



Randy Iwasaki - *Executive Director*
Contra Costa Transportation Authority
December 2019



Who We Are

- CCTA is a public agency formed by voters in 1988 to manage the county's transportation sales tax program and to lead transportation planning efforts.
- We are responsible for maintaining and improving the county's transportation system by delivering critical transportation infrastructure projects to safely and efficiently get people where they need to go.
- Managing entity of autonomous vehicle (AV) testing site: GoMentum Station.



Contra Costa County, California

Location

Eastern suburb of the San Francisco Bay Area



Population

1 Million+



Thriving Commerce

Businesses headquartered in Contra Costa County include:



Diverse

Demographically, economically and geographically



What We Do



PEDESTRIAN

Make improvements to sidewalks, crosswalks, trails, and paths



LOCAL STREETS

Smooth traffic flow on major roads and invest in improvements such as repairing potholes and road surfaces



BUSES

Invest in a reliable, comfortable and convenient bus network



SAFE ROUTES TO SCHOOLS

Focus on programs and projects aimed at bicycle and pedestrian safety for K-12 students



FERRIES

Expand the Bay Area ferry system by looking to ferries as an alternate commute method between West County and San Francisco



BICYCLE

Invest in safe routes and infrastructure improvements for bicyclists



BART

Improve BART service and stations, extend routes and increase parking at stations



HIGHWAYS

Complete Contra Costa's highway system, and improve air quality and noise protection along these corridors



CARPOOL/RIDESHARE

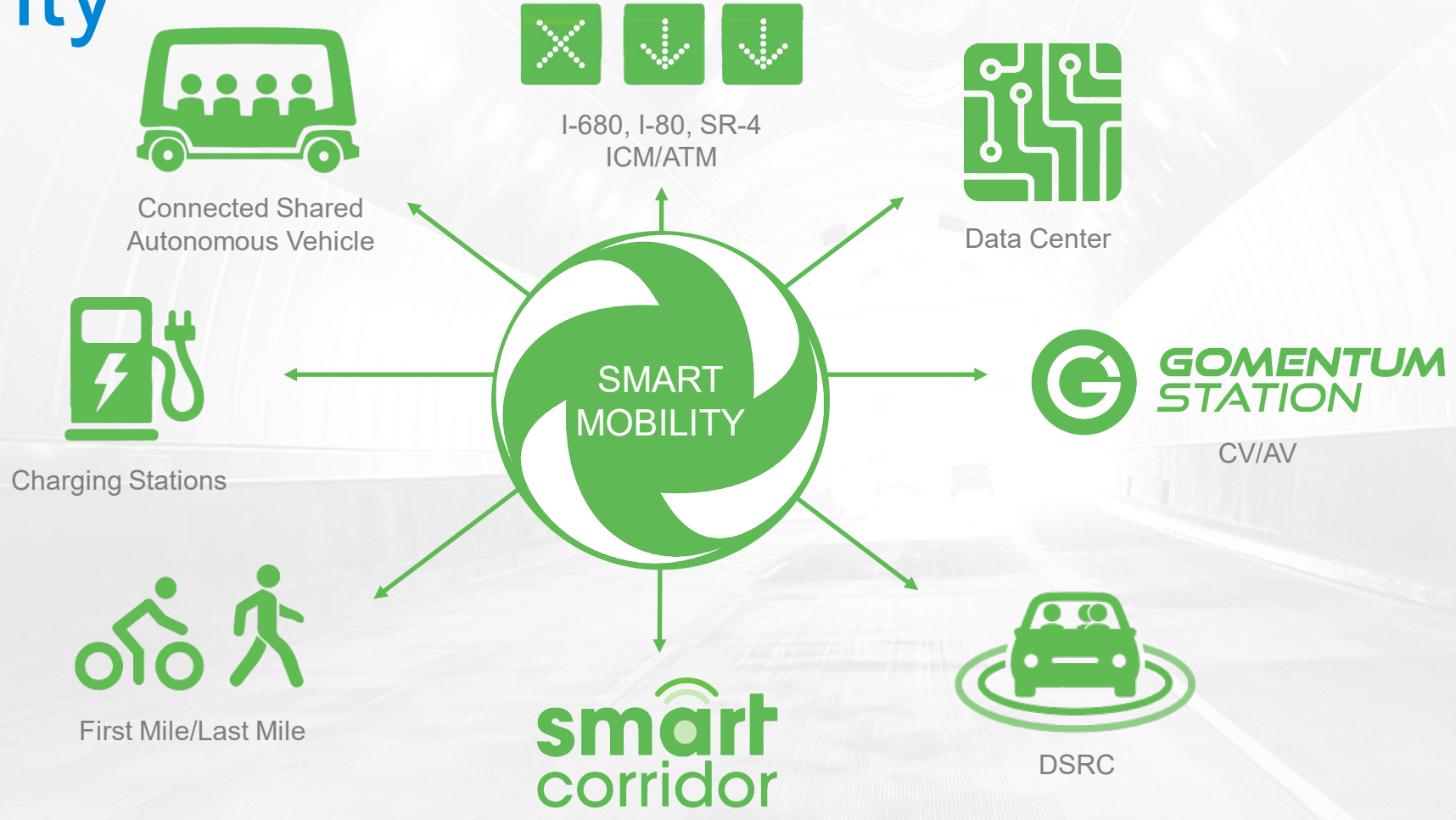
Implement programs to reduce traffic congestion by encouraging carpooling and ridesharing



