



BEST:

Michigan Avenue

**Technical Committee,
Wednesday, September 9, 2015**



RTA

**REGIONAL
TRANSIT AUTHORITY**
OF SOUTHEAST MICHIGAN

Agenda

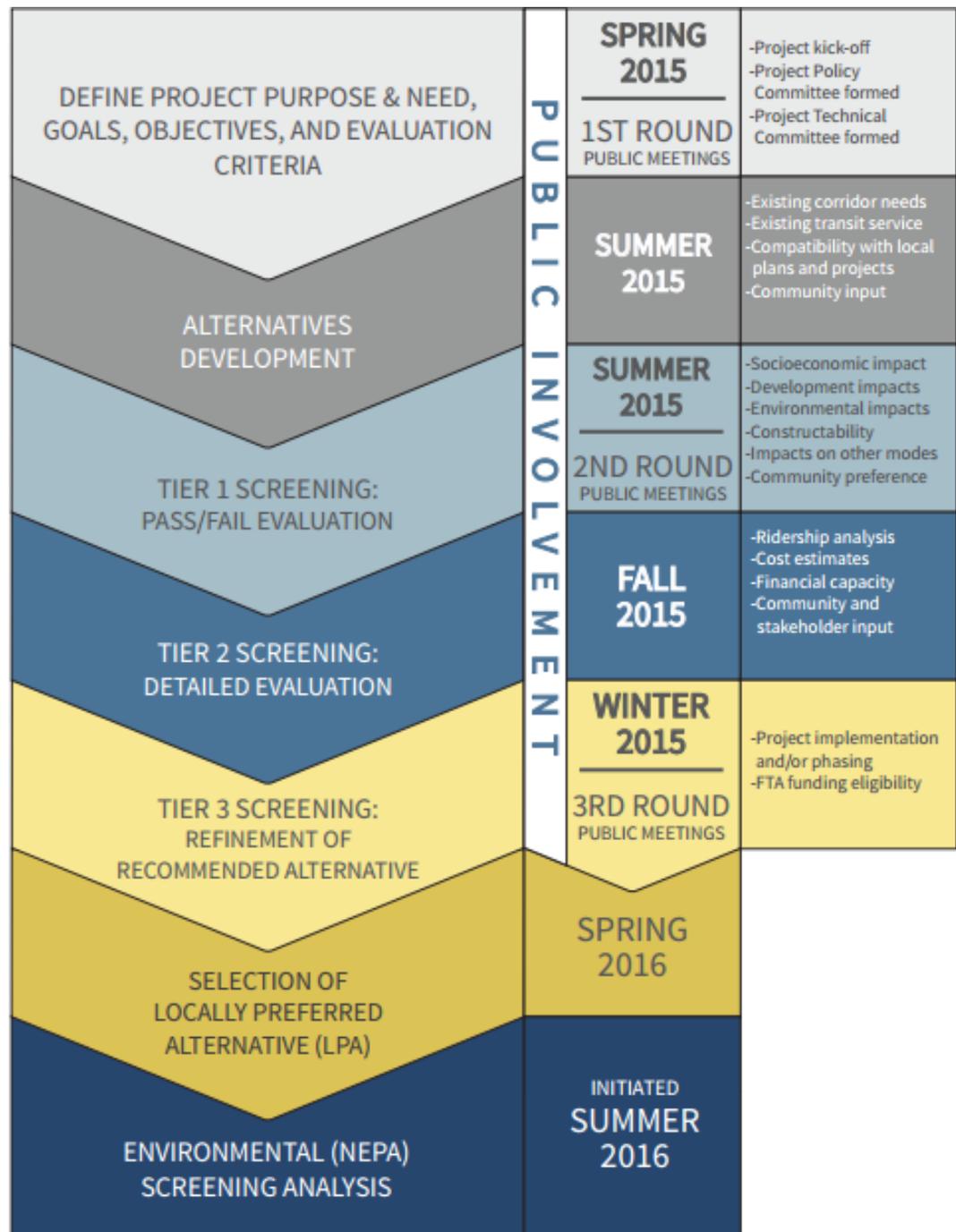
1. Welcome and Introductions
2. Project Update
3. Recap from Last Meeting
4. Public / Stakeholder Involvement Activities
5. Tier 1 Screening Results
6. Alternatives for Detailed Definition
7. Next Steps / Next Meeting
 - Technical Committee Meeting:
October 14, 2015, 2:00 – 3:30,
Dearborn Council Chambers
8. Adjourn

