

# **Brown Line Capacity Expansion Project**

## **Three Track Operation**

### **January 10, 2007**





# Brown Line Capacity Expansion Project Project Summary

## 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

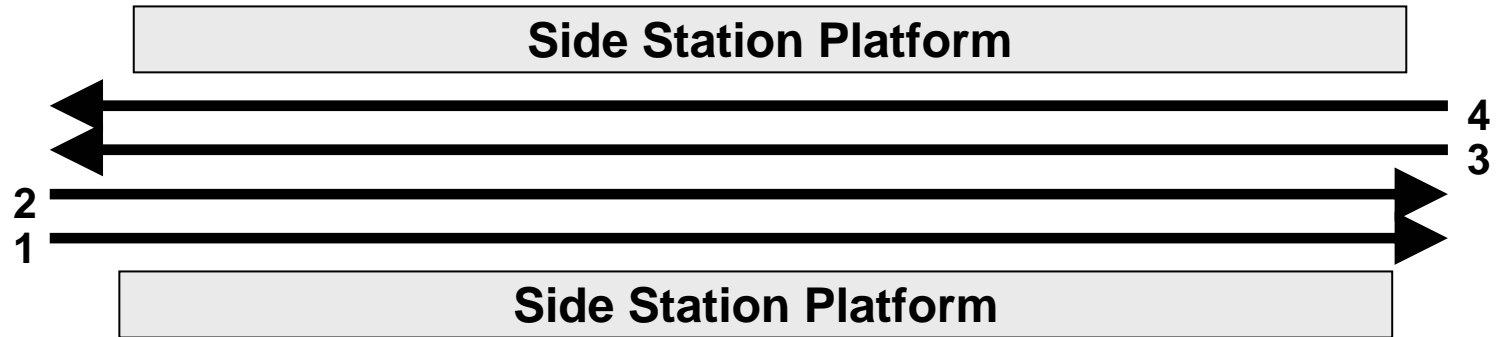


# **Brown Line Capacity Expansion Project Fullerton and Belmont Stations**

- 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

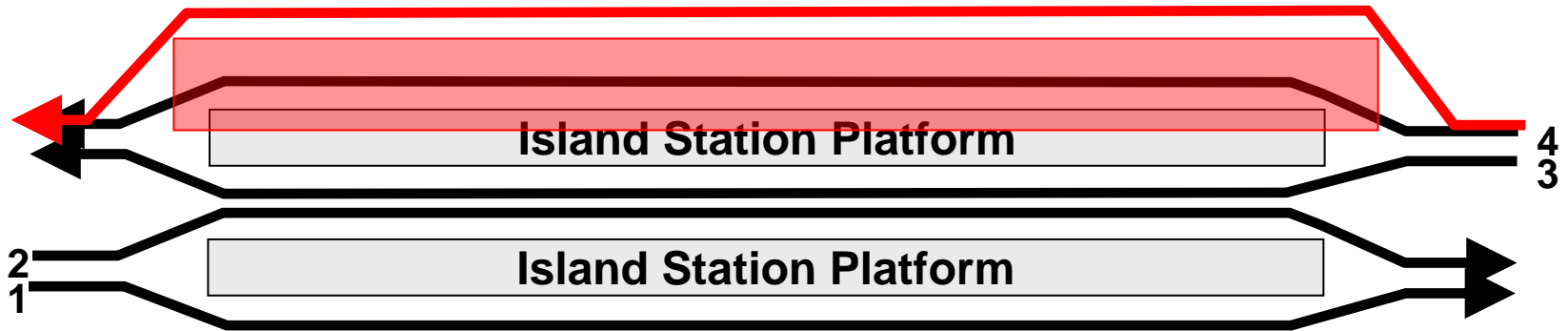


Fullerton and Belmont Stations


NOT TO SCALE



# Brown Line Capacity Expansion Project Extending Station Platforms



Fullerton and Belmont Stations

 New Platform and Track Construction

NOT TO SCALE





# Three Track Operations Fullerton Station New Track



Fullerton Station



