



# 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

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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?

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- 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

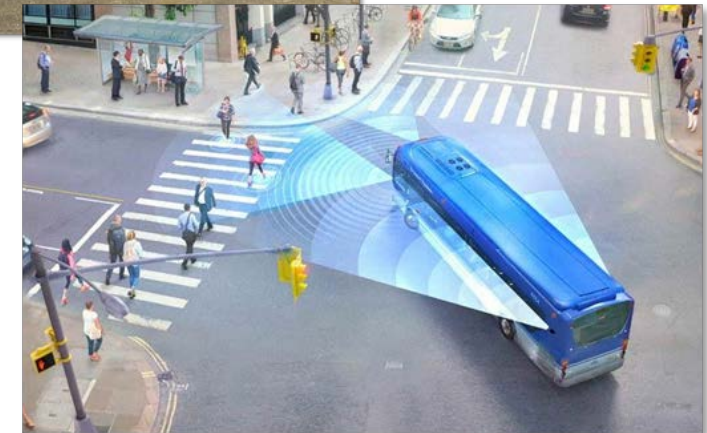
- AV testing is happening in San Mateo County
  - CPUC has issued 30+ testing permits with safety driver in California
  - Driverless not commercial operations (i.e. robo-taxis) are not yet approved in San Mateo County
- This is the first county program or plan to address AVs
- Learn from local, state,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

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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

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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

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How are we thinking  
through our strategies?



Agency Readiness



Infrastructure Readiness



Public Outreach & Partnerships



Policy



Pilots & Testing

# AV Strategy Prioritization Activity

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## 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](mailto: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

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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

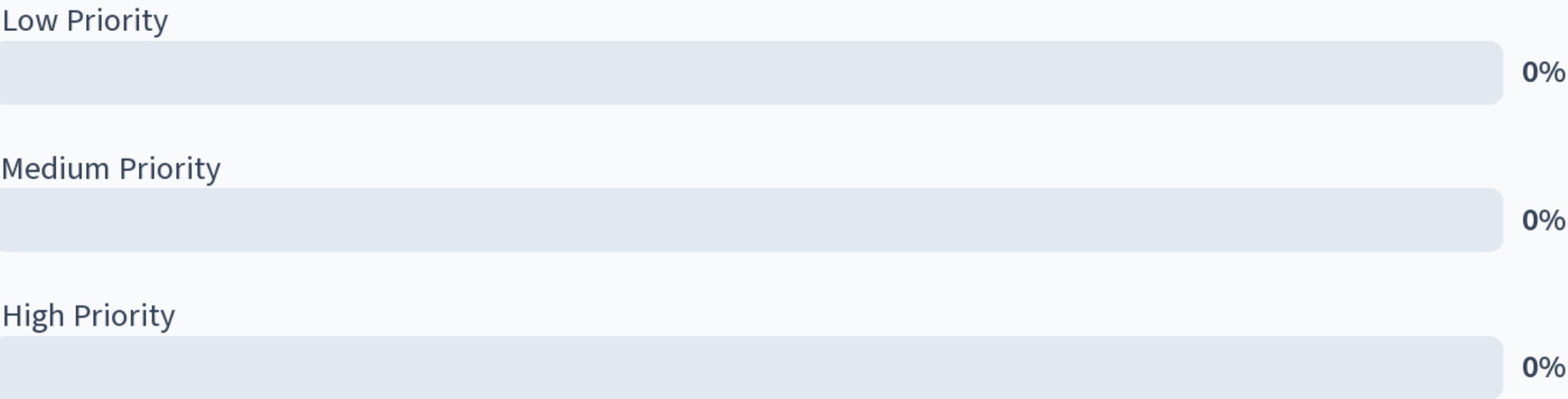
**Strategy 1.3** – Determine AV Staffing Needs

**Strategy 1.4** – AV Training

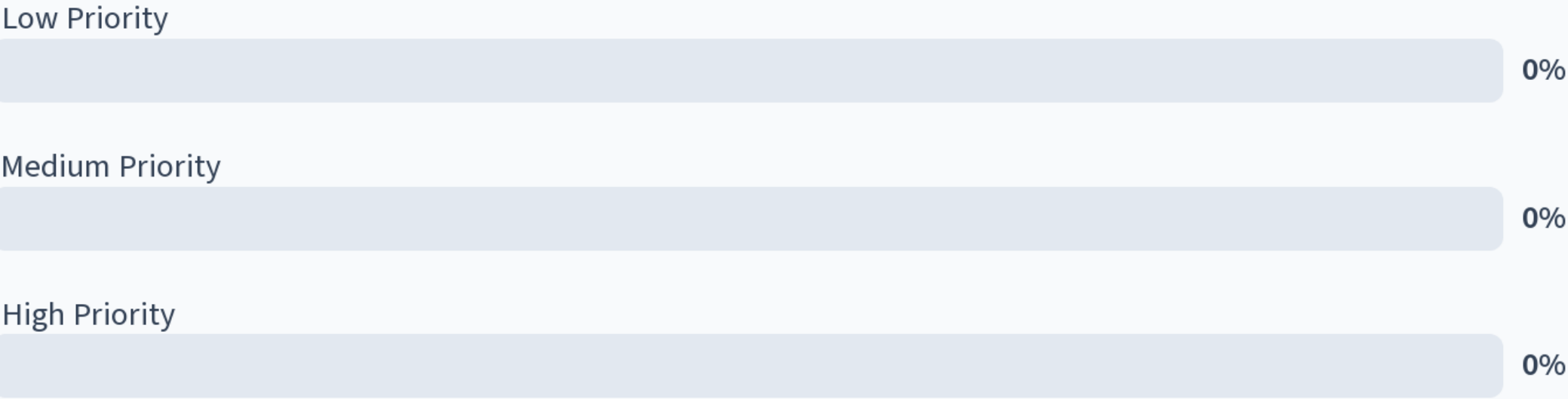
**Strategy 1.5** – Integrate AV into Planning Process



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

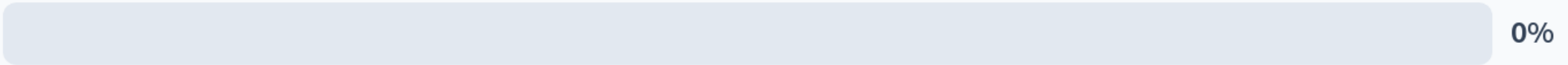


# Prioritization | Strategy 1.2 - AV Outreach and Awareness Program for Agencies | What level priority is this draft strategy?

