



TOWN OF CHAPEL HILL

Town Hall
405 Martin Luther King Jr.
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Chapel Hill, NC 27514

Legislation Text

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Staff Update: Real-Time Passenger Information System Contract.

Staff:

Brian Litchfield, Director
Nick Pittman, Transit Planning Manager

Department:

Transit

Overview: Chapel Hill Transit currently utilizes a Real-Time Passenger Information System ("Real-Time System") from Cubic Corporation previously known as "NextBus." This system provides real time information that over 70% of our customers utilize, as well as telematics that inform operational and maintenance functions. Starting in February 2022, the system became obsolete when it stopped sending data updating customers about bus locations.

We intend to use \$1.4M of Transit American Rescue Plan Act (ARPA) funds to replace and upgrade the Real Time System.



Recommendation(s):

That the Council receive this update.

Key Issues:

- In 2021, Chapel Hill Transit was named in a multi-agency consortium solicitation administered by the Piedmont Authority for Regional Transportation (PART) for the purchase of a new Real-Time System.
- On March 9, 2022, the PART Board of Trustees approved the recommendation to award a contract to GMV Syncromatic.
- The Real-Time System was originally installed in 2006 and has met its useful service life for hardware and software.
- Over the past five (5) years Chapel Hill Transit has experienced issues with the proprietary nature of the hardware and software which has impacted our ability to meet our customer and operational needs, and the customer support from NextBus has not met our organizational interests.
- With the shutdown of AT&T's 3G network, our NextBus system has been rendered obsolete and no longer provides real-time information to our customers. Supply chain issues have caused lengthy delays in the update of this system.
- This effort is endorsed by the Transit Partners Committee and is identified as a priority by our staff.

Background

In August 2021, a Request for Proposals (RFP) was advertised through the PART website and direct notices to potential vendors. PART procurement staff received five (5) proposals in response to this RFP.

Representatives from PART, Davidson County Transportation System, Greensboro Transit Authority, High Point Transit System, Link Transit Winston-Salem Transit Authority, and Chapel Hill Transit reviewed the responses in this RFP and chose to host interview/product demos in January 2022.

Following the interviews, the Selection Committee made the recommendation to award the solicitation to GMV Syncromatics. Chapel Hill Transit's estimated cost for the installation and operations of the system for Year 1 is \$1,381,375. Similar to NextBus and other transit focused software systems, there will be an additional annual operating cost that will be included in future budgets for Chapel Hill Transit.

The Selection Committee believed that the Real-Time System proposed by GMV Syncromatics best met the needs of the consortium and would provide the transit operators and its customers the best real-time vehicle information. In addition, the customer applications and connections to additional third-party transit systems provided by GMV Syncromatics proved to be superior to the other proposals.

In addition to providing real-time information that is used by over 70% of our customers, below is a list of additional information that the system provides that will benefit our operations and our customers:

- Core AVL - this is the base product from the vendor with all necessary hardware, modems, MDT (tablets), training, licensing. System is built with no proprietary equipment. All hardware is commercial off the shelf.
- Planning-Remix - provides Remix Explore, Transit Planning + Scheduling, On Demand Planning. Connects census and APC data to analysis of routing and schedule information. Provides On-Demand Planning options to evaluate potential new services. Connects to Remix Street software currently provided by DCHC-MPO.
- Planning-Optibus - Optibus provides staff a platform to update routes and schedules for direct import into the AVL platform. Optibus software will create a new database for stop and amenities information that will then be used by downstream systems via GTFS and GTFS-RT exports (will replace dependency on outdated ARC-GIS and Trapeze FX system). Optibus also provides an enhanced run-cut solution (will replace outdated Trapeze Blockbuster).
- APC Integration - system will integrate with current UTA APC system. Data from APCs will be used to provide real-time load information to customers and dispatch.
- Vehicle Headsign integration - integrates with current vehicle headsign systems (destination signs) to provide single login for Operators.
- Video integration - integrates with Seon camera system to provide live looking utilizing AVL modem, which will better help Supervisors respond to issues and improve the safety of Operators, Supervisors and customers.
- Radio System - provides VOIP radio system that will connect vehicles with Dispatch and Supervisors. Uses modem technology onboard vehicles to communicate.
- AVA - Automatic Vehicle Announcements - provides required announcement of key locations, timepoints, route names throughout the vehicle and through external speaker.

- Covert Alarm - provides covert safety alarm for the Operators to communicate with Dispatch.
- Regional Connectivity - this system will provide reliable data for use with the other Triangle and Triad transit partners. Customers will be able to view transit real-time/schedule information from Winston-Salem to Raleigh.

Fiscal Impact/Resources: On [October 27, 2021 <https://chapelhill.legistar.com/LegislationDetail.aspx?ID=5193687&GUID=F0AAE397-4B7A-4EBD-BEBD-31588AB21A2F&FullText=1>](https://chapelhill.legistar.com/LegislationDetail.aspx?ID=5193687&GUID=F0AAE397-4B7A-4EBD-BEBD-31588AB21A2F&FullText=1), the Council appropriated ARPA funds awarded to the Chapel Hill Transit system to help respond to and recover from the COVID-19 pandemic. We did not have a plan for use of funds at that time and we will continue to identify initiatives for use of funds as needs arise. This allocation of \$1.4M of American Rescue Plan Act (ARPA) funds will cover implementation and the first year of service. Additional years of service will be covered through allocations in the Transit budget.

Next Steps: Staff will develop and execute a contract with GMV Syncromatics, and begin the implementation process.

The Agenda will reflect the text below and/or the motion text will be used during the meeting.

By accepting this update, the Council acknowledges receipt of this update on the Real-Time Passenger Information System Contract.