

# Bay Area Region's Priority Climate Action Plan Greenhouse Gas Reduction Measure: Safe, Accessible, Clean and Equitable Multi-modal Transportation

The San Francisco Bay Area (Bay Area) is a leader in transportation planning that is integrated, favors transit and active modes of transportation, and considers environmental and equity impacts. The Bay Area is unique in that it has a visionary long-range integrated transportation, housing, economic, and environmental plan – Plan Bay Area 2050<sup>1</sup> (PBA 2050), developed by the Metropolitan Transportation Commission (MTC). PBA 2050 aims to have nearly half of all Bay Area residents (70% for low-income households) living within one half-mile of frequent transit by 2050, in order to make the region more affordable, connected, diverse, healthy, vibrant, with a focus on equity outcomes. Implementation of PBA 2050's strategies, especially those that focus on active and shared travel modes, combined with PBA 2050's transit-supportive land use pattern, are forecasted to significantly decrease greenhouse gas (GHG) emissions, meeting the state-mandated 19% reduction in per capita GHG emissions from transportation below 2005 levels by 2035 for the region. The Priority Climate Action Plan (PCAP) measure described below is designed to implement key elements of PBA 2050, particularly in frontline communities,<sup>2</sup> and help achieve this GHG emission reduction target.

## Background

Transportation is the largest contributor to GHG emissions in the Bay Area, accounting for 35% of the GHG emissions for the region. Passenger cars and light-duty trucks make up more than half of those emissions. With many of the area's highways cutting through frontline communities, this vehicle travel also contributes to the health burden of these communities through the increases in air pollution that result from tailpipe exhaust and brake and tire wear. Although private vehicle trips have rebounded since COVID-19, as demonstrated by toll crossing numbers for the Bay Bridge, transit ridership across the Bay Area is still greatly suppressed, with Bay Area Rapid Transit (BART) only at approximately 37% of the average monthly ridership of the year before the pandemic.<sup>3</sup> This new reality for transit agencies across the Bay Area is one that creates significant funding challenges as they work to attract new and previous riders to their services.<sup>4</sup>

The Bay Area's transit system is comprised of 27 different transit agencies operating with a transit fleet that includes bus, rail, and ferry service. The complexity of this network leads to challenges that include lack of accessibility due to poor first-mile, last-mile connections;<sup>5</sup> increased costs due to uncoordinated fare structures; and increased time for trips due to uncoordinated service schedules. These challenges are often felt more acutely by residents of frontline communities that have historically faced under-

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<sup>1</sup> MTC's Plan Bay Area website: <https://www.planbayarea.org/plan-bay-area-2050>

<sup>2</sup> For the purpose of the PCAP, frontline communities are defined using: 1) [EPA IRA Disadvantaged Communities](#), 2) [AB 617 communities](#), and 3) [MTC Equity Priority Communities](#), and visualized together in [this map](#).

<sup>3</sup> BART ridership information accessed on 9/11/23 at <https://mtc.ca.gov/tools-resources/data-tools/monthly-transportation-statistics>

<sup>4</sup> In April 2020, MTC established the [Blue Ribbon Transit Recovery Task Force](#) to help transit agencies rebound from suppressed ridership in the wake of the COVID-19 pandemic.

<sup>5</sup> First-mile, last-mile connections describe the distance to get from your home to the transit stop and from the transit stop to your final destination (work, goods and services, etc.).

investment due to racism, socioeconomic status, and lack of access to decision makers. Additionally, residents in these communities are typically more reliant on public transportation to complete trips to work, obtain goods and services, and get to other places they need to go. This measure is aimed at reducing these challenges by co-locating a variety of transportation options in mobility hubs that will offer a safe, comfortable, convenient, and accessible space to seamlessly transfer between different travel modes and ultimately shift trips made in single occupancy vehicles to transit and active modes of transportation, reducing vehicle miles traveled (VMT) and GHGs.

#### *Priority for local governments in the region*

Regional and local governments and agencies across the Bay Area region<sup>6</sup> identified reducing VMT through transportation mode shift as a priority for the PCAP. Their commitment to addressing vehicle emissions through mode shift is demonstrated through their adopted active transportation<sup>7</sup> plans, climate action plans, and policymaking. They also raised this priority during engagement efforts led by the Bay Area Air Quality Management District (Air District) and partners to inform PCAP development from April 2023 to October 2023.

Engagement conducted by MTC to inform PBA 2050 identified active transportation and mobility improvements as a priority for communities throughout the Bay Area region as well. Engagement with the public, and specifically from frontline communities, identified priorities for transit, changes in travel behavior, and active transportation improvements.<sup>8</sup> For active transportation, there was a call to encourage and provide alternative mobility options, to increase safe bike and pedestrian infrastructure and to prioritize that infrastructure over vehicles, making communities more accessible via active modes of transportation.

