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Memorandum

Date: June 20, 2017

To: Transportation Authority Board

From: Jeff Hobson – Deputy Director for Planning

Subject: 07/11/17 Board Meeting: Adoption of the San Francisco Transportation Demand

Management Plan for 2016-2020

RECOMMENDATION ☐ Information ☒ Action	☐ Fund Allocation
Adopt the San Francisco Transportation Demand Management (TDM)	☐ Fund Programming
Plan for 2016-2020	☐ Policy/Legislation
	☑ Plan/Study
SUMMARY	☐ Capital Project
This memo summarizes the purpose of the 2016-2020 San Francisco	Oversight/Delivery
TDM Plan, next steps for TDM projects, and previous expenditures	☐ Budget/Finance
related to this planning effort. The TDM Plan is a joint effort between	☐ Contract/Agreement
the Transportation Authority, San Francisco Municipal Transportation	☐ Procurement
Agency (SFMTA), Department of the Environment (SFE), and the	☐ Other:
Planning Department. The Plan, which follows the Transportation	
Authority-supported 2014 TDM Strategy will be considered by each	
partner agency's board and represents the next step in collaborative	
TDM planning in San Francisco.	

DISCUSSION

Background.

In 2014 the Transportation Authority, SFMTA, SFE and Planning Department supported the Interagency TDM Strategy as part of the TDM Partnership Project. The TDM Strategy identifies shared goals and priority activities to deliver TDM programs in a coordinated manner throughout San Francisco. Together these four agencies will work collaboratively to achieve San Francisco's Transit First policy and adopted Climate Action Strategy. The 2016-2020 TDM Plan is the next step towards this vision.

A successful TDM plan will reduce the cost of living for San Francisco residents by reducing reliance on driving in and to the city. Moreover, by reducing solo-driving trips and increasing mobility through more sustainable modes, air quality will also increase. Lastly, a successful TDM plan will complement larger infrastructure improvements by making our transportation system more efficient and sustainable.

2016-2020 TDM Plan.

The TDM Plan is based on the 2014 Strategy and identifies policies, projects and programs San Francisco can implement to accomplish its TDM goals. The TDM Plan also identifies general roles for specific TDM strategies and assigns accountability to certain agencies. Finally, through inter-agency

collaboration, we will evaluate the effectiveness of the TDM plan based on changes in single-occupancy vehicle trips, vehicle miles traveled, and greenhouse gas emissions.

The four agencies have formed a TDM Partners Working Group that meets quarterly. During these meetings, agencies will provide each other with updates on program and policy activities. The meetings will also serve as a forum to collaborate, and propose new TDM ideas and strategies.

TDM Plan Vision and Goals.

The Plan's vision is to encourage transit, walking, biking and shared rides as the preferred means of travel through San Francisco by reducing dependency on single occupancy trips.

Goal 1: Make it easy for residents, employees and visitors to travel by transit, foot, bike, or shared rides when traveling to, from, and within San Francisco.

Goal 2: Institutionalize a culture in San Francisco that embraces walking, bicycling, taking transit and sharing rides.

Goal 3: Collaborate on a wide variety of initiatives to leverage the impact of TDM.

Goal 4: Ensure and prioritize effective programs through monitoring and evaluation.

Feedback.

The SFMTA developed the TDM Plan internally with support from agency stakeholders and partners. We request feedback from the Citizens Advisory Committee and Board in identifying if any major strategies are missing or that we should consider.

Additional TDM Projects and Activities.

The TDM strategy projects, programs and initiatives are funded by Prop K funds designated for Citywide TDM programs in the current Prop K 5-Year Prioritization Program. The Citywide TDM programs include Citywide TDM Marketing, TDM Program Evaluation, Commuter Benefits Ordinance Employer Outreach, and Comprehensive Residential and Employee TDM Program.

Other TDM-related activities include the following:

- BART Perks Test Program
- Bayview Moves Pilot Program
- Freeway Corridor Management Study
- Late Night Transportation Plan
- Lombard Crooked Street Study
- Transportation Sustainability Program
- Treasure Island Mobility Management Agency Project

FINANCIAL IMPACT

The recommended action would not have an impact on the proposed Fiscal Year 2017/18 budget.

CAC POSITION

The CAC will consider this item at its June 28, 2017 meeting.

SUPPLEMENTAL MATERIALS

Attachment 1 – Transportation Demand Management Plan 2016-2020

Attachment 2 – Transportation Demand Management Partnership Project Fact Sheet

Attachment 1

SAN FRANCISCO TDM PLAN 2016-2020

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EXECUTIVE SUMMARY

San Francisco is an attractive place to live, work and play because it offers so much to such a wide variety of people. As a vibrant, busy city, San Francisco faces challenges with how to accommodate expected growth within the constraints of a world-class location that has already developed most of its available land. As the city increases in intensity, transportation and land use planners are looking to make the city work better for the people who are here, as well as those who will be here in the future. Due to the costs of building major infrastructure, San Francisco is looking to do more with our existing system, while focusing on key important projects like the Central Subway and Van Ness BRT. In order to succeed, an ambitious transportation demand management (TDM) program will be needed to meet the challenge of maintaining mobility and access within the city.

This Transportation Demand Management Plan, based on the 2014 Interagency TDM Strategy, outlines the policies, projects, and programs the City and County of San Francisco will employ as part of a comprehensive effort to ensure access and mobility for all. This work will mainly engage the efforts of four key partners: San Francisco Municipal Transportation Agency (SFMTA), San Francisco County Transportation Authority (SFCTA), SF Planning and San Francisco Department of the Environment.

A successful TDM program will make San Francisco a better place to live. If people can get as good or better access without having to drive for as many of their trips, we'll have less air pollution that will lead to better health and safer streets for San Francisco residents and the people who work in and visit the city. Further, TDM is a key component of the city's Climate Action Strategy in addressing carbon emissions and global warming.

A successful TDM program can make San Francisco a more affordable place as well. For most families, transportation is the second-largest part of the household budget, after housing. Whether a household owns one or more cars is the biggest factor in transportation costs. By supporting walking, bicycling and transit, as well as shared-use vehicles when needed, the TDM Plan can support significantly lowering transportation costs. The plan recognizes that many low income communities need better information about their transportation options. The plan includes strategies meant to ensure that a lack of internet access or technology, non-English fluency and other factors such as lack of access to credit/banking do not limit residents' ability to travel around the city.

TDM program success

In 1973, San Francisco passed a "Transit First" policy. Since then, the city has continued to prioritize public transportation, walking and bicycling when determining how to best use limited street space and public thoroughfares. Voters have repeatedly confirmed that integrated approach that emphasizes sustainable modes. Most recently in 2014, San Francisco voters reaffirmed the city's transportation planning direction to support transportation options that are more environmentally friendly.

A successful TDM program will help create and foster an environment where public transportation, walking, biking and shared rides are the preferred means of travel for most trips in San Francisco. As the city continues to grow and evolve, we know we will not be able to build our way out of congestion. A successful TDM program, and the resulting change in how we use the transportation system, will play a key role in making our transportation system work.

Consistent with the Interagency TDM Strategy, we will evaluate the effectiveness of the TDM plan by tracking changes in solo driving, measured by single occupancy vehicle (SOV) trips. We will also report on changes in transportation behavior demonstrated by other key metrics such as total driving (vehicle miles travelled, or VMT) and greenhouse gas emissions (GHGs). The full report includes a discussion of how we define program success and measure effectiveness, including a detailed methodology in Appendix B: Measuring Success.

VISION, MISSION AND GOALS

Program Vision

It is easy for everyone to get around by transit, walking, biking and shared rides as the preferred means of travel and that they are accessible to all users.

Program Mission

Reduce dependency on single occupancy vehicles (SOV) use in support of a vibrant and livable SF through the provision of TDM programs, services and policies to SF residents, employees, and visitors.

The TDM Plan's goals are:

- **TDM GOAL 1:** Make it easy for SF residents, employees, and visitors to travel by transit, foot, bike, or shared rides when traveling to, from, and within San Francisco.
- **TDM GOAL 2:** Institutionalize a culture in San Francisco that embraces walking, bicycling, taking transit and sharing rides.
- **TDM GOAL 3:** Collaborate on a wide variety of initiatives to leverage the impact of TDM.
- **TDM GOAL 4:** Ensure and prioritize effective programs through monitoring and evaluation.

The full report includes specific objectives for each goal. The full report also describes the key overall responsibilities of the four main agencies (SFMTA, SFCTA, SF Planning, & SF Environment), other city and external agencies, and the role of private entities.

