





# 2.1 DEVELOPING THE MOBILITY MASTER PLAN

The City of San Diego (City) is dedicated to improving the health and well-being of its residents, employees, and visitors. Everyone who lives, works, plays, shops, or does errands in San Diego deserves opportunities to use and experience the City in ways that improve their quality of life. As the backbone of the City, San Diego's transportation network serves as a primary and foundational aspect of people's lived experiences. Creating and maintaining a citywide mobility system that meets the needs and exceeds the expectations of all users is tantamount to ensuring that San Diego is a place people want to be in and explore.

While the City's existing transportation network has a strong foundation, there are opportunities to expand and enhance it through a suite of interconnected policies, projects, and programs. These improvements will allow San Diego's mobility system to effectively meet the needs of all users while helping the City achieve its climate, equity, and mobility goals. Just as critical to an enhanced mobility system as planning and developing policies, projects, and programs is successfully implementing them. San Diego has recognized the need to ensure complementary planned and potential mobility initiatives are not just forward-thinking, but also include a framework for successful implementation.

Development of a Mobility Master Plan serves as a vital tool in effectively implementing mobility improvements, services, and programs that align with the City's Climate Action Plan (CAP), General Plan, Community Plans, among other efforts. The CAP calls for reductions in greenhouse gas (GHG) emissions, especially those generated from combustion engine and fossil fueled vehicles, through a variety of strategies. While all strategies in the CAP are critical to combatting climate change, it is anticipated that strategies related to reducing vehicular travel would significantly reduce GHG emissions. The Mobility Master Plan supports the CAP by providing a roadmap to increase travel by walking/rolling, biking, and taking transit. The Mobility Master Plan also works together with long-range planning policies found in the General Plan and Community Plans that encourage new development in places where people are most likely to drive less, such as areas located in proximity to transit. Specifically, the Mobility Master Plan focuses on promoting safety through closing gaps in the multimodal transportation network, supporting the equitable distribution of mobility investments to move everyone better especially in areas with the greatest needs, and removing barriers that communities face in their daily mobility choices.

The Mobility Master Plan lays the groundwork for prioritizing much needed mobility projects to be implemented throughout the City. It not only creates new processes and tools — using input from community members and data on local and regional connectivity, priorities, and infrastructure — but also creates actionable steps for the City to take. These steps include recommending projects and programs that improve and promote the use of pedestrian and bicycle facilities, as well as increase efficiency and connections to transit. Overall, the Plan provides a necessary coordinated approach to transportation infrastructure development and a prioritization process for investments in accordance with citywide sustainability, equity, land use, and mobility policies.



#### WHY IS THIS FIRST ITERATION OF THE MOBILITY MASTER PLAN UNIQUE?

This first iteration of the Mobility Master Plan was developed to provide the initial comprehensive, strategic mobility planning framework that would serve as a helpful resource for City staff and the public moving forward. With that in mind, emphasis was placed on outlining the context and roles of the Plan within the overall City planning and project development structure, as well as connecting the Plan to other adjacent policies and strategies that strive to meet overall City goals. This particular Plan brings together mobility ideas, needs, and a focused subset of unbuilt projects and recommendations from previous planning efforts in order to establish processes related to consolidating mobility information and strategically implementing improvements that would eventually be applied citywide.

Key deliverables of this Plan include:

- » A policy framework connected with the General Plan and enhanced to provide actionable objectives related to mobility solutions.
- » A menu of programs that can optimize investments in capital infrastructure projects and provide additional mobility solutions in the form of incentives, public-private partnerships, and services to address various aspects of an individual's mobility needs.
- » A pathway to implementing mobility projects by prioritizing projects in areas with the greatest needs and with solutions that are most impactful to the traveling public.
- » A structure to articulate implementation actions that can be tracked over time and a process to monitor system performance as investments are made to improve the mobility system.

This Plan also has been developed to serve as a template for future Mobility Master Plan iterations. Overall, the intent of the Mobility Master Plan is to be dynamic in that it will be updated every four years in order to align with San Diego's evolving mobility system, to capture and build upon separate plans and improvements taking place, and to take advantage of changes in technology and emerging strategies.

