Transit Assets and Opportunities Study

Stakeholders Meeting # 3

County Center

Thursday, March 27, 2014

URS

Metropolitan Planning Organization for Transportation

Welcome

Study Sponsors

- Hillsborough County MPO

- The Tampa Downtown Partnership

Welcome

Project Management Team

URS

URS

Agenda

- Evaluation Methodology
- Alternatives Considered
- Evaluation Results
- Break Out Session
- Next Steps

URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

1. Visions/Ideas, Goals & Objectives

2. Review of Possible Alignments

3. Evaluation of Alternatives

We Are Here

4. Select Preferred Alternative

Stakeholders Meeting #1

Stakeholders Meeting #2

Stakeholders Meeting #3

Public Meeting

Final Report

Building on Previous Efforts

- ***HART Alternatives Analysis***
- ***Tampa Center City Plan (InVision)***
- ***TBARTA Master Plan***
- ***HART Tampa Rail Project – FEIS/ROD***
- ***Various Streetcar Studies***
- ***Various MPO Studies***
- ***Various City of Tampa Studies***

URS

mpo METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Modes Considered

Commuter Rail:

Diesel Multiple Unit (DMU)

Light Rail Transit

URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Modes Considered

Streetcar:

Modern

Streetcar:

Heritage

URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Modes Considered

Rubber Wheeled:

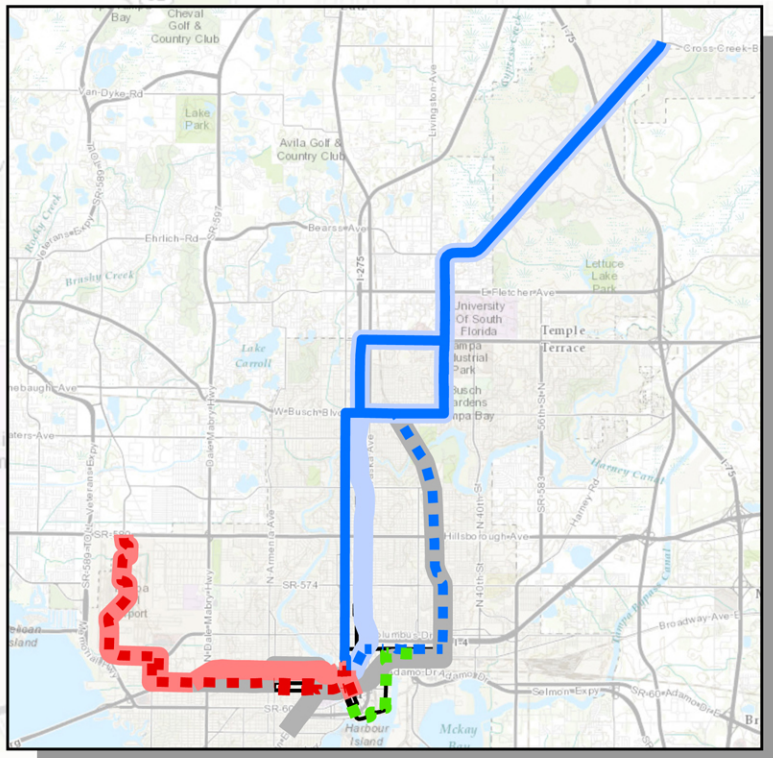
City Bus

Rubber Wheeled:

Trolley

URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION



Legend

Streetcar
- Existing Streetcar

HART AA Alternatives
- West Corridor - Cypress Street
- West Corridor - I-275
- North Corridor - Florida Ave
- North Corridor - 30th and CSX Via Palm
- North Corridor - I-275

2003 FEIS/ROD
- 2003 FEIS/ROD

Other Routes
- Combined Corridors

Stations
- Union Station
- Westshore Intermodal Center
- Marion Transit Center

North Route Utilizes Central Ave In Place of Florida

West Route Utilizes Main Street

CSX North Route Utilizes Existing Streetcar Line and 8th Ave

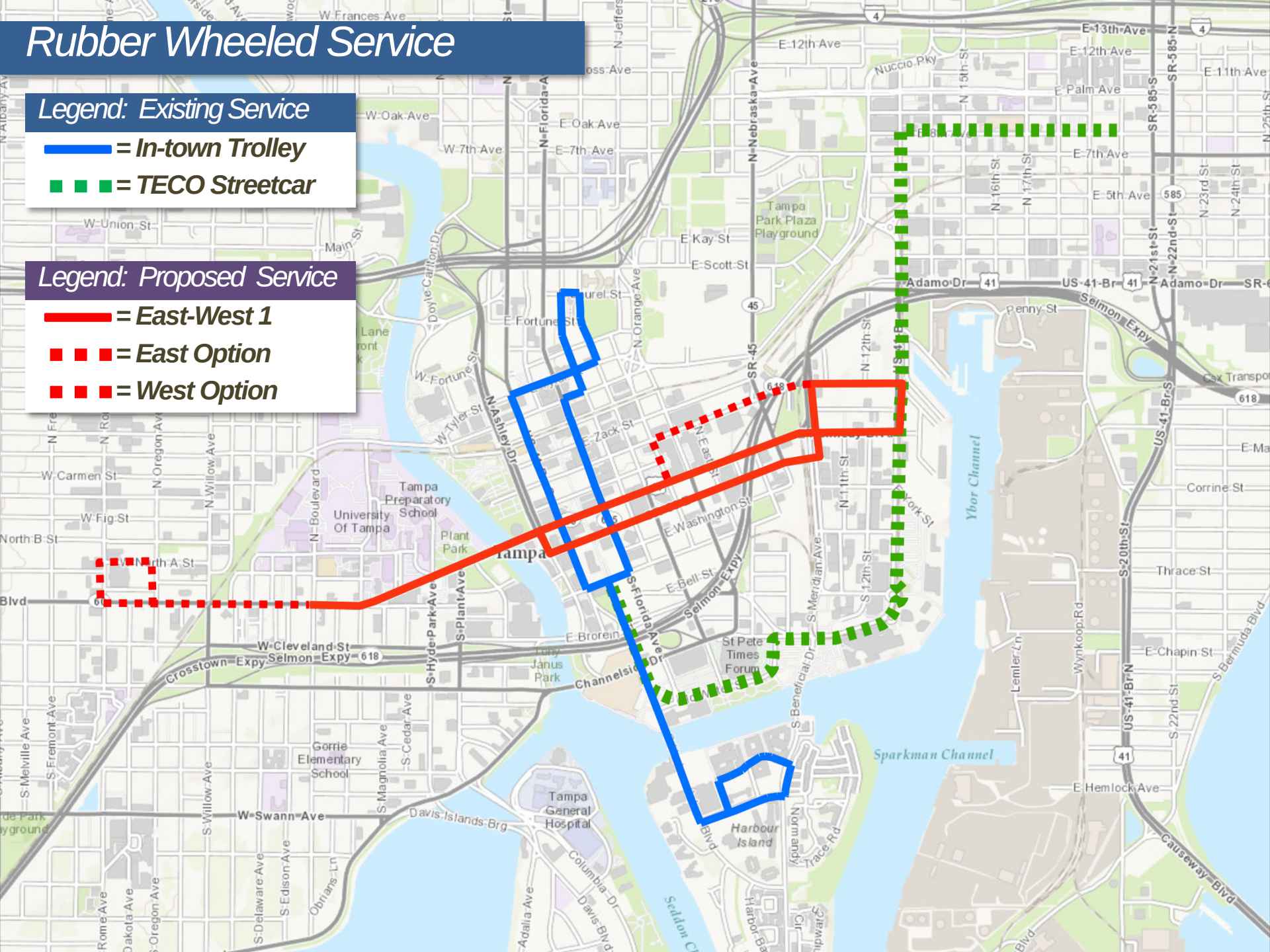
CSX North Route Utilizes Nuccio Pkwy

Cypress or Main Enter I-275 Median @ Howard Ave

Cypress Route Utilizes Laurel Street Bridge

Streetcar Extension to MTC Utilizes Franklin, Marion or Tampa

Rubber Wheeled Service

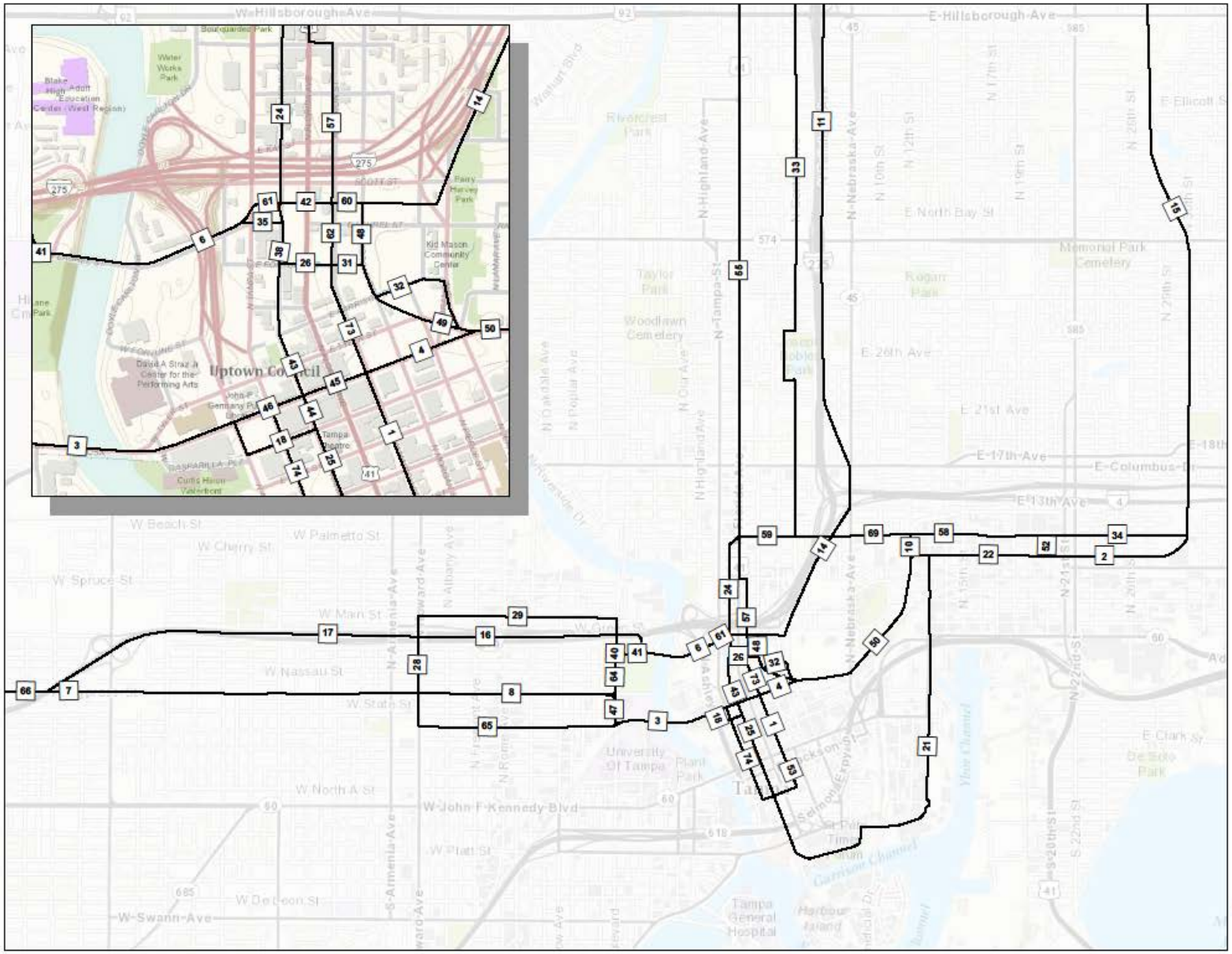


Evaluation Matrix

- Developed Criteria based on
  - Study Goals and Objectives
  - Stakeholder input
  - Standard transit indicators
- Phased approach
  - Phase 1 – technical feasibility (quantitative)
  - Phase 2 – transit success indicators (qualitiative)

URS

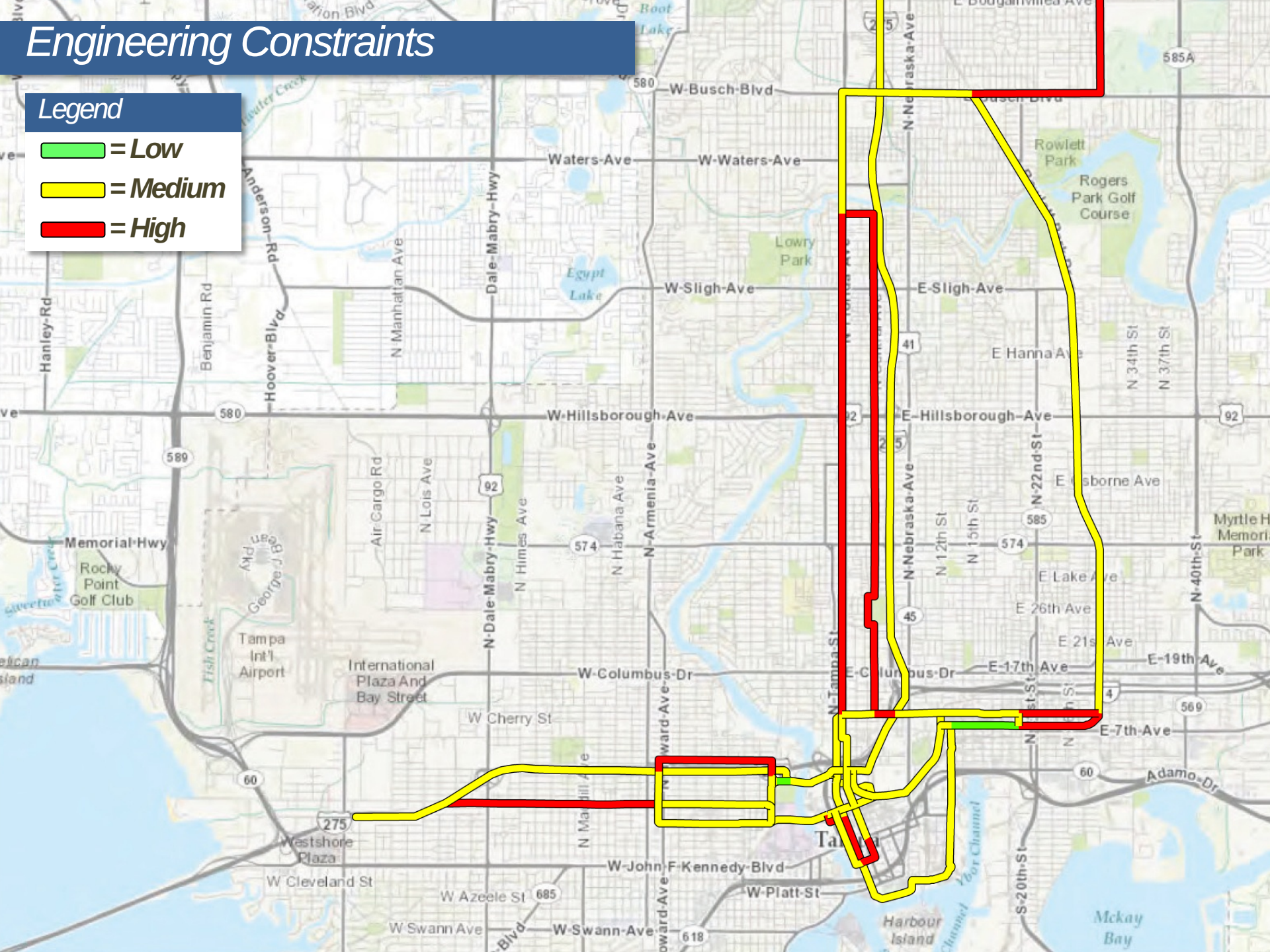
MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION



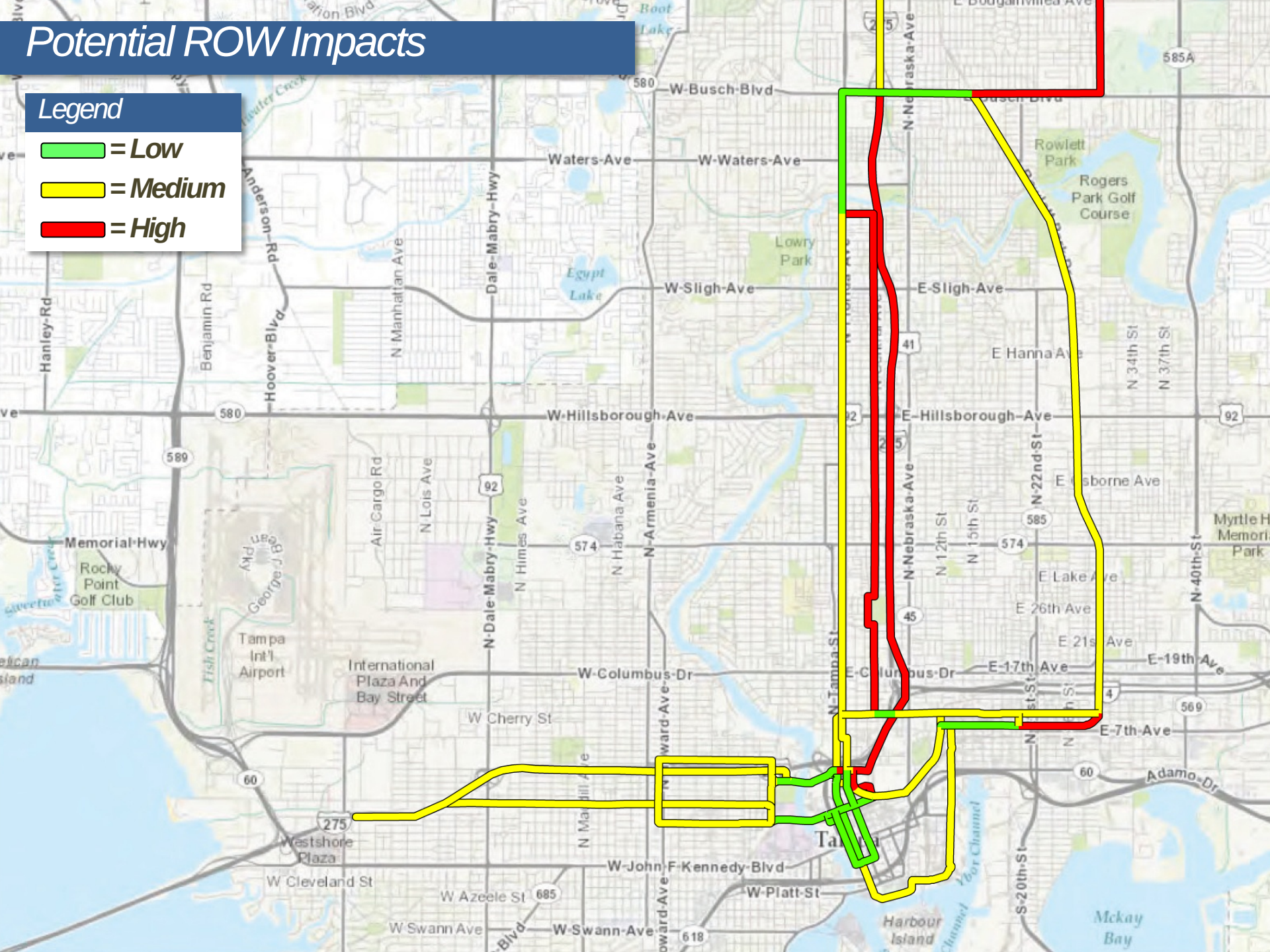
URS

MPO Metropolitan Planning Organization for Transportation

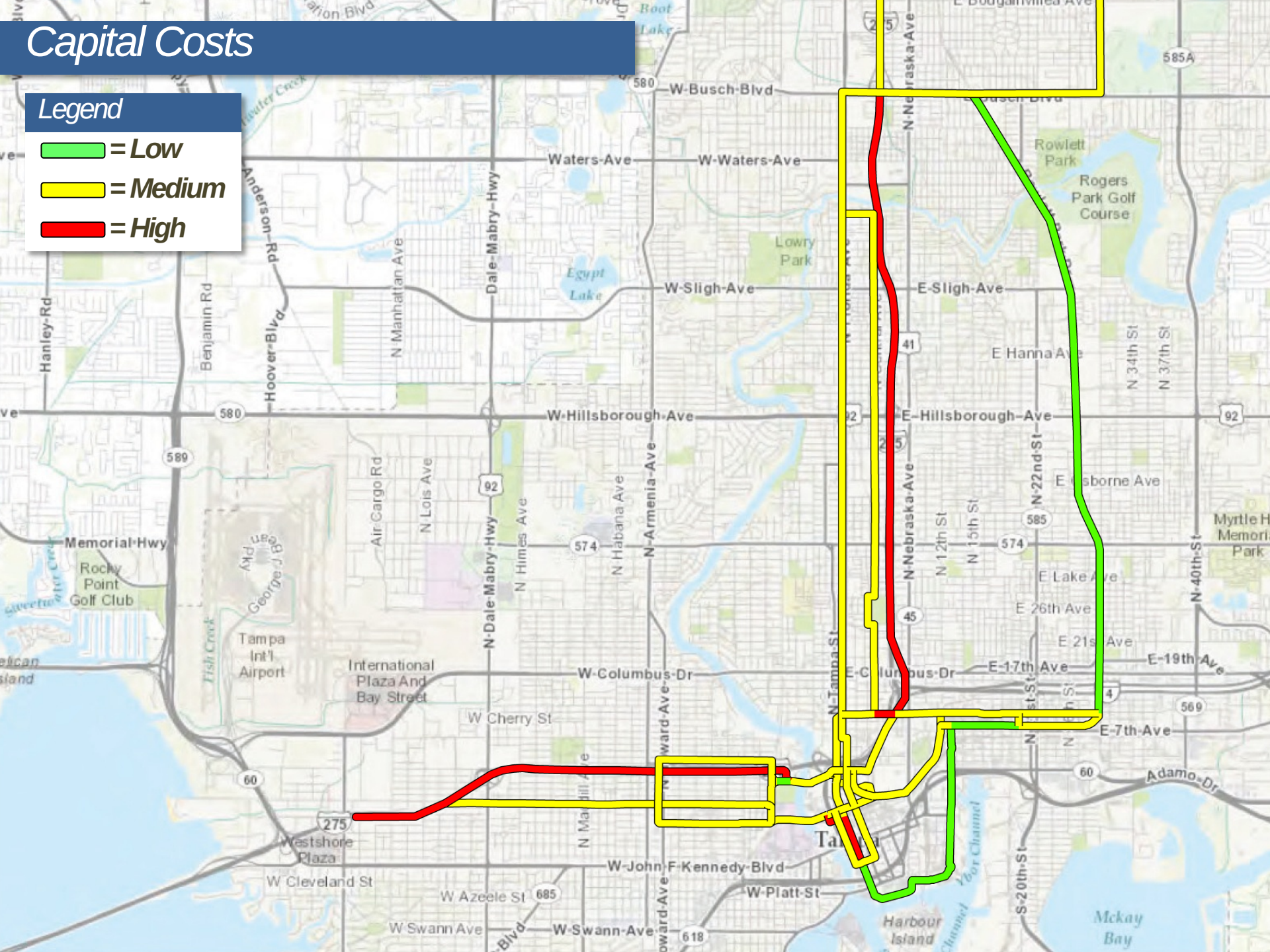
Engineering Constraints



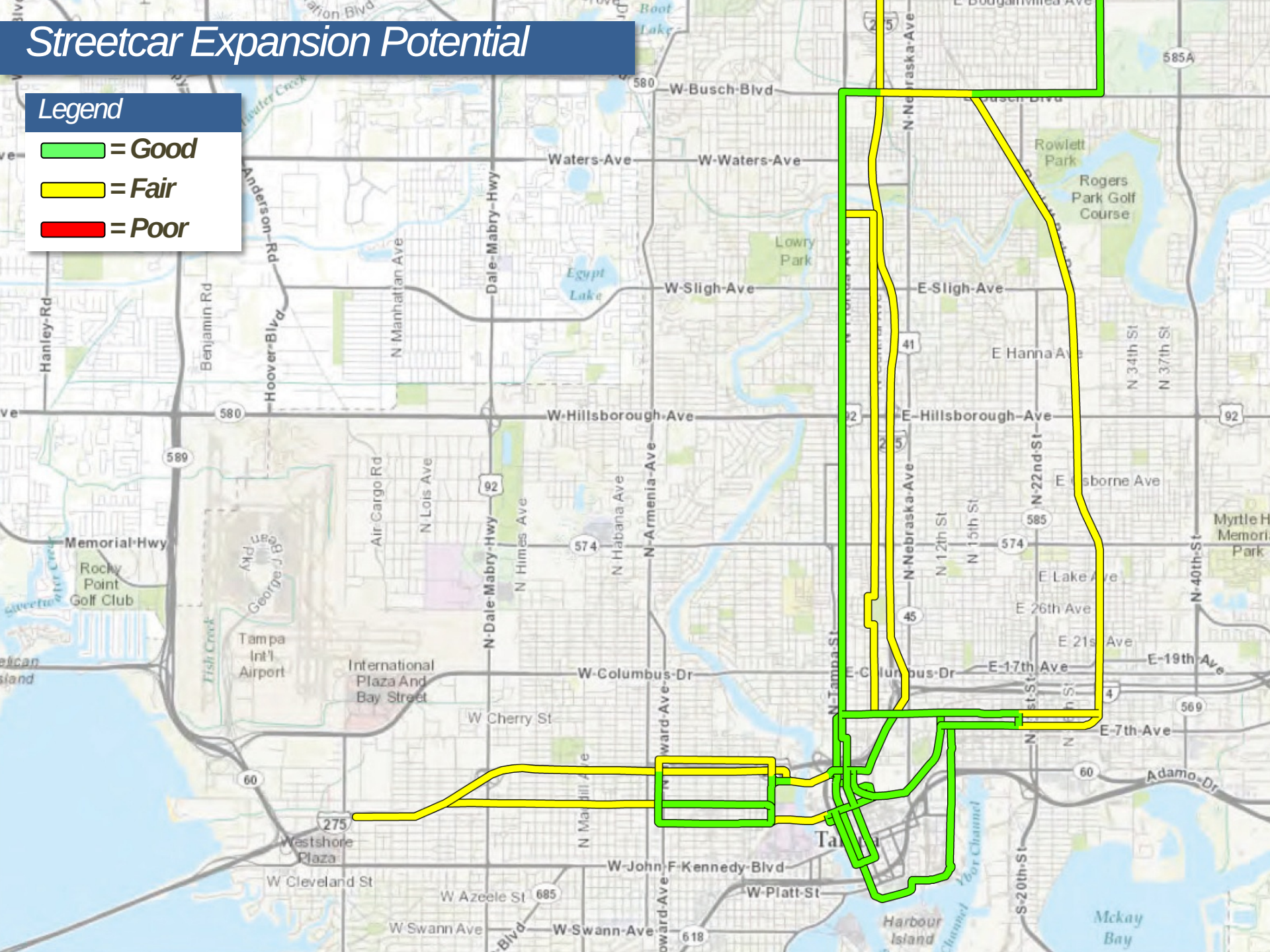
Potential ROW Impacts



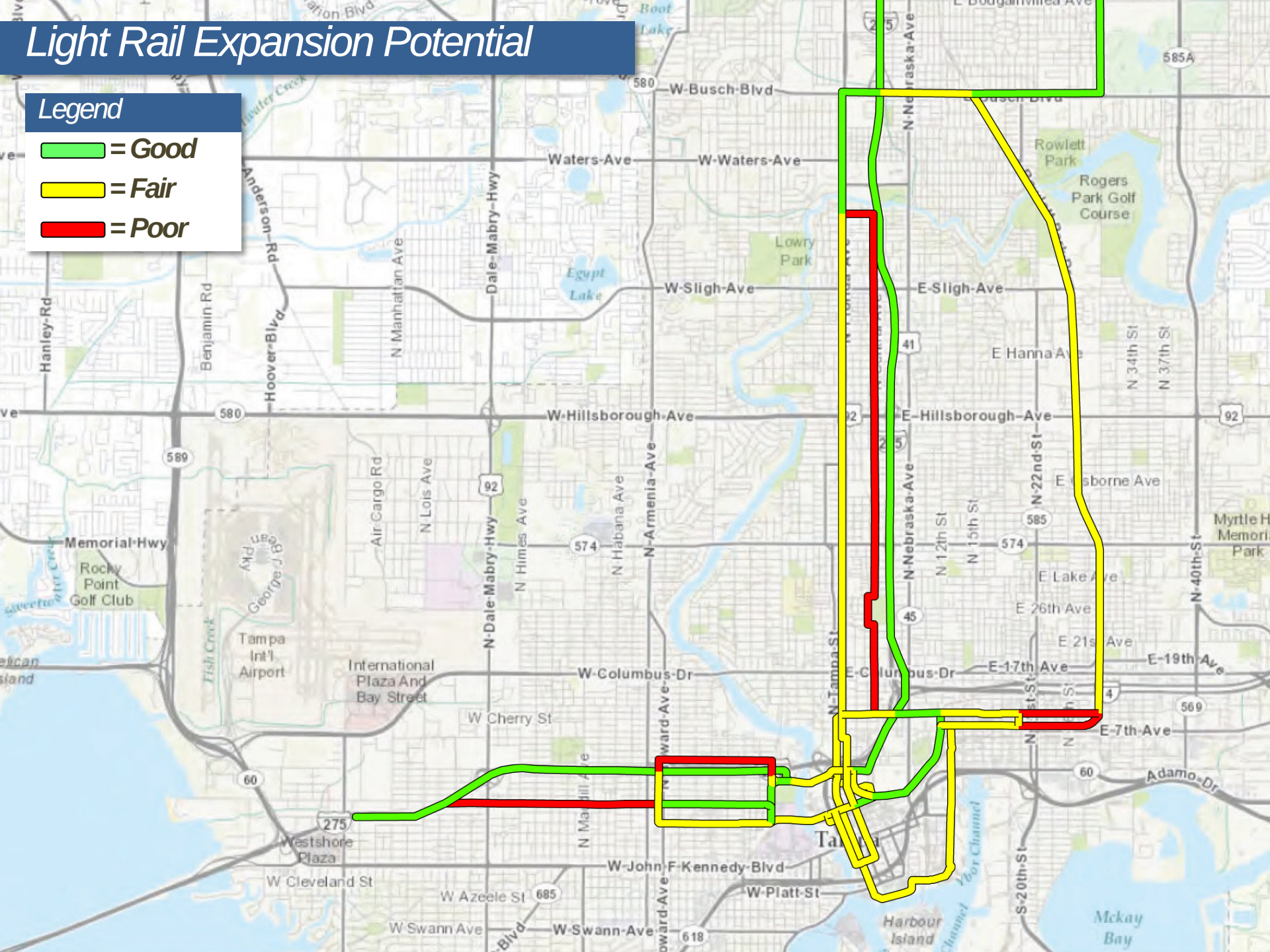
Capital Costs



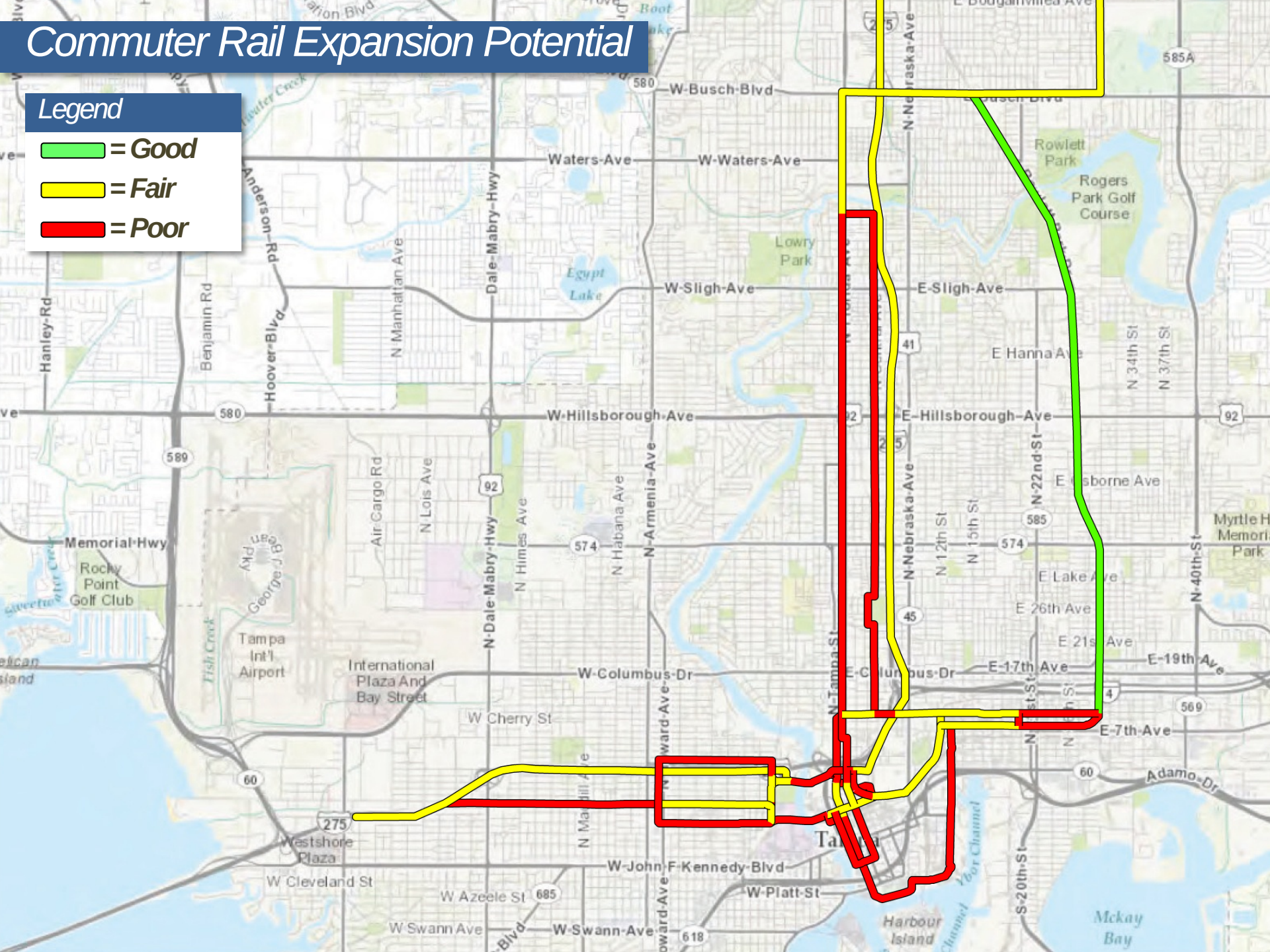
Streetcar Expansion Potential

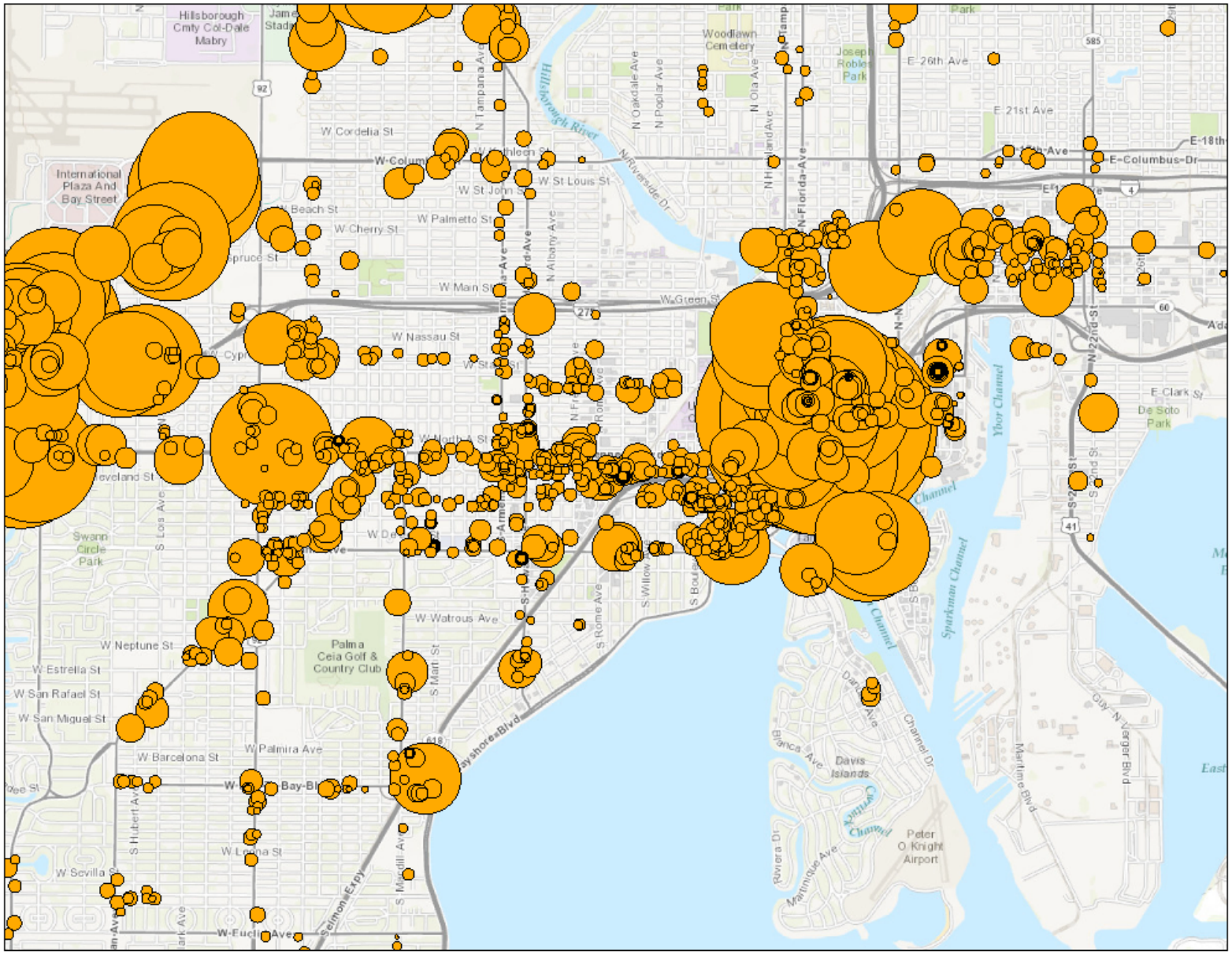


Light Rail Expansion Potential



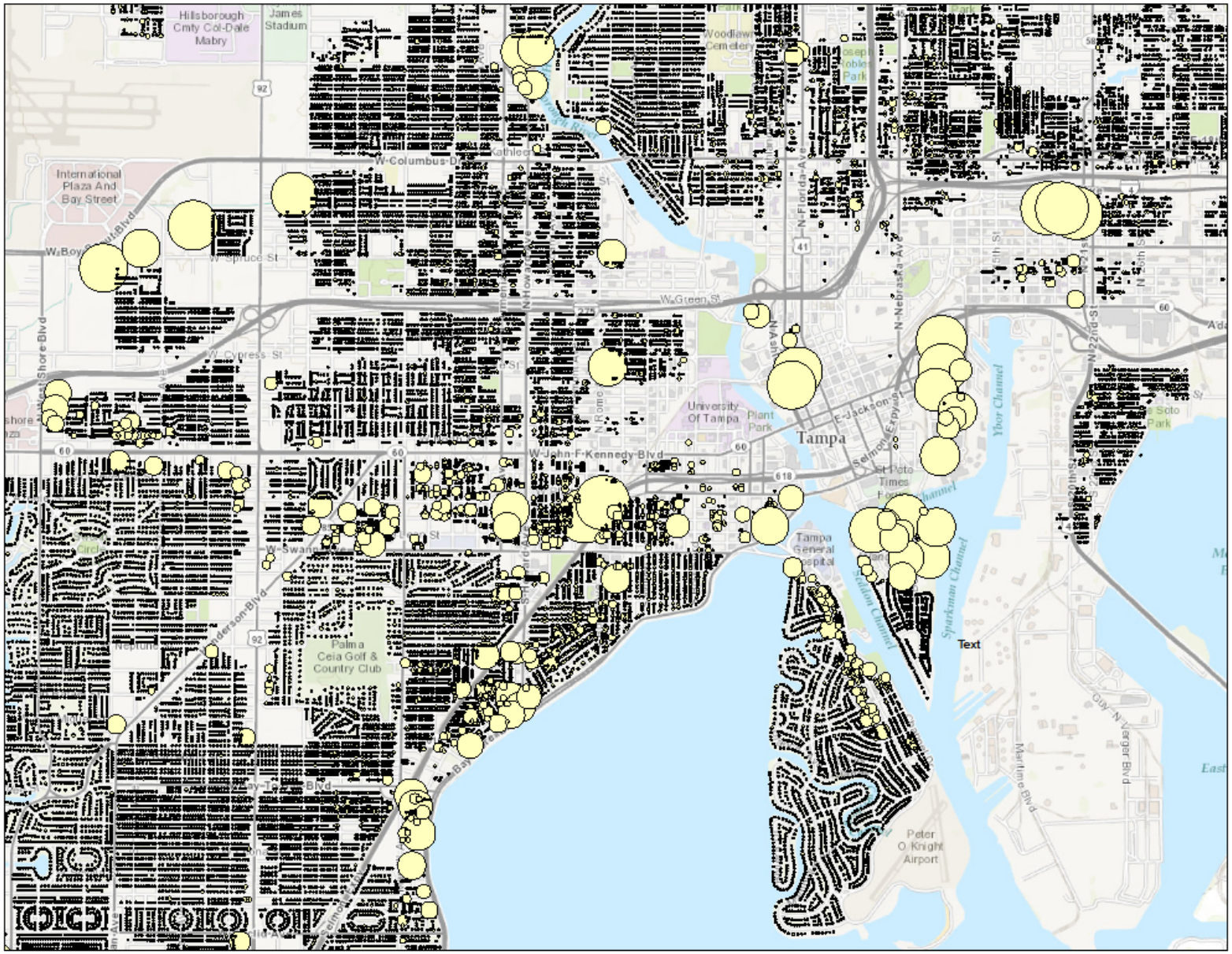
Commuter Rail Expansion Potential





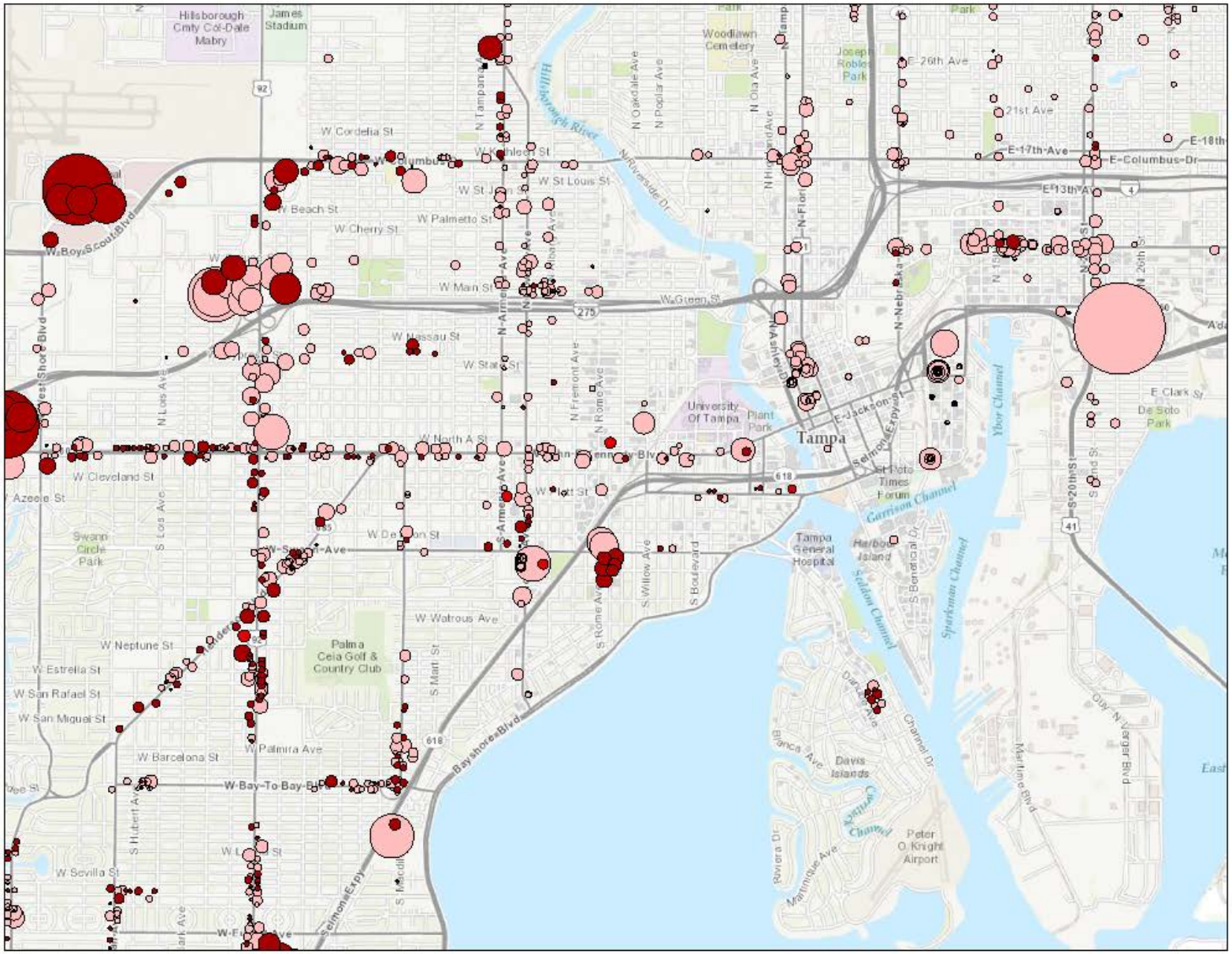
URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION



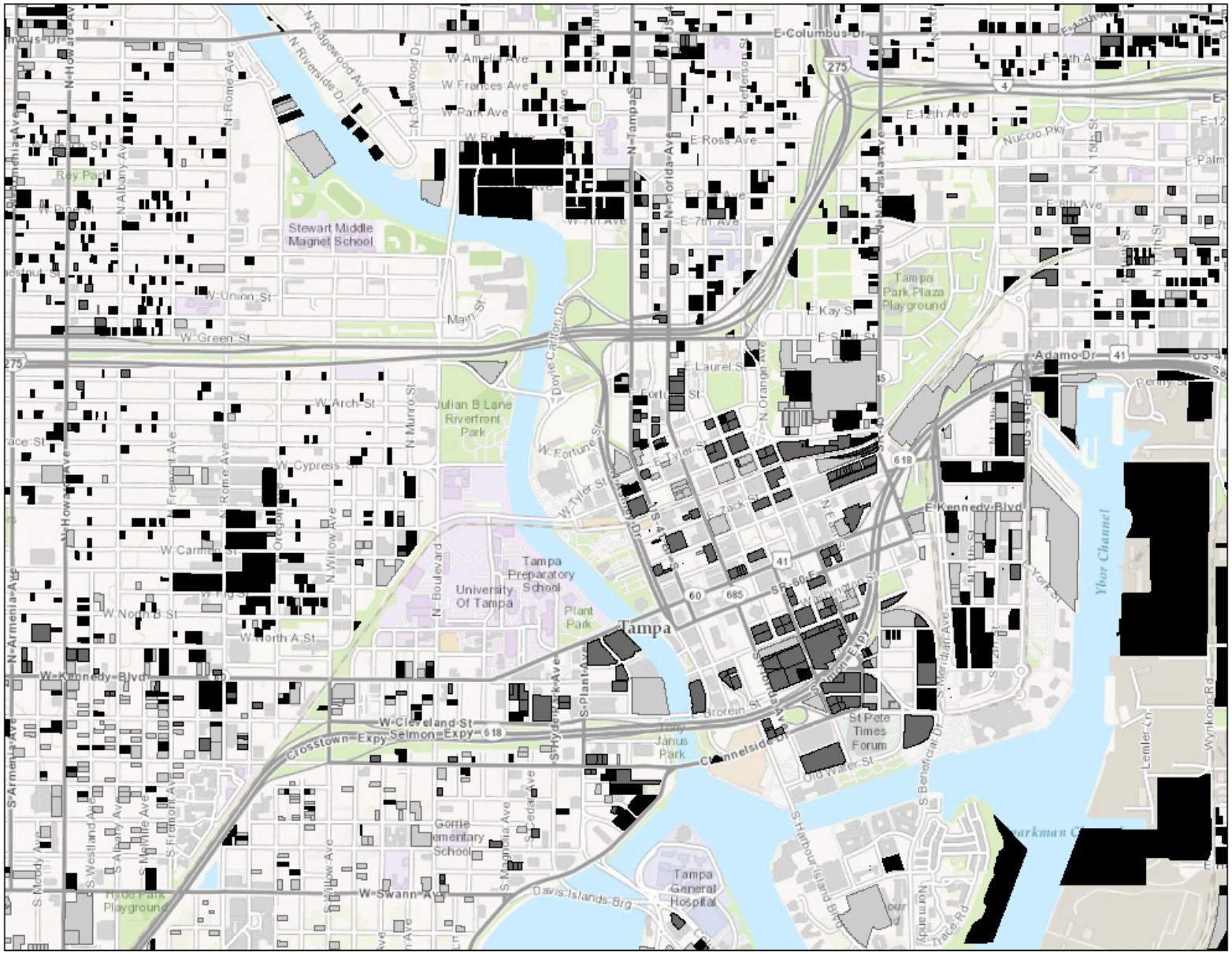
URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION



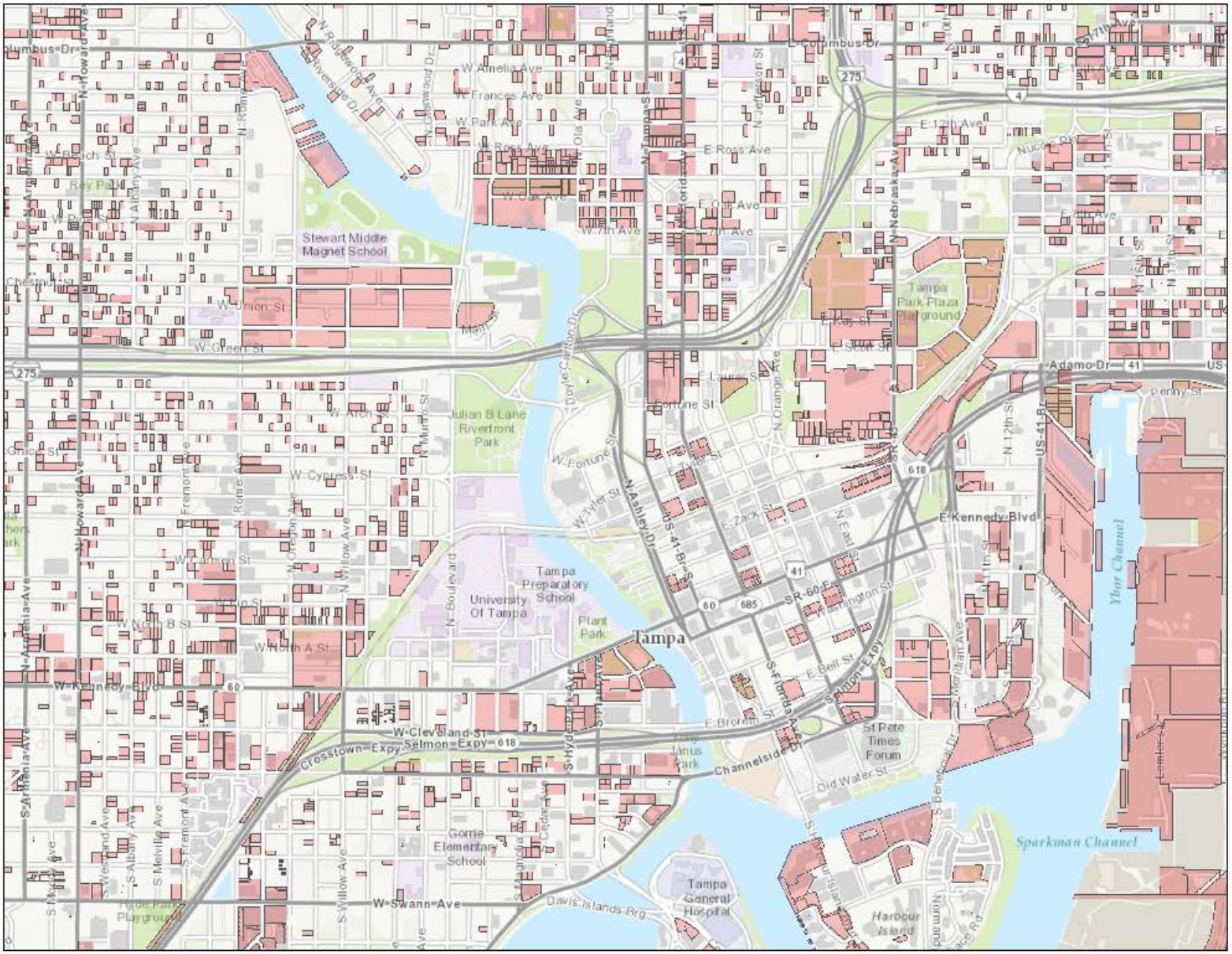
URS

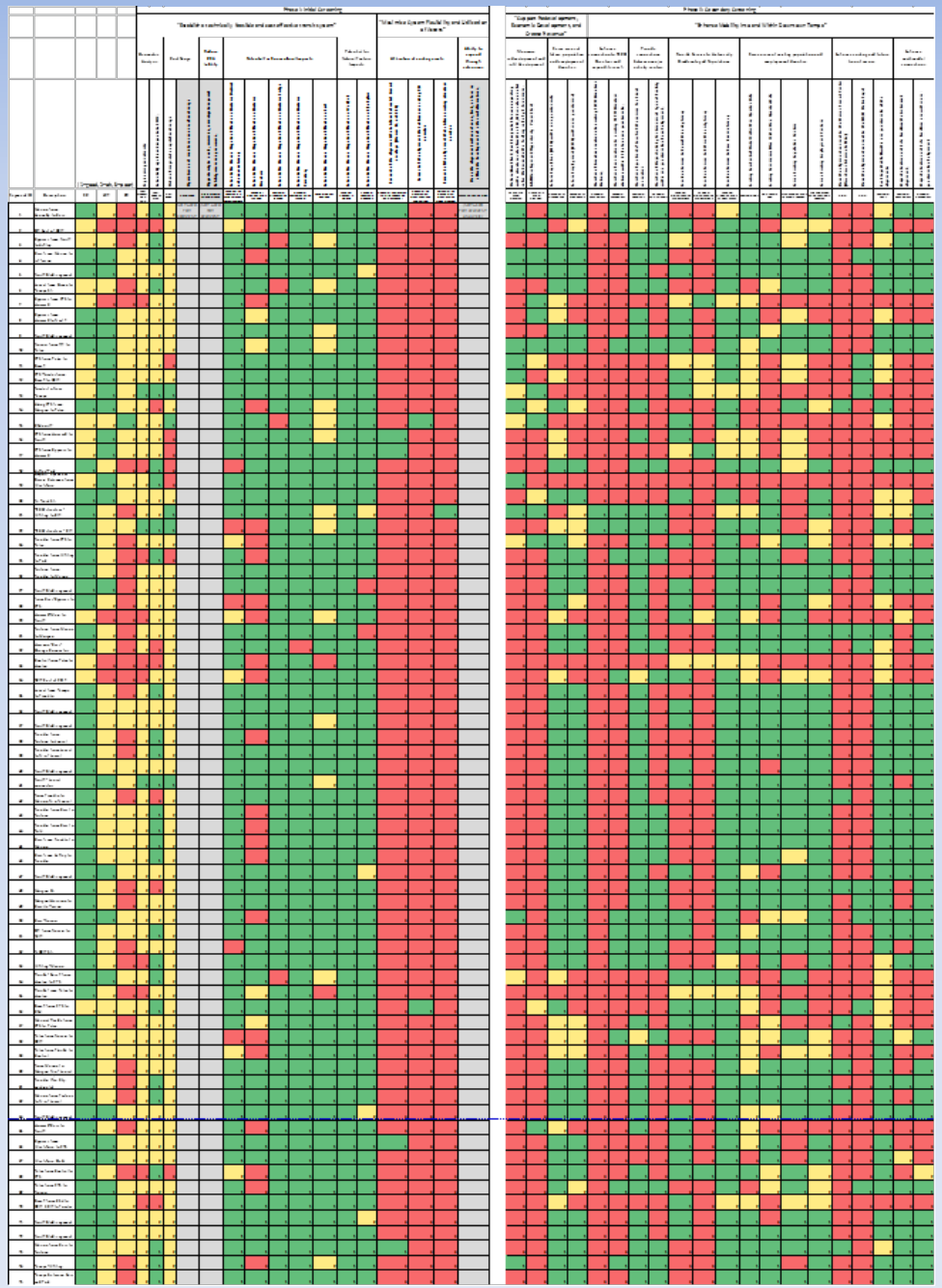
MPO Metropolitan Planning Organization for Transportation



URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION


Stewart Middle Magnet School
Julian B Lane Riverfront Park
Tampa Preparatory School
University Of Tampa
Plant Park
Tampa
Tampa Park Plaza Playground
Ybor Channel
Sparkman Channel
St Pete Times Forum
Tampa General Hospital
Harbour Island
Gorrie Elementary School
Ryde Park Playground
W Columbus Dr
E Columbus Dr
W Amelia Ave
W Frances Ave
W Park Ave
E Ross Ave
W Union St
W Green St
W Arch
W Cypress St
W Carmen St
W North B St