In support of these, the resulting program will focus its efforts in three key areas:

- Land-use development programs and policies: Developing and implementing policies
 that shape future trips associated with new development and major changes of use;
 includes monitoring and evaluation of compliance with approved TDM measures.
- Street management programs and policies: Developing and implementing policies and programs that maximize efficient use of street space and support the benefits of and minimize the negative impacts of high occupancy vehicles (e.g. private shuttles, tour buses, car share and ride hail services)
- Customer focused operational campaigns and programs: Providing information and services to visitors, residents, employees/employers, etc. that promote and encourage walking, biking, transit use and shared vehicles and rides.

TDM PROGRAM STRATEGIES AND ACTIONS

From these principles, this plan outlines strategies and actions that reinforce desired travel behavior changes through multiple channels, including policies and outreach aimed at employers, employees, residents, visitors, schools, and other audiences. The strategies are designed to be both aspirational and attainable, and call for action in both the short- and long-term. They build toward our goals; capitalize on our strengths; and consider opportunities for citywide and intra-agency collaboration.

- **Strategy 1:** Develop Program Infrastructure for public engagement
- **Strategy 2:** Propose and advocate for strong policies that reduce SOV trips into, through and within San Francisco
- **Strategy 3:** Advocate for and support programs, tools and services that enhance and improve coordination of regional transportation
- **Strategy 4:** Monitor, evaluate and enforce development agreements
- **Strategy 5:** Develop materials that provide information about services, products and programs
- **Strategy 6:** Develop visitor-oriented and event related TDM services to facilitate and encourage visitors' understanding and use of sustainable options when in San Francisco.
- **Strategy 7:** Develop programs for employer and residential communities to ensure residents/ employees are fully aware of their transportation options.
- **Strategy 8:** Strengthen partnership with San Francisco schools to enhance school and family focused programming
- **Strategy 9:** Incubate innovative policies and programs and explore their feasibility to further TDM goals.
- **Strategy 10:** Facilitate transportation equity through targeted provision of education and encouragement for minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share
- **Strategy 11:** Create/Formalize active transportation (walking and bicycling) encouragement programs

Strategy 12: Research and evaluate TDM strategies to develop a stronger, more effective program.

The full report includes significant additional detail on each strategy, including a list of key actions and which agencies will play lead and supporting roles to pursue them. The report distinguishes between near-term and longer-term actions and sets out a protocol by which agencies collaborate to move actions forward.

Formalizing a new TDM Partners Working Group

A key way to build on the momentum of this report is to convene a new TDM Partners Working Group, consisting of the four identified TDM agencies, on a quarterly basis. At this meeting, participants will provide updates on program and policy development activities that are ongoing, under consideration, or of interest to start. When successful, this meeting will provide a structure for TDM Partners to raise new ideas, propose supportive projects.

FUNDING

The City's current expenditures on TDM related activities are about \$2.5 million a year and while there has been some success, in order to meet the transportation goals for San Francisco, we will need to do a lot more. Many of the actions listed in this plan are unfunded and cannot be implemented without additional resources. However, the hope is by reinstituting the TDM Partners Working Group and identifying future actions, individual agencies can set aside funding in their future work plans for these actions.

INTRODUCTION AND OVERVIEW

People travel to and from their jobs, their homes, their places of worship daily on San Francisco's streets; they travel to the city's impressive cultural attractions, stopping to eat at the Ferry building or to take a ride on an historic cable car. They go to school, business meetings and baseball games; meet friends for dinner or a hike. And, they reach their destinations by walking, bicycling, using transit or riding in a car.

San Francisco is an attractive place to live, work and play because it offers so much to such a wide variety of people. As such, maintaining mobility - the ability for people to get where they are going in a reasonable amount of time - continues to be a challenge that must be faced head on. With growth and development, this challenge will become even greater in future years. To ensure that people can safely and efficiently reach their destinations, the city develops and implements an ongoing comprehensive, cohesive Transportation Demand Management (TDM) work program. The program aims to support travel by transit, bicycling, walking, and shared rides and reduce the need for single-occupancy vehicle (SOV) travel to, from, and within the city. It also complements our longer-term capital expansion strategy with more affordable, near-term 'non-infrastructure' strategies to help meet our safety, equity and environmental goals.

This Transportation Demand Management Plan outlines the policies, projects, and programs the City and County of San Francisco will employ as part of a comprehensive effort to ensure access and mobility for all. Based on the work of the 2014 Interagency TDM Strategy¹ this document describes the City's near-term work program to implement the activities in 3 main areas:

- Land use development programs and policies
- Street management programs and policies that address existing development
- Customer focused operational campaigns and programs.

Although the plan focuses on describing work led by San Francisco city and county agencies, many other organizations play an important role in TDM including employers, developers, Transportation Management Associations, the hospitality industry, transportation advocacy organizations, community-based organizations, regional transportation and air quality agencies, BART, Caltrain, and many others.

When successful, San Francisco will be even more livable. A reduction in the demand for vehicle travel and lessening air pollution, coupled with enhanced accessibility and improved health will support increases in well-being of San Francisco residents and the people who work in and visit the city. Reduced reliance on cars can also mean greater affordability for many.

¹ The Interagency TDM Strategy was created by the San Francisco Municipal Transportation Agency, the San Francisco Department of Environment, the San Francisco County Transportation Authority, and the San Francisco Planning Department in 2014. It is available upon request.

The TDM Plan outlines a framework for how the city will ensure that the messages and programs that are developed employ a unified voice and are based on the same vision, objectives and data and are supported by a long-term commitment from the city.

Taken together, TDM programs can be a powerful tool to shift travel behavior. As San Francisco endeavors to develop a world-class TDM program that will efficiently and effectivity reduce SOV use in San Francisco, the strategies outlined within this document put San Francisco on the path to achieving this aim.

WHAT IS TDM?

Transportation Demand Management encompasses a set of low-cost, near-term tools and strategies that encourage use of sustainable transportation options while improving the efficiency of the transportation system, and reducing crowding on mass transit. TDM constitutes a layer of information, programs, and policies that makes the available options for sustainable transportation choices more appealing and easy to use. Done well, TDM elevates residents', workers', and visitors' knowledge of and experience with the variety of transportation options available, builds a constituency in support of making the transportation system more sustainable, and reinforces wider transportation goals in the city and region.

TDM includes the following key functions:

- Provides easily accessible information on sustainable travel choices through effective user interfaces;
- Encourages and incentivizes desired mode shift from and reduction of single occupant vehicle trips;
- Improves the efficiency of the transportation system by managing the demand for transportation facilities and services;
- Affects and complements mixed-use compact land use; and,
- Employs market pricing to remove the hidden costs of the use of single occupant vehicles and barriers to active and collective transportation modes (e.g., through parking management, vehicle circulation, off-board fare programs, user amenities).

Demand management in San Francisco

Transportation has a significant impact on individual quality of life. The time spent commuting is often time that could be spent with family and friends or on important, but discretionary activities. Most people care most about how quickly they can travel from point A to point B and/or the experience of the travel. Convenience, cost, experience, and travel time are major factors in how people will choose to get around.

People who travel in San Francisco know that the city's roads, bridges and transit lines can be congested and sometimes struggle to operate effectively when they are over capacity. The city is in the midst of another era of high population growth and development. The city's population is expected to grow by 280,000 people and add 100,000 new households by 2040. Additionally,

San Francisco is the dominant employment center in the Bay Area and is projected to add as many as 190,000 jobs by 2040.

As one of the nation's top tourist destinations, visitors to San Francisco bring many economic and cultural benefits. They also create additional demand on the city's transportation network. In 2013, San Francisco hosted 16.9 million visitors, including Bay Area visitors driving in for the day and those staying outside the city but whose primary destination was San Francisco. A 2010 survey found that most visitors – nearly half – used a personal or rental car to travel the city. These millions of annual car trips can have major impacts on the operation of the city's streets and neighborhoods, as well as air quality, quality of life, economic viability, public health and other significant impacts.

Affordability and Equity

Evidence continues to accrue that affordability is a function of not only housing costs but also transportation costs. One way to support the city's affordability goals is to support low-cost and no-cost transportation options and ensure that people who live in San Francisco are positioned to be able to use them. In supporting walking, bicycling and transit, as well as shared-use vehicles when needed, the TDM Plan supports lowering transportation costs. This plan recognizes that many low income communities are in need of better information regarding transportation options. The strategy works to ensure that a lack of internet access or technology, non-English fluency and other factors such as lack of access to credit/banking do not limit residents' decisions on how to travel around the city.

TDM program success

Our current infrastructure and operations simply can't sustain more growth in use without increasing the time it takes to travel through the city, unless people opt to change how they get around in San Francisco. A successful city TDM program will support a reduction in the average travel time for people in San Francisco, supporting the city in jump-starting this savings as it works on longer term capital projects and supporting their success.