PROGRAMS FOR SENIORS AND PEOPLE WITH DISABILITIES


Enhance transit options to improve mobility for seniors and people with disabilities

Redefining Mobility in Contra Costa County



Why Mobility as a Service?



ON  EAST OF GRAND AVE
OVER 4 1/2 TONS

 Alameda San Jose
 San Francisco

 BUSES AND
CARPOOLS ONLY
5AM-10AM MON-FRI
3PM-7PM
San Francisco
ONLY 

END CARPOOL
LANE
600 FEET


 Oakland 
San Jose
  

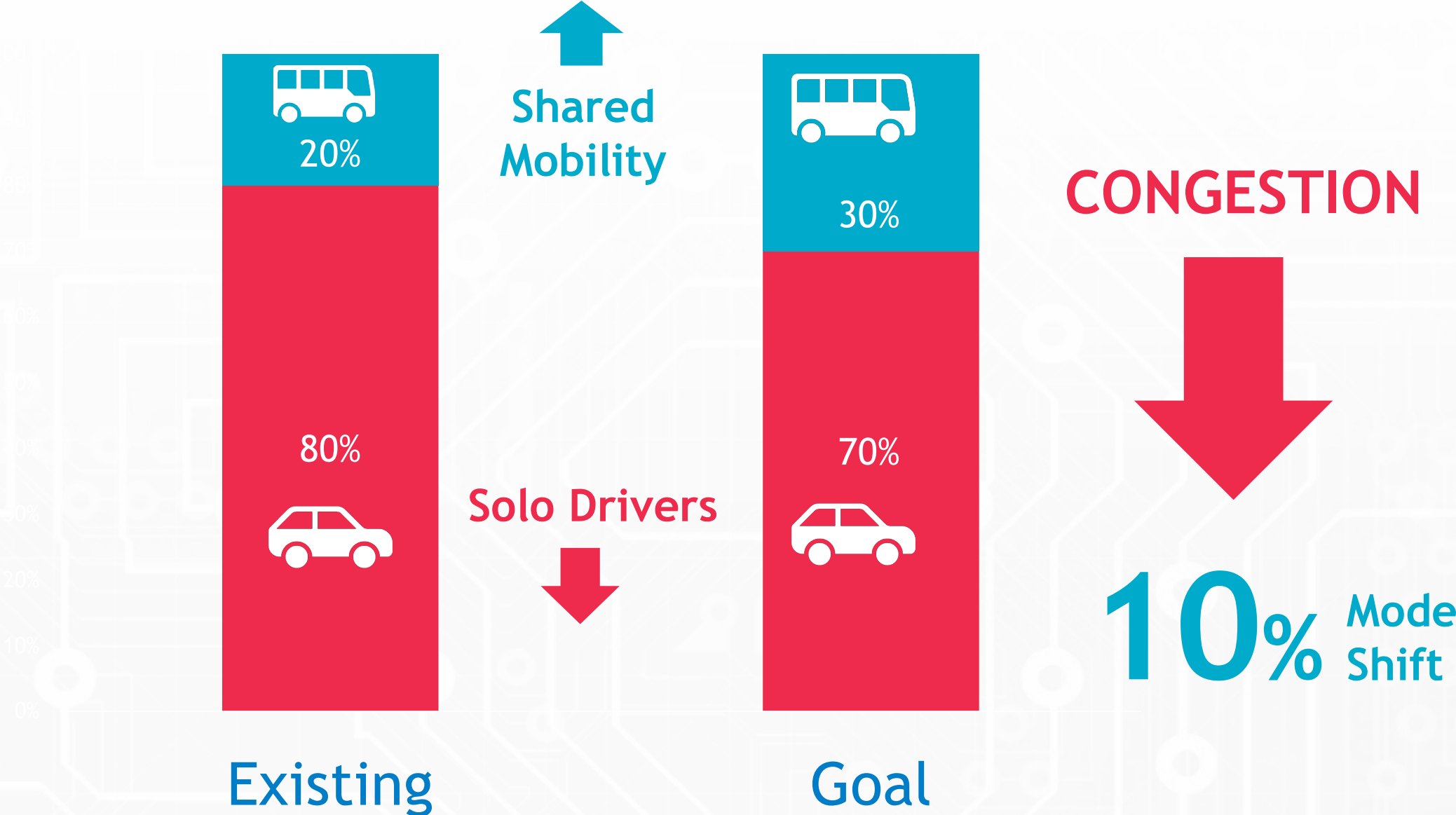
 San Francisco
3 RIGHT LANES

 LEFT
LANE MUST
EXIT
AHEAD

 14 9


EXIT
9 2R

Mode Shift



Rethinking Ownership

16.5%

Rethinking car ownership

42.5%

Would own a self-driving car

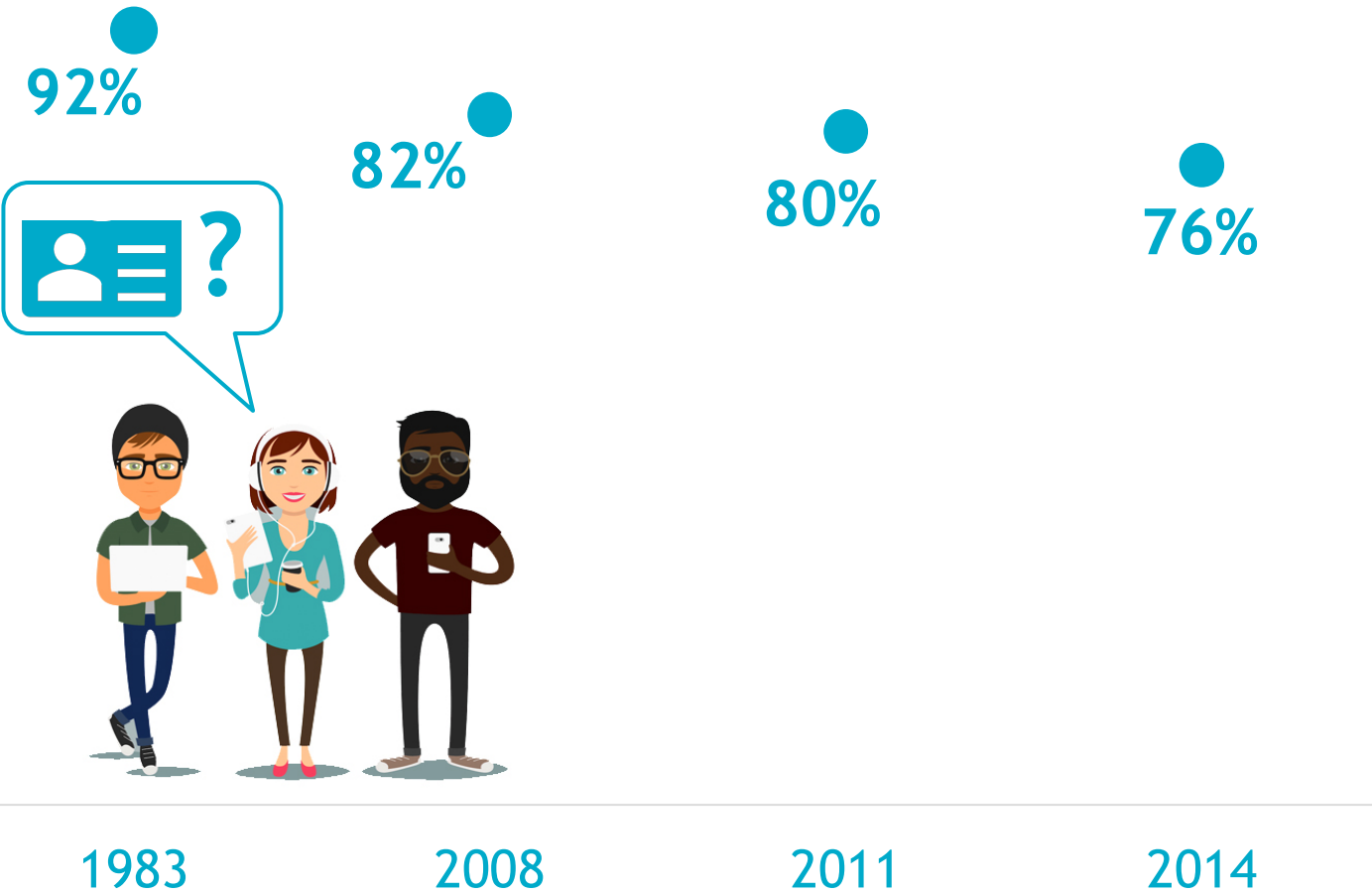
50%

Would buy a “green” car



