



# The Behavioral Economics of MaaS

March 12, 2019



# Agenda

1

A Perspective  
on MaaS

2

The Behavioral  
Economics of MaaS

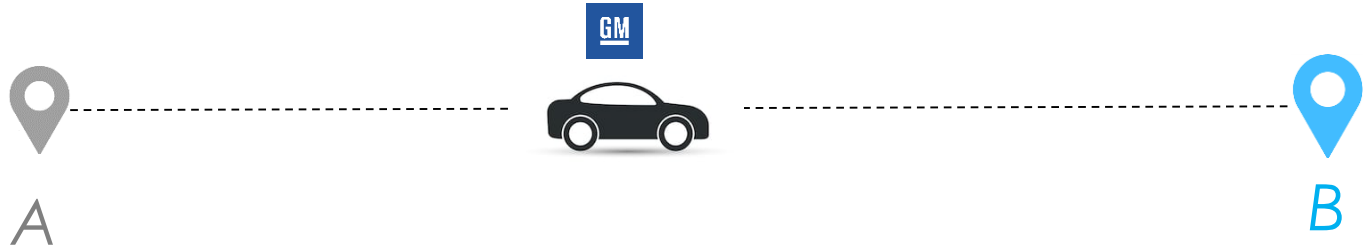
3

Enabling MaaS with  
Amdocs



# MaaS // Shifting to Mobility as a Service model for transportation

Until 2010

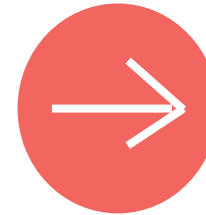