A successful TDM program will serve as a key component in creating and fostering an environment where public transportation, walking, biking and shared rides are the preferred means of travel for most trips in San Francisco. As the city continues to grow, our constrained rights of way will put limits on our ability to entirely build our way into reduced travel time. TDM, and the resulting community-wide transportation behavior change, will play an important role in achieving this goal.

San Francisco chose to prioritize public transportation and walking and bicycling through the passage of the city's Transit First policy in 1973, and continues to make decisions in support of transit, walking and biking when determining how to best use limited street space and public thoroughfares. Since that time, voters have continued to support an integrated approach that emphasizes sustainable modes. Most recently in 2014, San Francisco voters reaffirmed their support for sustainable mode use by voting to continue to support the city's transportation planning direction.

MEASURING EFFECTIVENESS

Consistent with the Interagency TDM Strategy, the effectiveness of the TDM plan will be determined by tracking changes in single occupancy vehicle (SOV) trips.

In order to reduce or maintain travel times within San Francisco's current rights-of-way, people may need to shift when they travel, where they travel, and most importantly, how they travel, and move away from single occupant vehicles to more sustainable modes of travel such as carpooling, walking, bicycling, and mass transit.

Additionally, program evaluation should report on changes in transportation behavior as it relates to other transportation related metrics, including vehicle miles travelled (VMT) and greenhouse gas emissions.

The TDM program's focus on SOV to evaluate its success is based in the following:

- Successful TDM efforts result in reduced SOV trips and also increases in walking, bicycling, transit use and shared rides. As there are many factors that could explain an increase in these modes (for example, enhanced MUNI service, a new bike lane, walking challenge, etc.) it would be challenging to determine the TDM program's proportional contribution to the change.
- A TDM program's success is the sum of its efforts and should be evaluated as a whole.
 While individual programs should be evaluated, success in reducing SOV use will come as a result of the impacts of many different programs and policies combined.

Reporting on the resulting reductions in VMT and GHG's will be calculated from the trip reduction calculations. A detailed explanation of the methodology on how TDM's impact on SOV trips is available in Appendix B: Measuring Success.

Individual TDM offerings (e.g. business outreach, bicycle education classes, etc.) will also be evaluated regularly to assess how they are meeting their goals, which may include additional project-level goals. This will ensure that each tool is supporting the TDM Program as a whole in reaching its goals. This will also enable modifications to the program mix that will ensure that the program is capitalizing on changes to the transportation, land-use or demographic landscape.

VISION, MISSION, GOALS AND PERFORMANCE MEASURES

The TDM program will be guided by the following Vision and Mission:

Program Vision

It is easy for everyone to get around by transit, walking, biking and shared rides as the preferred means of travel and that they are accessible to all users.

Program Mission

Reduce dependency on single occupancy vehicles (SOV) use in support of a vibrant and livable SF through the provision of TDM programs, services and policies to SF residents, employees, and visitors.

San Francisco's Transportation Strategic Plan and TDM Program Goals

The SFMTA Strategic Plan identifies goals and objectives that guide decision making and provide the overarching direction of the citywide plan. The SFCTA also discusses TDM as a core policy initiative in its countywide long range plan known as the San Francisco Transportation Plan and other initiatives. San Francisco's TDM strategy goals are described in the 2014 Interagency TDM Strategy². Additionally, the TDM plan supports the goals identified in numerous city policy documents and strategies, including the General Plan, Climate Action Strategy, Vision Zero and the San Francisco Planning Code, among others.

The TDM program goals are:

TDM GOAL 1: Make it easy for SF residents, employees, and visitors to travel by transit, foot, bike, rideshare or carshare when traveling to, from, and within San Francisco.

Objective 1a: Provide high quality TDM programs and services to San Francisco residents, employees, businesses, schools and visitors.

Objective 1b: Ensure that TDM information and services are presented in a culturally sensitive manner and are accessible to and can be obtained by people of all incomes, abilities and ages.

Objective 1c: Develop innovative TDM policies, programs and services.

TDM GOAL 2: Institutionalize a culture in San Francisco that embraces walking, bicycling, taking transit and sharing rides.

Objective 2a: Increase awareness and support of, and comfort with, the use of non-SOV transportation options by residents, employees, employers and visitors.

²

Objective 2b: Remove policy and cultural barriers to the use of transportation options

Objective 2c: Increase awareness of the power of TDM efforts and support of a strong TDM program by government agencies, elected officials and community leaders.

TDM GOAL 3: Collaborate on a wide variety of initiatives to leverage the impact of TDM.

Objective 3a: Work with city and private partners to incorporate TDM into programs and projects across San Francisco as appropriate

Objective 3b: Promote and educate to develop an understanding of the economic, environmental, social and health benefits of TDM and use TDM support city goals in these areas when not in conflict with transportation goals.

Objective 3c: Maximize the use of sustainable transportation options for trips generated by new development

Objective 3d: Collaborate with regional partners

TDM GOAL 4: Ensure and prioritize effective programs through monitoring and evaluation.

Objective 4a: Increase the use of research and evaluation to improve and focus SF's TDM services and to promote the benefits of the services to key stakeholders

Objective 4b: Improve monitoring and begin enforcement of TDM commitments in new developments/institutional plans

CITYWIDE TRANSPORTATION DEMAND MANAGEMENT PROGRAM

In 2014, the city committed to developing a new structure for the city's mobility management offerings. This new structure emphasizes highly coordinated, comprehensive activities to support the city's TDM goals of reducing single occupant vehicle trips. There are four organizations that have a responsibility/accountability for transportation planning and operations. They are: SFMTA, SFCTA, SF Planning and the Department of the Environment.

- SFMTA is responsible for overall management of San Francisco's transportation
 systems, including such roles as ensuring that San Francisco's streets work for all users,
 managing access to curb space, managing public vehicle and bicycle parking, operating
 Muni, overseeing taxi services, and many others. SFMTA is held accountable by the
 public and decision-makers for the smooth functioning of the transportation system and
 therefore has a special responsibility to ensure TDM programs are implemented
 effectively.
- SFCTA is the county congestion management agency, a statutory role that requires biannual performance monitoring and strategic planning and policy development,

- consistent with the agency's long-range countywide transportation plan. SFCTA also funds a wide-range of TDM programs and leads San Francisco's regional managed lanes and variable pricing/incentives work on Treasure Island and with BART; and
- SF Planning shapes the future of San Francisco and the region by: generating an
 extraordinary vision for the General Plan and in neighborhood plans; fostering exemplary
 design through planning controls; improving our surroundings through environmental
 analysis; preserving our unique heritage; encouraging a broad range of housing and a
 diverse job base; and enforcing the Planning Code. SF Planning is responsible for the
 city's development-review and approval related TDM policies, such as the
 Transportation Sustainability Program and related TDM ordinance; and
- The San Francisco Department of the Environment has a unique set of official duties as the Delegated County Coordinator for 511 Rideshare, as well as oversight of the San Francisco Commuter Benefits Ordinance, Tenant Bicycle Access in Existing Commercial Building Ordinance and the Emergency Ride Home program.

Additionally, there are agencies/departments that have important policy or programmatic connections to transportation including SFDPH (e.g. Public Health, Equity and Sustainability, Safe Routes to Schools), and SFUSD (e.g. school transportation issues/education). Several regional agencies have a role in TDM including regional transit agencies (BART, Caltrain, AC transit), the Metropolitan Transportation Commission, the Bay Area Air Quality Management District, and others.

Finally, there are numerous private entities and nonprofits who contribute to TDM or deliver transportation services and programs, including large employers, private transportation providers, Transportation Management Agencies, advocates, developers, and others.

The Inter-Agency Strategy for Transportation Demand Management can be referenced for more details on the guiding strategy for program development and some of the programmatic focus points. The TDM Plan commits each partner agency to ensuring that other partners have the opportunity to provide meaningful and impactful input into TDM planning in order to meet the Plan's goals, requirements and needs of each agency's charge.

The TDM program will build upon existing efforts to develop, implement and manage a coordinated Transportation Demand Management program that will make it easy for residents, employees and visitors to use all available transportation options, other than driving alone, to meet their travel needs. This effort will include a suite of programs, services, and communications, based on best practices, linked through an identifiable, well-known brand, and will be reinforced by strong policies that support the reduction of SOV trips into and within San Francisco.

The San Francisco TDM program will be based on three key areas as described in the framework below:

• Land-use development programs and policies: Developing and implementing policies that shape future trips associated with new development and major changes of use; includes monitoring and evaluation of compliance with approved TDM measures.

