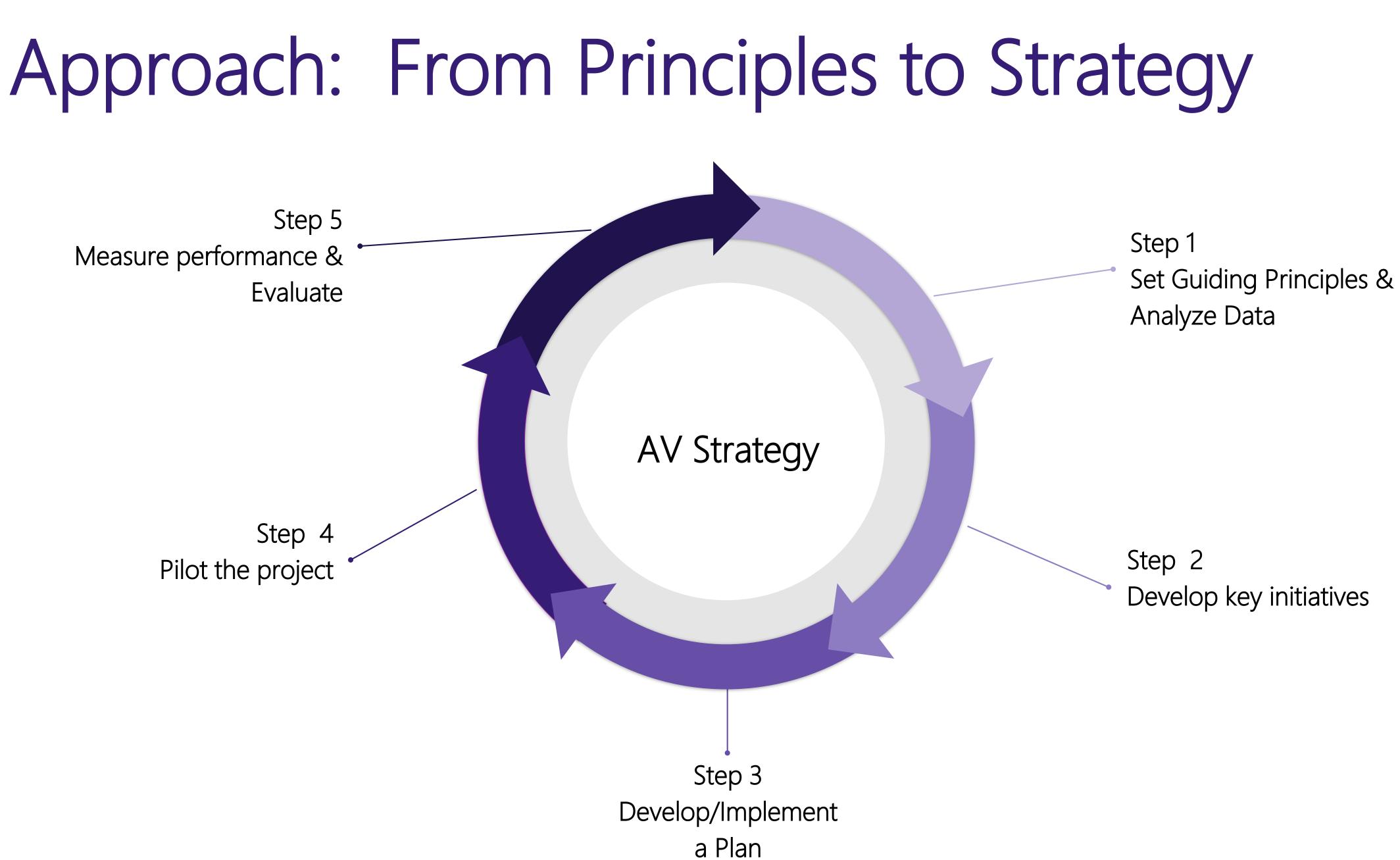
