

### A/E/C Committee Meeting

RHCA . . . the leader in Diversity Inclusion Networking and building business relationships and opportunities

June 14, 2023

Disclaimer: This webinar is not intended for press purposes. If you are part the press, please disconnect.









## Housekeeping Rules

- Keep yourself muted throughout the meeting
- Please make sure to stay for the whole meeting
- Presentation will be emailed
- Q&A will be after each presentation
- Ask questions in the chat
- Please make sure to keep your camera on, at all times
- If you get logged out, please re-login using the same link









## Welcome









## Committee Introductions











Looking to hire individuals with training?

#### **ConnectU2Jobs Workforce Development Training Program**

Discover the advantages of ConnectU2Jobs, a nine-week program that boosts trainees with advanced training, practical experience, and access to the latest tools and equipment.

Partner with Skilled Trainees to Optimize Your Workforce Potential as a Contractor

#### Trainees learn about

- Construction Math
- Hand Tools
- Power Tools
- Construction Drawings (Blueprint reading)
- Heavy Equipment Operator Training
- Flagger Certification
- o OSHA 10

#### **Trainee requirements**

- Must be 18 years old
- Valid Driver's License, Social Security Card and Authorized to Work in the United States

#### **Program Partners**:



Register by June 12th to join the next





#### Individuals who participate in CU2J are:

- Recent High School Graduates
- Anyone looking to transition into the civil infrastructure industry

origin, pregnancy, genetic information, citizenship or immigration status, military status, disability, or age. All contractors, vendors, and consultants working in partnership with the ConnectU2Jobs program, including the RHCA, commit to this equal employment opportunity (EEO) policy

For more information contact: Eduardo Martinez, eduardo@regionalhca.org, 972-786-0909

https://form.jotform.com/231346454129152











http://events.r20.constantcontact.com/register/event?llr=ymfrebdab&oeidk=a07ejr9u0wv1b8eb2ad









#### One Story. One Future. One DFW.

The countdown has begun and registration for DFW's Business Opportunity Forum is now open!

This is your opportunity to attend an infrastructure and development centered event on June 21st.

Attendees will gain insight into DFW Airport's operations, upcoming opportunities, and in-person networking with airport executives, architecture, engineering and construction firms, suppliers, partners, and advocacy groups. You will also learn more about capital programs, controls & analytics, sustainability, business diversity & development, procurement and how to position your company for success.

The event is taking place in person at AMC Theaters Grapevine Mills. An online option will be available at the **DFW Business Opportunity** website.

We look forward to seeing you there. Click the link below to register today. If you have any trouble with registration, please feel free to contact us.

**CLICK HERE TO LEARN MORE AND REGISTER** 

https://dfwopportunityforum.digitalevent.us











https://form.jotform.com/231434913111141







JOBTREAD

relationships with General · Building strong relationships with

your construction partners



Austin, Corpus Christi, Dallas/Fort Worth, El Paso, Houston, and San Antonio

## Statewide Luna Awards Call for Nominations!





Corpus Christi Luna Awards Luncheon Thursday, September 7, 2023 Henry Garrett Ballroom C



Friday, September 8, 2023 11:30 AM - 1:30 PM The Junior League of Housto The Tea Room



Luna Awards Luncheon Thursday, October 5, 2023 11:30 AM - 1:30 PM **Marriott Rivercenter** 



Luna Awards Luncheon Friday, October 6, 2023 11:30 AM - 1:30 PM **Austin Marriott South** Lone Star Ballroom A 4415 S I-35 Frontage Rd., Austin, TX 78744





Vallas/Fort Worth Luna Awards Luncheon Thursday, November 9, 2023 11:30 AM - 1:30 PM Dallas Ballroom



