

What is MaaS and Why Does it Matter?

MAX Program Participants

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Agenda

- 1. What is Mobility as a Service (MaaS)?**
- 2. The 10 Year Mobility Shifts Influencing MaaS**
- 3. Impacts of MaaS and New Transportation Modes for DART Riders**
- 4. What's Next for MaaS at DART?**
- 5. Q&A**

A city street scene with a yellow bus in the center. The bus has "eye opener WEEKDAYS 7-10" and "CLUB" on its side. A yellow text box is overlaid on the image, containing the text "WHAT IS MOBILITY AS A SERVICE?". In the background, there are tall buildings and a traffic light. A sign on the right side of the image reads "#HungerActionMonth" and "WWW.org/MASS" with a leaf logo.

WHAT IS MOBILITY AS A SERVICE?

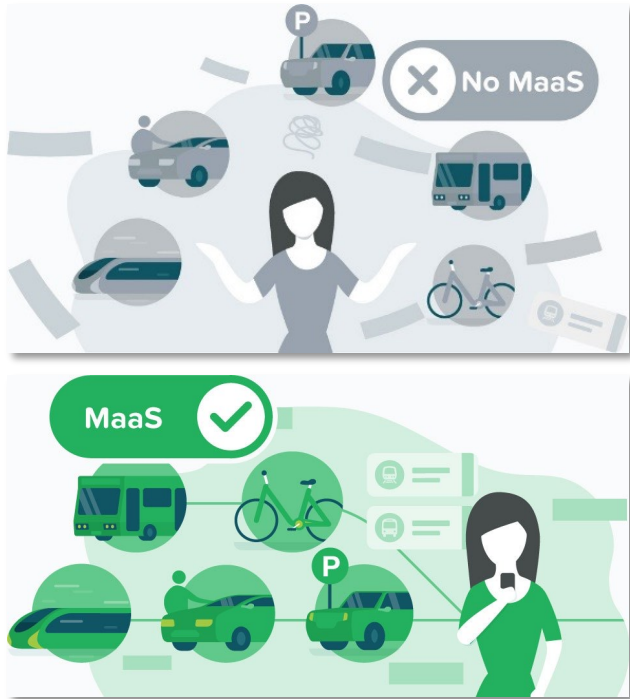
What is Mobility as a Service (MaaS)?

Mobility-as-a-Service (MaaS) is an emerging type of service that, through a joint digital channel enables planning, booking, and payment for multiple mobility services.

