



Signals Project



Block 37



Brown Line



Howard



CTA Capital Construction Update

April 23, 2007



Capital Construction Update Agenda

- Howard Station Reconstruction
- Brown Line Capacity Expansion Project
- Block 37 Tunnel Connections Project
- Dearborn/Congress/Kennedy/Block 37 - Train Control System and Traction Power System Upgrades and Improvements
- Loop Signals Project



Howard Station Reconstruction Project Summary

BUDGET

- Total CTA budget: \$87 million

SCHEDULE

- NTP: February 27, 2006
- Completion: Spring 2009

PROJECT GOALS

- Key station to be made accessible in compliance with the Americans with Disabilities Act Accessibility Guidelines by July 26, 2010
- Reconstruct Howard station, Rail Operations and Facilities Maintenance facilities
- Infrastructure upgrades will include newly-installed precast concrete platforms, viaduct repairs, track work, new elevators, and escalators



Howard Station Reconstruction

Project Activities

- Began demolition activities on the south side of Howard
- Began demolition activities of the vacated areas of the existing stationhouse
- Received building permit on March 29, 2007
- Began platform construction during a 54-hour shutdown that took place the weekend of April 13, 2007 thru April 16, 2007.

Three Month Look Ahead

- Begin viaduct repairs
- Continue demolition activities on the south side of Howard Street
- Continue platform construction
- Begin foundation and caisson work



Howard Station Reconstruction



Lateral bracing system on east retaining wall



Howard Station Reconstruction



Construction of caisson reinforcing steel cages



Brown Line Capacity Expansion Project Project Summary

BUDGET

- Total project budget: \$529.9 million

SCHEDULE

- Project Completion: December 31, 2009

PROJECT GOALS

- Extend platforms to allow 8-car operations
- Make stations ADA compliant
- Add elevators to 13 stations
- Rehabilitate 18 stations
- Restore 8 historic stations
- Upgrade signal, communications and power delivery system



Brown Line Capacity Expansion Project

Project Activities

- Began three track operations on April 2, 2007. Commenced demolition of track work and structure on the two out-of-service tracks at Fullerton
- Closed Southport station on April 2, 2007. This station will remain closed for 12 months.
- Continued structural steel installation at Belmont for the new northbound track
- Completed demolition of the old northbound Brown and Purple Line tracks at Belmont
- Prepare historic station houses for relocation at Fullerton and Belmont
- Commenced foundation work for the new secondary entrance and exit at Chicago
- Continued installation of new platform decking and structural steel at the south end of the Armitage Station



Brown Line Capacity Expansion Project Three Month Look Ahead

- Commence installation of new concrete track bed at Belmont
- Relocate the historic station houses at Fullerton and Belmont to their future locations across the street from where they are presently located. Relocations are tentatively scheduled for Fullerton by mid-May 2007 and for Belmont on April 29, 2007.
- Begin construction mobilization activities for Diversey Station
- Close Diversey Station in late Spring/early Summer 2007 for 12 months.
- Complete demolition of Southport station and begin foundation work
- Continue the installation of new platform steel and decking on platforms at Sedgwick, Armitage and Chicago Stations
- Continue installations of new foundations at Montrose and Addison
- Continue punch list work at Kimball and Francisco



Brown Line Capacity Expansion Project



New track 4 and platform at Fullerton



Brown Line Capacity Expansion Project



New Track 4 at Belmont



Brown Line Capacity Expansion Project



Addison Station foundation replacement



Brown Line Capacity Expansion Project



Kedzie Station



Block 37 Tunnel Connections Project Project Summary

BUDGET

- Total project budget: \$213.3 million

SCHEDULE

- Project Completion: September 2008

PROJECT GOALS

- Construct two short tunnels, one connecting to the Dearborn Street subway and one connecting to the State Street subway
- Install new track, signal and power components in the new tunnels
- Developer will construct a new subway station below the Block 37 development
- Station will be designed to eventually function as a downtown terminal for express trains to O'Hare and Midway



Block 37 Tunnel Connections Project Project Activities

Project Activities

- Continued pre-excavation activities including exploration and identification of existing utilities

Three Month Look Ahead

- Relocate or protect existing utilities located within the limits of the tunnel connections excavations
- Submit revised construction documents to DCAP for review and approval
- Replace existing half-ties in the Blue Line and Red Line subway tunnels at identified locations



