



San Mateo County Automated Vehicles (AV) Strategic Plan

C/CAG TAC Meeting

January 18, 2024



Project Refresh

Meeting Goals:

- Update you on the AV Strategic Plan progression since August 2023
- Understand your priorities as we begin to draft the AV Strategic Plan



Project Background

Workshop on **Towards an Autonomous Future in San Mateo County** on November 17, 2021

Identified Next Steps:

- Develop a San Mateo Countywide AV Strategic Plan
- Organize an AV Task Force or Working Group
- Plan for and fund AV pilots



Project Timeline



Phase 1 (Summer 2023): Identify existing AV programs at local, state, and federal levels

Phase 2 (Fall 2023): Develop a framework for AV pilot programs, projects and activities

Phase 3 (Winter 2023): Prepare the draft San Mateo Countywide AV Strategic Plan

What Research Have We Done?

- Reviewed County Transportation Plans & Programs
- Conducted One-on-One Interviews with Cities, Agencies and Private Sector AV Operators
- Conducted In-depth Discussions with Peer Agencies
- Published an Existing Conditions Report on project website
- Conducted a public AV Workshop on November 15



Existing Conditions Refresh

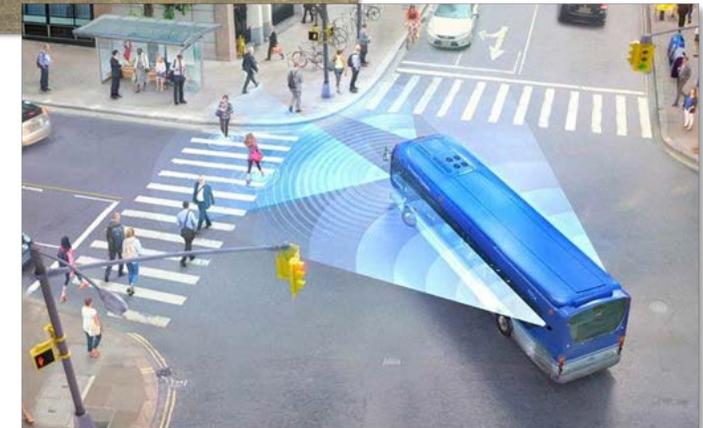
- AV testing is happening in San Mateo County
 - CPUC has issued 30+ testing permits with safety driver in California
 - Driverless not commercial operations (i.e. robo-taxis) are not yet approved in San Mateo County
- This is the first county program or plan to address AVs
- Learn from local, state, and federal AV policies and programs



Public Workshop Feedback Summary

What We Heard:

- Prioritize **equity communities, people with disabilities and seniors** for services such as shuttles and deliveries
- Participants are interested in **safety and compatibility** with various road users
 - Consider advanced driver assistance systems on buses
 - Consider public sector data sharing with AVs
- **Fair geographical distribution** of potential pilots or projects (e.g., coastal county areas versus the Bay side)



Strategic Plan Development



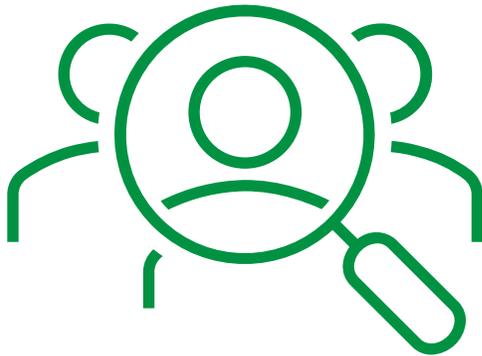
Draft - Vision Statement



What is our
ideal future?

SMCTA and C/CAG will support strategic measures toward implementing automated vehicle technologies that promote equitable levels of access, safety, reliability, and sustainability in San Mateo County.

Draft - Strategic Plan Goals



What are our objectives that will help us achieve our vision?



Accessibility & Equity



Engagement



Connectivity



Workforce Development



Safety

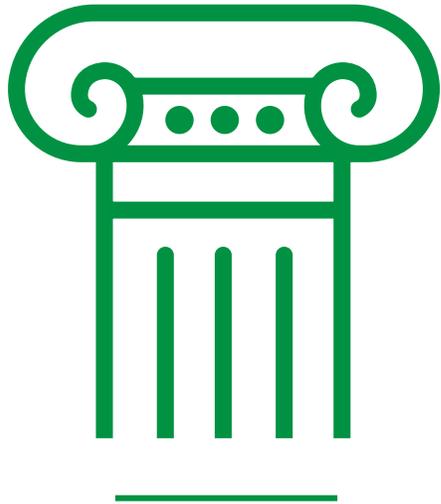


Support Local Agencies



Sustainability

Draft - Strategic Pillars



How are we thinking
through our strategies?



