SFMTA

Congestion Management

SFMTA Board Annual Workshop

January 29, 2019

Congestion Consequences

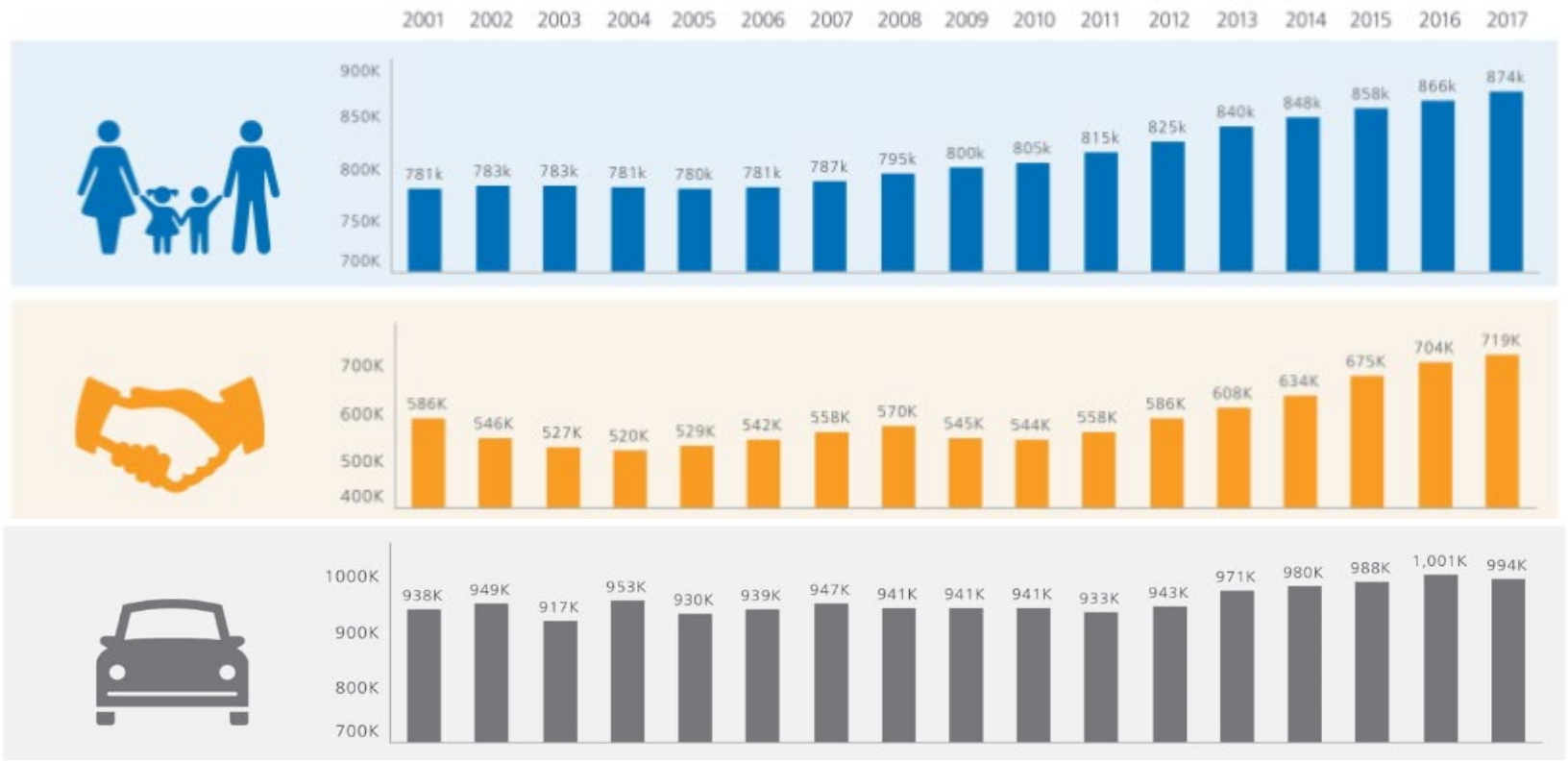
- We want economic growth and more housing, but that mean more trips of all types.
- Per Transit First, vehicular congestion cannot be solved by adding lanes to streets or freeways.
- Cities formerly relied upon parking policy and pricing to limit trip making to busy areas. TNCs allow people to travel in a vehicle without the need to park.
- Increases in street congestion affects other modes, particularly transit. Slower transit can make driving more attractive.
- It is slower and takes more time for those who chose to drive, which may add to stress and business costs.

WHY IS CONGESTION INCREASING IN SF?

Our Challenge

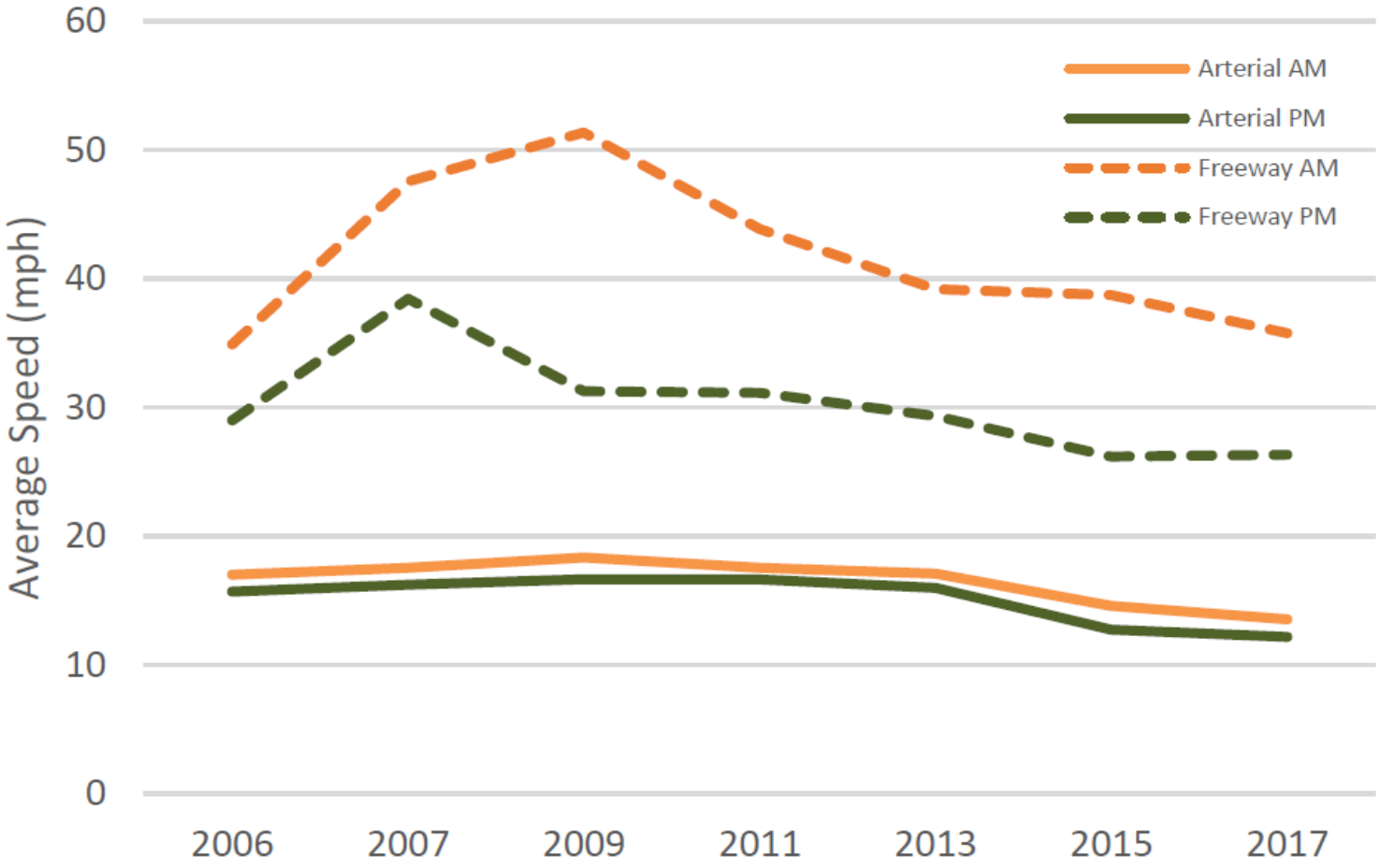
FACTORS THAT RESULT IN MORE VEHICULAR TRIPS

