Transportation Visions of Tomorrow
Why are we doing this presentation?

Megatrends
Survival
Sustainability
Scale
The big picture
The local picture
The human picture
All one picture
Our Community Need

- **In the past 3 decades…**
  - Population has doubled
  - Employment has tripled
  - Nearly 50 percent of our developable land has been built out
  - Delay in our commute time has more than doubled
- **By 2050…**
  - Traffic congestion is expected to triple
- **Our transportation system is the foundation for our desired quality of life.**

“Plan for the future because that’s where you are going to spend the rest of your life.” – Mark Twain
Our region competes with other cities for economic growth and jobs.

Transportation was named the \textbf{#1 issue} affecting the region’s economic competitiveness, in surveys conducted by the not-for-profit Tampa Bay Partnership.
A Regional Approach

• Seamless Travel
• Leverage for Federal and State Dollars
  • Planning our transportation system on a regional level and speaking with one voice will increase our chances for securing funding.
• Competitive Advantage
  • Our region’s ability to maintain and expand economic competitiveness is affected by the quality of our transportation connections.
• TBARTA – A Regional Approach
What is TBARTA?

- Created by state legislation on July 1st, 2007
- **Capabilities**: plan, develop, finance, construct, own, purchase, operate, maintain, relocate, equip, repair, and manage multimodal transportation systems
- **Purpose**: Improve mobility and expand multimodal transportation options for passengers and freight throughout the seven-county region.
TBARTA Partners

- TBARTA Counties
- TBARTA Cities
- Metropolitan Planning Organizations
- Transit Management Committee
- Citizens Advisory Committee
- Land Use Working Group
Creating the Master Plan

• Questions we explored in developing the Master Plan:
  • Where are you going to and from?
  • Which routes make the best connections for regional travel?
  • What is the best type of transportation improvement?
  • How do we ensure consistency and help advance local efforts?
    • For example:
      • Hillsborough Rail Plan
      • Sarasota Bus Rapid Transit
A Balanced, Multimodal System

Technologies Included in Regional Networks

- Short-Distance Bus
- Long-Distance Bus
- Managed Lanes
- Short-Distance Rail
- Long-Distance Rail
What is Short-Distance Bus?

- **What is it?**
  - Frequent service with a limited number of stops
  - Can travel in mixed traffic or in lanes dedicated to transit use only

- **What are some examples?**
  - Limited Stop Service
  - Bus Rapid Transit (BRT)

- **How far apart are the stations?**
  - 2 to 4 blocks in urban areas
  - ½ mile to 3 miles in suburban

- **How often does a vehicle come?**
  - Peak time ~ every 10 to 20 minutes
  - Non-peak time ~ 30 to 60 minutes

- **What is the average speed with stops?**
  - 15 to 20 MPH
What is Long-Distance Bus?

- **What is it?**
  - Peak-hour focused service with very limited stops
  - Can travel in mixed traffic or in lanes dedicated to transit use only

- **What are some examples?**
  - Express Bus

- **How far apart are the stations?**
  - Varies (can be as much as 5 to 20 miles between stations)

- **How often does a vehicle come?**
  - Peak time ~ every 20 to 60 minutes
  - Non-peak time ~ 30 to 60 minutes

- **What is the average speed with stops?**
  - 25 to 45 MPH
What is Managed Lanes?

• **What is it?**
  • Special lanes on highways & roadways
  • For use by transit vehicles or carpools
  • Also for use with tolls for other vehicles

• **What are some examples?**
  • High-Occupancy Vehicle (HOV) Lanes
  • High-Occupancy Tolls (HOT) Lanes

• **What is the average speed?**
  • 60-65 MPH
What is Short-Distance Rail?

• **What is it?**
  • Frequent service
  • Multiple stops
  • Customarily located in urban areas
  • Vehicles can operate in mixed traffic or separate right-of-way

• **What are some examples?**
  • Light Rail
  • Heavy Rail
  • Streetcar or Trolley
  • Monorail
  • Automated Guideway

• **How far apart are the stations?**
  • ½ mile to 1 mile apart

• **How often does a vehicle come?**
  • Peak times ~ every 10 minutes or less
  • Non-peak ~ 15 to 30 minutes

• **What is the average speed with stops?**
  • 15 to 25 MPH
What is Long-Distance Rail?