W North A St
W Kennedy Blvd
E Kennedy Blvd
W Cleveland St
Crosstown Expy
Selmon Expy
W Swann Ave
Davis Islands Brg
Channelside Dr
Old Water St
E Bell St
E Broren St
E Zack St
E Fortune St
W Fortune St
W Tyler St
E Laurel St
E Scott St
E Kay St
E Harrison St
E Washington St
Adamo Dr
E 12th Ave
E 7th Ave
E 4th Ave
E 2nd Ave
E 1st Ave
Perry St
N Ashley Dr
N Boulevard
N Nebraska Ave
N Orange Ave
N Florida Ave
N Tampa St
N Jefferson St
N Rome Ave
N Willow Ave
N Howard Ave
S Willow Ave
S Melville Ave
S Albany Ave
S Westland Ave
S Fremont Ave
S Hyde Park Ave
S Armenia Ave
S Boulevard
S Tampa St
S Franklin St
S Meridian Ave
S Beneva Rd
N 12th St
N 17th St
US-41-Bus-S
US-41-Bus
SR-60-E
SR 618
Lowry Park
Lemon St
Grace St
Fremont Ave
Rome Ave
Dale Mabry Hwy
Doyle Carlton Dr
Riverside Dr
Rivershore Dr
Lakewood Dr
Ola Ave
Florida Ave
Nuccio Pkwy
Chestnut St
Rey Park
Mart
Perry St
Meridian Ave
Ybor Channel
Sparkman Channel
Tampa
Adamo Dr
E Kennedy Blvd
W Cleveland St
Selmon Expy
Crosstown Expy
W Swann Ave
Davis Islands Brg
Channelside Dr
Old Water St
E Bell St
E Broren St
E Zack St
E Fortune St
W Fortune St
W Tyler St
E Laurel St
E Scott St
E Kay St
E Harrison St
E Washington St
W Columbus Dr
E Columbus Dr
W Amelia Ave
W Frances Ave
W Park Ave
E Ross Ave
W Union St
W Green St
W Arch
W Cypress St
W Carmen St
W North B St
W North A St
W Kennedy Blvd
E Kennedy Blvd



