



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 14

PM_{2.5} National Ambient Air Quality Standards and Initial Area Designations

Board of Directors Meeting
February 7, 2024

Kate Hoag, Ph.D.
Assistant Manager
Meteorology and Measurements
khoag@baaqmd.gov

Presentation Outcome



To provide an informational update on Environmental Protection Agency's revision to the PM NAAQS and the process EPA uses to designate areas as attaining or not attaining the revised NAAQS.

Presentation Outline



- National Ambient Air Quality Standards (NAAQS)
- Designations process including exceptional events
- Preliminary 2021 - 2023 data
- Next Steps

Presentation for Information Only



No action required.

National Ambient Air Quality Standards (NAAQS)

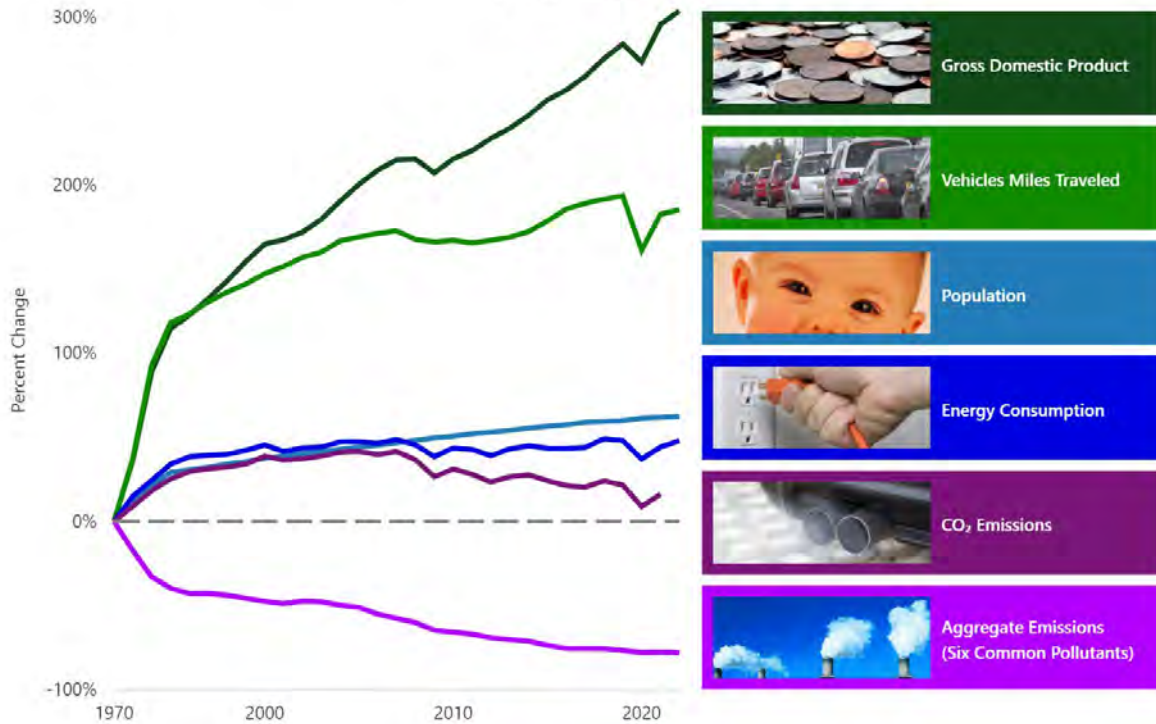


- U.S. Environmental Protection Agency (EPA) sets limits for concentrations of six pollutants in ambient (outdoor) air according to the Federal Clean Air Act
 - Carbon monoxide, ozone, lead, oxides of nitrogen, particulate matter (PM), and oxides of sulfur
 - Primary NAAQS: Health-based, to an adequate margin of safety
 - Secondary NAAQS: Welfare-based, e.g. visibility, damage to crops, vegetation, buildings, and animals
- EPA is required to review NAAQS every five years

National Ambient Air Quality Standards (NAAQS)



