

COVER PAGE

Applicant Information

Applicant organization	City of Austin, Department of Transportation and Public Works
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Type of Application: individual application or coalition application

Coalition Application	City of Austin (lead), Texas Department of Transportation (coalition partner), Capital Area Council of Governments (coalition partner), CapMetro (coalition partner), and Capital Area Rural Transportation Service (coalition partner).
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Funding Requested: Total CPRG implementation grant funding requested.

Total Funding Requested	\$47,854,062
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Application Title

MOVING Central Texas towards lower GHG emissions

Brief Description of GHG Measures

- Improving Regional Transit Service:** Improve CapMetro service frequency and increase service capacity for Capital Area Rural Transportation Service (CARTS) to expand regional transit service and local connector routes within the City of Austin.
- Investing in Mobility Infrastructure:** By implementing “mobility hubs” that provide non-single occupancy vehicle (SOV) travel options and amenities at connection points, the measure will provide the infrastructure needed to support the increased use of non-SOV travel options. The measure will also provide new mobility hubs at locations across the Central Texas region impacted by planned major transportation construction efforts. Together, these mobility hubs will serve as centralized points where multiple transportation demand management (TDM) options converge, providing people opportunities to choose alternative, lower emission modes of travel other than driving alone.
- Inspiring Behavior Change:** A consolidated regional TDM information resource, underneath one brand umbrella, that will provide comprehensive traveler information, education, marketing, and community engagement efforts, as well as customer support services and incentives. The measure will leverage the current and planned construction projects that are expected to cause significant disruption to SOV travel and encourage people to change their travel behavior.

Sector(s)

Transportation Sector

- Policies to support TDM incentive programs to reduce vehicle trips or travel and expand transit use, such as vanpool programs, ridesharing, transit fare subsidies, and bicycle facilities.
- New or expanded transportation infrastructure projects to facilitate public transit, micro-mobility, car sharing, bicycle, and pedestrian modes.
- Encourage mode shift from private vehicles to walking, biking, and public transportation (e.g., complete streets, bike share programs, bike storage facilities, low-speed electric bicycle subsidies, public transit subsidies).

Expected Total Cumulative GHG Emission Reductions

The proposed measures will realize cumulative GHG emission reductions of:

2025 – 2030: 395,188 cumulative MTCO₂e Reduced

2025 – 2050: 2,597,588 cumulative MTCO₂e Reduced

Location(s)

The primary locations of the project are the City of Austin and the Austin-Round Rock-Georgetown Metropolitan Statistical Area (MSA). All primary locations are within the state of Texas.

Applicable PCAP Reference(s)

The **MOVING Central Texas towards lower GHG emissions** project is identified in the Austin-Round Rock-Georgetown Metropolitan Statistical Area Priority Climate Action Plan, submitted to the EPA under the Climate Pollution Reduction Grant, 2024.

- **PCAP lead organization:** City of Austin, Office of Sustainability
- **PCAP title:** Austin – Round Rock – Georgetown Metropolitan Statistical Area Priority Climate Action Plan
- **PCAP website link:** <https://www.epa.gov/system/files/documents/2024-03/city-of-austin-austin-rrock-georgetown-pcap.pdf>
- **List of GHG reduction measures:** Implement Transportation Demand Management Programs.
- **PCAP page numbers:** Reduction measures listed on page 39.

WORKPLAN

1. Overall Project Summary and Approach

A. Description of GHG Reduction Measures

As Central Texas experiences a once-in-a-generation opportunity to deliver new clean travel options to more of our residents, the City of Austin and its partners are poised to seize this opportunity and inspire behavior change throughout the region. For years, the region has been on the brink of delivering an urban transportation system that supports multiple mode options, yet the region remains car-centric today.

In the next decade, the region will deliver on its aspiration for a truly multi-modal transportation network with significant projects such as Austin's first light rail system, investments in Interstate 35, new MetroRapid transit lines and improved active transportation connectivity for pedestrians and people riding bikes. When completed, these projects will offer new transportation mode options to Central Texas residents, including new light rail and bus rapid transit services. However, this intensive construction will cause major traffic impacts in the short-term, which risks increasing vehicle miles traveled (VMT) and corresponding greenhouse gas (GHG) emissions and air pollution. Low-income and disadvantaged communities (LIDACs) will bear the brunt of these construction impacts, including exposure to criteria air pollutants (CAPs) and hazardous air pollutants (HAPs). Furthermore, without a strong shift to a regional culture of transit use and non-SOV travel, the ambitious regionally significant transportation projects under construction risk being underutilized upon completion.

These risks are heightened by intense population growth. The Austin-Round Rock-Georgetown Metropolitan Statistical Area (MSA) is among the fastest-growing regions in the country, with the population projected to increase to 4,671,000 by 2045, an increase of 146% compared to the 2015 population of 1,897,352 (2045 Regional Transportation Plan, CAMPO). In a no-build scenario, this population growth would be expected to increase Vehicle Hours Traveled (VHT) from 0.58 to 1.11 per person per day, reflecting a dramatic increase in single-occupancy vehicles (SOVs) and reinforcing car primacy across Central Texas. The region needs a concerted push to non-drive alone mode shift.

The City of Austin and its partners propose this project as a coordinated regional approach to transportation demand management (TDM) as our region embarks upon an unprecedented level of new transportation infrastructure and the construction-related impacts on mode choice this will have for travelers in the short-term. The project will scale up proven solutions to reduce GHG emissions across the five county Priority Climate Action Plan (PCAP) region, addressing the risks of increased VMT, poor air quality, and public transit underutilization. The program will expand transit ridership, provide new last mile modes at connection points, and increase accessibility to non-SOV travel options in the region through three measures:

- **Measure 1: Improving Regional Transit Service**
- **Measure 2: Investing in Mobility Infrastructure**
- **Measure 3: Inspiring Behavior Change**

Together, these measures will strengthen transportation mode choice other than SOVs and spark behavior change to help Central Texans adopt new transportation modes, both during and after the region's impending construction boom. The measures in this application will increase transit service and frequency, offer incentives to low-income residents and workers, and expand mobility access into previously underserved neighborhoods. LIDAC residents face increased risk of service impacts due to the location of construction near LIDACs and the higher rate of transit ridership by low-income people. Benefits will be prioritized in low-income neighborhoods that are most impacted by planned construction, air quality impacts of current transportation decisions, and the broader effects of GHG emissions such as urban heat island impacts.

These measures are drawn from the Austin-Georgetown-Round Rock MSA PCAP and are informed by stakeholder feedback. Table 1 shows the relationship to PCAP, reason for prioritization, and connection to CPRG goals for each measure.

Table 1: Relationship to PCAP, Reason for Prioritization, and Connection to CPRG Goals

Measure	Component of PCAP Measure “Implement Transportation Demand Management Program”	Reason for Prioritization	Relevant CPRG Goal
Measure 1: Improving Regional Transit Service	Dedicated measure to manage transportation demand during the multi-year disruptions that will be caused by the construction of mobility corridor upgrades.	Reduce VMT and increase equity by improving transit service in LIDACs.	GHG reductions. Community benefits.
Measure 2: Investing in Mobility Infrastructure	Development of eight mobility hubs and other supportive infrastructure for people to access transit, private shuttles, bike share, micro-mobility, and carpool/vanpool meetup points.	Reduce VMT and increase equity by improving mobility infrastructure in LIDACs.	GHG reductions. Community benefits. Innovative programming.
Measure 3: Inspiring Behavior Change	<p>Commute tools that include trip and route planning, carpool matching, and emergency rides home.</p> <p>Subsidies, incentives, and rewards for commuters to take transit, ride bikes, walk, carpool, or choose not to drive.</p> <p>Partnerships with employers to support flexible scheduling and remote work.</p> <p>Large-scale multilingual marketing and communications campaign informing communities (especially those impacted by major construction projects) of their low-GHG mobility alternatives. This campaign would also include grassroots, multilingual, community-based outreach, and partnerships with local community-based organizations to develop personalized low-GHG travel planning for hard-to-reach communities, such as LIDACs.</p>	Reduce VMT by kickstarting behavior change to adapt to construction impacts and build cultural acceptance of non-SOV modes.	GHG reductions. Community benefits.

Roles and Responsibilities

The coalition, led by the City of Austin’s Transportation and Public Works Department, is the ideal partnership to lead this transformational effort. **As lead applicant, the City of Austin will submit a Memorandum of Agreement (MOA) signed by all coalition partners by July 1, 2024.** The project design effort, led by the City of Austin, incorporated significant input from each partner. Table 2 summarizes each partner’s role. Table 3 outlines subrecipient roles. In addition to the coalition partners, CAMPO, the region’s Metropolitan Planning Organization, and Movability, the region’s transportation management association, will play a pivotal role in implementation of this measure and will be a subrecipient per EPA guidelines.

Table 2: Coalition Partner Roles and Responsibilities

Partner	Organization Type	Role	Responsibilities
City of Austin Transportation and Public Works (TPW) Department	Municipal agency	Applicant, lead partner, convenor, implementation lead, and funding/administrative lead. Brings expertise delivering and managing comparable efforts, institutional relationships, and financial reporting capacity.	Leads implementation of Tasks 2.1, 2.2, 2.3, 2.4 and 3.1, 3.2, 3.3 and 3.4.

Partner	Organization Type	Role	Responsibilities
CapMetro	Municipal transit agency	Holds jurisdiction over City of Austin public transit system. Brings history of TDM planning and implementation.	Leads implementation of Task 1.2 and supports implementation of Tasks 2.1 and 2.2.
Capital Area Rural Transportation System (CARTS)	Regional transit agency	Holds jurisdiction over regional public transit system connecting the surrounding region to Austin. Brings history of TDM planning and implementation.	Leads implementation of Task 1.1.
Texas Department of Transportation (TxDOT)	State department of transportation	Brings state-level TDM experience and regional planning capacity. Plays a lead role in implementation of the planned construction projects.	Planning partner. Will incorporate TDM messaging from this project into its communications. Measure 3 platforms will build off existing TxDOT efforts.
Capital Area Council of Governments (CAPCOG)	Regional council of governments	Brings history of regional transportation planning and institutional relationships. Plays a lead role in implementing the region's existing air quality monitoring program.	Leads implementation of Task 2.5.