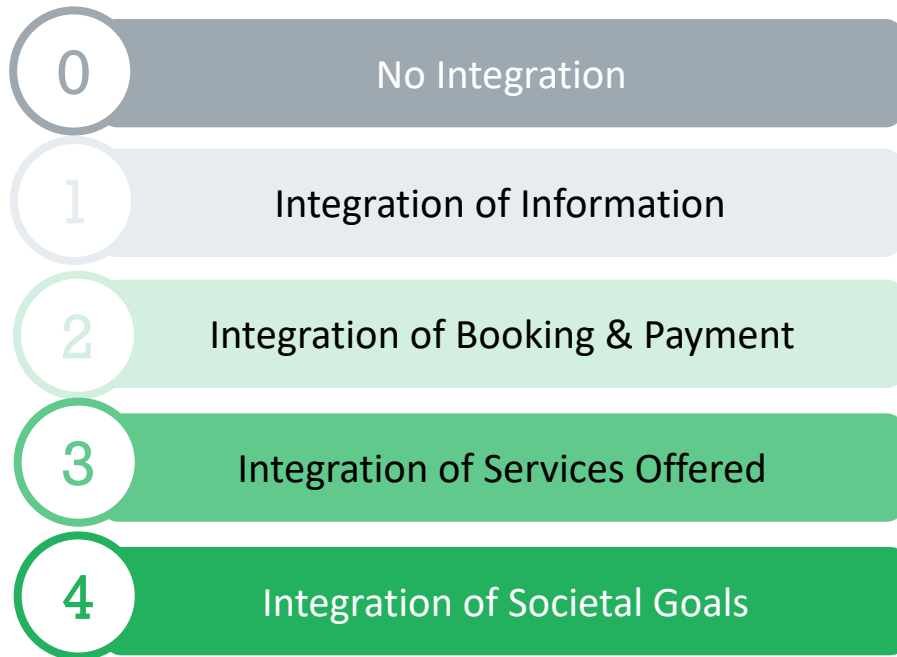


DART's Current MaaS Capabilities

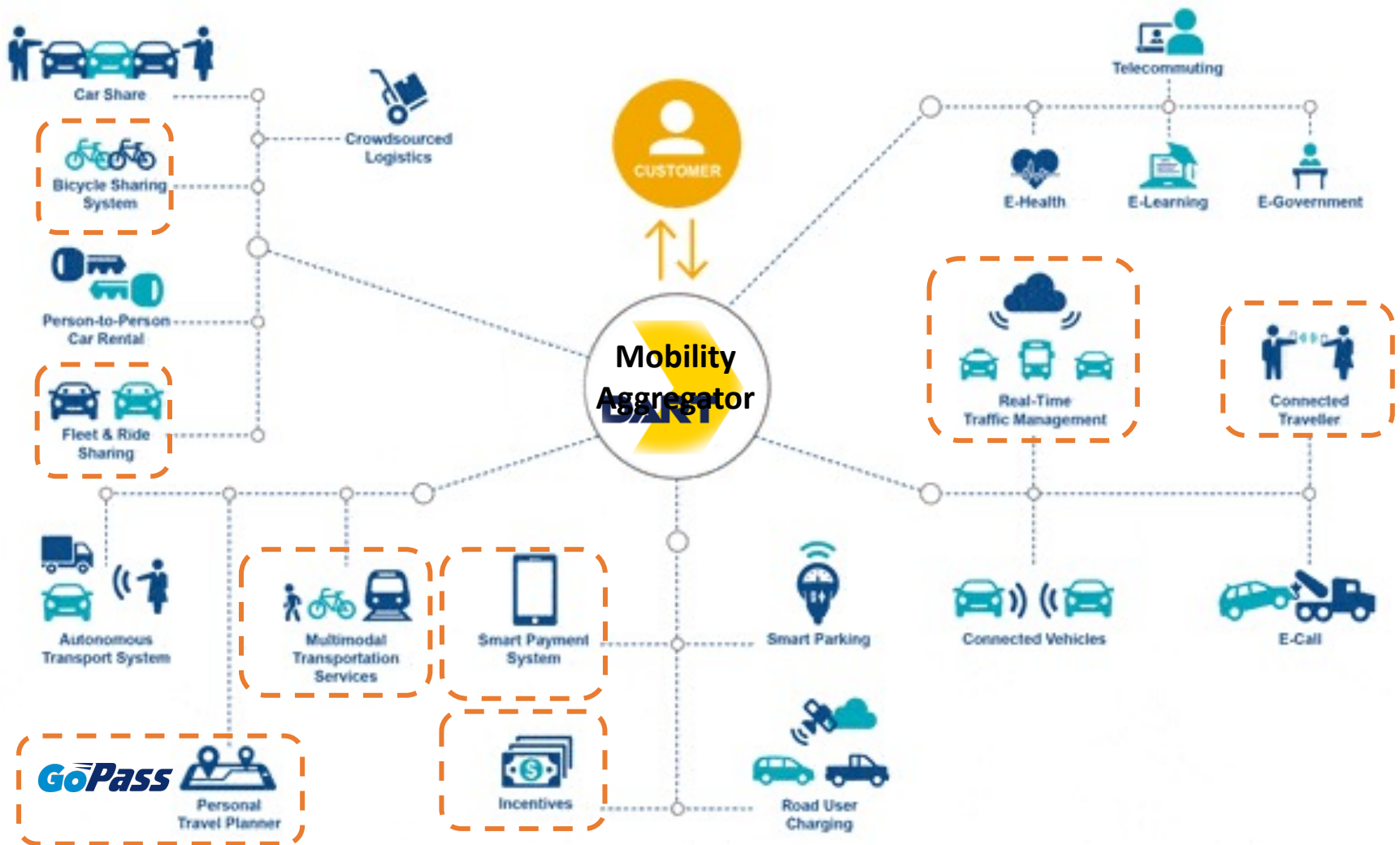
DART's MaaS ambition encourages equitable accessibility and distribution of new transportation modes for all rider segments.