Agency Readiness



Infrastructure Readiness



Public Outreach & Partnerships



Policy



Pilots & Testing

AV Strategy Prioritization Activity

Activity time! | What to Expect

- **Share your feedback** | share whether you believe each of the presented draft strategies are low, medium or high priority.
- **Go with your gut** | The *may* all be high priority for you.
- **This is a first step** | This activity will be fast-paced. At a future meeting, you will have the opportunity to provide more detailed feedback at our next meeting.
- **Something on your mind?** | Reach out to ashiramizu@smcgov.org to share your input.
 - Share new strategy ideas, refinements, or reasons to remove a strategy
 - Talk through potential pilots for consideration
 - Learn more about the Strategic Plan



Pillar 1: Agency Readiness

Agencies need to be resourced and ready to manage AV operations on public roadways.

Strategy

Strategy 1.1 – Joint AV Working Group

Strategy 1.2 – AV Outreach and Awareness Program for Agencies

Strategy 1.3 – Determine AV Staffing Needs

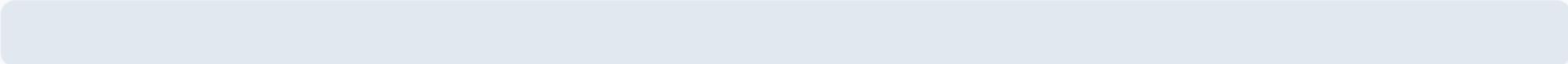
Strategy 1.4 – AV Training

Strategy 1.5 – Integrate AV into Planning Process



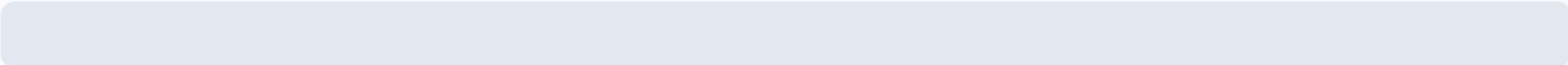
Prioritization | Strategy 1.1 - Joint AV Working Group | What level priority is this draft strategy?

Low Priority



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Medium Priority



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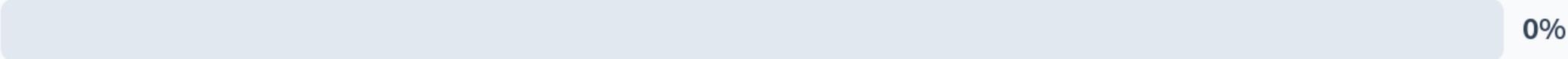
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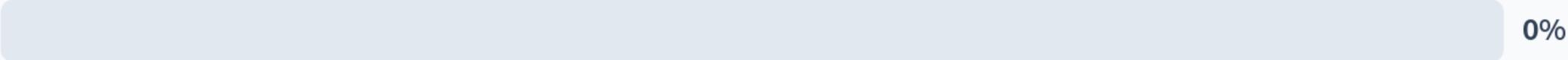
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Prioritization | Strategy 1.2 - AV Outreach and Awareness Program for Agencies | What level priority is this draft strategy?

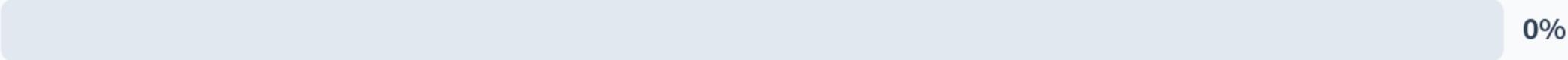
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Medium Priority

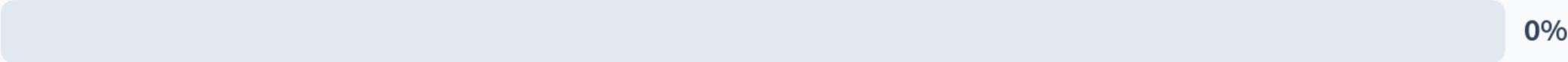


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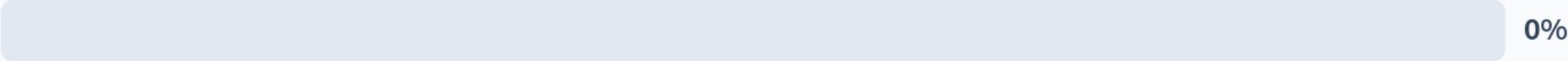


Prioritization | Strategy 1.3 - Determine AV Staffing Needs | What level priority is this draft strategy?

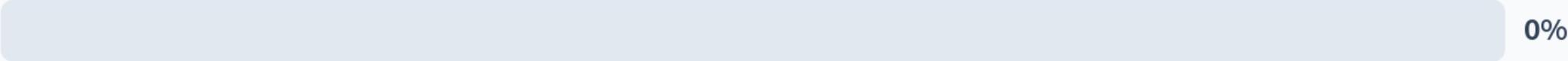
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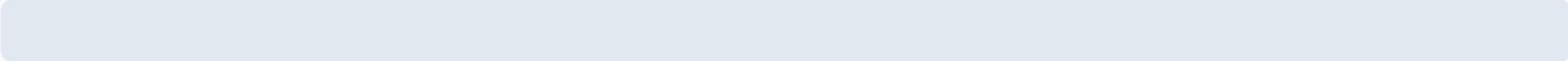


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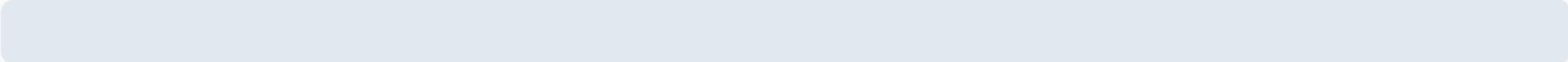
Prioritization | Strategy 1.4 - AV Training | What level priority is this draft strategy?

