North Central Texas Council of Governments

Mobility on Demand (MOD) Working Group
Microsoft Teams
February 22, 2021
1:00 p.m. - 2:30 p.m.

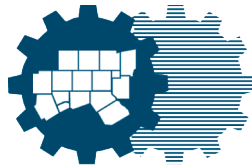Welcome and Introductions

Working Group Background and Purpose

Arlington, TX Mobility on Demand: Via Rideshare Service & RAPID Autonomous Vehicle Service

(Ann W. Foss, Ph.D., AICP – City of Arlington)

DART Mobility on Demand GoLink Update (Ralph Zaragoza – DART)

Discussion and Future Topics

Closing

North Central Texas Council of Governments

Mobility on Demand Working Group
Microsoft Teams
February 22, 2021
1:00 p.m. - 2:30 p.m.

Attendance:

NCTCOG – Rachel Jenkins, Shannon Stevenson, Gypsy Gavia, Dora Kelly, Vivian Fung, Tom Bamonte, Natalie Bettger, Ying Cheng, David Garcia, Clinton Hail, Kevin Kokes, Dan Lamers, Sonya Landrum, Travis Liska, Arash Mirzaei, Tim O'Leary, Donald Parker, Ezra Pratt, Caryn Sanders, Marian Thompson, and Kate Zielke

AECOM – Matthew Ables and Andrew Ittigson

Cambridge Systematics – Scott Boone

Catholic Charities of Fort Worth – Matt Jacobs

City of Arlington – Ann Foss, Melissa Heltzel, Bob Johnson, Lyndsay Mitchell, Alex Radke, and Alicia Winkelblech

City of Cedar Hill - LaShondra Stringfellow,

City of Dallas – Andrew Pagano

City of Fort Worth – Chad Edwards

City of Frisco – Kerin Smith

City of Grand Prairie – Monica Law and Walter Shumac

City of McKinney – Akia Pichon

City of Plano – Robert Saylor and Brian Shewski

DART – Kerri Babbitt, Noah Berlin, Dwight Burns, Dawn Dorman, Doug Douglas, Tammy Haenftling, Christopher Hawkins, Somayeh Moazzeni, Jing Xu, Ralph Zaragoza, and Gregory Elsborg

DCTA – Athena Forrester, Sarah Hultquist, Jacob Riley, Raymond Suarez, and Mary Worthington

FTA – Lynn Hayes, Marc Oliphant, Gwo-Wei Torng, and Laura Wallace

Irving Holdings – Jack Bewley, Liz George, and Charlie Johnston

Kimley-Horn – Brad Lonberger

MATA – Vic Cervantes

North Texas Center for Mobility Technologies – Victor Fishman

Public Transit Services – Terry Robertson

STAR – Kim Britton, Tommy Henricks, and Valerie Orr

Texas Transportation Institute – Todd Hansen

Toyota – Yumna Bham, Colleen Casey, Kelli Gregory, Trey Ingram, Kory Koran, and Janay Winston

Trinity Metro – Phil Dupler, Carla Forman, Wayne Gensler, Janice Pearce, Sandip Sen, and Rodney Woods

University of Texas at Austin – Natalia Zuniga

University of Texas at Arlington – Mehrdad Arabi and Stephen Mattingly

Via – John Criezis

Welcome & Working Group Background
- Mobility Management Team Overview
    - While team was restructured, MOD working group was put on hold and shifted into the Mobility Management portion of the team.
    - Regional Mobility Managers group – some overlap in audience. MOD working group will specifically address MOD and MaaS concepts.
- Background and Brief History of the Workgroup
    - Began in 2017 to support DART's MOD Sandbox project
    - Provide a platform to continue discussion and coordination on efforts related to Mobility on Demand and Mobility as a Service
    - Direction of future meetings should fit needs of participants
    - Ideas for future topics or presentations can be sent to NCTCOG
- Overview of MOD & MaaS
    - Definitions provided are by no means the only definitions that exist for these concepts.
    - MOD per DOT is an innovative transportation concept where consumers can access mobility, goods, and services on demand by dispatching or using shared mobility, courier services, UAVs, and public transportation solutions.
    - MaaS is a framework for fulfilling public and private policy goals by combining all transport services in a region through a central interface for integrated mobility options. Emphasizes mobility aggregation, smartphone and app-based subscription access, and multimodal integration.

City of Arlington's Via Rideshare Service and RAPID Autonomous Vehicle Service *(slides provided)*
- Presenter: Ann W. Foss, Ph.D., AICP
- Project Background
    - City of Arlington created a committee with over 30 different stakeholders
    - Pursued the service through RFP with detailed information on the needs
    - Were able to use FTA formula funds, one of the first to use FTA funding in this manner and to implement ride share as the main form of public transportation
    - It has been successful because it is personalized and efficient for riders; people can request rides when and where it's needed
    - From the city's perspective it can be scalable with the needs of city/riders. For example, when COVID Stay at Home orders were in place number of vehicles were reduced and save costs and scale back once numbers increased.
- Service Details
    - Service area has grown gradually in the 3 years it has been in existence
    - Booking and payment can be done in app with fares ranging from $3-$5 per person
    - Fleet includes 68 vehicles, adding hybrid-electric vehicles soon
    - Service is being used across the city; with CentrePort being a consistent stop
- Arlington RAPID: Rideshare, Automation, and Payment Integration Demonstration
    - Will be integrating AV into the overall VIA service; received $1.7 Million from the FTA Integrated Mobility Innovation competitive program

- Partnership with Via, May Mobility, and UT Arlington; covering one square mile around Arlington's downtown and UTA's campus
  - Service will be on-demand and riders will have choice between AV or a standard Via vehicle
  - Standard fare structure will apply; grant funding will include some free rides for UTA students
  - Launch event on March 23, 2021 at 9am at Urban Union
  - Website: www.arlingtontx.gov/rapid

[Questions and Answers]

1. Are fares tiered based on distance or some other criteria?
   Until Feb. 15 the flat rate was $3 and starting Feb. 15 fares have gone to distance based with $5 cap.

2. How will it work for folks who want to go from nearby cities who may implement Via to Arlington and vice versa? Will there be transfer points at the borders of the two cities or some through service?
   Arlington is open to having those discussions with nearby cities who would like to implement same/similar service.

3. Does 12-minute wait time target apply for both vehicle types?
   That is goal for the standard vehicles but for accessible vehicles are seeing a similar time.

4. Are the only public sources of funding the FTA grant? No 5310, other?
   For RAPID it is just the FTA competitive grant and city funds. For the standard service it uses 5307 FTA funds.

5. Does the Accessible Shuttle option also require those patrons with mobility devices to travel up to 2 blocks as well? Or will it come directly to their location?
   For accessible trips within the standard service, it is a door-to-door service. For AV service it is functioning as an on-demand service and it has specified safe stops, typically 1-3 blocks for riders. For wheelchair users, they would need to travel to the stop.

6. Roles of Via and Arlington in AV project evaluation?
   City of Arlington and Via will be deploying evaluations and sharing results widely.

7. What is the cost of the operation and is the cost scalable?
   For the RAPID cost it is 1.8M for the 18-month deployment. The first part has been planning and it also includes the evaluation period at the end. In the future, operating cost would be lower since some planning and implementation steps would have already been completed.

DART Mobility on Demand GoLink Update *(slides provided)*
- Presenter: Ralph Zaragoza
- GoLink Program Overview
  - Before GoLink there was "DART On-Call" which was available to 8 areas; with GoLink hours and areas were expanded
  - When GoLink was introduced there was GoTap and eventually GoPass app was introduced to allow journey planning and payment integration
- DART's Vision
  - Continuously improve the transportation experience
  - Expand the reach of public transport
  - Access to all consumers
- GoPass Mobile App Journey & Overview
  - Platform is being used by more agencies, which adds more flexibility to the platform
  - As they coordinate with Trinity Metro, they have started working with Via to add that on-demand functionality to the app

[Questions and Answers]

1. What is a Go-Link Zone?
   GoLink is used in areas where we do not have a high density of fixed route ridership or where big buses cannot easily travel. More details can be found via this webpage:
   https://www.dart.org/riding/golink.asp

2. Is GoPass the preferred app over the My Ride North Texas or QRyde app for trip planning, booking, and paying?
   GoPass is different from My Ride North Texas, which is more of a resource of services. For DART, Trinity Metro & DCTA GoPass is the Primary Trip Planning & Payment App that is used. We are onboarding STAR Transit currently. Trinity Metro & DCTA would have to comment on their future plans regarding maintaining multiple apps for the on-demand components of their booking experience, but DART"s view is that a single platform is a more powerful vessel to drive digital rider experience, versus multiple apps.

