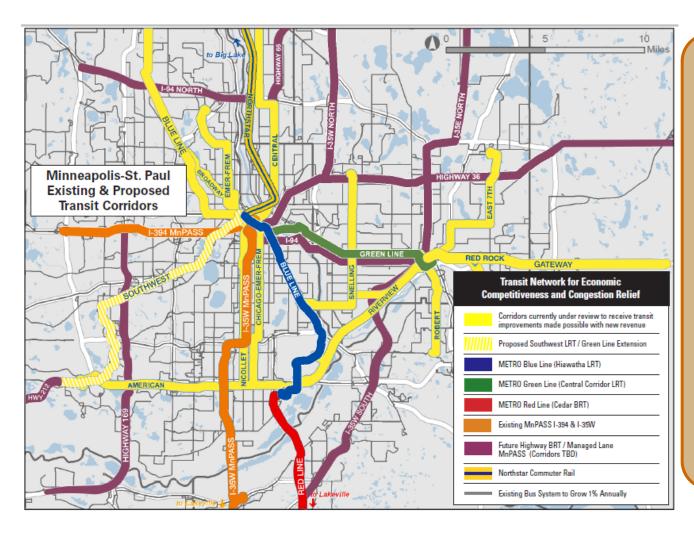
2030 plan with growth near stations

 Proposes 2030 plan is built as in scenario one, but reallocates 25% of expected community growth to station areas (i.e., assumes station areas absorb more of future growth though does not presume new growth)

## **Current Regional Transit System Commitments**



# **Proposed Regional Transit System – 2030**



A regional transit system in the Minneapolis – St. Paul Metro area includes:

- 1% per year bus service expansion
- Addition of nine arterial BRTs
- Four BRT lines
- Total of five LRT lines.

Mode and alignment for each corridor are still being determined

Source: The Twin Cities Metropolitan Council's 2030 Transitway Plan featuring commuter rail, light rail, bus rapid transit and improved bus corridors.

### We calculated six kinds of direct impacts

A few well-established metrics focused on transportation, safety, and health were incorporated as direct impacts:

- 1. Vehicle operating costs
- 2. Travel times and travel reliability
- 3. Shippers and logistics costs
- 4. Emissions
- 5. Safety costs
- 6. Road pavement conditions

We worked with the Metropolitan Council to develop costs for each scenario: capital + operations & maintenance

### **Direct Impacts – Results**

	Compared to base case scenario 2010 \$ Millions			
		<b>Total direct impacts</b>		_
Scenario	Investment	Low	High	IRR*
1 2030 Regional Plan	\$4,361	\$6,571	\$10,083	7.8 – 14.8%
2 Accelerated Regional Plan	\$5,289	\$10,762	\$16,516	11.2 – 18.0%
3 2030 Plan with growth near stations	\$4,361	\$9,082	\$13,927	13.0 – 20.9%

Note: Benefits and operating and maintenance costs are calculated for 15-year period 2030-2045 for regional system, 2023-2045 for accelerated system. All are reported in 2010 dollar

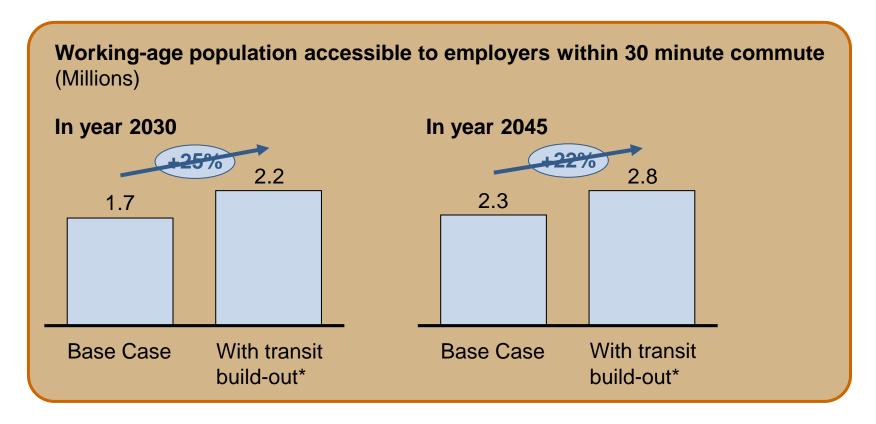
\*IRR = Internal Rate of Return, the discount rate often used in capital budgeting that makes the net present value of all cash flows from a particular project equal to zero