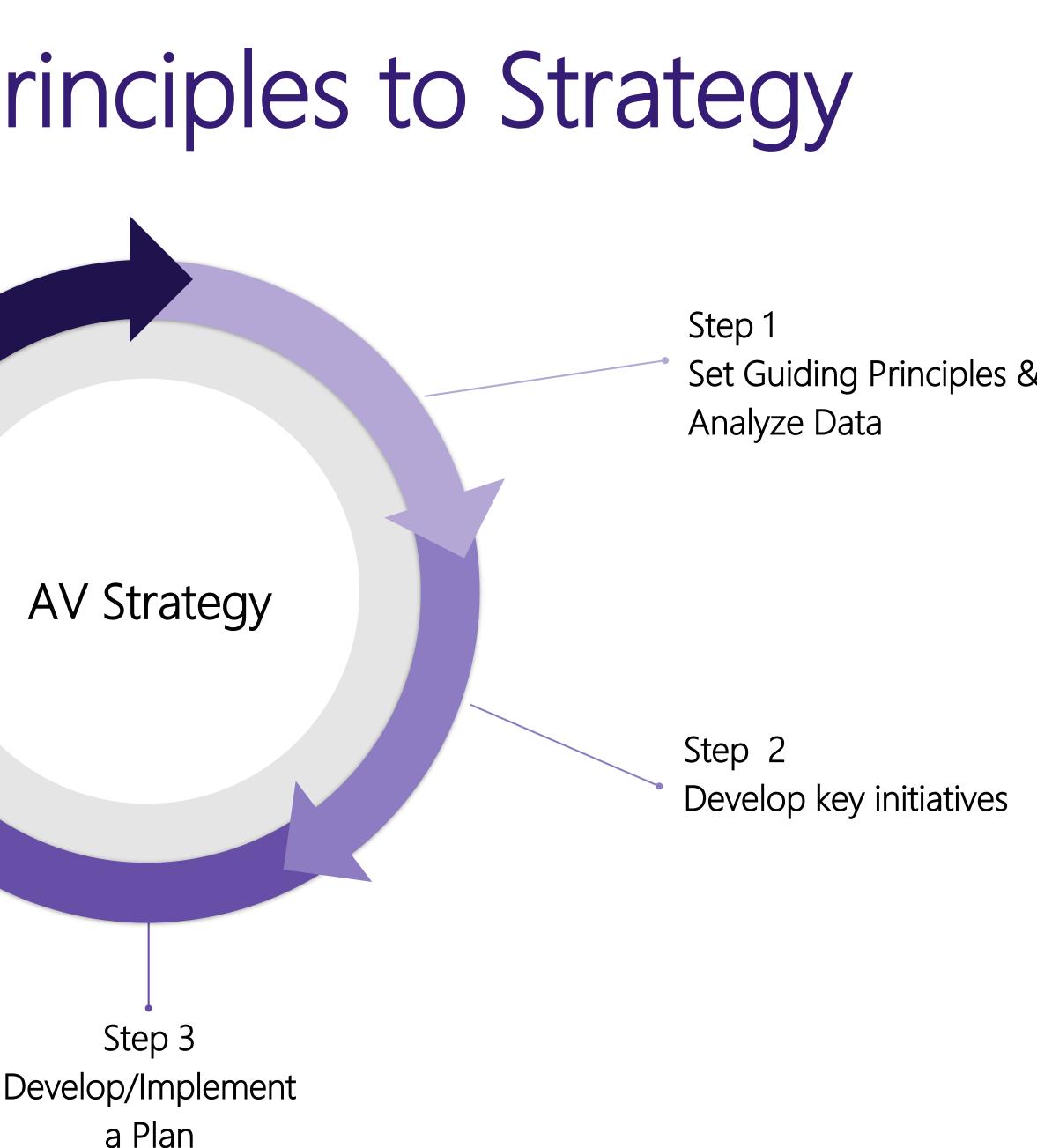
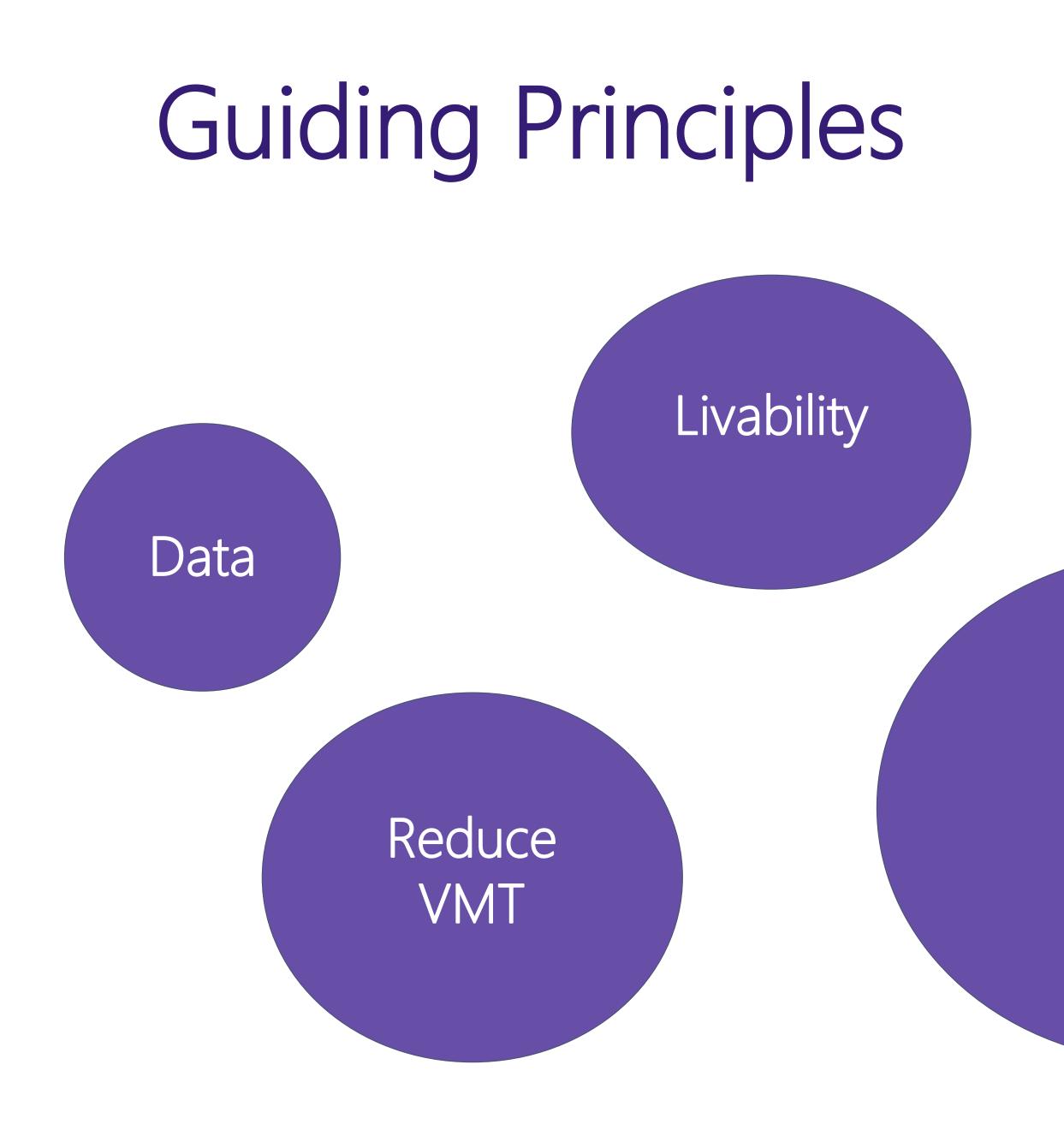
# (d) 2. Autonomous Vehicles Strategy Update

