

# INNOVATIVE MOBILITY & TRANSIT

KING COUNTY METRO

APTA Annual Conference  
October 2017

**Christina O'Claire**  
Assistant General Manager  
Planning and Customer Service



**King County**  
**METRO**

## Outline

- **First reflections**
- **Initial analyses of new services and technologies**
- **Innovative mobility action agenda**
- **Shared mobility initiatives**
- **Institutional change at Metro**

## First reflections

### King County Metro (2016)

Service Area	2,134 square miles
Population	2.1 million
Employment	1.36 million
Fixed-route ridership	121.5 million
Vanpool ridership	3.6 million (2015)
Access ridership	1.3 million (2015)
Active bus fleet	1,414 excluding ST
Bus stops	over 8,000
Park-and-rides	137 lots
Park-and-ride spaces	26,869 w/ ST



# First reflections

## Embracing innovation

- New private actors and technologies in public transportation space.
- Protecting the role of transit requires proactive approach towards innovation.
- Learn-by-doing, 'fail forward'.

Local News | Technology | Traffic Lab

### UberHop: New carpooling service rolls out in Seattle

Originally published December 10, 2015 at 8:52 am | Updated December 10, 2015 at 12:39 pm

Uber tests out carpool rides with specific pickup and drop-off locations.



By **Evan Bush**   
Seattle Times enterprise producer

#### Share story

Share

Email

Tweet

Uber is [launching a new service](#) during Thursday's commute, and it looks closer to transit than taxi.

The service, called UberHop, costs \$5. Riders meet an Uber driver at a pickup spot, join the carpool and are driven downtown.

The company is launching three trial routes: From Ballard to South Lake Union, from Capitol Hill to downtown, and from Wallingford to downtown.

The routes will run from 7 to 10 a.m. and be reversed for the evening commute, between 5 and 8 p.m.

The app Thursday morning showed cars on each route leaving every 15 minutes from designated pickup sites.



Eastside | Local News | Traffic Lab

### Micro-transit firm Chariot to join Seattle market

Originally published June 21, 2017 at 6:00 am | Updated June 21, 2017 at 4:00 pm



### Lyft Shuttle mimics mass transit with fixed routes and fares

Buses are the new ride-share

by [Andrew J. Hawkins](#) | [@andyjayhawk](#) | Mar 29, 2017, 4:15pm EDT

SHARE TWEET LINKEDIN



NOW TRENDING

## First reflections

We are not starting from scratch



**Bike racks, 1978**



**Vanpool, 1979**

## First reflections

We are not starting from scratch



**Flexcar, 2000**



**Pronto, 2014**

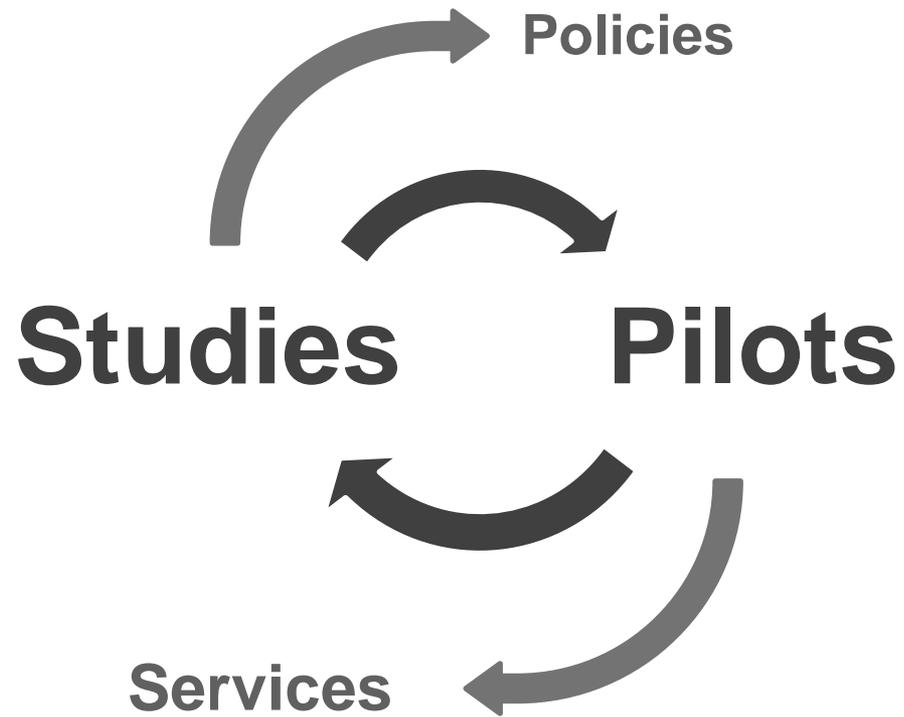
# First reflections

## Community Connections

- A new model to deliver mobility services to parts of King County that do not have the infrastructure, density, or land use to support traditional fixed-route bus service.
- Key features:
  - Community based process
  - Innovative services & products
  - Customized, creative solutions
  - Community partnerships
- Metro has provided and contracted new services, including:
  - Community transportation hubs
  - Community ride
  - Real-time rideshare
  - Trip pool
  - Community shuttle
  - Community van