#IAMLUNA

#LUNASTATEWIDE

Registration: https://form.jotform.com/230085618271151

Nomination: https://rhcaluna.awardsplatform.com









## SAVE THE DATE BUILD FORT WORTH EXPO

Opportunities Await at BUILDFW2023

August 18, 2023
Will Rogers Memorial Center - Fort Worth, TX







https://form.jotform.com/222965555456164











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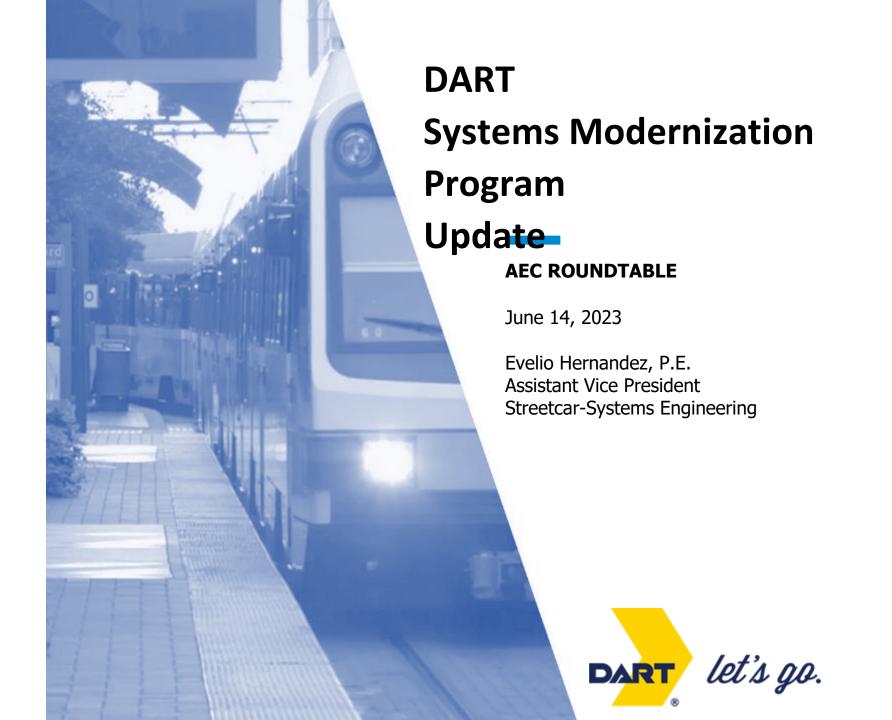
## Guest Speaker

Evelio Hernandez, P.E.
Assistant Vice President
Streetcar-Systems Engineering
DART









## **Today's Discussion**

- Why are we Here and Why This Matters
- Systems Approach
  - Key Elements
  - Customer Experience and Engagement
- How to Get There
  - Program Management Consultant (PMC)
- Next Steps



## Why are we here?

- DART's Aging System
  - Turns 40 this year...
  - Light rail lines are over 25-years old...
- Assets Lifecycle Replacement
  - 2025 Pivotal Year
    - Rail Cars & Buses reach end of Design Life
- Systems Modification
- Technology Evolution
- Modernization



## **Why This Matters**

## Over the next ten years, variety of asset replacements and infrastructure improvements are required:

#### Fleet Replacement

♦ New light rail vehicles, fixed route buses, and commuter rail vehicles for TRE

#### Infrastructure changes

- ◆ Interdependency of vehicles and wayside infrastructure requires a comprehensive systematic approach to project delivery
- Operating facility changes to accommodate new vehicle technology, wayside systems, and customer facing stations and passenger amenities improvements

#### Customer Experience & Stakeholder Engagement

- These efforts matter to our customers and stakeholders
- ★ The customer experience is critical to process
- Improvements should reflect the DART brand, our future vision, and our surrounding communities



## **Systems Approach**

- The interdependency of vehicles and infrastructure requires a wellwell-planned systematic approach to project delivery
- Additional project management and technical resources are needed to support and execute what is likely a \$2+ Billion program
- Additional efforts that will influence how we approach <u>modernization</u> include:
  - Strategic Plan
  - Mobility + Program initiatives, such as Phase 2 Bus Network
     Plan, Mobility Hub Guidelines, and New Bus Amenities
  - Zero Emission Bus Fleet Transition Plan
  - State of Good Repair (SGR) Assessment/Asset Management
     Strategy
  - TRE Fleet Replacement Study
  - Bus Operating Facilities Master Plan



## **Program Goals**

- Customer Experience Focused on improving the customer experience
  - Security, Cleanliness,
     Reliability, and Amenities
- State of Good Repair Continued stewardship of system assets
  - Operability,
     Maintainability, Reliability,
     and Resiliency
- Modernization Enhanced mobility options
  - Level Boarding, Unified Signal System, Facilities Improvements, System Resiliency, Capacity and Efficiency



## **Core Program Elements\***



#### **VEHICLES**

Replace the 95 oldest LRVs with state-of-the-art low floor vehicles to improve the customer experience.



## UNIFIED SIGNAL SYSTEM

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



#### **RESILIENCY**

Enhance resiliency of LRT operations during extreme weather events.



#### **STATIONS**

Raise the remaining 23 Red and Blue Line platforms to support universal level boarding, along with additional station improvements.



#### **OPERATIN**

G

**FACILITIES** 

Modify Central and Northwest rail operating facilities to support new vehicle maintenance activities.

