Savannah Riverfront Trolley Project Plans







Why Savannah?

6 Million annual visitors and many go to River Street

 River Street cobblestones inhibit walking the whole street

Narrow sidewalks limit ADA

access

 Businesses at both ends of street see fewer patrons

Limited parking





Why Savannah?



Issues Influencing Savannah Vehicle Selection

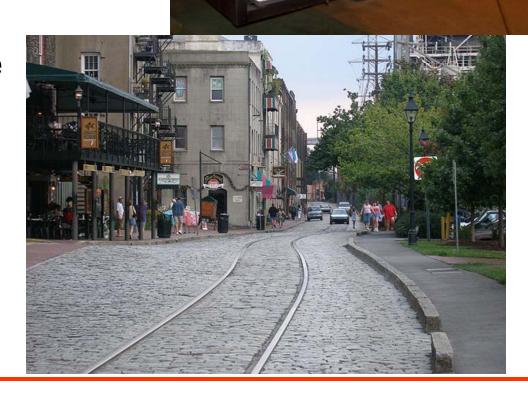
- Need to self power the car
- First cost / O&M cost
- ADA access
- Need for doubleended / double-sided cars
- Street congestion





Need to self power the car

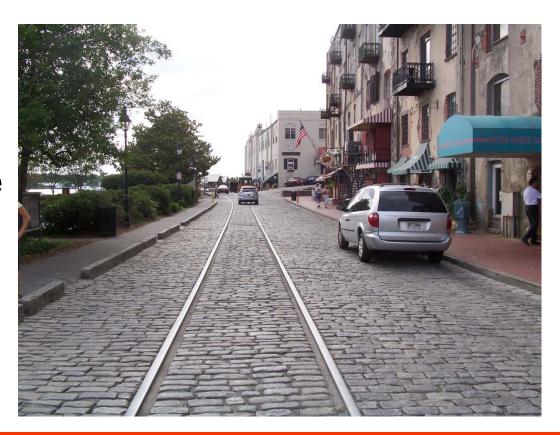
- This is a demonstration project
- Historically River
 Street never had wire
- You do not want to fight the Historical Review Commission, yet





Costs always matter

- New car would cost over a \$1 million
- Must be proven technology
- Must be maintainable in Savannah





ADA Access

- Car borne lift preferred due to River St. geometry
- Additional options employed in other cities:
 - Wayside Lift
 - Mini "High Block" platform
 - High Platform (level boarding)
 - Low Platform (level boarding)









Need for Double ended cars

- Remember: This is a demonstration project
- Therefore no infrastructure in the ground
- That means no loops also







Why the Melbourne Trolley

- We already owned it
- Manufactured in Melbourne, Australia Historic "real thing" 70 years old
- 8 ft. 6 in. wide, 47 ft long
- Now running in Seattle (6), San Francisco (1), San Jose (1), Memphis (10), Dallas (1)
- Double sided, double ended
- 44 seats, 44 standees
- ADA access with car-borne lift







Why Refurbished "PCC" Type Cars

- \$125,000 less corrosion repairs than other options
- Manufactured in US 1936-1952 to 30's art deco styling
- 8.5 9 ft. wide, 46 49 ft long
- Philadelphia, Boston, San Francisco still operating PCC fleets
- Light uni-body design is easy to rebuild and modify
- 45 seats, 50-70 standees

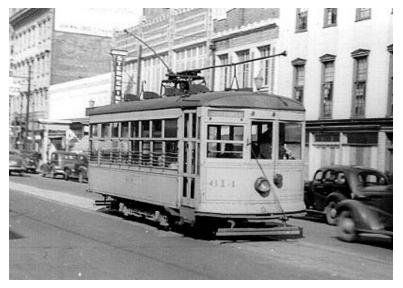






Why not a Restored Savannah Birney

- Three original Savannah carbodies available
- 7 ft. 8 in. wide, 28 ft long
- Double ended, but only one door per side
- 28-32 seats
- Small car, not well suited for ADA access, no room for generator/power system
- The "ceremonial" car







Why not St. Pat's Day?

- Third largest parade in America
- Second largest celebration
- Wall to wall imbibing celebrators







The Technology

- Goal: to be so quiet that our guest will not know how it is powered
- Low noise diesel generators
- Hospital grade mufflers
- AC 480v/DC 600v motor controllers
- Ultra-capacitors
- Regenerative braking







The Technology

- An "off the shelf" equipment kit
- Experience with industrial applications and railroading
- Belt drives are standard for rough industrial use









Street Improvements

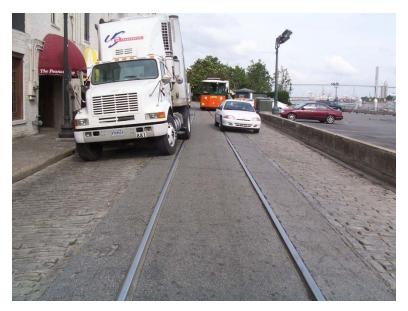
- Existing pavement problems need to be corrected
 - Minimize tripping hazards
 - Stabilize Belgium blocks
- Make sure of reliability
 - Correct any track issues before the streetcar runs
 - Vs stopping it to do repairs after
- Do no harm!
 - Work with merchants and contractors to get in, get done and get out





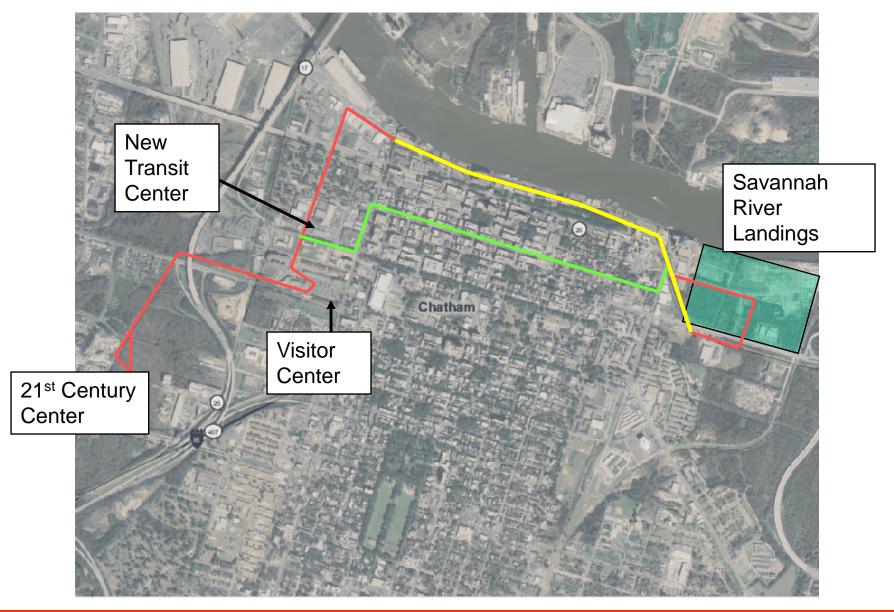
Traffic & Delivery Issues

- Track location issues
 - Track in middle of street
 - Traffic can not pass oncoming streetcar
- Merchant Issues
 - Truck deliveries can not be eliminated
 - Concern about eliminating one way traffic before it proves itself





Possible future





The Result

- A project that combines technology
- with the best of proven practices
- At much less cost, less than \$2 million for one mile
- And with practical application

