District 10 Mobility Management Study

November 2018

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ACKNOWLEDGEMENTS

The District 10 Mobility Management Study has been funded in part through the San Francisco County Transportation Authority's (Transportation Authority) Neighborhood Transportation Improvement Program (NTIP). The NTIP was established to fund community-based efforts in San Francisco neighborhoods, especially in underserved neighborhoods and areas with vulnerable populations (e.g., seniors, children, and/or people with disabilities). The NTIP is made possible with Proposition K local transportation sales tax funds.

The Transportation Authority would like to thank Commissioner Malia Cohen for recommending the District 10 Mobility Management Study for NTIP funding.

Additional funding for this report was provided by a grant from the Toyota Mobility Foundation, by federal Surface Transportation Program funds provided by the Metropolitan Transportation Commission through its Community-Based Transportation Planning Program, and by Proposition K local transportation sales tax funds.

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1 PROJECT OVERVIEW AND THE NEED FOR EQUITY IN THE PLANNING PROCESS

The District 10 Mobility Management Study project was requested by Commissioner Cohen for Prop K sales tax funds from the Neighborhood Transportation Improvement Program (NTIP). The NTIP is intended to strengthen project pipelines and advance the delivery of community-supported neighborhood-scale projects, especially in Communities of Concern and other underserved neighborhoods and areas with at-risk populations (e.g. seniors, children, and/or people with disabilities).

The Study seeks to engage stakeholders to identify a set of non-infrastructure strategies that will reduce vehicle miles of travel in the District, through partnerships between community organizations, developers, and emerging mobility services and technologies. The Study focuses on near-term, lower-cost, non-infrastructure concepts that address travel demand to, from, and within District 10.

The new, non-infrastructure tools explored in this Study may be implemented by a range of lead entities (a developer, or a community-based organization, a private company, or a public agency) in the short-term, with modest resources, to respond both to existing and future transportation demands.

PURPOSE AND NEED

Vehicle traffic impacts health, safety, mobility, and affordability in District 10 today, but the car often appears to be the only viable travel mode for the District's residents, workers, and visitors. San Francisco's District 10 has a difficult transportation environment that makes it difficult to travel within and to other parts of the city. Residents must navigate congested and dead end streets, unreliable public transit, or steep terrain that is physically difficult for pedestrians and cyclists. The transportation setting within the district leaves residents with a lack of reliable and efficient transportation options to travel with their communities and to other parts of the City. As a result, many residents are compelled to drive to make everyday trips. Many District 10 travelers seek alternatives, and have made their mobility needs known during past outreach and planning studies.

In addition to today's needs, future transportation needs stem from the District's status as one of two in which most of the City's new development is planned. New developments will contribute to improving the area's transportation system, but they are not responsible for addressing pre-existing and area-wide transportation needs.

District 10 is also home to low income communities of color that have experienced a history of neglect and disinvestment in San Francisco. Historically, much of the District was redlined by the Federal Home Owners Loan Corporation, meaning that residents were denied access to federally guaranteed home mortgages that helped many communities establish wealth. While there was a sizeable white working class population for much of the District's history as a hub for industrial jobs, today the District is home to sizeable immigrant communities including Asian, Pacific Islander, and Latinx Groups. As of 2014, 14% of all households in District 10 were considered linguistically isolated, including 20% of Latinx households and 36% of Asian households.

The District also contains the highest remaining concentration of Black San Franciscans, whose population has decreased by over 50%since 1970. [1] Multiple waves of displacement connected to the redevelopment of the Western Addition and high housing costs associated with the tech economy have affected this community and others in District 10. As of 2014, 47% of District 10 residents rent, meaning nearly half of residents are vulnerable to displacement in the current expensive housing market.[2] Along with the threat of displacement, the District is also a flashpoint for environmental justice challenges and community organizing. The U.S. EPA defines environmental justice as:

> "When everyone enjoys the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work"[3]

District 10 residents disproportionately face exposure to environmental health hazards from nearby highways, industry, and the contaminated EPA Superfund site at the Hunter's Point Shipyard. The persistence of these structural factors for decades despite promises to address them has resulted in a low levels of trust in government amongst community members.[4]

Given this history, it is not sufficient to focus narrowly on improving mobility options within the district with near-term, low-cost, non-infrastructure transportation strategies to reduce the need to drive alone for regular trips. Conversations with the community elevated the need to consider the larger picture of Mobility Equity to address the history of injustice, neglect, and associated trauma affecting long term residents. Mobility Equity is defined as: "a transportation system that increases access to high quality mobility options, reduces air pollution, and enhances economic opportunity in low-income communities of color."[5] In the context of this project, the goals expanded from simply improved mobility to include all of the following goals that leverage transportation to create a more equitable community:

- Increase non-drive-alone transportation choices for District 10 residents
- Increase connectivity between District 10 and the rest of San Francisco
- Improve air quality to positively impact Environmental Justice within the community

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[1] http://default.sfplanning.org/publications_reports/SF_NGBD_SocioEconomic_Profiles/2010-2014_ACS_Profile_SupeDistricts_v3AH.pdf

[2] https://www.forbes.com/sites/priceonomics/2016/05/11/the-african-american-exodus-from-san-francisco/

[3] United States Environmental Protection Agency, Environmental Justice, https://www.epa.gov/environmentaljustice.

[4] San Francisco Chronicle, Hunters Point is a Textbook Case of Environmental Justice, https://www.sfchronicle.com/opinion/openforum/article/Hunters-Point-is-a-textbook-case-of-environmental-12917354.php.

5 The Greenlining Institute, Mobility Equity Framework, http://greenlining.org/wp-content/uploads/2018/03/Mobility-Equity-Framework-Final.pdf.

- Support employment opportunities and economic development
- Support public health initiatives
- Improve public safety and security
- Build community power: "the ability of marginalized communities to influence decisions in a way that addresses their needs and concerns"[6]

New technologies and travel demand management (TDM) tools can be used in the near-term to help achieve these goals. During the planning phase, thinking ahead to implementation provides an opportunity to enhance the long-term benefits to the community and of larger infrastructure projects planned within the District. This study results in a list of potential transportation strategies that can be implemented to improve the Mobility Equity within District 10; all strategies are non-infrastructure projects that could be implemented with adequate funding and stakeholder support.

6 The Greenlining Institute, Mobility Equity Framework, http://greenlining.org/wp-content/uploads/2018/03/Mobility-Equity-Framework-Final.pdf.

2 A DISTRICT 10 TRANSPORTATION HISTORY

Vehicle traffic impacts health, safety, mobility, and affordability in District 10 today, but the car often appears to be the only viable travel mode for the District's residents, workers, and visitors. Many District 10 travelers seek alternatives, and have made their mobility needs known during past outreach and planning studies.

VEHICLE TRAFFIC AND SAFETY IN DISTRICT 10

Automobile traffic - coupled with street design that does not yet incorporate contemporary safety design standards -has shown to increase cases of severe and fatal injuries. San Francisco's 2017 Vision Zero High Injury Network (HIN) illustrates the need for safety improvements in District 10. Specifically, Third Street is a Vision Zero HIN segment, and is the main north/south arterial for District 10 for both automobiles and transit. Low-income communities in District 10 rely on the Third Street light rail line to reduce dependence on personal automobile travel, and unsafe conditions reduce the share of people who are willing to walk, bike, and take transit along this corridor.

In much of the southern parts of District 10, street design has changed very little since the first shipbuilding families moved into these neighborhoods during and after World War II. Street design priorities are held over from an era of standards catered to the car. Substandard sidewalk widths, lack of protected bicycle networks, prioritized pedestrian right-of-way, curb cuts for garage parking, and wide streets encourage high-speed automobile traffic through the district and discourage and deprioritize walking, biking, and transit use. Some streets will be updated and improved with some of the large development projects planned for the district, and other initiatives like the SFMTA's Bayview Community Based Transportation Plan will holistically consider the streetscape and walkability of the entire District.

Personal safety due to crime and property theft in the District further discourage people from choosing active transportation modes and transit. According to the San Francisco Controller's Office's bi-annual resident survey, District 10 residents feel significantly less safe compared to the rest of the city. Only 62 percent of respondents from District 10 claimed they feel safe during the day, and only 30 percent feel "safe" or "very safe" at night. Compared to other parts of the city, neighborhood safety perception is significantly lower. Because of this, travelers in the district are more likely to consider personal safety a factor when deciding how to travel.

VEHICLE TRAFFIC AND HEALTH IN DISTRICT 10

Community health outcomes are shaped by travel behavior and mobility options. Access to public transportation and active transportation facilities enables wider employment opportunities, less automobile dependence, and a healthier more sustainable way for the community to travel. Alternatively, health inequities due to low public transportation access and active transport facilities are experienced disproportionately by low-income African American and Hispanic communities in the United States, including residents of District 10.[7] Smart solutions to mobility

[7] "Communities in Action: Pathways to Health Equity – Opportunities for the Transportation Sector", www.nap.edu, last modified 2018, accessed February 21, 2018, https://www.nap.edu/resource/24624/TransportationforHealthEquity/#slide0.

barriers in these communities have potential to improve transportation-related health effects and create a more vibrant community, such as access to quality public transport and streets designed to promote walking and bicycling.

High automobile traffic volumes also adversely affect the health outcomes of communities. District 10 has two major freeways bordering and intersecting its boundary, U.S. 101 and Interstate 280. Harmful particulate matter from vehicle exhaust causes cancers and acute asthma syndromes. Noise and light pollution from freeways affects sleep quality and also creates dead spaces which could otherwise be used for affordable housing, parks, schools, or other productive and healthy uses. Freeways tend to cordon and isolate residents from the rest of the city and have severed communities. The separation barrier from the rest of the city further decreases the health and safety outcomes of the neighborhood by discouraging active modes of transportation through inadequate infrastructure and circuitous route networks.

