



Is enhanced transit viable in the region?

Onondaga County Planning Federation
Syracuse, NY
March 1, 2018

Topics

- ▶ Introduction to the Syracuse Metropolitan Transportation Council
- ▶ Bus Rapid Transit & Light Rail Transit
- ▶ SMART 1 enhanced transit study

Introduction to the Syracuse Metropolitan Transportation Council

What is an MPO?

- ▶ A Metropolitan Planning Organization, or MPO, is a transportation **policy-making and planning body** made up of representatives of local, state, and federal government and transportation authorities.
- ▶ The Policy Committee (not the staff) is the designated MPO.



What is an MPO?

- ▶ A federal requirement for urbanized areas with a population of 50,000 or more (based on most recent decennial Census)
- ▶ The MPO is charged with **comprehensive, cooperative,** and **continuous** transportation planning for a metropolitan area.



Who is the SMTC?

Policy Committee members:

- ▶ CenterState Corporation for Economic Opportunity
- ▶ CNY Regional Planning & Development Board
- ▶ CNY Regional Transportation Authority (Centro)
- ▶ City of Syracuse
 - ▶ Office of the Mayor
 - ▶ Common Council
 - ▶ Planning Commission
- ▶ New York State
 - ▶ Department of Environmental Conservation
 - ▶ Department of Transportation
 - ▶ Empire State Development
 - ▶ Thruway Authority
- ▶ Onondaga County
 - ▶ Office of the County Executive
 - ▶ Legislature
 - ▶ Planning Board



Staff:

Director
Planners
Technical staff

SMTC Planning Area

- ▶ All of Onondaga County
- ▶ Town of Sullivan in Madison County
- ▶ Towns of West Monroe, Hastings, Schroepfel, and small portion of Granby in Oswego County



Quick stats

- ▶ 1 City, 23 Towns, 18 Villages, 1 Tribal Nation
- ▶ Total population: 504,672
- ▶ Bridges: 554
- ▶ Roadway mileage: 4,244
- ▶ Miles of on-road bicycle facilities: 18.9
- ▶ Annual transit ridership: ~10 million
- ▶ 1 international airport
- ▶ 1 intermodal rail yard



What does the SMTC do?

- ▶ **Comprehensive** transportation planning includes
 - ▶ Automobiles and the road network
 - ▶ Freight
 - ▶ Transit
 - ▶ Bicycling
 - ▶ Walking



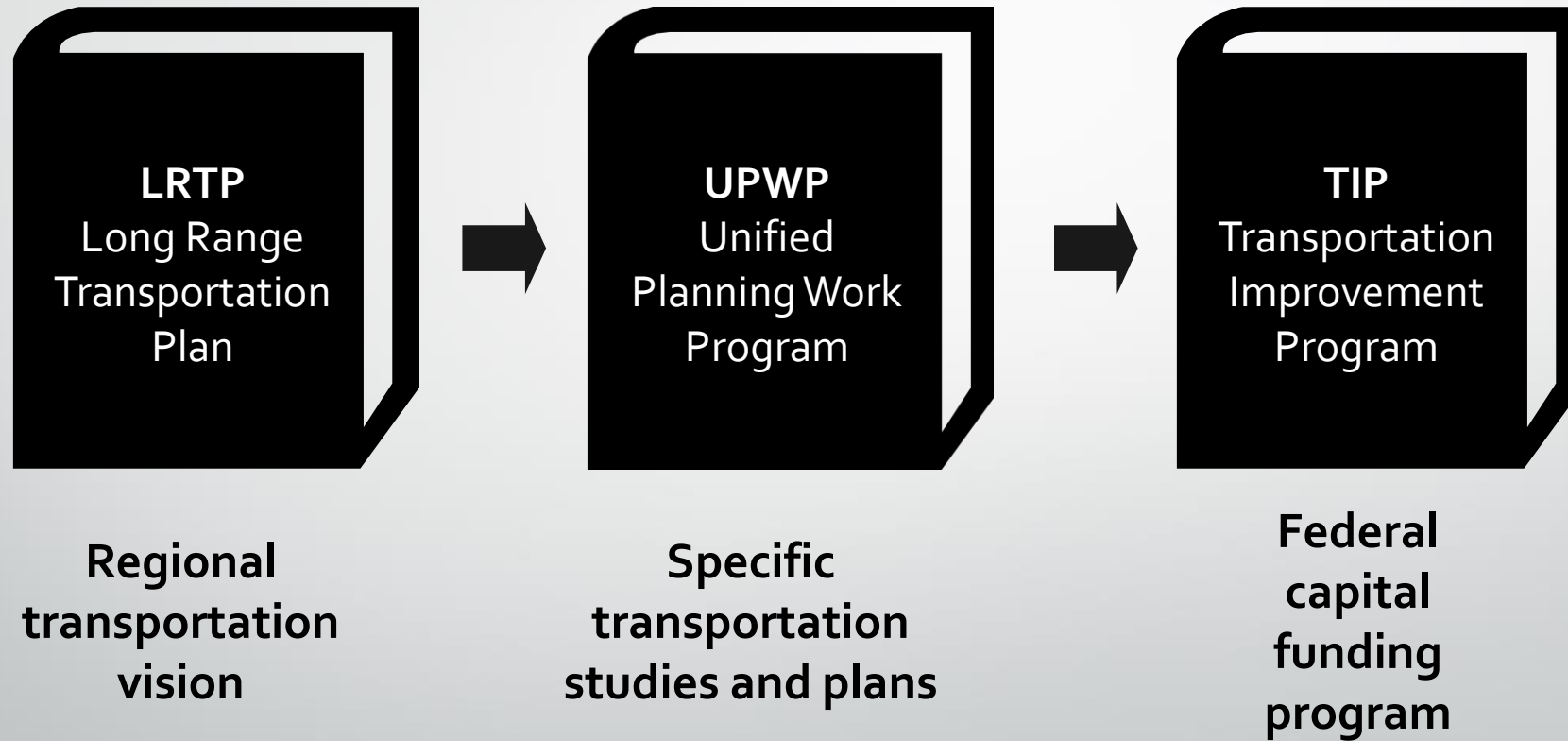
What does the SMTC do?

- ▶ **Cooperative** transportation planning
 - ▶ Coordinate between federal, state, and local agencies to develop transportation plans and programs
 - ▶ Provide an opportunity for citizens to participate in planning (not implementation)



What does the SMTC do?

- ▶ **Continuous** transportation planning

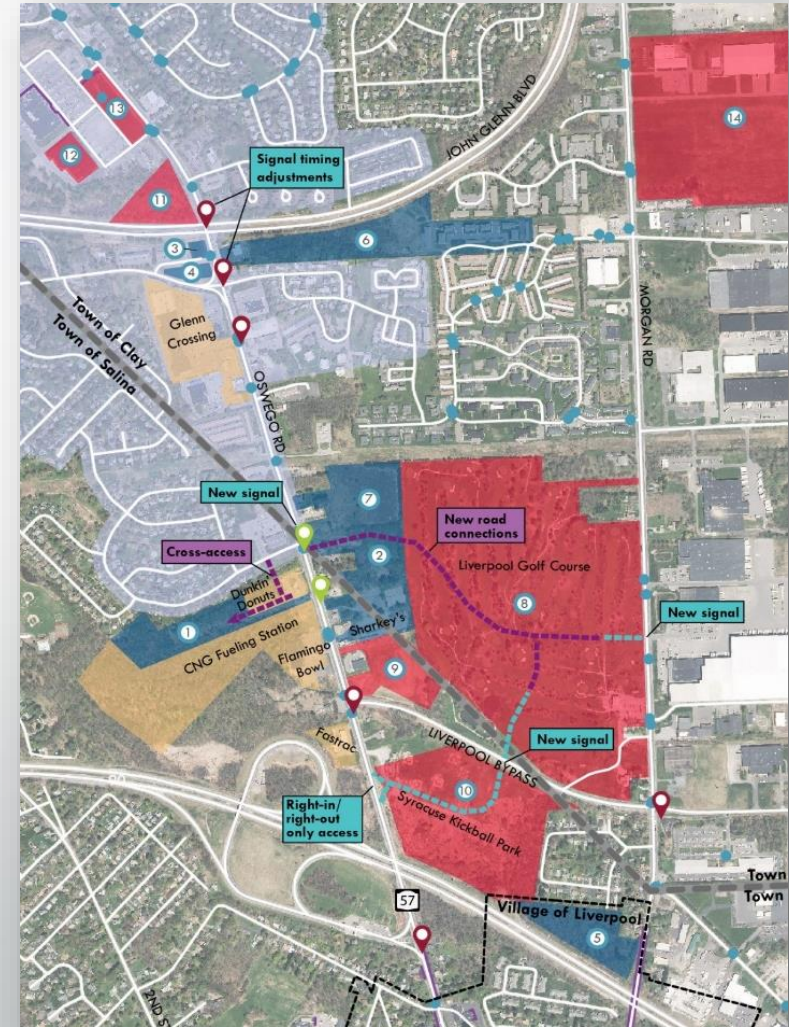


Assistance we can provide

	Scope and Public involvement	Budget	Schedule
General planning assistance	<i>limited</i>	<i>Small (<\$10K)</i>	<i>Short (<6 mos)</i>
Local Comprehensive Plan assistance			
Unified Planning Work Program (UPWP) study	<i>significant</i>	<i>Large (>\$40K)</i>	<i>Long (>1 yr.)</i>