Stages of MaaS Integration



Mobility as a Service Landscape



A city street scene with a yellow bus and a yellow sign that says '#HungerActionMonth' and 'WFP.org/MaaS'. The text is overlaid on a semi-transparent yellow box.

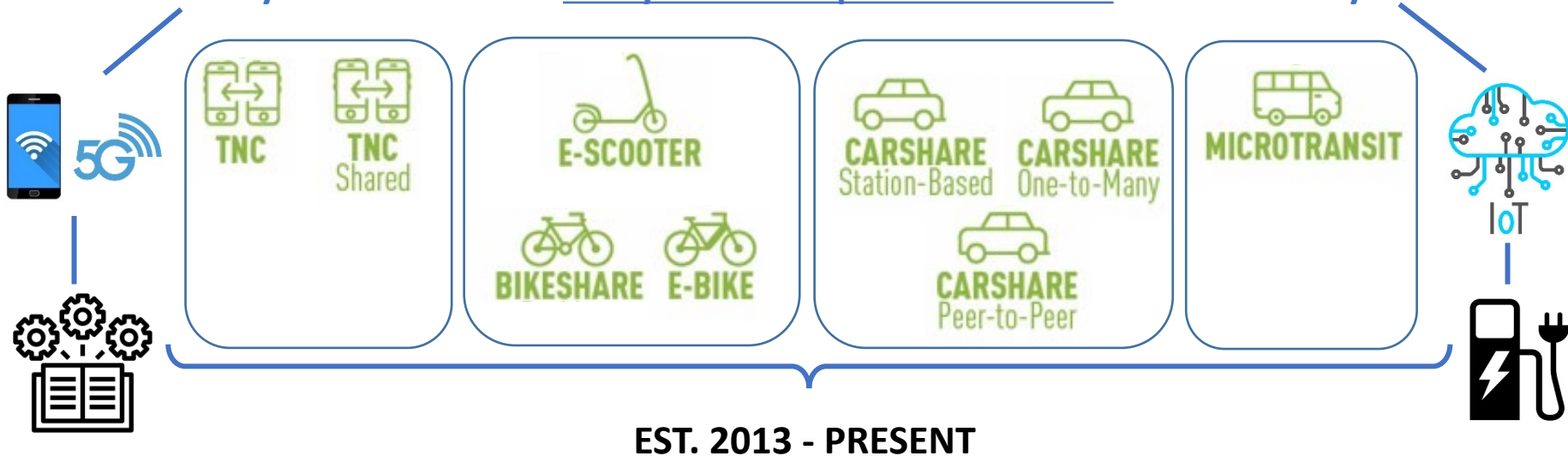
THE 10 YEAR MOBILITY SHIFTS INFLUENCING MaaS

PAST 10 Year Shifts: Emergence of New Transportation Modes

Society has experienced a greater shift in the variety of transportation modes available to the public over the past 10 years than the preceding 100+ years. Technology has powered this shift.