3. How is GoPass being shared with other transit providers? Heard Oklahoma, are you training these agencies and/or providing the platform?
   We are sub-licensing the platform to other Agencies. Typically, we enter into an Interlocal Agreement (ILA) with that Agency to share as a sub-licensing arrangement.

4. So, DART is bidding on RFPs from transit agencies looking for a mobile ticketing solution for their transportation services?
   Yes, that is correct.

5. Have you had interest from other transit agencies or city transportation departments in licensing GoPass besides Tulsa? Curious if there's been additional interest at-large.
DART is currently finalizing contractual terms with CATS (Charlotte, NC), winning a competitive RFP process (which we also did for Tulsa). Have multiple others in progress too both within Texas and outside.

6. Does GoPass have an open API?
DART is developing a trip planning API so that we can replicate the multi-modal trip planning components into other properties, though obviously that API would only function for those whose GTFS feeds we have integrated to the platform. For Payments, we maintain a flexible payments architecture so it's not something we can easily wrap into one API.

7. What percent of GoLink trips are on UberPool?
It varies by zone. Overall speaking about 40% pre-pandemic, and about 14% during pandemic.

8. How does public subsidy per trip and per passenger revenue for GoLink compare to DART main line bus service? ...passenger revenue mile?
Cost for running the service was decreased when UberPool was brought in. It is about $10-15/ride average in pre-pandemic statistics. For UberPool, per trip in FY21, it was $5.70 and when combined with overall service, it is $34.57 for both DART vehicles and UberPool combined.

9. DART's GoLink Zones are very small compared to Arlington and perhaps somewhat smaller than Trinity Metro's ZIPZONEs. Is DART getting pressure to expand the size of the GoLink Zones and are small zones (just more of them) going to be a continuing strategy?
Try to keep them at 6-8 sq miles to keep down wait times for the zone. Also, they are strategically placed to anchor them near rail stations.

10. What is being done to try to provide a unified platform to request trips across transit provider zones? Barriers clearly still exist. We are all Federally funded, yet no one has addressed the problem of getting from metro area a, to metro area b crossing three agencies?
At DART, we'd love for GoPass to be that platform for the region since it aggregates services. Would need some work on regional fare policies and other complexities worked out but it is definitely achievable!

At NCTCOG, it's something we work to address as we are look upon the regional collaborative role. However, because we don't provide transit service we look to providers for guidance and input.

11. *Are there any statistics that provide an idea as to when this type of on demand transit is no longer optimal over traditional transit (i.e., cost, environmentally)?*
They have not been done yet but exploring for future. Concerns how pandemic numbers could skew stats.

Next Quarterly Meeting

- Plan is to meet quarterly; Next meeting would be in May 2021
- Using virtual format until further notice
- Anyone to add to our contact list? Information can be sent to Rachel at rjenkins@nctcog.org or Gypsy at ggavia@nctcog.org

NCTCOG PRESENTATION

Mobility On Demand Working Group

February 22, 2021

OUR VISION FOR MOBILITY MANAGEMENT

Identify Gaps

Coordinate Resources

Promote Partnerships

To identify transit gaps, coordinate regional resources, and promote partnerships with governments, transit providers, and stakeholders in order to serve the transportation needs of the region including disadvantaged populations.

Image Provided By Getty

MOD Workgroup at NCTCOG

- A forum for collaboration and education across regional transportation entities

- Support discussion, coordination, and demonstration of MOD/MaaS concepts and solutions in the region

- FTA MOD Sandbox Program

- Partnerships and innovative transit services

Image Provided By Getty

WORKGROUP CONCEPTS

Image Provided By Getty

Image Provided By Getty

Mobility on Demand (MOD)

Mobility as a Service (Maas)

DISCUSSION

What would you like to see from this group in the future?

What MOD/MaaS initiatives in the region are you interested in learning more about?

Are you involved in projects or initiatives that should be shared with the group?

What challenges and barriers do you see to implementing these concepts?

What does MOD or MaaS look like specifically for our region?

Are there any resources or information that we could compile that would be helpful to the group?

Are there any other transit related topics or projects that have been impacted by COVID-19 you think we should address or talk about?

NEXT QUARTERLY MEETING

- Quarterly Meetings – May 2021

- Digital meetings until further notice

- Please contact us to suggest future meeting topics or add a colleague to the invite list

CONTACT US

Rachel Jenkins, AICP Candidate
Transportation Planner
Transit Management and Planning
rjenkins@nctcog.org

Gypsy Gavia
Senior Transportation Planner
Transit Management and Planning
ggavia@nctcog.org

Arlington TX Mobility on Demand:
Via Rideshare Service &
RAPID Autonomous Vehicle Service

Via On-Demand Rideshare Service

Via On-Demand Rideshare: Background

- City convened a transportation advisory committee in 2016 to study the future of transportation

- On-demand rideshare was chosen as one of the solutions to address Arlington's unique needs

- Use of Federal Transit Administration funding, one of the first in the country

- Creative procurement to design service for our needs

- First in the country to form public-private partnership for on-demand rideshare as sole public transportation

- Lack of comparable benchmarks – uncharted territory

Via On-Demand Rideshare: Overview

- Arlington was one of the first cities in the US to promote rideshare as the sole public transportation solution

- The service is personalized and efficient for riders

- The service is flexible, scalable, and cost-efficient for the City
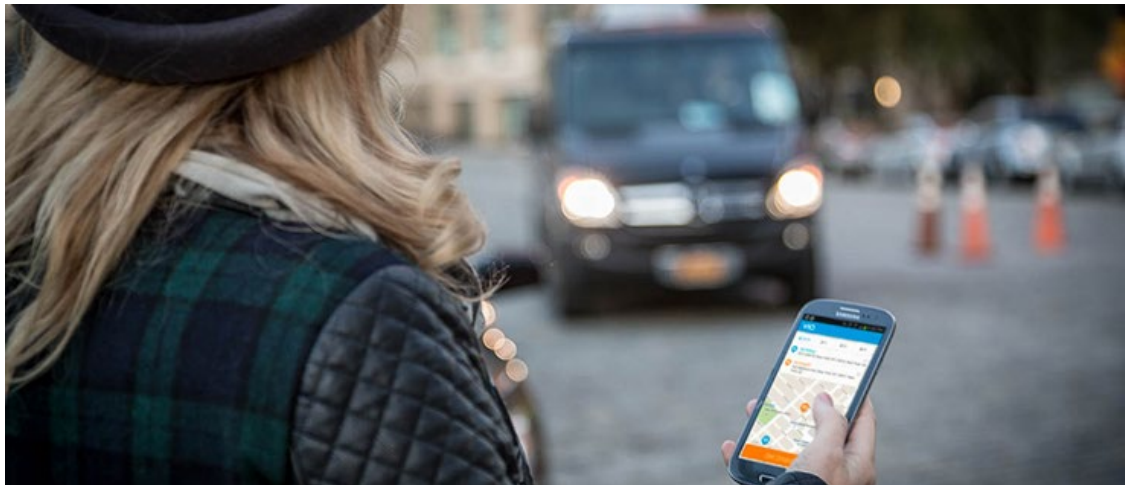
On-demand
Book a seat on your phone
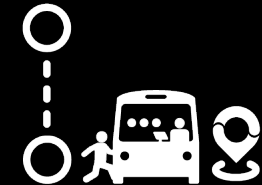
Convenient
Get picked up at a corner nearby: 'Virtual Bus Stop'

Shared
Seamlessly share the ride with others

Dynamic
Real time routing, no fixed routes or schedules

Via On-Demand Rideshare: Service Details

- Area: covers entire City and CentrePort TRE Station; no fixed schedules or routes