2011-2018





# User Experience // But what is it like to be a user these days?

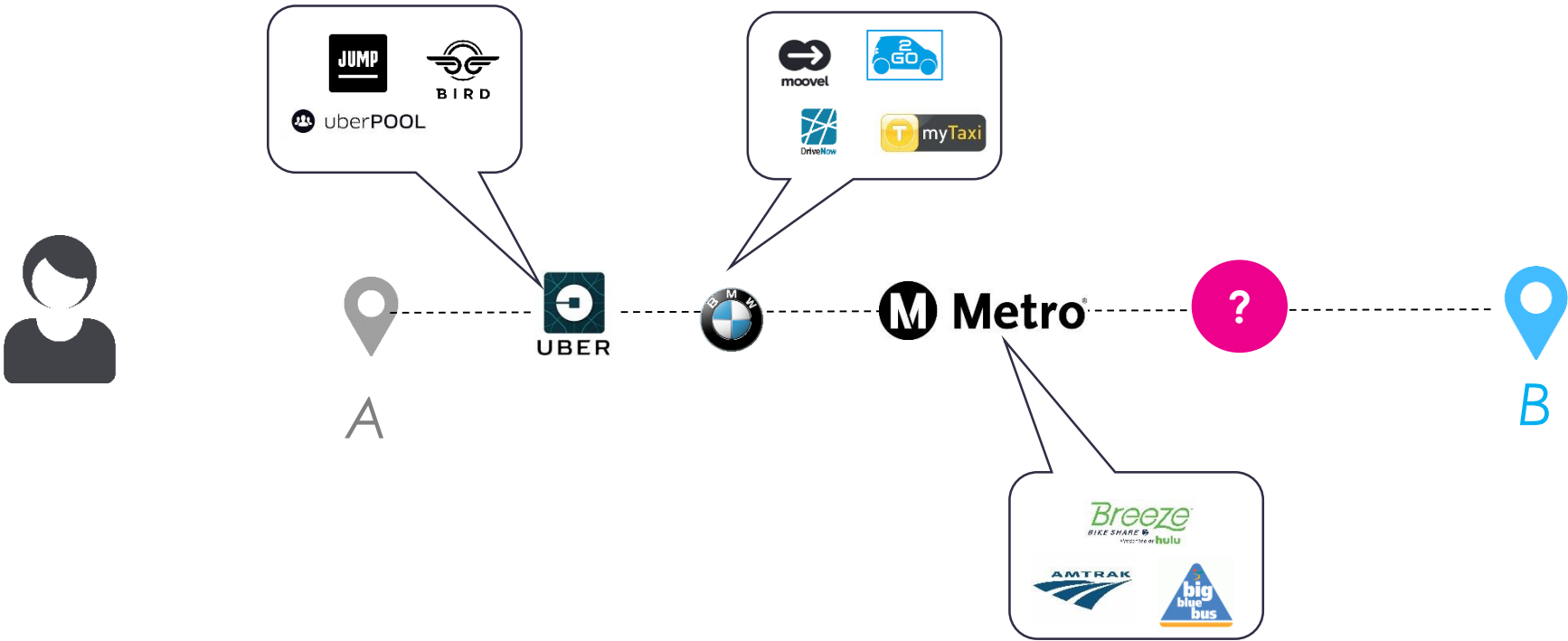


**20 modes = 20 apps = 20 accounts = 20 price structures**



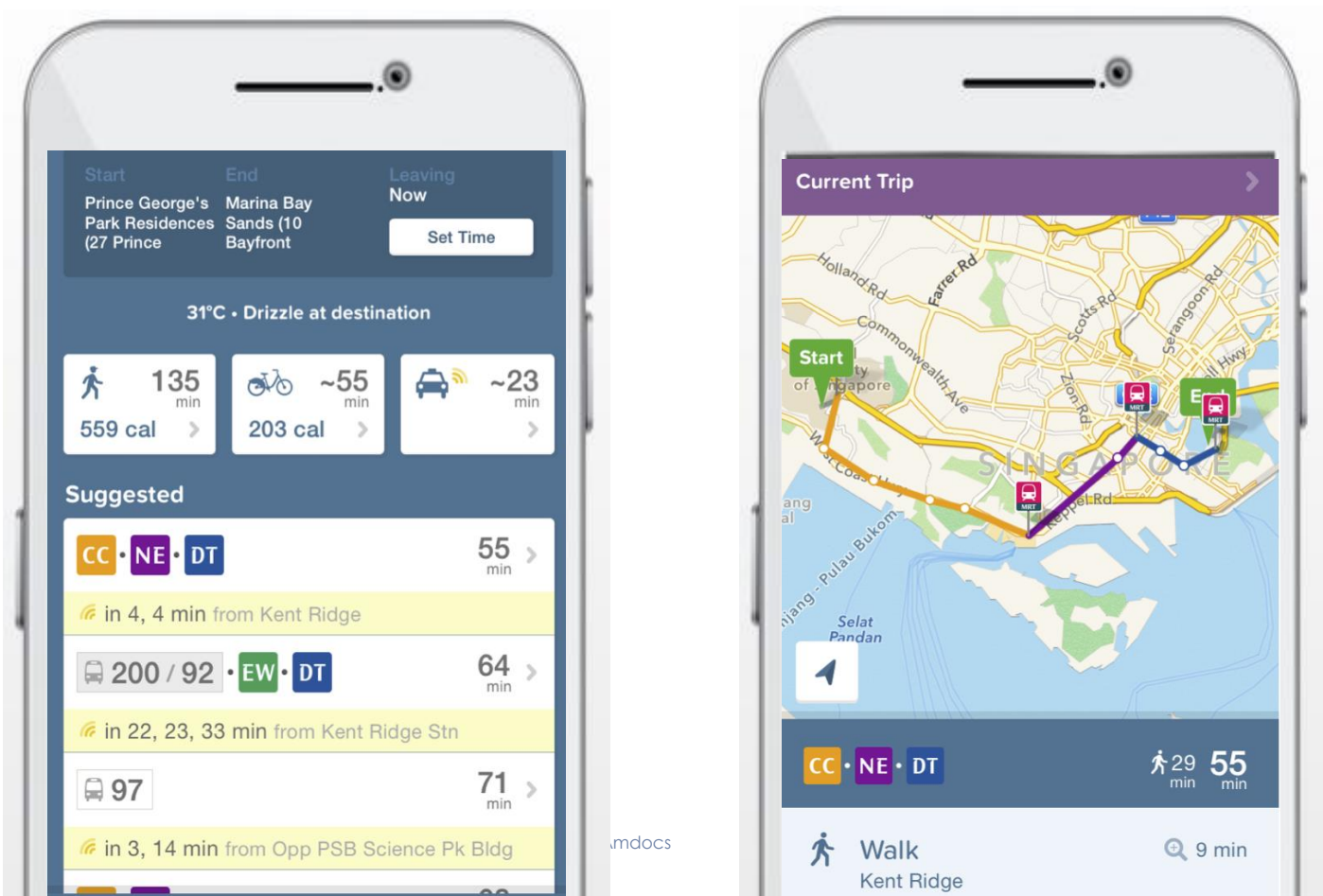
# Market Direction // Consolidation is needed for integrated experience

