JOINT MEETING

### DART Opportunities Luncheon

WHEN: **April 3, 2024** 11am - 1:15pm

Networking: 11am - 11:30am WHERE: Vouv Meeting & Event Space 4445 Sigma Road Dallas, TX 75244

Advancing women Advancing transportation > Greater Dallas/Fort Worth

FEATURING: DART



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Darryl Spencer Vice President of Engineering & Construction

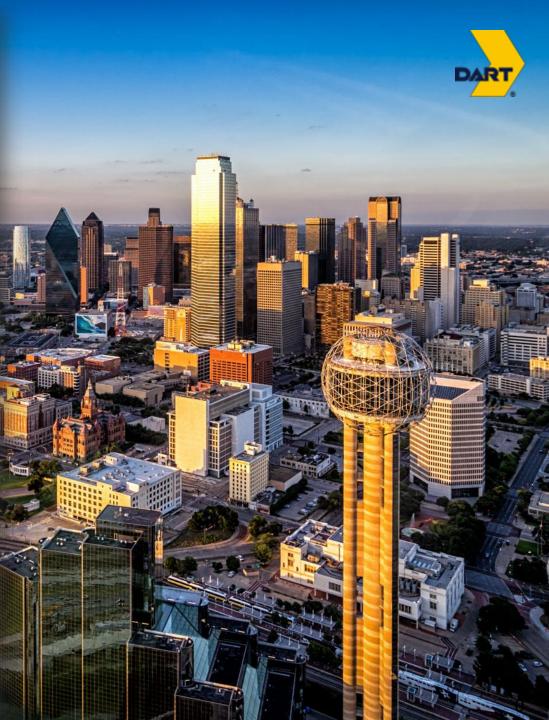
SPECIAL GUEST SPEAKERS:

Dee Leggett Executive Vice President/Chief Development Officer



#### Thank You to Our Sponsors!





## **Presenters Panel**

- Speakers Panel:
  - Dee Leggett Executive Vice President / Chief Development Officer, Dallas Area Rapid Transit (DART)
  - Darryl E. Spencer, P.E. Vice President, Engineering & Technical Services, Dallas Area Rapid Transit (DART)
  - Sherre Holmes Sr. Manager, Procurement, Dallas Area Rapid Transit (DART)





### **Today's Discussion**



### Why Are We Here and Why This Matters?



### System Modernization Program Approach



### PSP 2.0 - Procurement Overview



### DART Strategic Vision

### Introduction to the Strategic Plan Effort



#### DART is in the process of developing a new Strategic Plan to guide our agency into the future.

This effort comes at the perfect time as we celebrate 40 years of success and outline our first steps toward the next 40 years.



The Strategic Plan will help us move from Point A to Point B our future vision.

This vision is aspirational, exciting, and full of opportunities for us all to contribute towards a better future.



♦

The main theme of our journey to Point B is to move from being a service people sometimes use, to being valued as a key regional asset that helps people and cities thrive.

## **Six Pillars of Strategic Plan**



#### **EMPOWERED AGENCY**

Build a nimble organization that can act quickly and effectively by streamlining processes and empowering employees.



#### **QUALITY SERVICE**

Deliver a quality customer experience defined by strong rider advocacy and built on professional pride and continuous improvement.



#### FANTASTIC SPACES

Create fantastic spaces that add value to our communities, enhance the rider experience, and foster a sustainable and thriving region.



#### **CULTURE OF CONTRIBUTION**

Create a culture that aligns roles and responsibilities with the vision, deepens organizational trust, and encourages growth.



#### SEAMLESS MOBILITY

Integrate mobility options to create a seamless travel experience defined by frequency and reliability to position DART as first in mind.



#### STRATEGIC RELATIONSHIPS

Position DART as a collaborative leader and recognized regional economic and mobility asset.



## DART System Modernization

### System Modernization Program Core Elements







Replace up to 95 oldest LRVs, over 500 Buses, and some TRE commuter rail vehicles.

#### UNIFIED SIGNAL SYSTEM

Modernize signal systems on the oldest lines to maximize safety, communications, reliability, and network capacity.





Enhance resiliency of operations during extreme weather events.



#### STATIONS & PASSENGER FACILITIES

Raise the remaining platforms to support universal level boarding along with additional improveme nts to other passenger facilities.