Table 3: Subrecipient Partner Role and Responsibilities

Partner	Organization Type	Role	Responsibilities
Movability	Nonprofit transportation management association (TMA)	Grassroots campaign lead. Brings on-the-ground connections and knowledge.	Leads implementation of Measure 3.2. Supports implementation of Measure 3.1.
Capital Area Metropolitan Planning Organization (CAMPO)	Metropolitan Planning Organization (MPO)	Brings expertise of TDM planning across the region and implements the region's trip tracking infrastructure.	Supports implementation of Tasks 3.1 and 3.4.

Detailed Description of Proposed GHG Reduction Measures

The City of Austin led application proposes three integrated measures to reduce VMT and GHG emissions, leveraging a critical moment when the Central Texas region faces multiple major transportation infrastructure construction projects over the next 10 years. The multi-year construction projects will present a unique opportunity to shift travel behavior and drive lasting change as travelers look to new modes, access expanded transit services, and seek up-to-date travel information to reduce the potential impacts of these projects on their daily lives.

Measure 1. Transit Service

Major Features

The impending transportation construction in the region introduces risks for Central Texas residents who rely on public transit. TxDOT's I-35 Capital Express Central Project impacts 13 arterial cross streets that carry 23 bus routes and is expected to affect over 15,000 daily transit users, or almost 20% of total average daily CapMetro riders. As downtown Austin, the University of Texas, and the

State Capitol Complex are the major destinations for many of these routes, 44% of the bus routes crossing I-35 within the project area carry 50% or more of that route's total daily passengers when the bus crosses I-35 Central.

Measure 1 will address the impacts of construction on transit riders, particularly low-income transit riders, by improving service frequency for two major transit agencies: CapMetro and CARTS. Offering convenient transit service is crucial to presenting transit as an attractive transportation choice. By increasing service frequency, the agencies will reduce passenger wait times, improve schedule predictability, and induce additional passenger demand.

Tasks and Milestones

Task 1.1. Expanded CARTS service. CARTS will expand its service options by offering more frequent service on its interurban coach service and additional vanpool services from suburban communities such as San Marcos, Bastrop, and Taylor. The increase in service frequency will offer commuters more options to get to Central Austin in time for their shift, medical appointment or class.

Milestone: Initiation of increased service frequency (Year 2)

Task 1.2. Improved CapMetro service. CapMetro will provide service enhancements to its existing bus and Pickup routes, adjacent to construction projects. As an example, during times when multiple northbound lane closures are planned, CapMetro will increase frequency of adjacent north/south bus routes from every 30 minutes to every 15 minutes during peak times during the construction period. By increasing frequency, transit will be a more convenient and competitive option for current SOV commuters to shift their trips.

Milestone: Initiation of increased service frequency (Year 2)

Task 1.3. Small-scale shuttle service/circulators in construction areas. Shuttle service offers a flexible alternative to SOVs, particularly in areas not currently served by a conventional transit route. By situating circulators within areas impacted by construction, the project fulfills two purposes and focuses resources where they are most needed by providing a climate-friendly and congestion-mitigating mobility option to both the local community and construction workers working on transportation projects.

Milestone: Initiation of shuttle service (Year 2)

Addressing Risks

This measure addresses the risk of transit service impacts from construction in key corridors. In particular, LIDAC residents face increased risk of service impacts due to the location of construction near LIDACs and the higher rate of transit ridership by low-income people.

Additionally, this measure addresses the risk of increased GHG emissions due to increased VMT and extended idling times due to construction disruptions. The service improvements will work in concert with transit stop infrastructure improvements (Measure 2) and incentives and discounts (Measure 3) to help reduce GHG emissions. Specifically, the service improvements will expand the non-SOV choices available during a time of necessity and catalyze long-term behavior change as users experience the benefits of public transit.

Measure 2. Mobility Infrastructure

Major Features

Many Central Texas residents lack access to non-SOV transportation choices. Measure 2 will remove barriers to SOV alternatives and create new "mobility hubs" by adding travel options and amenities to key regional and local mobility transition points, thereby making carpooling, biking, transit, and other non-SOV transportation choices viable travel options for more people and decreasing SOV reliance during construction projects and into

Table 4 and Table 5 outlines the various amenity upgrade options for mobility hubs by type. This grant provides funding for upgrades at secondary and neighborhood mobility hub types. The multimodal transportation options and enhancements provided at each hub will be informed by the individual location and the needs of the community it serves.

Table 4: Type of Mobility Hubs and Attributes

Mobility Options Offered	Mobility Hub Type		
	Primary	Secondary	Neighborhood
CapMetro Rail	X		
CapMetro Rapid Bus	X	X	
CapMetro Local Bus	X	X	X
CapMetro Pickup On-Demand Service	X	X	X
CARTS Regional Bus	X	X	
MetroBike	X	X	X
Neighborhood Circulator			X
Workplace Shuttle Pickup			X
Carpool/Vanpool Pickup		X	X
Micromobility			X

Table 5: Amenity Options by Mobility Hub Type

Potential Amenity Type	Secondary	Neighborhood
Dynamic parking availability	X	
Long-term secure bicycle parking shelter	X	
Real-time transit information screen	X	
Individual bike racks	X	X
Shared mobility parking	X	X
Shade structure or shelter	X	X
Personal e-bike charging	X	
Bike repair station	X	X
Seating and other placemaking amenities	X	X
Carpool/vanpool pickup signage	X	X

Measure 2 will enhance 16 secondary mobility hubs at major regional connection points – primarily CapMetro park and ride facilities – with a range of upgrades including secure bicycle parking shelters, real-time parking availability, and placemaking and wayfinding improvements like real-time transit screens to make non-drive-alone mode choices more comfortable and intuitive for community members to make.

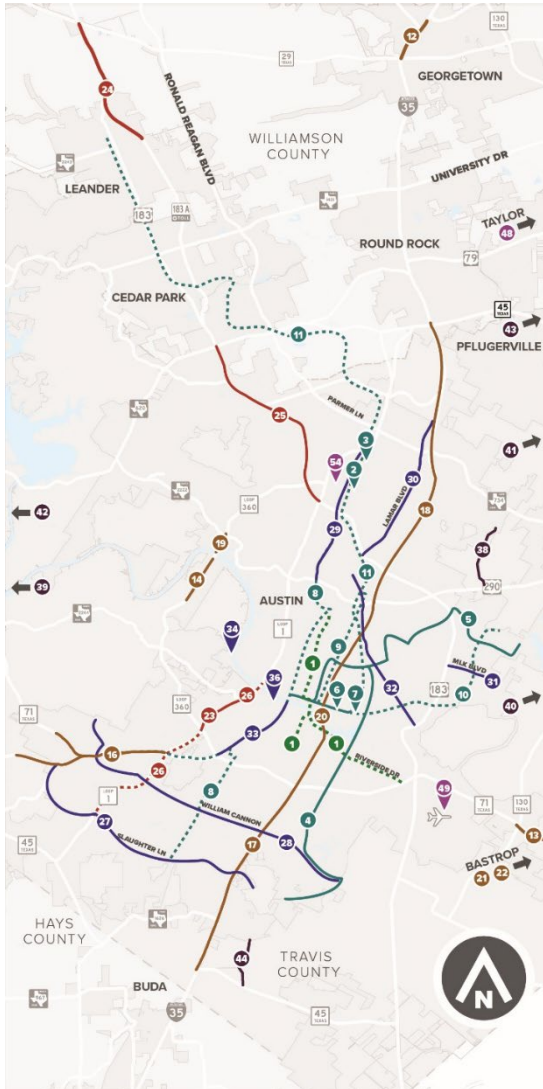
The measure will implement 48 neighborhood mobility hubs at key mobility transition points throughout the City of Austin to provide enhanced first- and last-mile mobility options through expansion of the local electric bikeshare system and micromobility choices.

The measure will also support data collection, including air quality monitoring and additional bicycle, micromobility and pedestrian trip tracking counters. This data will be used to assess the success of TDM measures and plan future TDM improvements, with a focus on monitoring air quality near schools and idling lines.

The mobility hubs will be sited across a range of properties and rights-of-way that are leased, owned, or managed by coalition members. Larger mobility hub infrastructure will be sited on owned properties. The key outcomes of Measure 2 include improved accessibility and visibility, expanded travel mode options, and enhanced amenities that connect the user to the multi-modal transportation network and micromobility options. Measure 2 will motivate behavior change (supported by the incentives in Measure 3) by increasing the comfort and safety of alternative modes, particularly public transit (supported by the service improvements in Measure 1).

Tasks and Milestones

Figure 1: Regional Map of Routes



Task 2.1. Mobility hub implementation at 48 stations. Expanding access to the successful, newly electrified public bikeshare program, MetroBike, and other micromobility options, will increase interconnectivity and help travelers bridge first- and last-mile gaps.

Milestones: Bidding/procurement (Year 2), design (Year 2), installation (Year 3), launch (Year 4).

Task 2.2. Large-scale bicycle storage at 16 mobility hubs (park and rides).

Concerns about bicycle security are a barrier for bicycle transit. By adding bicycle storage to park and rides, the project will encourage adoption of bicycling as well as transit.

Milestones: Bidding/procurement (Year 2), design (Year 2), installation (Year 3), launch (Year 4).

Task 2.3. Dynamic parking for nearly 4,000 parking spaces. Adding sensors to parking spaces at existing mobility hub (park-and-ride) locations will discourage additional traffic to congested areas where sensors indicate a lack of parking availability and will encourage adoption of mobility hubs by indicating parking availability. Sensor data will be incorporated into the regional dynamic parking inventory.

Milestones: Bidding/procurement (Year 2), design (Year 2), installation (Year 3), launch (Year 4).

Task 2.4. Bike and pedestrian counters. Understanding the movement patterns of bicyclists and pedestrians at key locations across Austin will enable continued and improved investment in supporting infrastructure and will be used to support behavior change initiatives (Measure 3). The data will improve regional travel demand modeling and help decision makers understand where mode shift may be most effective. These monitors will include 5 placemaking bike and pedestrian counters, 50 post mounted bike and pedestrian counters, and 50 in-ground bike and pedestrian counters.</

Measure 3. Behavior Change

Major Features

This measure will introduce a comprehensive TDM campaign to already planned regional transit service improvements and transportation infrastructure investments. This campaign will include extensive cross-jurisdictional and departmental information sharing, as well as public-facing education and incentive programs to encourage behavior change and shape regional travel demand. Key outcomes of this measure include increasing the number of commuters using carpool and vanpools, transit, and active transportation options provided in Measures 1 and 2. The measure will include:

- Transportation subsidies and rewards for taking low-GHG trips
- On-the-ground community engagement to reach communities with personalized travel planning assistance
- A coordinated regional mobility platform that will serve as a one-stop-shop for accessing transportation options
- TDM marketing materials and multilingual communications to reach communities impacted by major transportation construction projects.