Through its Community-Based Transportation Planning (CBTP) Program, MTC and county transportation agencies work with communities that have been historically underserved by or excluded from the transportation process to identify mobility challenges and prioritize solutions. Nearly half of the CBTP-related recommendations focused on active transportation improvements, and more than one-third of the recommendations were related to transit.<sup>9</sup>

Frontline communities have shared with local governments similar transportation-related priorities for improved active transportation infrastructure and public transit systems, along with safety and

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<sup>6</sup> The Bay Area region includes Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Napa Counties and the portions of Solano and Sonoma counties located in the Air District's jurisdiction.

<sup>7</sup> Active transportation refers human-powered mobility, including biking and walking.

<sup>8</sup> MTC PBA 2050+ Round 1 Engagement:

[https://mtc.ca.gov/sites/default/files/meetings/attachments/5833/8aiii\\_PBA50\\_Attachment\\_B\\_Draft\\_Blueprint\\_Round\\_1\\_Engagement.pdf](https://mtc.ca.gov/sites/default/files/meetings/attachments/5833/8aiii_PBA50_Attachment_B_Draft_Blueprint_Round_1_Engagement.pdf)

<sup>9</sup> MTC CBTP Program Evaluation: [https://mtc.ca.gov/sites/default/files/documents/2022-05/CBTP\\_Program\\_Evaluation\\_April\\_2022.pdf](https://mtc.ca.gov/sites/default/files/documents/2022-05/CBTP_Program_Evaluation_April_2022.pdf).

The most common recommendations included new bike facilities, roadway intersection and sidewalk improvements, complete streets improvements, and shared mobility (e.g., bike or scooter share). The two most common transit recommendations focused on improving traveler information and improvements to stations.

affordability concerns, and interest in e-micro-mobility,<sup>10</sup> which echo much of the feedback MTC received.<sup>11</sup>

#### *Priority reflected in regional planning*

This priority measure creates mobility hubs - places in a community that bring together different types of low-emission, safe, and accessible transportation options. By locating new or expanded mobility hubs in frontline communities within MTC's priority development areas (areas within existing communities identified and approved by local cities or counties for future growth), the measure supports two high-impact PBA 2050 strategies (Strategies H3 and EC4)<sup>12</sup>, bringing more transportation options to areas that have been identified for increased densities of residential and commercial growth. Increasing connectivity to transit and improving access to active transportation will allow more trips to be completed without the use of personal vehicles and will help the region reach its ambitious targets for VMT reduction and reducing GHG emissions.

Plan Bay Area 2050 includes strategies that support active transportation. PBA 2050 strategy T8 calls for building a Complete Streets network that promotes walking, biking and other micro-mobility options through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multi-use paths. Strategy T9 advances the regional Vision Zero policy through improved street design and reduced vehicle speeds. Both of these strategies complement and enhance mobility hubs implementation.

#### *Existing efforts*

Throughout the Bay Area region, a variety of programs focus on shifting single occupancy vehicle trips to transit and active modes of transportation and reducing emissions from alternative modes. They include projects such as incentives for e-bikes, electric vehicle (EV) charging infrastructure, bike/car share, and other clean, shared, zero-emission transportation projects. The main program this measure builds upon is MTC's Regional Mobility Hubs Program,<sup>13</sup> which coordinates, funds, and provides technical assistance for the development of mobility hubs. Mobility hubs serve as community anchors that enable travelers of all backgrounds and abilities to access multiple travel options – including shared scooters, bicycles, cars, and transit – as well as supportive amenities in a cohesive space, oriented to the traveler. MTC has funded twelve mobility hub projects to date throughout the Bay Area since the launch of the program in 2021,<sup>14</sup> and developed a Mobility Hubs Implementation Playbook<sup>15</sup> to provide technical assistance to public agencies and community organizations interested in providing safe and accessible alternatives to single-occupancy vehicle trips.

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<sup>10</sup> E-micro mobility (Electric micro mobility) includes any small, low-speed, electric-powered transportation device, including electric-assist bicycles (e-bikes), electric scooters (e-scooters), and other small, lightweight, wheeled electric-powered conveyances.

<sup>11</sup> These priorities come from an analysis of outputs from recently conducted (within the past 3 years) community engagement activities provided by local governments.

<sup>12</sup> Strategy H3: Allow a greater mix of housing densities and types in growth geographies; Strategy EC4: Allow greater commercial densities in growth geographies.

