

AGENDA

Mobility on Demand (MOD) Working Group Meeting at NCTCOG

7/23/2018 2:00 pm – 3:30 pm

NCTCOG Transportation Council Room

616 Six Flags Drive, CenterPoint II, Arlington, TX 76011

2:00 pm Welcome and Introductions (Jing Xu - NCTCOG)

2:05 pm Alliance Link Shuttle: Public/Private Partnerships (Zoha Momin – Toyota, Lindsey Baker - DCTA)

2:20 pm Partnership between FedEx and STAR Transit (Mike Sims – STAR Transit)

2:35 pm DART MOD Sandbox Project Update (Somayeh Moazzeni – DART)

2:55 pm Whitepaper on Accessibility and MOD Options (Cody Nelson – NCTCOG)

3:05 pm Using a MaaS Platform to Enable a MaaS Ecosystem (John Horner – Kapsch)

3:15 pm Q&A, Discussion and Future Topics (All)

Mobility on Demand (MOD) Working Group
July 23, 2018
North Central Texas Council of Governments (NCTCOG)
Transportation Council Room

1. Meeting Summary
 - a. Welcome & Introductions
 - b. Alliance Link Shuttle: Public/Private Partnerships
 - c. Partnership between FedEx and STAR Transit
 - d. DART MOD Sandbox Project Update
 - e. Whitepaper on Accessibility and MOD Options
 - f. Using a MaaS Platform to Enable a MaaS Ecosystem
 - g. Q/A, Discussion and Future Topics
2. Attendee List

1. Meeting Summary

a. Welcome

Jing Xu from NCTCOG welcomed and thanked everyone for attending the meeting. All attendees gave brief introductions as well.

b. Alliance Link Shuttle: Public/Private Partnerships

Zoha Momin, Senior Green Mobility Analyst with Toyota Motor North America (TMNA) and Lindsey Baker, Director of Strategic Partnerships with Denton County Transportation Authority (DCTA) collaborated and gave an overview of their Public-Private Partnership with Alliance Link Shuttle to provide transportation options that support low-wage workers whom are employed in Alliance, Texas. The program focuses on job accessibility and improving access specifically targeting lower income individuals. The 9 month pilot program was recently implemented in April 2018 and has already served nearly 500 rides. It is a cost effective option at \$1/trip using the Alliance Link app. The app is free to download and allows the service to function on-demand which also allows for rides with other passengers going to the same or similar destinations. Currently, booking a trip via smartphone is the only option for payment, however, if a rider does not have access to a smartphone, there is a form to submit online to request additional information for commuting purposes.

Lastly, Alliance Link focuses on three specific overarching goals including: expansion into other sectors and areas, decreasing employment turnovers because of limitations on transportation, and reducing traffic in Alliance due to single-occupancy vehicles which also helps to improve local air quality.

c. Partnership between FedEx and STAR Transit

Mike Sims, Deputy Executive Director with STAR Transit gave an overview of the current service operations within Inland Port recognizing more recent initiatives to promoting MOD opportunities. FedEx Home Delivery is among the newest locations for service via Hutchins Shuttle. Hutchins Shuttle offers convenient service and is a cost effective option at \$1/trip, which is paid while boarding the bus. STAR Transit's current MOD operations include a more community-based feel including a cohesive and high quality customer-driven focus.

Currently, STAR Transit is collaborating with City of Desoto to add additional services and also has two other goal jurisdictions (Mesquite and Rockwall) for expansion. These options will likely become available in FY 2019.

New Wave MOD, as defined by STAR Transit, is focusing on increasing customer mobility while simultaneously decreasing costs. Successful goals and implementations will include ridership utilizing TNC and Taxi services as well as payment options via a mobile app or phone and collecting data and customer feedback.

d. DART MOD Sandbox Project Update

Somayeh Moazzeni, Service Planner II with DART, gave an update on DART's MOD Sandbox Project. This project has three main components to its vision:

- Continuously improving the transportation experience
- Expanding the reach of public transportation
- Allowing access to all consumers

DART has examined growth potential of population, economic growth, current issues such as affordable housing, poverty levels, and spatial mismatches regarding employment and transit availability. MOD is an alternative for increasing transit availability to address transportation issues for expansion into reaching underserved and lower income areas as well as promoting additional transportation options for areas that are growing rapidly.

DART's GoLink Program currently operates six MOD Zones, (Legacy, North Central Plano, Inland Port, Rowlett, Kleberg, and Rylie), and has seen ridership increases overall, with majority of its daily ridership in the Legacy and North Central Plano Zones. This on-demand service allows users to connect with services via the TapRide app, which allows riders the opportunities to schedule rides and request an accessible vehicle, if need be. For those who do not have access to a smartphone, there is also a call-in option as an additional add-on component.

DART has determined that MOD Microtransit is viable with TNC-style pricing and/or additional ridership. DART's hope through additional Sandbox Grant improvements via technology and TNCs, will increase ridership, both cost effectively and equitably.

e. Whitepaper on Accessibility and MOD Options

Cody Nelson from NCTCOG gave an overview of the current completed Whitepaper on Accessibility and MOD Options for people with disabilities in the Dallas-Fort Worth (DFW) region developed by NCTCOG staff. The whitepaper examines the mobility and accessibility needs of people with disabilities and helps to facilitate those needs via transportation options. The whitepaper includes current up-to-date options and will be updated on a regular basis to inform the public on transportation availability throughout the DFW region. The whitepaper does include organizations in DFW that assist with linking people with disabilities to the most appropriate transportation options. Some of the services in DFW that assist in mobility options are Transportation Network Companies (TNCs) and Taxis. The whitepaper includes regulations, restrictions, as well as

benefits geared specifically towards people with disabilities and can be used as a direct resource or guide for transportation availability and options.

f. Using a MaaS Platform to Enable a MaaS Ecosystem

John Horner, National Practice Lead with Kapsch gave an overview and demonstration of approaches to foster MaaS initiatives and defining an ecosystem with clear stakeholder functions and a cloud-based service solution. The company Fluidtime acts as a platform service operator in the MaaS Ecosystem and distinguishes between different levels of integration – from information, booking, and access to payment. This allows for a more seamless travel experience by using one single app incorporating all aspects including but not limited to: public transportation, sharing services, and taxis to achieve a common objective.

The demonstration included a brief presentation via online of how the service platform operates, combining traveler demand with integrated mobility offerings creating a seamless data transfer between mobility service providers and public transport service operators.

g. Q/A, Discussion and Future Topics

The committee did not recommend topics for next quarter’s meeting. The next meeting will focus on academia and research-oriented perspective, as planned.

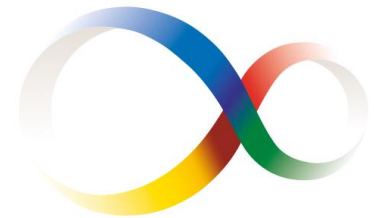
2. Attendee List

Catholic Charities of Fort Worth: Scott Hurbough
City of Fort Worth: Gerald Taylor, Susan Alanis
City of Frisco: Kerin Smith
City of Grand Prairie: Walter Shumac
City of Mesquite: Valerie Bradley
City of Plano: Rama Dhanikonda
Community Transit Services, Inc.: Katie Ragan
Dallas Area Rapid Transit: Somayeh Moazzeni
Denton County Transportation Authority: Jonah Katz, Lindsey Baker
Federal Transit Administration: Melissa Foreman
Irving Holdings: Jack Beverly, Charlie Johnston
Kapsch: John Horner
North Central Texas Council of Governments: Marian Thompson, Natalie Bettger, Cody Nelson, Tom Bamonte, Clint Hail, Jing Xu, Shannon Stevenson, Karina Maldonado, Caryn Sanders, Donald Parker, Ying Cheng, Tim O’Leary, Dan Lamers
Span, Inc.: Roger Muckel
STAR Transit: Mike Sims
Toyota: Trey Ingram, Zoha Momin
Trinity Metro: JD Smith, Carla Forman

Using a MaaS Platform to Enable a MaaS Ecosystem

Enabling Smart Mobility.

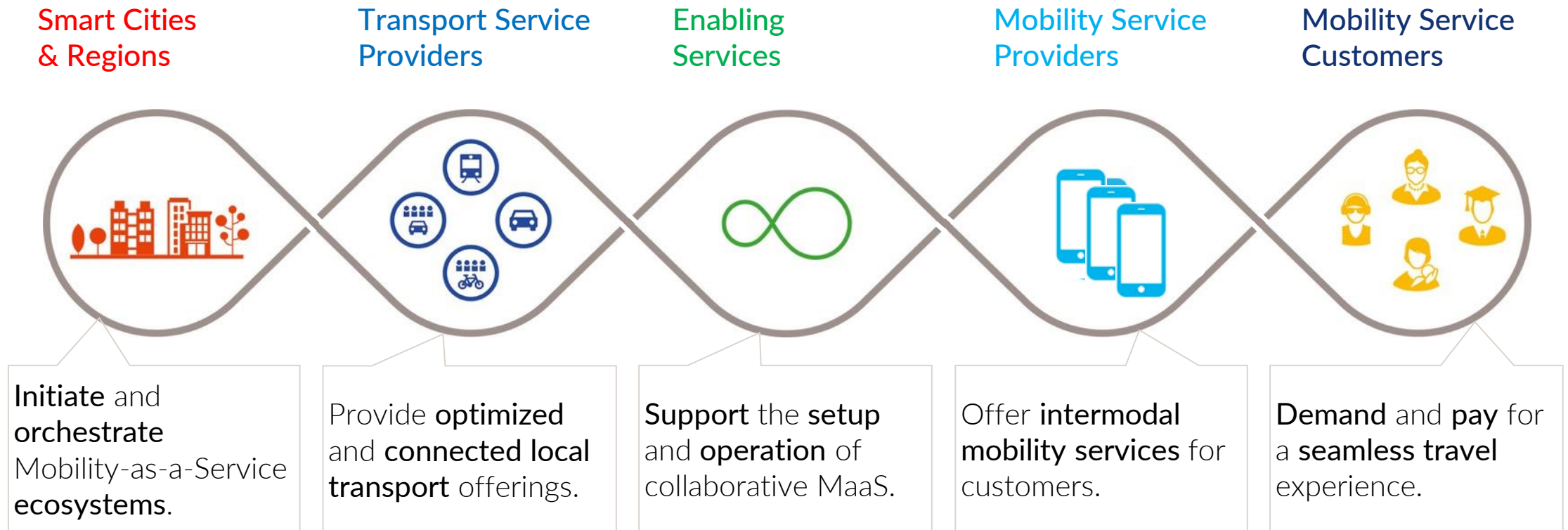
Fluidtime



A Kapsch Group Company >>>



MaaS Ecosystem | Achieving a common objective







MaaS Operator | solution components

INTEGRATION

PUBLIC TRANSPORT




SHARED TRANSPORT




PAYMENT

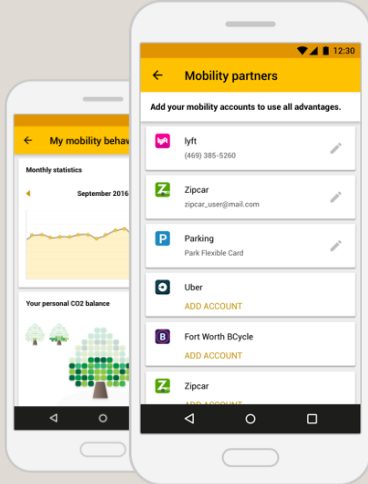
PAY AS YOU GO



SUBSCRIPTION



PERSONALIZATION





Fluidtime offering for MaaS operators

Fluidtime connects and standardizes (shared) transport offerings, makes them book- and payable from a personalized device.

INTEGRATION



A cloud service providing a **standardized access point** to all integrated Transport services.

PAYMENT



A set of services to **manage customers**, their **bills** and **payment**

PERSONALIZATION

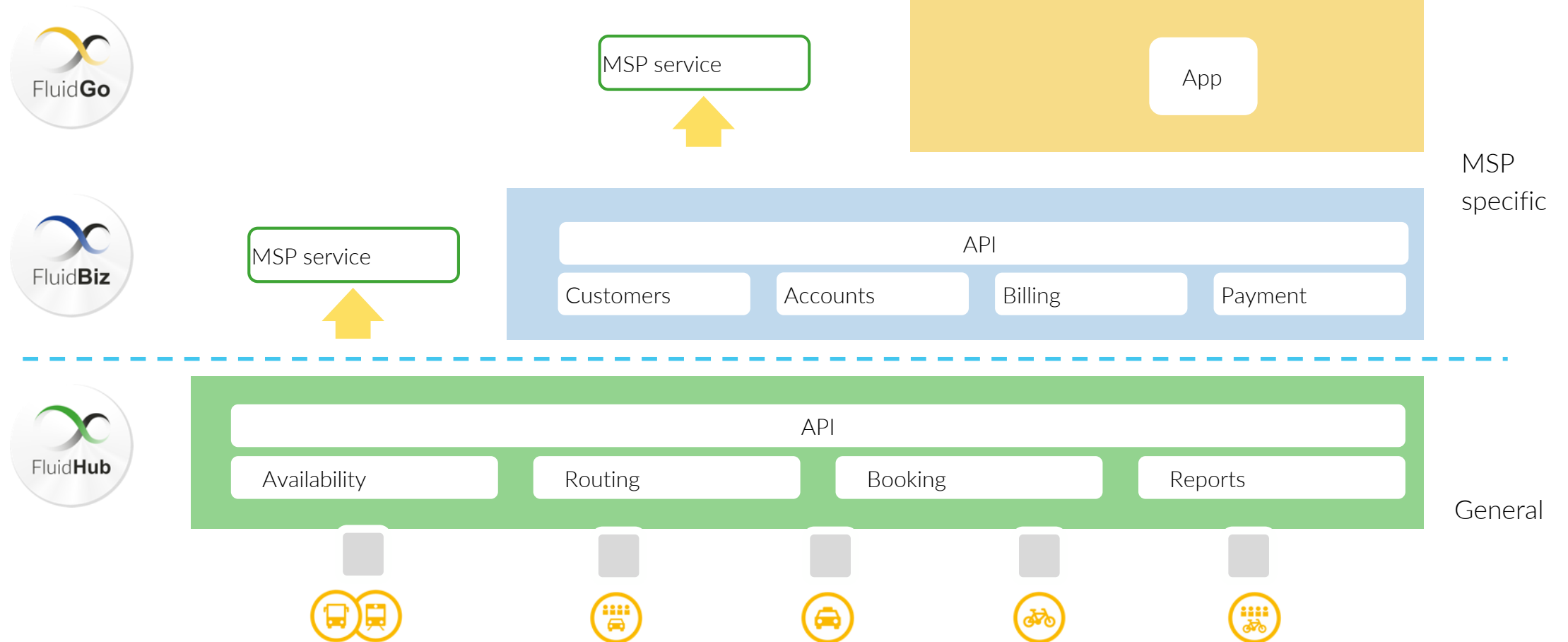


The **white-label app** as face to the customers.



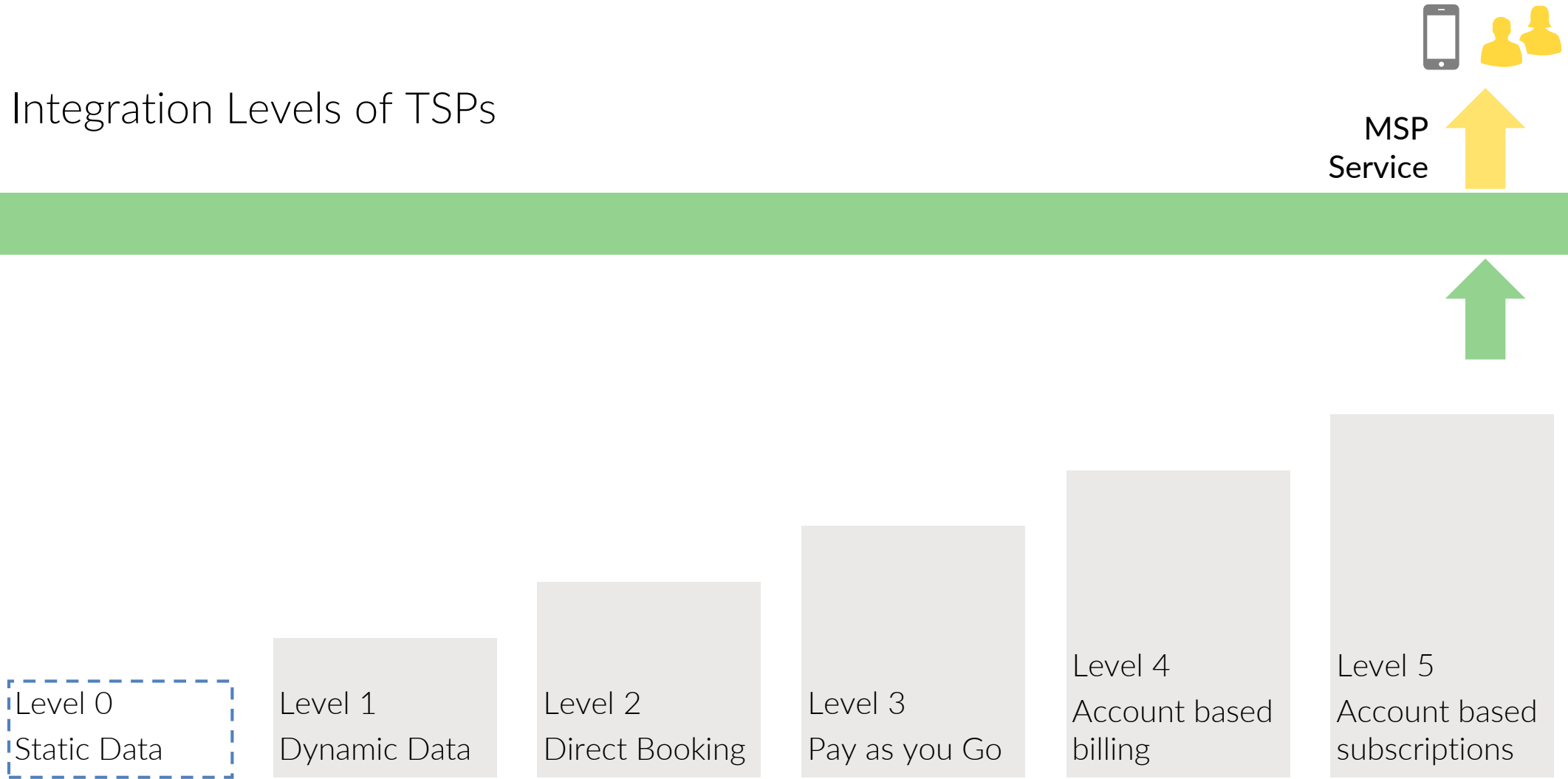
Offering for MaaS Operators

Enabling various approaches towards MaaS based on a modular SaaS





Integration Levels of TSPs





Cities, Regions and MaaS ecosystems

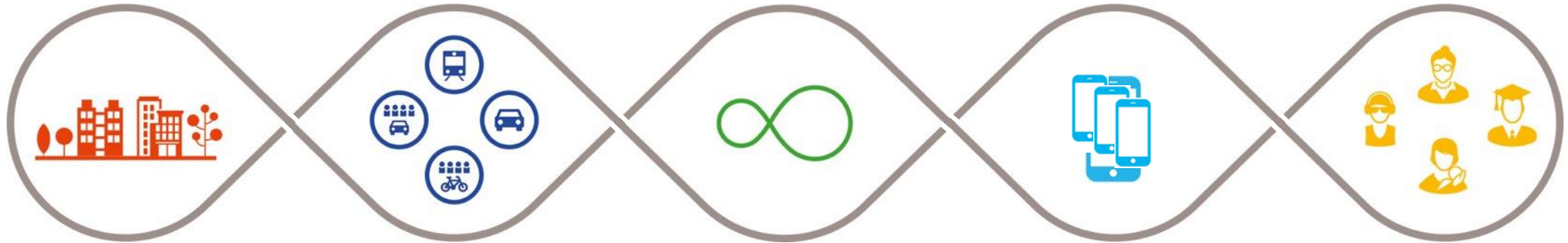
Smart Cities
& Regions

Transport Service
Providers

Enabling
Services

Mobility Service
Providers

Mobility Service
Customers



ORCHESTRATION

Regulation &
Governance





Benefits - orchestrate the MaaS ecosystem

Smart Cities & Regions



ORCHESTRATION

Regulate coverage & business areas, see which zones get transport and govern the mix of offerings

The screenshot displays the Fluidtime web application interface. At the top, it features the Fluidtime logo and the text 'Enabling Smart Mobility. A Kapsch Group Company >>>'. Below the header is a navigation menu with the following categories and options:

- City**
 - Population density
 - Point of interests
- Transport availability** (Show all)
 - Bikesharing
 - Car Rental
 - Carsharing
 - Public transport
 - Ride Hailing
 - Ridesharing
 - Taxi
- Request**
 - Routes
 - Routing requests density
 - Bookings
- Business Areas**
 - Drive now
 - Uber
 - Villot

The main area of the interface is a map of Brussels, Belgium, with several districts highlighted in blue: LAKEN, Schaerbeek/Schaarbeek, Brüssel, Ixelles/Elsene, and Uccle/Ukkel. Other districts visible include Jette, Ganshoren, Evere, Woluwe-Saint-Lambert/Sint-Lambrechts-Woluwe, Woluwe-Saint-Pierre/Sint-Pieters-Woluwe, Auderghem/Oudergem, Forest/Vorst, and WATERMAEL WATERMAAL. A legend in the top right corner allows switching between 'Dynamic' (selected) and 'Average' views. The interface also includes a search bar and various navigation controls.



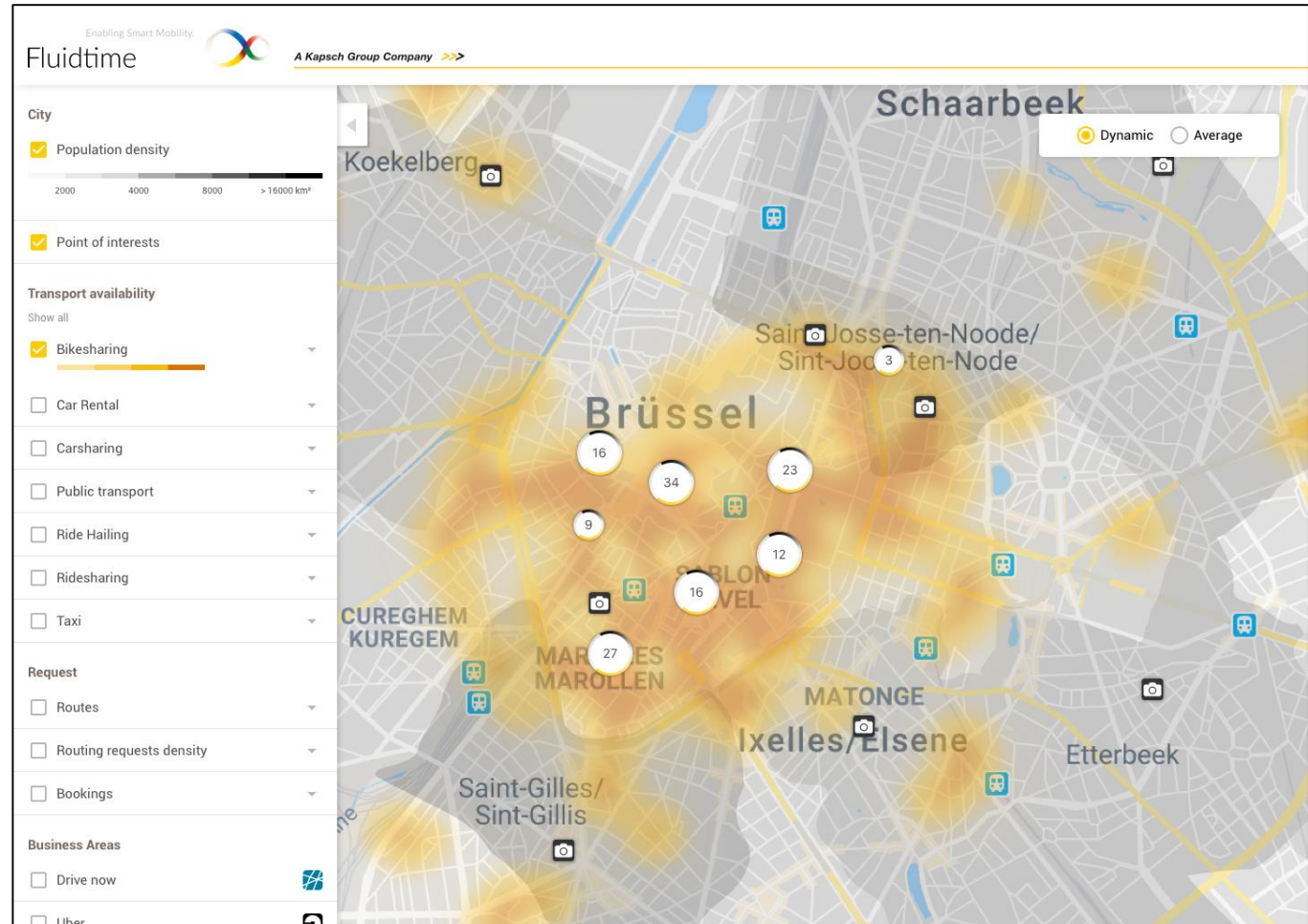
Benefits – optimize transportation

Transport Service Providers



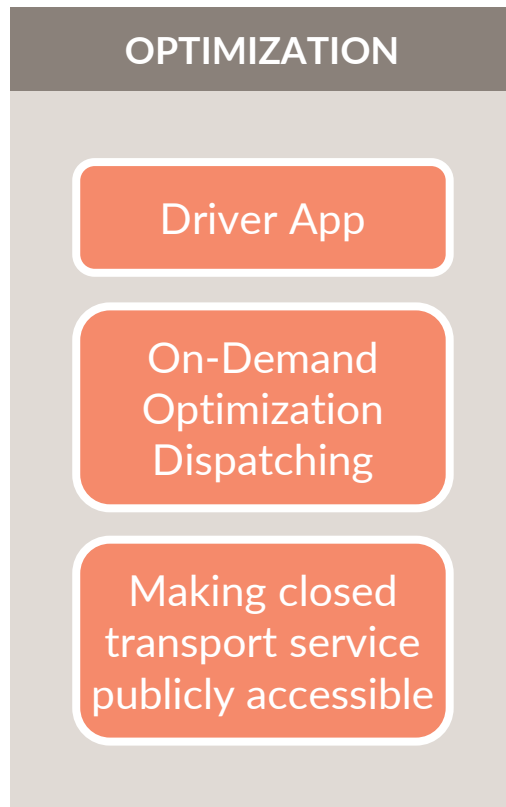
OPTIMIZATION

See coverage vs. transportation demand and optimize service





MOD in Conjunction with FluidHub



Capabilities

- Door to door
- Stop to stop
- Real-time
- Pre-bookings
- Mixed fleets
- Demand-profile and supply matching

Offering

- Operation center
- Driver app
- APIs
- Simulator

Domains

- Taxi
- Public Transit
- Paratransit
- MaaS



MOD | Operator dashboard

Trip #719
Firtz

Departure	18:19
Arrival	18:41
Anchor	Pick
Requested Time	2018-03-23 17:15:00Z
Origin	lat: 60.319435, lng: 25.006287
Destination	lat: 60.282014, lng: 25.067742
Driver Info	Testdriver

Search criteria: [Add criteria](#)

Date: 23/03/2018

#	Route	Vehicle	Origin	Destination	Date	+	-	☑
728	368	2	lat: 60.300763, lng: 24.998016	lat: 60.296510, lng: 25.069771	23/03/18	15:30	15:45	<input type="checkbox"/>
692	337	3	lat: 60.318959, lng: 25.009033	lat: 60.269450, lng: 25.06101	23/03/18	16:00	16:19	<input type="checkbox"/>
717	362	3	lat: 60.281619, lng: 25.066606	lat: 60.308159, lng: 25.048753	23/03/18	17:55	18:08	<input type="checkbox"/>
718	363	2	lat: 60.289996, lng: 25.002430	lat: 60.317719, lng: 25.070751	23/03/18	18:10	18:26	<input type="checkbox"/>
719	365	3	lat: 60.319435, lng: 25.006287	lat: 60.282014, lng: 25.067742	23/03/18	18:19	18:41	<input type="checkbox"/>
725	365	3	Kallioruohontie	Riilivägen	23/03/18	18:24	18:37	<input type="checkbox"/>
730	369	1	Kallioruohontie	Riilivägen	23/03/18	19:03	19:20	<input type="checkbox"/>
729	369	1	lat: 60.305866, lng: 25.006287	lat: 60.288854, lng: 25.067742	23/03/18	19:05	19:15	<input type="checkbox"/>

[New Trip](#)

Vehicle itinerary (03/04/2018 00:00 - 05/04/2018 23:59)

Event	Address	Load
26/03/2018	09:14	Shift start
01/05/2018	07:14	Shift end

Trip #751
MAX

Route: 380
Vehicle: 3 kulla
Capacities: 1
Origin: lat: 60.316238, lng: 25.008859
Destination: lat: 60.296340, lng: 25.069084

04/04/2018

Status	Pickup	Drop
Requested	15:00	
Promised	15:00	15:15
Planned		
ETA		
Actual		

Route 380
Espoo

Status	Trip	Type	Planned	Promised	ETA
	751	Pick	15:00		
	751	Drop		15:15	

Trips

#	Status	Route	Vehicle	Origin	Destination	Pickup	Dropoff
751		380	3 kulla	lat: 60.316238...	lat: 60.296340...	15:00	15:15

Vehicles

#	CallID	Seats
1	Vehicle 1	8
2	Vehicle 2	15
3	Vehicle 3	3

Example: Helsinki

Enabling Smart Mobility.