# **Direct impacts by category**

	Compared to base case
	2010 \$ Millions
<ol> <li>Travel time savings and reliability</li> </ol>	\$4,643 - \$11,429
2. Vehicle operating cost savings	\$1,479 - \$4,717
3. Shipper and logistics cost savings	\$185 - \$271
4. Reduction in emissions	\$185 - \$395
5. Safety benefits	\$53 - \$88
6. Pavement maintenance savings	\$26 - \$54
TOTAL	\$6,571 - \$16,516

Note: Benefits and operating and maintenance costs are calculated for 15-year period 2030-2045 for regional system or 2023-2045 for accelerated scenario. All are reported in 2010 dollars

# A regional transit system enables employers to access more potential employees



Building the regional transit system would enable **employers in the region to access 500,000 more employees** within a 30 minute commute, a 22 - 25% increase

<sup>\*</sup> With build-out of the 2030 regional plan

# Additional impact not considered in the ROI study results:

### **Short-term economic impacts:**

- \$4.3 billion in construction impacts Economic activity created over the construction period
- 30,000 construction jobs FTE job-years tied to build-out of the transit system

If Federal dollars are leveraged for investments, then the ROI of state/local dollars would be even higher

# **Experience with Hiawatha and Central Corridor suggest Scenario 3, with the highest benefits, is a likely scenario**

- 2 million square feet of office space was constructed within half a mile of Hiawatha from 2004-2010
- Development of new housing exceeded 2020 projections by nearly 50% within first year of operation
- \$1.2B of construction has been approved along Central Corridor, set to open in 2014

# In addition to the quantitative analysis, we interviewed regional businesses about how they view transit

### Transit is important to employers' ability to attract employees

"Improved transit provides greater efficiency to attract employees, enables them to connect with labor groups."

"Our younger workers show a higher level of interest in transit."

"60% of our downtown employees have a Metropass. We want to support that."

"Transit comes up in every HR conversation with new employees."

"We have a company priority to be green and socially-responsible. Supporting transit is important. We find that it gets a very positive reaction within our younger employees." "Transit is important to attracting workers. Without it, working downtown would be very difficult."

"We worry about future commuting costs, as gas could be significantly more expensive."

Source: Focus groups with HR and facilities leaders from leading companies in Minneapolis-St. Paul Metro area. Interviewed companies include: Target, UnitedHealth, US Bancorp, Xcel Energy, and Plymouth/Center National Bank.

# What business leaders say (cont)...

Transit enables higher density development and greater customer access

"Improved transit would allow higher densities and greater customer access."

"Higher densities encourage entrepreneurial activities."

Transit must be connected to and aligned with destinations and other modes of transit

"Pedestrian access is important to support transit, complete last mile connections."

> "Want to see more suburb-tosuburb connections."

"I appreciates the LRT connection to the airport but there are limited door-to-door mass transit options."

"Must be reliable."

Source: Focus groups with HR and facilities leaders from leading companies in Minneapolis-St. Paul Metro area. Interviewed companies include: Target, UnitedHealth, US Bancorp, Xcel Energy, and Plymouth/Center National Bank.

