



# Summary of Proposed Award CTDS Replacement

Presented to: Organizational, Services and  
Performance Monitoring Committee

September 13, 2022

---

---



# Project Background

The Greater Cleveland Regional Transit Authority (GCRTA) owns and operates a Consolidated Train Dispatch System (CTDS). The system monitors and controls train movements via system initiated controls relayed to field devices. Data is processed and displayed on workstations located in the Integrated Control Center (ICC). In addition the CTDS is a mission critical system that provides scheduling and reporting functions.

---

---



# Project Background

The existing network configuration consists of three types of computers:

- Main Processors
- Front-End Processors
- Workstations





# Justification

The existing CTDS is approximately twenty–five (25) years old and the software is no longer supported by the original Systems Integrator. The current system relies on older technology such as modems, channel banks and antiquated servers which have reached the end of their service life.



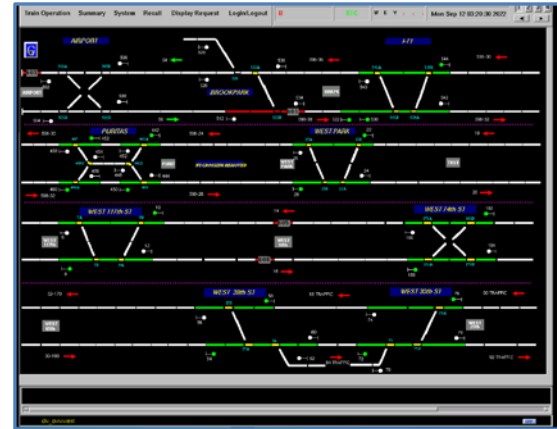


# Overview of Existing CTDS

WINDERMERE TO E. 34<sup>TH</sup> CAMPUS



AIRPORT TO W. 25TH





# Scope of Services

Furnish, install, test and commission over two years a new CTDS system. The new system shall be equipped with the following enhanced features.

- Transmission Control Protocol/Internet Protocol (TCP/IP) based system capable of communicating with legacy GCRTA field devices
  - New modern CTDS software package that provides a graphical representation of the GCRTA rail alignment.
- 
-



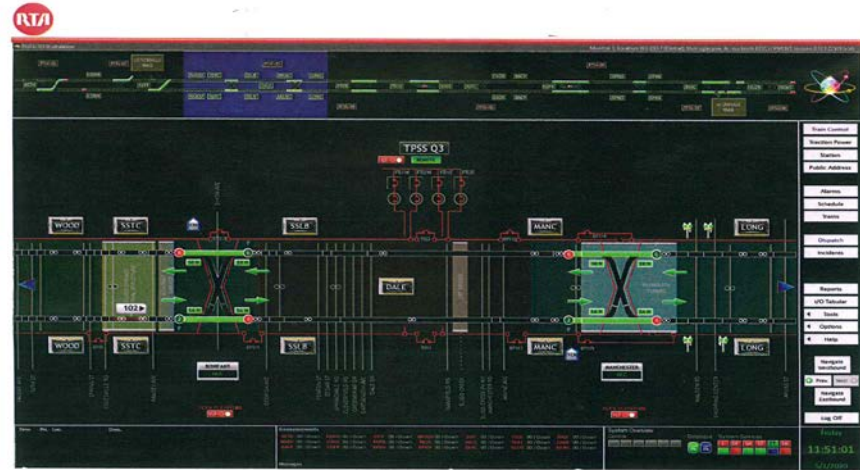
# Scope of Services

- The software will have the capability to monitor and manipulate field devices such as switches and status indicating points
  - Enable the Train Controllers to set schedules, view system alerts, warnings, change set points, analyze, archive and present data trends
  - Enable the GCRTA to decommission older technologies such as modems and channel banks.
  - Two weeks of CTDS Operational Training performed by Senior Application Engineer.
- 
-



# Technical Enhancements

- Moving from an older version of Linux to a Modern Windows and Linux based system.
- Greater speed.
- Open architecture.
- Enhanced graphical interface allows GCRTA Engineers and Technicians the capability of making rail alignment changes.
- Ability to integrate with outside systems such as GCRTA SCADA.





# Procurement Overview

- RFP issued on February 21, 2022
- Notifications sent to five (5) potential proposers
- Accessed on the GCRTA website by four (4) interested parties
- The Office of Business Development assigned a 2% DBE goal to this procurement
- Three (3) proposals received May 5, 2022

# Procurement Overview

## Evaluation Panel Members

- Engineering & Project Development
- Information Systems
- Power & Way
- Safety
- Service Quality Management
- Training & Employee Development

# Procurement Overview

## Evaluation Panel Members (Cont'd)

- Legal (Legal and Risk Management)
- Internal Audit
- Office of Business Development
- Procurement

# Procurement Overview

## Evaluation Criteria

- Technical/Functional Response to Requirements
- Execution, Delivery & Project Management
- Qualifications & Experience
- Cost

# Procurement Overview

## Recommended Vendor:

- B&C Transit, Inc.
  - Serving public transit sector over 25 years
  - Wholly owned subsidiary of Alstom
  - Oakland, CA headquarters with regional office in Pittsburgh, PA
  - High-quality engineering solutions ranging from wayside signaling and communications solutions to central control upgrades and replacements
  - Proposed project team with proven success
  - “Nucleus” Software
    - Provided with perpetual site license
    - User-friendly and end-user maintainable

# Procurement Overview

## Firm's Experience:

- Valley Metro Rail, Miami Dade Transit, Los Angeles Metropolitan Transportation Authority, Hampton Roads Transit, San Francisco Metropolitan Transit Authority, Sacramento Regional Transit District, Washington Metropolitan Area Transit Authority, among others.

# Procurement Overview

## DBE Goal:

- DBE Goal was set at 2%
- US Communications & Electric, Inc.
  - Installation & testing of system
  - Founded in 1996
  - Crains Largest Women Owned Businesses in Cleveland List
  - Network cable design & integration, audio/visual, distributed antenna, security & IoT

# Procurement Overview

## Recommendation:

- Staff requests that the Organizational, Services & Performance Monitoring Committee recommend an award to B&C Transit, Inc. to provide a new consolidated train dispatch system in a total contract amount not to exceed \$4,000,000.00.



# Questions?

