Data Sharing in Transit/Shared Mobility Partnerships

*Welcome!*

We will begin shortly…

U.S. Department of Transportation

Federal Transit Administration

FTA Research Mission & Priorities

To advance public transportation innovation by leading research, development, demonstration, deployment, evaluation, and implementation practices and technologies that, enhance effectiveness, increase efficiency, expand quality, promote safety, and ultimately improve the transit rider's experience.

Consistent focus for almost ten years....and based on industry feedback

Operations

Mobility Innovation

Travelers' Experience

Infrastructure

Safety

Economic Growth
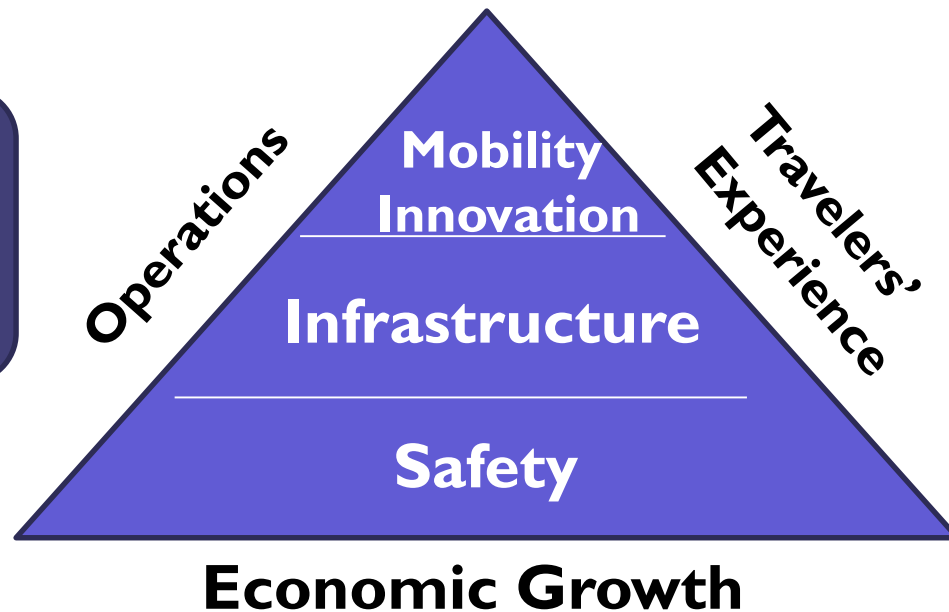
Defining Mobility Data

- "Mobility data" = information about travel that is collected using digitally enabled mobility devices or services.

- May include information about trips (i.e., origins, destinations, trip length, trip route, start and end times, etc)

- May include information about the vehicles used (vehicle location, avg speed, direction, sudden breaking, emissions etc).

- Data typically recorded as series of lat/lon coordinates and collected at regular intervals by smart phones, on-board computers, or app-based navigation system.

- For the purposes of this webinar, we won't be including in our definition of mobility data:
  - Data collected through traveler surveys
  - Data traditionally reported to the National Transit Database (i.e. unlinked passenger trips, vehicle revenue miles)

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Data Sharing: Competing Priorities

- Mobility occurs in the public right of way. Cities and other public entities need travel information in order to improve operations and plan for the future.

- Funding agencies have an interest in mobility data to better understand results of their investment.

- Individual travelers expect that their privacy will be protected.

- Mobility providers have financial interests in protecting proprietary information.
  - Concerns that data shared with public agencies is subject to FOIA

- How to balance these competing priorities?

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Mobility Data Sharing Challenges

Additional challenges include:

- Cost of collecting and storing

- Lack of common standards

- High levels of expertise needed for analysis and visualization

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Mobility Data Sharing Strategies

- Encourage standardized data specifications. Examples include:
  - The General Transit Feed Specification
  - The General Bikeshare Feed Specification
  - The Mobility Data Specification
- Develop data sharing legal agreements.
- Take advantage of big data repositories managed by third parties.
- Leverage existing transportation planning tools and platforms.

