

# California Integrated Travel Project

## Interoperability and Equity



# 40 Million Californians in 2019 50-70 Million in 2050

California is the 5<sup>th</sup> largest global economy and home to many of the private sector's mobility and financial innovators, as well as home to the largest and most complex public transportation system in the United States – up to 360 operators.

About **5%** of Californians commute to work by **public transit**

**65%** of California public transportation trips are by **bus**



**18% of households are underbanked**

**21% of African American households are unbanked**



**7% of households are unbanked**

**15% of Hispanic households are unbanked**

# Mobility in Flux

Today, residents, visitors, businesses and institutions of California face a disaggregated public transportation network that is often

## Difficult to Use

Customers experience significant difficulties planning trips, making connections, and coordinating fare payments

## Costly to operate

Agencies face high fare collection costs

## Suffering from declining ridership

Between 2012 and 2016 California lost 62.2 million annual transit rides

# Opportunities

A sense of urgency around mobility, climate change, health and rising inequality

Public investments in transit capacity and transit network redesigns

Economic mobility and inclusion initiatives across California's regions

Diverse agencies and civic institutions addressing the same problems

Substantial use of cash payments in transit

New technology platforms and new data sources

To solve a problem of this magnitude, **collaboration and collective problem solving is required** at all levels of government, with public and private operators, academia and think tanks, and with vendors of relevant technologies and business models.

# What is Cal-ITP?



Cal-ITP is the result of cooperation between the California State Transportation Agency (CalSTA), Caltrans, the Capitol Corridor Joint Powers Authority (CCJPA), as well as local, regional and state partners.



Cal-ITP was started to research, plan and establish a statewide framework for multimodal transportation integration, beginning with payments and trip planning.



# Cal-ITP Objectives



Improve the transit experience  
in California



Increase public agency buying power  
for technology and services



Meet California  
climate change law

Promote equity

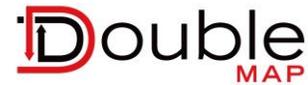


Realize benefits for transit services



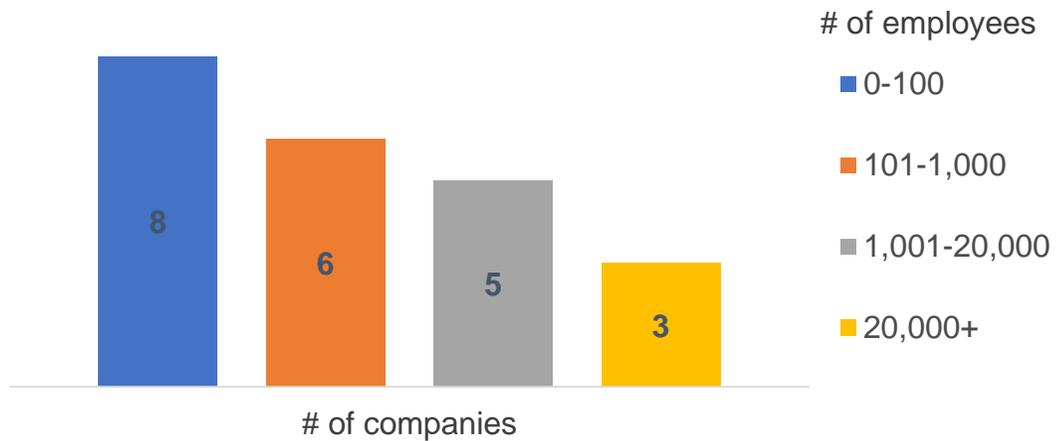
# A Market Sounding was conducted to learn from the private sector

Responses were received from small & start-up firms as well as established, global companies in the marketplace.