- Increased population
- Increased employment
- Increased vehicular trips by Uber and Lyft
- Increase in number of registered vehicles

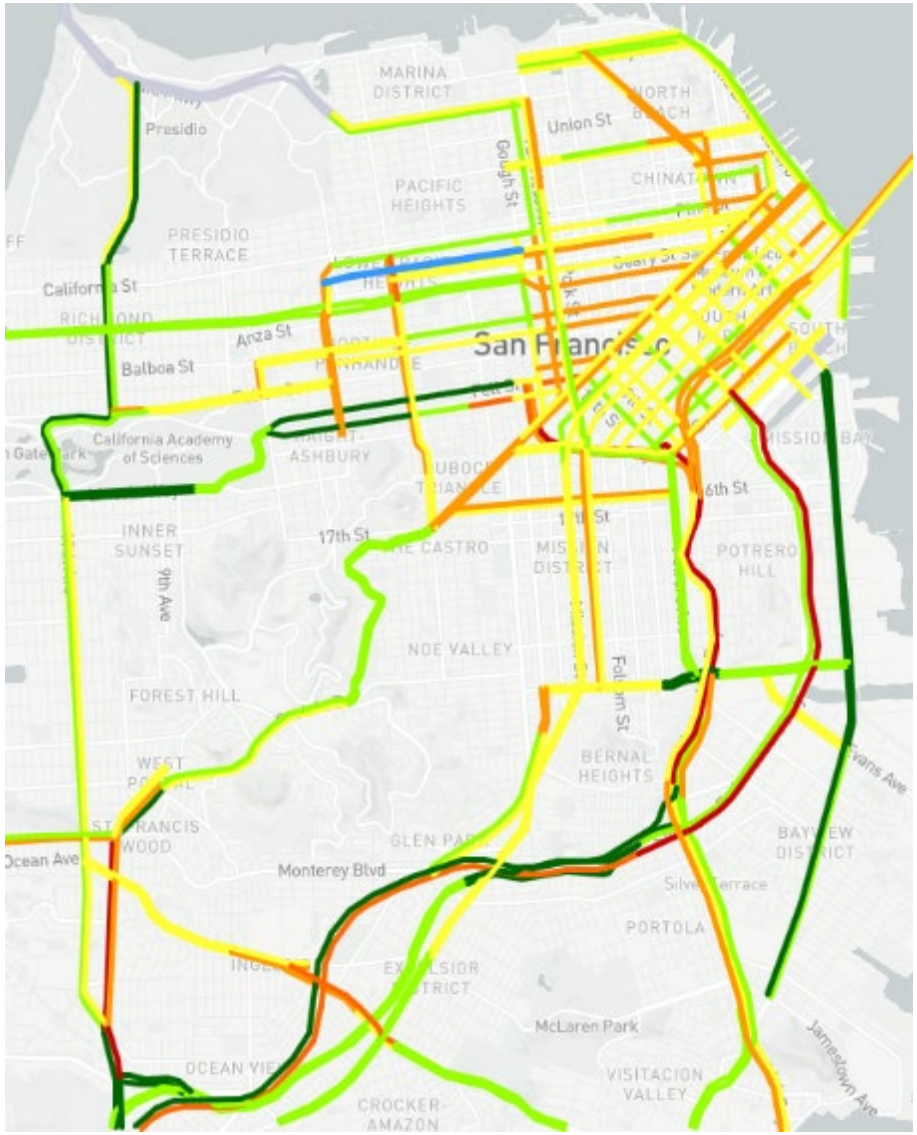


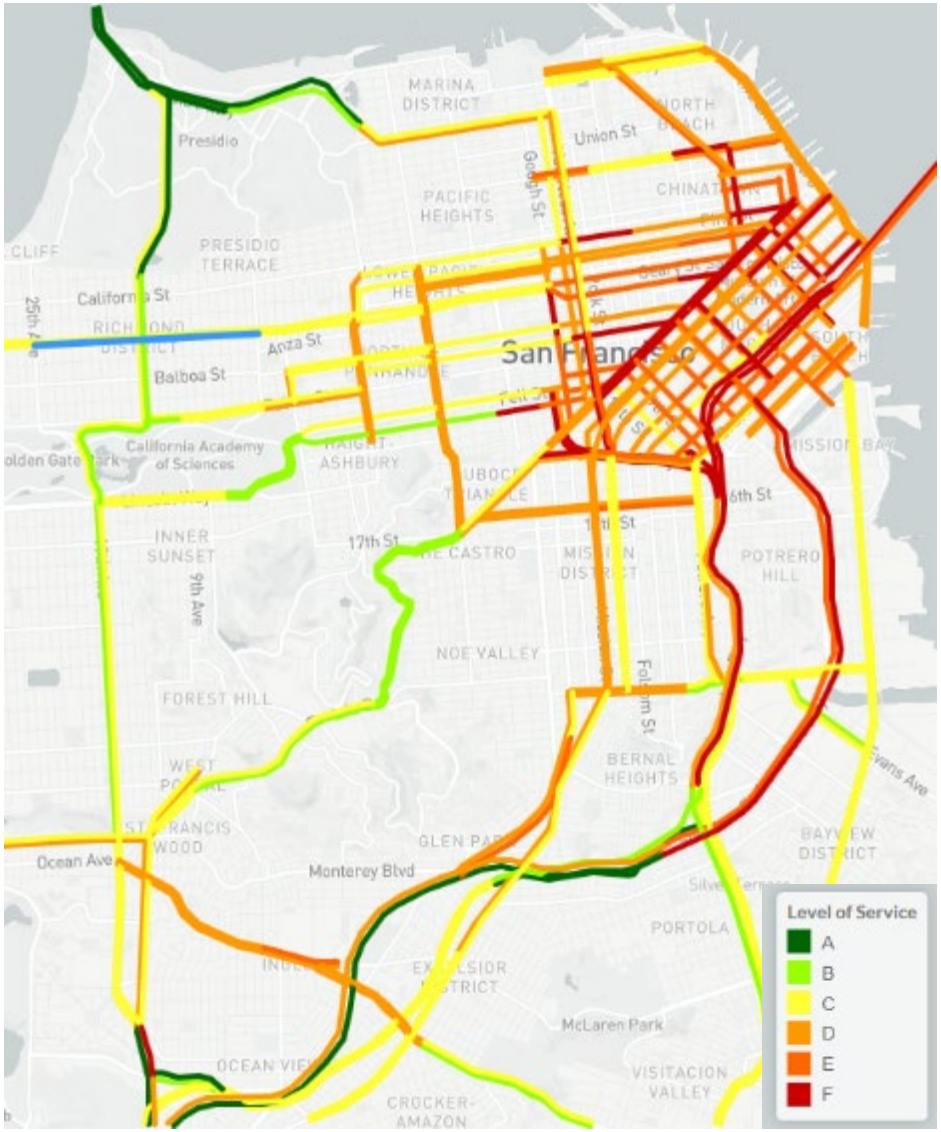
VEHICULAR TRAVEL SPEEDS ARE DECLINING ON SF STREETS

Figure 0-2: CMP Network Average Travel Speed Change

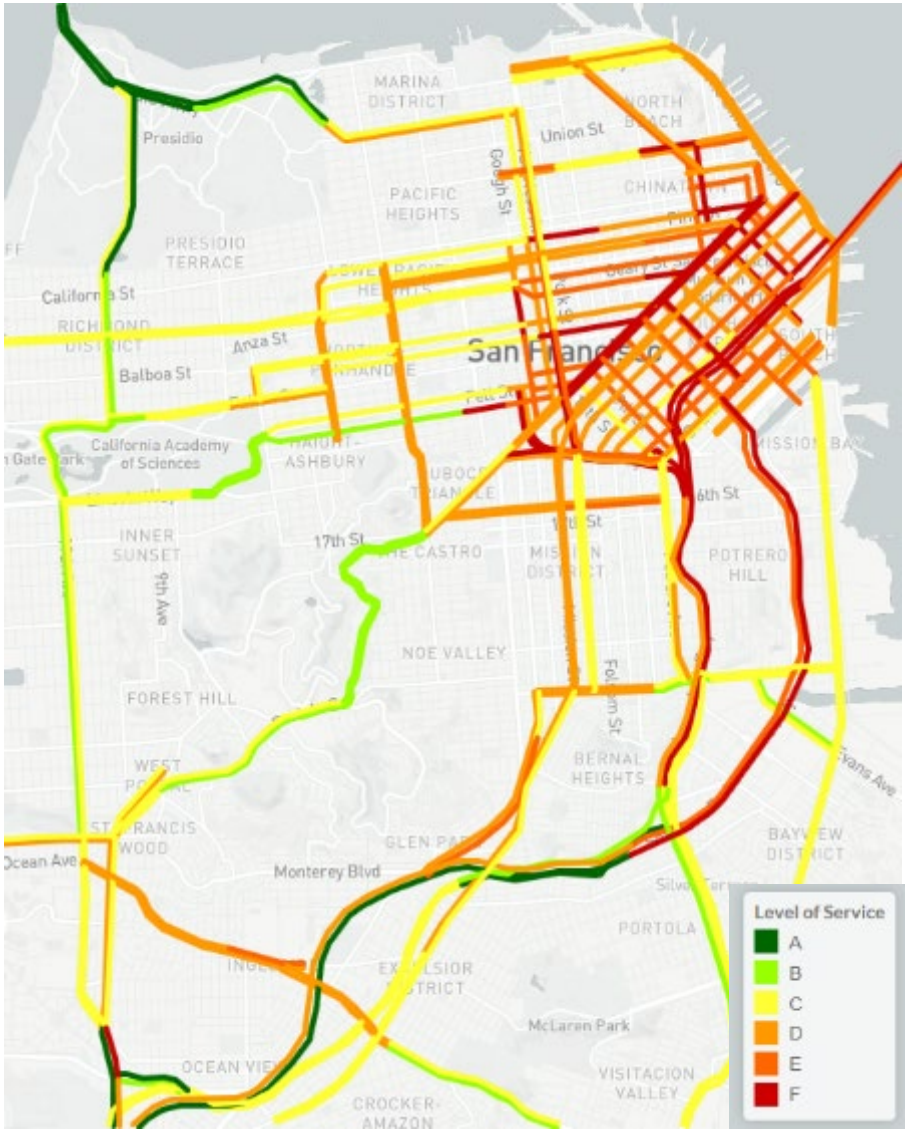


Arterial Delay
2011 versus 2017 in AM PEAK (Source: SFCTA)