FTA Supported Resources: Secure Data Commons

FTA-Supported Resources: Data Management Planning

- Supports U.S. DOT Public Data Access Policy

- FTA Requested preliminary data management plans of applicants for Innovative Mobility Integration funds.

- Preliminary plans help agencies begin to think about data collection, access, privacy, storage.

- Plans are updated over time.

- https://ntl.bts.gov/public-access

FTA-Supported Resources TCRP reports and related research

Emma Huang

LA METRO

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- Contract with Via for on-demand, shared, first and last mile rides to select transit stations
- Established 6 goals and related KPIs for measuring success
- Underlying policy goal to share both risk and rewards with a TNC and eventually move towards performance-based model
- All requires data!

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Sharing Data

- Approach: Identified data variables around goals & KPIs
- Protections: NDAs, contract, scope of work, PII, trade secret designations
- Tools: Dashboard, warehouse, table of variables and definitions

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Considerations

- Ownership versus license
- Public records requests
- Granting access to data warehouse

Metro®

Abby Chazanow

SOUND TRANSIT

Project Overview

- First and last mile shared ride service **connecting with transit**

- **12-month** pilot

- Project impetus: **FTA Mobility on Demand Sandbox Grant**

- Project partners: **King County Metro, Sound Transit, City of Seattle, Via**

VIA TO TRANSIT – SE Seattle Service Areas

Monday–Saturday: 5 a.m. – 1 a.m. | Sunday: 6 a.m. – midnight

S DEARBORN ST

23RD AVE S

17TH AVE S

S COLLEGE ST

LAKESIDE AVE S

21ST AVE S

Mount Baker
7 8 9 14
48 106

LAKE WASHINGTON BLVD S

24TH PL S

SOUTH DAKOTA ST

15TH AVE S

Columbia City
50 106

S ORCAS ST

Seattle

Othello
36 50 106

S CLOVERDALE ST

Rainier Beach
9 106 107

RAINIER AVE S

S RUSTIC RD

CORNELL AVE S

S 115TH ST

RENTON AVE S

S 129TH ST   S 128TH ST

Tukwila

LEGEND

- Mount Baker Station service area
- Columbia City Station service area
- Othello Station service area
- Rainier Beach Station service area
- Link light rail
- Link light rail station
- 7 Bus connections

VIA TO TRANSIT – Tukwila Service Area

Monday–Friday: 6–9 a.m., 3:30–6:30 p.m.

