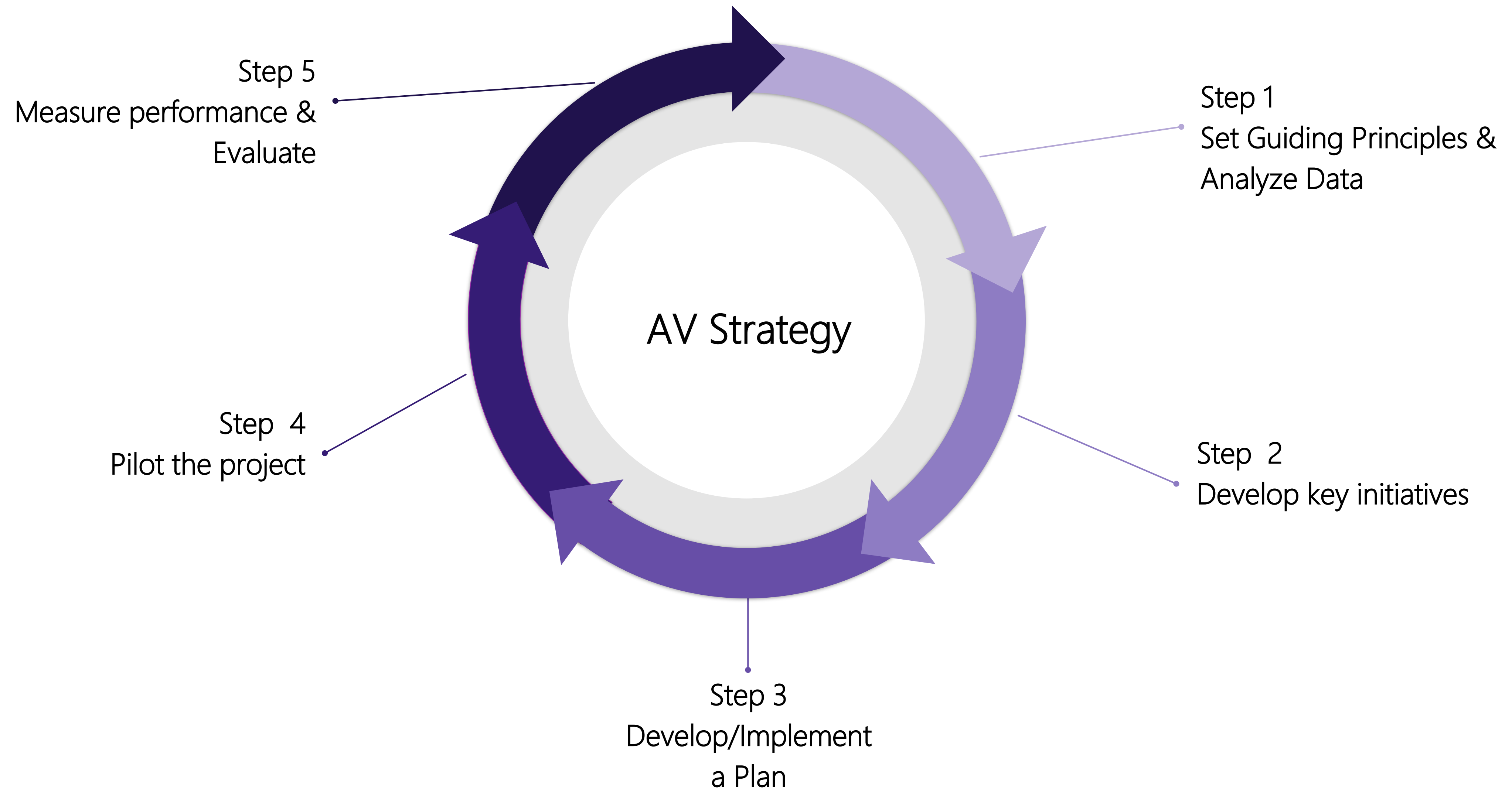


# (d) 2. Autonomous Vehicles Strategy Update

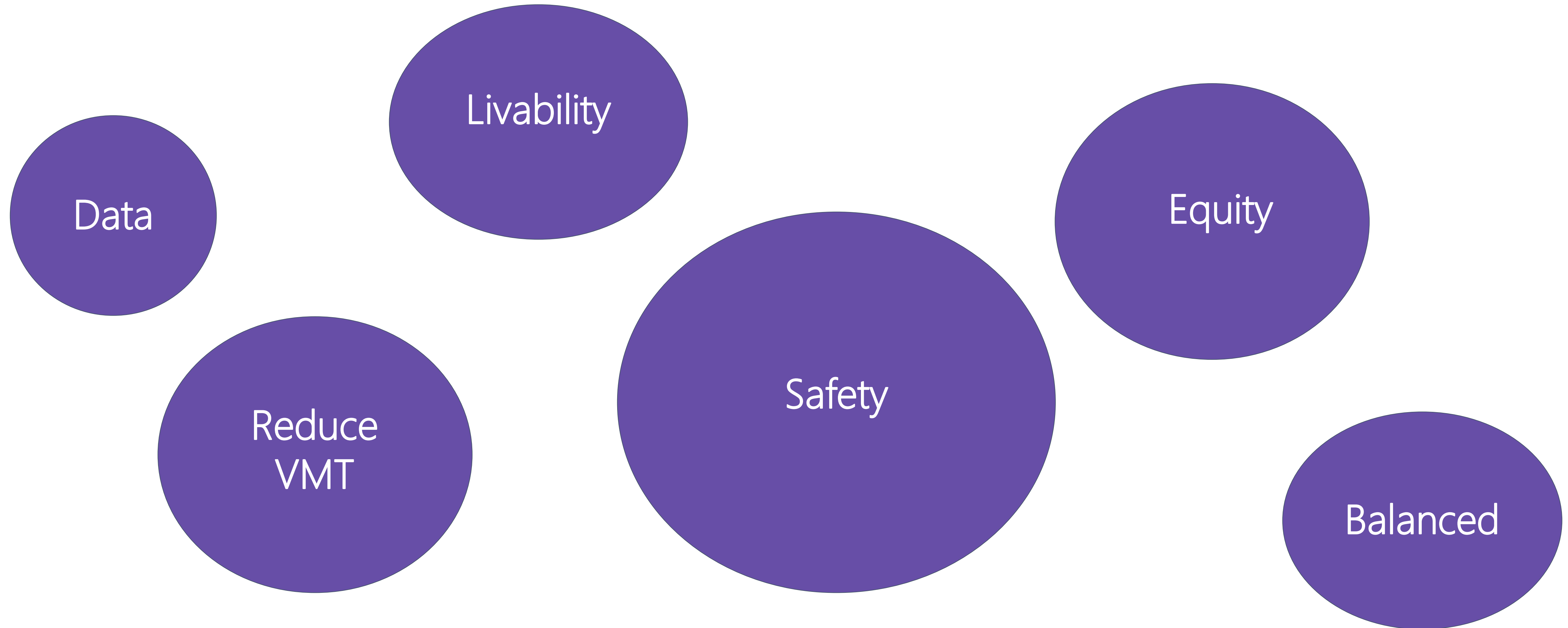