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Phase 1 – Initial Screening

					Phase I: Initial Screening																
					"Establish a technically feasible and cost effective transit system"													"Maximize System Flexibility and Utilization of Assets"			
					Geometric Analysis		Cost Range		Reduce CSX liability	Potential for Sociocultural Impacts					Potential for Natural Feature Impacts		Utilization of existing assets			Ability to expand through extensions
		(1=good, 2=ok, 3=poor)			Engineering constraints	Potentially significant impacts to ROW.	Order of magnitude capital cost range	Operations and maintenance annual cost range	Opportunity to avoid, minimize, or mitigate required liability insurance provisions.	Potential to Have a Negative Effect on a Historic District or Resource Group	Potential to Have a Negative Effect on a Historic Structure	Potential to Have a Negative Effect on a Historic Bridge	Potential to Have a Negative Effect on a Historic Cemetery	Potential to Have a Negative Effect on a Park	Potential to Have a Negative Effect on a Wetland	Potential to Have a Negative Effect on a Floodplain	Percent of the alignment that utilizes dedicated transit envelope (Marion St. or I-275)	Percent of the alignment that utilizes an existing CSX corridor	Percent of the alignment that utilizes existing streetcar corridor	Does the alignment either enhance, limit, or have no effect the development of other rail alternatives.
Segment ID	Description	SC	LRT	CR	Low, Medium, High, Fatal	Low, Medium, High	Cost range	Cost Range	Avoid, Minimize, Mitigate, or none	Length of the Segment that passes through a Resource Group	Number of Structures Within 100 Feet	Number of Bridges Within 100 Feet	Number of Cemeteries Within 100 Feet	Number of Parks Impacted	Length of Segment in Wetland	Length of Segment in Floodplain	Percent of the alignment that utilizes dedicated transit envelope	Percent of the alignment that utilizes an existing CSX corridor	Percent of the alignment that utilizes existing streetcar corridor	Enhance, Limit, No Effect
1	Marion from Kennedy to Cass	1	2	3	2	1	2	(NOT USED FOR SEGMENT	(NOT USED FOR SEGMENT	1	1	1	1	1	1	1	1	3	3	(NOT USED FOR SEGMENT ANALYSIS)
2	8th East of 20th	2	3	3	3	3	2			2	3	1	1	1	1	1	3	3	3	
3	Cypress from North to Ashley	2	2	3	2	1	2			1	1	3	1	2	1	1	3	3	3	

URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Phase 2 – Secondary Screening

Phase II: Secondary Screening																				
"Support Redevelopment, Economic Development, and Create Revenue"				"Enhance Mobility Into and Within Downtown Tampa"																
Maximize redevelopment and infill development		Serve areas of future population and employment densities		Enhance connection to TECO Streetcar and expand its reach		Provide connections between major activity centers		Provide Service to Historically Disadvantaged Populations			Serve areas of existing population and employment densities				Enhance existing and future transit service			Enhance multimodal connections	
Underutilized land: Land designated for use as parking with a structure value less than 250,000 in value or a lot value that exceeds the building value by 2.5x or more.	Infill Development Opportunity - Vacant Land	Future Population (2040) within one-quarter mile	Future Employment (2040) within one-quarter mile	Number of direct connections to existing TECO Streetcar Stations.	Number of connections to existing TECO Streetcar stations within 3 blocks or one-quarter mile.	Number of quadrants? to which the service has direct connection	Number of Major Activity Centers served by each facility within one-quarter mile of each alignment.	Provides Service to Racial Minority Group	Provides Service to Ethnic Minority Group	Provides Service to Low Income Group	Existing Residential Units Within One-Quarter Mile	Existing Commercial Use Within One-Quarter Mile	Serves Existing Population Centers	Serves Existing Employment Centers	Does the alignment connect to the Marion Transit Center (Downtown Intermodal Site)	Does the alignment connect to the HART MetroRapid	Bus Stops that fall within one-quarter mile of the alignments	Major Pedestrian and Bike facilities that intersect alignment.	Major Pedestrian and Bike facilities are within one-quarter mile of alignment
SF Within 1/4 mile of Alignment	SF Within 1/4 mile of Alignment	Population by Affected TAZ	Population by Affected TAZ	Number of connections	Number of connections	Number of Quadrants	Number of Activity Centers	Length of Alternative Within EJ Block Group	Length of Alternative Within EJ Block Group	Length of Alternative Within EJ Block Group	Number of Units	Total Square Feet	2010 Population Within 1/4 mile of a Segment	2010 Employment Within 1/4 Mile of a Segment	Y or N	Y or N	Number of Stops	Number of Connections	Number of Connections
1	3	1	1	3	1	1	1	3	3	2	1	1	3	1	3	3	2	1	1
1	1	3	2	3	1	2	1	1	3	1	1	3	2	2	3	3	1	3	3
3	3	1	1	3	3	1	1	2	3	1	1	1	2	1	3	3	2	1	1

URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Practice Question
Which college football team will win the National Championship next year?

A. University of South Florida

B. LSU

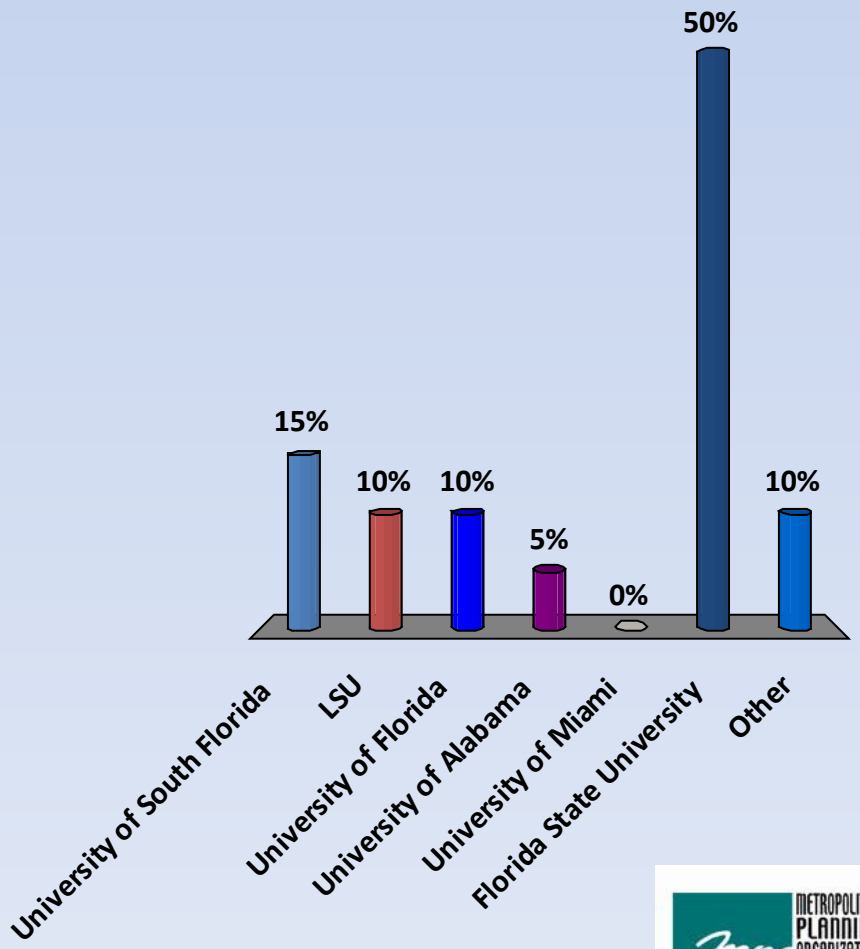
C. University of Florida

D. University of Alabama

E. University of Miami

F. Florida State University

G. Other



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question #1
The methodology to the evaluation is reasonable.

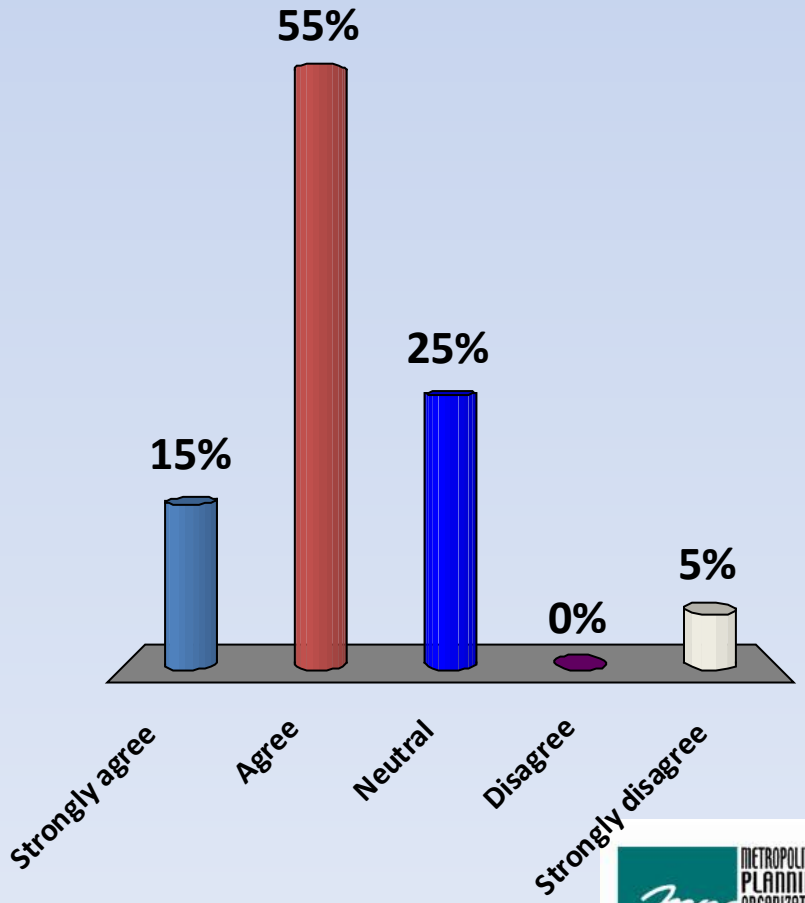
A. Strongly agree

B. Agree

C. Neutral

D. Disagree

E. Strongly disagree



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question #2
The segments considered are reasonable for further study.

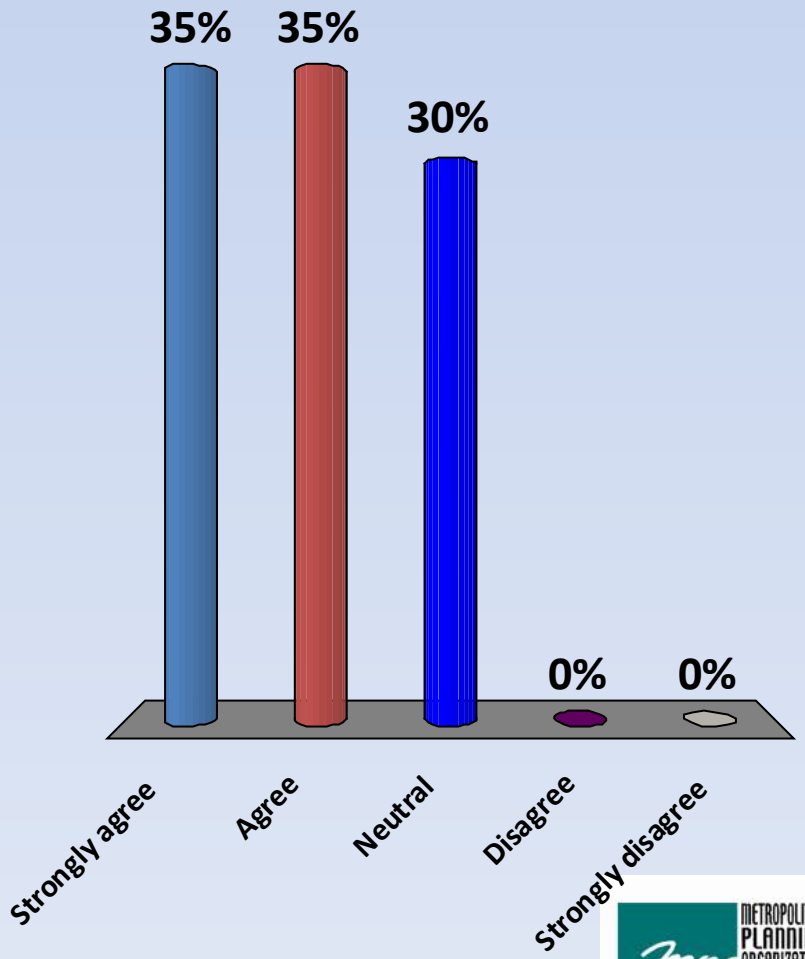
A. Strongly agree

B. Agree

C. Neutral

D. Disagree

E. Strongly disagree



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question 3
The modes considered are reasonable for further study.

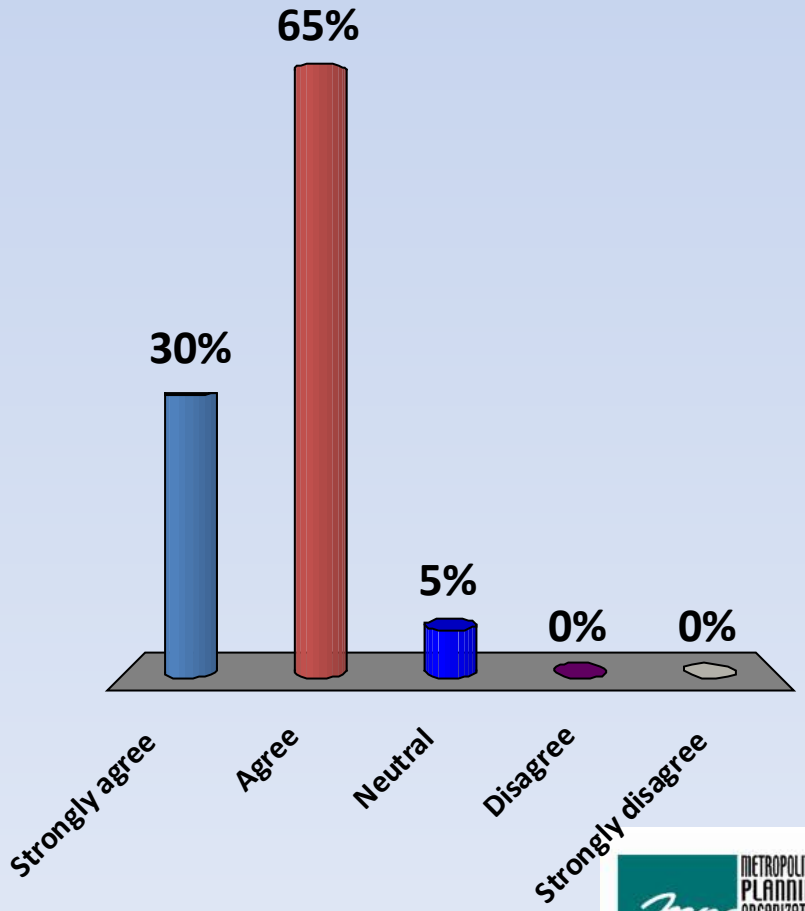
A. Strongly agree

B. Agree

C. Neutral

D. Disagree

E. Strongly disagree



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

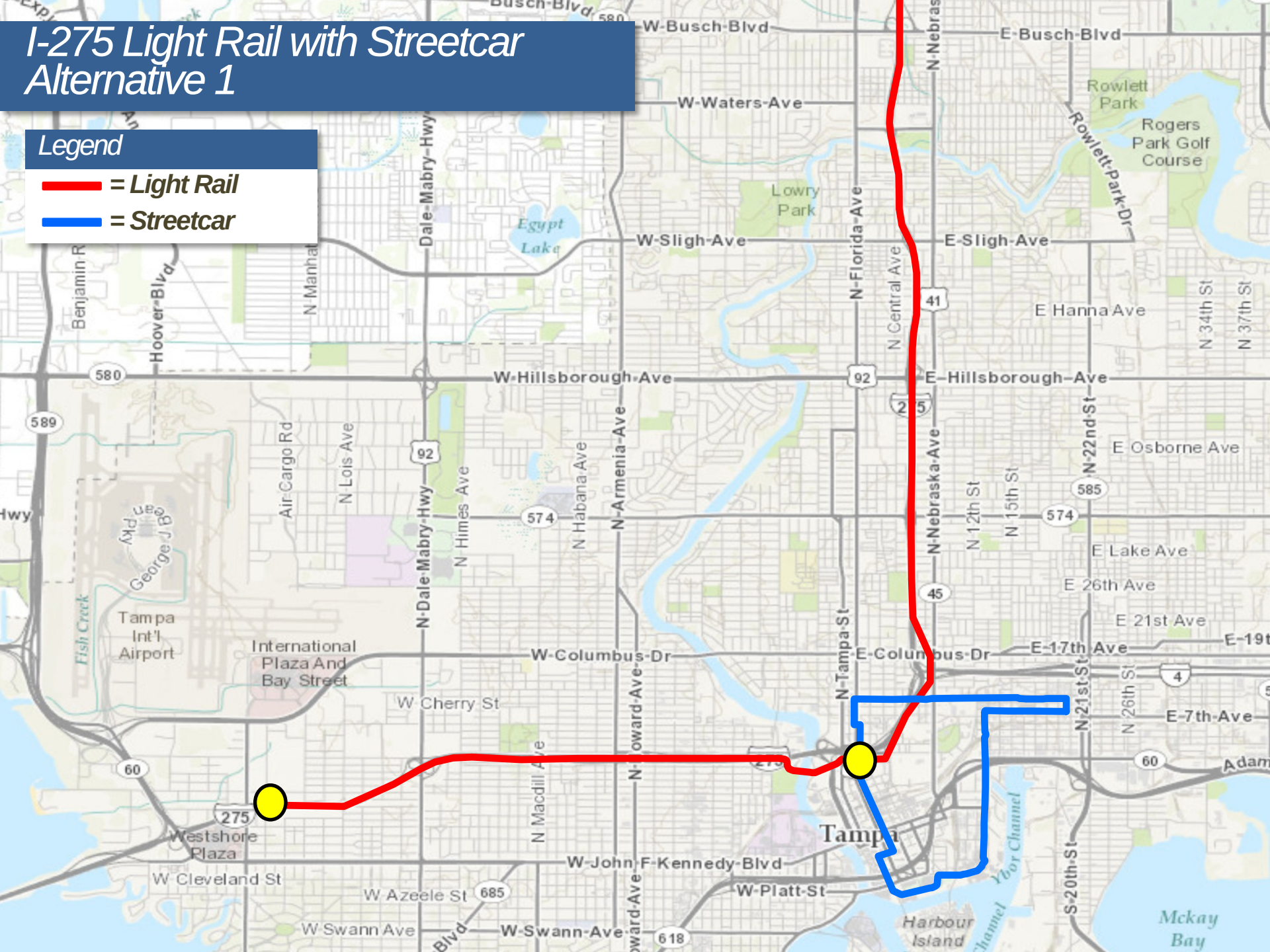
Alternatives Evaluated

- FEIS/ROD, HART AA and existing TECO Streetcar as starting point
- Analyzed by link
- Considered:
  - Previous studies
  - Stakeholder input
  - Scenarios – no use of CSX, CSX operating agreement, CSX purchase, use of highway ROW

