



Construction Project Briefing



September 22, 2023



Today's Presentation

- CDOT - Lake Line - Damen Station
- Non-Revenue Maintenance
- Traction Power Upgrades - Canal Tie House, Barry and Damen Substations
- Refresh & Renew Program
- Forest Park Phase 1 Rebuild
- Red and Purple Modernization Project



Project Title: CDOT - Lake Line - Damen Station

Justification of Need:

Priority of Project:	Medium
Total Project Budget:	
Construction Contract Value:	\$70,891,884
Earned to Date:	39%
Percent Change Orders to Construction Contract:	5.3%
Percent Time Used:	78%
DBE:	MBE: 30% WBE: 8% VBE: 0.96%
Funding Source:	TIF/CMAQ
Estimated Start Date/Estimated Length of Project:	897 days after NTP – New SC Date: 3/28/24
Designer of Record:	Perkins and Will
Construction Manager/General Contractor:	Arcadis / FH Paschen



Project Title: CDOT - Lake Line - Damen Station

Impact on Customers:	This will be a new Elevated CTA Station on the Lake Branch of the Green Line at Damen and Lake Streets. CTA has also implemented slow zones due to structural on-going work.
Benefit to System:	The new station will provide transit connectivity, convenience and amenities to residents, workers and visitors alike.
Benefit to Community:	New, modern transit facility that will serve the burgeoning needs of the Kinzie Industrial Corridor. The new station will also support visitors to the United Center, Malcom X College and educational institutions.
Impact on Accessibility:	This will be a fully accessible CTA station equipped with escalator and elevator access to both platforms and accessible path to the new station house.
Customer Communication Need:	Customer and Community facing is being handled through CDOT.

Comparable Projects:

Morgan Station on Green Line



Project Title: CDOT - Lake Line - Damen Station

Construction Progress

Phase	Description	Status
Construction	<ul style="list-style-type: none">• Pier & Column Replacements (west of Damen)	On-Going
	<ul style="list-style-type: none">• Reconstruct curbs and pour base course for Lake St (east of Damen)	On-Going
	<ul style="list-style-type: none">• Install and detail outbound exit stair (east end)	On-Going
	<ul style="list-style-type: none">• Erecting steel and detailing connections for North Tower and Stair enclosure	On-Going
	<ul style="list-style-type: none">• Station House interior wall pours	On-Going
	<ul style="list-style-type: none">• Install Shoring for Elevator steel / ACON Tower	Late Q3
	<ul style="list-style-type: none">• Steel Delivery for Pedestrian Bridge	Planned Q4



Project Title: CDOT - Lake Line - Damen Station



Damen Station

**View of Station
House and ACON
Tower**



Project Title: CDOT - Lake Line - Damen Station



Damen Station

**Detailing Steel at
North Tower /
Stair enclosure**



Project Title: Non-Revenue Rail Vehicle Facility

Justification of Need:

Priority of Project:	Medium
Total Project Budget:	\$65,902,503
Construction Contract Value:	\$44,370,833
Earned to Date:	54% (thru April 2023)
Percent Change Orders to Construction Contract:	4% (Change Order #1 – \$1,694,221 – Executed October 4 th , 2022)
Percent Time Used:	85%
DBE:	Goal: 30% Design / 27% Construction Commitment: 30% Design / 27% Construction Workforce Goals: 10% Career Opportunity/ 10% Apprentice/ 35% EDA Outreach events conducted: 3 (CTA / Clark) Contract is on track to meet the DBE goal
Funding Source:	IDOT - Rebuild Illinois
Estimated Start Date/Estimated Length of Project:	NTP: 3/24/21 Project Duration 803 Days – Change Order 1
Designer of Record:	STV Inc.
Construction Manager/General Contractor:	WSP/Clark Construction

Detailed Overview of Scope: Perform Design/Build Services to design and construct a new maintenance facility at the CTA's 63rd Lower Yard. This facility will be utilized to repair and maintain CTA's Non-Review Rail Mounted Equipment Fleet. This facility will include three maintenance and inspection tracks, a vehicle wash track with equipment, a paint booth, a welding room, a multipurpose lunchroom and classroom, locker and washroom facilities, supervision offices, and storage facilities.