LIGHT RAIL MODERNIZATION



\*There will be similar modernization elements for bus and commuter rail

## **Light Rail Vehicles**

#### **→** Oldest 95 of 163 vehicles are reaching end of useful life

#### **Exterior Body**



#### **Parts Obsolescence**

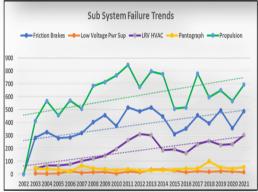


SIEMENS Evaluation Unit
Train Stop



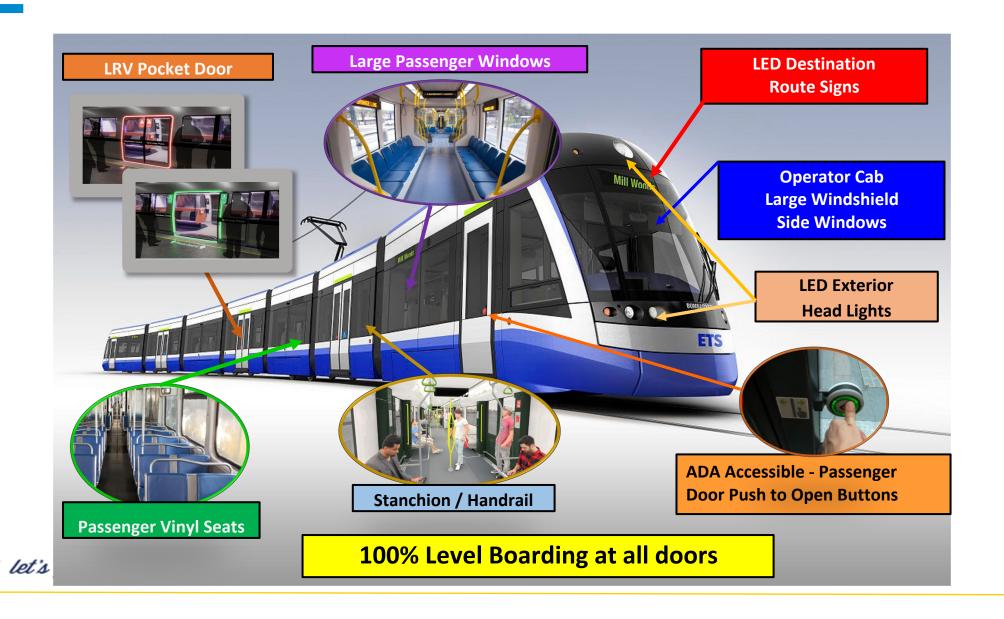
#### Reliability

Fiscal Year	Friction Brakes	Low Voltage Power Supply	LRV HVAC	Pantograph	Propulsion	Grand Total
2002	1				1	2
2003	228	3	40	46	379	696
2004	288	2	65	33	524	912
2005	242	6	66	35	424	773
2006	249	22	76	15	529	891
2007	277	10	102	62	487	938
2008	349	16	122	41	645	1173
2009	386	18	143	37	663	1247
2010	320	6	193	24	704	1247
2011	419	20	260	36	780	1515
2012	412	14	310	19	631	1386
2013	442	33	291	28	761	1555
2014	396	33	184	31	743	1387
2015	274	26	193	31	487	1011
2016	295	15	161	41	474	986
2017	365	24	229	39	725	1382
2018	331	19	254	98	568	1270
2019	401	19	225	46	601	1292
2020	294	20	231	40	525	1110
2021	401	15	301	41	630	1388
Grand Total	6370	321	3446	743	11281	22161



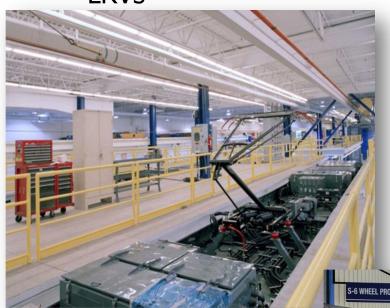


## **New LRV Features and Technology**

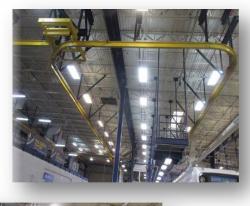


## **Operating Facility Modifications**

 Both Central and Northwest Rail Operating Facilities will be modified to accommodate new LRVs



Monorail Crane



227

**Body Lifts** 

**Increased Roof Access** 



**Wheel Profiling** 

## **Red & Blue Lines Level Boarding**

- 23 Red and Blue Line Stations to be raised by 7.5 inches
  - Four aerial stations
  - One subway station
  - This will allow for universal accessibility at all doors on new vehicles