## WHAT IS THE DIFFERENCE BETWEEN TRANSPORTATION AND MOBILITY?

Transportation and mobility are distinct yet interconnected concepts. Both terms apply to everyone and all their modes, including people who walk, people who use wheelchairs or other assistive devices, people who bike, people who use shared micromobility devices or transit, and people who drive vehicles. Transportation primarily refers to the physical movement or process of moving people or goods from one place to another. Transportation typically focuses on the physical infrastructure (e.g., roads, railways, airports, ports) and the logistics to facilitate the movement of people and goods. Transportation networks play a crucial role in supporting mobility by providing the means for people and goods to reach their desired destinations.

Mobility is different from transportation in that it goes beyond the act of moving something or someone. Mobility is a broader and more holistic concept that refers to the ability of individuals or goods to move or be moved within a particular area or across regions, as well as covers the overall ease and efficiency of their movement. Mobility involves having access to quality transportation options that you can count on to get you where you need to go. Transportation is one of the key components of mobility, but the scope of mobility systems extend to encompass non-transportation aspects, such as digital connectivity, inclusivity, and the design of cities and spaces, all aimed at facilitating seamless movement and access to opportunities, services, and resources. Equitable, convenient, and effective mobility choices should support all our community members, businesses, and visitors. As mobility continues to evolve, the Mobility Master Plan leaves room for emerging technologies, patterns, and mobility options of the future.



### 2.1.1 RELATIONSHIP WITH THE GENERAL PLAN

The City's General Plan is a policy document that reflects the vision and values for San Diego and it's communities. It is comprised of 10 elements that provide a comprehensive slate of citywide goals and policies that guide where new homes and jobs should go, how our mobility system should improve, and where and how to invest in communities with new infrastructure and amenities.

Blueprint SD is the City's latest update to the General Plan. It is a proactive effort to refresh the framework for growth and development in an equitable and climate-friendly way. Specifically, Blueprint SD incorporates a land use strategy and complementary transportation policies that encourages the development of homes that are connected to affordable options to walk, bike, and ride transit to go to work, school, or the grocery store. This approach will help meet the needs of our growing City while making progress towards reducing GHG emissions.

Within the General Plan is the Mobility Element that lays out the City's vision of a balanced, well-connected, safe, sustainable, and equitable multimodal mobility system for people to safely, conveniently, and enjoyably move around. It also contains citywide goals and polices that play a crucial role in implementing this vision. Overall, the Mobility Element is part of a policy framework that directs the development and management of our mobility system.

The Mobility Master Plan is a separate comprehensive, strategic document that works with the General Plan in guiding the implementation of mobility improvements, services, and programs that achieve San Diego's climate, equity, and mobility goals. It aims to remove the barriers that people face when utilizing non-auto travel modes, expanding mobility options. As a Plan with implementation strategies and action items, it adds another layer of detail and guidance to help realize the broad citywide vision for mobility initially set forth by the City's General Plan Mobility Element.

Figure 2-1 illustrates how the Mobility Master Plan fits within the overarching General Plan Mobility Element of the City's policy framework. The Plan provides a key function within the City's process for identifying, budgeting, and implementing mobility.



FIGURE 2-1: Mobility Master Plan's Place in San Diego's Policy Framework



### 2.1.2 RELATIONSHIP WITH OTHER CITYWIDE EFFORTS

In addition to the General Plan, the City of San Diego's progress relies on a diverse set of visionary citywide initiatives and plans aimed at enhancing its livability, sustainability, and accessibility for San Diegans. The citywide efforts described below have created a strong foundation of aspirational goals and policies for the Mobility Master Plan to align with, build from, and in turn shape many of its recommendations.

### **CLIMATE ACTION PLAN**

Cars and other fuel-powered vehicles are the largest source of greenhouse gas (GHG) emissions and pollutants impacting San Diego's air quality. These mobile sources of emissions from residents, passenger and freight transportation, employees, and visitors account for greater than 50% of all local GHG emissions. Updated in 2022, the City's Climate Action Plan (CAP) is a landmark plan that envisions a more sustainable San Diego by setting an ambitious citywide goal of net zero GHG emissions by 2035. The CAP serves as a roadmap for the City to move towards this goal through six strategies designed around decarbonization, renewable energy, transportation and land use planning, clean communities, resiliency, and emerging climate actions. Within each strategy, specific targets and implementing actions have been established. The targets and actions specifically relating to transportation are within *Strategy 3: Mobility and Land Use* in the CAP. Table 2-1 outlines key mobility targets for years 2030 and 2035 as described in the CAP.