Project Title: Non-Revenue Rail Vehicle Facility

Impact on Customers:	While no direct impact to rail service, this facility will allow CTA Rail Maintenance to efficiently maintain the CTA's non-revenue fleet. This will result in equipment being in good working order and ready to perform necessary repairs and upkeep to the CTA system. This will allow CTA to maintain reliable service to our customers.
Benefit to System:	The ability to effectively and efficiently maintain the CTA's non-revenue fleet will result in equipment being in good working order and ready to perform necessary repairs and upkeep to the CTA system.
Benefit to Community:	This facility will be design to compliment the surrounding neighborhood from an aesthetic perspective. It will also bring additional activity to the immediate neighborhood.
Impact on Accessibility:	The building will obtain City of Chicago Building permits, which included accessibility reviews.
Customer Communication Need:	Customer impact will be minimal. Community outreach efforts are ongoing with local elected official and the neighboring school to discuss and minimize impacts during construction. Communications will continue with the surrounding residences and business regarding any upcoming impacts to the surrounding area during construction.

Comparable Projects:



Project Title: Non-Revenue Rail Vehicle Facility

Construction Progress

Phase	Description	Status
Construction	Design Phase <ul style="list-style-type: none">• Design Package 3 – W48 Waterline Permit• W48 Parking Lot Design• Final Design	Complete In Progress Complete
	Construction Phase <ul style="list-style-type: none">• Maintenance Pit Wall/Slab• Install Stairs To Mezzanine And Roof• Pour Slab on Grade• Duct banks Installation• Fencing at 61st• Pour Slab on Grade• Installing CMU Walls• Painting Walls• Backfill at Maintenance Pits• Storeroom 48 Waterline Installation• Installing Paint and Blast Booth• Oil-Water Separator Installation	Complete Complete In Progress In Progress In Progress In Progress In Progress In Progress Upcoming Upcoming Upcoming

Delay Explanation:



Project Title: Non-Revenue Rail Vehicle Facility



Slab on Grade Pour #3B – Facing North



Project Title: Non-Revenue Rail Vehicle Facility



Building Interior – Looking Northeast



Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations

The CTA has identified additional traction power demands based on results from the Blue Line Load Flow study and determined that three (3) areas along the blue line O'Hare branch and Dearborn subway may experience problems with running the new fleet at the service levels proposed. To continue providing a reliable and safe service, it is necessary to build two (2) new traction power substations, one at Barry and the other at Damen with all their infrastructure support along with installing a new Tie Breaker house in the Dearborn subway. Also, the project includes the replacement of all traction power equipment at the Haymarket substation.

Justification of Need:

Priority of Project:	High
Total Project Budget:	\$122.8 Million
Construction Contract Value:	\$67.9 Million
Earned to Date:	56% (As of July 2023)
Percent Change Orders to Construction Contract:	16.7%
Percent Time Used:	60% (As of July 2023)
DBE:	Goal: 25% Commitment: 25.3% Workforce Goals: 10% Career Opportunity/ 8% Apprentice/ 25% EDA Contract is on track to meet the DBE goal
Funding Source:	CTA Bonds / Rebuild Illinois
Estimated Start Date/Estimated Length of Project:	NTP: October 20, 2021, Estimated Duration 1020 days/Substantial Completion August 5, 2024
Designer of Record:	TYLin
Construction Manager/General Contractor:	WSP / John Burns Construction



Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations

Impact on Customers:	Minor service disruptions during track access occurrences.
Benefit to System:	The new Traction Power Substation will increase service reliability to the Blue Line.
Benefit to Community:	New buildings will enhance and will blend with the surrounding community and will benefit transit riders in the Blue Line with a safer and more reliable service.
Impact on Accessibility:	N/A
Customer Communication Need:	Construction Activity Notices.

Comparable Projects:

East Lake, Milwaukee & Illinois (ELMI) and Broadway substations



Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations

Construction Progress

Phase	Description	Status
Haymarket Substation	<ul style="list-style-type: none">• Install new electrical equipment• Build building interior, flooring, rooms and finishes• Equipment testing and commissioning.	Ongoing
		Ongoing
		Upcoming
Canal Tie-House	<ul style="list-style-type: none">• Fabricate new Canal Tie-House equipment• Install new Canal Tie-House equipment• Install, form, and pour new Ductbank 2	Completed
		Ongoing
		Ongoing
Damen Substation	<ul style="list-style-type: none">• Fabricate new substation electrical equipment• Build building exterior walls and roof• Build building interior, flooring, rooms and finishes	Ongoing
		Ongoing
		Upcoming
Barry Substation	<ul style="list-style-type: none">• Building exterior walls and roof.• Site excavation and preparation for grade beams.• Caisson Installation	Upcoming
		Ongoing
		Completed
Belmont Crossover	<ul style="list-style-type: none">• Mobilize and demo existing traction power ductbanks• Install New Crossover, Ductbanks, and Cut-Ins• Commission New Belmont Crossover	Completed
		Completed
		Completed



Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations



Birds Eye of Damen Substation



Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations



Equipment Installation at Haymarket



Project Title: Traction Power Upgrades – Canal Tie House, Barry and Damen Substations



Ductbank Vault Install at Barry



Project Title: Forest Park Phase 1 Rebuild

Justification of Need: Improve eroded track conditions and address slow zones within project limits

Priority of Project:	High
Total Project Budget:	\$112,212,000
Construction Contract Value:	\$104,980,000
Earned to Date:	45% (thru August, 15, 2023)
Percent Change Orders to Construction Contract:	0%
Percent Time Used:	42% (thru August, 15, 2023)
DBE:	Goal: 30% Commitment: 30% Workforce Goals: 10% Career Opportunity/ 10% Apprentice/ 30% EDA Contract is on track to meet the DBE goal
Funding Source:	IDOT - Rebuild Illinois, CTA Bonds, TIF
Estimated Start Date/Estimated Length of Project:	NTP: 3/09/2023 Project Duration: 382 days (NTP through SC)
Designer of Record:	AECOM
Construction Manager/General Contractor:	Congress Corridor Partners, a joint between (WSP/Ardmore) / Kiewit Infrastructure Co.

- Detailed Overview of Scope:**
- Rebuild 1.5 miles of tracks between the south portal of the Dearborn Subway, east of Halsted St., and the east end of the IMD Station near Damen Ave.
 - Replace the Morgan Middle Special Trackwork, the Racine Siding tracks and track connections to Loomis inclines.
 - Right-of-way, civil, site, and drainage improvements along the project limits, including underground foundations for the Racine stationhouse and Morgan substation.
 - Miscellaneous improvements on the existing utilities, including traction power, communications and signal systems.



Project Title: Forest Park Phase 1 Rebuild

Impact on Customers:	<ul style="list-style-type: none">• No rail service between IMD and LaSalle stations for 28 days and (Racine, UIC-Halsted, Clinton) stations will be OOS.• No rail service between IMD and UIC-Halsted for 33 days and Racine station will be OOS.• No access to Racine stationhouse from Racine street until completely rebuild, the Loomis stationhouse will remain in service during this time.• Express and local bus shuttles will be provided during the linecut.
Benefit to System:	<ul style="list-style-type: none">• The project will address 1.5 miles of existing slow zones between IMD & Halsted.• The project will reduce maintenance needs and extend the life of the track infrastructure.
Benefit to Community:	<ul style="list-style-type: none">• When completed, the project is expected to provide 4 minute headway travel time between the Racine station and the loop, improving the overall commute quality for the Blue Line passengers in the surrounding medical, school and business districts.
Impact on Accessibility:	<ul style="list-style-type: none">• None
Customer Communication Need:	<ul style="list-style-type: none">• GCR outreach with surrounding stakeholders.• Construction activity notices will be distributed as needed.• Advanced service disruption signs and posters will be installed as needed.

Comparable Projects:

The Dan Ryan Track Renewal Improvements



Project Title: Forest Park Phase 1 Rebuild

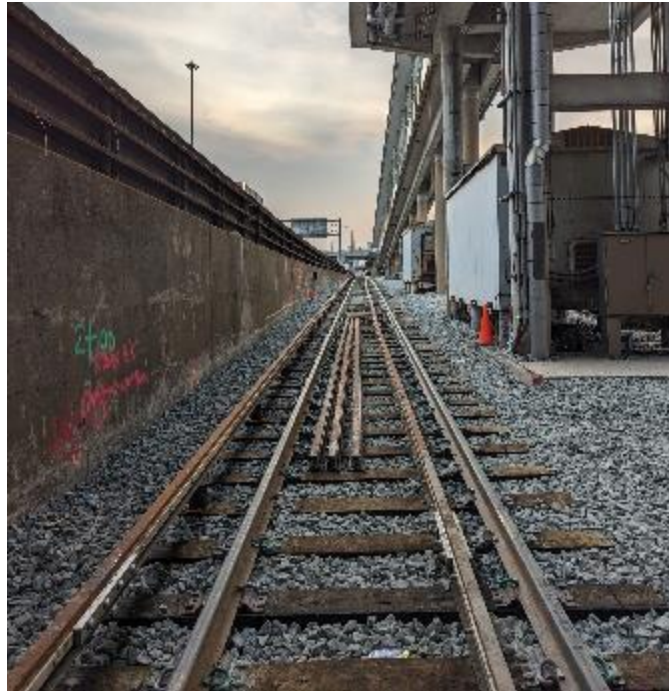
Construction Progress

Phase	Description	Status
Construction	<p>Pre-Linecut Work:</p> <ul style="list-style-type: none"> • Mobilization and site setup at the Rush Lot staging site • Advanced material procurement and delivery • Installation of a temporary Fencing barrier & stair towers • Utility investigation and potholing • Pre-testing and assessment of Signal equipment • Earthwork and mass excavations outside main track bed • Advanced drainage & utility work outside main track bed <p>Linecut Work:</p> <ul style="list-style-type: none"> • Demolition of the Racine stationhouse and ramp • Demolition and removal of existing tracks • Installing new foundations at Racine and Morgan • Installing directional bores under I-290 • Installing new ballast and utilities under track bed • Installing new rail including all special trackwork • Dearborn subway work (Rail, tunnel) • Testing for mainline service restoration <p>Post-Linecut Work:</p> <ul style="list-style-type: none"> • Testing and commissioning of Morgan Middle & TOs. 	<p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Completed</p> <p>Ongoing</p> <p>Ongoing</p> <p>Completed</p> <p>Completed</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Completed</p> <p>Planned</p> <p>Planned</p>

Delay Explanation:



Project Title: Forest Park Phase 1 Rebuild



Halsted Station After



Project Title: Forest Park Phase 1 Rebuild



Stage A Completion



Project Title: Forest Park Phase 1 Rebuild



Mass Excavation & Grading by IMD Station



Project Title: Forest Park Phase 1 Rebuild



Morgan Middle Looking West



Project Title: Forest Park Phase 1 Rebuild



Morgan Middle Looking East



Project Title: Forest Park Phase 1 Rebuild



Duct Banks East of Racine



Project Title: Forest Park Phase 1 Rebuild



Cassions and Deep Foundations at Racine



Project Title: Refreshed & Renewed

Justification of Need:

The Refreshed & Renewed Program is a CTA Facilities Maintenance implemented plan to promote safety, security and longevity to all CTA Facilities including, but not limited to: Rail Stations and Platforms, Bus Garages and Rail Shops across the system. The Refreshed & Renewed Program performs major improvement work at these transit operations facilities for both the customer and the internal needs of the Authority.

Priority of Project:	Medium
Total Project Budget:	\$6,500,000
Expended to Date:	\$2,539,929.53
Used last Month:	\$ 368,817.41
Funding Source:	Various
Estimated Start Date/Estimated Length of Project:	January 2021 to December 31, 2023
Contractor	CTA Forces

92 Rail stations will receive lighting upgrades, painting and deep cleaning as part of this program.

29 stations will have a detailed Scope of work which includes:

- Maintaining Cleanliness throughout public, as well as back-of-house areas
- Ensuring stations are graffiti free;
- Re-painting painted surfaces;
- Maintaining pathways of ingress and egress are clear of obstruction;
- LED lighting conversions and component;
- Removing obstructions from windows and store front systems that may impede natural light and safe viewing points.
- Address and repair any unsafe defects such as spalling concrete and rotted wooden platforms;
- Replacing outdated and damaged signage;
- Maintaining a warm/cool working environment.



Project Title: Refreshed & Renewed

Impact on Customers: (Slow zones, single tracks, reroutes, weekends, etc.)	No track access occurrences within the scheduled work of the Refreshed & Renewed program will affect customers. Minimal impacts to customers will be work-arounds at any given station/ facility that may affect customers, or employees, for a relatively short amount of time (Typically less than 1 day.)
Benefit to System:	The Refreshed & Renewed Program is implemented to promote the continued safety, security and longevity of all CTA Facilities including, not limited to: Rail Stations and Platforms, Bus Garages and Rail Shops across the system.
Benefit to Community:	Improved overall lighting and wayfinding signage, newly painted & refreshed stations, safety, cleanliness and appearance. Focus on the Customer experience, both Internal and external.