- Street management programs and policies: Developing and implementing policies and programs that maximize efficient use of street space and support the benefits of and minimize the negative impacts of high occupancy vehicles (e.g. regulated private shuttles, tour buses, car share and ride hail services)
- Customer focused operational campaigns and programs: Providing information and services to visitors, residents, employees/employers, etc. that promote and encourage walking, biking, transit use and shared vehicles and rides.

In pursuit of this larger goal, the TDM program supports programs, policies and services that reduce drive-alone commutes, in addition to increasing transportation choice; reducing household transportation costs, car-related pollution, space, and energy use; improving public health; and transporting people and goods more efficiently by maximizing the efficiency of existing investments. Many of these concepts exist in programs that are not currently considered part of the city's TDM program. The TDM Plan focuses on more formally making the connections between TDM and these broader objectives and ensuring that TDM communications are in-line with the City's transportation priorities and that the City's marketing is consistent with TDM's messaging.

TDM PROGRAM CORE PRINCIPLES

The partner agencies endeavor to create a world-class TDM program that will efficiently and effectivity reduce SOV use in San Francisco. To ensure this outcome, we identified 10 core principles that will guide the policies, programs and plans that will make up the city's comprehensive TDM offerings. These core principles are also a demonstration of the city's commitment to San Francisco residents, visitors and commuters to develop a TDM program that strives to make travel by transit, walking, biking and shared vehicles rides more convenient, cost-effective, and easy.

The San Francisco TDM program will be guided by the following principles:

- 1. All users should have access to information that makes choices clear (including costs).
- 2. People of all ages, income levels, ethnic backgrounds, and abilities should be able to conveniently travel by transit, walking, biking, and/or shared vehicle.
- 3. Use of multiple modes for trips should be easy/clear.
- 4. New developments should ensure that sustainable modes are prioritized as transportation options.
- 5. The city should partner with private sector and community groups to help reduce SOV use.
- 6. All travelers should be treated equally and provided with clear and easy choices.
- 7. Programs should be comprehensive and reinforce desired travel behavior changes through multiple channels and be made available in multiple languages.
- 8. Supportive policies should be a strong component of the program as they are needed to ensure measurable change.

- 9. TDM requirements of existing and new developments should be monitored and enforced.
- 10. Comprehensive, systematic evaluation and reporting on the effectiveness of city TDM programs should be standard, transparent, and inform future work.

Audiences

The city's population and demographics are changing:

San Francisco is expected to continue experiencing population growth over the coming years, including a dynamic demographic shift. While the city's population is expected to grow by 5% by 2020 (Table 1), this population growth will be concentrated in the city's youngest residents—those under 14—and older residents – those 60 years and older (Table 2). Younger and older populations are transitioning away from a car-based lifestyle and seeking transportation (and housing) choices that cater to all ages and abilities. These demographic patterns suggest a need to focus TDM programs on children and families and aging adults, and to ensure that new residents can be supported by sustainable transportation options. It will also continue to be important to consider how the TDM program can help address economic inequality and engage San Francisco's diverse population with culturally sensitive communication.

San Francisco is a dominant employment center

The number of employed residents in San Francisco is also expected to grow between 2015 and 2020. The 7.9% projected increase in employed residents in SF (Table 3) will produce a demand on the transportation system that will need to be considered moving forward. The Association of Bay Area Governments projects that the city will add as many as 190,000 jobs and 100,000 households by 2040.³ It is not only employed San Franciscans who have an impact on San Francisco's transportation system, but also those employed in San Francisco who live in the surrounding region: according to a mode share survey conducted by the SFMTA,⁴ work is the most likely reason for residents of adjacent counties to come into San Francisco. The city should use TDM to help employees make full use of all transportation options including local and regional transit, when designing employee and employer targeted TDM programs, policies and services.

San Francisco is a popular tourist destination

San Francisco's scenic beauty, outdoor activities, vibrant retail and dining cultures and exceptional museums have made the city a favorite of visitors from around the globe. In 2013, San Francisco hosted 16.9 million visitors, including hotel guests, those staying with friends and relatives, those staying in accommodations outside the city but whose primary destination was San Francisco, and regional visitors driving in for the day.⁵ A 2010 survey from the San Francisco Travel Association found that visitors tend to take taxis while in the city (38%), followed by other automobile options, with 35.1% using a personal car and 15% using a rental car. Just over one quarter (28%) of tourists rode the cable cars, while under a quarter rode

 $^{^3\} Plan\ Bay\ Area: http://www.planbayarea.org/pdf/JHCS/May_2012_Jobs_Housing_Connection_Strategy_Main_Report.pdf$

⁴ SFMTA Travel Decision Survey, 2014.

⁵ SF Travel Visitor Industry Statistics: http://www.sftravel.com/san-francisco-visitor-industry-statistics

MUNI trains and/or buses (23%) and rode the F-Line street cars (18%).⁶ An opportunity exists for TDM to play an important role in helping visitors use sustainable modes of transportation more often.

The TDM program has identified a two tier set of audiences for its efforts, these are prioritized in terms of importance for outreach:

Audience Tier 1: Primary traveler audiences: residents, employees, and visitors.

Audience Tier 2: Wholesaler audiences, communications aimed at those charged with passing along information to advance and promote transportation options to their constituents, noted in parenthesis: Employers (employees), property building managers (residents), and business owners (customers/visitors).

The audience is the end user of the effort. In many cases, organizations listed in Tier 2, such as business, may be a conduit to communicating to the Tier 1 audience. In this instance, the business is not an audience, they are a distribution channel. The audience is the employee of the business. Outreach, programs and communications aimed at Tier 2 audiences will tend to be more supportive building interest in collaborations to leverage program outreach, support for policies, and other higher level goals.

Geographies

Areas with service capacity and infrastructure to support easy access to sustainable transportation options should be prioritized:

TDM efforts are predicated on the idea that those traveling have access to infrastructure that provides them the opportunity to reach their destination by transit, bike, foot or shared rides. This TDM plan only encourages shared rides that either support transit trips through last-mile connections or provide rides to multiple travelers in a single vehicle. Improvements and/or modifications to infrastructure are outside the scope of TDM. Nonetheless, it would not be possible to expect shifts in behavior in those areas of the city where there is not robust transit or the capacity of transit to absorb more riders, or a bike network or car sharing facilities. As such, the TDM program will continue to analyze the city's transit, bus, pedestrian and car sharing network and focus efforts on the audiences in accordance with the following geographic priority tiers:

Geographic Tier 1: Locations with high rates of driving, adequate transit service with available capacity, but lower than expected transit usage; situated near the bike network; and in proximity to vehicle sharing sites.

⁶ SF Travel transportation survey 2010 - Note that percentages do not add to 100% because people could indicate multiple modes of travel in their response.

Geographic Tier 2: Locations well serviced by transit but lacking capacity to absorb increases in ridership; located near or moderately near the bike network and in proximity to carshare sites.

Geographic Tier 3: Locations moderately serviced by transit that have the capacity to absorb increases in ridership; situated relatively close to the bike network; and that have access to carshare sites.

TDM PROGRAM STRATEGIES AND ACTIONS

The strategies and actions below provide guidance for funding and implementation of the San Francisco TDM program. As identified in the Interagency TDM Plan, TDM measures have the most impact when they are applied in a comprehensive approach. The strategies outlined in this document are designed such that they reinforce desired travel behavior changes through multiple channels, including policies and outreach aimed at employers, employees, residents, visitors, schools, and other audiences. The strategies are designed to be both aspirational and attainable, and call for action in both the short- and long-term. They build toward our goals; capitalize on our strengths; and consider opportunities for citywide and intra-agency collaboration. **Actions in bold are funded and are expected to be actively in development or completed by the end of 2016**. It is expected that this list will be updated annually to reflect completed actions and identify new ones that are being undertaken in subsequent years.

The TDM program in San Francisco involves both overlapping jurisdictions as well as numerous partnerships and collaborations. This multijurisdictional work occurs within a system that does not have the funding to carry out all of the concepts that are identified as providing a TDM benefit. In order to address funding tradeoffs and clarify the roles and responsibilities for TDM strategic actions, the work plan identifies a lead agency and supporting agencies.

In the context of this document, a lead agency is the agency that is accountable for delivering the action. This is typically identified through regulatory language, the city's general plan or legislated ordinances. The lead agency will typically initiate and guide the development and implementation of a given specific action. Supporting agencies are those that have direct responsibility or overlapping jurisdiction for the action or who should be considered for inclusion in program development discussions (e.g., at quarterly meetings) and/or implementation tasks. At times, an agency may choose to propose an implementation activity for a task for which the agency is not listed as "lead." In doing so, the agency would work with the lead and support agencies to develop a program that is supported by the lead agency staff. In cases where this consensus is not achieved, final decisions would be made at the director level between the lead agency and the proposing partner. When multiple agencies are identified as co-leads for an action, all initiation, development and guidance of program implementation tasks will be established by consensus among the co-lead agencies. Where this consensus is not achieved, final decisions would be made at the director level between the co-lead agencies.