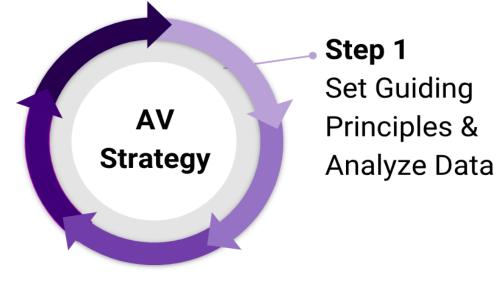
Jill North, Interim Information Technology Manager, Department of Transportation

April 4, 2019









### Equity

### Safety

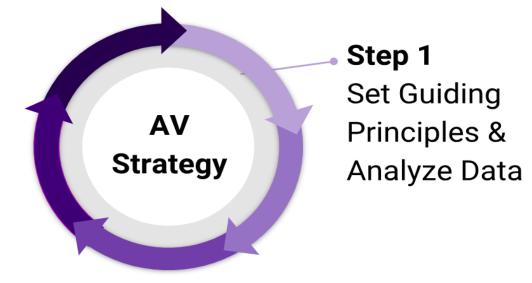
Balanced



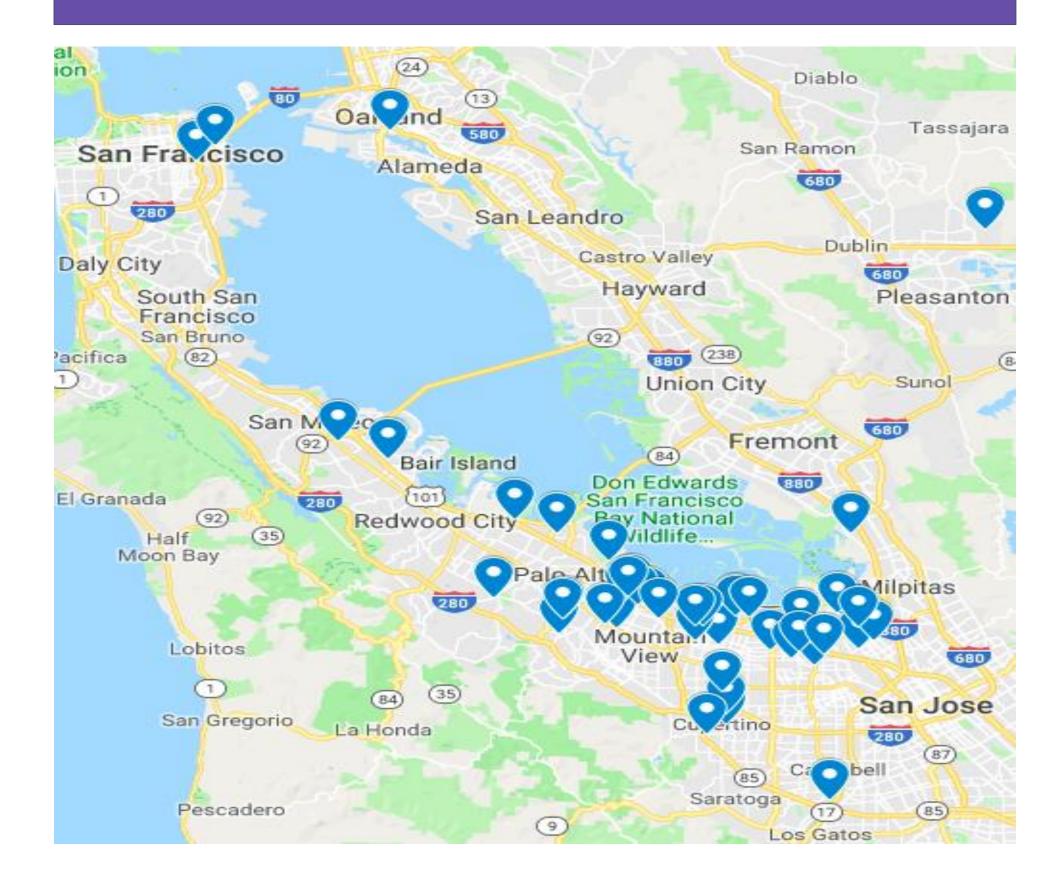
# AV testing is at our doorstep

4 Types of Permits Issued by DMV

Type of Permit	# Issued
Testing w/ Driver	62
Driverless Testing	1
Deployment w/ Driver	0
Driverless Deployment	0