Although the two biggest air polluting culprits in District 10 – the PG&E Hunters Point Power Plant and the Potrero Generating Station – have been closed in the last decade, increased automobile congestion along U.S. 101 and Interstate 280 due to a growing population and workforce within the City's footprint is further degrading the air quality of the district to levels considered unacceptable by City health officials. While parts of the district have better air quality than decades past due to industrial plant closures, denser residential areas along freeways are seeing increasingly worse air quality during this same time since the plant closures. A 2017 San Francisco Chronical article about poor air quality in the City reports, "…Statistics from the California Office of Statewide Health Planning and Development show that between 2013 and 2015, the Bayview – which is surrounded by freeways, cement plants, and other industry – had 93 asthma emergency room visits for every 10,000 people. South of Market had 74 visits. West Portal, which is on the other side of the city and relatively insulated from freeways and major streets, had significantly fewer visits – about 12 for every 10,000 people." These numbers show that communities along increasingly congested major commute thoroughfares have a much larger health burden to carry than residents secluded from the negative health effects of automobiles, and because these communities are already marginalized by socioeconomic burdens, the health inequities due to transportation activities are exacerbated.[8]

VEHICLE TRAFFIC AND AFFORDABILITY IN DISTRICT 10

Transportation costs, specifically the cost to own and operate a car, is the second highest cost burden for Americans second only to housing costs.[9, 10] Transportation costs can limit employment opportunities. The costs of car ownership are sometimes 'hidden' to car owners because fees, taxes, fuel, and maintenance are paid over time, compared to transit costs, which are often paid out of pocket at the fare box. A 2010 report produced by the American Public Transportation Association found that a household of two saves $9,242 per year by switching from owning a car to using public transit.[11] Savings for giving up your car are even higher today as fuel prices have increased significantly since 2010. Car owners often only consider the cost of gas

[8] "Map Shows Which SF Neighborhoods Are Hit Hardest by Air Pollution", San Francisco Chronicle, last modified 2017, accessed March 17, 2018, https://www.sfchronicle.com/bayarea/article/Map-shows-which-SF-neighborhoods-are-hit-hardest-12172473.php.

[9] G.E. Miller, "Transportation Costs: The 2Nd Highest Expense in The U.S.", 20Somethingfinance.Com, last modified 2018, accessed March 17, 2018, https://20somethingfinance.com/transportation-costs/.

[10] Consumer Expenditure Survey, U.S. Bureau of Labor Statistics, March 2013

[11] "Riding Public Transit Saves Individuals $9,242 Annually", www.apta.com, last modified 2010, accessed February 21, 2018, http://www.apta.com/mediacenter/pressreleases/2010/Pages/100112_Transit_Savings.aspx.

when thinking about the cost for an individual trip, but when fuel, insurance, maintenance, and external un-priced externalities on the environment is factored into the equation, the price of driving an automobile is considerably more expensive than public transport, walking, or biking. Therefore, a key strategy for more equitable transport options for low-income communities is improving access to transit, walking, and biking, while providing access to a car without the need for individual household car ownership.

TRANSPORTATION AND SOCIAL NETWORKS IN DISTRICT 10

Through outreach, we heard consistently that longtime District 10 households want to remain as new development changes the District 10 skyline, but displacement is a significant concern. Those who have already left their historic community continue to travel back for social reasons.

As District 10 develops, residents will move in and out of the district and will need affordable and accessible mobility options to travel back to the district to connect with their community and social networks. This study will consider previous residents and people connected to the district socially to uphold social networks.

EMERGING NON-INFRASTRUCTURE TRANSPORTATION CONCEPTS IN DISTRICT 10

Over the past few years, various "emerging mobility services and technologies" have started operating in District 10. The Transportation Authority's Emerging Mobility Services and Technologies Study recently inventoried and assessed those currently operating in San Francisco, including in District 10. This Study identifies ways to leverage these tools, services, and technologies.

Public agencies may facilitate the adoption of the most promising of these emerging strategies among communities that haven't widely adopted them to date. Another potential role for the public sector is to manage or influence these emerging strategies such that they help meet emissions reduction and other goals or needs of District 10. Agencies can seek to ensure that the services are deployed in a way that does not compound historic mobility needs that are already present.

TODAY'S TRANSPORTATION NEEDS IN DISTRICT 10

District 10 is one of two districts in which most of the City's new development is planned. The current development pipeline for District 10 includes over 21,000 net new units, 34 percent of the citywide total. The only other district that has comparable development planned is District 6, which sits to the north and will further influence travel patterns and added users to District 10's transportation network.

This new development will contribute financially to infrastructure and service increases, through the Transportation Sustainability Fee; and will implement demand management strategies to reduce the transportation impacts of growth. These planned contributions are described in Appendix A. However, some infrastructure strategies have a relatively long timeframe; the service increases are subject to future budget appropriations; and the demand management techniques will be implemented gradually as new development is completed.

Moreover, these contributions from new development are not responsible for reducing existing and area-wide vehicle miles of travel or congestion.

Residents of District 10 have voiced their views on mobility challenges during past outreach efforts associated with agency-led planning studies in the District over the last 10 years, as described in Appendix A. Appendix A synthesizes 13 planning studies and transportation-policy-making efforts conducted in or relevant to District 10 over the last 10 years. These studies have identified infrastructure projects around the District that respond to many community needs and concerns.

Themes with relevance to this Study fell into four main categories:

- Needs Related to Transit Service Quality
- Challenges with Comfort and Safety in the Public Realm
- Challenges for Marginalized Populations
- Traffic Congestion and Future Growth

Needs Related to Transit Service Quality

San Francisco's Muni system provides significant coverage across the City, including District 10. However, community members have pointed to a set of challenges with transit service including the reliability of service, the quality of transit service coverage away from main arterials such as Third Street, and crowding on the most popular transit routes during peak periods.

Efforts to address many of these challenges are included in Muni's plans: to increase the frequency of T-Third Muni Metro service after the Central Subway opens, to enhance service and infrastructure through Muni Forward, and to improve east-west transit connections in the southern part of the City through the Geneva-Harney Bus Rapid Transit (BRT) project. However, these planned projects would still leave some of the challenging first- and last-mile connections District 10 stakeholders have cited in past studies; and transit service expansions are dependent upon developer contributions and future budget appropriations. The recommendations of this Study may be able to help address needs that may remain: fill some of these gaps, reduce existing vehicle trips, and complement fixed-route service.

Challenges with Comfort and Safety in the Public Realm

In District 10, geographic barriers such as freeways (I-280, US-101), rail lines, and hills reduce accessibility. Personal safety concerns, such as the real and perceived threats of street crime, were cited in past studies as another factor that can significantly inhibit mobility for people walking and biking. These challenges are particularly acute for vulnerable populations such as children, seniors, and people with disabilities.

Many of these challenges will need to be addressed by infrastructure-improvement efforts such as Vision Zero and the City's other efforts to address cyclist and pedestrian safety on high-injury corridors. The SFMTA's Community Based Transportation Plan for the Bayview neighborhood, currently underway, will also recommend infrastructure improvements to address these challenges. Non-infrastructure strategies from this Study may be able to help local residents and employees have more information on safe and comfortable walking routes, gain access to equipment and gear for non-motorized travel, and limit the amount of time spent waiting for a connection to/from transit.

Challenges for Marginalized Populations

Mobility in District 10 is most challenging for residents who do not have access to personal vehicles. Previous studies indicate that communities that are most likely to face mobility challenges include young people and their families, seniors, low income households, and people with limited English proficiency.

Traffic Congestion and Future Growth

The major developments in the area are contributing to transportation infrastructure and service throughout the area, and all of them are also committed to transportation demand management (TDM) programs and plans. There is an opportunity to supplement existing TDM programs through a package of innovative management strategies.

FUTURE TRANSPORTATION NEEDS IN DISTRICT 10

Major developments will bring thousands of new jobs and residents to District 10 over the coming decades. Development is expected to generate transportation needs in addition to those described in past studies, and each is planning investments in transportation services and demand management programs. Each development project has a transportation obligation, including Transportation Sustainability Fee payments that support Muni transit and improve street safety and efficiency. These fees are in addition to any on-site improvements developers are responsible for as well as transportation-related mitigation measures that are identified through environmental review. Development agreements and environmental approvals document each project's commitments. Appendix A provides a review included to show the types of measures developers are planning to implement as examples of the types of programs that could be separately implemented in areas of the district that are already developed.

TDM Ordinance

In February 2017, the Board of Supervisors enacted the City's TDM Ordinance, which requires development projects to implement TDM measures to reduce their effects on citywide congestion. Developers can select from a menu of more than 20 potential TDM measures. The number of total measures required is determined based on the number of parking spaces they plan to provide, based on evidence that the provision of parking has a causal relationship with vehicle travel demand. The Ordinance applies to all development projects over 10 residential units or 10,000 square feet. While major projects' specific TDM and other transportation commitments are typically determined through development agreement negotiations, the Ordinance provides a consistent framework from which future projects will work.

Growth in District 10 depends upon the T-line service and expansion and enhancements of key bus routes. New development is also responsible for complying with the TDM Ordinance. The San Francisco Planning Code requires new buildings to implement a New Development TDM Program to reduce VMT from new development. This program applies to projects with 10 units or more of new residential development, 10,000 square feet or more of commercial development and relatively large (25,000 square feet or more) changes of use like expanding an auto shop or other small industrial space into office space. In order to achieve this VMT reduction, the TDM Program requires that property owners select from a menu of TDM

measures, such as family-friendly measures, bicycle parking, unbundled parking supply, and/or other on-site services provided by a transportation coordinator. The TDM measures will be implemented gradually as new development phases in. "Each Development Agreement requires the sponsor to demonstrate both that it is delivering the agreed-upon TDM program and that the project is in compliance with its performance commitment" (SFMTA 2017).