S 116TH WAY

S 115TH ST

Seattle

Tukwila

24TH AVE S

TUKWILA INTERNATIONAL BLVD

INTERURBAN AVE S

Tukwila International Blvd.
A F 124 128

SOUTHCENTER BLVD

SeaTac

S 160TH ST

LEGEND

- Tukwila International Blvd. Station service area
- A 124 Bus connections
- Link light rail
- Link light rail station
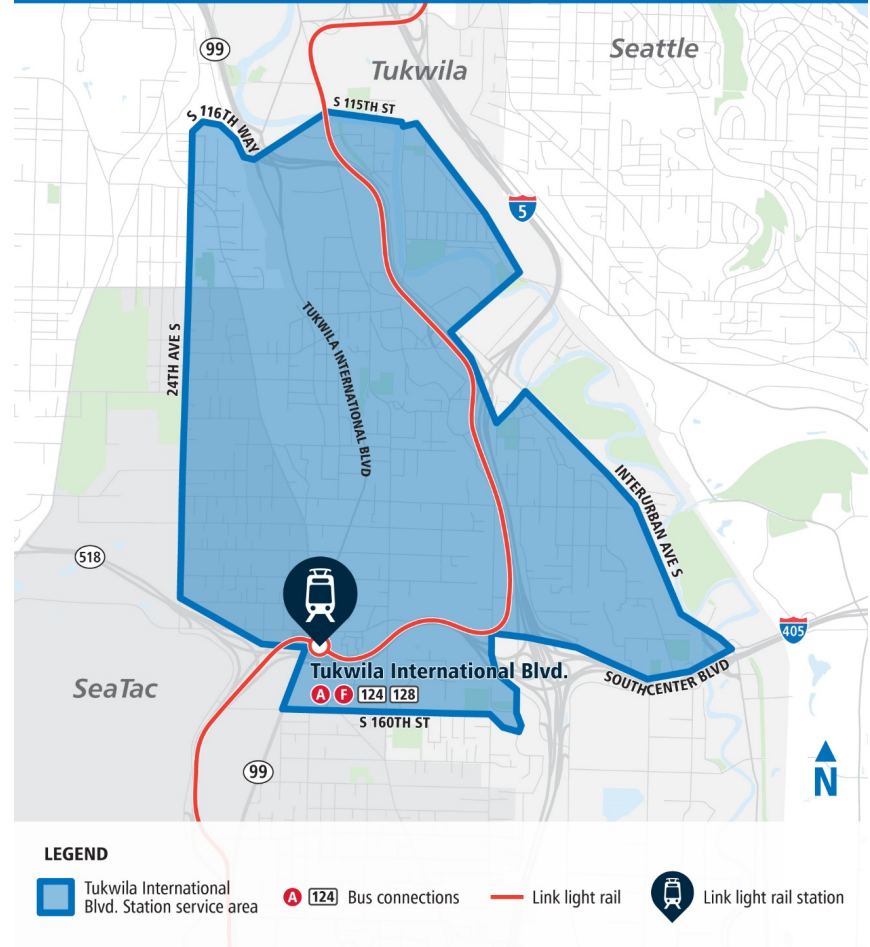
How does it work?

- **Get picked up** within 10-15 minutes

- **Walk** up to 5 minutes

- **Take a shared ride**

- **One end of trip must be Link light rail station**

- **Payment options** include ORCA cards, Transit GO mobile ticket, credit/debit cards

- **Integrated fares,** free transfer to buses and light rail

Pilot Goals

- Improve mobility by **expanding access to transit.**

- Test how to develop a **partnership with a private sector mobility company**, integrating TNC services with existing transit services.

- **Broaden TNC access** to a wider audience, including populations without smartphones, those who need wheelchair accessible vehicles, unbanked populations, and populations with limited English proficiency.

- **Inform best-practices** and FTA guidance for public-private partnerships.