The measure will help travelers become informed transportation decision-makers, able to make the best choice for their specific needs. The measure leverages new and existing approaches to engage employers, employees, and the public and support traveler choice through education and incentives. The measure reduces or removes the reliance on SOVs as a primary means of transportation by:

- Informing the public of future construction impacts.
- Building awareness of TDM strategies and traveler tools to mitigate impacts from construction.
- Creating positive opinions about TDM strategies and a person's ability to use them.
- Changing behaviors and increasing the use of TDM strategies over the 10-year construction period and beyond.

Tasks and Milestones

Task 3.1. Provide transportation wallets, subsidies, incentives, and rewards for commuters to take low-GHG trips in place of SOV trips. Incentives are a powerful tool to facilitate behavior change. They contribute to successfully getting people to use public transportation and other transportation alternatives. The task will provide mobility incentives through two programs, which aim to target both low-income users and other commuters:

- **Transportation wallets for low-income transit users - over 700 recipients annually:** The Equifare program will provide low-income transit users, defined as those who are under 200% of the federal poverty line or those who access social service programs such as Supplemental Nutrition Assistance Program (SNAP), Children's Health Insurance Program (CHIP) or Medicaid. These users will be eligible to receive a free monthly local CapMetro pass (\$33 value) as well as a \$74 prepaid Visa gift card to support other transportation options, such as rideshare.
- **Cash for Commuters - over 70,000 incentives to be distributed annually:** A daily cash incentive of \$5 (for up to 90 days per calendar year) will incentivize commuters to use alternative modes, such as carpool or vanpool, transit, bike, or walking. The incentive will encourage long-term behavior change, with similar programs experiencing continuation rates of up to 70% after the incentive period closes.

Milestones: Distribution of incentives begin (Year 2) and will continue throughout the grant period (Year 5).

Task 3.2. Implement grassroots, community-based programming to develop personalized travel planning for hard-to-reach communities impacted by major construction projects. The task will be led by Movability, Central Texas' first and only transportation management association. Movability's priorities are aligned to this measure by working with employers and communities across Central Texas to develop and implement mobility plans that incentivize mode choice and keep the region moving. The task will focus on the communities most affected by major construction projects, which includes traditionally marginalized or excluded communities due to language or technology barriers, by providing a suite of community-based programs.

- **Expanded access to discount travel passes:** Movability will support small employers, in key construction areas, to access "CapMetro for Business" discounts through the MovePass program. The MovePass program will purchase batches of passes and distribute them to eligible employers, removing the need for a 10-pass purchase minimum which excludes many employers with fewer than 10 commuting employees.
- **Mobility Camps:** Prior to the beginning of key construction work, Movability will host "Mobility Camps" for residents and employees commuting to and through construction corridors. The task will increase transit and non-SOV ridership choice and ridership. Movability hosts groups of 10 to 40 participants for an off-site trip using city buses or trains, often for the very first

time. Organizations that typically participate include employers, senior centers, churches, schools, neighborhood associations, and non-profit organizations. The program empowers individuals and entire neighborhoods to include active mobility into their travel choices.

- **Transportation option education and incentives:** Movability will increase scope to engage neighborhoods adjacent to construction projects to educate and incentivize commuters and residents of their transportation choices. Movability leverages multiple channels of communication to best reach residents, including:
 - Multilingual postcard drops focusing on residents of key impacted areas.
 - Block walking in affected neighborhoods to provide direct education and outreach.
 - Multilingual stakeholder meetings, including both in-person and virtual events.
 - Dynamic signage to encourage carpooling and vanpooling, transit and bike days, ozone action days, and alternative routes.
 - Coaster campaigns at local bars and restaurants with a QR code connected to TDM behavior change information platforms.
 - TDM discounts, such as promotions in partnering retail locations offering a discount to shoppers with bus passes.
- **Trip planning for impacted properties:** Movability will offer one-on-one trip planning for properties located along construction corridors. The task will encompass both residential and commercial properties, offering up to 15-minute sessions to help residents and employees plan their travel via alternative modes.

Milestones: Movability tasks begin (Year 2) and continue throughout the grant period (Year 5).

Task 3.3. Implement a coordinated and holistic regional mobility platform for TDM. The upcoming planned construction projects will cause disruptions for those living, working, and visiting the Austin region. To reduce the impacts of these projects, the task will create a one-stop trusted and dependable service for sustainable transportation modes, travel-related information, and multimodal trip planning services for the Central Texas area. Users will be directed to non-SOV mobility choices during the construction disruptions and beyond. The proposed regional mobility platform will allow users to view roadway construction schedules, delays, and special events resulting in closures.

A new TDM Customer Support Center (CSC) will provide live telephone, social media, text, and chat support, along with email and form submission responses during transit system operating hours. A customer support team would be able to provide the public with assistance for all transportation alternatives. The CSC will provide a range of trip planning support from simple and more generic requests to more complex and customized trip plans.

The regional mobility platform brings together and builds on existing or planned TDM initiatives, including the myCommuteSolutions platform for carpooling, vanpooling, and ride matching services, TxDOT's construction information website and app, and CAMPO, CapMetro, and Movability's Emergency Ride Home Program. These programs do not include live, in-person phone services which was identified as a need through partner agency engagement activities. The service is important for underrepresented, non-English speakers, and low-income communities with limited access to internet or mobile devices.

Milestones: TDM platform procurement (Year 2), TDM platform operation begins (Year 2), and continue throughout the grant period (Year 5).

Task 3.4. Execute a regional multilingual marketing and communications campaign.

The marketing and communications campaign will focus on communities impacted by major construction projects to educate and guide them to relevant and helpful resources that will reduce SOV trips, vehicle miles traveled, and GHG emissions. The campaign will include multilingual materials and support services to reach as many residents as possible, encourage broad shifts in behavior, and increase use of transit and other non-SOV modes. The campaign will also develop tailored communication approaches to reach young and aging populations, communities of color, residents with disabilities, and low-income communities.

Navigating trip planning can be extremely daunting and challenging, especially during dynamic construction projects that disrupt services. The campaign will support communities to navigate the potential disruptions and access resources that can help them. Targeted marketing and outreach campaigns include:

- Proactive regional media engagement through in-studio appearances, media events, and press releases.
- Online digital marketing tools such as geotargeting/geofencing, sponsored ads, and mobile app promotions, which will focus outreach to the communities impacted by construction projects.
- Targeted social media communication to reach younger and diverse audiences. This includes enlisting trusted messengers such as social media influencers to show real people sharing their positive experiences using TDM options.
- Digital content creation that engages the public in fun and relatable ways.
- Free public service announcement opportunities across platforms.

Addressing Risks

TDM incentive programs risk directing incentives to those transportation users with the greatest existing access to non-SOV transportation options. As a result, incentive programs can fail to adequately serve LIDAC residents, who may have less flexibility in their transportation options due to lack of financial means and historical underinvestment in mobility infrastructure in LIDACs. To address this risk, Measure 3 ensures that LIDAC residents will receive incentives by prioritizing LIDAC engagement and designating subsidies for users under an income threshold. Outreach will be conducted through a variety of channels designed to address language and technology barriers. Furthermore, the measure addresses the risk of increased VMT due to construction by directing behavior change programming to the areas most affected by construction, which also includes LIDACs.

B. Demonstration of Funding Need

Need: The proposed project leverages a unique opportunity to drive mode shift to reduce VMT and GHG emissions. The region's 35 current or upcoming construction projects will impact SOV drivers, causing increased GHG emissions due to vehicle detours and increased idling and congestion. Long-term projected population and employment growth will further intensify transportation related GHG emissions in the region. The current moment offers a once-in-a-generation chance to bring together regional efforts to drive mode shift at a regional scale in the short-term, while setting the stage for long-term, non-SOV reliant transportation mode choices.

Exploration of Other Funding Streams: Given the once in a generation opportunity, other funding sources are inadequate to pursue a regional TDM program that addresses this magnitude of impact and the shared aspirations of the region. While the City of Austin has secured grant funding for TDM-related activities that complement this effort, including a U.S. Department of Transportation Neighborhood Access and Equity Grant, these grant funds address narrower priorities and are not suitable to fund a regional TDM program. During the PCAP development the City considered the potential of funding opportunities through the White House BIL Guidebook and IRA websites.

Historically, Austin has lacked access to Congestion Mitigation and Air Quality (CMAQ) Improvement Program, a major federal funding source for TDM programming. Austin has been ineligible for CMAQ funding as the region has not surpassed the relevant pollutant thresholds. However, Austin faces high levels of other transportation-related air pollutants, including particulate matter. Other municipalities have used CMAQ funding to support extensive TDM programming, such as the City of Atlanta's Georgia Commute Options (GCO). Although Austin is ineligible for CMAQ funding, Austin's suite of proposed TDM measures will emulate peer cities who have used CMAQ funding to implement TDM programs.

Other Funding Sources Applied for or Secured: In 2023 and 2024, the City of Austin secured three federal grant awards for TDM-related activities that support the goals of this grant. However, these grant programs are not suitable to fund a regional TDM program due to the narrow focus of these programs.

C. Transformative Impact

CPRG funding will enable the implementation of a regional TDM program during a pivotal moment for transportation in Central Texas. Extensive current and planned construction along transportation corridors has created a great need and a unique opportunity for regional mode shift. While the region is in the process of upgrading its transportation system through bus, shuttle, and light rail projects set to come online in the coming decade, much of the region is currently SOV-dependent. The proposed measures will address this challenge, achieving GHG emissions reduction through increased transit service to expand non-SOV options, installation of mobility infrastructure to increase access to transit and micromobility, and robust behavior change programming to drive a cultural shift toward these non-SOV choices. This approach scales proven approaches to deliver GHG emissions reduction, improving the air quality of Central Texas for generations to come.

The project will also address the negative impacts of current mode choices, in particular for LIDACs. By expanding transit service, improving mobility infrastructure, and engaging the community, the measures will not only reduce GHG emissions but will also reduce CAP and HAP emissions in LIDACs. Implementation of these measures will improve the region's public health and reduce travel costs.

