



Where Have All The Riders Gone? — New Approaches

Todd Plesko
VP Planning & Development



Agenda

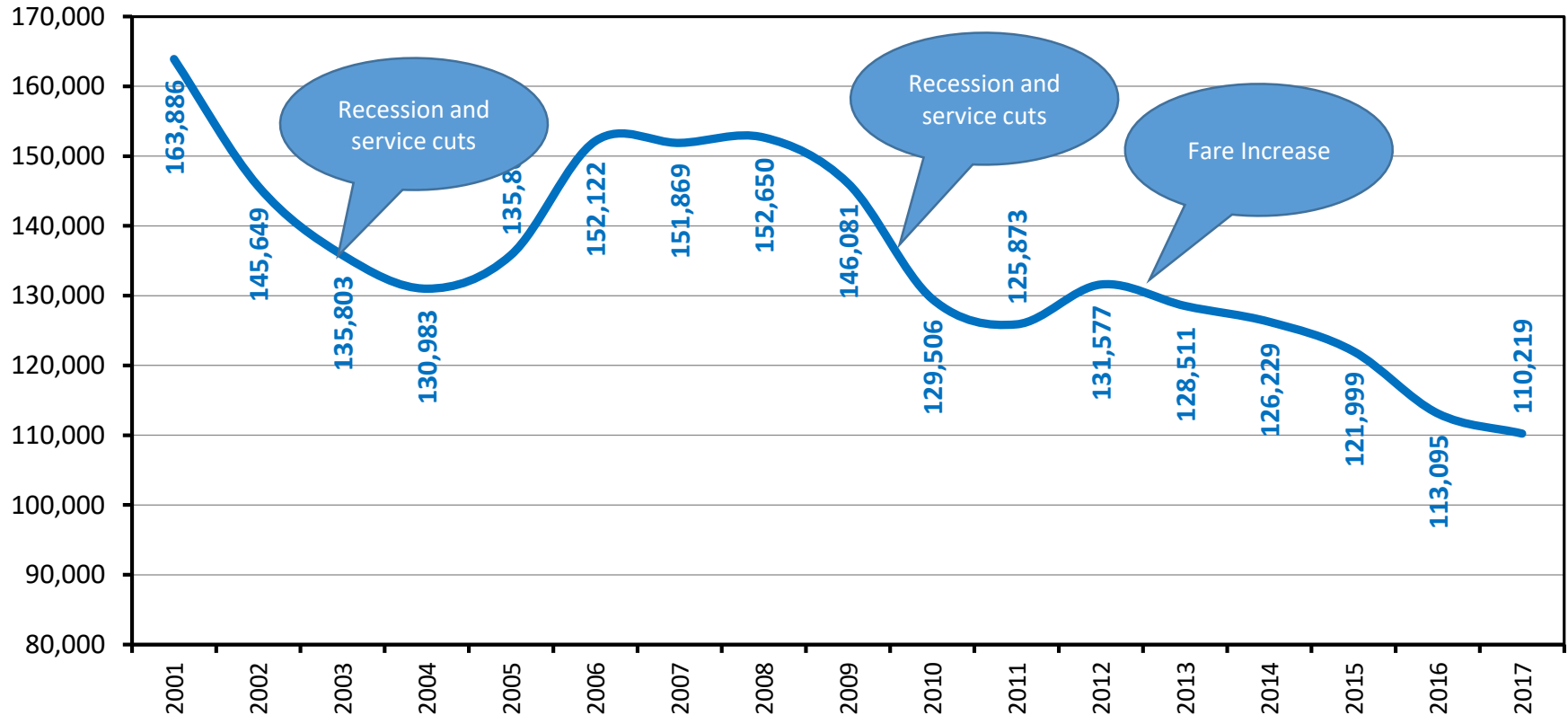
- Ridership Challenges
- FTA MOD Sandbox Technology Grant
- FTA MOD Sandbox Field Test Mobility Options

Ridership Trends

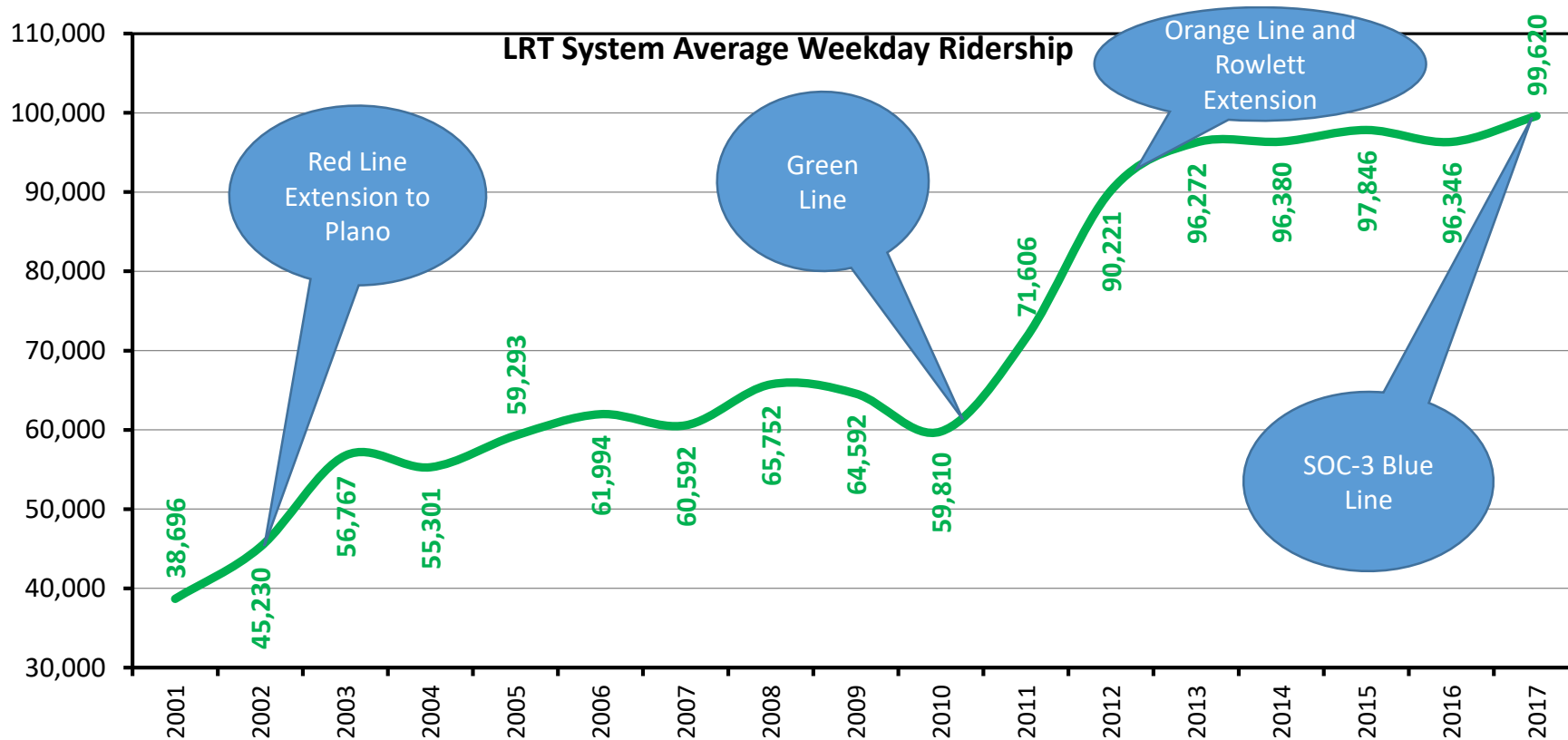
- DART bus ridership has generally declined since 2008, but has experienced more significant declines in 2016 and early 2017
- LRT ridership is flat in 2016 and 2017 after expansion-driven growth since 2001
- TRE ridership has been trending down since 2008, but had a small increase when the Arlington Max was implemented in 2013 and 2014
- TRE ridership declined in 2016 and early 2017