Partnerships and collaborations are the norm in TDM in San Francisco, and the work plan assumes that many of the following actions will be developed collaboratively with agencies not identified as lead or support, as has been the case during the development of this document.

Neither of these designations should be seen to preclude partnerships with additional city or private partners as appropriate. The designation is meant to ensure that

accountability is identified early. This designation does not assign specific work programs to specific agencies.

The TDM Partners Working Group, consisting of the four identified TDM agencies, should convene quarterly. This meeting will be used to provide updates on program and policy development activities that are on-going, under consideration, or of interest to start and ensure that partners have an opportunity to identify areas of interest to provide input, resources or requests to participate in TDM work that is outlined in this document. When successful, this meeting will provide a structure for TDM Partners to raise new ideas, propose projects they are interested in pursuing and ensure that all key parties are informed about upcoming and on-going opportunities for collaboration and partnership.

Strategy 1: Develop Program Infrastructure for public engagement

In order to be successful it is imperative that the TDM program have the infrastructure that will allow it to develop effective programs, services and policies. The following elements are integral to the creation of this infrastructure and the long -term success of the TDM program.

Key Actions:

Establish an identifiable brand for the city's TDM program

Lead: SFMTA; Support: Planning, SFE, SFCTA

- Develop an integrated, customer-friendly website for the TDM program.
 Lead: SFMTA; Support: Planning, SFE, SFCTA
- Develop and implement standard operating marketing and outreach procedures that ensure customers have a seamless experience regardless of the agency primarily responsible for the effort

Lead: SFMTA; Support: SFE, SFCTA

- Ensure adequate staffing for TDM Program priorities
 Lead: All Agencies
- Identify funding and develop internal budget in operating and capital programs to fund the annual work program identified by the TDM Partners Working Group

Leads: Planning, SFCTA, SFMTA; Support: SFE

 Coordinate TDM offerings with each other to deliver a comprehensive program and capitalize on areas of potential mutual impact or effort Lead: SFMTA; Support: Planning, SFE, SFCTA, others

Strategy 2: Propose and advocate for strong policies that reduce SOV trips into, through and within San Francisco

Best-practices suggest that San Francisco's TDM program should rely on a solid policy framework that sets the boundaries for how city transportation supply should be used. The following are policies that have been shown to be effective and should be pursued for development and adoption, as appropriate.

- Use pricing to facilitate and support the use of sustainable modes of transportation:
 - Continue to implement and update parking management and pricing policy

Lead: SFMTA; Support: --

 Pursue a comprehensive mobility management program (congestion pricing, parking management and transit affordability pass development) on Treasure Island.

Lead: SFCTA; Support: SFMTA

 Investigate and pilot pricing or incentive-based approaches to managing congestion in the downtown core and on regional transportation infrastructure.

Lead: SFCTA (regional)SFMTA (local) Support: SFCTA (local) / SFMTA (Regional)

 Investigate voluntary and mandatory vehicle trip-caps for high vehicle tripgeneration areas

Lead: TBD Support::

 Ensure that new developments limit their impacts on San Francisco's transportation system through VMT reduction targets and TDM measures

Lead: Planning; Support: SFMTA, SFCTA

- Develop policy positions to support regional and state legislative advocacy for better managed highway capacity focused on further encouraging carpooling Co-Lead: SFMTA, SFCTA, Support: SFE
 - Develop and refine car-share supportive policies

Lead: SFMTA; Support: Planning, SFCTA

 Develop and refine curb-use and parking policies to manage commuter shuttle, tour bus, and other non-SOV private vehicle systems

Lead: SFMTA; Support: SFCTA

 Integrate TDM strategies into relevant city planning and policy processes, such as complete streets policy and local zoning ordinances

Lead: Agency responsible for policy; Support: Planning, SFCTA, SFMTA, SFE

 Develop policies that support HOV use and integrate and support regional and local HOV networks on San Francisco's streets

Lead: SFMTA; Support: SFCTA

 Identify effective ways to encourage transit riders to travel outside the peak period when passenger capacity is less of an issue.

Lead: SFCTA (regional) / SFMTA (Local); Support: SFE

 Develop citywide policy to mandate TDM as primary transportation offering to city employees for getting to and from work

Co-Lead: SFE/SFMTA

Strategy 3: Advocate for and support programs, tools and services that enhance and improve coordination of regional transportation

San Francisco's transit system is inextricably linked to those of the other transportation providers throughout the region of which there are more than two dozen. For the San Francisco TDM program to be successful, this regional context must be considered. Currently, there are 4 million daily trips to, from and within San Francisco. This is expected to increase to 4.2 million by 2018.⁷ Significant regional growth from the east and south puts increasing pressure on downtown station areas and local and regional connecting services.

By thoughtfully locating opportunities for regional transit integration and eschewing the current system of divergent maps, schedules and fares, the TDM program could help make transit trips throughout the region a more efficient and usable experience—an end that is directly in line the San Francisco's TDM program goals.

Key Actions:

 Support efforts for integrated and regional fare/pass development to maximize region- wide transit ridership and promote equity (e.g. MTC meansbased fare policy, Gatorpass, lifeline program, etc).

Co-Lead: SFCTA/SFMTA; Support:

 Coordinate the development of an implementation plan for the recommendations of the Late Night Transportation Study (e.g. service proposals, Lifeline pass program changes, security and marketing strategies).

Lead: SFCTA Support: SFMTA, OEWD, SFE, Regional partners

- Incorporate regional transit providers in marketing and promotion materials Lead: SFMTA; Support: SFE
- Coordinate with regional agencies involved in provision regional rideshare, local and regional commuter benefit ordinance implementation and emergency ride home.

Lead: SFE / SFCTA; Support: --

Strategy 4: Monitor, evaluate and enforce conditions of development project approval

Monitoring and enforcing existing conditions of development project approval is an important TDM activity. Historically, the city has not proactively monitored or enforced these conditions on an ongoing basis with regard to TDM commitments due to limited staff resources. Monitoring and enforcing existing developer TDM conditions is critical to limiting the transportation impact of developments and to ensuring that residents, tenants and employees have access to the TDM measures that were outlined in project conditions. Future work will focus on agencies partnering together to standardized efforts to monitor for compliance.

-

⁷ Source: SF – CHAMP (2010); US Census Population Estimates

Key Actions:

 Establish standardized monitoring and reporting practices and tools for existing and future development projects, including database tracking

Lead: Planning; Support: SFCTA, SFMTA

Monitor and Enforce TDM-related developer conditions

Lead: Planning; Support: SFMTA

 Establish and implement evaluation program to identify efficacy of TDM measures associated with land use development

Lead: Planning/SFCTA; Support: SFMTA

 Continue and enhance the TDM team's role in advising new development to ensure that developers are made aware of and consider best practices in TDM.

Lead: Planning; Support: SFCTA, SFMTA, SFE

Strategy 5: Develop materials that provide information about services, products and programs

Outreach and education materials are an effective way to deliver information about TDM programs and services. User oriented outreach approaches, including Community Based Social Marketing (CBSM) and Human Centered Design (HCD) – a community outreach and communication methodology that works with communities to develop campaign messages that target the interests and needs of intended audience, and can successfully address barriers to transportation and ensure that outreach and materials are not only useful but also effective in changing behavior as well.

Key Actions:

 Create outreach and marketing materials that will ensure that target audiences are fully informed of their transportation options beyond driving alone

Lead: SFMTA; Support: SFE

 Design, update and provide information to promote new transit and bicycling routes and support service changes.

Lead: SFMTA; Support: SFE

 Ensure message compatibility and consistency with marketing and communications efforts by providing ongoing input.

Lead: SFMTA; Support: Planning, SFCTA, SFE

- Design pedestrian wayfinding standards and implementation plan Lead: SFMTA; Support: --
- Implement the Bicycle wayfinding pilot and expand based on the results Lead: SFMTA; Support: --
- Develop an outreach team that will engage with work places, multifamily residential buildings, hotels, schools, hospitals and other entities to implement programs that provide in-person transportation assistance.

Strategy 6: Develop visitor-oriented and event related TDM services to facilitate and encourage visitors' understanding and use of sustainable options when in San Francisco.

San Francisco is a major visitor destination. A series of programs and services tailored to the needs of visitors can help ensure that tourists utilize sustainable modes of transportation when traveling to, from and within San Francisco.