2019-





# Public Sector// More cities launch MaaS services to reduce congestion

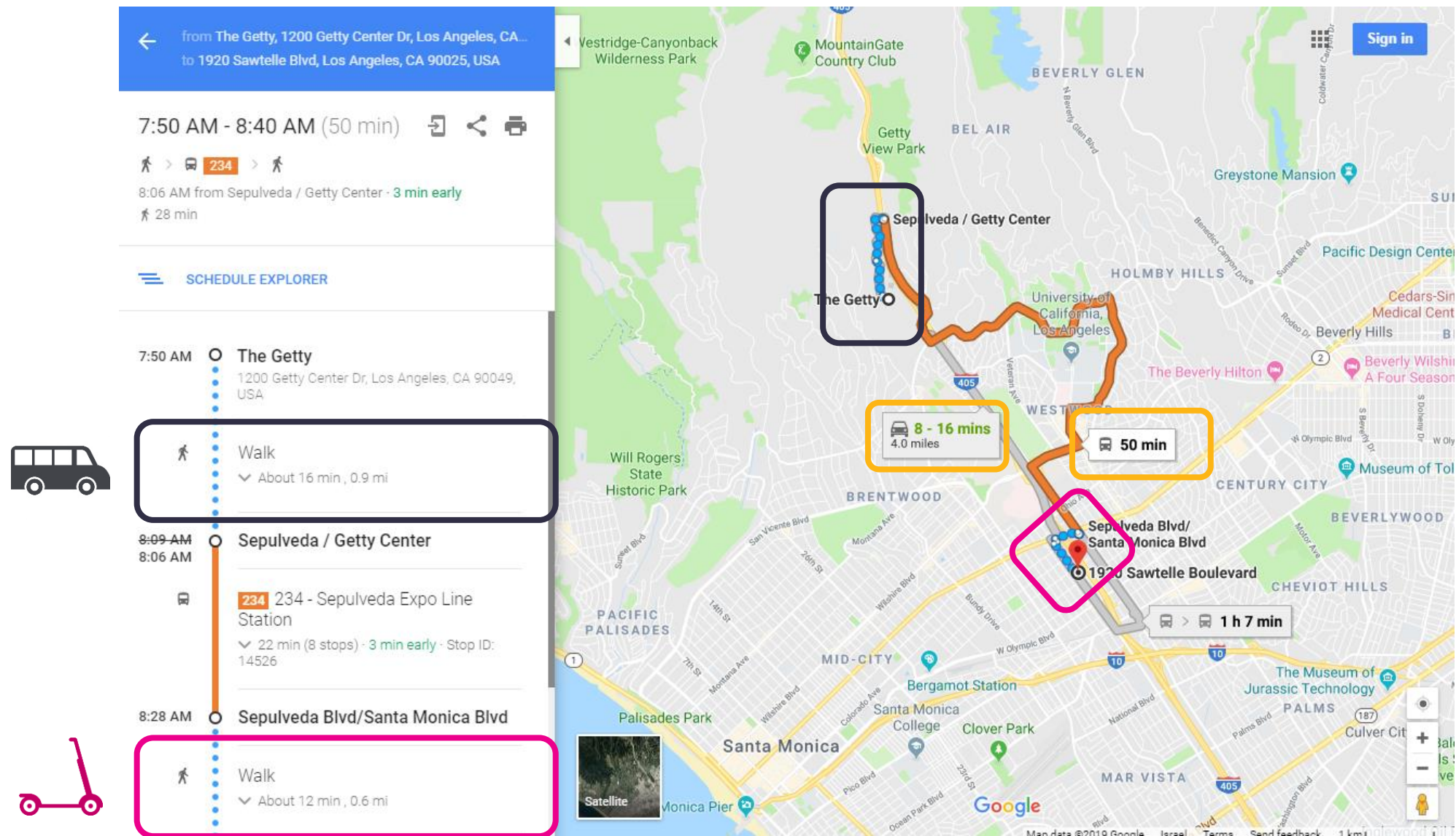


City of Helsinki





# Public Sector Solutions // “Fill the gaps” with new modes & orchestrate





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# What is the **PERCEIVED COST** of Car Ownership?

“Unable to link the costs and benefits of any given play, patrons who **purchased tickets to multiple plays increasingly treated their tickets as if they were free**”

-HBR Behavioral Economics Study



## Goal

MaaS is 50% less than monthly cost of car ownership



\$450

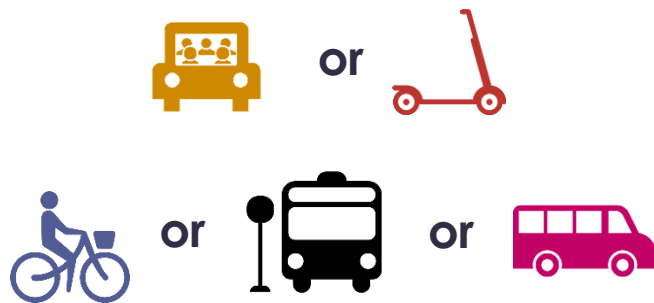
(\$900/2)