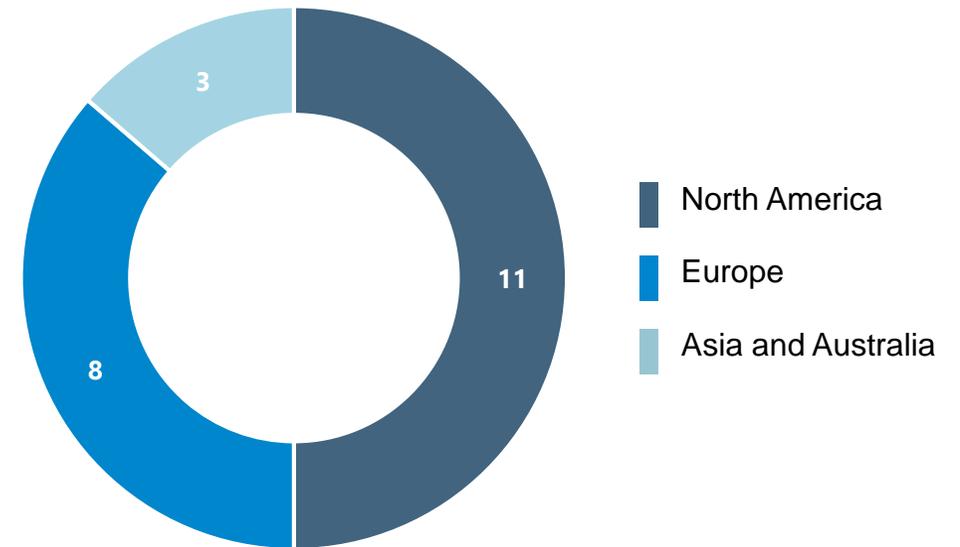


# Overview of Respondents

## Distribution of companies by size



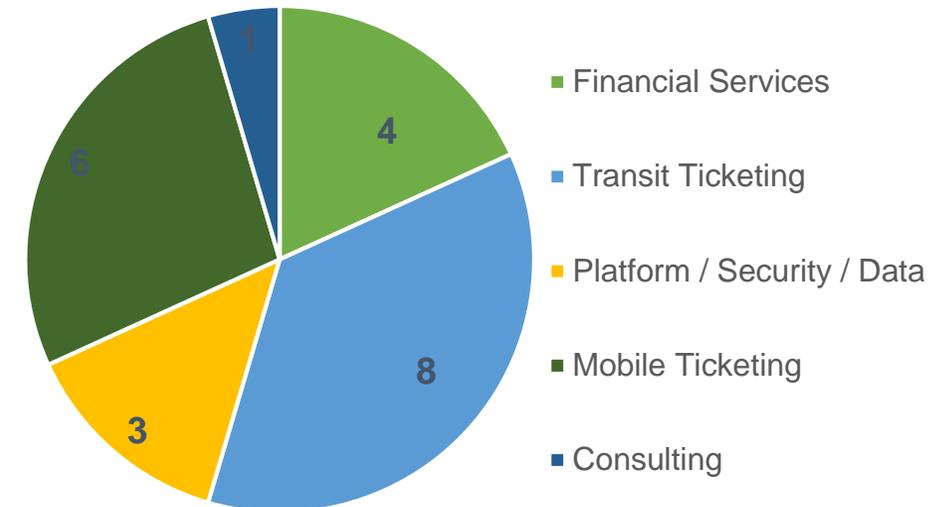
## Distribution of companies by location



# Participation shows that the market is being disrupted

## The payments market is changing rapidly.

- Consumer expectations have changed as a result of exposure to the superior user experience in mobile (wallet) payments and the convenience of door-to-door services provided by mobile apps and platforms.
- Cal-ITP's Market Sounding underscored this trend, as the incumbent fare payment industry players were around one-third of the interested and responding organizations.
- The bulk of interest comes from the financial services industry, the mobile phone industry including platform and app developers, and start-ups.



