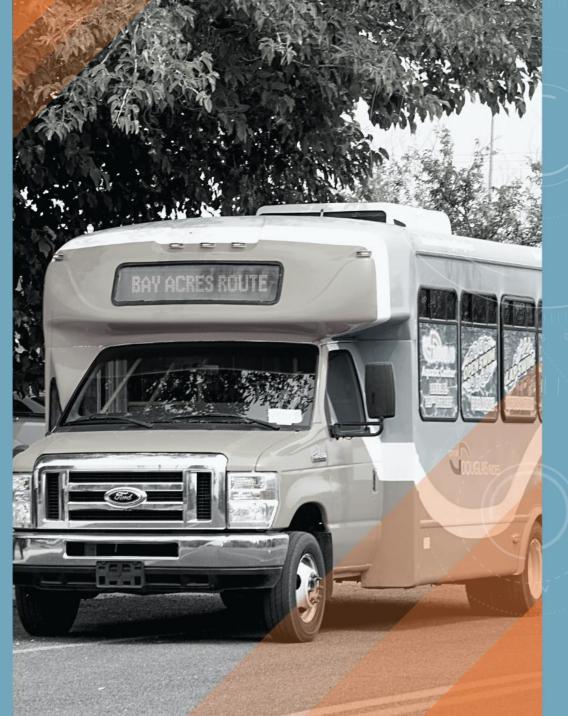


Population 16,534
Median Age 32.7
Border City
Distance to Phoenix: 230 miles
Distance to Tucson: 120 miles
City Began Transit in 2012





### RIDERSHIP & ROUTES

- Ridership
  - October 2018 September 2019
    - 58,321 year
    - Average 4,860 month
    - Average 200 rides a day
- Routes
  - 2 Fixed routes
  - Dial-A-Ride
  - Cochise College
  - Elfrida
  - ACT
  - Cochise Connection
  - Bisbee Bus





## NEED

Douglas Rides started with 2 fixed routes and dial a ride

Added: 4 routes, nutrition runs and began operating the Bisbee Bus in 2014

Increased 1,000 rides per month

Complex reporting with so many routes, demographics and increased ridership

Significant staff time to complete reports



## **PLAN**

- Seek Vendors providing ridership tracking
- Solution not completely meeting our needs and too expensive
- Seek a custom solution meeting needs and budget
- Budget \$20,000
- Contacted various app developers





# DEVELOPING A CUSTOM APPLICATION

- Developed a scope of work
  - Product to electronically record ridership statistics and mileage using a mobile device
  - Track: Date, Driver, Route, Bus, Stops, Demographic, mileage, mapping
  - System operates without a data connection and syncs when WiFi is available
  - Flexibility on ability to add different routes, buses, drivers, stops and demographics
  - Add deboarding
  - Custom reports that can be exported to Excel
  - Easy to use!



## TESTING

Began development in August 2018

Sync & Reporting Issues

Final testing was completed in February 2020 (paperless!)

30 Builds



### **ENHANCEMENTS**

Utilizing the same app, we added different but related enhancements to different transit related tasks



QR Codes on Elderly/Disabled Bus Passes

Real Time GPS Tracking



## ELECTRONIC PRE/POST TRIP FORMS

GOAL: Achieve paperless processing of bus pre and post inspections using the driver tablets and enable electronic reporting capabilities.

- 12 paper forms were being generated daily
  - More than 3,000 forms per year
  - 15,000 forms for 5 years retained per retention records policy
- Forms were not providing insight on conditions of buses
- Needed to implement controls to ensure all items are being inspected
- Allows pictures to be uploaded



#### THIS REPORT IS FOR BOTH PRE-TRIP & POST-TRIP INSPECTIONS

GENERAL	PRE- TRIP	POST- TRIP	FRONT/REAR	PRE- TRIP	POST- TRIP	DRIVER AREA	PRE- TRIP	POST TRIP
Engine: Performance	~	~	Alternating Flashers	~	~	Horn	~	~
Engine: Excessive Smoke	~	~	Turn Signals	~	~	Fuel Gauge	~	~
Leaks	~	~	Windshield	~	~	Tire Depth	~	~
Steering System/Front Axle	~	~	Emergency Door	~	~	Oil Pressure	~	~
Service Brake	~	~	Crossover Mirror	V	~	Water Temperature	~	~
Parking Brake	~	~	Tail Pipe	~	~	Amp meter	~	~
Drive Line/Rear Axle	~	~	Headlights	V	~	Windshield Wiper	~	~
Springs	~	~	Stop Lights	~	~	Windshield Washer	~	~
Exhaust System	~	~	License Plates	~	~	Defroster Fans	~	~
Charging System	~	4	INTERIOR			Heater Fans	~	~
Transmission	~	~	Fire Extinguisher	~	~	Light Monitor System	~	~
Annual Inspection	~	~	Roof Hatch(s)	~	~	Mirror Adjustments	~	~
RIGHT/LEFT SIDE			Reflectors	~	~	Ignition/Master Switch	~	~
Fender Convex Mirror	~	~	First Aid Kit	~	~	Brake Test	~	~
Rear View Mirror	~	~	Bio Hazard Kit	~	~	Speedometr/Tachometer	~	~
Front Tires/Wheels	~	~	Seat Frames/Cushions	~	~	Wheelchair Lift/Restraints	~	~
Rear Tires/Wheels	~	~	Emergency Door, Latch/Buzzer	~	~	Vehicle, Registration/Insurance	4	~
Windows	~	~	Service Door/Steps/Handles	~	~	Driver's Seat Belt	~	~
Battery Compartment	~	~	Cleanliness	~	~	RAMP/LIFT		
Clearance Lights/Maker	~	~	Condition of Floor	~	~	Counter Reading	282	282
Fuel Cap	~	~				Functioning	~	~
Entrance Door	~	~						

DRIVER'S COMMENTS

PRE-TRIP DRIVER CERTIFICATION: By signing below I attest that I have reviewed the previous inspections report and performed a pre-trip maintenance insperior each item listed above. I have noted those found to have defects.

NO DEFECTS DEFECTS AS NOTE:

OST-TRIP DRIVER CERTIFICATION: By signing below I attest that I have reviewed the previous inspections report and performed a post-trip maintenan spection for each item listed above. I have noted those found to have defects.