• **What is it?**
  • Rail service with fewer stops
  • Intended for peak hour-focused commuter travel

• **What are some examples?**
  • Traditional Locomotive
  • Diesel Multiple Unit
  • Electrical Multiple Unit

• **How far apart are the stations?**
  • 5 to 10 miles apart

• **How often does a vehicle come?**
  • Peak times ~ every 20 minutes
  • Non-peak ~ every 60 minutes

• **What is the average speed with stops?**
  • 30 MPH
Transportation systems and land use patterns influence each other.

A dispersed pattern of low-density development relies almost exclusively on cars as the primary mode for transportation.

Alternatively, denser urban centers can combine different land uses in closer proximity, to:

- encourage walking, biking, and transit
- provide choices
- make a transit system viable.
What did we consider when looking at regional needs?

- Employment Centers
- Population Centers
- Tourist Attractions
- Airports
- Regional Shopping
- Colleges/Universities
- Culture/Entertainment
- Major New Development
- Areas Incentivized for Redevelopment by State & Local Governments

- “Very Intense Cluster of Destinations”
- “Intense Cluster of Destinations”
- “Cluster of Destinations”
Land Use Working Group: Formation/Participants

- Regional Planning Councils were contacted:
  - Central Florida RPC (Polk)
  - Tampa Bay RPC (Hillsborough, Manatee, Pasco, Pinellas)
  - Southwest Florida RPC (Sarasota)
  - Withlacoochee RPC (Citrus, Hernando)

- Regional Planning Councils invited their County & Cities:
  - Planning, Current & Long Range
  - Transportation Planning
  - Economic Development
  - Economic Development Councils
  - Others on their distribution lists

- MPOs/TRT committee members, including Polk TPO

- 1000 Friends of Florida
- Sustainable Florida
- Nature Conservancy
- Sierra Club
- The Urban Charrette (AIA)
- SWFWMD
- Public School Districts-Facilities
- Colleges & Universities-Presidents
- Multifamily, Commercial, Industrial & Office Properties Associations
- Tampa Bay Estuary Program
- Urban Land Institute
- Home Builders of Tampa Bay
- Realtors
- Planning Consultants
- Developers
Land Use Working Group: Topics & Discussions

May-July 2008
- Growth Forecasts
- Regional Anchors
- One Bay Coordination

August-November 2008
- Transit Oriented Development (TOD) Scenarios
- Developer Panel on TOD

February 2009
- Citizen Panel on the Transportation-Land Use Connection
- FTA New Starts Land Use Criteria
- Relationship between TBARTA & Land Use Planning Agencies

May 2009
- National TOD Success Stories – Charlotte & Denver

July-October 2009
- TOD Toolbox/Resource Guide
Transit Oriented Development (TOD)

Compact, mixed use development
- Near new or existing public transportation infrastructure
- Serves housing, transportation, and neighborhood goals

Pedestrian-oriented design
- Encourages residents and workers to drive their cars less and ride transit more
TBARTA Public Engagement Summary

- **549+ TBARTA Events**
  - Speakers Bureau Presentations
  - Community & Online Workshops
  - iTownHall Meetings
  - Special Events and Displays

- **51,000+ Total Attendees**

- **590+ Total TBARTA Related Articles Published**

- **55,796+ Total TBARTA Web Site Visits** (~ 78 visits per day)

- **Follow TBARTA on Twitter**
  [http://twitter.com/TBARTA](http://twitter.com/TBARTA)

- **Become a Fan on Facebook**
  [http://www.facebook.com](http://www.facebook.com)
Long-Term Network

- 135 miles Short-distance rail
- 115 miles of Long-Distance Rail
- 42 miles of BRT in Mixed Traffic
- 220 miles of Managed Lanes with Express Bus
- 217 miles of other Express Bus
Mid-Term Network

- **116 miles** Short-distance rail
- **12 miles** of BRT in Exclusive Lanes
- **42 miles** of BRT in Mixed Traffic
- **159 miles** of Managed Lanes with Express Bus
- **226 miles** of other Express Bus
Supporting Network

Magnitude of Service Expansion over 2007 Service
Investment in Our Future

• Cost of improving our infrastructure is high; what is the cost of not improving it?
• Projects will be prioritized and implemented over time

“The critical responsibility for the generation you’re in is to help provide for those generations who come behind.” – Gloria Dean Randle Scott, First African American President of the Girl Scouts
Real Dividends of Transportation Infrastructure

- **Quality of Life**
  - Improve mobility
  - Allow more free time
  - Save money
  - Provide choices
Real Dividends of Transportation Infrastructure

• **Boost to Economy**
  - Each dollar invested returns $5.84 to our economy, of which $4.79 stays in our region.