# Industry has traditionally been organized in silos with old boundaries...



## Fare Payment

- Proprietary, card systems, tokens, paper tickets
- Gates, validators



## Financial Services

- Interaction with fare payments limited to sales and card top-ups



## Automotive

- No interaction with fare payments



## Identity

- No interaction with fare payments



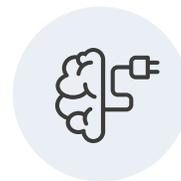
## Mobile

- No interaction with fare payments



## Shared transportation

- No interaction with fare payments

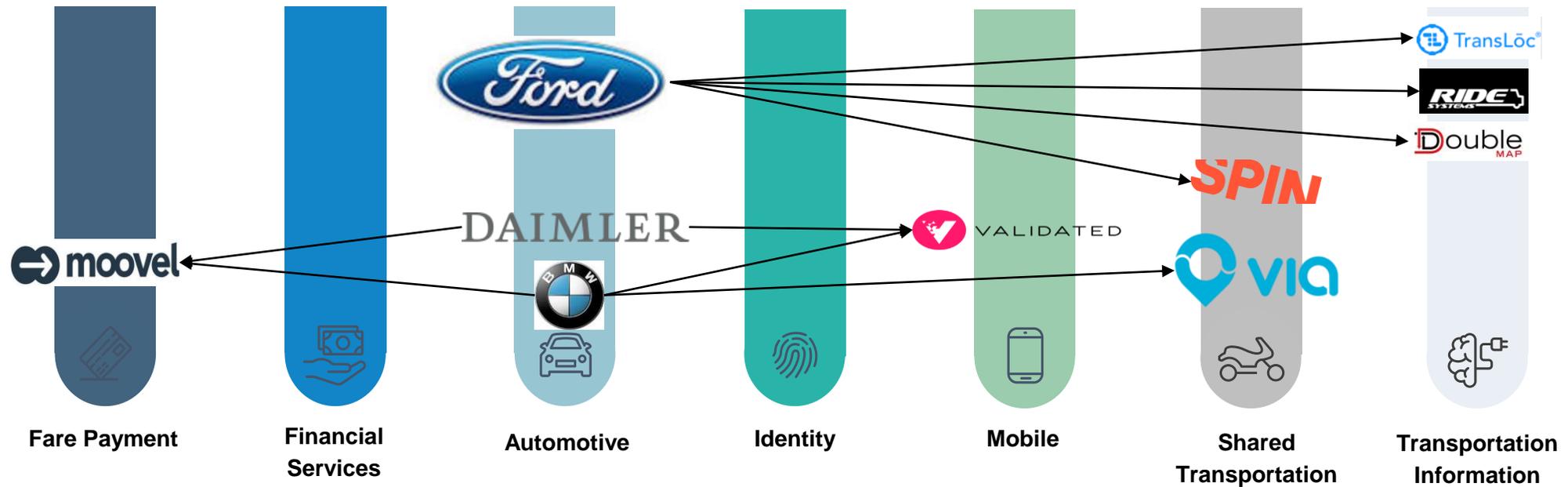


## Transportation information/data

- No interaction with fare payments

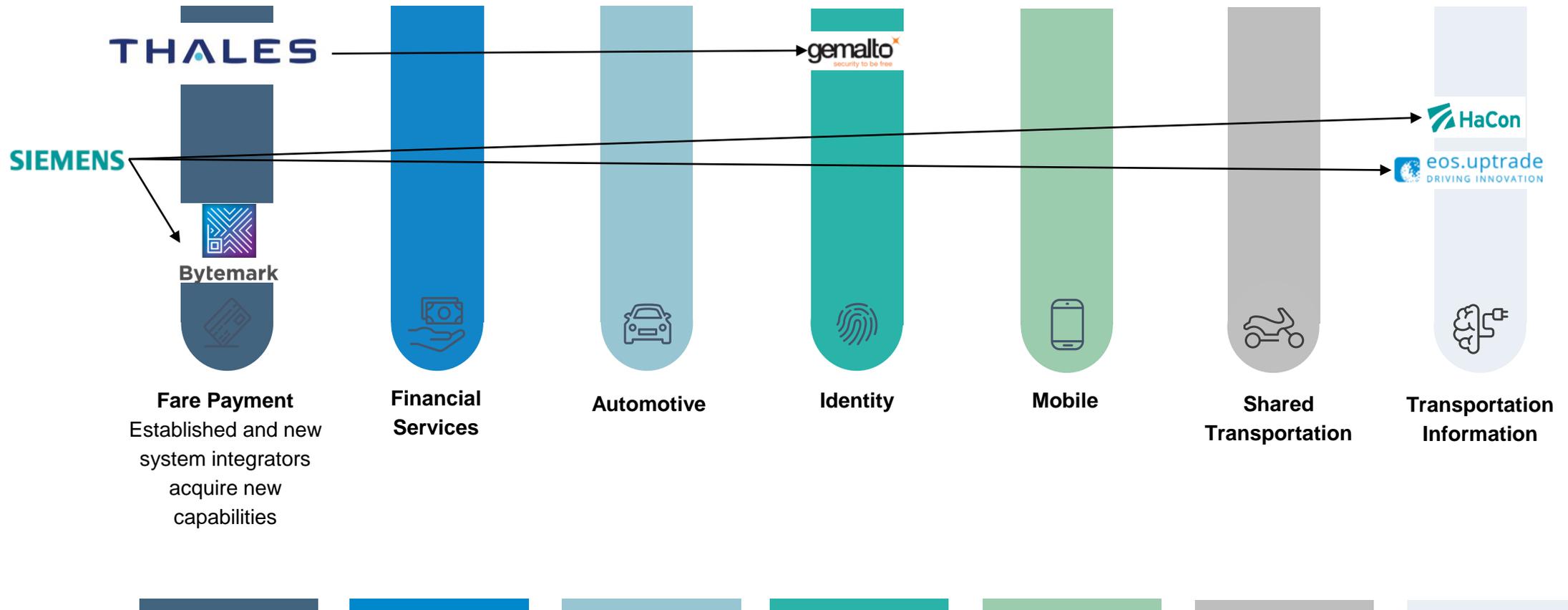
# Cal-ITP's Market Sounding shows that these verticals have started interacting in transit

With the automotive industry moving in



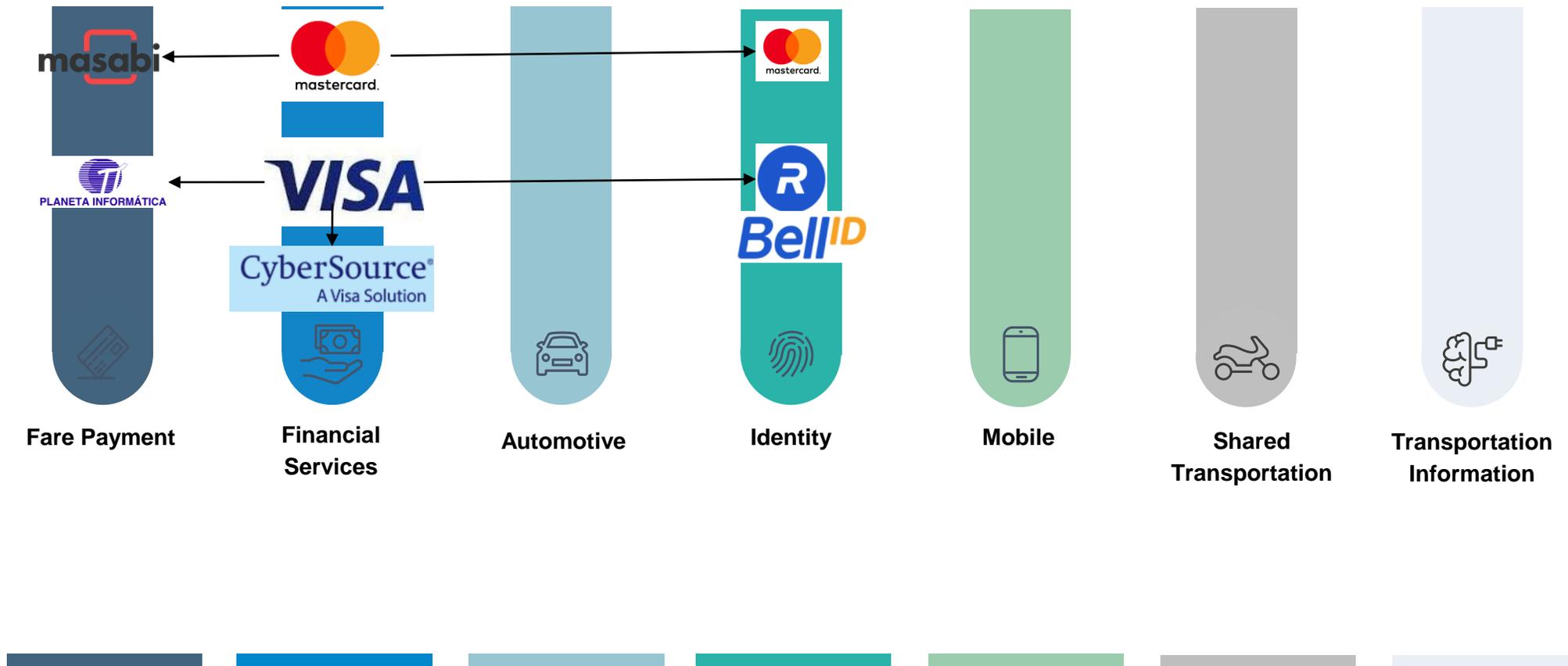
# Cal-ITP's Market Sounding shows that these verticals have started interacting in transit