Figure 8 shows the array of new transportation programs and incentives that are relevant to this study for each of the major developments in District 10. Many of them are planning a variety of information and communications structures, some of which may extend into the neighborhood. The Warriors Event Center and Mission Rock documents specifically call out the potential to develop apps and/or install interactive kiosks. All of the projects are planning to incorporate bike share docks and car share vehicles. Some also plan to fund new microtransit shuttle service ahead of future additional Muni service, and a subset plans to provide transit subsidies of different sizes to site users.

Figure 1 Transportation Commitments in District 10 Development Transportation Plans

Strategy	Warriors Event Center	Mission Rock	Pier 70	Potrero Power Station	India Basin[12]	Hunters Point/ Candlestick Point
Building Blocks						
Trip Reduction %		20%	20%	20%	15%	21%[13]
Establish TMA or On-Site Mobility Manager	X	X	X	X		X
Information and Communications						
Sign- or Kiosk-Based Real-Time Information Systems On-Site	X	X	X	X		
Online or App-Based Real-Time Transportation Information	X	X				X
Cycling						
Bikeshare Dock	X	X	X	X		X
Bicycle Programs and Amenities		X				X
Transit						
Shuttle Service	For Events Only		X	X		Serving Retail Component
Additional Muni Service[14]	For Events Only					X
Offer Subsidized Transit Passes	For Events Only	Initial Subsidy	Partial Subsidy.	Partial Subsidy		
Mandatory Transit Pass Purchases						X
Transit Center	X			X		X
Street Management						

[12] India Basin is still developing its Transportation Plan. This column will be updated when the City receives a draft of the plan

[13] This is an "aspirational goal," not a legal performance standard included in the project's EIR.

[14] All projects will pay a Transportation Sustainability Fee (or the predecessor fee, the Transportation Impact Development Fee). This row indicates whether projects have committed to fund service increases or additional lines.

Strategy	Warriors Event Center	Mission Rock	Pier 70	Potrero Power Station	India Basin[12]	Hunters Point/ Candlestick Point
Managed Lanes	For Events Only	For Events Only				X
Transit Priority Treatments						X
Expanded Passenger Loading	X	X	X	X		X
PCOs	For Events Only	For Events Only				
Parking						
Car Share Parking	Above Code	Above Code	Code	Above Code		Code
Low Parking Ratio		Residential & Office Components	X	X		
Shared Parking	Some Spaces	Some Spaces	Some Spaces	Some Spaces		Some Spaces
Parking Pricing	X	X	X	X		X
Unbundling	X	X	X	X		X

Past studies revealed a number of mobility challenges in District 10 that could be partially addressed by the non-infrastructure strategies that are the focus of this study. New development in the District will both generate new travel demand through the district and make contributions to address it. The strategies they are employing – enhanced information (much of it real-time), increased access to shared modes (car/bike/scooter-share), and active management of the roadway network – are all measures that could be employed district-wide to supplement their efforts and address existing demand.

3 WORKING WITH THE COMMUNITY

Developing mobility strategies for the community requires strong support from those who live in the area; investments need to meet the needs of the community. A co-design, or participatory

design, process was used to work with the community to identify potential strategies for District 10. The process included the following phases:

1. **One-on-one conversations** with community leaders in District 10 to identify existing barriers and equitable transportation opportunities. These conversations also helped understand how to engage with local people of color and low-income residents.
2. **A project plan** based on conversations with community leaders established an engagement approach that began with three visioning workshops – in Spanish, English, and Cantonese – to build trust and offer a direct opportunity for participation with communities that are often left out of the conversation. After building a trusting and engaged relationship with the project team, these communities came together for the final pilot workshop.
3. **Prototype community visioning workshop** materials with community leaders by reviewing and iterating on meeting format and materials. Through this process, technical topics around transportation options became accessible and relevant to the general public.
4. **Three community visioning workshops** in English, Spanish, and Cantonese. In these meetings, residents were introduced to project opportunities and constraints for transparency. Each meeting included hands-on activities where residents worked together to design transportation solutions that leveraged new mobility technologies to meet their specific needs for their most frequent and challenging trips. In total, over 80 residents participated and generated more than 90 ideas.
5. **Evaluate and develop ideas** by identifying which ideas are most likely to be equitable, desirable to residents, and feasible to implement. This process was informed by the goal to establish Mobility Equity, feedback from residents, and conversations with potential implementation partners; 14 concepts were presented back to residents for feedback.
6. **Pilot workshop with residents** to understand which barriers would be most important to address (e.g. price, payment method, smartphone use) as well as how desirable each idea was. Each of the 14 concepts had illustrations to convey how they would be used day-to-day by a resident. For transparency, each idea also had information on what would be needed for implementation. At this workshop, participants were able to give specific feedback and generated redesigns to improve each concept.

After the engagement phase was complete, strategies were evaluated and recommend based on community feedback, alignment with the project goals, and the San Francisco County Transportation Authority's (SFCTA) Guiding Principles for emerging mobility (see Figure 3).[15] The evaluation criteria are outlined in Figure 2 below:

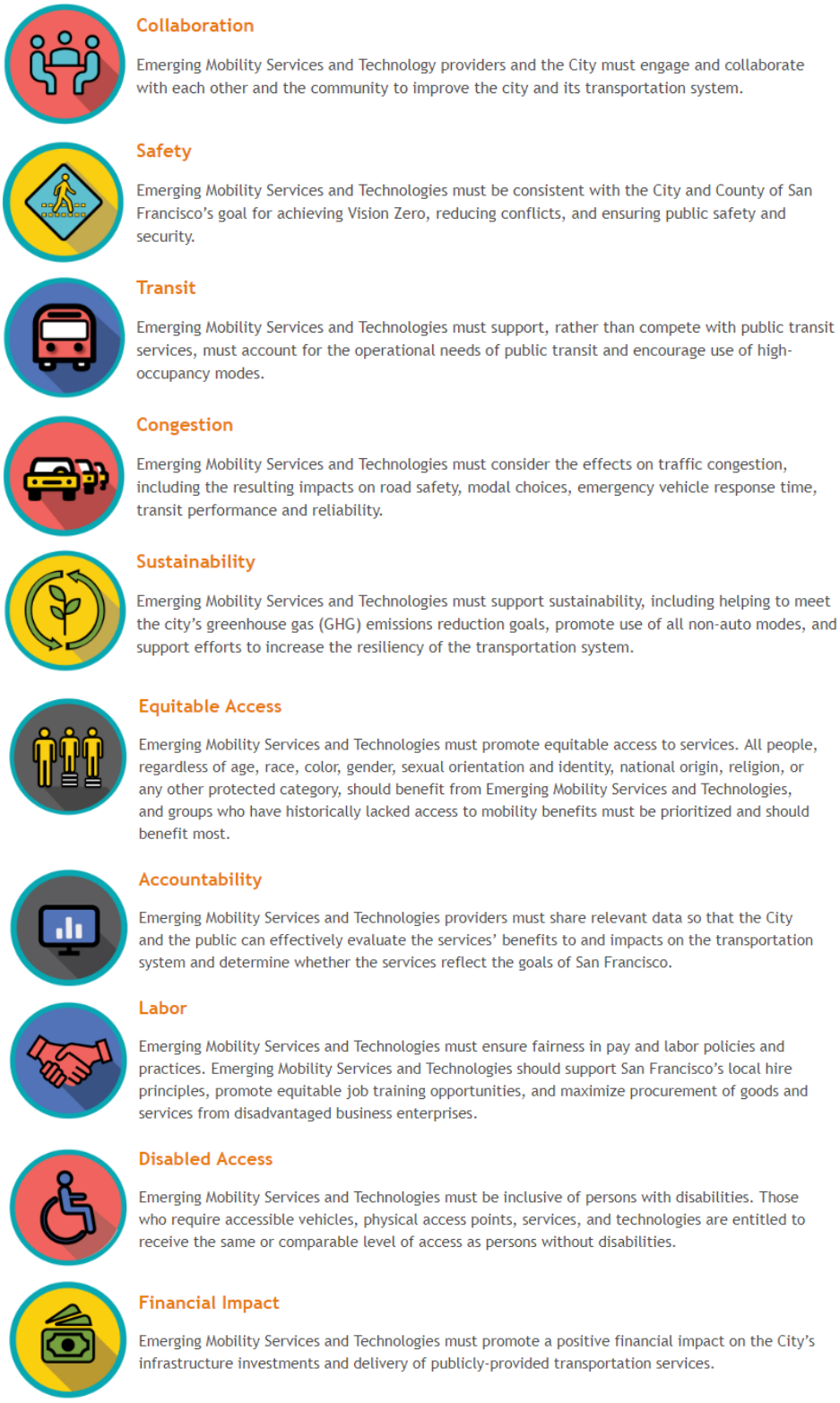
Figure 2 Strategy Evaluation Criteria

Category	Criteria	Description
Equity Criteria	Address mobility and access challenges	How accessible the proposed interventions are to underserved communities, such as people of color, low-income residents, people with disabilities, constituents with limited English proficiency, seniors, and youth
	Traveler safety	Extent to which they address different safety-related concerns. Safety-related concerns include, among others, safety from identity-based discrimination, crime, police violence, and systems of accountability if breaches of safety occur

[15] San Francisco County Transportation Authority, Emerging Mobility – Guiding Principles, https://www.sfcta.org/emerging-mobility/principles.

