# Construction Project Briefing

June 12, 2013



#### **Today's Presentation**

- Loop Track
- Farwell/Armitage/Hill Substations
- Dan Ryan Track Project
- Bus Hoist Replacement Program
  - **✓** Phase 1 Forest Glen, South Shops, 77<sup>th</sup> Street Bus Garage
  - √ Phase 2 Kedzie Bus Garage
- Green Line Reliability Improvements
  - ✓ Englewood & Incline Track Renewal
  - **✓** Garfield Station and Terminal
  - **√** 63<sup>rd</sup> and Ashland Station



#### Project Title: Loop Track Renewal Project Managing Department: Power & Way Construction

Justification of Need:	The existing track system and the components are beyond their useful life.
Priority of Project:	High
Total Project Budget:	\$53,026,306
Construction Contract Value:	\$34,545,713.56
Earned to Date:	\$30M
Percent Change Orders to Construction Contract:	2.2%
Percent Time Used to Date:	100% for Milestone A-1, 99% for Milestone A-2
Funding Source:	2010 State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 14, 2011, Milestone A-1: 476 days to Substantial Completion, Milestone A-2 (Tower 18 and Hubbard): 609 days to Substantial Completion
Designer of Record:	CTA In-House Design
Construction Manager/General Contractor:	PB America (CM), Ragnar Benson (GC)
Project Manager:	Barney Gray (GM); Grace Ohs (PM)

#### **Detailed Overview of Scope:**

- The project consists of renewal of track on the Wells/Van Buren legs of the Loop, including Tower 18 and Tower 12 Junctions, and Hubbard Curve on the Brown Line.
- New components shall include ties, running rail, rail fasteners, guard rail, restraining rail, other track material, contact rail, contact rail insulators and anchors, footwalk, track access stairs, control panels, switch machines, rail lubricators, traction power and signal cabling.
- Special Track Work includes Tower 12 Junction, Tower 18 Junction, new double crossover near Washington/Wells and replacement of Left Hand & Right Hand crossovers near Adams/Wabash.



# **Project Title: Loop Track Renewal Project Managing Department: Power & Way Construction**

Impact on Customers:	16 Weekend line cuts and reroutes. 14 Nightly single tracks and reroutes. Work will also be completed during two extended line cuts for the CDOT Wells Street Bridge Project.
Benefit to System:	Reduced maintenance costs, improved headways for revenue service, and improved safety.
Benefit to Community:	Improved headways for revenue service and improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	140
Customer Communication Need:	Construction Activity Notices will be needed to alert businesses and residents to weekend and night work. Station signage and Customer Assistants will be needed to direct customers during weekend and night work.

#### **Comparable Projects:**

- Dearborn Track Renewal
- Ravenswood and North Main Line Tie Renewal
- Loop Signal Project (Track Renewal on Lake and Wabash)



#### Project Title: Loop Track Renewal Project Managing Department: Power & Way Construction

#### **Construction Progress**

Phase	Description	Status
Construction	<ul> <li>Contractor requested substantial completion of Milestone A-1 on December 4, 2012.</li> <li>CTA issued the Notice of Substantial Completion for Milestone A-1 on January 14, 2013 with the Punch List. Punch List work is in progress.</li> </ul>	Ongoing
	The first extended line cut for the Wells Street Bridge took place March 1, 2013- March 11, 2013. The North and Center sections of Tower 18 were completed. Track 2 (northbound) and the northern half of Track 1 (southbound) at Hubbard Curve were completed. CDOT's Contractor (Walsh/II In One JV) completed the South leaf of the Wells Street Bridge.	
	The second extended line cut for the Wells Street Bridge took place April 26, 2013 – May 6, 2013. The East, West, and portions of the South sections of Tower 18 were completed. The southern half of Track 1 (southbound) at Hubbard Curve was completed. CDOT's Contractor (Walsh/II In One JV) completed the North leaf of the Wells Street Bridge.	

