

# **Construction Project Briefing**

**September 10, 2014**



# Today's Presentation

- **Traction Power - Farwell/Armitage/Hill Substations**
- **Bus Hoist Replacement Program**
  - ✓ **Phase 1 – Forest Glen, South Shops, 77th Street Bus Garage**
  - ✓ **Phase 2 – Kedzie Bus Garage**
  - ✓ **Phase 2 – North Park Garage**
  - ✓ **Phase 2 – Chicago and 103rd Garage**
- **Milwaukee Blue Line Track Renewal**
- **O'Hare Blue Line Station Improvements (Damen, Western, California)**



# Project Title: Traction Power Systems Upgrades and Improvements

Justification of Need:	Substation equipment is obsolete and has exceeded its current lifespan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:	64%
Percent Change Orders to Construction Contract:	0.5%
Percent Time Used to Date:	87% (as of August)
Funding Source:	State Capital Program
Estimated Start Date/Estimated Length of Project:	NTP issued August 30, 2012; substantial completion 810 days after NTP
Designer of Record:	Laramore, Douglass and Popham (LDP)
Construction Manager/General Contractor:	STV (CM), F.H. Paschen (GC)
Project Manager:	Barney Gray (GM); Premal Vora (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

Impact on Customers:	Nine single tracks, and six reroutes. Street and lane closures around worksites, curtailed access to resident garages (at Armitage).
Benefit to System:	Additional traction power capacity reduced traction power related train defects, improved reliability for revenue service, and improved safety.
Benefit to Community:	Improved safety.
Impact on Accessibility:	None.
Estimated # of Jobs Created:	89
Customer Communication Need:	Construction activity notices will be needed to alert businesses and residents to weekend, night work and power outages.

<b>Comparable Projects:</b>
<ul style="list-style-type: none"> <li>• NA</li> </ul>



# Project Title: Traction Power Systems Upgrades and Improvements

## Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none"><li>▪ Farwell – Traction power equipment is installed. Connection to rails is complete. Final equipment-rail connection tests are required prior to energization.</li> <li>▪ Armitage – The last of the CTA track column replacement work continues. Wall installation progresses on the DC building. Foundation work on the AC building continues.</li> <li>▪ Hill – Traction power equipment is installed. Cable pulling and splicing from the substation continues.<ul style="list-style-type: none"><li>▪ Subway ductbank installation is complete. Preparation for rail connections is in progress.</li></ul></li></ul>	Ongoing

**Delay Explanation:**

- Unforeseen underground conditions and a high water table have been encountered within CTA Right of Way at Armitage Substation, creating a delay and requiring site dewatering prior to interior column excavation work.



# Project Title: Traction Power Systems Upgrades and Improvements

## Managing Department: Power & Way Construction



**Hill Substation**

# Project Title: Traction Power Systems Upgrades and Improvements

## Managing Department: Power & Way Construction



**Armitage Substation: West wall masonry installation**

# Project Title: Traction Power Systems Upgrades and Improvements

## Managing Department: Power & Way Construction



**Armitage Substation: North wall of DC first building**

# Project Title: Bus Hoist Replacement Program

Justification of Need:	The existing bus hoists are beyond their useful life and many are not functioning.:			
Priority of Project:	High			
Construction Phase	Phase 1: 77 <sup>th</sup> /SS/ Forest Glen	Phase 2: Kedzie	Phase 2: North Park	Phase 2: Chicago/103 <sup>rd</sup>
Bus Hoist Equipment Contract Value:	\$1,668,052	\$1,163,892	\$779,769	\$1,066,901
Construction Contract Value:	\$2,663,345	\$3,145,143	\$1,869,630	\$2,820,651
Value Earned to Date (Construction and Hoists):	\$4,288,084	\$4,227,808	\$2,551,989	\$3,442.713
Percent Change Orders to Construction Contract:	25%	3%	0%	6%
Percent Time Used to Date:	99%	99%	99%	90%
Estimated Start and Completion Date:	NTP 11/21/12 Projected Final Completion 8/1/14.	NTP 3/4/13 Projected Final Completion 8/1/14	NTP 6/24/13 Projected Final Completion 8/30/14	NTP 9/10/13 Projected Substantial Completion 8/29/14.
Designer of Record:	TranSystems Corporation			
Contractor	Paul Borg	Kiewit	F.H. Paschen	F.H. Paschen
Project Manager:	Steve Mascheri (GM); Jacobs (CM)			
Funding Source:	FTA and RTA Grants			