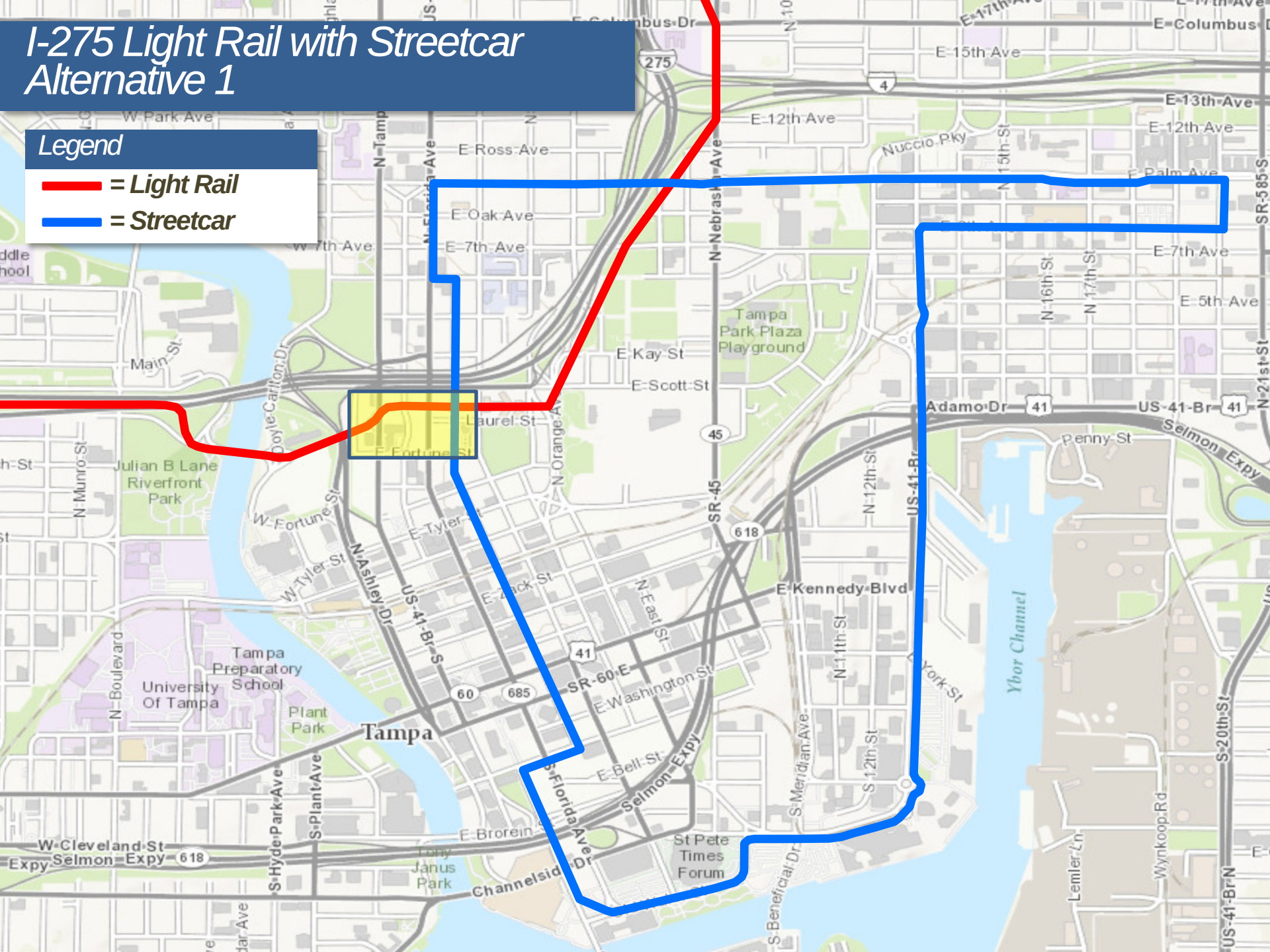
URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

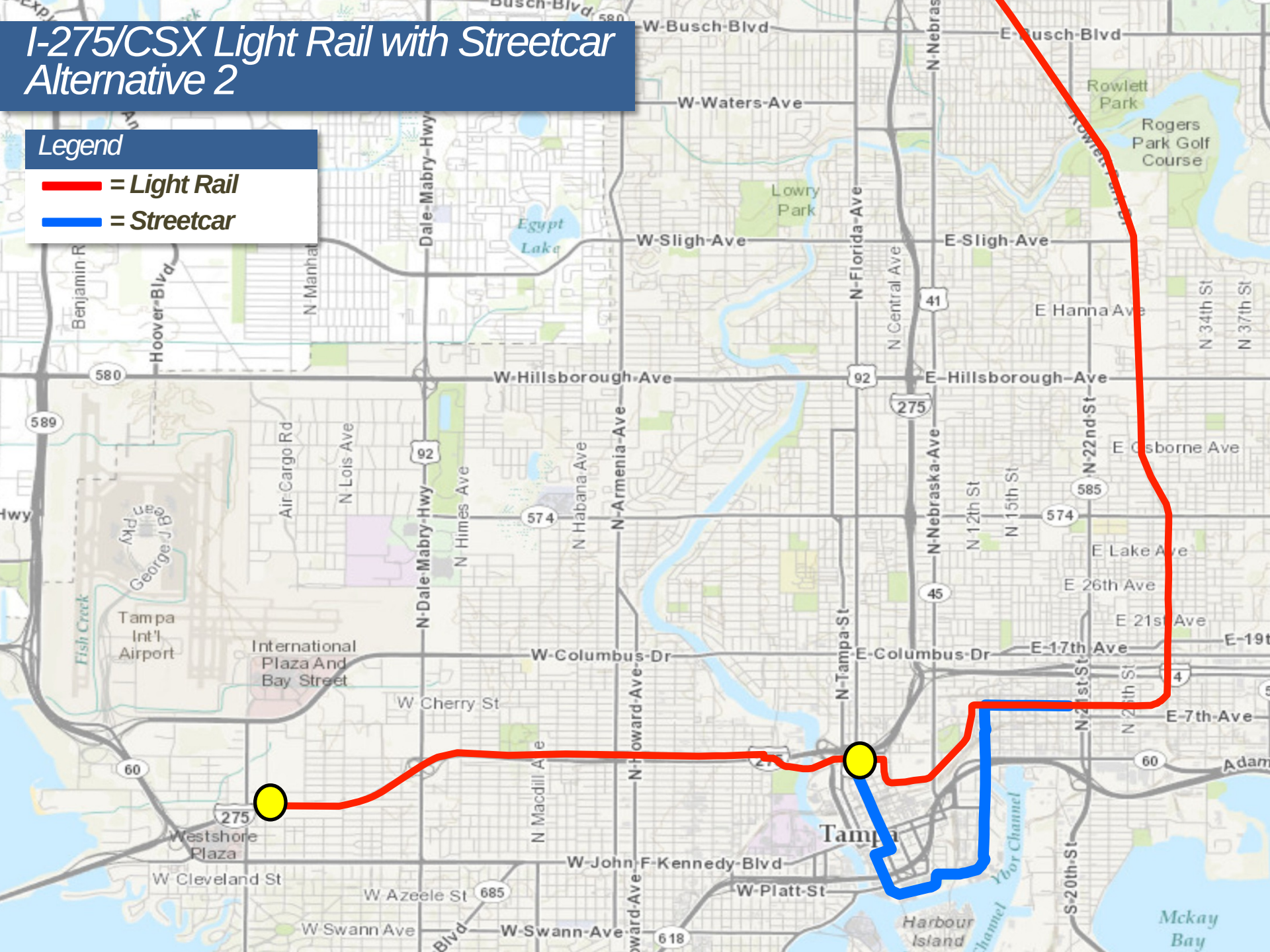
I-275 Light Rail with Streetcar Alternative 1



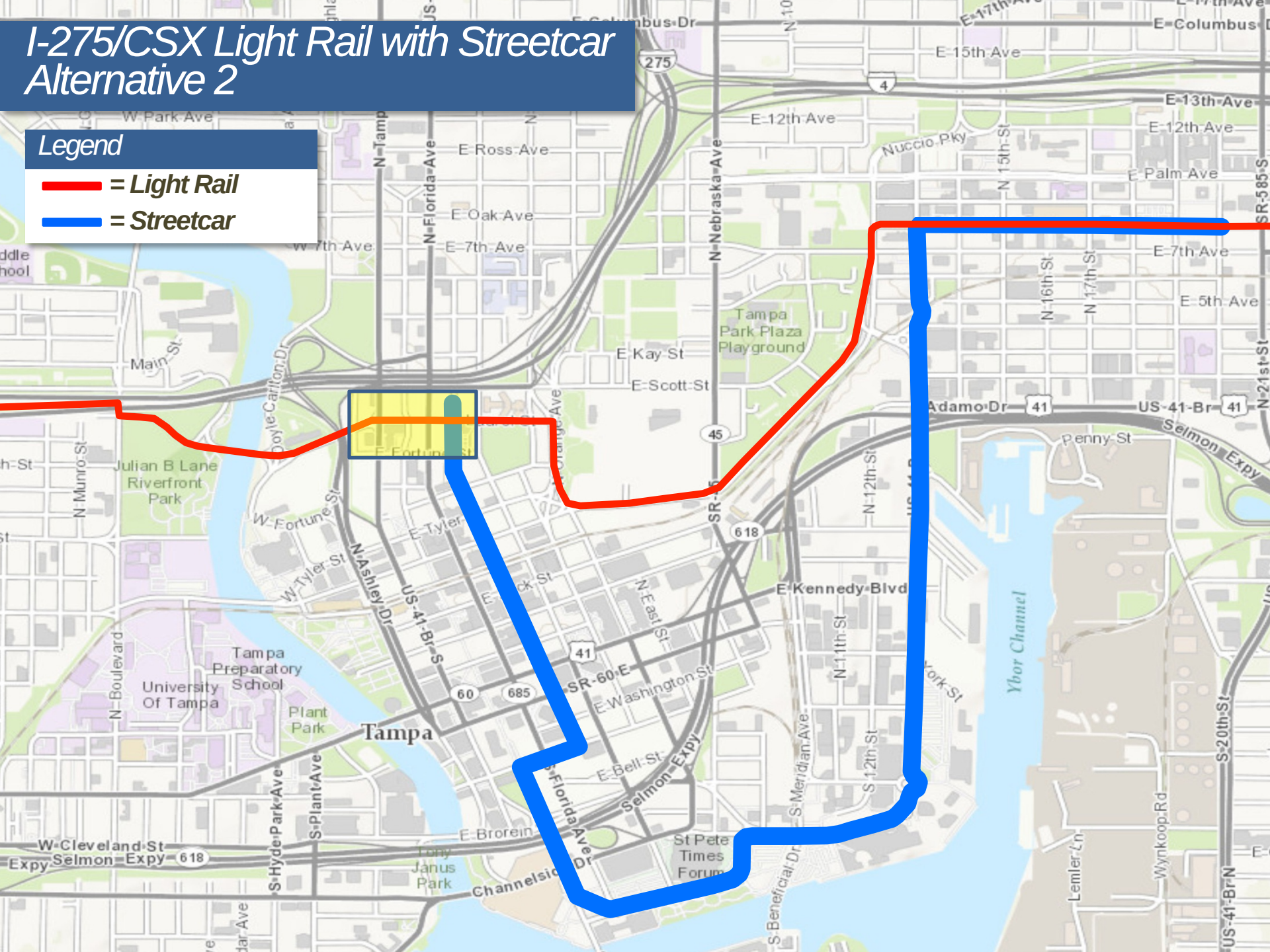
I-275 Light Rail with Streetcar Alternative 1



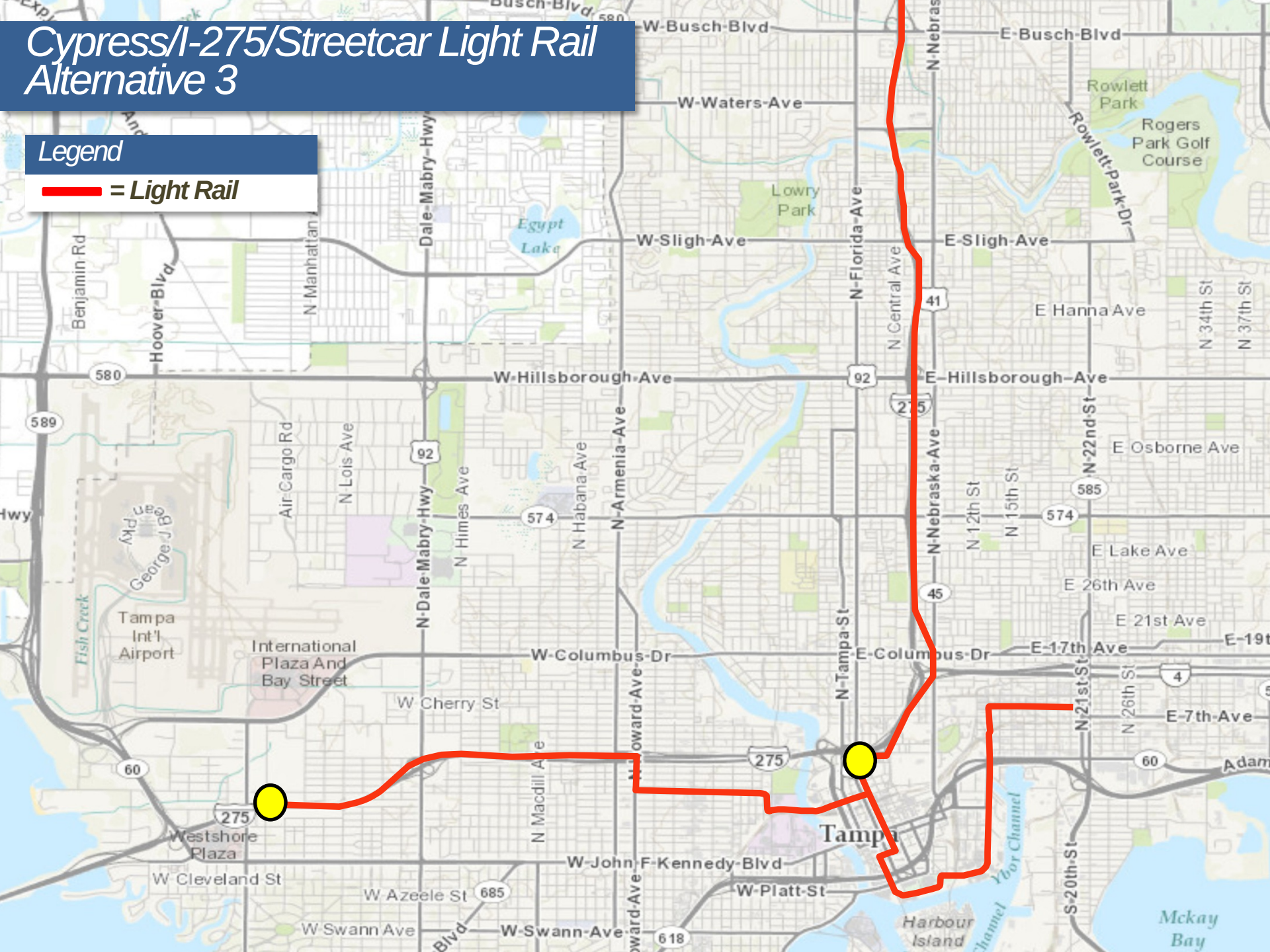
I-275/CSX Light Rail with Streetcar Alternative 2



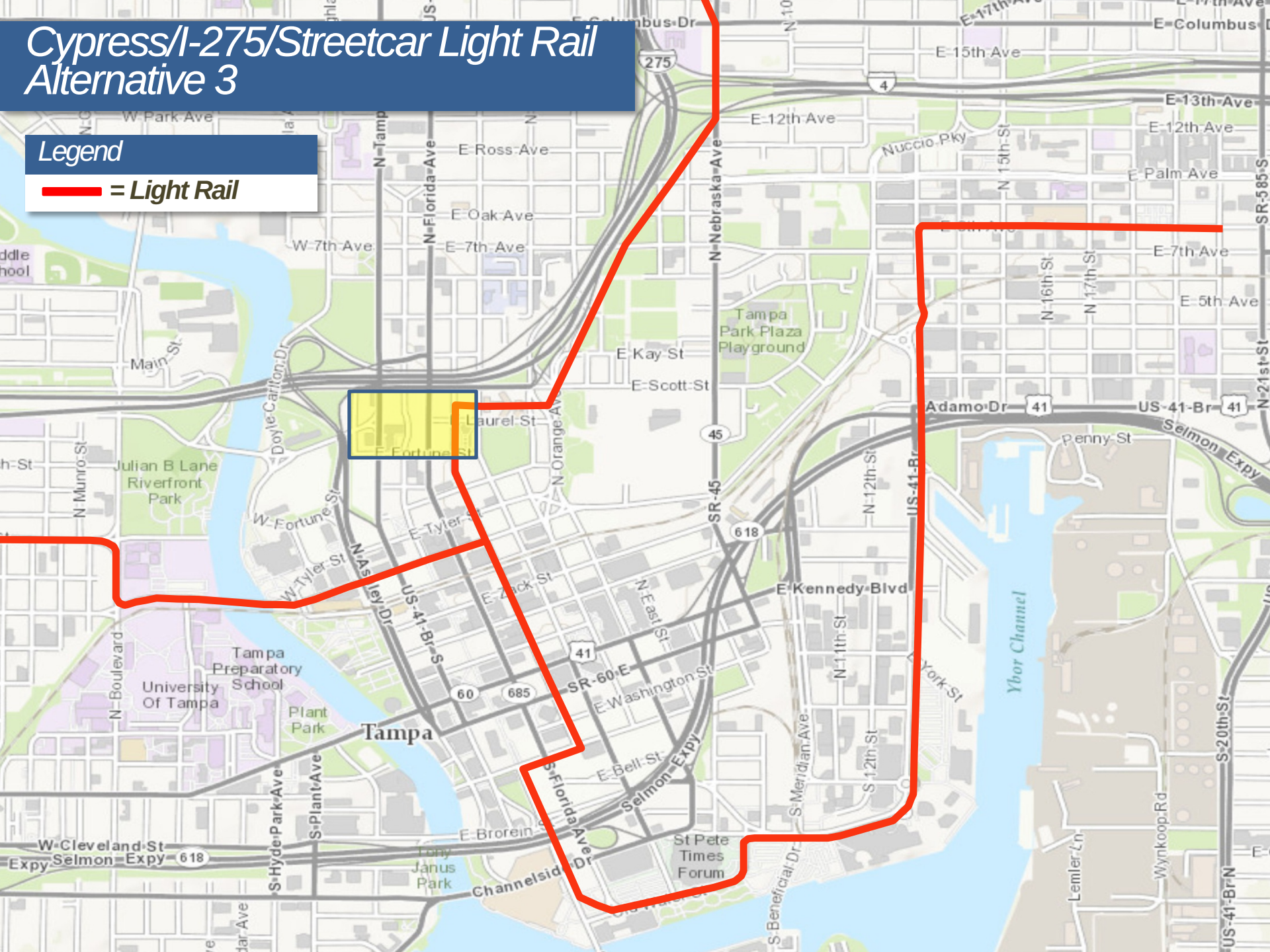
I-275/CSX Light Rail with Streetcar Alternative 2