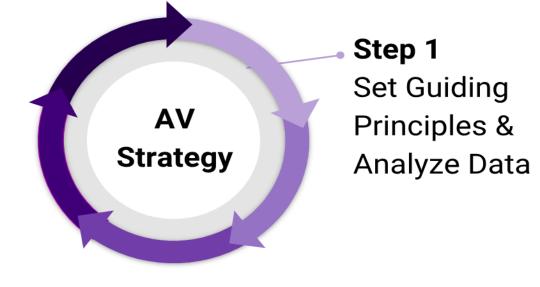
#### Bay Area is Home to Majority of AV Companies



# AV Activity: 2017 versus 2018

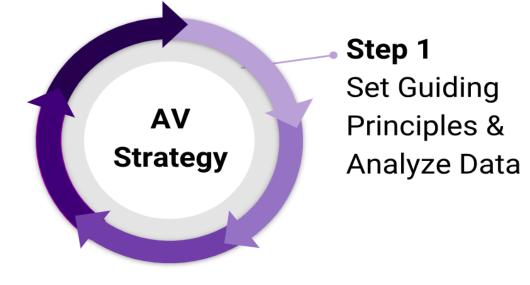
#### California AV Activity

Year	# of Companies	Total Miles	Total Vehicles Driven Public Roadways
2017	25	578,006	254
2018	29	1,880,300	383



# Key Insights

- (65%) were by two companies
- Most AV companies (65%) drive less than 10,000 miles a year
- Most AV companies (62%) operate fewer than 5 vehicles
- roadways

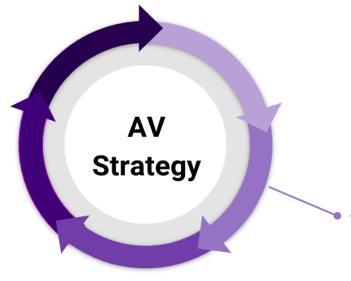


## Majority of AV miles driven (80%) and number of vehicles operated

• No AV driverless testing miles driven to date on California public

# Key Initiatives

Guiding Principle	
Safety	<ul><li>AV safety plan</li><li>Upgrade smart</li></ul>
Reduce VMT	<ul><li> EV Charging St</li><li> Promote share</li></ul>
Balanced	<ul> <li>Integrate with</li> </ul>
Equity	<ul> <li>Encourage equ</li> </ul>
Livability	<ul> <li>Engage comm</li> </ul>
Data	<ul><li>Develop data a</li><li>Form a data ex</li></ul>