Local Comprehensive Plan assistance

- ▶ Standing UPWP task, sponsored by SOCPA.
- ▶ Provide assistance to municipalities that are updating their comprehensive plans.
- ▶ Anticipate providing assistance to up to 3 municipalities within one program year.
- ▶ Municipalities to be chosen by SOCPA.
- ▶ Specific tasks to be defined once a municipality is chosen. Will be documented in a memo to SOCPA and municipality.
- ▶ SMTC staff will attend municipal meetings, may present findings at public meetings hosted by municipality.



UPWP study

- ▶ Stand-alone UPWP project specific to a municipality(ies).
- ▶ Formal application process and specific timeline
- ▶ Larger scope and budget, 1-2 year timeframe for completion
- ▶ Includes Study Advisory Committee and public involvement



**Syracuse
Metropolitan
Transportation
Council**



[UPWP 2018-2019]
Unified Planning Work Program

Resources available from the SMTC

- ▶ Traffic counts – intersections and road segments
- ▶ Publications – available for download or request a hard-copy
 - ▶ Transportation Atlas
 - ▶ Bike Suitability Map
 - ▶ Canal Services Map
 - ▶ Newsletters
- ▶ Online interactive maps
 - ▶ Pedestrian Demand Model
 - ▶ Bike Map
 - ▶ Hiking and biking in Central New York



Why an MPO process?

The MPO provides a forum to:

- ▶ Collaborate between governments, interested parties, and the public
- ▶ Examine the region's future
- ▶ Plan to reflect the region's vision
- ▶ Prioritize transportation needs
- ▶ Balance needs versus limited funding
- ▶ Invest funds appropriately
- ▶ Express the consensus of the community through member agencies and elected officials

Bus Rapid Transit & Light Rail Transit

Transit benefits

Enhances
Personal
Opportunities

Saves Fuel,
Reduces
Congestion

Provides
Economic
Opportunities

Saves Money

Reduces Carbon
Footprint

Drives
Community
Growth &
Revitalization

Reduces Gasoline
Consumption

Source: American Public Transportation Association

Transit priority treatments

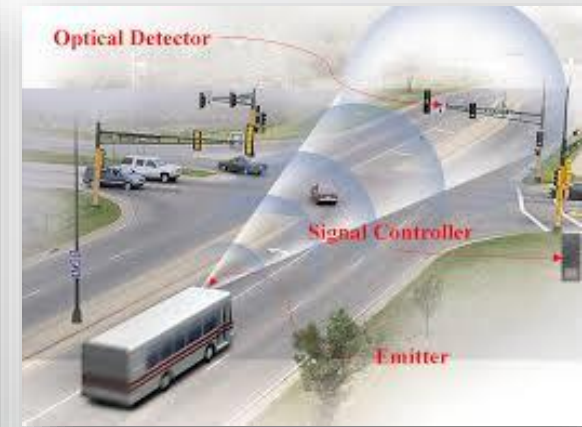
Bus-Only Lanes

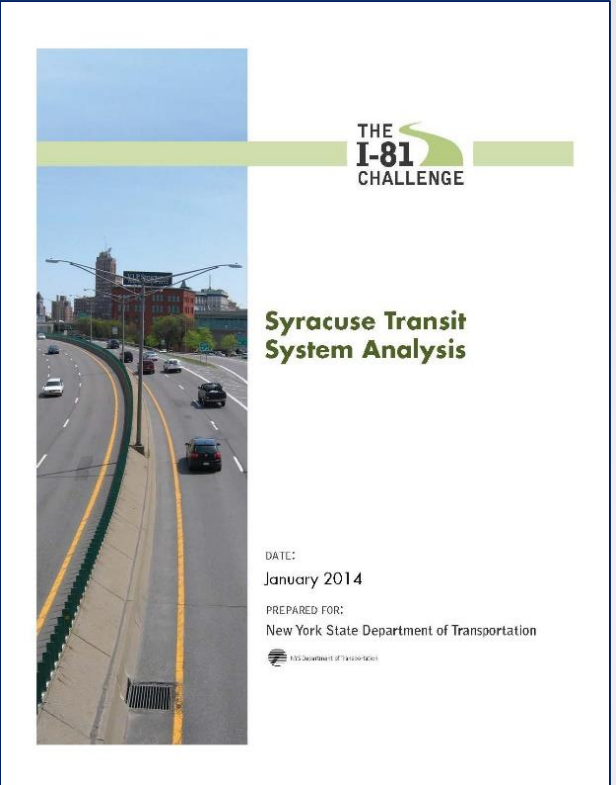


Bus Pull-Outs



Transit Signal Priority

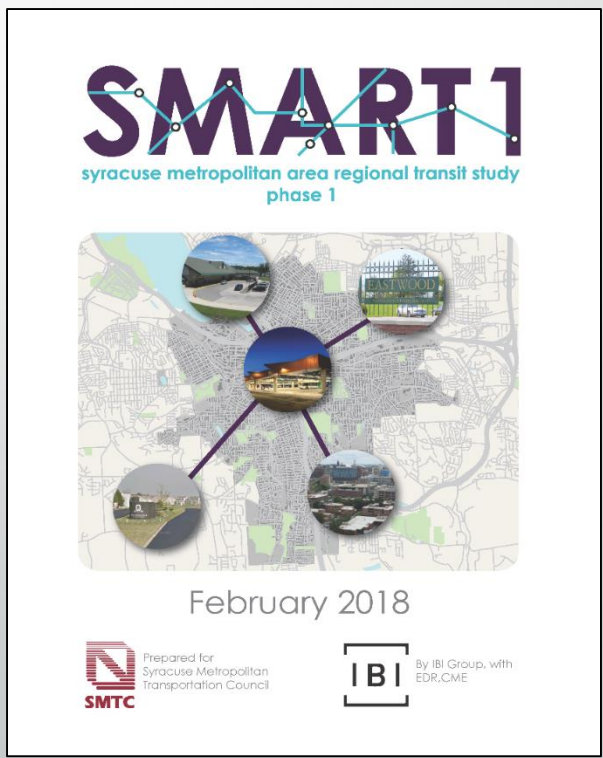




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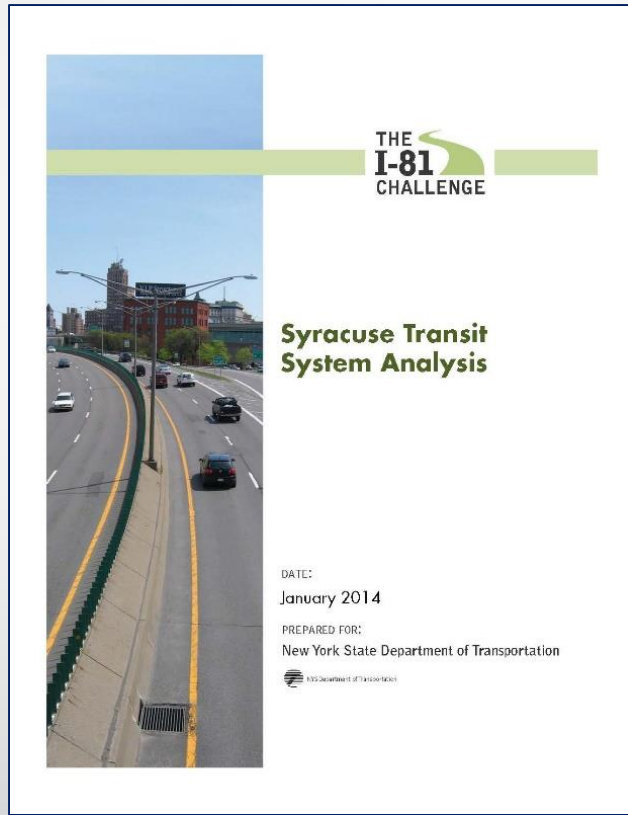