Fluidtime



A Kapsch Group Company >>>

Thank you.

John Horner

john.horner@kapsch.net

Vlad Marica

vlad.marica@fluidtime.com





STAR TRANSIT

Connecting you to where you want to go.

STAR TRANSIT and Mobility on Demand

July 23, 2018

NCTCOG

- STAR Transit is a state established public transportation agency.
- Based in Kaufman County operating as a Rural Transit District.
- Agreements in place with 10+ entities (as big as Mesquite and as small as Fate) with service ranging from Royce City to Navarro County.
- Stellar safety record with 65+ buses in daily operation.
- Fourth largest transit agency in greater North Texas, all with no dedicated sales tax.
- Roughly 200,000 rides each year.



Core Services Tool Box

STAR TRANSIT

Connecting you to where you want to go.

Demand
Response
Service

Call,
Schedule a
Ride, Curb to
Curb Service

Circulators

Fixed Routes
from Transit
Generators
to Transit
Destinations

Commuter
Routes

Fixed Routes
from
residential
areas to
jobs/DART

Reverse
Commute

Fixed
Routes to
Jobs

STAR TRANSIT

STAR Transit Service Area



Connecting you to where you want to go.

Kaufman County

Rockwall County

Balch Springs

DeSoto

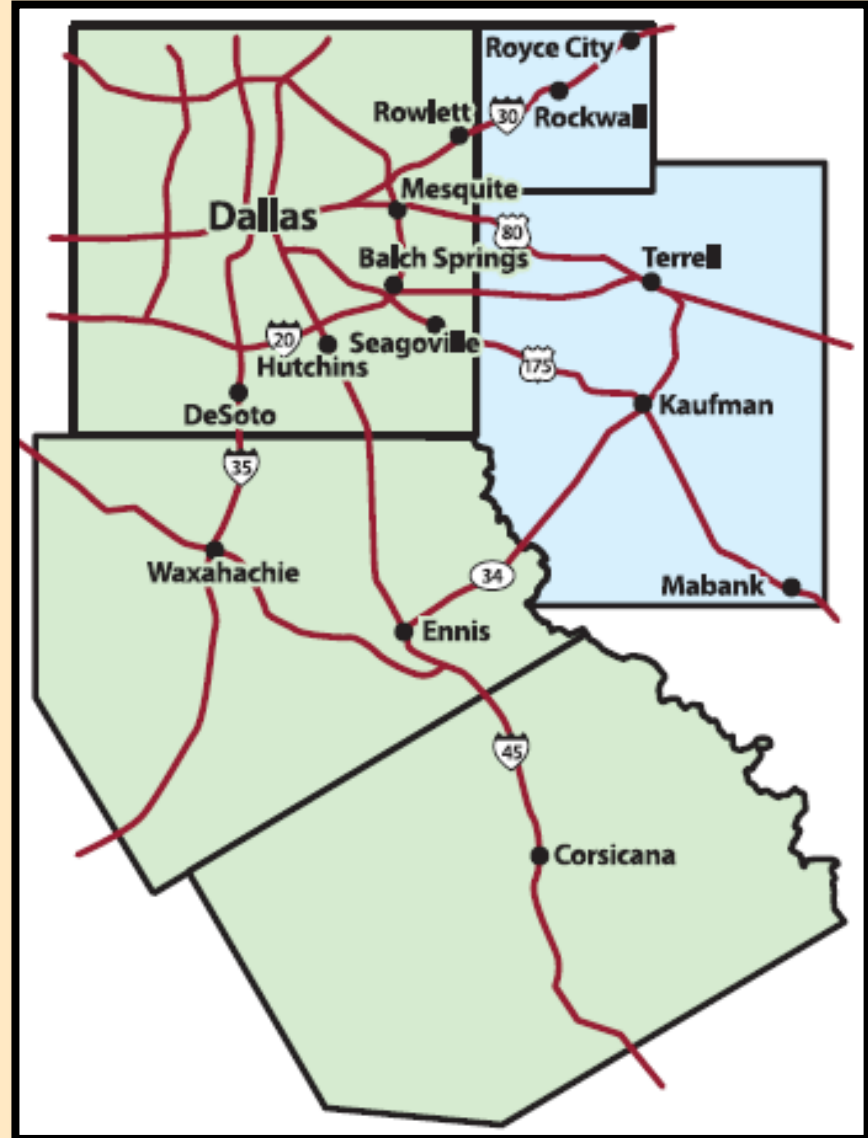
Hutchins

Mesquite

Seagoville

Ellis County (Medicaid/Aging)

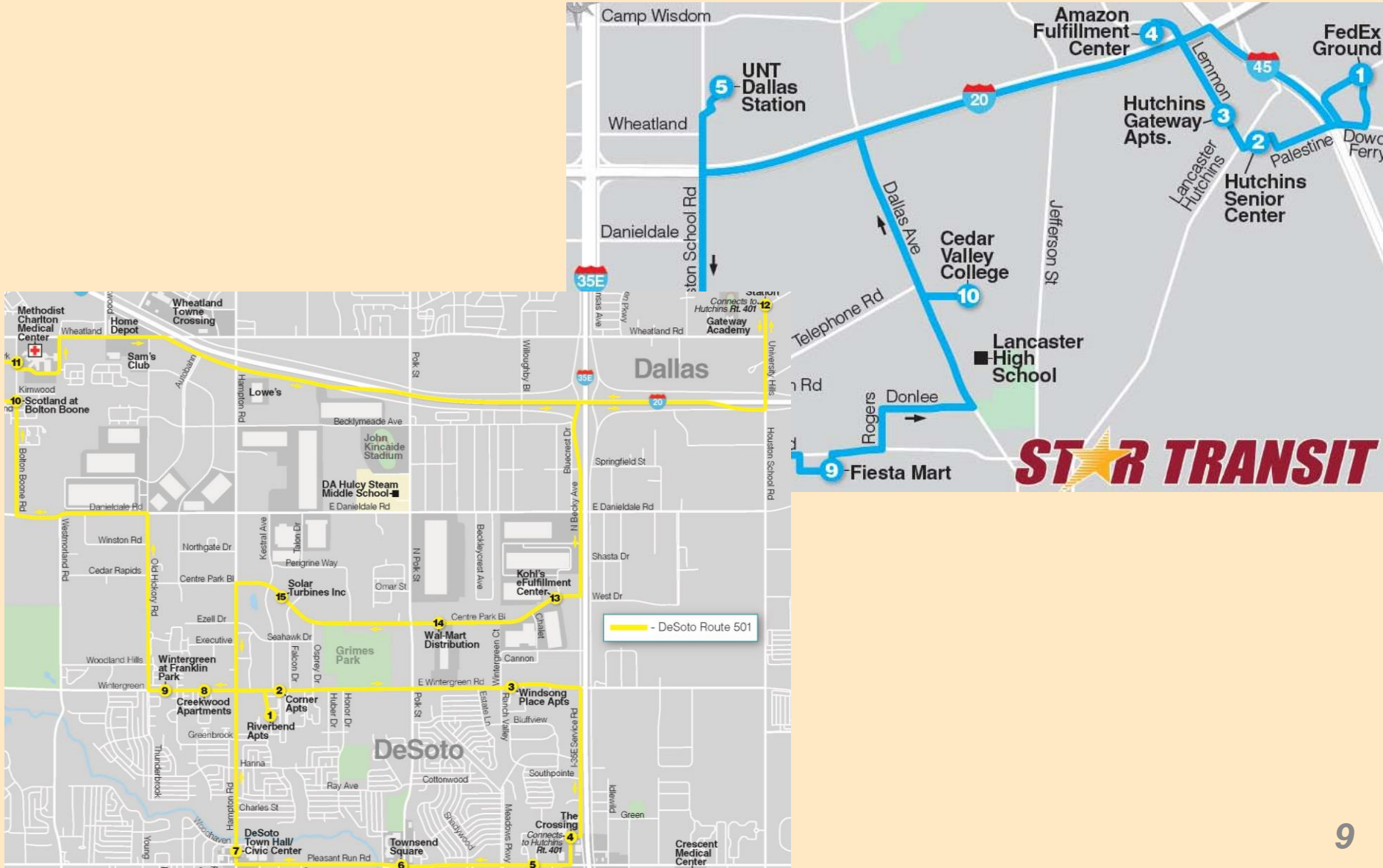
Navarro County (Medicaid/Aging)



Current Inland Port Operations



Connecting you to where you want to go.



- Current Mobility on Demand Operations
- 3rd Party Provider Relationships
- New Wave Mobility on Demand

Current Mobility on Demand Operations

- Hometown Style
- Not Advertised
- Availability Based
- Customer calls, Customer speaks with Driver
- Driver and Dispatch Discuss
- If we have flexibility when you ask for “right now service” we accommodate based solely on driver/dispatch discretion
- We pick you up
- We take you there
- Demand Response Fare Schedule



FY19 Taxi Cab Pilot Programs

Goal Jurisdictions

- Mesquite
- Desoto
- Rockwall



Traditional Taxi Cab Voucher Program plus STAR Transit as trip provider as available.

Working through contract topics with Desoto currently; aiming for start prior to close of calendar year.

Anticipate small trials of Desoto program in Mesquite and Rockwall by end of FY19.



Future Mobility on Demand Operations

How do we define New Wave MOD?

Ability to direct riders originating in the STAR Transit Service area to a TNC, Taxi or STAR Vehicle MOD through a mobile app or phone.

Ability to facilitate MOD payments through a mobile app or prepaid card.

Ability to collect data and customer service feedback throughout any/all methods of MOD.

Increase customer mobility while decreasing costs.

Future Mobility on Demand Operations

What elements are in place now?

Dispatch integrated with drivers

Drivers with connected tablets

Supervisory oversight

Local government partners requesting innovation

Back office technologies

Flexible Fleet

E&D verification already in place



Future Mobility on Demand Operations

What would we like to put in place?

MOD Cost of Service Policy

Sign on with GoPASS with DART

Cheer on DART progress with MOD Sandbox; cooperate as feasible

Increase Station Access with DART

Minor Website Updates

Trial operations in Kaufman County

Trial operations in Mesquite

Trial operations in Wilmer, Hutchins, Ellis County, Navarro County

www.STARtransit.org

The screenshot shows the STAR Transit website interface. At the top left is the STAR TRANSIT logo. To the right, there are navigation links: ABOUT, NEED A RIDE?, COMMUTE TO DART, FIXED ROUTES, and CONTACT. A toll-free number, 877-631-5278, is also displayed. Below the navigation is a section titled "GENERAL DIAL-A-RIDE INFORMATION CLICK HERE". The main content area is the "Fixed Route Trip Planner", which includes input fields for "Starting Location" and "Destination", a "Depart at" dropdown menu set to "8:53 AM", and a date field set to "6/30/2017". A "GET DIRECTIONS" button is located below these fields. The central part of the page features a map of the service area with several routes highlighted: a green line connecting Mesquite and Balch Springs, a yellow line connecting Balch Springs and Seagoville, and a red line connecting Seagoville and Kaufman. A "TRANSFER TO DART" icon is shown near the Balch Springs area. At the bottom of the map, there are buttons for "BALCH SPRINGS MIDTOWN EXPRESS", "SEAGOVILLE EXPRESS", "KAUFMAN TROLLEY", "COMPASS", and "MEDICAL DIAL-A-RIDE".



FACEBOOK.com/STARtransit

877-631-5278



Mobility on Demand Sandbox Project Update

Mobility on Demand (MOD) Working Group Meeting

July 23 , 2018

Somayeh Moazzeni

Service Planner II

smoazzeni@dart.org



Current population demand diversity in mode of access

The Dallas-Fort Worth area is the fourth largest metropolitan region in the country in terms of population – and it is growing. With a current population of 7 million, the area adds approximately 1 million people every decade. By 2040, the region will be home to nearly 10.7 million people and will provide 6.7 million jobs.

CURRENT POPULATION:
7.0 MILLION



1 million people



1 million jobs



2040 POPULATION:
10.7 MILLION



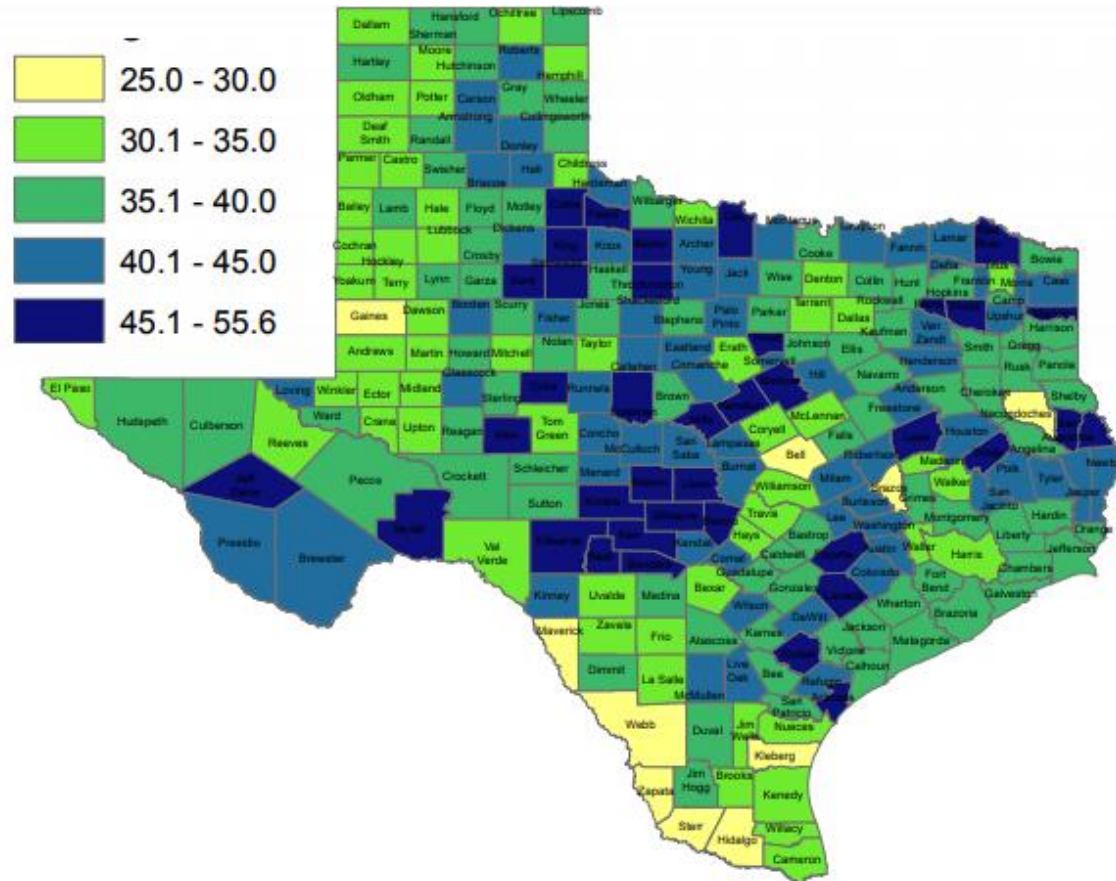
CURRENT EMPLOYMENT:
4.6 MILLION



2040 EMPLOYMENT:
6.7 MILLION



Current population demand diversity in mode of access

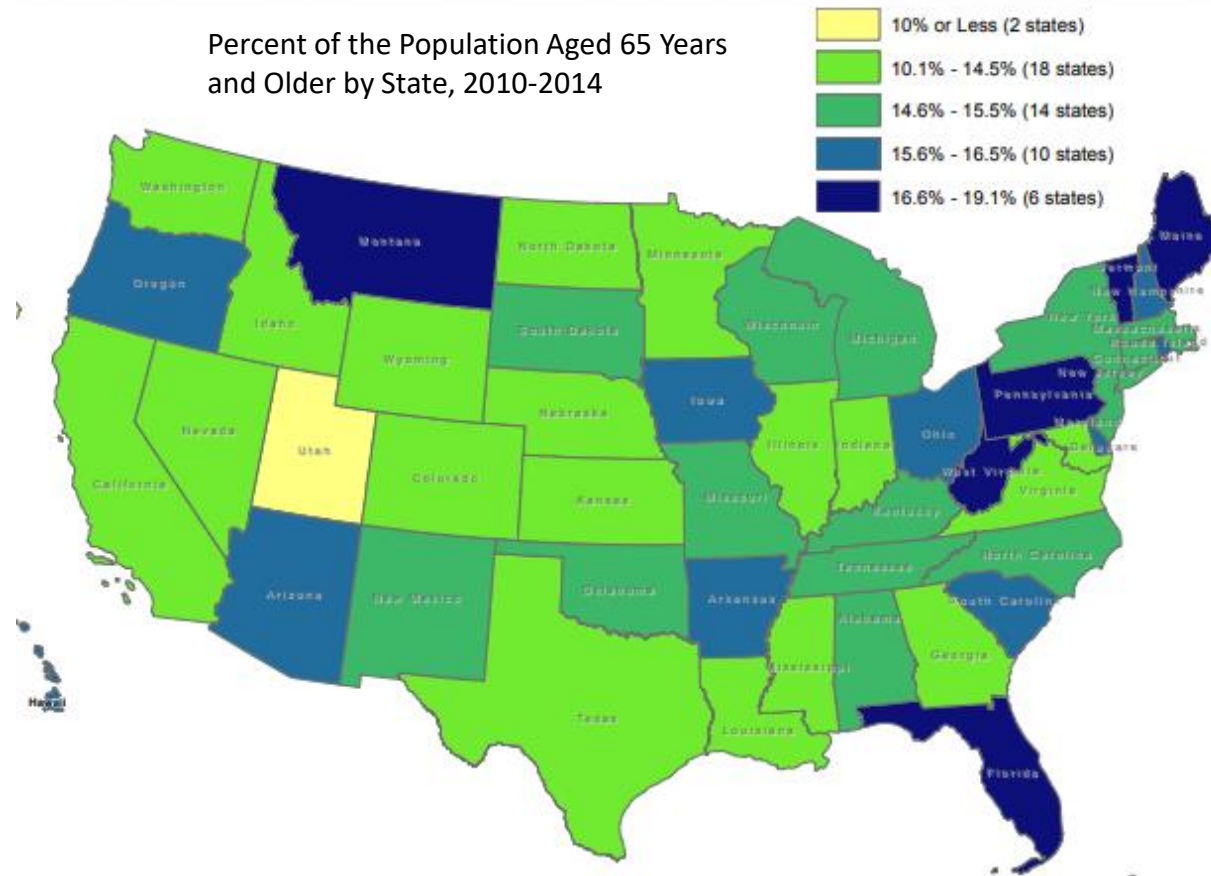


Current population demand diversity in mode of access

Texas is ranked 3rd for number of senior in US (65 and older)

2014			
State	Total	Aged 65 and Older	Percent of those Aged 65 and Older in the US
CA	38,802,500	4,993,047	10.8%
FL	19,893,297	3,791,544	8.2%
TX	26,956,958	3,099,081	6.7%
NY	19,746,227	2,898,094	6.3%
PA	12,787,209	2,134,521	4.6%
OH	11,594,163	1,799,169	3.9%
IL	12,880,580	1,788,533	3.9%
MI	9,909,877	1,530,052	3.3%
NC	9,943,964	1,463,362	3.2%
NJ	8,938,175	1,313,503	2.8%
US	318,857,056	46,243,211	100%

Percent of the Population Aged 65 Years and Older by State, 2010-2014

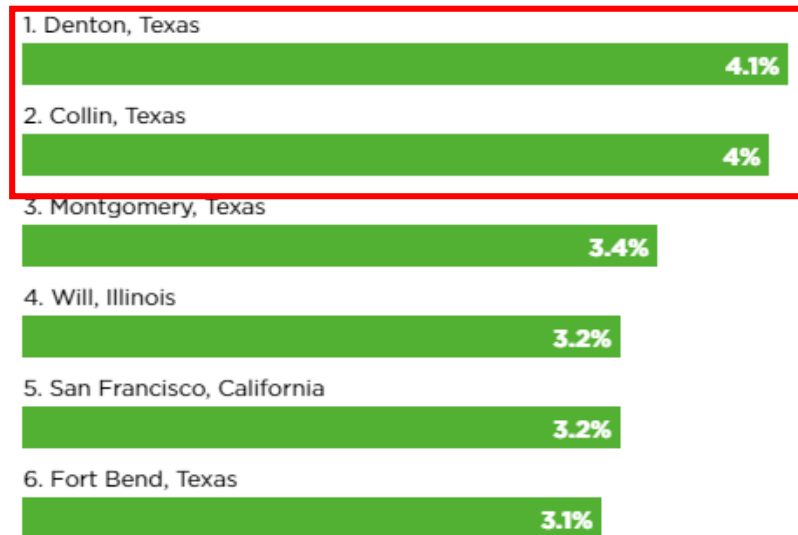


Growth potential in DFW

- Magnet for major corporate headquarters

Projected economic growth, in GDP

Three Texas counties take the nation's top spots for projected economic growth in the five-year period from 2017-2021.