• **Creating Jobs**
  - Create an **annual average** of nearly 21,000 quality full-time jobs over the 40 years regionwide.
Real Dividends of Transportation Infrastructure

- **Environmental Benefits**
  - Reduce greenhouse gas emissions

- **Economic Development**
  - Transit can be a tool to influence our region’s growth patterns
    - Transit Oriented Development
    - Redevelopment
    - Minimize cost of providing utilities and other services
Transportation’s Impact on the Economy

- Charlotte has competed with Atlanta (a metropolis 3x its size) and won major employers such as GMAC Financial Services, in part because of its investment in light rail.

- In Dallas, transit has led to $3.7 billion in economic activity and created 32,000 new jobs.

- For every $1 invested in public transportation, $6 is generated in economic returns.
Thank You!

- **Website:** www.TBARTA.com
- **Info Line**
  813-217-4048 or 1-888-684-9461 (toll free)
- **Meeting Schedule:**
  - **Board** – December 11, 9:30am
    Florida Department of Transportation
    11201 N. McKinley Drive
    Tampa, FL 33612
  - **TMC** – November 18, 10:00am
    Pinellas Suncoast Transit Authority (PSTA)
    3201 Scherer Drive
    St. Petersburg, FL
  - **CAC** – November 18, 1:30pm
    USF Connect Building
    3802 Spectrum Blvd.
    Tampa, FL 33612
COMMUNITIES OF TODAY
VISIONS OF TOMORROW

Part 2 –
Michael English, AICP
Vice President
WilsonMiller, Inc.

Florida Redevelopment Association’s Annual Conference
October 28-30, 2009 • Orlando Hilton I Drive
Streetcar Systems as Urban Circulators

Michael English, AICP
Vice President, WilsonMiller, Inc.
Vice President, Tampa Historic Streetcar, Inc.
Tampa, FL
Tampa’s Streetcar Development
1984 - 2009

- Streetcar Society
- HART initiative
- MPO funding
- Mayoral Funding Commitment
- Community Support
The Urban Center of the Regional Center

Downtown Tampa
TECOLine Streetcar System
Ybor City to the Channel District to Downtown

- 2.5 miles of track
- Extension underway
- Soon to be 2.875 m.
- 11 streetcars
- 7 day per week service
- $2.3 million operating budget
- Opened 2002
- Birney replica cars
Connecting Urban Districts
Ybor City - Channel District - Downtown

Connects the three major urban core neighborhoods:
• Ybor City
• Channel District
• Downtown Tampa

And multiple attractions and multiple CRAs
Centro Ybor

- Retail/entertainment/office complex in Ybor City Historic District
The Shoppes at Channelside
Retail – entertainment complex, cruise ship port south end of downtown
Nearly 60,000 employees, reinventing residential and retail, contains five museums (3 new), the St. Pete Times Forum, a new Riverwalk, five new parks and multiple other local attractors.
The streetcar system has been context sensitive in the design of its:

- Facilities
- Respecting Scale
- Tradition
- And Other Modes of Transportation
The streetcar Car Barn and Maintenance Facility in Ybor City was a 2003 Community Design Award Winner for its contextual Ybor City design, and is a state of the art facility. It is also houses HART’s administrative offices.
Design Awards
Tampa Streetcar System

Recognized for outstanding design of an industrial building in an historic district.
Southern Transportation Plaza, currently the downtown end of the line, was a 2004 Planning Commission Community Design Award winner.
- THS is a Not-for-Profit Board, separate from HART or City
- Currently 6 City Appointees, 3 HART Appointees
- Purpose - to manage, operate & maintain streetcar system, and provide operating funding and budget
- HART under contract to THS for operations
- Capital equipment owned by City or HART
Agreements