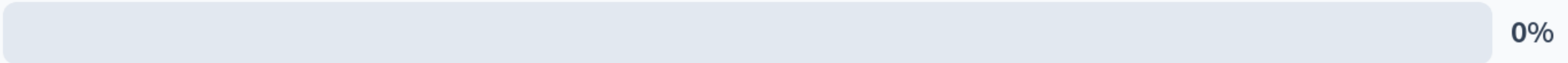


## Prioritization | Strategy 1.3 - Determine AV Staffing Needs | What level priority is this draft strategy?

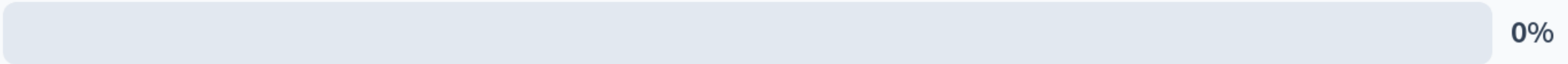
Low Priority



Medium Priority

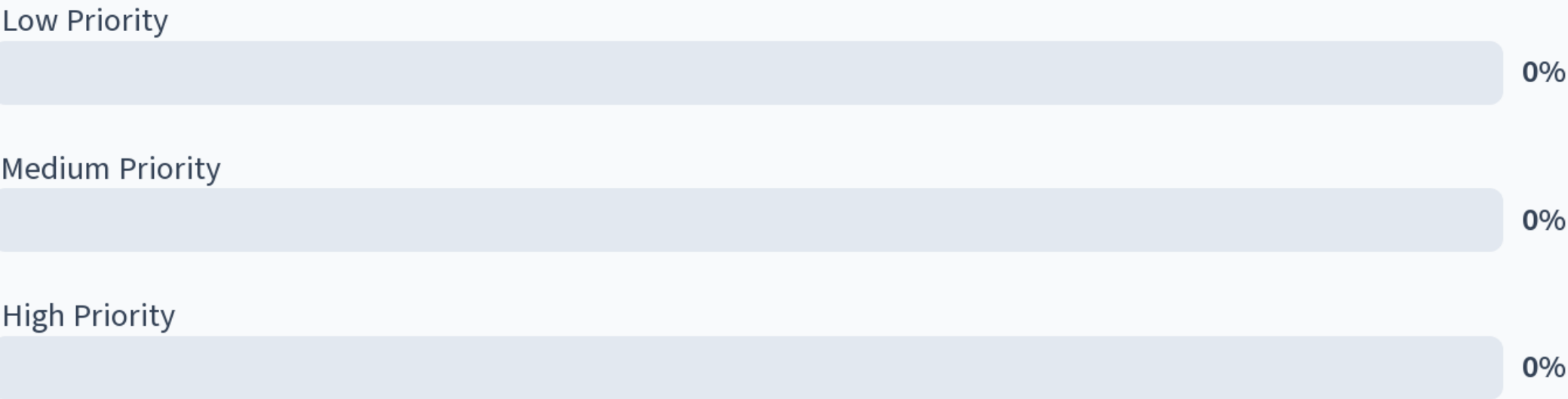


High Priority



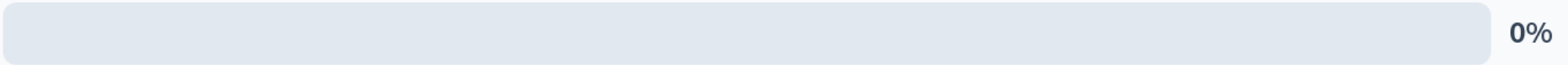


# Prioritization | Strategy 1.4 - AV Training | What level priority is this draft strategy?



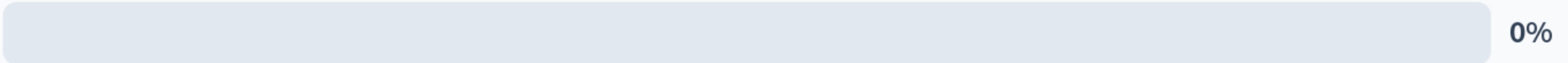
## Prioritization | Strategy 1.5 - Integrate AV into Planning Process | What level priority is this draft strategy?