## A basic framework for innovation



# Shared mobility report

## SHARED MOBILITY TECHNICAL REPORT



July, 2017

 King County  
**METRO**

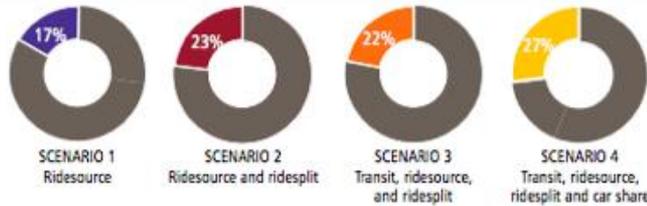
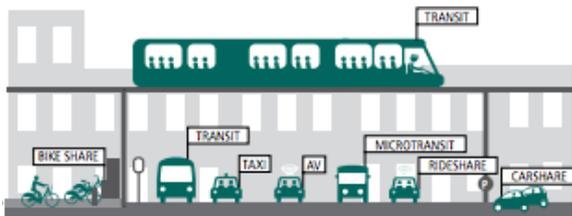
### Table of Contents

PREFACE	2
EXECUTIVE SUMMARY	2
SOCIAL UTILITY EXERCISE	7
ECONOMIC MODEL	16
PSRC TRAVEL DEMAND MODEL	28
CAPACITY AND HOV <sub>e</sub> MODEL	35
SPATIAL DROP-OFF MODEL	41
TRANSIT ANALYSIS	51
SHARED MOBILITY SUPPLY	57
STOCKHOLM STUDY	61
SELECTED BIBLIOGRAPHY	78

- A collaboration between Metro, SDOT, Sam Schwartz Consulting and the UC Berkeley Transportation Sustainability Research Center.
- Development of methodological foundations to analyze the potential impact of shared mobility and other trends in the sector.

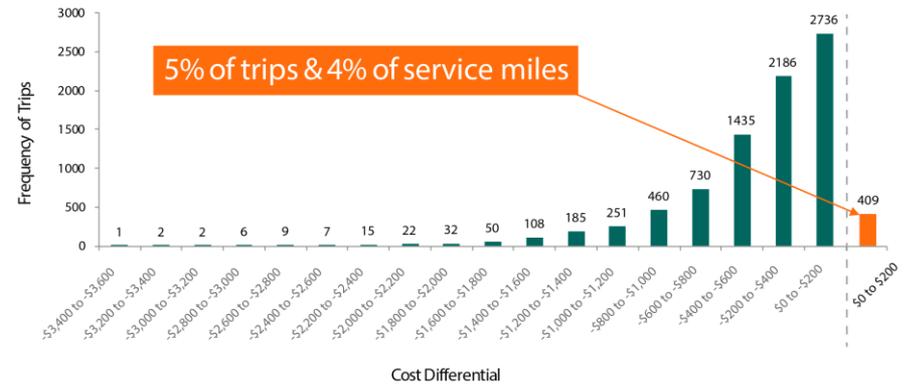
# Shared mobility report

## User: Improved options, reduced costs



- 17-27% of existing vehicles in King County could be reduced because it is cheaper for their owners today to choose shared mobility options.
- 17% = 227,658 cars!
- In additional scenarios accounting for AVs, reduction increases to 31-45%.

## Agency: Improved services, reduced costs



- An analysis of the productivity of Metro’s non-express bus service shows that 5% of runs and 4% of service miles would be cheaper to the agency if provided by TNC.
- 36% of these trips occur between 10:00 pm to 5:00 am; 26% occur between 5:00 am to 9:00 am.

## Innovative mobility action agenda

*To achieve Metro's goals in both the short- and the long-term, Metro will embrace innovation by pursuing the following strategies:*

- |            |  |           |  |
|------------|--|-----------|--|
| <b>I</b>   | Leverage the growth of <b>shared mobility</b> options as a complement to Metro's services.         | <b>IV</b> | Integrate Metro's <b>data management platforms</b> and engage with <b>Smart City</b> initiatives throughout King County. |
| <b>II</b>  | Build an internal framework to support the realization of <b>Mobility-as-a-Service</b> .           | <b>V</b>  | Advance efforts to improve the efficiency of existing <b>infrastructure</b> and realize <b>compact urban forms</b> .     |
| <b>III</b> | Embrace the strategic opportunities brought by <b>electric, connected, and automated</b> vehicles. | <b>VI</b> | Strengthen Metro's institutional capabilities to invest and nurture a <b>culture of innovation</b> .                     |

## Innovative mobility action agenda

*To achieve Metro's goals in both the short- and the long-term, Metro will embrace innovation by pursuing the following strategies:*



**I** Leverage the growth of **shared mobility** options as a complement to Metro's services.

---

**II** Build an internal framework to support the realization of **Mobility-as-a-Service**.

---

**III** Embrace the strategic opportunities brought by **electric, connected, and automated** vehicles.

---

**IV** Integrate Metro's **data management platforms** and engage with **Smart City** initiatives throughout King County.