## System integrators are acquiring new capabilities



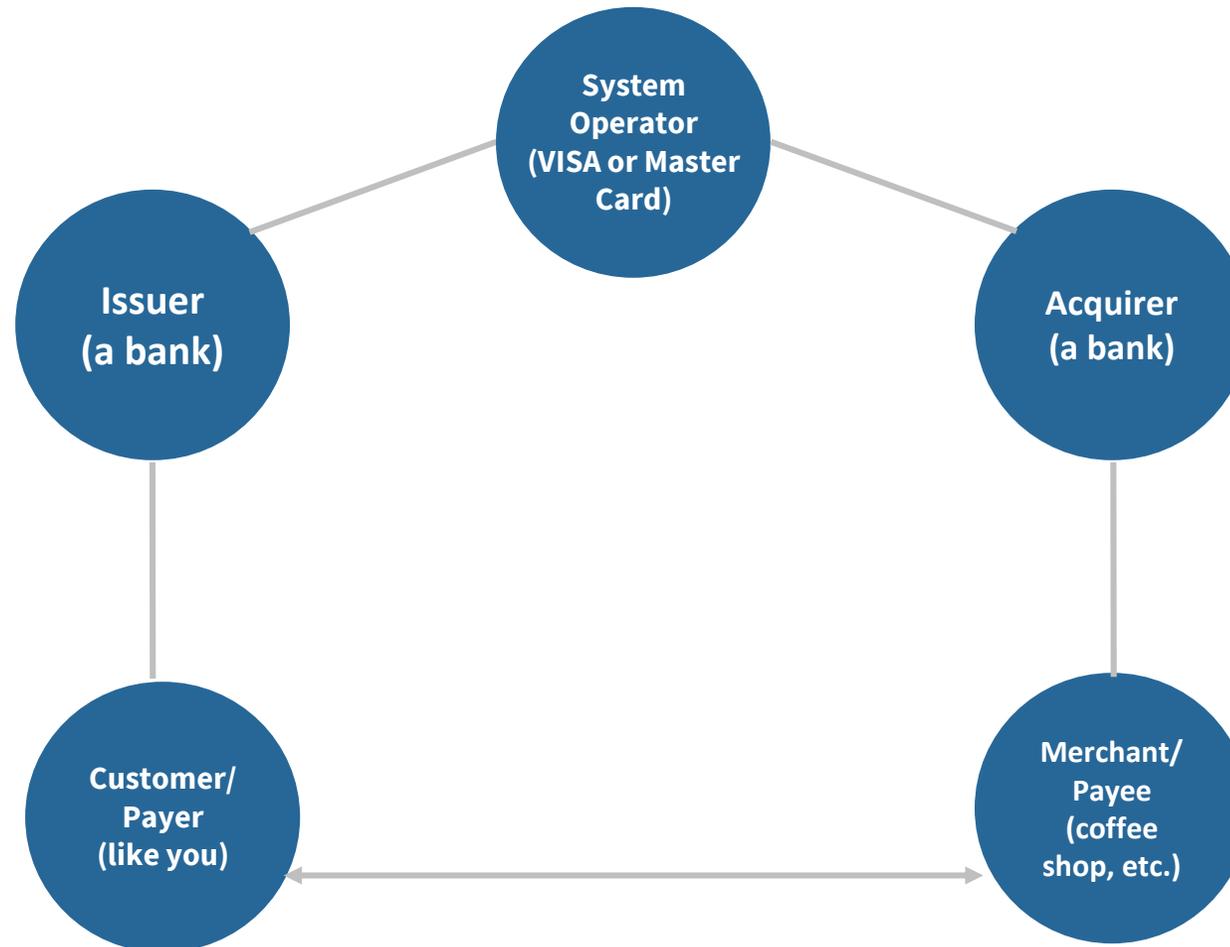
# Cal-ITP's Market Sounding shows that these verticals have started interacting in transit