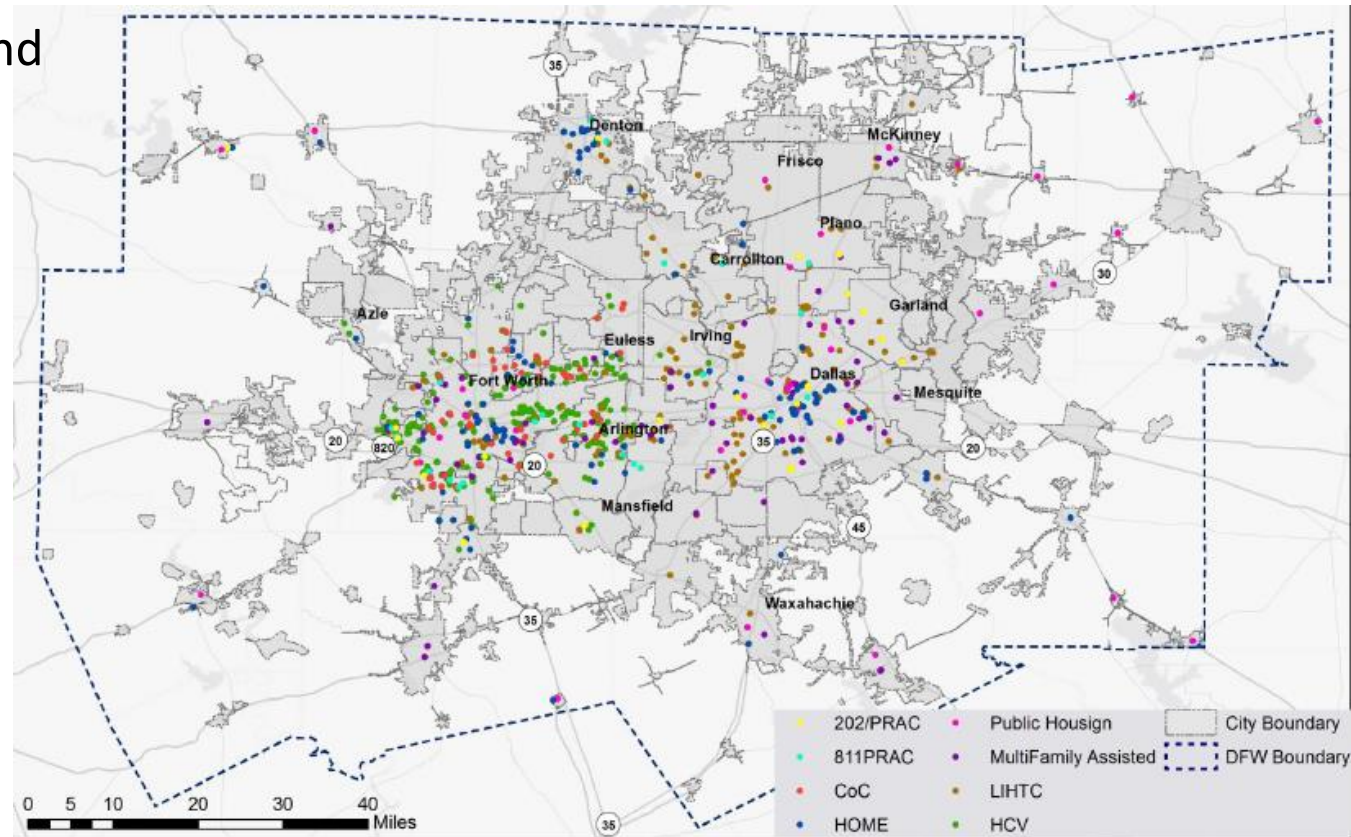


SOURCE: Oxford Economics

Tracy M. Cook / DMN

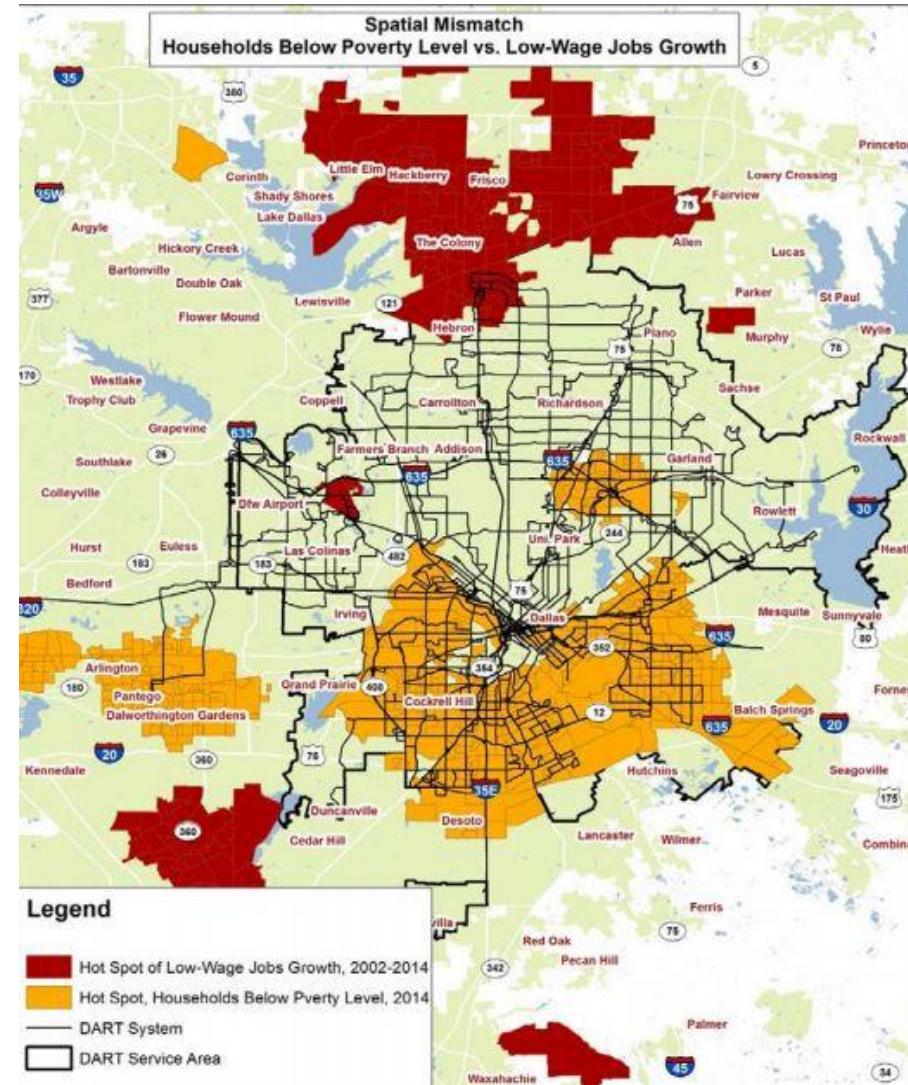
Growth potential in DFW

- Low costs of living and affordable housing opportunities



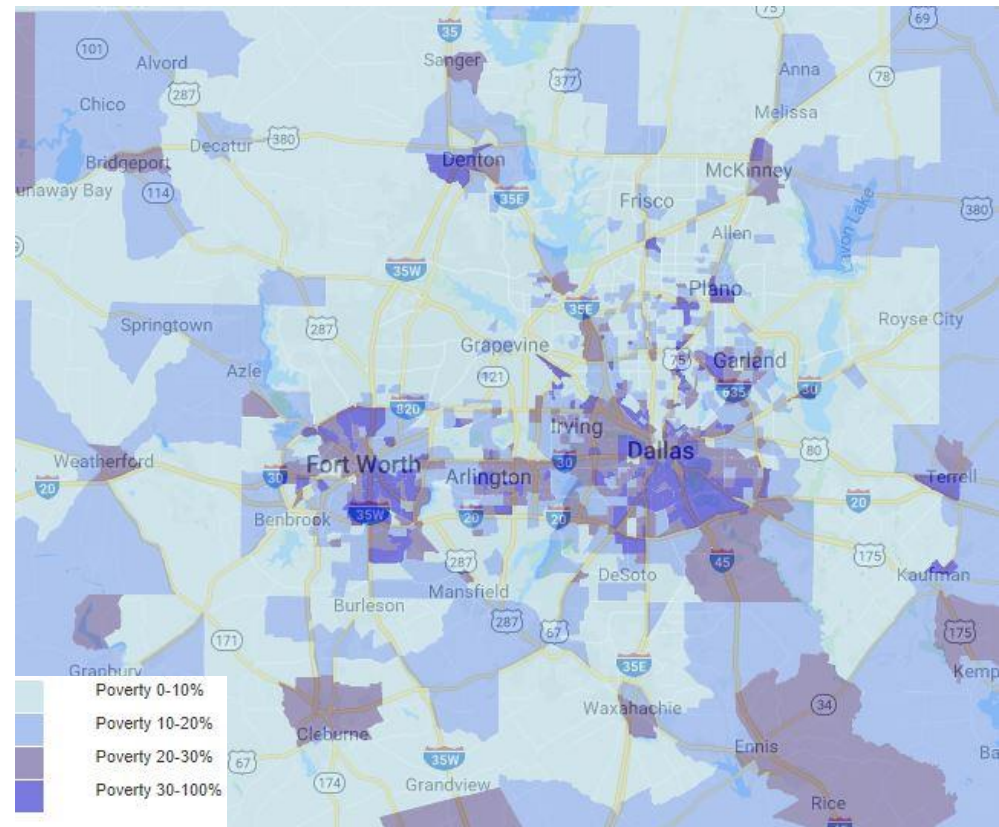
Current issues in DFW

Less jobs are accessible by transit
(Spatial Mismatch)



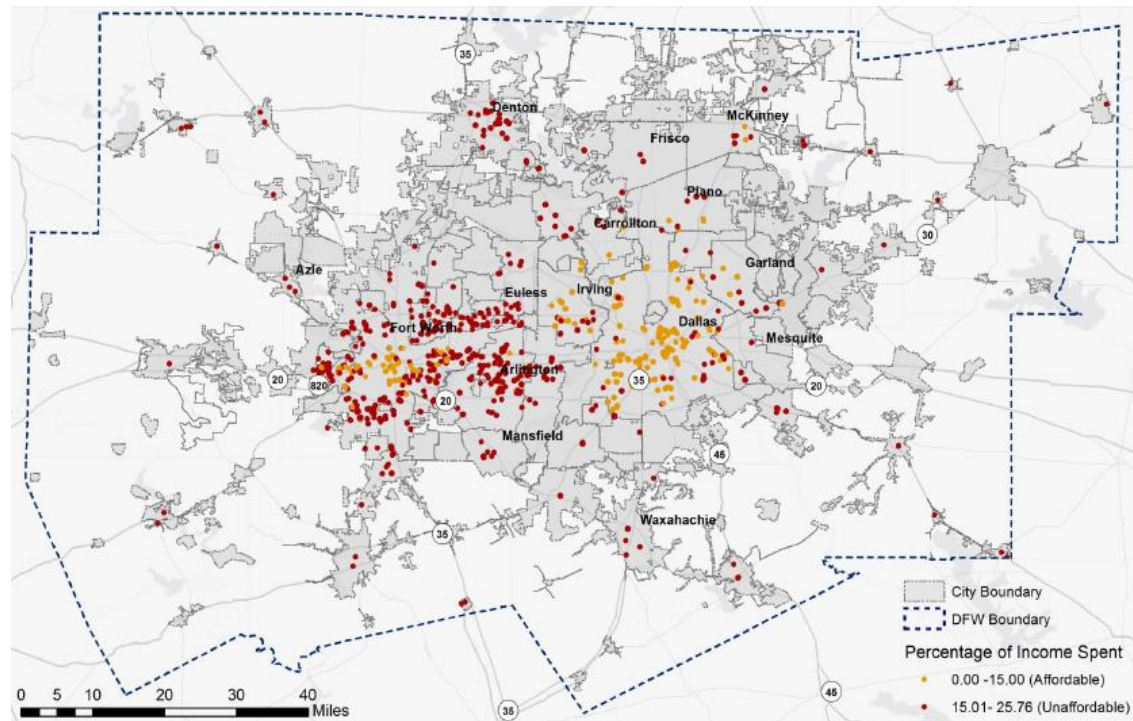
Current issues in DFW

- High Poverty Rate (30 % of children in Dallas are living in poverty)



Current Issues in DFW

- The residents of affordable units in DFW are spending a higher percentage (15.1% to 26%) of their income on transportation



Why Transit?

- Helping urban density as it continues to grow
- Matching demand with supply
- Response to expected needs of customers
- Approach for reducing traffic congestion
- Increases job access for low income riders
- Provide alternatives modes of transportation
- Create the fundamentals for households costs savings



Mobility on Demand is one of the alternatives

The Last Mile

Increasing transit accessibility



The terms “first mile/last mile” refer to the distance a person must travel to get to or from a transit stop. DART is working with transportation partners to increase the options available to bridge that distance and make riding transit a viable choice for more people.

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

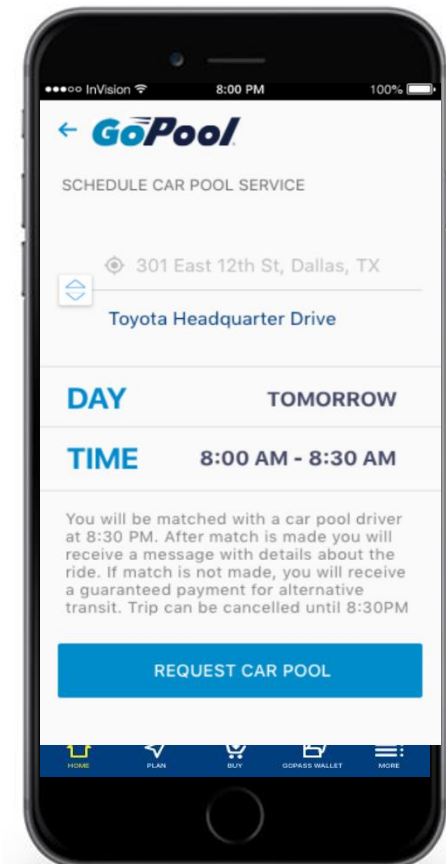
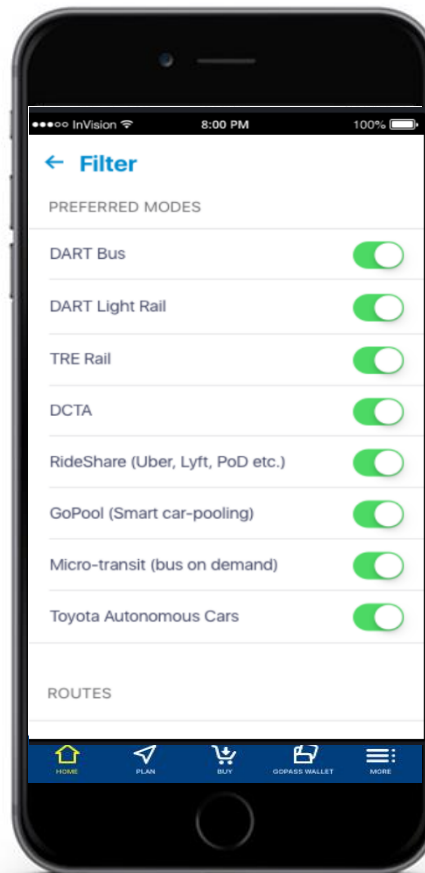
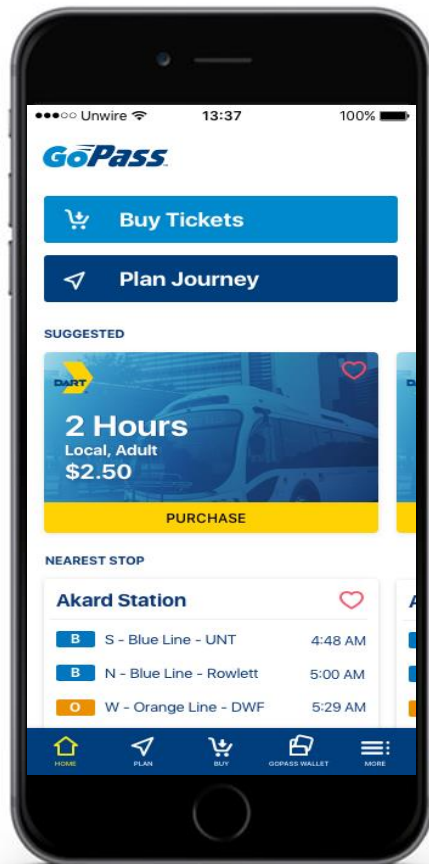
Lower the cost and expand the reach of public transportation to provide high quality, first and/or last mile services.



ACCESS TO ALL CONSUMERS

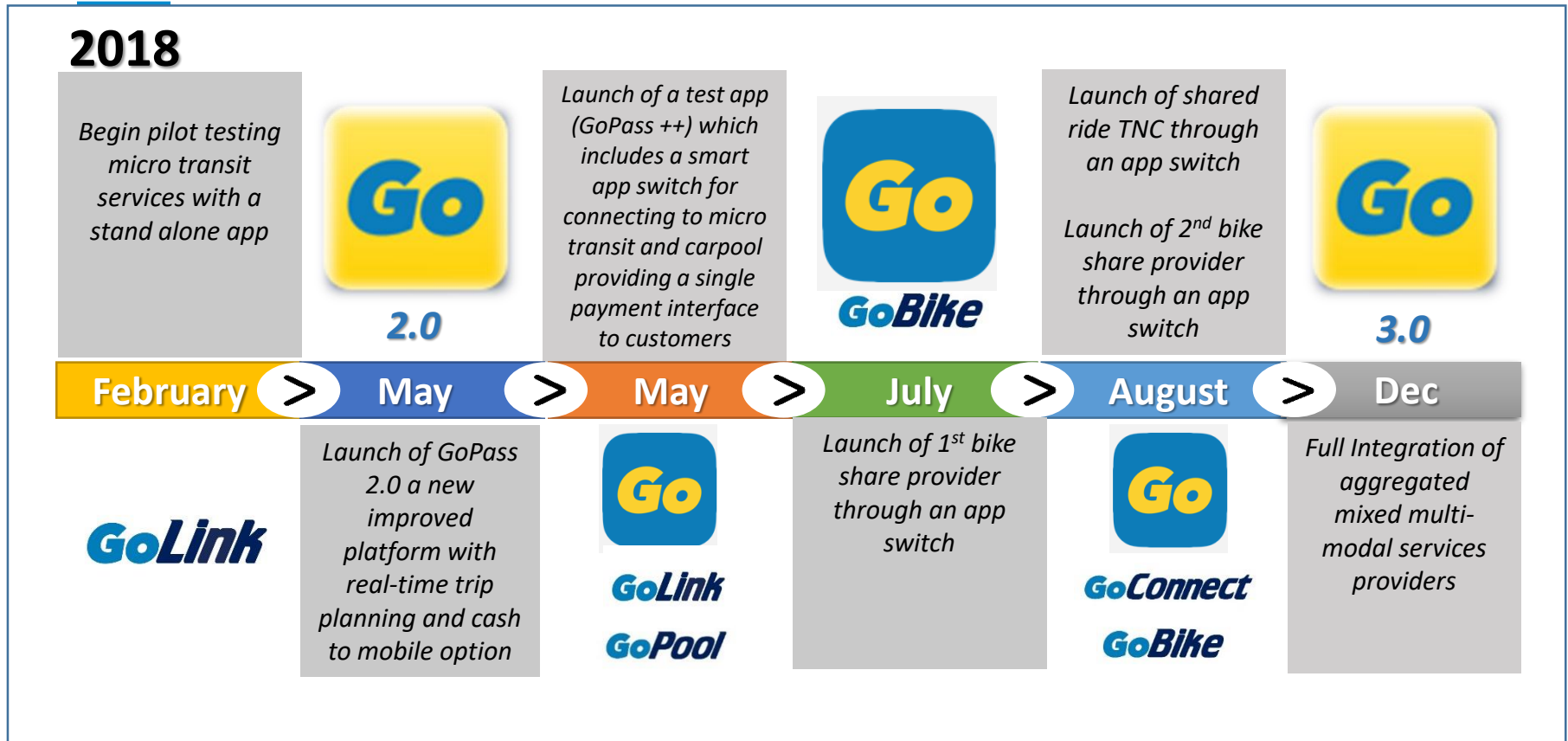
Integrate equitable MOD solutions including comparable access for the unbanked, disabled, low income, smartphone challenged customers and typically non-transit customers.

Simple Idea: Integrated Ticketing, Payment and Mobility Options



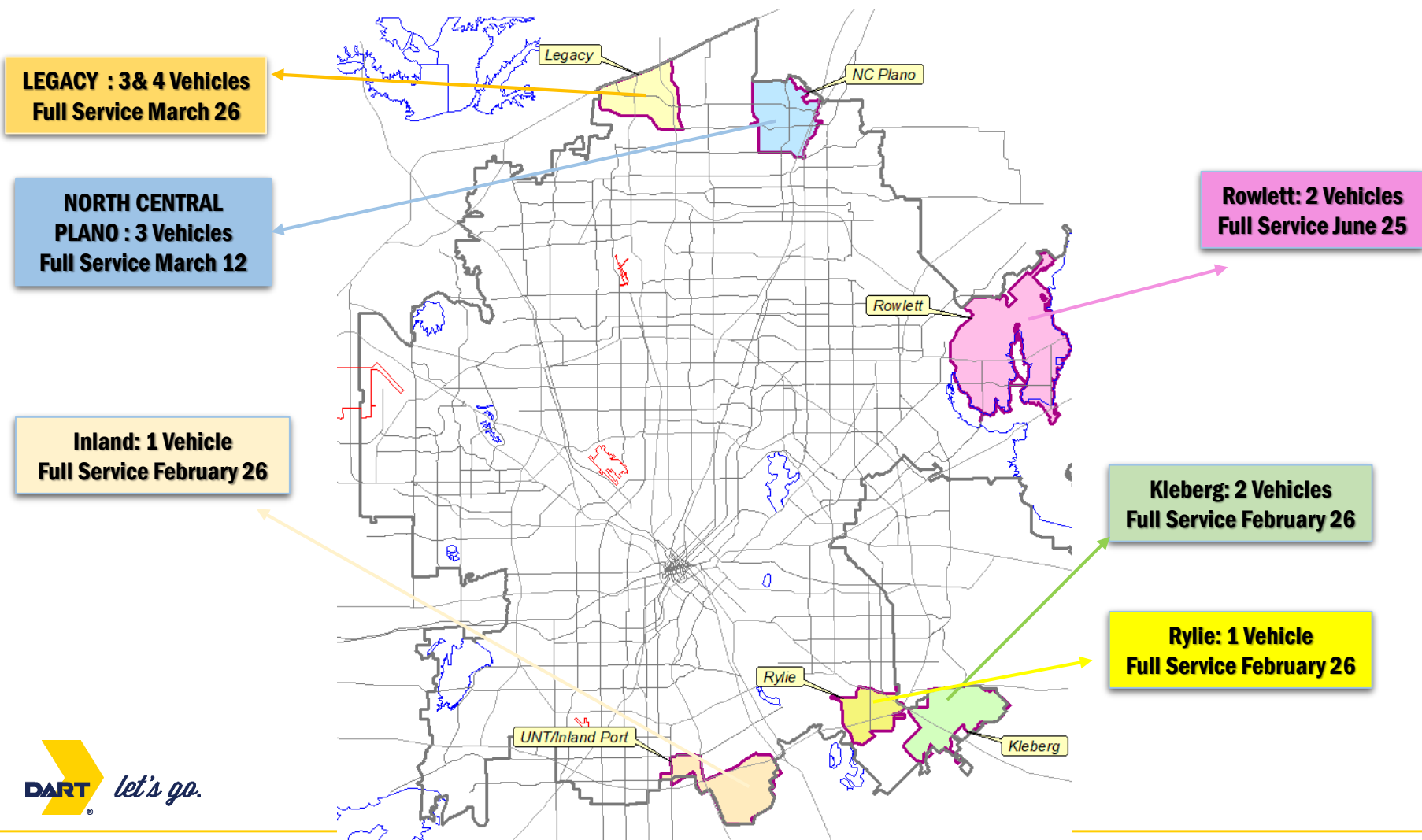
Partially Sponsored by FTA MOD Sandbox Demonstration