- Hours: Monday - Friday 6am to 9pm, Saturday 9am to 9pm

- Fare: $3 - $5 per person per ride; $25 weekly pass for up to 4 rides per day

- Payment: accepts credit, debit, and pre-paid cards

- Booking: app-based booking and payment, with local call-in number

- Fleet: 68 six-passenger vans, 14 WAVs, adding hybrid-electric vehicles
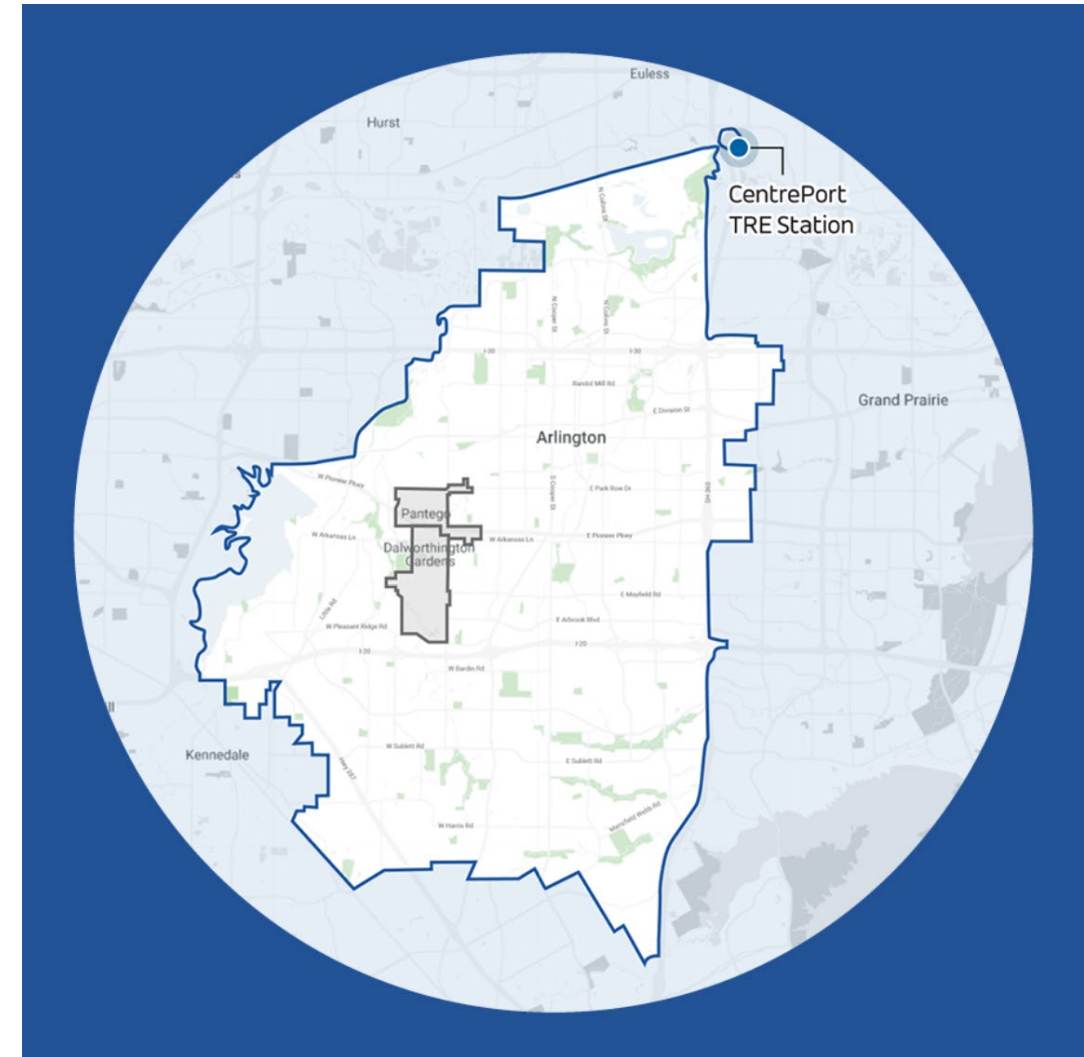
Via On-Demand Rideshare: Expansion

- Launch: December 2017; covered ~8 square miles

- 1st Expansion: January 2018; covered ~13 square miles

- 2nd Expansion: September 2018; covered ~25 square miles

- 3rd Expansion: June 2019; covered ~27 square miles

- 4th Expansion: January 2020; covered ~41 square miles

- 5th Expansion: January 2021; covered ~99 square miles
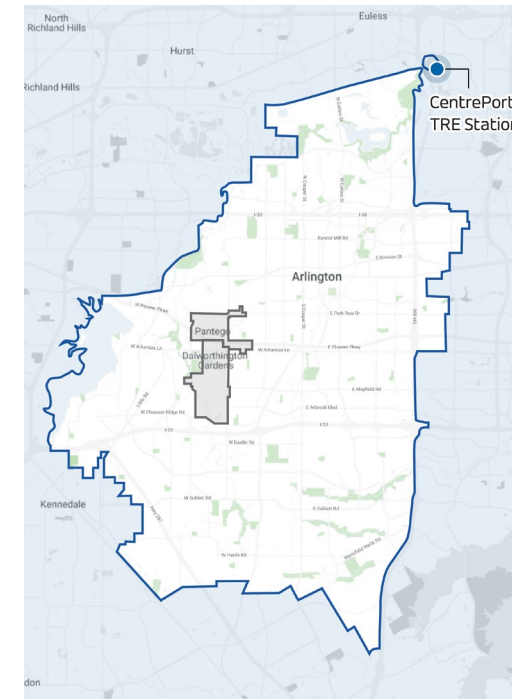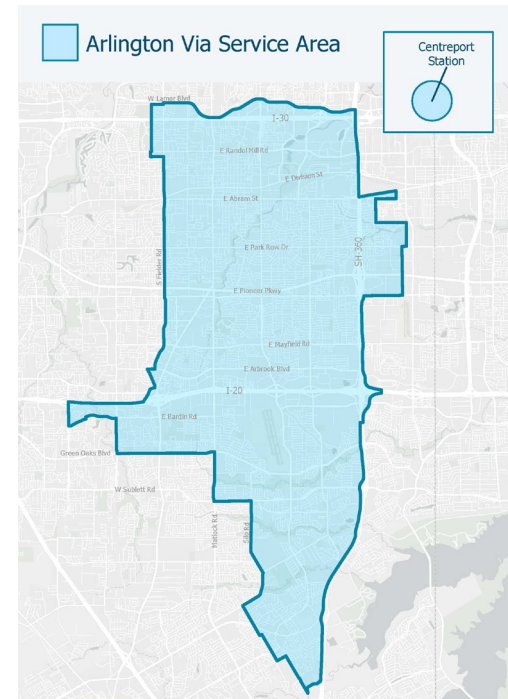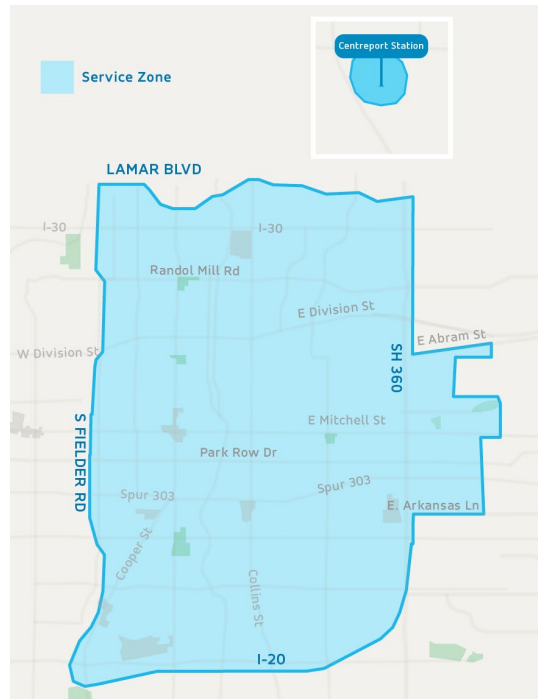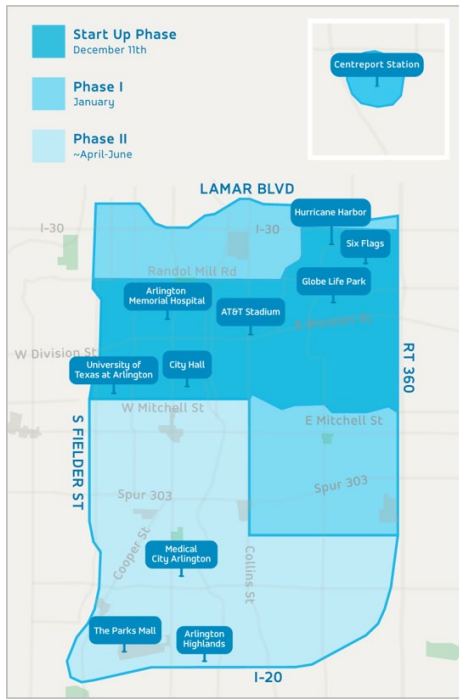
Via On-Demand Rideshare: Performance