Welcome & Introductions

Project Update

Study Process and Schedule

We are here →



Project Committee Roles

Technical Committee

- Community and agency staff
- Meets Frequently (Monthly/Semi-Monthly)
- Offer technical guidance and data to support team
- Suggest stakeholders and outreach methods
- Report back to colleagues and community

Policy Committee

- Community and agency leadership
- Meets occasionally (e.g., quarterly) to review key decisions:
 - Official project goals
 - Description of detailed alternatives
 - Evaluation and selection of preferred alternative
- Provide support for implementation and funding of preferred alternative

Public / Stakeholder Involvement Activities

Phase Two Community Outreach

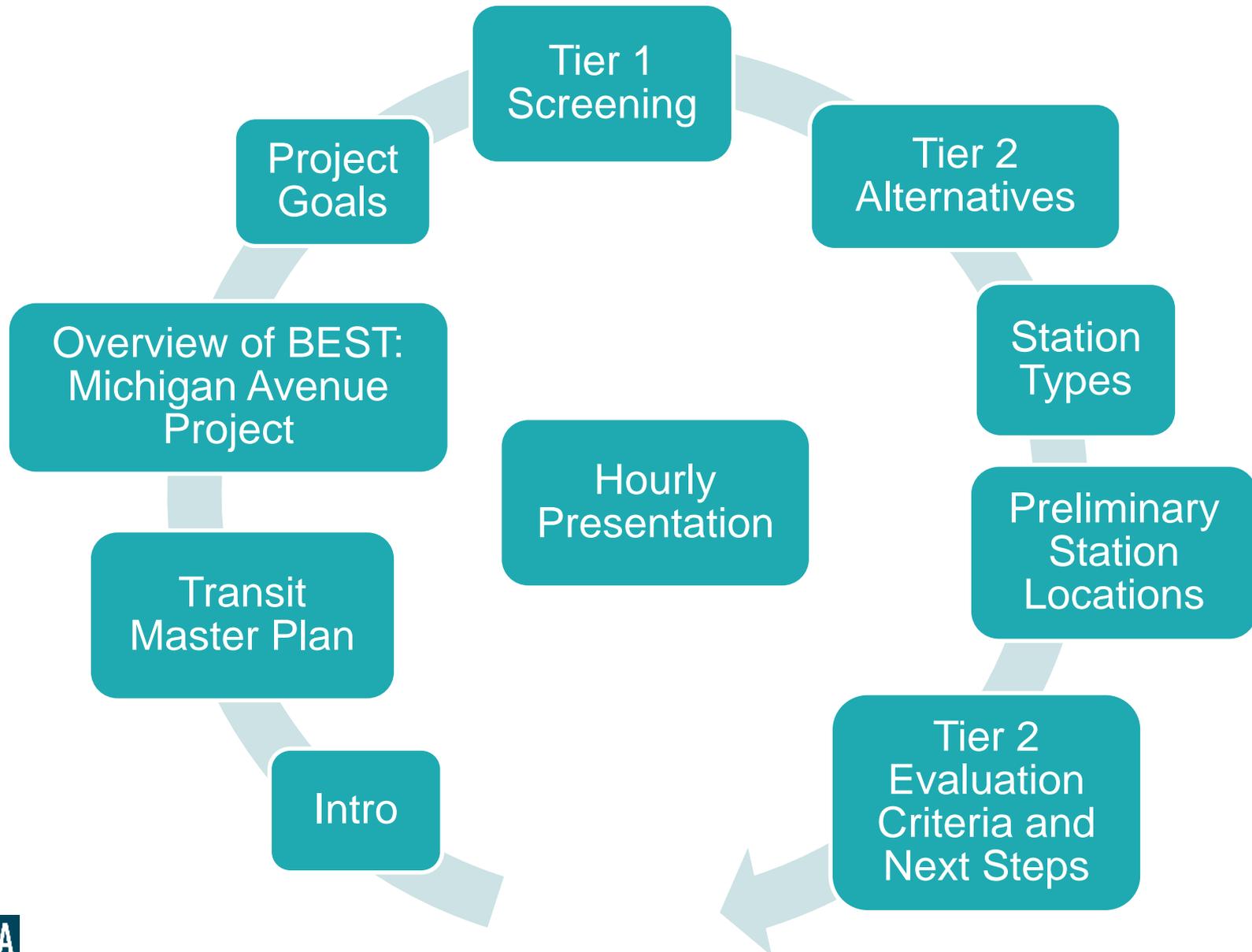
Thursday, October 8th: Eastern Michigan University College of Business, Ypsilanti (4-7PM)

