Brown Line Capacity Expansion Project

Three Track Operation

January 10, 2007
BACKGROUND
• Constructed between 1896 and 1907
• Over 66,000 daily customers on six car maximum length trains
• 28,000 cross platform transfers daily
• Third busiest CTA rail line providing over 13 million rides in 2005
• Ridership up 83% since 1979
• Total project budget: $529.9 million
• Project completion: December 31, 2009

PROJECT GOALS
• Extend platforms to allow 8-car operations, increasing capacity by 33%
• Make stations ADA compliant
• Add elevators to 13 stations
• Rehabilitate 18 stations
• Restore 8 historic stations
• Upgrade signal, communications and power delivery system
• Enhance security
Brown Line Capacity Expansion Project
Past Construction Scenarios

- Close Rail Line
  - Used for Green Line South, Green Line West (Completed 1996)

- Close Rail Line on Weekends/Off Peak Hours
  - Used for Cermak Branch (Completed 2005)

- Complete Construction During Operations
  - Process used on South Red Line (Completed 2006)

- Brown Line Construction will take place during operations
  - North Main Line (including Red Line, Purple Line and Brown Line trains) is the most heavily used part of the rail system
Brown Line Capacity Expansion Project
Fullerton and Belmont Stations

- Unlike the other stations on the Brown Line, Belmont and Fullerton are island platforms.

- The station platforms will need to be widened to comply with ADA standards and lengthened to allow for eight car Brown Line operations.

- Rebuilding these stations requires moving the tracks east and reconstructing all four tracks.

- Belmont and Fullerton are landlocked on their west boundaries.

- Rail service will continue to serve Fullerton and Belmont stations throughout the project.
Brown Line Capacity Expansion Project
Extending Station Platforms

Example: Diversey

Fullerton and Belmont Stations
Brown Line Capacity Expansion Project
Extending Station Platforms

Island Station Platform
Island Station Platform

Fullerton and Belmont Stations

New Platform and Track Construction

NOT TO SCALE
Three Track Operations
Fullerton Station New Track
Three Track Operation
Related Construction Projects

Many other capital projects were staged in advance of the Brown Line

- Clark Junction Rehabilitation (Completed 2006)
- Dan Ryan Red Line Rehabilitation (Completed 2006)
- State Street Subway Signal Project (Completed 1998)
- Installation of Webster crossover (Completed 1996)
Three Track Operations
Clark Junction

Background
• Located just north of Belmont station where the Brown Line meets the Red and Purple Lines
• Interlocking plant that controls train routing
• Components replaced under the rehabilitation work ranged in age from 25 years to 75 years
• Clark Junction has been in operation for over 100 years
• Over 900 trains carrying 125,000 customers pass through each weekday
• Among the five busiest flat railway junctions in the world

Benefits
• Will provide increased service reliability
• Creates service flexibility
• More efficient system reducing transition times
• Will allow for the reconstruction of Belmont and Fullerton stations
Three Track Operation
Construction Preparation

PREPARATION WORK UNDERWAY
Customers have already seen the Clark Junction track preparations

- CTA forces installed 14 pieces of crossovers for track-to-track transfers work beginning in 2002
- Notice to Proceed issued to Aldridge/Mass AJV on December 13, 2004 for Clark Junction signal work
- Notice to Proceed issued on January 10, 2005 to Aldridge Electric for substations work
- Replaced all track, ties, third rail and signal components
- Installed a new signal and train control system in the Clark Junction Corridor
- Connected the new crossovers
- Rehabilitated and installed new control consoles in Clark Tower
PREPARATION WORK UNDERWAY
Customers are already seeing the station construction transitions

- Notice to Proceed issued to FHP Tectonics August 17, 2005
- Held community meeting with the contractor for Belmont and Fullerton stations on October 6, 2005
- Began demolition of adjacent properties in late 2005
- Began construction of the new partial platform and Track 4 at Fullerton in early 2006
- Temporary stationhouse at Fullerton opened in October 2006
- Temporary stationhouse at Belmont opened in December 2006
- Customers have experienced station closures, weekend line cuts and single tracks as part of the overall Brown Line Capacity Expansion project
Three Track Operation
Clark Junction Track Preparation

Before: 22 locations for track to track transfers

After: 32 locations for track to track transfers
Three Track Operation
Construction Staging

All four tracks and station facilities will be rebuilt at Fullerton and Belmont stations

• Contractor authorized to start no earlier than April 2, 2007
• Will not commence until Rail Operations, Engineering, Signal, Construction and the President are confident the system will operate reliably
• Expected to last through December 2009
• Three tracks in service, one track out of service
• Initially, there will be two southbound and one northbound tracks operating through the affected area providing 25% less track capacity
• As construction progresses
  • Different tracks will close and reopen
  • Customers will board trains on varying platforms
• Brown, Red and Purple Line service will continue to operate
Phase One Fullerton
- New Track Four in service
- Old Track Four out of service
- Old Track Three out of service
- Operating on old Track 1 & 2 and new Track 4

