

Community Meeting March, 2017

## Agenda

- 1. Welcome / Introductions
- 2. Background / Meeting Purpose
- 3. Progress to Date
  - Options Evaluated
  - Capital/Operating Costs
  - Ridership
- 4. Financial Analysis/Commuter Rail Comparison
- 5. Governance/Funding
- 6. Community Meetings
- 7. Next Steps

## What is Commuter Rail?

### TRAINS + CARS



### STATIONS





### ONBOARD





### What is Commuter Rail?

### TRAINS + CARS

### **ONBOARD**



### **STATIONS**







## North South Commuter Rail Study Area



- Passenger service on an existing State-owned freight line
- Initially 4 trains each direction per day
- Connecting buses in Ann Arbor will serve North Campus,

# Medical Center, and downtown

## Seven Rail Options Evaluated



• Proposed station locations

## Seven Rail Options Evaluated

		Opt	ion S	Stati	ons		Capital Expense (MM)	Operating Expenses (MM/year)	Da Ride (one-wa	aily rship ay trips)	Travel Time
Option Name	Howell	Genoa	Hamburg	Whitmore Lk (WL)	Barton Drive (BD)	Ann Arbor (AA)			STOPS 2015	STOPS 2040	
1. Full Service	Х	Х	Х	Х	Х	X	\$122.3	\$13.2	1,840	2,346	51 mins.
2. Full Service w/o Barton Drive	Х	х	Х	Х		Х	\$121.0	\$13.1	1,190	1,540	48 mins.
3. "Starter Service" - Howell / WL / AA	х			Х		Х	\$118.4	\$12.9	1,170	1,500	44 mins.
4A. Minimum Operating Configuration w/ PTC				Х	х		\$28.9	\$5.8	800	1,100	18 mins.
4B. Minimum Operating Configuration w/o PTC				Х	Х		\$21.9	\$5.7	800	1,100	18 mins.
5A. Shuttle Service (one train set)				Х	Х	Х	\$61.3	\$6.6	1,350	1,960	21 mins.
5B. Shuttle Service (two train sets)				Х	Х	Х	\$65.2	\$7.0	1,670	2,420	21 mins.

## **Options Selected for Additional Analysis**

### **Option 1 - Full Service**

### **Option 5B - Shuttle Service**



- Seven options were evaluated on a cost, service and ridership basis  $\bullet$
- Option 1 Full Service and Option 5B Shuttle Service have been selected for additional  $\bullet$ analysis

Downtown Ann Arbor

## **Comparison of Rail Options**

	<b>Option Stations</b>				Capital Expense (MM)	Operating Expenses (MM/year)	Da Ride (one-wa	iily rship ay trips)	Travel Time		
Option Name	Howell	Genoa	Hamburg	Whitmore Lake	Barton Drive	Ann Arbor			STOPS 2015	STOPS 2040	
Option 1 - Full Service	Х	Х	Х	Х	Х	Х	\$122.3	\$13.2	1,840	2,346	51 mins.
Option 5B - Shuttle Service (two train sets)				Х	х	Х	\$65.2	\$7.0	1,670	2,420	21 mins.

## **Benefits of Commuter Rail**

- Parking Avoided: \$15 36M Capital Cost 900 riders at 1.5/car = 600 spaces at \$25,000-\$60,000/space per A2 DDA
- Reduction in VMT and GHG emissions
  - 95% less CO, 90% less VOC, 50% less CO2 and NOx per passenger mile as private vehicles

Public Transportation: Benefits for the 21<sup>st</sup> Century, APTA

- Transit Oriented Development mixed-use development within ¼ to ½ mile of a transit station
  - Increased local property values

Residents of TODs typically reduce single-occupant vehicle commuting by 15-30% Evaluating Public Transit Benefits and Costs, VTPI

For every \$1 billion invested in public transit, more than 24,000 job are created • Economic Recovery Promoting Growth, APTA

North-South Commuter Rail Feasibility Study

## Financial Analysis + Commuter Rail Comparison

### **Project Development**

In accord with FAST act requirements, the project sponsor is responsible for:

- Selecting the locally preferred alternative (LPA)
- Getting the LPA adopted in the fiscally constrained metropolitan transportation plan
- Completing the NEPA process (Categorical Exclusion, Finding of No Significant Impact or Record of Decision)
- Developing sufficient information for the FTA to develop a project rating.