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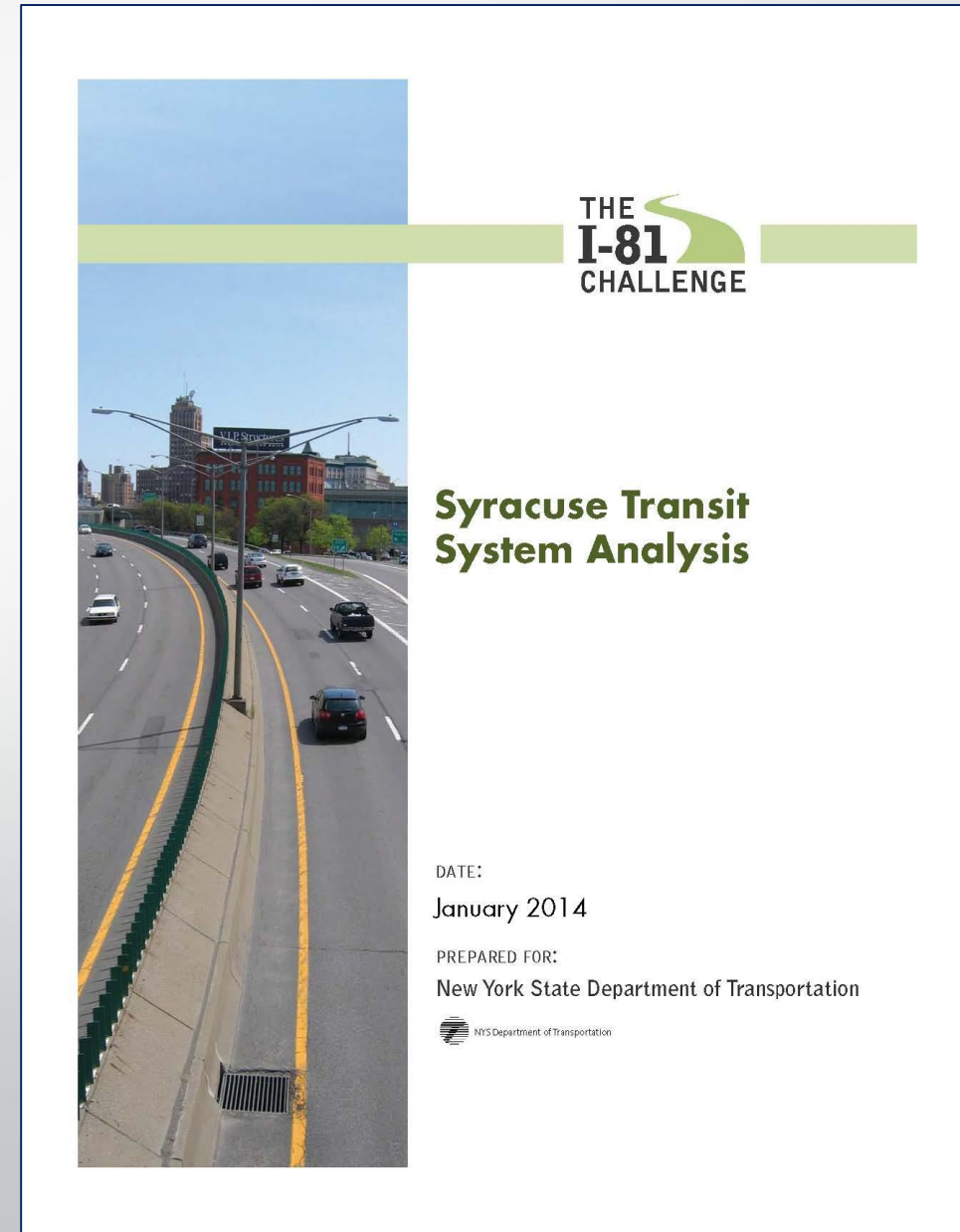
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Syracuse Transit System Analysis



Syracuse Transit System Analysis

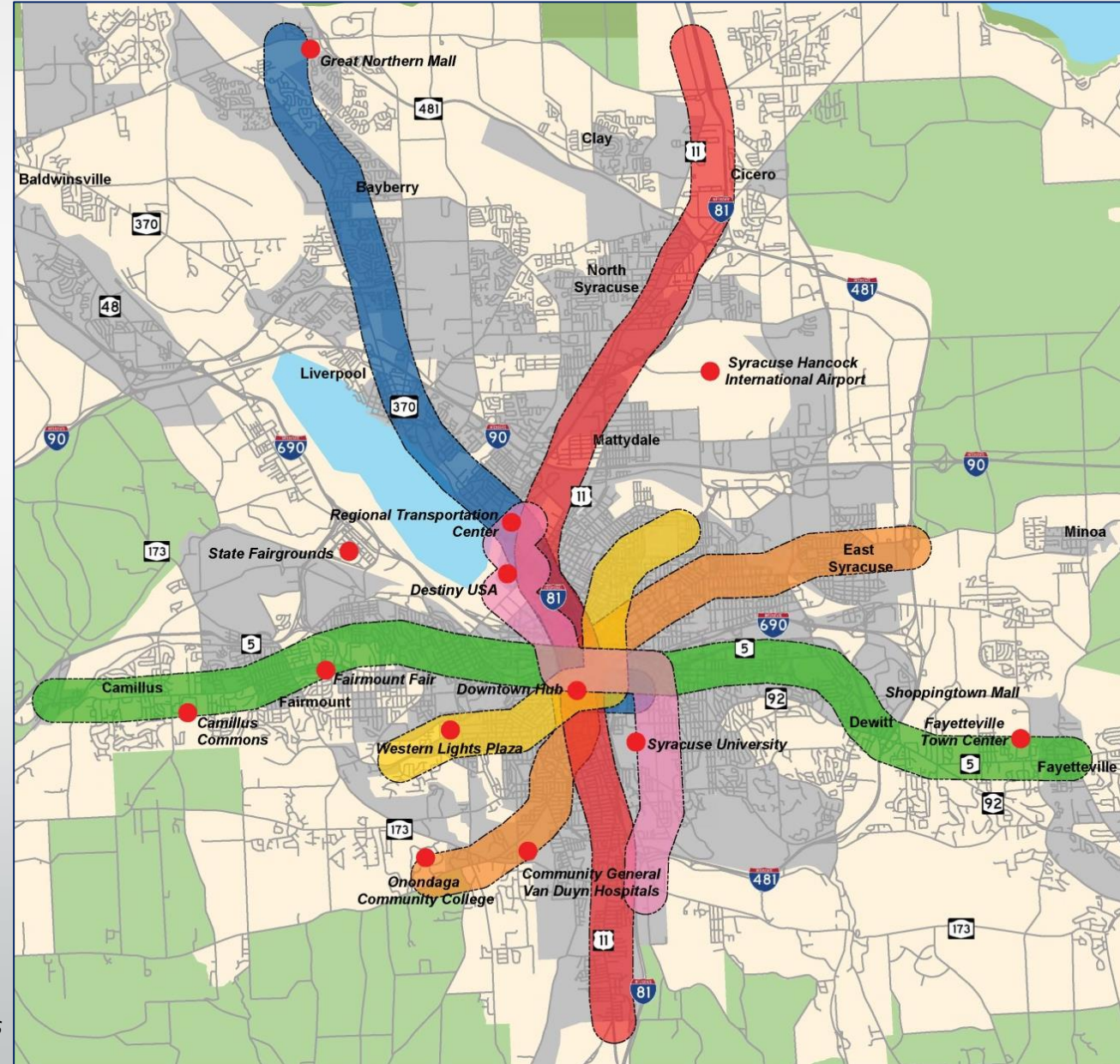
- ▶ Completed by New York State Department of Transportation as a component of *The I-81 Challenge*
- ▶ Serve as a potential long-range vision for transit in the area
- ▶ Identified transit enhancement corridors
- ▶ Three transit enhancement strategies (Base Build, BRT & LRT)