### **Summary**

- Based on direct impacts alone, the benefits of implementing a regional transit system far outweigh the costs
  - Building the 2030 regional plan would result in \$6.6 10.1 billion in direct benefits, on a \$4.4 billion investment (between 2030 – 2045)
  - Accelerating the system buildout to 2023 would result in increased direct benefits:
     \$10.7 16.5 billion on a \$5.3 billion investment
  - More community growth near transit stations would also increase the return on investment by an additional \$2 - \$4 billion
- In addition to the quantified direct benefits, the region would benefit from many wider economic benefits
  - Increased access to employers (an additional 500,000 within 30-minute commute)
  - 30,000 construction jobs and \$4.3 billion in economic impacts
- Interviewed employers reinforced the benefits of a regional transit system
  - A comprehensive transit system is critical to attract and retain employees

# **Appendix**

# Methodology and key assumptions

- The analysis estimates future benefits arising from transportation system user benefits, sustainability benefits, state-of-good repair benefits and wider economic development benefits
- Utilizes output from Metropolitan Council's regional travel demand model; population estimates based on Met Council
- Discount rate is 2.8 percent, as recommended by MnDOT
- The SW Corridor is assumed to commence operation in 2018; for regional assessment, all corridors are assumed to operational in 2030 and impacts from 2030-2045 are estimated and reported
- The price of fuel used in the travel demand and mode choice models is \$3.41 per gallon (\$2.59 in 2000\$ based on the CPI) to reflect the average cost of fuel in the region on October 26, 2011

## Thank you to Itasca Project Transportation Task Force

Jay Cowles, Chair Unity Ave

Mike Erlandson SUPERVALU

David Freed Xcel Energy

Restor Johnson UnitedHealth

Richard Murphy Murphy Warehouse

Judi Nevonen US Bancorp

Duane Ring Century Link

Lee Sheehy McKnight Foundation

David Sparby Xcel Energy

John Stanoch

Richard Varda Target

Charlie Zelle, Chair Jefferson Lines

#### Itasca Project leadership

Mary Brainerd, Chair HealthPartners

Richard Davis, Vice-Chair US Bancorp

# Thank you to Technical Advisory Committee

Mary Richardson CTIB

Mary Kay Baily Corridors of Opportunity

Katie Walker Hennepin County

David Lawless Hennepin County

Lee Sheehy McKnight Foundation

Eric Muschler McKnight Foundation

Arlene McCarthy Metropolitan Council

Guy Peterson Metropolitan Council

Mark Filipi Metropolitan Council

John Kari Metropolitan Council

Will Schroeer Minneapolis Regional Chamber of Commerce and Saint Paul Area

**Chamber of Commerce** 

Jim Erkel Minnesota Center for Environmental Advocacy

Kate Johansen Minnesota Chamber of Commerce

David Levinson University of Minnesota

Laurie McGinnis University of Minnesota

Caren Dewar ULI MN and Regional Council of Mayors

Ted Schnoenecker Washington County

# Breakdown of net benefits (2030 system built out example)

# **Quantified benefits of transit investment**

\$B



**Benefits** 

**Other:** Includes safety, emissions, logistics and state-of-good-repair savings

### **Vehicle operating expense savings**

These savings are driven by **fuel expense avoided** by both transit users and drivers, whose fuel use decreases with less congestion. Savings are net of transit fares.