- 1998 Interlocal Agreement between City and HART
- 1998 THS Articles of Incorporation & By-Laws
- 2001 Tri-Party Agreement between City, HART and THS
- 2007 Interlocal Agreement for Extension
• Agreement to Build & Run the System
• Using Fed & State Grants plus City Funds to Construct
• Operations to be (uniquely) Funded by:
  – Farebox
  – Advertising/Naming Rights Revenue
  – Special Assessment District
  – Endowment Fund
• City or HART may adjust service to bring into line with available funding
• City must make up any shortfall
Ridership Meeting Projections
Tampa Streetcar System

- 440,000 riders in 2007
- 442,000 riders in 2008
- 464,000 riders in 2009
Nearly $1.5 billion in public and private investment along alignment.

- 1,200 riders per day
- 2,500+ new housing units (new phenomena)
- Integral to City’s image (iconic)
- Integral to Port’s cruise industry image
- Invaluable to Special Events, conferences
- Appears in all city/visitors promotional literature
Economic Development
Streetcar Corridor

- T.O.D. begins!
- New private developments are attracted to the proximity of the 2.5 mile TECO Line Streetcar System
- New housing and mixed use predominates in transitioning our urban setting into the future
- Hampton Inn Hotel at Ybor City (Historic District hotel located facing the streetcar car barn)
- Grand Central at Kennedy (412 units, mixed-use)
- The Place at Channelside (227 units, retail/dedicated art studios)
- Towers at Channelside (269 units, 30 story twin towers, mixed-use)
- Downtown Channelside (250 units, 30 story, retail)
- Victory Lofts (89 units)
- Seaboard Square (387 units, mixed use)
- Seaport Village (680 units, rental apts)
- Ventana (84 units, 11 story, retail)
- Cobalt (280 units, 8 story)
- Meridian (37 units, 6 story)
- Lafayette Lofts (30 units, 6 story)
- Embassy Suites Hotel (400 suites, 300 rooms)
Ybor Development Projects
Streetcar Corridor

Ybor Development Projects

- Ybor Village Lofts: 6 condo units
- Ybor Village Lofts II: 12 condo units
- Villas at 5th Avenue: 29 condo units
- Ybor Citi Lofts: 13 townhomes
- Gallofts: 5 townhomes
- Residential Infill: 7+ condo units
- 11 - 13 townhomes
- Las Ybor City Homes: 12 condo units w/retail
- Casa Las: 6 detached homes
- Offices
- Residential lofts: 49 units
- Ybor Past Office
- Ybor Hampton Inn
- Les Casitas
- McDonald's
- The Children's Board
- The Yellow House office
- Ybor Arts Center
- Three Townhomes
- Fourteen Townhomes
- Commercial Retail Project
- Lotus Ultra Lounge
- Taverna Opa Restaurant
- Heidt & Assoc. Offices
- Wilson Miller Offices

Legend:
- **Completed**
- **Under Construction**
- **Entitled (in BLC process)**
- **Planned**
New Development
Channel District

Towers at Channelside  Victory Lofts  Grand Central  The Place

Streetcar Line

Channel District Development Overview
The Future

- Future extensions will create loop and stimulate more redevelopment
- Projected growth of residents, retail, & office uses will create new (and different) demand for streetcar service
- Mission of the streetcar system will evolve from its current mission of primarily serving visitors into a modern urban center transit system
- Will remove short trips from cars
- Demand for more service may justify modern trams, double-tracking
First Extension
Tampa Streetcar System

0.35 mile extension from Southern Transportation Plaza to downtown core.
- Design 2008
- Construct 2009-10
- Open 2010
Future Expansion
Tampa Streetcar System

• System will encourage new development opportunities

• Future extensions will reach the north end of downtown, Tampa Heights, and connect back to Ybor City.
# Capital Funding Program