- Data from Lendedu.com (2017) & Industry Week (May 2018)

Reduction in Driver Licenses

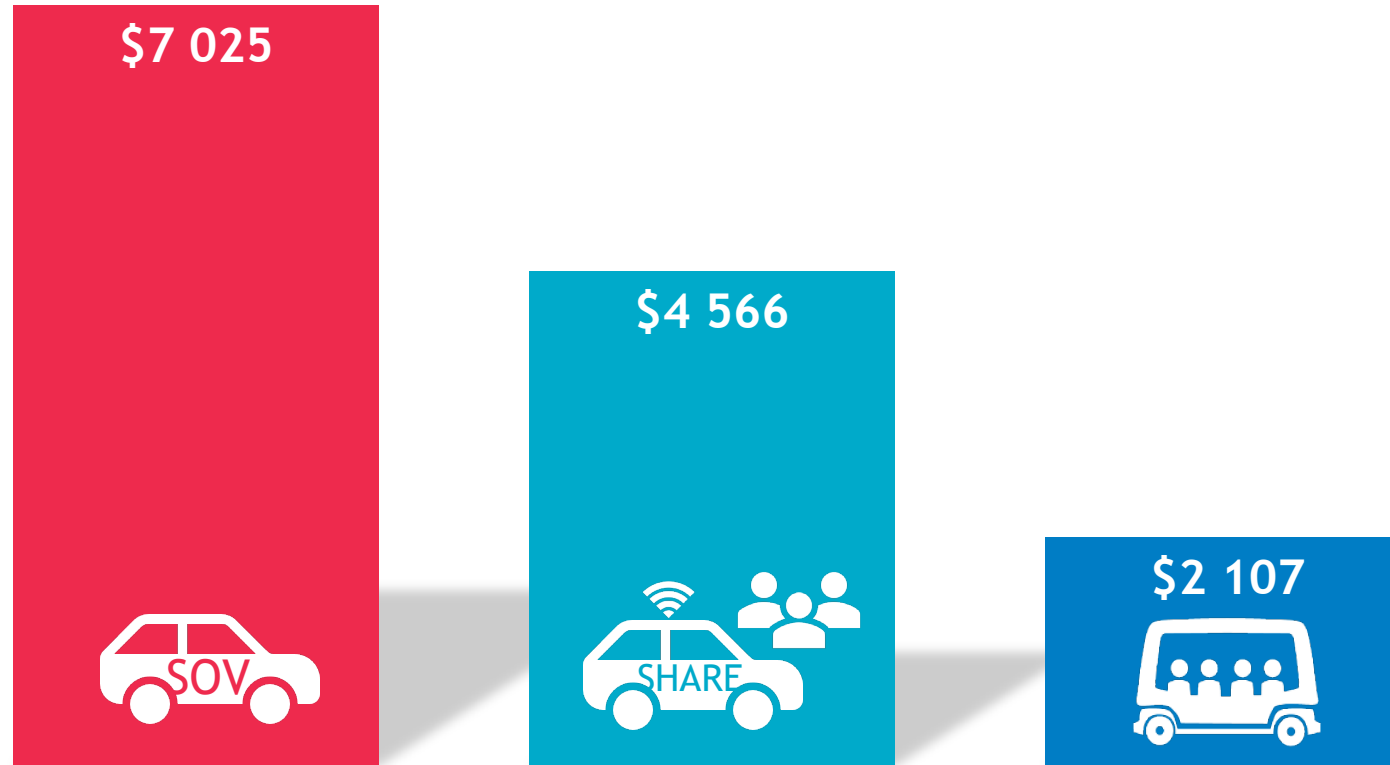


Continuous decrease in people with driver's licenses
(20-24 year-olds)

16% decline over 30 years

Source: Money Magazine, 2016

Annual Cost Comparison by Mode



Calculation based on average car commute 25 miles/day.