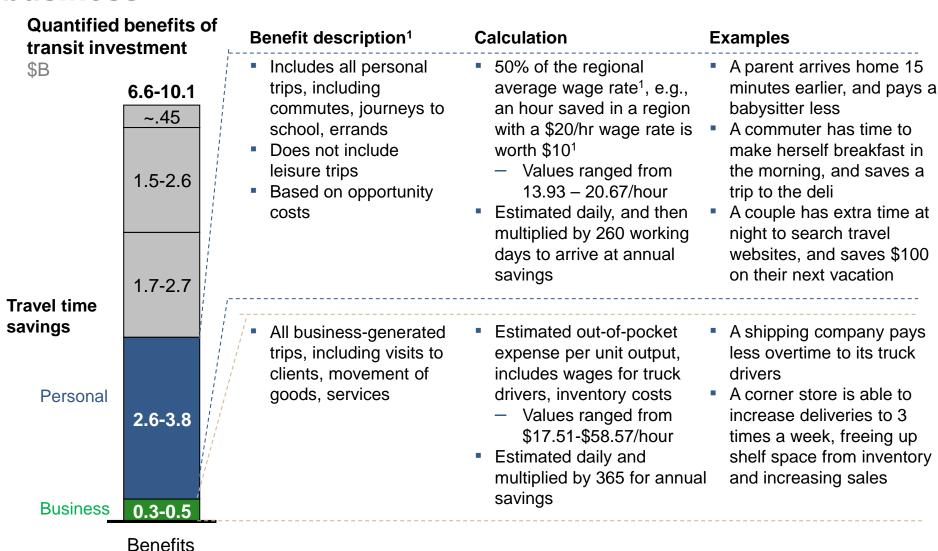
Reliability savings: Opportunity cost of the "time buffer" travelers build in during congested peaks to arrive on time, and the cost to businesses of missing on-time deliveries.

Travel time savings: As the saying goes, time is money. These savings place a value on the time saved by both transit uses, who have shorter, more direct trips with a built-out system, and the time saved by drivers, who face less congestion on roads due to transit users, and by businesses, who can ship goods and services more efficiently.

# Not included in benefits:

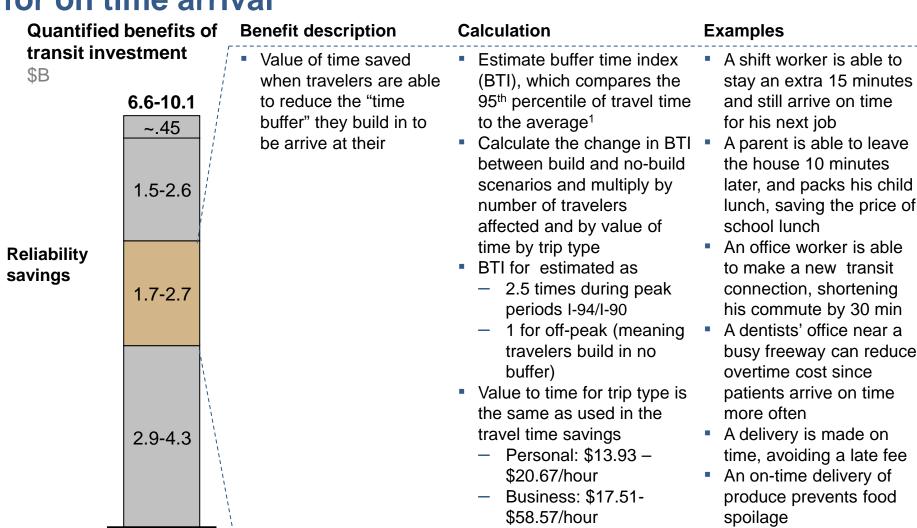
- Induced development
- Qualitative benefits (e.g., enjoyment of driving, lowered stress from not driving)
- Livability benefits, e.g., cost of housing, walkability, social capital
- Clustering benefits, e.g., more efficient use of public infrastructure, increased productivity

# Travel time savings are calculated by type – personal and business



<sup>1</sup>These are net benefits, that is, the generally higher travel times of transit users are subtracted from the lower travel times of highway users 2 These values were drawn from MNDOT, the Bureau of Labor Statistics, and the Transportation Research Forum