Low Priority



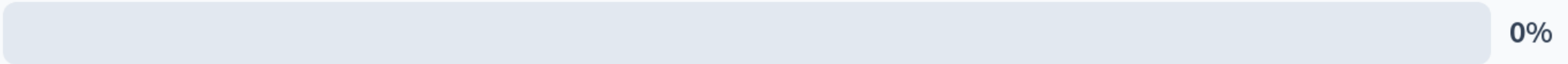
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Medium Priority



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High Priority



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# Pillar 1: Agency Readiness

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- 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

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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

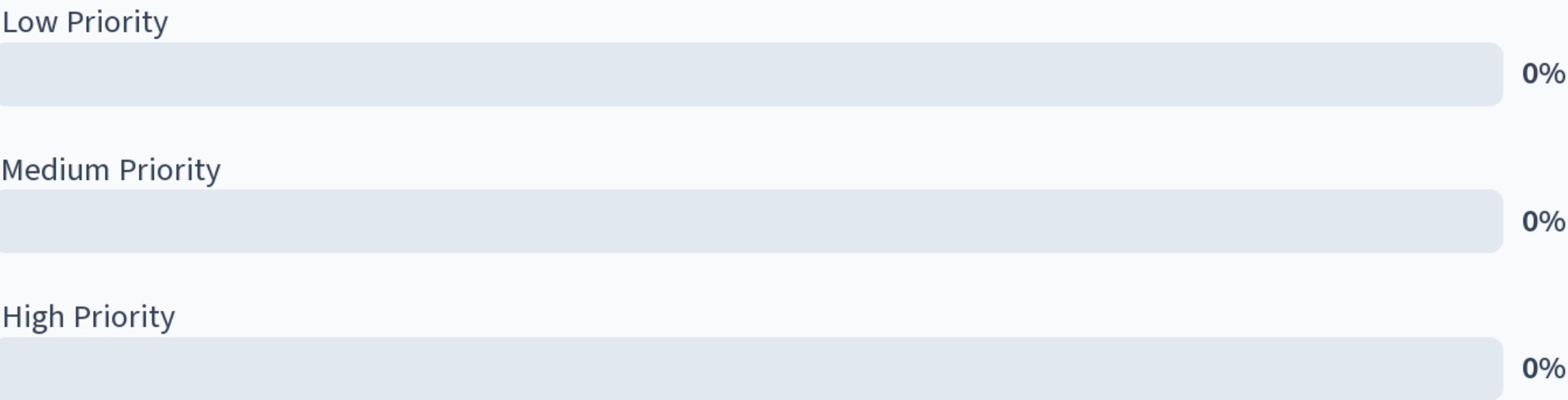
**Strategy 2.3** – Infrastructure Assessment

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

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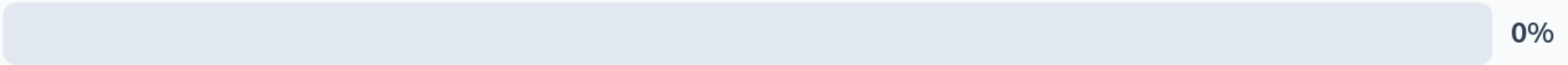


# Prioritization | Strategy 2.1 - Joint AV Working Group | What level priority is this draft strategy?



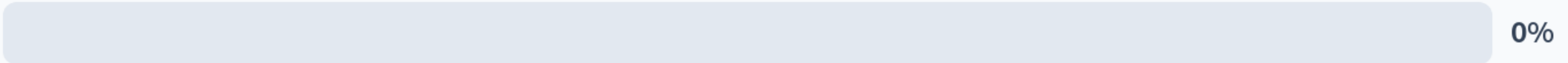
## Prioritization | Strategy 2.2 - Investigate AV Needs for digital Infrastructure | What level priority is this draft strategy?

Low Priority



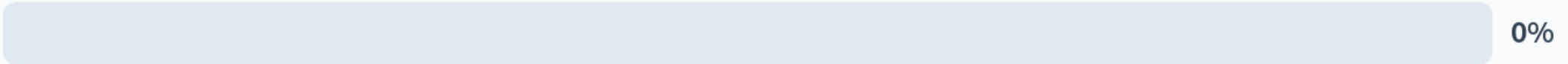
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Medium Priority



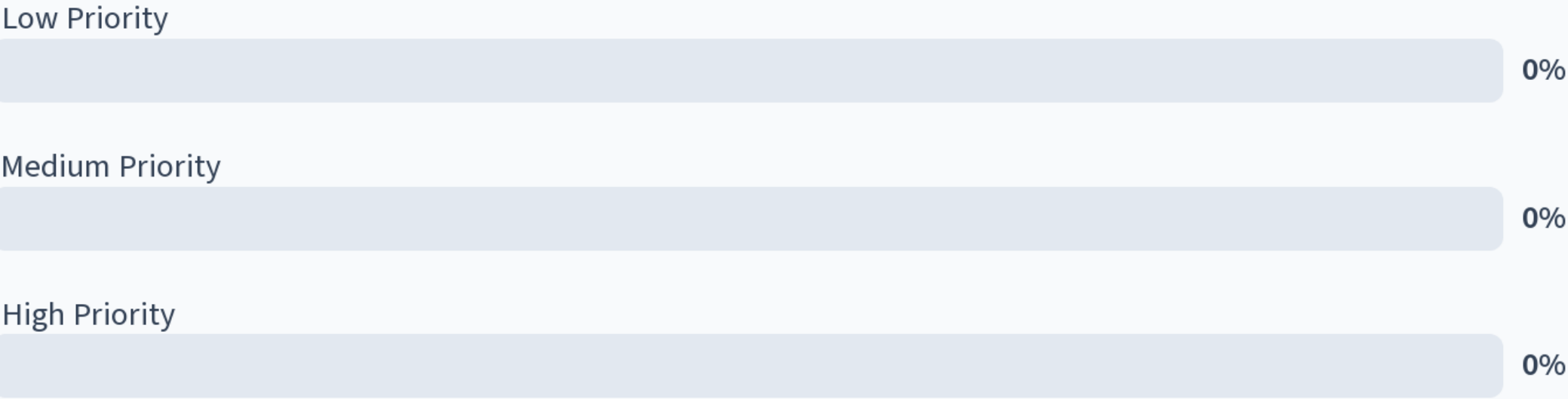
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High Priority

