

RESOLUTION NO. 2018-120

AUTHORIZING A CONTRACT WITH CLEVELAND STATE UNIVERSITY FOR A STUDY THAT INCLUDES THE IMPLEMENTATION OF ON-BOARD SENSORS AND REAL TIME DATA ACQUISITION CAPABILITIES IN TRANSIT VEHICLES IN AN AMOUNT NOT TO EXCEED FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) (RTA DEVELOPMENT FUND, INTELLIGENT TRANSPORTATION SYSTEMS BUDGET)

WHEREAS, the Greater Cleveland Regional Transit Authority ("Authority") has been awarded a competitive United States Department of Transportation ("USDOT") Advanced Transportation and Congestion Management Technologies Deployment ("ATCMTD") grant; and

WHEREAS, the Authority committed in its grant application to partnering with the Cleveland State University - University Transportation Center to provide research opportunities as a condition of receiving the grant funding; and

WHEREAS, the Authority wishes to enter into a contract with Cleveland State University for the implementation of on-board sensors and real time data acquisition capabilities in transit vehicles for a study that will provide data in four areas – assessment of rail ballast condition, health monitoring of rail car wheels, assessing bus emissions, and monitoring on-time performance and passenger wait time.

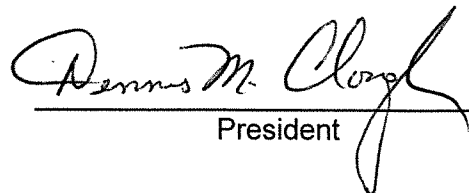
NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the Greater Cleveland Regional Transit Authority, Cuyahoga County, Ohio:

Section 1. That the Interim CEO, General Manager/Secretary-Treasurer of the Greater Cleveland Regional Transit Authority be and he is hereby authorized to enter into a contract with Cleveland State University for the implementation of on-board sensors and real time data acquisition capabilities in transit vehicles for a study that will provide data in four areas – assessment of rail ballast condition, health monitoring of rail car wheels, assessing bus emissions, and monitoring on-time performance and passenger wait time.

Section 2. This work will be funded through the RTA Development Fund, Intelligent Transportation Systems Department Budget, including but not limited to 100% Local Funds, in an amount not to exceed \$500,000.00, pending an amendment to the grant agreement for reimbursement from the Federal Highway Administration Cooperative Grant Agreement #693JJ31850009 for a total contract amount not to exceed \$500,000.00 (\$250,000.00 in Federal Funds which represents 50% of the total cost).

Section 3. That this resolution shall take effect immediately upon its adoption.

Adopted: December 18, 2018



President

Attest: 

Interim CEO, General Manager/Secretary-Treasurer



Greater Cleveland Regional Transit Authority
STAFF SUMMARY AND COMMENTS

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| TITLE/DESCRIPTION: CONTRACT: CONTRACT WITH CLEVELAND STATE UNIVERSITY FOR A STUDY THAT INCLUDES THE IMPLEMENTATION OF ON-BOARD SENSORS AND REAL TIME DATA ACQUISITION CAPABILITIES IN TRANSIT VEHICLES AMOUNT: NOT TO EXCEED FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) | Resolution No.: 2018-120 |
| | Date: December 14, 2018 |
| | Initiator: Intelligent Transportation Systems Department |
| ACTION REQUEST: <input checked="" type="checkbox"/> Approval <input type="checkbox"/> Review/Comment <input type="checkbox"/> Information Only <input type="checkbox"/> Other _____ | |

1.0 **PURPOSE/SCOPE:** This action will allow the Authority to enter into a contract with Cleveland State University ("CSU") for a study that includes the implementation of On-Board Sensors and Real Time Data Acquisition Capabilities in Transit Vehicles. This study will be performed by CSU's University Transportation Center ("CSU-UTC") and will provide data in four areas – assessment of rail ballast condition, health monitoring of rail car wheels, assessing bus emissions, and monitoring on-time performance and passenger wait time.

2.0 **DESCRIPTION/JUSTIFICATION:** GCRTA successfully submitted a grant application for the competitive USDOT Advanced Transportation and Congestion Management Technologies Deployment ("ATCMTD") grant. As part of the application and criteria for receiving the grant GCRTA committed to partnering with CSU-UTC. The project will allow GCRTA's bus and rail vehicles to act as mini data hubs which, coupled with sensor technology and real time data acquisition, can provide valuable information for GCRTA to incorporate into its operations and maintenance programs.

CSU-UTC will collaborate with the Case Western University Institute for Smart, Secure and Connected System through the Northeast Ohio Urban Transportation Consortium & The Internet of Things (IoT) Collaborative to study the four items noted above. If successful, GCRTA will gain valuable data and will be in a position to continue the collaboration on future research projects.

3.0 **PROCUREMENT BACKGROUND:** N/A

4.0 **DBE/AFFIRMATIVE ACTION BACKGROUND:** N/A

5.0 **POLICY IMPACT:** N/A

6.0 **ECONOMIC IMPACT:** This agreement will be funded through the RTA Development Fund, Intelligent Transportation Systems Department Budget, including but not limited to 100% Local Funds, in an amount not to exceed \$500,000.00, pending an amendment to the grant agreement for reimbursement from the Federal Highway Administration Cooperative Grant Agreement #693JJ31850009 for a total contract amount not to exceed \$500,000.00 (\$250,000.00 in Federal Funds which represents 50% of the total cost).

7.0 **ALTERNATIVES:** Reject the contract. Rejection of the contract would prevent the Authority from obtaining the research and data that this contract will provide. The Authority would also be out of compliance with its grant requirements.

8.0 RECOMMENDATION: The Operational Planning & Infrastructure Committee has been briefed on the project at its September 11, 2018 and December 4, 2018 meetings. This is one of the many contracts that are included in the Radio CAD/AVL Replacement Program. Staff recommends approval of the contract.

9.0 ATTACHMENT: None

Recommended and certified as appropriate to the availability of funds, legal form and conformance with the Procurement requirements.



Interim CEO, General Manager/Secretary-Treasurer