**TABLE 2-1:** CAP Strategy 3: Mobility and Land Use Targets

| 2030 Target   | 2035 Target  |
|---|--|
| Achieve <b>19% walking</b> and <b>7% cycling</b><br>mode share <b>of a</b> ll San Diego residents'<br>trips | Achieve 25% walking and 10% cycling<br>mode share of all San Diego residents'<br>trips |
| Achieve <b>10% transit</b> mode share of all San Diego residents' trips                                     | Achieve <b>15% transit</b> mode share of all<br>San Diego residents' trips             |
| Achieve <b>4%</b> citywide vehicle miles<br>traveled (VMT) reduction through<br>telecommute by 2030         | Achieve <b>6%</b> citywide VMT reduction through telecommute by 2035                   |
| Install <b>13</b> new roundabouts   | Install <b>20</b> new roundabouts  |
| Achieve 8% VMT (Commuter and non-<br>commuter) reduction per capita   | Achieve <b>15%</b> VMT (Commuter and non-<br>commuter) reduction per capita            |

In this climate crisis every mile and every trip counts - the City's community members and visitors deserve more sustainable mobility options. The Mobility Master Plan identifies programs and promotes projects that encourage walking, biking, and transit, and to transition combustion vehicles to zero emission vehicles. As the Mobility Master Plan works to help guide the change in the way we travel and provide more opportunities to choose climate-friendly modes, it implements the CAP and helps reduce overall citywide vehicular travel (vehicle miles traveled, or VMT) and therefore GHG emissions.

#### **CLIMATE RESILIENT SD**

Climate Resilient SD is the City's comprehensive plan to prepare for, adapt to, and recover from the impacts of a changing climate. At its core, Climate Resilient SD is a plan for the people of San Diego to not only adapt, but to also thrive in the face of extreme heat, wildfires, sea level rise, flooding and drought. The Plan includes a suite of adaptation strategies that reduce climate change-related risk to the City and work towards solutions for more resilient, more sustainable buildings, infrastructure, and environmental systems.

### STRATEGIC PLAN

The Strategic Plan identifies the City's vision, mission, operating principles, and priority areas of focus for 2022 and beyond. The Plan outlines key outcomes, strategies, and performance measures and organizes them according to the following five priority areas of focus: Create Homes for All of Us, Protect and Enrich Every Neighborhood, Advance Mobility and Infrastructure, Champion Sustainability, and Foster Regional Prosperity. Overall, the Strategic Plan guides the work of City leaders and employees to deliver what San Diego and its community members need to thrive.

Aligned with the Strategic Plan's focus on the advancement of transportation infrastructure and mobility options, the Mobility Master Plan serves as a tool to assess and prioritize multimodal investments and actions that help progress strategies and realize expected results related to infrastructure, safety, equity, accessibility, performance, and mobility options.

### VISION ZERO STRATEGIC PLAN (2020-2025)

The City has committed to the Vision Zero goal of eliminating all traffic-related fatalities and severe injuries. The Vision Zero Strategic Plan lays out a course of purposeful actions to help achieve the Vision Zero goal along with other considerations to help San Diegans move around safely. Safe travel is a top priority for the City. The City can improve road safety for all users, especially the most vulnerable, through the application of engineering solutions that mitigate concerns related to traffic speeds, conflicts between different modes, and street quality. This Strategic Plan lays out a framework for years 2020-2025 and will be updated as the City makes progress toward the Vision Zero goal.

The commitment to safety and furthering Vision Zero initiatives permeates throughout the Mobility Master Plan through goals, objectives, policies, programs, actions, as well as its data-driven methodology for prioritizing projects.