DART's APP Based Shared Mobility Transition



Partially Sponsored by FTA MOD Sandbox Demonstration

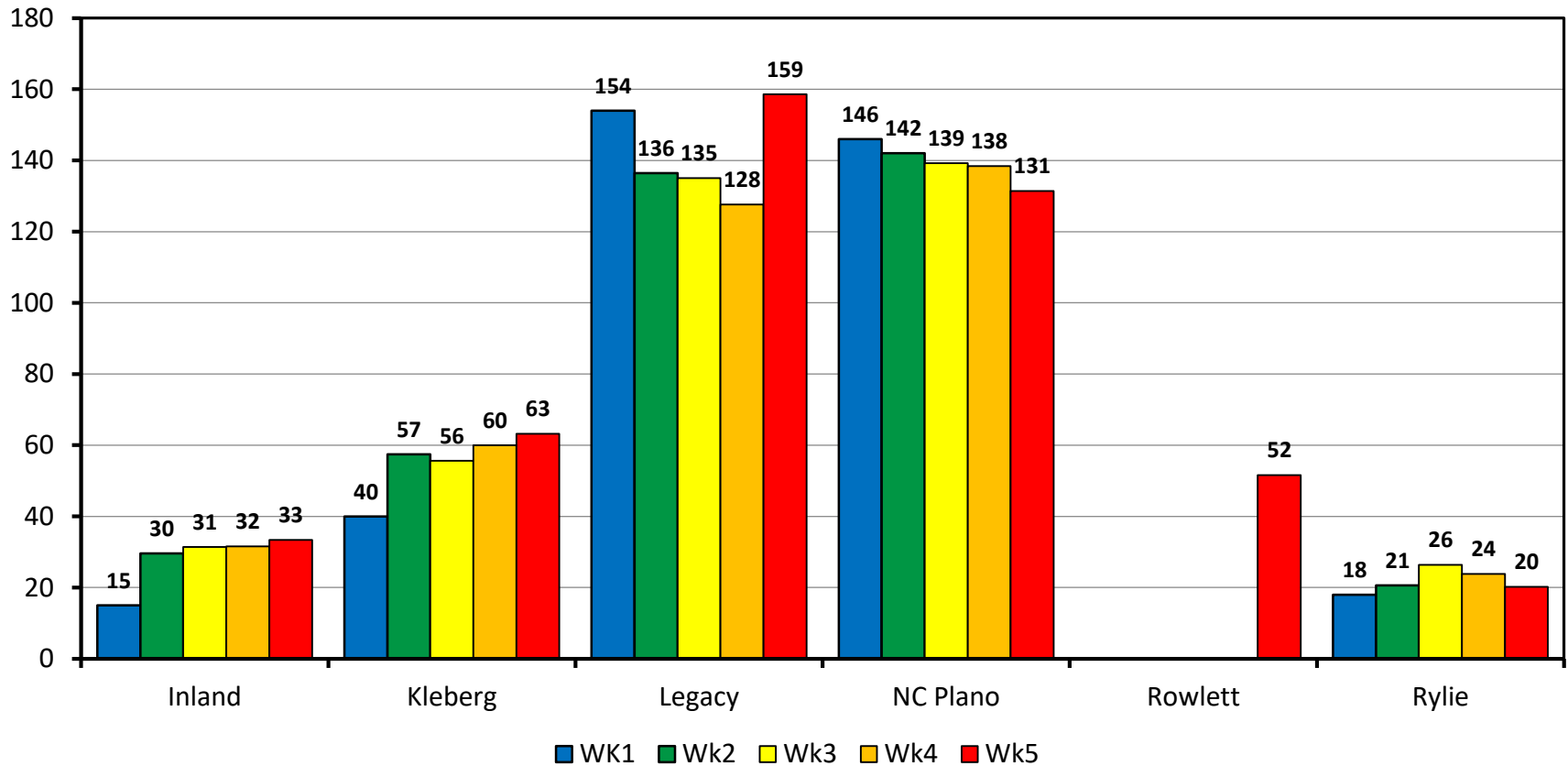
Current Mobility on Demand Zones



Average Daily Ridership- June 2018

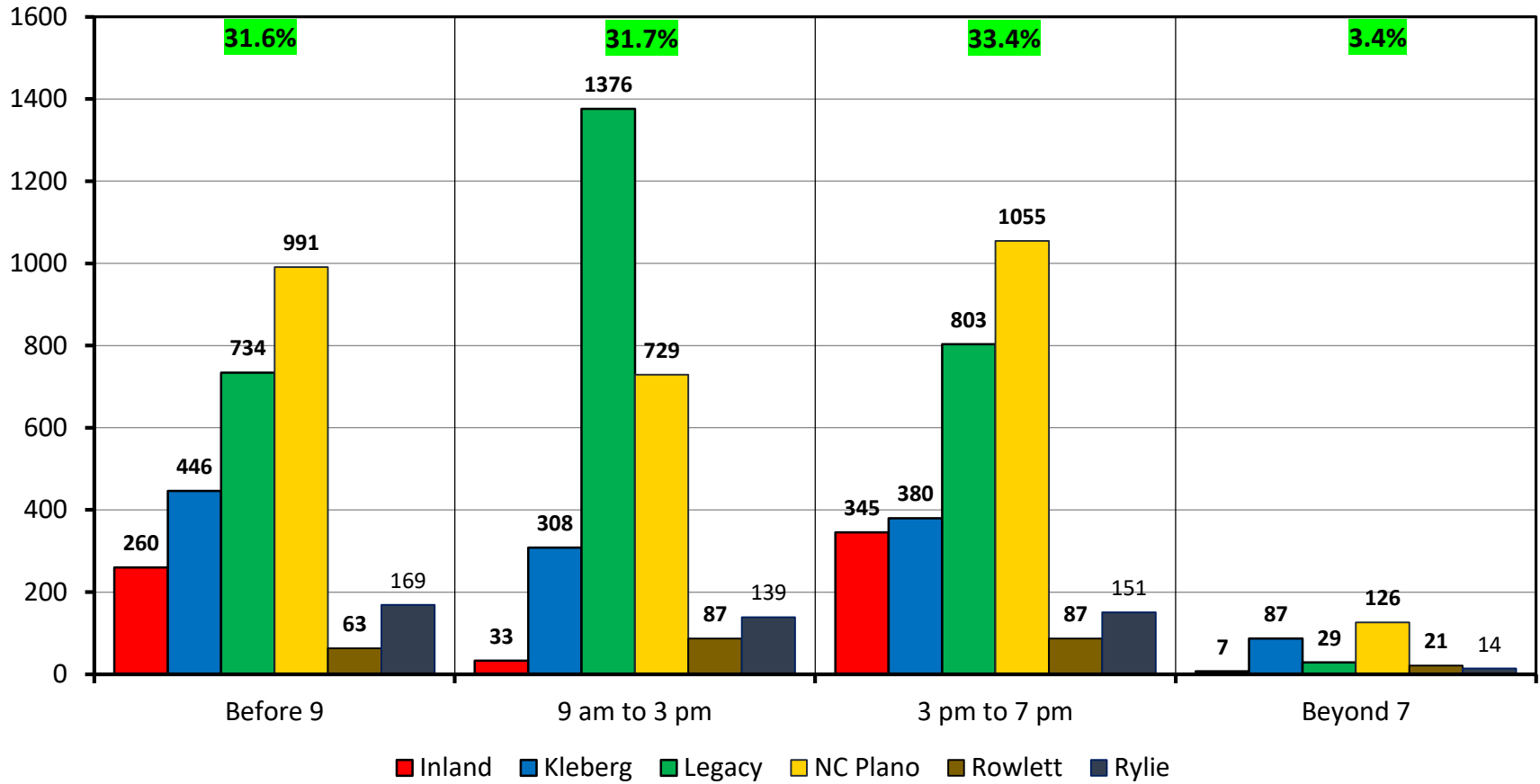
Mostly from Legacy

Average Daily Ridership



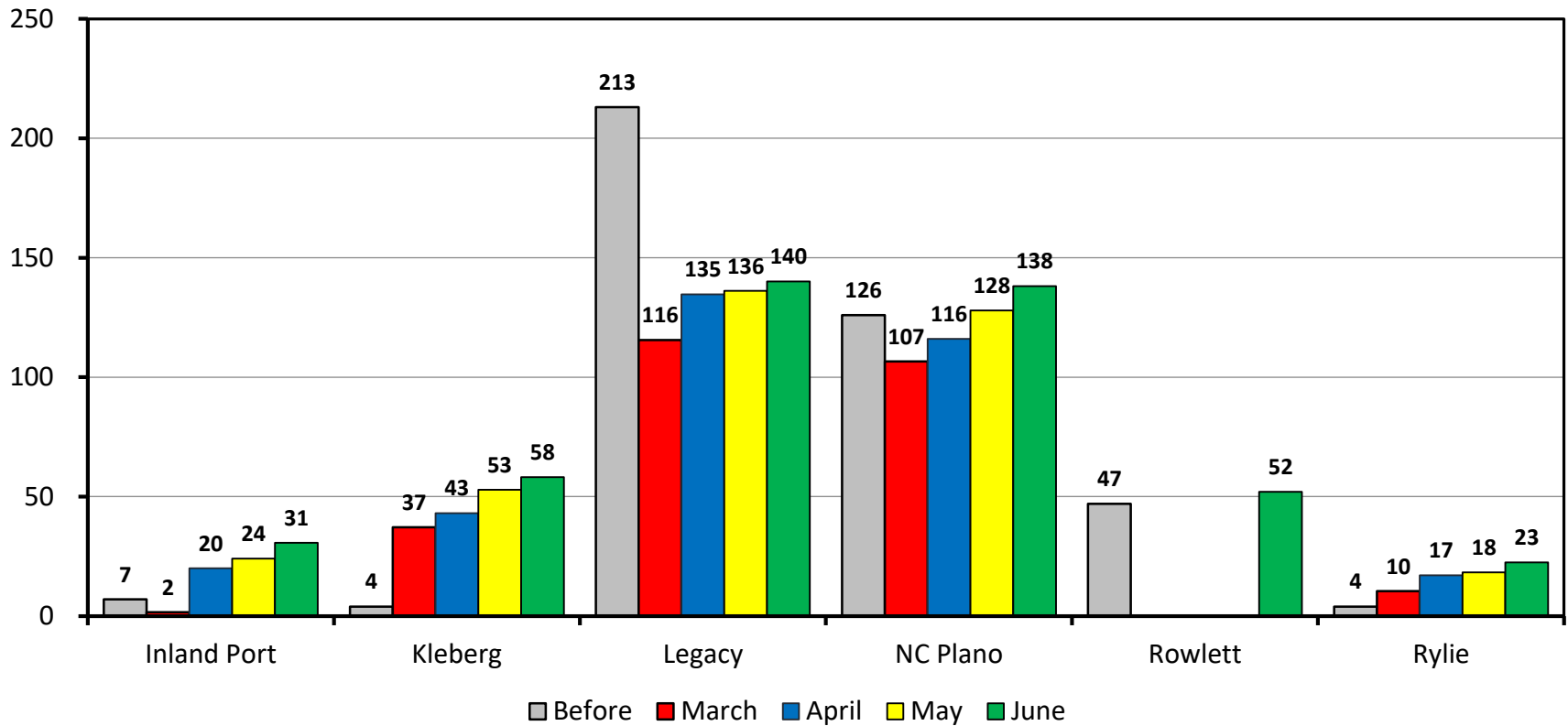
Ridership by Time Quadrant - June 2018

Average Daily Ridership by Time of Day



Average Daily Ridership

Average Daily Ridership
Before – After (March to June 2018) MOD Implementation

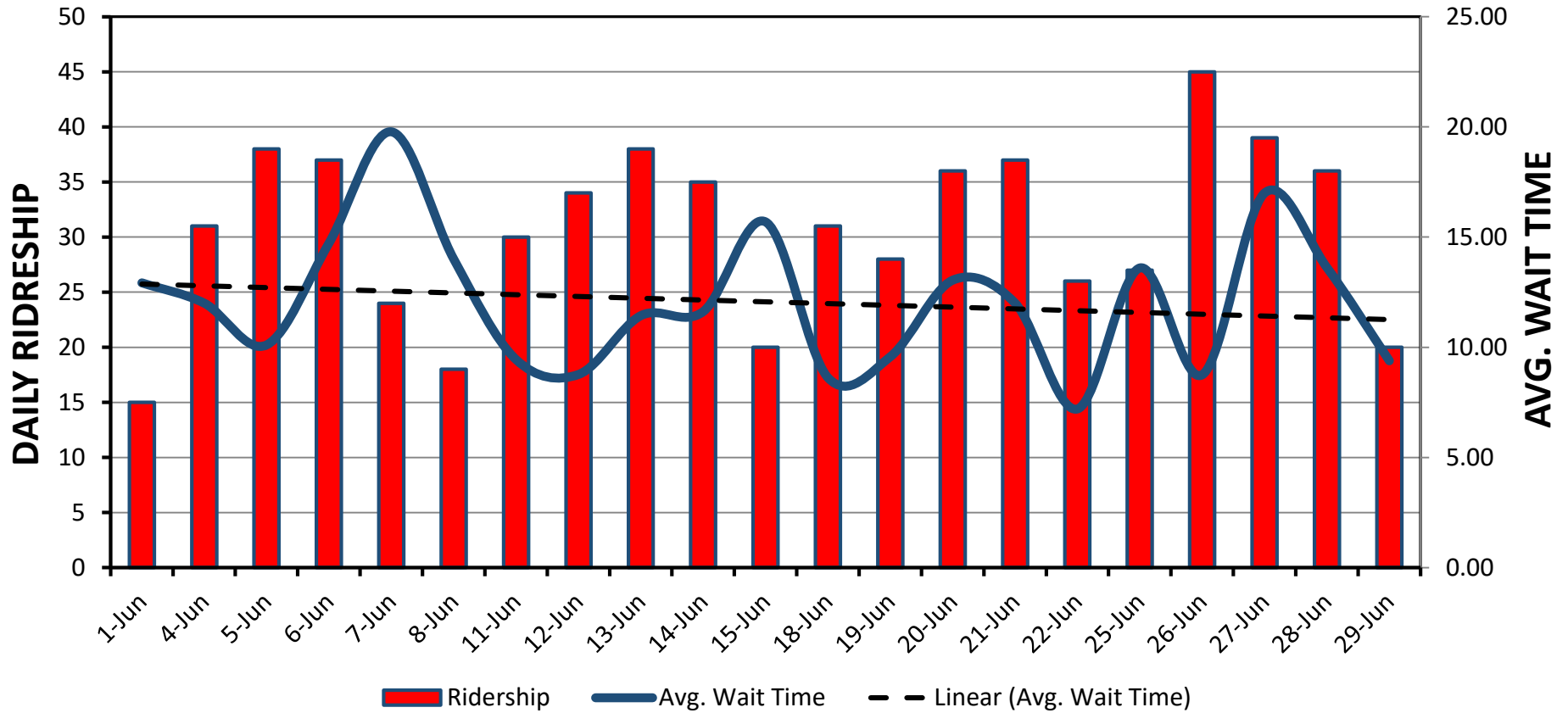


Inland Port

645 Riders

Average waiting Time: 12 minutes

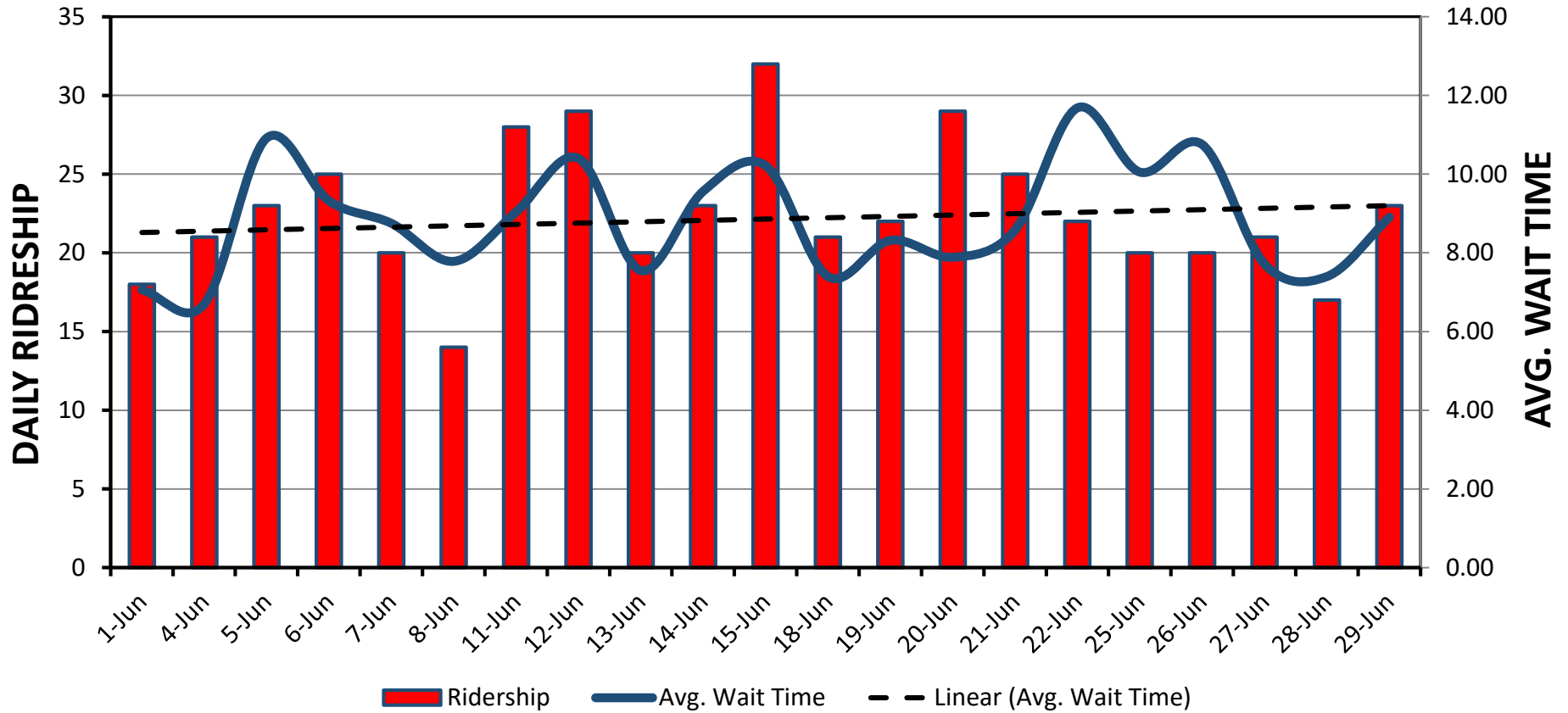
Total Daily Ridership and Average Wait Times



Rylie

473 Riders
Average waiting Time: 9 minutes

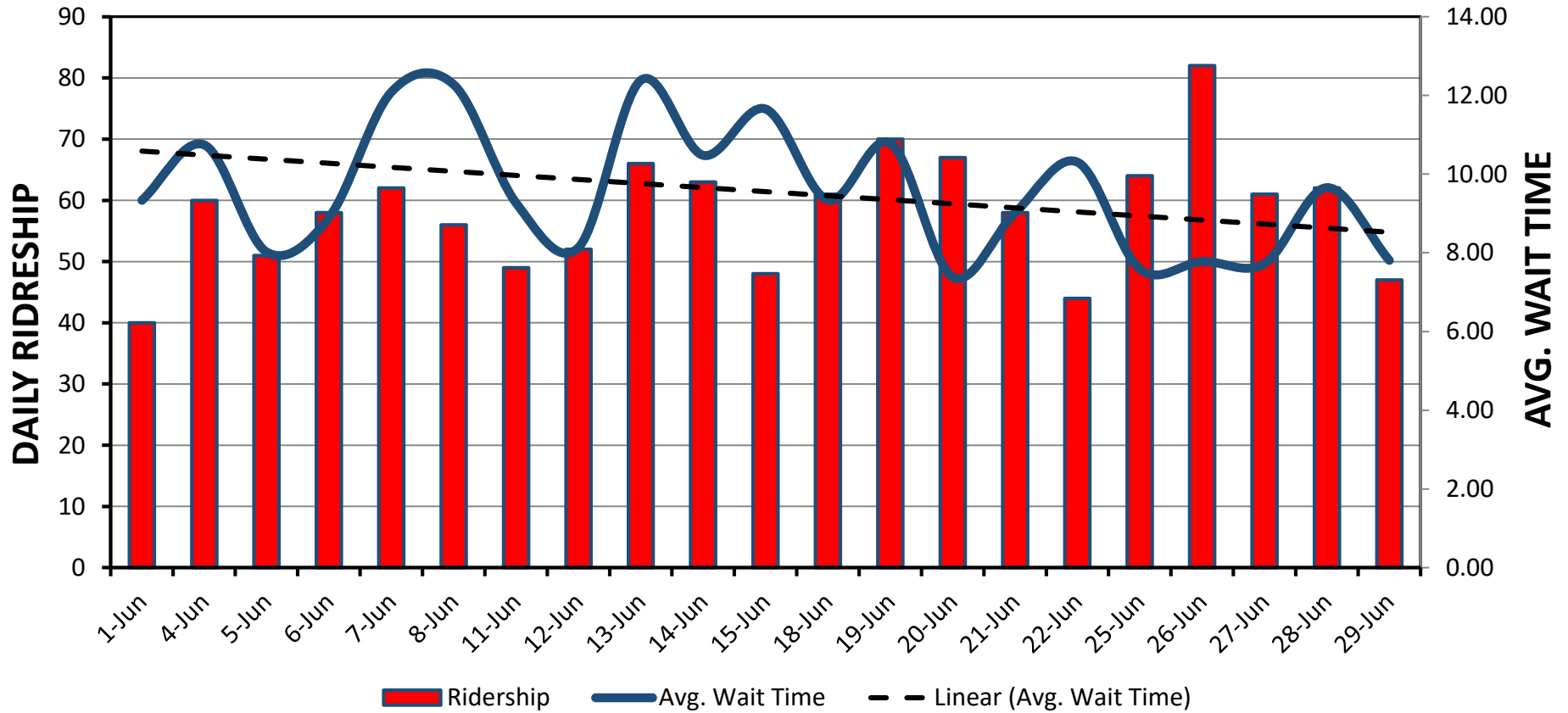
Total Daily Ridership Vs. Average Wait Times



Kleberg

1,221 Riders
Average waiting Time: 10 minutes

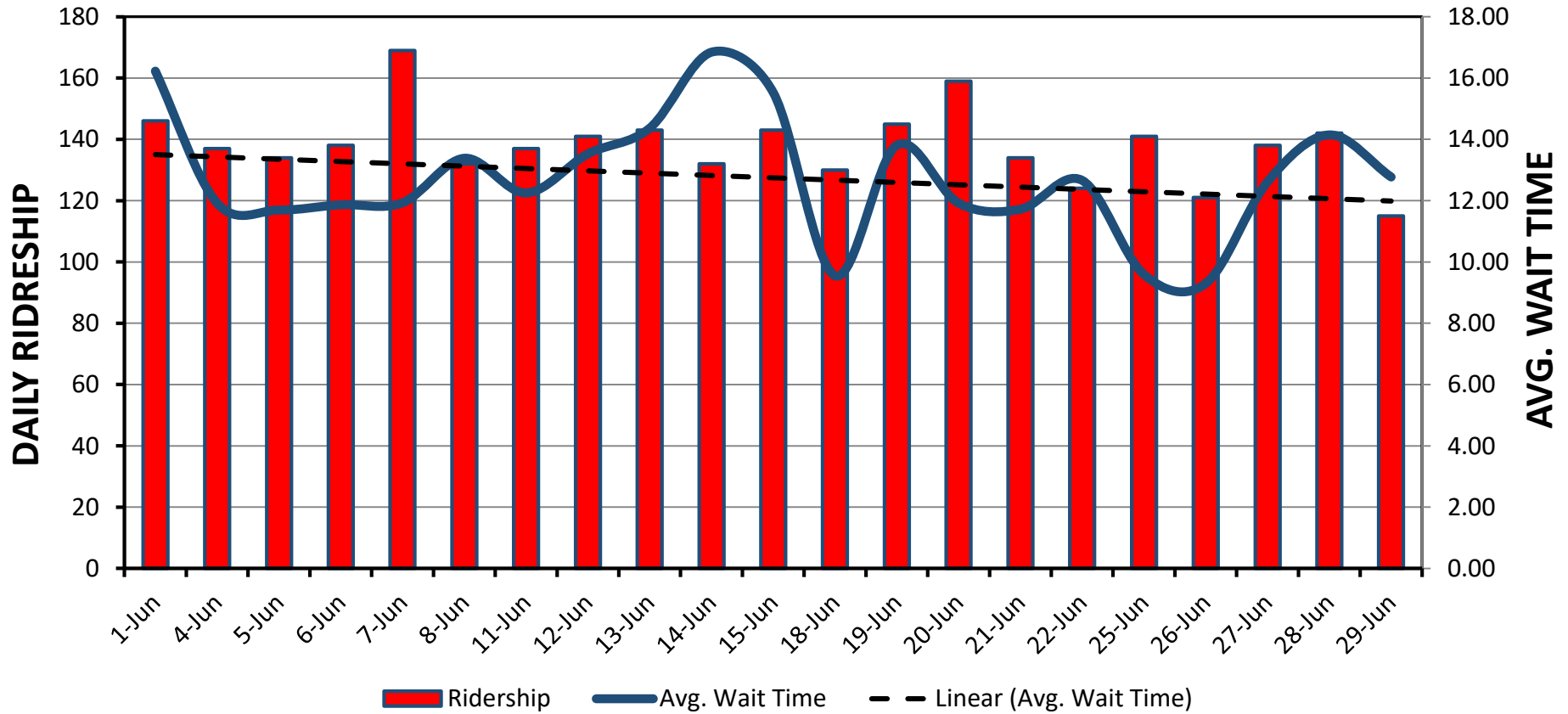
Total Daily Ridership and Average Wait Times



North Central Plano

2,901 Riders
Average waiting Time: 13 minutes

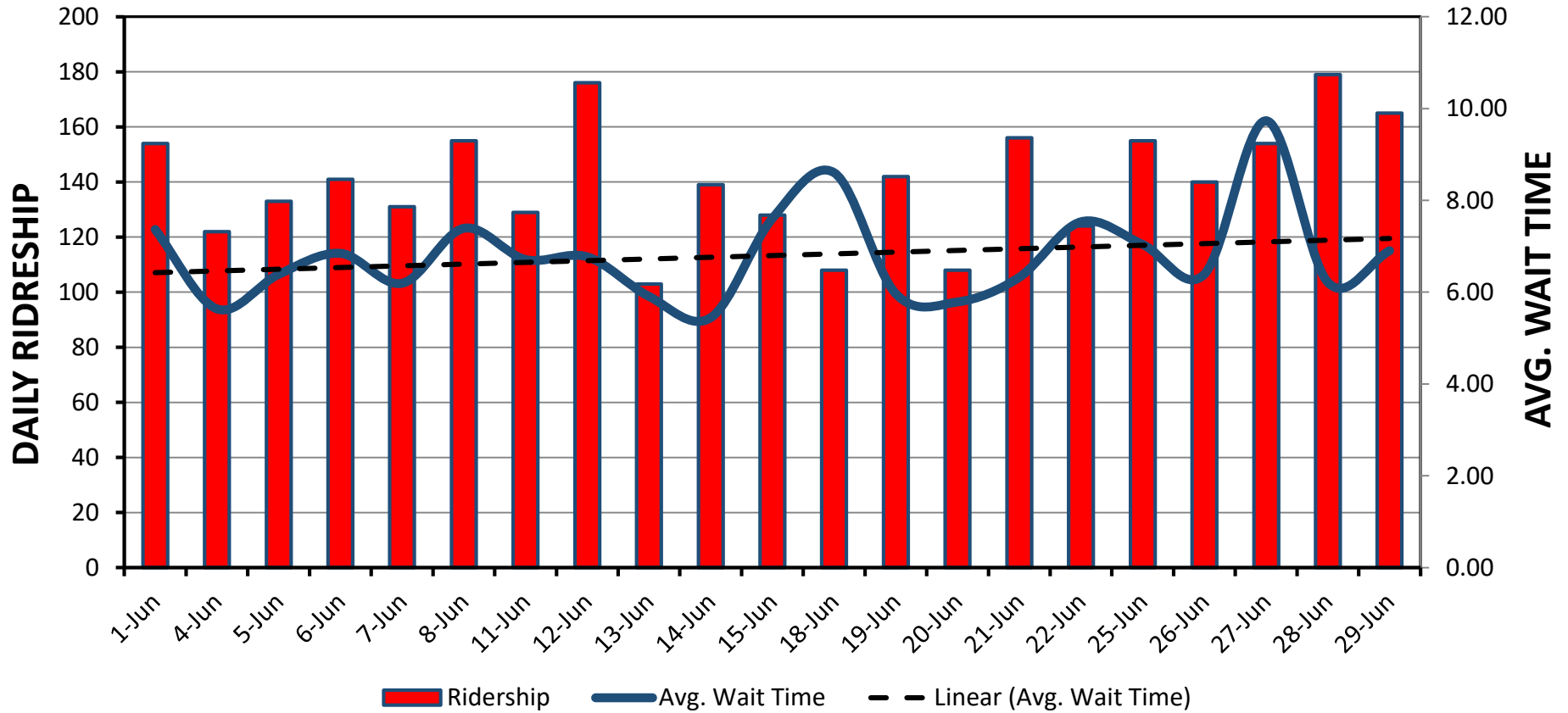
Total Daily Ridership Vs. Average Wait Times



Legacy

2,942 Riders
Average waiting Time: 7 minutes

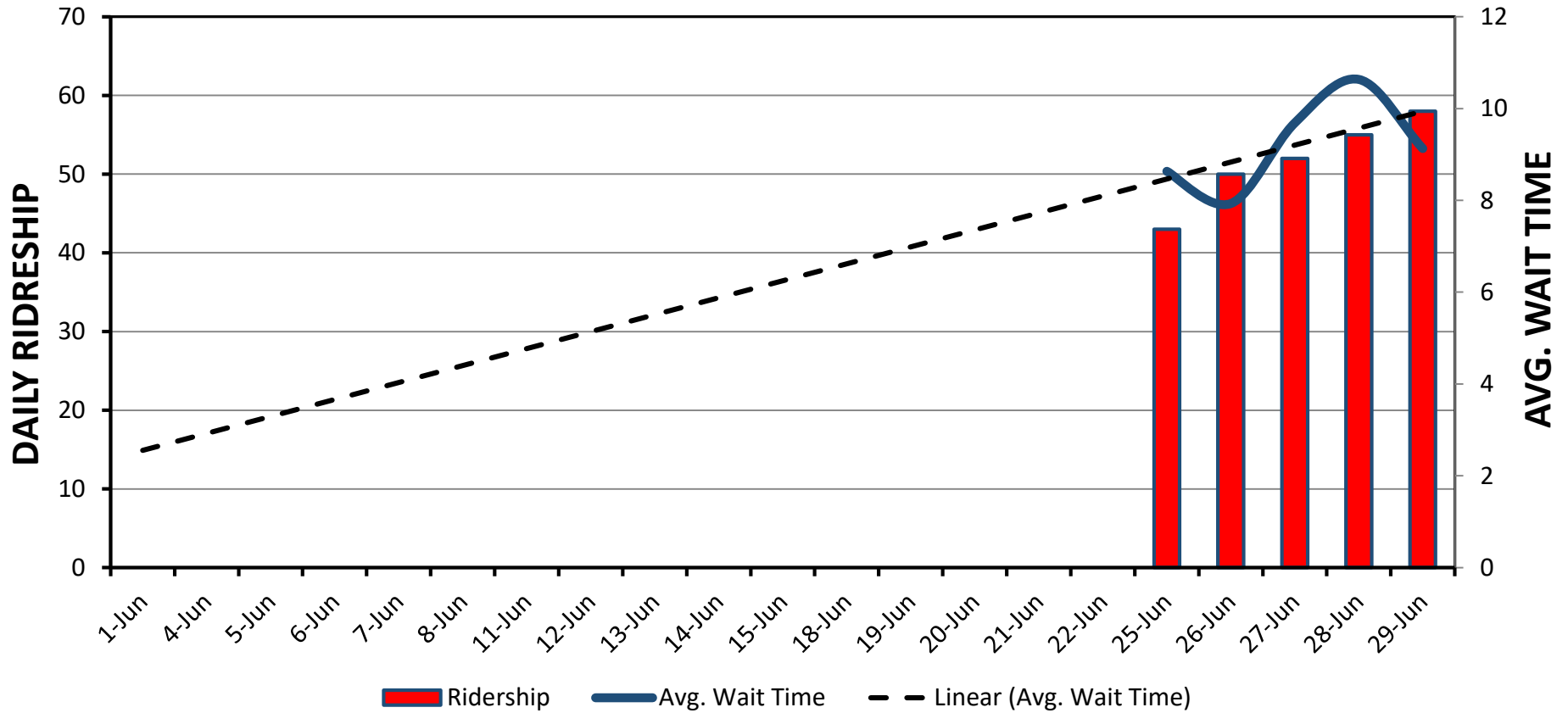
Daily Ridership and Average Wait Times



Rowlett

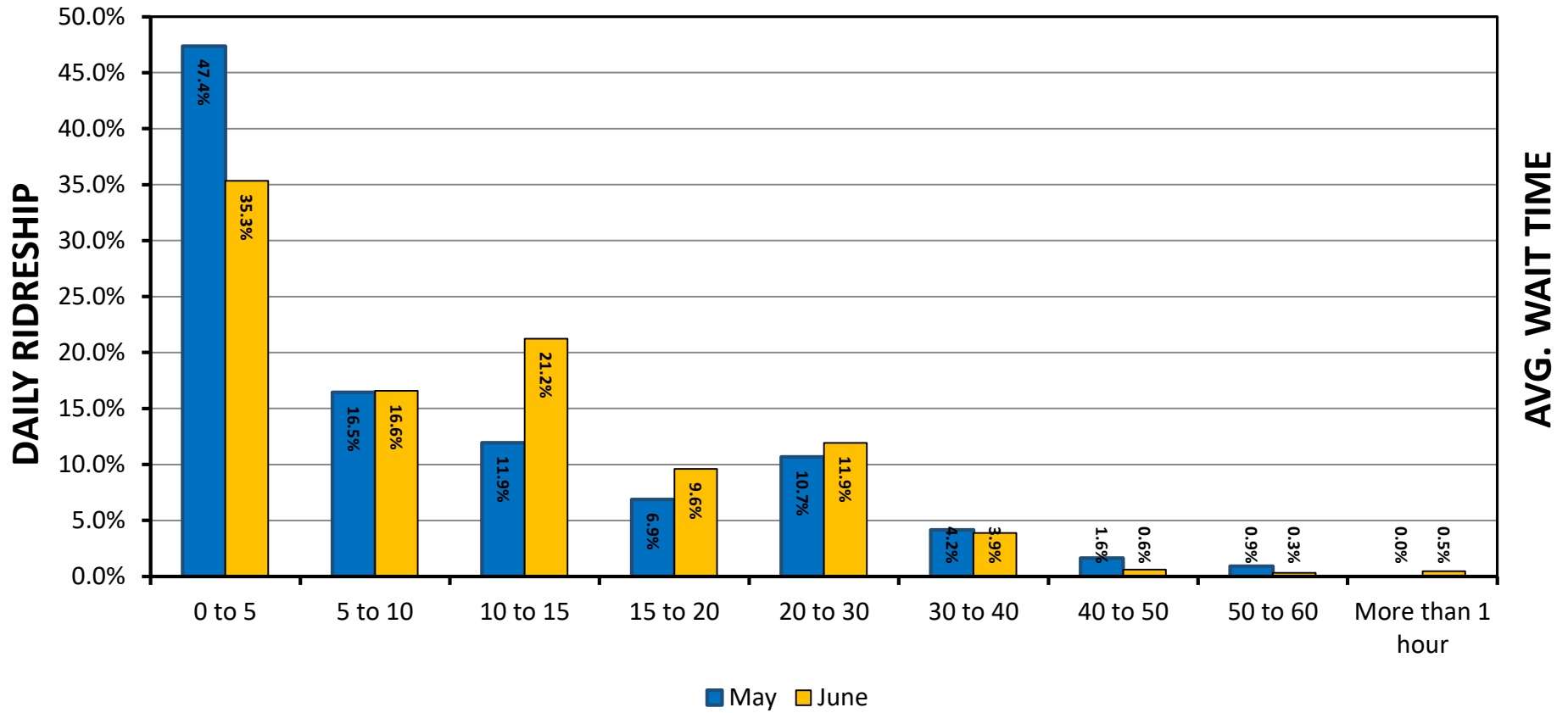
258 Riders
Average waiting Time: 9 minutes