Key Actions:

 Coordinate with SF Travel, Hotel Council, Concierge Council, Cruise Operators and major conferences to ensure that visitors to San Francisco are aware of all non-SOV options.

Lead: SFMTA; Support: SFE

 Market Muni's special fare to encourage tourists to ride transit when in San Francisco.

Lead: SFMTA; Support: SFE

 Provide hotels with the information and materials that staff members need to inform and assist guests about local transportation options.

Lead: SFMTA; Support: SFE

 Continue existing efforts to manage demand associated with major events or venues/tourist sites.

Lead: SFMTA: Support: --

 Complete study of tourist-related congestion on the Lombard crooked street and recommend next steps.

Lead: SFCTA; Support: SFMTA.

Strategy 7: Develop programs for employer and residential communities to ensure residents/ employees are fully aware of their transportation options.

A comprehensive TDM program for employees should provide information on local and regional transportation options along with incentives to try/use them. A successful program will be unified and provide low cost programs such as rideshare matching, emergency ride home, and education about pre-tax benefits; the program should also connect employees with bicycling, car sharing, bike sharing and transit options. Residential programs should focus on neighborhoods with high rates of driving, adequate transit service with available capacity, but lower than expected transit usage. Many of these efforts will be carried out in partnership with SF Environment and the SFCTA.

Key Actions:

 Implement neighborhood-specific TDM programs that help residents know and understand how to navigate the travel options available in their community Lead: SFMTA; Support: SFE

- Develop and implement an employer outreach program that connects employers with programs and services that enable them to support their employees in reducing SOV trips:
 - Provide a standardized and focused survey for employers to administer to help them understand their employees' commuting patterns and needs.

Lead: SFMTA; Support: SFE

 Exclusively for participating companies and office locations, create customized programs, including marketing materials including commute planners, brochures, posters, and resource guides.

Lead: SFE/SFMTA; Support: --

 Provide outreach and information to companies and their employees about commuting options and benefit information.

Lead: SFMTA; Support: SFE, SFCTA

 Help companies evaluate options for Bay Area Bikeshare corporate membership and station sponsorship.

Lead: SFMTA; Support: --

- Help companies gain national recognition as Bike Friendly Businesses
 Lead: SFMTA; Support: SFE
- Better integrate existing TMA's in San Francisco into supporting the city's TDM efforts

Lead: SFMTA; Support: SFCTA, SFE

 Develop and implement a pilot program to provide outreach to new and relocating businesses

Lead: SFMTA; Support: SFE

 Develop a fuller understanding of how transportation management associations (TMAs) might be created in existing neighborhoods and developing areas and look for opportunities to support and encourage the creation of new TMAs within San Francisco.

Lead: TBD

Promote the Emergency Ride Home program

Lead: SFE: Support: SFMTA

- Review the Commuter Benefits Ordinance and consider amendments
 Lead: SFE; Support: SFCTA, SFMTA
- Annually convene TDM practitioners from the San Francisco public and private sector, including universities and educational institutions, as well as regional partners to share best practices, TDM updates, recognize organizations demonstrating Excellence in TDM, and build stronger partnerships

Lead: SFCTA; Support: SFMTA, SFE, SF Planning

Strategy 8: Strengthen partnership with San Francisco schools to enhance school and family focused programming

Travel to school, including colleges and universities, is a large source of trips in San Francisco. Although many of these trips are made by car there are increases in traveling to school by biking, foot and transit. Efforts to extend education and encouragement for walking, biking, taking transit, and sharing rides to San Francisco's school populations is an effective way to increase trips made by these modes and to ensure that these trips are positive experiences for students.

Key Actions:

 Develop a TDM guidebook/toolkit to help universities and other institutions coordinate transportation, housing and land use.

Lead: SFMTA; Support: SFCTA, SFE, Planning

 Work with K-12 schools to promote and to coordinate TDM requirements and transportation options for schools

Lead: SFMTA; Support: SFDPH, SFE, SFUSD

 Support crossing guards in areas where trips could be made on foot in addition to those areas where walking to school is already more established.

Lead: SFMTA; Support: SFDPH, SFUSD

 Provide survey tool for universities to administer to better understand travel behaviors of faculty, staff, and students

Lead: SFMTA; Support: SFCTA

- Call for robust TDM plans as part of Institutional Master Plans Lead: Planning; Support: SFMTA, SFCTA
- Convene TDM leads from across educational institutions to share best practices

Lead: SFMTA: Support: SFCTA

- Identify family transportation needs and potential programs to address them Lead: SFMTA; Support: SFCTA
- Finalize school transportation survey and identify next steps Lead: SFCTA: Support: SFCTA, DPH, SFMTA, SFE
- Implement a Safe Routes to School program for San Francisco public schools

Lead: SFDPH: Support: SFMTA, SFE

Strategy 9: Incubate innovative policies and programs and explore their feasibility to further TDM goals.

The TDM program should be approached as a place to incubate new and unique ideas that could contribute to a reduction in SOV use and that could help build positive habits around sustainable transportation.

Key Actions:

- Develop a policy framework for incubation to assess new programs to pilot.
 Co-Lead: SFMTA, SFCTA; Support: SFE
- Pursue bulk pass programs and other fare offerings that will encourage transit use.

Lead: SFMTA; Support: --

 Identify and integrate technology that provides useful information about transit and other modes into TDM efforts

Lead: SFMTA; Support: SFCTA, SFE

 Make data about bicycle routes, transit routes and operations, and parking and taxis publicly available so third parties can use the data to produce useful tools and applications.

Lead: SFMTA; Support: SFCTA

 Work to reduce the number of delivery vehicles that use the city during peak hours and impact congestion.

Lead: SFMTA; Support: SFCTA

 Study the use of HOV lanes on local streets and roads and regional tolling⁸.

Lead: SFCTA (regional) / SFMTA (local); Support: SFCTA (Local) / SFMTA (regional)

Work with the Faith community to develop supportive TDM programs to support better multimodal access to worship.

Lead: SFMTA; Support: SFE

 Develop a permanent on-street permit program for shared vehicles and provide off-street parking to carshare vehicles in SFMTA garages.

Lead: SFMTA; Support: --

Strategy 10: Facilitate transportation equity through targeted provision of education and encouragement for minority, low-income, disabled, and senior populations to take transit, walk, bike, use rideshare or car share

A goal of the TDM program is for everyone in the city to be able to find it easy to access a range of high-quality transportation choices. A lack of reliable and efficient transportation is often a huge barrier for many low-income people trying to access fundamental needs; furthermore, transportation has emerged as crucial to escaping poverty and overcoming many of its associated health impacts. Programs that promote walking and biking can have significant health benefits. To ensure that SF residents, employees, and visitors who have limited English proficiency, are minorities, low-income, and/or seniors are aware of and educated about San Francisco's transit options, extra

⁸ This work will be completed as part of the "Freeway and Street Traffic Management Strategy" of the LRTPP and through the Freeway Corridor Management Study

and concerted efforts need to be put forth to reach these populations and culturally inclusive techniques must be used.

Key Actions:

 Promote pass-based programs that provide discounted Muni fares to low-and-moderate-income residents, seniors, people with disability, and youth under 18.

Lead: SFMTA; Support: SFE

 Create a plan for gaining an understanding of the unique transportation needs and ways to serve a variety of socioeconomic and demographic groups of all travelers in San Francisco, including those traveling to/from the city.

Lead: SFMTA (local)) SFCTA (regional); Support: SFMTA (regional), SFCTA/SFE/Planning (local)

 Investigate the feasibility of providing free Bikeshare memberships to qualifying clients of San Francisco social service agencies

Lead: SFMTA; Support: --

 Provide ongoing outreach, education, and encouragement for all forms of transit, to target populations to reduce the cost of and facilitate the use of transit and Bikeshare.

Lead: SFMTA; Support: SFE

 Support the creation of transit etiquette materials that focus on providing safe transit experience for passenger overall with an emphasis on seniors and people with disabilities.

Lead: SFMTA; Support: --

 Support data collection and analysis on paratransit trips to ensure that services provided are optimal for San Francisco's senior and disabled populations.

Lead: SFMTA; Support: --

Integrate the provision of information about the transportation choices available to residents of low-income developments into their site management practices

Lead: SFMTA; Support: Planning

 Investigate ways to ensure that vehicle sharing programs are financially accessible to people in all income brackets and regardless of primary language spoken.