Monday, October 12th: Wayne Historical Museum, Wayne (4-7PM)

Tuesday, October 13th: Arab American National Museum, Dearborn (4-7PM)

Wednesday, October 14th: Gaelic League, Corktown, Detroit (4-7PM)

Phase Two Open House Format





August 31

Building Equitable Sustainable Transit (BEST): Michigan Avenue posted

Where along the BEST: Michigan Avenue Corridor do you commute for work?

“**Joseph Krause:** For work I walk from 6th and Michigan to Capitol Park. I take the bus about 1/8th of the time, as it usually isn't worth the wait, but I'll hop on if it's less than 10 minutes away when I check...stops at Trumbull and 14th would make sense, possibly 6th and Rosa Parks as well, depending on whether the line was local or express.

Sometimes I ride the bus to Livernois/Junction and Michigan for groceries, CVS, computer repair, theatre concerts, ice cream, or El Barzon. A stop around there would be useful.

I see films at Fairlane Town Center in Dearborn, but the bus doesn't run late enough for that to be convenient...With BRT that ran 24 hours this could be a transit trip...”

Tier 1 Alternatives Screening Results

Tier 1 Transit Modes

Mode	Typical Characteristics	Example Service
No Build	<ul style="list-style-type: none">• Single (40-foot) and articulated (60-foot) low-floor, diesel buses• Mixed traffic operations• Frequent (10 minute) peak service; 30- to 60-minute service off-peak• Stops spacing varies: every other block; ¼-mile; half-mile• Stations vary between shelters and concrete pads	Detroit, MI DDOT 
Commuter Rail	<ul style="list-style-type: none">• Diesel engine or Diesel Multiple Unit (DMU) trains with three to ten cars• Operates in a dedicated right-of-way, typically a freight corridor• Frequent peak-hour service; infrequent off-peak and weekend service• Stops spaced two to five miles apart• Off-board fare payment• Typical corridor length of 20 to 80 miles	Chicago, IL Metra 

Mode	Typical Characteristics	Example Service
Highway Express Bus	<ul style="list-style-type: none"> • Single (40-foot) low-floor, diesel buses • Operates in mixed traffic or dedicated lane (or shoulder) of the highway • Frequent peak-hour service; infrequent off-peak and weekend service • Stops spaced two to five miles apart • Typical corridor length of 10 to 30 miles 	Sacramento, CA 
Bus Rapid Transit (BRT) "Low"	<ul style="list-style-type: none"> • Single (40-foot) and articulated (60-foot) low-floor, diesel buses • Defined stations • Traffic signal priority for transit vehicles • Frequent bidirectional service for a substantial part of weekday and weekend days • At the discretion of the FTA, any other features that support the transit investment (the majority of which does not operate in a separated right-of-way during peak periods) • Typical corridor length of five to 20 miles 	Kansas City, MO MAX 

Mode	Typical Characteristics	Example Service
BRT “High”	<ul style="list-style-type: none"> • 60-foot buses that have multiple doors, sleek styling, and onboard visual/automated next stop announcements • Exclusive bus lanes • Level boarding at high quality stations • Wide stop spacing (typically one mile) and frequent, seven-day-a-week service • Branded service • Off-board fare payment • Signal priority • “Real time” vehicle arrival information • Typical corridor length of five to 20 miles 	Cleveland, OH HealthLine 