---

**V** Advance efforts to improve the efficiency of existing **infrastructure** and realize **compact urban forms**.

---

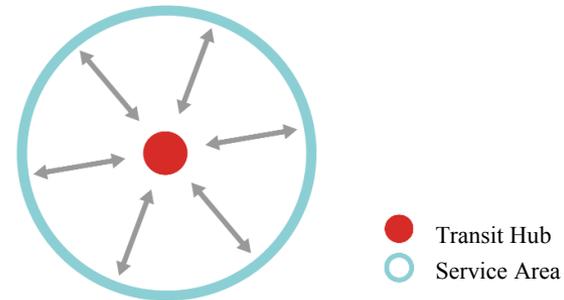
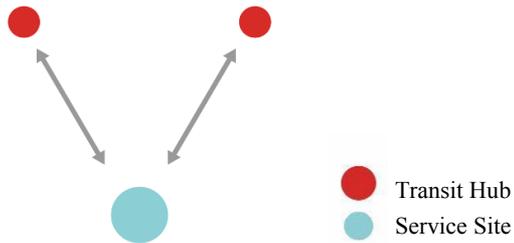
**VI** Strengthen Metro's institutional capabilities to invest and nurture a **culture of innovation**.

---



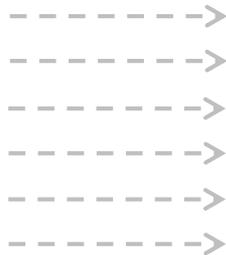
# Shared mobility initiatives

## First/Last mile program



### Pilot #1: Bellefield

- 1 location
- Predetermined O-D pairs, < 2 miles
- Ridesplit only: UberPool
- Single flat fare for all rides
- Individual trip data sharing
- Separate WAV solution



### Pilot #2: FTA MOD Sandox

- 3-4 locations
- Open service within 2-3 mile radius service area.
- Ridesplit and ridesource: Lyft Line, Lyft
- Standard rates, low income rates
- Individual trip data sharing, data sharing platform
- Integrated WAV solution, call center dispatch

# Shared mobility initiatives

## First/Last mile program

- **Challenge bringing together:**
  - Old institutions & new business models
  - Government policy goals & corporate goals
- **Principles:**
  - Incremental approach
  - Incentivize more comprehensive services, performance
  - Higher risk tolerance
- **Pilot #3:**
  - Build on lessons learned
  - Use RFP process to advance market to where we want it to be.
  - Closed proposal evaluation, targeting service launch in Q4 2017 / Q1 2018.



# Shared mobility initiatives

## Private transit management

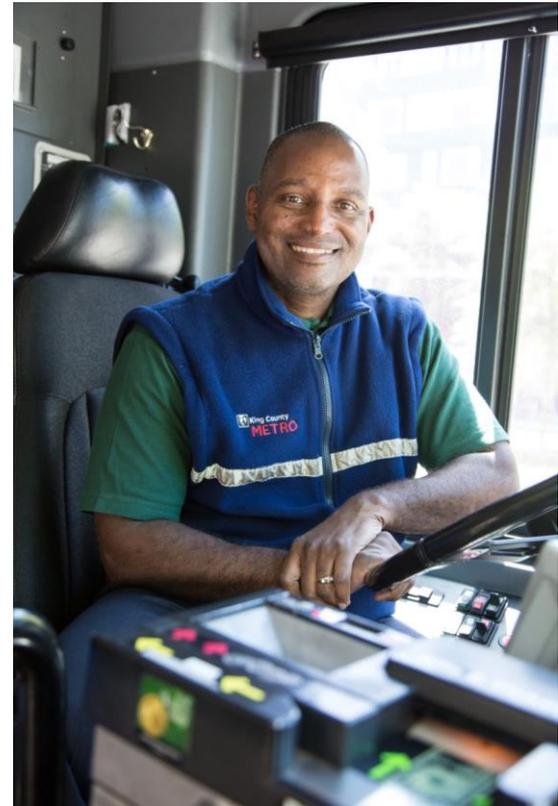
- **Background:**  
State law awards Metro a local monopoly for the provision of public transportation services.
  - Original vision behind this law was prevent other providers from competing in our market.
  - 2017 reinterpretation is Metro will manage provision of services by new providers.
- **Approach:**  
Implement a formal process to proactively authorize, monitor, and evaluate the provision of privately operated public transportation services, while retaining the overall management of public transportation.
- **Timeline:**  
Intake process open in Q4 2017  
Service launch in Q1 2018



# Nurturing innovation

## Embracing change at Metro

- **An expansion of our role – from service provider to mobility management.**
  - Growing role for partnerships and coordination with private sector operators.
  - Managing leadership through this change.
- **Advance needed regulatory changes to reduce barriers to innovation.**
- **Internal considerations**
  - Higher risk tolerance
  - Organizational changes and resource allocation
  - Labor discussions
  - Workforce development



# Thanks!

[Christina.OClaire@kingcounty.go](mailto:Christina.OClaire@kingcounty.go)