**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

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:	80 (phases 1 thru 4)
Customer Communication Need:	N/A

<b>Comparable Projects:</b>
<ul style="list-style-type: none"><li>N/A</li></ul>



# Project Title: Bus Hoist Replacement Program

## Construction Progress

Phase	Description	Status
Phase 1:	▪ Forest Glen – Close Out, paperwork pending.	Close Out
	▪ South Shops – Close Out, paperwork pending.	Close Out
	▪ 77 <sup>th</sup> Garage – Close Out, paperwork pending.	Close Out
Phase 2:	▪ Kedzie Garage – Close Out, paperwork pending.	Close Out
	▪ North Park Garage – 2 Punch List items remain, Substantial Completion has been issued.	Close Out
	▪ 103 <sup>rd</sup> and Chicago Garages –9 lifts total: 9 have been installed. Phase 2 for wash and inspection is 80% complete. Substantially complete with wash bays and inspection bays by September 2014.	Construction

Delay Explanation:
Phase 1: Work Complete
Phase 2: Earth retention system constraints for Bays 13 & 14 forced Phase 2 work at 103 <sup>rd</sup> to be split into two separate phases which added an estimated 5 weeks to the final schedule.



# Project Title: Bus Hoist Replacement Program



**Sediment Pit for Chassis Wash Foundation Installation –  
103rd Garage**



# Project Title: Milwaukee Blue Line Track Renewal

Justification of Need:	The existing ties and track components have reached or exceeded their useful life, resulting in slow zones between Damen Station and Kimball Subway.
Priority of Project:	High
Total Project Budget:	\$30,264,684
Construction Contract Value:	\$20,395,680 (Design/Build)
Earned to Date:	71% (design and construction) thru June 2014
Percent Change Orders to Construction Contract:	0%
Percent Time Used to Date:	72% thru September 10, 2014
Funding Source:	FTA/IDOT
Estimated Start Date/Estimated Length of Project:	NTP Issued August 30, 2013; Substantial Completion January 31, 2015 (NTP + 519 Days)
Designer of Record:	HW Lochner (for Kiewit Infrastructure Co.)
Construction Manager/General Contractor:	Parsons Brinckerhoff (CM), Kiewit Infrastructure Co. (DBC)
Project Manager:	John Titzer (GM); William Polacek (PM)

<p><b>Detailed Overview of Scope:</b></p> <ul style="list-style-type: none"> <li>• Improvements to 18,680 track feet along the elevated portion of the Logan Square Connector on the O'Hare Blue Line.</li> <li>• Scope includes replacement of ties, plates, timber guard, other track material and footwalk from North of Damen Station to the Kimball Subway Portal.</li> <li>• Damen/North Ave reverse curves will be reconstructed to increase speed through the curve.</li> </ul>
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# Project Title: Milwaukee Blue Line Track Renewal

Impact on Customers:	Ten line cuts and two single tracks. Street and lane closures around worksites, curtailed access to resident garages under the right of way. Bus shuttles required on line cut weekends.
Benefit to System:	Reduced maintenance costs; Improved reliability; New infrastructure
Benefit to Community:	Improved customer travel times by eliminating slow zones
Impact on Accessibility:	None.
Estimated # of Jobs Created:	82
Customer Communication Need:	Construction activity notices will be needed to alert businesses and residents to weekend, night work and power outages.

<b>Comparable Projects:</b>
<ul style="list-style-type: none"> <li>• Englewood Green Line Track work</li> <li>• Ravenswood-Loop Connector Project</li> </ul>



# Project Title: Milwaukee Blue Line Track Renewal

## Construction Progress

Phase	Description	Status
Design Design Design	<ul style="list-style-type: none"> <li>▪ Milestone 1 – RFP Validation</li> <li>▪ Milestone 2 – 90% Design</li> <li>▪ Milestone 3 – 100% Design</li> </ul>	Complete Complete Complete
Construction	<ul style="list-style-type: none"> <li>▪ Contractor has completed nine of ten weekend line cuts to date. Approximately 94% of track work has been completed or 17,478 track feet.</li> </ul>	Complete
Construction	<ul style="list-style-type: none"> <li>▪ Contractor is preparing for the final line cut on August 22 (Damen to Logan Square).</li> </ul>	Ongoing