#### OPERATING FACILITIES

Modify operating facilities to support new vehicle maintenance activities and future proof for technology advancements.

DART let's go.

### **DART Design Goals**

### Customer Experience

Focus on improving the customer experience – Security, Cleanliness, Reliability, & Amenities

### State of Good Repair

Continued stewardship of system assets – Operability, Maintainability, Reliability, & Resiliency

### $\bigcirc$ Modernization

Enhance mobility options – Level Boarding, Unified Signal System, Facility Improvements, System Resiliency, Capacity and Efficiency





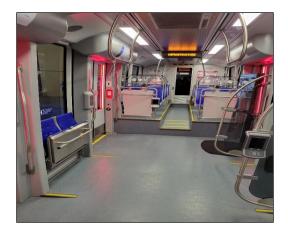
### **Opportunities to Optimize and Expedite Modernizations**

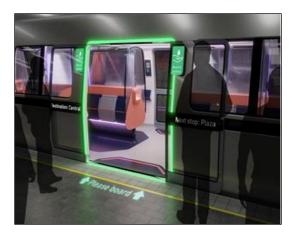
Additional	DART Strategic Plan
Studies	City / DART Area Plans
that might	2045 Transit System Plan
influence	Sustainability Plan
Program:	Zero Emissions Fleet Transition Plan
	HVAC Facility Assessment
	State of Good Repair Assessment and Management Strategy
	DART Security Plan / Crime Prevention Through Environmental Design (CPTED)
	Bus Operating Facilities Master Plan
	Mobility+ Bus Corridor & Mobility Hub Guidelines Planning
	Vulnerability Assessment and Resiliency Plan (grant application submitted)



### **New Light Rail Fleet Amenities** Upgraded Lighting, Passenger Doors, Cleanliness features

Accent LED lighting around windows, rails and signage to increase visibility





Pre-lit doors with LED lighting and safety messaging



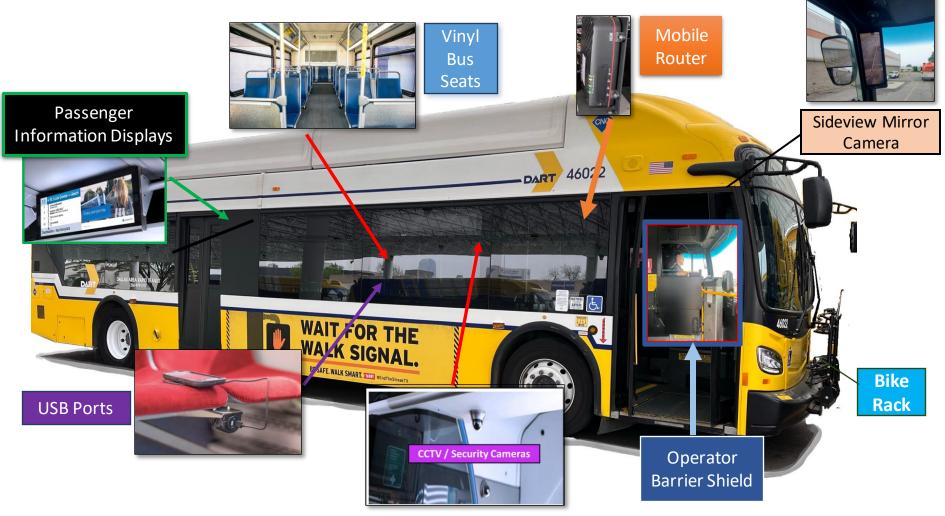
Larger receptacles for trash and recycling that are easier for riders to find and use