Evaluation

Sources

- Trip reports

- User surveys
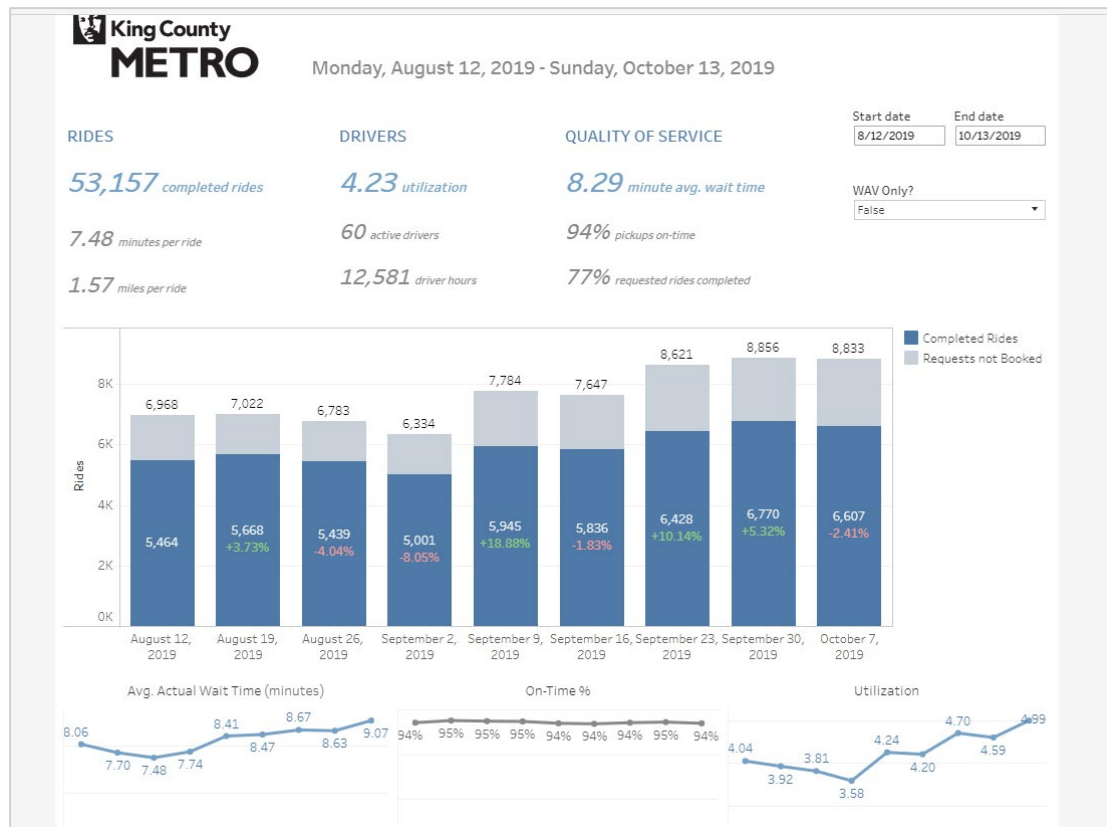
- Focus groups

- Customer comments