#### Key Initiatives Taken

n with SJPD rt infrastructure to improve safety redundancy

Strategy ed and electric

public transit by providing first-last mile solutions

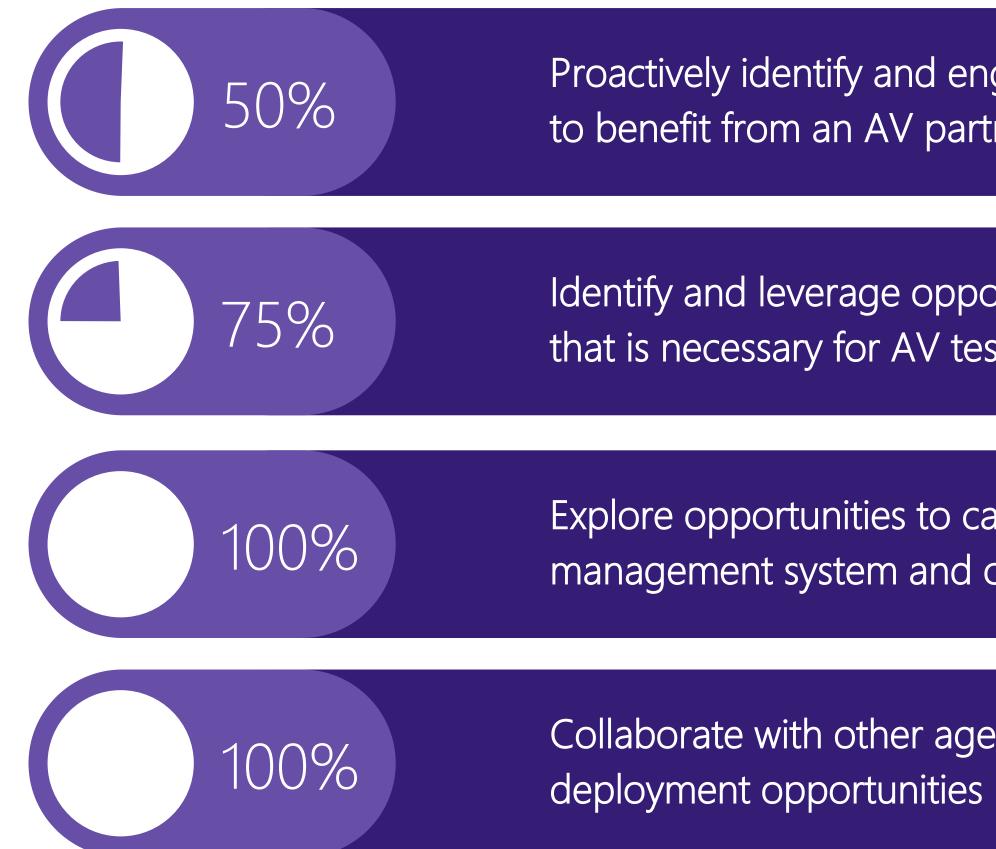
uitable service for underserved groups

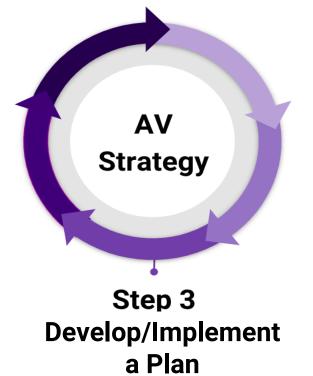
nunity to shape future streets with design thinking

analytics capacity exchange model

#### **Step 2** Develop key initiatives

## 2019 AV Plan





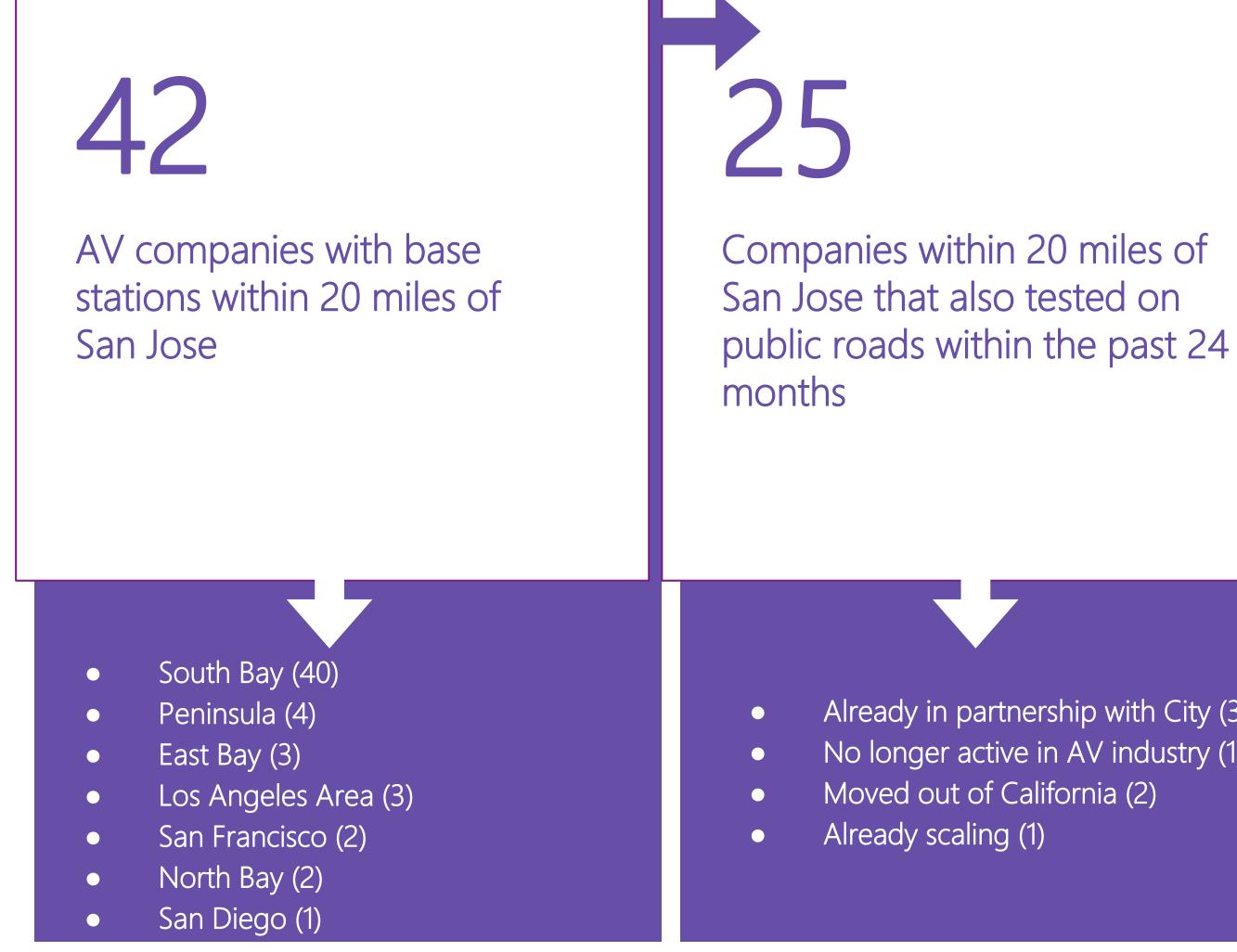
Proactively identify and engage companies that are in the best position to benefit from an AV partnership with the City