**Fully Raised Platform** 

 Current vehicles will continue to be accessible via the low-floor section of each vehicle until all LRVs

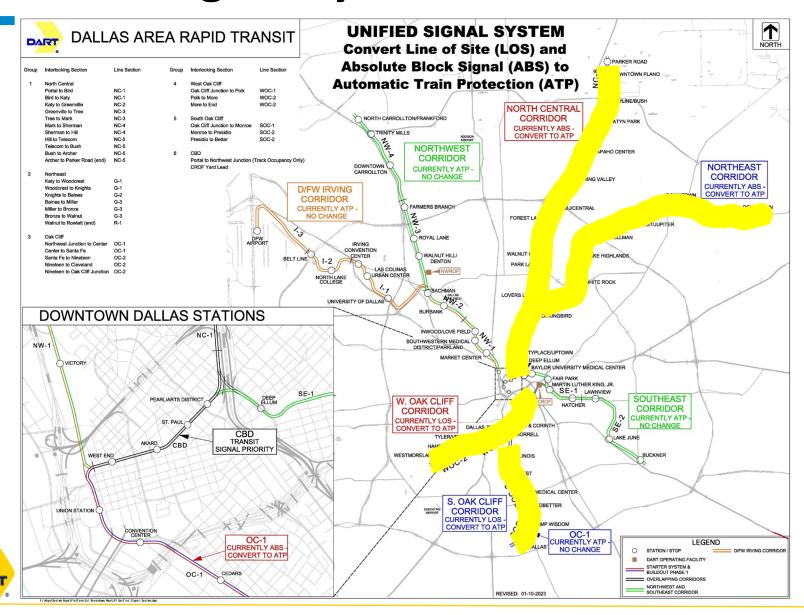
are replaced



**Mini-Level Boarding Area** 



## **Unified Signal System**



## **Red and Blue Lines**

- 48 Miles of Red and Blue Lines
  - Line of Sight
  - Block Indicators
  - Absolute Block
  - Street Running
  - Median Running
    - o 21 Interlockings
    - 5 Major Junctions
    - 5 Crossovers
    - 2 Pocket Tracks





ABS INTERLOCKING SIGNAL



GREEN BAND STREET RUNNING



## **Rail Winterization Study**

- System modernization program will support opportunities to improve resiliency to minimize disruption to service during extreme weather
  - Light Rail Vehicles
  - Facilities
  - Stations
  - Traction Power,

Signals







**Guideway** 



**Switch Machines** 

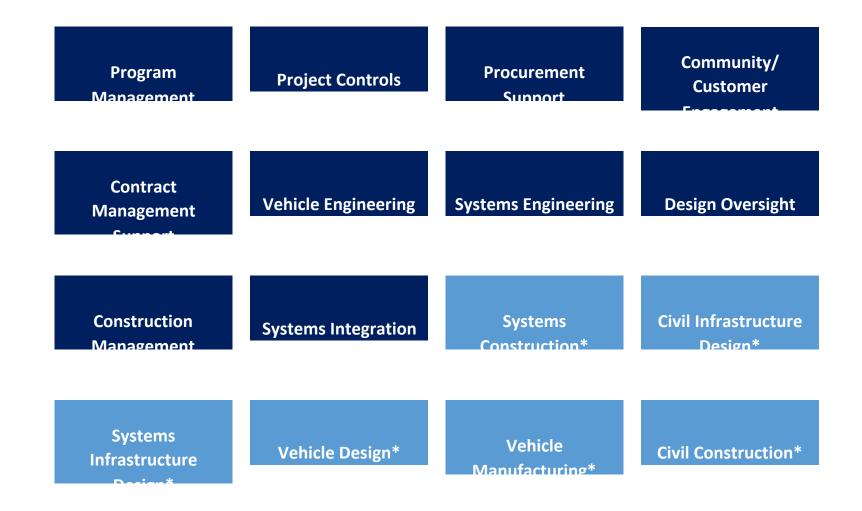


## **How to Get There**

- The magnitude of this program requires comprehensive support of a Program Management Consultant (PMC)
- Role of the PMC will be to:
  - Supplement DART staff
  - Help develop/train DART staff to execute projects with a more holistic Systems Engineering approach
  - Seamlessly coordinate various program elements
  - Allow for quick deployment and scaling of technical resources across life of program
  - Leverage best practices/prior experience from other systems
  - Provide deep bench of technical expertise across vehicles, systems and project management
  - Allow for resources to be organized by mode allowing for simultaneous deployment and activities



## **Program Management Consultant's Scope\***



DART let's go.