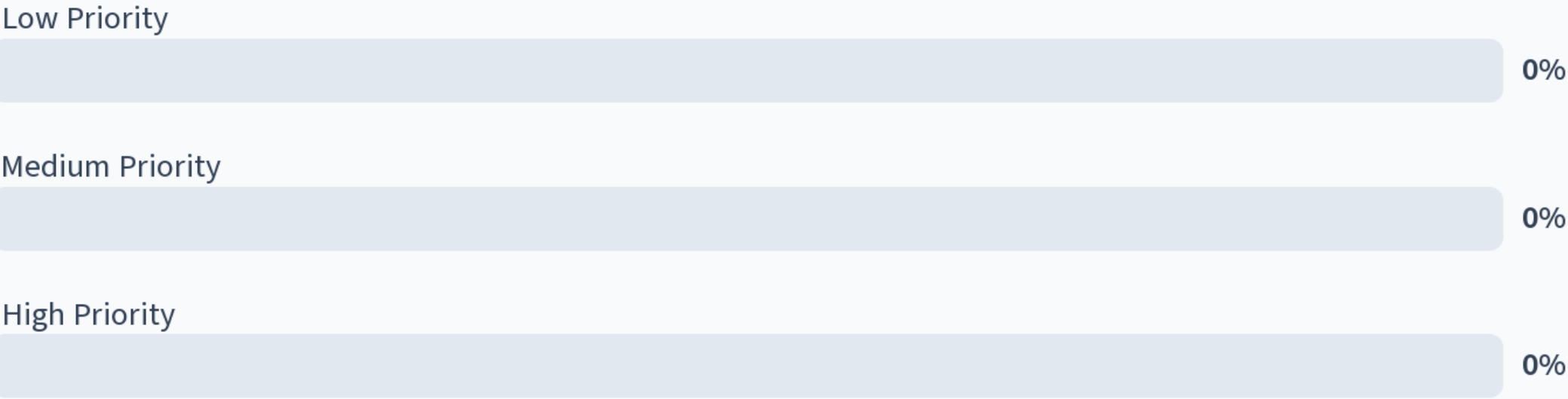


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# Prioritization | Strategy 2.3 - Infrastructure Assessment | What level priority is this draft strategy?



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





# Pillar 2: Infrastructure Readiness

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- 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

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# Pillar 3: Public Outreach and Partnerships

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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

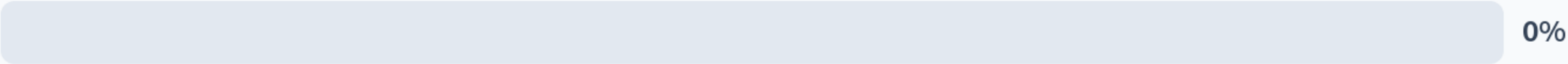
**Strategy 3.4** – Public Private Partnerships

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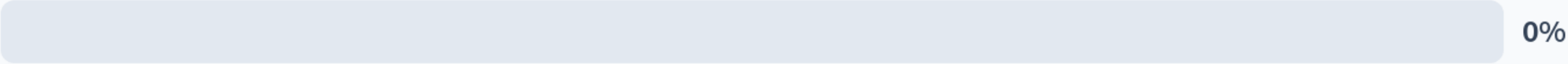