Comparable Projects:

- Station Renewal
- Logan Square Station Renewal



Project Title: Refreshed & Renewed

Department	Description	Status
Facility Maintenance	<u>Rail Stations Full Program Scope 29 Stations (12 of 29 Completed)</u> <ul style="list-style-type: none"> • Addison/Red Line • 35th/Red Line • 35th/Green Line • Montrose/Brown • Halsted/Orange • Cicero/Green • Howard/Red • Sheridan • Indiana/Green • 35th/Orange • Merchandise Mart • 54th/Cermak/Pink • Laramie/Green • Addison/ Brown Line 	Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed Completed In-Progress Scheduled
	<u>Bus Turnaround Full Program (9 of 12 Completed)</u> <ul style="list-style-type: none"> • 79th & South Shore • 63rd & Archer • Central & Harrison • Chicago & Austin • 79th & Halsted • 74th & Damen • Archer & Neva • 24th & Cicero • North & Narragansett • Belmont & Kimball • Belmont & Cumberland 	Completed Completed Completed Completed Completed Completed Completed Completed In-Progress Scheduled



Project Title: Refreshed & Renewed

Before



After



Merchandise Mart – Paint all interior and replace lights with LED.



Project Title: Refreshed & Renewed

Before



After



Merchandise Mart – Replace all lightening with LED



Project Title: Refreshed & Renewed

Before



After



35th/Archer – Replace exterior signage with new and add LED lightening to light boxes.



Project Title: Refreshed & Renewed

Before



After



Sheridan/Red – Replace Mezzanine storefront doors with salvaged doors from BrynMawr station demo, RPM Project

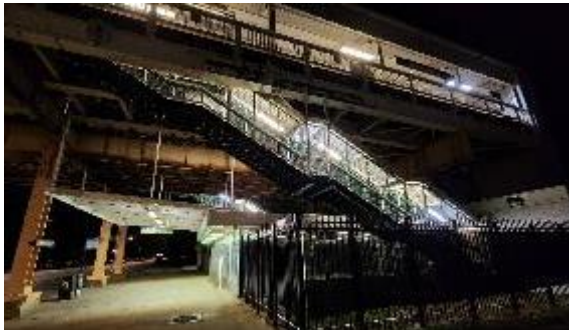


Project Title: Refreshed & Renewed

Before



After



Indiana/Green Line – Replace all light fixtures with LED



Project Title: Refreshed & Renewed

Before



After



Indiana/Green Line – Replace all platform light fixtures with LED

Before



After



54th/Cermak/Pink – Replace concrete slab causing a tripping hazard concrete slab with new slab, eliminating tripping hazard



Project Title: Refreshed & Renewed

Before



After



54th/Cermak/ Pink– Replace all exterior & platform lights with LED



Project Title: RPM Phase One – Design-Build Contract

Justification of Need:	The RPM Phase One Project is greatly needed in order to expand capacity on CTA's most utilized rail line and to replace aging infrastructure.	
Priority of Project:	High	
Total Project Budget:	\$ 2.1 Billion (excludes Transit TIF interest payments)	
Construction Contract Value:	Original - \$1,272,275,929 Current - \$1,364,324,117	
Earned to Date:	64.98%	
Percent Change Orders to Construction Contract:	7.2%	
Percent Time Used:	66.58%	
DBE:	Design: Goal: 20% / Commitment: 20.64% Construction Goal: 20% / Commitment: 20% Workforce Goals: 10% WIOA / 15% Apprentice / 35% EDA	Contractor is on track to meet the DBE goal
Funding Source:	CTA Financing, FTA Core Capacity Grant, CMAQ, TIFs	
NTP / Construction Start / Estimated Completion:	February 8, 2019 / October 2019 / 2025	
Design-Build Contractor:	Walsh-Flour Design-Build Team	
Owners Representative:	Elevated Solutions Partners	
Detailed Overview of Scope:	RPM Phase One consists of the following elements that will allow CTA to expand service along the Red and Purple lines:	
	<ul style="list-style-type: none"> • Lawrence to Bryn Mawr Modernization (LBMM) – complete reconstruction and addition of ADA accessibility at four Red Line stations (Lawrence, Argyle, Berwyn, and Bryn Mawr) and reconstruction of 6 miles of track, structures, and viaducts from Leland Ave. to Ardmore Ave. • Red-Purple Bypass (RPB) - Construction of a grade-separated bypass for the Brown Line at Clark Junction, just north of Belmont Ave. Includes realignment and reconstruction of 1.4 miles of mainline tracks and structure between Belmont station and south of Cornelia Ave. • Corridor Signal Improvements (CSI) – Installation of new higher-capacity signal system on 23 miles of track between Belmont and Howard stations. 	