As a regional effort, the project will scale the past successes of its partners, building on collaborative TDM planning efforts and meeting the need of current and planned transportation construction projects. The coalition brings the institutional capacity, robust plans, statutory authority, and strong history of collaboration necessary to deliver a regional program of this magnitude. The project

stands to achieve market transformation by taking advantage of the disruption caused by construction to accelerate the adoption of non-SOV modes to reduce VMT and GHG emissions.

2. Impact of GHG Reduction Measures

A and B Magnitude of GHG Reductions from 2025 through 2030 and 2050

Successful implementation of this program will result in reductions of 395,188 Metric Tons of Carbon Dioxide Equivalent (MTCO₂e) over the five-year period of 2025 to 2030. This is 15% of the overall reduction potential, with the total GHG emission reductions of 2,597,588 MTCO₂e achieved over the 2025-2050 period. Table 6 highlights the Cumulative MTCO₂e reduction between 2025-2030 and cumulative reduction between 2025 and 2050.

Table 6: Cumulative GHG Reductions

Years	Cumulative MTCO ₂ e Reduced
2025-2030	395,188
2025-2050	2,597,588

The program will result in a long-term reduction in VMT and associated GHG emissions across the region. It is assumed that the level of VMT reduction resulting from this program is proportional to measure implementation progress, with maximum emissions reductions occurring when measures are fully implemented. By implementing a comprehensive and holistic program of measures that bring expanded service, enhanced infrastructure, incentives and education, the program will result in long-term behavior changes towards using alternative transportation that sets the region’s planned multimodal network up for success. The timelines for construction completion and the initiation of new transit modes such as light rail and BRT will also play a role in maintaining the permanency of GHG emission reductions over time.

The magnitude of GHG emission reductions was calculated by assessing the expected VMT reduction potential of each measure based on SOV travel within the MSA catchment area. These calculations used national, state, and local reduction assumptions from trusted and verifiable sources. The calculations also leveraged locally implemented programs to directly inform VMT reduction assumptions with Austin and MSA specific inputs and data points.

For a detailed description of GHG reduction calculations, please see Technical Appendix A.

C. Cost Effectiveness of GHG Reductions

The cost effectiveness of this measure for GHG emission reductions achieved for the period of 2025-2030 is provided below:

\$47,854,062 (Requested CPRG funding) / 395,188 MTCO₂e (Sum of Quantified GHG reductions from CPRG funding from 2025-2030)

= \$121 per MTCO₂e

The cost effectiveness of this measure for GHG emission reductions achieved for the period of 2025-2030 is provided below:

\$47,854,062 (Requested CPRG funding) / 2,597,588 MTCO₂e (Sum of Quantified GHG reductions from CPRG funding from 2025-2050)

= \$18 per MTCO₂e

The cost effectiveness of this application will be impacted by a range of factors, including the speed of implementation and completion of transit service expansion and mobility infrastructure enhancements, as well as the uptake of incentive and support

services. Transitions to cleaner vehicular combustion fuel types and vehicle electrification will also impact the cost effectiveness as bus services also transition to cleaner options.

D. Documentation of GHG Reduction Assumptions

For the complete GHG emission reduction methodology, assumptions, tool, and data sources, and identified uncertainties are provided in the corresponding Technical Appendix A.

3. Environmental Results – Outputs, Outcomes, And Performance Measures

A. Expected Outputs and Outcomes

The primary goal of the project is to **reduce GHG emissions by reducing VMT**, particularly by SOVs. However, the project’s three measures will produce many other desirable outcomes, discussed in more detail in Table 8.

- Increase in transit service frequency
- Improved mobility hubs, bike parking locations, and monitoring infrastructure
- Increase in residents engaged and incentives distributed

Monitoring the use of non-SOV modes by tracking transit ridership and bicycle and pedestrian counts will demonstrate uptake of other transportation options. The City and its partners will track these outcomes using the monitoring infrastructure installed in Measure 1.

Outputs

Per EPA’s guidelines, outputs refer to environmental activity, effort, and/or associated work product related to an environmental goal and objective that will be produced or provided over a period or by a specified date. Outputs may be quantitative or qualitative but must be able to be assessed during the performance period. Table 8 lists outputs.

Table 7: List of Outputs

Measure 1: Regional Transit Service	Measure 2: Mobility Infrastructure	Measure 3: Behavior Change
Number of additional CARTs routes implemented	Number of dynamic space sensors installed	Number and total value of transport wallets distributed
Increase in service frequency for CapMetro (number of additional transit runs daily)	Number of bike spaces installed at mobility hubs	Number and total value of commuter incentives distributed
Number of shuttle/circulator services in operation	Number of MetroBike stations with amenity enhancements completed	Number of CapMetro for Business passes purchased and distributed
	Number of bike and ped counters installed	Number of stakeholder meetings hosted
	Number of AQI data monitoring sensors installed	Number of postcards distributed
		Number of block walking sessions hosted

Outcomes

Per EPA’s requirements, outcomes are the result, effect, or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Table 9 lists outcomes.

Table 8: List of Outcomes

Measure 1: Regional Transit Service	Measure 2: Mobility Infrastructure	Measure 3: Behavior Change
Reduction in cumulative metric tons of GHG emissions:	Reduction in cumulative metric tons of GHG emissions:	Reduction in cumulative metric tons of GHG emissions:
<ul style="list-style-type: none"> From 2025 through calendar year 2030, and From 2025 through calendar year 2050. 	<ul style="list-style-type: none"> From 2025 through calendar year 2030, and From 2025 through calendar year 2050. 	<ul style="list-style-type: none"> From 2025 through calendar year 2030, and From 2025 through calendar year 2050.
Reduction in annual amount of CAP and/or HAP emissions in general and in LIDACs	Reduction in annual amount of CAP and/or HAP emissions in general and in LIDACs	Reduction in annual amount of CAP and/or HAP emissions in general and in LIDACs
<ul style="list-style-type: none"> From 2025 through calendar year 2030, and From 2025 through calendar year 2050. 	<ul style="list-style-type: none"> From 2025 through calendar year 2030, and From 2025 through calendar year 2050. 	<ul style="list-style-type: none"> From 2025 through calendar year 2030, and From 2025 through calendar year 2050.
Increased passenger ridership	Increase in bike trips made	Reduced vehicle miles traveled
	Increased coverage of local and regional AQI monitoring network	Number of trips taken with transport wallet
	Percent of land area covered by local and regional AQI monitoring infrastructure	Increase in passengers using transit services

B. Performance Measures and Plan

Proposed performance measures to track, measure, and report progress

To evaluate project effectiveness, the City and its partners will develop a standardized reporting template and submission process at the project's outset, synchronized with the semi-annual progress reporting schedule mandated by the EPA CPRG program. The partners will determine appropriate approaches to track the progress of various project components and will set annual targets for each of the project's three measures over the grant's five-year duration. The City will evaluate project performance against these targets to gauge overall progress and success. These **performance measures** will include:

- Estimated VMT reduced to-date and corresponding reduction in GHG emissions
- Estimated increase in transit ridership
- Estimated percent completion of infrastructure installation
- Estimated commuter mode shift

The City and its partners will gather at monthly check-ins to review progress and address challenges. All contracted parties will be subject to similar reporting requirements, including participation in the final report deliverable required by the EPA. To quantify and disclose actual GHG emission reductions, the City of Austin will conduct an estimation of avoided GHG emissions on an annual basis and will report estimated GHG emission reductions to the public through communication and marketing channels established through the implementation of this measure and other relevant City and partner communication platforms.

The City and its partners will track and measure implementation progress and evaluate each measure's results. The City and its partners will deploy a customized approach for tracking and measuring progress toward achieving the expected outputs and outcomes described in Section 3.A. Results will be evaluated against yearly targets established at the start of the project.

Outputs

The City and its partners will create a standard reporting process and establish a semi-annual cadence for reporting, in line with EPA reporting requirements. As lead partner, the City of Austin will collect reports from the partner organizations and lead tracking of the project outputs.

Outcomes

Monitoring will occur during and after project installation to track progress over time. Measure 1 includes installation of trip tracking and AQI data monitoring infrastructure. Following monitor installation, City of Austin staff will assess data on a regular cadence and will report findings to project partners. Partners will collect additional data on the use of their services, such as transit ridership or community outreach event attendance, and report this data to the City of Austin on a regular basis.

In the short-term, this data will guide CPRG project investments, such as identifying areas with poor air quality in need of TDM intervention and bus routes with high ridership in need of greater service frequency. In the long term, this data will inform CAMPO's future travel demand models, which will be used to create long-range plans and build upon the mode shift sparked by the CPRG project.

Unhealthy AQI data will be shared between CAPCOG, the City, and other partners and used to inform appropriate decision-making. For example, persistent poor AQI data, linked to vehicle exhaust fumes, in a given location would lead to a vehicle reduction intervention by our coalition.

Trip monitoring data would inform CapMetro transit service improvements. For example, if a given route is too busy additional buses will be added to meet additional demand or if a route has low ridership the data will be used to understand why and to inform adjusted service provision. Vehicle congestion data could inform transit service improvements and mobility hub locations during construction to prioritize impacted areas and meet the needs of those communities.

C. Authorities, Implementation Timeline, and Milestones

The project will be implemented by a coalition of organizations with strong existing relationships. As the applicant and lead partner, the City of Austin will serve as convenor, coordinating between the grassroots nonprofit and local and state agencies helping to implement this regional effort. The City of Austin will distribute sub-awards and handle reporting and financial management. In addition, the City of Austin TPW will implement much of the work.

Crucial on-the-ground engagement work will be led by Movability, Central Texas's transportation management association. Movability will lead Measure 3.2 and will provide support to the City of Austin in executing Measure 3.1. Additionally, transit agency partners CapMetro and CARTS will be responsible for implementing improvements to their respective transit services under Measure 1. CAMPO and TxDOT will collaborate on project aspects falling within their jurisdictions, to be further outlined in collaboration with the City of Austin. These relationships are visually represented in Figure 2 Regional TDM Partnership Structure and Table 10: Partner Roles describes partner roles.

