

# ***Construction Project Briefing***

**July 14, 2010**



# ***Today's Presentation***

- **Cermak Station Project**
- **Subway Escalators Project**
- **Howard Signals Project**
- **Loop Signals Project**
- **Blue Line Signals Project**



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

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| Justification of Need:                            | Reconstruct station entrance after vehicle accident and fatality; make station fully accessible.   |
| Priority of Project:                              | High   |
| Project Budget                                    | \$12.5M  |
| Earned to Date:                                   | \$6.2M   |
| Percent Change Orders to Construction Contract:   | 0%   |
| Percent Time Used to Date:                        | 60%  |
| Funding Source:                                   | ARRA (Federal Stimulus Funds)  |
| Procurement Status:                               | <ul style="list-style-type: none"> <li>• Archer auxiliary entrance open for customer use.</li> <li>• Permit was issued on 6/14/10 for Cermak main entrance.</li> </ul> |
| Estimated Start Date/Estimated Length of Project: | Started in November 2009, with a 15 month construction duration  |
| Project Manager:                                  | Steven Mascheri (GM); Chris Mulcrone (PM)  |

**Detailed Overview of Scope:**

- New auxiliary entrance at Archer Avenue.
- New station house with new revenue equipment, elevator, escalator, and bike racks at Cermak entrance.
- Station will become ADA compliant upon project completion.



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

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|------------------------------|---|
| Impact on Customers:         | Cermak entrance will be closed during construction. CTA will construct new Archer entrance to keep station open.  |
| Benefit to System:           | <ul style="list-style-type: none"> <li>• Station will become ADA-compliant.</li> <li>• Third means of egress from platform for station access &amp; exiting.</li> </ul> |
| Benefit to Community:        | <ul style="list-style-type: none"> <li>• Station will become ADA-compliant.</li> <li>• New Archer Avenue auxiliary entrance.</li> </ul>                                 |
| Impact on Accessibility:     | Station will become ADA-compliant.  |
| Estimated # of Jobs Created: | 50 on-site jobs (Contractor, CM, PM).   |
| Customer Communication Need: | Cermak entrance to be closed during construction and will reroute customers to Archer auxiliary entrance .  |

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| <b>Comparable Projects:</b>  |
| <ul style="list-style-type: none"> <li>■ Brown Line Capacity Expansion Project.</li> </ul> |



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction

### Construction Progress

| Phase               | Description  | Status  |
|---------------------|--|---|
| Design              | <ul style="list-style-type: none"> <li>Archer design complete, permit issued in December.</li> </ul>   | Archer complete; Cermak under Design and awaiting permit from the City. |
| Archer Construction | <ul style="list-style-type: none"> <li>Station opened for customer use June 4, 2010.</li> </ul>  | Closeout  |
| Cermak Construction | <ul style="list-style-type: none"> <li>Review shop drawings for escalator and elevator.</li> <li>Permit set being finalized prior to being issued for construction.</li> </ul> | Scheduled completion December 31, 2010                                  |

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| <b>Delay Explanation:</b>  |
| <ul style="list-style-type: none"> <li>No current delays.</li> </ul> |



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction



**Archer stationhouse opened June 4, 2010 for customer use. Views from street level.**



# Project Title: Cermak Station Project

## Managing Department: Facilities Construction



**New auxiliary entrance opened to public being used while main entrance is closed for construction.**



# Project Title: Subway Escalators

## Managing Department: Facilities Construction

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| Justification of Need:                           | Escalators beyond useful life; high maintenance cost |
| Total Project Budget:                            | \$22.8M  |
| Construction Contract Value:                     | \$17.2M  |
| Earned to Date:                                  | \$16.0M or 93%                                       |
| Percent Change Orders to Construction Contract:  | 3.98%  |
| Percent Time Used to Date:                       | 90%  |
| Funding Source:                                  | FTA  |
| Estimated Start Date/Estimated Length of Project | NTP 1/7/08; Completion Date 9/22/10                  |
| Project Manager:                                 | Bob Wittmann (GM); Rick Herndobler (PM)              |

|                                    |   |
|------------------------------------|---|
| <b>Detailed Overview of Scope:</b> |   |
| ■                                  | Replace nine escalators, reopen one exit and relocate one escalator facility on Red and Blue Lines Subway |