Co-Lead: SFE/SFMTA; Support: --

 Support implementation of pilot shuttle program to provide transportation services to Bayview Residents

Lead: SFCTA; Support: SFE, SFDPH

Strategy 11: Create/Formalize active transportation (walking and bicycling) encouragement programs

San Francisco residents, employees and visitors are eager to include biking and walking as part of their transportation options. Safety has been identified as a key barrier to expansion of non-motorized mode share. Bicycling and walking can be most directly encouraged through coordinated safety infrastructure investment, education, and enforcement. Promoting and facilitating safe biking and walking is key to ensuring a growth in these modes and is critical to helping San Francisco meet its TDM goals. Additionally, many Muni lines have exceeded their capacity at certain times of day. The TDM program should, in concert with SFMTA's transit division, consider ways to shift riders to bicycling and walking in order to free up space on Muni and provide space for additional commuters to shift from driving to transit.

Key Actions:

Support and promote Vision Zero pedestrian and bicycle safety promotion efforts

Lead: SFMTA; Support: SFCTA, SFE

 Develop comprehensive, long term programs that encourage people to bicycle and walk more

Lead: SFMTA; Support: SFE

 Support the expansion of bicycle sharing and bike parking; provide recommendations and input on outreach materials and the strategic direction of the programs

Lead: SFMTA (public right-of-way)/Planning (new development); Support:

SFE

Provide and measure the impact of bike amenities, such as Bike FixIt
 Stations and permanent air pumps, throughout the city, concentrating on transit hubs, secondary schools, and retail business

Lead: SFMTA; Support: Planning

 Coordinate outreach and education around bicycle and pedestrian network upgrades.

Lead: SFMTA: Support: SFE

 Strategically market transit service and the bicycle network to provide riders with multiple options on the overall system

Lead: SFMTA; Support: SFE

Strategy 12: Research and evaluate TDM strategies to develop a stronger, more effective program.

If the TDM program is to develop services, programs and policies that meet the needs of residents, visitors and employees, it must continually be aware of the landscape in which it operates. To do so the program should conduct regular research that will provide insight into the transportation needs and habits of these groups and that also clarifies the impact of TDM policies on travel behaviors.

Key Actions:

 Regularly evaluate the TDM program's effectiveness and recommend adjustments to the program based on the results in order to ensure increased effectiveness over time

Co-Lead: SFMTA/SFCTA; Support: Planning, SFE

Evaluate the effectiveness of individual TDM programs

Co-Lead: SFCTA/SFMTA; Support:SFE

 Conduct research on how people use the transportation system in San Francisco, their satisfaction with local and regional transportation options, and best practices in the development and implementation of TDM programs

Lead: SFCTA (regional), SFMTA (local); Support: SFCTA (local), SFMTA (regional), SFE

 Create survey and data tools to identify baseline information about the needs and attitudes of San Francisco's transportation users.

Lead: SFMTA; Support: SFCTA, SFE

 Quantify the return on investment of transit and TDM programs in terms of public health

Lead: SFMTA; Support: SFDPH

 Develop bi-annual congestion management program to report on of TDM and other measures in reducing congestion and vehicle miles of travel

Lead: SFCTA

FUNDING

The City's current expenditures on TDM related activities are about \$2.5 million a year and while there has been some success, in order to meet the transportation goals for San Francisco, we will need to do a lot more. Many of the actions listed above are unfunded and cannot be implemented without additional resources.

One point of comparison is Arlington, Virginia's TDM program which is considered to be among the best in the nation. Arlington's mobility management program budget is \$10 million a year for an area one quarter the size of San Francisco with a third of current jobs. It is important to note that Arlington County (which is built primarily around rail transit hubs and fed by local bus services) grew by over 1/3 during the last three decades and has measured no significant increase in vehicle miles traveled or congestion.

APPENDIX A: DEMOGRAPHIC DATA

Table 1: Population Projections, San Francisco, 2015-2020

	2015 (projected)	2020 (projected)
Total Population	848,564	891,493
Population Change		42,929
% Population Change		5%

Source:

Table 2: Projections by Age Group, San Francisco, 2015-2020

2015 (projected)	2020 (projected)	% Change
105,539	120,349	14%
72,518	69,788	-4%
318,205	312,676	-2%
170,743	183,975	8%
181,559	204,705	13%
	105,539 72,518 318,205	105,539 120,349 72,518 69,788 318,205 312,676

Source:

Table 3: Employed Resident Projections, San Francisco, 2015-2020

	2015 (projected)	2020 (projected)
Employed Residents	426,770	460,322
Change	12,904	35,552
% Change	3.1%	7.9%
Source:		

APPENDIX B: MEASURING SUCCESS

TDM PROGRAM METRIC: Average weekday SOV vehicle trips and miles reduced in SF by SF TDM efforts

TO IDENTIFY TDM PROGRAM IMPACT ON REDUCING SOV TRIPS:

STEP 1:

Identify the population base for each program (number of people included in the coverage) (Total #)

- Commute by Bike Classes
- Neighborhood TDM
- Employer TDM program

STEP 2:

Identify the number of new placements (commuters or other travelers who were influenced or assisted by a TDM program to start or increase use of non-SOV modes) (%)

• This data is based on program effectiveness surveys, or national research if necessary

STEP 3:

Calculate the total number of vehicle trips reduced using a Vehicle Trip Reduction (VTR) factor (#1*#2*VTR)

• This data is based on program effectiveness surveys, or national research if necessary

APPENDIX C: TDM PROGRAM PERFORMANCE MEASURES

GOAL 1: Make it easy for SF residents, employees, and visitors to travel by transit, foot, bike, rideshare or carshare when traveling to, from, and within San Francisco.

OBJECTIVES

- Provide high quality TDM programs and services to San Francisco residents, employees, businesses and visitors.
- Ensure that TDM information and services are presented in a culturally sensitive manner and are accessible to and can be obtained by people of all incomes, abilities and ages.
- Develop innovative TDM policies, programs and services.

PERFORMANCE INDICATORS	BASELINE9
Awareness, recognition of, satisfaction with TDM programs and services by employees, employers, residents, developers, and visitors	
Use of TDM services and programs by employees, residents, and visitors	
Emergency Ride Home (number of registered employers)	400
511 rideshare	
 SF pre-tax commuter benefits enrollment (annual; 2014) 	
City employees	5,166
Non-city employees	90,000
 Number of employers participating in employee commuter benefit programs (2014) 	
City departments	52
 Businesses 	1,851
Enrollment in membership and pass-based programs	
 Bay Area Bikeshare: Rides per bike/ day (2014) 	2.6
Carshare (2015)	
 Membership 	96,568
On-street spots	123
Off-street spots	1629
Free muni for youth (2015)	22,000

⁹ Where no data is shown, baseline data was unavailable. TDM Program Staff will continue to work to identify or develop tools to collect and report this data

Free muni for seniors (2015)	40,000
Free muni for people with disabilities (2015)	10,000
Muni Lifeline (2015)	
Identification Cards Issued	50,000
 Average passes purchased per month 	19,000
Class pass	
Bulk transit pass (program not established)	
Mode share at businesses and residences offering TDM services	

GOAL 2: Create a culture in San Francisco that embraces walking, bicycling, taking transit and sharing rides.

OBJECTIVES

- Increase awareness and support of, and comfort with, the use of non-SOV transportation options by residents, employees, employers and visitors.
- Increase awareness and support of the benefits provided through TDM by government agencies, elected officials and community leaders.
- Remove barriers to the use of sustainable transportation options.

PERFORMANCE INDICATORS	BASELINE
Automobiles per capita (2013)	.47
Bicycle mode share (2014)	4%
Drive alone commute mode share for SF residents, employees and visitors (2014)	
Private auto-trips	48% / 1,900,000
Vehicle trips on SF streets	1,823,840
Sustainable use mode share for SF residents, employees and visitors (2014)	
Active and shared modes-trips	52% / 2,100,000
Carpool usage (within SF)	16%
Muni ridership (average weekday boarding; 2014)	704,000
Paratransit ridership (total annual trips, 2013)	771,175
Permanent TDM funding (millions)	1.1
Number of new and continuing transportation options awareness events	
Perception of transportation system and services (Muni satisfaction; 2014)	64%
Walking mode share (2014)	23%
Vehicle Miles Traveled (million miles; 2012)	9.4

GOAL 3: Collaborate on a wide variety of initiatives to leverage the influence of TDM.

OBJECTIVES

- Work with city and private partners to incorporate TDM into all programs and projects across San Francisco as appropriate.
- Promote the understanding of the economic, environmental, social and health benefits of TDM.
- Maximize the use of sustainable transportation options for trips generated by new development.
- Collaborate with regional partners.

PERFORMANCE INDICATORS	BASELINE
Greenhouse gas emissions (% of SF's carbon footprint - 2013 Climate action strategy)	43%
Percent of new development/redevelopment with TDM conditions	
Mode use at new developments	
Number of employers working with TDM programs	

GOAL 4: Ensure and prioritize effective programs through monitoring and evaluation.