Figure 2: Regional TDM Partnership Structure

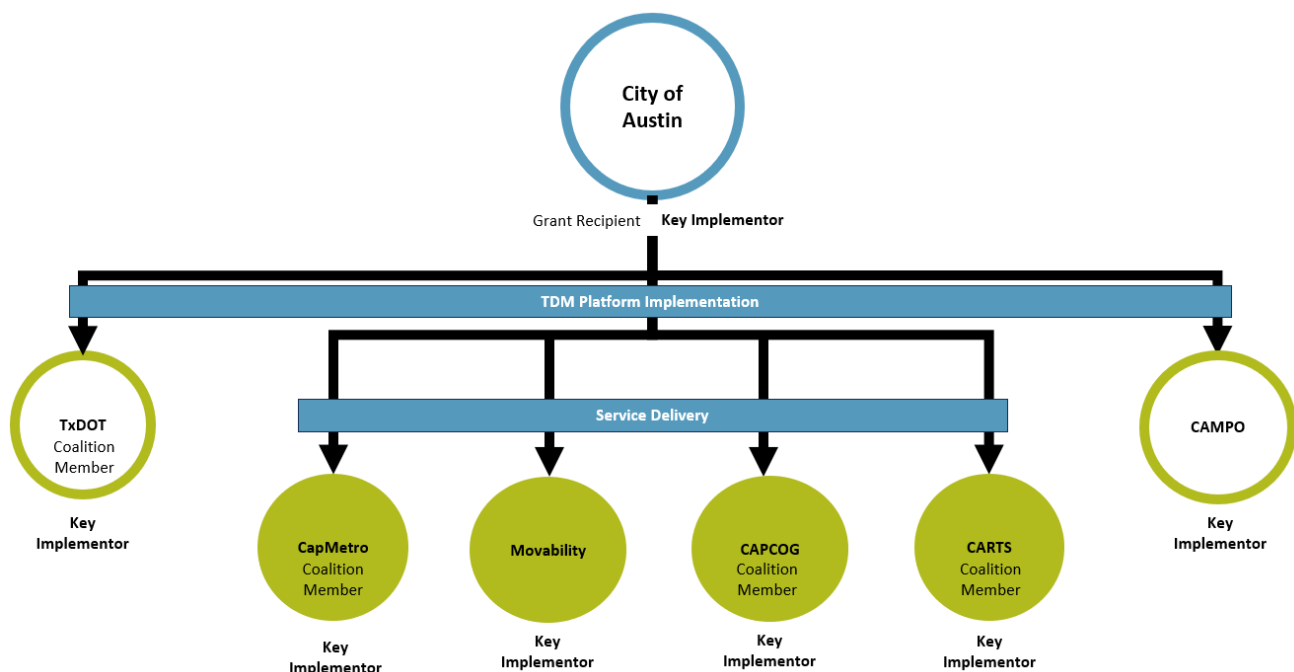


Table 9: Partner Roles

Measure	Task	Implementor(s)
Measure 1. Transit Service	Task 1.1 Expanded CARTS service.	CARTS
	Task 1.2 Improved CapMetro service.	CapMetro
	Task 1.3 Small-scale shuttle service/circulators in construction areas.	City of Austin TPW
Measure 2. Mobility Infrastructure	Task 2.1 Mobility hub amenity enhancement at 48 stations.	City of Austin TPW, CapMetro
	Task 2.2 Large-scale bicycle storage at 16 mobility hubs (park and rides).	City of Austin TPW, CapMetro
	Task 2.3 Dynamic parking for nearly 4,000 parking spaces.	City of Austin TPW, CapMetro
	Task 2.4 Bike and pedestrian counters.	City of Austin TPW
	Task 2.5 AQI data monitoring infrastructure.	CAPCOG
Measure 3. Behavior Change	Task 3.1 Provide transportation wallets, subsidies, incentives, and rewards for commuters to take low-GHG trips in place of SOV trips.	City of Austin TPW, CAMPO, Movability
	Task 3.2 Implement grassroots, community-based programming to develop personalized travel planning for hard-to-reach communities impacted by major construction projects.	Movability
	Task 3.3 Implement a coordinated regional mobility platform for TDM and direct one-stop mobility shop for the public	City of Austin TPW
	Task 3.4 Execute a large-scale multilingual marketing and communications campaign to reach communities impacted by major construction projects and educate and guide them to resources that will reduce drive alone vehicle trips, vehicle miles traveled, and GHG emissions.	City of Austin TPW, CAMPO

Each implementing partner has the existing authority to perform its respective role and assigned tasks. The City of Austin and its partners hold the legal and regulatory authority required to carry out their designated roles and responsibilities within the scope of the project. By choosing to design the project around their existing authority, the partners will be able to execute their tasks efficiently and effectively without the need for additional approvals or bureaucratic hurdles. The partners have worked together previously on TDM and related transportation programming. By assembling a broad regional coalition, the partners have ensured coverage of all needed statutory and regulatory authority.

Implementation Timeline

The implementation of the **MOVING Central Texas towards lower GHG emissions program** will be completed within the five-year period of performance. The following section describes the outlines the intended implementation timeline, including milestones for completing specific tasks by the end of the grant period. Figure 3 visualizes key tasks and workstreams on a five-year timeline.

Table 11: Implementation timeline

Year	Measure 1: Transit Service	Measure 2: Mobility Infrastructure	Measure 3: Behavior Change
1	Tasks 1.1, 1.2, and 1.3. Assessment of routes to received increased service frequency completed, in partnership with the community. <i>Community Engagement is begun and continues throughout year 1.</i>	Task 2.1 and 2.2. Assessment of mobility hub locations and amenity upgrade requirements completed, in partnership with the community. <i>Community Engagement is begun and continues throughout year 1.</i>	<i>Community Engagement is begun and continues throughout year 1.</i>

Year	Measure 1: Transit Service	Measure 2: Mobility Infrastructure	Measure 3: Behavior Change
2	<p>Task 1.1. Expansion of CARTS service begins, delivering higher frequency service through to the end of the grant.</p> <p>Task 1.2. Expansion of CapMetro service begins, delivering higher frequency service through to the end of the grant.</p> <p>Task 1.3. Small-scale shuttle service/circulator services begin and will continue to offer service through to the end of the grant.</p> <p><i>Community Engagement continues.</i></p>	<p>Task 2.1 and 2.2. Mobility hub bid and procurement process is complete.</p> <p>Task 2.1 and 2.2. Small- and large-scale mobility hub design begins.</p> <p><i>Community Engagement continues.</i></p>	<p>Task 3.1. Transit incentive programs begin and run through to close out of the grant.</p> <p>Task 3.2. Grassroots community activities begin and run through to close out of the grant.</p> <p>Task 3.3. TDM platform bid and procurement process is completed.</p> <p>Task 3.3. TDM platform is developed and launched.</p> <p>Task 3.4. Marketing and communication efforts begin and run through to close out of the grant.</p> <p><i>Community Engagement continues.</i></p>
3	<p>Tasks 1.1, 1.2, and 1.3. Expanded services continue to operate.</p> <p><i>Community Engagement continues.</i></p>	<p>Task 2.1 and 2.2. Small- and large-scale mobility hub design is complete.</p> <p>Task 2.1 and 2.2. Small- and large-scale mobility hub implementation begins.</p> <p>Task 2.3. Parking sensor roll out begins at large-scale mobility hubs.</p> <p>Task 2.4 and 2.5. Bike and ped counters and AQI monitors implemented.</p> <p><i>Community Engagement continues.</i></p>	<p>Task 3.1, 3.2, 3.3, and 3.4. Activities continue.</p> <p><i>Community Engagement continues.</i></p>
4	<p>Tasks 1.1, 1.2, and 1.3. Expanded services continue to operate.</p> <p><i>Community Engagement continues.</i></p>	<p>Task 2.1 and 2.2. Small- and large-scale mobility hub implementation is completed.</p> <p>Task 2.1. Small-scale mobility hub operation begins and close out and monitoring begins.</p> <p>Task 2.3. Parking sensor roll out completed at large-scale mobility hubs.</p> <p><i>Community Engagement continues.</i></p>	<p>Task 3.1, 3.2, 3.3, and 3.4. Activities continue.</p> <p><i>Community Engagement continues.</i></p>
5	<p>Tasks 1.1, 1.2, and 1.3. Expanded services continue to operate.</p> <p><i>Community Engagement continues.</i></p> <p>Measure close out is completed and final outputs and outcomes reported to the EPA.</p>	<p>Task 2.2. Large-scale mobility hub operation begins and close out and monitoring begins.</p> <p><i>Community Engagement continues.</i></p> <p>Measure close out is completed and final outputs and outcomes reported to the EPA.</p>	<p>Task 3.1, 3.2, 3.3, and 3.4. Activities continue.</p> <p><i>Community Engagement continues.</i></p> <p>Measure close out is completed and final outputs and outcomes reported to the EPA.</p>

Quality assurance through continuous community engagement – Pre-Award (Year 0) through to grant completion (Year 5): Upon submitting this grant application the coalition, led by the City of Austin’s Transportation and Public Works public information office will begin community engagement activities – specifically with LIDACs – to involve them in the selection of final neighborhood mobility hub locations, to determine the appropriate amenity types, and to build and strengthen relationships as the foundation for

continued positive feedback loops throughout the grant period. Strengthening connections between implementing agencies and communities will support streamlined risk mitigation throughout program implementation. By building community engagement feedback loops into the process, from year zero, before major grant work begins and continuing to engage at regular intervals throughout the program, through to the end of year five, the City will mitigate the risk of directing TDM incentives to those transportation users with the greatest existing access to non-SOV transportation options. Community engagement will be conducted in accordance with the City's language access guidelines and will provide multilingual and contextually appropriate outreach.

Bidding and procurement – Procurement (Year 2): In year two, the project team will prioritize installation of monitoring infrastructure and bidding and procurement to enable implementation of the mobility infrastructure measure. The City has existing contracts that will be expanded to procure additions to its bike and pedestrian monitoring network rapidly. The City is currently working on a methodology to site future counters that will be ready to be implemented by the time this grant is awarded. The City and the regional coalition is also poised to implement its air quality monitoring program expansion through CAPCOG's air quality program which is proven and provides AQI information and education for the region.

The procurement of the CSC public platform will be an expedient process as TxDOT is already working to provide a front-end construction information platform for the region and has committed to implementing the TDM CSC functionality as part of that platform.

Installation and behavior change – Initiation (Year 2) through to grant completion (Year 5): Beginning at the end of year two, behavior change programming will be implemented for the region, leveraging the engagement activities that have already been underway. Many regional construction projects will be in progress in years two through to end of the grant program. As these programs are initiated, the coalition, led by City of Austin, will focus transit service improvements and community outreach and incentives to the communities that are impacted by these projects.

Installation of mobility hub infrastructure will begin in year three and projects will be completed throughout years three, four and five to be operational before adjacent construction work begins. Transit service improvements, incentives, and direct community outreach will be shifted to follow and capitalize on the construction work for peak mode-shift potential.