## And the payments industry is waking up

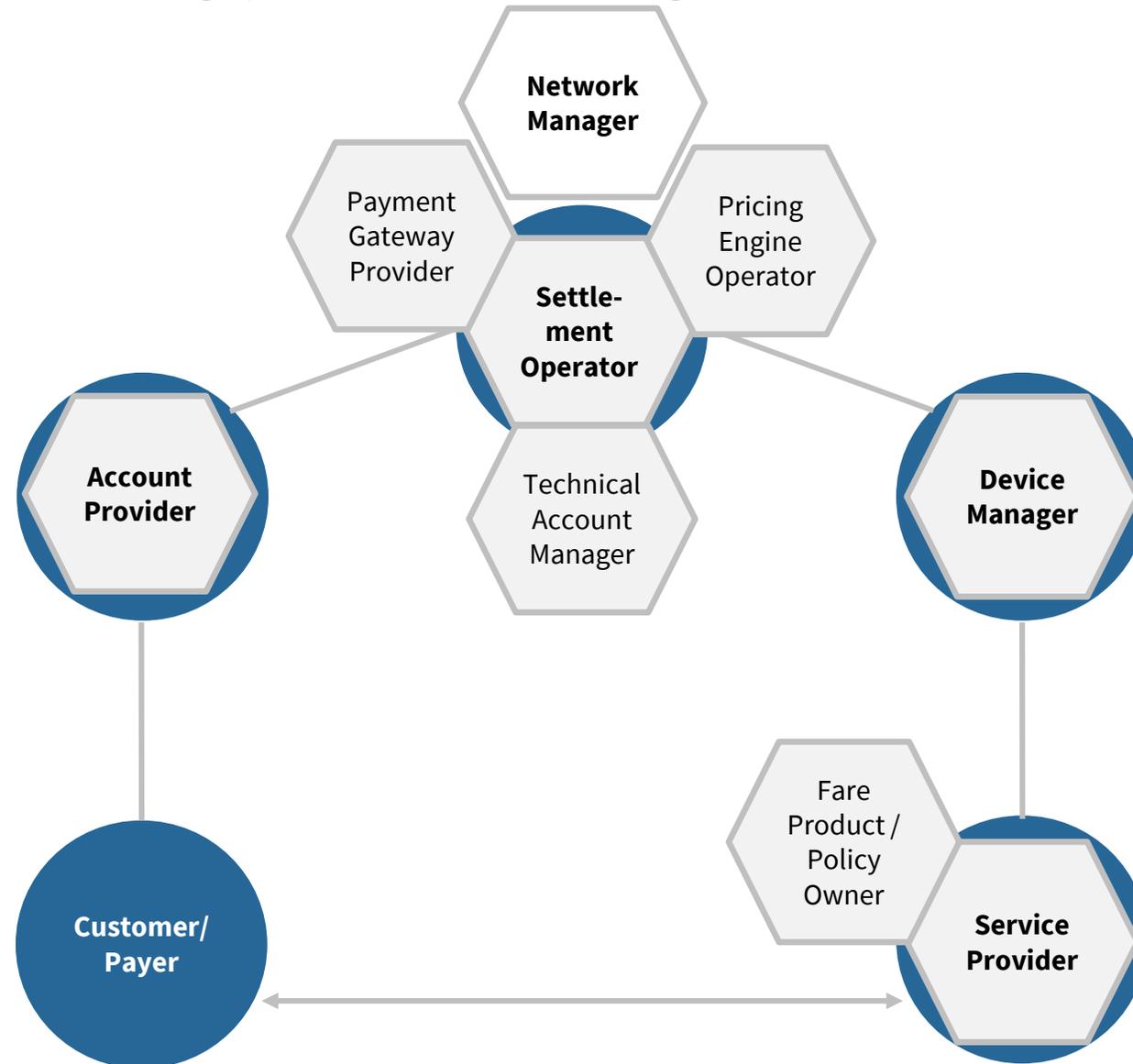


# Interoperable Four-Party Payment System

Why you can pay almost anywhere (except on American transit) with your bank or credit card, or with Apple Pay, etc.)



# How will the disruption impact interoperability, and equity?



# Cal-ITP objective: increase ridership and improve customer experience

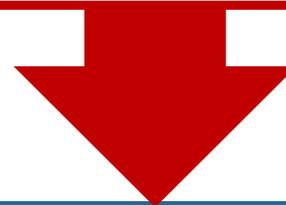


## Barriers highlighted by the private sector:

Convolutd landscape of transit payment systems not designed for interoperability

Quality and reliabilty of existing mobility data

Lack of fare policy standards



## The private sector suggested California do the following to overcome barriers and achieve objectives:

Promote EMV as the payment standard for interoperability

Statewide platform

Promote global data standards (like GTFSrt)

Create requirements for data quality

Provide technical assistance to transit agencies

# Cal-ITP objective: decrease the cost of revenue collection

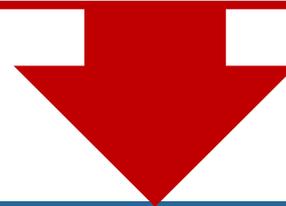
## Barriers highlighted by the private sector:

Lack of global standards for mobility payments

Existing long-term contracts with financial payment processors and vendors

Transit agencies' insufficient funding and capacity to procure

Bank fees



## The private sector suggested California do the following to overcome barriers and achieve objectives:

Agree on standards for mobility payments

Document scope and duration of existing contracts

Centralize procurement with framework agreements

Create funding

Leverage state buying power to process payments

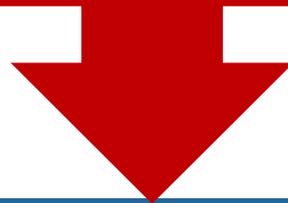
