1. What are the projects to be built?

2. How is it funded?

3. Who is responsible for building and maintaining it?
PLAN PURPOSE

- Define and validate a **regional transit vision**.
- Identify a **catalyst** that begins building the vision.
- Identify a **catalyst** that has the **greatest potential to be built** (compete for state and federal grants).
THE PLAN IS NOT

- Another study for the shelf
- A replacement for the Long Range Transportation Plan or a Transit Development Plan

THE CATALYST IS NOT

- A replacement for future transit projects
- The only transit recommendation for Tampa Bay
REGIONAL TRANSIT VISION

The top performers and critical regional connections would serve the following within ½ mile of each connection by 2040:

- Serves approx. 6 in 10 jobs (2040)
- Serves approx. 5 in 10 residents (2040)
- Serves approx. 2,100 jobs per mile (2040)
- Serves approx. 3,000 residents per mile (2040)
- Serves approx. 6 in 10 residents without cars (2040)

VISION - STEP 1 RESULTS
CHOOSING MODES
Understanding the travel needs of riders along and near each of the top connections illustrates which modes best serve that need.

Ferry and Aerial Propelled Transit

Steel Wheel or Rail Transit

Rubber Tire Rapid Transit
STEP 3 EVALUATION: FIVE ALTERNATIVES

- I-275 Rubber Tire
- I-275 Urban Rail
- CSX Rubber Tire
- CSX Urban Rail
- CSX Commuter Rail

2017 LAND USE
- Employment
- Population density

2017 MOBILITY AND CONGESTION
- New riders
- Annual ridership

2017 ENVIRONMENTAL BENEFITS

2017 COST EFFECTIVENESS
### Step 3: Evaluation Results

<table>
<thead>
<tr>
<th>FTA Cost Effectiveness (New Starts Medium Rating)</th>
<th>$10 or Better</th>
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</thead>
<tbody>
<tr>
<td><strong>2017 Total Project Capital</strong></td>
<td><strong>2017 Cost per Trip</strong></td>
</tr>
<tr>
<td>I-275 Rubber Tire</td>
<td>$2.3B - $2.9B</td>
</tr>
<tr>
<td>I-275 Urban Rail</td>
<td>$3.9B - $5.1B</td>
</tr>
<tr>
<td>CSX Rubber Tire</td>
<td>$340M - $420M</td>
</tr>
<tr>
<td>CSX Urban Rail</td>
<td>$800M - $1B</td>
</tr>
<tr>
<td>CSX Commuter Rail</td>
<td>$520M - $650M</td>
</tr>
</tbody>
</table>

Not Final Recommendations

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.
How much capital investment does the ridership support?

\[
\text{COST PER TRIP} = \frac{\text{Annual capital + operations}}{\text{Annual ridership}}
\]
PROJECT CONCEPT: I-275 RUBBER TIRE
WESLEY CHAPEL TO ST. PETERSBURG

- Combination of dedicated transit lane and mixed traffic operations
- NO RIGHT-OF-WAY NEEDED (except stations)
- 21 stations (19 at-grade/street level, 2 elevated)
- 80-95 minutes to travel from Wesley Chapel to St. Petersburg
PROJECT CONCEPT: I-275 RUBBER TIRE
ST PETERSBURG TO GREATER GATEWAY AREA

Stations:
- 4th Street
- 8th Street
- Tropicana Field
- 27th Ave
- 62nd Ave
- Gateway
- Carillon

Dedicated transit lane on shoulder

Connect with PSTA Central Avenue BRT and use same lane
PROJECT CONCEPT: I-275 RUBBER TIRE HOWARD FRANKLAND BRIDGE

Use planned improvement for bridge, significant transit project cost reduction.
PROJECT CONCEPT: I-275 RUBBER TIRE
AIRPORT AND WESTSHORE

Direct connection to airport using planned SR 60 improvements

Connection to Westshore Intermodal Center
**PROJECT CONCEPT: I-275 RUBBER TIRE**

**WESTSHORE TO TAMPA**

**Elevated Stations:**
- Westshore
- Howard - Armenia

**Street Level Stations:**
- Himes
- North Blvd.
- Tampa

Use preserved transit corridor for median running dedicated transit lane
Opportunity to make Floribraska a transit only access point to interstate

Connects with and could share a dedicated lane with City of Tampa Streetcar Extension

Dedicate a transit lane on Tampa and Florida
PROJECT CONCEPT: I-275 RUBBER TIRE
TAMPA TO WESLEY CHAPEL