Transit enhancement corridors

Corridors

-  University Hill - RTC
-  Northside - Western Lights
-  Camillus - Fayetteville
-  North Syracuse - South Valley
-  East Syracuse - OCC
-  Great Northern Mall - Downtown



Source: Syracuse Transit System Analysis

Enhanced transit concepts

Bus Rapid Transit
(BRT)



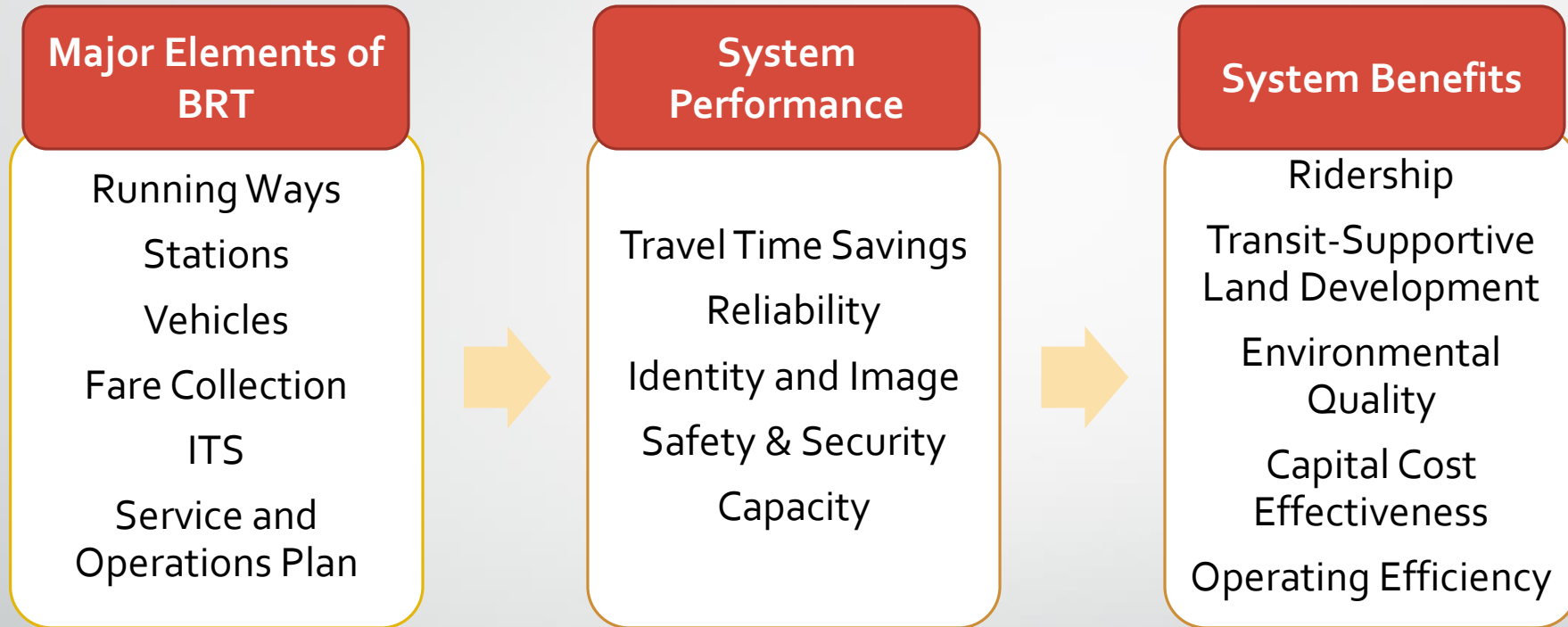
Hartford, CT

Light Rail Transit
(LRT)



Portland, OR

Characteristics of BRT



Source: Characteristics of Bus Rapid Transit for Decision-Making

BRT: Busway

MLK Jr East Busway, Pittsburgh, PA



Image Source:
usa.streetsblog.org

BRT: Bus-Only Lanes
HealthLine, Cleveland, OH



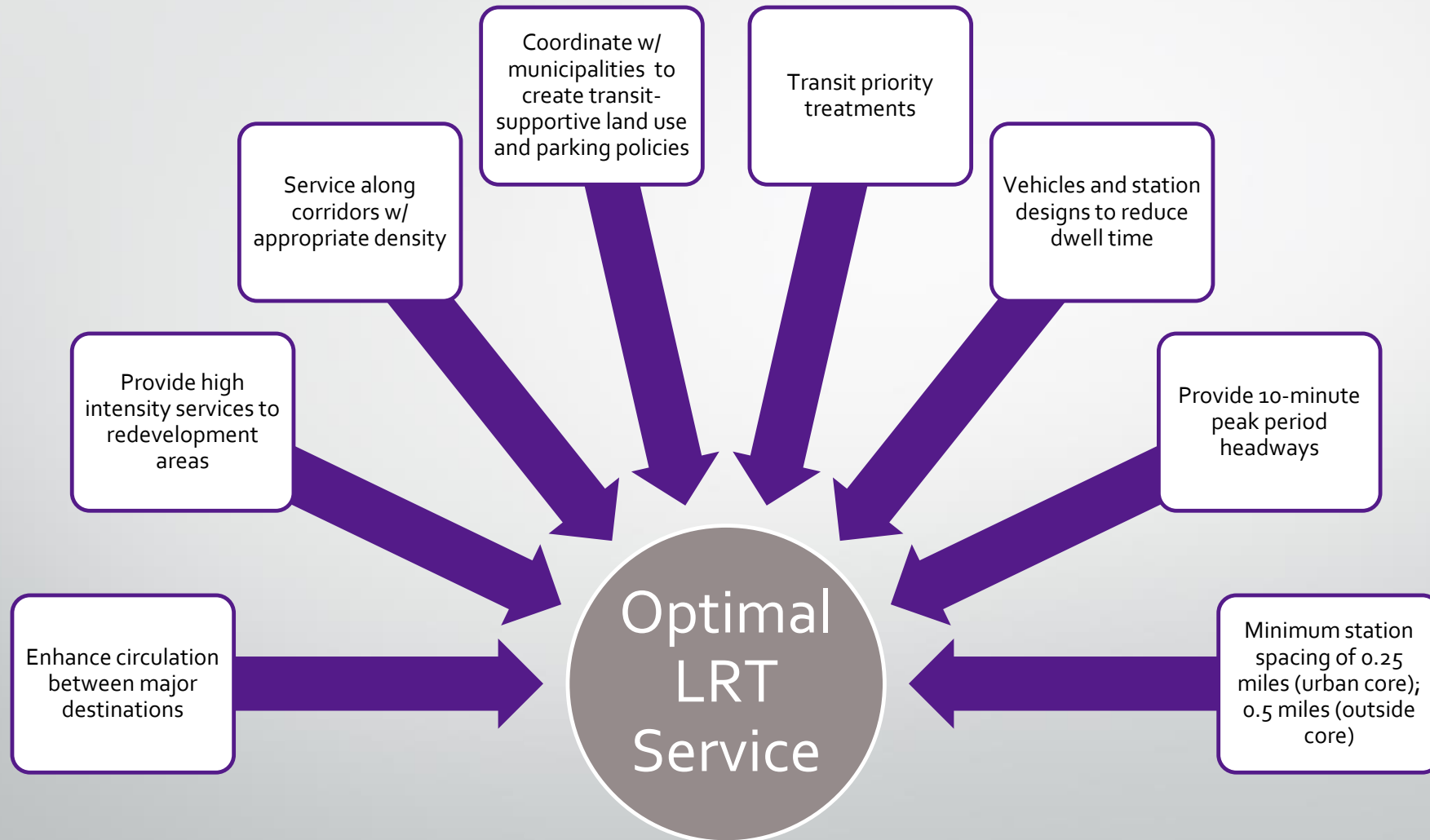
Image Source:
Sasaki.com

**BRT: Mixed Traffic
BusPlus, Albany, NY**



*Image Source:
timesunion.com*

LRT service objectives



Source: Syracuse Transit System Analysis

LRT
METRO Green Line, Minneapolis, MN



Image Source:
metrotransit.org

LRT: Modern Streetcar
Sun Link, Tucson, AZ



Image Source:
hdrinc.com

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2050 Long Range Transportation Plan