- Rides given: 490,000+

- Accounts set up: 41,700+

- Average wait time: 12 minutes

- Average rider satisfaction: 97%

- Health safety and flexibility during COVID-19

Dropoff Requests
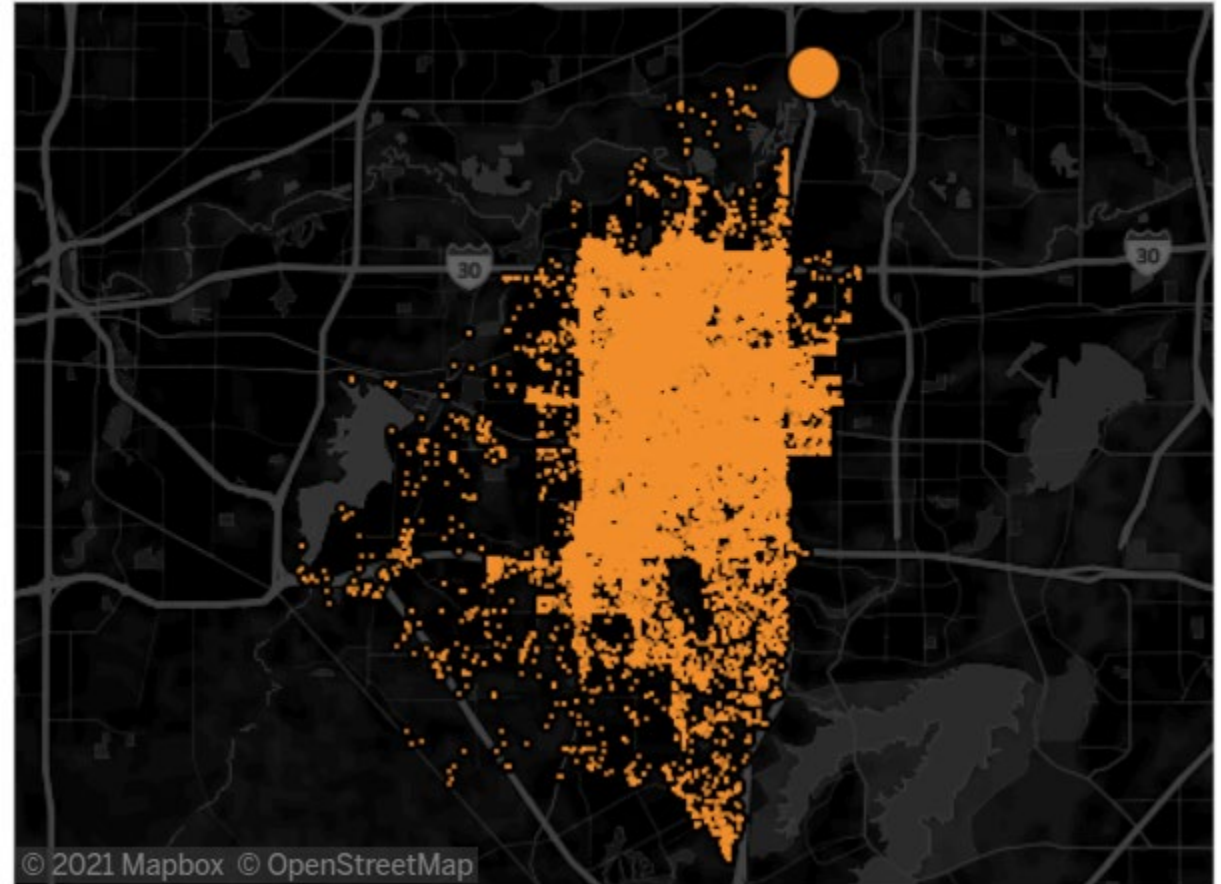
Arlington RAPID:
Rideshare, Automation, and Payment Integration Demonstration

Arlington RAPID: Overview

- $1.7 Million funding from the FTA Integrated Mobility Innovation competitive grant program

- Partnering with Via, May Mobility, UT Arlington

- Integrate May Mobility autonomous vehicles into Via's on-demand rideshare service around Arlington's downtown and UTA's campus

- One-year demonstration, launching March 2021

- First on-demand AV service integrated into existing public transportation in the United States

Arlington RAPID: Project Goals

GOAL: combine AV and mobility on-demand technologies to develop effective, efficient, safe, and accessible transportation networks in a low-density setting where traditional fixed-route transit is impractical

OBJECTIVES:

- Increase access for seniors, students, and individuals with limited personal mobility

- Improve equity and accessibility to public transportation

- Improve safety and efficiency

- Share lessons learned widely

Arlington RAPID: Vehicles

Fleet of 5 autonomous vehicles
- 4 Lexus RX450H vehicles: up to 3 passengers, hybrid electric
- 1 Polaris GEM vehicle: wheelchair accessible passenger, electric
- All wrapped to match each other and complement existing Via vans

Fleet Attendant behind the wheel at all times

Health Safety Features:
- Partition between Attendant and passenger areas
- Daily cleans
- Masks required

Arlington RAPID: Service Details

Service Area: one square mile in Downtown and on UTA's campus

Service Hours: Monday – Friday, 7am – 7pm

Booking: through Via's app or call-in number
 *Riders will always have choice of AV or
   standard Via van

On-demand service will pick up and drop off at desired locations

Fares: standard Via fare applies; free rides for UTA students
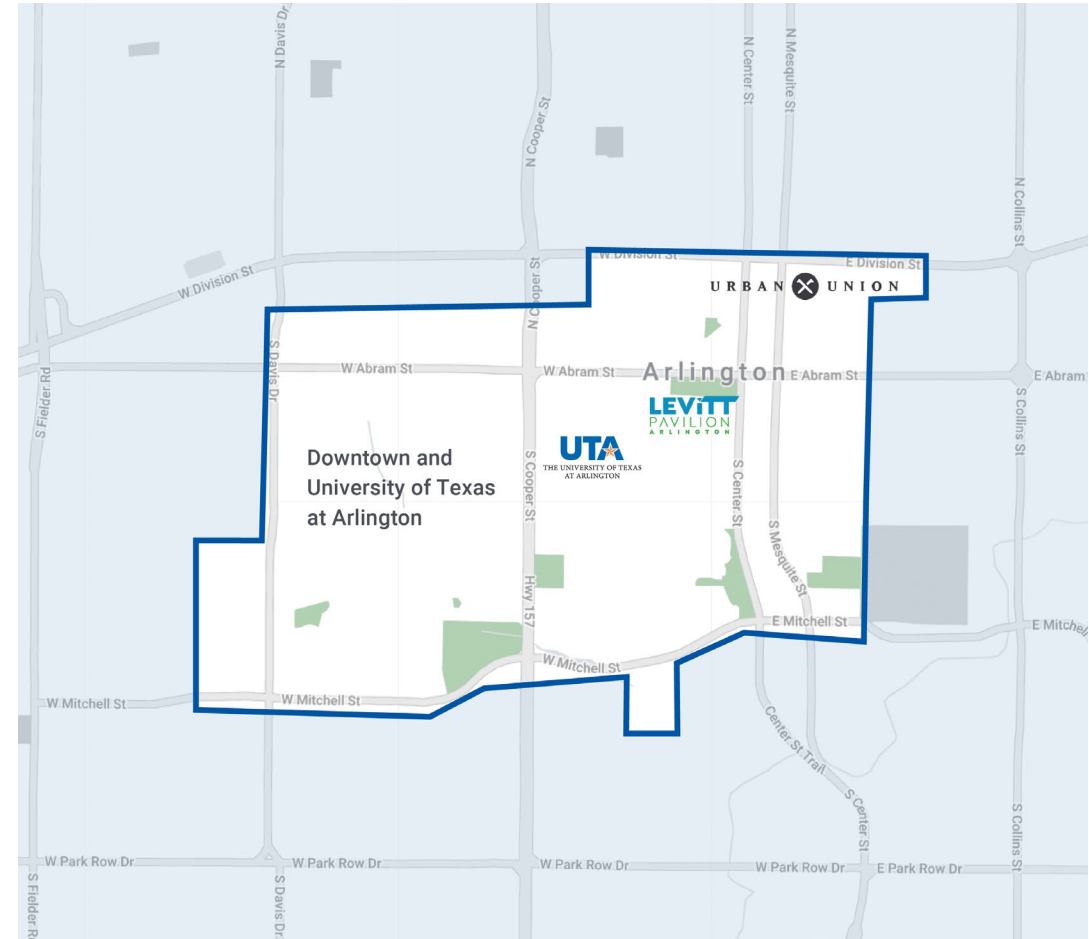
Arlington RAPID: Service Launch