- Northbound Red, Brown and Purple line customers will board on the new eastern platform
- Southbound customers will not have a platform change initially
Phase One Belmont
• Old Track Four out of service while new Track Four is being constructed
• Northbound Red, Brown and Purple line trains operate on Track 3
• All northbound customers board on the current northbound Red Line track
• Southbound customers will not have a platform change initially
Three Track Operation
Customer Impact Summary

• Overall travel time will **significantly** increase
  • Fewer trains will operate
  • Time between Brown and Purple Line trains will increase during rush hour - wait times will increase
  • In first days of Phase 1 operation, Red Line customers will also experience some delays while operators and customers become accustomed to the new train movements
  • Trains will be more crowded and it will be more difficult to board during rush hour
  • Loading times at stations will increase and slow service
  • Service patterns will change during project
    • Tracks will close in order (4,3,2,1), East to West, requiring changes to train routing
    • Customers will board on different platforms as construction progresses
  • Work zones will delay trains during off-peak hours
    • Additional work crews and slow zones midday and weekends
Substantial Northbound and Southbound Capacity Reductions

AM Southbound Rush (6:00-9:30 AM)
• Rush capacity reduced by 16 trains or approximately 8,640 customers (-13%)
• Peak travel period (8:00-8:30 AM) capacity reduced by 8 trains or approximately 4,320 customers (-31%)

PM Northbound Rush (3:00-6:30 PM)
• Rush capacity reduced by 31 trains or approximately 17,460 customers (-25%)
• Peak travel period (5:30-6:00 PM) capacity reduced by 9 trains or approximately 5,400 customers (-40%)
Three Track Operation
Operations Preparation

• Monitor new customer travel patterns and adjust service accordingly
• Extend rush hour service levels 30 to 60 minutes
  • *Even with extended rush hours, the number of trains operating will be less than current level*
• Focus rail service in demand direction where and when needed
• Operate Purple and Brown Lines, as the Brown Line does currently through the loop (counter-clockwise on the outer track)
• Operate supplemental bus service on key complementary bus lines
• Coordinate with traffic management (CPD, OEMC) to improve bus movements
• Coordinate with the Chicago Police and Fire Departments on emergency response
• Station additional maintenance crews in the Clark Junction corridor during rush periods
Three Track Operation
Service Alternatives

• Many customers will shift travel times or how they make their trips

• CTA expects customers will try different service alternatives over the first days and weeks as they identify what works best for them

• Customers will use different service, depending on their trip needs
Three Track Operation Outreach

Customer Service
• CTA call center open for extended hours weekdays from 6AM-8PM as needed
• RTA travel information call center open daily from 5AM to 1AM
• Track customer inquiries and concerns
• New message informing customers of project impacts and directing them to the website for more information

Government and Community Relations
• Elected Official Briefings
• Community Briefings
• Business Community Briefings
• Health/Educational/Cultural Institutions Briefings
Three Track Operation
Outreach

Media Relations

• Media Briefings
• Press Events
• Press Releases
• Segment on Connections Television Program
Three Track Operation Outreach

Marketing

• Informational and directional signs at rail stations
• Announcements on buses, on trains and at rail stations
• Customer Alerts posted on buses and trains and flyers distributed at rail stations.
• Series of interior bus and rail cards
• Print ads
Three Track Operation

Outreach

Transit Benefit Program
- Order fulfillment kit insert
- Program booklet insert
- Transit Cards in cellophane wrapper insert

Chicago Card and Chicago Card Plus
- Letter and e-mails sent to registered customers
- Order fulfillment kit insert

U-Pass
- E-mail Blast sent to Program Administrators
- Media Buy in Student Newspapers
- Distribute flyers during UPASS registration
Three Track Operation
Customer Preparation

NOW:
• Learn about travel alternatives
  • RTA Trip Planner, www.rtachicago.org
  • RTA Travel Information, 836-7000
  • CTA website, www.transitchicago.com
• Test alternative routes and services
• Options to consider
  • CTA Blue Line, Lakeshore Express routes, parallel bus services
  • Metra trains
Three Track Operation
Customer Preparation

Leave early. Leave late. Alternate.

WHEN CONSTRUCTION BEGINS:

• Use alternative services
• Shift your Trip - Travel during non-rush periods if possible
• Allow plenty of extra travel time – delays will occur
• Stay tuned to local news media for additional information
• Check CTA Website, www.transitchicago.com
• Check CTA Brown Line construction website, www.ctabrownline.com
Three Track Operation Preparation Summary

CTA has taken, and will continue to take, a number of steps to prepare for operations and to assist customers

• Completed a series of capital projects including the Dan Ryan Rehabilitation in preparation for the Brown Line
• Conduct outreach to elected officials, customers, community members and businesses
• Publicize alternate service in the corridor
• Educate and assist customers in identifying service alternatives
• Coordinate with City agencies to decrease response time to incidents
• Make additional announcements and provide additional signage
• Provide for additional maintenance crews in the corridor during rush hour
• Provide additional staff to assist customers during the transition
Brown Line Capacity Expansion Project
Three Track Operation
January 10, 2007