SYRACUSE METROPOLITAN TRANSPORTATION COUNCIL

2050

LONG RANGE TRANSPORTATION PLAN



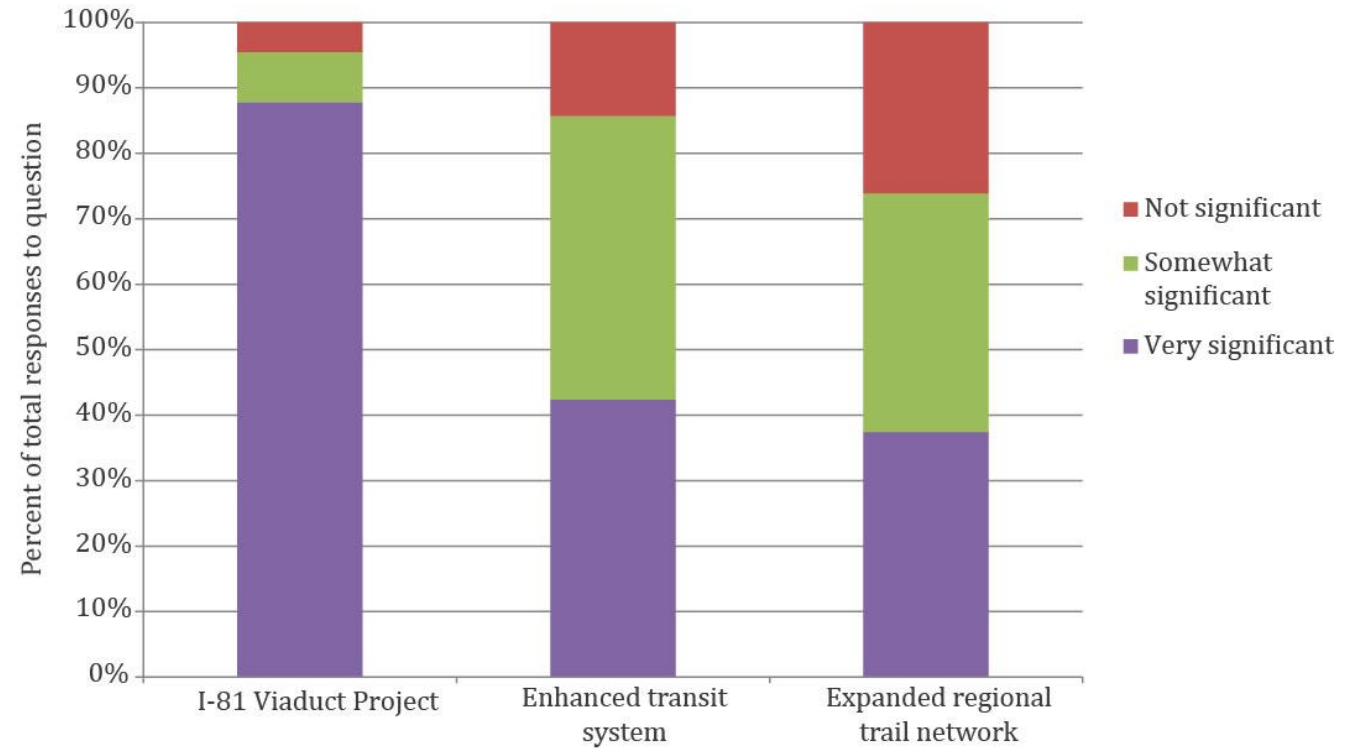
Moving Towards a
Greater Syracuse



2050 Long Range Transportation Plan

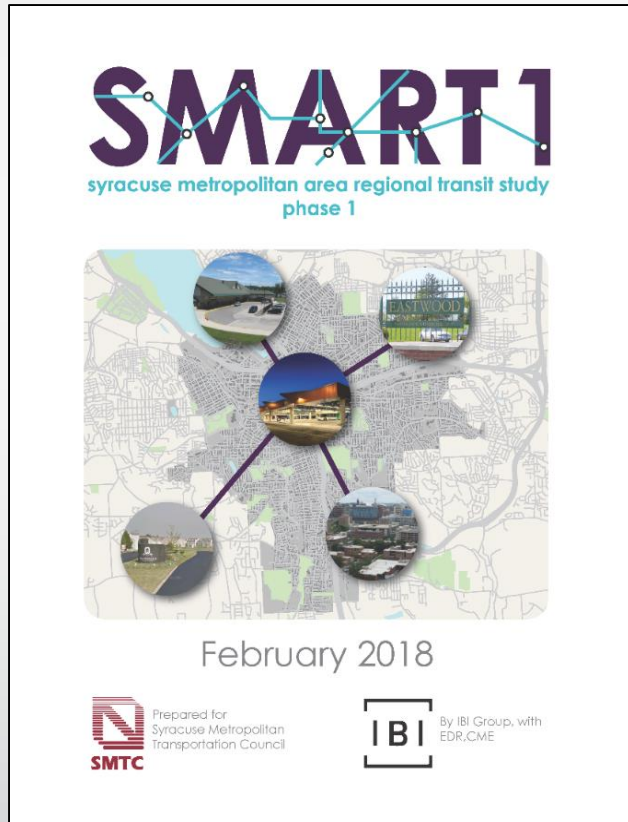
- ▶ Vision of transportation system in the SMTC's planning area
- ▶ SMTC's 2050 Long Range Transportation Plan includes an "enhanced transit system" as a regionally significant priority project.

Public feedback on significance of major projects



3

SMART 1 enhanced transit study



Overview

- ▶ On behalf of Centro
- ▶ Follow-on study from Syracuse Transit System Analysis
- ▶ Feasibility and competitiveness of BRT & LRT
- ▶ Develop a competitive project for funding