Launch Event: March 23, 2021, 9am at Urban Union

Project Website: www.arlingtontx.gov/rapid

Discussion

Ann Foss, PhD, AICP
City of Arlington
Principal Planner
Ann.Foss@arlingtontx.gov

DART Mobility on Demand GoLink Update

Ralph Zaragoza

Project Manager

Service Planning & Development

February 22, 2021

DART *let's go.*

Agenda Topics

- GoLink Program Overview

- Progress made since 2018

  - Service Implementation

  - Technology and Payment Platform

  - FTA Report

- Performance Measures

  - Pandemic Impact

- Future Plans

  - Expansion under DART Zoom

  - Technology Integration

  - New Microtransit Procurement

GoLink Program Overview

- In October 2016, the Federal Transit Administration (FTA) selected DART as one of the recipients for the Mobility on Demand (MOD) Sandbox Demonstrations

- Prior to GoLink, DART operated this program as an "On-Call" service known as "DART On-Call"

- In February 2018, DART first introduced GoLink in the Southern Dallas Sector consisting of three zones; Inland Port, Rylie, and Kleberg

- New GoPass App introduced to allow Journey Planning and Mobile Payments

- In March 2019, Uberpool was introduced in Plano and the Southern Dallas zones

- As of today DART is operating a total of 16 GoLink Zones with more on the way in 2022!

DART let's go.

Progress since 2018

DART'S Vision

CONTINUOUSLY IMPROVE THE TRANSPORTATION EXPERIENCE
A seamless and user-friendly solution for public and third-party mobility transport options with a one-touch payment solution.

EXPAND THE REACH OF PUBLIC TRANSPORT
Lower the cost and expand the reach of public transportation to provide high quality, first and/or last mile services.
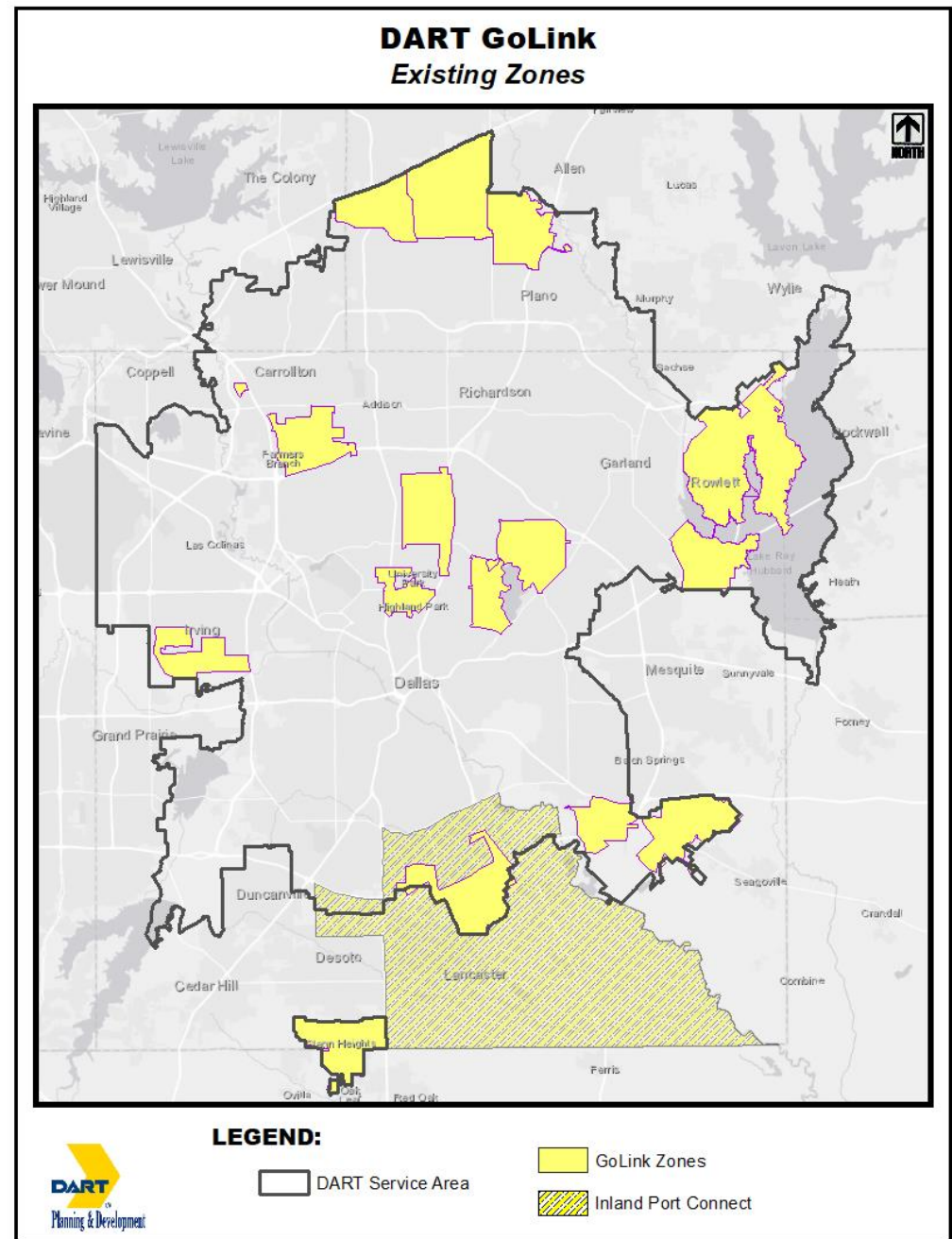
ACCESS TO ALL CONSUMERS
Integrate equitable MOD solutions including comparable access for the unbanked, disabled, low income, smartphone challenged customers and typically non-transit customers.

DART *let's go.*

GoLink Current:
Jan 2021

- Operating 16 total GoLink zones

- Special GoLink Zones
  - Western Carrollton
  - Inland Port Connect

- Upcoming Zones
  - South Dallas
  - Joppa

- All GoLink zones are supplemented by Uberpool

DART
let's go.

5

Dallas Area Rapid Transit

GoPass Mobile App Journey

2014
Admission Tickets
State Fair of Texas
Zoo
CFC
NCAA

2016
Introduced Corporate and University passes

2018
GoPass 2.0
Real-time
Cash-to-mobile
Fare capping
Apple Pay
GoPass Wallet

2020
Expansion
National Partnerships
Driving
3rd-party integrations

2013
GoPass 1.0
Ticketing
Trip planning
Special events and offers
Regional app

2015
Deep Linking
Uber
Lyft
Zipcar

2017
FTA Grant Recipient

2019
GoPass 3.0
Multimodal
Microtransit
UberPool
Bird
Rideshare choices

DART *let's go.*

6

GoPass Application Overview

GoPass brings the broadest set of tools in the nation available to our riders through one tool.