	Address service challenges	Degree to which they help to overcome these long-term barriers to mobility
	Enhance economic opportunity	Extent to which they enhance connections to places of employment, education, social services, and recreation
	Reduce air pollution	Extent to which they contribute to reductions in vehicle miles traveled (VMT), as well as greenhouse gas (GHG) emissions and local air pollutant emissions that harm public health
	Desirability based on community conversation	Any idea that originated from a community workshop is considered desirable because it came from a set of current residents
	Counteracts displacements greater than accelerating it	Ability to provide economic stability to current District 10 residents and help them to remain in the community
Feasibility Criteria	Cost	Implementation cost, based on high-level estimates of
	Time to implement	Estimated time to implement
	Similar programs in practice	Assessed based on their transferability from existing policies, programs, and services in the Bay Area
	Implementation partners available	The availability of implementation partner(s)
	Infrastructure upgrades required for implementation	Extent to which it is dependent on infrastructure upgrades
	Viability of implantation partners and funding	▪ Agency willingness to commit to the solution in the long-term ▪ Flexibility around the project's implementation timeline ▪ Past and current commitments of implementation partners to prioritize District 10 community needs over profitability ▪ Clear avenue for accountability if commitments are broken
Mobility Criteria	ADA accessibility	Ability to serve people with disabilities in District 10
	Coverage within District 10	Ability to provide seamless and time efficient connections
	Connects city with transit and mobility hubs	Ability to provide direct connections to key areas in the City
	Fulfills multiple trip types	Ability to perform a variety of trip types with one mode choice

Figure 3 SFCTA Guiding Principles for Emerging Mobility



Source: SFCTA

4 POTENTIAL STRATEGIES

This chapter describes the non-infrastructure transportation strategies offered for community consideration and feedback. The strategies are split into four types:

NEW MOBILITY

These transportation services use technology to automate routing; matching/sharing; and/or (un)locking, among other features. Many "new mobility services and technologies" make Mobility as a Service (see next category) possible because they offer as-needed, on-demand transportation. In June 2017, the Transportation Authority and the SFMTA adopted 10 Guiding Principles to serve as a framework for managing and evaluating emerging mobility services and technologies.[16] Based on these, the Transportation Authority collaborated with partners to evaluate how the services help the city meet its stated goals. The purpose of the evaluation effort was to identify where:

- the services and technologies were helping the city meet its goals;
- there is room for improvement; and
- future research may be conducted.

San Francisco's Emerging Mobility Final Report (SFCTA, 2018) documents the findings of this work.

Figure 4 At-a-Glance Overview of Emerging Mobility Services Strategies

Tool		Description
	**Car Share**	Car Sharing programs allow people to access a shared fleet of vehicles on as-needed, per-hour or per-mile basis for point-to-point or round-trip trips. Car Sharing programs reduce the need for businesses or households to own vehicles, and they also reduce personal transportation costs and vehicle miles traveled.
	**Transportation Network Companies (TNCs)/Ride hailing/Ride-sourcing**	Ride hailing services, known in California as Transportation Network Companies (TNCs), match riders with drivers in real-time through mobile apps that also accept payment. These platforms typically operate through a network of third-party contractor drivers using non-commercial vehicles. Ride hailing drivers are not themselves travelers. Ride hailing companies are distinguished from taxi services by the inability to street hail (can only pick up prearranged rides). The companies typically offer several ride types, such as private ride and pooled-ride/fare splitting (in which multiple users with origins and destinations along a similar route can hail the same driver in real time).
	**Bike share**	Bike sharing is a system of bicycles that is available to users to access as needed for point-to-point or round-trip trips, traditionally to station kiosks in dense urban areas. Docked bike share systems are generally unattended and offered through

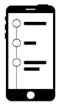
[16] http://www.sfcta.org/emerging-mobility/principles

		public-private partnership. Advances in bike share locking technology have allowed for dockless, free-floating bikes, lockable anywhere within a geographic region. This model is becoming increasingly popular and are often privately owned and operated.
	**Carpool Platforms/ride sharing**	Ride sharing is the third-party service of matching of riders and drivers with similar shared origins and/or destinations, enabling them to split the cost of the ride. Unlike ride sourcing and ride splitting, the driver is themselves a traveler and is not fare-motivated. There are two types of ride sharing services. On-demand, dynamic matching is facilitated through a software platform with no long-term commitment required. Second is the pre-arranged batching of matches, where travelers enter their desired pickup and drop-off schedule, and drivers and riders are matched daily with an advance alert to users.
	**Microtransit/private transit**	Microtransit is an unsubsidized, privately operated shuttle service that usually operates along a dynamically generated route using technology to match capacity to demand. Microtransit often operates in areas during peak-period commute hours where public transit is reaching capacity or may be unavailable. Microtransit is distinguished from private shuttles because, in addition to being available to the public, of its ability to automate routing, billing, customer feedback and reservations.

MOBILITY AS A SERVICE

Mobility as a Service describes the use of technology to substitute car ownership for a range of mobility services, often accessible on-demand, through a unified user interface that integrates trip planning, hailing, navigation, and payment.

Figure 5 At-a-Glance Overview of MaaS Strategies

Tool		Description
	**Transportation Management Platforms**	Transportation management platforms are software products that offer comprehensive travel tracking tools and serve as a one-stop-shop for mobility options and incentives. Many include customization or games to encourage travel behaviors that align with defined program goals.
	**Multimodal Trip Planners/Aggregators**	Multimodal trip planners/ aggregators are online or mobile references to help users decide between routes and modal options. These tools typically customize options based on the user's preferences (e.g., to optimize cost, time, or emissions). Some platforms enable users to plan trips in real-time or in advance. Trip planners that aggregate multiple modes often include real-time information on arrivals, travel times, and availability.

	Smart Mobility Kiosks	Smart mobility kiosks in the public right-of-way typically provide a range of wayfinding and trip-planning information, including real-time transit availability, nearby shared mobility services, community attractions and services, and public amenities like phone-charging ports and public Wi-Fi.

INCENTIVES AND REWARDS

Incentive and reward programs can take several forms. Some are revenue-neutral programs that levy a fee on discouraged travel behavior, in order to provide revenue for redistribution to fund mobility services, targeted investments to improve transportation choices, or direct incentives to encourage more sustainable travel. Others are platforms that offer discount offers to travelers in exchange for travel data, with greater discounts offered for more sustainable trip-making.

The goal is to reduce driving or congestion by creating financial disincentives for vehicle trips (including during times of day or in particular areas) and to provide funding for alternatives to driving.

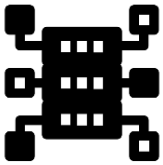
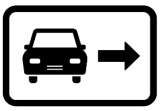
Figure 6 At-a-Glance Overview of Incentive and Reward Strategies

Tool		Description
	Congestion Pricing	"Congestion pricing" refers to policies or programs that increase the price for a resource during peak demand times to shift vehicles and allocate the resource more efficiently. Pricing may be used to manage parking availability, encourage off-peak transit ridership, or reduce peak-period traffic in an area or along a corridor. Here, "congestion pricing" refers to relieving traffic congestion through peak-period road pricing. Under a congestion pricing program, private vehicles are charged when accessing congested areas during the most congested times.
	Gamification	Techniques for engaging and motivating travelers that incorporate game-design elements into travel decision-making. People are rewarded for tracking travel patterns and using non-drive-alone modes of travel in response to potential discounts or incentives.
	Managed Lanes	Provide priority, reliability, and travel time savings for carpools and transit by using high occupancy requirements, tolling, roadway designations, and/or other access restrictions. May be on a freeway or surface street.
	Single-Occupancy Vehicle (SOV) Charge or Trip Cap	Program to restrict the number of, and/or charge a fee for, SOV trips and redistribute fee revenue to reimburse or provide incentives to commuters taking trips by other modes.

PARTNERSHIP TOOLS

Partnership tools and coordination strategies can reduce seams across information, processes, and services for the traveler, and pool resources at a larger scale to improve the reach and efficiency of programs.

Figure 5 At-a-Glance Overview of Partnership Strategies

Tool		Description
	**Transportation Management Association (TMA)**	TMAs are partnerships of area businesses, officials, and community organizations which allocate transportation funding to create, promote, manage, and measure area transportation programs.
	**Backend Synthesis / Data Platforms**	Systems that compile and centralize all available data generated through one or more technology-based transportation programs; simplify the data analysis process; and coordinate with other datasets (e.g. transit performance) to enable a clear understanding of system performance for all travel markets and population subgroups.
	**Shared Parking**	Minimize the amount of space used for parking/vehicle storage by sharing off-street parking facilities across land uses, instead of requiring dedicated off-street parking supplies for each individual land use.

5 RECOMMENDATIONS

This chapter provides the transportation strategies that best met the project goals and supported the community's priorities during the evaluation process. The strategies are split into two sections:

1. **Near-term, priority implementation strategies** are relatively low-cost and can be implemented with community support and relatively lesser funding. Each of these strategies should be implemented as a time-limited pilot that can be adjusted with data and community insights. Importantly, this set of combined strategies address financial equity, ADA access, regional connectivity, and low-cost driving alternatives for people of all abilities.
2. **Long-term implementation strategies** range in cost and effectiveness in achieving the stated goals of the project. These strategies were identified by the community and would likely require continued strong stakeholder support, as well as additional funding.

Near-term/priority implementation items

The following near-term recommendations are seen as high priorities because they have potential for implementation on a relatively fast timeline and can have a high impact; combined, they support equity and mobility for District 10 residents.