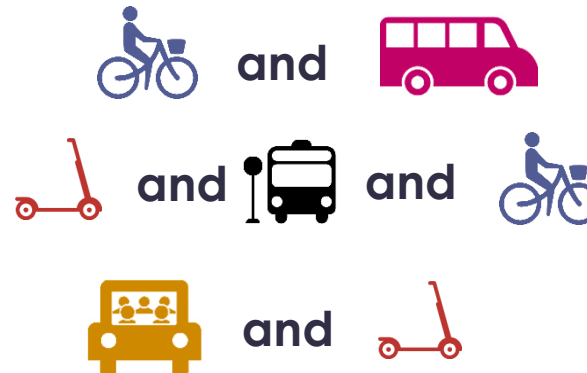


# How do we do this? Increased sophistication of Pricing Strategies

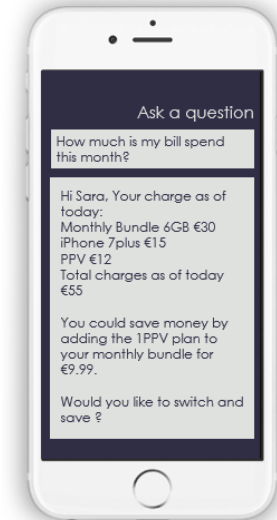
## More Modes



## Trip Pricing

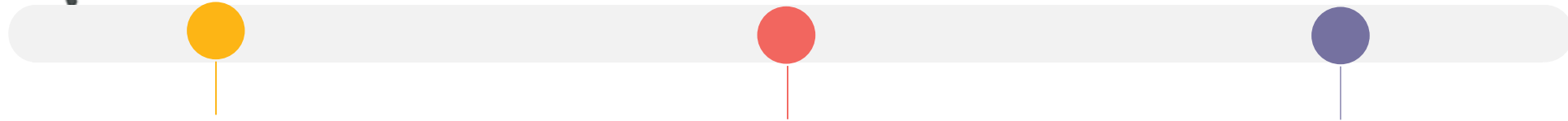


## Monthly Usage





# Key Requirements // Enabling MaaS step by step



**Step 01**

**Security  
Settlement**