Comparison of Growth Areas and Declining Emissions
1970-2022

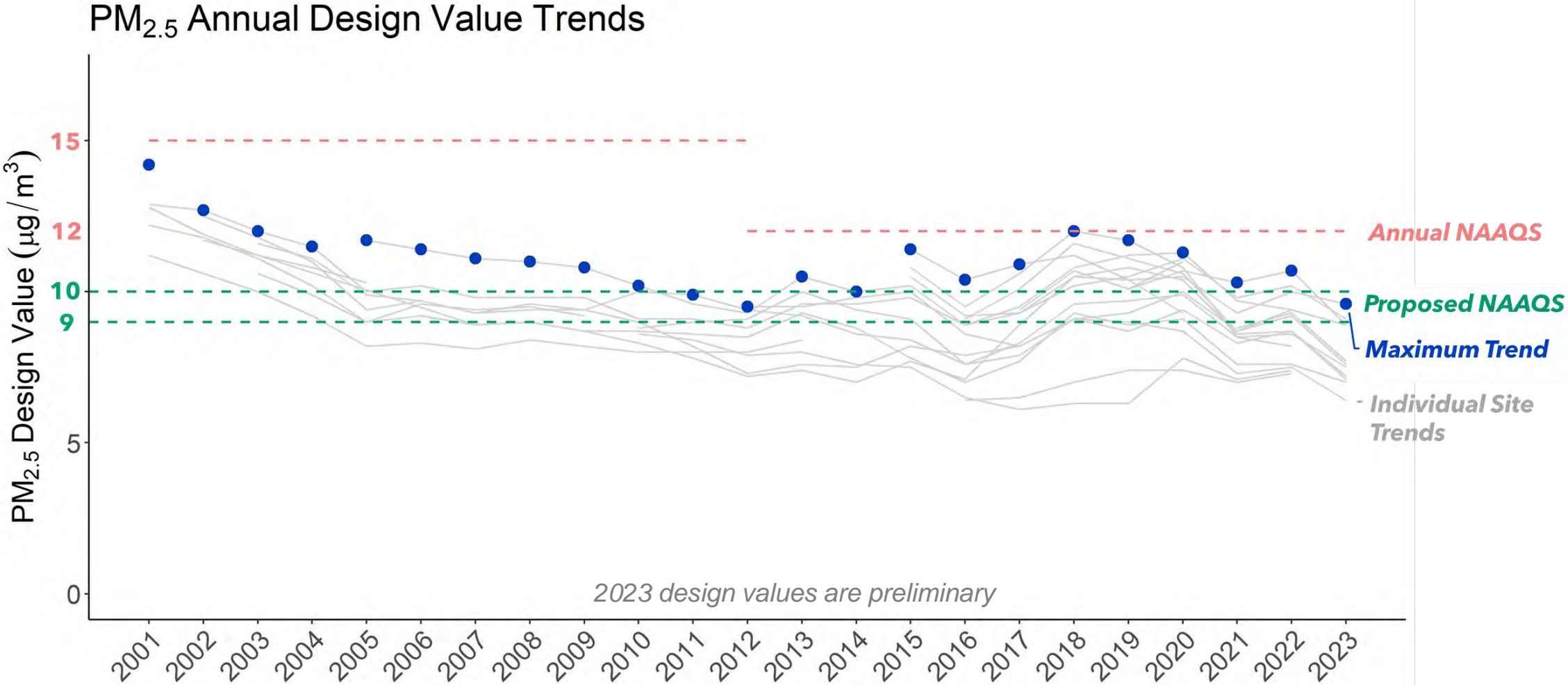


source: EPA, *Our Nation's Air, 2022*

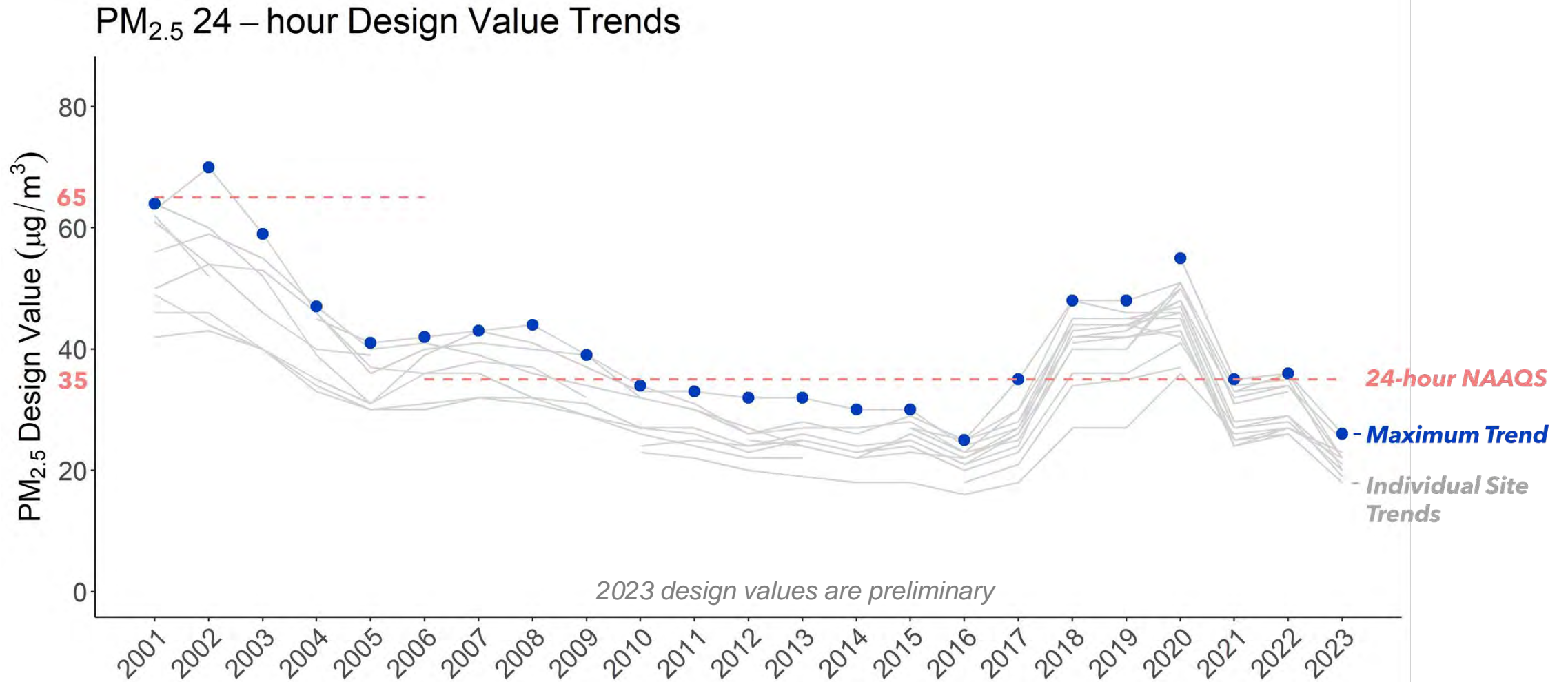
- Implementing the NAAQS has been a significant driver of emission reductions nationwide
- Implementation includes:
 - NAAQS revision
 - Nonattainment designations
 - State Implementation Plans
 - Emission reductions
 - Monitor to show attainment



Long-Term NAAQS Trends



Long-Term NAAQS Trends (cont.)

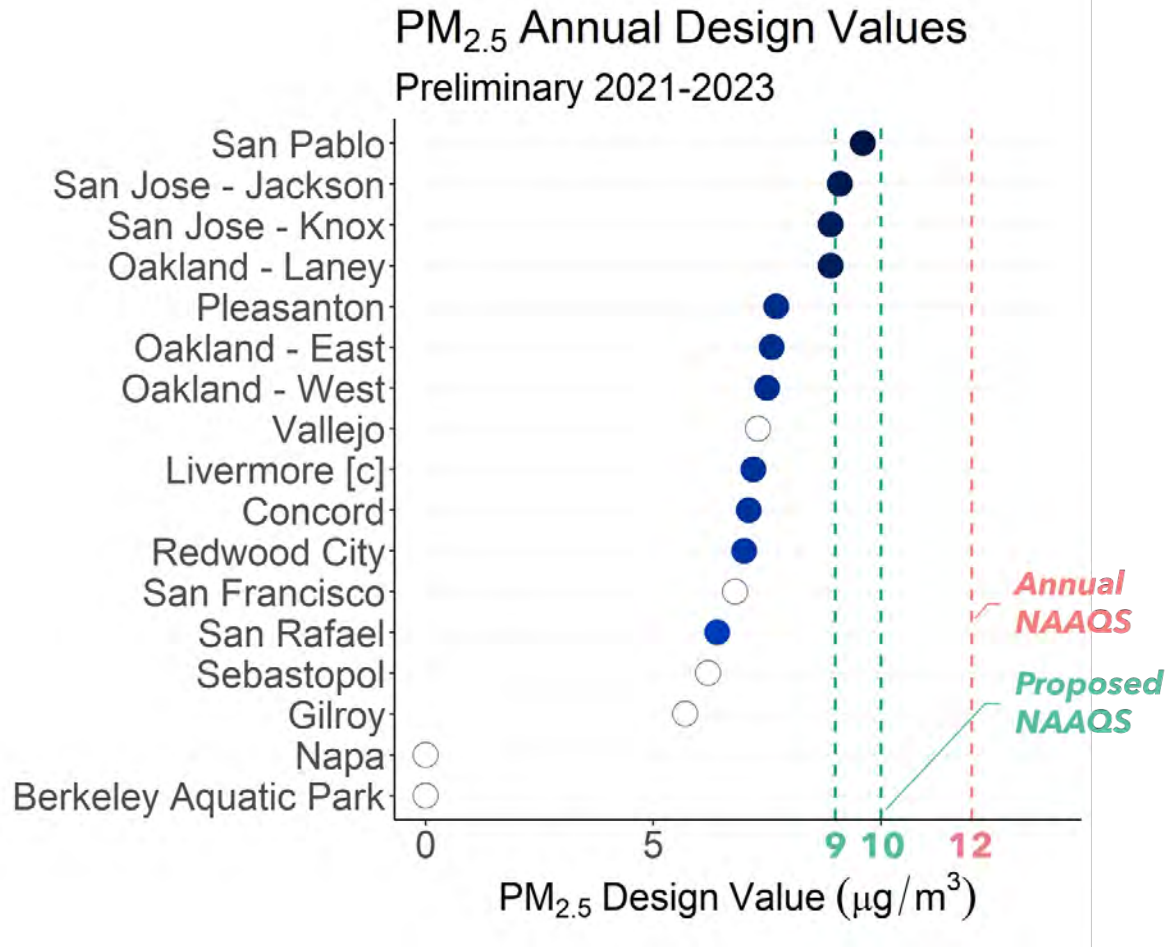


Proposed 2024 PM NAAQS (Primary)



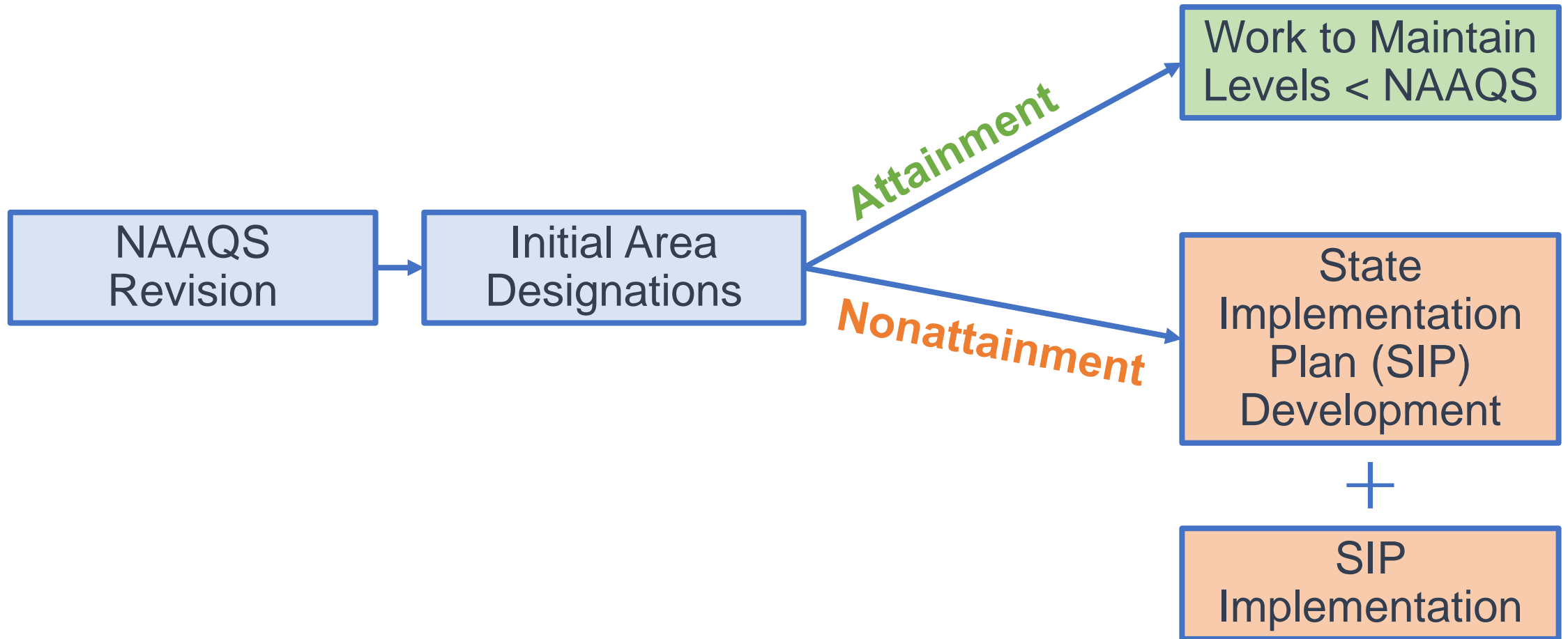
Indicator	Averaging Time	Previous Level	Existing Bay Area Status	EPA Proposal
PM _{2.5}	Annual	12.0 µg/m ³	Unclassifiable / Attainment	9.0 – 10.0 µg/m ³
PM _{2.5}	24-Hours	35 µg/m ³	Nonattainment	No change / Retain
PM ₁₀	24-Hours	150 µg/m ³	Unclassifiable / Attainment	No change / Retain