Consultant led study

Management &
oversight



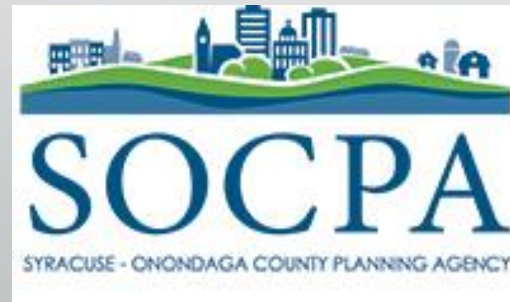
Lead consultant



with



Study Advisory Committee

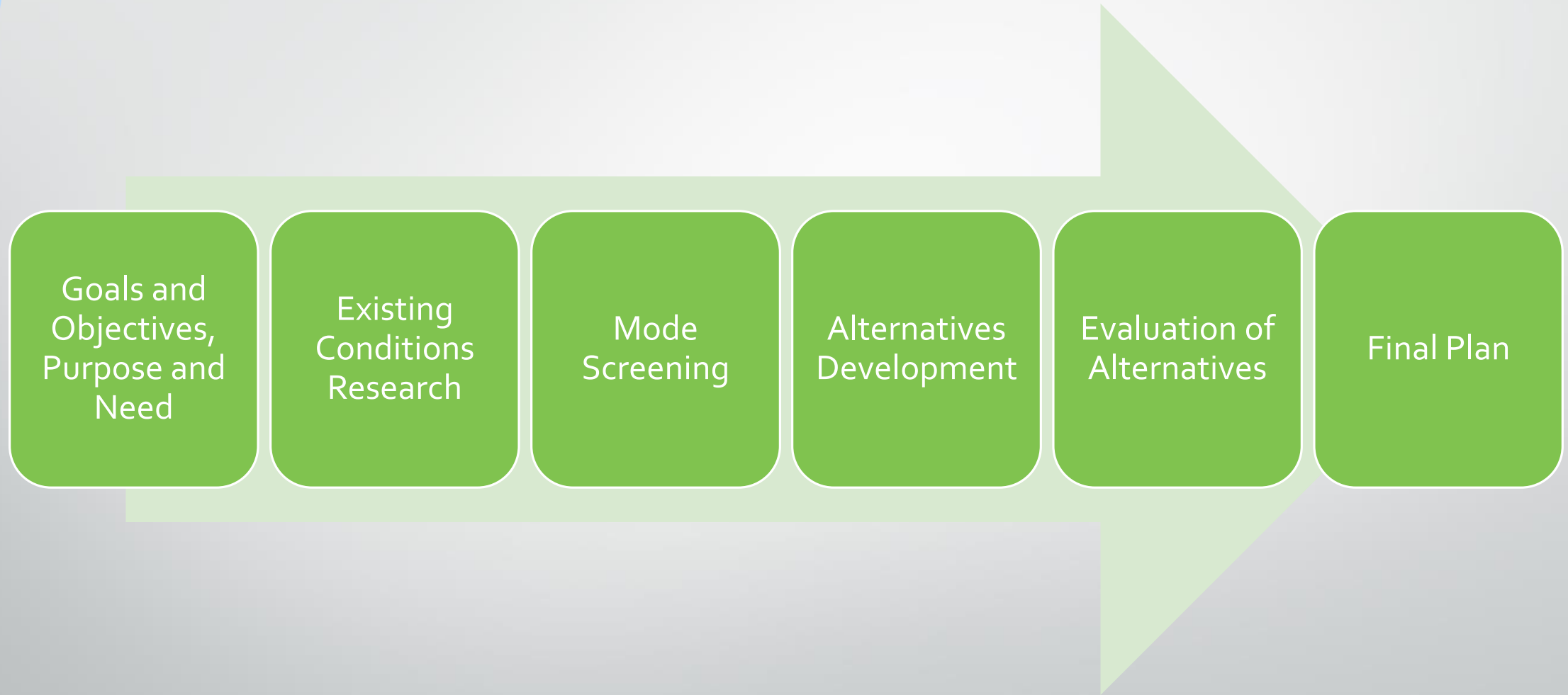


Community engagement

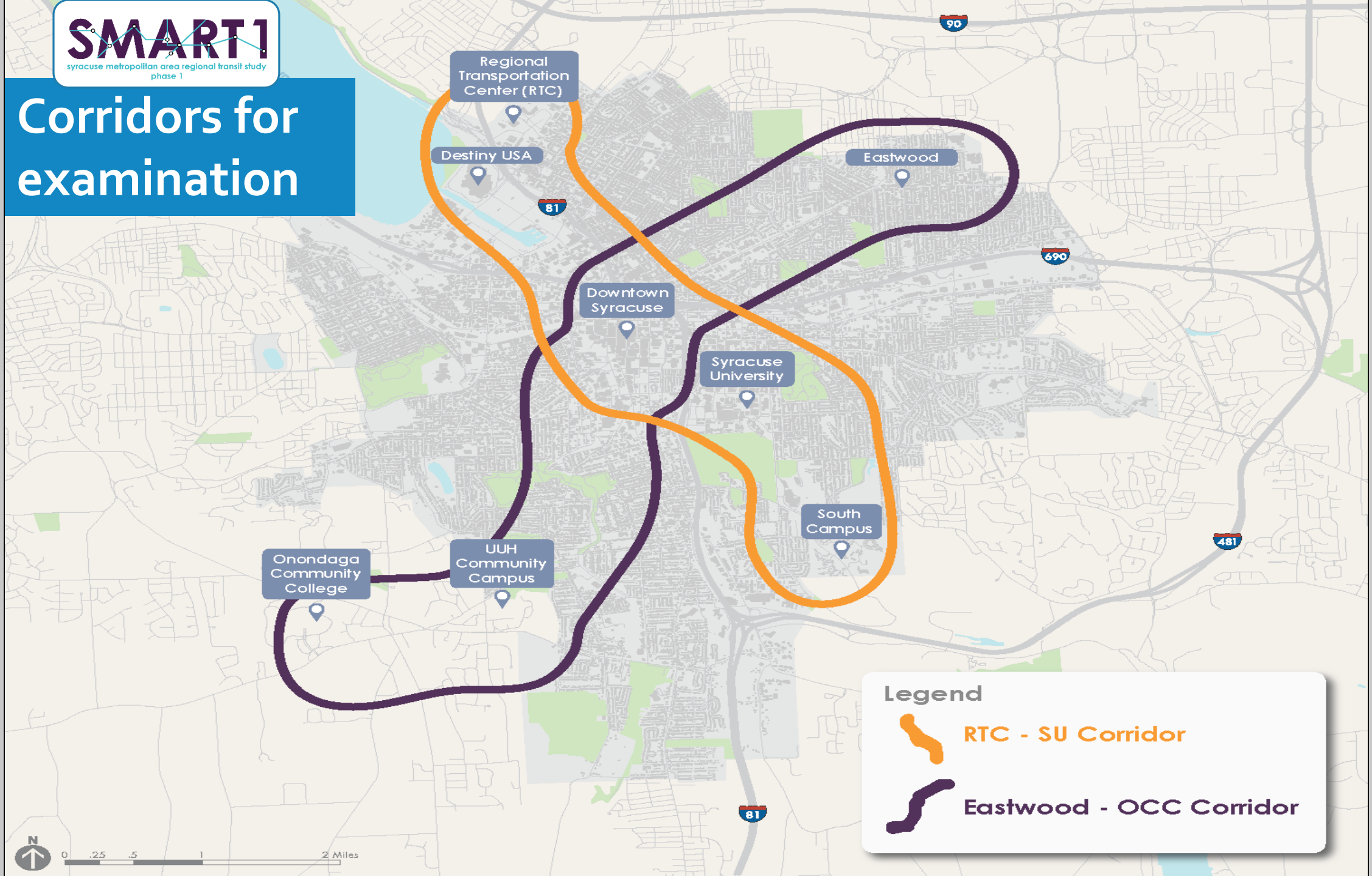
- ▶ 3 public meetings
- ▶ 3 focus group meetings on various topics
- ▶ 9 pop-up meetings at stops along corridors
- ▶ Project web site, mail & e-mail announcements
- ▶ 2 study brochures
- ▶ Frequently Asked Questions





Process



Corridors for examination



Legend

-  **RTC - SU Corridor**
-  **Eastwood - OCC Corridor**



Existing transit use

- ▶ Centro operates:
 - ▶ RTC – SU corridor
 - ▶ 42 lines
 - ▶ Eastwood – OCC corridor
 - ▶ 41 lines
- ▶ Top four lines in the system:
 - ▶ James Street = 1,772
 - ▶ South Salina/Nedrow = 1,288
 - ▶ Drumlins/Nob Hill = 1,185
 - ▶ South Ave/Valley Dr = 1,157



Local characteristics

- ▶ Characteristics that influence increase in ridership:
 - ▶ Existing transit usage
 - ▶ Population density
 - ▶ Land use
 - ▶ Households in poverty
 - ▶ Zero vehicle households
 - ▶ Population under 25 years old
 - ▶ Population over 65 years old



Enhancement strategies

- ▶ Three strategies were developed to evaluate transit in the two corridors:



Existing service improvements



BRT












































LRT










































Mode screening

- ▶ **Dedicated right-of-way:** Does adequate ROW exist to construct project?
- ▶ **Total project capital cost:** Less than \$300M
- ▶ **Maximum practical local funding:** Feasibility of providing required local cost share.
- ▶ **Existing riders on corridor:** At least 3,000
- ▶ **Limited operating cost increases:** Less than 5% of current operating costs

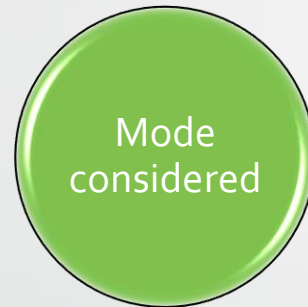
Mode screening (RTC – SU corridor)

		LRT 	Modern Streetcar 	BRT-Busway 	BRT-Bus Lane 	BRT-Mixed Traffic 
Dedicated ROW North Segment 	 Available	 N/R	 Available	 N/R	 N/R	
Dedicated ROW South Segment 	 Not Available	 N/R	 Not Available	 N/R	 N/R	
Total Cost (in millions) 	 \$457	 \$426	 \$190	 \$25	 \$10	
Local funding (in millions) 	 \$357	 \$326	 \$90	 \$5	 \$2	
Existing Ridership 	 3,726	 3,726	 3,726	 3,726	 3,726	
Operating Cost Increase 	 26%	 22%	 18%	 6%	 5%	