OBJECTIVES

- Increase the use of research and evaluation to improve upon SF's TDM services and to promote the benefits of the services to key stakeholders.
- Improve monitoring and begin enforcement of TDM commitments in new developments/institutional plans.

PERFORMANCE INDICATORS	BASELINE
Completion of monitoring and evaluation program as outlined for each program and policy	
Rate of compliance for existing and new developments meeting their TDM commitments	

TDM PROGRAM PERFORMANCE MEASURES

Each goal and objective is supported by a series of performance measures and their related indicators (see Appendix C: TDM Program Performance Measures). The measures and indicators are the means through which the TDM program will monitor its status in meeting each objective.

Table 4: SFMTA TDM Performance Measures by goal

GOAL	PERFORMANCE MEASURE
TDM-1 Make it easy for SF residents, employees, and visitors to travel by transit, foot, bike, rideshare or carshare when traveling to, from, and within San Francisco.	 Awareness and recognition of TDM programs and services by employees, employers, residents, developers, and visitors Use of and satisfaction with TDM services and programs by employees, residents, and visitors Enrollment in membership and pass-based programs Mode use at employers, businesses and residences offering TDM services
TDM-2 Institutionalize a culture in San Francisco that embraces walking, bicycling, taking transit and sharing rides.	 Automobiles per capita Bicycle and walking mode share Drive alone and sustainable commute mode share for SF residents, employees and visitors Muni and paratransit ridership Number of new and continuing transportation options awareness events Permanent TDM funding (citywide) Perception of transportation system and services Vehicle miles traveled
TDM-3 Collaborate on a wide variety of initiatives to leverage the influence of TDM.	 Greenhouse gas emissions Employers offering TDM services Mode use at new developments Percent of new development/redevelopment with TDM conditions Health impacts of TDM programs and services
TDM-4 Ensure and prioritize effective programs through monitoring and evaluation.	 Completion of monitoring and evaluation program as outlined for each program and policy Rate of compliance for developments (existing and new) meeting their TDM commitments

APPENDIX D: TDM PARTNERS ROLES

City staff that works on TDM related efforts has developed a framework for working together that identifies the current areas where the agencies that have historically worked on aspects of TDM have responsibility or accountability for the outcomes of TDM efforts.

The TDM program shall leverage strengths of other city and regional agencies and private or non-profit entities. There are already solid partnership projects that exemplify how the city, county and private-sector work together to provide high-quality TDM offerings.

At the time of the development of this plan, the TDM partners had the following responsibilities related to TDM.

San Francisco Planning Department

The Planning Department interacts with TDM primarily through development review and changes to the zoning code, which affects new development and changes of use. The Zoning Code includes a variety of TDM requirements. The Planning Department also employs TDM measures as mitigations within environmental review process. The Planning Department is the lead agency in the proposed TDM Ordinance, which will provide a cohesive approach to reducing VMT through application of TDM measures to new development in San Francisco.

San Francisco County Transportation Authority (SFTCA)

The SFCTA plays an important role in TDM policy development, planning and funding for San Francisco and within the Bay Area region. It also is delivering an innovative comprehensive mobility management program to support development plans on Treasure Island. SFCTA is the county Congestion Management Agency and designated Treasure Island Mobility Management Agency. As the County Transportation Authority, the SFCTA plays an important role in coordinating regional transportation and transportation policy, as well as the development of the San Francisco Transportation Plan (SFTP) which identifies San Francisco's priorities for the regional transportation plan (Plan Bay Area). As the Congestion Management Agency, the SFCTA updates the bi-annual Congestion Management Program (CMP) for the county which reports on progress toward TDM goals and ongoing work program priorities. The SFCTA funds many TDM activities led by other local and regional agencies, from the local-voter approved Prop K and AA programs, as well as the Air District, Lifeline and Regional "One Bay Area" Transportation Grant Program (OBAG). Finally, the SFCTA maintains a comprehensive travel demand model and database and regularly conducts research and evaluation on TDM policies and projects.

San Francisco Department of the Environment (SFE)

The San Francisco Commuter Benefits Ordinance (CBO) identifies SFE as the manager of the CBO program. The department is also the delegated county manager for rideshare activities in San Francisco and operates the Emergency Ride Home program. SFE is responsible for the implementation and outcomes of these programs. Additionally, as there are major impacts from transportation on greenhouse gas emissions and pollution, SFE's responsibility for the city's climate plan ensures that it is an important voice in reducing global warming impacts from transportation through the TDM program.

San Francisco Municipal Transportation Agency (SFMTA)

Many of SFMTA's core services are strongly connected to TDM. SFMTA oversees San Francisco's roadway network, operates Muni transit services and manages the city's taxi and accessible transportation programs. Additionally, the agency is charged with managing the city's public parking supply. As SFMTA is the primary agency who is accountable for the management of the city's streets and transit, it is charged with managing a large portion of the city's TDM program, coordinating and working with city partners to ensure that this strategy meets the needs of the various departments and agencies, while meeting the transportation goals of the city as defined in the SFMTA Strategic Plan.



TDM Interagency Strategy

Infrastructure alone (bicycle lanes, sidewalks, and transit) is not sufficient to achieve the City's goals for increasing the share of trips made by biking, walking, and riding mass transit. Transportation Demand Management (TDM) strategies that reduce drive-alone trips and increase overall regional mobility are also needed.

The TDM Partnership, an effort of the San Francisco County Transportation Authority (SFCTA), the San Francisco Municipal Transportation Agency (SFMTA), the Planning Department (DCP), and SF Environment (SFE), jointly developed and coordinated a strategy to ensure an effective approach to TDM in San Francisco. The Interagency TDM Strategy identifies shared goals and priority activities for the coming five years.

APPROACH

The TDM Partnership began by analyzing the current policies, programs, and practices that make up TDM in San Francisco now. It then reviewed the universe of potential TDM efforts. Staff completed a literature review and interviews with TDM experts from across the country to identify the most promising TDM measures. Examples of assessed TDM measures included pricing policies, HOV lanes, employer and residential outreach programs, bulk transit passes, parking management, carsharing, bikesharing, and others.

As part of the analysis, the team also analyzed the major sources of single occupant vehicle travel in San Francisco. Findings suggest that San Francisco residents' and employees' commute trips generate the most single-occupancy vehicle driving trips in San Francisco (approximately 200 million single-occupant commute trips annually). Because regional commuting occurs within congested periods and locations, this compounds its environmental effects and impacts the most congested transit routes.

WHY SAN FRANCISCO NEEDS TDM

A robust suite of TDM measures is critical to to support sustainable trip-making to achieve San Francisco's clean air and climate change goals. Measures are also needed to address the transportation system challenges associated with planned population and employment growth.

TDM

Transportation Demand Management (TDM) is a set of programs and policies designed to reduce drivealone trips by removing potential barriers to using transit, bicycling, walking, and ridesharing. TDM strategies include information and education, incentives, technology, and policies.



The Interagency TDM strategy recommends the initiation of a comprehensive neighborhood-based residential and employer program.



The Interagency TDM Strategy recommends implementing a TDM framework for growth to reduce single-occupancy trips associated with new development.



CONTACT US

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RESULTS

San Francisco residents' and employees' commute trips are the most significant generator of single-occupancy vehicle driving, and usually occur at peak congestion times periods and locations, compounding impacts on crowded transit routes and air pollution.

The TDM Partnership compared effectiveness, impact, and cost of scored TDM measures and identified priority policies, programs, and enforcement measures for San Francisco. These include existing measures that may be expanded, innovative pilot projects, and new practices. Overall, regulatory policies and pricing (e.g. parking pricing, congestion pricing) were found to be the most cost effective TDM measures. The analysis also revealed several gaps and opportunity areas for San Francisco's TDM programs, described below.

RECOMMENDATIONS

- **Speak in a unified voice.** San Francisco's TDM programs have historically been isolated; agencies should coordinate to present a unified program and brand.
- **Programs should be comprehensive.** Reinforce desired travel behavior changes through multiple channels, including residences and worksites.
- Provide high-quality, user-friendly transportation options. Effective TDM programs rely on alternatives to the automobile and transit capacity constraints must be addressed.
- TDM programs and services should be supported by strong, enforceable policies. Continue to study or pilot policies such as congestion or parking pricing to gauge support for ongoing implementation.
- Enforce existing and future regulation. Enforcing existing developer TDM commitments is critical for the future.
- Pursue comprehensive, systematic evaluation and report on the effectiveness of city TDM programs. Begin a bi-annual, outcomesbased evaluation of city TDM programs.
- **Prioritize new ideas for projects or programs.** The TDM Interagency Strategy outlined a five-year program, with recommendations grouped according to priority: core (essential), priority, and supportive.