# Reliability savings are based on lower "buffer" times needed for on time arrival



1 We drew our value from an empirical estimate made in 2009 of the BTI as 2-3 times average trip time

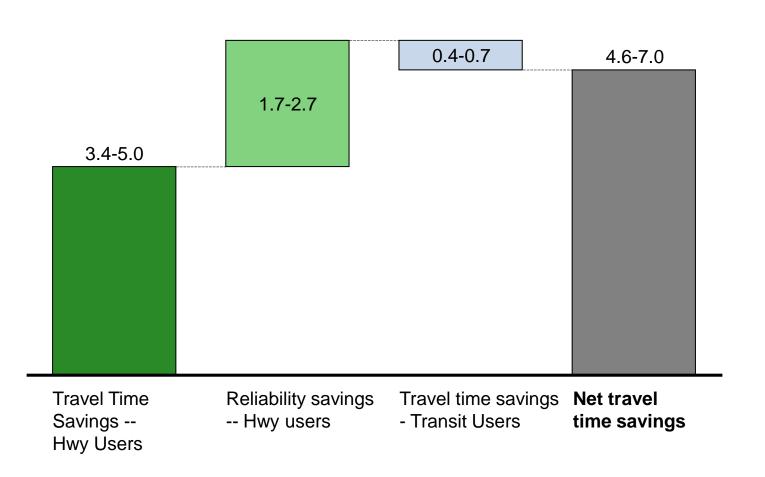
**Benefits** 

2 These values were drawn from MNDOT, the Bureau of Labor Statistics, and the Transportation Research Forum

### Breakdown of travel time benefits by user group



\$B



### **Credentials of Cambridge Systematics**

The Itasca Project working team, in consultation with its Technical Advisory Committee, selected Cambridge Systematics (CS) via a competitive bidding process. CS was selected based on the breadth and depth of its experience in transit and economic analyses. Details on services provided and relevant experience of CS is available on the CS website: <a href="http://www.camsys.com/">http://www.camsys.com/</a>

#### **Key Qualifications**

Cambridge Systematics has deep experience with **Federal**, **state**, **and local government** 

- Relationships with 9 Federal agencies, including on-call contracts with FHWA and FTA
- Served 44 state governments and over 60 MPOs and other local government bodies

Experience with **multiple modes** of transit (e.g., LRT, local and intercity bus, alternative transportation services)

#### **Highlighted projects**

TCRP H-9: Economic Impact Analysis of Transit Investments: Evaluation of methods used to conduct economic impact analysis for proposed transit investments

**APTA Economic Analysis:** Economic impacts of national transit investments

Envision Utah Economic Impacts of Public Transportation System Expansion: Direct effects of public transit investments on travel efficiency, user bene-fits, and the regional economy.

**LAMTA Economic Impact Benefits Study:** Longrange economic impacts of alternative transportation development and financing plans

**NYMTA Benefits:** Long-term economic consequences of investments in public transportation facilities and services

California High-Speed Rail: Induced Growth Summary and Secondary Impacts Analysis



# Operations and Maintenance Facility – Technical Issue #23 Workshop















# **Operation and Maintenance Facility (OMF)**

- OMF Activities:
  - LRV cleaning
  - LRV maintenance
- Central Corridor OMF:
  - 180+ jobs



Interior of Franklin (Hiawatha) OMF



# **OMF Initial Site Selection Criteria**

- Site size of 10 to 15 acres
- Flat/rectangular site
- Efficient LRT train movements to/from
- Good roadway access to site
- Compatible with adjacent land use

