Briefing on GTFS-Realtime Prospective Vendor Utilization

Administration Committee
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Greg Elsborg
Vice President & Chief Innovation Officer
Background

• The transit industry utilizes a data specification known as the General Transit Format Specification (GTFS) to organize schedule and trip-related information for riders.

• Additional data may be overlaid using the GTFS-Realtime (GTFS-R) format. This data includes:
  – *Positional data on vehicles*
  – *Updated timing estimates for stop arrivals*
  – *Service Alerts, from individual vehicles and routes, to system-wide impacts*

• DART currently makes our GTFS Schedule data publicly available, and allows access to GTFS-R data for DART’s own digital channels, and not external channels.

• Pursuant to a request during the December 8, 2020, Board session to investigate opening GTFS-R to additional channels, DART has issued a Request for Information (RFI) to understand better prospective industry applications that may enhance our capability to support our riders’ needs.
RFI Process

• On March 25, 2021, DART issued an RFI for “GTFS-Realtime Feed (GTFS-R) Utilization,” in which we asked the industry to present solutions that will:

  ➢ Broaden the accessibility of GTFS-R data without creating diminishment to the value proposition of the channels utilizing GTFS-R data that DART currently offers to riders.
  ➢ Add value for DART riders and inform them of relevant service impacts and changes to scheduled travel.
  ➢ Add new ways of connecting to riders. We welcome opportunities to integrate hardware as well as software solutions to broaden our capabilities in communicating with riders.

• DART received interest from various parties and responded to several questions asked by respondents during the solicitation process.

• We have received four qualified responses to the RFI following the closing of the response window on April 26, 2021.
RFI Results

• DART received responses from four companies:
  - Connect Point
  - Here Technology
  - Swiftly
  - TranSee

General Observations

• Respondents who included monetization methodology included advertising as the primary methodology.

• Respondents provided multiple solution types centered on displaying DART’s GTFS-R data in a consumable format that could be presented through DART’s digital channels in new ways.

• RFI did not uncover technologies bringing unique capabilities not already factored into DART’s roadmaps for existing vendor partnerships.
DART has invested heavily in our technologies for both recording and communicating GTFS-R data, bringing class leading capabilities and award-winning rider tools. We have many real-time trip planning focused enhancements in progress to bring further improvements to rider experience.
Upcoming GoPass Realtime Features

**Cancelled Trips Integration**

**Live Vehicle Tracking (Vehicle Route View)**

**Crowdsourcing of Realtime issues**

**Service Alerts Integration**
Considerations for DART on opening GTFS-R access to third parties

Option 1: Enabling access only to DART channels (current methodology)

✓ Supports the full array of services offered by DART (including GoLink).
✓ Approach draws riders into utilization of our popular digital channels.
✓ Creates stickiness to DART channels and equips the agency to better handle issues across a single channel vs. from multiple channels.
✗ Approach does not broaden data access to riders who choose not to utilize DART’s digital products.

Option 2: Expand access to GTFS-R data to select third parties

✓ Broadens the accessibility of real-time information to those using non-DART tools.
✓ Certain tools (ex: Google Maps) have incredibly high visibility to riders.
✗ Approach does not broaden equitable access, as the only gap being solved is having the GoPass app installed.
✗ Reduces adoption of digital ticketing through GoPass, our least expensive revenue collection method.
✗ DART’s ability to communicate to our riders digitally would be diminished if adoption of GoPass is reduced.
✗ Third-party solutions are not yet integrating on-demand transit service offerings.
DART has an extensive microtransit offering, which is being further expanded with the 2022 DART network redesign.

On-Demand is considered an ‘experimental component’ of GTFS-R and is not consumed by third-party services.

Providing GTFS-R to third parties who cannot display DART’s GoLink Service would be counterintuitive to driving the adoption of DART’s 2022 network redesign.

Impact on Visibility of GoLink Services

- GoLink Service is not represented through third-party apps, either in availability or booking flow.
Summary

- Staff's evaluation of market offerings through research and the issuance of an RFI has confirmed that the investments made by the agency into GoPass and our GTFS-R capabilities are in line with industry best-practice capabilities.

- Enabling access to GTFS-R data only to DART's digital channels remains the recommended approach for the agency currently, as this enables promotion of the full array of DART services, and retention of a valuable digital channel for rider engagement.

- Staff recommends that we continue to evaluate the market’s capabilities and respond appropriately as new capabilities emerge, while continuing to improve the offering provided through DART's digital channels.
Thank You