Preliminary 2023 PM_{2.5} Data



- Preliminary review shows area design value is 9.6 µg/m³
- Designations will also include 2024 and possibly 2025 data
- Final attainment status is uncertain until late 2024
- Other factors to consider:
 - 2023 had historically low PM levels due to a very stormy winter
 - Currently assessing magnitude of wildfire smoke impact on 2021-2023

What Happens After EPA Revises a NAAQS?

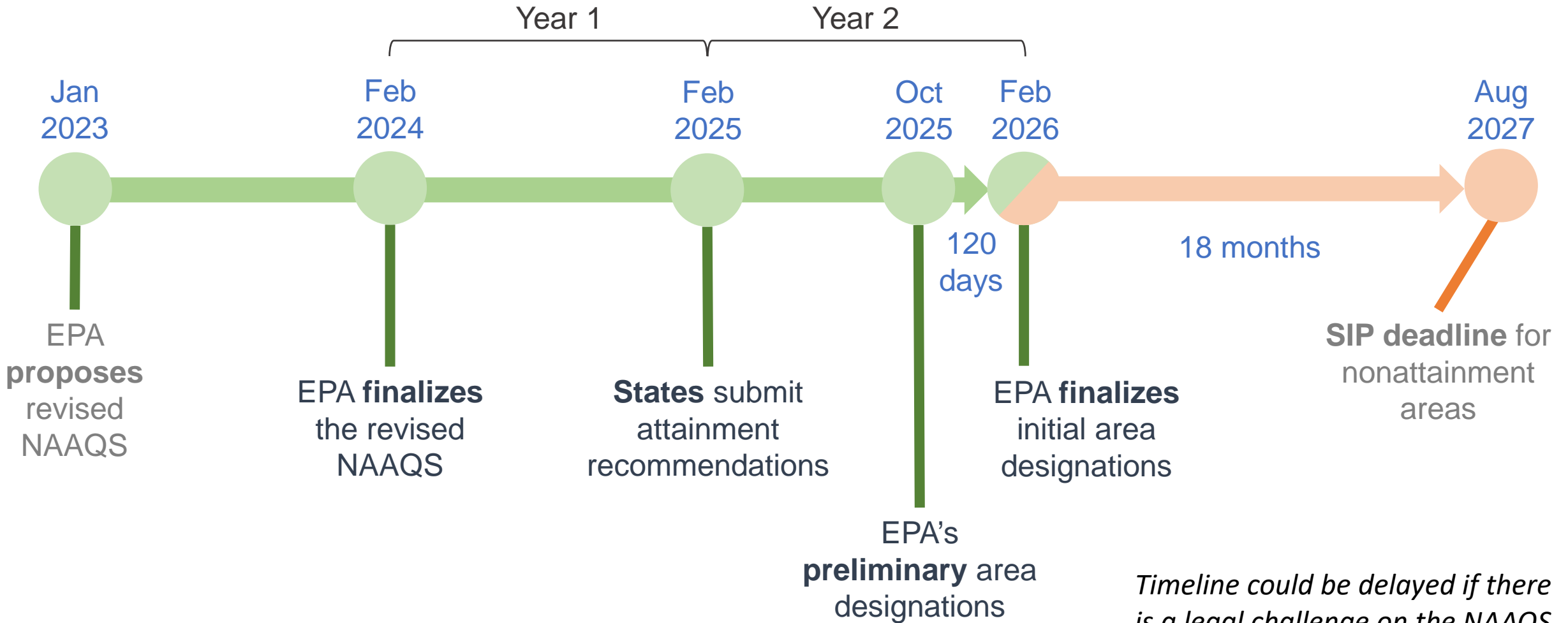


NAAQS: Initial Area Designations

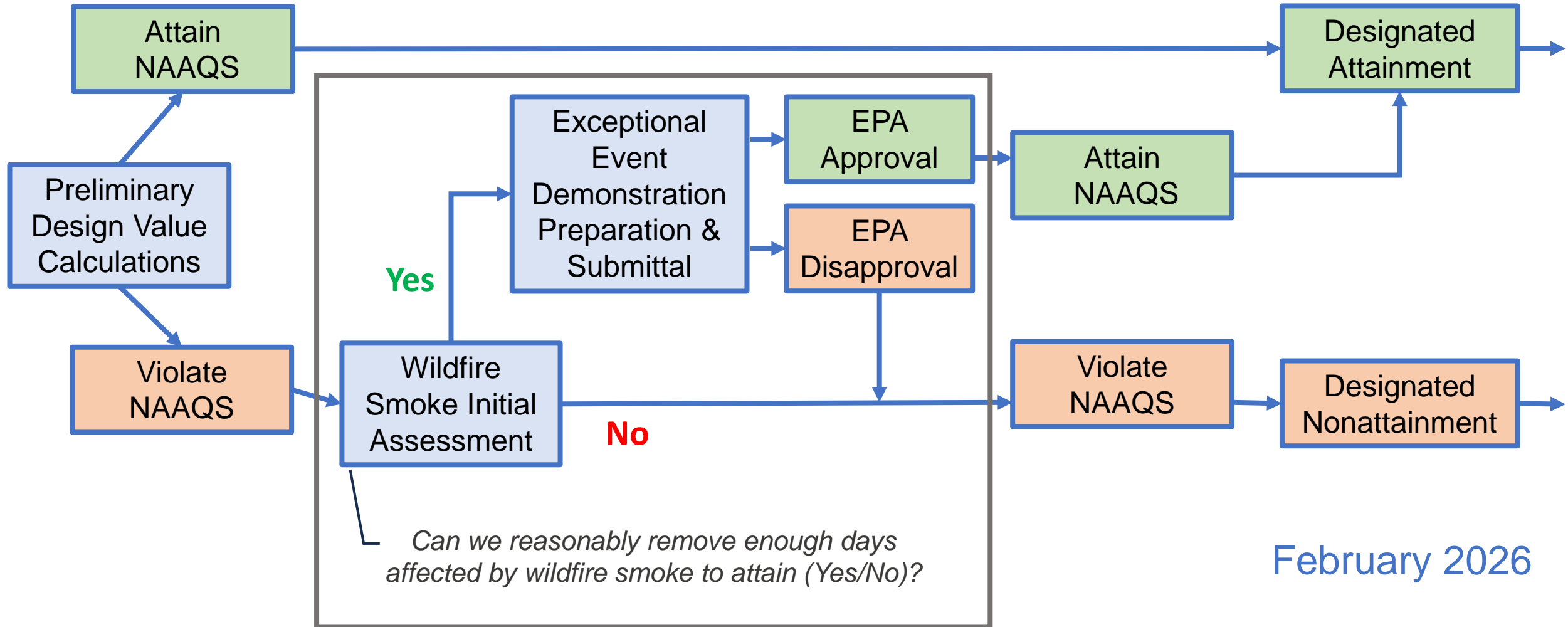


- EPA determines which areas are attaining or not attaining the NAAQS within two years of a final revised (or new) NAAQS
- States submit recommendations to EPA on attainment status
- EPA considers the state recommendation as well as five factors in their technical analysis: air quality, emissions, meteorology, geography & topography, and jurisdictional boundaries
- The air quality factor is based on long-term ambient air quality monitoring performed by State, Local, and Tribal agencies