Strategy	Supports
Establish Transportation Management Association (TMA) and hire Transportation Coordinator	Supports: non-drive alone trips, community power, address mobility and access challenges
Expand bike-, scooter-, and moped-share in D10	Supports: public health, public safety, improve air quality to positively impact environmental justice, address mobility and access challenges, connectivity with the rest of the City, affordability,
Pilot shuttle for connections to local transit hubs[17], paired with medical trip services during off-peak hours	Supports: non-drive-alone trips, improved connectivity with the rest of the City, environmental justice, employment opportunities, accessibility
Pilot rewards tracker to encourage non-driving trips	Supports: economic development, non-drive-alone trips, environmental justice, overall affordability

Long-term implementation items

Strategy	Supports
Operate shuttle for shopping and discretionary trips	Supports: non-drive alone trips, improved connectivity with the rest of the City, economic development, employment opportunities
Operate microtransit shuttle to regional transportation hubs	Supports: non-drive alone trips, improved connectivity with the rest of the City, environmental Justice, employment opportunities
Create school carpool program	Supports: non-drive alone trips, improved connectivity with the rest of the City, public safety
Implement mobility kiosks	Supports: improved connectivity with the rest of the City, address mobility and access challenges
Expand car share in D10	Supports: improved connectivity with the rest of the City

[17] In community outreach events, "shuttle" and "microtransit" terms were used interchangeably.

Strategy	Supports
Implement managed lanes	Supports: improved connectivity with the rest of the City, non-drive alone trip, environmental justice, safety and security, accessibility
Create a Parking Benefit District	Supports: non-drive alone trips, public safety

The success of these strategies depend on collaboration in getting services implemented with operational models that meeting community needs. Accountability and accessibility are key elements to success. It is also important to maintain constant communication with the community to share progress and performance updates to ensure the new programs are working towards community goals.

Collaboration

- Use the transportation coordinator (Page 5-23) role to create a feedback loop so that all strategies can be adjusted overtime.
- Allow residents to be involved in the decision-making process as strategies are pursued and implemented.

Accountability

- Maintain community relationships to keep mutual trust in the community
- Attend meetings where residents are already gathering to discuss community issues related to housing, development, transit, etc.
- Acknowledge barriers to collaboration across diverse groups and accommodate the different needs between ethnic groups (Latinx vs Asian Pacific Islander American vs Black).

Accessibility

- Provide adequate need-based subsidies to low income residents. Partnership with local community-based organizations could help facilitate a less burdensome verification process.
- Use the Transportation Coordinator to provide booking services and information in-language for non-English speaking residents.
- Enable cash or cash card (e.g. Clipper Card) payment options for unbanked residents.
- Enable call or text-based access to the solution (e.g. unlock bike via text, call to book a Lyft ride) for the many residents who do not have smartphones, such as seniors.

NEAR-TERM/PRIORITY IMPLEMENTATION ITEMS

ESTABLISH TRANSPORTATION MANAGEMENT ASSOCIATION AND HIRE TRANSPORTATION COORDINATOR

Mode(s): All modes

Trip Type(s): All trip types

Strategy Type: Partnership Tools

Recommendation

Establish a Transportation Management Association (TMA) and hire a Transportation Coordinator to help District 10 residents know exactly who is responsible for getting this plan done and who can help answer transportation and trip planning related questions.

Everyone wants transportation improvements, but it is not always clear who is responsible for implementing them and ensuring they operate as planned. A TMA for District 10 could be established by expanding the service area for an existing TMA (such as the Mission Bay TMA) or by establishing a new TMA formed specifically as a result of this study. The TMA would be responsible for collecting dues from member organizations and staffing a Transportation Coordinator position, either as a TMA employee or contracted third party, to manage transportation policies and programs in District 10.

The city could pursue two different ways of pursuing this recommendation:

> **Method 1: establish a TMA membership fee for for-profit land uses**, e.g., for profit employers, or others with ability-to-pay.
>
> **Method 2: establish a trip-credit in-lieu of-fee approach** based on a means test for existing land uses with limited ability to pay. Under this method, developers of new land uses would earn credit towards their trip reduction targets for trips reduced from existing land uses. Membership in the TMA or transportation coordinator program would be free or reduced for the existing land use.

To get the most benefit from the mandatory TMAs and Transportation Coordinators, we recommend some additional agency-led programs:

> **Establish a San Francisco-wide TMA Working Group.** The purpose of the Working Group is: 1) develop and disseminate TMA best practices and resources; 2) convene TMA representative and transportation coordinators in a community of practice to enable education; and 3) promote coordination and information sharing among TMAs and transportation coordinators.
>
> **Develop and adopt TMA / Transportation Coordinator guidance, best practices, and resource guide.** Disseminate guidance and best practices through the Working Group and as part of the land use entitlement process.

All new development subject to the TDM Ordinance is required to designate a Transportation Coordinator – a micro-version of a TMA. In addition, large development areas recently approved

in D10 require the formation of a TMA. The TMA for District 10 could be formed by expanding an existing TMA (such as the Mission Bay TMA) to serve the wider D10 area or by establishing a new TMA formed as a result of development approval requirements. For instance, the Mission Bay TMA has expanded its service area over time by allowing adjacent land uses to "opt in" to the TMA service area through a membership fee. This study recommends that transportation agencies promote fee-based TMA Membership expansion to allow existing land uses to utilize the services of the mandatory transportation coordinators or TMAs established by new development in compliance with the City TDM Ordinance. This could be accomplished through the membership fee structure described above.

However, existing land uses may not always have the financial resources or sufficient incentive to join an existing TMA with a membership payment. To address this, this study also recommends that the City explore a TMA Membership Program to allow for trip reduction credits in lieu of membership fees for qualifying land uses.

The TMA would be responsible for collecting dues from member organizations and staffing a Transportation Coordinator position, either as a TMA employee or contracted third party, to manage transportation policies and programs for their service area.

In addition, this Study recommends that an agency convene a citywide TMA working group to develop and disseminate TMA best practices and resources; and to convene transportation coordinators to promote coordination, information sharing, and continuing education.

For example, TMAs should use tools to ensure that mobility services are accessible: in languages other than English; for those without smartphones; and for the un- and under-banked. This Study also supports the continuation of recent pilots of community-relevant marketing and promotion of new mobility services, using community based organizations and "co creation" techniques, such as the successful techniques of Bike share for All, conducted by TransForm in the east bay.

Lastly, the city's interagency TDM team could facilitate the establishment of a Coordinated TMA/Transportation Coordinator work plan. This activity would include establishing/leading a local community of TDM practitioners. Modeled after San Mateo's Commute.org or Commute Seattle, the work would bring together private and nonprofit transportation coordinators and TMA employees on a periodic basis to coordinate their programs. A benefit of this would be to pool resources and merge similar programs to be more cost effective and expand the reach of each program, as well as learning what programs are most effective locally and for different communities.

Implementation Elements

Responsibilities of the Transportation Coordinator position would include, among others:

- In-language support for non-English speakers to book rides or trips on apps that only support English speakers, such as Spin or Lyft.
- Oversee operations of relevant District 10 mobility programs, such as shuttles, on-demand carpooling, car-share, bike-share, and others.
- Coordinating microtransit services such as SFMTA's ShopAround and Van Gogh; paratransit; taxi; and other ride-hails for customers without smartphones.
- Deploying and managing trip planning tools and tracking commuting behavior (e.g. surveys) via a Rewards Tracker/Multimodal Trip Planner tool.
- Verifying eligibility for fare discount programs.

- Administering Emergency Ride Home and Non-Emergency Medical Transportation services.
- Managing communications, marketing, and outreach for all new District 10 mobility providers. Consider the OakMob model for community-relevant marketing/outreach.[18]
- Create an opt-in membership program for existing and future TMAs or coordinators from area institutions, employers, nonprofits, etc.
- Provide transportation marketing and planning to connect residents with parks/recreation opportunities.
- Participate in education about mobility providers in local tech literacy courses
- For the Transportation Coordinator's work related to ride-hailing, the following actions are recommended:
  - Apply for Relief Rides to be funded via HOPE SF transportation funding for District 10 orgs
  - Reach out to senior-oriented rideshare program such as Gogo Grandparent and Silver Ride, connect them with the community, and facilitate service to District 10.

This position would also need to manage mobility provider resources to plan for special events, when travel demand in District 10 is greater than normal, especially with the coming arrival of the Warriors Arena. This could include rebalancing bike-share or scooter-share fleets to ensure availability, setting up special-event-oriented microtransit, or coordinating with Muni to provide additional transit trips.

The TMA's client base or areas of responsibility would include:

- New development areas with mandated TMA membership
- Employers or institutions who may join the TMA for a membership fee; and/or
- Homeowner Associations or property managers who can join the TMA for a membership fee.

Additionally, the TMA would oversee the Rewards Tracker/Multimodal Trip Planner tool for District 10 residents/employees. Key considerations for the TMA include:

- Effective TMAs capture new development tenants/employers as soon as occupancy begins, so the organizations have the best chance at shifting mobility habits.
- Developments seeking entitlements and/or trip cap compliance could receive credit for trip reductions made by adjacent land uses / participating members.
- Allow adjacent land uses to join existing TMAs or Coordinator programs, through nominal fee or trip reduction credits to developer.
- The funding to join a TMA for already-entitled land uses could come from a matching grant/challenge grant program from public agencies.
- Mission Bay TMA is the most prominent TMA in District 10. Planned development justifies additional transportation coordinators to meet the needs of the local community and who would report to a larger TMA.

[18] Brown, Brytanee. 2017. "OakMob 101: A Case Study in Expanding Access to Shared Mobility." TransForm. July 10, 2017. http://www.transformca.org/transform-report/oakmob-101-case-study-expanding-access-shared-mobility.

The City's interagency TDM team could facilitate the establishment of a Coordinated TMA/Transportation Coordinator work plan. This activity would include establishing/leading a local community of TDM practitioners. Modeled after San Mateo's Commute.org or Commute Seattle, the work would bring together private and nonprofit transportation coordinators and TMA employees on a periodic basis to coordinate their programs. A benefit of this would be to pool resources and merge similar programs to be more cost effective and expand the reach of each program, as well as learning what programs are most effective locally and for different communities.