NO DEFECTS DEFECTS AS NO

EFECTS HAVE BEEN CORRECTED. ABOVE DEFECTS NOT NECESSARY FOR SAFE OPERATION OF VEHIC

DATE 11.08.2021

2021 SIGNATU





# QR CODE BUS PASSES

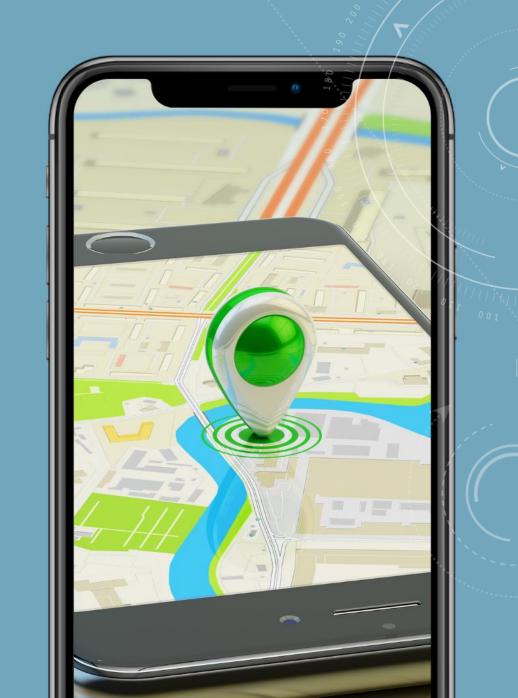
GOAL: Implement a touchless bus pass verification system through the use of the driver tablets that would automate pass information to the ridership tracking application

- Currently process 1,830 bus ride passes for elderly/disabled
- Implementing a touchless solution during the pandemic
- Better enforcement of bus passes before boarding
- Pilot program for other bus pass development

# REAL TIME GPS BUS TRACKING

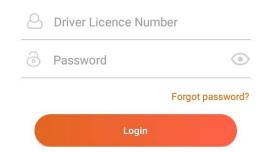
GOAL: Reduce dispatch calls to drivers and track bus routes by implementing GPS real time bus tracking utilizing the driver tablet

- City communicates via cell phone with bus drivers. GPS will enable fewer calls regarding driver whereabouts
- Archiving routes shows areas needed for coverage or potential overlaps in service
- Provides monitoring for drivers to be on designated route