# Prioritization | Strategy 3.1 - Industry Collaboration | What level priority is this draft strategy?

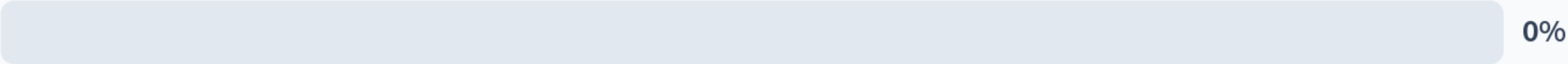
Low Priority



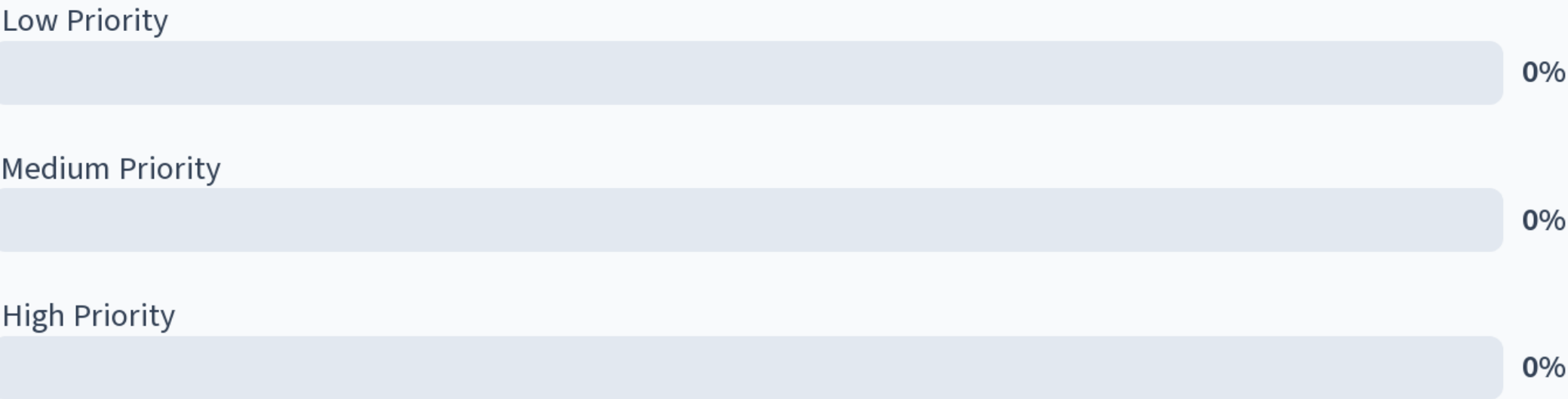
Medium Priority



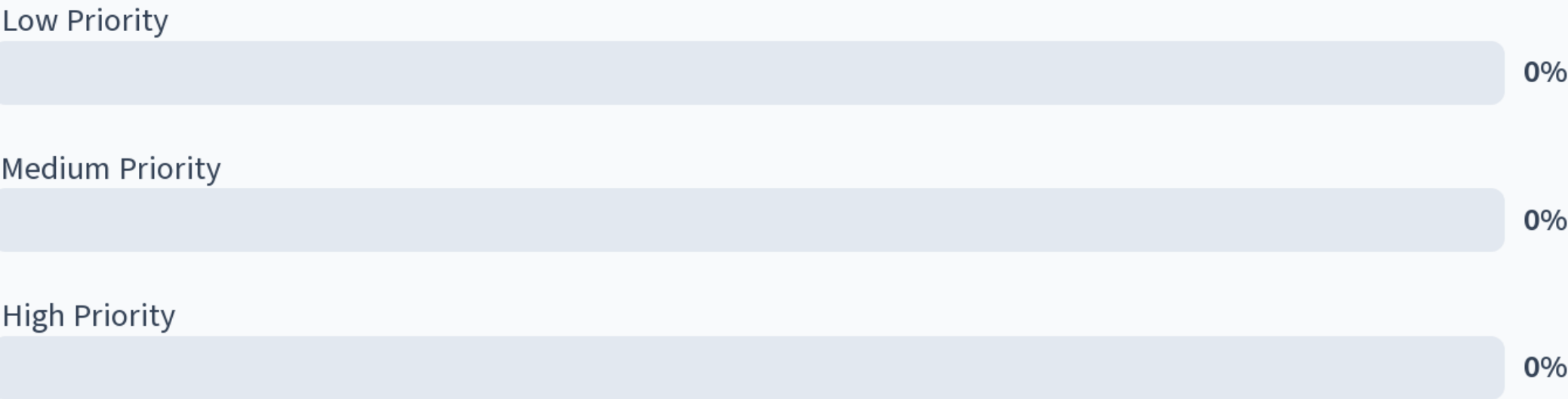
High Priority



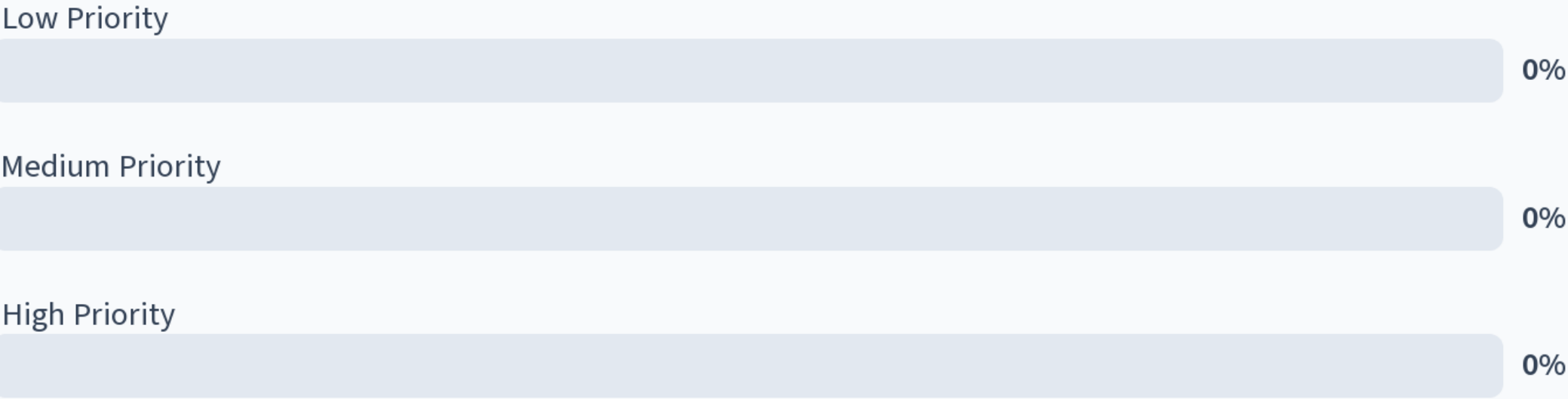
# Prioritization | Strategy 3.2 - Public Education | What level priority is this draft strategy?



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



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



# Pillar 3: Public Outreach and Partnerships

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- 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

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# Pillar 4: Policy

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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

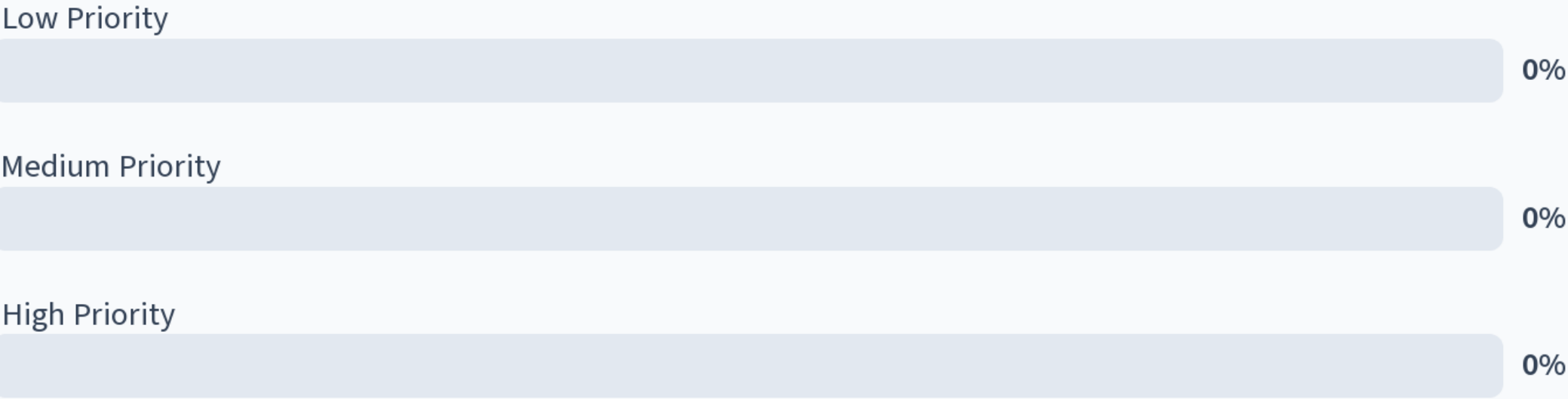
**Strategy 4.4** – Establish an equity policy for AVs