**More Modes**

**Step 02**

**Interoperability  
Intelligence**

**Trip Pricing**

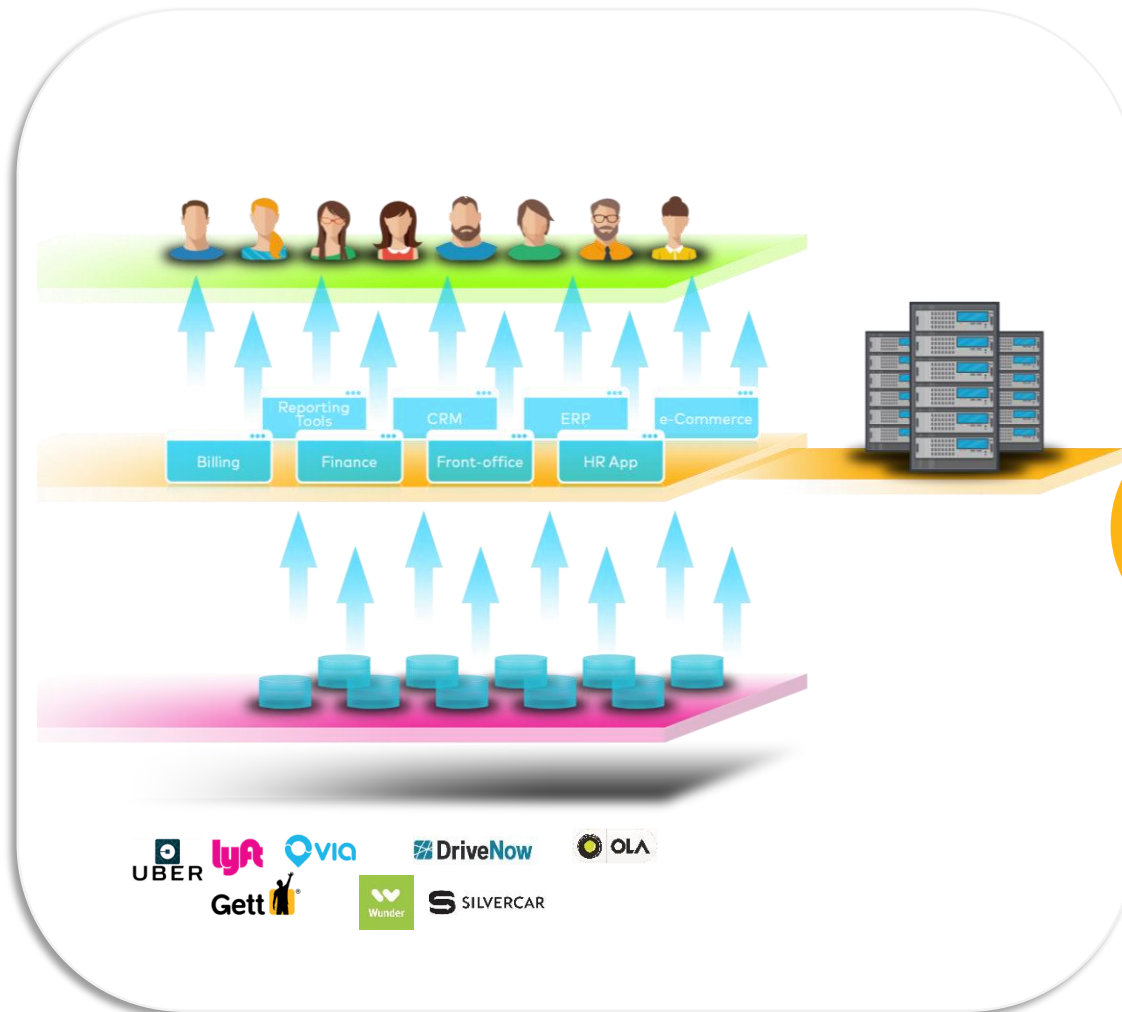
**Step 3**

**AI-Driven Network  
Optimization**

**Monthly Usage**

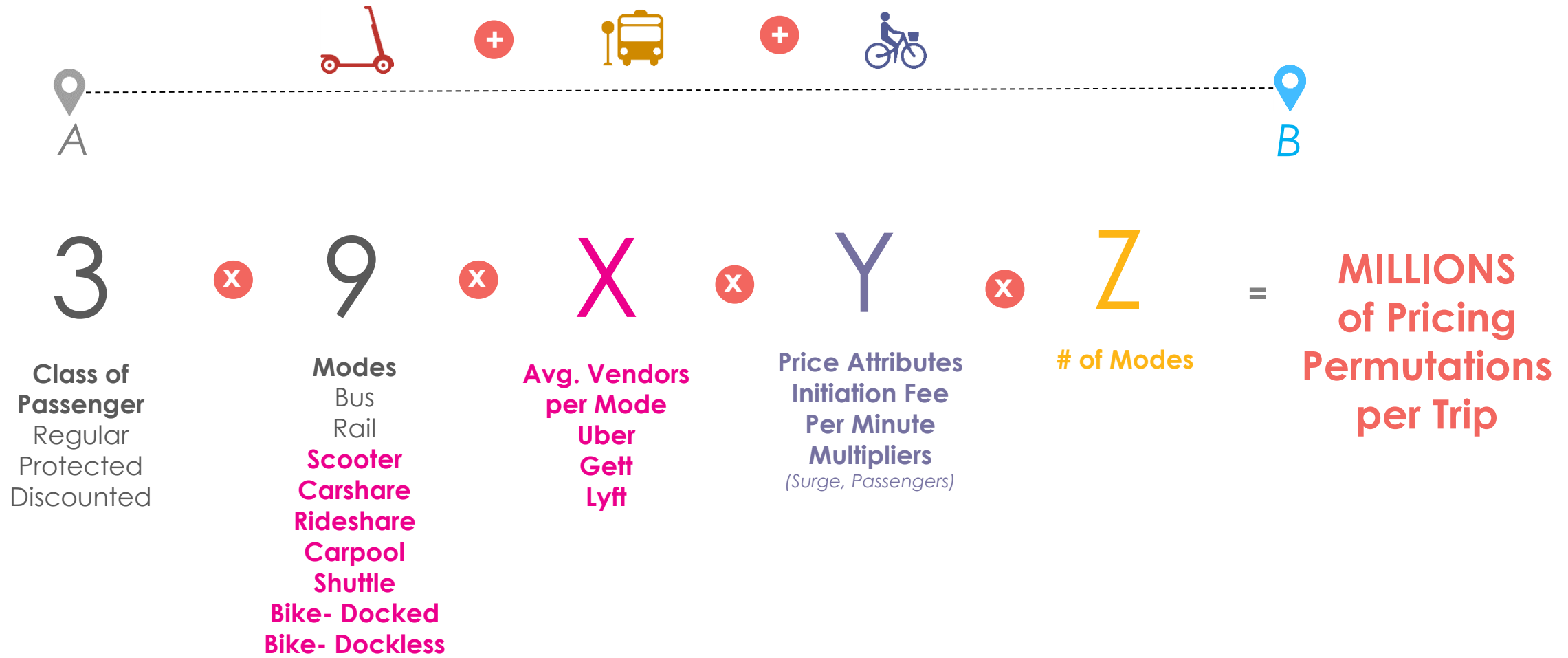


# Step 1- More Transit Modes // SECURITY and SETTLEMENT



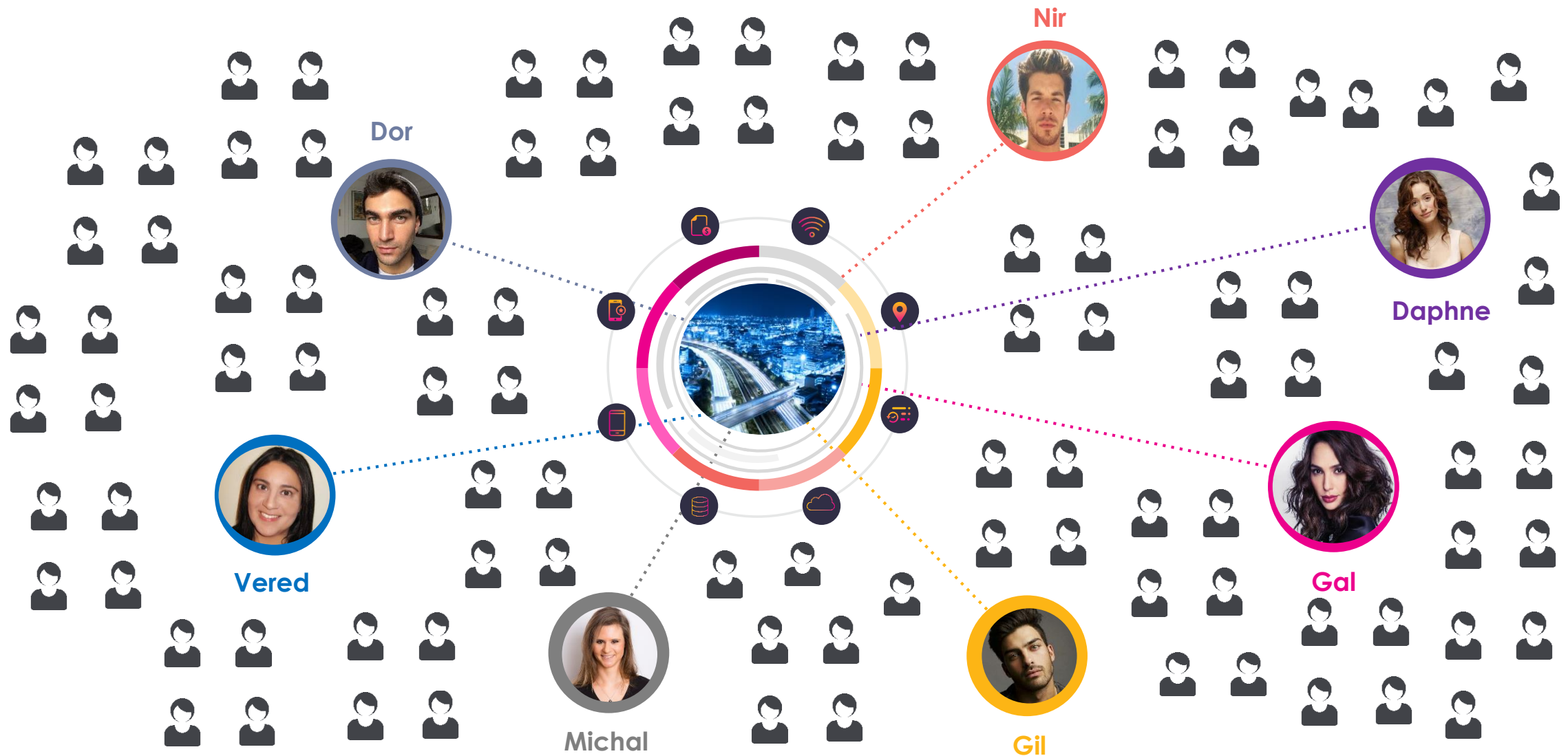


## Step 2 - Trip Based Pricing // INTELLIGENT bundling





## Step 3 - Monthly Usage Charging // AI-DRIVEN NETWORK OPTIMIZATION





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Did you know Amdocs handles...  
over  
**100B**  
events per day  
serving over  
**2B**  
subscribers