Mature Multi-Agency Platform

Multi-Modal Trip Planning

Flexible Payment Methods

Safety & Security

Additional Rider Tools

Regional Events & Wayfinding

Fully Integrated Microtransit

GoPass – Integrated Microtransit

- Rider trip search starts or ends within GoLink zones
- Various multi-modal journey options presented in App
- Seamless GoLink booking integrated to journey planning
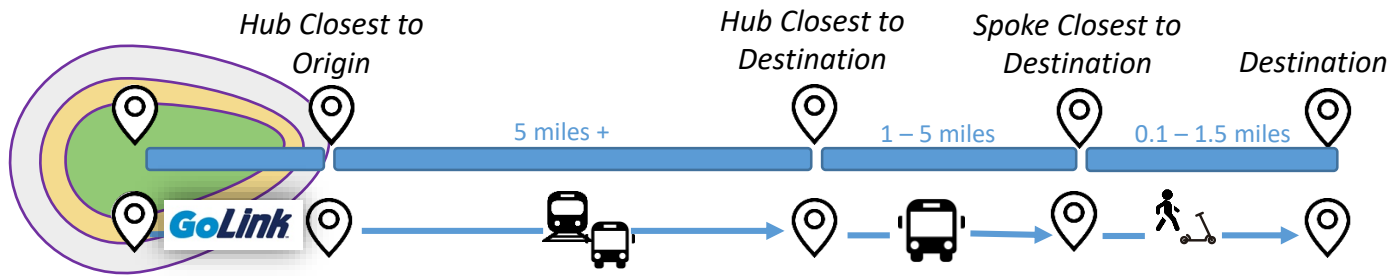
Multi-Modal Microtransit across DART service area
- *Multi-Vendor integration*
- *Rider choice*
- *TNC inclusion flexibility*
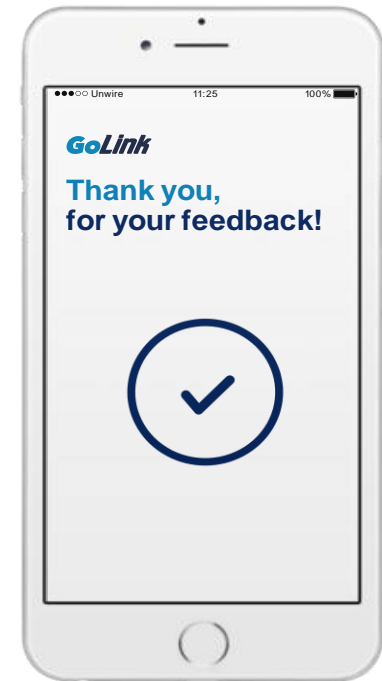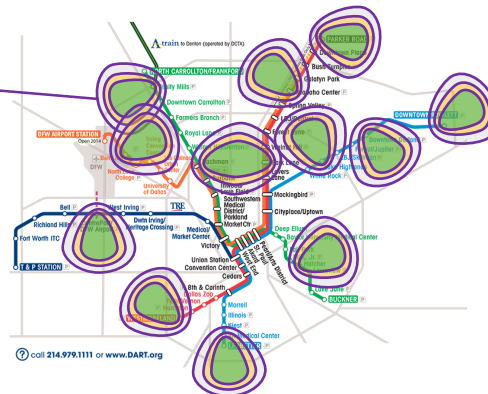
GoPass Payment Platform

- Integrated Ticketing and Payment
- Retail Network
  - Cash to Mobile
- GoPass Tap Card
  - Fare Capping
- Contactless Payment
  - GoLink

Just Tap to Board

Works on Buses and Trains

900+ Buy or Reload at 900+ Locations

No Credit/Debit Card Needed

GoPass Milestones & Accolades

10m+ Tickets Sold through GoPass App

1.4m+ GoPass App Downloads

100k+ Loaded to GoPass App through Cash-to-Mobile

81% App Users that are DART Riders

American Public Transportation Association (APTA) Award for 2019

GoPass® received 2019 APTA Innovation Award. Industry recognition for excellence, DART honored as award recipient

Customer Satisfaction

Best App Store Ratings Across US Transit Market

★ ★ ★ ★ ☆ 4,047 👤
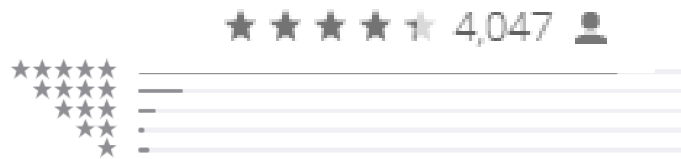
4.8 out of 5

17.3K Ratings

★★★★★

Erin Dragonrider, 10/30/2019

Great discovery!
I am just discovering this pass with all of the features. I do not drive so this looks like a very promising release from isolation. My congratulations and thanks to all the peo more

★★★★★

soukb, 06/18/2019

No cash
Driver told me no card was allowed only cash but he told me about the app so I downloaded it bought my ticket. I thought I was going to have to walk until he said something abo more

★★★★★

Cratylus1998, 01/14/2019

Best app ever
This app helps me navigate public transportation so easily. I just tell it where I want to go, and it shows me exactly which stops the train stops to take. I buy a pass more

DART *let's go.*

FTA Published Report

- Project Success/Challenges

- Project Implementation

- Project Evolution

- Marketing Strategies

- Performance Measures

- Lessons Learned

- Future Recommendations

- Free Report to Download!

https://rosap.ntl.bts.gov/view/dot/49256

FTA RESEARCH
FEDERAL TRANSIT ADMINISTRATION

Mobility on Demand (MOD)
Sandbox Demonstration:
DART First and Last Mile Solution

APRIL 2020

FTA Report No. 0164
Federal Transit Administration

PREPARED BY
Robert Parks, Senior Manager of Planning Programs
Somayeh Moazzeni, Service Planner II
Dallas Area Rapid Transit