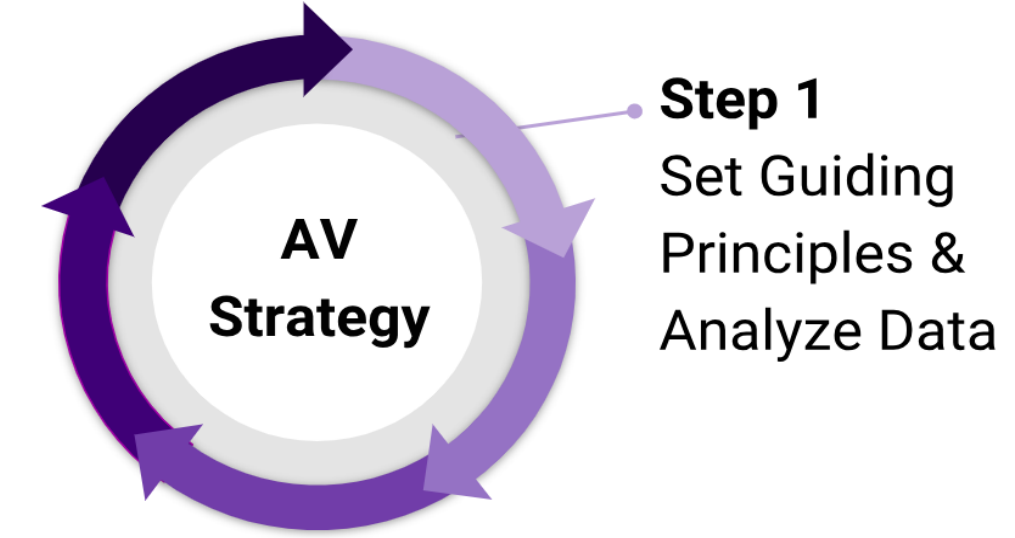
Jill North, Interim Information Technology Manager,  
Department of Transportation