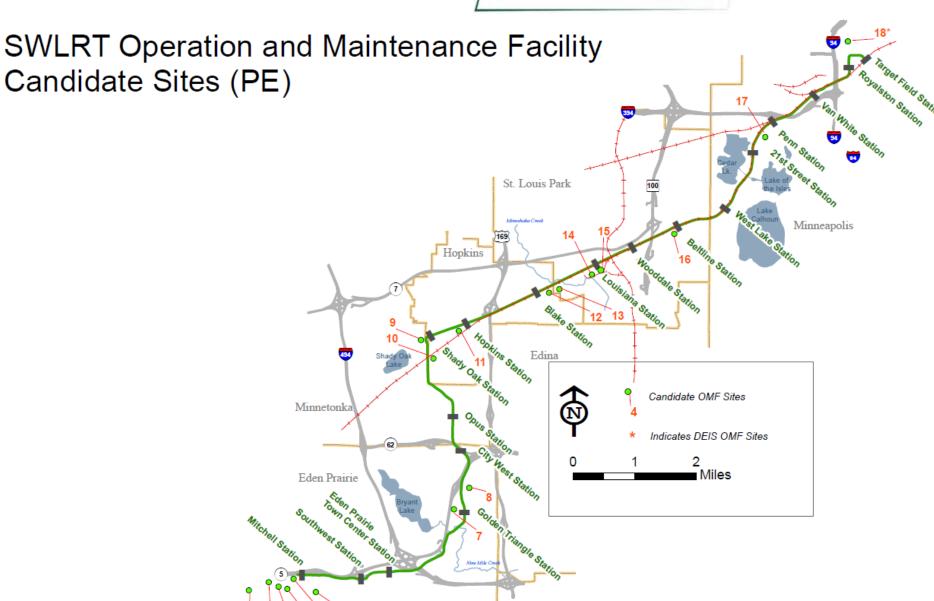


# **OMF Candidate Sites**

OMF Site #	Description	City
1*	212 ROW	Eden Prairie
2*	Wallace Road	Eden Prairie
3*	City Garage West	Eden Prairie
4*	City Garage East	Eden Prairie
5*	Mitchell West	Eden Prairie
6	Mitchell East	Eden Prairie
7	Flying Cloud/W. 70th Street	Eden Prairie
8	Shady Oak/W. 70 <sup>th</sup> Street	Eden Prairie
9	K-Tel	Minnetonka
10	7 <sup>th</sup> Street (Landfill)	Hopkins
11	11 <sup>th</sup> Avenue	Hopkins
12	Excelsior West	Hopkins
13	Excelsior East	Hopkins/St. Louis Park
14	Louisiana West	St. Louis Park
15	Louisiana East	St. Louis Park
16	Beltline	St. Louis Park
17	Penn	Minneapolis
18*	5 <sup>th</sup> Street North	Minneapolis

<sup>\*</sup> From DEIS







# **SWLRT OMF Evaluation Criteria**

Operational Characteristics				
1	Site Configuration: operational effectiveness			
2	Alignment Proximity/Connectivity: distance/connection to mainline			
3	Alignment Location: geometric position on mainline			
4	Site Access: access for operations staff			
Site Characteristics				
5	Adjacent Land Use Compatibility			
6	TOD/Mixed Use/Economic Development Considerations			
7	Zoning			
8	Site & Facilities Cost: facilities, grading, utilities, soils			
9	Real Estate Acquisition: cost, complexity, legalities			
10	Relocation Cost: displaced occupants and uses			
11	Environmental Impact: wetlands, hazardous materials			
12	Cultural Resources: cultural, historical			
13	Stormwater Management: drainage, treatment			



# **OMF Technical Issue #23 Workshop**

- Seeking feedback on:
  - Opportunities
  - Challenges
  - Concerns



# **OMF Technical Issue #23 Next Steps**

- Present to advisory committees for input:
  - BAC March 27
  - CAC March 28
  - SWCMC April 3
- Narrow candidate list to 5 or 6 sites for input:
  - BAC April 24
  - CAC April 25
  - SWCMC May 1
- Public open houses in cities where one or more of the 5/6 sites reside: May



# Freight Rail – Technical Issue #21 Workshop















# Freight Rail Technical Issue #21 Workshop

- Background:
  - Co-location and relocation analysis required by FTA as a condition to enter PE
  - Part of the Metropolitan Council's due diligence and responsibility as project lead



# Freight Rail Technical Issue #21 Workshop

- Review existing information:
  - Train Volumes
  - Preliminary co-location Kenilworth Corridor review
  - DEIS proposed freight rail relocation route