Low Priority



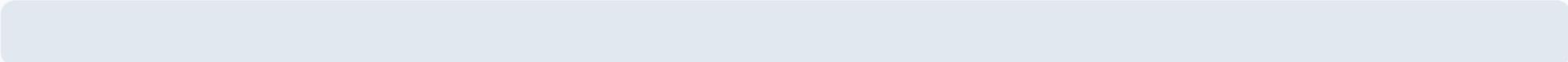
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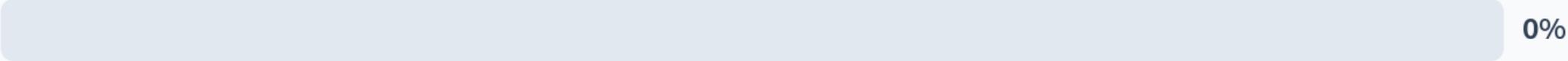
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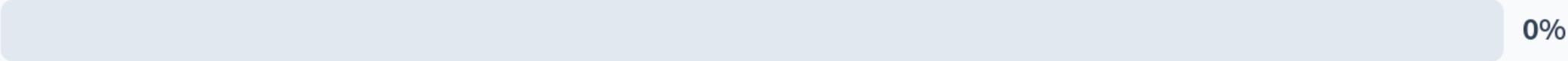
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Prioritization | Strategy 1.5 - Integrate AV into Planning Process | What level priority is this draft strategy?

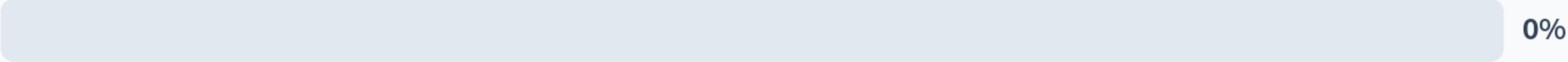
Low Priority



Medium Priority



High Priority



Pillar 1: Agency Readiness

- Are there any additional strategies we should consider?

Strategy

Strategy 1.1 – Joint AV Working Group

Strategy 1.2 – AV Outreach and Awareness Program for Agencies

Strategy 1.3 – Determine AV Staffing Needs

Strategy 1.4 – AV Training

Strategy 1.5 – Integrate AV into Planning Process



Pillar 2: Infrastructure Readiness

Investments into transportation infrastructure networks (both physical and digital) to support AVs operating on public roadways.

Strategy

Strategy 2.1 – Investigate AV needs for changes to physical infrastructure

Strategy 2.2 – Investigate AV needs for digital infrastructure

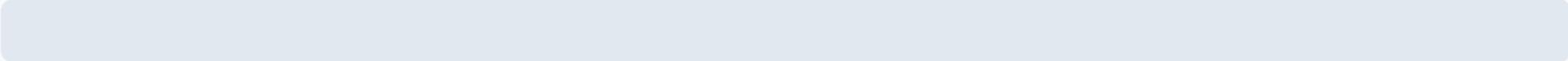
Strategy 2.3 – Infrastructure Assessment

Strategy 2.4 – Upgrade County Infrastructure to make it AV-ready



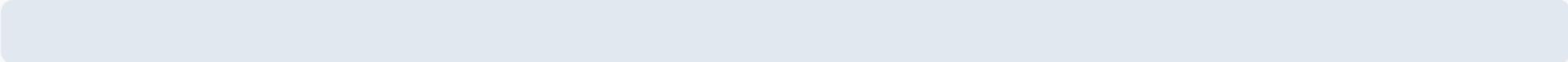
Prioritization | Strategy 2.1 - Joint AV Working Group | What level priority is this draft strategy?

Low Priority



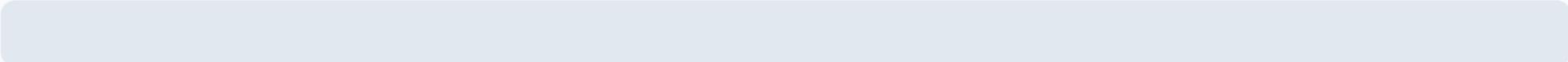
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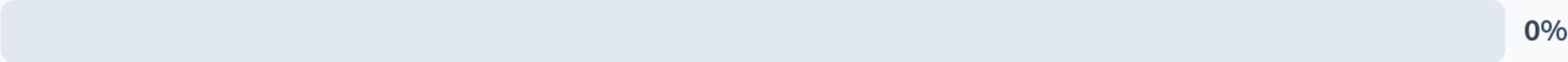
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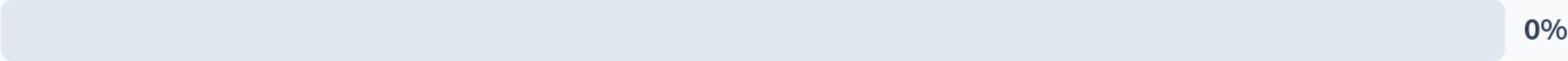
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Prioritization | Strategy 2.2 - Investigate AV Needs for digital Infrastructure | What level priority is this draft strategy?