Daily Ridership and Average Wait Times



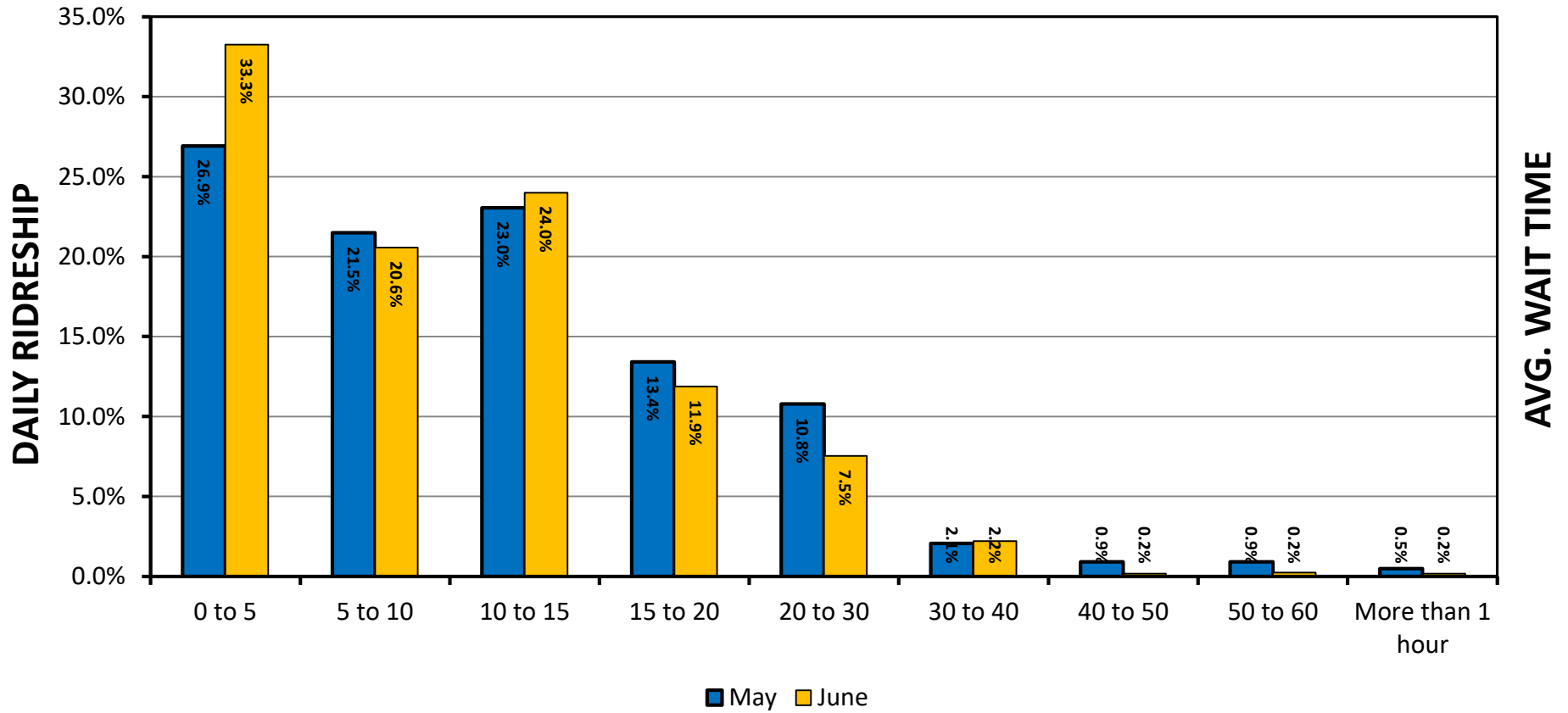
Inland Port

Wait Times



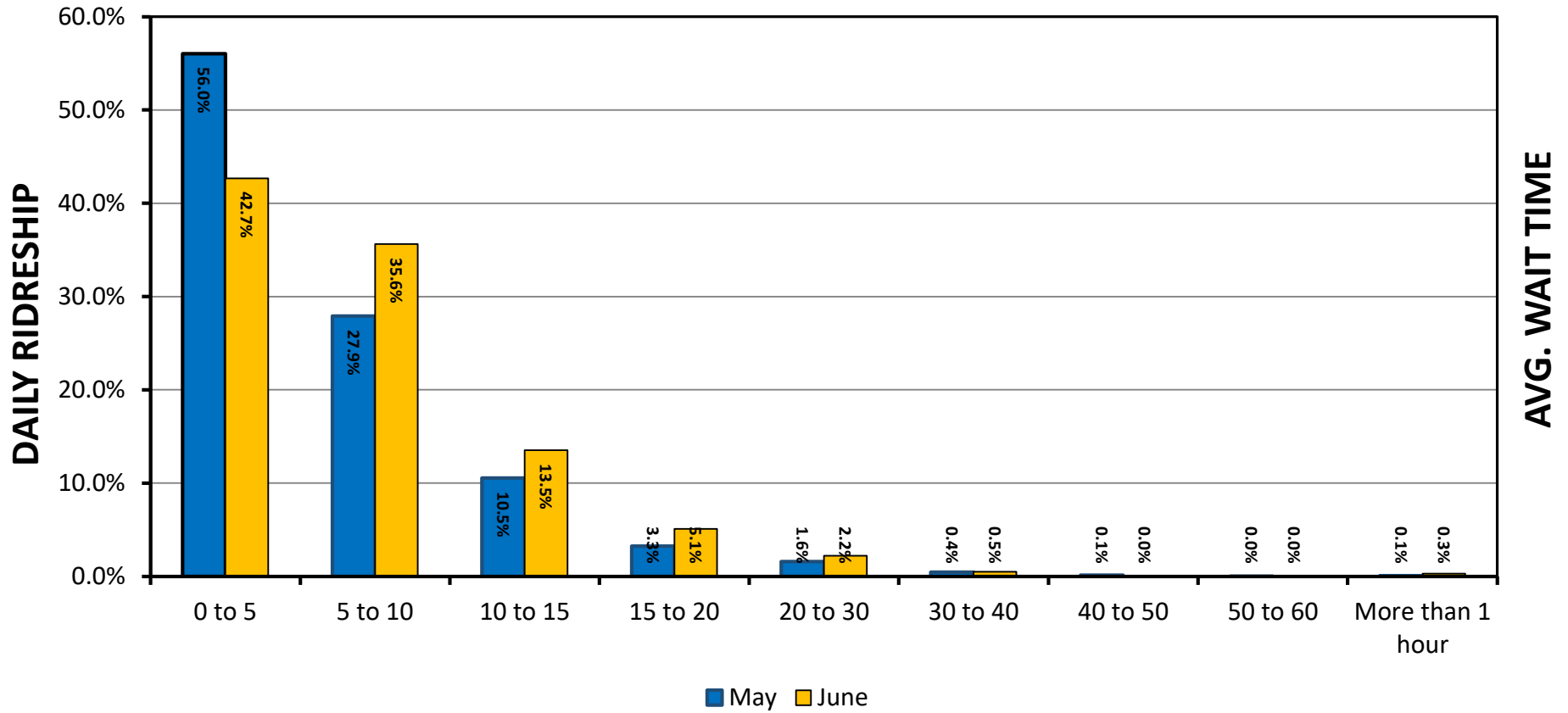
Kleberg

Wait Times

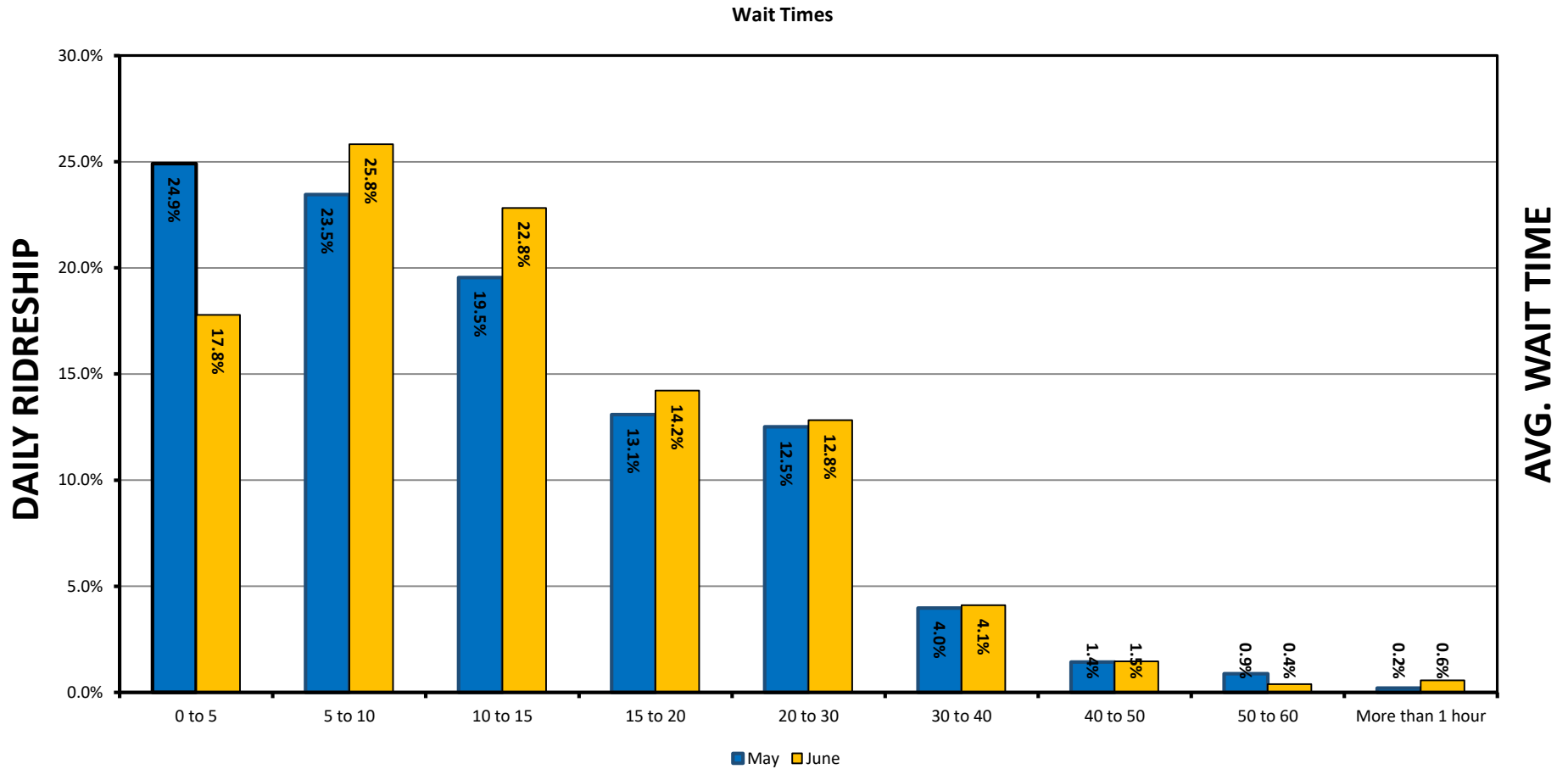


Legacy

Wait Times

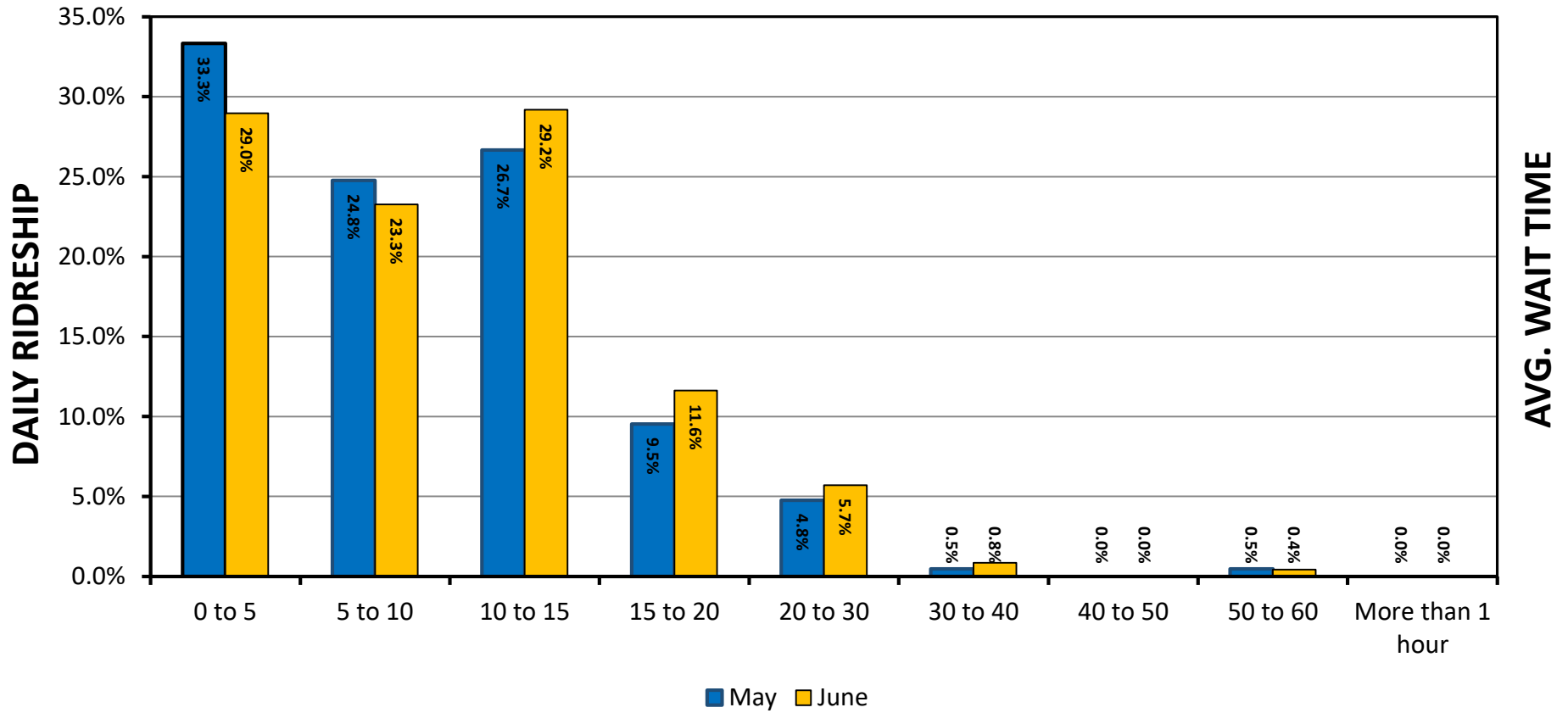


NC Plano



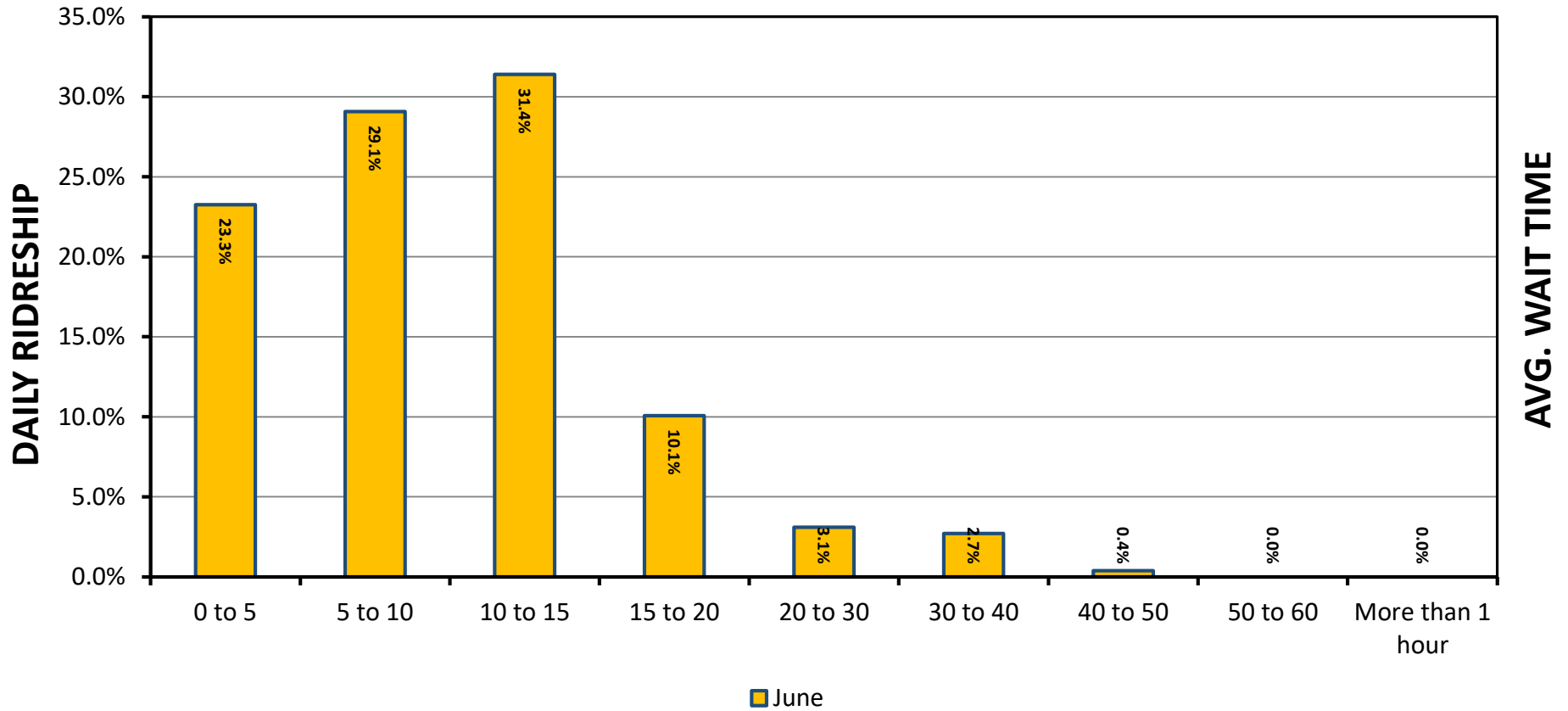
Rylie

Wait Times



Rowlett

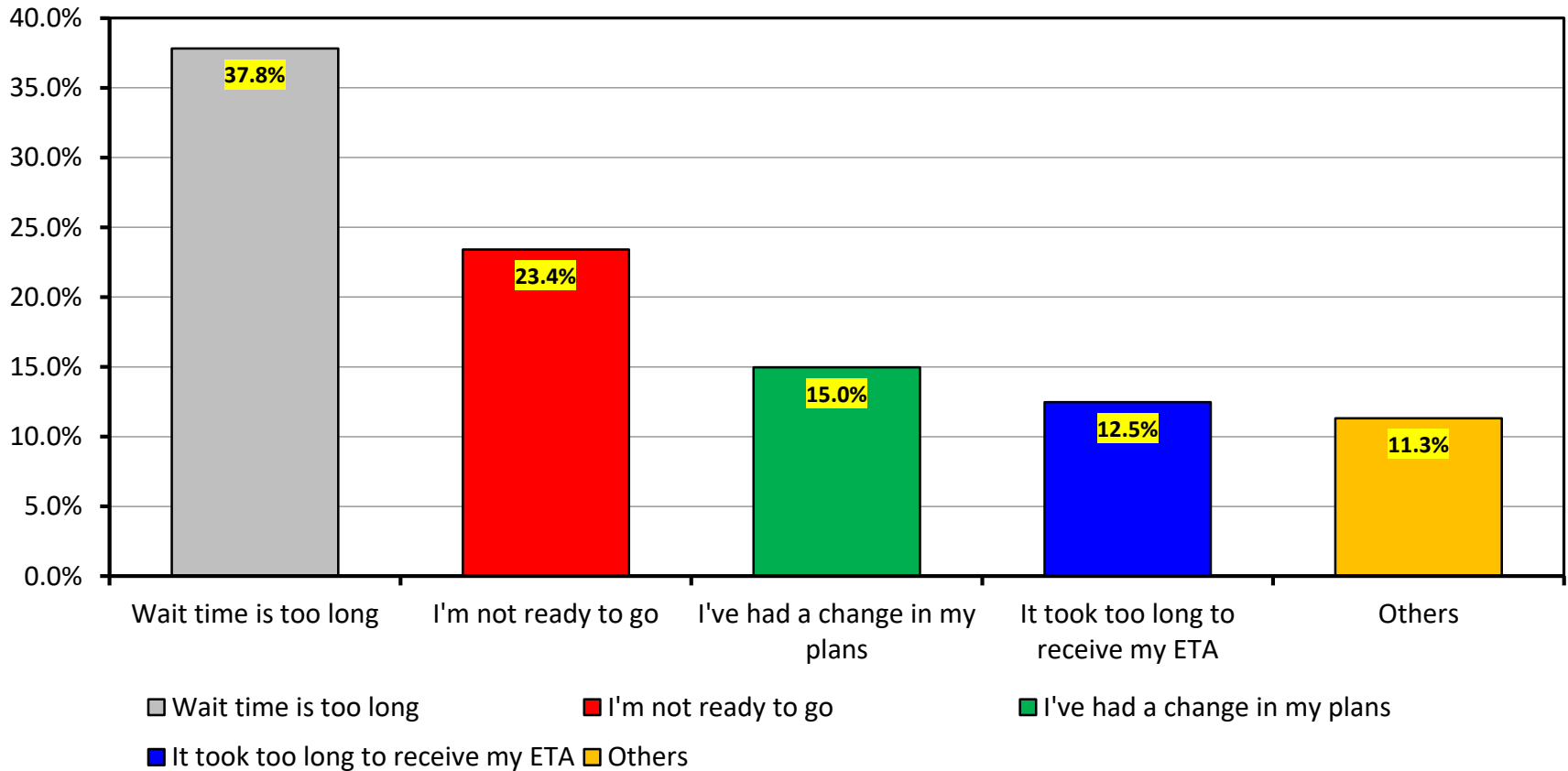
Wait Times



Cancelled Trips

6.5 % (521) of Requested Trips was Cancelled by Passengers

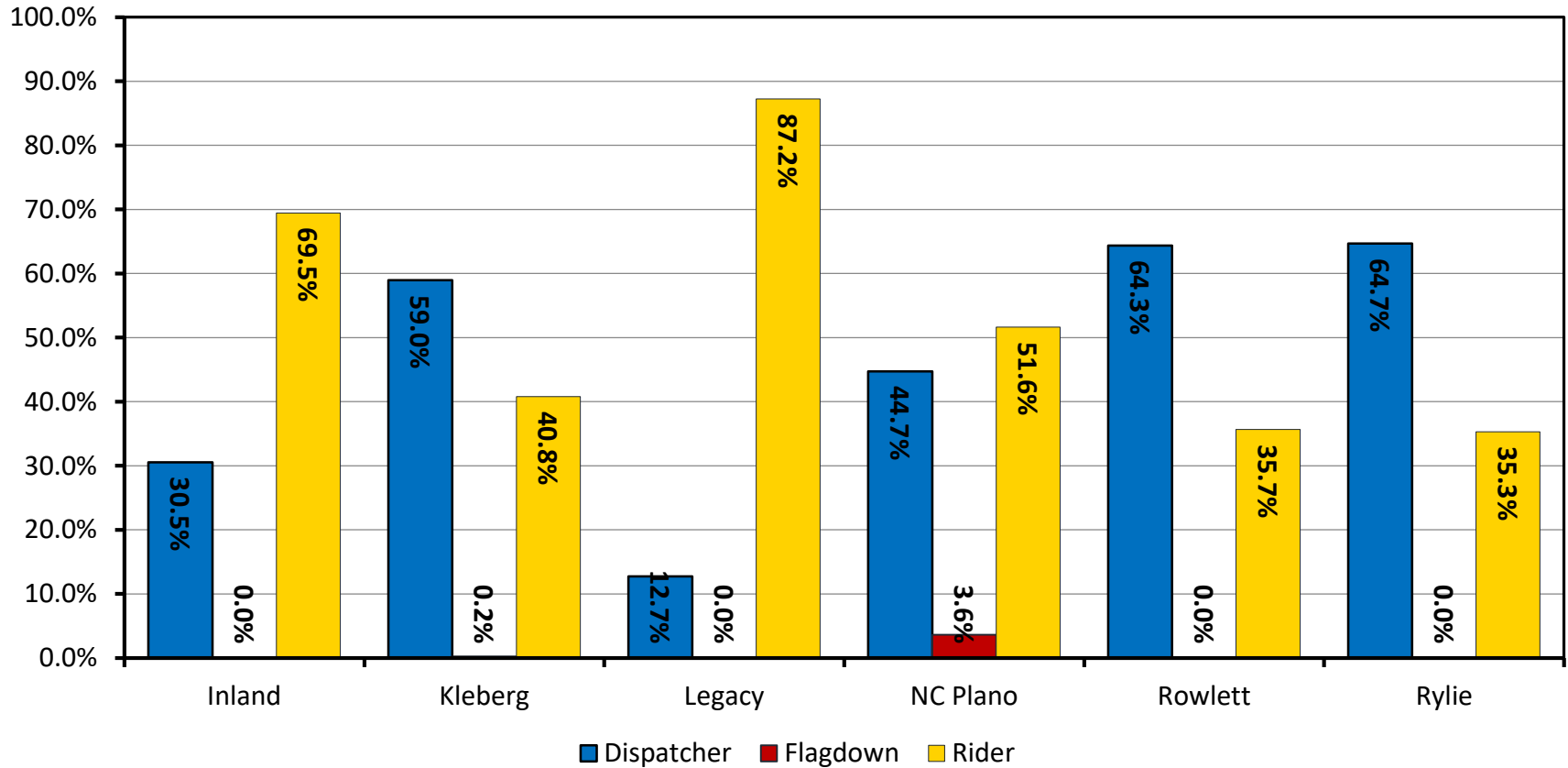
Passenger Messages



Reservation Type - June 2018

Mostly through App: 62.4%

Reservation Type

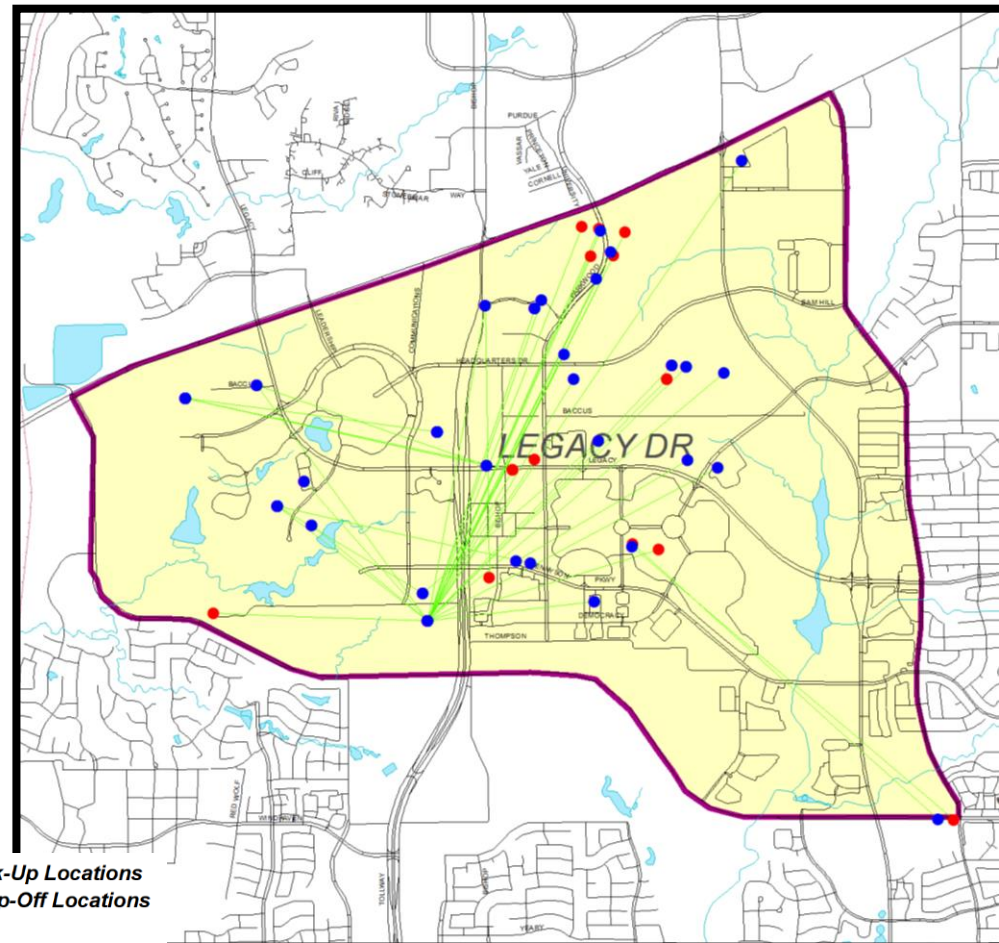
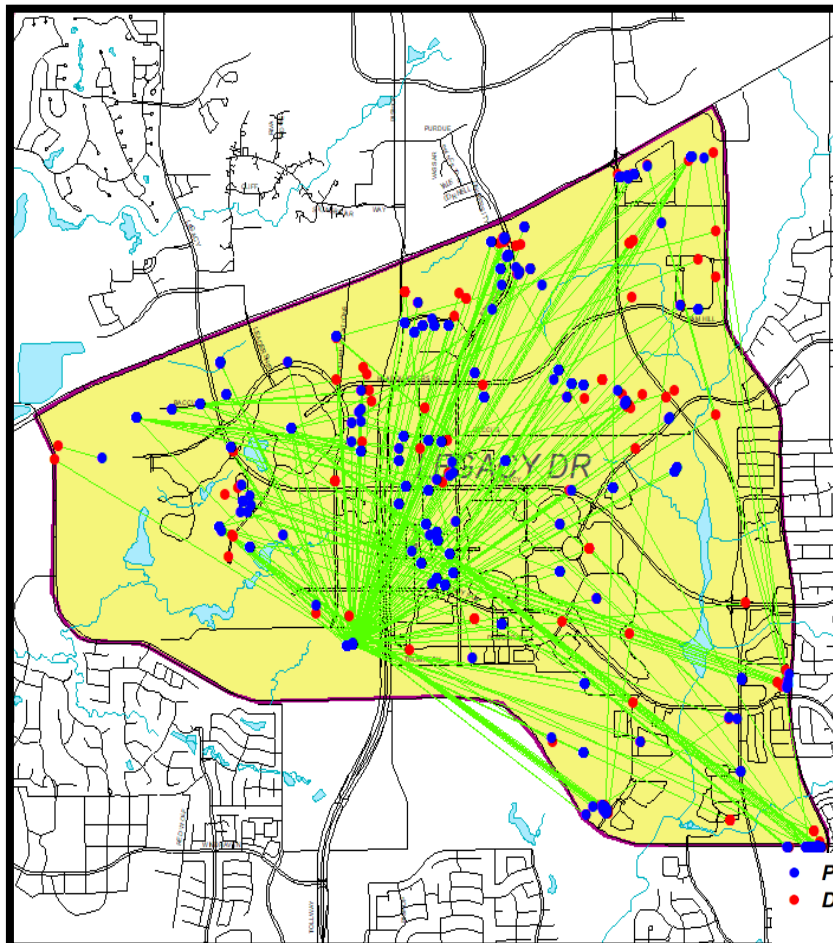