April 4, 2019

# Approach: From Principles to Strategy

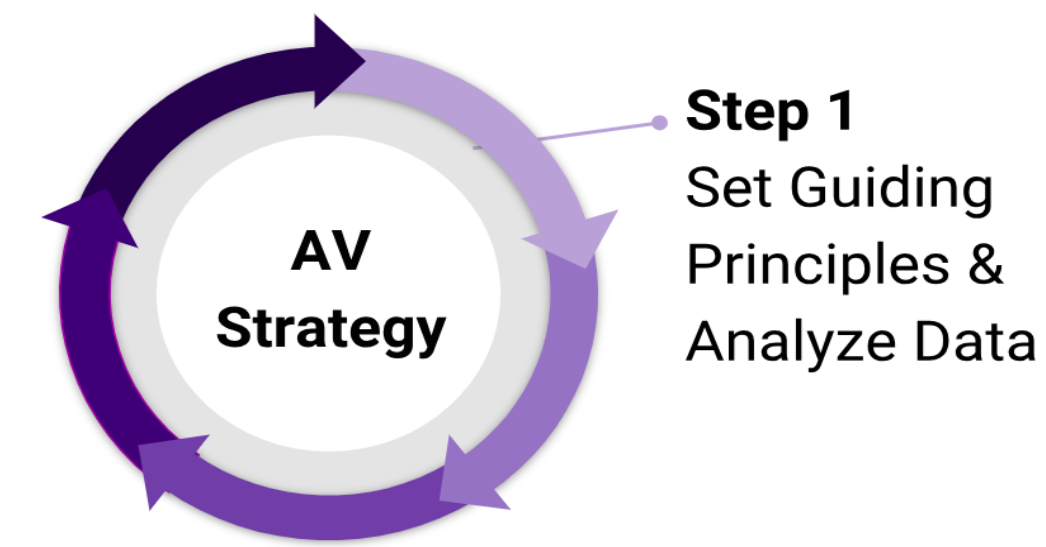


# Guiding Principles





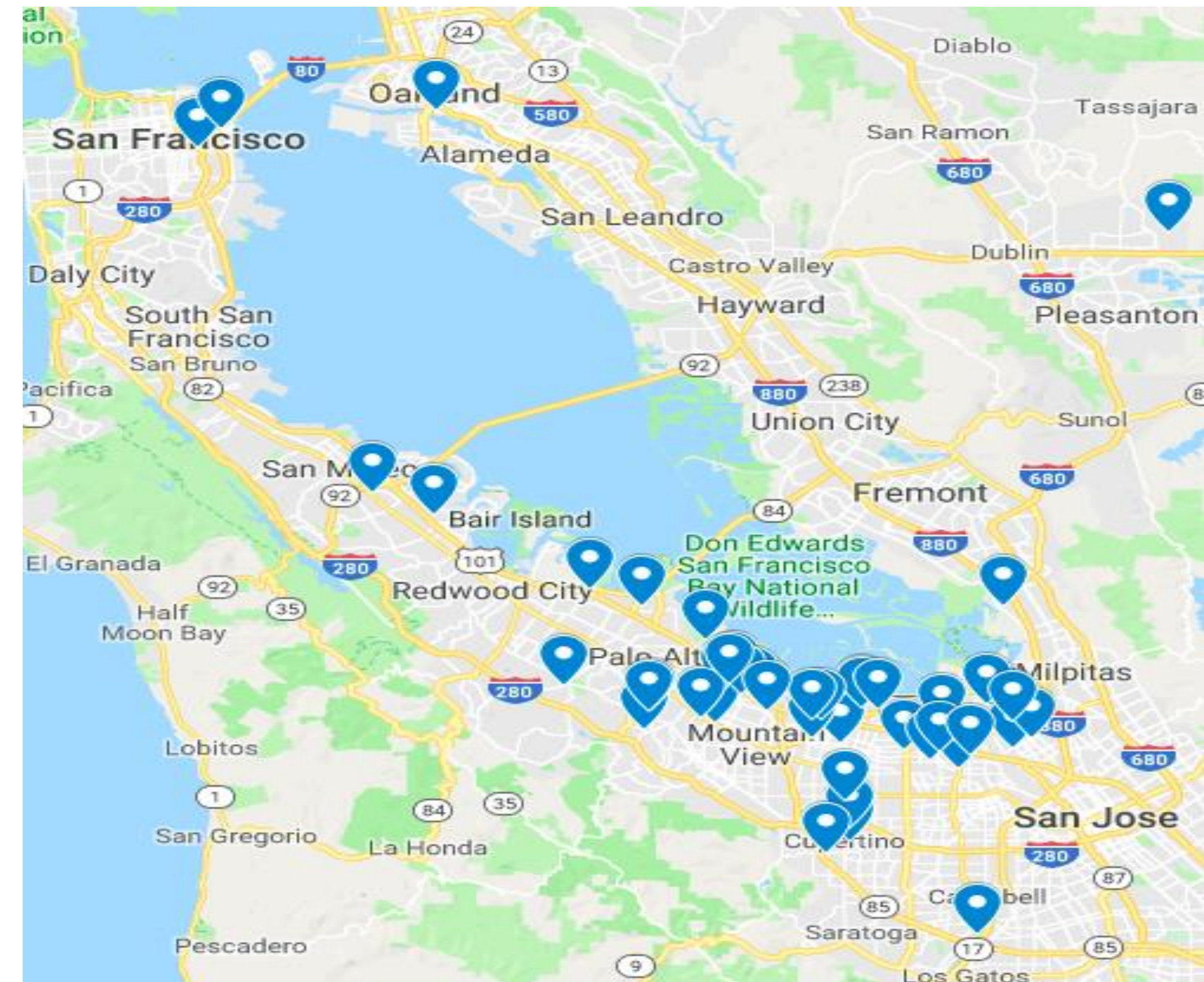
# AV testing is at our doorstep

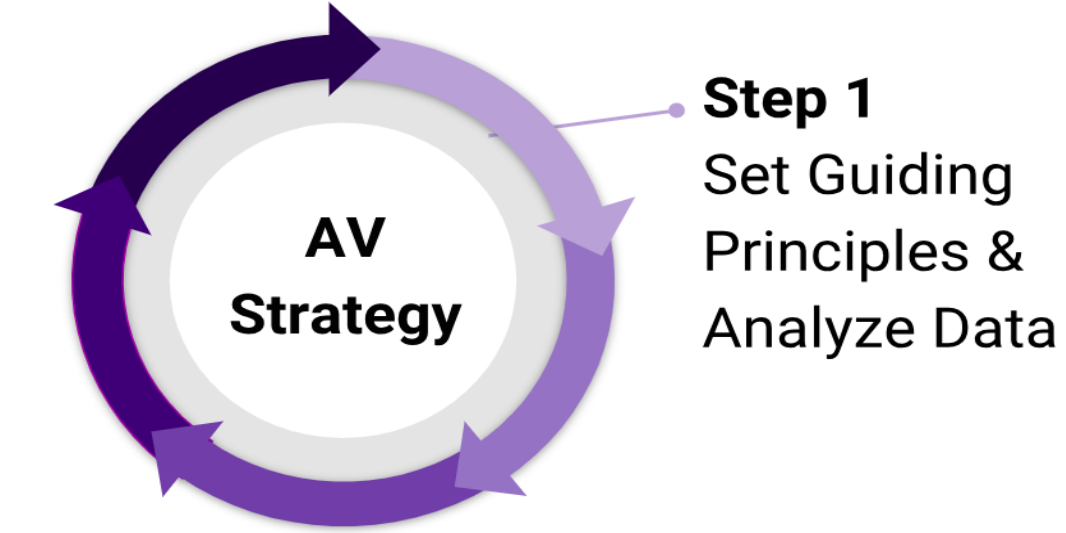


## 4 Types of Permits Issued by DMV

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