Two-year Timeline for EPA Designations



Designations Scenarios

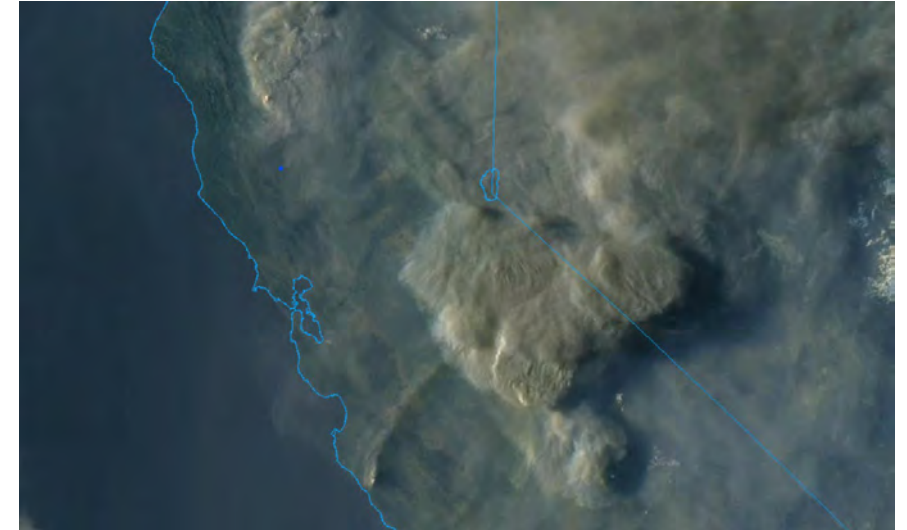


February 2026

Exceptional Events



- Long-standing EPA policy based on the Clean Air Act defining the use of monitoring data affected by emissions that are outside the control of State, Local, and Tribal agencies
- Does not allow agencies to get out of controlling local sources of air pollution or from activities to protect public health during high pollution episodes
- Agencies may request that EPA set aside certain days affected by exceptional events when calculating design values
- EPA only uses design values without exceptional event data for specific regulatory actions



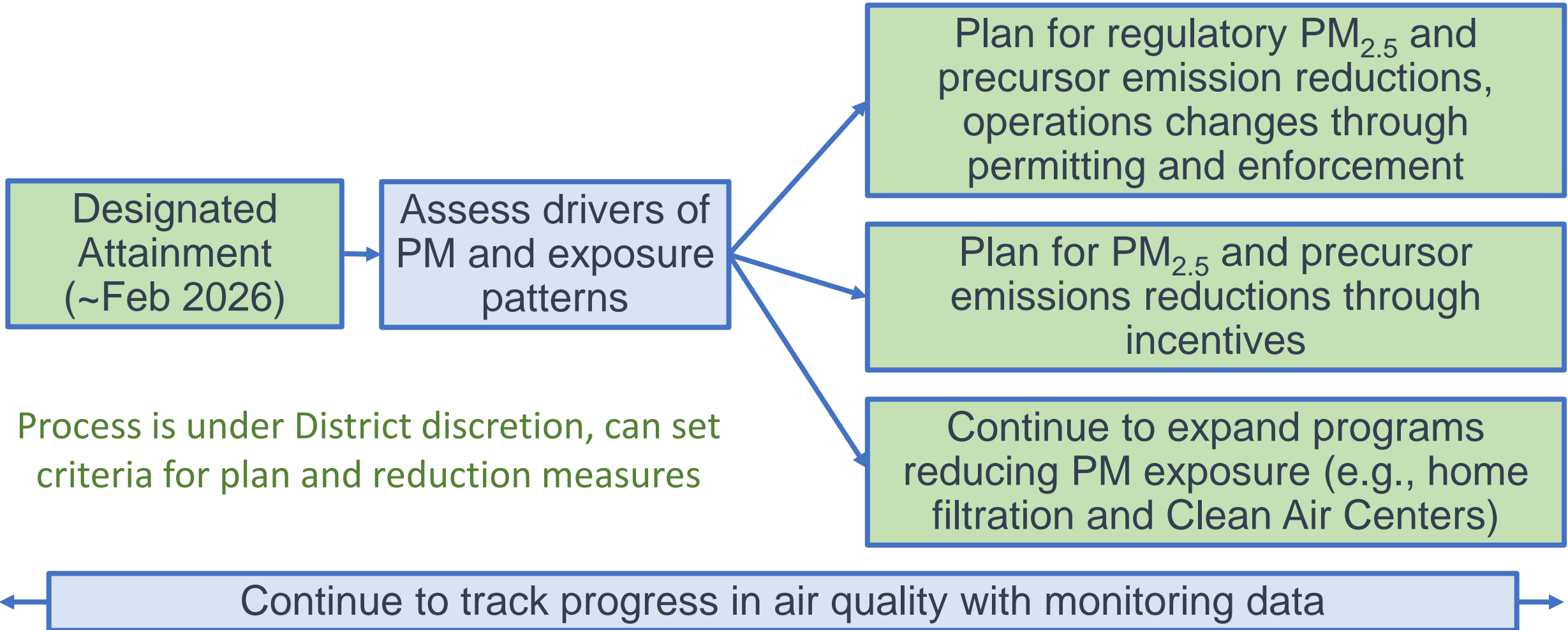
Wildfire Smoke Impacts and Annual PM_{2.5} Designations



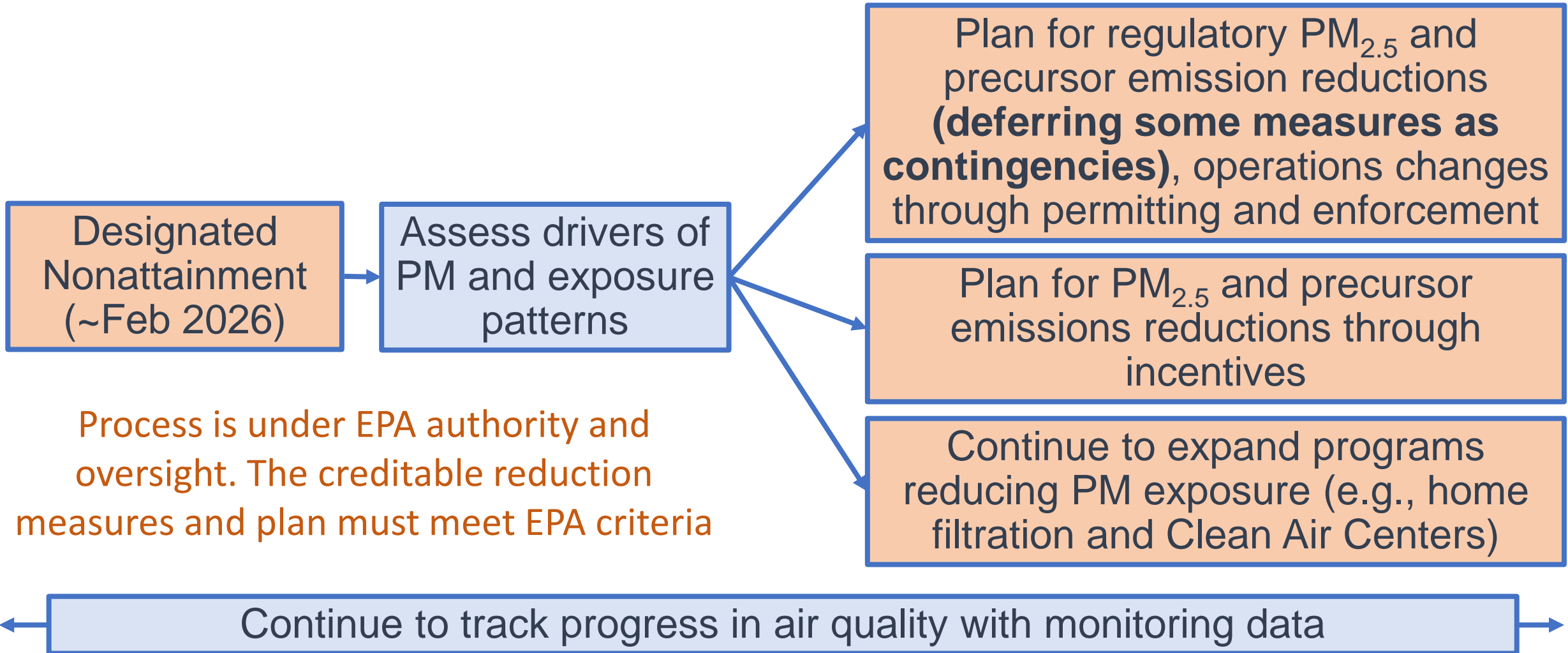
Will air quality impacts from wildfire smoke affect our designation?

- Days where wildfire smoke causes a NAAQS violation are eligible exceptional events
- Removing wildfire smoke days may only change a site's annual design value by approximately 0.5 $\mu\text{g}/\text{m}^3$, and could require demonstrations for over 50 days from 2021 – 2023
- Wildfires in 2024 and 2025 may also affect final designation

Scenario 1: Designated Attainment



Scenario 2: Designated Nonattainment



Next Steps



- Review the final NAAQS and forthcoming designations guidance
- Prepare data and exceptional events for CARB recommendation
- Upcoming conversations include
 - Update on exceptional events and expected CARB recommendation
 - Share updated technical information about the drivers of PM_{2.5} levels and our path to meeting air quality goals

Feedback Requested/Questions



- Questions and Comments



AGENDA: 15

Follow-up to Board Retreat Strategic Planning Discussion

February 7, 2024 | Board of Directors Meeting



Innovation.
Empathy.
Impact.