Source: Deloitte University Press



Increased Accessibility, Opportunity

Studies show that **COMMUTE TIME IS THE KEY FACTOR** in social mobility, more so even than factors related to crime or education.*



**Transportation Emerges as Crucial to Escaping Poverty, NY Times May 2015*

Need to Redefine Mobility



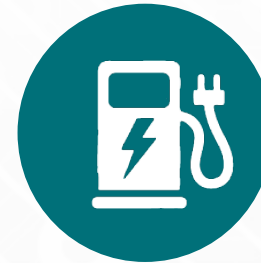
RIDESHARING



TRANSIT



CAR
SHARING



ELECTRIC
VEHICLES



TNC +
RIDESOURCING



DYNAMIC
PARKING



PEDESTRIAN



SHARED
AUTONOMOUS
VEHICLES



BICYCLES

Mobility as a Service (MaaS)

A combination of **public and private** transportation services that provides **personalized mobility options** based on traveler needs, to enable **end-to-end journeys** paid for by the traveler with a **single payment**, and aims to **optimize** the **transportation** system.

Guiding Principles



Collaboration



Accountability &
Data Sharing



Promote
Equitable Access



Complement
Transit



Include
Disabled Access



Ensure
Fair Labor
Practices



Support
Sustainability



Improve
Safety



Positive
Financial Impact



Consider
Effects on
Congestion

Bay Area MaaS Activity

(public/private partnership)



PARTNERS

STAKEHOLDERS

WHERE WE ARE AT

The Urban landscape is evolving at a fast pace.



BY 2050,
66% OF THE
POPULATION WILL
BE IN URBAN
AREAS



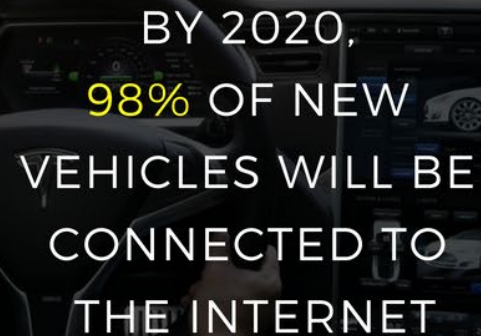
DUE TO
CONGESTION, 68 U.S.
URBAN AREAS LOST
TIME AND WASTED
FUEL COSTING
\$72 BILLION



IN 2016,
SMARTPHONE
ADOPTION
SURPASSED **80%**



BY 2025, THE
DRIVERLESS CAR
MARKET WILL BE
WORTH
\$42 BILLION



BY 2020,
98% OF NEW
VEHICLES WILL BE
CONNECTED TO
THE INTERNET



UBER AND LYFT
CLAIM MONTHLY
CONSUMERS OF
7.3 MILLION



U.S. BIKE-SHARE
ANNUAL
RIDERSHIP IS
28 MILLION TRIPS



BY 2024,
GLOBAL CARSHARING
IS PROJECTED TO
EXCEED **23 MILLION**
MEMBERS

1



Lack of first and last
mile trip support

2



Various channels:
Mobile, Web,
Digital Signs

3



Multiple patron
accounts and
payment profiles

CAUSE OF PATRON FRUSTRATION

4



Minimal trip
planning functions

5



Limited real-time
notifications

6



Minimal integration
with other public
and private
operators

7



Intermittent
in-journey
connectivity

OUR CHALLENGE



Patrons now have access to many more mobility providers and they are combining them in a single trip