Mode	Typical Characteristics	Example Service
Street-car	<ul style="list-style-type: none"> • Single-car trains • Rail tracks embedded within mixed traffic lanes • Overhead electrical system • Level boarding at high-quality stations • Stops spaced $\frac{1}{4}$ - $\frac{1}{3}$ mile apart • Frequent service • Off-board fare payment • Signal priority • “Real Time” vehicle arrival information • Typical corridor length of two to five miles 	Portland (OR) Streetcar 
Light Rail Transit (LRT)	<ul style="list-style-type: none"> • One- to four-car trains • Exclusive rail corridor or tracks embedded within lane of roadway • Overhead electrical system • Level boarding at high-quality stations • Stops spaced one mile apart • Frequent service • Off-board fare payment • “Real Time” vehicle arrival information • Typical corridor length of 10 to 20 miles 	Minneapolis, MN Hiawatha Line 

Tier 1 Evaluation Results

Alternative	Mode	Ridership Capacity	Multimodal Connectivity	Regional Connectivity	Compatibility with Local and Regional Plans	Environmental Impacts	Capital Cost
1a	Commuter rail	Pass	Pass	Not Pass	Pass	Pass	Pass
1b	Commuter rail	Pass	Pass	Not Pass	Pass	Pass	Pass
2 Low	BRT Low	Pass	Pass	Pass	Pass	Pass	Pass
2 High	BRT High	Pass	Pass	Pass	Pass	Pass	Not Pass
2a Low	BRT Low	Pass	Pass	Pass	Pass	Pass	Pass
2a High	BRT High	Pass	Pass	Pass	Pass	Pass	Not Pass
2b Low	BRT Low	Pass	Pass	Pass	Pass	Pass	Pass
2b High	BRT High	Pass	Pass	Pass	Pass	Pass	Not Pass
2c Low	BRT Low	Pass	Pass	Pass	Pass	Pass	Pass
2c High	BRT High	Pass	Pass	Pass	Pass	Pass	Not Pass
3	Streetcar	Not Pass	Pass	Pass	Pass	Pass	Not Pass
3a	Streetcar	Not Pass	Pass	Pass	Pass	Pass	Not Pass
3b	Streetcar	Not Pass	Pass	Pass	Pass	Pass	Not Pass
3c	Streetcar	Not Pass	Pass	Pass	Pass	Pass	Not Pass
4	LRT	Pass	Pass	Pass	Pass	Not Pass	Not Pass
4a	LRT	Pass	Pass	Pass	Pass	Not Pass	Not Pass
4b	LRT	Pass	Pass	Pass	Pass	Not Pass	Not Pass
4c	LRT	Pass	Pass	Pass	Pass	Not Pass	Not Pass
5	Express bus	Not Pass	Not Pass	Not Pass	Pass	Pass	Pass
6	Express bus	Not Pass	Not Pass	Not Pass	Pass	Pass	Pass
7	Express bus	Not Pass	Not Pass	Pass	Pass	Pass	Pass
8a	Express bus	Not Pass	Not Pass	Pass	Pass	Pass	Pass
8b	Express bus	Not Pass	Not Pass	Pass	Pass	Pass	Pass
9	Express bus (AirRide)	Not Pass	Not Pass	Not Pass	Pass	Pass	Pass

Recommended for Deferral

Alternative	Mode	Reason for Deferral
3	Streetcar	<ul style="list-style-type: none"> • High capital costs to serve the entire corridor • Insufficient capacity to meet demand across the corridor
3a		
3b		
3c		
4	LRT	<ul style="list-style-type: none"> • High capital costs to serve the length of the corridor • Right-of-way constraints
4a		
4b		
4c		
5	Express bus	<ul style="list-style-type: none"> • Not supportive of land use and development growth plans • Not supportive of multi-modal connectivity • Does not serve the diversity of transit trips types within the corridor
6		
7		
8a		
8b		
9	Express bus (AirRide)	