# 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



# Three Track Operation Construction Preparation

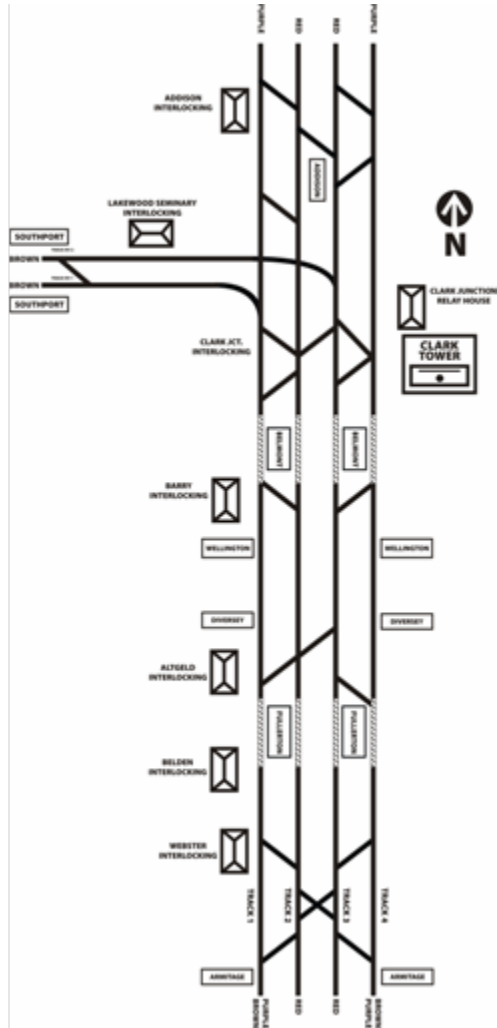
## PREPARATION WORK UNDERWAY

**Customers are already seeing the station construction transitions**

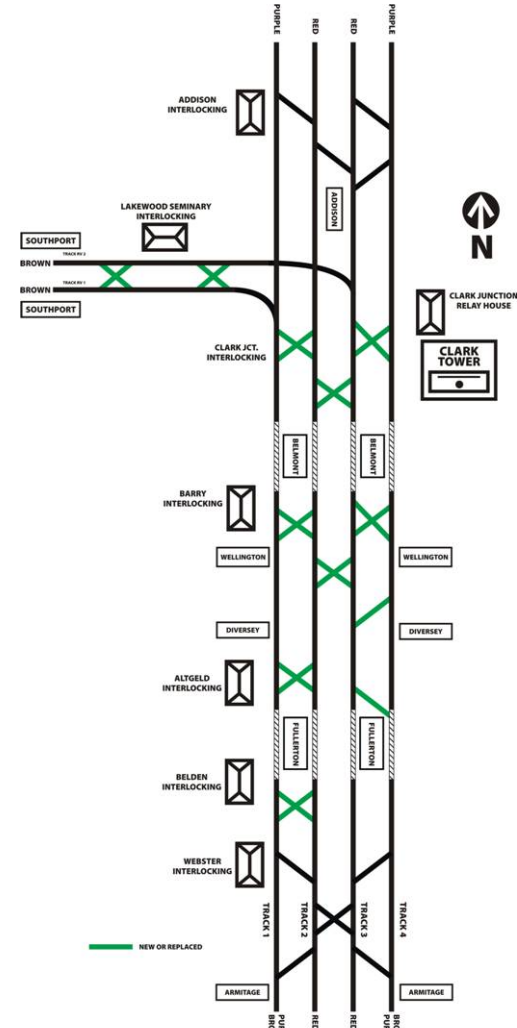
- Notice to Proceed issued to FHP Tectonics August 17, 2005
- Held community meeting with the contractor for Belmont and Fullerton stations on October 6, 2005
- Began demolition of adjacent properties in late 2005
- Began construction of the new partial platform and Track 4 at Fullerton in early 2006
- 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<sub>12</sub>  
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

