Introduction

Howard G. Richards

- Profile:
  - Deputy Director, City of Birmingham Capital Projects Management Office for the Mayor
  - 20+ years experience in Management Consulting, Engineering, Construction, and Project and Program Management
  - Served in the public, private, and non-profit sectors including, Local & Metropolitan, Energy & Water Utilities, Telecommunications, & Manufacturing

- Areas of Expertise:
  - Operations Management, Project & Program Management, Business Process Reengineering, Capital Program Management,
    Information Systems & Technology, Performance Management, Infrastructure Asset Management, and Sustainability

- Credentials:
  - BSME, P.E., M.A., CFM

Key Projects:
- Global Crossing Metro City – $1B plus project for last mile fiber-optics buildout (FTTP) in all major US cities, including
  engineering, design, implementation, construction, commissioning
- Birmingham Water Work CIP – Responsibility for all annual capital improvements program (CIP), annual $90M
  including management of engineers and project managers staff, multiple vendors, and construction
- Currently serves as Project Manager for the City of Birmingham, Bus Rapid Transit (BRT) Project

The Brand...

"Connecting our neighborhoods to opportunities"

62nd Annual Alabama Transportation Conference
Presented by Howard G. Richards, P.E.
13 February 2019

The BRT Standard*

1. BRT Basics
2. Service Planning
3. Infrastructure
4. Stations
5. Communications

*Published by Institute for Transportation and Development Policy (ITDP)

2012 Comprehensive Plan

WHAT IS BRT?
LIGHT RAIL ON TIRES

Transformation

Core Values
- Core Value 1: INNOVATIVE
- Core Value 2: RELIABLE
- Core Value 3: FRIENDLY
- Core Value 4: FAST

Foundation

2/14/2019
TIGER VII Award

- June 2015 TIGER application:
  - Titled “Birmingham Connecting Our Neighborhoods to Opportunities BRT Project”
  - Combined east and west lines for a 15-mile alignment between Five Points West and Parkway East communities
  - Southwest alignment served by Enhanced Bus Service
  - Awarded $40M on a 50% matched basis
- Alignments reduced to 10 miles from Five Points West to Woodlawn
- Woodlawn to Parkway East served by Enhanced Bus Service

Project Goals

1. Connect Birmingham’s Neighborhoods to Opportunities
2. Improve Mobility and Access to Jobs and Opportunities for Minority and Low-Income Residents
3. Complement and Encourage Community Reinvestment
4. Improve Birmingham’s Public Transportation Network and State of Good Repair
5. Provide a Foundation for Special Events Transportation including The World Games 2021

Corridor Demographics

- 25 of 45 neighborhoods
- 20% of City population within 1-mile walking distance
- 46% residents
- 15% are low income (City 21%)
- 26% are minorities (City 30%)
- 28% lack access to automobile (City 14%)
- 5 largest employers:
  - UAB
  - UAB Health Services
  - Regions Financial Corp
  - St. Vincent Health System
  - City of Birmingham
- Access to 1,250 jobs (compared to 1,600 Citywide)
- 266 (14%) with 5+ large employers
- Connectivity to Central Station (Intermodal)
- Over 20 other key destinations
- Opening day forecast: 3,121 daily passenger trips

High-Level Schedule

- 2016: Planning
- 2017: Design
- 2018: Construction
- 2019: Acceptance/Testing
- 2020: Start Service
- 2021: Revenue Service

Project Budget & Funding

- Forecast Budgets
- Funding Sources
- Breakdown of Funding Sources
- Project Timeline
- Project Sponsorship

2/14/2019
Success
- "Proportion of residents of population that has convenient access to public transportation."
- "Convenient access" is defined in industry standards by several combined transit metrics including:
  - Walking distance to transit stop – No more than 1/2 mile
  - Average headway – No more than 20 minutes
  - Hours of service – Extended hours and weekends

Metrics

<table>
<thead>
<tr>
<th>Service</th>
<th>Peak Headway</th>
<th>1/2 Mile Population</th>
<th>% Service Population</th>
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</thead>
<tbody>
<tr>
<td>Magic City Connector</td>
<td>10 Minutes</td>
<td>~10,500</td>
<td>2.3%</td>
</tr>
<tr>
<td>Birmingham Xpress</td>
<td>15 Minutes</td>
<td>~48,000</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

Estimated Full Cost Forecast

Public Benefits

Benefit to Cost: 1.8 to 2.4 times

The Public "Benefits"

Forecast Public Benefits

Environmental Sustainability 15%
Safety Improvements 10%

Estimated Full Cost

Accessibility 10%
Quality of Life 20%
Economic Competitiveness 30%
Environmental Sustainability 15%
Safety Improvements 10%

‘High Capacity Vehicles’

Here are 200 people in 177 cars on 3 buses
BRT’s in North America

Lessons Learned

1. Emphasis on project development
2. Communication within your agency
3. Reaction to turn restrictions
4. Budget development
5. Develop concise scope, schedule, and budgets for paper grant
6. Don’t underestimate timeline for Federal reviews
7. Consult regulations first then ask questions
8. Understand requirements for satisfactory continuing control
9. Keep all stakeholders informed

Thank You...

Howard C. Richbach, P.E., MPA, CPP
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