Modes Recommended for Further Consideration

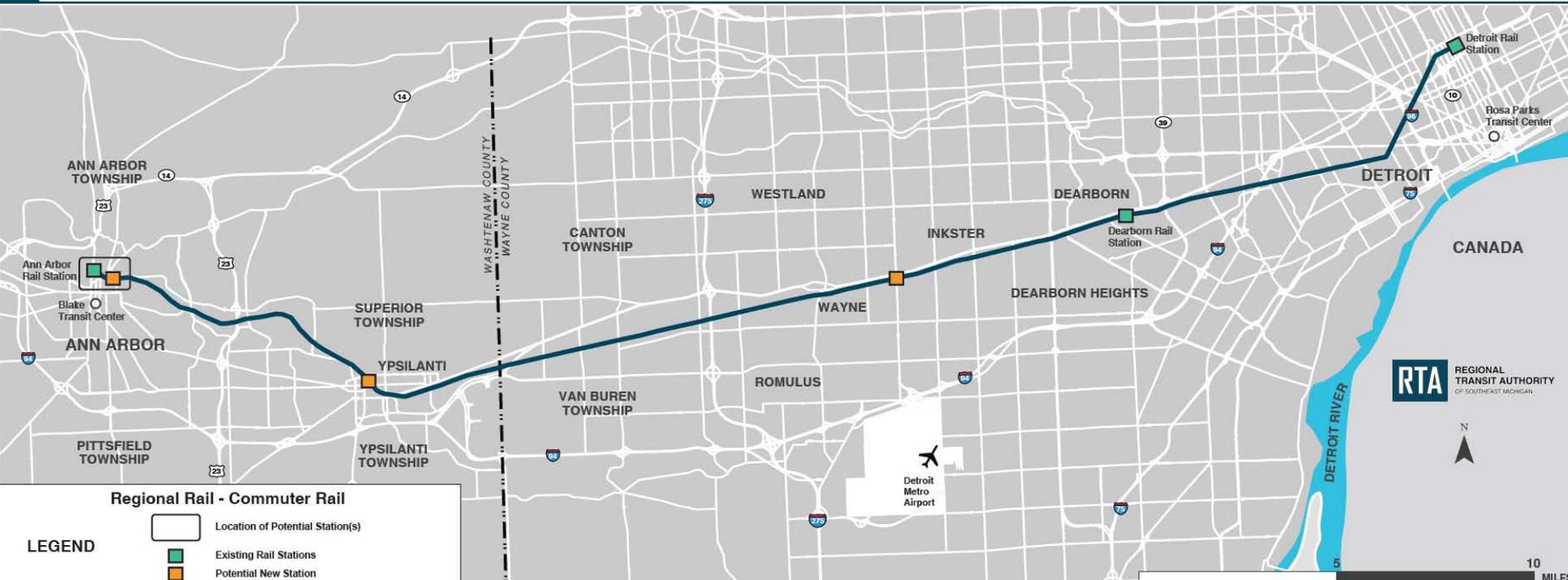
Alternative	Mode	Overall Assessment
1a	Commuter rail	Pass
1b	Commuter rail	Pass
2 Low	BRT Low	Pass
2 High	BRT High	Pass
2a Low	BRT Low	Pass
2a High	BRT High	Pass
2b Low	BRT Low	Pass
2b High	BRT High	Pass
2c Low	BRT Low	Pass
2c High	BRT High	Pass

Alternatives for Detailed Definition

No-Build Alternative

- The No Build Alternative is a local bus alternative that assumes no significant changes to the existing transit service and facilities in the Michigan Avenue / Washtenaw Avenue / Airport corridor