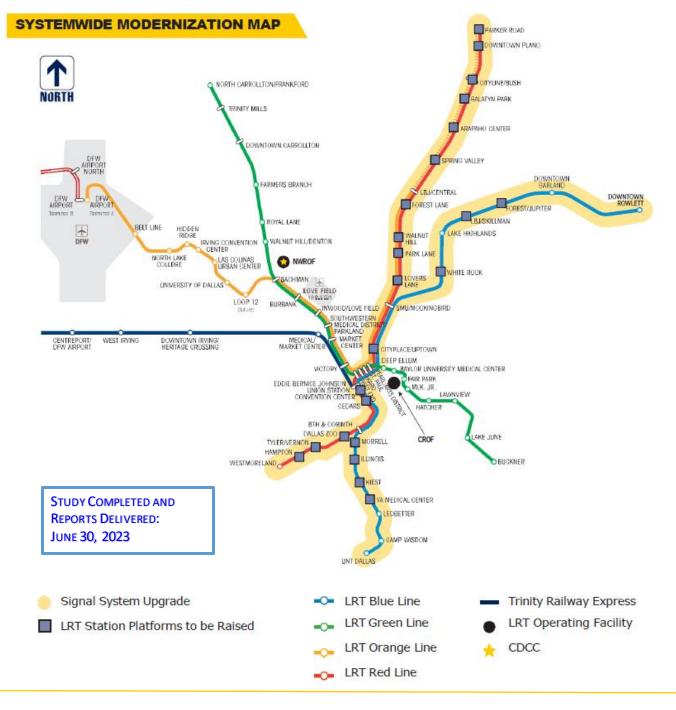


## **New Bus Fleet Amenities**

Upgraded lighting, system messaging, convenience features









## Unified Signal System

**UNIFIED SIGNAL SYSTEM** 

Modernize signal systems on the oldest lines to maximize safety, communications, reliability, and network capacity.

## **Weatherization Initiatives**

**Issue:** Ice and/or snow accumulation on bottom of the contact wire, resulting in loss on conductivity to LRV and system slowdown or shutdown.

#### Solutions:

- 1) Contact Wire Heater
  - Mockingbird Depression & CROF Yard Lead
- 2) Anti-icing Paste/Gel
  - DART is procuring 2 rail vehicles w/on-board applicators
- 3) Shrouds (Ice Caps) for Contact Wire Strategic locations only







## **Extreme Heat – Overhead Catenary Wire**

**Issue:** Extreme heat causes the conductors of the overhead contact system to expand to the point where the counterweights bottom out on the lower temperature limit plate. This effect causes conductors to sag, resulting in reduced speeds. This creates 10- to 15-minute delays in DART's travel times. System speed reductions were imposed to 40-mph systemwide in 2023.

In worst-case scenarios, catenary entanglements occur with the LRV pantograph result in extended service disruptions.





Number of Destructive Interfaces in 2023: 35

**Solution:** Replace counterweights with automatic tensioning device system wide (511 units), eliminating regular adjustments.

### **New LRV Station Amenities** Optimize and improve existing features

- 23 Red and Blue Line Stations to be raised by 7.5 inches (18 at grade, 4 aerial, 1 subway station)
- This will allow for universal accessibility at all doors on new vehicles
- Current vehicles will continue to be accessible via the low-floor section of each vehicle until all LRVs are replaced