EXPAND BIKE, SCOOTER, AND MOPED-SHARE IN D10

Mode(s): Active transportation

Trip Type(s): First/Last-Mile Connections, School Trips, General Discretionary Trips

Strategy Type: New Mobility

Recommendation

Expand bike-share, scooter-share, and moped-share services in District 10 to increase access and coverage to active transportation options and improve connections to transit for District 10 residents.

Bike-share: In community workshops, District 10 residents expressed desire for electric bikes, which are more appropriate for the district's hilly terrain. Few residents currently use bike-share due to safety concerns, which can be addressed by improved bike infrastructure. Some have also expressed a desire for bike-share more suitable for families with children, such as electric bike share with cargo bikes or bikes that include child seats. Hilly topography in District 10 may pose another barrier to bike-share adoption, and e-bikes may be helpful in overcoming this challenge. Ford GoBike's low station density in District 10 is another challenge to bike-share adoption, as many key destinations and residential areas do not have a bike-share station within walking distance. In summer 2018, Ford GoBike added five bike-share stations in District 10, in addition to stations in Dogpatch and northern Potrero Hill:

- Newhall at 3rd
- Mendell at Galvez
- Lane St at Revere Ave (YMCA)
- Williams at Apollo
- Lane at Van Dyke

Further Ford GoBike expansion in Bayview will be pursued in 2019. Future bike-share should consider dock-based as well as dockless bikes to ensure a wider distribution of bike fleets. Expansion plans should also consider both standard and electric bikes to serve riders who need help navigating District 10's hilly terrain.

Scooter-share: Scooter-share services require SFMTA permits. In September 2018, the SFMTA approved a one-year pilot program with two kick-scooter operators, Scoot and Skip. This program issued permits on October 15, 2018, with 625 scooters allowed for each company for the

first six months, with potential increases of up to 2,500 scooters for each operator during months seven through 12 of the pilot.[19] Shared, electric scooters may fill a similar niche to dockless bike-share, allowing riders to pickup and drop-off their devices anywhere in the service zone.

Moped-share: Support / partner with SFMTA, moped share, and private property owners to expand availability of dedicated parking / chargers for moped share. We recommend an active effort to establish additional moped-share spaces in District 10, through funding of off-street charging stations or a partnership between the City and vehicle share providers to locate spaces in public housing developments. Agencies or moped-share providers may apply for grants to fund electric charging infrastructure that is publicly accessible.

Currently, District 10 does not have access to an adequate concentration of shared electric mopeds for residents to use. Companies will need to expand access to these tools to support mobility equity.

Implementation Elements

Considerations for bike-share, scooter-share include:

- Coordinate with SFMTA to ensure District 10 is served by adequate bike lane infrastructure for the safety of bike-share users.
- Coordinate further fare integration with next-generation Clipper Card, which will feature a single account balance for transit and bike-share transactions.
- Work with bike-share operators to include bikes with child seats and/or cargo bikes to facilitate school transportation. This may require a partnership with a local bike shop to facilitate these rentals, as no U.S. bike-share system has these types of bikes in their fleet.[20]
- Require bike-share fleets to include a target percentage of electric bikes to accommodate District 10's hilly terrain.
- Consider family payment plans and bicycle/scooter options as part of the agreement with bike-share operators when the existing agreement is up for renewal.
- For dockless bike-share, follow SFMTA's established permitting processes to encourage proper parking/placement.
- Use bike-share and other emerging transportation services as a case study in local technology literacy courses. Potential tech literacy partners who already offer this type of programming include CYC Bayview branch, SF Libraries, and the Community Tech Network.
- Work with mobility providers to offer Chinese and Spanish-language service support. This support should be coordinated through a TMA.
- Ensure that the SFMTA's equity requirements in its dockless bike-share permitting process are fully met for any operators in District 10.

[19] Jose, Ben. 2018. "Powered Scooter Share Permit and Pilot Program." SFMTA. May 22, 2018. https://www.sfmta.com/projects/powered-scooter-share-permit-and-pilot-program.

[20] Zagster advertises some of these bikes on its website, while The Bike Hut is a socially conscious rental shop near AT&T Park that may be a viable partner.

- Undertake community-relevant engagement and marketing prior to bike-share expansion (e.g. modeled on the OakMob model). [21]
- Facilitate partnerships between e-bike operators and local developers, business associations, HOAs, property managers to install charge points on development sites.
- Work with the Planning Department to consider including dockless bike-share in the development TDM Menu.[22]
- Work with nonprofits, YMCA, schools, tenants' associations, non-profit developers, and others to hold "learn to ride" classes.

Considerations for moped-share include:

- Consider including moped-share vehicles in the City's TDM Menu for developers. This would require an amendment to the SF TDM ordinance.
- Support permitted moped share providers to increase the number of mopeds in D10 by supporting or leading grant applications for publicly-available moped charging stations. Grant sources include the Transportation Fund for Clean Air (TFCA).
- Consider whether to make use of existing, vacant, mandatory off-street car share spaces for moped-share parking.
- Grant or other funding for charging stations. Potential Implementation Partners:

PILOT SHUTTLE FOR CONNECTIONS TO LOCAL TRANSIT HUBS

Mode(s): Microtransit

Trip Type(s): Peak-period commute trips[23]

Strategy Type: New Mobility

Recommendation

Pilot shuttle service to enhance access to locally-oriented transit hubs within San Francisco, oriented to peak-hour commuting, using microtransit, shared-ride-hailing, or on-demand carpooling.

Many District 10 residents' jobs are located far from regional transit hubs, and improved access to BART and Caltrain stations will not improve their commute times. This Study recommends piloting new transit routes that comply with SFMTA's Private Transit Vehicle permit requirements, through funding partnerships between developers and microtransit service providers. Public agencies can support this by facilitating partnerships between microtransit providers and developers to provide publicly-available first-last mile or commute-oriented microtransit services to local transit hubs, supplemented by public funding as necessary to ensure access for communities of concern.

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[21] Brown, Brytanee. 2017. "OakMob 101: A Case Study in Expanding Access to Shared Mobility." TransForm. July 10, 2017. http://www.transformca.org/transform-report/oakmob-101-case-study-expanding-access-shared-mobility.

[22] This may require an amendment to the SF TDM ordinance

[23] This strategy may be able to be combined with shuttle for medical trips during the mid-day hours

All of the major recently approved development areas in District 10 include a new shuttle service in their transportation mitigation measures or TDM plan. Some shuttles are anticipated to serve as a first/last mile connection, e.g., to 16th street BART (Pier 70) or Glen Park BART (India Basin). The Mission Bay TMA provides an extensive network of microtransit connecting Mission Bay to Market Street BART stations. Others provide a direct connection to downtown (Shipyard). In each of these cases, expanded Muni transit is anticipated in the long run to meet these needs.

As things are today, the main beneficiaries of these new microtransit services are the residents and workers in new development areas. However, current residents would benefit from access to these supplemental services. Many longtime District 10 residents' jobs are located far from regional transit hubs, and improved access to BART and Caltrain stations will not improve their commute times. Some of these locally-oriented transit hubs may include:[24]

- Church/Market
- Van Ness/Market
- SF State University
- Columbus/Bay (North Beach/Fisherman's Wharf)
- Fillmore/California (Pacific Heights)

This Study recommends that the City consider a requirement that shuttle or microtransit services provided by developers in compliance with the City's TDM Ordinance be open to the public. Public funding contributions could subsidize access for Lifeline-eligible riders.

Implementation Elements

This strategy may be combined with "Shuttle for Medical Appointments to maximize the value of midday runs.

- Coordinate with SFMTA's Southeast Expansion Study team - the agency is working to increase transit frequency/coverage in District 10 as funding contributions from new development become available.
- Urge MTC and microtransit operators to integrate payment for microtransit with Clipper Card 2.0 simplify fare payment and incentivize transfers to fixed-route transit services.
  - In the interim, while no integration with Clipper Card is viable, public agencies should urge mobility providers to operate call centers for dispatch (for non-smartphone-users) and accept cash payment.[25]
- Adopt policy to ensure developer-funded microtransit shuttles are open to the public, include clear signage, and conduct promotion/outreach to ensure this is publicly known. This step would benefit from a clear City policy directing that developer shuttles be publicly available and signed /marketed as such. The SFMTA and Planning Departments should consider adopting such a policy. Examples of developer-funded shuttles that could be expanded to the public include:
  - Shipyard shuttles to downtown; Chariot/UCSF shuttle, Warriors Arena (to 16th Street BART), India Basin developers (to Glen Park), Pier 70, Potrero Power Plant,

[24] Confirm additional transit hub locations with results of Muni's Southeast Expansion Study.

[25] This could be accommodated through additional partnerships with legacy taxis or ambulettes, for unbanked riders.

Hunters Point. If necessary to avoid crowding, public hours could be restricted, following the example of the Presidio's Presidi-Go shuttle.

- Urge mobility providers to offer Chinese and Spanish language service support, and work with services like GoGoGrandparent to expand their offering beyond ridehail to encompass microtransit.
- Use microtransit and other emerging transportation services as case studies in local technology literacy courses (e.g. those offered by the Community Youth Center).
- Pilot means-based/sliding scale fares for microtransit. This would require initial public grant or other funding contributions.
- Ensure local funding for D10 microtransit pilots gives consideration to the following conditions:
  - Microtransit routes should be publicly accessible.
  - Microtransit drivers should undergo background checks and sensitivity training for working with people with limited English proficiency (LEP) and people with disabilities.
  - Mobility providers should participate in local job fairs and employment recruitment efforts.
  - Microtransit fleets should include wheelchair-accessible vehicles (WAVs), using access funds from SB 1376.