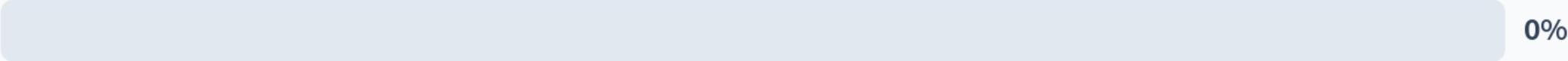
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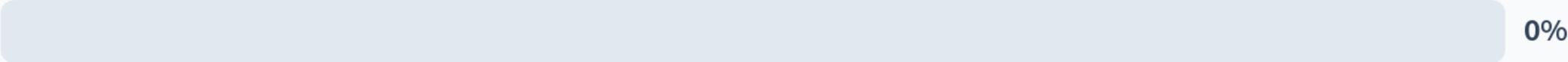


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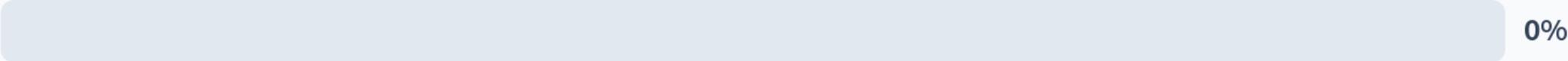


Prioritization | Strategy 2.3 - Infrastructure Assessment | What level priority is this draft strategy?

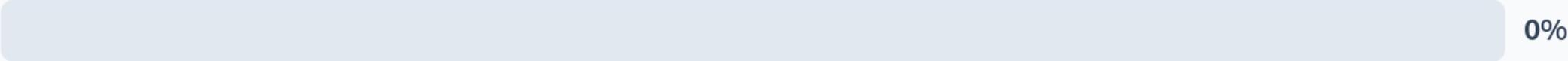
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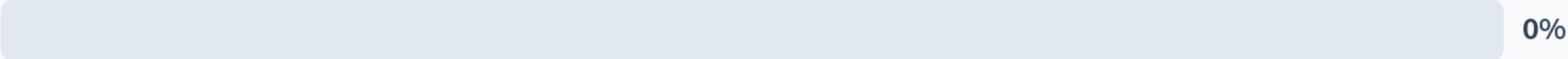


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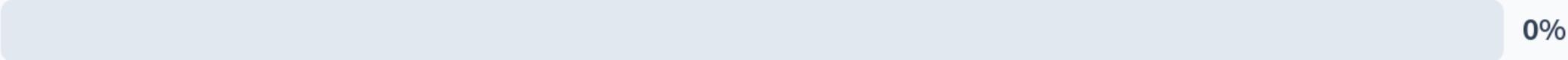


Prioritization | Strategy 2.4 - Upgrade County Infrastructure to Make it AV-Ready | What level priority is this draft strategy?

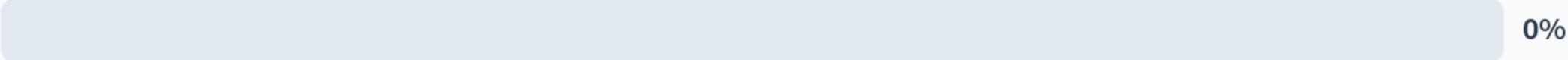
Low Priority



Medium Priority



High Priority



Pillar 2: Infrastructure Readiness

- Are there any additional strategies we should consider?

Strategy

Strategy 2.1 – Investigate AV needs for changes to physical infrastructure

Strategy 2.2 – Investigate AV needs for digital infrastructure

Strategy 2.3 – Infrastructure Assessment

Strategy 2.4 – Upgrade County Infrastructure to make it AV-ready



Pillar 3: Public Outreach and Partnerships

Increased awareness of the technology among the public, legislators, and local agencies can build trust and facilitate information sharing. There are also opportunities to leverage private sector investments.

Strategy

Strategy 3.1 – Industry Collaboration

Strategy 3.2 – Public Education

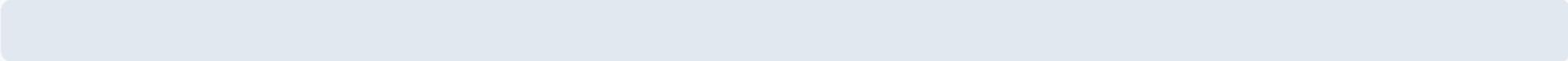
Strategy 3.3 – Legislative Outreach

Strategy 3.4 – Public Private Partnerships



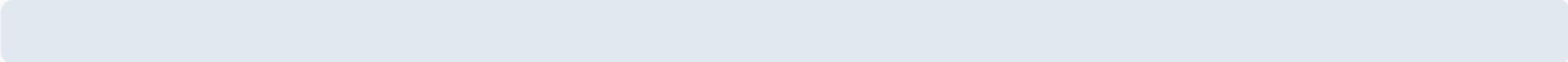
Prioritization | Strategy 3.1 - Industry Collaboration | What level priority is this draft strategy?