# Project Title: Subway Escalators

## Managing Department: Facilities Construction

### Construction Progress

| Phase               | Description  | Status   |
|---------------------|--|--|
| <b>Completed</b>    | Jackson/Van Buren Red (street to mezzanine escalator)      | Returned to service 2/19/09.                         |
|                     | Monroe/Adams Red (platform to mezzanine escalator)         | Returned to service 3/19/09.                         |
|                     | Adams/Jackson Red (street to mezzanine escalator)          | Returned to service 4/18/09.                         |
|                     | Randolph/Washington Blue (platform to mezzanine escalator) | Returned to service 5/4/09.                          |
|                     | Adams/Jackson Red (street to mezzanine escalator)          | Returned to service 9/4/09.                          |
|                     | Harrison Red (platform to mezzanine escalator)             | Returned to service 9/9/09.                          |
|                     | Monroe/Adams Red (street to mezzanine escalator)           | Returned to service 9/28/09.                         |
|                     | Monroe/Adams Red (street to mezzanine)                     | Returned to service 5/19/10.                         |
| <b>Construction</b> | Madison/Monroe Blue (platform to mezzanine)                | Return to service scheduled by the end of June 2010. |

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| <b>Delay Explanation:</b>                  |
| <input type="checkbox"/> No Current delays |



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

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|---|---|
| Justification of Need:                            | Restore Reliability and Improve Performance of the Train Control System |
| Priority of Project:                              | High  |
| Total Project Budget:                             | \$7M  |
| Construction Contract Value:                      | \$5.5M (Signal); \$355K (JOC); \$555K* (Additional JOC work funded)     |
| Earned to Date:                                   | \$2.5M (Signal); \$320K (JOC)   |
| Percent Change Orders to Construction Contract:   | 0%  |
| Percent Time Used to Date:                        | 42% (Signal); 100% (JOC); 0% (Additional JOC)                           |
| Funding Source:                                   | CTA Bonds   |
| Estimated Start Date/Estimated Length of Project: | NTP issued August 6, 2009; Completion by July 27, 2011                  |
| Project Manager:                                  | Barney Gray (GM); Grace Ohs (PM)  |

- Detailed Overview of Scope:**
- Upgrade existing Vital Processor Interlocking (VPI) systems at interlockings near the Howard Street Station. Upgrades to Communication hardware and software. Also includes replacement of faceplates for Howard Control Panel, new CTC Workstation, and new Maintainer’s overview displays.
  - Project also includes supplemental JOC work at Howard Tower. Roof replacement, HVAC replacement, and new fire suppression system is included.
  - Additional \$555K in JOC work includes Jarvis wall and abutment repair and backup generators.

\*Additional \$555K JOC work will be paid out of separate funds allocated by Capital Finance department.



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

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|------------------------------|---|
| Impact on Customers:         | During non-rush periods, reduced train speeds when workers are on the Right-of-Way.   |
| Benefit to System:           | Improve signal system at Howard Interlocking to prevent delays to service.  |
| Benefit to Community:        | More consistent travel times due to increased reliability.  |
| Impact on Accessibility:     | N/A   |
| Estimated # of Jobs Created: | N/A   |
| Customer Communication Need: | <ul style="list-style-type: none"> <li>• Courtesy notification to the Alderman and Community about the project.</li> <li>• Train announcements about reduced speeds due to workers on ROW.</li> </ul> |

|                             |                           |
|-----------------------------|---------------------------|
| <b>Comparable Projects:</b> |                           |
| ■                           | Blue Line Signals Project |
| ■                           | Loop Signals Project      |



# Project Title: Howard Signals Project

## Managing Department: Power & Way Construction

### Construction Progress

| Phase            | Description  | Status    |
|------------------|--|-----------|
| Construction     | <ul style="list-style-type: none"><li>Printed circuit boards (PCBs) received. Installation of CSEX3 boards completed in April 2010. Next field visit planned for September 2010. CTA installed new PCBs at Jarvis East and West. CTA to install PCBs at Howard South in June 2010.</li></ul> | Ongoing   |
| JOC Construction | <ul style="list-style-type: none"><li>Wight-Hill started work 6/10/09, HVAC and roof work is substantially complete.</li></ul>   | Close-Out |

#### Delay Explanation:

- No current delays.