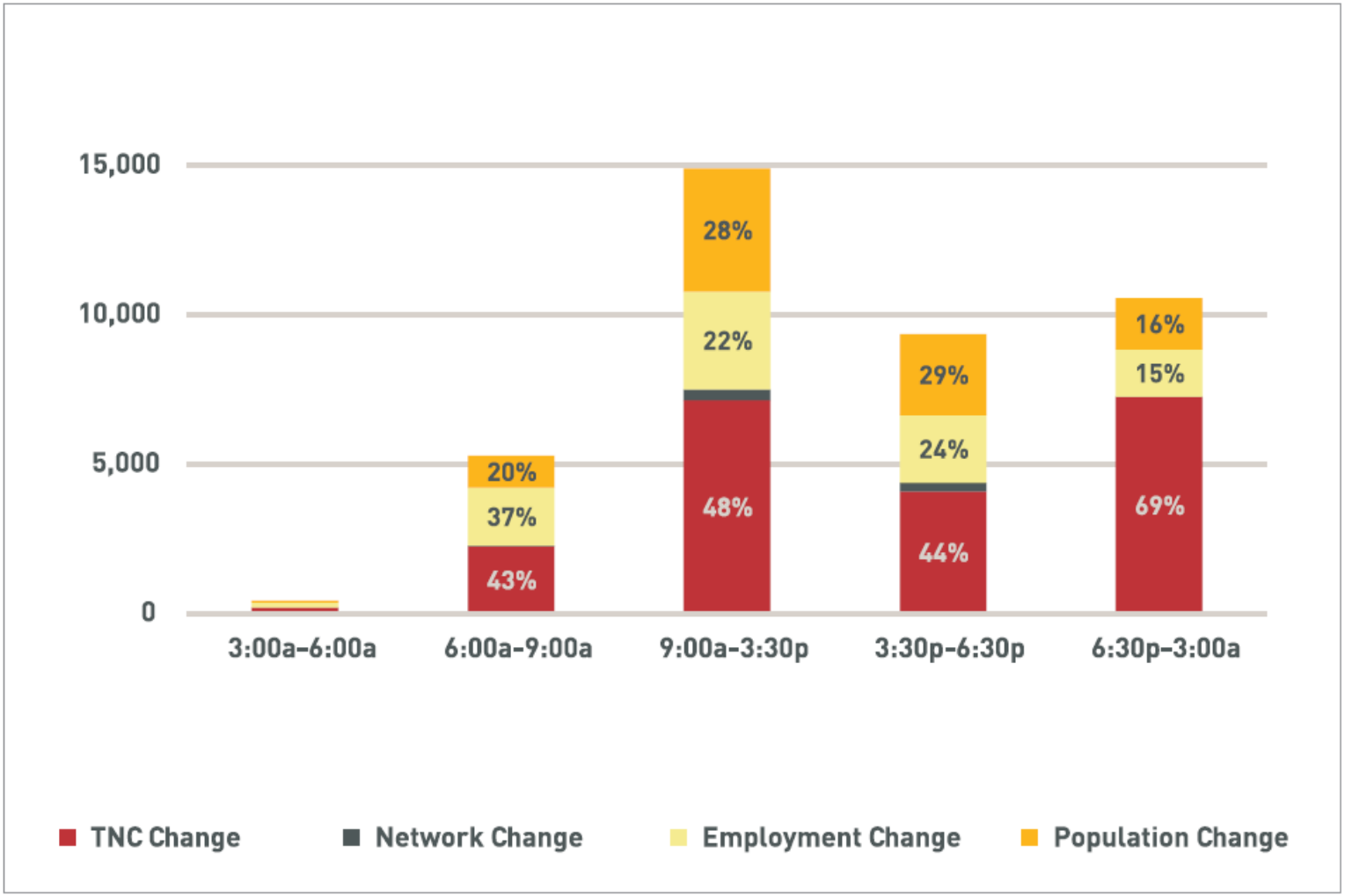


Arterial Delay
2011 versus 2017 in PM Peak (Source: SFCTA)