# Intelligently Managing Monthly Payment Plans

DATA INTEGRATION

KPI

MACHINE LEARNING

PROFILE

Customer Dashboard

Customer Signals

JOURNEY MANAGEMENT

NEXT BEST ACTION

REPORTING

USER ID

Alex Smith

FAMILY MEMBERS

3

Individual

Household

CUSTOMER TYPE

Residential

CUSTOMER SEGMENT

High Value

PRODUCTS

Wireless

PayTV

CREDIT RISK

Low

TENURE

6 Months

NPS

Detractor

CHURN RISK

91.4%

Customer Service Experience

TIME SINCE LAST INTERACTION

5 min

NO. OF CASES IN PROGRESS

4

AVERAGE NO. OF CALLS TO CALL CENTER PER MONTH

2

LAST INTERACTION TOPIC

Connectivity

NO. OF DISPUTES IN LAST YEAR

None

MOST RECENT CHANNEL TO RESPOND TO NBA

Chat

Network Experience

NO. OF DROPPED CALLS IN THE LAST 48 HOURS

7

NETWORK QUALITY SENSITIVITY

High

NO OF LONG WAITING TIME FOR STREAMING TV

1

Revenue & Billing

BILL PREDICTION

Jul

Aug

Sep

Oct

Nov

Dec

ARPU

Medium

PAYMENT PROFILE INDEX

Good

BILL AWARENESS

High

Usage Behavior

TIME SINCE LAST USAGE ACTIVITY

4 min

AVERAGE CALLS PER MONTH

24%

11%

65%

Local

Roaming

International

DATA CONSUMPTION LEVEL

High

FREQUENT TRAVELLER

No

Digital Behavior

HAS E-BILL

Yes

HAS A PORTAL USER

Yes

SOCIAL PORTAL

Influencer

USES CHAT

Yes

ACTIVE SHOPPING CART, CHECKOUT PROPENSITY

Yes, 0.3

INTEREST AREAS

Sports, Family Activities

Churn Risk Increase: Medium to High Today

Updated Bill Prediction Today

Positive Post on FB about NXT Today

Abandon Shopping Cart (past 2h) Today

High # of Open Cases Today

# Calls to CC on the same topic > 1 Today

# Dropped Calls > 5 (past 12h) Today

High # of Repeated Calls Today

New Interest Areas Today

New Family Member Today

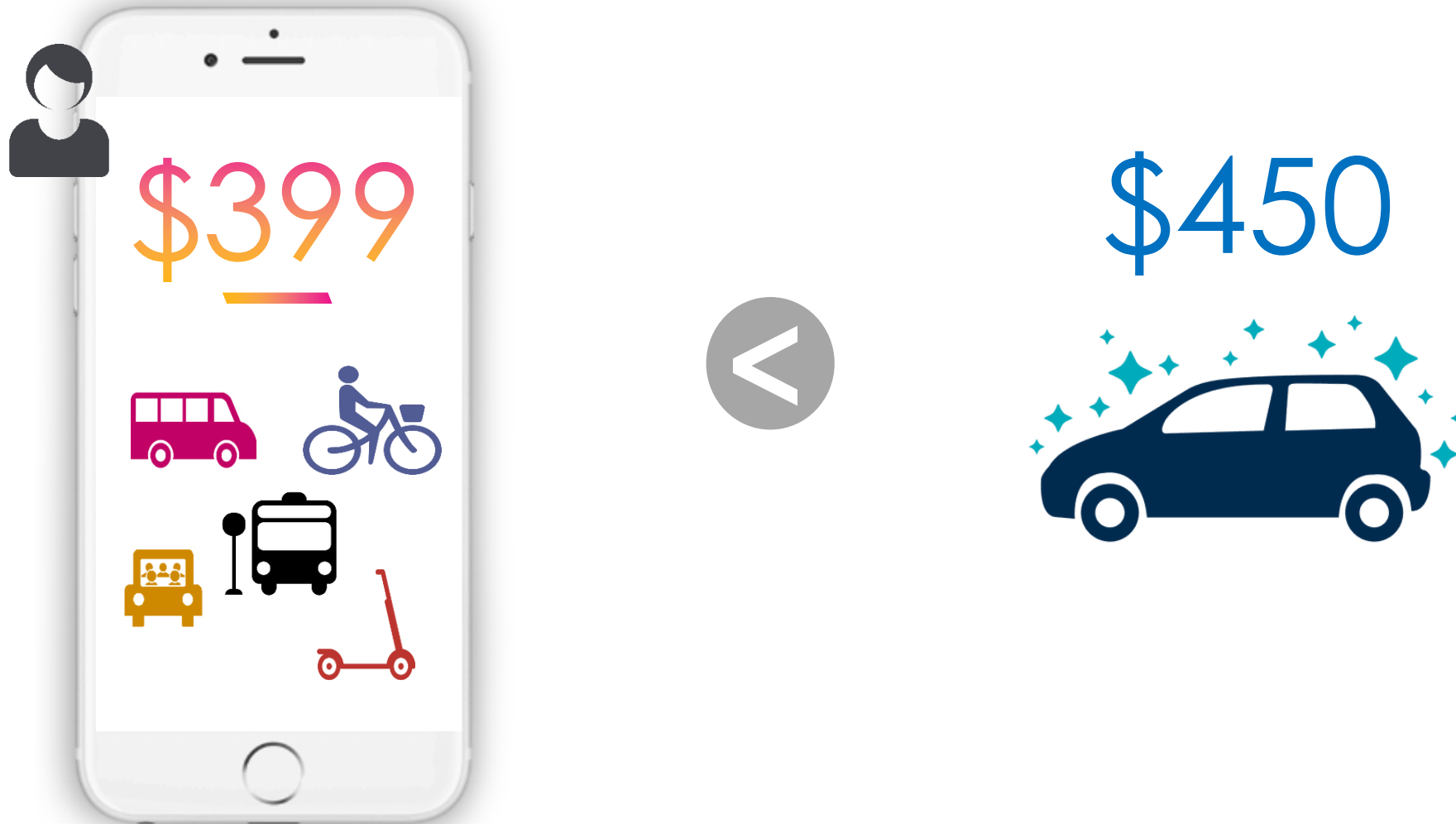
PayTV: Started Streaming Today

Updated E-Bill Preferences



Let's make this work!

MaaS is 50% less than monthly cost of car ownership







It's just the beginning

**Thank You**  
[katebalingit@amddocs.com](mailto:katebalingit@amddocs.com)



# MaaS Works! // Already demonstrating real power to improve traffic

48%

Of visitors took a  
Scooter in lieu of  
Uber or Lyft

16%

of residents  
consider getting rid  
of personal vehicle

10%

of Uber trips  
displaced by  
Jump bikes

15%

of new Jump bike  
trips taken during  
Rush Hours

+9%

increase in car  
sales when  
Uber/Lyft left

41%

of users turned to  
personal car  
instead



## After Uber bought Jump, people started riding bikes instead of ordering cars

f Share t Share +

Jump bikes got around San Francisco

IMAGE: SMITH COLLECTION/GAD

BY SASHA LEKACH  
1 DAY AGO

It's been a year since the bright red Jump electric-assist bikes started [popping up around San Francisco streets](#). It's also been a year since you could rent the e-bikes through the Uber app as part of a bike-sharing pilot program for the ride-hailing app.

In those 12 months a lot went down: [Uber bought Jump](#), Jump launched e-scooters in some cities, and Uber vowed to become the "Amazon of transportation." Jump crunched the numbers and found its year in San Francisco was just as busy as Uber's.