Commuter Rail



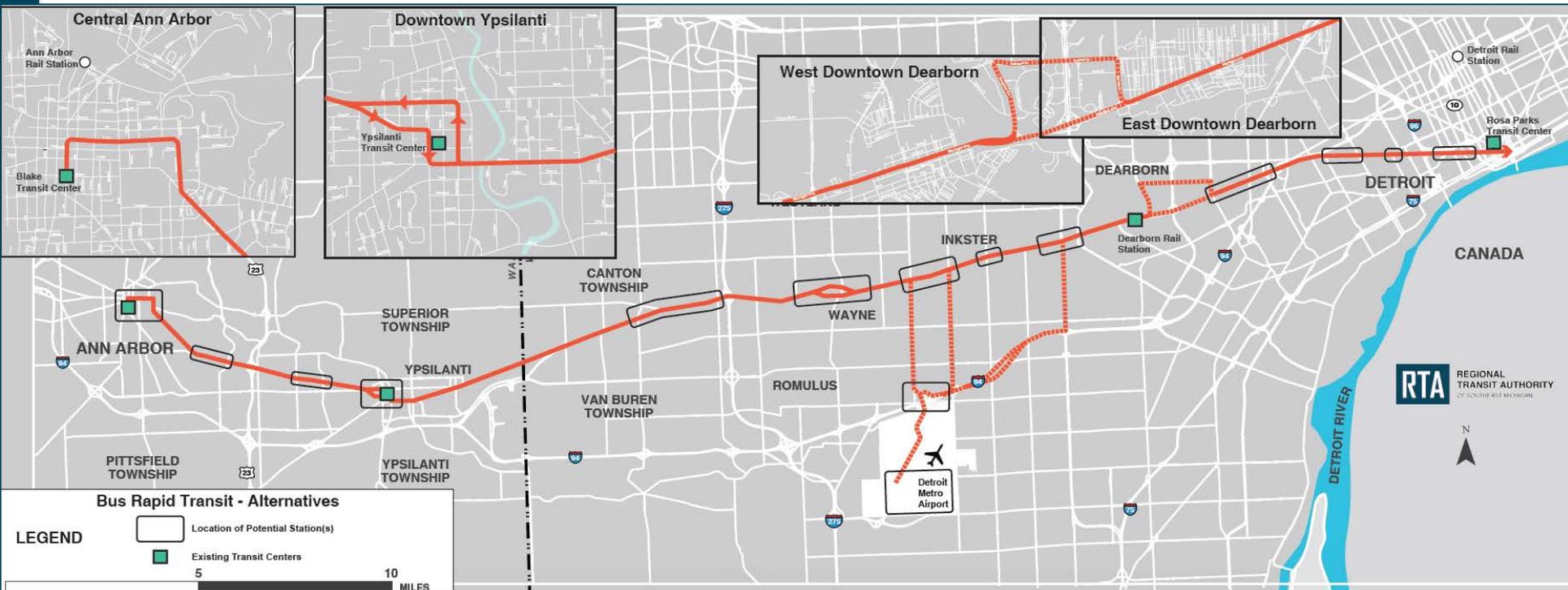
- SEMCOG / MDOT demonstration project
 - Up to 5 daily round trips, with two round trips per peak commute
 - Existing Amtrak stations, plus two new stations: Ypsilanti and north of Metro Airport