What We'll Look At

- Effective and efficient service

- Change in travel behavior / complementing fixed-route transit
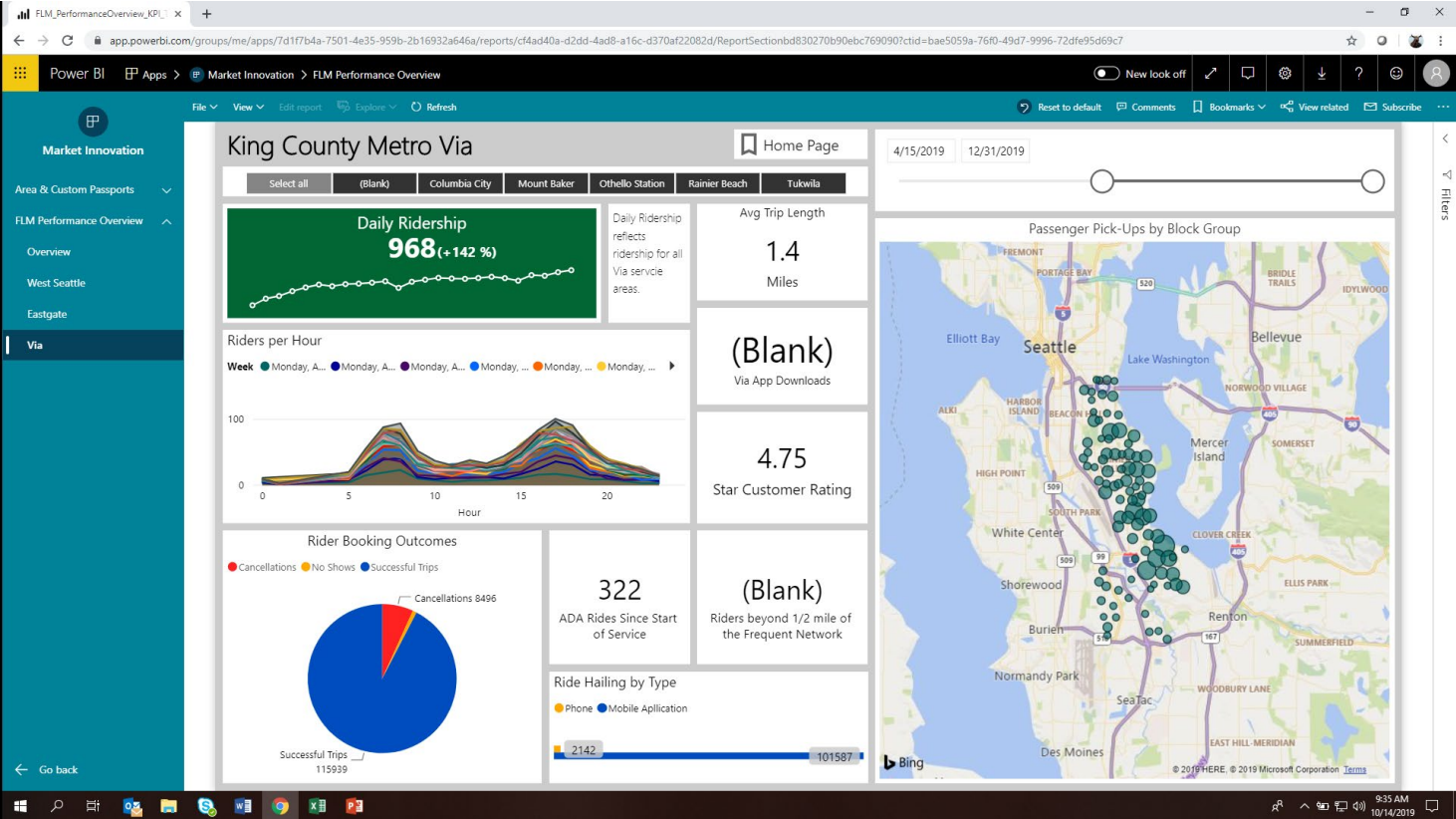
- Who is benefiting (and who is not)
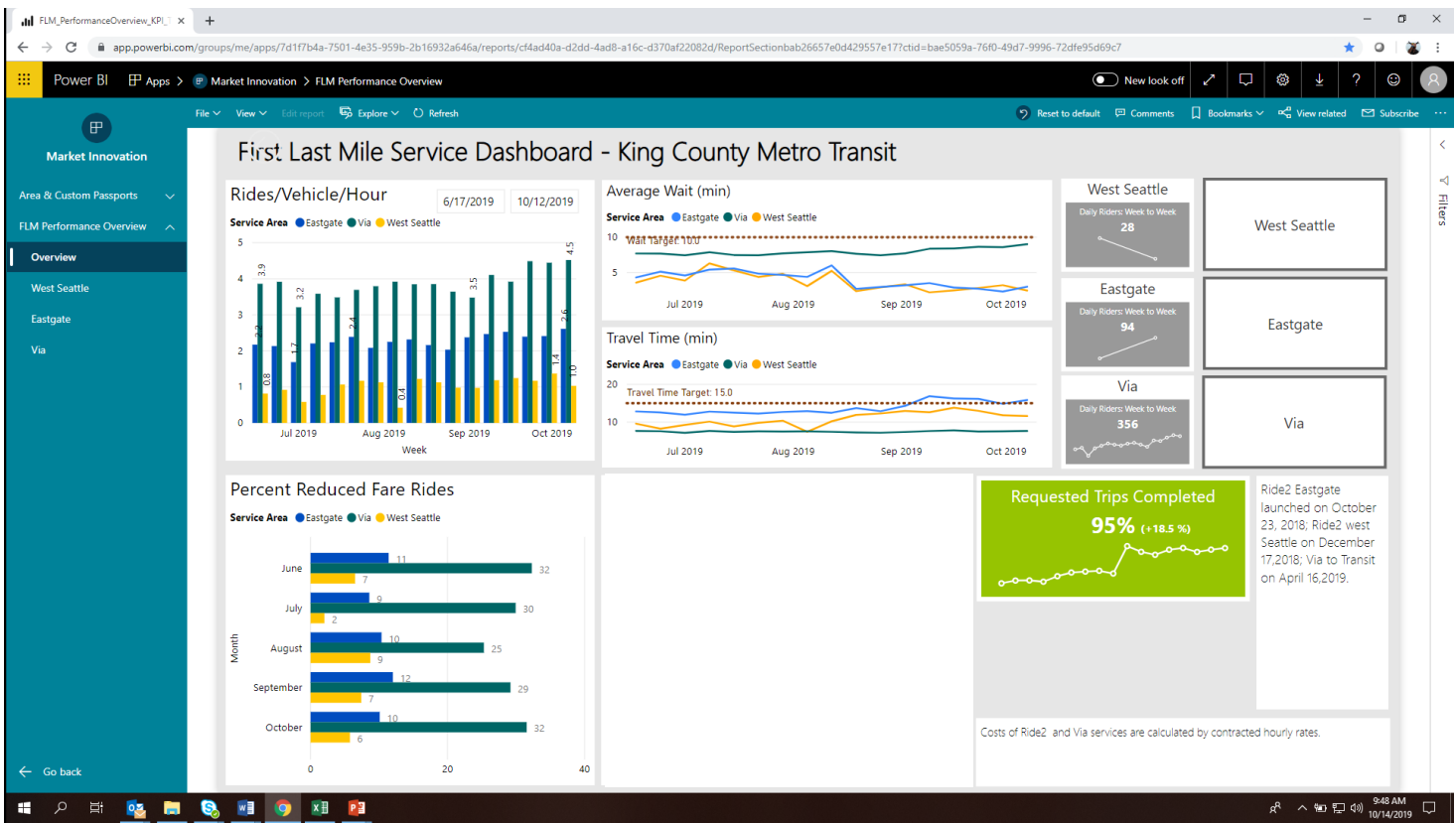
Jean Paul Velez