PILOT REWARDS TRACKER TO ENCOURAGE NON-DRIVING TRIPS

Mode(s): All modes

Trip Type(s): Peak-period commute trips, general discretionary trips

Strategy Type: Incentives/Rewards

Recommendation

Pilot mobile/web-accessible platforms to reward District 10 employees and residents for making non-driving trips.

Transportation management platforms (TMPs) help community members track their travel behavior, and help create targeted incentives to reward non-driving trips. TMPs typically include trip/commute tracking, multimodal trip planning, and incentive/gamification tools. Participants may be rewarded with cash-based incentives[26] for logging a target number of non-driving trips; rewards could be used to provide discounts on transit fares, shared ride-hail, or bike-share memberships. This solution would require integration with local transportation management associations and fare payment integration with Clipper Card.

[26] These incentives could be awarded in the form of online disbursements or prepaid debit cards. In community meetings, 73% of survey respondents found the incentive of $1.50 per non-driving trip attractive enough to change their travel behavior. This incentive is comparable to the $300 annual incentive awarded to Stanford University affiliates who enroll in the campus' "Commute Club" and commit to non-driving campus commutes.

Implementation Elements

- Work with the City to consider including rewards trackers as a strategy for TMAs/Transportation Coordinators in the TDM Menu
- Identify multimodal trip planners that meet community criteria, and conduct community-relevant promotion and outreach to increase adoption.
- Work with TMPs such as Luum, Commutifi, Rideamigos, Rideshark, "Miles" app, NuRide (not yet in CA), Commutifi, etc. to pilot service in District 10. Conduct community-relevant engagement/promotion to increase adoption.
- Work with health services, nonprofits, youth services to promote a rewards service to patients/clients/members.
- Integrate all options with Clipper Card to enable discounted transit fares and bike-share memberships as rewards to be earned by logging a target number of non-driving trips.
- Use TMPs as case studies in local technology literacy courses (e.g. Community Youth Center).
- TMPs should protect user privacy by ensuring compliance with the California Consumer Privacy Act.[27] This regulation requires most online platforms to get users' informed consent before collecting user data, provide users a means of revoking that consent, and provide a full log of all data collected for each user upon request.
- Consider direct cash incentives for non-driving trips. Employers using TMPs could disburse these incentives via employee payroll direct-deposit.
- TMAs or other administrators could distribute the incentives as prepaid debit cards or in the form of other transportation benefits, such as transit passes or bike-share memberships.

LONG-TERM IMPLEMENTATION ITEMS

OPERATE SHUTTLE FOR MEDICAL APPOINTMENTS

Mode(s): Microtransit, ride-hailing

Trip Type(s): Non-emergency medical transportation

Strategy Type: New Mobility

Recommendation

Operate on-demand non-emergency medical transportation (NEMT) services for qualified riders through partnerships with healthcare provider networks, taxis, ride-hailing and/or microtransit operators.

[27] Wakabayashi, Daisuke. 2018. "California Passes Sweeping Law to Protect Online Privacy." *The New York Times*, July 30, 2018, sec. Technology. https://www.nytimes.com/2018/06/28/technology/california-online-privacy-law.html.

Hospitals, HMOs, health insurance companies, and medical clinics are increasingly forming partnerships with ride-hailing companies and microtransit providers to improve non-emergency medical transportation (NEMT) choices for patients and their caregivers. NEMT exists to ensure that participants (especially patients with chronic conditions) have access to routine and preventative care, increasing overall health outcomes and avoiding costly ambulance bills or emergency room visits. NEMT is currently provided by SF Paratransit and various ambulette services. But many District 10 residents who need NEMT do not qualify for paratransit, and those who do qualify face long wait times and unreliable, inefficient service that is very expensive for SFMTA to provide.[28]

Most insurance plans will not reimburse patients for NEMT directly. However, numerous hospital groups have found significant savings by reducing missed appointment rates through paying for NEMT directly out of hospital budgets. Roughly 30% of all medical patients, or about 3.6 million people in the United States, miss necessary medical care every year because they cannot get transportation to get to their appointments.[29] These patients are typically low-income people with chronic conditions who do not have access to a personal vehicle. These missed appointments negatively affect clinical productivity, resulting in unused clinical space and staff time. Some analysts estimate that missed appointments cost healthcare providers nearly $200 per patient appointment.[30]

Residents emphasized the importance of providing this service for free or at a very affordable price point (around $2.50 per trip) for single trips, given that monthly passes are not a good value for infrequent medical appointments. Elder residents also noted the importance of providing this service door-to-door.

Implementation Elements:

- Partner with Zuckerberg San Francisco General Hospital (ZSFG) or other major healthcare networks to pay for wheelchair-accessible ride-hailing or microtransit services out-of-pocket, with the rationale that the cost of the trip is far less than the cost in wasted resources from missed medical appointments.
- Consider expanding existing SFMTA shuttles (e.g. Shop Around) to provide NEMT trips before contracting with private mobility providers.
- Revisit whether NEMT trips can be reimbursed via the SF Department of Environment's Emergency Ride Home Program.
- Evaluate Lyft's Bayview YMCA ride coupons program and expand/adjust to accommodate NEMT trips.
- Apply for or pilot a Lyft Relief Rides deployment in District 10.

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[28] SF Paratransit service is only available to pre-qualified residents with disabilities that prevent them from using or accessing the fixed-route system "some or all of the time." To qualify, riders must submit evidence of the nature of their disability and contact information for a physician who can verify their disability. https://www.sfparatransit.com/general-info/application.htm

[29] Castellucci, Maria. 2017. "Rideshare Partnerships Help Patients Get to Doc on Time." Modern Healthcare. April 20, 2017. http://www.modernhealthcare.com/article/20170420/NEWS/170419851.

[30] Yang, Serena, Robert L. Zarr, Taha A. Kass-Hout, Atoosa Kourosh, and Nancy R. Kelly. 2006. "Transportation Barriers to Accessing Health Care for Urban Children." *Journal of Health Care for the Poor and Underserved* 17 (4): 928–43. https://doi.org/10.1353/hpu.2006.0137.

- Work with SF Department of Children, Youth, and Their Families (DCYF) to consider applying for Relief Rides as an alternative to existing HOPE SF transportation funding for District 10 organizations.
- Work with mobility providers to offer Chinese and Spanish-language service support.
- Use microtransit and other emerging transportation services as case studies in local technology literacy courses (e.g. Community Youth Center). Partnerships with tech literacy groups may needed to raise awareness of any partnerships with hospitals to pay for NEMT.
- Reach out to senior-oriented ride-hailing companies such as Gogo Grandparent and Silver Ride, connect them with the community, and facilitate service to District 10.
- Integrate payment for microtransit and ride-hailing with Clipper Card to ease fare payment and enable free transfers to fixed-route transit services.
  - Alternatively, if this integration is not viable, mobility providers should operate call centers for dispatch (for non-smartphone-users) and accept cash payment.[31]
- Ensure local funding for D10 ride-hailing/microtransit projects give consideration to the following conditions:
  - Ride-hailing and microtransit drivers should undergo background checks and sensitivity training for working with people with limited English proficiency (LEP) and people with disabilities.
  - Microtransit routes serving hospitals/clinics should be publicly accessible.
  - Mobility providers should participate in local job fairs and employment recruitment efforts.
  - Ride-hailing/microtransit fleets should include wheelchair-accessible vehicles (WAVs), using access funds from SB 1376.

OPERATE MICROTRANSIT SHUTTLE TO REGIONAL TRANSIT HUBS

Mode(s): Microtransit, on-demand carpooling

Trip Type(s): General discretionary trips

Strategy Type: New Mobility

Recommendation

Operate microtransit service from District 10 to regional transit hubs, such as the 22nd Street Caltrain station, SFO Airport, 24th Street or Glen Park BART stations, and the Church and Market Muni Metro Station:

Many residents have difficulty accessing regional transit hubs from District 10. A microtransit shuttle service designed to bridge first/last-mile connections to key transit stations would

[31] This could be accommodated through additional partnerships with legacy taxis or ambulettes, for unbanked riders.

enhance residents' access to jobs, services, and regional destinations. On-demand carpooling could also play a part of this solution for times/locations microtransit service is not available.

Implementation Elements

- Coordinate with SFMTA's Southeast Expansion Study team - the agency is working to increase transit frequency/coverage in District 10 by 2021.
- Ensure developer-funded microtransit shuttles are open to the public, and do promotion/outreach to ensure this is publicly known. Examples of developer-funded shuttles that could become publicly accessible include:
  - Chariot/UCSF shuttle, Warriors Arena (to 16th Street BART), India Basin developers (to Glen Park), Pier 70, Potrero Power Plant, Hunters Point, the Presidio.
- To facilitate transfers from the T/Third, service would be at least partially oriented to serve the primary 3rd Street retail district, between Evans Ave, Thomas Ave.
- Seek flexible fare payment options (e.g. Clipper Card, cash, or mobile payments). Integrate with Clipper Card to ease fare payment and enable free transfers between modes.
  - Alternatively, if Clipper Card integration is not viable, microtransit providers should operate call centers for dispatch (for non-smartphone-users) and accept cash payment.[32]
- Encourage on-demand carpooling by offering means-tested discounts for riders/passengers, funded by either a local TMA or carpooling platforms.
- Work with TMAs, developers, and major institutions as partners to market service.
- Work with mobility providers to offer Chinese and Spanish language service support. For on-demand carpooling, this includes seeking opportunities to identify non-English speakers more optimal ride-matching.
- Ensure local funding of D10 ride-hailing/microtransit projects gives consideration to the following conditions:
  - Microtransit routes should be publicly accessible.
  - Microtransit drivers should undergo background checks and sensitivity training for working with people with limited English proficiency (LEP) and people with disabilities.
  - Mobility providers should participate in local job fairs and employment recruitment efforts.
  - Microtransit fleets should include wheelchair-accessible vehicles (WAVs), using access funds from SB 1376.
- Promote Waze Carpool, Scoop, Rideamigos, Rideshark, Rideshare by Enterprise, Carma, NuRide, or other on-demand carpool service.