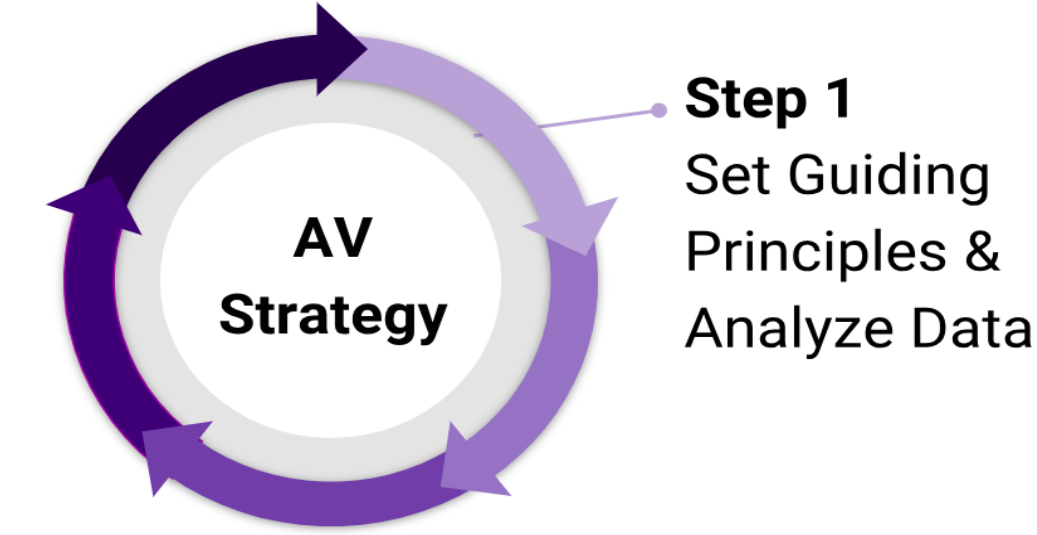
# AV Activity: 2017 versus 2018

## California AV Activity

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

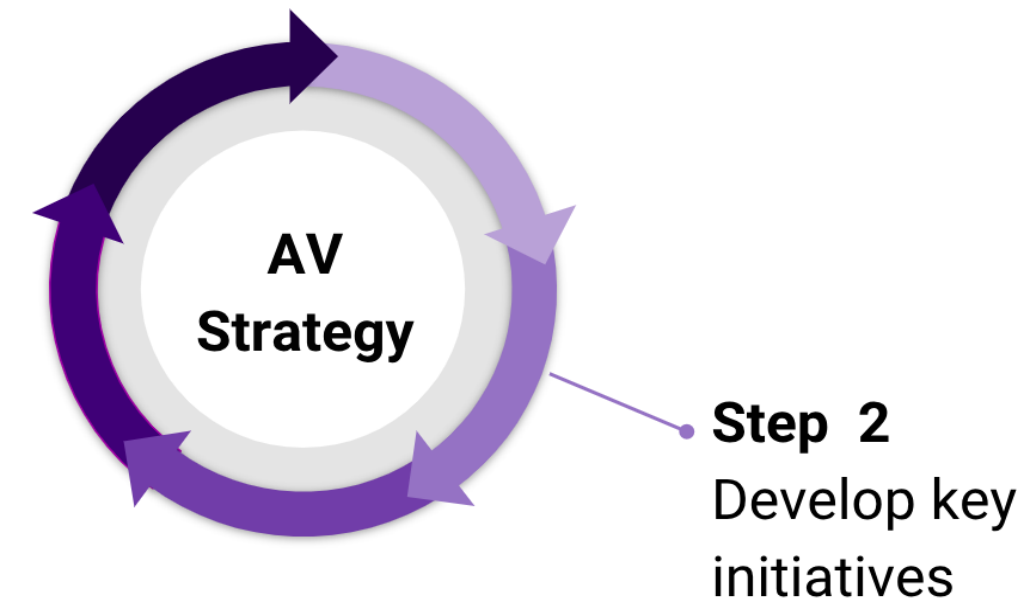


# Key Insights



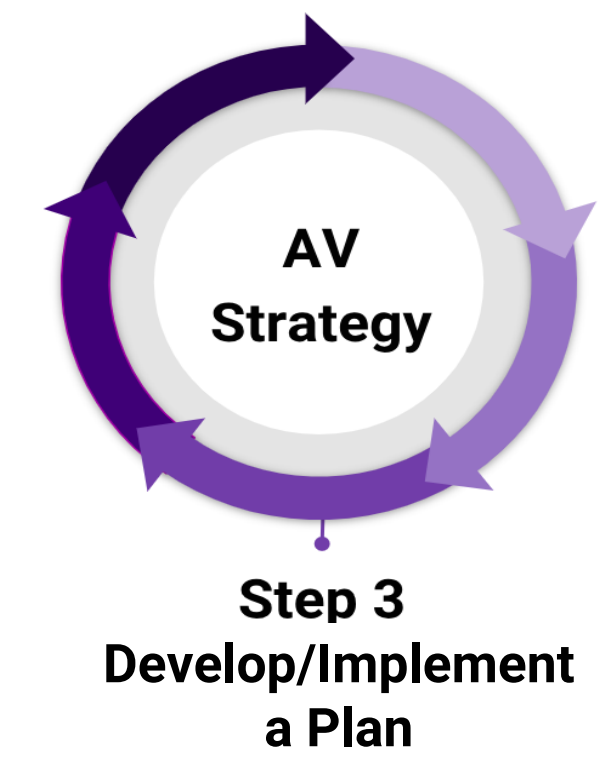
- Majority of AV miles driven (80%) and number of vehicles operated (65%) were by two companies
- Most AV companies (65%) drive less than 10,000 miles a year
- Most AV companies (62%) operate fewer than 5 vehicles
- No AV driverless testing miles driven to date on California public roadways