KING COUNTY METRO

Via Dashboard for KCM

KCM Via Dashboard

KCM First/Last Mile Dashboard

Accessibility and ridership

Accessibility and ridership (2)

Change in Number of Jobs Accessible
- Double the access to jobs
- 10-99% more access to jobs
- Neutral (+/- 10%)
- 10-20% decrease access to jobs
- 20% or more decrease access to jobs

AM Peak Pickups*
- (no pick-up)
- 0.1-0.9
- 1.0-3.9
- 4.0-6.9
- 7.0-11 (max)
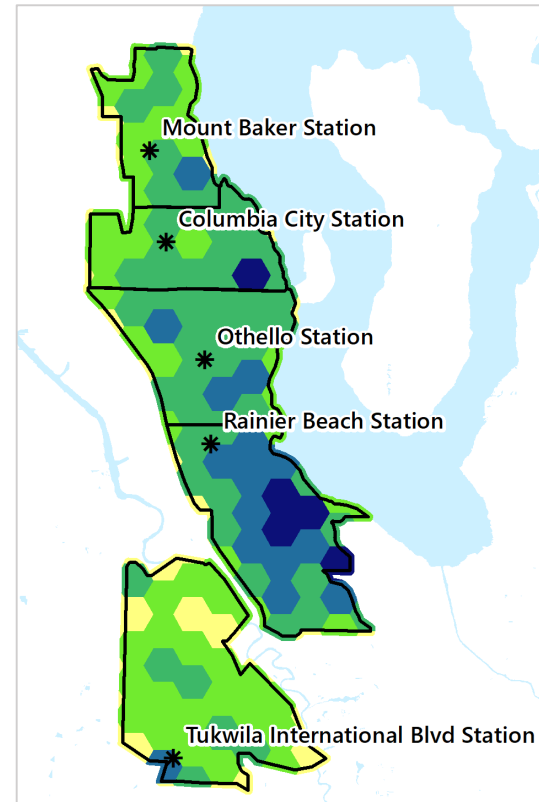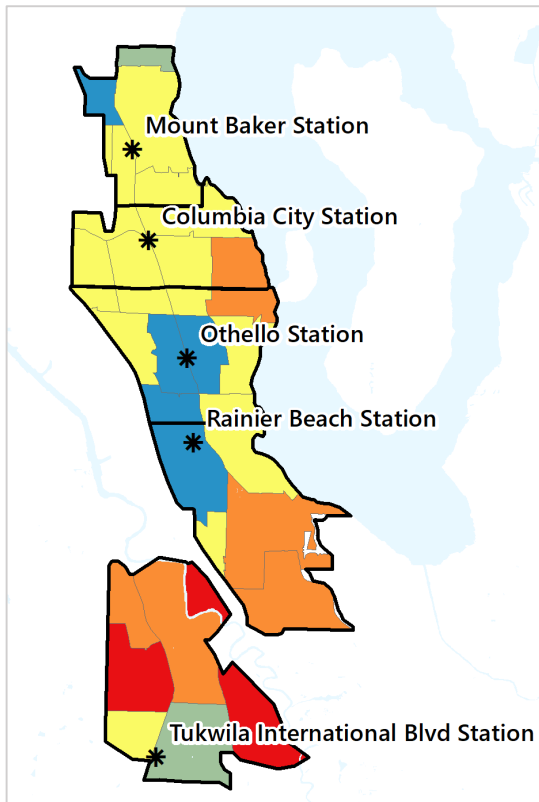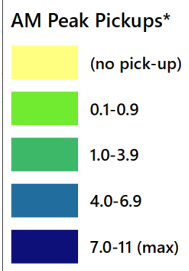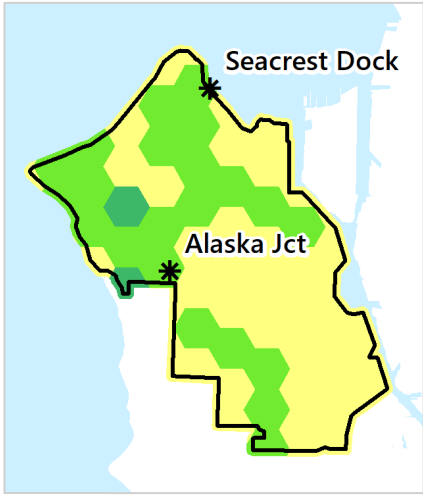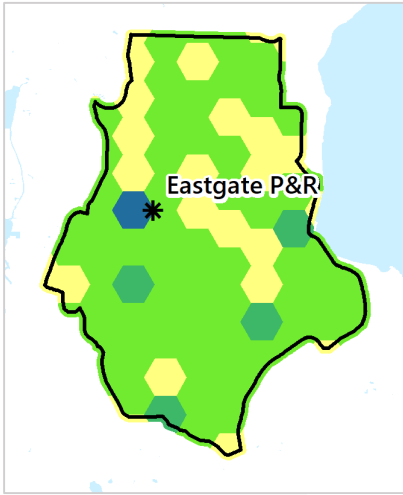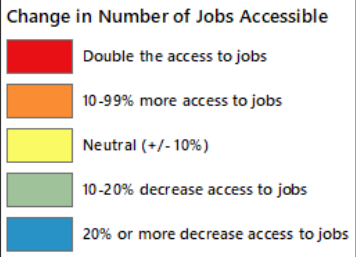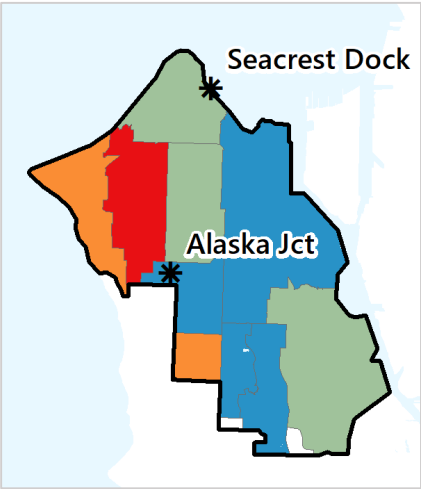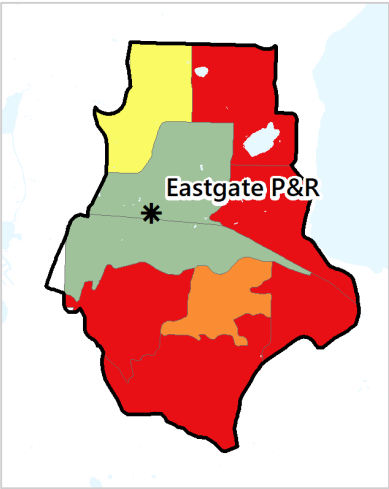
Alfredo Torales

CITY OF SANTA MONICA'S BIG BLUE BUS

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July 2018: Dial-A-Ride becomes Mobility on Demand Every Day (MODE)