DART Bus Ridership Trends

Bus System Average Weekday Ridership

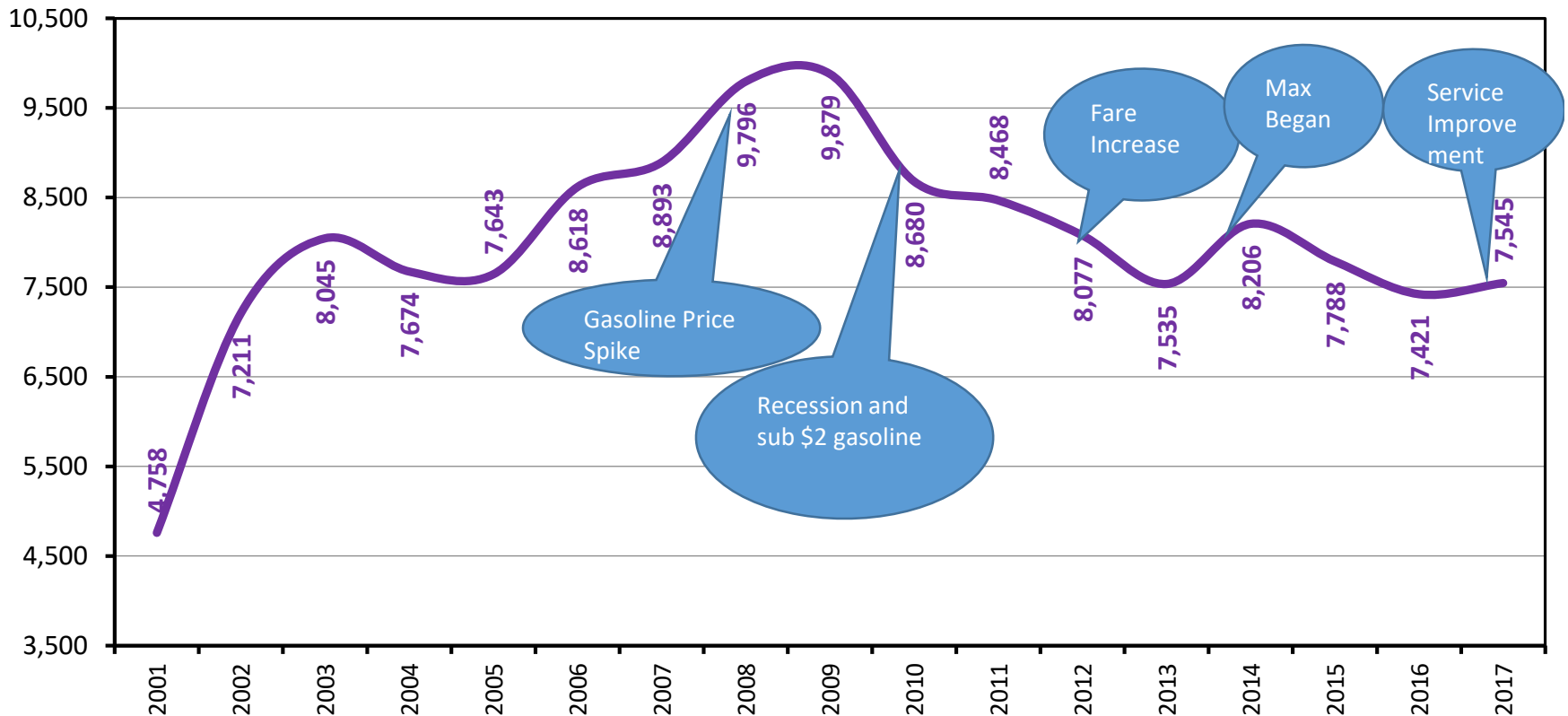


DART LRT Ridership Trends



TRE Ridership Trends

Average Weekday Ridership



Texas System Trends in 2016

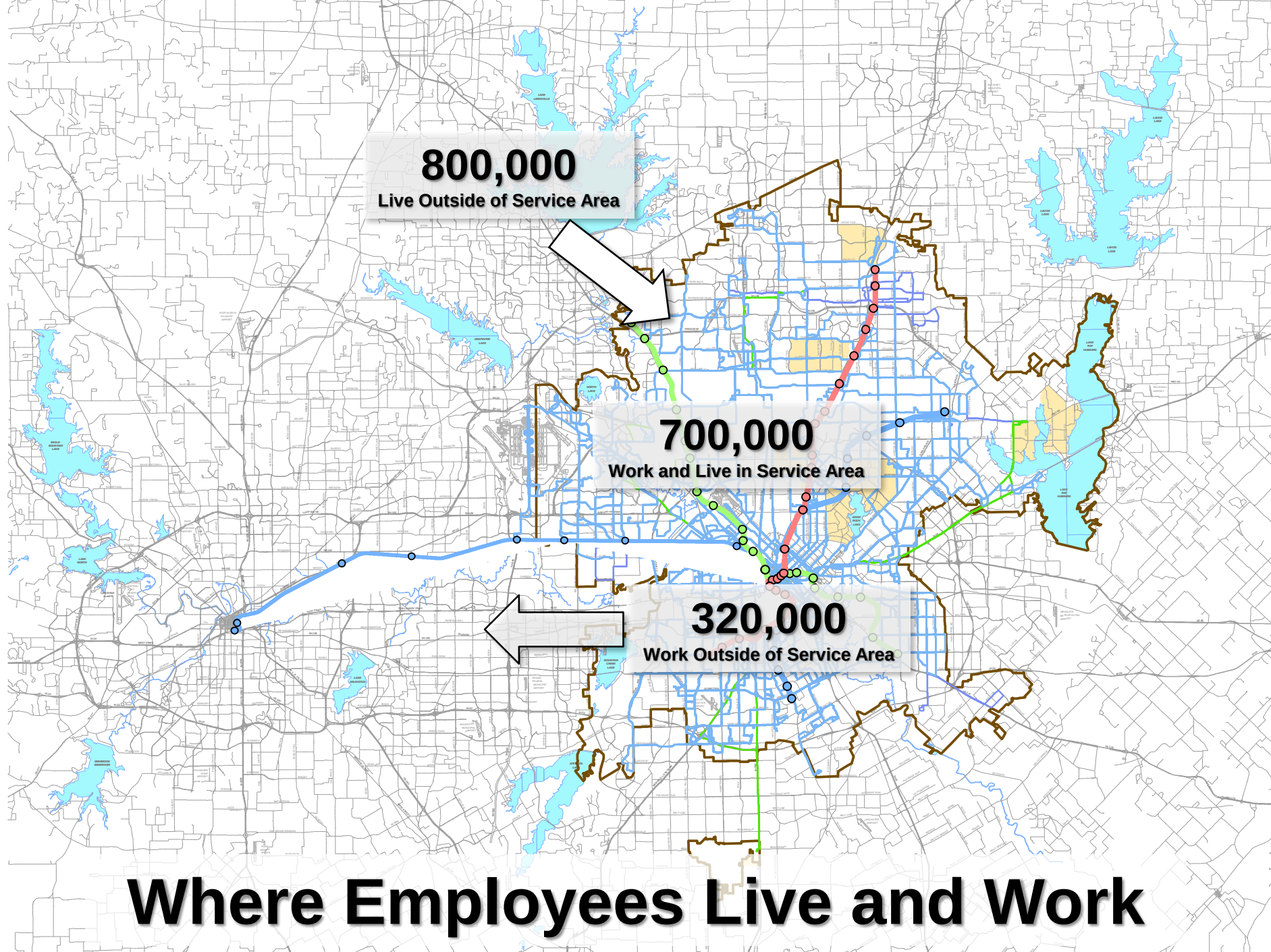
- All of the major transit systems in Texas are now reporting ridership losses
- Even Houston's gains from their service reimagining project have been offset by losses – especially from their express bus system
- When DART ridership trends are compared directly with most of the other Texas systems, there are remarkable parallels