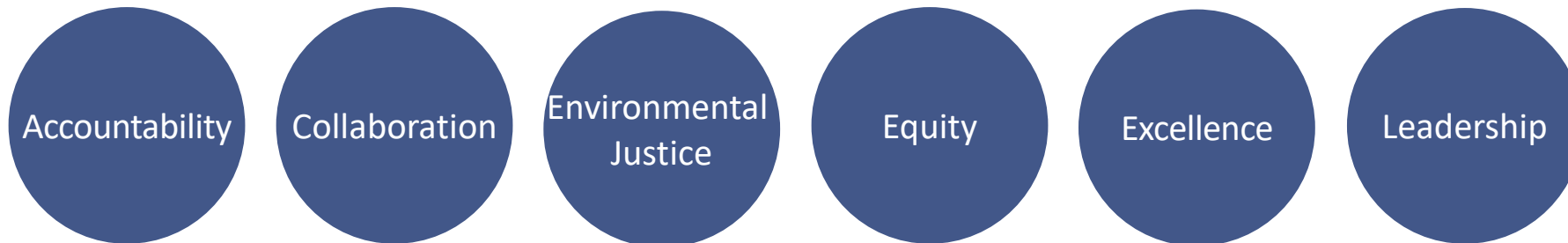
Meeting Objectives

- Provide a high-level summary of Board and other feedback at the Retreat
- Share Next Steps

Mission

The Air District protects public health and reduces historical and current environmental inequities by improving air quality and addressing climate change in all communities, especially those most impacted by air pollution.

Core Values



5-Year Organizational Vision

Over the next 5 years, the Air District will transform its operations, programs, and priorities to measurably improve air quality and be an innovative leader in equity-centered environmental protection, public health improvement, and climate solutions.

Environmental Justice Priorities

Goals

1

Advance environmental justice

2

Deliver exemplary services with transparency and accountability

3

Build and maintain an agency characterized by organizational excellence and centered on diversity, equity, inclusion

4

Reduce air pollution, protect public health, and mitigate climate change

Feedback and Insights

Mission, core values, vision:

- Emphasize partnerships, rather than only collaboration.
- Incorporate transparency more explicitly.
- Build out accountability more fully, including to whom the Air District is accountable.
- Add concepts of trust and integrity.
- Include efficiency.
- Connect the mission to the Bay Area.
- Instead of “excellence,” be more explicit about strong science and other qualities that give the public confidence.

Feedback and Insights (cont'd.)

Goals:

- Ensure goals and strategies include metrics for evaluation.
- Use clearer, more meaningful, less "fluffy" language.
- Goal 2: Add efficiency, build out accountability, reference smart, measurable objectives, emphasize partnerships.
- Goal 3: Add effectiveness, emphasize growing and diversifying the pipeline of talent.
- Goal 4: Add strong science, cumulative impacts, role as influencer; omit “cutting-edge,” consider “equitable” rather than “environmental justice.”

Next Steps

Next Steps

- Framework revisions
- Strategy development and refinement
- Continued coordination with the CAC's Environmental Justice Policy Ad Hoc Committee



Draft Mission,
Vision, Goals &
Objectives



Goals, Vision &
Framework
Revisions &
Continued
Development



October -
December

December -
January

January - February

February - April

Discussion



Strategic Planning

January 31, 2024 | 90 minutes



Innovation.
Empathy.
Impact.

Meeting Objectives

- Present Engagement Results
- Review Draft Framework
- Provide Overview of Integrating EJ Priorities into all Strategic Plan goals
- Discuss Development of EJ Strategies
- Discuss Vision
- Share Next Steps

Strategic Planning Process Update



Draft Mission,
Vision, Goals &
Objectives



Goals, Vision &
Framework
Development



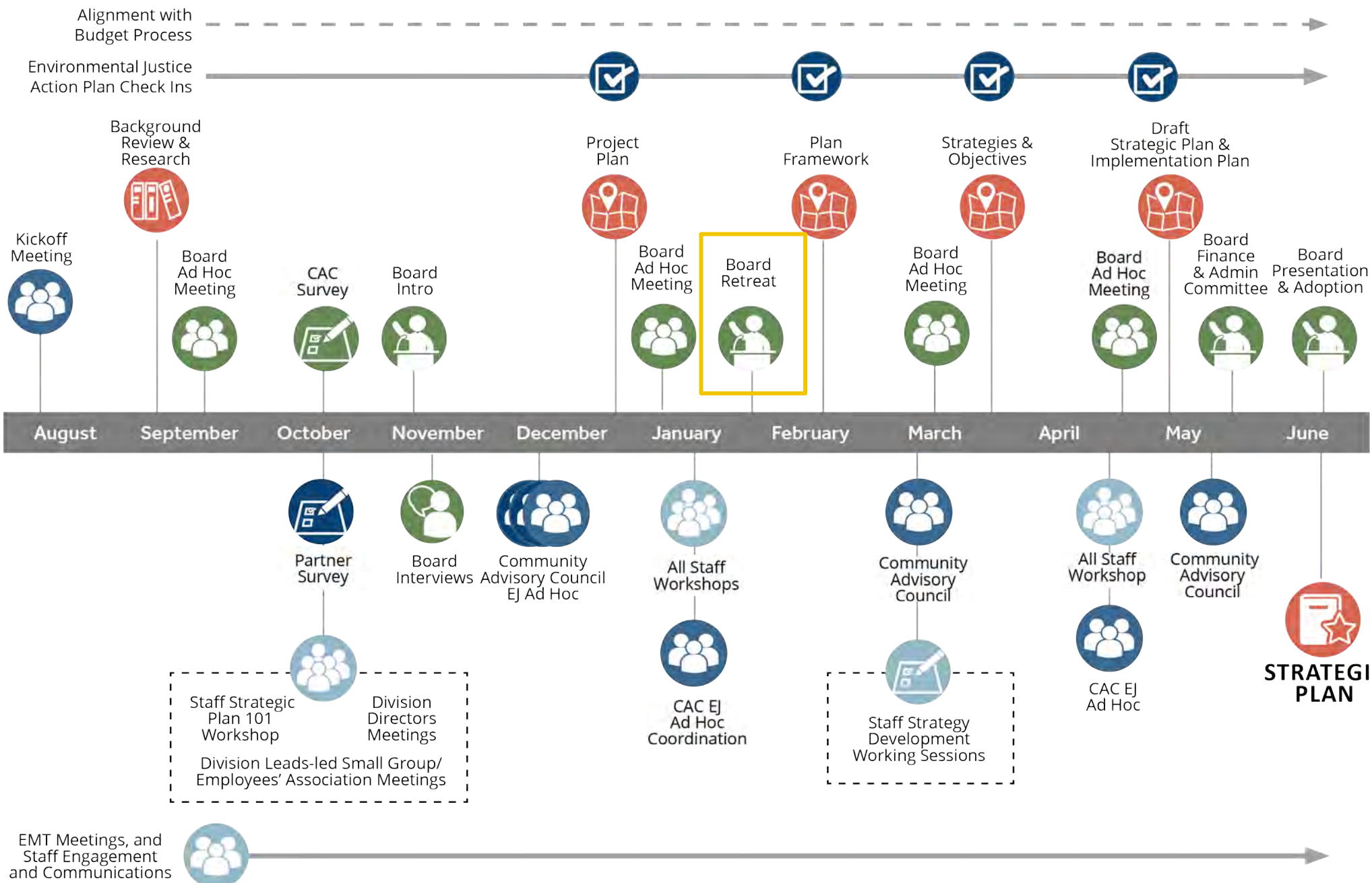
October -
December

December -
January

January - February

February - April

Setting the Context Define the Framework Establish a Path Forward Ensure Results



Engagement Summary and Findings

Engagement Summary



25 Divisional Meetings



Staff Divisional Visioning Exercise



Board Interviews



Board Presentation



Board Ad Hoc Meeting



Partner Survey



Community Advisory Council Survey

Key Engagement Findings

- Advancing and integrating environmental justice and equity
- Increasing transparency and accountability
- Enabling bold and visionary work
- Commitment to strong enforcement program
- Achieving organizational excellence
 - Permitting efficiencies
 - Organizational Culture
 - Siloed Divisions
 - Internal Coordination
 - Outdated Processes and Technology

Key Engagement Findings

- Focusing on what we are doing, why, and monitoring our impact
- Participating actively at the regional, state, and federal levels
- Establishing and maintaining clear priorities
- Continuing strong leadership
- Improving communications
- Building and sustaining partnerships – community and agencies

Draft Strategic Plan Framework

Strategic Plan Definitions

- **Mission:** A long-term statement of purpose, why the organization exists, and why we do what we do.
- **Core Values:** Guiding concepts, beliefs, and principles of the organization.
- **Vision:** An aspirational statement that captures the future of the organization and its impact.