Industry 4.0 has enabled every new transportation mode of the last 10 years



NEXT 10 Year Shifts: Personal Mobility and Lifestyle

Dallas Fort-Worth is the fastest growing metropolitan region in the Nation*



Growth in Region brings challenges and opportunities for DART



Increase in environmental and sustainability focus



Long-tail impacts of COVID-19 still unclear



Commuting pattern shifts and emerging technology



Additional Emerging Mobility modes

*Source: US Census Data: [Link](#)

10 Year Shifts : Emerging New Mobility Capabilities

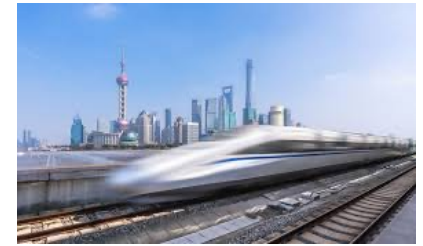
Short Term



*New Personal Mobility
Device Formats*



Vehicle Electrification



High-Speed Rail



*Personal Mobility Device
Enhancements*



*Autonomous / Self-
Driving Vehicles*



Hyperloop / Vactrains

Long Term



New Vehicle Formats



Cargo Drones



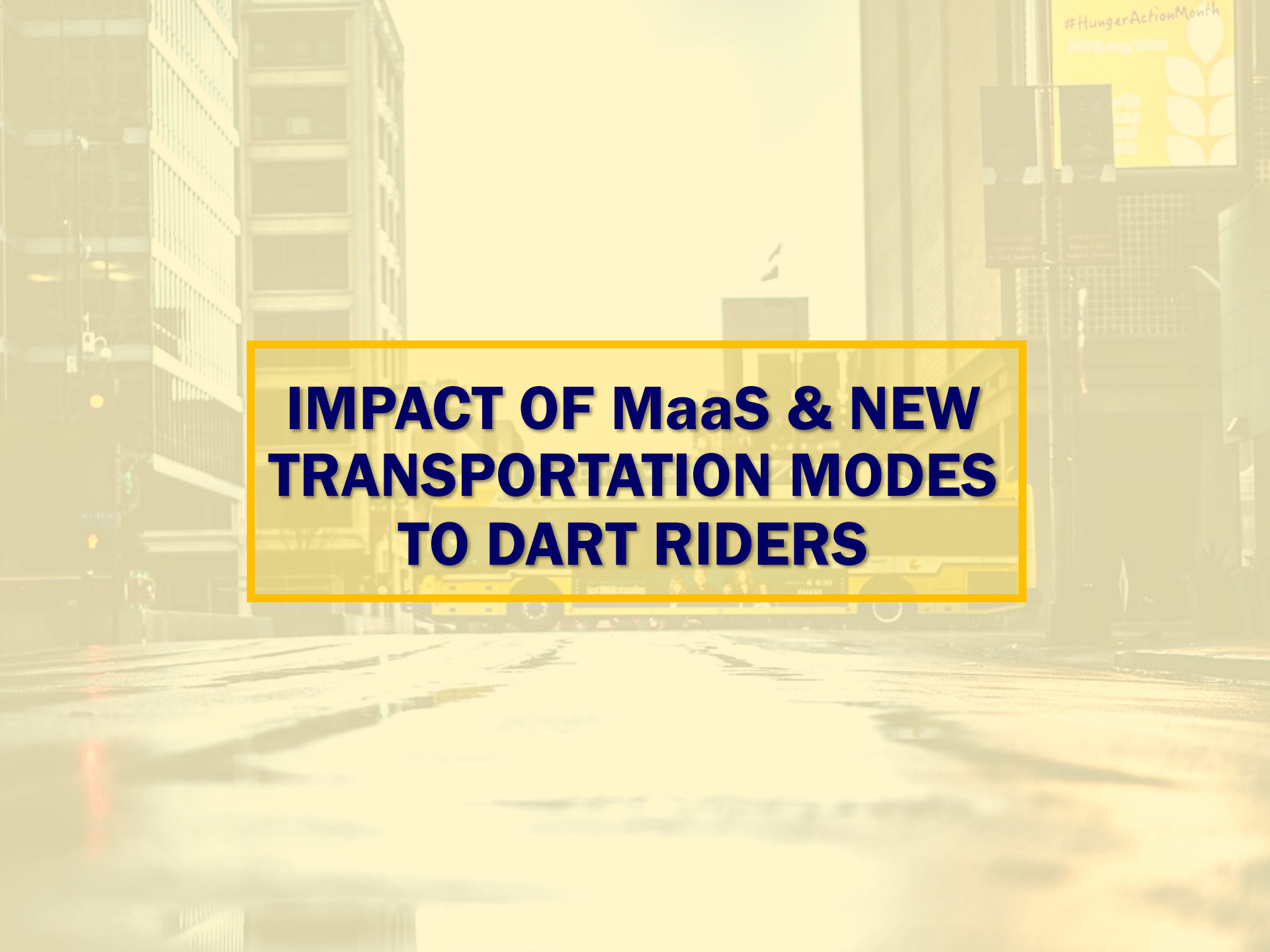
*UAV (Unmanned
Aviation Vehicles)*

How Does DART Retain Influence?

DART maintains an extensive, continually expanding and evolving network of mobility service provider partnerships and integrations.



Promoting open standards of digital connectivity between vendors is our primary method of driving MaaS forward.

A blurred city street scene with a yellow text box overlay. The background shows a city street with buildings, a traffic light, and a yellow sign with the text "#HungerActionMonth" and "www.org/MAAS". The text box contains the following text:

**IMPACT OF MaaS & NEW
TRANSPORTATION MODES
TO DART RIDERS**

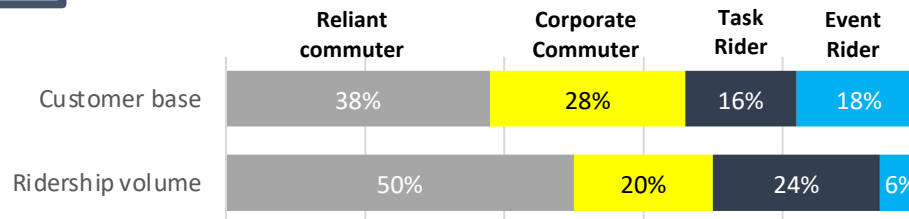