Privately-Owned Vehicles



Public Transit, Rail, Bus, Ferry



Regional & Intercity Services: Rail, High-Speed Rail, Air



Shared Mobility Services

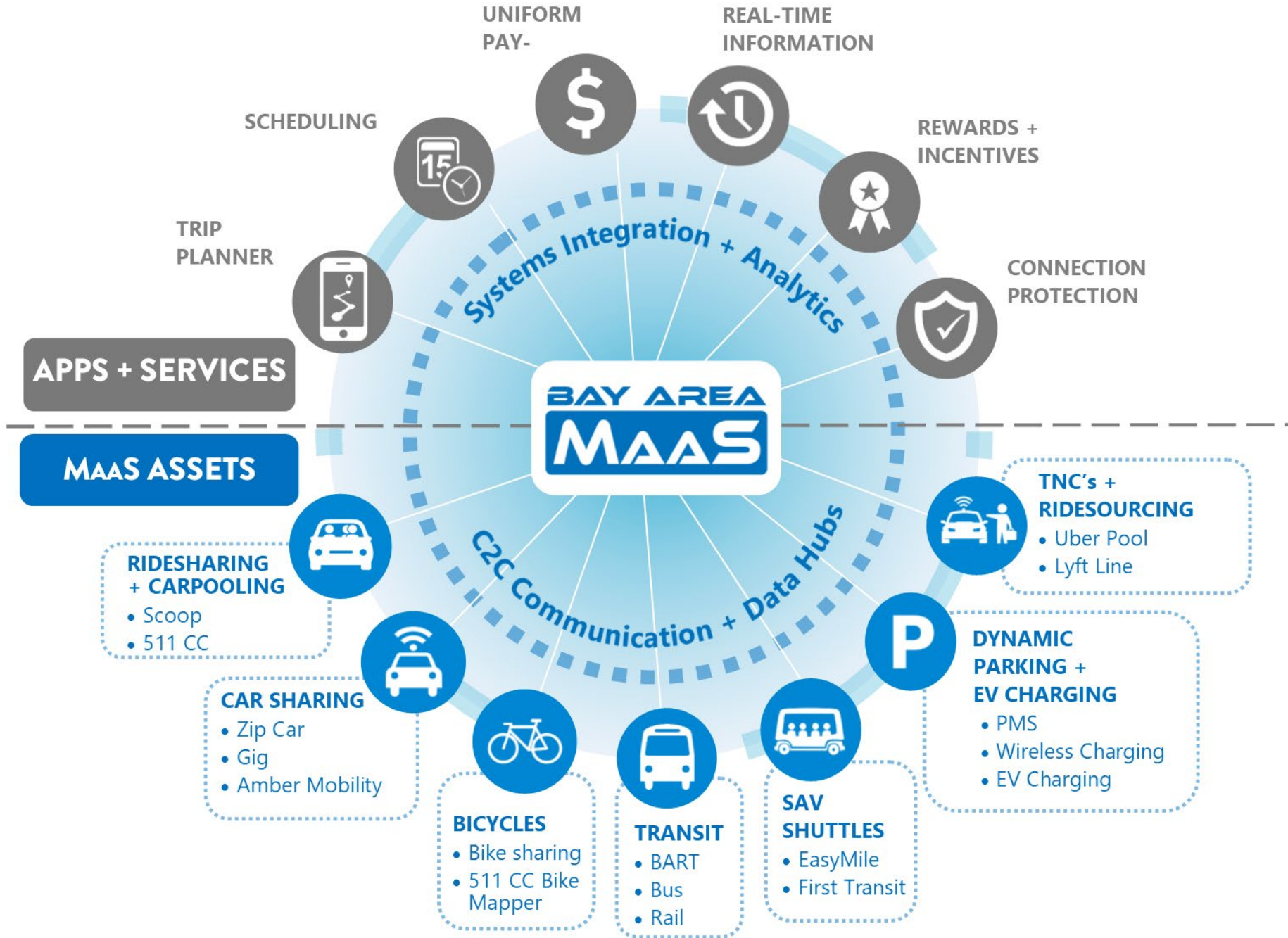


Employer Shuttles, Jitneys, Commercial Deliveries

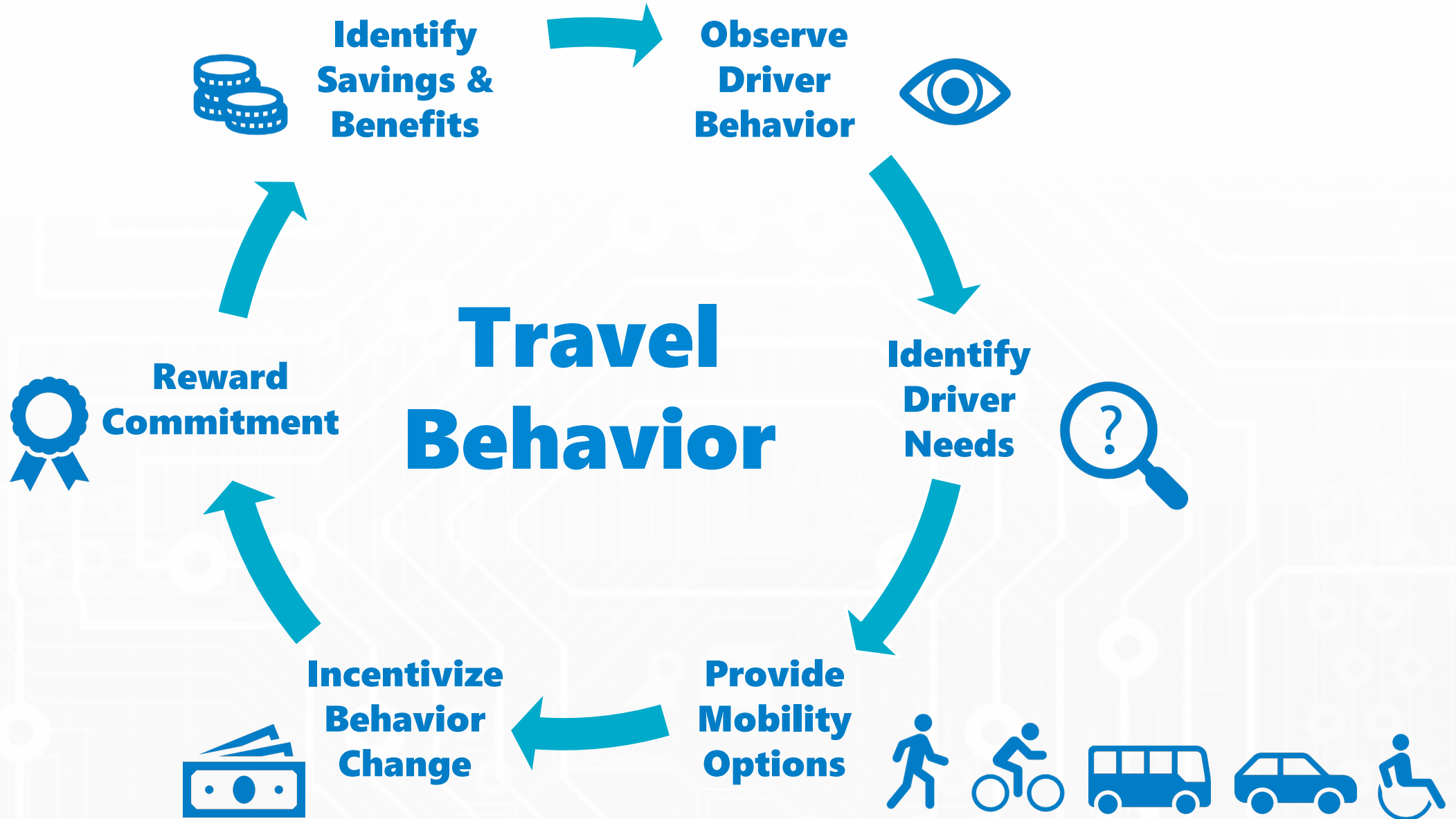


Taxi, Limousine & Transportation Network Companies

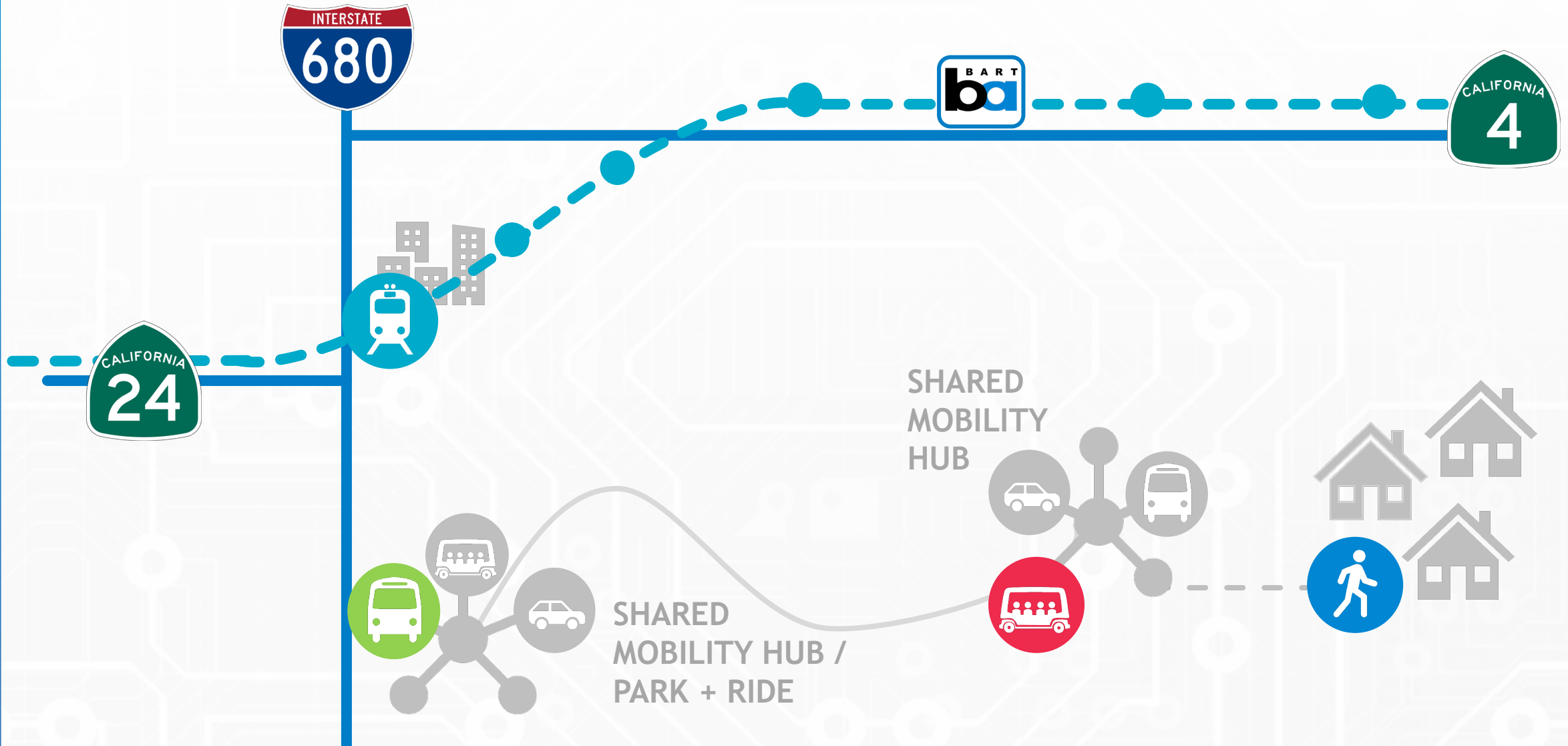




Travel Behavior



Mobility Management



Roles

Framework

-Regional-

- Manage Application
- Manage Users