Regional Rail



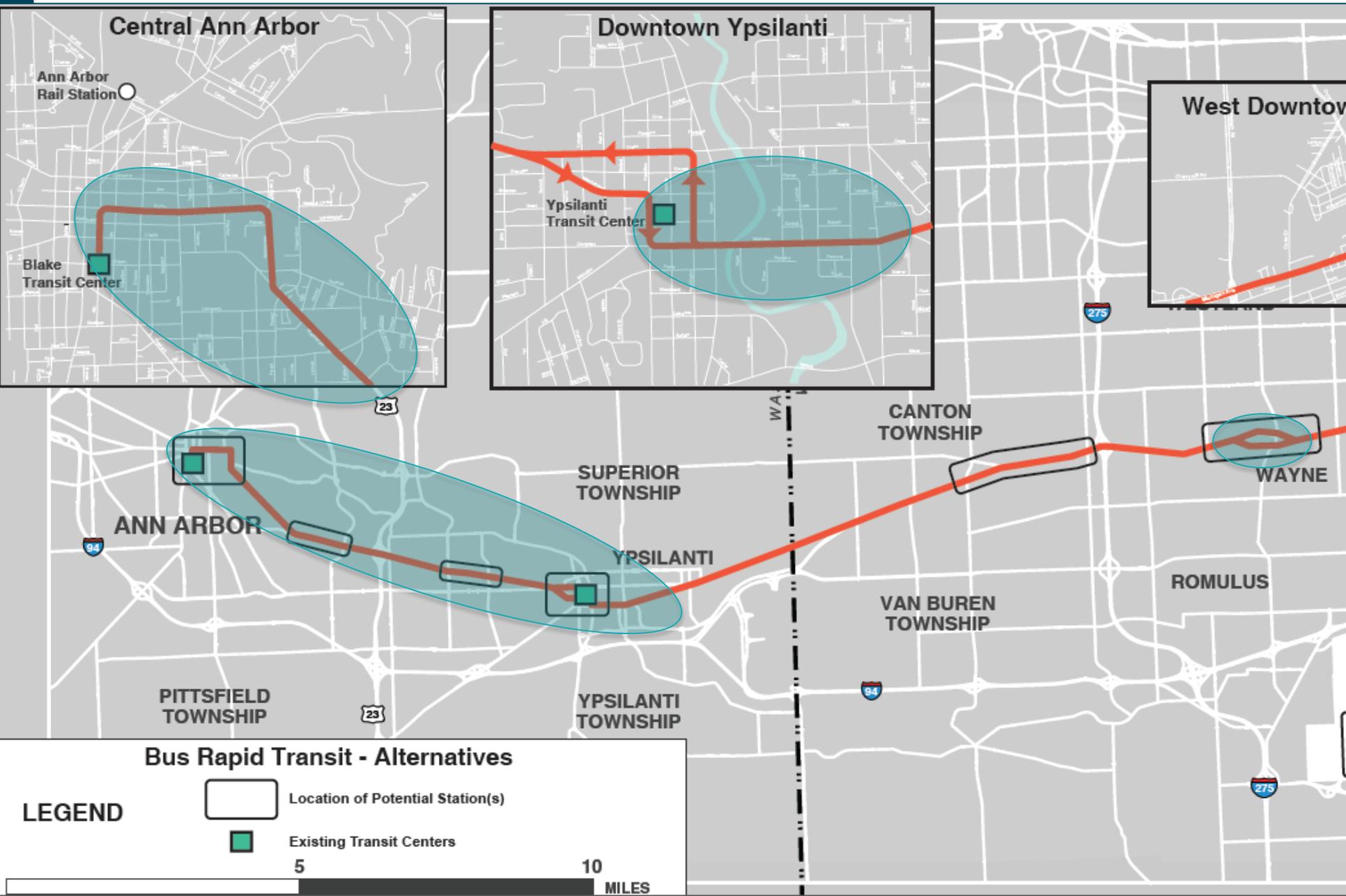
- Up to 8 near term regional round trip trains, in addition to existing and proposed intercity (Amtrak) trains
- Long term, SEMCOG / MDOT propose 15 regional round trips, plus up to 10 intercity trains, for up to 25 total daily round trips in the corridor
- Consideration of additional stations and Detroit station options

Bus Rapid Transit



- Reserved BRT lanes where right-of-way is available and cost constraints allow
- Capital improvements and service frequency focused where the demand is highest
- Stations generally spaced at mile intervals; more or fewer stations where demanded
- Alignment alternatives in Dearborn and to Metro Airport