2016 Texas Transit Ridership

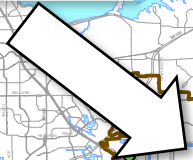
Monthly Annual Percentage Change in Average Weekday Ridership						
Month	Austin Bus	Austin Total	DART	Houston	San Antonio	Fort Worth
Jan-16	-0.9%	-0.4%	-2.2%	5.1%	-0.8%	-8.3%
Feb-16	-1.1%	-0.7%	-1.4%	7.0%	-3.2%	-5.5%
Mar-16	-1.9%	-1.0%	-8.0%	3.6%	-6.4%	-6.2%
Apr-16	-5.9%	-5.3%	-4.9%	3.1%	-6.5%	-7.3%
May-16	-2.5%	-1.9%	-6.6%	3.5%	-6.5%	-8.1%
Jun-16	-3.6%	-2.9%	-9.0%	1.6%	-4.0%	-7.8%
Jul-16	-5.2%	-4.4%	-11.0%	-0.9%	-13.7%	-2.2%
Aug-16	-3.2%	-2.6%	-8.2%	-1.5%	-9.9%	-1.7%
Sep-16	-5.3%	-4.3%	-5.8%	-0.8%	-9.0%	-4.9%
Oct-16	-4.5%	-4.4%	-3.8%	-7.4%	-5.7%	-1.2%
Nov-16	-4.9%	-4.4%	-4.9%	-5.1%	-4.9%	4.7%
Dec-16	-6.9%	-6.8%	-7.3%	-8.8%	-12.7%	-7.5%
Annual	-3.2%	-2.6%	-5.3%	0.4%	-6.0%	-4.1%

Possible Reasons

- Relocation of entry level and lower wages jobs for traditional transit dependent market to areas ineffectively served by transit
- Modified work schedules
 - Work from home
 - Three and Four day work weeks
- Lower fuel prices and lower priced car payments (longer loan terms)
- Residential development around rail stations and in downtown have attracted higher income persons who walk to work, take bikes, use TNC's
- Transit has not changed to attract broader market with high frequency routes and mode choices other than bus and rail
- Competition of TNC's for infrequent trips and off peak trips
- Growth of jobs outside area served by public transportation



800,000
Live Outside of Service Area



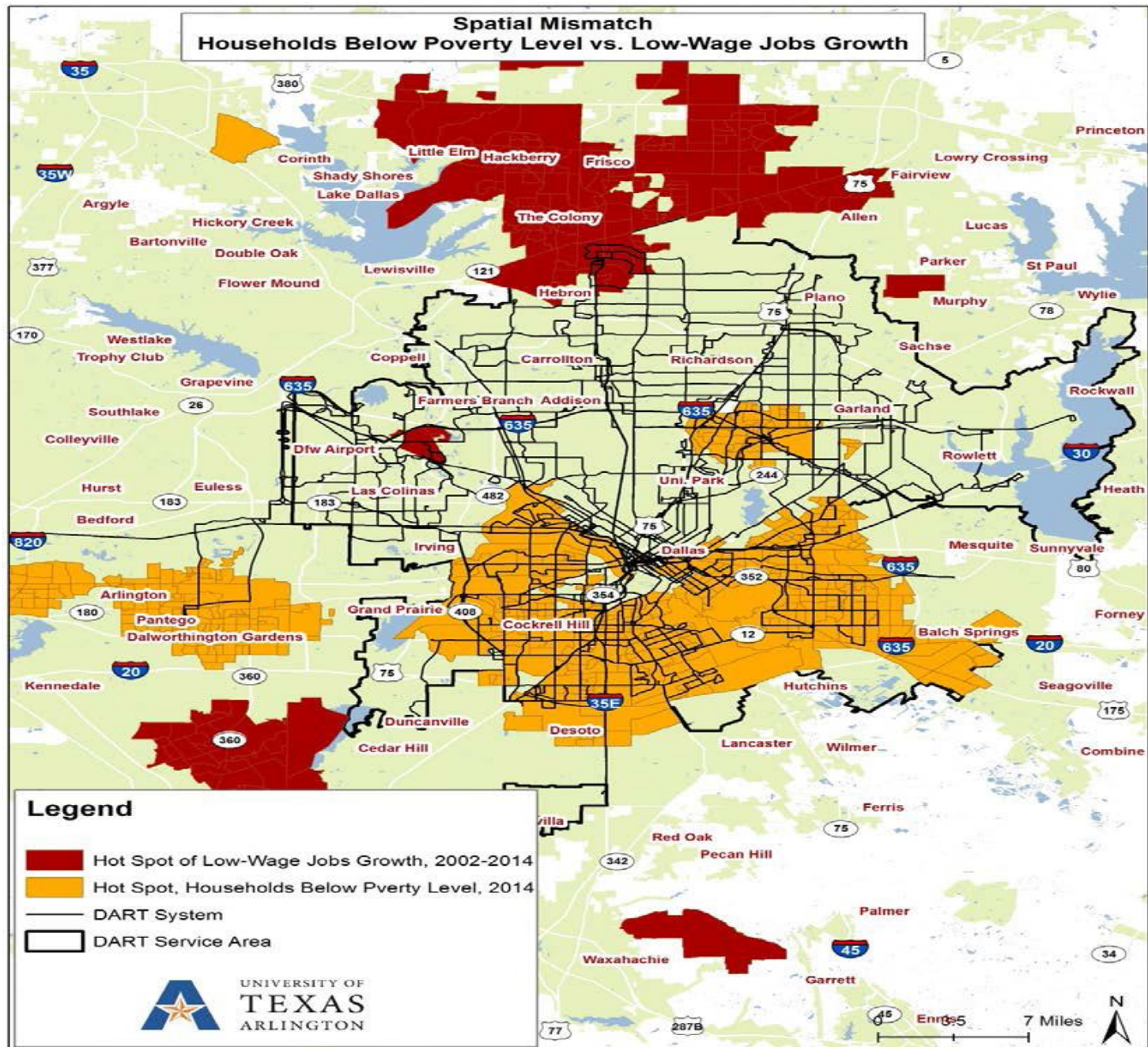
700,000
Work and Live in Service Area



320,000
Work Outside of Service Area

Where Employees Live and Work

Spatial Mismatch Households Below Poverty Level vs. Low-Wage Jobs Growth



Are New Mobility Options the Answer?

- Microtransit (Chariot, Via)
- Transportation Network Companies (Uber/Lyft)
- Privately funded corporate shuttles
- Taxi providers
- Carshare
- Bike Share
- Dynamic Carpool and Vanpool

FTA Sandbox Mobility on Demand Grant

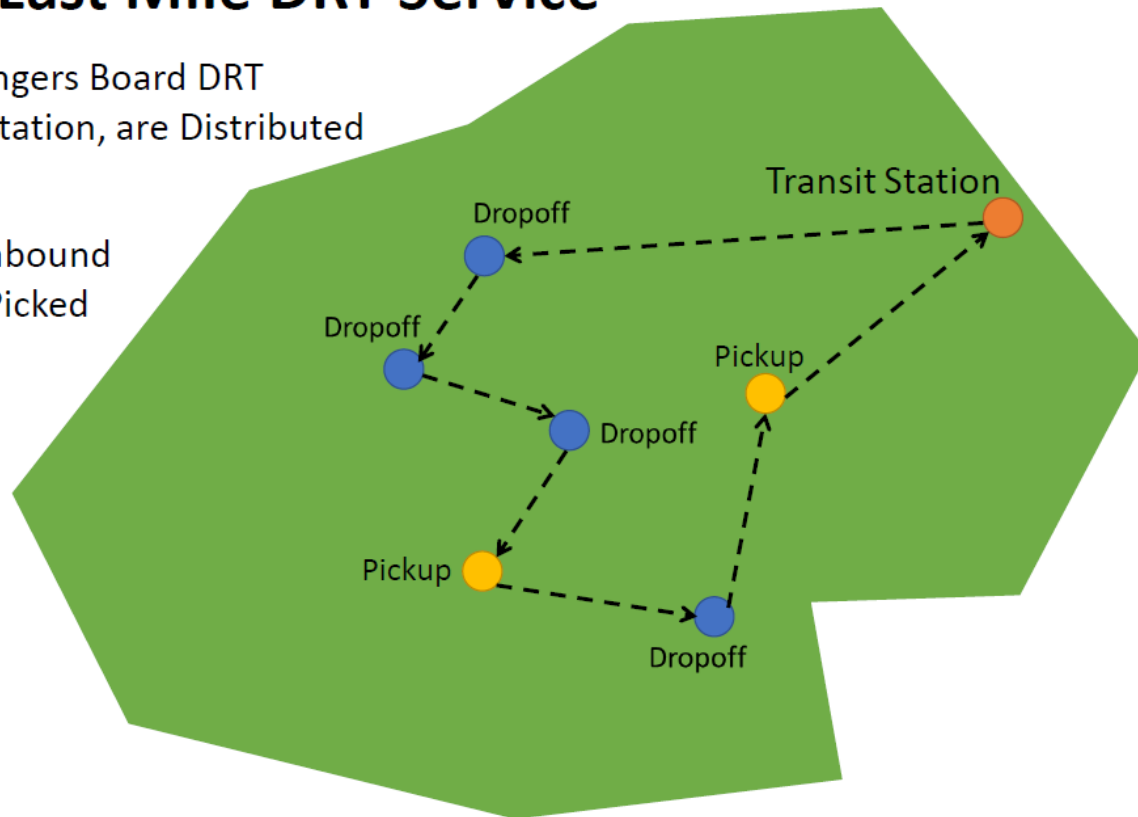
- Go Pass 2.0++ --- multi provider trip planning and payment system
- Account based payments for all MOD providers from transit account
- One year pilot test
 - Microtransit (Go Link)
 - Dynamic Carpooling (Go Pool)
 - TNC Providers (Lyft is the likely TNC)
 - Taxi Providers (Yellow Cab)
 - Bike Share (Lyme Bike)