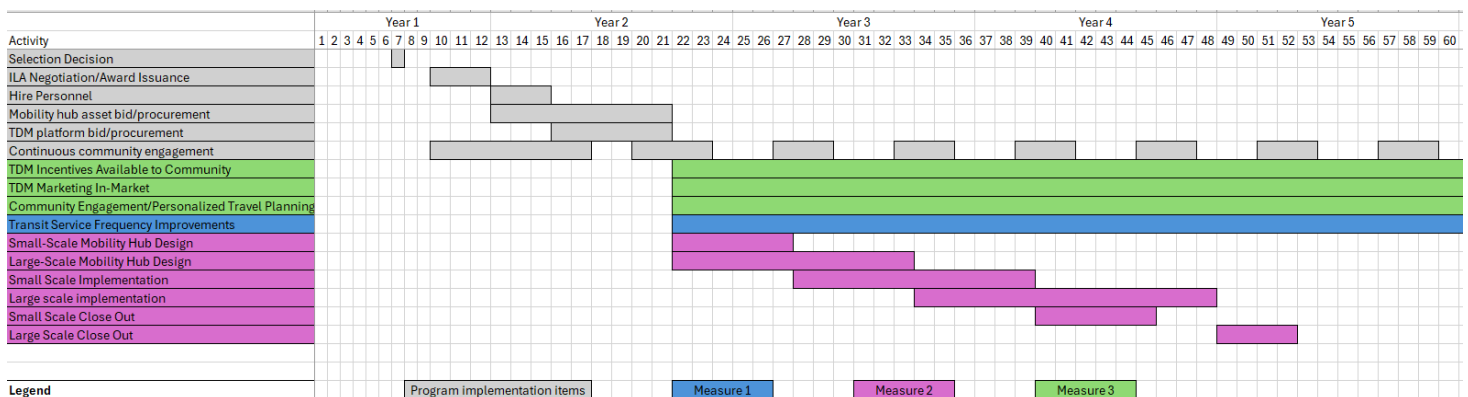
Reporting, semi-annual, and final report preparation – Initiation (Year 1) through to grant completion (Year 5): EPA required reporting will be conducted in compliance with the requirements as outlined by this grant program.

Beginning in year two, the City expects that programmatic elements of these measures will begin to be implemented. Progress and required outputs and outcomes tracking and reporting will outline implementation completed by the coalition on a semi-annual basis. The City will provide reporting on expenditures, project status, major work starts and completions, as well as any challenges or delays that put any implementation at risk.

Finally, TDM provides rich behavior change data. The City will create a final report (in year five) assessing the performance of the project and its individual measures and how they may be implemented in other regions of the country. TDM studies of this size and scale are few and far between and the data created by this grant will be valuable as other metropolitan regions combat climate change and look to limit GHG emissions while taking advantage of massive construction programs.

Figure 3 shows the timeline for rolling out each project measure and task.

Figure 3: Implementation Timeline



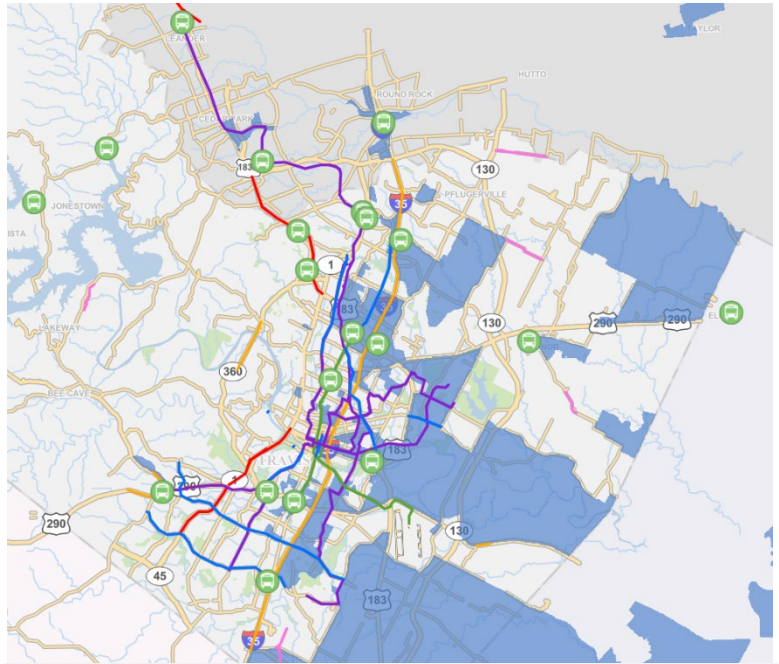
4. Low-Income and Disadvantaged Communities

A. Community Benefits

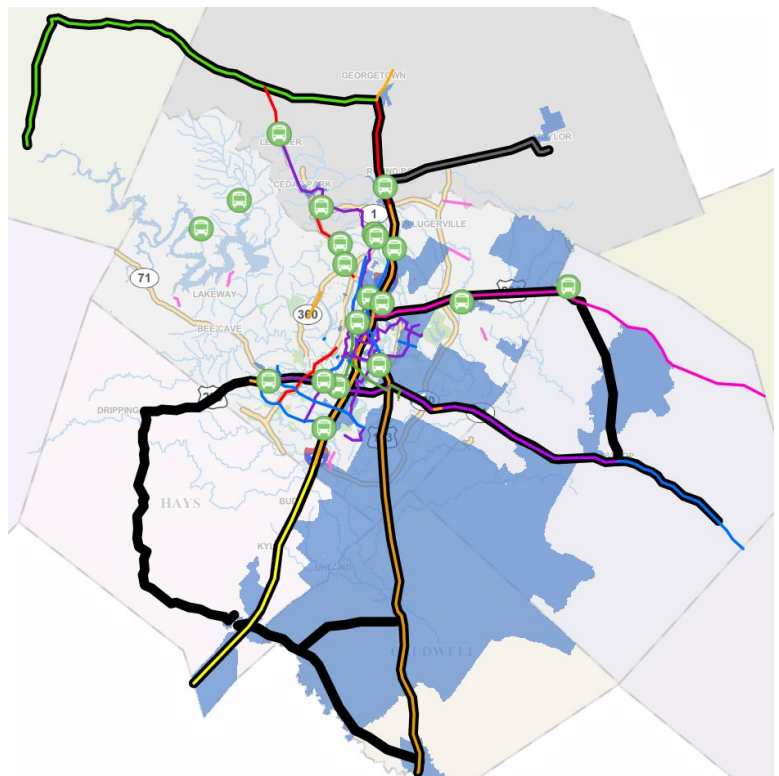
The program of measures outlined in this application will benefit all residents in the MSA, with particular emphasis on LIDACs, which represent 19% of the MSA's total population. Through transit service interventions, mobility infrastructure, and behavior change incentives and communication measures, regional reductions in VMT will be achieved. Implementation and benefits of these measures will focus on communities most impacted by construction works and those that considered to be LIDACs. These communities are historically separated from economic opportunity by past infrastructure investments and disproportionately suffer the impacts of prolonged exposure to air pollution and vehicle exhaust fumes.

Vehicle exhaust results in emissions of CAPs, including reactive organic gases, carbon monoxide, particulate matter, and nitrogen oxides, and HAPs, such as acetaldehyde, acrolein, benzene, toluene, xylenes, propylene, 1,3-butadiene, ethylbenzene, formaldehyde, diesel particulate matter, among others.¹ Motor vehicle emissions also lead to the formation of other pollutants in the atmosphere, such as nitrogen dioxide, which is found in elevated concentrations near major roads, and ozone, which forms further downwind. Roadway traffic also generates brake and tire debris and can re-entrain road dust into the air, contributing further to the generation of particulate matter.

Individually and in combination, many of the pollutants found near roadways have been associated with adverse health effects. Air pollutants from cars, trucks and other motor vehicles are found in higher concentrations near major roads. People who live, work or attend school near major roads have an increased incidence and severity of health problems including higher rates of asthma onset and aggravation, cardiovascular disease, impaired lung development in children, pre-term and low-birthweight infants, childhood leukemia, and premature death.² Therefore, reducing VMT through TDM strategies will lead to a direct reduction in CAPs and HAPs and co-pollution benefits to LIDACs adjacent to construction projects, along highways, and to downwind communities across the MSA and beyond.



Large-scale mobility hubs (green icons) will serve LIDACs (blue census tracts) and reduce impacts of planned construction projects (colored lines)



Expanded frequency of CARTs services (black/colored lines) will serve regional LIDACs and promote improved regional access via non-SOV modes.

¹ <https://www.epa.gov/gasoline-standards/gasoline-mobile-source-air-toxics#:~:text=The%20Mobile%20Source%20Air%20Toxics,acetaldehyde%2C%20acrolein%2C%20and%20naphthalene.>

² U.S. Environmental Protection Agency. (2014). Near Roadway Air Pollution and Health: Frequently Asked Questions. Available: https://www.epa.gov/sites/default/files/2015-11/documents/420f14044_0.pdf

Movability will serve as a key partner for project interventions in LIDACs. With a long history of collaborating with LIDAC residents through grassroots campaigns, Movability will collaborate with hard-to-reach communities facing construction impacts. Movability will offer one-on-one trip planning (Measure 3.2) to help LIDAC residents overcome cultural and practical barriers to transit and active mobility use. Movability will run multilingual engagement campaigns within neighborhoods adjacent to construction. These campaigns will leverage multiple modes – block walking, in-person meetings, virtual meetings, postcards, and more – to meet people where they are.

Other benefits to LIDACs include:

- **Increased connectivity for LIDACs across the Central Texas region**, including in the Eastern Crescent, with corresponding benefits due to improved access to employment, healthcare, and educational opportunities. Improved access to transportation will include both transit service improvements and new and expanded mobility hubs (offering transit stops, micromobility options, carpool pickups, and more).
- **Reduced travel costs** both due to transit incentives and improved access to public transit instead of SOVs or rideshare.
- **Reduced dependence on SOVs due to expanded transit and active transportation access.** SOVs can be an expensive and inaccessible mode of transportation for low-income and undocumented individuals. Increasing access to alternative modes offers flexibility and empowers individuals to exercise more choice in their travel.
- **Reduced wait times for transit** due to CARTS and CapMetro service improvements. Wait times both disincentivize transit use and become a “time tax” that disproportionately affects low-income travelers.
- **High-quality jobs will be created through the implementation of these measures.** The City of Austin and its partners are committed to delivering jobs in accordance with the approaches outlined in Section 5 and to the benefit of local communities.
- **Other benefits** include reduced travel times for SOVs due to reduced congestion and improved health outcomes due to adoption of active transport.