#### **MOBILITY ACTION PLAN**

In 2019, the Mobility Action Plan (MAP) was developed as a step towards establishing a strategic vision and framework to address the changing mobility needs of San Diegans given climate change, emerging technologies, and increased awareness for equity. This Plan summarized existing mobility policies and programs and outlined initial priorities and actions for the City to deliver a greater range of mobility services and options. The MAP set out associated goals, some of which have since been initiated, such as creating a City of San Diego Mobility Department (now paired with Sustainability) to work across departments and with other agencies to facilitate the delivery of safe and convenient mobility options, and to be the champion for mobility innovation and implementation in the City.

As a follow-up to the MAP, the Mobility Master Plan builds off the MAP's vision, framework, goals, and actions to create new processes related to comprehensive mobility planning for the City, to develop a methodology for prioritizing mobility projects in areas with the greatest mobility needs, and to outline near-term and long-term mobility initiatives.

# 2.2 LOCAL MOBILITY CHALLENGES

As the City plans to meet the evolving mobility needs, several challenges will drive the local mobility environment going forward. Safety, population growth and housing, climate change, resiliency, equity, affordability, and inter-agency coordination are key challenges this Plan helps the City address as they intersect with mobility.



### 2.2.1 INCREASED VULNERABILITY

Safety is the backbone of all transportation networks; ensuring all users are and feel as safe as possible when using any mode is imperative to creating real mobility options for all. As transportation becomes ever more multimodal and auto trips are shifted to other more vulnerable modes such as walking, rolling, or bicycling, the potential for conflicts and collisions could increase. San Diego has recognized that there is no acceptable level of loss of life when traveling around the City and has joined other cities throughout the country to be a Vision Zero City. This commitment affirms that San Diego is dedicated to making systemwide changes that facilitate eliminating traffic fatalities and severe injuries. The Mobility Master Plan is safety-focused and sets forth projects that help the City reach its Vision Zero goal.

## 2.2.2 POPULATION GROWTH AND HOUSING

In addition to the homes already needed to accommodate San Diego's existing population, the City will continue to grow. Additional growth plus an aging population with increased disabilities requires investments in transportation infrastructure to ensure that people can safely and enjoyably move around, in ways that result in improved air quality and quality of life. In accordance with the City's General Plan and CAP, most new growth is anticipated to occur in urban areas located near transit. This planned land use strategy will need to be supported by effective, timely construction of quality infrastructure, especially first and last-mile connections to transit, in the areas that would serve the most people and would be most used. In addition to implementing supportive multimodal facilities by the time of need, the City will also need to balance maintaining targeted service levels across transportation assets already in place to fulfill the needs of all users. Overall, thoughtful and complementary land use and transportation planning is necessary to support growth.



### 2.2.3 CLIMATE CHANGE AND RESILIENCY

Recognizing that climate change will continue to impact San Diego at everincreasing scales unless deliberate and targeted mitigation actions are taken, the City's CAP sets the following 2035 non-auto mode share targets for resident trips: 25% walking, 10% cycling, and 15% transit. Similarly, adaptation is necessary to shape a San Diego that is resilient in the face of climate change's impacts. For example, the transportation network and associated infrastructure must continue to function under threats from rising sea levels, flooding, heat, and other changing climate conditions. This may involve elevating a coastal roadway to accommodate rising sea levels, utilizing erosion control treatments to protect roadway facilities against damage during extreme storm events, and provision of additional shade structures or trees at transit stations to protect riders from the impacts of extreme heat.







2.2.4 EQUITY

Historically, not all communities in San Diego have had access to the same breadth or quality of mobility choices. Due to past investment practices, some communities have not received the multimodal infrastructure and resources that their community members need to access opportunities. Equity comes into play, in such cases, as historically underserved communities are prone to limited mobility options which could also lead to social and economic inequities. Providing safe, convenient, and affordable multimodal mobility options is essential to uplifting all communities and connecting community members to where they want to go. The Mobility Master Plan recognizes the importance of prioritizing mobility investments in areas with the greatest need and provides a path to ensuring equitable mobility choices among all communities.