<sup>13</sup> MTC's Regional Mobility Hub Program website: <https://mtc.ca.gov/planning/transportation/mobility-hubs>

<sup>14</sup> 2021 Pilot Awards approval: <https://mtc.legistar.com/LegislationDetail.aspx?ID=5126761&GUID=89D47ED1-F31B-4A79-960D-B655A382FD7E&Options=&Search=>; 2023 Grant Awards Approval:

<https://mtc.legistar.com/LegislationDetail.aspx?ID=6249612&GUID=94FDC2D8-7411-408C-A00B-85E06140E7FB>

<sup>15</sup> MTC's Mobility Hubs Implementation [Playbook](#) is a comprehensive technical assistance guide with implementation strategies, tactical approaches, and management techniques.

In addition to the Regional Mobility Hubs Program, MTC has developed a variety of plans and policies that support the implementation and success of Mobility Hubs. These include:

- MTC’s Regional Active Transportation Plan, which guides MTC’s policy and investment framework to implement the PBA 2050 active transportation strategies.
- The Regional Active Transportation Network, which focuses the Bay Area’s efforts in providing active transportation connections in areas with the highest potential for shifting vehicle trips to biking and walking, where there is the greatest need for affordable transportation options, and where active trips can connect people with transit for longer distance travel.
- MTC’s Transit Oriented Communities (TOC) Policy,<sup>16</sup> was developed to enable people to access and use transit more often for more types of trips by centering housing, jobs, services, and shopping around public transit.

Additionally, there are a multitude of plans and pilot projects from counties and cities throughout the Bay Area (community-based transportation plans, climate action plans, active transportation plans, general plans, etc.), that have identified active transportation improvements needed to help shift trips away from single occupancy vehicle travel. These plans help to identify and prioritize active transportation improvements around planned mobility hubs and can inform measure implementation.

These efforts include:

- Active transportation plans, bicycle plans, pedestrian plans, and/or safe streets plans for all counties and most cities in the Bay Area region, with others under development.
- Community-based transportation plans for more than 30 low-income communities across the Bay Area region that have been developed through a collaborative process with transportation agencies, residents, and community organizations, with funding from MTC. The plans include locally identified transportation needs and solutions to address them.<sup>17</sup>
- The City of Oakland’s Basic Mobility Pilot Project, which provides prepaid debit cards and transit passes to income-qualifying residents for transit, shared mobility, and other mobility-related services.<sup>18</sup>
- TransForm’s EV Carsharing and Mobility Hubs in Affordable Housing Pilot, which brings EV car sharing, EV charging infrastructure, and other travel options to affordable housing communities in the region.<sup>19</sup>

Although the Bay Area is ahead of many other regions in California and across the country, more accelerated action is needed to reduce VMT and meet state and regional goals. This includes funding mode shift-supporting plans, policies, and infrastructure that will be required to meet the region’s goal

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<sup>16</sup> MTC’s Transit Oriented Communities Policy: [https://mtc.ca.gov/sites/default/files/documents/2022-10/MTC\\_Resolution\\_4530.pdf](https://mtc.ca.gov/sites/default/files/documents/2022-10/MTC_Resolution_4530.pdf)

<sup>17</sup> Community-Based Transportation Plans website: <https://mtc.ca.gov/planning/transportation/access-equity-mobility/community-based-transportation-plans-cbtps>

<sup>18</sup> City of Oakland Universal Basic Mobility Pilot webpage: <https://www.oaklandca.gov/topics/universal-basic-mobility>

<sup>19</sup> TransForm’s EV Carsharing and Mobility Hubs in Affordable Housing Pilot webpage: <https://www.transformca.org/mobility-hubs-affordable-housing-pilot#:~:text=With%20funding%20from%20the%20California,%2C%20Richmond%2C%20and%20San%20Jose.>

of reducing per capita VMT to 19% below 2005 levels by 2035 and the state’s goal of reducing per capita VMT to 25% below 2019 levels by 2030 and 30% below 2019 levels by 2045.<sup>20</sup>

### *Key barriers and gaps*

There are a variety of barriers that can prevent Bay Area residents from using transit and active transportation, and importantly, from switching personal auto travel to transit or active modes of transportation. These barriers are often felt more acutely by residents of frontline communities, as these areas often have historically faced under-investment due to racism or socioeconomic conditions and are typically more reliant on public transportation to complete trips to work, obtain goods and services, and get to other places they need to go. These barriers include:

- Transportation costs
- Inadequate or unsafe first-mile, last-mile connections to transit
- Issues connecting between different transit agency networks
- Increased time for transit trips due to uncoordinated transit schedules
- Lack of tree cover and vegetation for biking and pedestrian facilities, contributing to uncomfortable conditions due to extreme urban heat and potential flooding during heavy rains

## Priority GHG Reduction Measure: Safe, Accessible, Clean and Equitable Multi-modal Transportation

The over-arching goal of this measure is to reduce GHG and other polluting emissions from personal vehicle travel while increasing transportation choices in frontline communities. This priority measure will reduce single occupancy VMT by creating or building out mobility hubs to make it easier for trips to be made by transit, biking, walking, scooter, wheelchair or other mobility devices, including e-micro-mobility. Implementation will focus on creating or expanding mobility hubs in frontline communities and incorporating policies that produce, preserve, and protect affordable housing and stabilize businesses to prevent displacement, similar to the goals outlined in MTC-Transit Oriented Community (TOC) Policy.<sup>21</sup>