# Key Initiatives



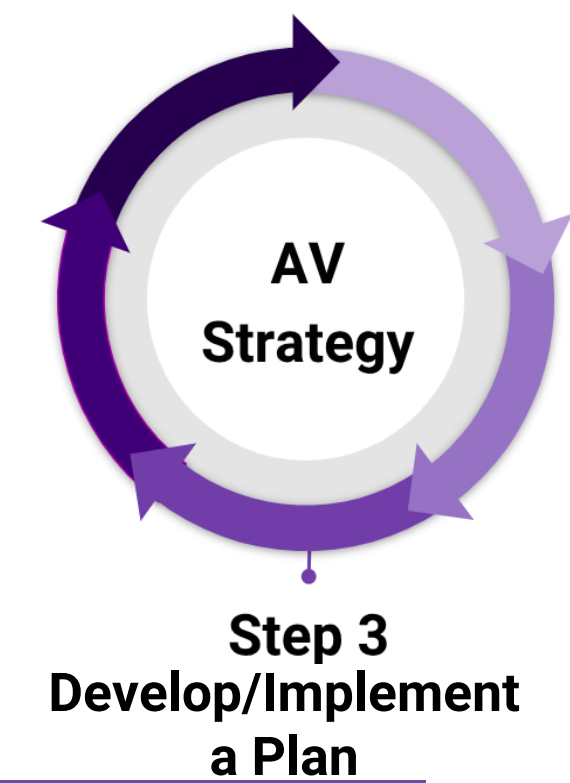
Guiding Principle	Key Initiatives Taken
Safety	<ul style="list-style-type: none"> <li>• AV safety plan with SJPD</li> <li>• Upgrade smart infrastructure to improve safety redundancy</li> </ul>
Reduce VMT	<ul style="list-style-type: none"> <li>• EV Charging Strategy</li> <li>• Promote shared and electric</li> </ul>
Balanced	<ul style="list-style-type: none"> <li>• Integrate with public transit by providing first-last mile solutions</li> </ul>
Equity	<ul style="list-style-type: none"> <li>• Encourage equitable service for underserved groups</li> </ul>
Livability	<ul style="list-style-type: none"> <li>• Engage community to shape future streets with design thinking</li> </ul>
Data	<ul style="list-style-type: none"> <li>• Develop data analytics capacity</li> <li>• Form a data exchange model</li> </ul>

# 2019 AV Plan





# AV Partnership Opportunities



42

AV companies with base stations within 20 miles of San Jose

- South Bay (40)
- Peninsula (4)
- East Bay (3)
- Los Angeles Area (3)
- San Francisco (2)
- North Bay (2)
- San Diego (1)

25

Companies within 20 miles of San Jose that also tested on public roads within the past 24 months

- Already in partnership with City (3)
- No longer active in AV industry (1)
- Moved out of California (2)
- Already scaling (1)

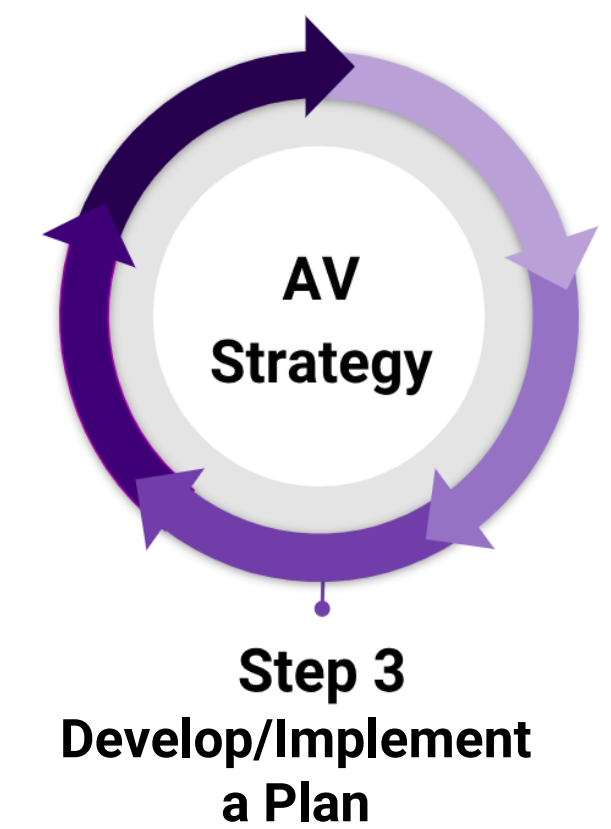
18

Number of companies to monitor for potential upcoming opportunities

Next steps include:

- 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

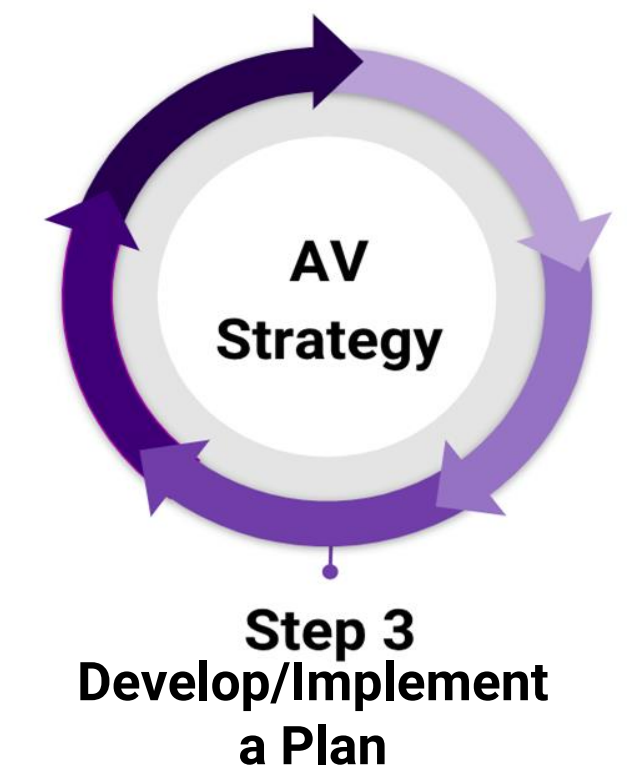


Real Time  
Construction Zone

June 2019:  
Target for pilot



# Updates to Systems and Collaboration Efforts



- Transferred Signal Phase and Timing feed over to Transcore to reduce latency
- Worked with VTA to identify routes that have been or are planned to be discontinued:

East Hills Route 45

Hellyer Avenue

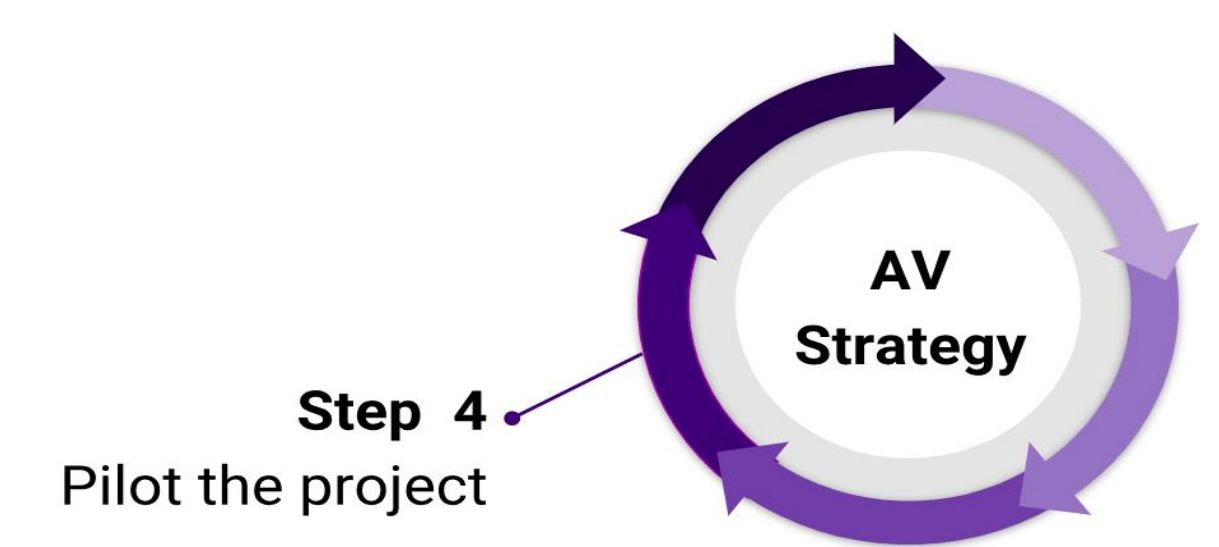
Leigh/Camden corridor

North San Jose

Branham corridor

Almaden Valley

# Pilot Projects in Scope for 2019



## 1. Mercedes Benz/Bosch/Daimler

- 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

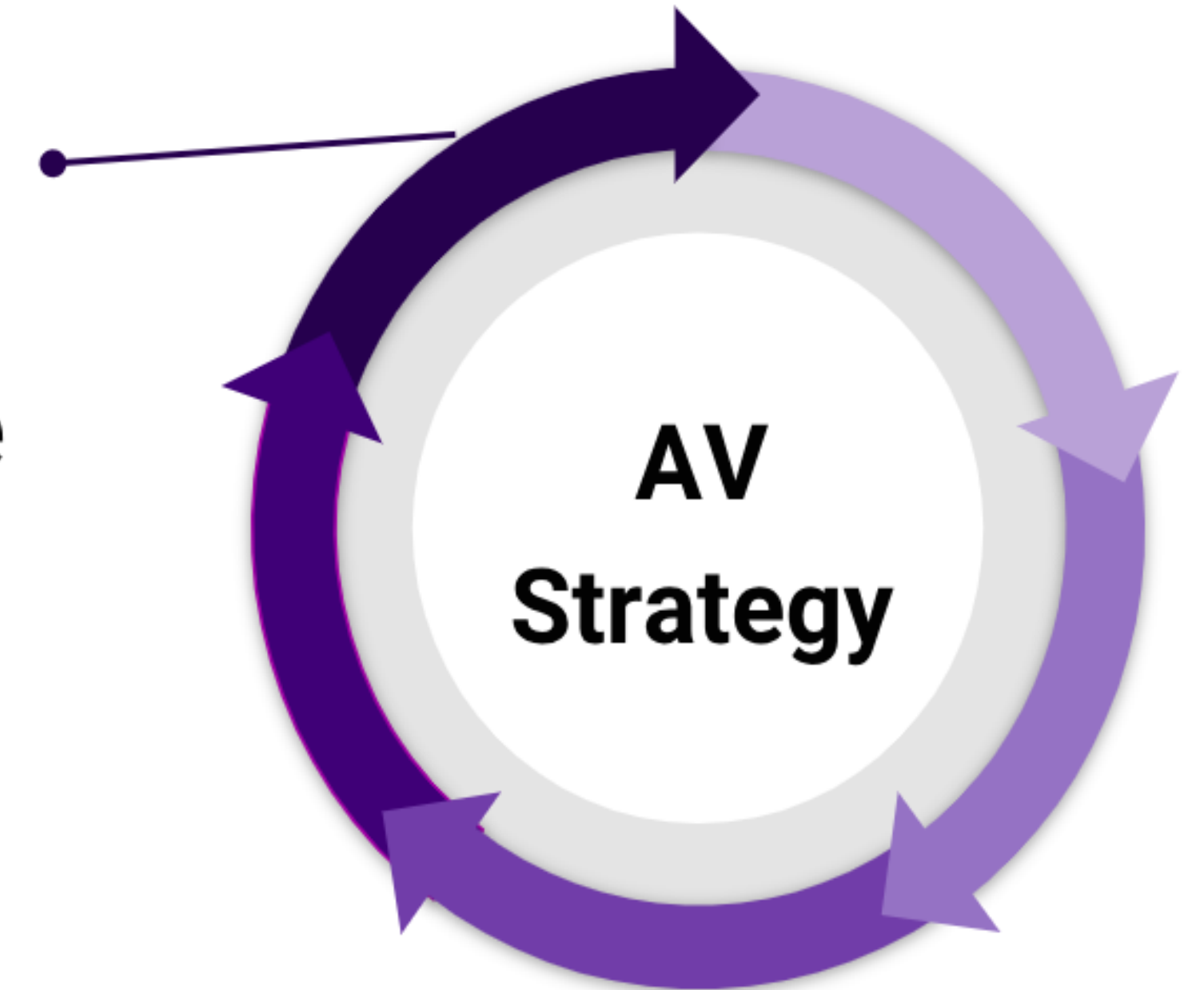
- Leverage V21 communication to connect employees



# 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