Low Priority



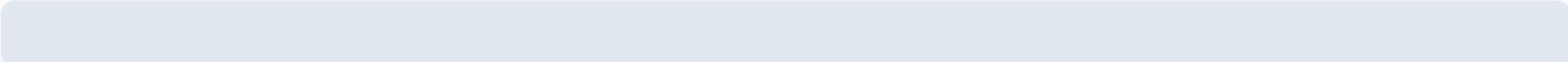
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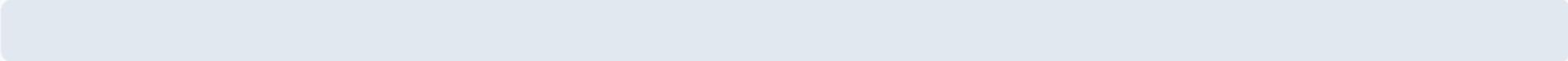
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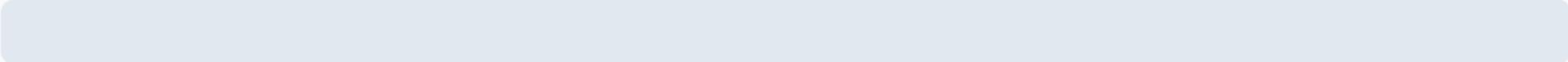
Prioritization | Strategy 3.2 - Public Education | What level priority is this draft strategy?

Low Priority



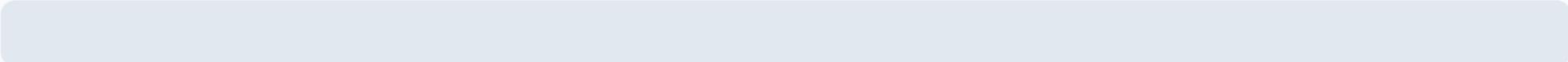
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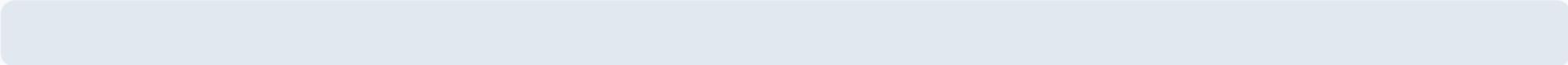
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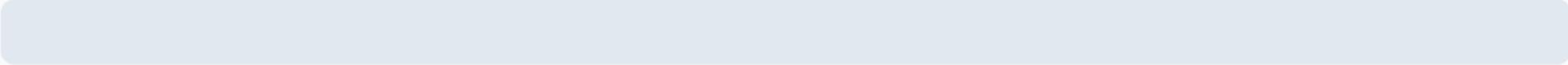
Prioritization | Strategy 3.3 - Legislative Outreach | What level priority is this draft strategy?

Low Priority



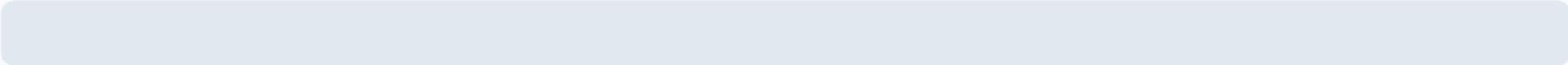
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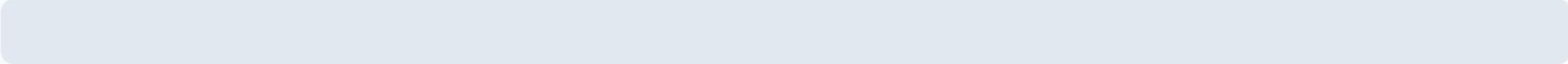
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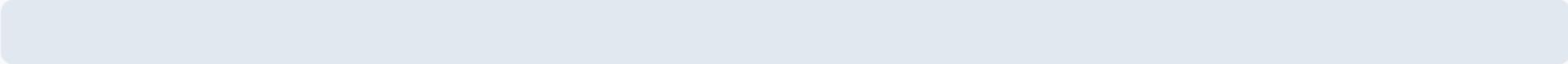
Prioritization | Strategy 3.4 - Public Private Partnership | What level priority is this draft strategy?

Low Priority



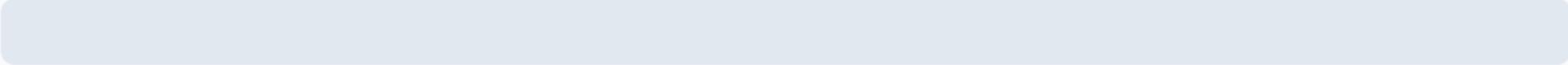
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High Priority



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Pillar 3: Public Outreach and Partnerships

- Are there any additional strategies we should consider?