Mobility hubs should include a variety of components to meet the needs of the community (determined through engagement with community-based organizations (CBOs) and participatory community processes), with the intent that the hub will serve as a community anchor that enables residents to access multiple transportation options and supportive amenities. While the optimal configuration of the mobility hub depends on the surrounding land use and community input, project components should include:

- First-mile, last-mile connectivity improvements, such as:
  - Bicycle and pedestrian facility improvements, incorporating complete streets and vision zero<sup>22</sup> in design
  - Micro-mobility, bikeshare/e-bikeshare

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<sup>20</sup> California Air Resources Board’s 2022 Scoping Plan: <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf>

<sup>21</sup> MTC’s Transit-oriented Communities website: <https://mtc.ca.gov/planning/land-use/transit-oriented-communities-toc-policy>

<sup>22</sup> “Vision Zero” is a nationwide movement to reduce traffic injuries to zero.

- EV Carshare/EV Charging (on-site and in adjacent ½ mile area)
- Urban greening along pedestrian, bicycle, and transit infrastructure
- Multi-modal connectivity improvements, such as:
  - Solar charging for e-bikes, e-scooters, and EVs
  - Bike racks/lockers (proper sizing for e-bikes and e-cargo bikes)
  - Micro-transit service
  - Transit priority infrastructure improving on-time performance and bus transit access
  - Improved transit waiting area infrastructure (bus shelters, lighting, etc.)
  - Improved signage, wayfinding, and real-time information for transit departure
  - Transit fare coordination
  - Transit schedule coordination
- Community amenities and services (e.g., common carrier package pickup lockers, retail kiosks, community centers, medical services, street furniture)
- E-bike incentives
- Discounted fare programs and discounted bike share passes for low-income and underserved populations
- Safety improvements
- Outreach and education to the community, with a special focus on youth, engaging CBOs to encourage increased use of single occupancy mobility options

### Key implementing agencies

Implementation of this measure involves a diverse collaboration of agencies across the region:

- Regional agencies to lead overall program management
- Regional and County Transit Agencies to coordinate stakeholders and projects within their jurisdictions and to implement project components on their properties
- Cities and counties to implement project components on their properties and right-of-ways
- Community choice aggregators and utilities to administer rebates and incentives
- Research institutions to partner on research efforts

Other organizations, including CBOs, may play key roles as well.

### Implementation Schedule and Milestones

- 2024 – Program established and sites selected for mobility hubs
- 2024-2025 – Engagement with the community and CBOs to determine mobility needs
- 2025-2026 – Develop final construction plans and/or programs and obtain needed permits
- 2026-2027 – Begin implementation of non-construction-related components of mobility hubs (such as e-bike incentives or reduced fare programs)
- 2026-2030 – Phased construction of upgrades to mobility hubs
- 2027-2028 – Education and marketing to promote use of mobility hubs

### Authority to implement

Implementation of this measure involves voluntary actions. No additional authority must be acquired by implementing partners to implement the measure. Below is a list of key existing authorities related to

the upgrades to properties and right-of-ways, administration of rebates and incentives, as well as anti-displacement policies.

- Transit Agencies have the authority to make upgrades to their properties.
- Cities and counties have the authority to make upgrades to properties and right-of-ways and implement anti-displacement policies<sup>23</sup>.
- Regional agencies, community choice aggregators, and utilities have authority to administer rebates and incentives.

### Geographic scope

The geographic scope of this measure covers frontline communities in Alameda County, Contra Costa County, Marin County, Napa County, City and County of San Francisco, San Mateo County, and the portions of Sonoma and Solano counties that are in the Bay Area air basin.

### Metrics for tracking progress

Because projects will be located in or adjacent to frontline communities, the metrics below will focus on frontline communities. The following metrics will be used to track progress:<sup>24</sup>

- GHG emission reductions
- VMT reductions
- Change in transit ridership
- Change in bike/ped activity
- Number of mobility hubs created and amount of each project component included (e.g., miles of bike lanes created, number of carshare vehicles and miles, number of e-bike incentives, etc.)

The full PCAP will include the following components for this measure: quantified GHG emission reductions, assessment of the impacts on frontline communities, brief discussion of intersections with other available funding and workforce needs.

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<sup>23</sup> Improvements to neighborhoods, such as investments to public infrastructure like the ones in this measure, can increase home values, which can in turn lead to displacement of long-time residents.

<sup>24</sup> The Air District will report on measure progress in its 2027 Status Report to EPA.