Typical 1st DART On Call Mile/Last Mile Service

First Mile/Last Mile DRT Service

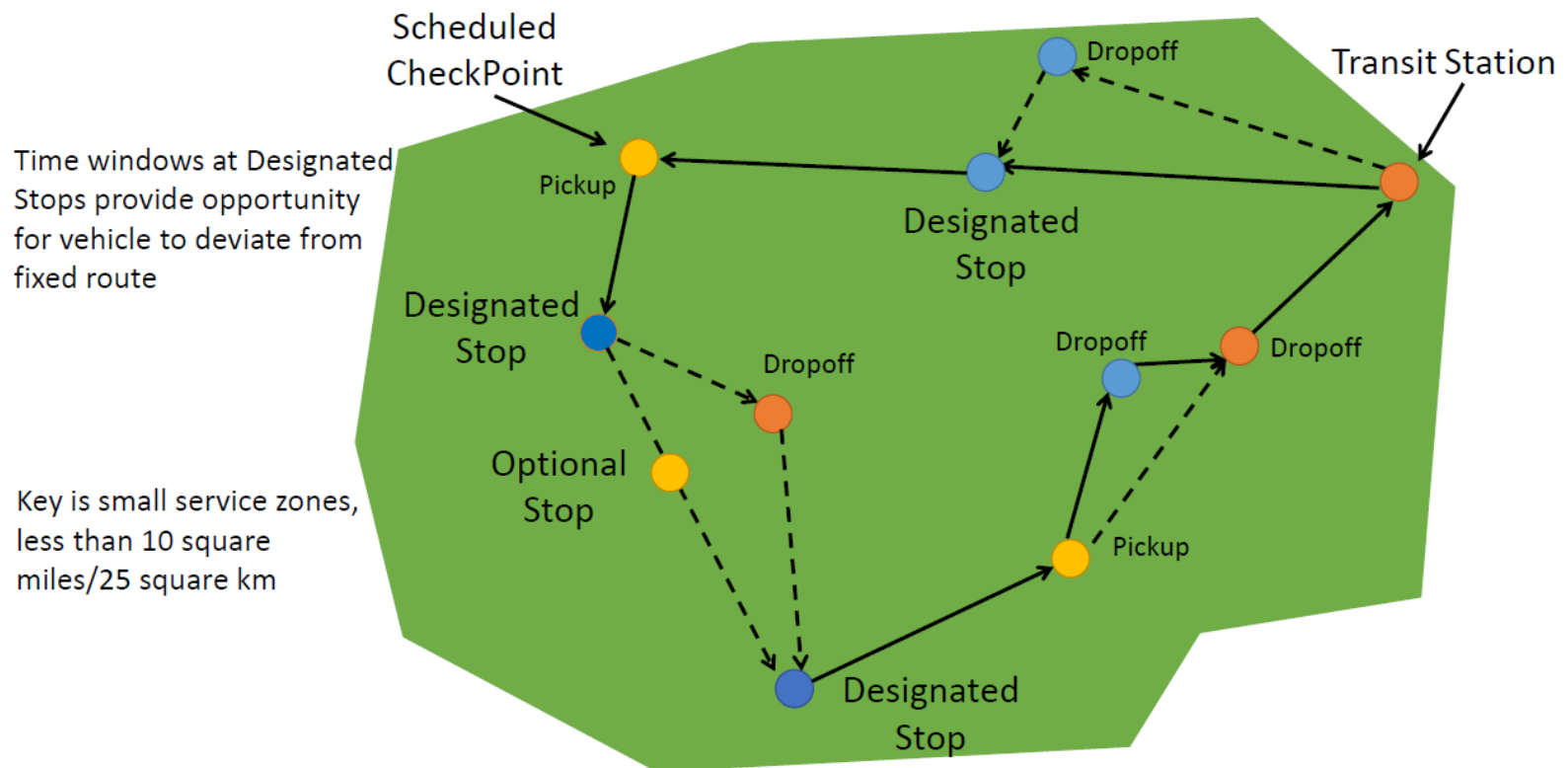
4 Outbound Passengers Board DRT
Vehicle at Transit Station, are Distributed