U.S. Department of Transportation
Federal Transit Administration

DART *let's go.*

Performance Measures

GoLink Total Ridership and Trip Trend
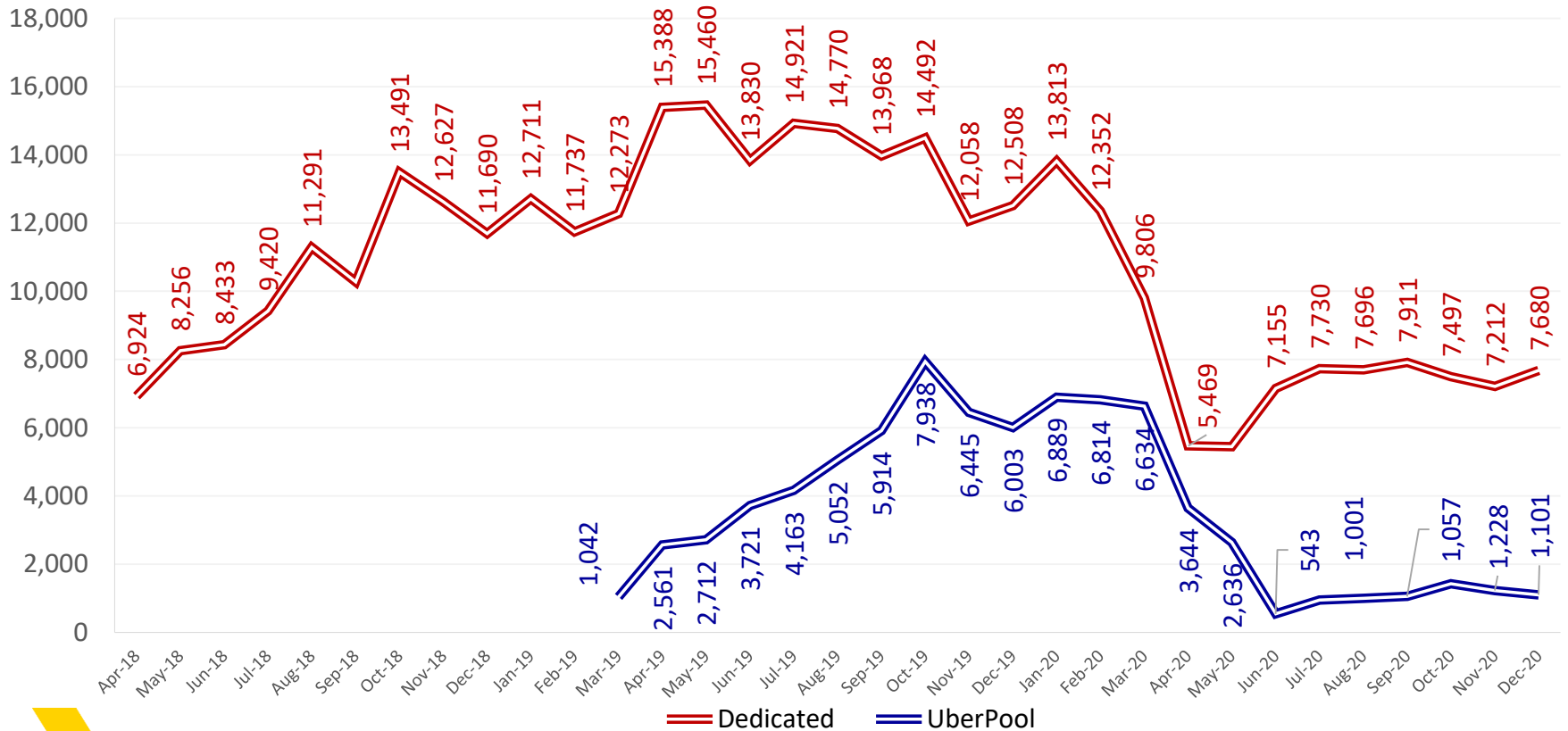## (From April 2018 to Dec 2020)
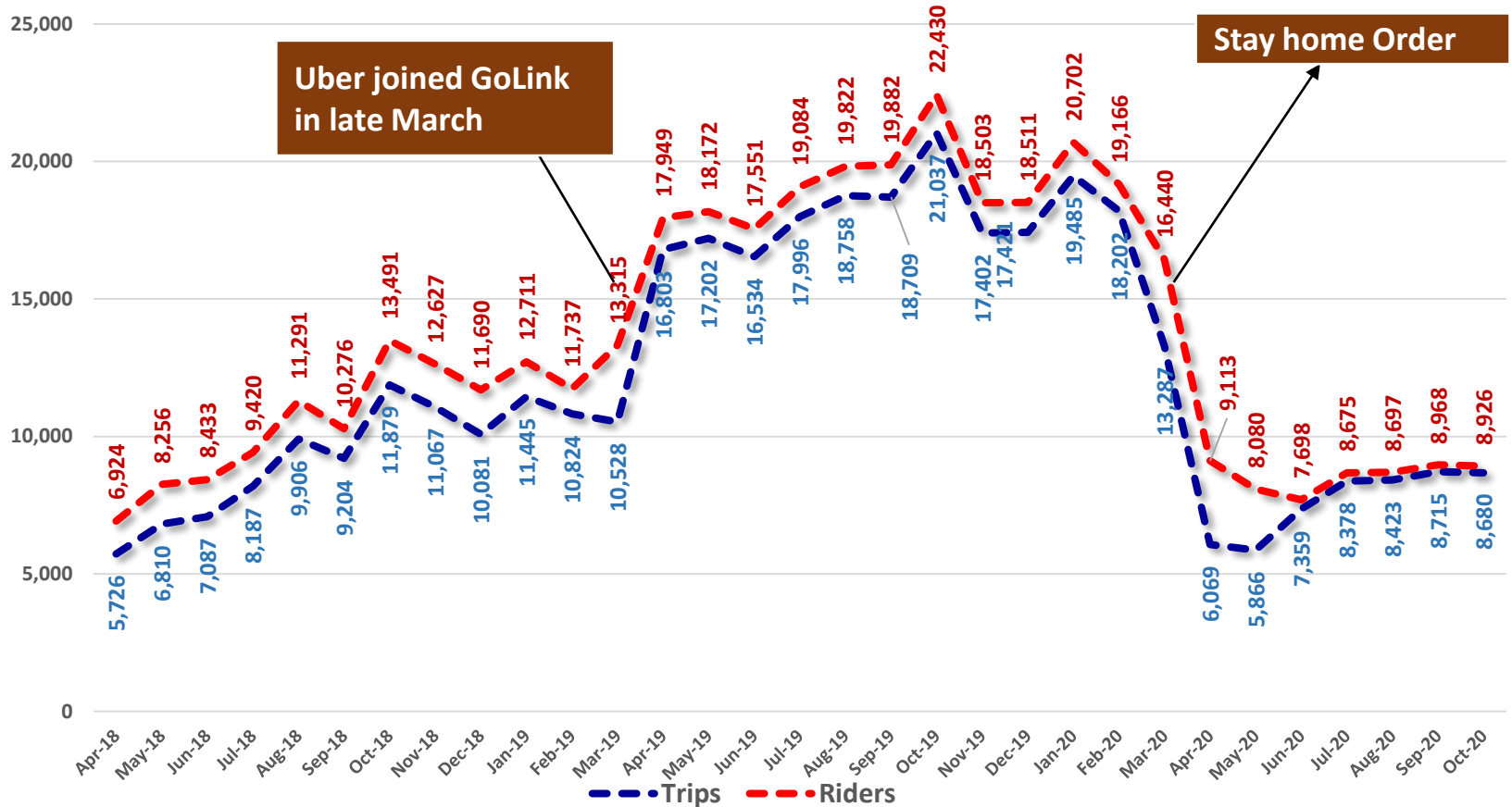
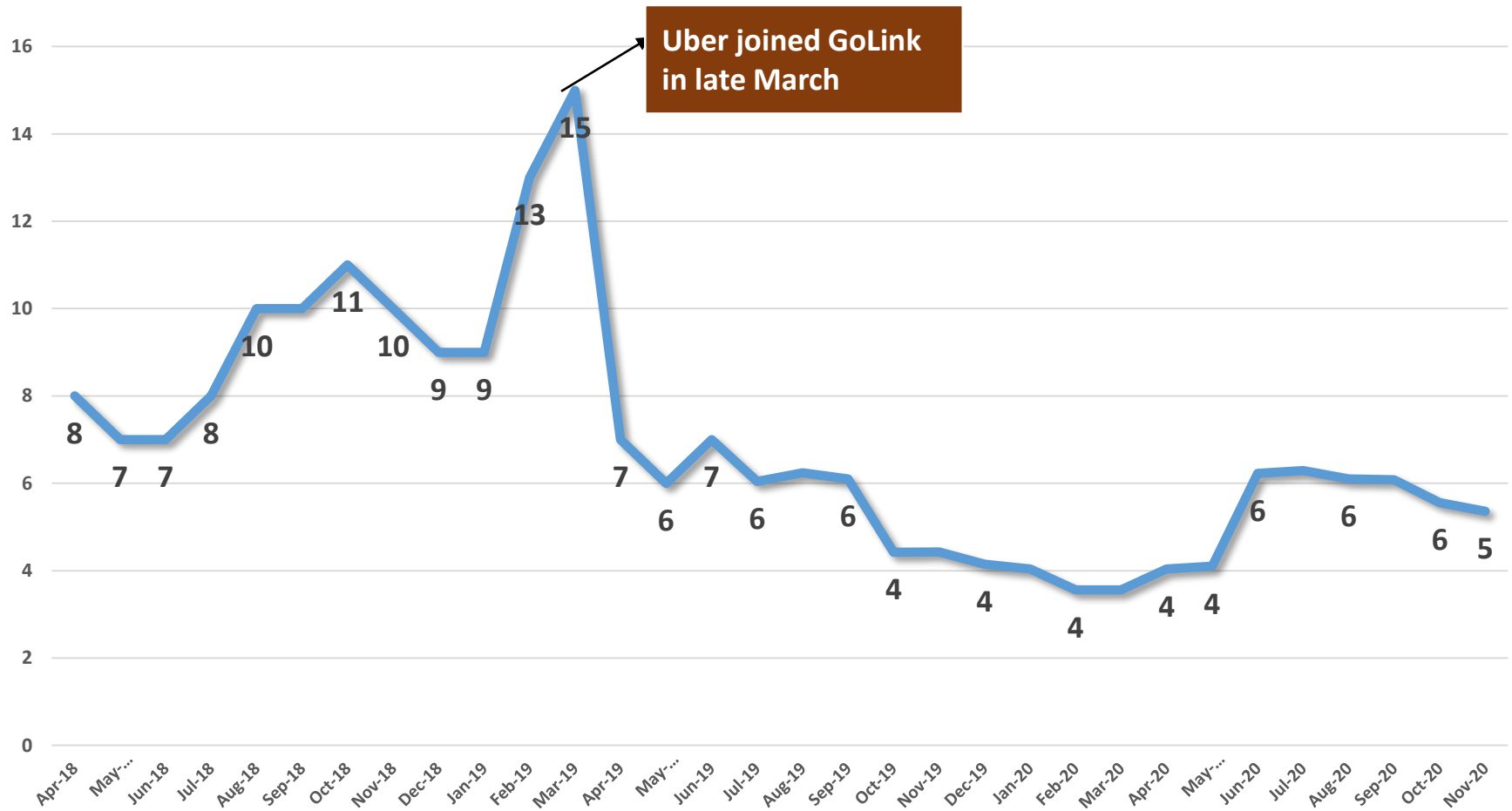# GoLink Average Weekday Ridership Trend in All Zones
(From Oct 2019 to Dec 2020)
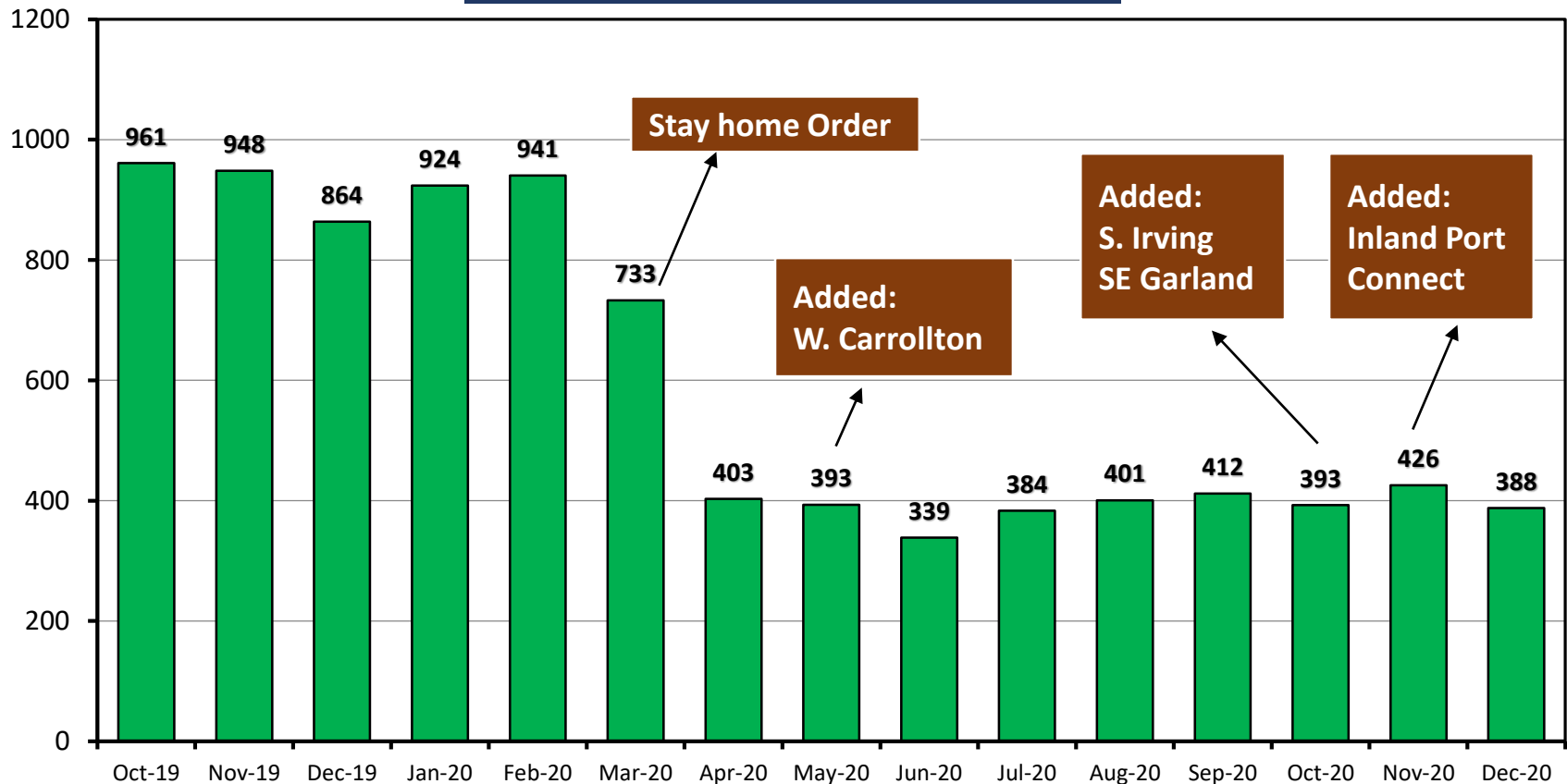
Impact of UberPool on GoLink Total Ridership Trend