Strategic Plan Definitions

- **Goals:** Priorities for achieving the mission that are outcomes based. High-level, organizational goals that go beyond a single division, department, or program.
- **Strategies:** Specific programs, policies, approaches, and initiatives designed to achieve the stated goal.

Mission

The Air District protects public health and reduces historic and current environmental inequities by improving air quality and addressing climate change in all communities, especially those most impacted by air pollution.

Core Values

Accountability

Collaboration

Environmental Justice

Equity

Excellence

Leadership

5-Year Organizational Vision

Over the next 5 years, the Air District will transform its operations, programs, and priorities to measurably improve air quality and be an innovative leader in equity-centered environmental protection, public health improvement, and climate solutions.

Environmental Justice Priorities

1

Advance environmental justice

2

Deliver exemplary services with transparency and accountability

3

Build and maintain an agency characterized by organizational excellence and centered on diversity, equity, inclusion

4

Reduce air pollution, protect public health, and mitigate climate change

Environmental Justice Action Plan

- An EJ Policy Ad Hoc Committee of the Community Advisory Council has been discussing considerations for an EJ Action Plan since December 2022
 - Will inform the development and selection of strategies within the Strategic Plan
 - The EJ Action Plan will serve to implement these strategies, which advance each of the Strategic Plan's goals

EJ Priorities

- The Metropolitan Group and Bluepoint Planning consultants started meeting with staff planning teams in September to share frameworks and development plans for the EJ Action Plan and the Strategic Plan.
- The CAC's EJ Policy Ad Hoc committee developed nine draft EJ Priorities, which when finalized will serve as a foundational guide for the development of EJ-related Goals and Strategies in the Strategic Plan.
- EJ Strategies are being developed via EJ Policy Ad Hoc meetings with Division staff.
- EJ Policy Ad Hoc will provide review and input on additional strategies that are developed by staff through strategic planning meetings, to ensure alignment.

*Current Mission:
The Air District aims
to create a healthy
breathing environment
for every Bay Area
resident while
protecting and
improving public
health, air quality,
and the global climate.*

Draft New Mission

The Air District protects public health and reduces historic and current environmental inequities by improving air quality and addressing climate change in all communities, especially those most impacted by air pollution.

Core Values

Current Core Values



Excellence



Leadership



Collaboration



Dedication



Equity



Updated Core Values



Accountability



Collaboration



Environmental Justice



Equity



Excellence



Leadership

Draft Core Values

Accountability: We are dedicated to fostering accountability and serving as responsible stewards of public resources through transparent processes, fair permitting and enforcement, and meaningful community engagement.

Collaboration: We actively engage in collaboration to achieve shared objectives, fostering cooperation both internally and externally.

Environmental Justice: We will integrate environmental justice processes within all aspects of our work and seek enhanced environmental justice outcomes for communities of concern.

Draft Core Values

Equity: We commit to equity and ensuring that our organizational culture fosters a diverse workforce that reflects our communities.

Excellence: Our programs and policies are grounded in law and science, and developed and implemented with technical knowledge, lived experience, and innovative approaches.

Leadership: We are at the forefront of air quality improvement by pioneering new strategies along with deep community engagement and collaboration to achieve clean and healthy air while safeguarding the climate.

Visioning Themes



Draft Vision Statement

Over the next 5 years, the Air District will transform its operations, programs, and priorities to measurably improve air quality and be an innovative leader in equity-centered environmental protection, public health improvement, and climate solutions.

Goal 1

Advance environmental justice by supporting, partnering with, and empowering communities overburdened by pollution to reduce disparities in exposure to air pollution and address historic environmental injustices.

- *Identify and reduce disparities in overburdened communities.*
- *Support, partner with, and empower communities.*
- *Enhance and implement rules, policies, and enforcement actions that recognize and address historic disparities in overburdened communities.*

Goal 2

Deliver exemplary services with transparency and accountability by improving our processes and systems to the highest level, holding ourselves accountable to the public, and being a leader among Bay Area agencies in transparency, communication, and collaboration.

- *Improve the collection, dissemination, and accessibility of data and information.*
- *Improve and enhance permitting analysis, decision-making, and timeliness.*
- *Ensure accountability.*
- *Build relationships with key partners and enhance external communications to achieve our clean air goals.*

Goal 3

Build and maintain an agency characterized by organizational excellence and centered on diversity, equity, inclusion, and belonging, ensuring efficient and effective operations and growing staff's capacity to lead, collaborate, innovate, and maintain its technical expertise.

- *Embody diversity, equity, inclusion, accessibility, and belonging.*
- *Establish a work culture that values our employees.*
- *Promote the “One Air District” concept.*
- *Align resources and budget with goals and priorities.*
- *Use smart processes.*

Goal 4

Reduce air pollution, protect public health, and mitigate climate change using our regulatory authorities, strong enforcement program, incentive programs, and partnerships with local, state, and federal authorities, while incorporating cutting-edge environmental justice approaches into our mission-driven policies and actions.

- *Mitigate climate change and its impacts.*
- *Reduce health impacts of air pollution.*
- *Hold violators accountable.*
- *Enhance partnerships in support of clean air efforts.*

Mission

The Air District protects public health and reduces historic and current environmental inequities by improving air quality and addressing climate change in all communities, especially those most impacted by air pollution.

Core Values

Accountability

Collaboration

Environmental Justice

Equity

Excellence

Leadership

5-Year Organizational Vision

Over the next 5 years, the Air District will transform its operations, programs, and priorities to measurably improve air quality and be an innovative leader in equity-centered environmental protection, public health improvement, and climate solutions.

Environmental Justice Priorities

1

Advance environmental justice

2

Deliver exemplary services with transparency and accountability

3

Build and maintain an agency characterized by organizational excellence and centered on diversity, equity, inclusion

4

Reduce air pollution, protect public health, and mitigate climate change

Questions?

Next Steps

Next Steps

- Framework Revisions, if necessary
- Strategy Development and Refinement
- Continued coordination with Environmental Justice planning process