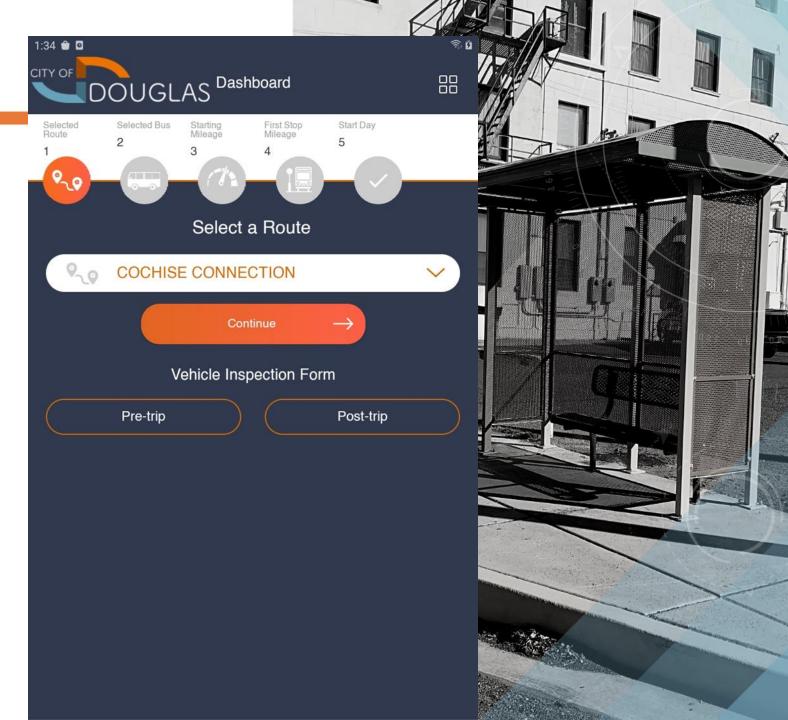


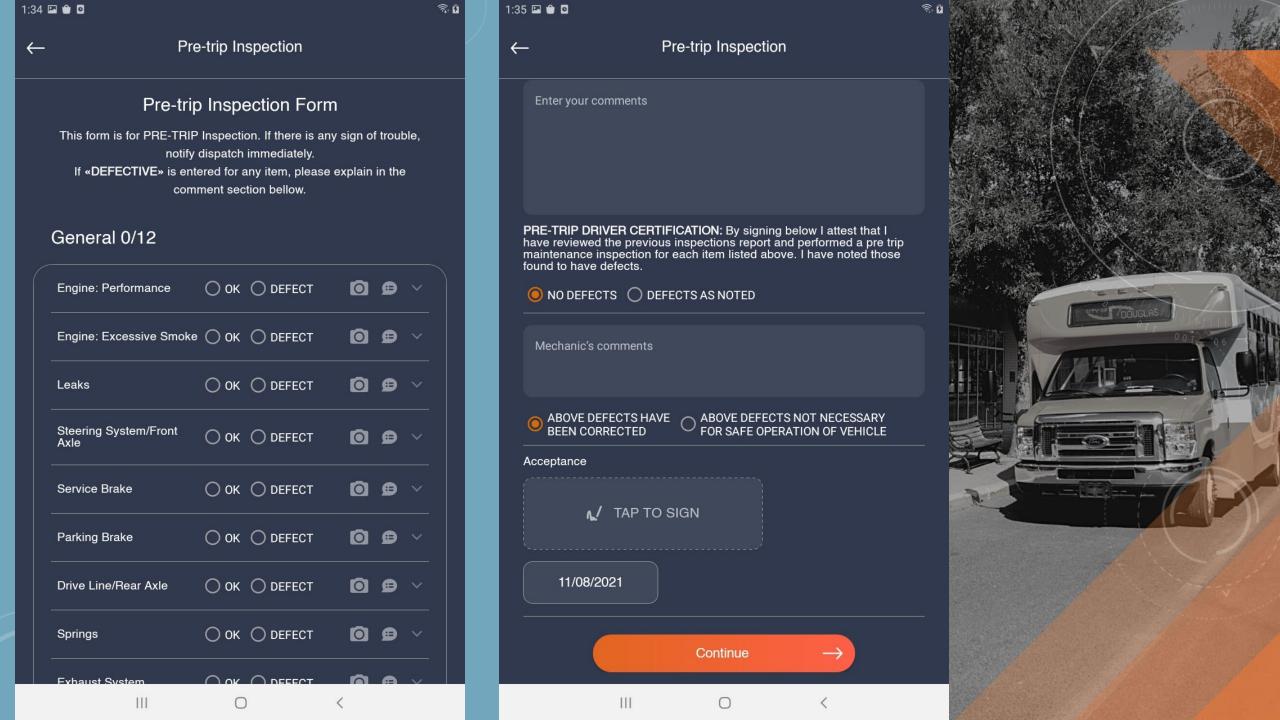


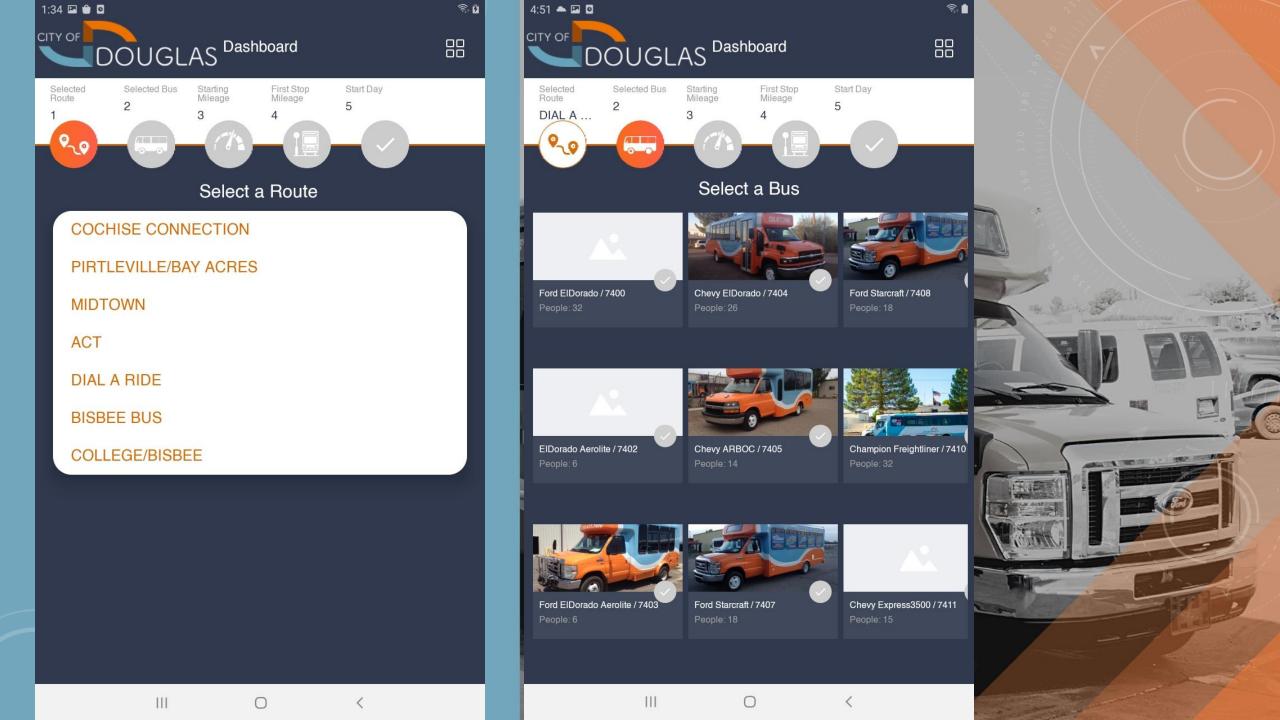
#### **Enter Information**

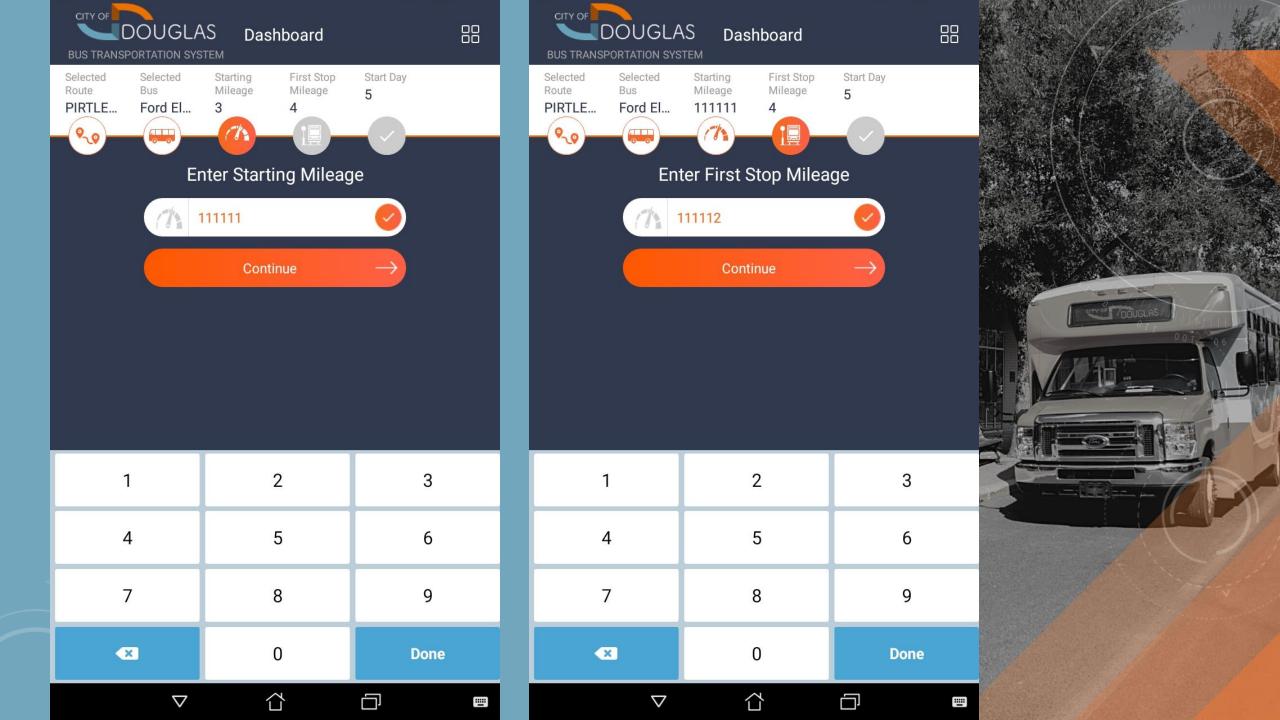


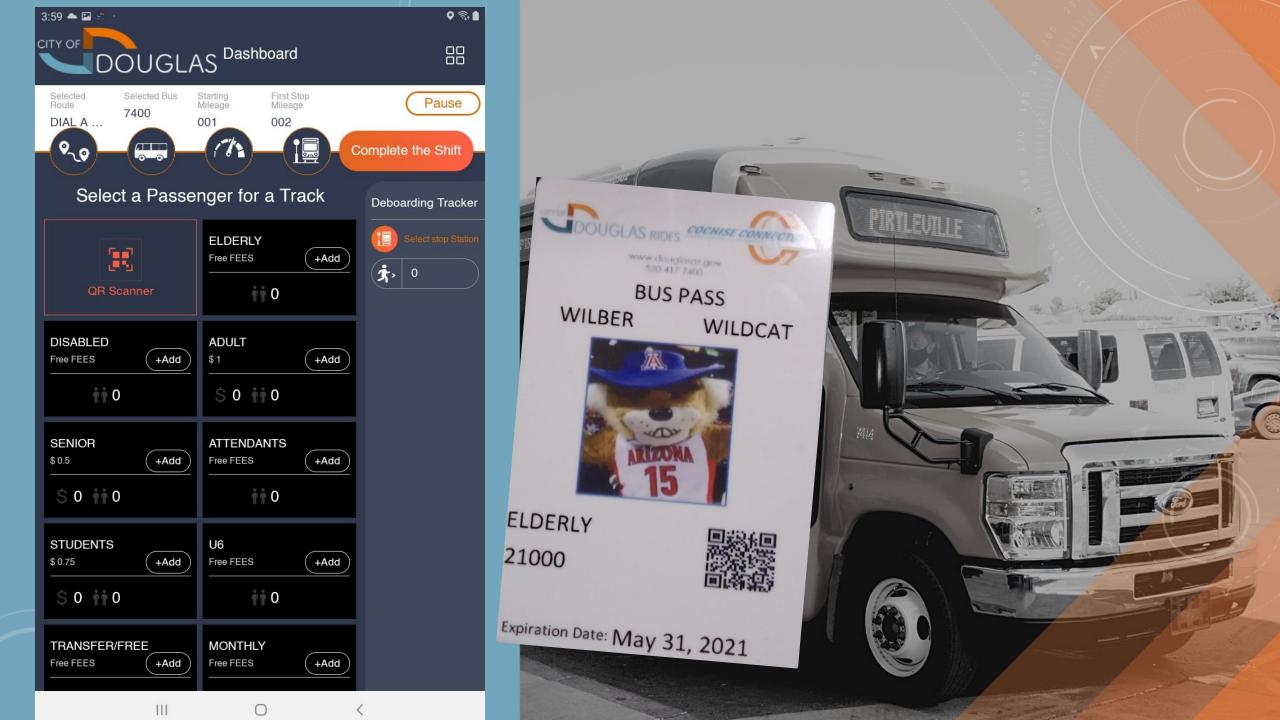
 $\Box$ 

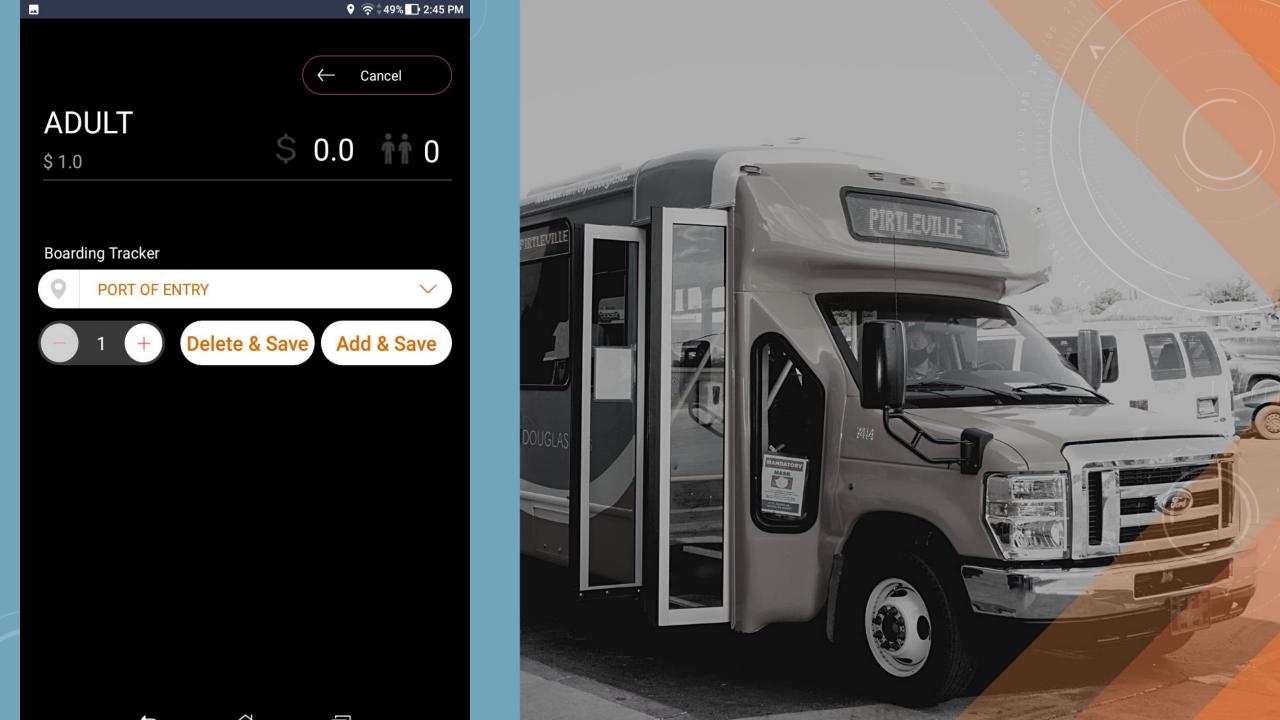


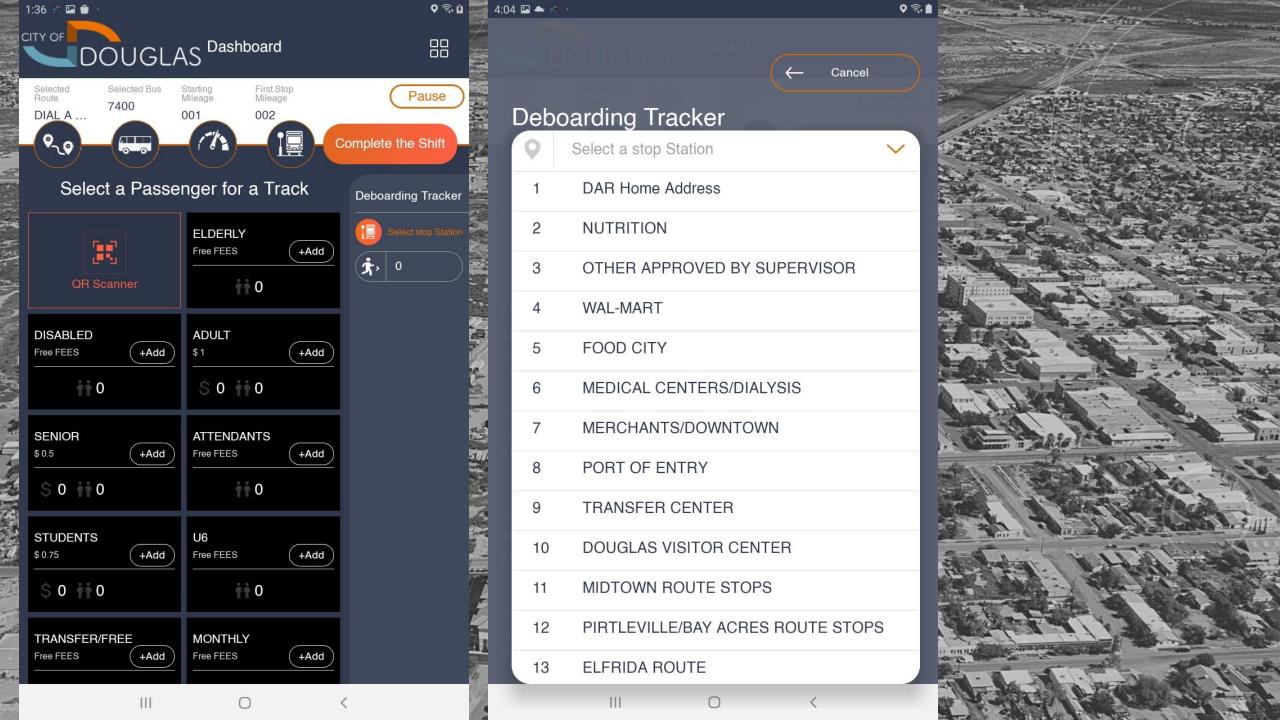


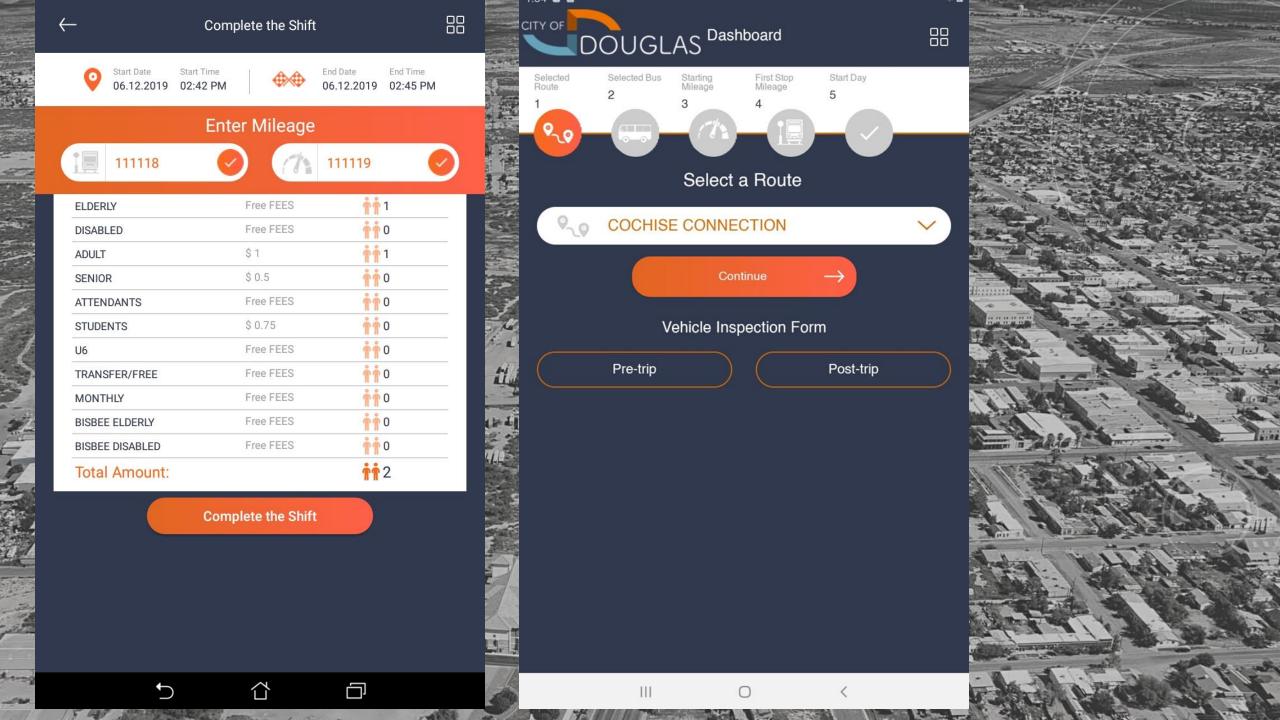


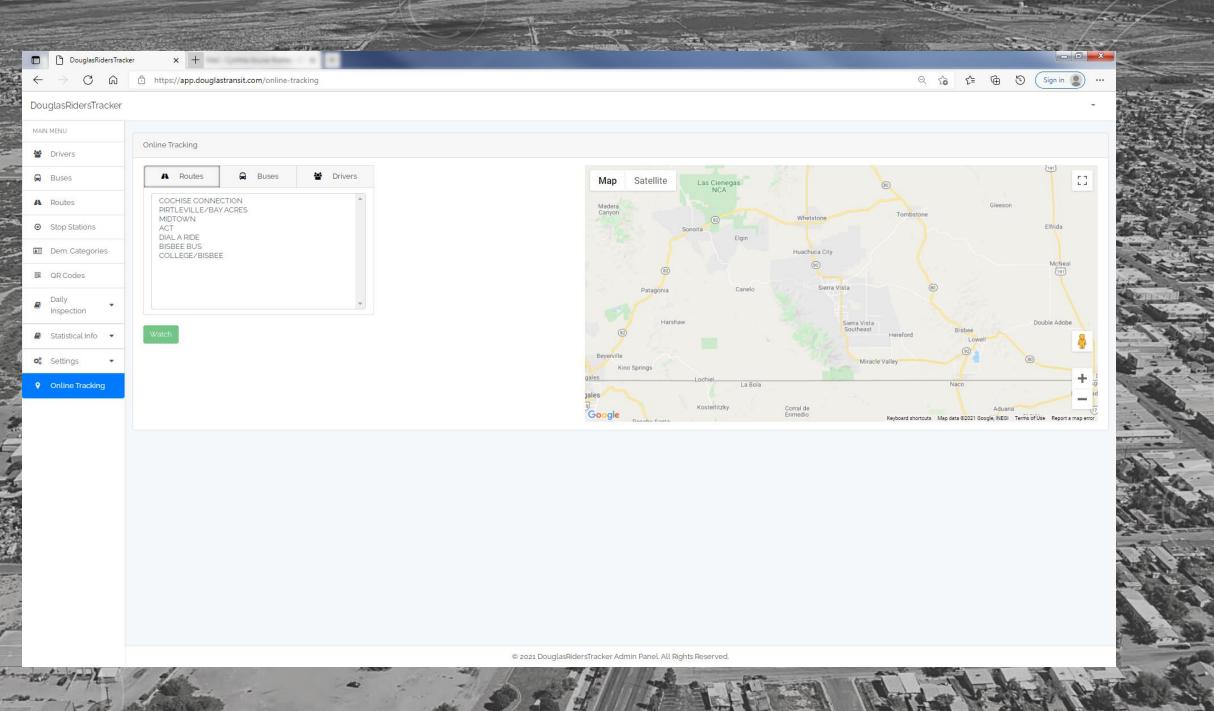


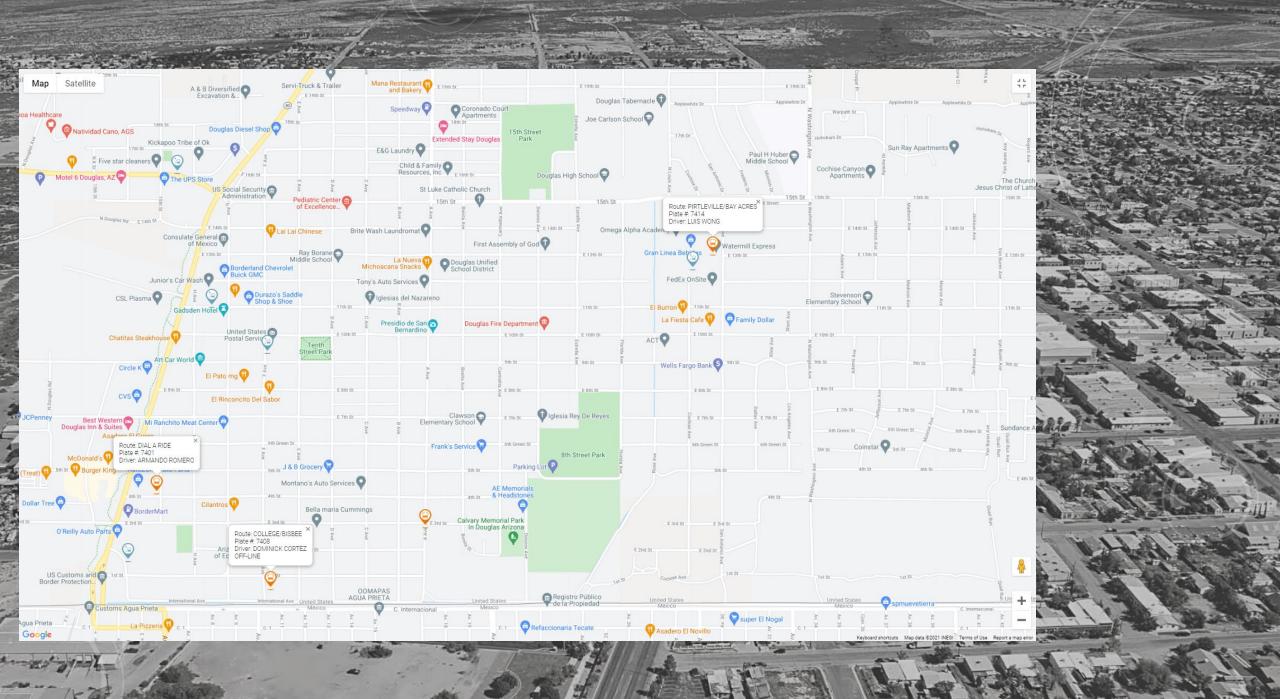


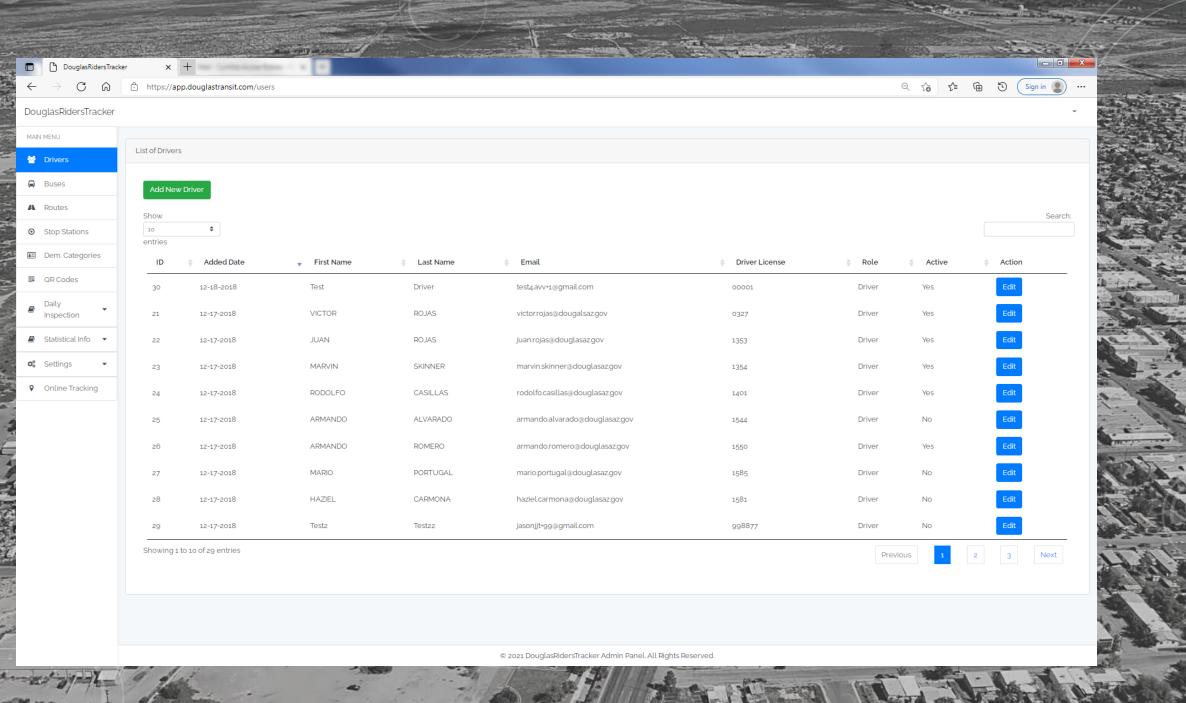