Areas of Constrained BRT Right-of-Way



Bus Rapid Transit - Alternatives

LEGEND

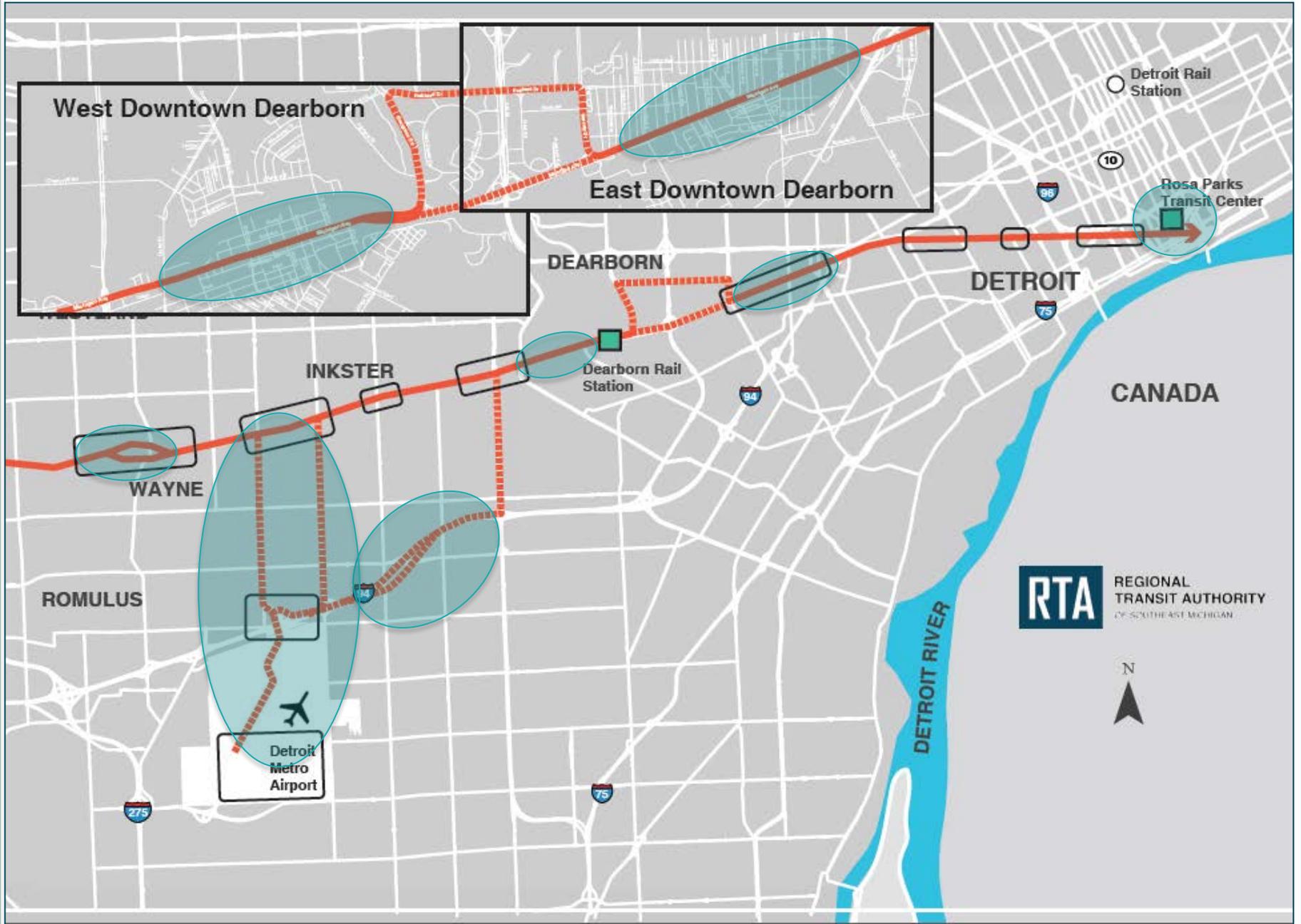
-  Location of Potential Station(s)
-  Existing Transit Centers

5

10

MILES

Areas of Constrained BRT Right-of-Way



Proposed Tier 2 Alternatives

- **No-Build**
- **Build Alternatives**
 1. **Commuter Rail**
(demonstration project—
up to 5 daily round trips)
 2. **Regional Rail**
 - a) Demonstration project
with additional station
considerations
 - b) Up to 8 daily round
trips
 - c) Up to 15 daily round
trips
 3. **Bus Rapid Transit** (in the
full corridor)
 - a) Mixed-traffic operation
 - b) Dedicated transit lane
 4. **Blended Alternative**
 - a) Commuter Rail /
Regional Rail
 - b) BRT with dedicated
lanes where
achievable given
constraints

Next Steps / Next Meeting

Next Steps

- Detailed Definition of Alternatives
- Technical Methodology memos
- Public Open Houses (October 8-14)

Next Technical Committee Meeting

- October 14, 2 pm – 3:30 PM, Dearborn Council Chambers

Next Combined Committees Meeting

- November 17, 2 pm – 3:30 PM, Dearborn Council Chambers

See you at the Open Houses!

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Thank You!

www.rtamichigan.org