DART Rider Segments

Reliant Commuters: with their high dependency and usage of DART, their concerns are pragmatic in nature (convenience, service, reliability)

Task Riders: viewing DART as a cost-effective mode of transportation, their concerns are about safety, panhandlers and cleanliness

Corporate Commuters: content with frequency and coverage but sensitive to safety, quality and comfort issues. Have other options besides DART

Event Riders: occasional users, somewhat sensitive about schedule and frequency but have the best opinion of DART among all



Benefits to Riders and DART of New Transportation Modes

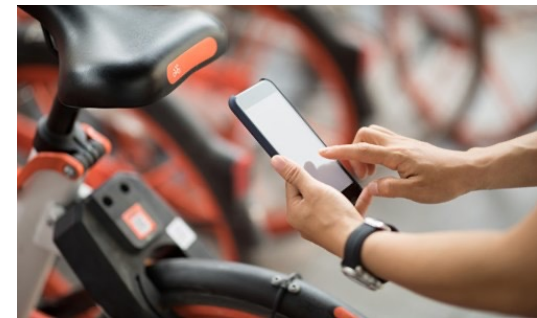
New transportation modes bring opportunities for DART to offer services, and DART riders to connect with services in innovative ways:

Key Benefits to Riders

- *Reduces necessity on single occupancy vehicle ownership*
- *Increased rider options for shorter distance trips*
- *Rapid response time and strong coverage across many areas*
- *Connect to DART services in new ways, closing gaps for many*

Key Benefits to Agencies

- *Innovation in the private sector helps to drive public sector evolution*
- *Increased pool of external contractor partnerships available to DART*
- *Prospect for lower cost engagement in facilitated transit services*
- *Can enable increased usage of core transit services (Rail Links, Bus)*



Challenges Presented to Riders from New Private Sector Transportation Modes

DART's Reliant Commuters and Task Riders face disproportionate challenges from new transportation modes:



Unbanked or Underbanked riders



High cost for participation in new modes



Non-smartphones owning riders



Mobility impaired riders often excluded through physical barriers to use



Geographically impacted by inequitable distribution of service coverage

Additional challenges may be presented by new transportation modes widening equity gaps:

- *Segmented impact on utilization of DART operated services impacts planning and operations*
- *Emergence of a tiered system in accessibility to emergent services based on income*
- *Without agency actions, private mobility vendors risk broadening the mobility gap for certain riders*

DART has Positively Impacted Equitable Service Distribution Through MaaS Framework

Investments made in new technologies (GoPass & GoLink) have included a focus on solving issues for Reliant Commuters and Task Riders.



Accessibility to book services through multiple channels (App or call-center)



Affordable services enabled and provided by DART, linked with DART's fare policy



Ability for riders to pay in a technology agnostic manner



Full range of mobility accessibility requirements for riders addressed by services



Equitable distribution of DART and supporting private sector services within GoLink zones to have comparable performance to private sector offerings. Conscious management of service planning in light of impact of new transportation modes

Impact of DART MaaS and GoPass Strategy

DART's investments in MaaS have brought the following benefits:

- Reduction in cash handling in the system and transactional processing costs
- Facilitation and adoption of novel service modes (ex: GoLink) that lower operating cost while retaining service quality
- Unique additional revenue generating partnerships for the Agency, and links to support communities in novel ways
- Flexibility for DART to continue to evolve service offering proactively vs. reactively as new mobility modes emerge

1.4m+

GoPass App
Downloads

81%

App Users that
are DART Riders

\$100k+

Loaded to GoPass App
through Cash-to-Mobile

10m+

Tickets Sold
through GoPass App

A city street scene with a yellow bus in the center. The bus has "eye opener WEEKDAYS 8:30-10:30" and "CLUB" on its side. A yellow text box is overlaid on the bus. In the background, there are buildings and a sign that says "#HungerActionMonth" and "WFP.org/MAAS".

WHAT IS NEXT FOR MAAS AT DART?

MaaS Aligns with DART's Future Vision

Mobility & Innovation is one of DART's five key future opportunities identified within the 2045 Transit System Plan, and DART's MaaS technology is an enabler to additional future opportunities.

RIDER EXPERIENCE

MOBILITY & INNOVATION

SERVICE & EXPANSION

LAND USE & ECON DEVELOP.

COLLABORATION

GOAL 1

BE A LEADER IN MOBILITY AS A SERVICE (MAAS) INNOVATIONS TO SUPPORT THE TRANSIT SYSTEM AND ENHANCE THE CUSTOMER EXPERIENCE

GOAL 2

ADVANCE PILOT PROGRAMS TO TEST NEW IDEAS AND TECHNOLOGY TO GENERATE DATA AND SUPPORT DECISION-MAKING

GOAL 3

INTEGRATE PUBLIC AND PRIVATE MOBILITY OPTIONS AT DART FACILITIES TO REDUCE RELIANCE ON THE AUTOMOBILE AND ENHANCE CONNECTIVITY

GOAL 4

CONTINUE TO ENHANCE GoPASS™ AND OTHER TOOLS WITH INNOVATIVE FEATURES TO ENHANCE CUSTOMER INFORMATION

GOAL 5

EXPLORE FLEET OPTIONS AND FACILITY ENHANCEMENTS THAT SUPPORT LOCAL AND REGIONAL AIR QUALITY AND CLIMATE ACTION GOALS



Mobility Hubs can seamlessly integrate different modes of transportation, multi-modal infrastructure, and placemaking strategies to create community centers that maximize first and last mile connectivity.