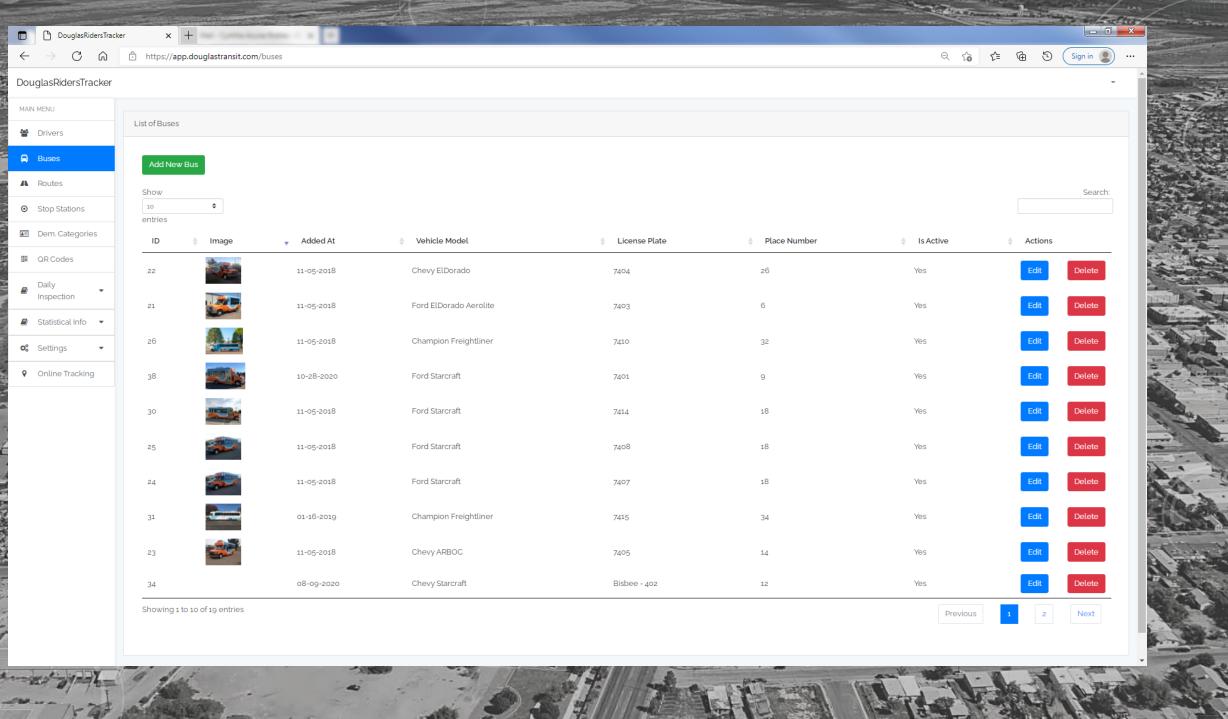


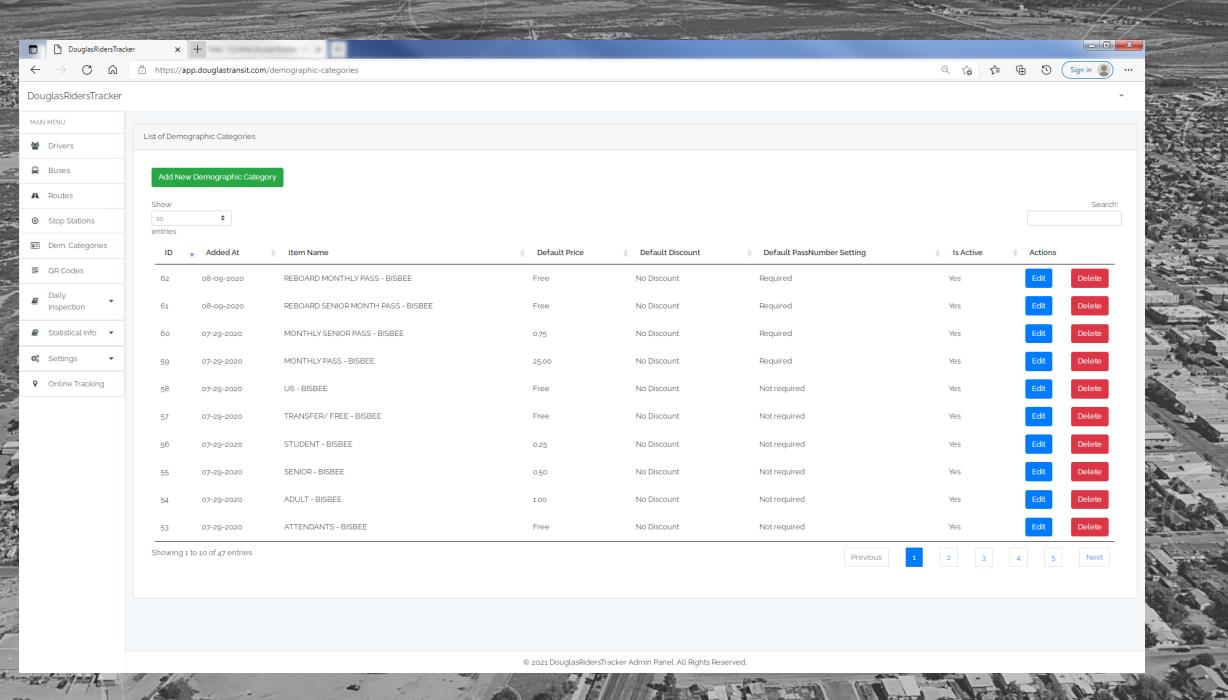


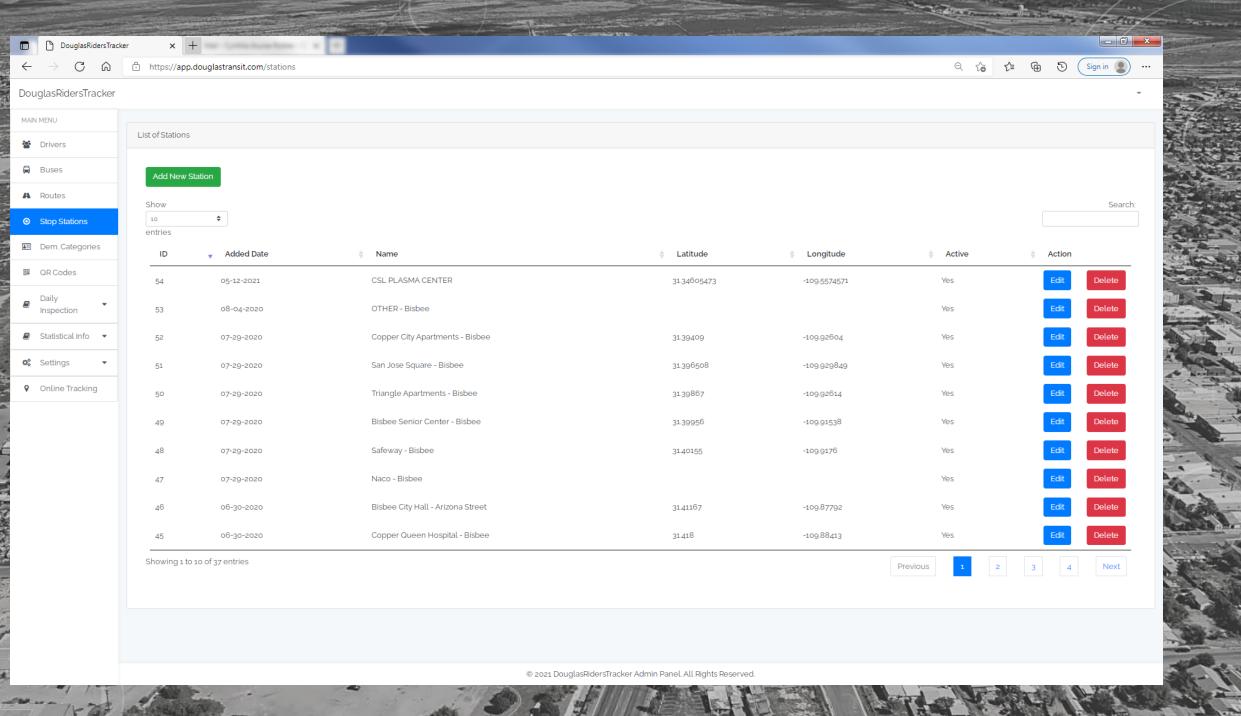


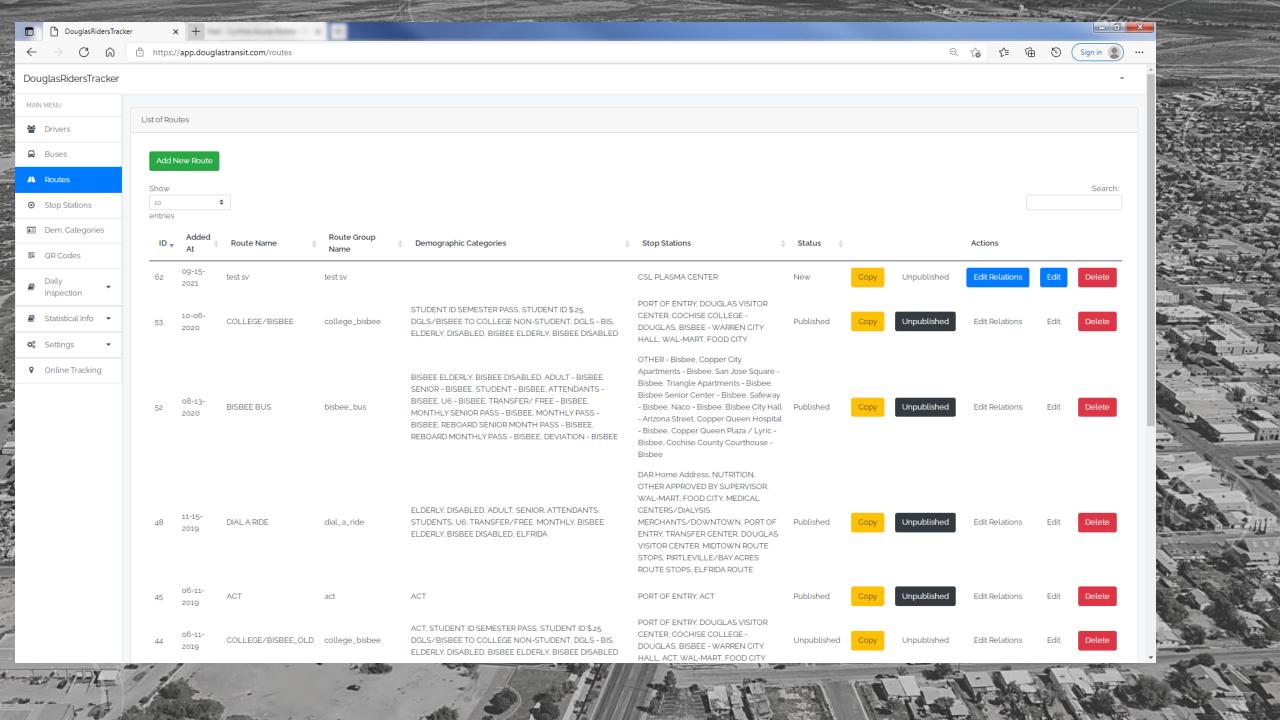


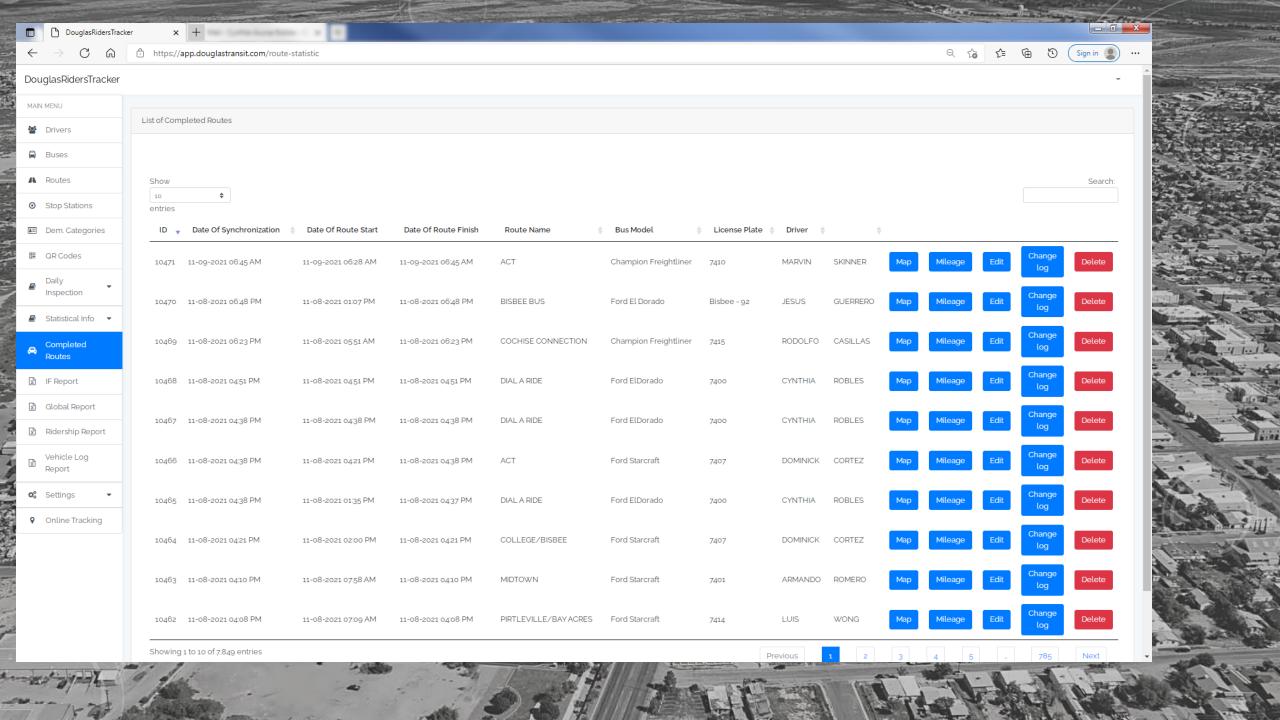












### **TRAINING**

1.5 hr. instruction and the rest was field training on their own

7 months of training (paper and tablet)

### **Concerns:**

Driver acceptance

Resolution: Drivers learned the system quickly and

became part of their daily routine