Legacy Origin Destinations

June 2018: 2,942

4.03%

April 2018 : 2828

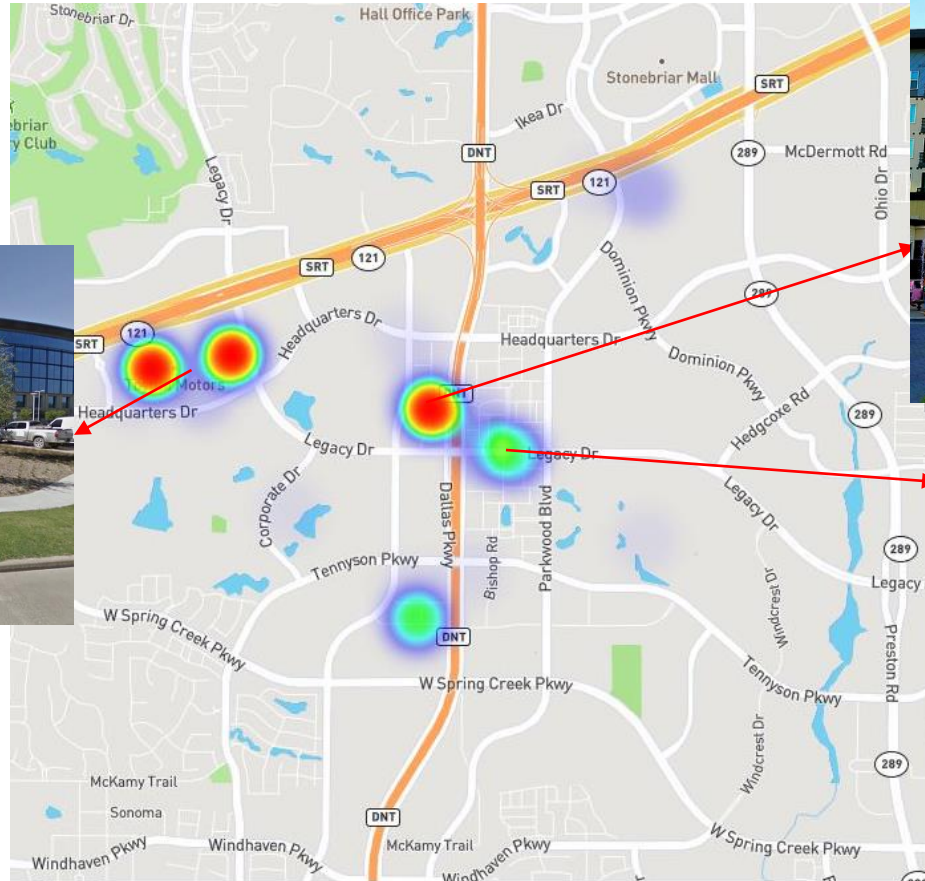


- Pick-Up Locations
- Drop-Off Locations

Legacy: Lunch Time

Legacy West

Toyota HQ



Shops @ Legacy

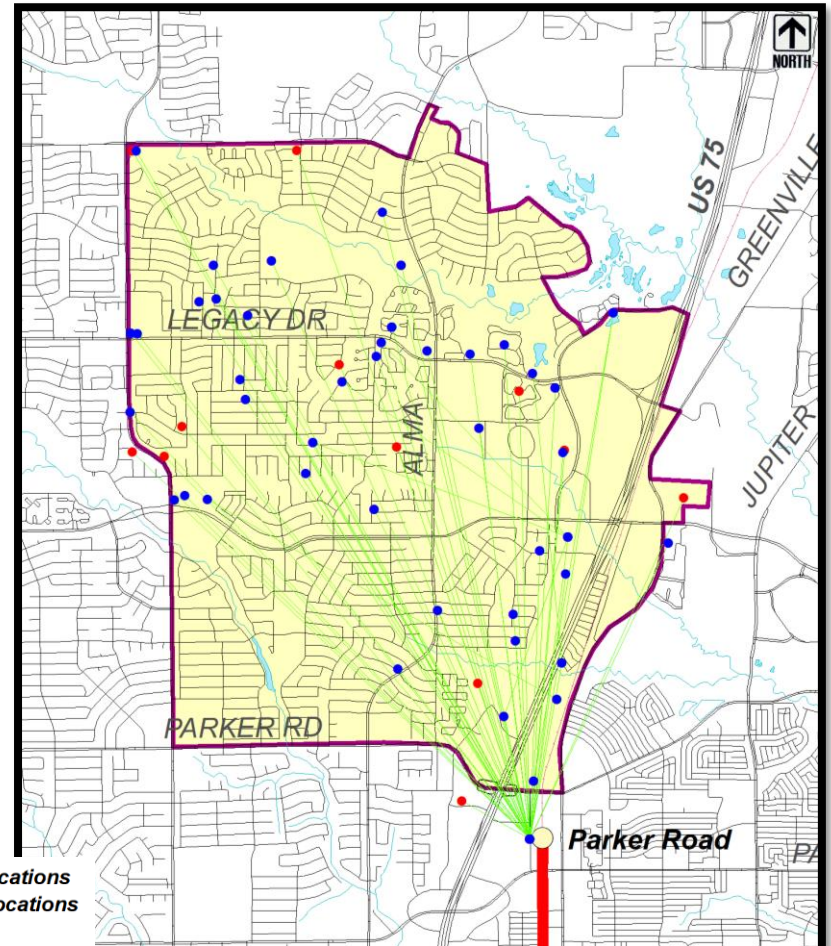
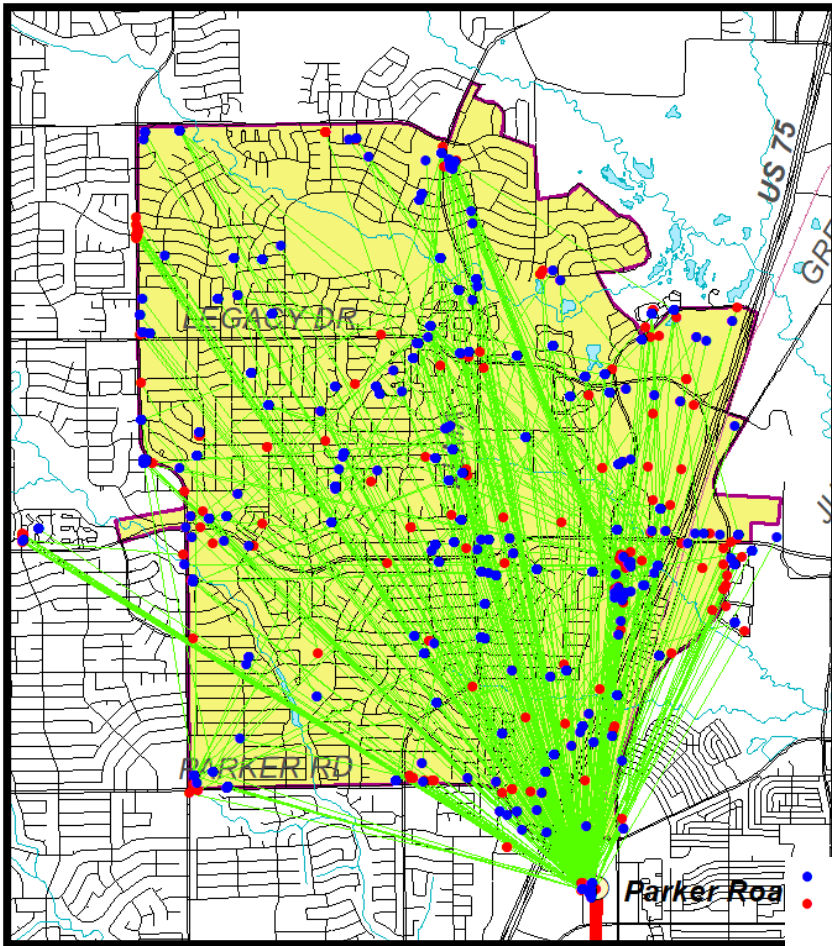


NC Plano Origin Destinations

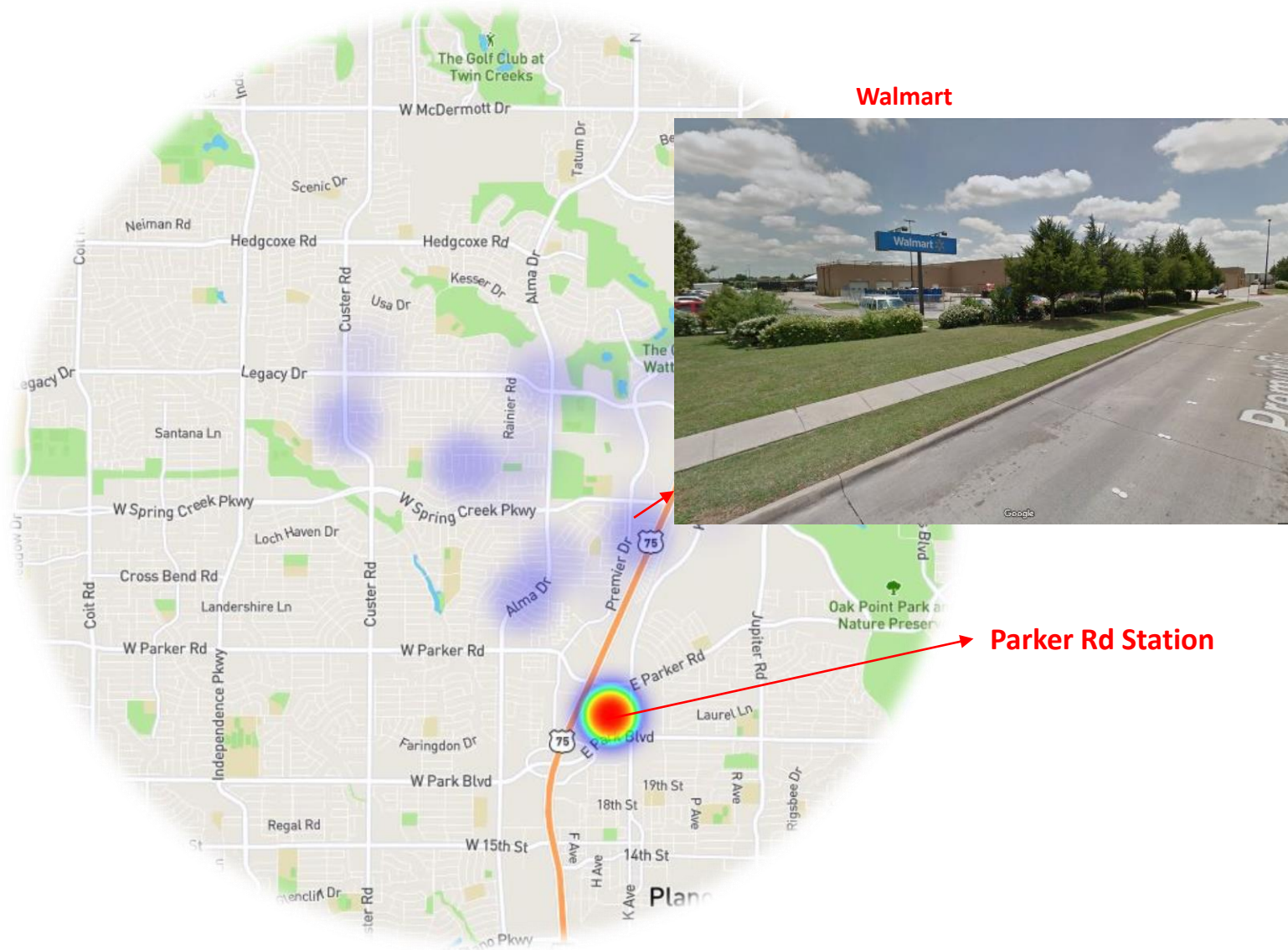
June 2018 : 2901

19.09%

April 2018 : 2,436

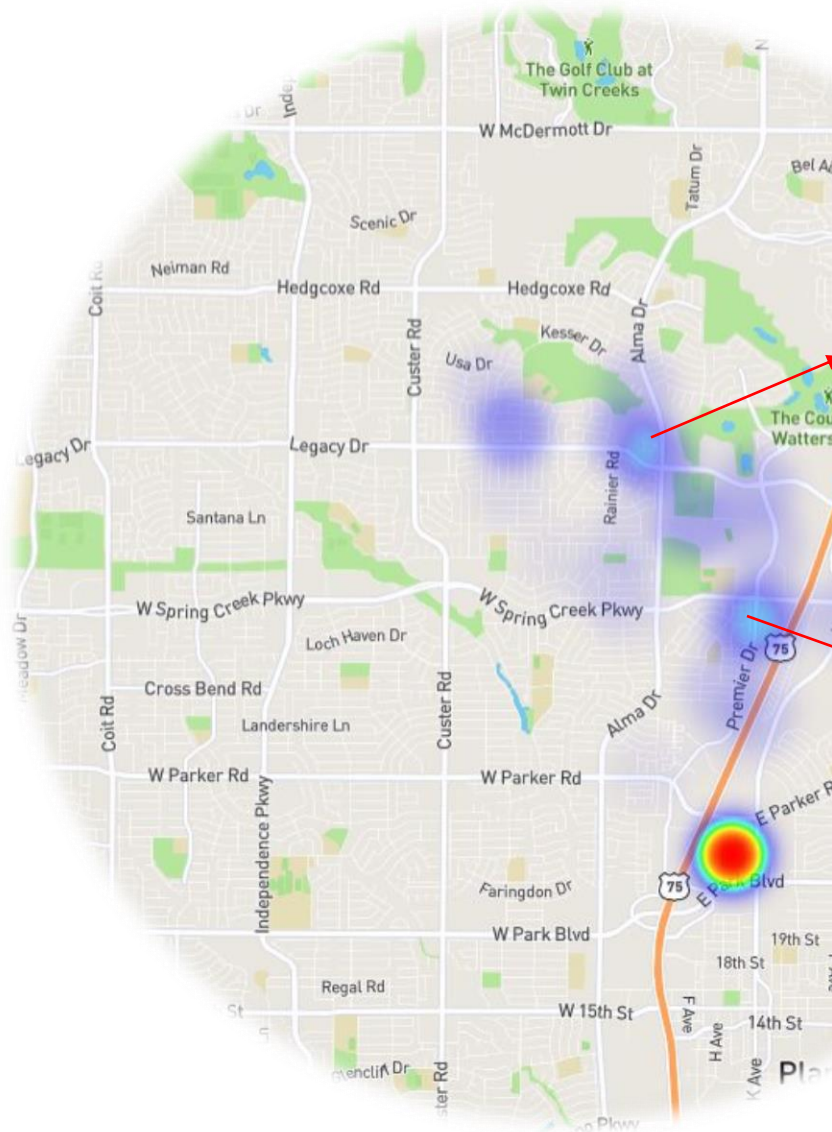


NC Plano: Morning peak



NC Plano: Morning peak

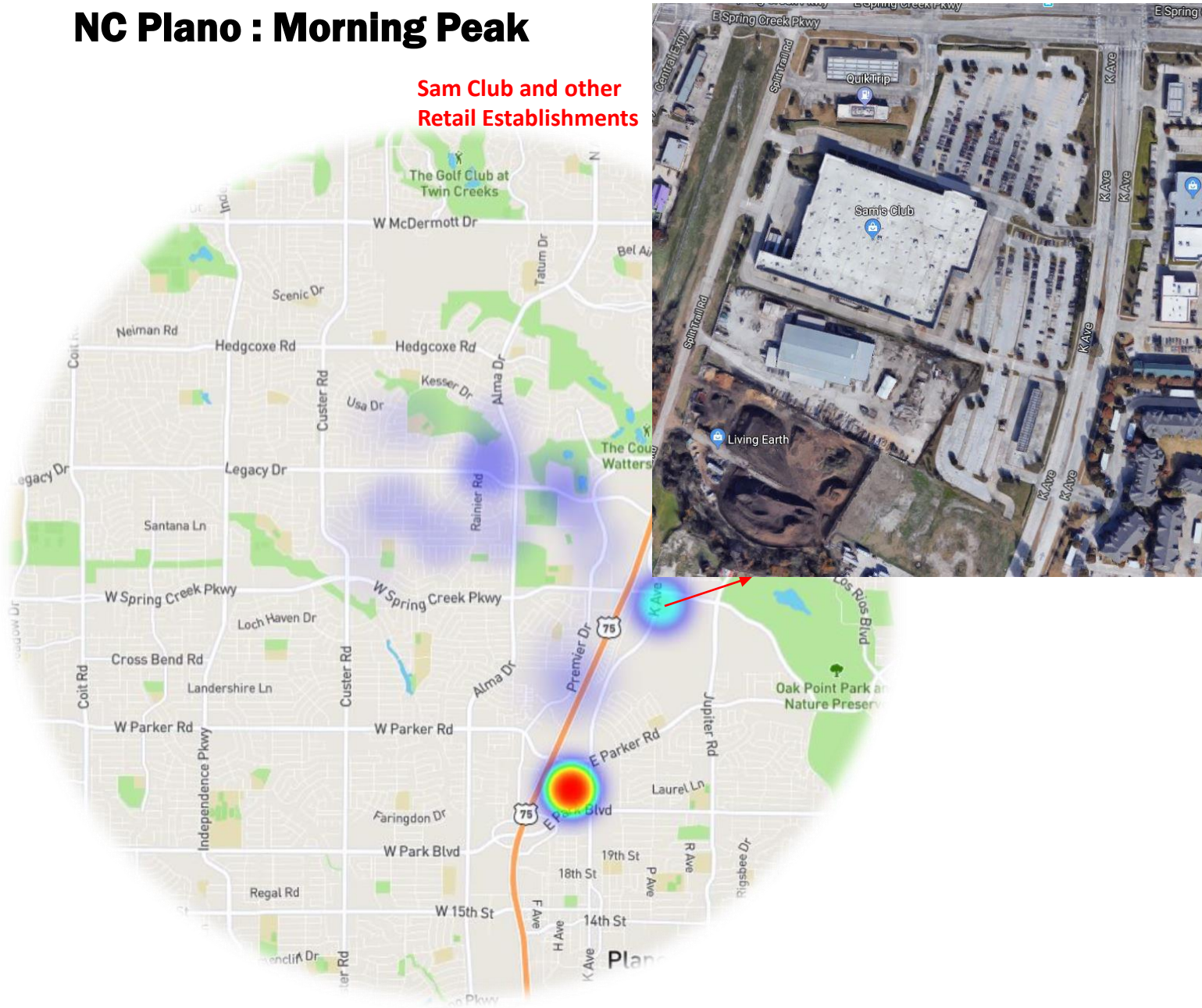
Cross Creek Village Neighborhood Shopping Center



Business Place :
Walmart

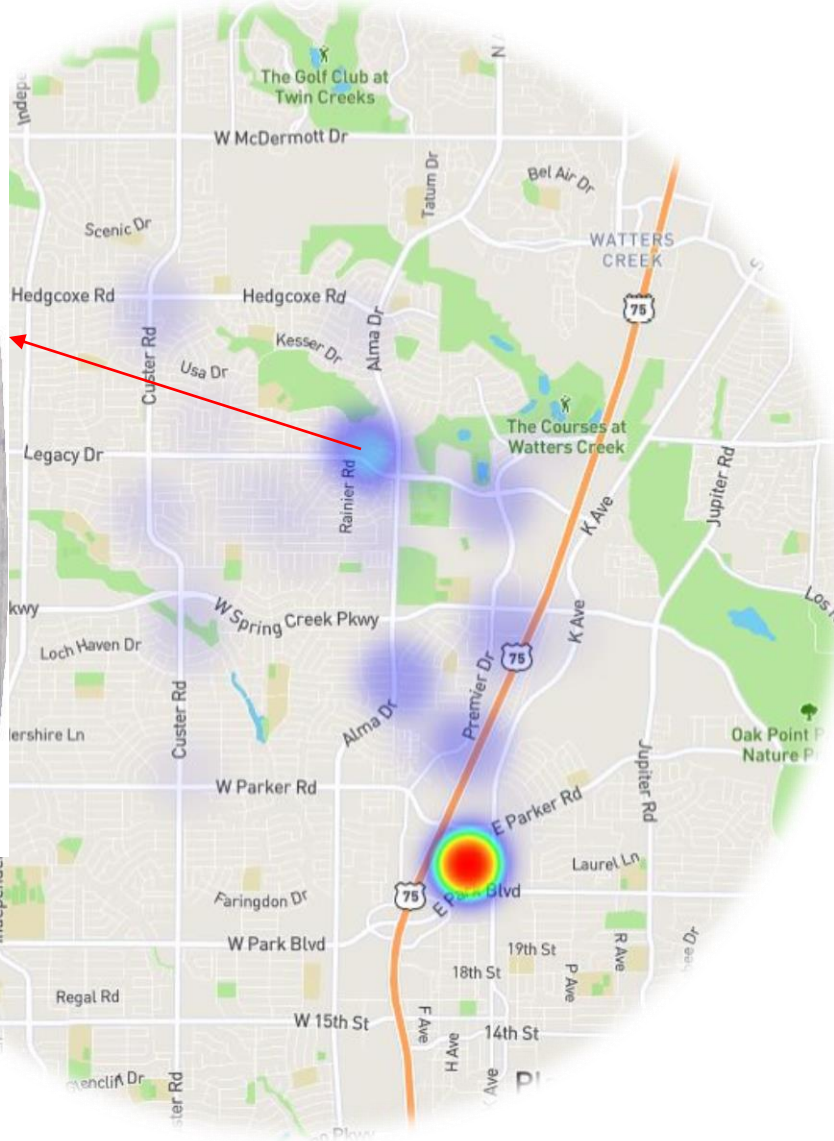
NC Plano : Morning Peak

Sam Club and other
Retail Establishments



NC Plano : MIDDAY

6600 Custer Rd., Plano TX

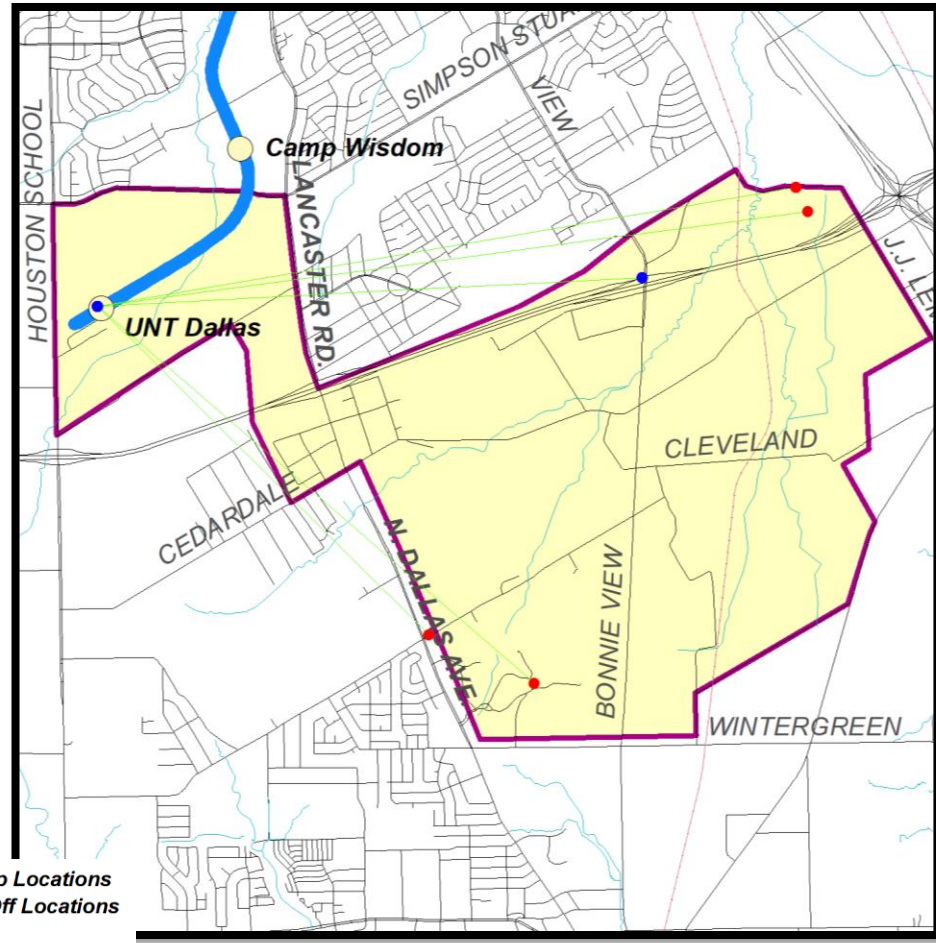
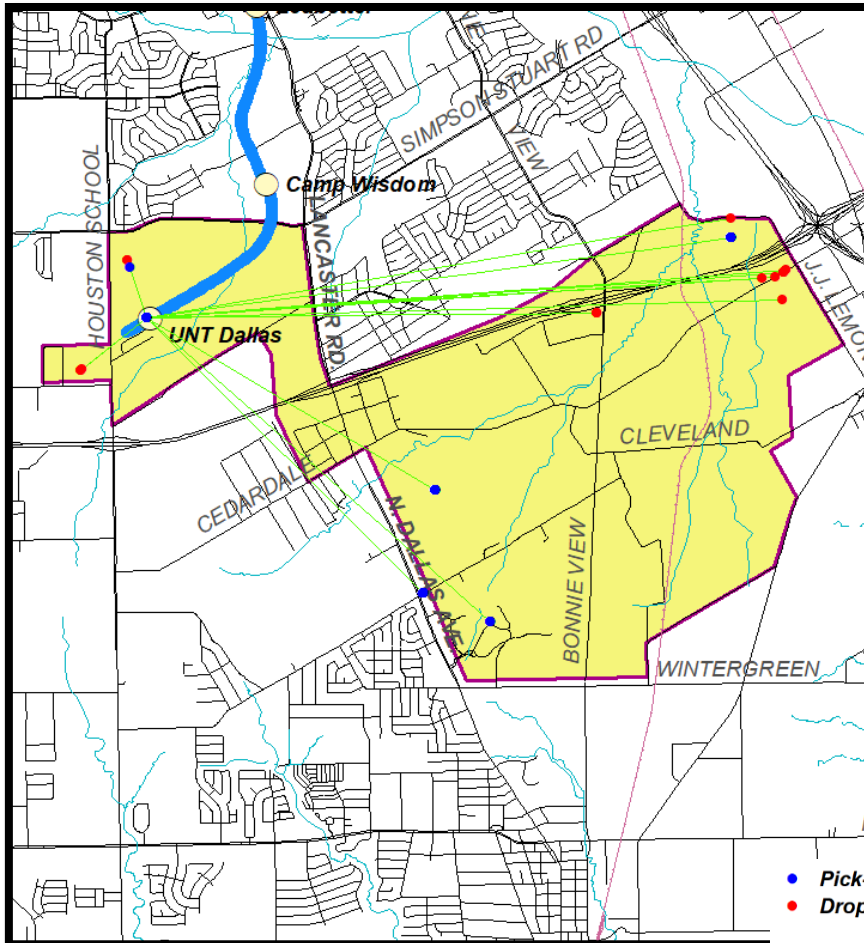