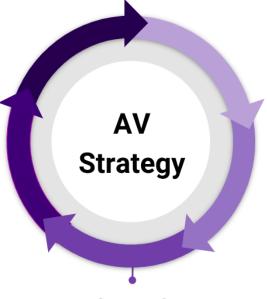
Identify and leverage opportunities that provide the digital information that is necessary for AV testing and development

Explore opportunities to capitalize on the City's advanced traffic signal management system and our smart cities capabilities

Collaborate with other agencies to create cross-jurisdictional testing and deployment opportunities

# AV Partnership Opportunities





Step 3 Develop/Implement a Plan

Number of companies to monitor for potential upcoming opportunities

Next steps include:

Already in partnership with City (3) No longer active in AV industry (1)

- Establish a point of contact
- Provide options for potential partnership opportunities with San Jose

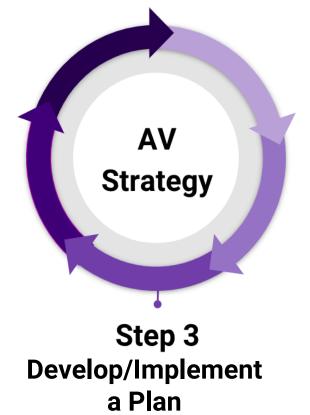
## Digitizing Information to Support AV Deployments

#### Transportation Data Platform

August 2018: Proof of Concept High Definition Map February 2019: MOU signed







#### Real Time Construction Zone

June 2019: Target for pilot



Updates to Systems and Collaboration Efforts

- reduce latency
- to be discontinued:

East Hills Route 45 Hellyer Avenue Leigh/Camden corridor





### Transferred Signal Phase and Timing feed over to Transcore to

### Worked with VTA to identify routes that have been or are planned

North San Jose Branham corridor Almaden Valley

# Pilot Projects in Scope for 2019

#### Mercedes Benz/Bosch/Daimler 1.

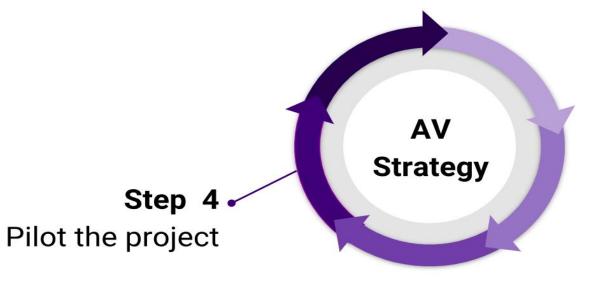
- Targeting Fall 2019 launch
- Point to point, Diridon to Santana Row
- Teaming up with Federation of the Blind as target user group