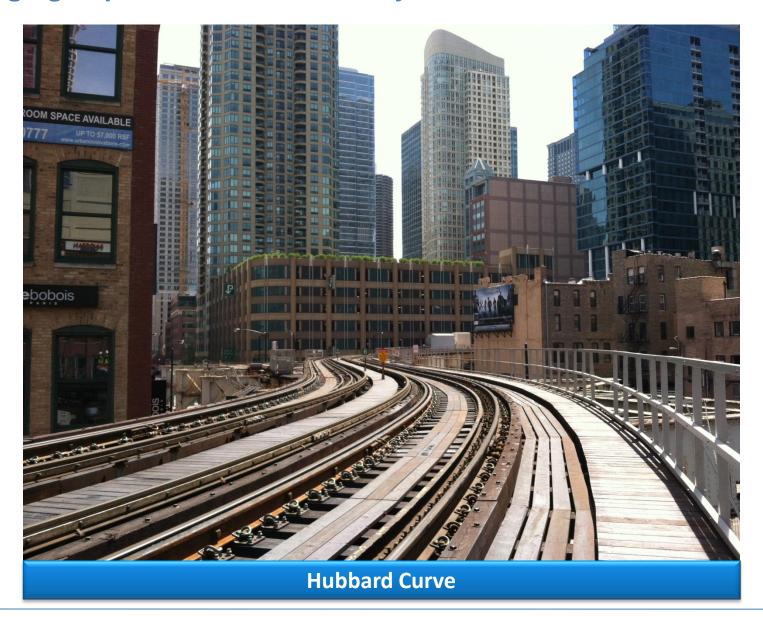
#### **Delay Explanation:**

- Change Order 1 extended the Substantial Completion Date from January 1, 2013 to May 15, 2013 for work at Tower 18. Tower 18 work will be coordinated with the two 9 day line cuts for the CDOT Wells Street Bridge Project.
- Hubbard Curve work will also be coordinated with the two 9 day line cuts for the CDOT Wells Street Bridge Project.
- Remaining work in the South Quadrant of Tower 18 will be completed under a future weekend reroute in the Summer of 2013.



#### **Project Title: Loop Track Renewal Project**

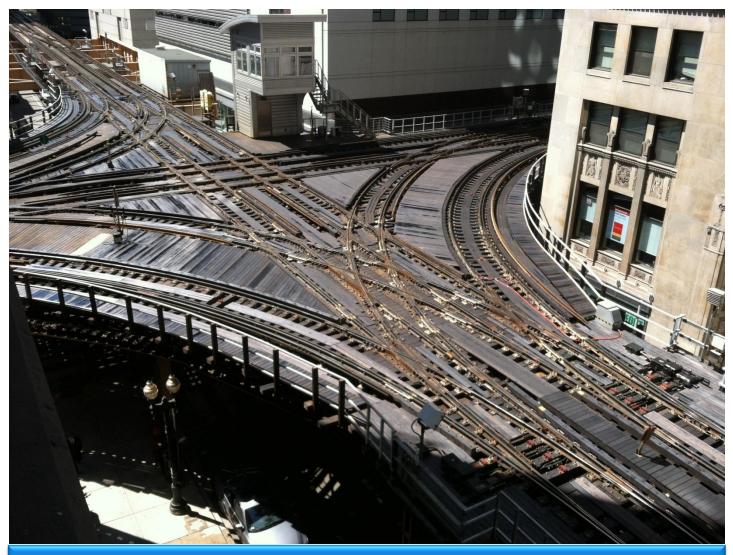
**Managing Department: Power & Way Construction** 





#### **Project Title: Loop Track Renewal Project**

**Managing Department: Power & Way Construction** 







### Project Title: Traction Power Systems Upgrades and Improvements Managing Department: Power & Way Construction

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan
Priority of Project:	High
Total Project Budget:	\$56,918,563.00
Construction Contract Value:	\$46,684,000.00
Earned to Date:	4%
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	31.23%
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued September 30, 2012
Designer of Record:	Laramore, Douglass and Popham(LDP)
Construction Manager/General Contractor:	STV (CM), F.H. Paschen (GC)
Project Manager:	Barney Gray (GM); David Heard (PM)