2 Passengers Are Inbound
to Transit Station, Picked
Up During Tour



Pop-Up Bus Route Style Microtransit

Flex-Route Service—Limited Deviations



Go Link Today (Microtransit) Body on Chassis Vehicles



Future Vehicle Types

Smaller Vehicles

Ultimately Electric and Autonomous

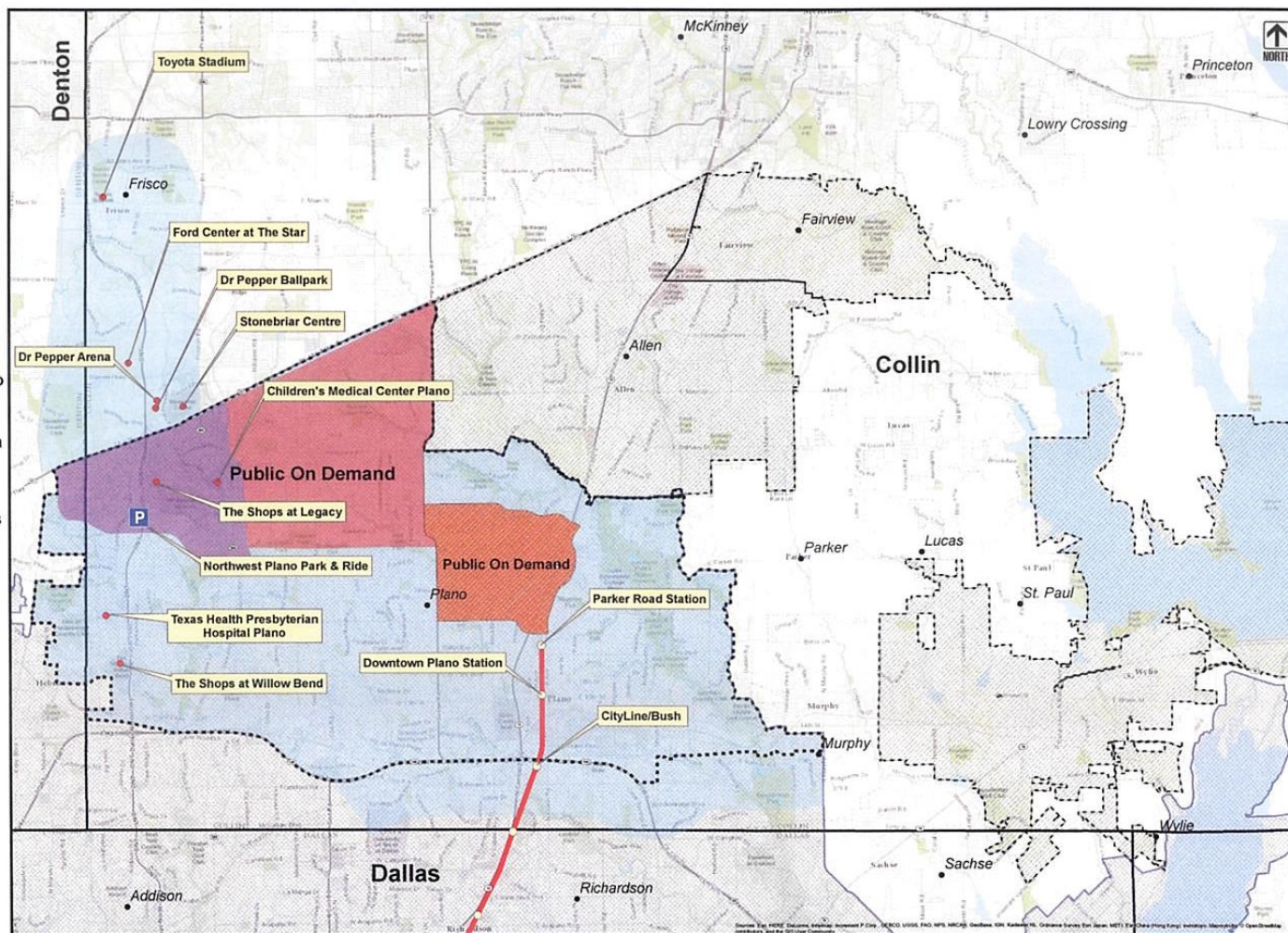


Mobility On Demand - Pilot Area Location

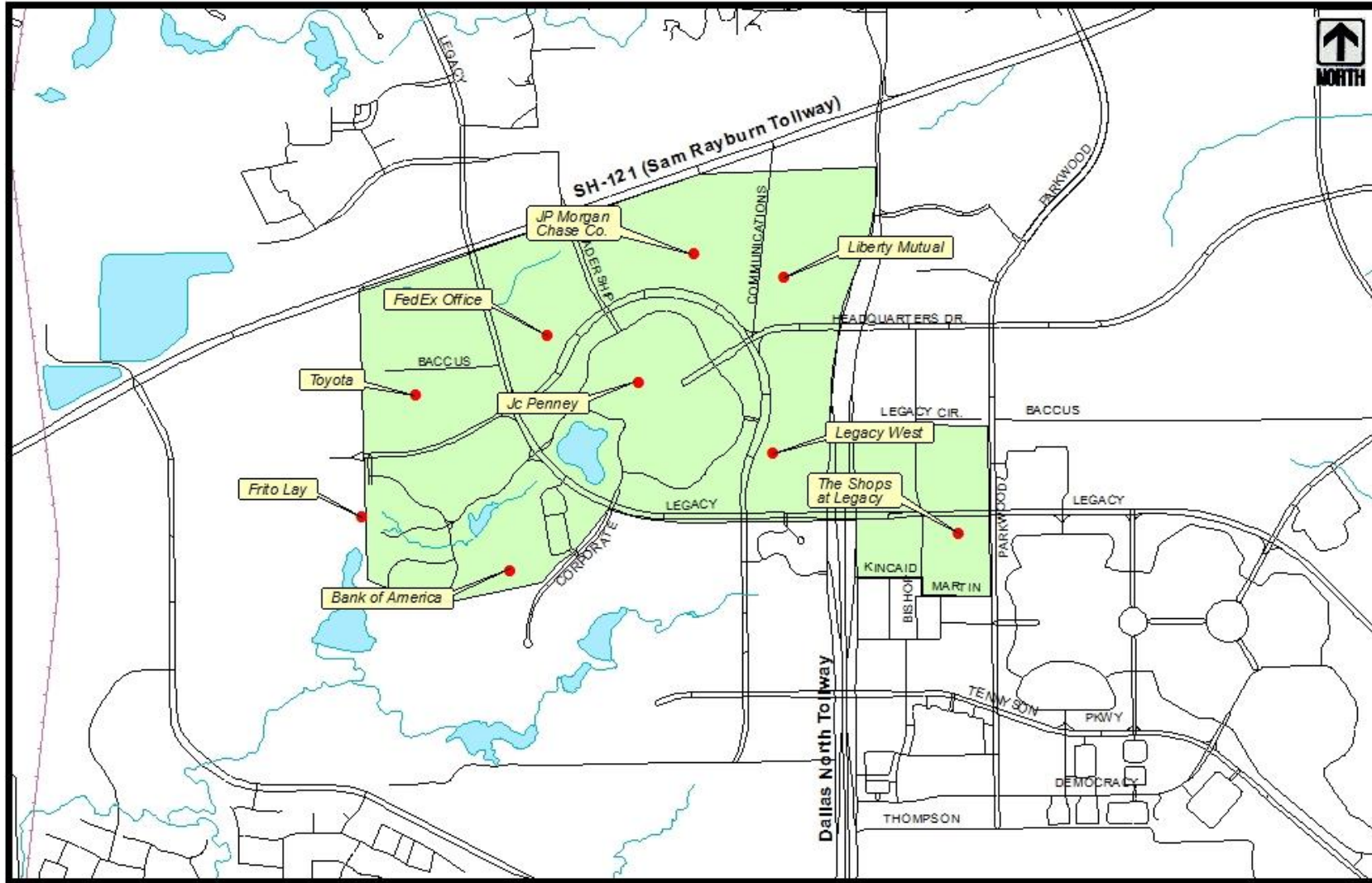


LEGEND:

-  **Plano Legacy Area
Public On Demand**
*Chase
Liberty Mutual
Toyota
FedEx*
-  **Far North Plano
Public On Demand**
-  **North Central Plano
Public On Demand**
-  **MOD Sandbox Area**
*(Approx: 96 Sq Mi)
(Est Pop: 290,000)*
-  **Collin County Rides**
-  **DART Service Area**
-  **County**
-  **City of Plano**
-  **Rail Station**
-  **LRT Red Line**