Project Title: RPM Phase One – Design-Build Contract

Phase	Description	Status
Administrative / Design: Construction:	<ul style="list-style-type: none"> ▪ Continued submittal/revisions of required management plans ▪ Continued Design Development in support of Red-Purple Bypass, Lawrence to Bryn Mawr Modernization, and Corridor Signal Improvements ▪ Red-Purple Bypass (RPB). <ul style="list-style-type: none"> – Ravenswood structure rehabilitation – North Mainline Stage 2 track work – North Mainline Stage 2 structure rehabilitation – North Mainline Stage 2 noisewall installation – North Mainline special track and continuous rail installation – Installation of signal cabling for permanent bypass track equipment – Installation of cable brackets below the new North Mainline structure – Installation of contact rail blocks on the new North Mainline deck ▪ Lawrence to Bryn Mawr Modernization <ul style="list-style-type: none"> – Pre-cast Segment fabrication – Stage A Punchlist work – Bryn Mawr Temp A Station Demolition – Retaining Wall Demolition and Temp Sheeting – Removal of decommissioned signal, track, traction power and communications materials along tracks NM1 and NM2 following the stage change. ▪ Corridor Signal Improvements (CSI) <ul style="list-style-type: none"> – Stage A systems punchlist activities – Preparations along NM5 at Clark Junction Interlocking and Kenmore Interlocking for the migration of AF-800 to DGTrack on NM5 – Installation of signal equipment along the RPB North Mainline Structure – Terminations of signal cabling at Clark Junction Relay House and adjacent tie-in houses 	<p>Ongoing Ongoing</p> <p>Ongoing Ongoing Ongoing Ongoing Ongoing Ongoing Ongoing</p> <p>Ongoing Ongoing Started Started Started</p> <p>Ongoing Ongoing</p> <p>Ongoing Ongoing</p>
Delay Explanation:		



Lawrence to Bryn Mawr Modernization



**Stage B
Ceremonial First
Train**



Red-Purple Bypass



**North Main Line
Curve Plinth
Installation**



Lawrence to Bryn Mawr Modernization



**Embankment
Wall Removal**



Lawrence to Bryn Mawr Modernization





Ardmore Viaduct Demolition



Lawrence to Bryn Mawr Modernization



**Embankment Soil
Removal near
Balmoral**

	Outreach type	Major Activities	Timing
Community	 <p>Visual notetaking during the Argyle station "neighborhood identifier" creative workshop</p>	<ul style="list-style-type: none"> Weekly Red-Purple Bypass Project updates for 44th ward Lawrence to Bryn Mawr project updates for 48th ward Rogers Park Chamber of Commerce meeting RPM August virtual office hours FTA RPM project tour Argyle Night Market RPM station "neighborhood identifier" art meeting outreach/flyering Workshops to develop "neighborhood identifiers" for new Lawrence, Argyle, Berwyn and Bryn Mawr Red Line stations 	<ul style="list-style-type: none"> Weekly Bi-weekly August 3 August 7-8 August 10 August 10 August 28 August 29-30
Workforce & SBE/DBE	 <p>Attendees at the Q3 Workforce Outreach Event at Truman College</p>	<ul style="list-style-type: none"> Monthly DBE/Workforce Outreach & Compliance Meeting Q3 Workforce Outreach Event DBE and Workforce Numbers as of 8/31/2023 Dollars Awarded To Date: \$243,168,320 <ul style="list-style-type: none"> Unique DBE Firms To Date: 96 Unique Firms New to CTA: 40 Total Labor Hours Produced: 1,387,820 Total Dollars Earned: \$80,964,488 Jobs created to date (construction trade labor on the design-build team): 1,938 individuals 	<ul style="list-style-type: none"> Ongoing August 8