Strategy

Strategy 3.1 – Industry Collaboration

Strategy 3.2 – Public Education

Strategy 3.3 – Legislative Outreach

Strategy 3.4 – Public Private Partnerships



Pillar 4: Policy

Policies should be consistent at the local, regional, and state level and they should align with federal AV policy (as it evolves).

Strategy

Strategy 4.1 – Support regional AV goals

Strategy 4.2 – Engage with State regulatory agencies

Strategy 4.3 – Establish a data sharing policy for AVs

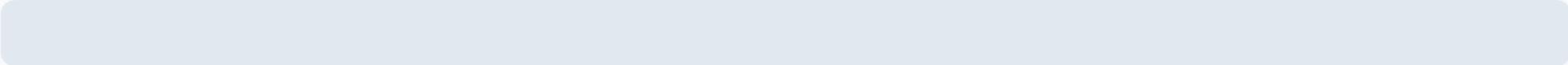
Strategy 4.4 – Establish an equity policy for AVs

Strategy 4.5 – Incorporate AVs into county funding programs



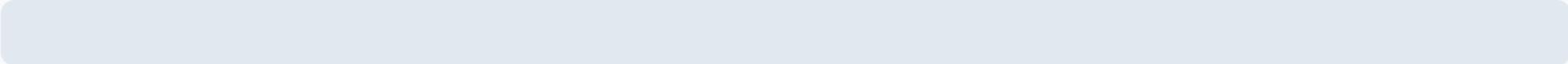
Prioritization | Strategy 4.1 - Support Regional AV Goals | What level priority is this draft strategy?

Low Priority



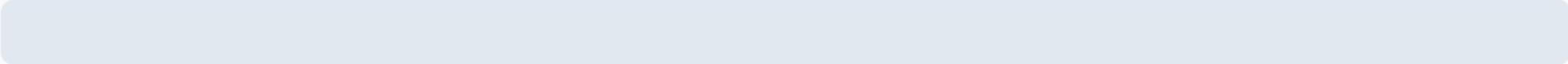
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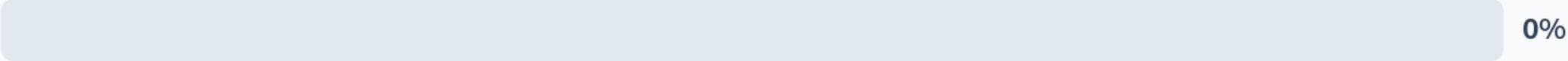
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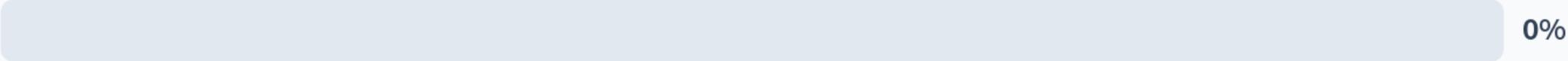
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Prioritization | Strategy 4.2 - Engage with State Regulatory Agencies | What level priority is this draft strategy?

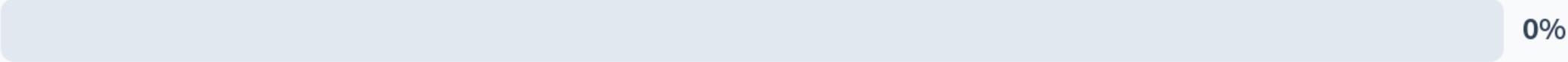
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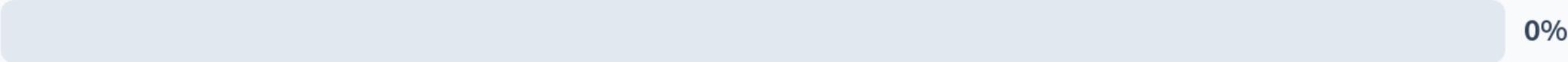


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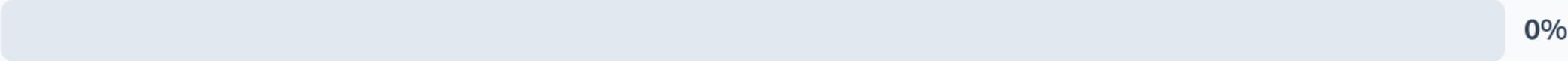


Prioritization | Strategy 4.3 - Infrastructure Assessment | What level priority is this draft strategy?

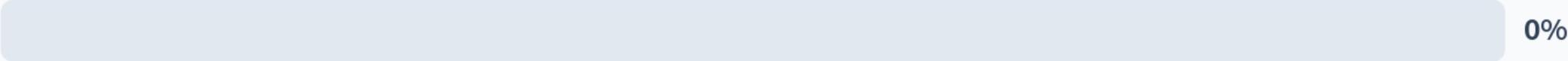
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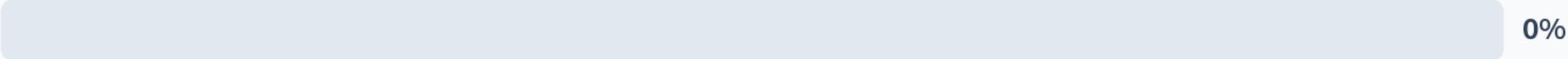


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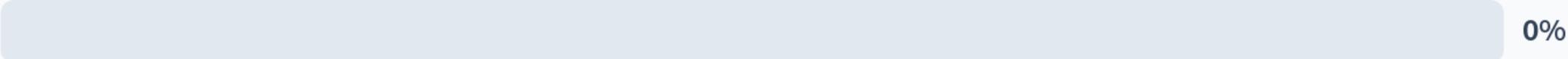


Prioritization | Strategy 4.4 - Establish an equity policy for AVs | What level priority is this draft strategy?