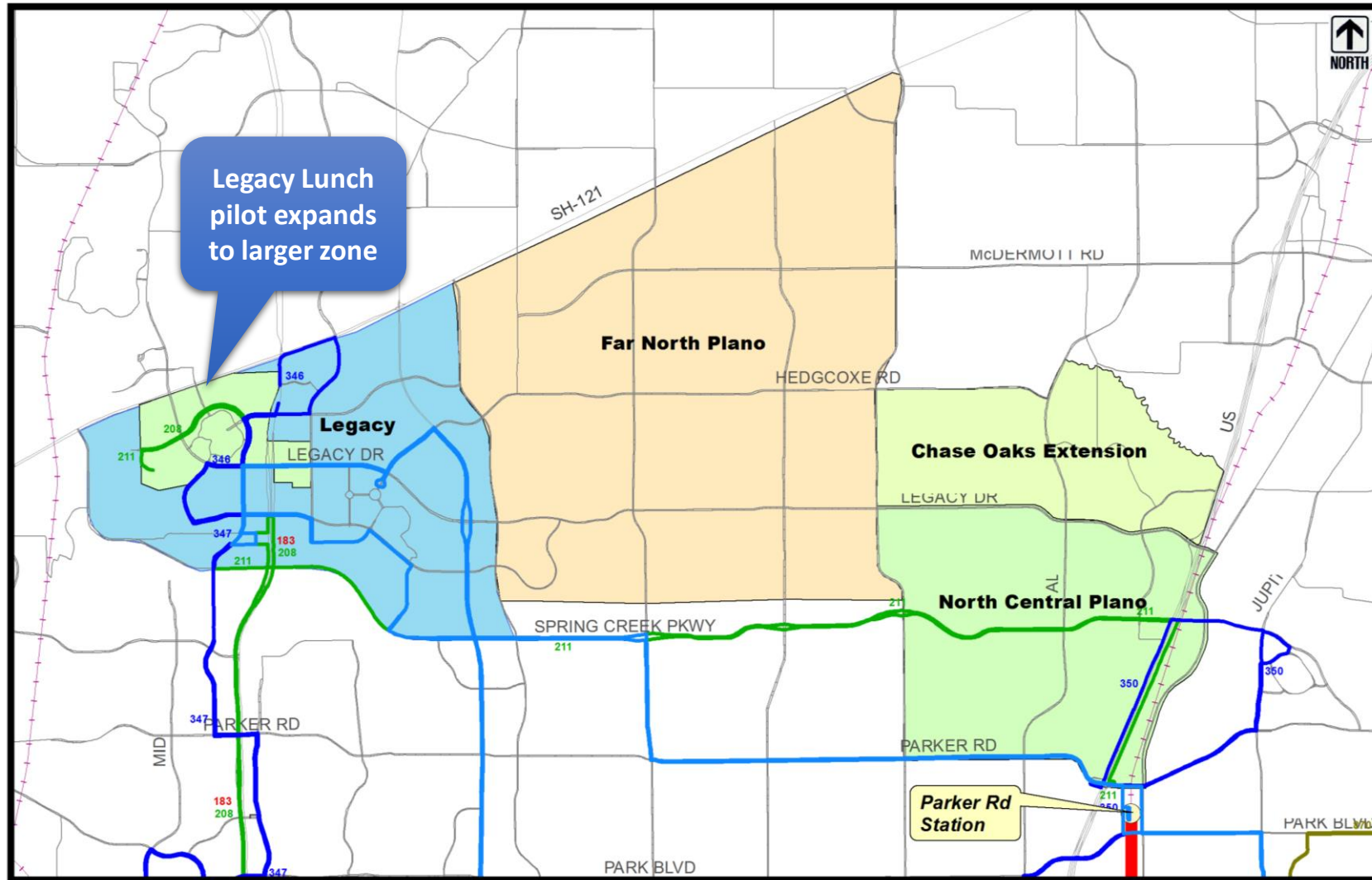


Legacy Lunch Service (Starting in October 2017)

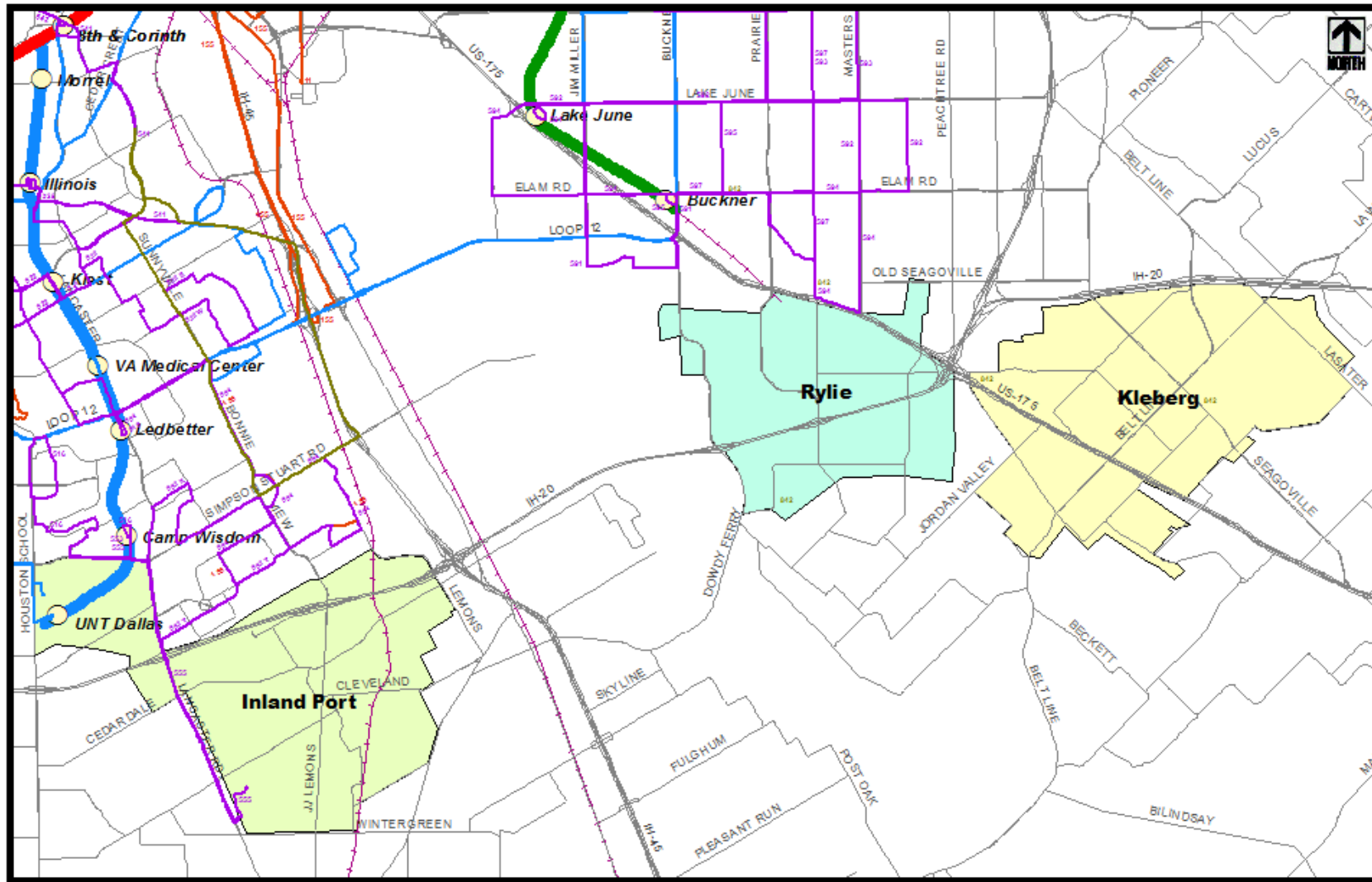


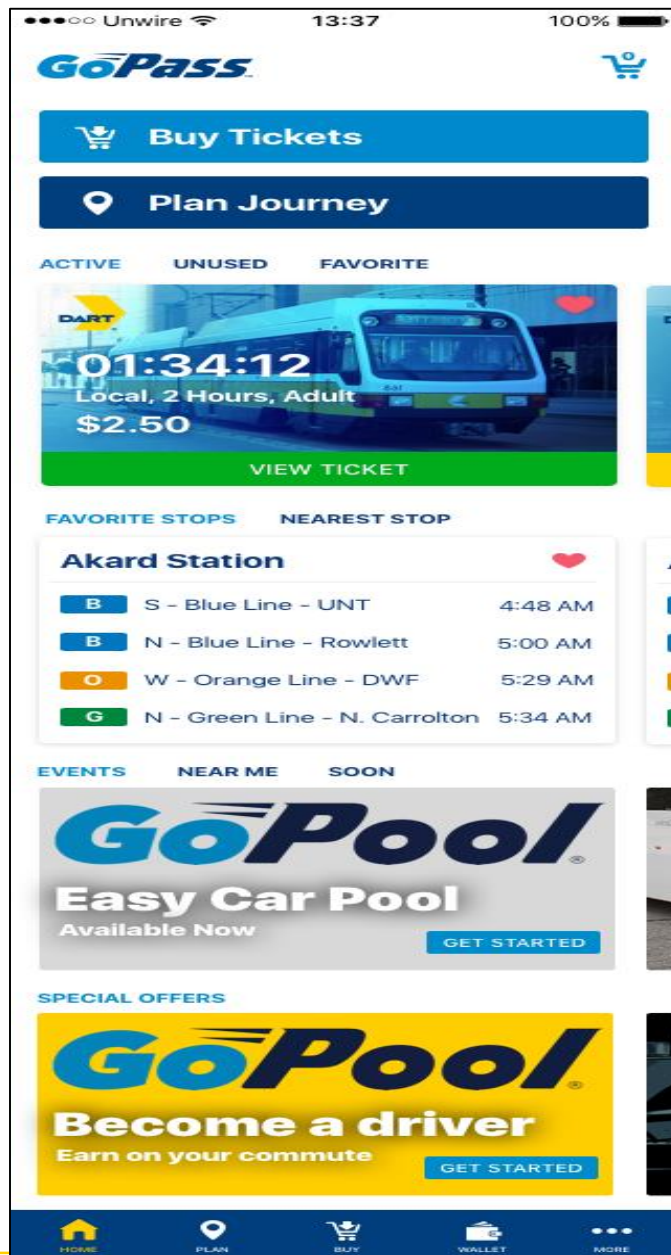
Daily Boardings Range from 5 to 10 passengers per hour

