Center City Streetcar

Charlotte, North Carolina
Center City Streetcar Project

- Charlotte Area Transit System (CATS)
- 10 mile modern streetcar system
- Complements other lines in system
- 2013 Design → 2018 Operation
Project Case Studies

• Typical Aspects of Streetcar Mode
• Trade Street Lane Selection
• Lane Shift at Trade & Tryon
• Extension of “Road Diet”
• Elizabeth Avenue Partnership
Comfortable by Design

Operates with Traffic
Comfortable by Design

Small Scale Stations
Comfortable by Design

Curb Running

- Typical practice
- Stops integrate with sidewalk
- Loading/unloading conventional like bus
- Slower traffic keeps right
Trade Street Lane Selection

- Through Uptown
Trade Street Lane Selection

- Time controlled on-street parking
- Landscaped median
- Major utilities in curb lane
Trade Street Lane Selection

Comfortable Fit Would:

- Limit impact to on-street parking
- Hold existing curb line
- Maintain traffic lanes
- Minimize impact to underground utilities
Trade Street Lane Selection

Median Solution
Is the center lane the best fit for the Tryon Street intersection?
Lane Shift at Trade & Tryon

- Focal point of Charlotte
- Elaborate streetscaping and public art
- Intense sidewalk activity
Lane Shift at Trade & Tryon

Will It Center Running Work?

- Widen at station?
- Maintain traffic lanes?
- Visual impact?
Lane Shift at Trade & Tryon

Comfortable Fit Would:

• Have “invisible” stops
• Not alter curbs
• Not interfere with intersection
• Maintain traffic lanes
Extend “Road Diet”

Study Area

Existing Road Diet

Hawthorne Lane
Extend “Road Diet”

**Hawthorne Lane**

- Reduce number of traffic lanes (4 to 3)
- Already planned from Central Ave. to 7th St.
- Significant mature trees
- Residential, hospital, neighborhood retail, churches, park
Extend “Road Diet”

Comfortable Fit

- Preserves trees
- No adverse traffic impacts
- New opportunities for on-street parking
Elizabeth Avenue Project Acceleration

First ½ mile under construction
Elizabeth Avenue

Initial Streetscape Improvement Project

- Road diet
- Sidewalk enhancement
- Promote mixed-use redevelopment
- City sponsored (Economic Development)

Rendering Courtesy of HDR
Elizabeth Avenue

Grubb Properties Development

- Six block redevelopment
- Residential, commercial, office, medical
- Assembling property for last 10 yrs.
- Partnership with Novant Health
- Funded the undergrounding of overhead power lines

Rendering Courtesy of Grubb Properties
Elizabeth Avenue

Grubb Properties Development

Rendering Courtesy of Grubb Properties
Elizabeth Avenue

After
Elizabeth Avenue

Infrastructure Needed to Support Development

- Water line upgrades
- Signal upgrades
- Communication upgrades
- Sewer upgrades
Elizabeth Avenue

Streetcar Added to the Mix

- Track slab
- Lighting/OCS poles
- Curb layout anticipates station stop
Elizabeth Avenue

Comfortable Fit through Cooperation

- CPCC and City
- Grubb and City
- CATS and Duke Energy
- MOU within City Departments
- Municipal agreement with NCDOT – mast arms and streetscape elements
Elizabeth Avenue

Comfortable Fit through Cost Sharing

Project Funding

Total Capital Cost: $14 Million