<table>
<thead>
<tr>
<th>Funding Program</th>
<th>Funding Amount</th>
<th>Detail</th>
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<tbody>
<tr>
<td>Surface Transportation Program</td>
<td>$1,400,000</td>
<td>FY 2008 funds not yet obligated in an approved grant</td>
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<tr>
<td>Federal Discretionary</td>
<td>$980,000</td>
<td>FY 2008 discretionary funds recently approved by Congress, not yet obligated in an approved FY 2008 funding originally programmed to Ybor city Streetcar Museum; not yet obligated in an approved grant</td>
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<tr>
<td>Surface Transportation Program</td>
<td>$2,000,000</td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>$4,380,000</td>
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<td>Major Funding Sources</td>
<td>FY2009</td>
<td>FY2008</td>
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<tr>
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</tr>
<tr>
<td>Fares</td>
<td>$646,210</td>
<td>$614,360</td>
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<td>Sp. Assessments</td>
<td>$600,040</td>
<td>$521,160</td>
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<td>Endowment</td>
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<td>$1,112,530</td>
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<td>HART – Grants</td>
<td>$300,000</td>
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<td>Port Authority</td>
<td>$150,000</td>
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<tr>
<td>City of Tampa-TIF</td>
<td>$150,000</td>
<td>$150,000</td>
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</table>
Major Funding Sources – FY 2008

- Fares, $614,360, 22%
- City of Tampa - TIF, $150,000, 5%
- Port Authority, $150,000, 5%
- HART - Grants, $300,000, 11%
- Endowment, $1,112,530, 39%
- Special Assessment, $521,160, 18%
Major Funding Sources – FY 2009

- City of Tampa - TIF, $150,000, 6%
- Fares, $646,210, 26%
- Port Authority, $150,000, 6%
- HART - Grants, $300,000, 12%
- Endowment, $601,800, 25%
- Special Assessment, $600,040, 25%
Extending the Tampa streetcar system is next step to light rail viability.

TBARTA and HART initiatives promise exciting changes for Tampa Bay area regional transit.
Cities planning new or existing system extensions:

- Albuquerque, NM
- Atlanta, GA
- Austin, TX
- Boise, ID
- Brooklyn, NY
- Cincinnati, OH
- Colorado Springs, CO
- Cripple Creek, CO
- Dayton, OH
- Detroit Belle Isle, MI
- Ft. Lauderdale, FL
- Ft. Worth, TX
- Galveston, TX
- Greeley, CO
- Indianapolis, IN
- Kenosha, WI
- Lowell, MA
- Los Angeles, CA
- Miami, FL
- Middleton, CT
Cities planning new systems or existing system extensions:

- Milwaukee, WI
- Myrtle Beach, SC
- New Orleans, LA
- Ogden, UT
- Orange County, CA
- Port of Los Angeles, CA
- Portland, OR
- Sacramento, CA
- Salt Lake, UT
- San Antonio, TX
Cities planning new systems or existing system extensions:

- Savannah, GA
- Seattle, WA
- Tacoma, WA
- Tampa, FL
- Tucson, AZ
- Wilmington, NC
Contact
Tampa Streetcar System

www.tecolinestreetcar.org
www.hartline.org
www.tbarta.com

MichaelEnglish@wilsonmiller.com
Part 3 – Angelo Rao, PE
Transportation for Livable Communities Manager
Volkert & Associates
Chapter One: A Personal Story

Angelo Rao, PE
My Hero: Giuseppe Rao (1913 – 2002)
Dad’s Motto: “Se non poso andare al piede o con il tram, non val’ andare”
Dad’s Motto: “If I can’t walk or take the streetcar to it, it isn’t worth going to”
Come In and Try on A Pair of Shoes
Balance
It’s Always About R/W!!
Probability of Pedestrian Fatality with Increasing SPEED

- 20 MPH: 15%
- 30 MPH: 45%
- 40 MPH: 85%
A City of 3,000,000 Mourns The Loss of One
Typical Operating Speeds On Many Major Arterials:
35 – 40 MPH
Can We Squeeze in Transit Along with Everything Else?
The Urban Roadway: use it!!
The Urban Roadway: use it!!

This is not a ppt error!!
30,000 vpd
Parking Lanes Too!
(Temporal Parking)
So Put On Those Shoes:

- Change the culture
- Think pedestrian first – there will always be room for the SOV
- Challenge the ROW folks
- Share the Road – Even if it really means sharing the road; and of course as McCartney said:

“Someone's knocking at the door so...Let ’em in”

.....And one more thing....
Please remember:

Life is like biking. You have to keep moving to stay in balance.
For more information:

Please contact:

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_Courtesy Promotes Safety: Please give pedestrians and bicyclists a brake!_