<b>Delay Explanation:</b>
<ul style="list-style-type: none"> <li>• N/A</li> </ul>



# Project Title: Milwaukee Blue Line Track Renewal



**Loading Timber Guard – NB near Kimball Subway incline**



# Project Title: Milwaukee Blue Line Track Renewal



**Installing Running Rail at California Interlocking – WE#9**



# Project Title: O’Hare Blue Line Station Improvements (Damen Western California)

Justification of Need:	The existing stations have undergone varying degrees of repair since they opened in 1895. The objective of this project is to bring the stations up to a state of good repair while retaining historic elements.
Priority of Project:	High
Total Project Budget:	\$33,000,000
Construction Contract Value:	\$25,585,000 (Design/Build)
Earned to Date:	8% (design) thru June 2014
Percent Change Orders to Construction Contract:	4%
Percent Time Used to Date:	60% thru September 10, 2014
Funding Source:	IDOT (Jump Start)
Estimated Start Date/Estimated Length of Project:	NTP Issued March 19, 2014; Substantial Completion January 6, 2015 (NTP + 293 Days)
Designer of Record:	Ross Barney Architects (for F.H. Paschen)
Construction Manager/General Contractor:	Parsons Brinckerhoff (CM), F.H. Paschen (DBC)
Project Manager:	John Titzer (GM); William Polacek (PM)

<p><b>Detailed Overview of Scope:</b></p> <ul style="list-style-type: none"> <li>• <b>California and Damen:</b> Replace platform decking, station house roofing , interior flooring, structure painting, interior station house renovation, sidewalk/plaza paving, tuck point masonry, LED lighting, new signage, bike racks, CA Booth, additional fare turnstiles and new art work.</li> <li>• <b>Western:</b> New entrance canopy, paint stairs, LED lighting, bike racks and art work.</li> <li>• <b>Damen Tower:</b> Replace roofing, doors, windows, tuck point masonry and install new station electrical service.</li> </ul>
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# Project Title: O'Hare Blue Line Station Improvements (Damen Western California)

Impact on Customers:	<p>California Station will be closed for a period of 42 days beginning in 3<sup>rd</sup> quarter 2014.</p> <p>Damen Station will be closed for a period of 63 days in the 4<sup>th</sup> quarter of 2014. Western will remain open during construction.</p> <p>Only one station will be closed at a time to minimize customer impacts.</p>
Benefit to System:	<p>Reduced maintenance costs; New infrastructure, improved lighting and customer interfacing, including train tracker system</p>
Benefit to Community:	<p>Modern, well lit station with additional security cameras that will improve safety and security.</p>
Impact on Accessibility:	<p>None.</p>
Estimated # of Jobs Created:	<p>70</p>
Customer Communication Need:	<p>Construction activity notices will be needed to alert businesses and residents regarding station closures and construction impacts (noise, dust, street/alley impacts)</p>

<b>Comparable Projects:</b>	
<ul style="list-style-type: none"> <li>• North Main Line Seven Station Renovations</li> <li>• Harrison Station Renewal Project</li> </ul>	



# Project Title: O'Hare Blue Line Station Improvements (Damen Western California)

## Construction Progress

Phase	Description	Status
Design	<ul style="list-style-type: none"> <li>Milestone A – RFP Validation and presentation boards</li> </ul>	Complete
Design	<ul style="list-style-type: none"> <li>Milestone B – 90% Design</li> </ul>	Complete
Pre-Construction	<ul style="list-style-type: none"> <li>Contractor Soliciting and awarding bids for various trades (June through August) Work Order packages #1 and 2 are currently in approval process</li> </ul>	On-Going
Construction	<ul style="list-style-type: none"> <li>Mobilize for construction work late August 2014</li> </ul>	Planned
Construction	<ul style="list-style-type: none"> <li>Close California Station 42 days for construction work (9/4 -10/16/14)</li> <li>Close Damen Station 63 days for construction work (10/20-12/22/14)</li> </ul>	Planned Planned

<b>Delay Explanation:</b>
<ul style="list-style-type: none"> <li>N/A</li> </ul>