#### SWLRT PE Technical Issues

REV 02: FEB 8, 2013

PEC West

PEC East

Joint PEC West/PEC East

#### Technical issues:

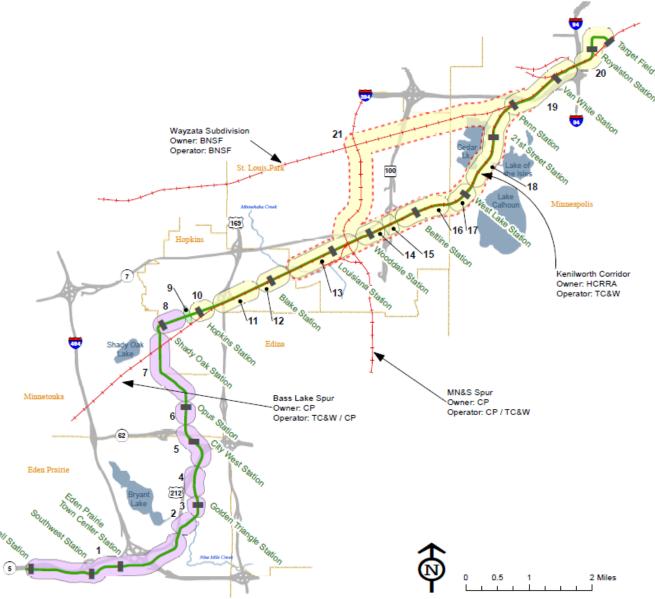
- 1. Eden Prairie Alignment
- 2. Nine Mile Creek Crossing
- 3. Golden Triangle Station
- 4. Shady Oak Road Crossing
- 5. City West Station and TH 212/TH 62 Flyover Bridges
- 6. Opus Station
- 7. Minnetonka/Hopkins Bridge
- 8. Shady Oak Station

#### 9. PEC West/PEC East Interface Point

- 10. Hopkins Station
- 11. Excelsior Blvd. Crossing
- 12. Blake Station
- 13. Louisiana Station
- 14. Wooddale Station
- 15. TH 100
- 16. Beltline Station 17. West Lake Station
- 18. Kenilworth Corridor
- 19. Bassett Creek Valley Corridor
- 20. Royalston Station/Interchange Project Connection
- 21. Freight Rail Co-location/Relocation Alternatives

#### System-wide technical issues (not shown):

- 22. Traction Power Substation and Signal Bungalow Locations
- 23. OMF Location
- 24. Park & Ride, Kiss & Ride and Bus Layover Locations
- 25. Trails and LRT Interface Coordination





# Freight Rail Technical Issue #21 Workshop Existing Train Volumes

Railroad and Route	Avg. Weekly Trains	Avg. Number of Cars Per Train	Typical Commodities
TC&W/ Bass Lake and Kenilworth	14	65 – 75	Agri-goods
	3	80 – 125	Ethanol, Grain, Coal
CP/ MN&S	10	10 – 25	Local Services
BNSF/ Wayzata Subdivision	91	80 – 125	Wide Variety



# Freight Rail Technical Issue #21 Workshop

- Overview of Track Characteristics:
  - Curvature
  - Maximum Grade
  - Maximum Compensated Grade (curvature + maximum grade)
- Challenges

Opportunities



# Freight Rail Technical Issue #21 Workshop

- Seeking feedback on:
  - Opportunities
  - Challenges
  - Concerns



# Freight Rail Technical Issue #21 Next Steps

- Existing conditions workshop:
  - BAC March 27
  - CAC March 28
  - SWCMC April 3
- Co-locate and relocation design workshop:
  - BAC May 29
  - CAC May 30
  - SWCMC June 5
- Corridor-wide public open houses: June/July



# Reports

- Member and Committee Reports
  - Defining Success Sub-Committee
- Public Forum
- Next Meeting:
  - BAC: April 24, 8:00 AM
  - CAC: April 25, 6:00 PM



# **More Information**

Online:

www.SWLRT.org

Email:

SWLRT@metrotransit.org