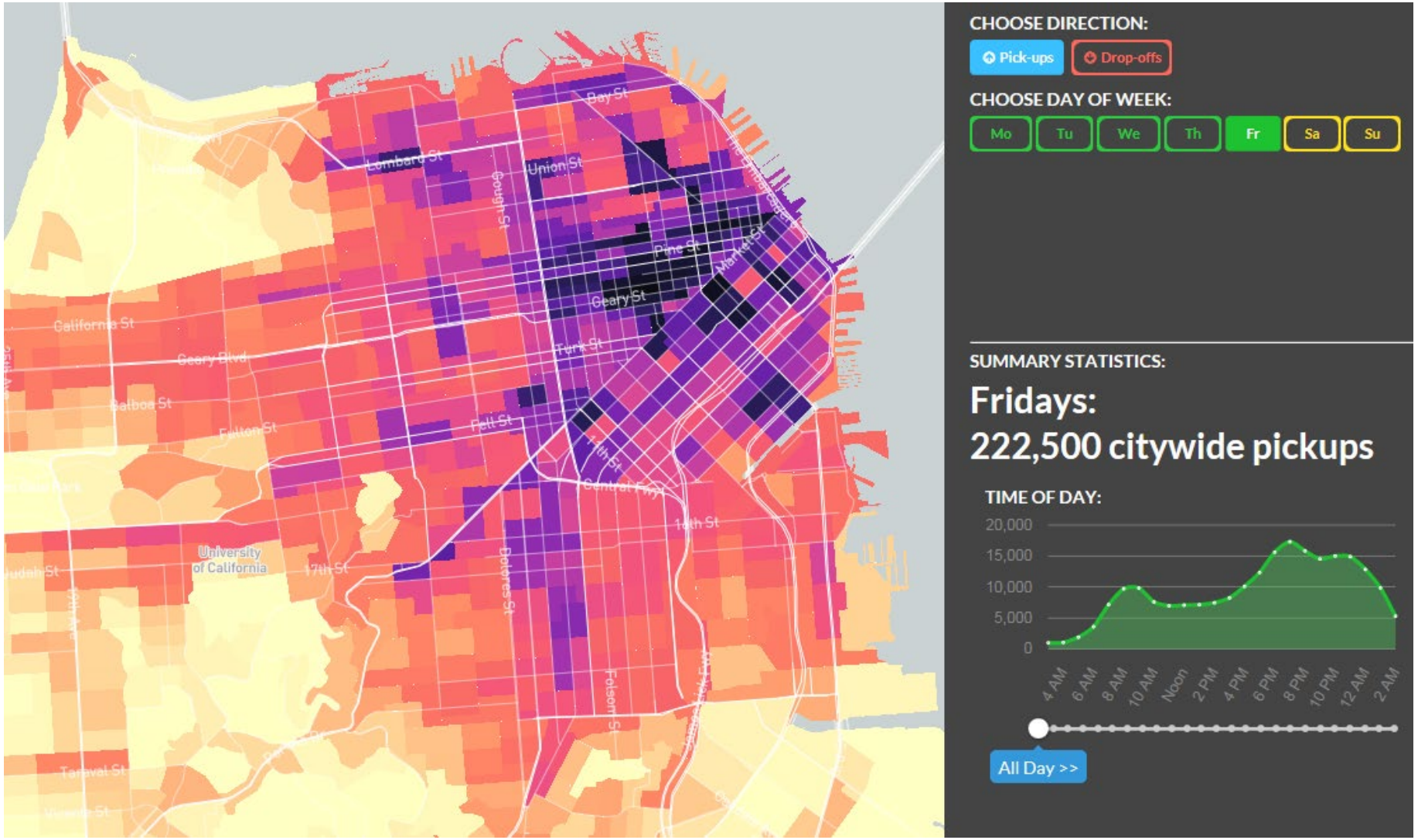


SFCTA's "TNC and Congestion" Report

FIGURE 1. CHANGE IN VEHICLE HOURS OF DELAY BY TIME PERIOD BY FACTOR



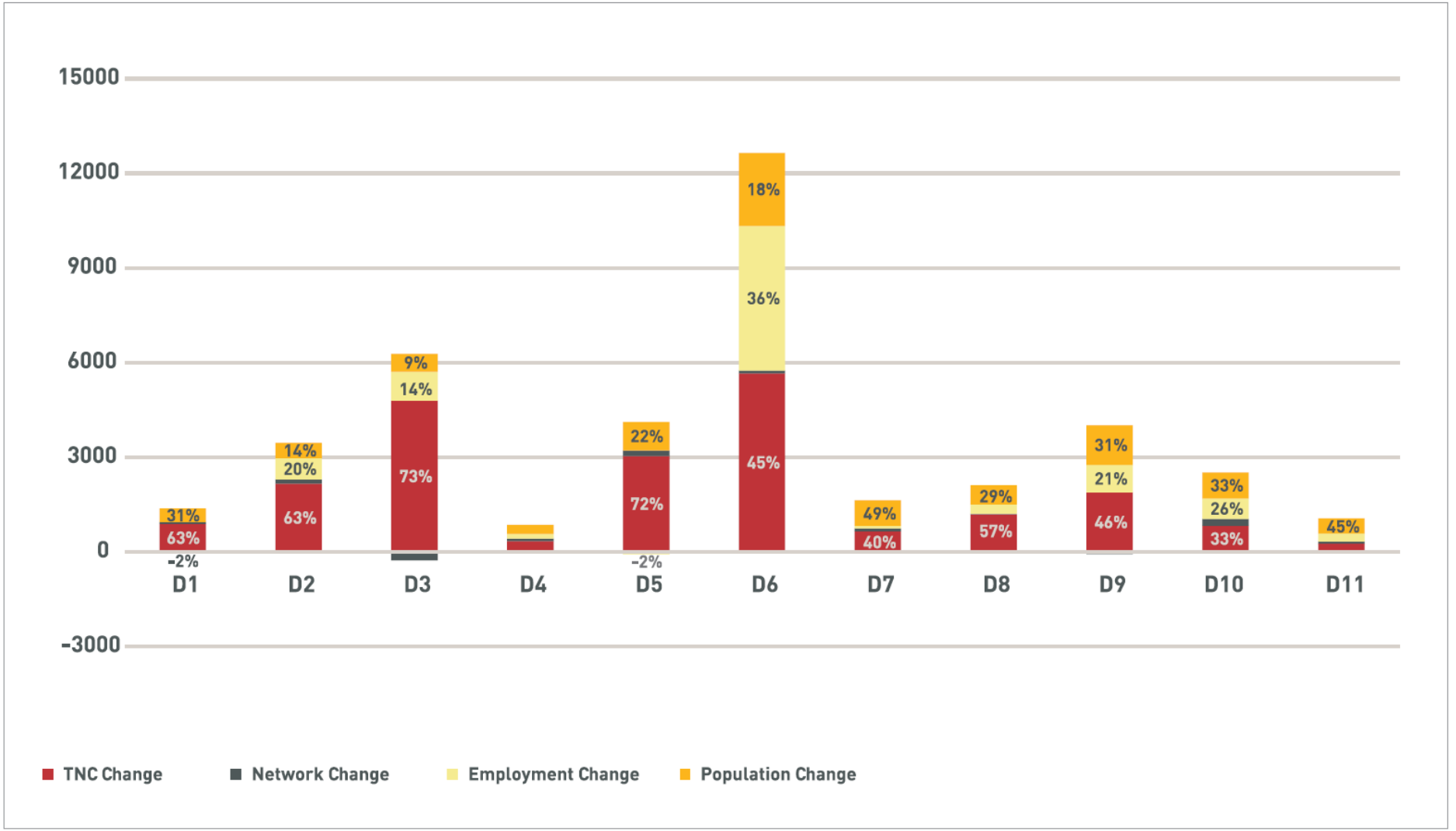