# Cal-ITP objective: promote equity

## Barriers highlighted by the private sector:

Large share of underbanked and unbanked customers in California

High cost & complexity onboarding certain groups

Privacy & security expectations of customer segments



## The private sector suggested California do the following to overcome barriers and achieve objectives:

Promote digital payment methods that reach underbanked and unbanked

Statewide repository for concession eligibility

Implement CCPA compliant PII-data framework

# In other words

According to the private sector, the most effective course of action for Cal-ITP to advance the dual potentials of interoperability and equity in the face of accelerating disruption is:

- Drive the adoption & improvement of global standards as well as the creation of missing standards
  - Help transit agencies implement global mobility data standards
  - Help transit agencies implement global payment standards
- Leverage California's buying power to lower the cost of revenue collection
- Forge partnerships with market parties
- Consider standardized statewide solutions to reduce the cost of special local programs, such as:
  - Account system
  - Credential issuance

# Market Sounding Report & Process

- <https://dot.ca.gov/cal-itp-market-sounding>

# Next Steps

- Feasibility Study underway to test feasible initiatives that meet Cal-ITP goals.
- Study due end of January, 2020.
- Accelerated work studying a statewide Master Services Agreement(s) for payment processing and related services for transit agencies to use rather than going it alone individually.

# Thank you

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