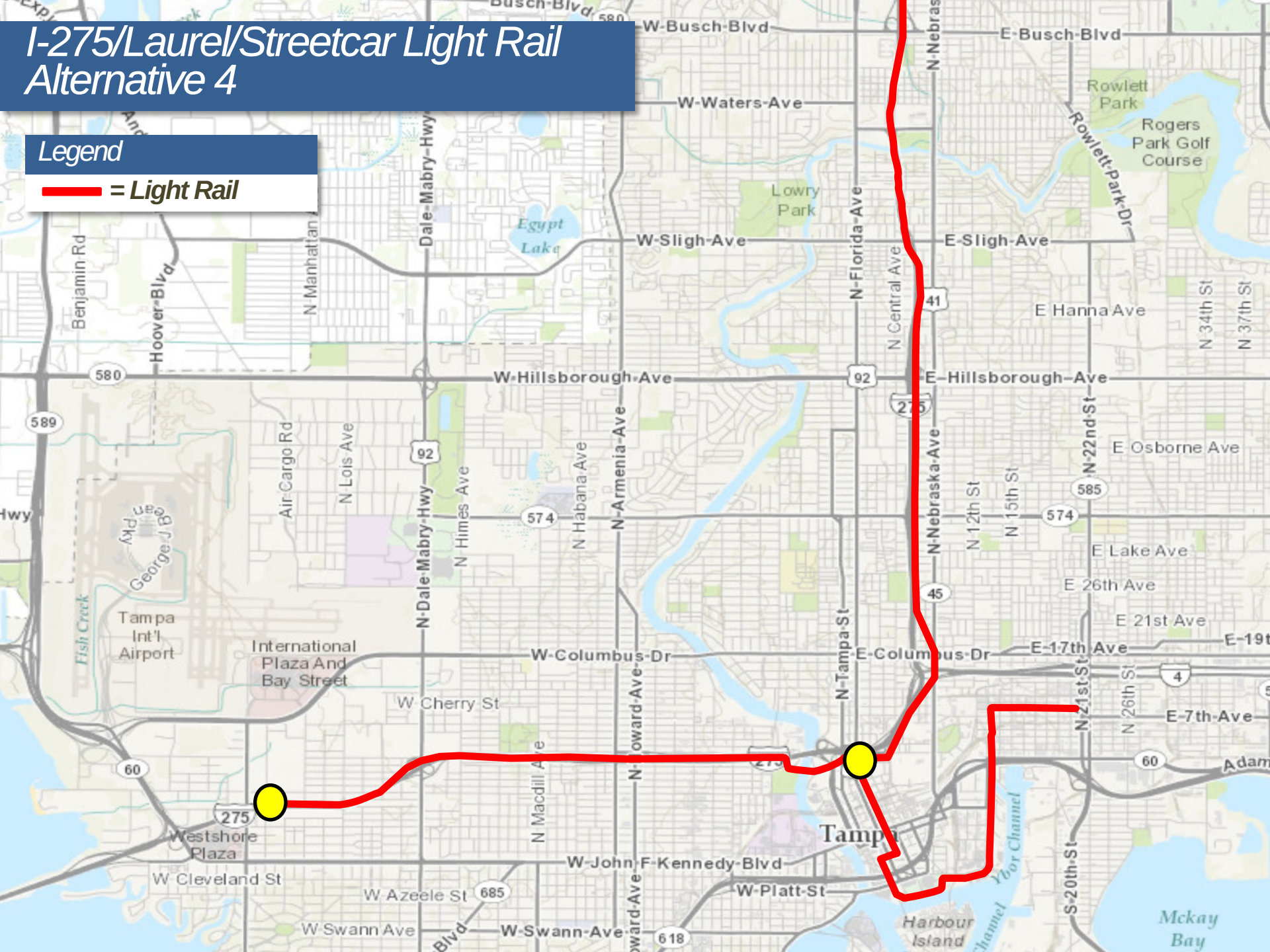
Cypress/I-275/Streetcar Light Rail Alternative 3



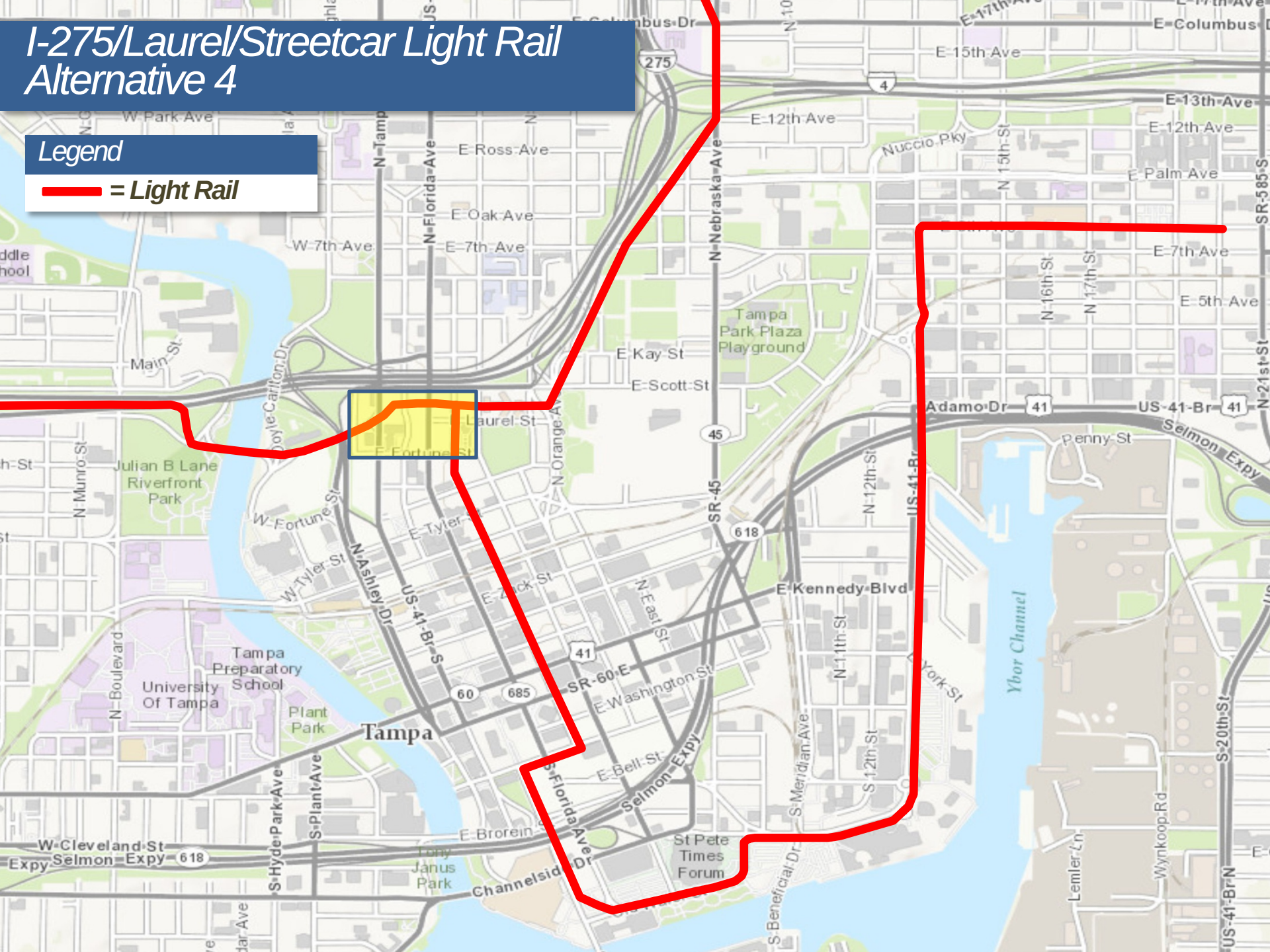
Cypress/I-275/Streetcar Light Rail Alternative 3



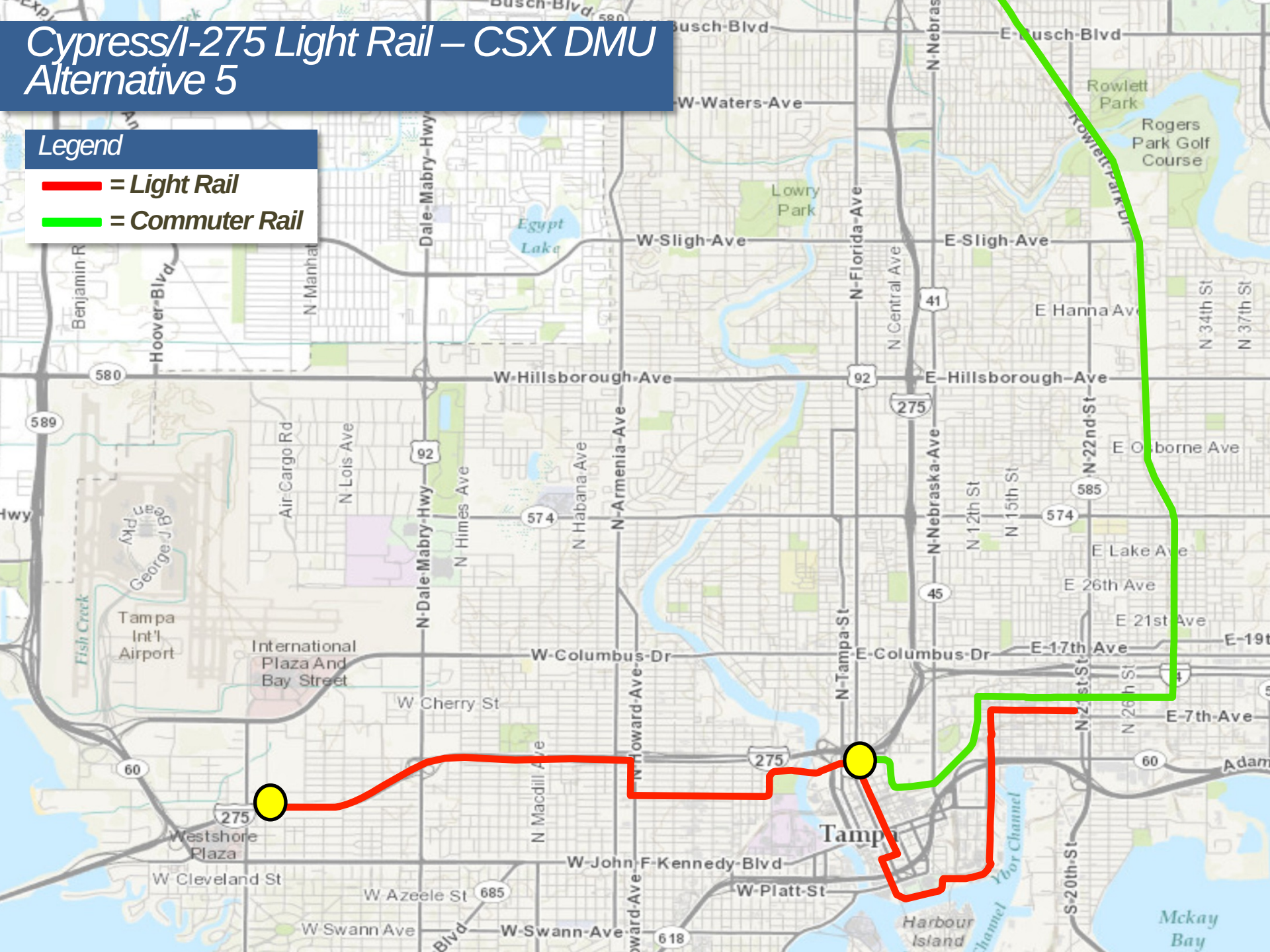
I-275/Laurel/Streetcar Light Rail Alternative 4



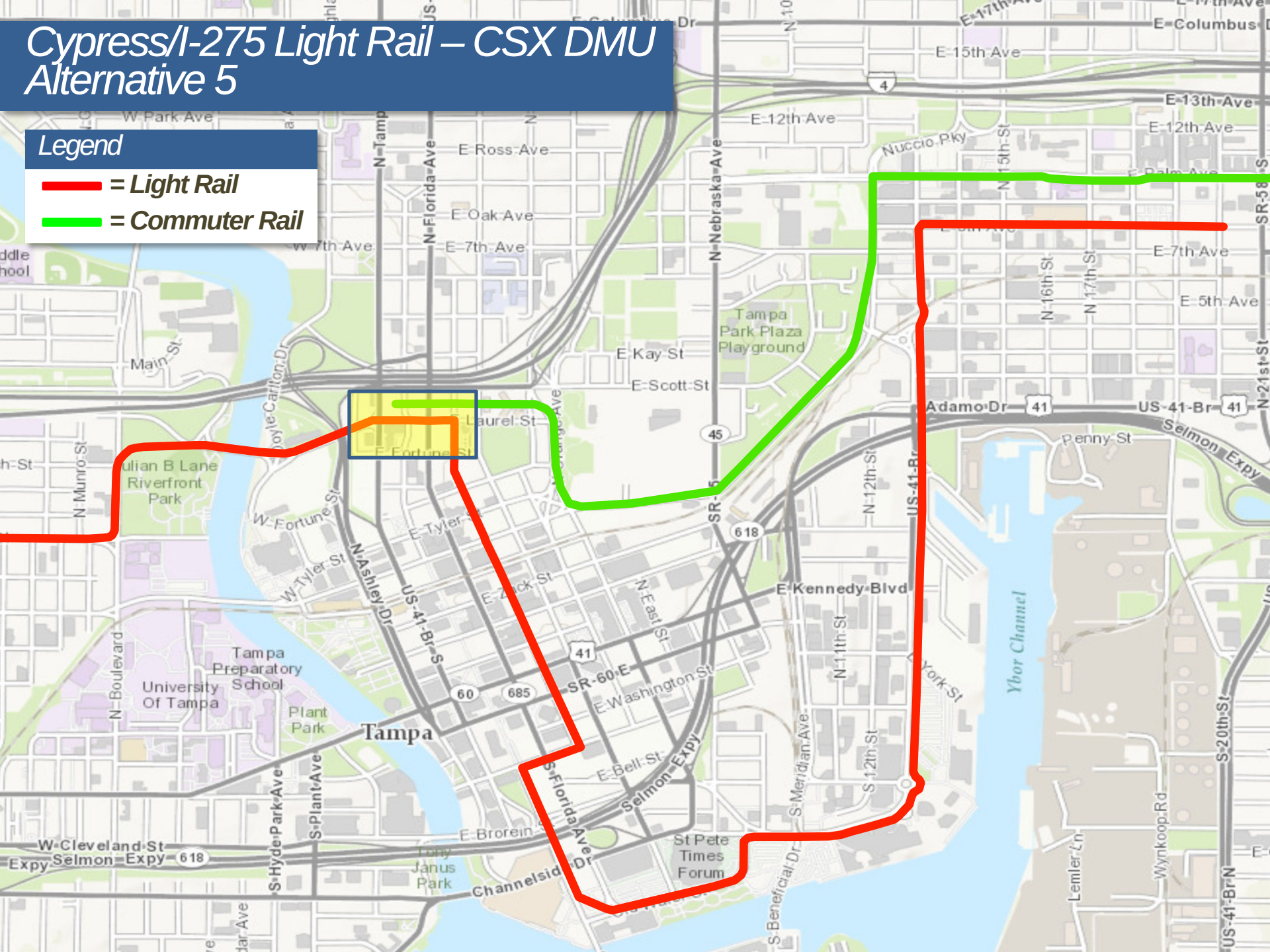
I-275/Laurel/Streetcar Light Rail Alternative 4



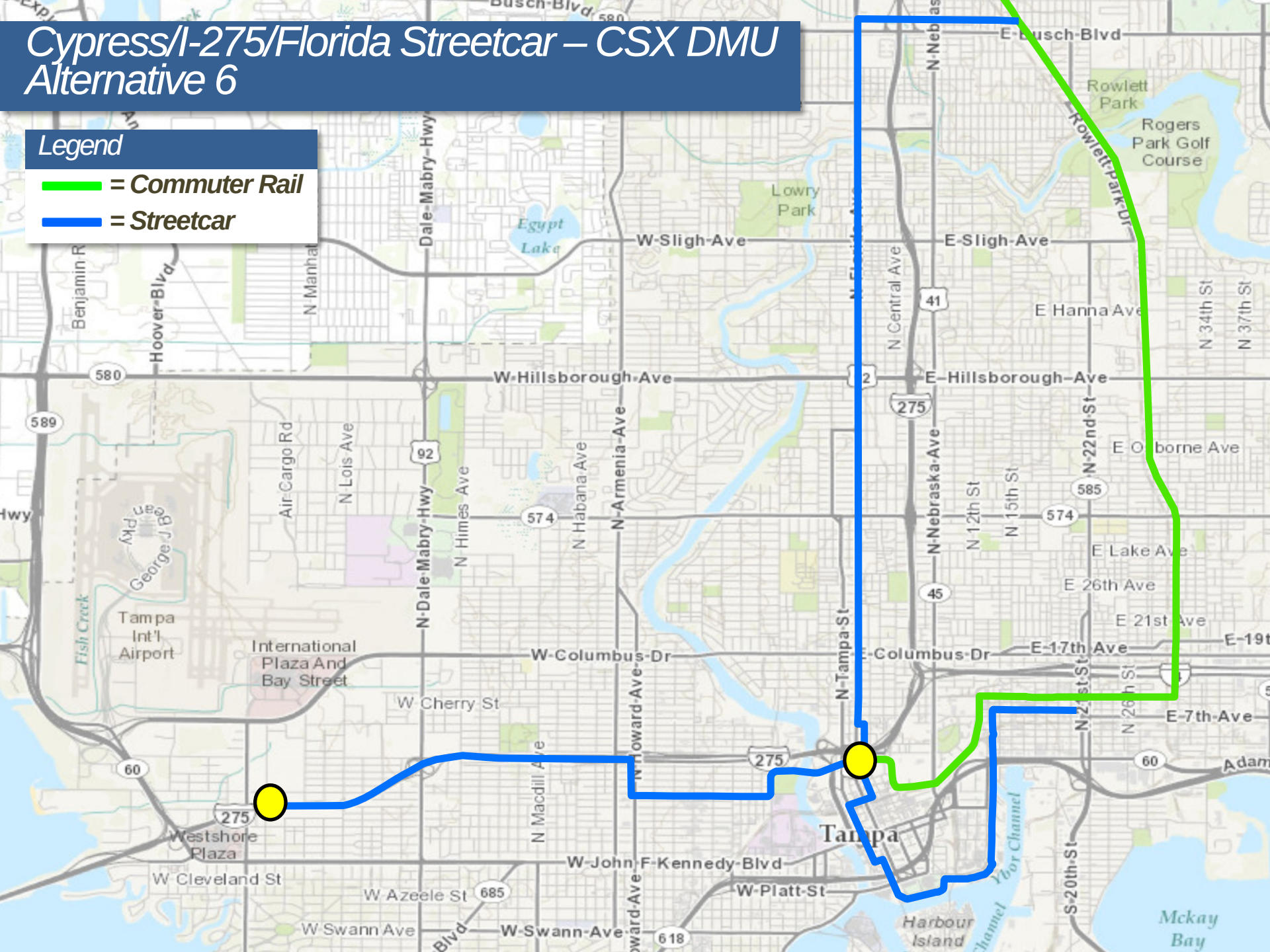
Cypress/I-275 Light Rail – CSX DMU Alternative 5



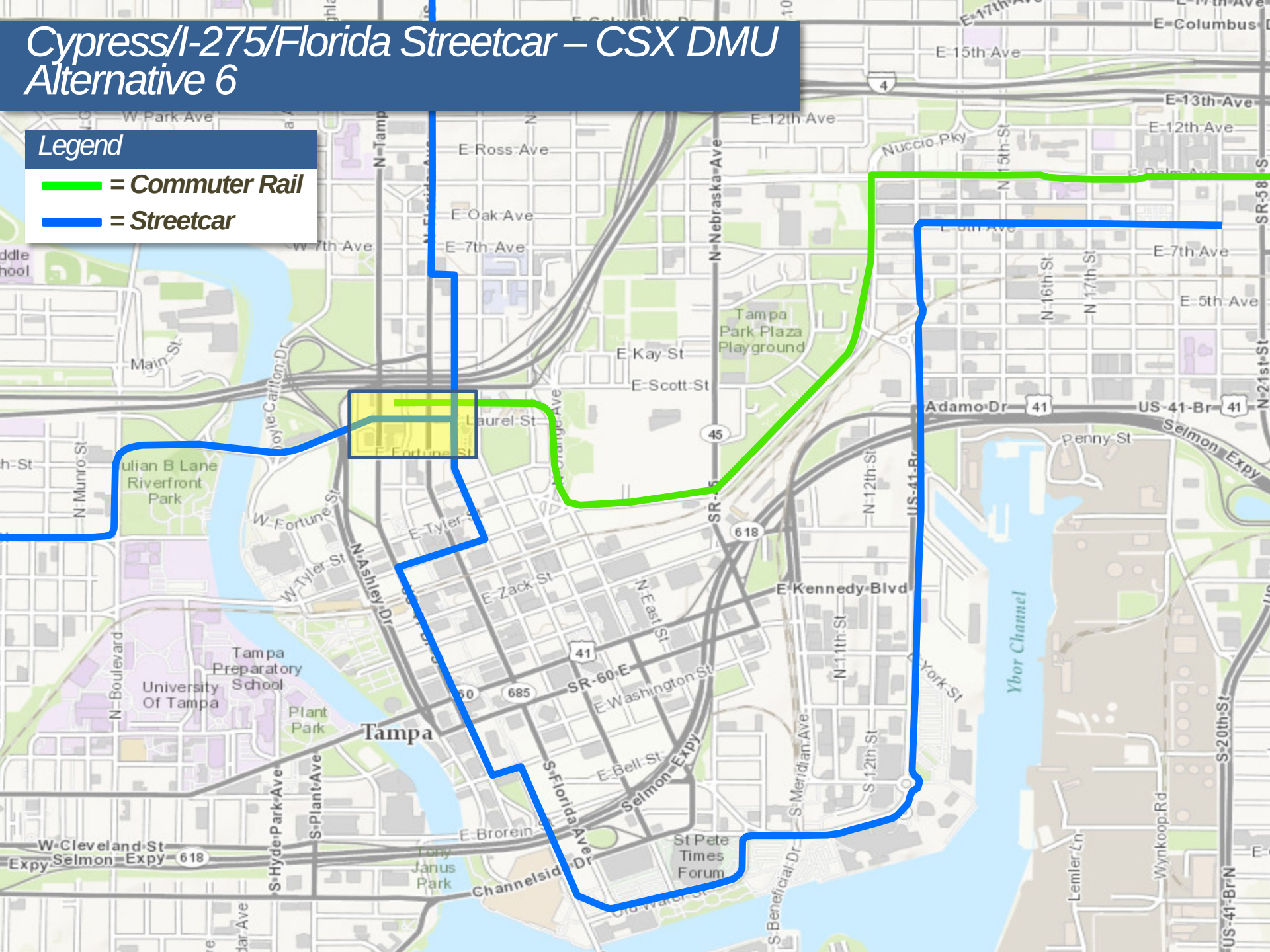
Cypress/I-275 Light Rail – CSX DMU Alternative 5