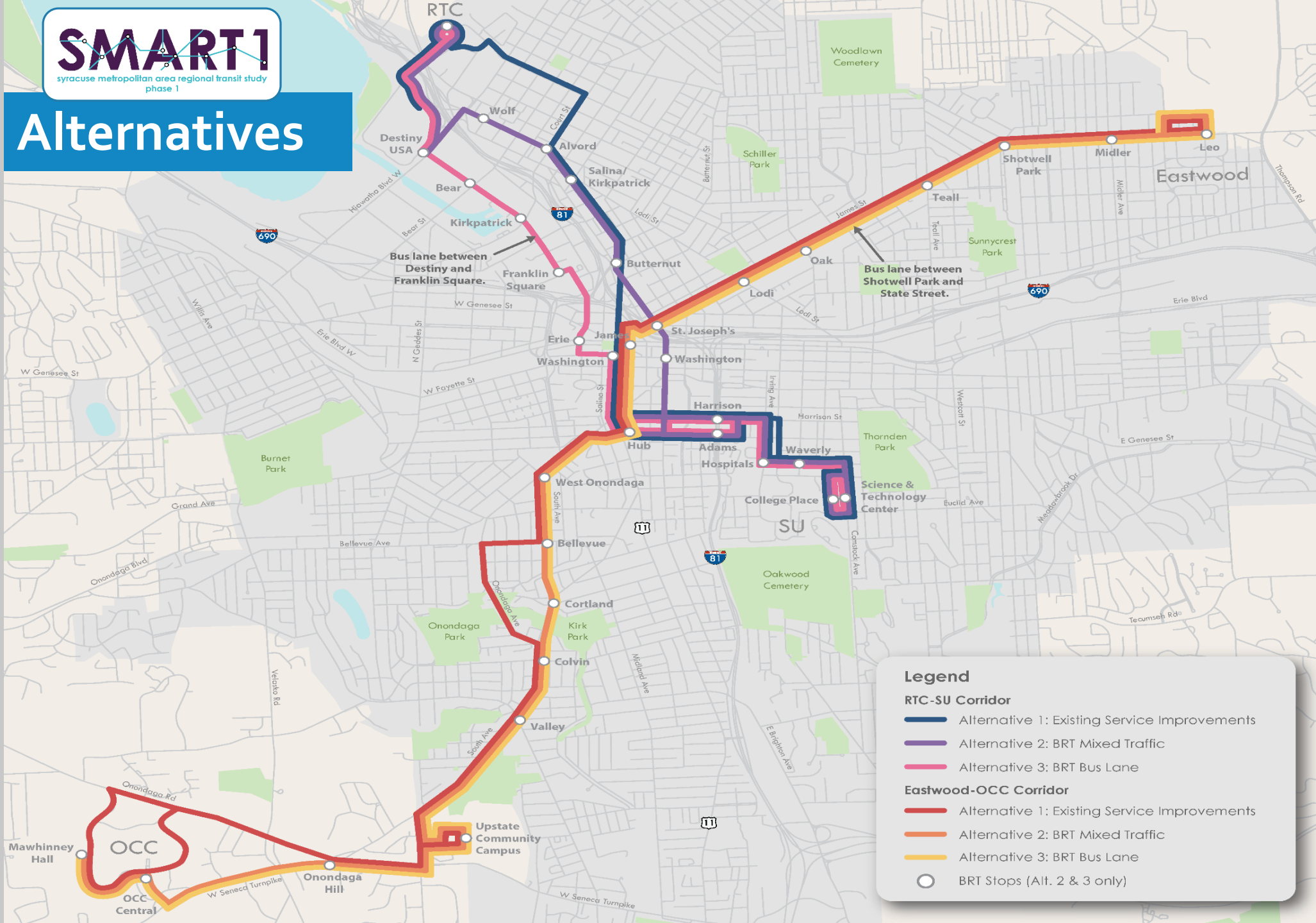
Mode screening (Eastwood – OCC corridor)

		LRT 	Modern Streetcar 	BRT-Busway 	BRT-Bus Lane 	BRT-Mixed Traffic 				
Dedicated ROW North Segment 		Available		N/R		Available		N/R		N/R
Dedicated ROW South Segment 		Not Available		N/R		Not Available		N/R		N/R
Total Cost (in millions) 		\$526		\$491		\$219		\$27		\$11
Local funding (in millions) 		\$426		\$391		\$119		\$5		\$2
Existing Ridership 		3,456		3,456		3,456		3,456		3,456
Operating Cost Increase 		30%		25%		20%		7%		6%

	LRT 	Modern Streetcar 	BRT-Busway 	BRT-Bus Lane 	BRT-Mixed Traffic 
Further Study? ?	✗ No	✗ No	✗ No	✓ Yes	✓ Yes



Alternatives



Bus lane between
Destiny and
Franklin Square.

Bus lane between
Shotwell Park and
State Street.

Legend

RTC-SU Corridor

- Alternative 1: Existing Service Improvements
- Alternative 2: BRT Mixed Traffic
- Alternative 3: BRT Bus Lane

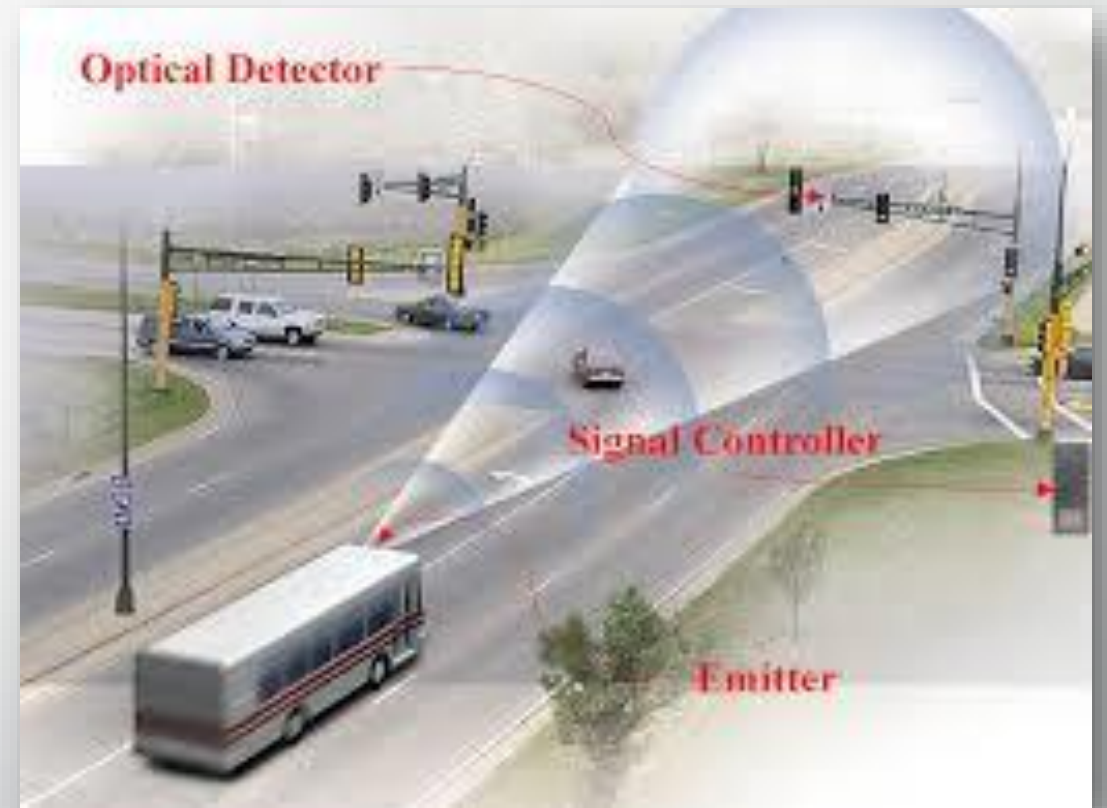
Eastwood-OCC Corridor

- Alternative 1: Existing Service Improvements
- Alternative 2: BRT Mixed Traffic
- Alternative 3: BRT Bus Lane

○ BRT Stops (Alt. 2 & 3 only)

Alternative: Existing Service Improvements

- ▶ Lower cost option
- ▶ New shelters
- ▶ Transit priority at key locations
- ▶ Service every 20 minutes
- ▶ Some improvements in travel time



Alternative: BRT – Mixed Traffic

- ▶ Medium cost option
- ▶ New shelters at all BRT stations
- ▶ Transit priority at key locations
- ▶ New branded buses
- ▶ More frequent service, every 10-15 minutes
- ▶ Cost effective improvements in travel time



Alternative: BRT – Bus Lane

- ▶ High cost option
- ▶ Bus only lane on James St (Grant St to State St) and Solar St (Destiny to Franklin Square)
- ▶ New shelters at all BRT stations
- ▶ Transit priority at key locations
- ▶ New branded buses
- ▶ More frequent service, every 10-15 minutes
- ▶ Highest improvements in travel time



Evaluation results: RTC - SU

Existing Service
Improvements



BRT-
Mixed Traffic



BRT-
Bus Lane



Key:

- Less positive (1 pt.)
- Positive (2 pts.)
- More positive (3 pts.)