Jump released numbers Friday that show 63,000 riders in SF took more than 625,000 trips, covering more than 1.6 million miles. San Francisco limited the

## Ride Sharing Is Already Reducing Car Ownership and Public Transportation Usage



POSTED BY CHRISTOPHER BOLL ON 22 FEBRUARY 2018  
POSTED IN RIDE SHARING

A [recent study](#) by the ride-hailing service Lyft and a [similar study](#) by a group of American universities pointed to the positive impact ride-sharing services not only have on consumers, but on the surrounding communities they service. These studies found that ride-hailing services aid in reducing congestion, increase individual consumer mobility, and found that in 2017 alone, Lyft passengers spent over \$2 billion more in communities where ride-sharing services exist. But, the studies and more also point to the negative impact ride sharing services have on individual car ownership and public transportation usage in the same areas.



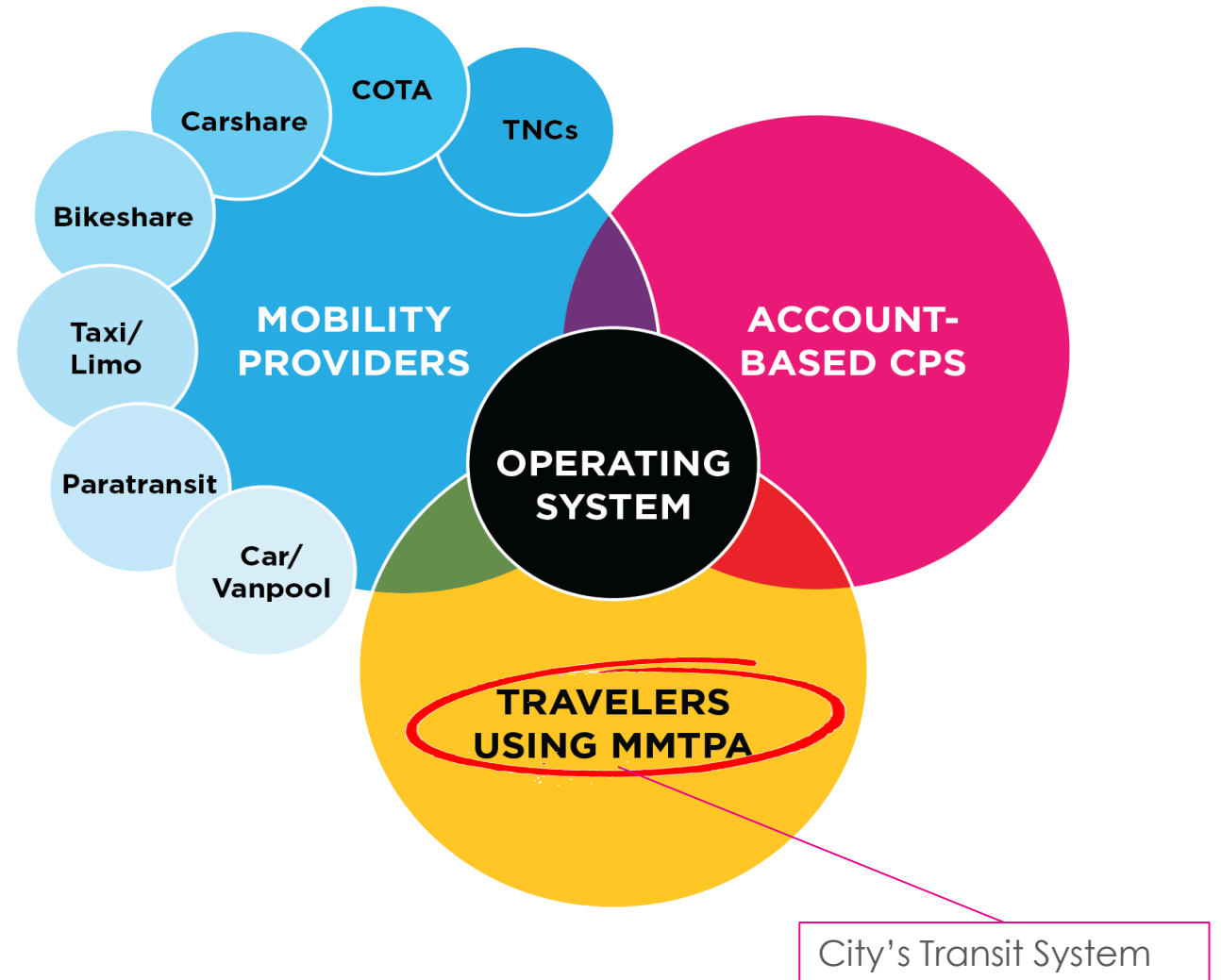


## What are cities doing?

Columbus City, OH

- The future of transit is multimodal and on-demand
- A shift away from personally-owned vehicles
- A solution that uses both public and private entities
- Integration with the Smart Columbus Operating System
- One-stop shop to plan, book, and pay
- As the regional public transit provider, COTA is the ultimate owner

## “Columbus Multi-mode Trip Planner/ Common Payment System”





# BTW- The Devil is in the Details