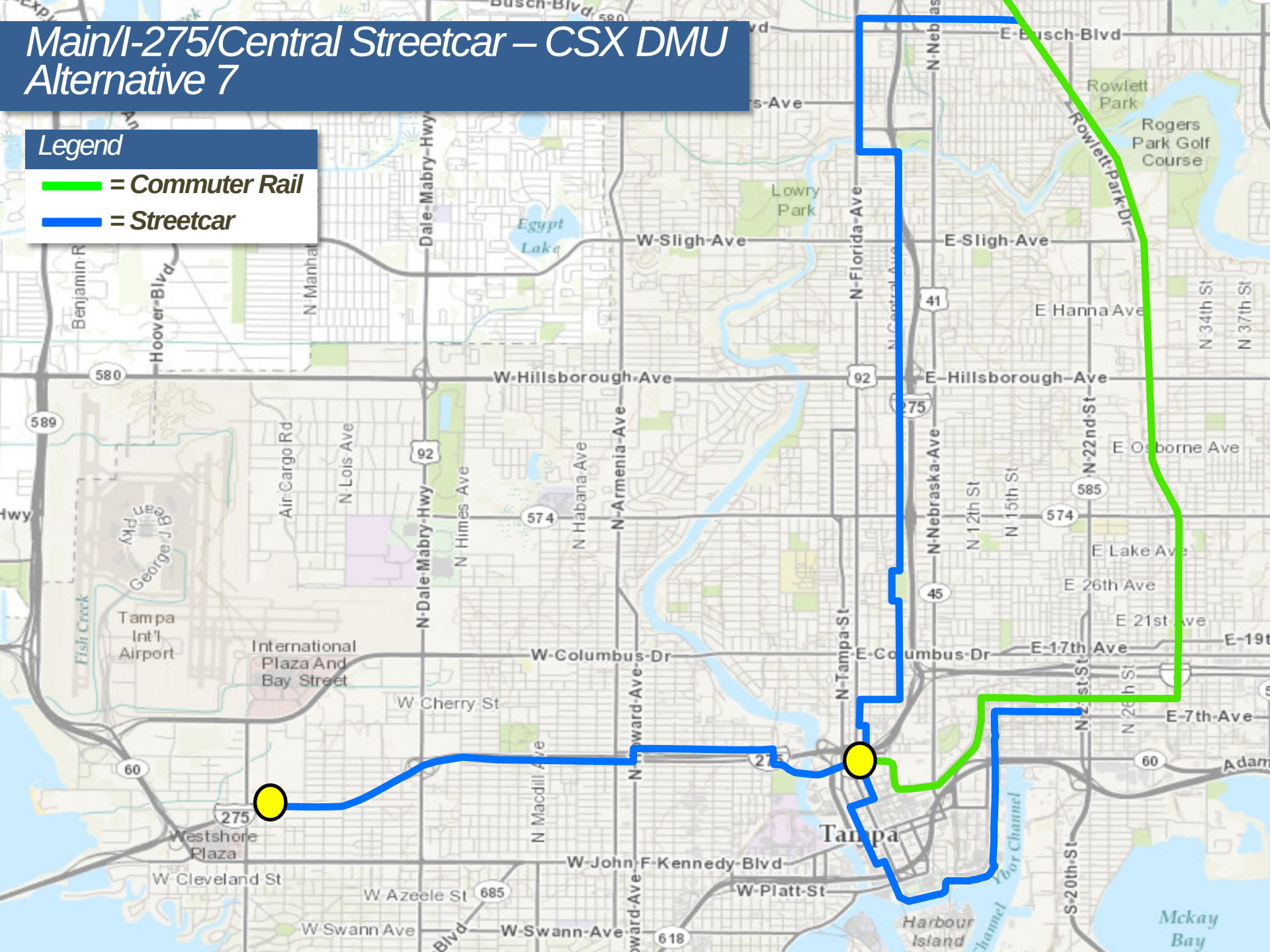
Cypress/I-275/Florida Streetcar – CSX DMU Alternative 6



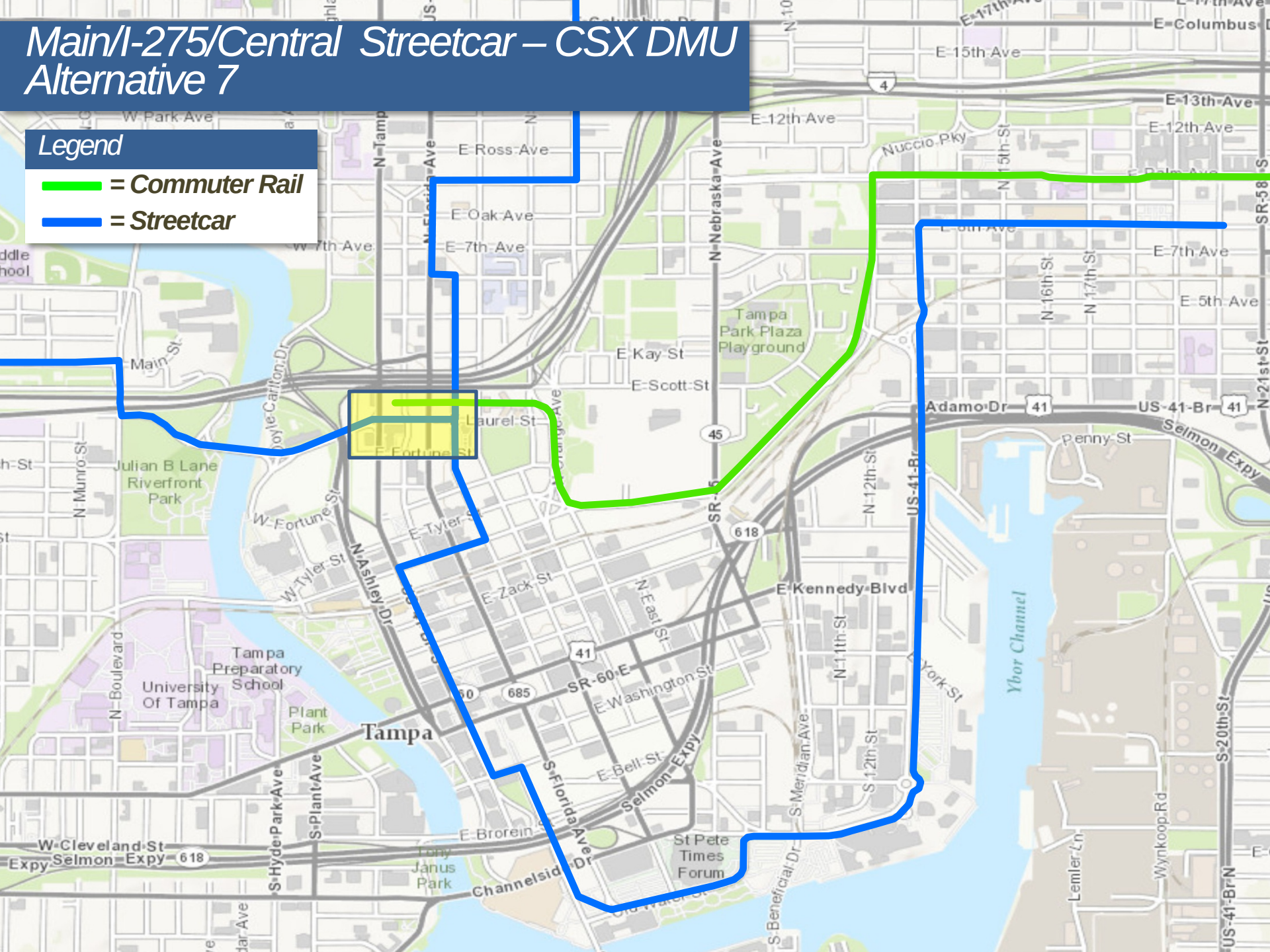
Cypress/I-275/Florida Streetcar – CSX DMU Alternative 6



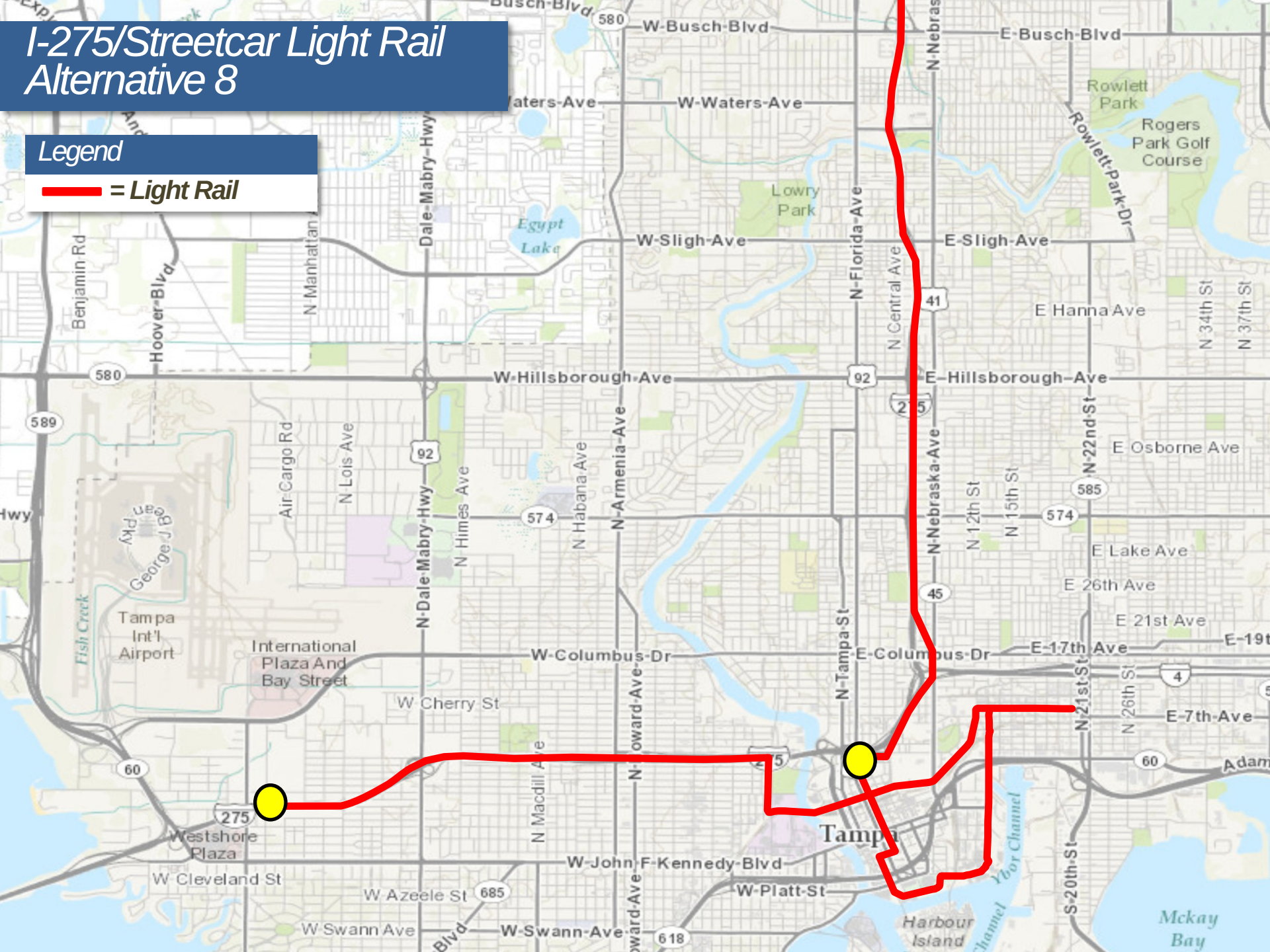
Main/I-275/Central Streetcar – CSX DMU Alternative 7



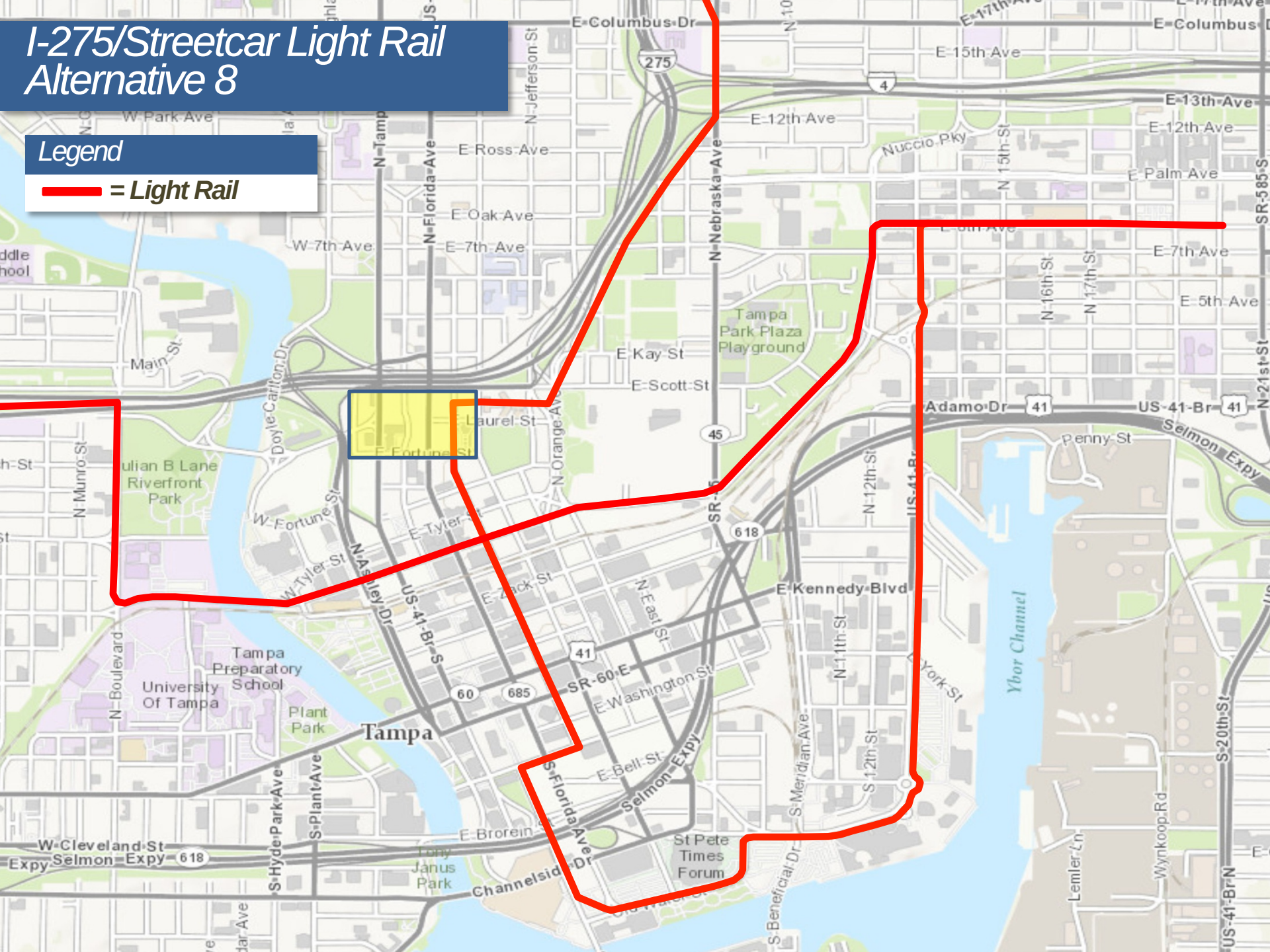
Main/I-275/Central Streetcar – CSX DMU Alternative 7



