Double-Tracking
Baltimore's Light Rail Transit System

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13th National Light Rail & Streetcar Conference
Key Presentation Take Aways

• It’s okay to think small.
• A constrained rail system can be expanded into a robust system, as additional budget and schedule become available.
Obligatory Old-Tyme Photo
Baltimore Region
Rapid Transit System
Baltimore Heavy Rail (Subway)
Why implement a constrained rail system?

• Cost
• Schedule
Schedule
Mid-80’s: Changes are Happening

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Schedule
Mid-80’s: Changes are Happening

Governor Schaefer

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Schedule
1987: A time for decisions

• Build Oriole Park at Camden Yards to open Spring 1992

• Build a light rail system to serve the stadium on opening day

• Proceed without federal funds to accelerate the schedule
Cost
Baltimore’s Central Light Rail Line

- Conceptual estimate - $190 million
- PE estimate - $400 million
Opening Day
Camden Yards Stadium

• On Time: April 6, 1992
• Under Estimate: $365 million
Cost and Schedule Savings

- Single-track sections
- Local power feeds
- Fixed block signaling
- Early bidding
Single Track Sections

• Seven track sections
• 8.2 miles of single track
• 15 minute headways
• Bridge substructure for future track
Central Light Rail Extensions, 1997

• 4.5 mile to North
• 0.34 mile to Penn Station
• 2.7 mile to BWI Airport
Central Light Rail Extensions, 1997

- 4.5 mile to
- 0.34 mile to
- 2.7 mile to
Double Tracking the Central Light Rail Line

- Second track
- Three bridges
- Four station platforms
- Cab signaling system
- Central control upgrade

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Double Tracking the Central Light Rail Line

- Conceptual Estimate – $175M
- First construction contract – 2002
- South of downtown shutdown – 2004
- North of downtown shutdown – 2005
- Final budget – $205M
Baltimore Central Light Rail Line Lessons Learned

• Large shutdowns can work

• Seek to:
  • Anticipate future infrastructure upgrades
  • Acquire right-of-way for future upgrades during the initial program.
Baltimore Central Light Rail Line
Primary Lesson / Takeaway

Don’t let cost and schedule constraints kill your program; a staged transit system implementation is an effective means for introducing a rail system.