Inland Origin Destinations

53.57%

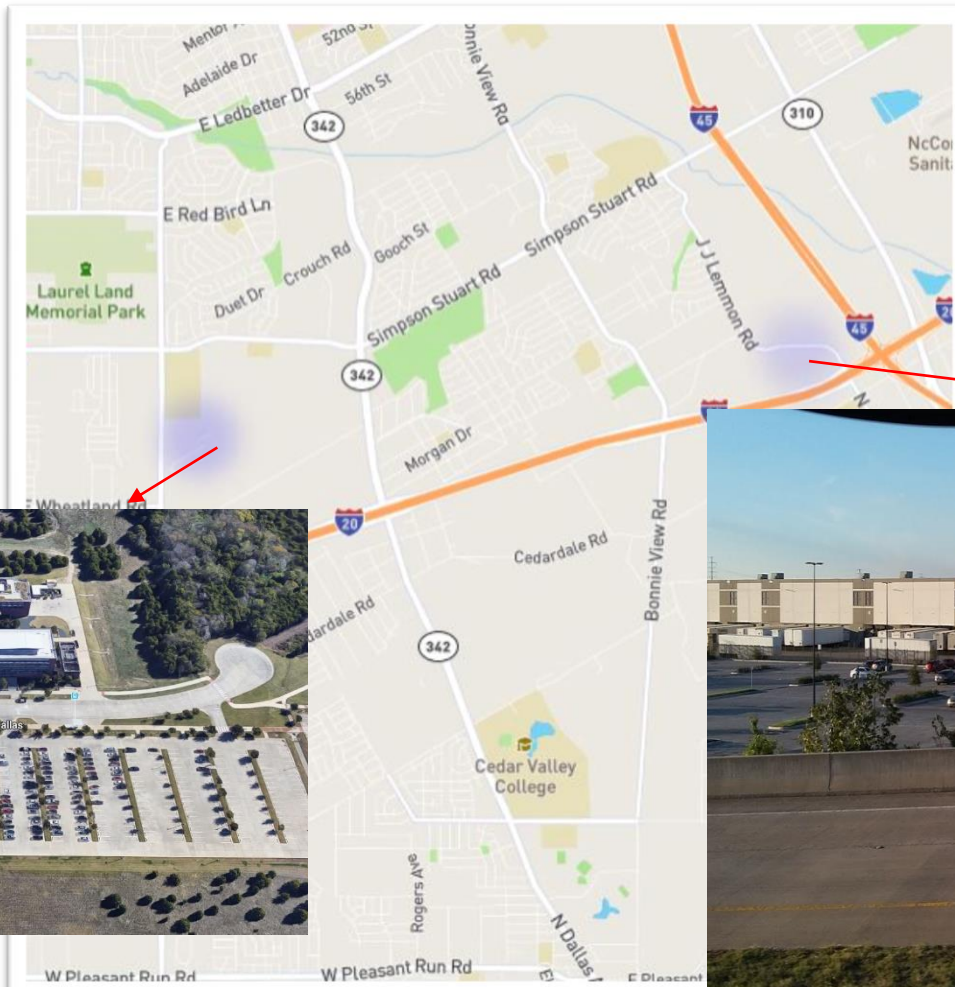
June 2018 : 645

April 2018 : 420



- Pick-Up Locations
- Drop-Off Locations

Origin	Destination	# of Trips
UNT Dallas Station	Amazon Fulfillment Center	228
Amazon Fulfillment Center	UNT Dallas Station	113



UNT Dallas

Amazon Fulfillment Center



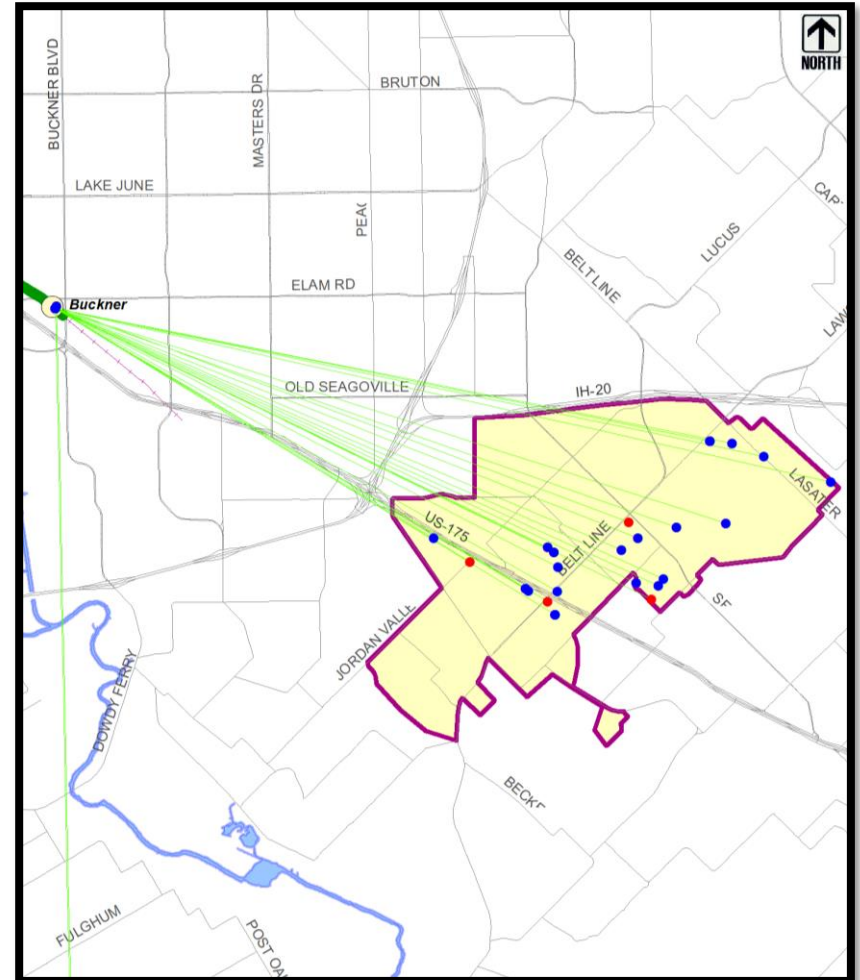
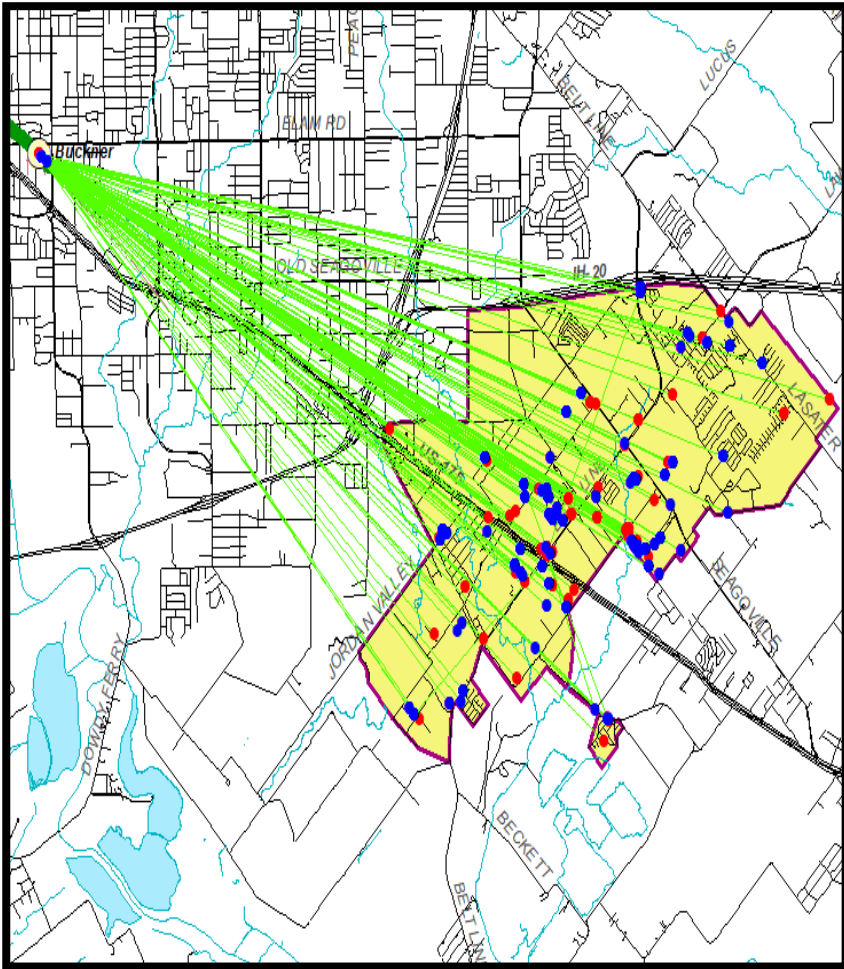
DART let's go.

Kleberg Origin Destinations

June 2018 : 1,221

34.92%

April 2018 : 905



(Mobile Home Park)

(Mobile Home Park) & Linda Henrie Elementary School

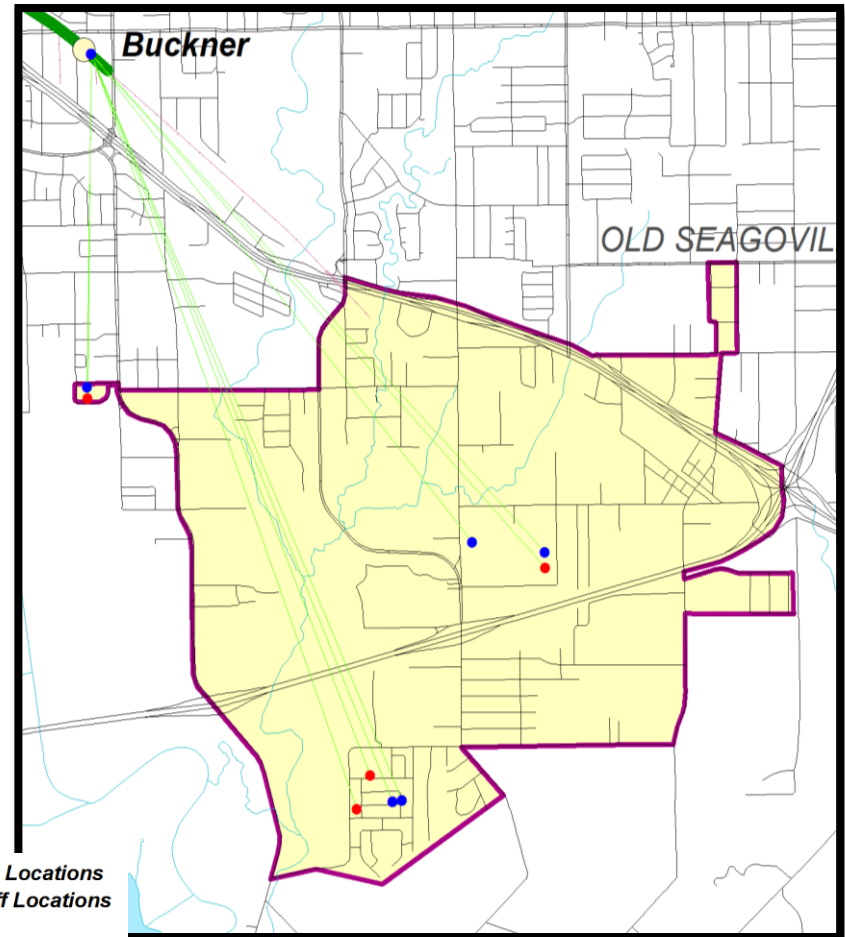
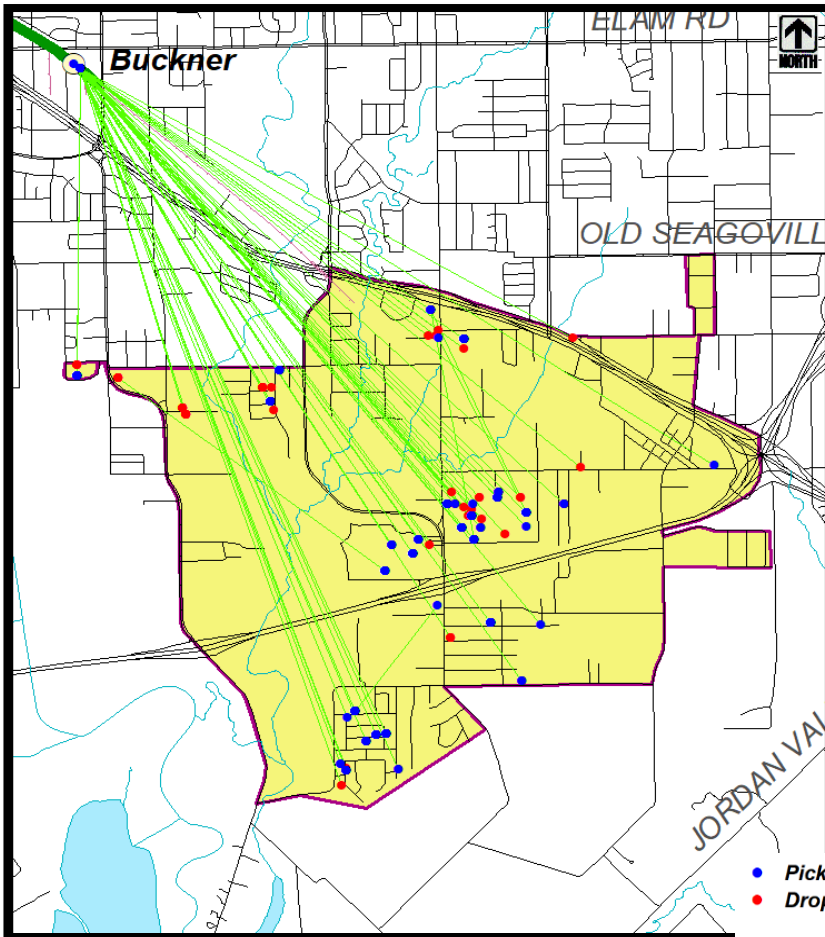


Rylie Origin Destinations

32.12%

June 2018 : 473

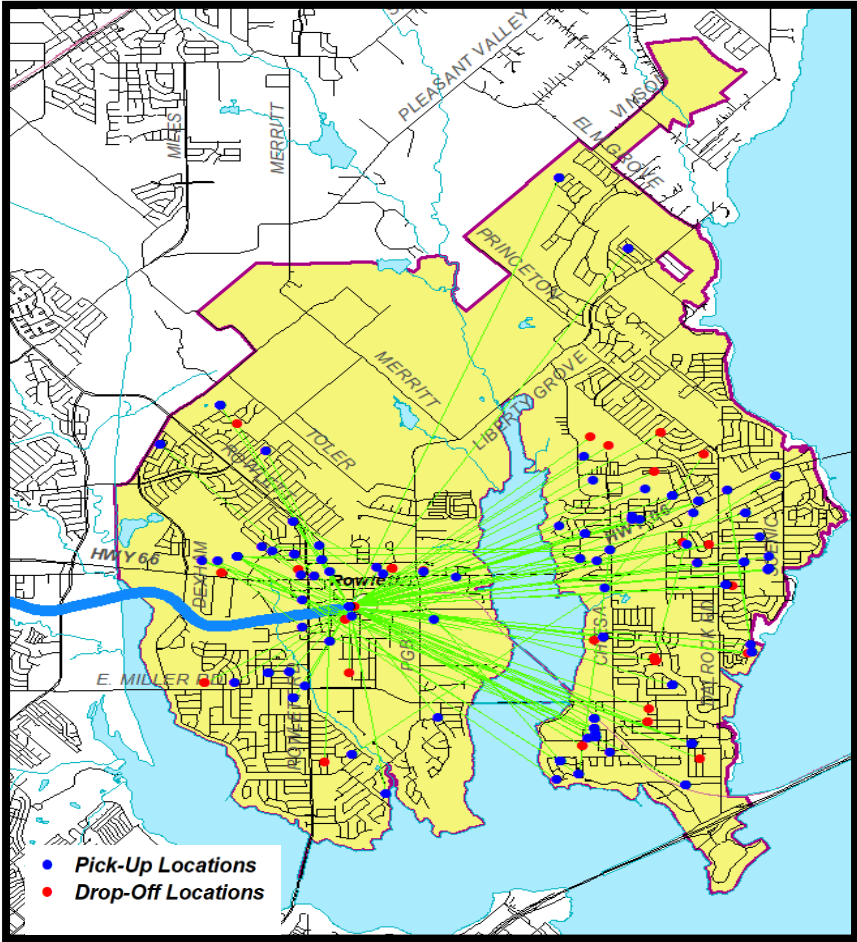
April 2018 : 358



- Pick-Up Locations
- Drop-Off Locations

Rowlett Origin Destinations

June 2018

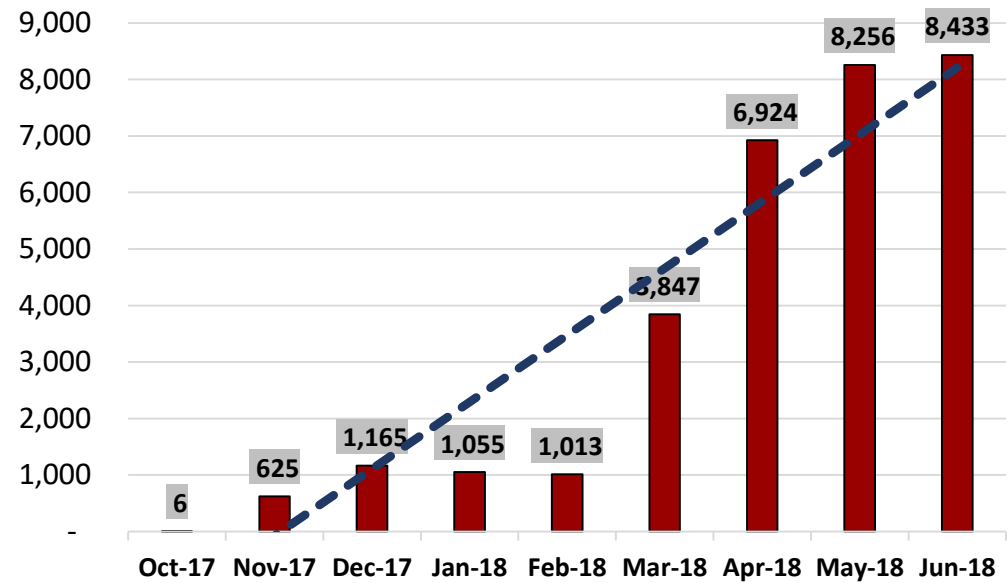


Overall Results

- Ridership

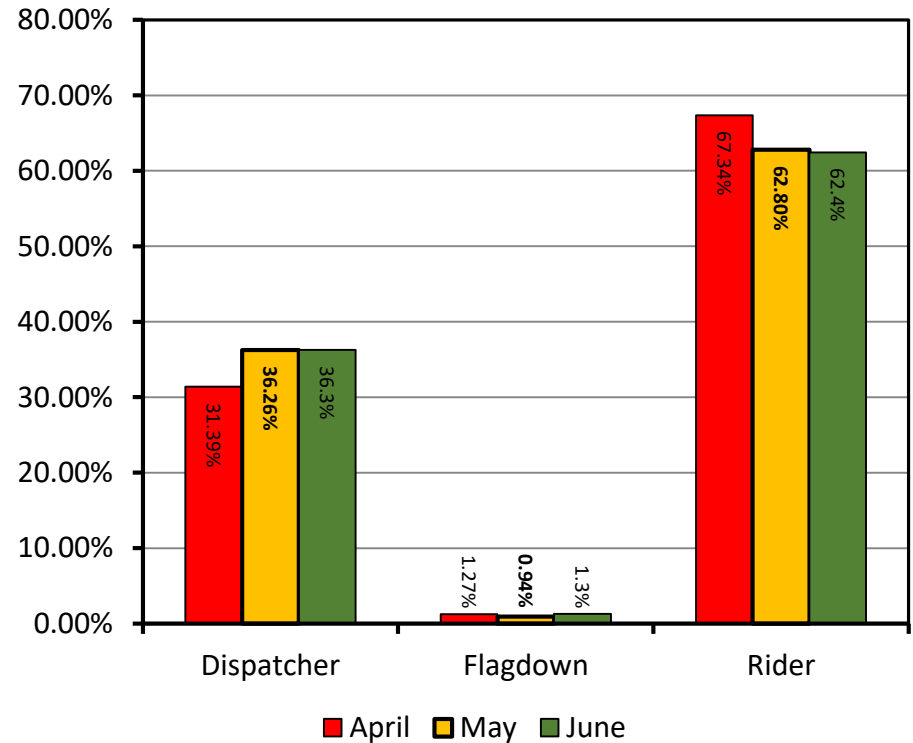


DART GoLink Ridership







Overall Results









- Ridership  
- Call Volumes  



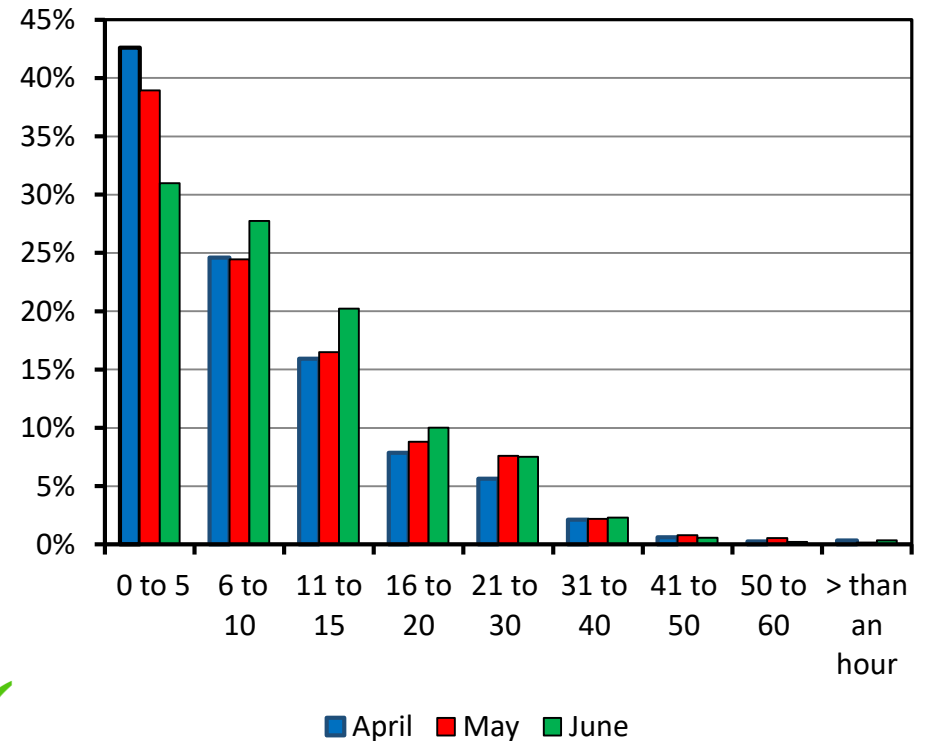
Overall Results

- Ridership  
- Call Volumes  
- Dispatch Activity  

Overall Results

- Ridership  
- Call Volumes  
- Dispatch Activity  
- Service with 10 minutes  

Wait Times



Is MOD Microtransit Financially Viable?