Low Priority



Medium Priority

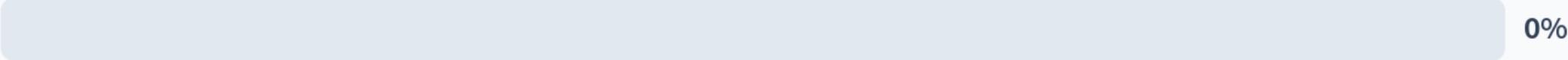


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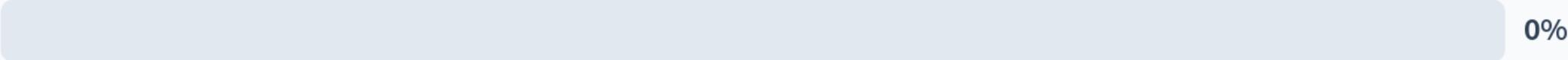


Prioritization | Strategy 4.5 - Incorporate AVs into county funding programs | What level priority is this draft strategy?

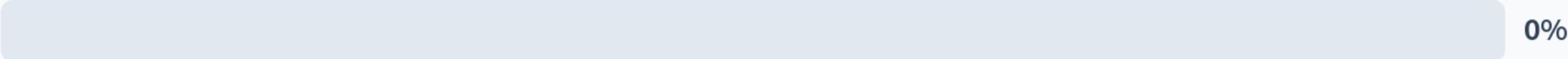
Low Priority



Medium Priority



High Priority



Pillar 4: Policy

- Are there any additional strategies we should consider?

Strategy

Strategy 4.1 – Support regional AV goals

Strategy 4.2 – Engage with State regulatory agencies

Strategy 4.3 – Establish a data sharing policy for AVs

Strategy 4.4 – Establish an equity policy for AVs

Strategy 4.5 – Incorporate AVs into county funding programs



Pillar 5: Pilots and Testing

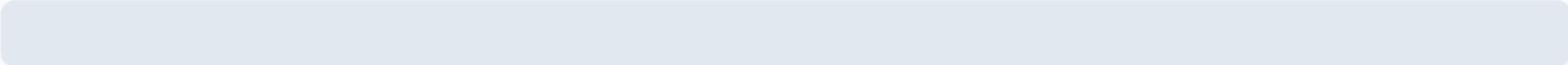
Testing and pilots of AV use cases will enable agencies to understand potential benefits and see what is needed to support them in the future, paving the way for further developments.

Strategy	Example Applications
Strategy 5.1 – AV Pilot Planning	See Below
Strategy 5.2 – Shared AV shuttle pilot	<ul style="list-style-type: none">• Millbrae to Broadway Caltrain Station along California Drive• Shuttles to connect BART Stations to Caltrain Stations• Shuttle service to Canada Community College, Sequoia Hospital, Bair Island Neighborhood in Redwood City• Belmont Caltrain Station to the Notre Dame Belmont Campus
Strategy 5.3 – Transit ADAS pilot	<ul style="list-style-type: none">• Blindspot warning, automatic braking, lane keeping assist• Automated parking in bus yards for storage and refueling/charging• Precision docking• Platooning on future BRT routes
Strategy 5.4 – AV data sharing pilot	<ul style="list-style-type: none">• Curb use management• Interactions with construction or work zones• Interactions with emergency vehicles and response zones



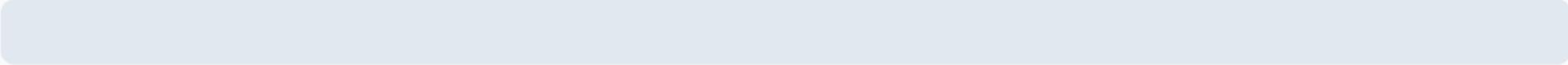
Prioritization | Strategy 5.1 - AV Pilot Planning | What level priority is this draft strategy?