**Fully Raised Platform** 



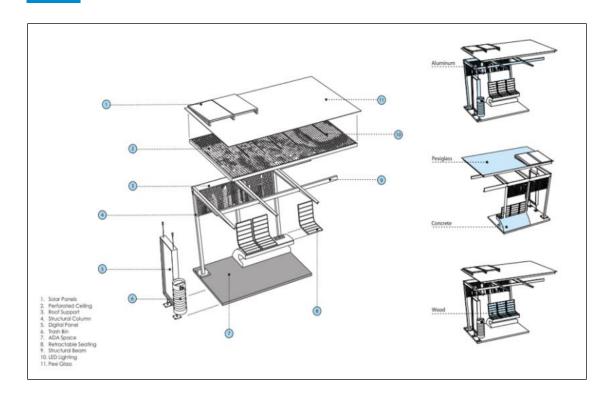




Mini-Level Boarding Area



### **New Bus Stop Amenities** Optimize and improve existing features



Improve lighting, visibility and comfort level with next generation bus shelter

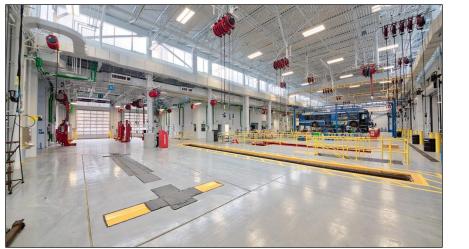






### **New Facility Amenities** Bus & Rail Maintenance Facilities, etc.













## Rail Maintenance Facilities Mods

Modifications to both Central and Northwest Rail Operating Facilities



General platform and fall protection view



**Body Lifts** 



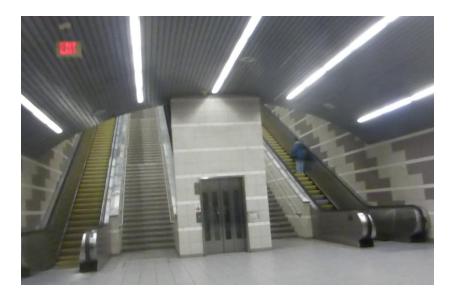
**Wheel Profiling** 

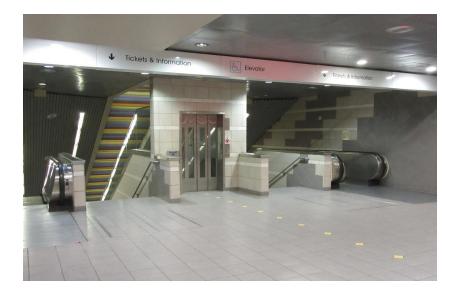


**Monorail Crane** 



### **CityPlace Station Modernization Update**











## **Future Procurements**

## Professional Services Pool Contract C-2047867

- Worked to pre-qualify 35 firms to meet various contract services DART utilizes with regular frequency, including:
  - Civil/ Structural/ Environmental/ Surveying
  - Architectural/ Electrical and Mechanical
  - ITS/ Traffic Engineering
  - Systems Engineering
  - Miscellaneous Support
- 65 Contracts Awarded



## Future Direction for Professional Services

- Focus on Multi-Year Task Order Based Assignments
- Reduce Number of Contracts
- Rotate Small Dollar Task Orders (≤ \$250K)
- Minimize the Use of Seconded Staff to Allow Flexibility in Firm Resource Management
- Decrease Procurement Timeline
- Decrease Expenses Incurred to 'Chase Work'
- Increase Competition for Larger Opportunities (≥ \$7M)
- Small Business Carve Outs in Multiple Awards Procurements



## **Future Direction for Professional Services**

Future Direction	Current PSP Category	Number of Future Awards			
General Engineering, Architectural and Design Services (GEADS)	Groups 1, 2, & 3	Multiple Awards (incl 2 SBEs)			
Third Party Project Support Services (TPPS)*	All Groups	Single Award			
Construction Management Support (CMS)	Group 5	Multiple Awards (incl 2 SBEs			
Systems Engineering and Design Services (SEDS)	Group 4	Single Award			
Real Estate Management Support (REMS)	Group 5	Single Award			
Project Controls Support (PCS)	Group 5	Single Award			
System Safety Certification (SSC)	Group 5	Single Award			
Management and Project Support (MAPS)	Group 5	Multiple Awards (incl 2 SBEs)			



## **Successor Contract Timeline**

Contract	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
PSP Active										
After PSP:										
• Due Diligence										
Solicitation										
Active										

Issued 3/27/2024 Third Party Project Support Services

Issued 3Q FY 24General Engineering, Architectural and Design Services<br/>Construction Management Support<br/>Systems Engineering and Design<br/>Real Estate Management Support<br/>Project Controls Support<br/>System Safety Certification<br/>Management and Project Support

## **Successor Contract Timeline**

- Mar/Apr: Issue Request for Proposal
- April/May : Proposals Due
- May/July: Evaluations and Negotiations Complete
- August: Award Recommendation to the Board
- October: Award Contract

### What can you do now?

- Network to develop Teams
- Register your firm in Bonfire at <u>https://dart.bonfirehub.com/</u>



## **Upcoming Opportunities**

- Various State of Good Repair Remediation Projects
- Design HVAC Systems within Bus & Rail Maintenance Facilities
- Crime Prevention Through Environmental Design (CPTED) Recommendations will enhance DART security
- Mobility Hub Guidelines and Selected Projects
- Sustainability and Resiliency Projects
- Corrosion Control Program Refinement & Training
- Removal of Center Crosswalks at LRV Stations
- Phase 2 Cotton Belt Hike and Bike Trail
- High-Capacity Bus Corridor Treatments
- Loop 12 Infill Station Design on Orange Line



# **Thank You!**