#### **Detailed Overview of Scope:**

Construct Three (3) New Traction Power Substations namely, Farwell, Armitage, Hill

Modify Orleans Switch Room Modify Weed Switch Room Modify Sedgwick Substation



# Project Title: Traction Power Systems Upgrades and Improvements Managing Department: Power & Way Construction

Impact on Customers:	59 Tracks Out of Service. 9 Single Tracks, and 6 Reroutes. Street and lane closures around worksites, Curtailed access to resident garages(at Armitage)
Benefit to System:	Reduced Traction Power related Train Defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved reliability for revenue service and improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	40
Customer Communication Need:	Construction Activity Notices will be needed to alert businesses and residents to weekend, night work and power outages.

Comparable Pro <sub>.</sub>	jects:
-----------------------------	--------

NA



#### Project Title: Traction Power Systems Upgrades and Improvements Managing Department: Power & Way Construction

#### **Construction Progress**

Phase	Description	Status
Construction	<ul> <li>Farwell – Foundation work underway with the installation of the first set of tie backs to support the substation earth retention system or sheeting wall. The excavation for the second set of tie backs is underway. The embankment wall will be lowered in conjunction with this excavation.</li> <li>Armitage Tie House – Further work pending permit by CDOT Office of Underground Coordination (OUC).</li> <li>Hill – Further work pending permit by CDOT Office of Underground Coordination (OUC).</li> </ul>	Ongoing

#### **Delay Explanation:**

• Contractor did not complete City of Chicago permits on schedule and did not initially coordinate utility relocations. Contractor submitting recovery schedule. CDOT OUC reviewing earth retention permit requirements for both Armitage and Hill. FHP coordinating with OUC as necessary.



Justification of Need:	The existing ties, rail and track components, as well the underlying ballast and drainage systems have reached or exceeded their useful life. In addition, this project is necessary to provide accessibility at all of the Dan Ryan stations and to improve customer experience at these stations.	
Priority of Project:	High	
Total Project Budget:	\$425M	
Funding Source:	RTA/IDOT CTA-2012-LI	
Designer of Record:	T.Y. Lin International; TranSystems Corp	oration
Construction Manager:	Parsons Brinckerhoff	
Project Manager:	Robert Wittmann (GM); Brittany Dyra (PM)	
	Track Renewal	Station Improvements
Construction Contract Value:	\$220,166,000	\$43,875,000
Earned to Date:	\$10.7M	\$2.8M
Percent Change Orders to Construction Contract:	0.0%	0.0%
Percent Time Used to Date:	32.0% (as of May)	55.7% (as of May)
Estimated Start Date/Estimated Length of Project:	Notice To Proceed: October 4, 2012 Substantial Completion: October 24,	Notice To Proceed: December 21, 2012 Substantial Completion: October 6,
Louinated Start Date, Louinated Longin of Froject.	2014	2013



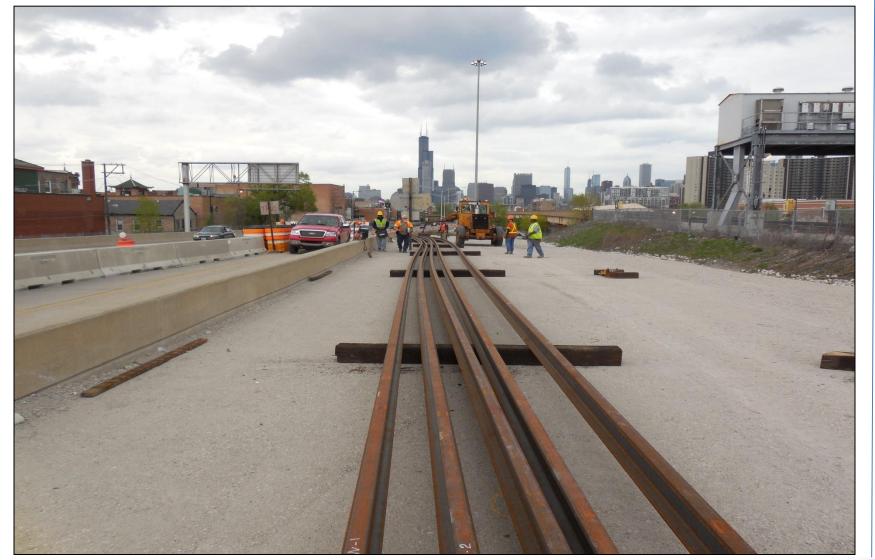
Impact on Customers:	The Dan Ryan Red Line branch from Cermak to 95 <sup>th</sup> will be shutdown for 154 days from May 19 <sup>th</sup> , 2013 to October 20, 2013. There may be single track outages prior to the line cut to perform preparatory work.
Benefit to System:	Reduced maintenance costs; Improved reliability; New infrastructure
Benefit to Community:	Improved customer travel times by eliminating slow zones; New elevators at Garfield, 63 <sup>rd</sup> and 87 <sup>th</sup>
Impact on Accessibility:	Garfield, 63 <sup>rd</sup> and 87 <sup>th</sup> stations will be accessible.
Estimated # of Jobs Created:	1150
Customer Communication Need:	Preliminary outreach started last fall. A comprehensive outreach plan will be implemented to ensure all customers clearly understand travel alternatives and construction impacts.

