

**Red Line/Dan Ryan**



**Block 37**



**Brown Line**



**Howard**



# **CTA Capital Construction Update November 14, 2006**



# Capital Construction Update Agenda

- Red Line/Dan Ryan Rehabilitation Project
- 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



# Red Line/ Dan Ryan Rehabilitation Project Project Summary

## **BUDGET**

- \$282.6 million total budget

## **SCHEDULE**

- Phase I: Completed April 20, 2005
- Phase II: Completed May 24, 2006
- Phase III: NTP April 11, 2005, Completion December 31, 2006

## **PROJECT GOALS**

- Eliminate slow zones
- Upgrade to bidirectional signal system
- Upgrade power delivery system including commissioning of two new substations at Pershing and 50<sup>th</sup> Street, and decommissioning of 42<sup>nd</sup> substation
- Upgrade communications system including installation of new fiber optic cable throughout the project
- Enhance stations' appearance
- Install new elevators at 47<sup>th</sup> and 69<sup>th</sup>
- Improve bus connections



# Red Line/ Dan Ryan Rehabilitation Project

## Project Activities

### STATIONS

- Installation of station skylights is substantially complete at 35<sup>th</sup>, 47<sup>th</sup>, 55<sup>th</sup>, 63<sup>rd</sup>, 69<sup>th</sup> and 79<sup>th</sup>, 87<sup>th</sup> Street stations
- Continued the installation of platform amenities at all locations
- Continued painting station house exteriors and platforms
- Completed installation of new light fixtures at all station platforms
- Continued installation of new lighting and ceilings in stationhouses
- Continued escalator installation at 33<sup>rd</sup>, 47<sup>th</sup>, 69<sup>th</sup>, and 79<sup>th</sup> Street stations. Completed escalators at 35<sup>th</sup>, 55<sup>th</sup> and 87<sup>th</sup> Street stations.
- Continued elevator installation at 47<sup>th</sup> and 69<sup>th</sup> Street stations
- Continued installation of new signage

### BRIDGES

- Continued construction at the 33<sup>rd</sup> Street entrance and pedestrian bridge
- Modifications to the 47<sup>th</sup>, 55<sup>th</sup>, 69<sup>th</sup>, 79<sup>th</sup> and 87<sup>th</sup> Street bridges and station entrance enhancements have begun



# Red Line/ Dan Ryan Rehabilitation Project

## Look Ahead to December 31, 2006

- Complete skylight canopy bubble installation
- Complete installation of platform amenities
- Complete painting at all stations
- Complete installation of new signage
- Complete new station entrances at all stations
- Complete installation of customer assistant kiosks
- Complete escalator installation at 33<sup>rd</sup>, 47<sup>th</sup>, 63<sup>rd</sup>, 69<sup>th</sup>, and 79<sup>th</sup> Street stations
- Complete bridge modifications and station entrance enhancements at 47<sup>th</sup>, 55<sup>th</sup>, 69<sup>th</sup>, 79<sup>th</sup> and 87<sup>th</sup> Street stations
- Complete construction of new elevators at 47<sup>th</sup> and 69<sup>th</sup> Street stations
- Complete construction of the new auxiliary station entrance at 87<sup>th</sup> Street
- Complete Reconstruction of the 33<sup>rd</sup> Street entrance and pedestrian walkway



# Red Line/ Dan Ryan Rehabilitation Project



33rd Street pedestrian walkway and entrance



# Red Line/ Dan Ryan Rehabilitation Project



55th Street (Garfield) Station Pedestrian Bridge



# Red Line/ Dan Ryan Rehabilitation Project



87th Street station Auxiliary Entrance



# Red Line/ Dan Ryan Rehabilitation Project



87th Street station Auxiliary Entrance (Interior)



# 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 December 31, 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 concrete retaining wall and cap repairs on both the east and west side of the station
- Continued demolition activities on the north side of Howard Street

## Three Month Look Ahead

- Continue concrete retaining wall and cap repairs on both the east and west side of the station
- Continue site clean up
- Continue demolition activities on the north side of Howard Street
- Begin foundation work after receipt of Foundation Permit



# Howard Station Reconstruction Project Activities



East retaining wall rehabilitation



# 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

- Installed foundations and steel supports for the new platform and auxiliary stationhouse at Francisco
- Completed demolition work at the station house and north side of the main platform at Kimball stations
- Continued installation of Phase I structural steel and concrete track bed at Fullerton
- Opened temporary station house at Fullerton on October 8, 2006
- Continued temporary station house work at Belmont
- Continued interior demolition of 939 W. Armitage
- Began platform and stair foundation work at Armitage
- Began the installation of the platform extensions, demolition of abandoned track structure and the erection of a temporary platform extensions at Sedgwick



# Brown Line Capacity Expansion Project Three Month Look Ahead

- Reopen Kimball Station in January 2007
- Complete construction of the new track four at Fullerton
- Open the temporary station house at Belmont
- Begin Phase I columns and structural foundations at Belmont
- Temporarily close Addison and Montrose on December 2, 2006
- Award contract for Diversey, Wellington, Southport and Paulina
- Continue the installation of new platform steel at Sedgwick
- Commence installation of platform and station house at Sedgwick
- Begin installation of platform steel and platform foundations at Armitage



# Brown Line Capacity Expansion Project



Excavation for platform Foundations at Francisco Station



# Brown Line Capacity Expansion Project



Interior demolition activities at Kimball



# Brown Line Capacity Expansion Project



Fullerton Station forming for concrete decking and platform steel



# 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

- Issue notice to proceed to contractor on September 13, 2006
- Began preconstruction activities