Strategic Planning

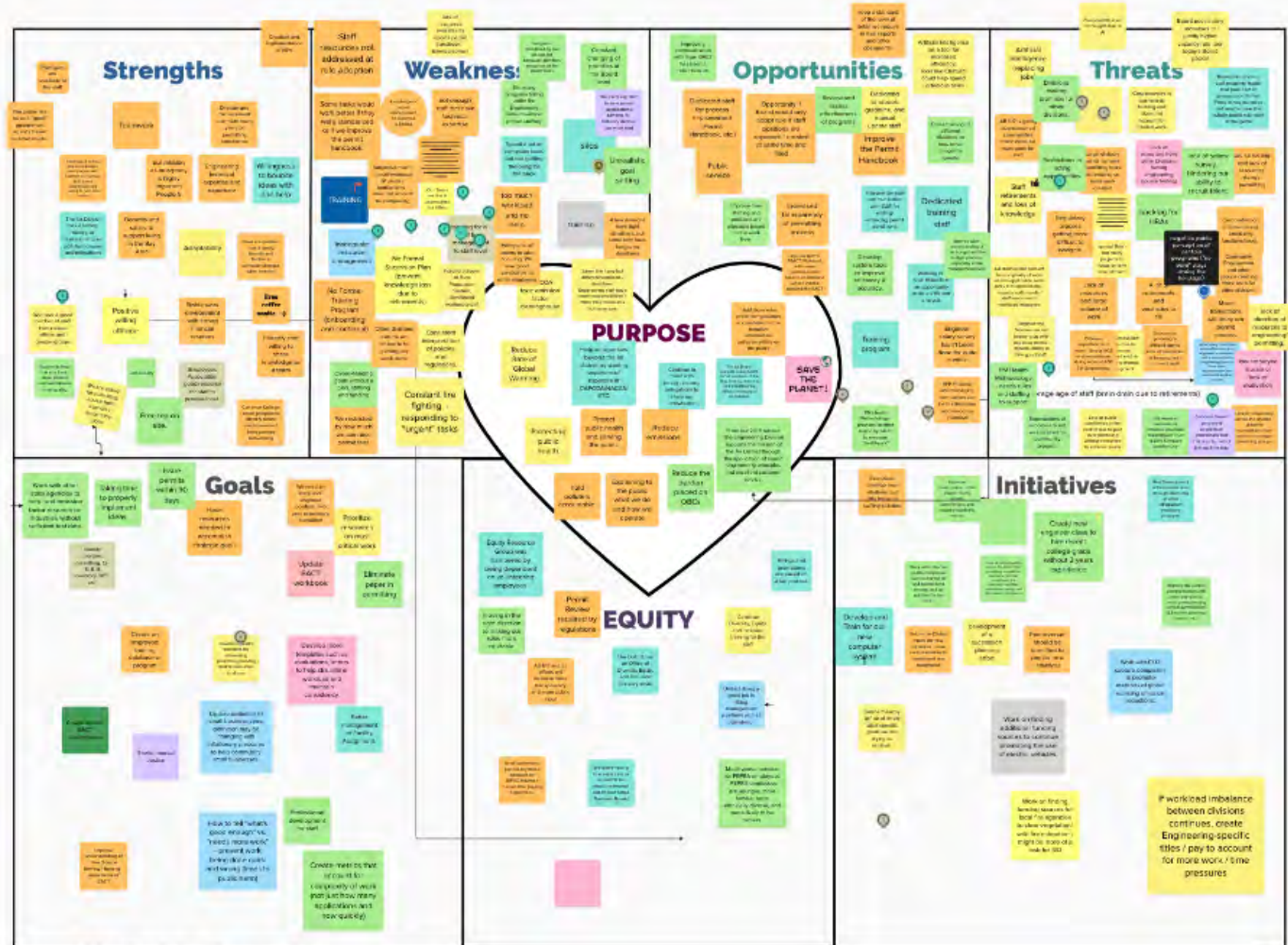
January 31, 2024 | 90 minutes



Innovation.
Empathy.
Impact.

Appendix: Additional Engagement Results

Staff SWOT Findings



Prepared by BluePoint Planning, LLC

Strengths to Continue

- Committed staff with technical knowledge
- Science-based organization
- Well-resourced agency
- Mission-based organization
- Focus on equity
- Respected leader in air quality space
- Promising new leadership
- Good place to work

Weaknesses to Address

- Siloed divisions and poor internal coordination
- Bureaucratic processes that disincentivize innovation and collaboration
- Lack of trust and negative view of workplace culture
- Outdated and tedious systems and technology
- Changing and inconsistent priorities
- Lack of understanding and implementation of Diversity, Equity, and Inclusion
- Insufficient external engagement, particularly with Environmental Justice communities
- Operations concerns – professional development, training, HR, etc.

Opportunities to Embrace

- Realize internal capabilities
- Expand role as a regional leader
- Improve and enhance partnerships
- Bring new people into Air District
- Increase public awareness and transparency
- Embrace and leverage new technology
- Capitalize on new funding opportunities, including climate resiliency

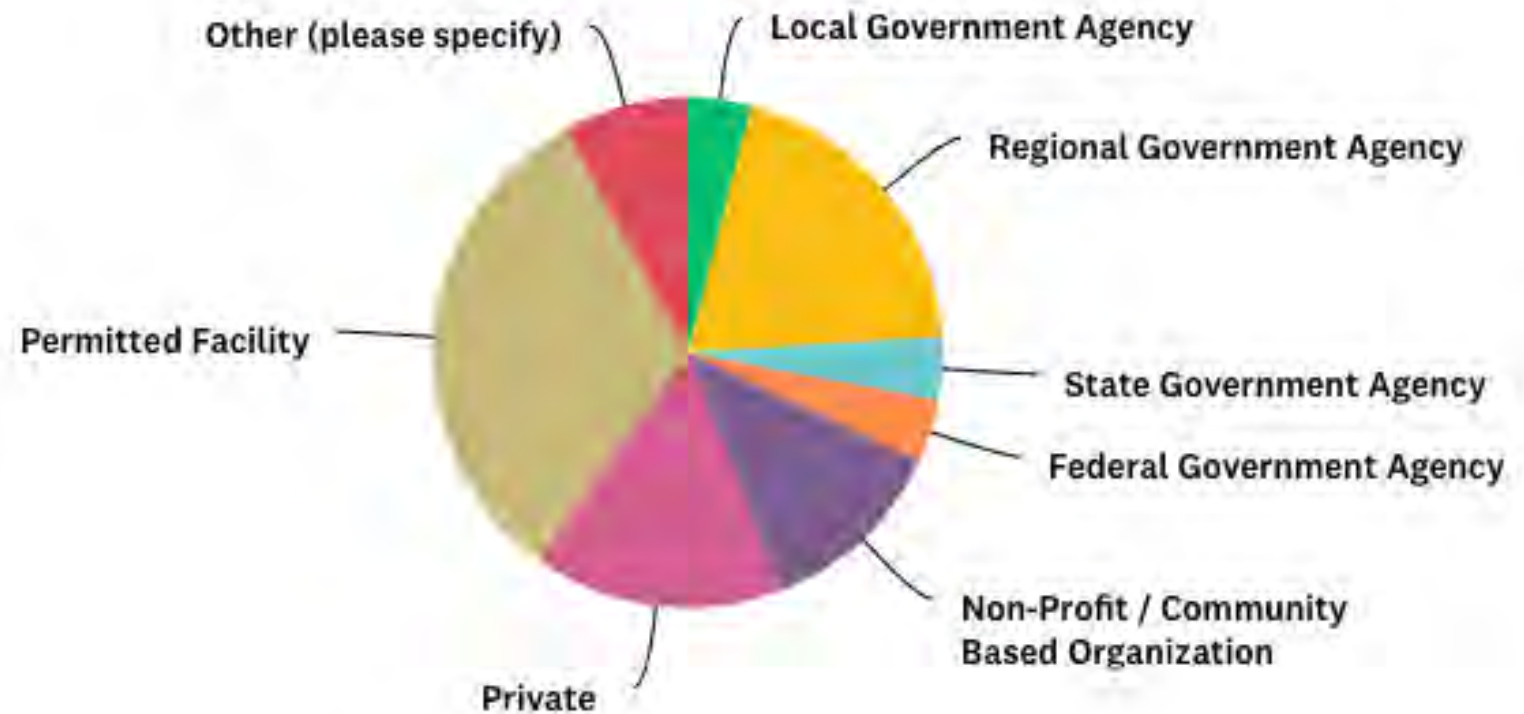
Threats to Consider

- Political uncertainty and changing times
- Limited and rigid regulatory authority
- Disconnect with Board of Directors decision-making
- Poor relationship and reputation with public
- Challenge of maintaining an effective agency

Partners Survey Findings

What type of organization are you affiliated with?

- Sent out to ~45 organizations, such as CARB, MTC/ABAG, 617 Committees, BARC, SPUR, etc.
- Received 25 responses



When you think of the Air District, what 2-3 words come to mind?