MaaS Goals Tied with DART's Future Vision

- Pursuing more equitable access and distribution of services for core rider segments
- Continuing the agency response to evolution of new transportation modes
- Continuing DART's position of the convener of mobility services for North Texas
 - ✓ Integration of new MaaS vendors into DART's ecosystem and DART operations
 - ✓ Expand GoPass App role as convener of Mobility Services for riders in the region
 - ✓ Broadening payment, booking and service methods for MaaS vendors
 - ✓ Novel payment models such as subscription services, integrated subsidies, rewards programs
- Positive impact on DART 2045 Transit System Plan's key identified opportunities
- Revenue generation for Agency, offsetting costs for pursuing MaaS vision
- Fulfillment of DART Mobility as a Service vision statement



Thank You!

Questions?





APPENDIX

Bringing Integrated Multi-Modal Microtransit to DFW Riders

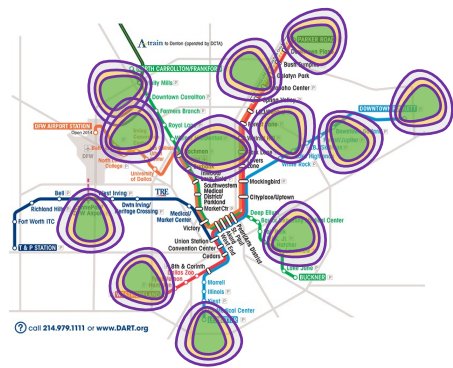
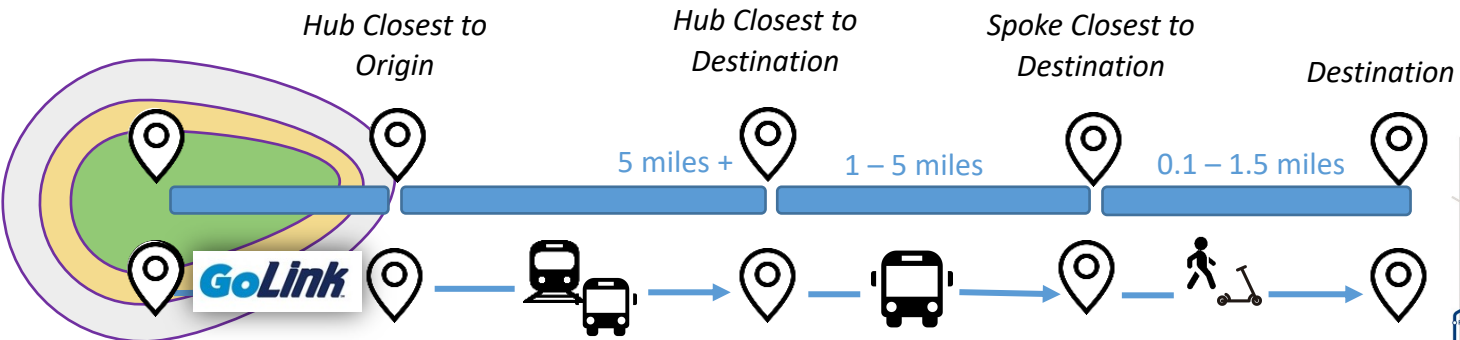
GoLink™ connects riders to and from transit-hubs across DART’s service area. It is an industry first in fully integrating Microtransit discovery, booking and payment activities to an end-to-end multi-modal trip planner in a MaaS app.

GoLink provides flexibility in offering service across:

- **DART Vehicles**
- **Private Hire / Taxi**
- **TNC (Uber Pool)**

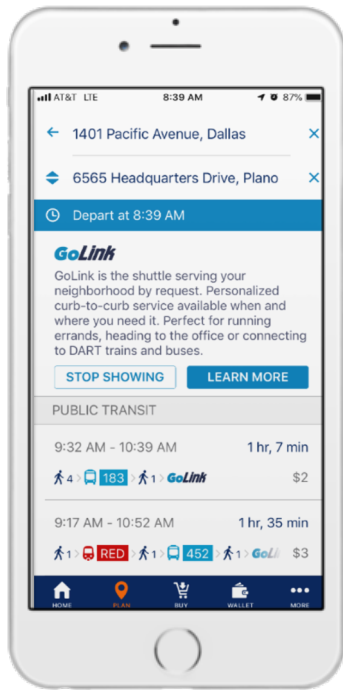
spare Bookings managed through Spare Labs Engine integrated to GoPass® App Front-End.