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### **Evaluation Criteria and Rating**

- Mobility improvements ۲
- **Environmental benefits** ۲
- **Congestion relief** ٠
- **Economic development**  $\bullet$
- Land use •
- Cost effectiveness



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### **Cost Effectiveness**

i cuciai share or the annualized capital cost	ιιp
High: <\$1.00	
Medium-High: \$1.01-\$1.99	
Medium: \$2.00-\$3.99	
Medium-Low: \$4.00-\$5.00	
Low: >\$5.00	





- Assumed funding split: Federal (50%)/Federal-State (25%)/Local (25%) •
- Option 5B is anticipated to be a stronger project as measured by Cost Effectiveness and an assumed 25% local funding commitment
- Option 1 could achieve a Medium rating provided a higher share of local funding is available



**Downtown Ann Arbor** 

(potential future station)

### **Commuter Rail Comparison**



### North-South Commuter Rail Feasibility Study



March 20, 2017

## Commuter Rail Comparison: Performance Metrics

Metric					System				
Performance Metric	North-South Option 1*	North-South Option 5B*	Music City Star	Northstar	SunRail**	Coaster	Red Line	A-Train	Average Value***
OpEx per Train Revenue Mile	\$186.48	\$149.73	\$51.45	\$104.47	\$120.48	\$69.71	\$56.51	\$39.62	\$73.71
OpEx per Passenger Mile	\$1.84	\$1.53	\$1.15	\$0.83		\$0.41	\$1.32	\$1.49	\$1.04
Unlinked Trips per Veh-Rev-Mile	2.02	3.89	1.22	1.36		1.20	2.73	0.91	1.48

\*North-South Operating Costs are adjusted to eliminate the the costs of operating connecting bus service and the cost of leasing locomotives and coaches \*\*SunRail started service in mid year 2014; Limited 2015 data is available.

\*\*\* This value represent the average of existing, operating commuter rail systems

## North-South Commuter Rail Feasibility Study

**GOVERNANCE / FUNDING** 

## Michigan Governance Options for Consideration

Option	Considerations
<ol> <li>New Multi-Jurisdictional Agreement (under Act 7) established between Corridor municipalities / authorities</li> </ol>	<ul> <li>Could be used to continue project planning and developm transit services and build market</li> <li>Funding provisions of Act 7 may not be adequate for long</li> </ul>
<b>2.</b> New Transit Authority (under Act 196) covering all or part of Washtenaw and Livingston Counties	<ul> <li>New authority could plan for and implement complement Washtenaw Counties</li> <li>Authority could be established to grow along with project allowing for voluntary expansion of district)</li> <li>New Authority could potentially develop multi-jurisdiction under Act 7</li> </ul>
<b>3.</b> Livingston County joins Regional Transit Authority of SE Michigan	<ul> <li>Provision in RTA Act allows for adjoining Counties to join</li> <li>RTA currently proposing to complete commuter rail conn Ann Arbor</li> <li>NS Rail project not in RTA's 20-year plan, expansion outsid unlikely to be first priority</li> <li>Could be a long term option dependent on success of RTA</li> </ul>

Options are not mutually exclusive – some combination may be needed or feasible



- nent, or organize to fund pilot
- -term project financing
- tary services in Livingston and
- t phasing (under Section 7
- nal authority with AAATA
- ection between Detroit and
- de initial four-County area