Existing
Ridership
(daily)



Estimated Future
Total Ridership
(daily)



Travel Time
Improvement
(minutes)



Change in
VMT



Riders New
to Transit
(annual)



Capital
Cost



Operating
Cost Increase


































Sub total score:

15
































15

13
































Evaluation results: RTC - SU

		Existing Service Improvements	BRT- Mixed Traffic	BRT- Bus Lane
				
Transit Supportive Plans & Policies				
Serves Existing Activity Centers				
Population & Employment Density		 23,814	 24,084	 23,105
Affordable Housing		 32%	 30%	 21%
Ability of Region to Fund Capital & Operating				
Roadway Suitability & Pedestrian Environment				
Stakeholder Comments				
Sub total score:		15	19	14
Total score:		30	34	27

Evaluation results: Eastwood - OCC

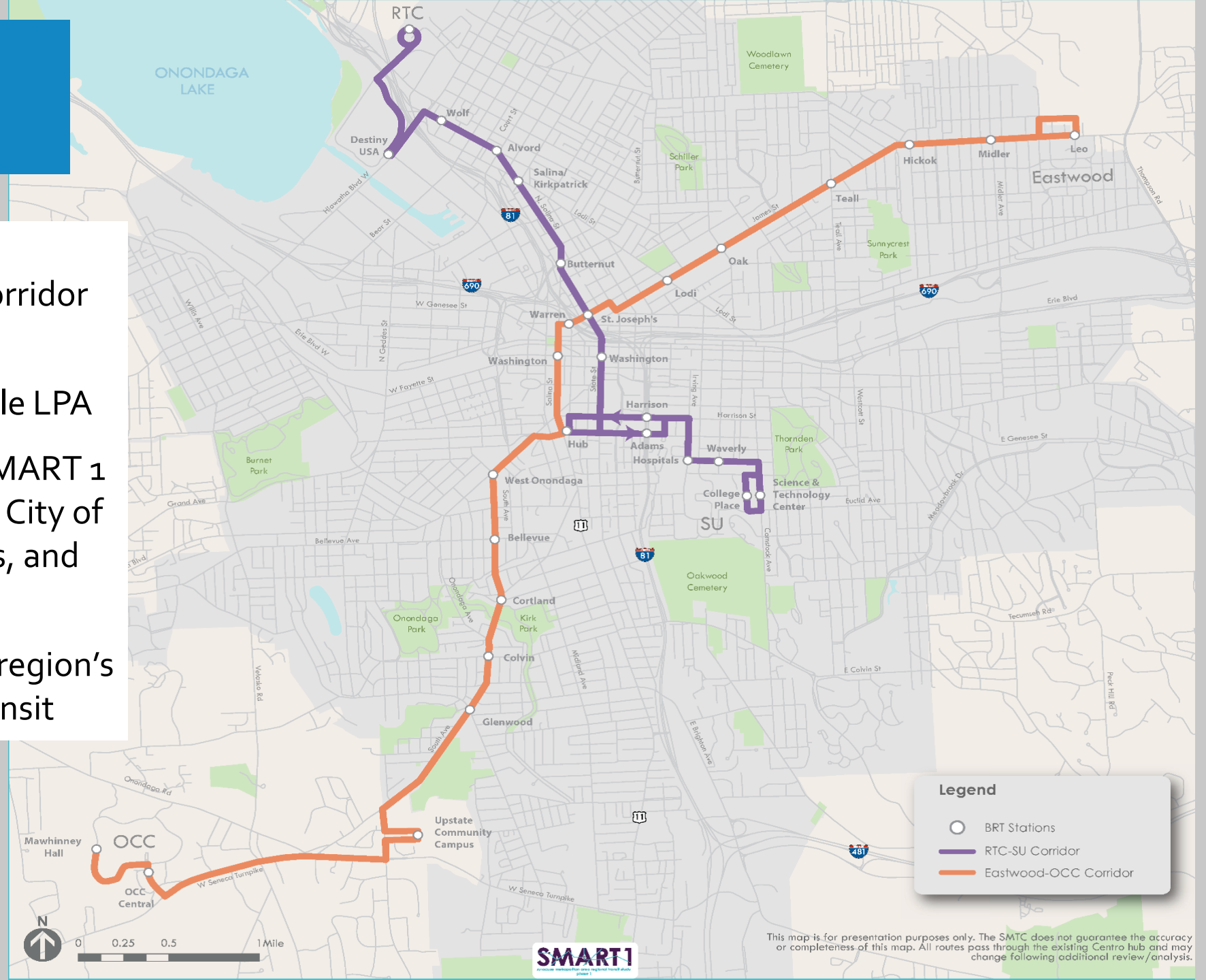
		Existing Service Improvements	BRT- Mixed Traffic	BRT- Bus Lane
				
Existing Ridership (daily)		 3,636	 3,636	 3,636
Estimated Future Total Ridership (daily)		 4,710	 4,643	 4,740
Travel Time Improvement (minutes)		 no change	 17 to 19 mins.	 19 to 21 mins.
Change in VMT		 -294,183	 -257,442	 -282,240
Riders New to Transit (annual)		 64,440	 60,420	 66,240
Capital Cost		 \$4.7m	 \$19.5m	 \$21.7m
Operating Cost Increase		 \$1.5m	 \$4.7m	 \$4.6m
Sub total score:		17	16	16

Evaluation results: Eastwood - OCC

		Existing Service Improvements 	BRT- Mixed Traffic 	BRT- Bus Lane 
Transit Supportive Plans & Policies 				
Serves Existing Activity Centers 				
Population & Employment Density 		 14,652	 15,257	 15,257
Affordable Housing 		 28%	 28%	 28%
Ability of Region to Fund Capital & Operating 				
Roadway Suitability & Pedestrian Environment 				
Stakeholder Comments 				
Sub total score:		14	18	18
Total score:		31	34	34

Locally Preferred Alternative

- ▶ BRT – Mixed Traffic recommended for each corridor
- ▶ Both corridors, combined, recommended as the single LPA
- ▶ Supports SMTC's LRTP, SMART 1 evaluation criteria results, City of Syracuse re-zoning efforts, and community input
- ▶ BRT – Mixed Traffic is the region's definition of enhanced transit



This map is for presentation purposes only. The SMTC does not guarantee the accuracy or completeness of this map. All routes pass through the existing Centro Hub and may change following additional review/analysis.



BRT – Mixed Traffic costs*

	Capital \$s	Operating \$s (annual)
RTC - SU	\$14M	\$3.5M
Eastwood - OCC	\$19.5M	\$4.8M

\$33.5M

\$8.3M

*planning level estimate

Implementation & Financial Plan

- ▶ 2 funding “tracks” identified (Small Starts, Non-Small Starts)
- ▶ FTA Small Starts program is a multi-step, multi-year process done in close coordination with FTA
- ▶ Non-Small Starts approach could rely on a number of other existing funding programs
- ▶ Funding for annual, on-going operations is essential

Next steps

- ▶ Discussions with community leaders, businesses, educational institutions
- ▶ Identify a “champion” to advance LPA



Other transit items

- ▶ Park-n-Ride system
- ▶ Centro surveys
 - ▶ Rider
 - ▶ Non-rider
 - ▶ Employer



Get involved, stay informed!

Syracuse Metropolitan Transportation Council

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