UberPool Portion from Mar 19 to Mar 20: 27%
UberPool Portion From Apr 20 to Dec 20: 18%

Dedicated — UberPool

Average Response Time *(In Minutes)*

Safety First!

- Face masks required on all DART vehicles.

- Van Capacity is currently reduced to 5 to facilitate social distancing. Under normal circumstances, van capacity is 14, and taxi capacity is 4 or 5.

- We factor wait time and or ride time for each individual zone to determine if another vehicle is needed.

- Vehicles are thoroughly cleaned nightly.

  – Interior is disinfected with EPA approved cleaning chemicals

  – Panels, Windows, Grab Bars, Doors, Floor Mats, Dashboard, Steering Wheel, etc.

Future Plans

Draft DART Zoom Network

- Draft bus network is a combination of:
  - ✓ Ridership concept
  - ✓ Additional adjustments to improve coverage
  - ✓ GoLink service

- GoLink service will be further expanded in the new bus network. The number of GoLink zones nearly doubles under the draft plan

DART *let's go.*

21
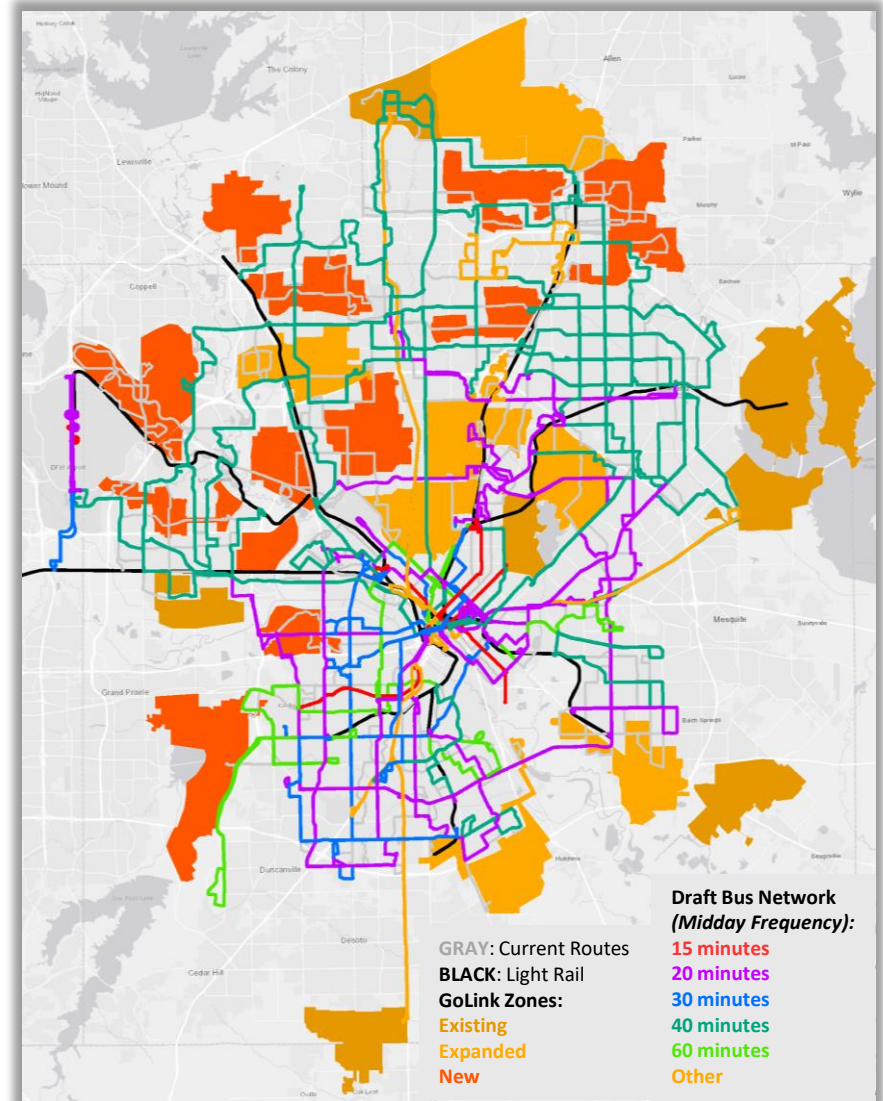
Technology Integration

- Comingle Microtransit trips with ADA Paratransit and Rider Assistance Program (RAP) Trips

- Full integration of all functions (Scheduling, Dispatching, Reporting)

- Full integration of TNC's

- Allow customers to rate trips/drivers for all Programs

- Support DART's fare capping Program

- Text to Speech capabilities

- Telecommunications Device for the Deaf (TDD)

Microtransit Procurement

- Potential Scope of Work under development

- Program flexibility to increase/decrease number of vehicles

- Requirement of maintaining cost effectiveness

- Increase use of non-dedicated service providers, while still providing 5-Star Service

- Equitable service for customers

- Virtual Stops or Cluster Stops

Thank You