### 2.2.5 AFFORDABILITY

The high costs of homes and transportation make affordability a key challenge to live in San Diego. Housing and transportation expenditures together account for over half of San Diegans' annual incomes. Rising fuel prices, maintenance expenses, and public transportation fare costs have made it difficult for individuals and families to meet their mobility needs without straining their budgets. Moreover, the transition towards sustainable transportation alternatives, such as electric vehicles and bikes, can be costly upfront, even if they offer long-term savings. Affordability can be addressed through increased investments in multiple reliable cost and time competitive mobility choices, and through policies. For example, parking reform policies that unbundle parking from housing costs in certain areas of the City that are more walkable, bikeable, and transit accessible promotes cost savings for those that opt to not own a car. The Mobility Master Plan works to help diversify San Diego's transportation environment and identify innovative ways to make multiple mobility choices cost-effective, attractive, and convenient.

### 2.2.6 INTER-AGENCY COORDINATION

There are many agencies who operate, maintain, and plan different transportation resources throughout the San Diego region. Agencies such as the California Department of Transportation (Caltrans), Metropolitan Transit System (MTS), North County Transit District (NCTD), and the San Diego Association of Governments (SANDAG) all actively contribute to the City's transportation network. These agencies, along with mobility technology and services from private companies, have highlighted interjurisdictional challenges and opportunities. Guaranteeing all agencies coordinate effectively and operate with aligned goals and priorities will ensure the City's mobility network is seamless and connected. The Mobility Master Plan is founded on conversations with all stakeholder transportation agencies and accounts for their diverse needs.



# 2.3 BENEFITS TO IMPROVED MOBILITY

Mobility permeates just about every aspect of life in San Diego. The way that we move around affects almost everything we do, how we do it, when we do it, and where we do it. Improving mobility by providing more choice, increasing access, improving facilities, and enhancing safety has tangible positive impacts on San Diegans' lives.

One of the most impactful benefits of improved mobility is an enhanced sense of safety. Mobility projects that recognize and design for the most vulnerable people are critical in creating a safer transportation network. For example, implementing separated bicycle lanes or cycle tracks featuring physical barriers like raised curbs or rows of bollards in their design effectively reduces the incidence of collisions between bicyclists and motorists, consequently minimizing the risk of injuries. Proactively focusing on the safety of people walking, rolling, and biking using mobility enhancements, such as Complete Street elements and traffic calming measures, can significantly reduce traffic-related fatalities, further contributing to a safer overall transportation network. Application of this safe systems approach citywide, where design features slow and separate conflicting paths so the consequence of a collision is not severe injury or death, can lead to fewer potential conflicts throughout the City and result in safer, better neighborhoods for everyone.

When mobility is equitably improved, those who have historically faced mobility challenges are able to get around with more ease and efficiency. When trips are easier and more practical to make, people's unique individual needs can be met. The City continues to enhance accessibility for people with disabilities, making trips more comfortable and practical through efforts such as maintaing sidewalks, adding curb ramps with detectable warnings, and holistically implementing ADA standards across the City.

Meaningful mobility improvements focus not just on one mode, but multiple modes. One of San Diego's greatest assets for mobility is its year-round temperate climate. The City has ideal weather for multimodal transportation and a culture that is receptive to modes that place the user outdoors for all or part of their trip, such as walking, rolling,



54th Street and Chollas Parkway mobility improvements

bicycling, using micromobility (e.g., scooters), and taking public transit. Improving facilities that these modes use makes them safer, more appealing, more accessible, and more viable ways of getting around. In this way, improving these modes gives people more choices about how they will get around so that they can rely less on private automobiles for all trips.

Furthermore, using these more active modes of transportation can contribute to positive public health outcomes as users spend more time moving and being outdoors. A 2016 report prepared for the California Office of Health Equity concluded that increasing the active transportation of the typical Californian to 21.4 minutes per day could result in 8,057 fewer annual deaths and 142,101 fewer years of life lost and disability.<sup>1</sup> Designing and retrofitting the City's mobility network to be active transportation-friendly is an effective way to promote and encourage healthy lifestyles – both physical and mental. Physical activity and spending time outdoors can improve mental health. Enhancing multimodal transportation facilities thus creates a positive cycle of improved physical and mental health: better facilities contribute to increased safety, reduced conflicts with other modes, and more pleasant user experiences, which can encourage more multimodal transportation use, which in turn can contribute to better health of the user.