Transportation Network Activity Has Increased



Source: SFCTA tncstoday.sfcta.org

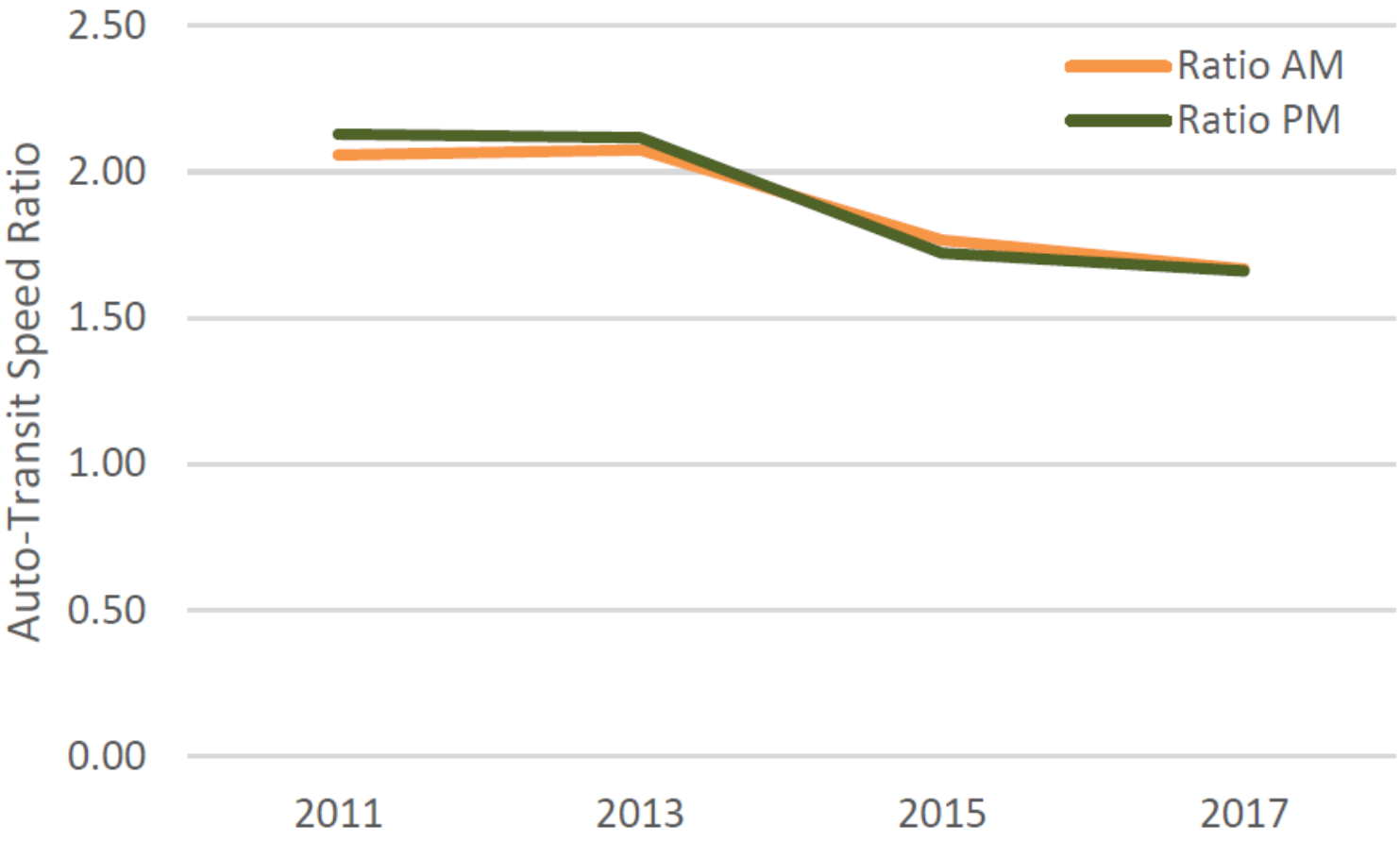
Increase in traffic activity concentrated in District 6