via Integration with Via Transportation currently in development to support DFW Agency utilizing VIA for microtransit, is being integrated to GoPass App



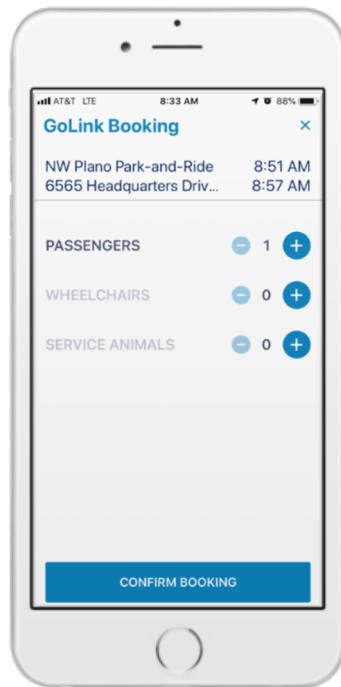
Integrated Multi-Modal Microtransit

Discovery



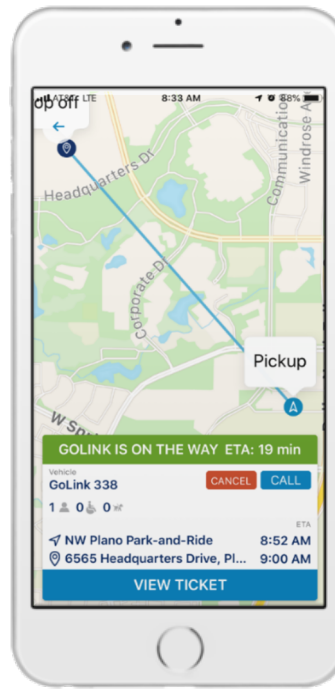
User is presented GoLink intuitively while planning their trip based on availability of service

Booking/Payment



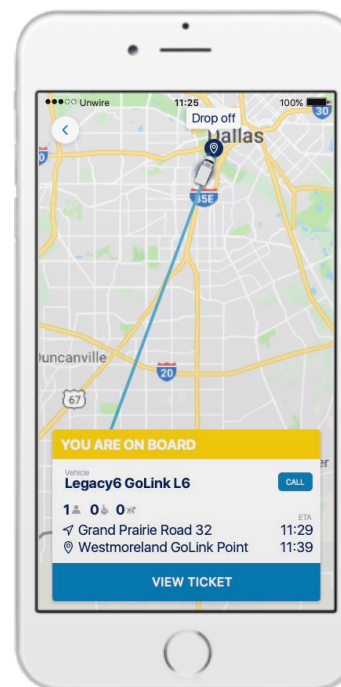
Integrated Booking / Payment prior to trip, including App, Cash & Tap Card

Pre-Boarding



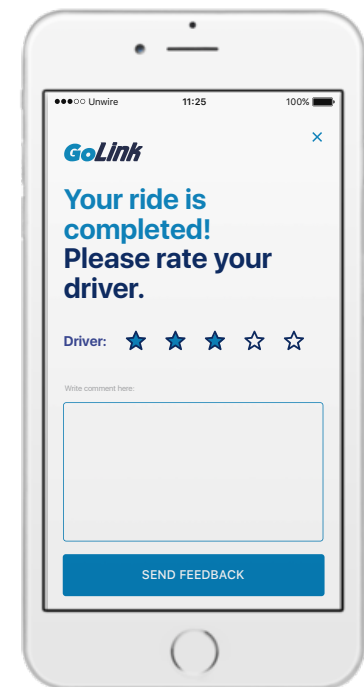
Real-time vehicle tracking to pick up rider

En-Route



On-board status and tracking during journey

Post Journey



Rating and feedback options to pursue continuous improvement