## Three Month Look Ahead

- Continue preconstruction activities
- Approve contractor schedule
- Confirm location and condition of all existing utilities
- Submit instrumentation plans to the Office of Underground Construction for review and approval
- Submit revised construction documents to DCAP for review and approval



# Block 37 Tunnel Connections Project



Overview looking southeast



# Block 37 Tunnel Connections Project



Assembling of caisson rebar frames



# 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 signal and communication house foundations on the Congress Line and O'Hare Line
- Completed excavation and poured the first and second floors for the Belmont Relay House
- Excavation was completed at the Chestnut Relay House and the concrete floor is scheduled to be poured on November 3, 2006.
- Continue to install cable racking and rodding drains in the State Subway
- First Signal Relay House is scheduled to be delivered and installed on November 16, 2006
- Six Communication Huts have been installed on the Congress Line



# **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 and communication houses foundations on the Congress Branch and O'Hare Branch
- Complete construction of the Belmont and Chestnut Relay Houses
- Install structural steel for the Damen Relay Houses
- Continue installation of communication huts on the Congress Branch
- Deliver the first Relay House on the Congress Line



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



Concrete Pour at Belmont Signal Room



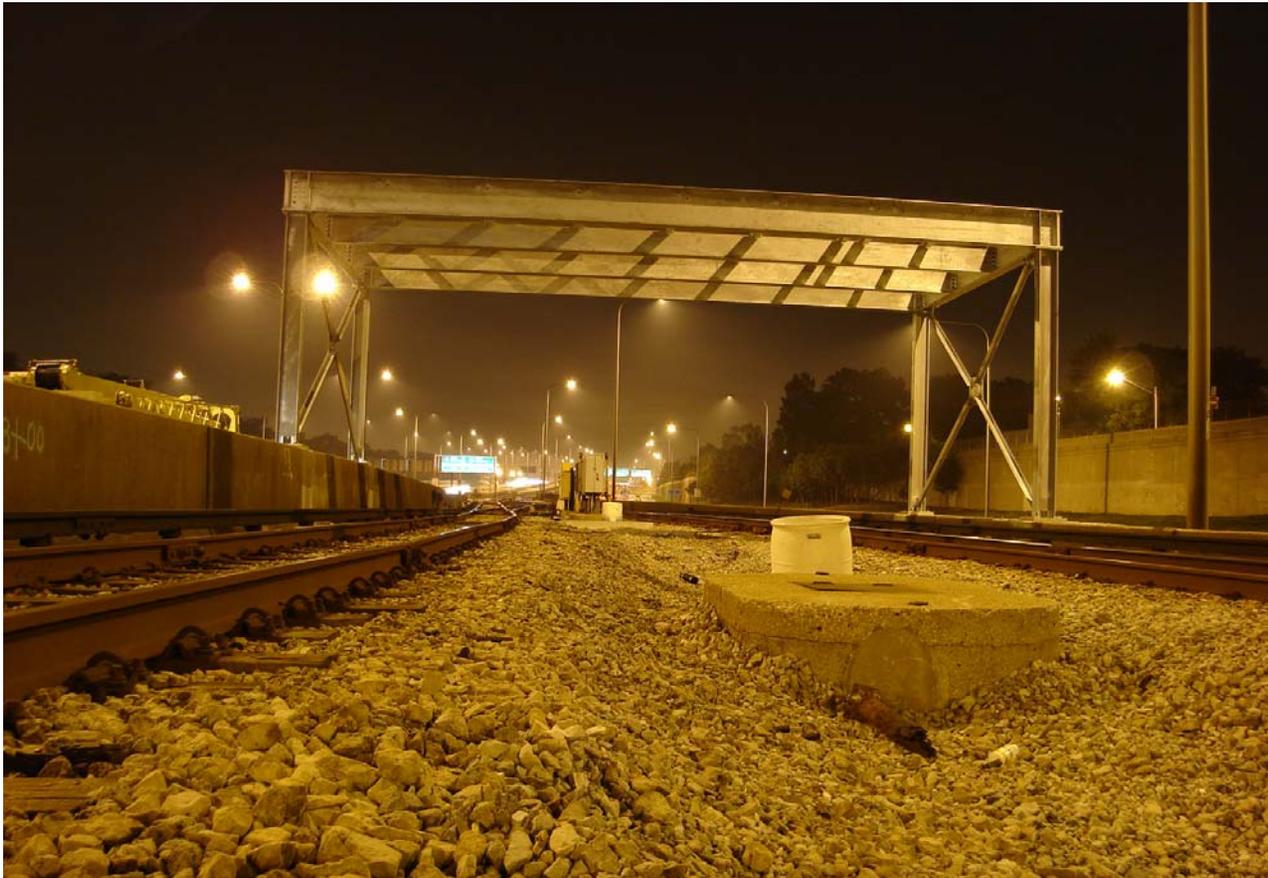
# Dearborn/Congress/Kennedy/Block 37 - Train Control System and Traction Power System Upgrades and Improvements



Excavation for new signal room at chestnut



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



Structural steel for new signal relay house



# Planned Construction Activities Route Extra Travel Time (through November 19, 2006)

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

<b>Key</b>	<b>0-10 mins</b>	<b>10-20 mins</b>	<b>&gt;20 mins</b>
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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 November 19th

**Red Line/Dan Ryan**



**Block 37**



**Brown Line**



**Howard**



# **CTA Capital Construction Update November 14, 2006**