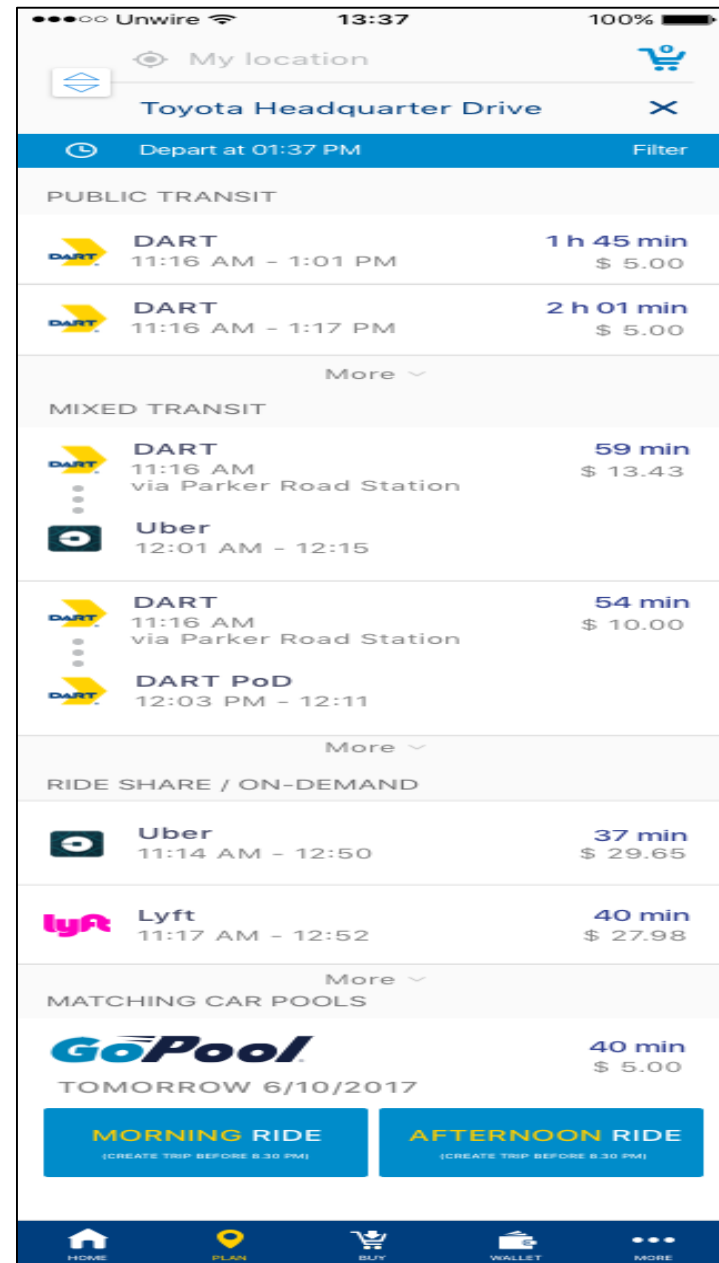
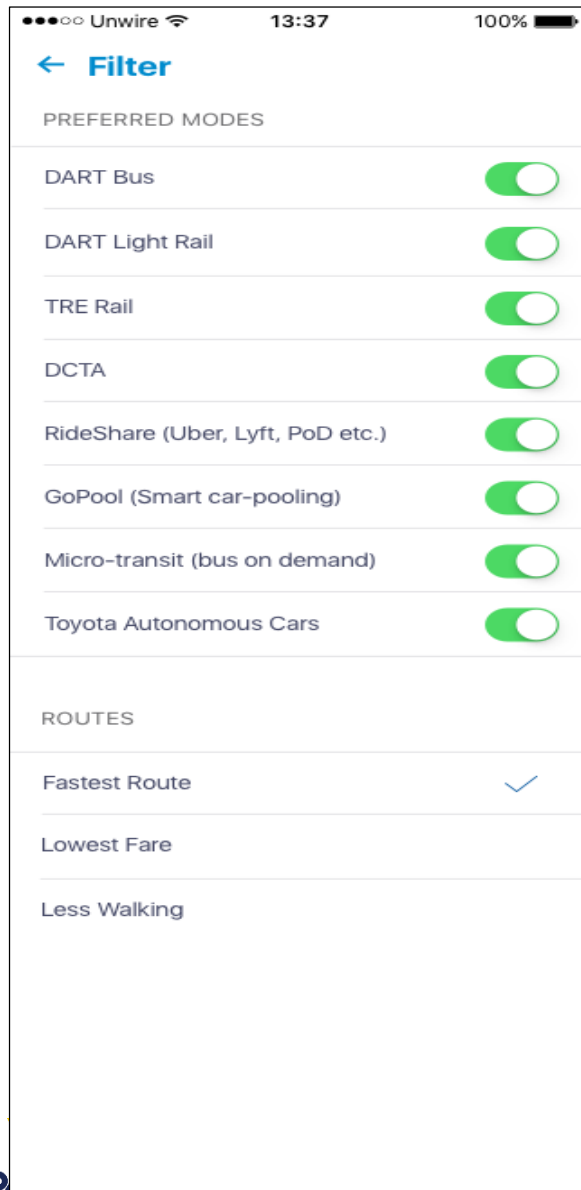
Plano Mobility on Demand Zones



Southern Sector Mobility on Demand Zones







My location

Where you want to go?



●●○○ Unwire

13:37

100% 

← Order your ride

 DART

11:16 AM

via Parker Road Station

54 min

\$ 10.00

 DART PoD

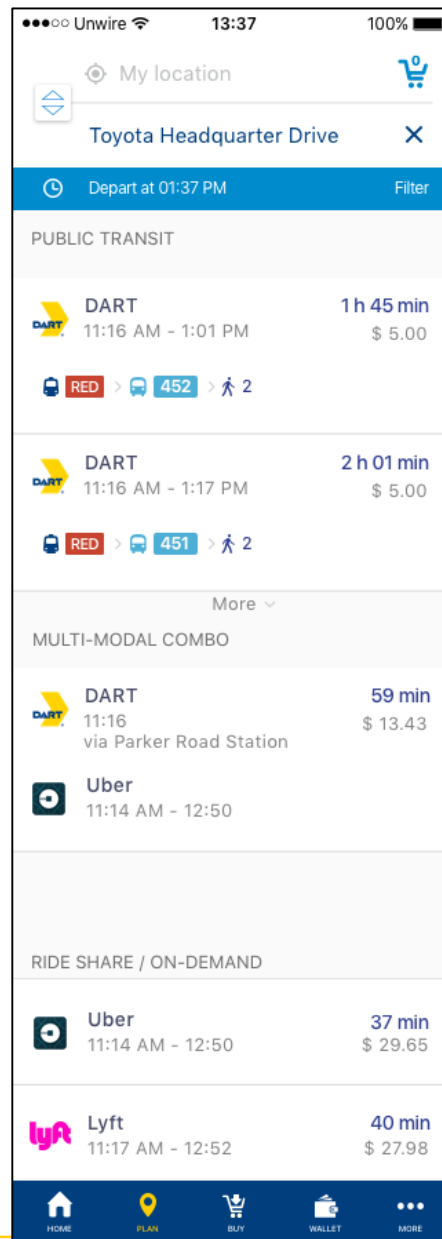
12:03 PM - 12:11

You are approaching Parker Road Station, and it is time to order your Public on Demand pick-up.