*Not Viable without TNC-Style Pricing
and/or more ridership*

Subsidy per rider Legacy
Route 346
\$35



GoLink Subsidy per Rider
\$18.07 In Legacy Zone
\$12.36 in N Central Zone



TNC Subsidy per Rider
in GoLink Zones
\$5.51



DART's TNC/Taxi Negotiations Update

- At least one TNC wants exclusivity to participate in MOD project
- TNC's have been willing to offer shared Ride Service for Dallas for MOD
- Without drug/alcohol testing transit must use FTA tax exemption approach to include TNC's in the MOD services
- Taxi's are willing to comply with all drug and alcohol regulations
- Taxi's have offered a shared ride product but exactly how it works is unclear
- Seamless integration of TNC's and Taxi into the DART Microtransit software and GoPass has yet to be developed and negotiated with taxis and TNCs
- Data sharing with TNCs will be suboptimal due to TNC concerns
- TNC background checks seems to be increasingly feasible
- To offer choice to customer, MOD will need to include taxi, DART operated , and TNC as a rider choice

Key Takeaways

High level of interest in MOD has sparked rampant software development activity and various PPP agreements



Although there are many pieces to an integrated journey planning and payment “ecosphere”, a mastery solution has not been developed



Determining who “owns and controls” integrated mobility solutions is open for debate



Negotiating acceptable agreements with the TNCs for shared ride service and access to data to evaluate the program has proven more difficult than anticipated

Thank You



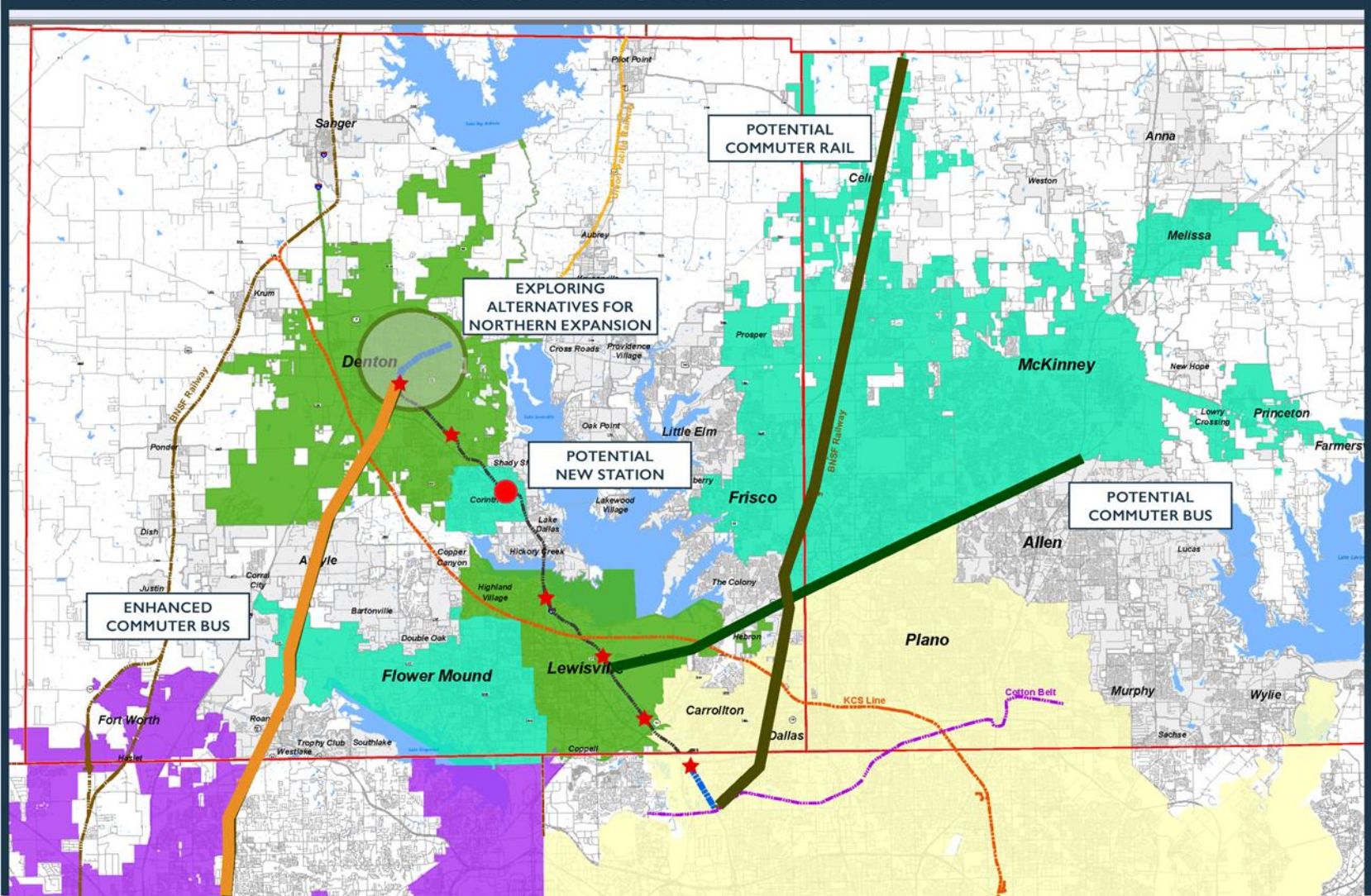
DART.org



NCTCOG MOD Workshop

Toyota Motor North America (TMNA) and Denton County Transit Authority (DCTA)

DCTA: REGIONAL PARTNER



- ★ A-TRAIN STATIONS
- A-TRAIN LINE
- - - - A-TRAIN EXTENSION
- - - - UNION PACIFIC RAILWAY
- - - - KCS LINE
- - - - COTTON BELT
- I-35W
- SRT 121
- BURLINGTON NORTHERN SANTA FE RAILWAY
- DCTA MEMBER CITIES
- DART MEMBER CITIES
- DCTA SERVICE AREA
- TRINITY METRO MEMBER CITIES

TOYOTA – SOCIAL INNOVATION

Toyota aims to directly enable affordable, low emissions mobility, improving environmental outcomes and quality of life for elderly, disabled and low-income Americans, while also strengthening Toyota North America's competitive advantage

Green Mobility

Improve access to mobility solutions that are Greener, Safer, Integrated, and more inclusive by designing, delivering & scaling solutions for communities across North America



Lower Emission Transport



Support Services for LE Transport



Energy tied to LE transport



Personal Mobility

Improve usability, affordability & quality of mobility products and services for those individuals facing the greatest mobility challenges, the elderly & people living with disabilities



Accessible vehicles



On Demand



Assistive devices

ALLIANCE TEXAS



ALLIANCE TEXAS

Alliance Texas

Developed by Hillwood Properties in Fort Worth

Home to more than 480 companies with 48,000 employees

Employees arrive to Alliance Texas from Denton, Fort Worth, etc.

Challenges

Access to transportation – first mile/last mile

High employee turnover

Tapped out talent pipeline

ALLIANCE LINK



Alliance Link:

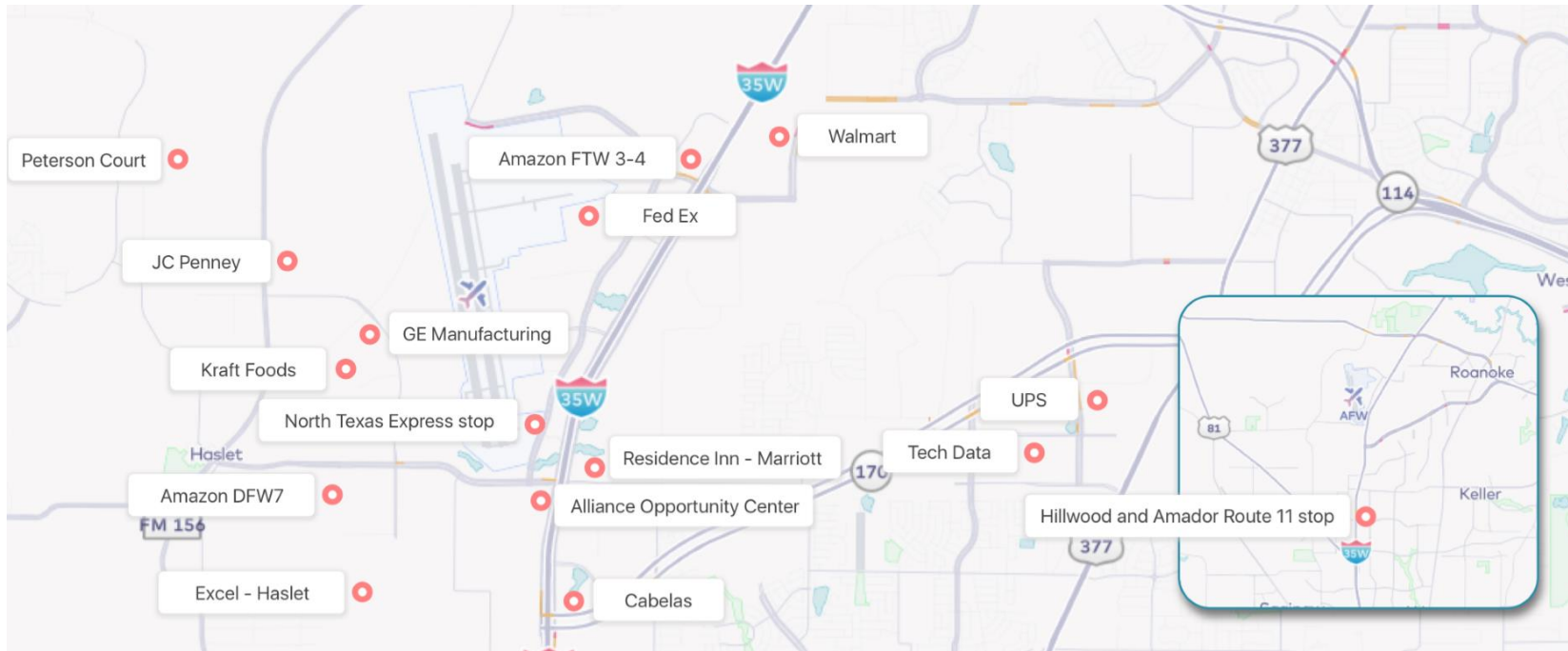
- Established for low wage workers of Alliance Texas
- Alliance is a 9 month pilot shuttle that started in April 2018
- Riders book a trip with the Alliance Link app - \$1 cost per trip
- Service Hours
 - M-F 4:30-7:30am & 4:40-7:30pm
 - Sa-Su 5:30-7:30am & 4:00-7:30pm

ALLIANCE LINK GOAL

Ultimate Goal: Provide an on-demand, last-mile transportation solution for Alliance employees with mobility challenges

Expand	Expand talent pipeline in different areas
Decrease	Decrease employee turnover due to transportation issues Decrease traffic in the area by reducing single passenger vehicles on the road
Reduce	Reduce carbon footprint of employees commuting and improve local air quality

ALLIANCE LINK – SERVICE STOPS



-  United Way (fiscal agent)
-  Spare Labs (technology provider)
-  MV Transit (shuttle provider)
-  Trinity Metro/ DCTA (public transit liaison)
-  Hillwood Properties (real estate developer)

ALLIANCE LINK - SPARE LABS METRICS



April 9, 2018

Start of service

483

Rides

4.4 min

Average wait time

42

Recurring riders

> 80%

Fixed route
market capture

40 min to 7.45 min

Change in first/last mile
travel time

40.2%

Pooled trips

Fort Worth

Majority of home addresses

"Great people"

*"DJ was an awesome driver!!!
Keep up the good work!!"*

"Awesome!!"

ALLIANCE LINK - CHALLENGES

Data of employees

- Zip code
- Mode of transportation
- Mobility Challenges

Employer Support

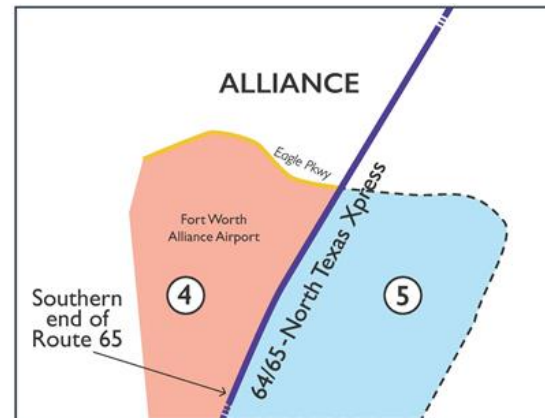
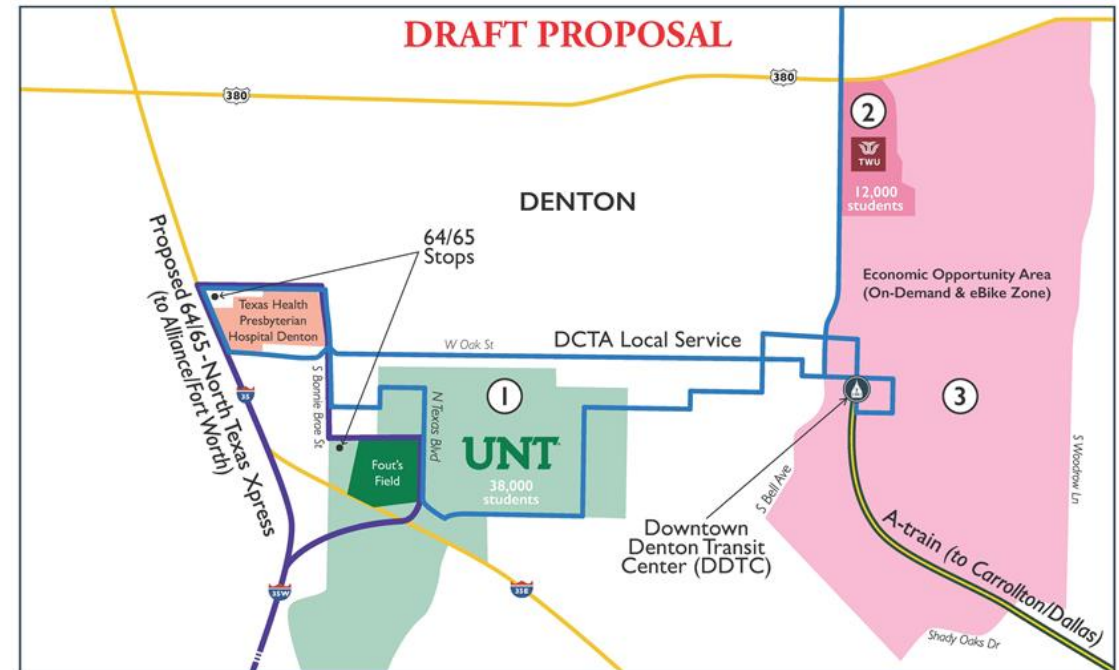
- Advocating service
- Key stakeholder on project
- Data Collection
- Serving all shifts

Ridership

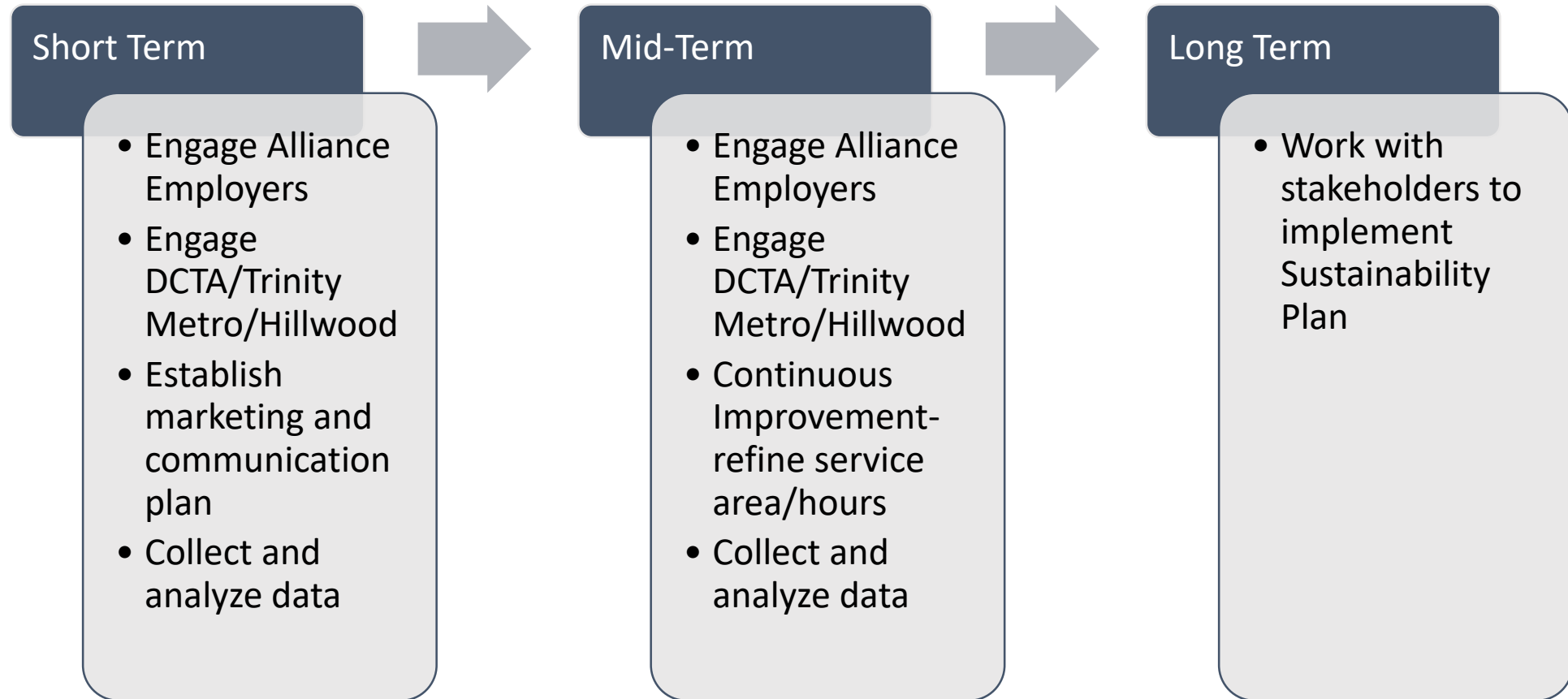
- Ridership of Trinity Metro/DCTA
- Public Transit Connectivity
- Behavior Change – public transit versus personal vehicle

ENHANCED CONNECTIVITY TO ALLIANCE

- Economic Opportunity Lyft Zones
 - Considered transfer within transit system/linked trip
- Route 65 Service to complement Routes 63/64
 - 7 days a week
 - Enhanced Service Hours to address shift work
 - Direct access to employer
- Target populations
 - UNT, TWU, NCTC students
 - Low-income workers



NEXT STEPS



Q & A

Whitepaper on Accessibility & Mobility on Demand (MOD) Options

Mobility on Demand (MOD) Working Group Meeting

Cody Nelson, Transportation Planner
North Central Texas Council of Governments

July 23, 2018



North Central Texas
Council of Governments

Overview

Introduction

Purpose of Whitepaper

Mobility on Demand (MOD) Options

Transportation Network Companies (TNCs) & Taxis Benefits

Transportation Network Companies (TNCs) & Taxis Restrictions

Recommendations to Improve Equity in Mobility on Demand (MOD)

Questions & Feedback

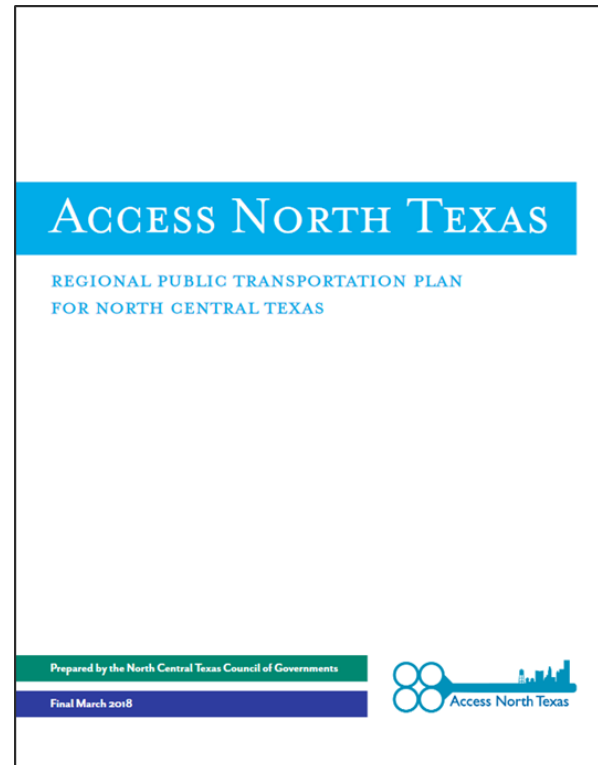


North Central Texas
Council of Governments

Introduction

Access North Texas & Public Outreach Meetings

Fort Worth Mayor's Committee on Persons with Disabilities



North Central Texas
Council of Governments

Purpose of Whitepaper

“Let’s improve services to help assure greater access to transportation options” -Shared Use Mobility Center

Use as a **brief** guide, tool, & informational resource

Easy-to-read for public perspective, helpful tips, & includes current options



North Central Texas
Council of Governments

Mobility on Demand (MOD) Options

Transportation Network Companies (TNCs)

Taxis



Transportation Network Companies (TNCs) & Taxi's Benefits

TNC Benefits

Spontaneity

Connections

Flexible Schedules

Cost effective



Taxi Benefits

Accessible

Wide coverage areas

Safe & easier for
accommodating needs



North Central Texas
Council of Governments

Transportation Network Companies (TNCs) & Taxi's Restrictions

TNC Restrictions

Rural access

Long distances

Costly for some

Personal vehicle accessibility

Hours of operation



Taxi Restrictions

Rural access

Spontaneity



North Central Texas
Council of Governments

Recommendations to Improve Equity in Mobility on Demand (MOD)

Continue to...

Foster public & private relationships between public transit agencies and MOD operators

Leverage late-night mobility services

Implement multiple fare payment options

Employ services and technologies that overcome physical challenges



Questions & Feedback

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Visit us at www.nctcog.org/mod !



North Central Texas
Council of Governments

Whitepaper on Accessibility and Mobility on Demand (MOD) Options

Table of Contents

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Introduction	1
Dallas-Fort Worth (DFW) Transportation Organizations	1
Transportation Network Companies (TNCs) & Taxis – Private Transportation Requirements & Regulations	2
Transportation Network Companies (TNCs) & Taxis – Private Transportation Benefits & Restrictions	2-3
Paratransit	3
Technology	3
Conclusion	3-4
References	4

Introduction

Transportation and mobility play extremely important roles in people’s daily lives. More specifically, people with disabilities need accessible, efficient, and reliable modes of transportation to fulfill daily activities. The rights of people with disabilities to access transportation for their everyday needs are guaranteed under the federal law – the Americans with Disabilities Act of 1990. With advancement in transportation modes, more options are now available for accessibility than ever before. Innovations in transportation and technology make it possible for people with disabilities to live more independently. Accessibility is a civil right and it must be assured in all operating decisions, including safety measures for all passengers with and without disabilities. (Transit Report – Volume 22, Number 12 & Transit Report – Oct. 13, 2015).

Dallas-Fort Worth (DFW) Transportation Organizations

The Dallas-Fort Worth (DFW) region has a few organizations that are dedicated to linking people with disabilities and older adults to the most appropriate transportation options. My Ride Dallas, My Ride Tarrant, and My Ride North Texas, are dedicated to helping people with disabilities and older adults understand the transportation options available to them. My Ride Dallas offers over-the-phone transportation counseling, e-mail, and printed guides for accessing rides that are available throughout Dallas County. My Ride Tarrant also offers assistance over-the-phone, e-mail, and via text message. Contacting a MyRide Navigator can help with finding the best transportation for needs for Tarrant County and Dallas County. My Ride North Texas is a website that offers users an easy-to-use database option using origin and destination information, time, date, and mobility options based on the riders’ needs. My Ride North Texas also provides other resources such as flyers, travel assistance resources, and frequently asked questions (FAQs). All three of these resources help people with disabilities and older adults understand transportation options for easier accessibility.

Transportation Network Companies (TNCs) & Taxis – Private Transportation Requirements & Regulations

Taxi companies in Texas are regulated at the municipal level and comply with ADA requirements for engaging in the transporting of people to provide demand-responsive transportation. Within the DFW region, wheelchair accessible taxicabs are available upon request. Texas policies state that taxicab services cannot deny rides to people with disabilities. Similar to TNCs, if a person is using a wheelchair or other mobility aids that can be stowed in the cab and can also transfer from a wheelchair to a vehicle seat, the company and driver must provide service. In situations where a person cannot transfer to a vehicle seat, the driver and/or company must connect them to the appropriate service options that operate ramps and lifts or other similar accommodating needs for transport purposes. This could be an additional accessible vehicle from the taxicab company or another transit provider that is within the specified area.

TNCs such as Uber and Lyft have specific accessibility requirements that they must follow in order to operate services. In May 2017, Texas lawmakers passed House Bill 100 that requires all TNCs to provide people an opportunity to indicate whether they need a wheelchair accessible vehicle when booking a ride. Moreover, TNCs cannot impose any additional charges for transporting people with disabilities. If an accessible vehicle is not available, the company directs the requesting person to an alternate provider that can provide an accessible vehicle and does not unreasonably delay the service.

Transportation Network Companies (TNCs) & Taxis – Private Transportation Benefits & Restrictions

To help solve transportation challenges in DFW, major transit agencies including Dallas Area Rapid Transit (DART) and Denton County Transportation Authority (DCTA) have formed public-private partnerships with Transportation Network Companies (TNCs) such as Uber and Lyft to help people get to and from where they need to go. Partnerships that exist between TNCs and transit agencies can:

- Lower transit provider's operational costs
- Serve additional riders outside of public transit agency coverage areas
- Improve access and provide improvements on services
- Provide more convenient services for paratransit riders

TNCs and Taxis, have made significant positive increases in mobility for people with disabilities, although, they operate with benefits as well as restrictions. TNCs are beneficial for people who choose and are able to use them, by offering same day spontaneous services, connections to public transportation, flexible schedules, and can be a cost effective option. TNCs offer an additional option, instead of having to reserve rides a day or so in advance. By TNCs partnering with transit agencies, within the DFW region, it increases the reach and coverage areas of transit for riders.

There can also be some limiting measures for TNCs, such as having a limited number of options for people with disabilities in rural communities. Since TNCs operate personal vehicles, accessibility is a major restriction because they are not all equipped with lifts or ramps. Other restrictions include recruiting 24/7 drivers, long distances between destinations, accessibility of technology, and costly for people with low incomes.

An operational benefit for taxis includes accessible vehicles. Several taxi services in the DFW region offer rides that are wheelchair accessible. They offer better chances of rides during difficult times such as peak periods, have a wider coverage area, and are easier and safer to serve mobility users. Some of the main operational restrictions for taxi services can be when an accessible vehicle is requested for a spontaneous ride, it can be difficult to obtain because many services require wheelchair accessible taxi vehicles to be requested at least one day or more in advance. This can restrict people with disabilities from being mobile, especially if they are in an area where there are a limited number of public and private transportation services.

Paratransit

In the context of transportation planning, mobility has been defined as the potential for movement, the ability to get from one place to another. More specifically, mobility is having services that are going to and from destinations that people want to travel to, information and/or data about such services, how to use them, accessible for everyone to use, and affordable. Paratransit services help to empower people with disabilities by focusing on their mobility needs. “Disability need not be an obstacle to success” –Stephen Hawking.

Paratransit is a specialized transportation that serves people who are physically unable to use a fixed-route transit system. According to ADA, paratransit must provide service within a $\frac{3}{4}$ mile radius of fixed-route services that are comparable to the service provided to people who use fixed-route systems. Paratransit must be provided to all eligible riders if it is requested in the appropriate timeframe, which in most cases is one day ahead of time.

The three transit agencies in DFW that provide paratransit service are Dallas Area Rapid Transit (DART), Trinity Metro, and Denton County Transportation Authority (DCTA). All agencies offer services in accordance with ADA regulations and provide demand-responsive service to qualified riders.

Technology

Transit agencies’ technology has increased mobility options and made it easier for people with disabilities to find rides. The GoPass app, which is an easy-to-use and personalized means to planning rides, allows users to purchase tickets on DART, Trinity Metro, and DCTA transit systems. Regional tickets and passes are also available to travel on any combination of the three transit agencies’ systems. For getting around the Fort Worth area specifically, NextBus is a mobile app that provides real-time service information on fixed-route buses. Riders can find the exact service and routes to get to and from their destinations.

Conclusion

Public and private transportation organizations in the DFW region continually strive to make it easier for people with disabilities to meet their daily mobility needs by offering opportunities for transportation. As Mobility on Demand (MOD) continues to improve the accessibility of people with disabilities, the focuses include: fostering public and private relationships between public transit agencies and MOD operators, leveraging around-the-clock services, implementations of fare payment options, and employing services and technologies that cater to people with physical disabilities. People with disabilities have identified transportation equity as an issue that should be addressed, not only to increase mobility, but also to increase community participation, economic stability, and social inclusion.

As transportation services, both public and private, continue to grow and technology becomes more advanced, restrictions on mobility for people with disabilities will decrease, thus providing a higher quality of life. “Let’s improve services to help assure greater access to transportation options” – Shared Use Mobility Center (SUMC).

References

Americans with Disabilities Act of 1990

Shared Use Mobility Center (SUMC)

Stephen Hawking

Texas Legislature House Bill 100

Transit Access Report October 13, 2015

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