FIGURE 5. CHANGE IN VEHICLE HOURS OF DELAY BY SUPERVISOR DISTRICT BY FACTOR



Transit speeds are not declining as much as vehicular speeds

Figure 0-6: Auto-Transit Speed Ratio



Congestion Activity

Objective

We would like your thoughts on:

a. Which congestion factors the SFMTA should focus on in 2019; and

b. Where these congestion factors are having an impact

Congestion Factors

- Construction
- Deliveries
- Double Parking
- Free On-Street Parking
- Schools
- Special Events
- Transportation Network Companies
- Work Commute

Ready?

Question 1: Types of Congestion

At the end of 2019, SFMTA is successful at reducing the impacts of congestion in San Francisco. **Which congestion factors did the SFMTA focus on?**

Please rank the 8 congestion factors on the line provided.

4 minutes

Share

Please share the top 3 congestion factors you believe the SFMTA should focus on in 2019.

30 seconds each

Question 2: Location

For each of the top 3 congestion factors, select a location where this type of congestion occurs.

Please be prepared to share 1 location and why you selected this location.

3 minutes

Share

Please share 1 of your congestion factors. For this factor:

- Share the location
- Why the SFMTA should focus on this location

2 minutes each

Thank you

Staff will summarize your input and report back after a short break.

Tools for Managing Congestion

Existing Tools For Managing Congestion

- Parking enforcement/PCO fixed post deployment
- Tighter approach to construction permitting and ISCOTT
- Spot parking and traffic changes
- Plan for large events
- Parking pricing/policy
- Signal timing adjustments
- Mode Shift efforts (Muni, bike network, ped safety)
- Transportation Demand Management (TDM)

Potential Tools For Managing Congestion

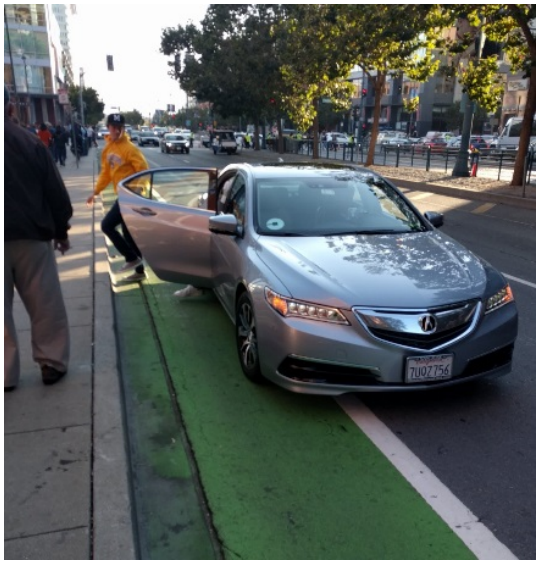
- Curb Management
- Automated Parking Enforcement
- Congestion Pricing
- Automated Vehicle (AV) Policy
- Mobility as a Service (MaaS)
- Restricting Use of Roadways (car free zones)