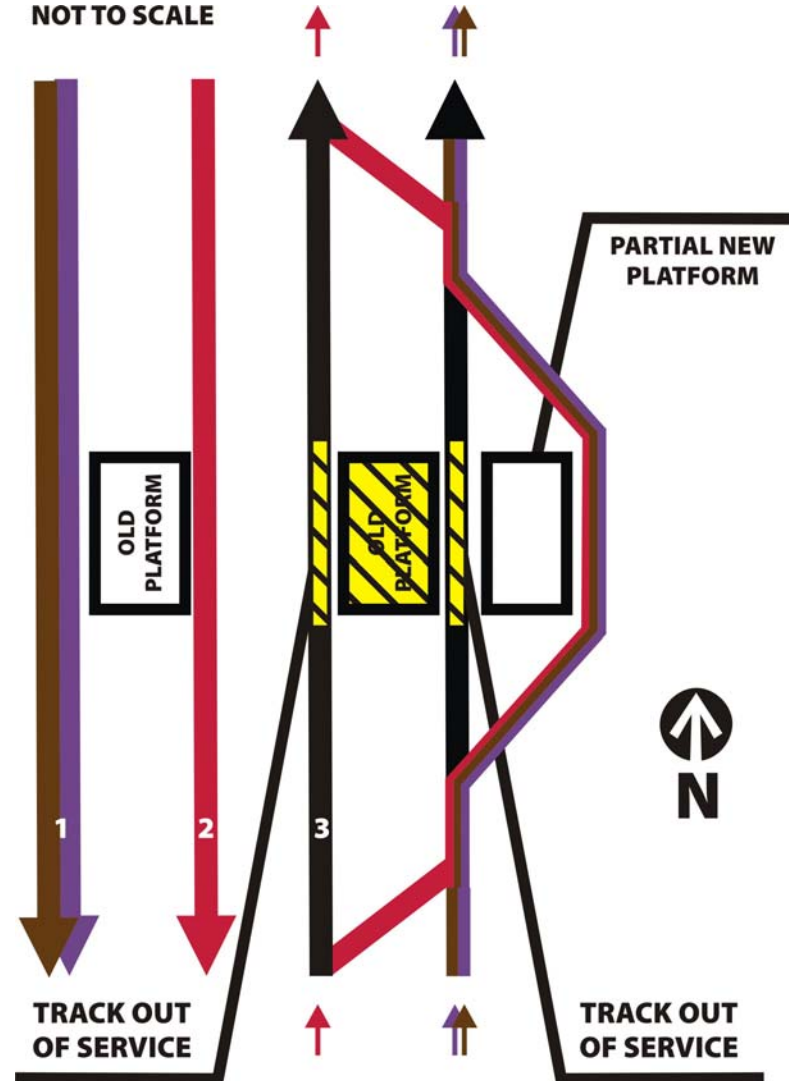


# Three Track Operation Fullerton Construction Staging

NOT TO SCALE

## 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



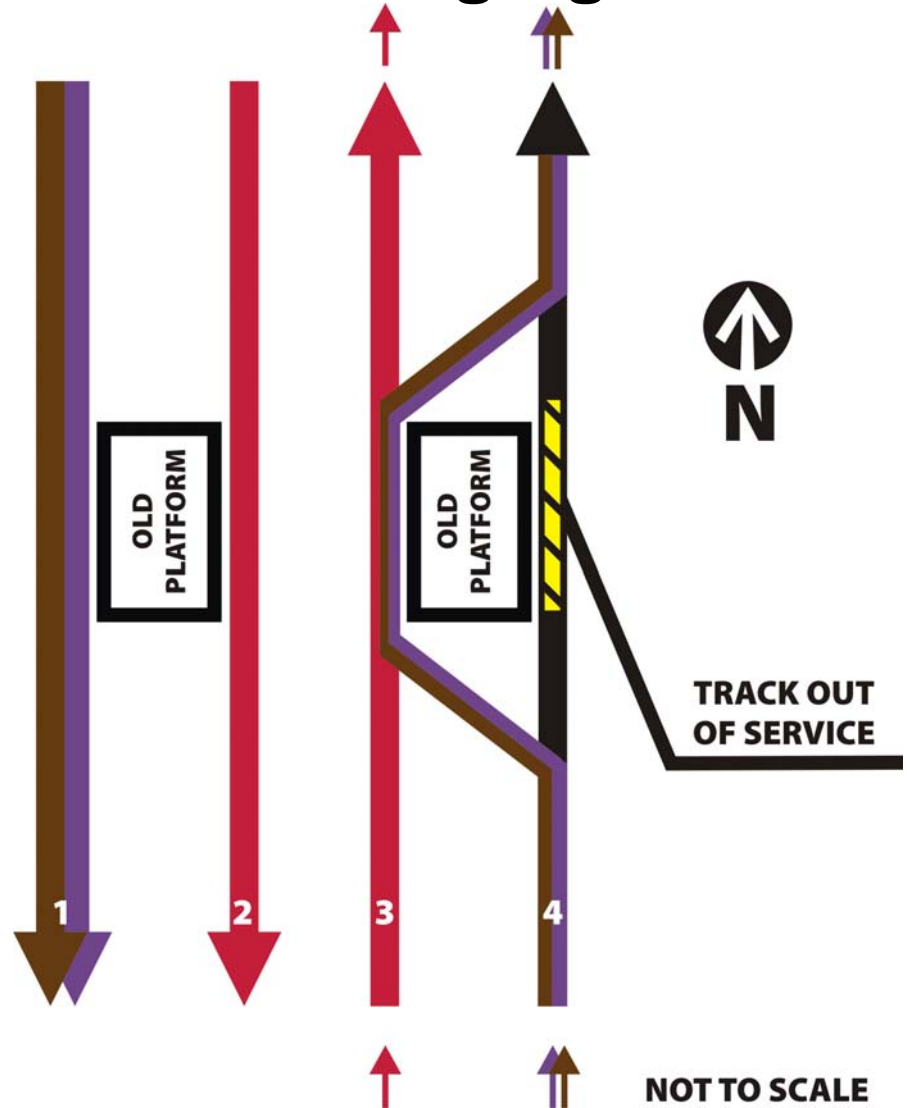




# Three Track Operation Belmont Construction Staging

## 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



# Three Track Operation

## Phase 1 – Northbound Track Closure

### Capacity Reductions

#### 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
- Continual updates on the CTA website, [www.transitchicago.com](http://www.transitchicago.com) and the Brown Line website, [www.ctabrownline.com](http://www.ctabrownline.com)



# 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](http://www.rtachicago.org)
  - RTA Travel Information, 836-7000
  - CTA website, [www.transitchicago.com](http://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](http://www.transitchicago.com)
- Check CTA Brown Line construction website, [www.ctabrownline.com](http://www.ctabrownline.com)

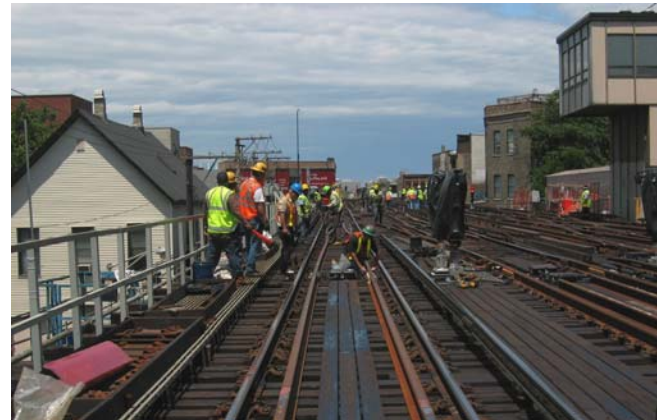


# Three Track Operation Preparation Summary

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





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