Dedicated transit lane on shoulder

Connects with Vision 54/56

Opportunity to continue dedicated transit lane on Tampa and Florida

VALUE ENGINEERING
PROJECT CONCEPT: I-275 RUBBER TIRE
TAMPA TO WESLEY CHAPEL

Stations:
- Downtown Tampa
- Floribraska
- MLK
- Hillsborough
- Waters
- Fowler
- Fletcher
- Bearss
- SR 56
- SR 54

Regional Transit Feasibility Plan
www.TBRegionalTransit.com
VALUE ENGINEERING
## Project Concept: I-275 Rubber Tire

### Shoulder Running Dedicated Transit Lane

Serves three counties

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-275 End to End Median Running Rubber Tire</td>
<td>$2.3B - $2.9B</td>
</tr>
<tr>
<td>I-275 Shoulder Running Concept</td>
<td>$1.3B - $1.6B</td>
</tr>
<tr>
<td>I-275 Shoulder Running Concept Integrated with Future Interstate Modernization Plans</td>
<td>$380M - $455M</td>
</tr>
</tbody>
</table>

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.


Source: Las Vegas, MAX BRT, Wikipedia

Value Engineering

Regional Transit Feasibility Plan
A Route Map to Implementation

www.TBRegionalTransit.com
PROJECT CONCEPT: I-275 RUBBER TIRE

2017 CAPITAL COST BREAKDOWN

$188M-$227M
FEDERAL CAPITAL
(FTA Capital Investment Grant Program)

$94M-$114M
LOCAL CAPITAL

$94M-$114M
STATE CAPITAL
(match of local share)

$7M
LOCAL ANNUAL OPERATIONS AND MAINTENENCE

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.
PROJECT CONCEPT: **CSX URBAN RAIL**
DOWNTOWN TAMPA TO USF

Electric/Diesel Multiple Unit

Stations:
- Tampa
- 21st Street
- MLK
- Hillsborough
- Waters
- Fowler

_Germany_ (Courtesy of Idenbild)
_New Jersey_ (uploaded: wikimedia.org/;edited by cwm - commons.wikimedia.org/hlm)
_Texas_ (by Michael Burren, CC BYSA 4.0, https://commons.wikimedia.org)
**PROJECT CONCEPT: CSX URBAN RAIL**

**ELECTRIC/DIESEL MULTIPLE UNIT**

Uses existing freight rail corridor

<table>
<thead>
<tr>
<th>COST</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOUBLE TRACKED URBAN RAIL</strong></td>
<td><strong>$800M - $1B</strong></td>
</tr>
<tr>
<td><strong>EMU/DMU URBAN RAIL SINGLE TRACK WITH SIDINGS</strong></td>
<td><strong>$490M - $620M</strong></td>
</tr>
</tbody>
</table>

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.
PROJECT CONCEPT: CSX URBAN RAIL

2017 CAPITAL COST BREAKDOWN

$245M-$311M
FEDERAL CAPITAL
(FTA Capital Investment Grant Program)

$123M-$155M
LOCAL CAPITAL

$123M-$155M
STATE CAPITAL
(match of local share)

$12M
LOCAL ANNUAL OPERATIONS AND MAINTENENCE

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.

VALUE ENGINEERING

www.TBRegionalTransit.com
CATALYST
# CATALYST: RECOMMENDATION

<table>
<thead>
<tr>
<th></th>
<th>I-275 Shoulder Running Rubber Tire</th>
<th>CSX Urban Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive for Federal &amp; State Funds</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Cost Per Trip</td>
<td>$8-$10</td>
<td>$11-$13</td>
</tr>
<tr>
<td>Total Capital Cost</td>
<td>$380M - $455M</td>
<td>$490M - $620M</td>
</tr>
<tr>
<td>Right-of-Way Needed</td>
<td>NO (Except for Stations)</td>
<td>YES (CSX Corridor)</td>
</tr>
<tr>
<td>Time to Construct</td>
<td>~5 YRS*</td>
<td>~10 YRS**</td>
</tr>
</tbody>
</table>

*NOTE: Would be impacted by interstate modernization plans

**NOTE: Would require negotiations with CSX

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.
### Catalyst: Recommendation

<table>
<thead>
<tr>
<th></th>
<th>I-275 Shoulder Running Rubber Tire</th>
<th>CSX Urban Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>41 miles, 3 counties</td>
<td>9 miles, 1 county</td>
</tr>
<tr>
<td><strong>2017 Capital Cost</strong></td>
<td>$9.3M - $11.1M per mile</td>
<td>$54.4M - $68.9M per mile</td>
</tr>
<tr>
<td><strong>Annual Local Operations &amp; Maint.</strong></td>
<td>$7M</td>
<td>$12M</td>
</tr>
<tr>
<td><strong>2017 Jobs</strong> (Jobs within ½ mile of project)</td>
<td>83,500</td>
<td>42,300</td>
</tr>
<tr>
<td><strong>2017 Population</strong> (Households within ½ mile of project)</td>
<td>65,000</td>
<td>34,800</td>
</tr>
</tbody>
</table>