### **Doubt to Completion**

**Resolution:** After more than 1 year in testing we finished in

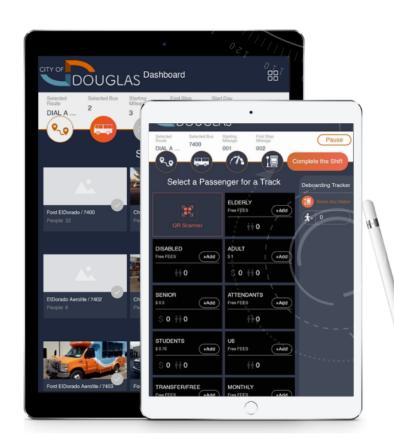
February 2020





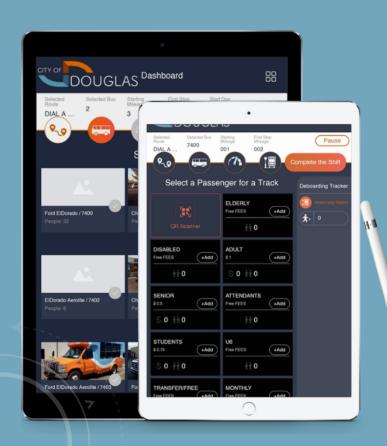
## TABLET POLICY

- The tablet that the City provides to Users will be primarily for City business related purposes
- Employees are responsible for the general care of the tablet and associated equipment issued by the City