## **Potential Capital Cost Funding Scenario**

	Capital	Potential Section 5309 Funding Level (50%)	Potential Other Federal and State Funding Level (25%)	Potential Local Match Needed (25%)
Option Name	Expense (\$M)	(\$M)	(\$M)	(\$M)
Option 1 - Full Service	\$122.3	\$61.2	\$30.6	\$30.6
Option 2 - Shuttle Service (two train sets)	\$65.2	\$32.6	\$16.3	\$16.3

## **Potential Operating Cost Funding Scenario**

Option Name	Annual Operations Expense (\$M)	Fares (\$M)	Potential Federal Funding Level (5%) (\$M)	Potential State Funding Level (10%) (\$M)	Potential Local Funding Needed (\$M)
Option 1 - Full Service	\$13.2	\$1.1	\$0.7	\$1.3	\$10.1
Option 2 - Shuttle Service (two train sets)	\$7.0	\$0.8	\$0.4	\$0.7	\$5.2

## Input on Governance / Funding Options

### **Project Scope and Schedule**

- Understanding of phased approach  $\bullet$
- Project likely needs to be considered as part of overall transportation ulletstrategy for corridor and Counties – linkages important
- Role of business community and employers  $\bullet$

### Governance

- Communities involved in Governance (narrow vs. broad)
- Establishment of a new Transit Agency

### Funding

- Recent millage proposal history
- Limited ability to leverage other local funding mechanisms

## Mill Rate Analysis

- Goal to understand level of local funding support needed to advanced ulletproject
- Millage covers local shares of project capital and operating costs  $\bullet$
- No project financing assumed, with construction occurring over 3+ year • timeframe
- Assumes equal distribution of millage rate funding levels lacksquare
- Developed multiple scenarios for comparison of options  ${\color{black}\bullet}$

## Millage Rate Analysis - Option 1: Full Service

### Two County Tax Base



Tax Base: \$25.2 B Mill Rate: 0.40 \$50/yr\*

\*based on \$250,000 property value = \$125,000 SEV

Jurisdictional Tax Base



Tax Base: \$12.0 B Mill Rate: 0.84 \$105/yr\*

## Millage Rate Analysis – Option 5B: Shuttle Service



### **One County Tax Base**



Jurisdictional Tax Base - 1

Tax Base: \$15.3 B Mill Rate: 0.34

Tax Base: \$8.4 B Mill Rate: 0.61 \$76.25 yr\*

Pittsfield Town

Lodi Township

ship

Scio Township

Lodi Township

Ypsilanti Townshin

\$42.50/yr\*

\*based on \$250,000 property value = \$125,000 SEV

North-South Commuter Rail Feasibility Study

### Jurisdictional Tax Base - 2



### Tax Base: \$6.1 B Mill Rate: 0.84 \$105/yr\*

### Millage Rate Analysis Summary

Tax Base Scenario	Full Service	Shuttle
	<u>Two County</u>	One
Country	Tax Base: \$25.2 B	Tax Base
County	Mill Rate: 0.40	Mill Ra
	\$50/yr*	\$42.
	Tax Base: \$12.0 B	Tax Bas
Jurisdictional (Option 1)	Mill Rate: 0.84	Mill Ra
	\$105/yr*	\$7
		Tax Bas
Jurisdictional (Option 2)	n/a	Mill Ra
		\$10

\*based on \$250,000 property value=\$125,000 SEV

### e Service

- <u>County</u> e: \$15.3 B
- ate: 0.34
- 50/yr\*
- se: \$8.4 B ate: 0.61 76.25
- se: \$6.1 B ate: 0.84 05/yr

North-South Commuter Rail Feasibility Study

## NEXT STEPS

### Next Steps: Meetings

### **Community Meetings**

Monday, March 20, 6:30-8:30 PM Howell Area Chamber of Commerce 123 E. Washington St. Howell, MI 48843

Tuesday, March 21, 6:30-8:30 PM Northfield Township Offices 8350 Main St. Whitmore Lake, MI 48189

Wednesday, March 22, 6:30-8:30 PM Eberwhite Elementary School 800 Soule Blvd. Ann Arbor, MI 48104



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