#### **Detailed Overview of Scope:**

- The limits of the project are the South subway portal near 16<sup>th</sup>/Clark on the north to approximately 95<sup>th</sup> Street on the south and including portions of the 18<sup>th</sup> Connector.
- Replacement of deteriorated track components, including new running rail, ties, fasteners, ballast, and drainage improvements.
   Structural work includes expansion joint replacement, new waterproofing, concrete repairs. Systems work includes contact rail replacement, new supplemental negative return, temporary relocation and/or replacement of existing signal and communications infrastructure.
- Rehabilitation of various architectural, civil, structural, mechanical and electrical elements at eight (8) stations along the Dan Ryan Red Line branch: Cermak/Chinatown, Sox/35<sup>th</sup>, 47<sup>th</sup>, Garfield, 63<sup>rd</sup>, 69<sup>th</sup>, 79<sup>th</sup>, and 87<sup>th</sup>. This work includes interior and exterior painting, platform canopy repairs, lighting and window repairs, and station cleaning.
- Construction of new elevators at Garfield, 63<sup>rd</sup> and 87<sup>th</sup> stations.
- New railing at the 69<sup>th</sup> St. bus bridge.

#### **Construction Progress**

Phase	Description	Status
Construction	Station contractor's baseline schedule approved.	Ongoing
	Station contractor continues fabrication of elevator steel and Cermak canopy.	
	<ul> <li>Track contractor completed pre-validation testing of the signal system.</li> </ul>	
	<ul> <li>Track contractor has started painting the CTA bridge structure over I-55 and 18<sup>th</sup> Street.</li> </ul>	
	<ul> <li>Track contractor has begun welding pieces of running rail.</li> </ul>	
	Progress of key track materials:	
	<ul> <li>Oak Ties – 53,040 (82%) of 65,000 received; on schedule</li> <li>Ballast - 110,047 tons (56%) of 195,500 tons received; on schedule</li> <li>Rail – 203,412 LF (100%) of 203,412 LF received; complete</li> <li>Contact Rail – 104,247 LF (97%) of 107,000 LF received; ahead of schedule</li> <li>Signal Cable – 498,155 LF (99%) of 504,000 LF received; on schedule</li> <li>Traction Power Cable – 70,000 LF (100%) of 70,000 LF received; complete</li> </ul>	



**WELDED RUNNING RAIL** 





STORAGE OF PRE-PLATED OAK TIES



### **Project Title: Bus Hoist Replacement Program Managing Department: Facilities Construction**

Justification of Need:	The existing bus hoists are beyond their useful life and many are not functioning.
Priority of Project:	High
Bus Hoist Equipment Contract Value:	\$1,668,052
Construction Contract Value:	\$2,130,676 (Phase 1: Forest Glen, 77 <sup>th</sup> , South Shops)
Construction Value Earned to Date:	\$1,235,267.39
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	60%
Funding Source:	FTA and RTA Grants
Estimated Start Date/Estimated Length of Project:	NTP 11/21/12 and the anticipated completion date is 8/16/13.
Designer of Record:	TranSystems Corporation
Construction Manager/General Contractor:	Jacobs (CM), Paul Borg Construction (GC), Stertil-Koni (Equipment)
Project Manager:	Steve Mascheri (GM); Shawn Riley (PM)

#### **Detailed Overview of Scope:**

Replacement of bus maintenance lifts including drainage, electrical work, and maintenance pads.