<sup>\*</sup> Design and construction services will be delivered separately

#### **Procurement Plan for PMC**

#### **ACTIONS TO BE TAKEN**

- RFP Developed: May 21
- Issue Proposal: May 31
- Pre-Proposal Conference: June 21
- Due back: August 1
- Evaluations Complete: August 29
- Oral Presentations: September 8
- HTQ Determination: September 15
- Price Request/Receipt: September 29
- Negotiations Complete: October 6
- Board Approval: October/November
- Award: November/December



## **Next Steps**

- Fall 2023
  - System Modernization Industry Forum
  - Customer Experience Activities
  - Program Scope Development
- Spring 2024
  - Vehicle RFPs
  - Signal System RFPs
  - Station RFPs



Thank You!





# Q&A









## **AEC Committee Upcoming Events and Topics of Interest**

- City of Dallas Event
- Heavy Highway Forum Statewide
- Build Fort Worth 2023 Construction Expo
- Municipal Improvements
- Water/Wastewater Event
- Federal Event
- Facilities Event
- Water Resources Event
- Transportation/Roadway Event









## **Heavy Highway Forum 2023 – Statewide**

- Thursday, September 21 or Friday, September 22 Austin & San Antonio Districts
- Thursday, October 19 or Friday, October 20 Houston District
- Friday, November 17 or Friday, December 1 Dallas and Fort Worth Districts

Note: These dates do not fall on a "letting date"









### **2023 Heavy Highway Forum**

**Budget Goal All Three Cities** 

o Revenue 70,000.00

### **2022 Heavy Highway Forum**

o Revenue 38,000.00

o Expenses 2,608.24

Net Income 35,391.76

o Attendance 150

## **2021 Heavy Highway Forum**

o Revenue 13,050.00

O Expenses 212.39

Net Income 12,837.61

o Attendance 120













#### **2023 Heavy Highway Forum Proposed Agenda**

- Welcome Remarks 8:30 am
- TxDOT Statewide Update 9:00 am
- District Update 9:45 am
- Breakout Session 10:20 am
  - Construction
  - o PEPS
- Lunch Break 11:30 am
- Alternative Delivery Presentation 11:45 am
- Closing Remarks 12:00 pm











#### **2023 Heavy Highway Forums Next Steps**

- Identify Venues
  - Houston
  - Central Texas (South Austin, North of San Antonio)
  - Dallas / Fort Worth Arlington
  - Venue Requirements
    - Main Room Capacity
      - 150 attendees
      - 15-20 exhibitors
      - Food can be allowed
    - Breakout Room Capacity
      - 60 attendees
- Sponsorship Menu
- Identify Partnering Organizations
  - Houston
  - Central Texas
  - Dallas/Fort Worth
- o Committee Meeting Schedule











## RHCA | Webinar

Infrastructure Bill Opportunities Impact on Texas with a Focus on North Texas

- Federal highway programs: \$26.9 billion
- Public Transportation: \$3.3 billion
- **Drinking water infrastructure (and removing lead pipes):** \$2.9 billion
- *Airports:* \$1.2 billion
- Bridge replacement and repairs: \$537 million
- *Electric vehicle charging network:* \$408 million
- Broadband expansion: \$100 million
- Wildfire protection: \$53 million
- Cyberattacks protection: \$42 million









## Agenda

#### 2023 Pre-Committee Meeting Date Agenda Review

- •Wednesday, May 17, 2023
- •Wednesday, June 21, 2023
- •Wednesday, August 16, 2023
- •Wednesday, September 20, 2023
- •Wednesday, October 18, 2023
- Thursday, November 16, 2023 \*
- •Wednesday, December 14, 2023\*









## RHCA | Subcommittee Help with inviting monthly guest speakers

Example:

The invitation details are listed below:

Tuesday, November 9, 2021 Date:

10 to 15 minutes (if you need more please let me know) Time Duration:

**Time Range:** Any 15 minutes between 8:45am to 10:00am CST

Via online Video: Zoom Video Conference

Committee: RHCA Economic and Business Development Committee: Audience –

Contractors/Professional Services/Public Agency Employees

Topic: Texas Emission Reduction Plan (TERP) Program overview & Benefits for

contractors

PowerPoint Due by Monday, November 8 – To Jonathon Garcia **Presentation:** 

Other Items Needed: (1) Headshot in JPEG (2) Title

Link to recommend guest speakers: https://forms.office.com/Pages/ResponsePage.aspx?id=m9gkZ9IDKEWQMA6zN7Gyu1-t7tkG5ypLvhzsQy7hgMRUNUdGT0UwVIVLTDVRSFNDUjZGU09VVFVPNC4u









# Q&A