Improved active transportation facilities can also have positive economic benefits. When there are numerous viable ways to get to a commercial destination, it becomes easier for patrons to frequent that destination. The 2022 Metro Active Transportation Return on Investment Study, led by Portland State University, studied the impact of 12 active transportation projects in and around the Portland, Oregon area and concluded that there were measurable increases in businesses activity at most of the project locations.<sup>2</sup> Making it easier for people to travel to a destination generally makes it more likely they will go there, which is particularly beneficial for San Diego's small businesses that rely on in- person patronage. As such, improving multimodal transportation facilities in commercial areas can have economic benefits for the City's small businesses.

Improving mobility in the City affects more than the region's people; it affects the environment. Improving mobility by investing in alternative modes of transportation can reduce the number of private vehicle trips, thus reducing the associated environmental impacts such as GHG emissions and local air pollution. Shifting trips away from private and other fuel-powered vehicles and towards alternative, sustainable modes can positively impact San Diego's environment.



<sup>1</sup> Increasing Walking, Cycling, and Transit: Improving Californians' Health, Saving Costs, and Reducing Greenhouse Gases (2016). https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/Maizlish-2016-Increasing-Walking-Cycling-Transit-Technical-Report-rev8-17-ADA.pdf

<sup>2</sup> Metro Active Transportation Return on Investments Study (2022). https://www.oregonmetro.gov/sites/default/files/2022/05/15/Active-Transportation-Return-on-Investment-study-2022.pdf

# 2.4 MOBILITY MASTER PLAN PROCESS

In 2019, the City completed the Mobility Action Plan (MAP) to understand the City's state of mobility planning, take inventory of City mobility policies in place, and to outline initial steps to implement the then 2015 CAP. As a next step, the Mobility Master Plan builds off the MAP vision framework and provides a centralized hub for all mobility related efforts, as well as provides clarification and refinement on the project implementation and prioritization process.

The Mobility Master Plan process began in December 2021, finding input and momentum from the CAP update's public outreach and engagement work. As shown in Figure 2-2, City departments and public agencies (i.e., SANDAG and MTS) were surveyed to explore challenges and aspirations for implementing mobility projects in San Diego in alignment with the CAP. A case study analysis of mobility master plans from peer jurisdictions across the country was also performed to research and compare different approaches. Extensive engagement with City departments and regional agencies was also conducted to understand the successes and common opportunities and barriers faced when implementing mobility-related programs and projects. This foundational exploratory work was then synthesized in the development of a preliminary outline. for this first Mobility Master Plan. The final stage in the preliminary development of the Plan was a comprehensive literature review in which existing City plans, policies, and regulations were analyzed, with particular focus on identification of deficiencies and areas that may be appropriate for improvement. After this preliminary research and foundational work was completed, work began on prioritizing mobility projects and identifying programs and actions.

The Mobility Master Plan supports a continuum of ongoing engagement that is mission-based rather than project-based. This Plan mostly builds off the engagement work of the CAP, which included an extensive outreach process that centered around partnering with Community-Based Organizations that focus their work in underserved communities. Throughout this Plan's development, action-oriented engagement was conducted with community members focused in historically disadvantaged areas and Master Plan Focus Areas, which have high propensities to increase active, sustainable mobility.

In this first version of the Mobility Master Plan, information gathered during engagement activities was primarily used to verify mobility goals and objectives such that community. needs and expectations are aligned with mobility initiatives. This Plan is intended to be a living document that will be regularly be updated as the mobility needs of the City evolve, and as aspects of the Plan are implemented and monitored. As the Plan is refined in the future, additional community and stakeholder engagement will be performed. Information gathered at this stage serves as the foundational repository that will inform future project and program efforts.

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FIGURE 2-2: Mobility Master Plan Process



**Draft First** Mobility Master Plan

Adopt First Mobility Master Plan

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Introduction

and public agency engagement

**Mobility Master Plan outline** 

START December 2021

> Mobility projects, programs, and actions identification





Mobility projects prioritization



and Monitoring

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Future Mobility Master Plan iterations Update every 4 years