Curb Management

Increased Demand for Curb Space

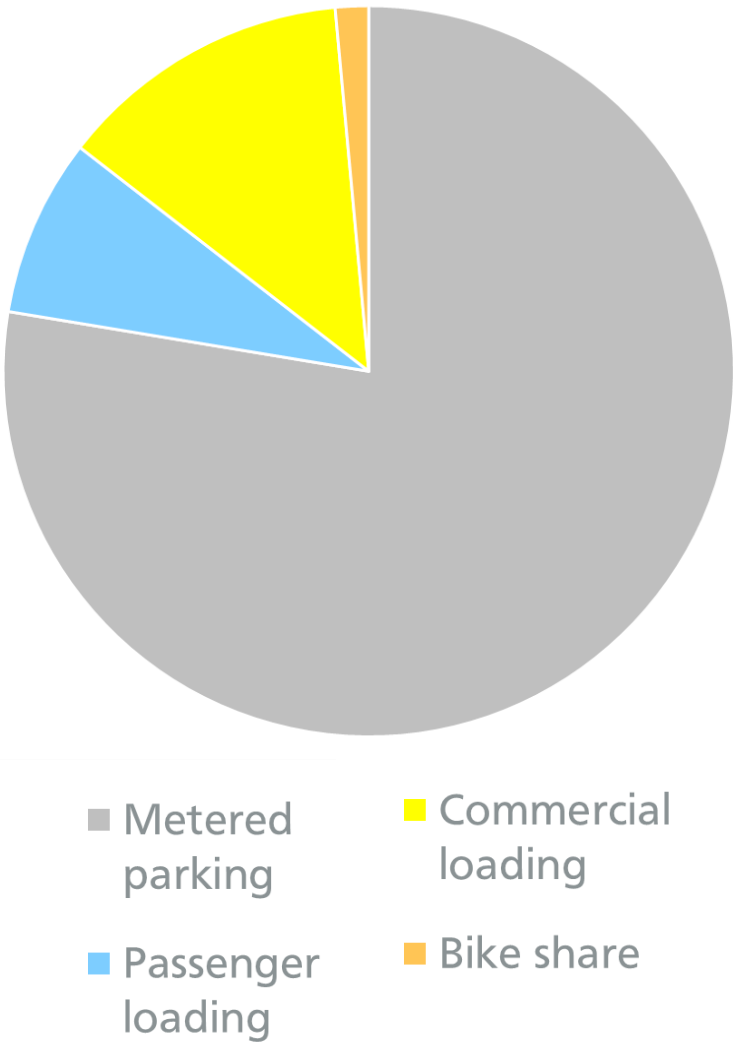
- Curb uses and users growing rapidly

- Increased double-parking, blocking transit, travel and bike lanes



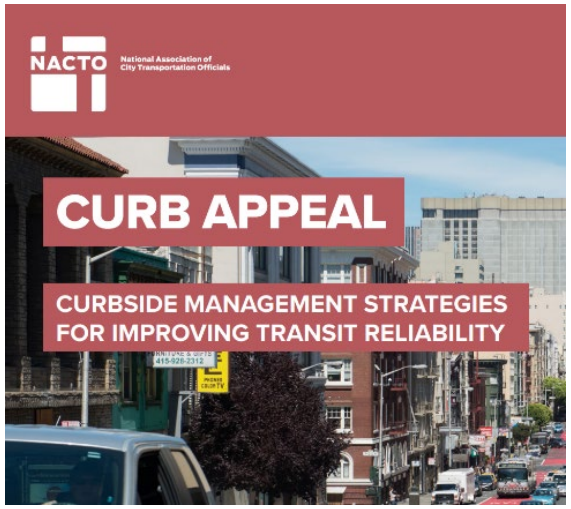
Limitations of Existing Strategies

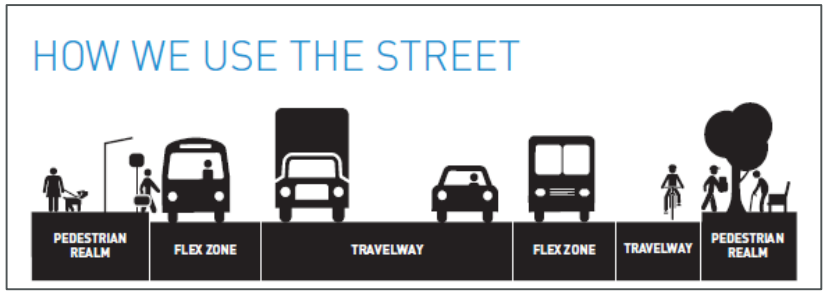
- Prioritizes private car parking
- Parcel-by-parcel rather than block-, corridor- or area-focused
- Loading zones require individual applicants
- Some users excluded



Curb Management Team

- Interim curb management guidelines for streetscape projects
- Holistic, place-based curb-management planning
- Curb Management Strategy
    - Reframing the role of the curb and how it is allocated
    - New curb hierarchy
    - Engagement and communications





Curb Hierarchy by Land Use

Residential Low Density	Residential Med - High Density	Neighborhood Commercial	Downtown	Major Attractor	Industrial/PDR
Movement	Movement	Movement	Movement	Movement	Movement
Access for people	Access for people	Access for people	Access for people	Access for people	Access for goods
Storage for vehicles	Storage for vehicles	Access for goods	Access for goods	Public space and services	Storage for vehicles
Public space and services	Access for goods	Public space and services	Public space and services	Access for goods	Access for people
Access for goods	Public space and services	Storage for vehicles	Storage for vehicles	Storage for vehicles	Public space and services

Congestion Pricing

Congestion Pricing

SFCTA SCOPE OF WORK:

- Project Management
- Community Outreach and Stakeholder Engagement:
  - *Community Engagement Plan*
  - *Polling & Communications Strategy*
  - *Technical Advisory Committee, Policy Advisory Committee*
  - *Two Major Outreach Efforts*
- Goals & Objectives, Purpose & Need
- Case Studies and Peer City Partnerships
- Evaluation Framework and Methodology
- Develop and Evaluate Scenarios
- Final Report: *Overview of Process, Preferred Scenario, Funding, Implementation Plan*

Congestion Pricing

TIMELINE & BUDGET

- Timeline: January 2019-June 2020
- Estimated cost: $1.8 million
- Potential funding sources: Prop K, IPIC, other grant sources

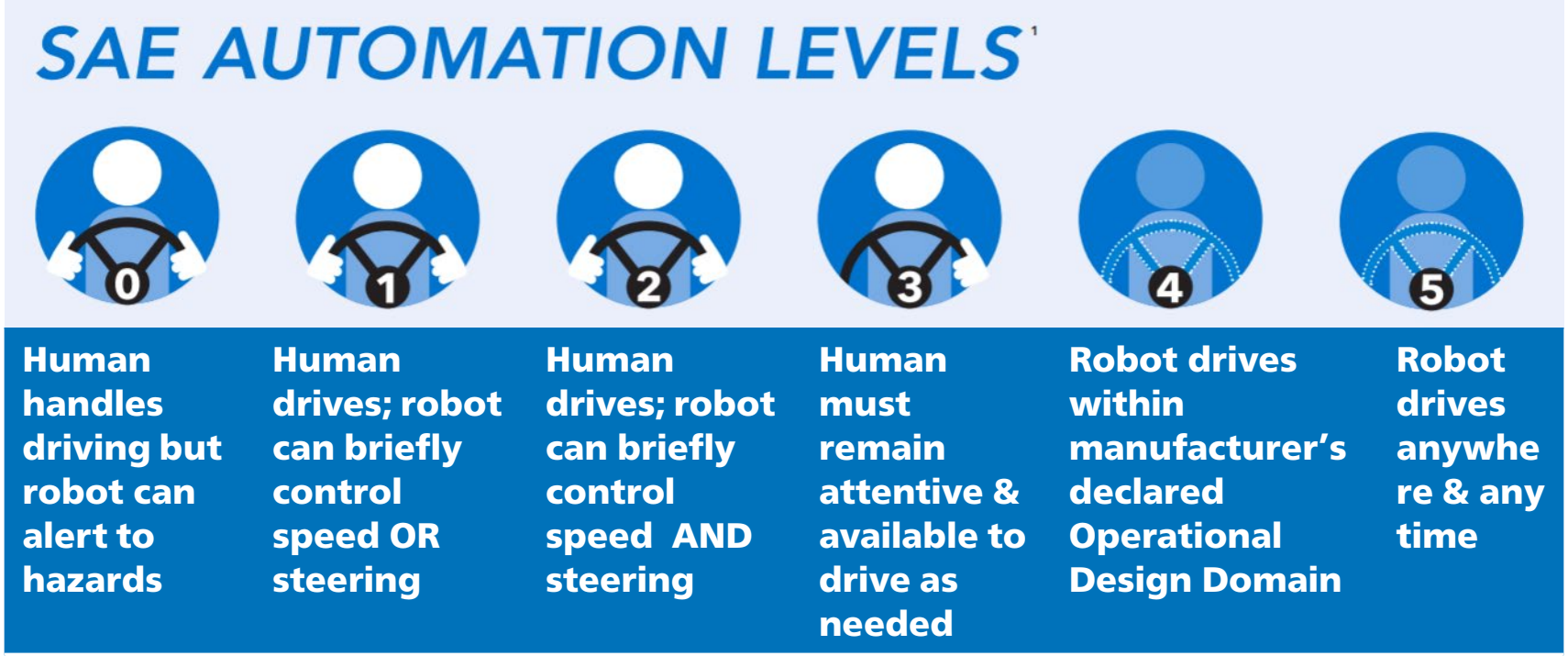
SFMTA BOARD INVOLVEMENT

- Updates through Director's report
- Key milestones brought to Policy and Governance
- Present final report to full Board

Automated Vehicles

Advanced Driver Assist Systems
ADAS = 0-2

Automated Driving Systems
ADS = 4&5



Industry's Stated Vision

- Eliminate collisions caused by human error
- Expand mobility for people with visual or other disabilities that make existing modes challenging
- Reduce *cost* of transportation