**Strategy 4.5** – Incorporate AVs into county funding programs

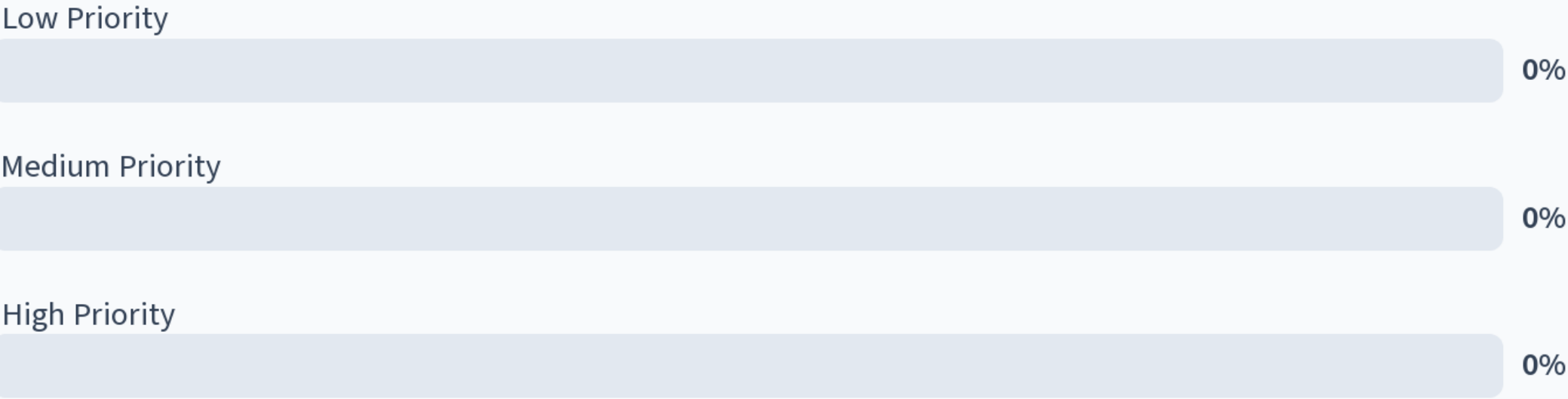




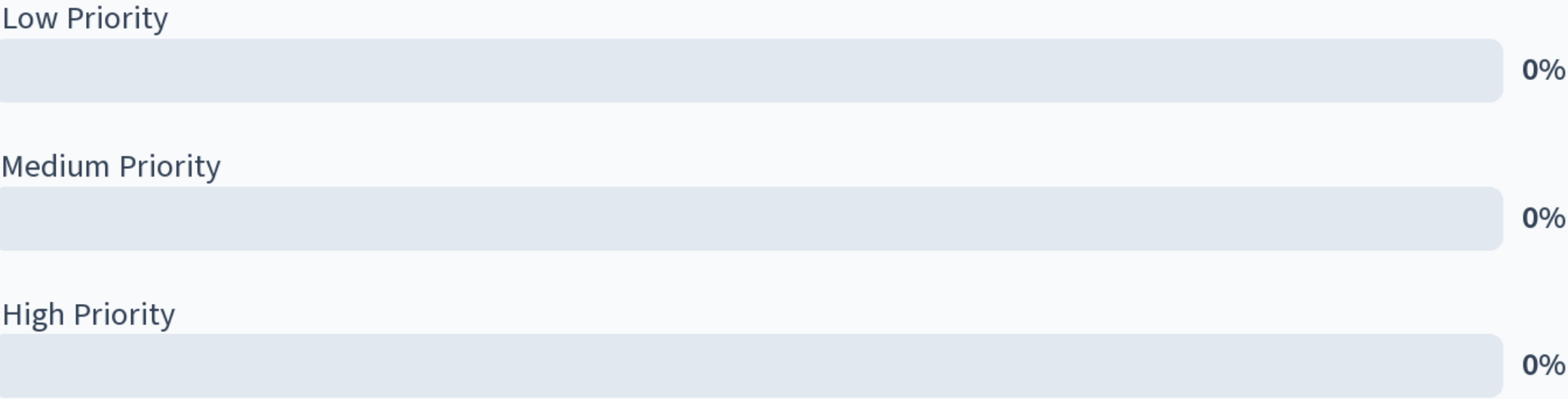
# Prioritization | Strategy 4.1 - Support Regional AV Goals | What level priority is this draft strategy?