- Contract with Lyft to provide On Demand Transportation

- City of Santa Monica Residents

- 65 years and older, or 18 years or older with a disability

- Weekdays 8am to 6pm, Limited Weekend Hours

- Trips within City Limits and 4 Medical Centers in Los Angeles

MODE: Better, Accessible Service to Riders

- Provides nearly every ride requested
- Twice as many rides, same budget
- City-owned vehicles for members in wheelchairs
- New ways to request rides and pay
- No need for advanced reservation
- Sustainable service - costs less to run

Data Requirements

Data Goal:

- Given known challenges with TNC data sharing, obtain enough data to manage service and meet federal requirements, and city requirements for invoicing

Original Data Agreement:

- Anonymized customer identification numbers
- Origin and destination data at the census tract level
- Day and time, duration, trip distance

Need for Update to Data Agreement

This year, BBB and Lyft updated its data agreement for two primary reasons:

1. To obtain data needed to inform proposed policy changes:
   - September 2019 – Fare and Program Changes
   - Two-Tier Fare System: Regular and Low-Income

2. Better auditing and enforcement of the MODE program

New Data Sharing

- Anonymized customer identification numbers – Now receive a key to identify member trip activity (de-anonymize data)
- Origin and destination data at the census tract level - Same
- Day and time, duration, trip distance - Same

Continued Challenges

- NTD reporting
- Customer complaint investigations

Thank you.

Alfredo Torales
Santa Monica's Big Blue Bus
alfredo.torales@smgov.net

Types of Service

Directly Operated (DO)

- Vehicles operated by reporter's employees

Purchased Transportation (PT)

- Vehicles operated by the seller's employees
- Service branded as the buyer's
- Buyer provides all funding (public or private)

New Types of Service

Proposed Change	Justification	Reporting Burden Impact
Add a new type of service for transit provided by TNCs	Allows FTA and stakeholders to track the use of TNC providers	Moderate - Reporters will need to separate TNC service from other Demand Response service

Proposed Change	Justification	Reporting Burden Impact
Add a new type of service for transit provided by taxi services	Aligns current Demand Response Taxi mode with the new structure for reporting service provided by TNC providers	No impact

New Types of Service

In order to report service to the NTD for inclusion in the FTA formula grant programs, the service must meet the statutory definition of public transportation found in 49 U.S.C. § 5302. TNC's must provide demand responsive service that is:

- Regular and Continuing
    - Not intermittent or tied only to special events
    - Advertised in a manner that allows the public to clearly understand its hours of operation and terms of service
- Shared Ride
    - There must be an attempt to share all rides. Typically, this is accomplished by coordinating all requests through a dispatch service
    - Voucher service that reimburses an individual for a solo TNC ride is <u>NOT</u> eligible.
- Open to the general public (or a segment defined by age, disability or low income)
    - Neither the driver nor first passenger can deny the second passenger's ride
    - All rides assigned by the dispatcher must be honored
    - Advertised on the agency's website

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New Types of Service

Type of Service	Definition
Directly Operated (DO)	Service provided directly by the public transportation agency using their own drivers and equipment.
Purchased Transportation (PT)	Service provided from a public or private transportation provider based on a written contract. The provider is obligated in advance to operate service for a specific monetary consideration, using its own employees to operate revenue vehicles
Taxi (TX)	Service provided by a private taxi company on behalf of a public transportation agency. Services are directly dispatched by the agency and provided using the taxi company's drivers and vehicles.
Transit Network Company (TN)	Service provided by TNC on behalf of a public transportation agency. Services are dispatched by the transportation network company and provided using company or private drivers and company or privately-owned vehicles.

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Questions and Comments

NTD Operations Center

Monday – Friday

8:00 a.m. – 7:00 p.m. (ET)

NTDHelp@dot.gov or 1-888-252-0936

Joseph Eldredge, Ops Center Mgr.

joseph.eldredge.ctr@dot.gov

434-993-8690

Murtaza Naqvi, Deputy NTD Program Mgr.

murtaza.naqvi@dot.gov

202-366-9285

Angie Wang, NTD Program Manager

angie.wang@dot.gov

202-366-2054

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Use the Chat Box, and Enter:

QUESTIONS AND ANSWERS