Likely Early Business Models

Driverless Congestion Scenarios

Utopian	Dystopian
AVs Operated as Fleets	Increased AV induced SOV use
Increased Pooling	Reduced Use of Transit & Active Modes
Increased Sharing	Increased VMT through Ghost Trips
Improved First/Last Mile to Transit	Increased Sprawl
Allows Reuse of Space Currently Used for Parking	AVs Do Not Comply with Parking/Traffic Laws Better than Human Vehicles

World Economic Forum - AV Policy Framework


Safety


Transit


Equitable Access


Disabled Access


Congestion

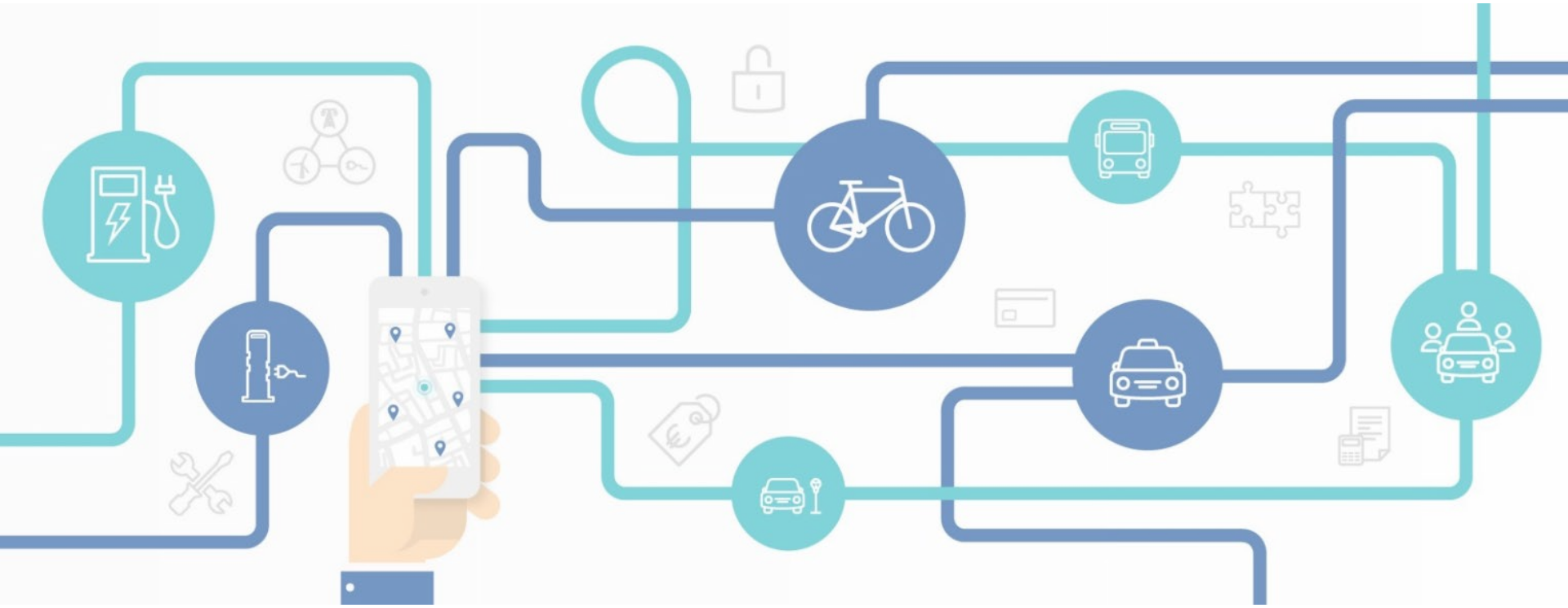

Sustainability


Financial Impact


Accountability


Labor


Collaboration



Mobility as a Service

Image: Exploring Mobility as a Service by Nigel Zhuwaki

What is Mobility as a Service?

- Enable start to finish trip planning and payment
- Multi-modal trip planning tool
- Single user account to link multiple mobility accounts
- May include public and private transportation services

Levels of Mobility as a Service Integration

- Real-Time Information
- Trip planning
- Booking and payment
- Bundling or subscription
- Incentives or rewards

Potential Benefits

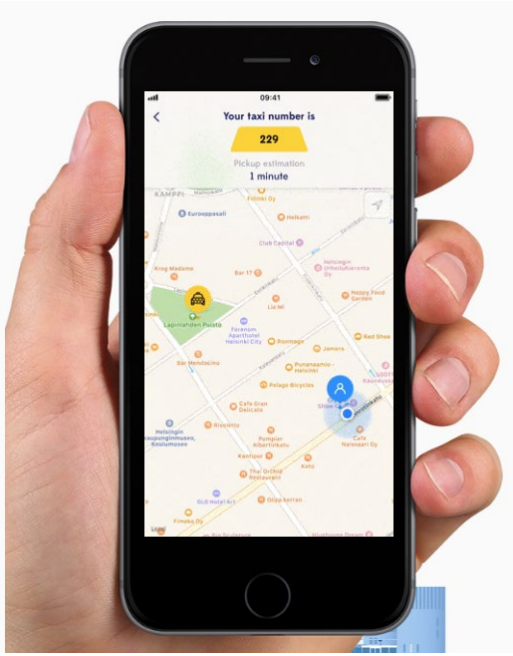
- Reduce car ownership
- Reduce local and regional congestion
- Integrate trip planning and payment across the Bay Area's 25+ public transit operators
- Provide users with a seamless travel experience
- Obtain data for system planning and management

Existing SFMTA Efforts

- SFMTA.com
- Clipper
- Muni Mobile
- SF Paratransit Access Online
- SF Paratransit Taxi Online
- Customer Information System

International Example – Whim, Helsinki

- Launched in 2016
- Public transit, bikeshare, taxis and rental cars
- Pay per ride or monthly plans
- Whim Urban: $55/month. Unlimited public transit. Reduced rates for taxi and carshare.
- Whim Unlimited: $565/month unlimited public transit, taxi and carshare access



Domestic Example: Miami Dade

- EASY Card
  - Transit
  - Ride-hailing
  - Bike-sharing
- Virtual EASY Cards

Domestic Example: LA Metro TAPforce

- Launched in November 2018
- Centralized program signup payment:
  - 24 transit agencies
  - Metro Bikeshare
- Planned for 2019:
  - New TAP mobile app
  - TAP rewards
  - Additional payment options (Apple Pay and Android Pay)
  - Include scooter sharing, parking, electric vehicle charging, micro transit, toll lanes, ride-hailing and other account-based programs

Private Companies

- Transportation Network Companies are building MaaS platforms:

Lyft

- Ride-hail
- Bike Share
- e-Scooter Share

Uber

- Ride-hail
- Bike Share
- e-Scooter Share
- Uber Eats

Policy Questions

- What barrier are we trying to reduce or remove?
- What services are we seeking to include?
- Should this be developed and owned by a public entity or private sector?
- Focus on an SF specific or regional approach?

THANK YOU