Order now, so your driver can be at the station to take you to Toyota at Headquarter Drive.

A confirmation will follow with estimated pick-up time.

REQUEST RIDE



Unwire 13:37 100%

My location

Toyota

- Toyota Headquarter Drive, Plano, TX
- Reunion Park, Dallas, TX
- Toyota of Plano, Plano, TX
- Work
- Home

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M

123 ☺ 🎤 space Submit

Unwire 13:37 100%

My location

Toyota Headquarter Drive

Depart at 01:37 PM Filter

1:37 PM - 1:59 PM 22 min

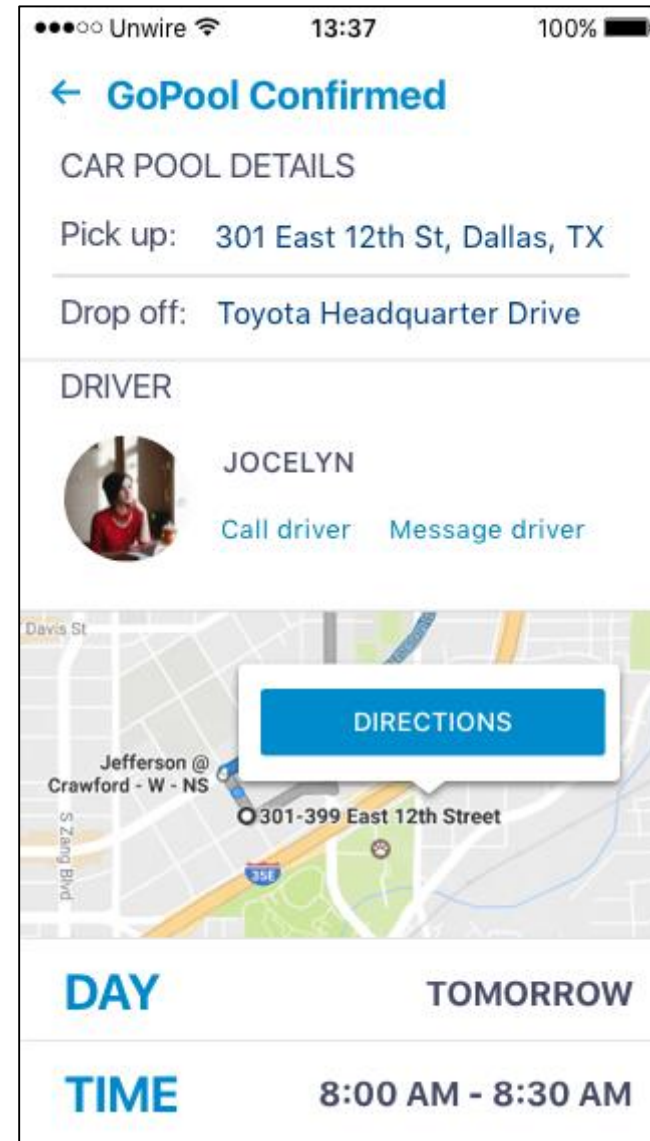
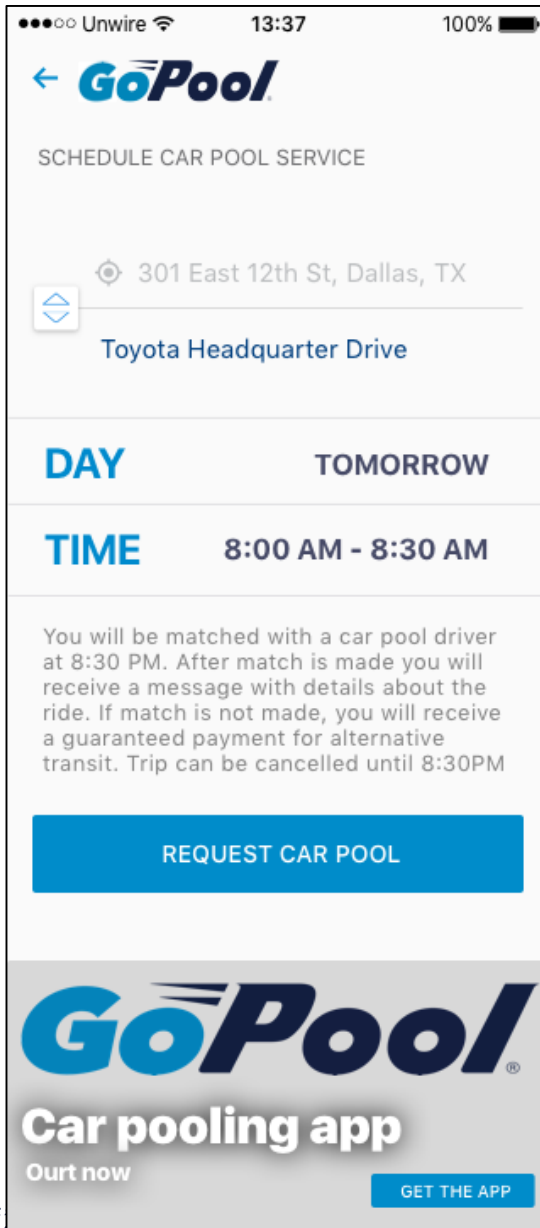
1:37 PM - 1:55 PM 18 min

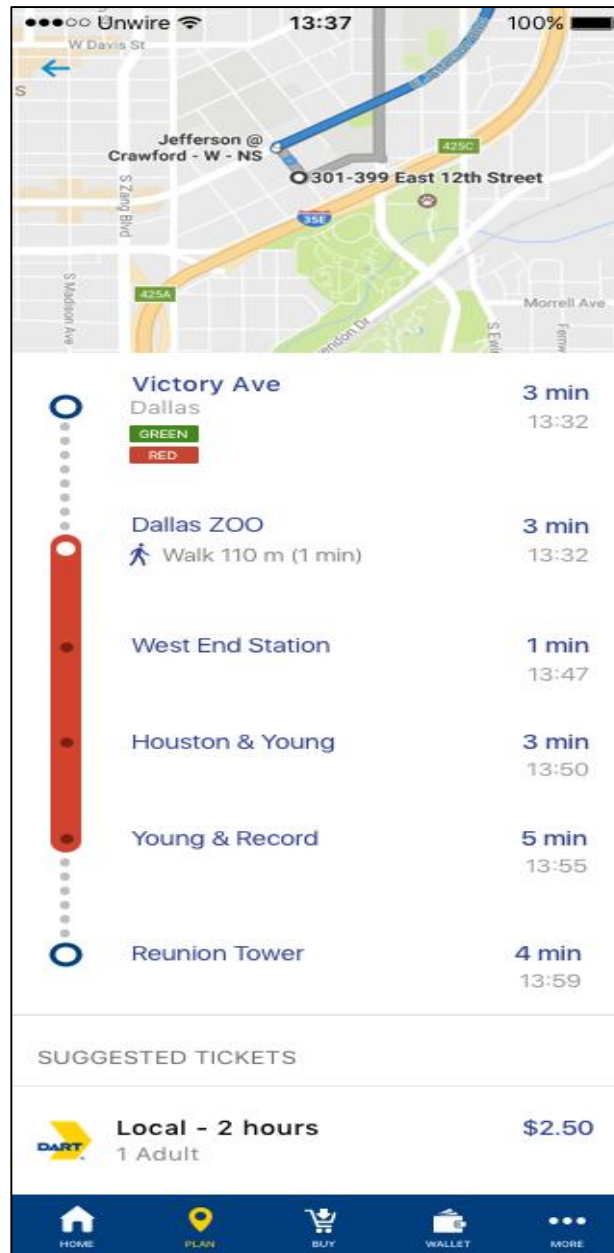
2 > BLUE > 5

OTHER OPTIONS

Now	Depart	Arrive	Last
Wed Jun 25	9	24	
Thu Jun 26	10	25	
Fri Jun 27	11	26	AM
Today	12	27	PM
Sun Jun 29	1	28	
Mon Jun 30	2	29	
Tue Jul 1	3	30	

CANCEL FINISHED







Questions?



DART.org