# Project Title: Loop Signals Project

## Managing Department: Power & Way Construction

|  |   |
|--|---|
| Justification of Need:                           | Upgrade Towers and Interlocking Control Systems to current technology; Tower 18 past useful life. |
| Total Project Budget:                            | \$103.2M  |
| Construction Contract Value:                     | \$67.9M   |
| Earned to Date:                                  | \$51.2M or 75.3%  |
| Percent Change Orders to Construction Contract:  | 40.7%   |
| Percent Time Used to Date:                       | 100%  |
| Funding Source:                                  | FTA, RTA and Bond Funds   |
| Estimated Start Date/Estimated Length of Project | NTP 2/21/07; Original Completion Date 9/2009; Revised Completion Date 10/2010.                    |
| Project Manager:                                 | Barney Gray (GM); Brittany Dyra (PM)  |

- Detailed Overview of Scope:**
- New Bi-directional Cab Signal System for the Loop.
  - Construction of new Control Tower at Lake/Wells.
    - New control panel with remote controls for Tower 12 and Jefferson.
  - Installation of a new Signal Facility Building at Randolph/Wells.
  - Installation of a new Tower 12 Relay House.
  - Installation of new interlocking at Jefferson.



# Project Title: Loop Signals Project

## Managing Department: Power & Way Construction

| Phase       | Description                      | Original Completion Date | Revised Completion Date | Actual Completion Date |
|-------------|----------------------------------|--------------------------|-------------------------|------------------------|
| Milestone 1 | Approved Signal Block Design     | 8/20/07                  | 4/2008                  | 3/18/08                |
| Milestone 2 | Approved Cable Plan              | 9/4/07                   | 5/2008                  | 5/21/08                |
| Milestone 3 | Approved Tower 18 Circuit Design | 9/19/07                  | 6/2008                  | 12/2/08                |
| Milestone 4 | Audio Circuit Cutover            | 9/2008                   | N/A                     | 9/14/08                |
| Milestone 5 | Tower 18 Relay Room              | 3/20/09                  | 11/2009                 | TBD*                   |
| Milestone 6 | Tower 18                         | None Provided            | 5/2010                  | 5/2010                 |
| Milestone 7 | Tower 18 Interlocking            | 8/2009                   | 9/2010                  |                        |
| Milestone 8 | Tower 12 Interlocking            | 8/2009                   | 10/2010                 |                        |
| Milestone 9 | Substantial Completion           | 9/2009                   | 10/2010                 |                        |

### Delay Explanation:

- Original project schedule to be complete 9/2009; current project schedule shows completion for 10/2010. See dates above for details.

\* Tower 18 Relay Room cutover was completed 11/16/09; testing still remains related to this milestone.



# Project Title: Blue Line Signals Project

## Managing Department: Power & Way Construction

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| Justification of Need:                           | Signal system is beyond expected service life and upgrades needed for compatibility with new AC-powered railcars. Traction Power upgrades needed to reduce power shutdowns and service disruptions. |
| Total Project Budget:                            | \$243M  |
| Construction Contract Value:                     | \$185.6M  |
| Earned to Date:                                  | \$183.4M or 99%   |
| Percent Change Orders to Construction Contract:  | 7.4%  |
| Percent Time Used to Date:                       | 100% of original time, 100% with new date of 11/22/09   |
| Funding Source:                                  | CTA Bonds, RTA, FTA, IDOT   |
| Estimated Start Date/Estimated Length of Project | NTP 12/1/05; Original Scope Completion Date 7/1/09, Substantial Completion Date for Additional Work 11/22/09  |
| Project Manager:                                 | Barney Gray (GM); Grace Ohs (PM)  |

**Detailed Overview of Scope:**

- Blue Line Signal and Traction Power Upgrades.
- Replace and upgrade signals systems, power distribution, and associated components at various facilities in the Dearborn Subway, the Congress and Kennedy Branches of the Blue Line and State Street Subway. Upgrades to communication facilities to include new fiber optics and copper wiring and emergency telephones in the Dearborn Subway.



# Project Title: Blue Line Signals Project

## Managing Department: Power & Way Construction

### Construction Progress

| Phase        | Description  | Status                        |
|--------------|--|-------------------------------|
| Punch list   | <ul style="list-style-type: none"> <li>Punch list work continues from Jefferson Park to Forest Park.</li> </ul>  | Ongoing                       |
| Construction | <ul style="list-style-type: none"> <li>Additional work: Automatic Vehicle Identification Upgrades</li> <li>Testing of 13<sup>th</sup> and 17<sup>th</sup> Towers started 1/25/10 and will continue for five weeks. Testing to be complete end of June 2010.</li> </ul> | Ongoing<br>Started<br>1/25/10 |

**Delay Explanation:**

- Contract Completion date extended from July 1, 2009 to November 22, 2009 for the completion of additional work. Final Acceptance and punchlist items will continue after November 22, 2009.