I-275/Streetcar Light Rail Alternative 8



I-275/Streetcar Light Rail Alternative 8



Evaluation Results

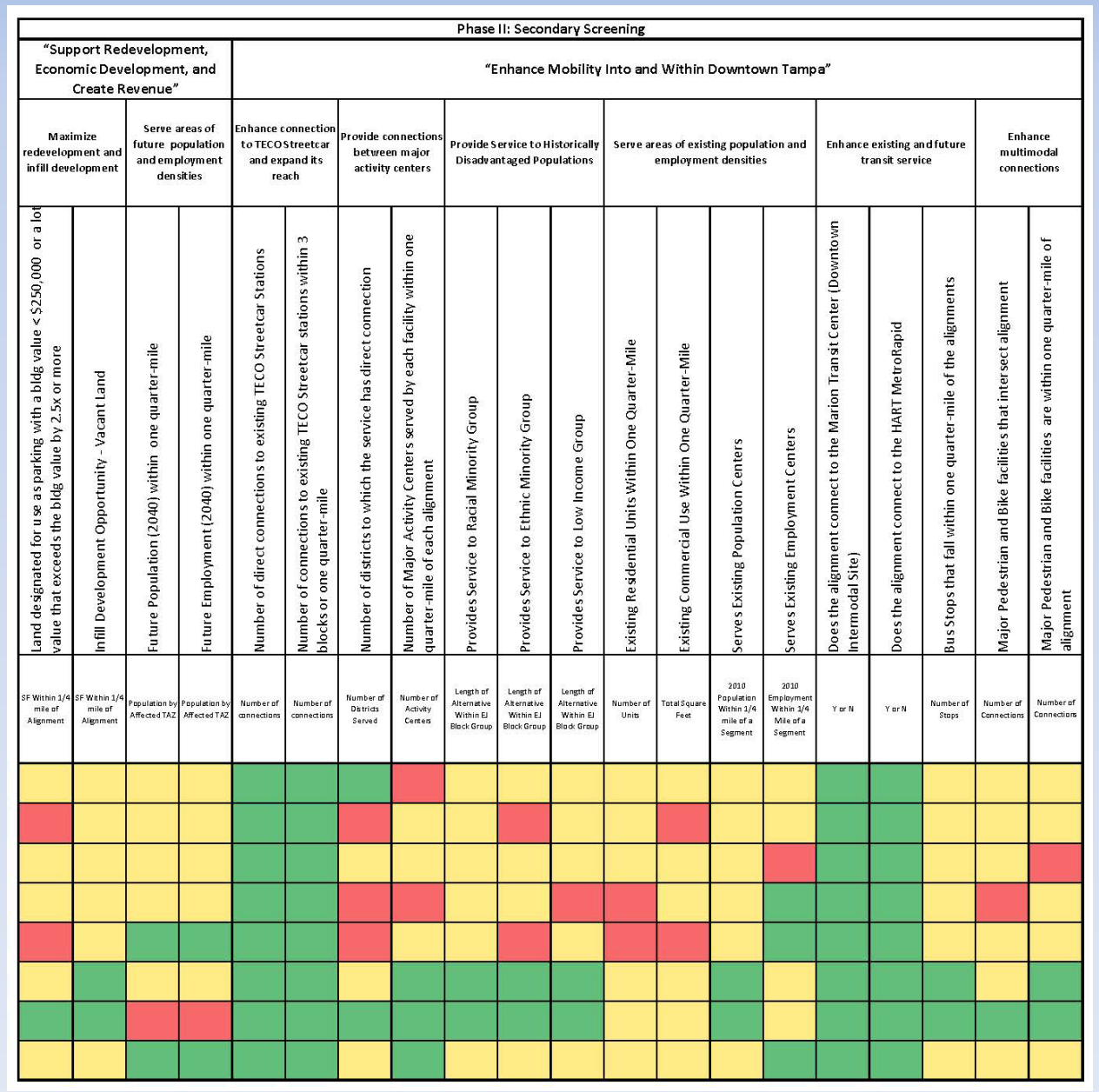
Evaluation of Alternatives Results

		Phase I: Initial Screening													
		"Establish a technically feasible and cost effective transit system"										"Maximize System Flexibility and Utilization of Assets"			
		Geometric Analysis		Reduce CSX liability	Potential for Sociocultural Impacts					Potential for Natural Feature Impacts		Utilization of existing assets			Ability to expand through extensions
		Engineering constraints	Potentially significant impacts to ROW	Opportunity to avoid, minimize, or mitigate required liability insurance provisions	Potential to Have a Negative Effect on a Historic District or Resource Group	Potential to Have a Negative Effect on a Historic Structure	Potential to Have a Negative Effect on a Historic Bridge	Potential to Have a Negative Effect on a Historic Cemetery	Potential to Have a Negative Effect on a Park	Potential to Have a Negative Effect on a Wetland	Potential to Have a Negative Effect on a Floodplain	Percent of the alignment that utilizes dedicated transit envelope (Marion St. or I-275)	Percent of the alignment that utilizes an existing CSX corridor	Percent of the alignment that utilizes existing streetcar corridor	Does the alignment either enhance, limit, or have no effect on the development of other rail alternatives
System	Description	Low, Medium, High, Fatal	Low, Medium, High	Avoid, Minimize, Mitigate, or none	Length of the Segment that passes through a Resource Group	Number of Structures Within 100 Feet	Number of Bridges Within 100 Feet	Number of Cemeteries Within 100 Feet	Number of Parks Impacted	Length of Segment in Wetland	Length of Segment in Floodplain	Percent of the alignment that utilizes dedicated transit envelope	Percent of the alignment that utilizes an existing CSX corridor	Percent of the alignment that utilizes existing streetcar corridor	Enhance, Limit, No Effect
1	I-275 Light Rail with Streetcar														
2	I-275/CSX Light Rail with Streetcar														
3	Cypress/I-275/Streetcar Light Rail														
4	I-275/Laurel/Streetcar Light Rail														
5	Cypress/I-275 Light Rail-CSX DMU														
6	Cypress/I-275/Florida Streetcar - CSX DMU														
7	Main/I-275/Central Streetcar - CSX DMU														
8	I-275/Streetcar Light Rail														

URS

MPO Metropolitan Planning Organization for Transportation

Evaluation of Alternatives Results



Phase II: Secondary Screening																					
"Support Redevelopment, Economic Development, and Create Revenue"				"Enhance Mobility Into and Within Downtown Tampa"																	
Maximize redevelopment and infill development		Serve areas of future population and employment densities		Enhance connection to TECO Streetcar and expand its reach		Provide connections between major activity centers		Provide Service to Historically Disadvantaged Populations			Serve areas of existing population and employment densities				Enhance existing and future transit service			Enhance multimodal connections	
Land designated for use as parking with a bldg value < $250,000 or a lot value that exceeds the bldg value by 2.5x or more	Infill Development Opportunity - Vacant Land	Future Population (2040) within one quarter-mile	Future Employment (2040) within one quarter-mile	Number of direct connections to existing TECO Streetcar Stations	Number of connections to existing TECO Streetcar stations within 3 blocks or one quarter-mile	Number of districts to which the service has direct connection	Number of Major Activity Centers served by each facility within one quarter-mile of each alignment	Provides Service to Racial Minority Group	Provides Service to Ethnic Minority Group	Provides Service to Low Income Group	Existing Residential Units Within One Quarter-Mile	Existing Commercial Use Within One Quarter-Mile	Serves Existing Population Centers	Serves Existing Employment Centers	Does the alignment connect to the Marion Transit Center (Downtown Intermodal Site)	Does the alignment connect to the HART MetroRapid	Bus Stops that fall within one quarter-mile of the alignments	Major Pedestrian and Bike facilities that intersect alignment	Major Pedestrian and Bike facilities are within one quarter-mile of alignment
SF Within 1/4 mile of Alignment	SF Within 1/4 mile of Alignment	Population by Affected TAZ	Population by Affected TAZ	Number of connections	Number of connections	Number of Districts Served	Number of Activity Centers	Length of Alternative Within EJ Block Group	Length of Alternative Within EJ Block Group	Length of Alternative Within EJ Block Group	Number of Units	Total Square Feet	2010 Population Within 1/4 mile of a Segment	2010 Employment Within 1/4 Mile of a Segment	Y or N	Y or N	Number of Stops	Number of Connections	Number of Connections

URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Evaluation of Alternatives Results

Alt	Technical Ranking	Systems Cost	
	Total Score	Capital Costs	O&M Costs
1	33	$1.5 - $2.0 B	$28.6 - $34.4 M
2	33	$1.0 - $1.3 B	$25.6 - $30.7 M
3	40	$1.5 - $2.0 B	$31.7 - $38.0 M
4	38	$1.5 - $2.0 B	$31.7 - $38.0 M
5	42	$800 M - $1.0 B	$16.1 - $19.3 M
6	47	$1.0 - $1.3 B	$14.1 - $16.9 M
7	43	$1.0 - $1.3 B	$14.1 - $16.9 M
8	44	$1.6 - $2.0 B	$34.7 - $41.7 M

URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Break Out Session

4 Discussion Topics

12-15 minutes each

Break Out Session Discussion #1

How would your group rank the top 3 proposed alternatives? Why?

Break Out Session Discussion #2

How would your group “hybridize” any of the proposed alternatives?

Break Out Session Discussion #3

What are the 3 most important factors in the Phase 2 – Secondary Screening?

Are there any other?

Break Out Session Discussion #4

Based on your group's ranking of the rail alternatives would you suggest any changes to the rubber wheeled circulator?

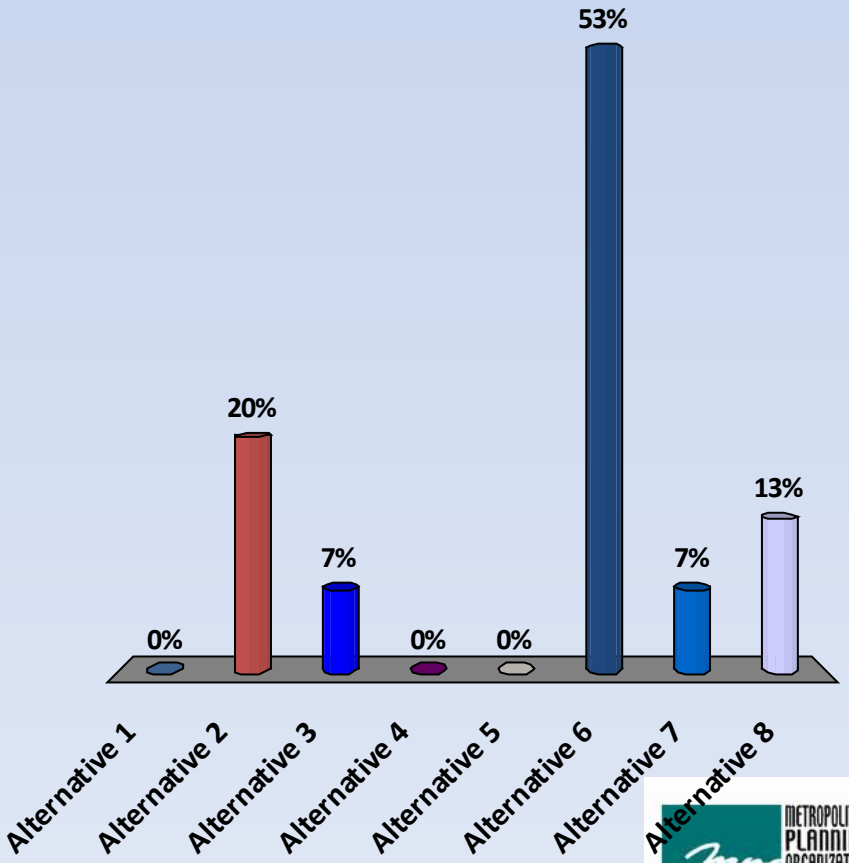
Break Out Conclusions

URS

MPO METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question #4
Which alterative should be moved forward?

A. Alternative 1
B. Alternative 2
C. Alternative 3
D. Alternative 4
E. Alternative 5
F. Alternative 6
G. Alternative 7
H. Alternative 8



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question #5
Pick 3 modes that should be moved forward for further study.

A. Commuter Rail DMU

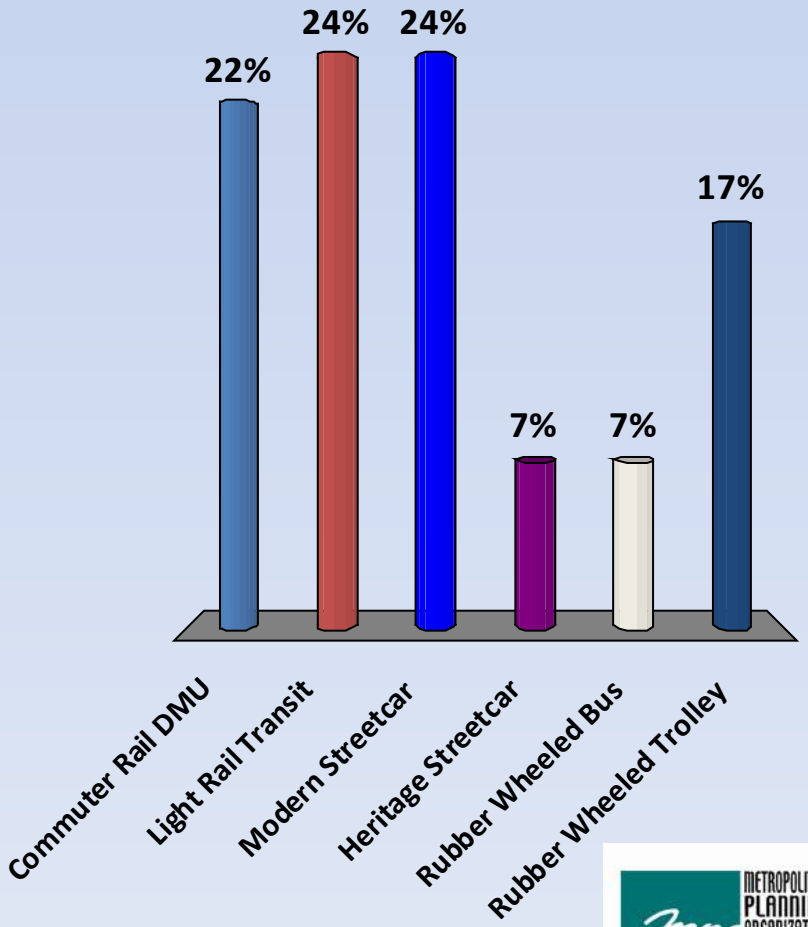
B. Light Rail Transit

C. Modern Streetcar

D. Heritage Streetcar

E. Rubber Wheeled Bus

F. Rubber Wheeled Trolley



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

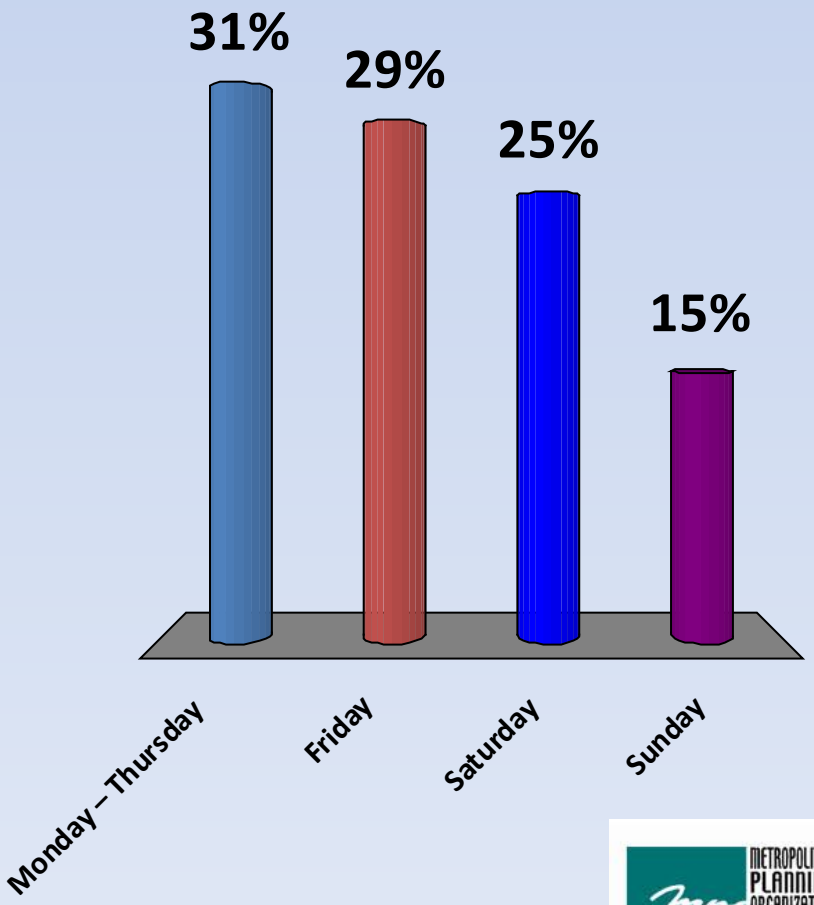
Question #6
Rank the days of the week you would use the system.

A. Monday – Thursday

B. Friday

C. Saturday

D. Sunday



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question 7
Rank the times of day you would use the system.

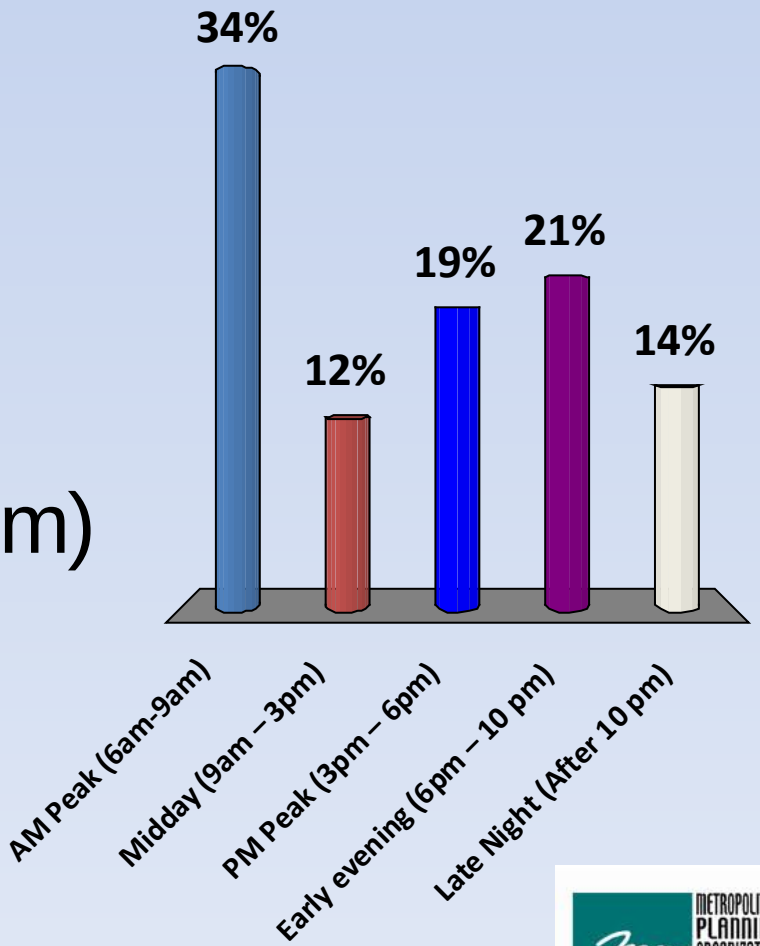
A. AM Peak (6am-9am)

B. Midday (9am – 3pm)

C. PM Peak (3pm – 6pm)

D. Early evening (6pm – 10 pm)

E. Late Night (After 10 pm)



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Question #8
From these trip types, rank your top 5 trips that you would use the system for.

A. Commute (work and home trips)

B. Access Other Transportation (i.e. Airport / Bus / Rail)

C. Attend a Meeting

D. Run an Errand (Post Office / Bank)

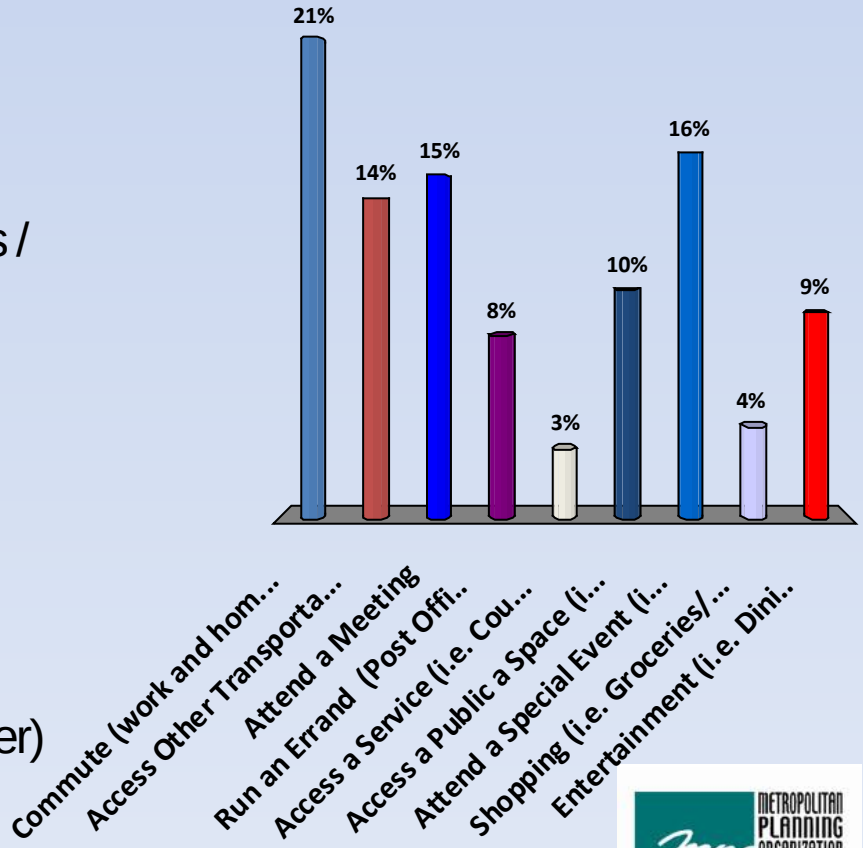
E. Access a Service (i.e. County and City Services / Courts)

F. Access a Public a Space (i.e. Riverwalk/Art Museum/Park)

G. Attend a Special Event (i.e. Hockey Game/Festival/Concert)

H. Shopping (i.e. Groceries/Clothing/Other goods)

I. Entertainment (i.e. Dining Out/Go To Bar/Theater)



URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION

Next Steps

- Consider input from today
- Public Meetings
- Continued coordination with City, HART and other agencies
- Determine Preferred Alternative(s)
- Present Projects to the MPO and HART for inclusion in the LRTP and TDP
- Finalize Report

URS

METROPOLITAN PLANNING ORGANIZATION FOR TRANSPORTATION