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

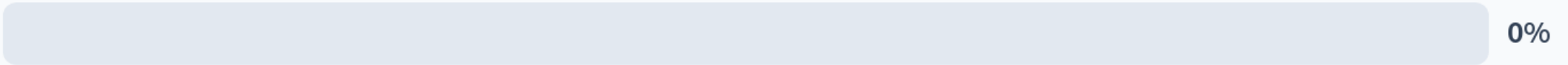


# Prioritization | Strategy 4.3 - Infrastructure Assessment | What level priority is this draft strategy?

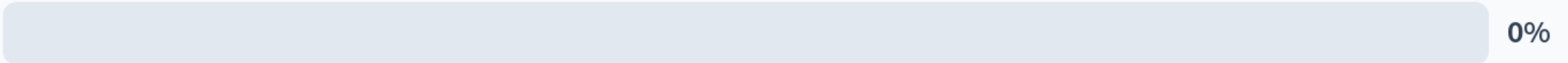


## Prioritization | Strategy 4.4 - Establish an equity policy for AVs | What level priority is this draft strategy?

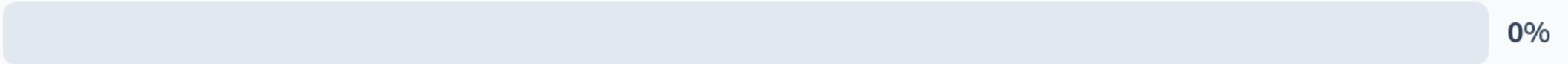
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Medium Priority

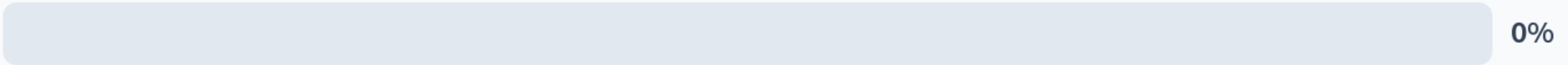


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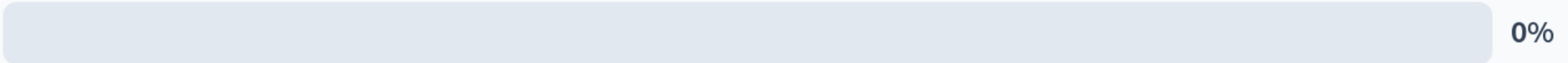


## Prioritization | Strategy 4.5 - Incorporate AVs into county funding programs | What level priority is this draft strategy?

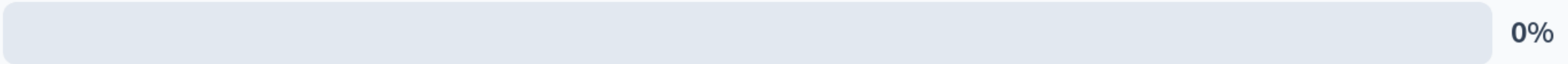
Low Priority



Medium Priority



High Priority



# Pillar 4: Policy

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- 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

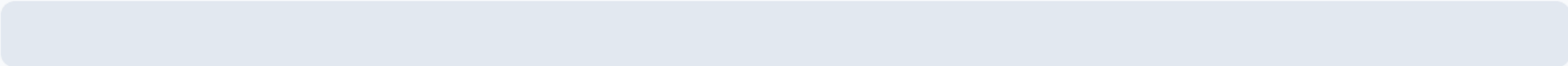
Testing and pilots of AV use cases will enable agencies to understand potential benefits and see what is needed to support them in the future, paving the way for further developments.

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



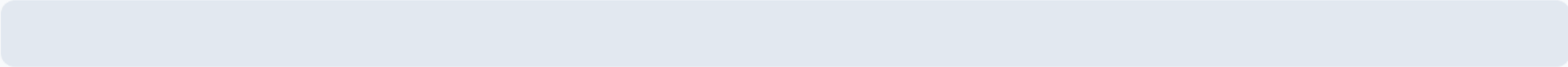
# Prioritization | Strategy 5.1 - AV Pilot Planning | What level priority is this draft strategy?