Low Priority



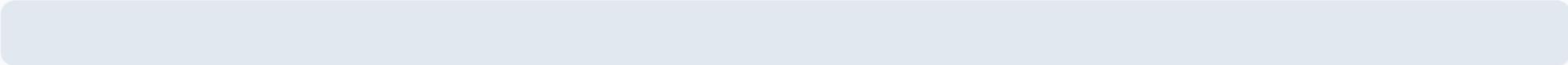
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Medium Priority



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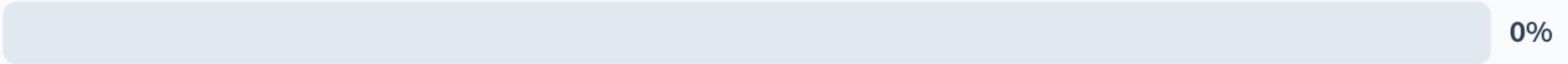
High Priority



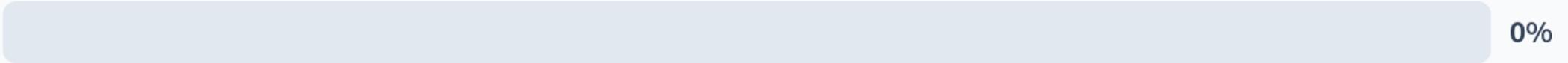
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Prioritization | Strategy 5.2 - Shared AV Shuttle Pilot | What level priority is this draft strategy?

Low Priority



Medium Priority

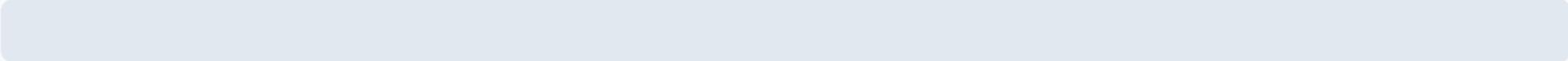


High Priority



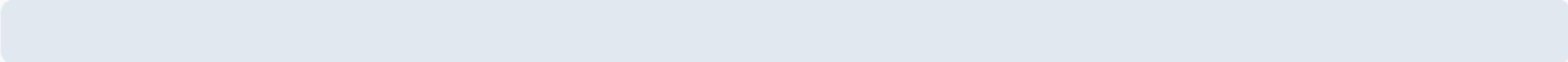
Prioritization | Strategy 5.3 - Transit ADAS Pilot | What level priority is this draft strategy?

Low Priority



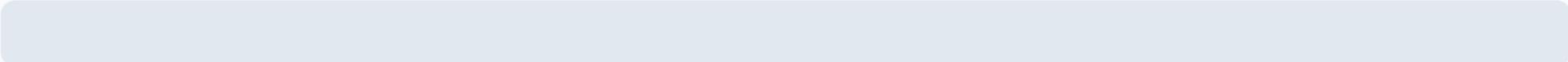
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Medium Priority



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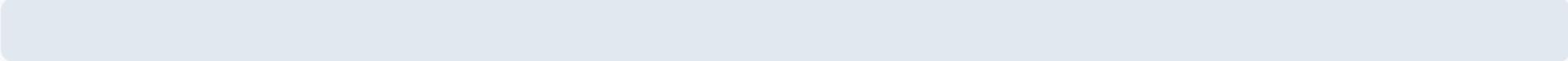
High Priority



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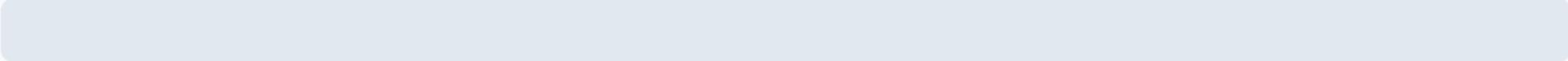
Prioritization | Strategy 5.4 - AV Data Sharing Pilot | What level priority is this draft strategy?

Low Priority



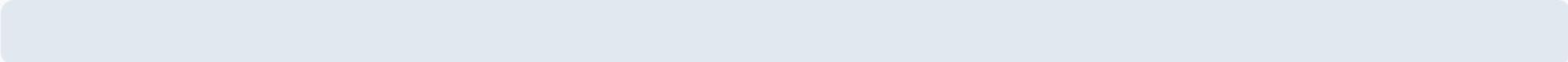
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Medium Priority



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High Priority



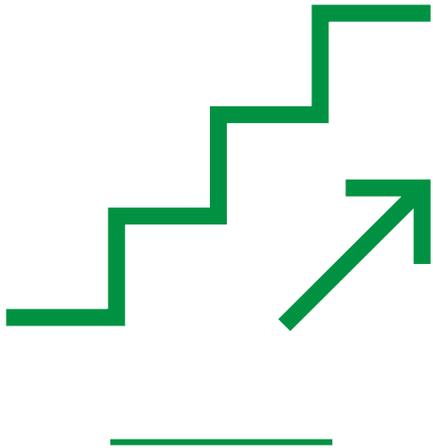
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Draft Strategies



- Are there any additional strategies we should consider?
- What additional advice do you have for the team?

Next Steps



Where are we going next?

- **January** | Feedback from the TAC will be incorporated to refine the *draft* strategies and develop the *draft* AV Strategic Plan.
- **Mid Q1 2024** | The project team will meet with the TAC to review the *draft* AV Strategic Plan.
- **Late Q1 2024** | The *draft* AV Strategic Plan, with edits from the TAC, will be presented to the TA Board.
- **Early Q2 2024** | The *draft* AV Strategic Plan will be brought to the C/CAG Board as a motion.

Questions/Feedback

Project Website/Factsheets/Draft Existing Conditions Report Available at: <https://www.smcta.com/planning-projects/SMCAVPlan>

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