Project has been sequenced to mitigate interference to CTA Bus Operations.



# **Project Title: Bus Hoist Replacement Program – Phase 1 Managing Department: Facilities Construction**

Impact on Customers:	N/A
Benefit to System:	Improved capacity for maintenance facilities and reliable equipment for bus operations.
Benefit to Community:	N/A
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	25
Customer Communication Need:	N/A

#### **Comparable Projects:**

N/A



### **Project Title: Bus Hoist Replacement Program – Phase 1 Managing Department: Facilities Construction**

#### **Construction Progress**

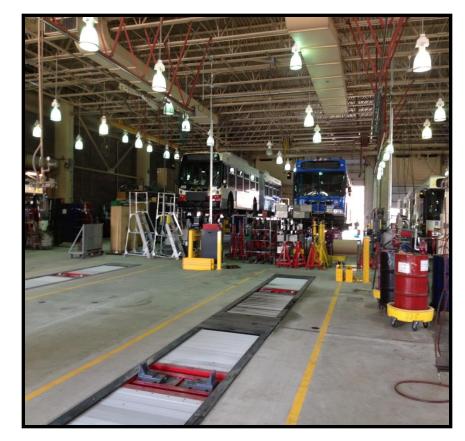
Phase	Description	Status
Phase 1	Project has been sequenced to minimize impact to Bus Operations and Maintenance.	Ongoing
	Forest Glen – 2 lifts installed. Work at 5 of the 7 pits is in progress.	
	South Shops – 4 lifts installed and operational. Close out in progress.	
	77 <sup>th</sup> Garage – 3 lifts installed. Work at 4 of the 11 pits is in progress.	
Phase 2	Kedzie Garage Hoist Work Order	Pre-Construction
	North Park Garage Hoist Work Order	Bidding
	■ 103 <sup>rd</sup> , Chicago, 74 <sup>th</sup> Hoist	In Design

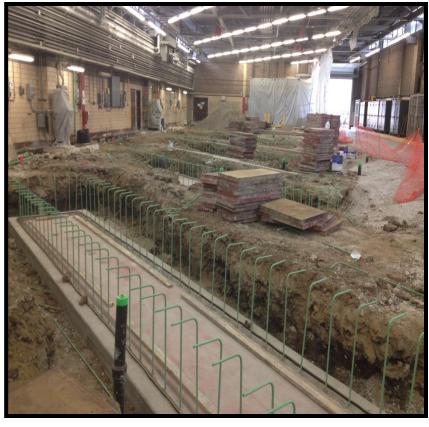
#### **Delay Explanation:**

Elevation differential in underground drainage has resulted in the requirement to place new drainage lines as opposed to tying into existing drainage lines.



## **Project Title: Bus Hoist Replacement Program Managing Department: Facilities Construction**





**South Shops – Completed Lifts** 

Forest Glen – Phase II in Progress



### Project Title: Green Line Reliability Improvements Managing Department: Facilities Construction

Justification of Need:	Infrastructure Improvements to the Green Line in support of the Red Line South line cut.
Priority of Project:	High
Construction Contract Value:	\$16,720,862
Construction Value Earned to Date:	\$10,764,253
Percent Change Orders to Construction Contract:	4%
Percent Time Used to Date:	80%
Funding Source:	FTA and RTA Grants
Estimated Start Date/Estimated Length of Project:	NTP 11/21/12 and Anticipated completion date is 5/19/13.
Designer of Record:	CTA
Construction Manager/General Contractor:	Jacobs/PB (CMs)/ F.H. Paschen, Kiewit Infrastructure (GCs)
Project Manager:	Steven Mascheri (GM); Pedro Hurtado