Low Priority



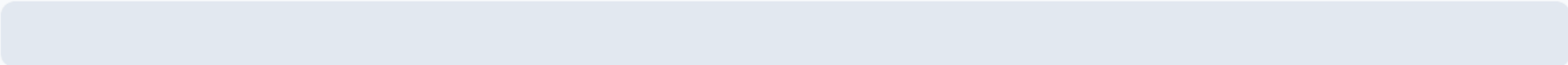
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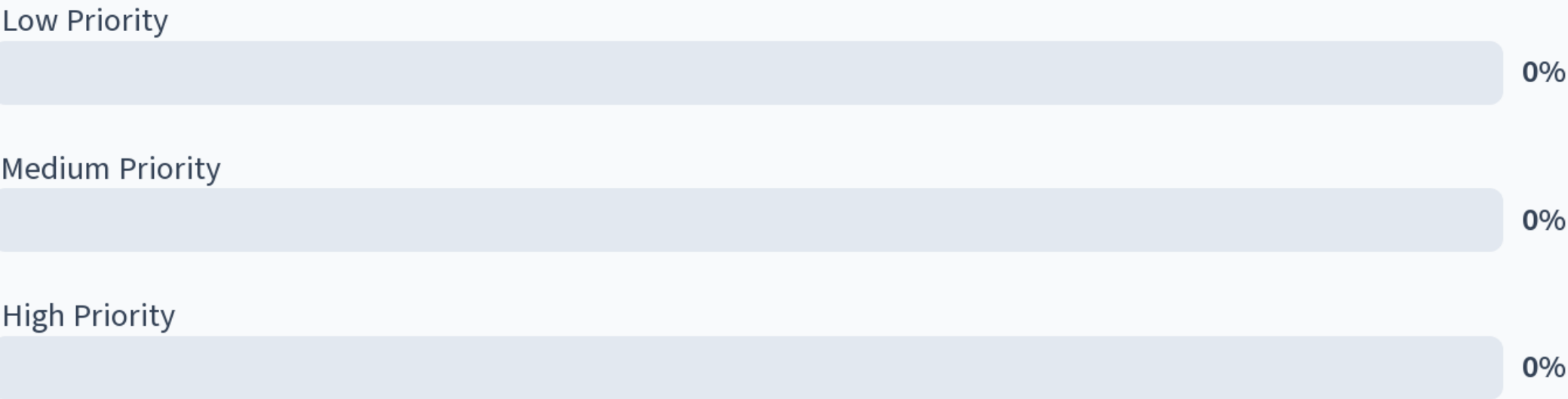
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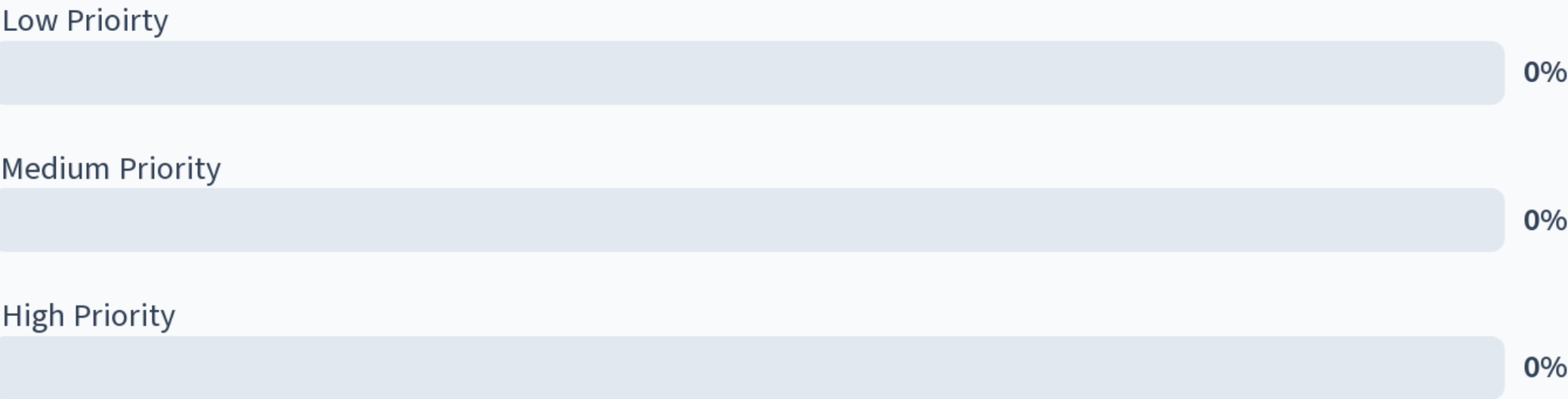
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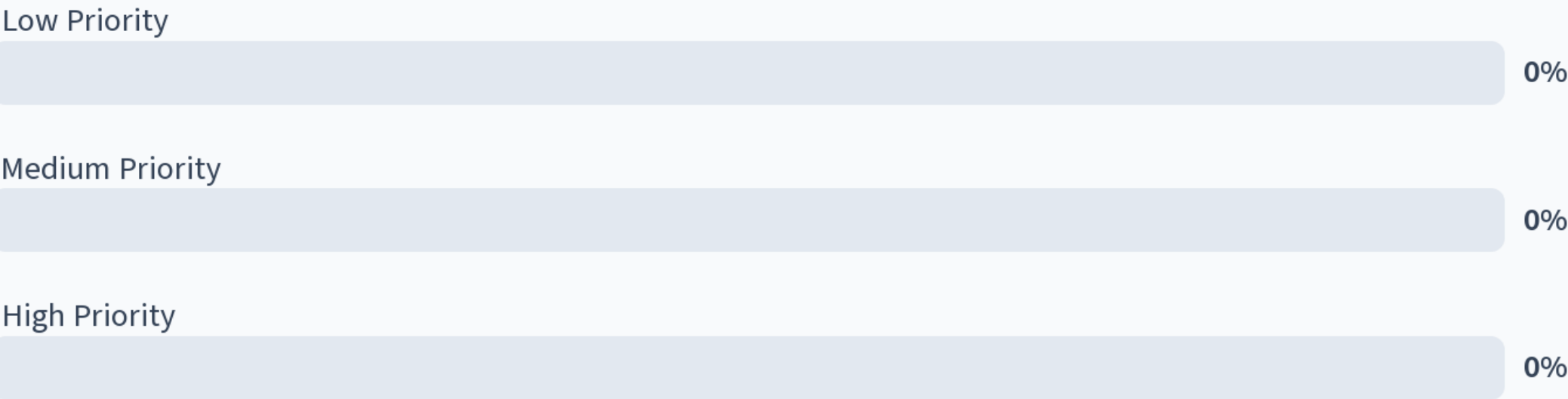
# Prioritization | Strategy 5.2 - Shared AV Shuttle Pilot| What level priority is this draft strategy?



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



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



# Draft Strategies

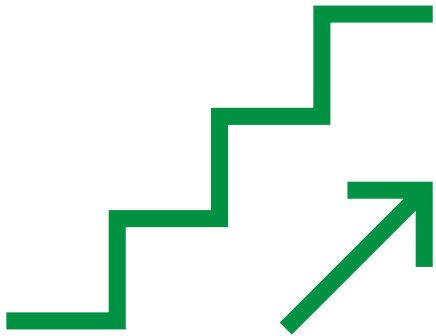
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- Are there any additional strategies we should consider?
- What additional advice to you have for the team?

# Next Steps

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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

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

Contact Info:

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Audrey Shiramizu, C/CAG, [ashiramizu@smcgov.org](mailto:ashiramizu@smcgov.org)