- Manage Service Providers
- Uniform Payment
- Rewards Program
- Concierge Customer Service Center

DATA

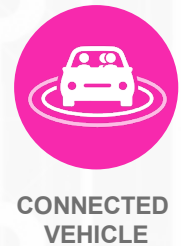
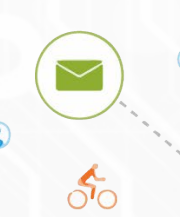
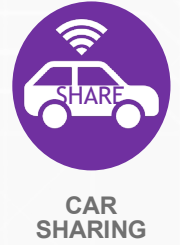
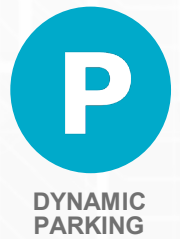
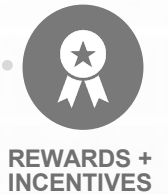
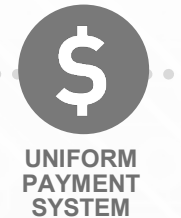
Mobility

Options

-Local-

- Identify Transportation Service Providers
- Infrastructure Needs
- Identify Local Rewards

Data Collection



Benefits of MaaS

- Increase Transit Efficiency
- Provide First and Last Mile Solutions
- Leverage Existing Transportation System
- Understand Travel Behavior
- Smart investments



Randell Iwasaki
Executive Director
Contra Costa Transportation Authority
riwasaki@ccta.net

 [@riwasaki2](https://twitter.com/riwasaki2)

 [Randell Iwasaki](https://www.linkedin.com/in/RandellIwasaki)



SAVE THE DATE

Redefining Mobility Summit 2020
Tuesday, March 10, 2020



California, USA