#### **Detailed Overview of Scope:**

- Track Replacement Englewood Branch of Green Line and Old Incline at 17th Street
- Garfield Station Bus terminal parking lot, auxiliary stair installation, boulevard curb cut
- 63<sup>rd</sup>/Ashland Station Roof replacement, station renewal, lighting upgrades, stair replacement



# **Project Title: Green Line Reliability Improvements Managing Department: Facilities Construction**

	Weekend track closures on Green Line,
Impact on Customers:	Partial station closures at 63 <sup>rd</sup> /Ashland
	Weekend bus reroutes for Green Line track work
Benefit to System:	Improved capacity for maintenance facilities and reliable equipment for bus operations.
Benefit to Community:	N/A
Impact on Accessibility:	N/A
Estimated # of Jobs Created:	210
Customer Communication Need:	Notifications for weekend track work, weekend street closures.

N/A



# Project Title: Green Line Reliability Improvements Managing Department: Facilities Construction

#### **Construction Progress**

Phase	Description	Status
Track work	<ul> <li>Approximately 7500 feet of ties and 2800 feet of footwalk on the Englewood branch of the Green Line to be replaced.</li> <li>Approximately 1000 feet of track on the 17th Street incline to be replaced.</li> </ul>	Substantial completed Substantial completed
Garfield	<ul> <li>Construct a new concrete bus terminal turnaround.</li> <li>Auxiliary exit stairs on either side of station, new lighting, signage, fare control, and advertising.</li> <li>Miscellaneous facility improvements to facilitate alternative service during the Red Line South line cut.</li> <li>Provide a median cut on Garfield Boulevard to allow buses a right turn access to bus turnaround.</li> <li>New sidewalk curb cut to allow a parking lane along Garfield.</li> <li>Provide new concrete pad to allow customers a wider standing sidewalk while waiting for bus service at 87<sup>th</sup>.</li> </ul>	Substantial completed
63 <sup>rd</sup> /Ashland	<ul> <li>Roofs replaced, Transportation office, platform canopy, elevator tower roof stationhouse and Bus canopies roofs.</li> <li>Staircase replaced.</li> <li>Escalators refurbished.</li> <li>Elevator refurbished to meet new code.</li> <li>New storefront with an ADA accessibility electric push button door, general painting, and landscape.</li> </ul>	Substantial completed

|--|

No delay



## **Project Title: Green Line Reliability Improvements – Track Renewal Managing Department: Facilities Construction**







**Englewood Track Renewal** 

**Incline Track Renewal** 



### **Project Title: Green Line Reliability Improvements – Garfield Station Managing Department: Facilities Construction**







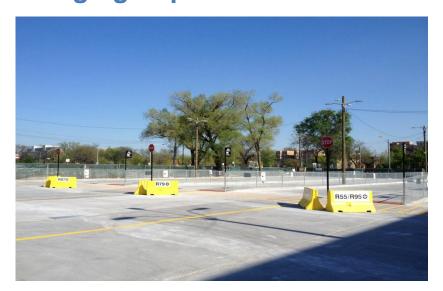


**Existing Lot/ New Median cut** 

**New Bus Turnaround facility** 



### **Project Title: Green Line Reliability Improvements – Garfield Station Managing Department: Facilities Construction**









**New stair and Bus Facility** 

New passenger access and stairs

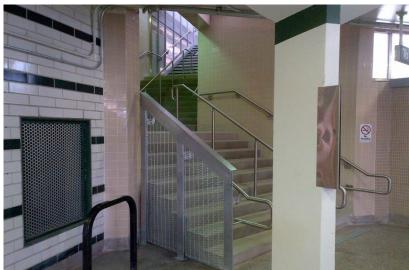


# Project Title: Green Line Reliability Improvements – Ashland/63<sup>rd</sup> Station Managing Department: Facilities Construction









## Project Title: Green Line Reliability Improvements – Ashland 63<sup>rd</sup>Station Managing Department: Facilities Construction







Ashland/63<sup>rd</sup> New ADA Storefront - Landscape