- Employees are expected to protect mobile devices used for work-related purposes from loss, damage, or theft. It is the responsibility of the User to ensure the City-provided tablet is kept in a reasonable and safe condition
- Employees are expected to refrain from using their tablets while driving. Regardless of the circumstances, including slow or stopped traffic, employees are required to pull off to the side of the road and safely stop the vehicle before entering ridership
- Employees are responsible for notifying supervisor of any issues related to the operation of the tablet





# COST



\$61,380 for software and enhancements

\$1,500 for 9 tablets

\$4,500 for computer and hardware

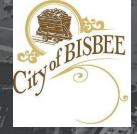


## PARTNERSHIPS OBTAINED

- Implemented the Ridership Tracking App in Bisbee
- Partnered with Net-Craft.com to market and sell Ridership Apps to other agencies
- ▶ Sold and implemented Ridership Tracking App to Vista Transit in Sierra Vista
- Sold Ridership Tracking App to Willcox
- Working with SEAGO for Regional Grant
- Legacy Foundation of Southeastern Arizona and ADOT Funding Source





















# Questions

DOUGLAS RIDES / COCHISE CONNECTION 520-417-7400

http://www.douglasaz.gov/283/Public-Transportation

https://douglastransit.com/

Luis Pedroza, Management Services Director luis.pedroza@douglasaz.gov

Cynthia Acuna-Robles, Transit Coordinator cynthia.acuna-robles@douglasaz.gov

Jason Tayles, President Net-Craft.com <a href="mailto:jasonjit@gmail.com">jasonjit@gmail.com</a>