## 2. AutoX Technologies

- Targeting Fall 2019 launch
- Replicating DASH route when discontinued
- Target user group is SJSU (Staff and Students)

## 3. Possible Berryessa BART to North San Jose

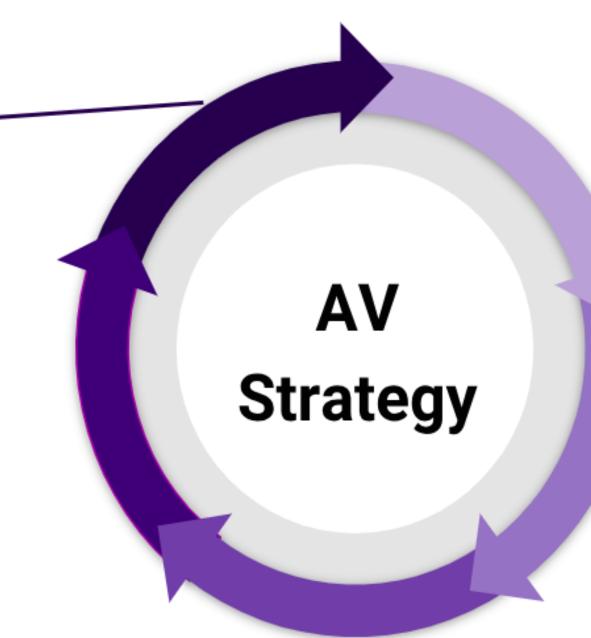
Leverage V21 communication to connect employees



# Next Steps

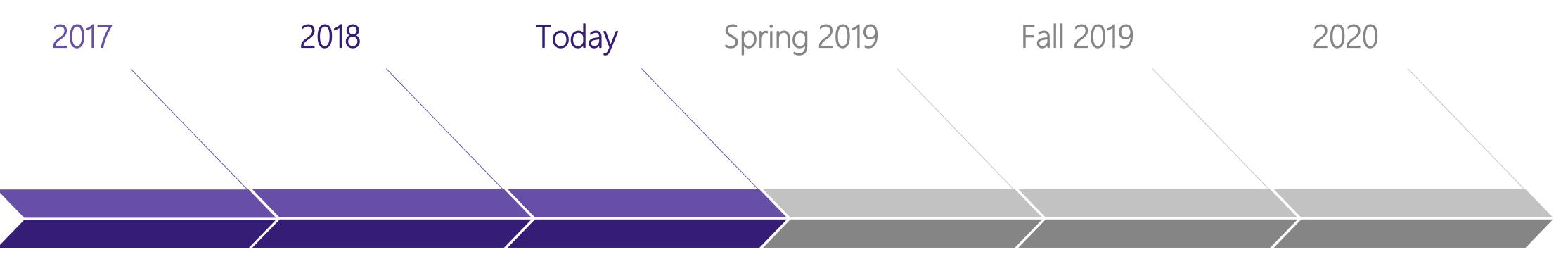
- Implement and launch pilot projects
- Measure performance of pilots to guiding principles
- Evaluate outcomes
- Identify new goals
- Iterate to improve

### Step 5 Measure performance & Evaluate





# AV Strategy Timeline



- Roundtables
- DevelopedGuidingPrinciples
- AV RFI Issued
- Key Initiatives Established
- Executed MOU with Mercedes
- Scope of Work negotiation
- Developed 2019
   Execute
   AV Plan
   Demonstration
- UrbanLogiq Data Project
   Platform Agreements
- Executed MOU
   Continue Plan execution
- Executed MOU with Sanborn



- Launch pilots
- MonitorPerformance
- Measure
   performance to
   Guiding
   Principles
- Evaluate and set new goals