The program design accounted for any anticipated negative impacts for LIDACs and has proposed mitigation strategies to minimize them:

- **First, LIDAC residents may face greater barriers to behavior change, causing incentives to flow to non-LIDAC residents who have more transportation options.** LIDAC residents’ barriers to behavior change may include language and technology access barriers, distrust in government messaging, and lack of access to transit and active transportation options. As a result, project incentives and interventions may disproportionately flow to residents with greater means who have more transportation choices and can more easily adopt behavior change.

The project is designed to address the barriers that may limit LIDAC participation in behavior change by pairing conventional TDM measures with a robust outreach campaign carried out by multiple partners. Measure 3. Behavior Change will offer multilingual education through multiple channels, including postcards and direct neighborhood block walk outreach, to overcome language and technology barriers when distributing information about incentives and educational programming. Events will be held both virtually and in-person to allow a greater number of residents to participate.

- **Second, LIDACs in Central Texas tend to be less dense and farther from the urban core, making it harder to commute via public transit and active modes.**

The project addresses this challenge by seeking to remedy the disconnection currently faced by LIDAC residents. Measure 1. Transit Service will improve transit availability in LIDACs most impacted by construction. Measure 2. Mobility Infrastructure will bring additional transit stops, bikeshare stations, and shuttle pickup locations to LIDACs.

B. Community Engagement

The City of Austin prioritized engagement with LIDACs throughout the development of the PCAP which directly informed the development of these measures. A Community and Stakeholder Advisory Group (CSAG) composed of representatives of LIDACs met monthly to review the progress and direction of the PCAP. CSAG members received stipends to address economic barriers to participation. Beyond the CSAG, community members shared feedback on the PCAP through a survey. Additionally, the City of Austin hosted an education open house event to inform the community and receive feedback. This engagement followed the IAP2 Spectrum of Public Participation, seeking to inform, involve, and collaborate with community members and community-based organizations.

The development of this project was directly informed by the more than 150 community perspectives shared through a survey and open house. The City distilled key themes from the feedback provided through the engagement process and used it to inform the development of this TDM project. Key community needs identified include:

- **Relevant and Consistent Transit lines:** Many comments emphasize the need for improved public transit options and infrastructure, including CapMetro lines.
- **Active Transportation Options and Walkability:** Several comments discuss the importance of promoting active transportation options, including biking and walking, by providing safer infrastructure. One commenter shared, “While we need better planning to minimize sprawl and eliminate car dependency, those seem like long-term solutions that won't help with traffic-related problems in the short-term. Incentivizing and promoting transportation demand management will help immediately, along with significantly increasing bus and shuttle service and SAFE walking and biking infrastructure.”

Ongoing community engagement and communication

The City and its partners will continue meaningful engagement during project execution and beyond. As the organization leading the compilation of the EPA CPRG Planning grant deliverables, the CCAP and Status Report, the City will continue to engage with the community on this topic when developing these deliverables. LIDAC engagement will continue to be prioritized. Key tasks outlined in this program are specifically intended to continue meaningful engagement, such as Mobility Camps, postcard drops, block walks, stakeholder meetings, coaster campaigns, multi-media marketing and communication campaigns, and trip planning support services.

Community members taking trips to work, school, medical appointments, and leisure activities are some of the best sources of data to identify pain points for both short- and long-term improvement. As such engagement will meet the communities where they are most comfortable to engage, such as at community events, schools, grocery stores, parks, community centers, and libraries. Community engagement will continue in fall and spring seasonal cycles every year to establish a clear cadence and predictability for the community. Regular engagement will also provide critical feedback loops for TDM programming to be refined. Where appropriate and to boost outreach, digital channels will be used.

Authentic community engagement will build advocates that will help promote TDM programming to others in their community that may have needs addressed by program offerings. With the long-term commitment to continued community engagement, those first engaged in the program will even have life transitions like becoming parents, moving jobs, or changing their regular trips. This data too, is useful for TDM to identify areas for improvement and evolve programming to address a community's expressed needs.

The project includes ongoing assessment, quantification, and reporting of these and other benefits to LIDACs. Reductions in emissions of CAPs and HAPs can be quantified using the EPA's Motor Vehicle Emission Simulator (MOVES),³ which provides county-specific emission factors for CAPs and HAPs for on-road sources (e.g., cars, trucks), and the estimates of avoided vehicle miles traveled. Emissions associated with re-entrained roadway dust can be calculated using paved roadway dust emissions factors provided in EPA's AP42: Compilation of Air Emissions Factors, Chapter 13: Miscellaneous Sources (Paved Roads).⁴ Measure 2 tasks will install both trip tracking and AQI monitoring infrastructure. The proposed project budget designates funds for analysis of these data, which will shape project interventions across duration of project implementation and well into the future. The monitoring infrastructure will allow the project team to adapt planned interventions to benefit those LIDACs that most suffer from poor air quality.

5. Job Quality

Through investment in regional TDM measures, the City and its partners will support employment in the region, seeking to create high-quality, family-sustaining jobs for LIDAC residents that may offer the possibility of union membership.

- **Measure 1. Transit Service** will support employment at both CapMetro and CARTS. These jobs may include bus mechanic jobs, identified as a high growth middle wage occupation by the local workforce development board, as well as bus drivers. CapMetro transit operator hiring and training is expected to be part of the City of Austin's new Infrastructure Academy. Academy will be a public-private infrastructure network that integrates recruitment, a comprehensive training hub,

³ <https://www.epa.gov/moves/latest-version-motor-vehicle-emission-simulator-moves>

⁴ <https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-13-miscellaneous-0>

childcare support, and placement services to connect local people to career pathways in infrastructure development. Through this partnership, the City can train and recruit construction trade professionals for program implementation.

- **Measure 2. Mobility Infrastructure** will support construction employment through the installation of mobility infrastructure, including station electrification, which will employ workers in the skilled trades.
- **Measure 3. Behavior Change** will support employment for workers with outreach and communication skills, with a particular focus on multilingual workers and workers with lived experience related to lack of transportation in LIDACs. The partners expect to pursue contract or stipend-based opportunities to engage community-based organizations to develop personalized low-GHG travel planning for LIDAC residents.

To support equitable workforce development, employment for all three measures will prioritize hiring local residents and ensuring that all economic opportunities focus on benefiting LIDAC residents. In particular, Measure 3 will prioritize hiring experts from within communities targeted for outreach.

The City will leverage existing long-standing relationships with workforce development and supportive organizations in the region to explore opportunities to build the green jobs workforce as related to the CPRG grant award. These organizations include the regional workforce development organization Workforce Capital Area as well as the EarthShare Texas Green Fellows, Austin Resource Recovery, Yellow Bike, and the Ghisallo Cycling Initiative. These organizations serve as resources for additional input.

6. Programmatic Capability and Past Performance

A. Past Performance and Reporting Requirements

The City of Austin and their coalition partners have successfully delivered extensive projects funded by federal grants. The 2023 kickoff of the MetroBike Bikeshare Program Expansion initiated a \$11.3 million program of work through which the City of Austin transit agency CapMetro will expand 81 transit stations within city limits. Also in 2023, the City of Austin Department of Transportation and Public Works began work on the Safe Streets and Roads for All (SS4A) Intersection Safety Improvements, a \$22.9 million grant that will significantly improve safety at major intersections across the city. The 2024 award of \$105.2 million for a freeway cap and walking and biking corridor will restore connectivity for LIDACs. These grants, further detailed in the tables below, demonstrate the City of Austin’s capacity to deliver on federal grants and meet all reporting requirements. The awardee’s compliance with reporting requirements is discussed in the final row of each table (see Table 11).

Table 10: Past Performance and Reporting Compliance

Our Future 35: Austin’s Cap and Stitch Program (2024) \$105.2 million	
Federal funding agency	U.S. Department of Transportation’s Neighborhood Access and Equity Grant Program (NAE)
Description of the agreement	The City of Austin will build a 5.3-acre freeway cap over I-35 to restore equity and provide enhanced connections to residents of the East Cesar Chavez Neighborhood to downtown, previously cut off by the original construction of I-35. Improvements will include a walking and biking corridor across I-35 that requires no frontage road crossings. The City was awarded the RCP Planning Grant in late February 2023 (\$1.12M federal/\$280K match).
DoT Contact	ReconnectingCommunities@dot.gov
Status	As this grant was awarded earlier this year, project work has not yet begun. However, the City of Austin anticipates timely and successful completion of list agreements through dedicated staff resources.
Reporting Requirements	As this grant was awarded earlier this year, reporting has not yet begun. However, the City of Austin anticipates timely completion of reporting requirements.

MetroBike Bikeshare Program Expansion (2023) | \$11.3 million

Federal funding agency	U.S. Department of Transportation via TxDOT Transportation Alternatives Set Aside (TASA)
Description of the agreement	CapMetro is replacing and expanding 81 transit stations and 800 bikeshare bicycles in downtown Austin, tripling the reach and density of the public bike-share system across the urban core. This intervention was prioritized to improve the equitability of the system and expand system access to more residents. \$11.3 million received to expand and electrify Metrobike Fleet
DoT/TxDoT Contact	Michelle Meaux (TxDOT) michelle.meaux@txdot.gov
Status	City Staff is coordinating with TxDOT staff to identify next steps in implementation process and will execute an Advance Funding Agreement in 2024
Reporting Requirements	CapMetro has complied with all reporting requirements to date and is on track to complete the project delivery on schedule.

Safe Streets and Roads for All (SS4A) Program Grant for Intersection Safety Improvements (2023) | \$22.9 million

Federal funding agency	U.S. Department of Transportation
Description of the agreement	This award will fund major intersection safety projects, pedestrian hybrid beacons, systemic safety treatments, street lighting, traffic signal improvements, a safety education campaign, and video analytics for safety analysis and evaluation.
DoT Contact	Tom Beeman (FHWA) thomas.beeman@dot.gov
Status	City Council accepted funds from USDOT for this project on September 14, 2023, and appropriated a portion of match funding needed. A Grants Agreement was executed in September and project implementation has begun.
Reporting Requirements	The City of Austin TPW has complied with all reporting requirements and is on track to complete implementation on schedule.