Estimates are calculated in 2017 dollars and do not include inflation or financing. These are planning level cost estimates that are subject to change as the project moves towards implementation.
CATALYST: RECOMMENDATION

GOLD STANDARD, PREMIUM SERVICE ASPIRATIONS

Source: Las Vegas MAX BRT, EricWeber-flickr
CATALYST: **RECOMMENDATION**

AS FAST AS A TRAIN

Source: Metz, France METTIS BRT system, Wikipedia user Occitandu34
CATALYST: RECOMMENDATION

BYPASSES CONGESTION
CATALYST: RECOMMENDATION

INVEST IN STATIONS

Source: Orange Line Minneapolis Lake Station Concept
CATALYST: RECOMMENDATION

INVEST IN THE FUTURE

Source: 2GetThere
CATALYST: RECOMMENDATION

SUPPORTS AND NEEDS SUPPORT FROM LOCAL SERVICES AND PLANS

- PSTA Central Avenue BRT
- City of Tampa Streetcar Extension and Modernization
- USF and Westshore Circulators
- Wesley Chapel, USF, Tampa, Westshore, Gateway, and St. Petersburg Intermodal Centers Study
SCHEDULE

- Community vetting of Draft Plan  
  Spring/Summer ‘18

- Incorporate public comment to finalize Plan  
  Summer/Fall ‘18
STEP 3: EVALUATION RESULTS

2017 TOTAL AND NEW RIDERS ANNUALLY

Using FTA STOPS model by mode
(Source: FTA STOPS model, total ridership weighted per FTA guidance)

- **RUBBER TIRE**
  - Total: 3.6M
  - New: 1.3M

- **URBAN RAIL**
  - Total: 5.6M
  - New: 2.6M

- **RUBBER TIRE**
  - Total: 3.3M
  - New: 1.5M

- **COMMUTER RAIL**
  - Total: 1.9M
  - New: 0.9M

I-275
Not Final Recommendations

CSX

STEP 3
STEP 3: EVALUATION RESULTS

TRAVEL TIME
Assumes service arrives every 15 minutes during peak commuter periods

<table>
<thead>
<tr>
<th>Route</th>
<th>Distance</th>
<th>Travel Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-275</td>
<td>41 miles</td>
<td>80 mins</td>
</tr>
<tr>
<td></td>
<td>Median stations</td>
<td></td>
</tr>
<tr>
<td>I-275 from Wesley Chapel to St. Petersburg</td>
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</tr>
<tr>
<td>CSX</td>
<td>9 miles</td>
<td>15 mins</td>
</tr>
<tr>
<td></td>
<td>CSX from USF to Tampa</td>
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<tr>
<td></td>
<td></td>
<td>20 mins</td>
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</tbody>
</table>

Not Final Recommendations

RUBBER TIRE
URBAN RAIL
COMMUTER RAIL

15min 30min 45min 60min 75min

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STEP 3
STEP 3: EVALUATION RESULTS

2017 GROSS PROJECT BENEFITS ANNUALLY (ROI):

Using FTA STOPS model by mode
(Source: FTA STOPS model and VMT Reduction as a result of the project, does not include impact of project)

- I-275
  - RubberTire: $4.4M
  - Urban Rail: $5.8M

- CSX
  - RubberTire: $0.9M
  - Urban Rail: $2.1M
  - Commuter Rail: $1.3M

EMMISIONS
ENERGY USE
GREEN HOUSE GAS
CRASHES/INJURIES

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**STEP 3: EVALUATION RESULTS**

**2017 EMPLOYMENT:**
Total employees within ½ mile of corridor
(Per FTA guidance)

- I-275: 83.5K
- CSX: 42.3K

**2017 POPULATION DENSITY:**
Station area population density
(persons/sq mi)

- I-275: 4.5K
- CSX: 6K
PUBLIC INVOLVEMENT SCHEDULE

YEAR 2

PUBLIC INVOLVEMENT

<table>
<thead>
<tr>
<th>Public Involvement</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
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<td>Website*</td>
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<td>Regional Transit Forums*</td>
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COMMITTEE/BORAD UPDATES

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<th>Committee/Borad Updates</th>
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<tbody>
<tr>
<td>HART Board*</td>
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<td>TMA Leadership Group*</td>
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<td>TBARTA Board*</td>
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<td>Partner Agency Boards*</td>
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* Public comment opportunity

Draft – subject to change