Professional,
Creative, Large

Difficult to Manage

Clean Air

Misdirected, Lost
Government

Needs reform

Progressive,
knowledgeable

Professional,
Responsive, Poorly-
Understood

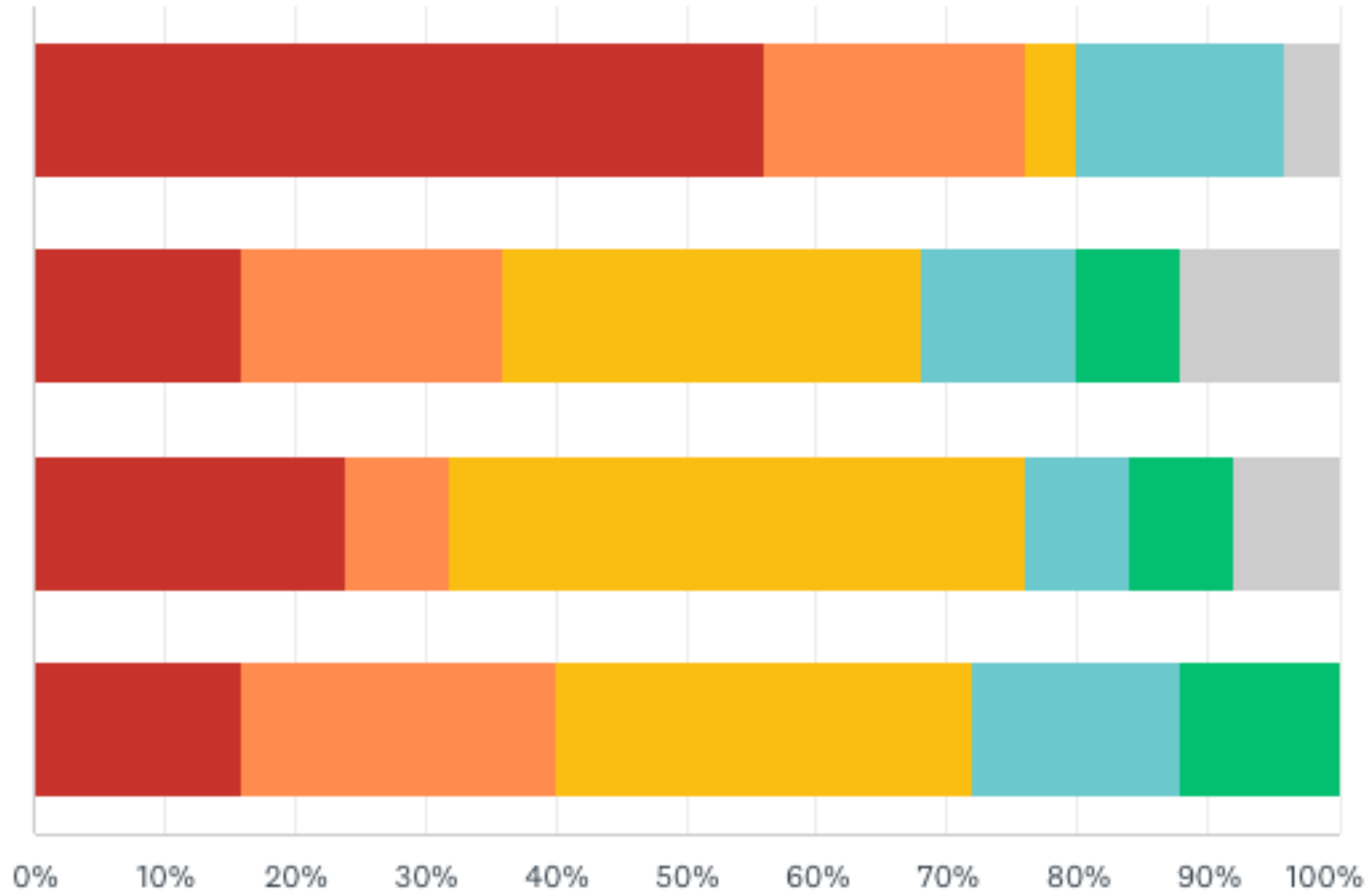
How satisfied are you with the...

Transparency of the Air District's operations and decisions?

Air District's relationship with other agencies, jurisdictions, and organizations?

Air District's relationship to Bay Area communities?

Air District's overall performance?



- Not at all satisfied
- Somewhat Satisfied
- Neutral
- Very Satisfied
- Extremely Satisfied
- Not Applicable

How well do you think the Air District's current work fulfills its mission?

We have communities that we know are in the 90th percentile of air pollution, and yet there is no law that says that you can't add air pollution to those communities. If they are at the top, there should be a ban on adding any additional burdens.

2.8★
average rating



While the mission is clear, some of the processes are challenging, even for public agency partners. Calls for project funding on the regional side are sporadic, making it challenging to coordinate with 40% fund projects. Would appreciate more consistency with funding rounds.

Need to focus on impact of policies and rules on low income residents.

The primary role of the District should be the implementation of science-based regulations that measurably improve health.

Rank the priority of the following areas that the Air District should focus on in the coming years, given its role in the region?



CAC Survey Findings

9 Responses Received

When you think of the Air District, what 2-3 words come to mind?

Room for Improvement

Clean Our Air

Obscure, Environmentalist

Compliance and Enforcement

Status Quo Continuation

Complicated Matter

Environmental Justice and Work from a Traditional Bureaucracy

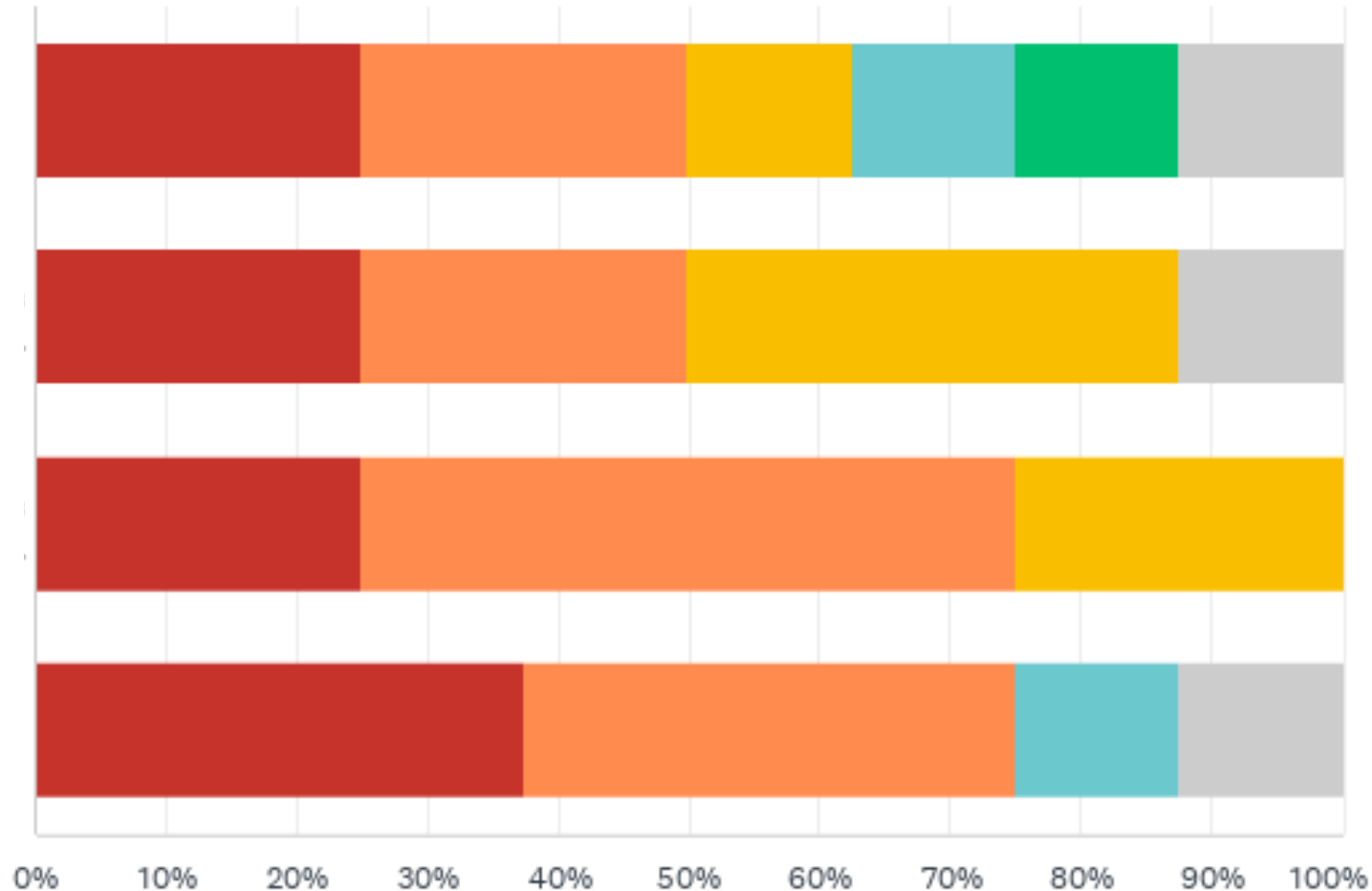
How satisfied are you with the...

Transparency of the Air District's operations and decisions?

Air District's relationship with other agencies, jurisdictions, and organizations?

Air District's relationship to Bay Area communities?

Air District's overall performance?



- Not at all satisfied
- Somewhat Satisfied
- Neutral
- Very Satisfied
- Extremely Satisfied
- Not Applicable

How well do you think the Air District's current work fulfills its mission?

We are all stepping out of our comfort zones for the greater good. Change is hard but inevitable. Especially when what you are fighting for is bigger than you.

Live up to it in words and reality.

2.5★
average rating



Somewhere in the Mission Statement shouldn't there be a commitment to reducing and preventing air pollution? Which would signify a sincere intention to vigorously investigate polluters and enforce compliance to pertinent laws.

Not enough staff with internal experience, expertise of community wellness and health.

Board Interview Findings

Big Themes and Insights

- The Air District is a leader and needs to continue to be bold and visionary
- New leadership and staff are moving in the right direction
- Strong improvements in community engagement, environmental justice, and equity... but need to continue to build responsiveness and trust
- Equity and environmental justice need to be integrated into existing rules, policies, and regulations
- Need for focus on communications externally and internally

Big Themes and Insights

- Need to be clearer about what we are doing and why, and monitor if the work has impact
- Should be at the table - at the regional and state level
 - For climate as well as to get results on rules and regulations
- Permitting and compliance is a critical piece
 - Improvements in holding polluters accountable through enforcement
- Focus for the next one to two years should be organizational development
- Air District needs more of a customer service-oriented mind-set