Safe Streets for All (SS4A) 2023 Planning Grant | \$288,000

Federal funding agency	U.S. Department of Transportation
Description of the agreement	\$288,000 for transition planning (ADA) for signalized street crossings and urban trails
DoT Contact	Rubaiet Islam (FHWA) rubaiet.islam@dot.gov
Status	City Staff is coordinating with USDOT to identify next steps in planning process
Reporting Requirements	The City of Austin has complied with all reporting requirements and is on track to complete implementation on schedule.

Other relevant grants received and in implementation are provided below:

Mokan Corridor Trail (Pleasant Valley to Springdale) – Doggett \$1M earmark

- **Description:** Phase 1 currently under construction Phase 2 (Pleasant Valley Rd to Gonzales) to begin following License Agreement with CapMetro
- **Status:** in need of cooperation from TxDOT to amend AFA to expedite completion

Northern Walnut Creek Trail Phase 3 (segment in MoKan Corridor from 290 to Braker Ln)

- **Description:** 3.5 mile segment of the trail funded, and is currently in Design Phase
- **Status:** will need TxDOT collaboration to minimize costs and maintain fastest timeline possible, including amended AFA

Community Project Funding (Congressional Earmark from Summer 2022)

- **Description:** City and TxDOT executed the corresponding AFA on February 6, 2024 and funding is ready to be spent (\$1.5M federal, roughly \$167K local match for cost overruns)
- **Status:** Staff is currently budgeting funds to be allocated towards robust community engagement and grant/funding pursuit activities over the next two years, kicking off this Spring

Neighborhood Access and Equity grant 2024 – César Chávez cap over I-35

- **Description:** \$105.2 million allotted for downtown cap from Cesar Chavez to 4th Street timed with I-35 reconstruction.
- **Status:** Award received, announcement made March 14, 2024

B. Staff Expertise

Together, the coalition partners bring a strong history of regional collaboration to plan and implement TDM programming. The proposed measures build on TDM investments and planning efforts that are already underway, including the Austin Strategic Mobility Plan, CAMPO's 2045 Plan, the City of Austin's Climate Equity Plan, the Central Texas Construction Partnership Program (CPP), and the City of Austin's Priority Climate Action Plan (2024), which outlined TDM as a key lever to drive GHG emission reduction in the region. As lead partner, the City of Austin Department of Transportation and Public Works Brings expertise delivering and managing comparable efforts as well as financial reporting capacity. Regional organizations CAMPO and CAPCOG have expertise in TDM planning in the Austin area as well as institutional relationships with a multitude of agencies. Transit agencies CapMetro and CARTS manage the public transit systems of their respective jurisdictions and have collaborated extensively with the other partners. As the region's nonprofit transportation management association (TMA), Movability holds crucial on-the-ground relationships with communities and will lead the grassroots engagement campaign. Finally, TxDOT brings a statewide perspective and key insight into the construction projects that span the region. **This section describes the experience and expertise of the City of Austin staff who will champion this multi-organizational effort.**

Jacob Barrett, Program Manager – City of Austin: Jacob will play a pivotal role in program management by overseeing the planning, execution, and monitoring of multiple projects, ensuring alignment with strategic objectives and efficient resource utilization. In grant implementation, he will meticulously manage the process from application to project execution, ensuring compliance with grant requirements, effective allocation of funds, and timely reporting to stakeholders. Additionally, he excels in regional coordination, fostering collaboration among stakeholders, navigating local regulations, and optimizing efforts to maximize impact within LIDACs.

Andrew Aylward, Associate Project Manager – City of Austin: Andrew is integral in advancing air quality and sustainability initiatives within the organization, implementing strategies to reduce emissions and promote environmentally responsible practices. In his role on the CAMPO TDM subcommittee, Andrew plays a key role in shaping policies and initiatives related to transportation, land use, and urban planning, ensuring alignment with sustainability goals and community needs. Additionally, Andrew oversees new employee orientation programs, welcoming and integrating new hires into the organization, and providing them with the necessary tools and information to thrive in their roles.

Briana Perez, Associate Project Manager – City of Austin: Briana spearheads community education efforts, designing and implementing programs to raise awareness about sustainability topics and foster understanding among diverse audiences. She specializes in behavior change strategies, developing interventions and campaigns aimed at promoting positive habits and attitudes within the community. Briana leads the COA Commute Rewards program, incentivizing sustainable transportation choices among employees, and actively engages with the public by tabling at events to disseminate information and encourage participation in initiatives.

Manuela Figueroa-Casas, Business Process Specialist – City of Austin: Manuela plays a critical role in identifying and implementing national best practices within the organization, ensuring that projects align with industry standards and deliver optimal results. She specializes in data analysis, leveraging insights to inform decision-making processes and drive continuous improvement across projects and initiatives. Additionally, Manuela oversees the implementation of projects from conception to completion, coordinating resources, managing timelines, and ensuring that objectives are met efficiently and effectively.

7. Budget

A. Budget Detail

As lead applicant, the City of Austin will receive funding and distribute it to sub-awardees, CAMPO, CARTS, and Movability based on the tasks outlined in this application and in adherence to the requirements of this grant program. The budget detail indicates the specific budget categories associated with each measure as part of the **MOVING Central Texas towards lower GHG emissions** program.

The total requested amount for funding is \$47,854,062. Specifically, \$17,500,000 (37%) will fund Measure 1: Improving Regional Transit Service, \$7,140,668 (15%) will fund Measure 2: Investing in Mobility Infrastructure, and \$22,625,000 (47%) will fund Measure 3: Inspiring Behavior Change. The remaining \$588,395 (1%) of the budget will be allocated to project management across all three measures of the program.

Budget Categories

- I. **Personnel:** \$449,463
- II. **Fringe Benefits:** \$119,781
- III. **Travel:** \$5,000
- IV. **Equipment:** \$4,710,468
- V. **Supplies:** \$2,229,750
- VI. **Contractual:** \$19,332,000
- VII. **Other:** \$21,007,600
- VIII. **Indirect Charges:** \$0

Please refer to the budget narrative appendix and the accompanying budget table provided for the complete budget narrative and further details.

B. Expenditure of Awarded Funds

The City of Austin will adopt a comprehensive approach to ensure the timely and efficient expenditure of awarded grant funds for the program. Our strategy encompasses rigorous procedures and robust controls to uphold accountability and maximize the impact of federal funding within the designated grant period.

- **Firstly, our approach begins with meticulous planning and budgeting, wherein we delineate clear objectives, milestones, and resource allocations aligned with the goals of the TDM program.** We will establish a detailed expenditure plan, breaking down anticipated costs for various program components such as infrastructure upgrades, outreach campaigns, and administrative expenses. Through this proactive planning, we aim to minimize the risk of delays or budget overruns during implementation.
- **Furthermore, we will implement stringent monitoring and oversight mechanisms to track the utilization of grant funds throughout the project lifecycle.** This involves regular financial reporting, budget reviews, and performance evaluations to ensure adherence to the approved expenditure plan and compliance with federal regulations. We will designate a dedicated team responsible for financial management and monitoring, tasked with conducting periodic audits and assessments to identify any discrepancies or inefficiencies promptly.
- **To enhance transparency and accountability, we will institute robust controls and procedures for procurement, contract management, and vendor selection.** All procurement activities will be conducted in accordance with federal guidelines and local regulations, emphasizing equitable and competitive practices to optimize the value of every dollar spent. We will maintain comprehensive documentation of procurement processes, including bid evaluations, contract negotiations, and vendor performance evaluations, to facilitate accountability and transparency in expenditure decisions.
- **Additionally, we will prioritize effective communication and collaboration among project stakeholders,** including EPA, local government departments, community partners, and contractors. Through regular meetings, progress updates, and stakeholder engagement initiatives, we aim to foster a collaborative environment conducive to efficient project

implementation and resource utilization. By soliciting input and feedback from key stakeholders, we strive to identify potential challenges or opportunities for improvement proactively, facilitating timely course corrections as needed.

C. Reasonableness of Costs

The budget is reasonable and necessary to achieve the outlined regional TDM improvements. Every expenditure is oriented to achieve these improvements and reduce GHG emissions by cutting VMT and shifting the regional market away from SOV travel in collaboration with LIDAC residents. Because this TDM project scales and integrates existing workstreams, the project prioritizes proven approaches to accomplish TDM change so that the funding invested will yield successful GHG emissions reduction. The Budget Detail section above provides information on the categories as described in the SF-424A. To demonstrate the reasonableness of costs, the budget request for each of the project's three measures is discussed below.

- **Measure 1. Transit Service (\$17,500,000):** The budget is necessary to improve the reliability and usability of the transit system to attract and retain new transit riders, key to the project's GHG emissions reduction strategy. The budget is reasonable to support the magnitude of service change across multiple transit systems, all of which include LIDACs: CARTS, to improve interconnectivity between rural areas (including LIDACs) and job and educational opportunities in Austin; CapMetro, to increase service frequency of this vital transit resource for Austin residents, including LIDAC residents; and shuttles/circulators to improve service provision in and around planned construction.
- **Measure 2. Mobility Infrastructure (\$7,140,668):** The budget is necessary to achieve large-scale mobility infrastructure improvements serving LIDACs and other areas impacted by construction. This measure increases the reach and usability of non-SOV modes, which will expand first- and last-mile mobility choices for transit riders (Measure 1) and support lasting behavior change (Measure 3). This budget is reasonable to achieve the scale of planned mobility hub infrastructure, including investing in 48 neighborhood mobility hubs with multimodal connectivity like bike share and micromobility connections and amenity upgrades such as electrification, shade structure and wayfinding improvements, and expanding 16 mobility hubs to add long-term bicycle storage facilities and other amenities.
- **Measure 3. Behavior Change (\$22,625,000):** The budget is necessary to scale behavior change programming across a variety of modes by offering incentives for commuters and other travelers, expanding low-income discounts, conducting outreach including on-the-ground LIDAC engagement, and building accessible public-facing resources. This measure is essential to supporting the project's overall GHG emissions reduction by providing incentives and education to kickstart behavior change and connect users to the improved infrastructure and transit service implemented in Measures 1 and 2. Furthermore, this measure will serve as a bridge, priming residents to become users of the transit system improvements currently under construction that will come online in the next decade. The budget is reasonable to offer 700 low-income transportation subsidies and 70,000 commuter incentives annually, conduct both a comprehensive LIDAC outreach campaign and a complete regional communications campaign, and implement a coordinated regional mobility platform.