Block 37 Tunnel Connections Project



Block 37 work site looking south



Block 37 Tunnel Connections Project



Completion of slurry wall at corner of State/Randolph



Dearborn/Congress/Kennedy/Block 37 - Train Control System and Traction Power System Upgrades and Improvements

Project Summary

BUDGET

- \$251 million

SCHEDULE

- Construction NTP: December 1, 2005
- Project completion: Summer 2009

PROJECT GOALS

- Replace approximately 20 miles of the existing train control systems on the Blue Line that are between 35 and 54 years old
- Install new interlockings and train controls for Block 37
- Installation of new fiber communication backbone with copper backup on the Congress Line and in the Dearborn Subway
- Traction Power upgrades in the State and Dearborn Subways



Dearborn/Congress/Kennedy/Block 37 - Train Control System and Traction Power System Upgrades and Improvements

Project Activities

- Continued installation of local hand holes, conduit and signal foundations on the Congress Line and O'Hare Line
- Continued installation of signal cable and traction power cable in the Dearborn Subway
- New cab signals were put in service on the Congress Line between the Harlem crossover and the east end of Forest Park Station.
- Begin signal cutover at Lombard on the Congress Line
- Continued subway lighting fixture replacement



Dearborn/Congress/Kennedy/Block 37 - Train Control System and Traction Power System Upgrades and Improvements

Three Month Look Ahead

- Continue installation of local hand holes, conduit and signal foundations on the Congress Branch and O'Hare Branch
- Complete the signal cut-over via the new Lombard Relay House. Once the cut-over is complete, cab signal operation will be in place between Lombard interlocking to the east end of the platform at Forest Park.
- Begin signal cutover via the new Lavergne Relay House
- Continue installation of traction power cable in the Dearborn Subway
- Continue installation of signal cable in the Dearborn Subway
- Take delivery and install new relay houses at Pulaski and Kedzie



Dearborn/Congress/Kennedy/Block 37 - Train Control System and Traction Power System Upgrades and Improvements



New lighting fixtures – Dearborn Subway



Loop Signals Project

PROJECT BUDGET

- \$78.8 million

SCHEDULE

- Contractor: Divane Brothers Electric Company
- Construction NTP: February 21, 2007
- Completion: Summer 2009

PROJECT GOALS

- Provide new train control system for the Loop elevated structure, replacing a system that is more than 30 years old. The new signal system will help to improve reliability of CTA rail service by regulating train movement, speed and intervals at these junctions.
- Construct new control tower at Lake and Wells to replace the current Tower 18, and new interlockings at Towers 18 and 12.



Loop Signals Project

Project Activities

- Divane Brothers is currently working on their construction schedule and has submitted their safety and quality plans.

Three Month Look Ahead

- Receive and approve Contractor's construction schedule
- Approve Contractor's safety and quality plans
- Begin signal block design
- Begin field surveys



Planned Construction Activities Route Extra Travel Time (through May 4, 2007)

	Rush M-F 5A-9A & 3P-7P	Day M-F 9A-3P	Night M-F 7P-5A	Weekends	Notes
Blue Line					
O'Hare					Signal Work, Track Maintenance
Dearborn					Signals, B-37, Track Maintenance
Forest Park					Signal Work
54th/Cermak		NA	NA	NA	
Pink Line					
54th/Cermak to Loop					
Purple Line					
Linden to Howard					Howard Station construction
Howard to Loop			NA	NA	Brown Line, Track Maintenance
Loop to Linden			NA	NA	Brown Line, Track Maintenance
Brown Line					
Kimball to Loop					Brown Line, Track Maintenance
Red Line					
Dan Ryan					
State					Signal Work and Block 37
North					Brown Line, Track Maintenance
Yellow Line					
Dempster to Howard				NA	
Orange Line					
Loop to Midway					
Green Line					
Lake					
Roosevelt to 55th					
55th to E. 63rd					
55th to Englewood					

Key	0-10 mins	10-20 mins	>20 mins
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Notes:

- Route travel times are conservative estimates
- Route travel times will vary based on day of week, and time of day
- Chart depicts planned construction activities
- Chart represents the impact of construction activities up to May 4, 2007



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