[32] This could be accommodated through additional partnerships with legacy taxis or ambulettes, for unbanked riders.

IMPLEMENT MOBILITY KIOSKS

Mode(s): Ride-hailing, microtransit

Trip Type(s): General Discretionary Trips

Strategy Type: Mobility-as-a-Service

Recommendation

Implement mobility kiosks located in key destinations to improve access to transportation and community information; design kiosks to support the hailing of shared rides and microtransit.

Many District 10 residents do not have access to smartphones and/or bank accounts and therefore cannot easily access mobility information, or use ride-hailing or microtransit services. Mobility kiosks can expand access to ride-hailing and microtransit services for these residents by enabling them to book rides directly from ride-hailing companies without the need for a smartphone. In addition to these functions, smart mobility kiosks in the public right-of-way typically provide a range of wayfinding and trip-planning information, including real-time transit availability, nearby shared mobility services, community attractions and services, and public amenities like phone-charging ports and public Wi-Fi.

Implementation Elements:

In addition to ride-hailing options, the kiosks would offer the following functions:

- Real-time transit information and multimodal trip planning tools, such as those offered by transportation management platforms (TMPs)
- Free phone calls
- Free public Wi-Fi
- Phone charging
- Links to essential social services (e.g. Aunt Bertha network)
- Chinese and Spanish-language content

Ride-hailing functionality has not yet been added to any known mobility kiosk installation in the United States – Innisfill, Ontario, has installed kiosks with iPads for ride-hailing at libraries and recreation centers to enable residents without smartphones to hail rides.[33] With proper customization, mobility kiosks could expand access to ride-hailing and microtransit services by enabling residents to book rides through analog account-based systems. Instead of a mobile app to facilitate fare payment, rides are charged to a user's account linked to their driver's license/ID and sent invoices payable by mail. This strategy is an alternative to the approach that cities have typically taken in ride-hailing partnerships to serve riders who do not have smartphones/bank accounts. Under this more traditional approach, riders call a dispatch hotline to hail a ride from

[33] CTV Barrie. 2017. "Uber Begins Public Transit Service in Innisfil." Barrie. May 15, 2017. https://barrie.ctvnews.ca/uber-begins-public-transit-service-in-innisfil-1.3414149.

the TNC, and are served by a legacy taxi company enrolled in the partnership, whose drivers can accept cash payment.

This strategy would require developing a customized, non-smartphone-based ride-hailing account system accessible from a mobility kiosk, and it would require extensive coordination between ride-hailing companies and kiosk providers. It is likely that this non-smartphone-based account system would rely upon a user's driver's license/ID to function, similar to the means by which electronic tolling gantries process vehicles via transponder.

However, other approaches to a non-smartphone-based account system are possible. For instance, TMAs or other non-profit partners based in District 10 may be able to book rides on their clients' behalf using concierge ride-hailing services such as Uber Central or Lyft Concierge. At the mobility kiosk, eligible riders would place a free phone call to the agency/non-profit that would request a ride. Such systems do not require the rider to have a ride-hailing account, smartphone, or bank account, and the ride-hailing companies bill the requesting agency/non-profit directly for any rides taken.

In addition to the integration with mobility kiosks, ensure local funding of D10 ride-hailing projects give consideration to the following conditions:

- Ride-hailing driver-partners should undergo background checks.
- Publicly-funded ride-hails should be the shared-ride option (e.g. Uber Pool, Lyft Line).
- Ride-hailing companies should participate in local job fairs and employment recruitment efforts.
- Ride-hail fleets should include wheelchair-accessible vehicles (WAVs), using access funds from SB 1376.
- Work with mobility providers to offer Chinese and Spanish-language service support.
- Use microtransit, ride-hailing and other emerging transportation services as case studies in local technology literacy courses (e.g. Community Youth Center).

EXPAND CAR-SHARE IN D10

Mode(s): Driving

Trip Type(s): General Discretionary Trips

Strategy Type: New Mobility

Recommendation

Expand car-share options in District 10 to accommodate a variety of trip types and passengers. This includes fleets that have different pricing models to meet affordability needs, one-way and round trip service models, and a fleet that can accommodate large groups, family amenities, and mobility devices.

Car-share is a crucial strategy of enabling people to live car-free lifestyles while retaining access to vehicles for occasional trips on an on-demand basis. Studies have shown that each car-share vehicle available displaces 7 to 13 private vehicles, either through personal cars sold or car

purchases postponed.[34] Currently, Zipcar's inventory is limited to three sites on 3rd Avenue in Bayview and about 10 sites in Dogpatch/Mission Bay. Other car-share services provide similarly sparse service to District 10. Getaround has fewer than 10 shared vehicles in Bayview and about 15 in Mission Bay/Potrero/Dogpatch. Neither Maven nor Gig have any vehicles available in District 10.

In community workshops, District 10 residents have indicated that current car-share services often do not suit their needs, particularly the needs of families with children. Price was the largest barrier to potential adoption, so subsidized prices will be important for accessibility. Many District 10 residents need an expanded range of vehicle options, such as vehicles with car seats to better serve families with children, or wheelchair-accessible vehicles to serve passengers with disabilities. A wider range of payment and vehicle pick-up/drop-off options to better suit the District's mobility needs.

Implementation Elements:

Options to increase car-share adoption in District 10 include:

- Promote car-share memberships and usage of existing District 10 car-share vehicles.
- Use car-share and other emerging transportation services as a case study in local technology literacy courses (e.g., Community Youth Center).
- Promote peer-to-peer car-share recruitment for platforms such as Getaround and Turo at tenants associations, HOAs, PTAs, neighborhood associations.
- Include car-share providers in local job fairs and employment recruitment efforts.
- Allow bulk purchasing of car-sharing memberships for below-market-rate (BMR) housing residents. These subsidized memberships would be available to anyone receiving public housing subsidies, regardless of where they live within District 10.
- Require car-share fleets to include a percent of their fleets as wheelchair-accessible vehicles (WAVs) to serve passengers with disabilities.
- Require car-share fleets to store car seats in the trunk of a target percentage of vehicles to meet the needs of families traveling with children.
- Consider all-electric car-sharing fleets, with funding from Electrify America.
- Explore one-way car-share implementation in District 10. Gig, the car-share provider operating in the East Bay and several San Francisco garages outside of District 10, is a potential partner in this effort.
- Work with car-share providers to offer Chinese and Spanish language service support.
- Create an "opt in" ZipKarma membership program with nonprofits from District 10. Non-profit organizations can sign up for reduced-rate business memberships, and savings passed onto their clients. Focus on the Department of Children, Youth, and Their Families (DCYF), non-profit developers such as Mercy Housing, HOPE VI sites, and health/senior/child-serving non-profits.

[34] Shaheen, Susan, and Elliot Martin. 2016. "Impacts of car2go on Vehicle Ownership, Modal Shift, Vehicle Miles Traveled, and Greenhouse Gas Emissions: An Analysis of Five North American Cities." Working Paper. Transportation Sustainability Resource Center. http://innovativemobility.org/wp-content/uploads/2016/07/Impactsofcar2go_FiveCities_2016.pdf.

- Add car-share spaces to affordable housing developments like HOPE VI and Mercy Housing. Public funding would provide discounted memberships for vehicles on public housing sites.
- Investigate strategies to allow one-way car-share partners to become eligible for SF TDM Menu.[35] Currently only round-trip car-share operators are eligible. This action would likely require a network of potential pick-up/drop-off locations at mixed-use developments.
- Station a customer service kiosk at the TMA office in District 10 to accept cash payments for car-share. Distribute refillable prepaid debit cards to District 10 so residents can still reserve their car on-demand. Residents could top up their accounts in cash at this office or kiosk. A public agency or non-profit partner could assist in staffing the kiosk.

IMPLEMENT MANAGED LANES

Mode(s): Driving

Trip Type(s): All Trip Types

Strategy Type: Partnership Tools

Recommendation

Implement managed lanes by restricting access to traffic lanes to optimize transit performance.

Managed lanes are a set of lanes where some combination of pricing, access control, or vehicle eligibility restrictions are used to manage traffic congestion. Managed lanes are typically used to reduce congestion and enhance transit service.

Implementation Elements

These strategies may include high-occupancy toll (HOT) lanes, truck lanes, or bus-only lanes on the most congested corridors such as Bayshore Boulevard, Cesar Chavez St, or 3rd Street. Depending on local traffic conditions, managed lanes can be enforced all-day or limited to peak periods, when congestion is most severe.

[35] This action would likely require an amendment to the SF TDM Ordinance.

CREATE A PARKING BENEFIT DISTRICT

Mode(s): Driving

Trip Type(s): All Trip Types

Strategy Type: Partnership Tools

Recommendation

Create a parking benefit district (PBD) that requires any revenues from on-street or off-street parking collected in District 10 to be re-invested in District 10 streetscape and mobility improvements.

Where paid, on-street parking exists, creation of a PBD would provide a way to commit to dedicating parking funds to improving the transportation environment in District 10 with a focus on improvements that support the plan goals of reduced drive-alone trips, access, affordability, and equity. A PBD would include revenue from both metered parking and neighborhood permit parking programs. At present, these revenues are directed to SFMTA's general funds.

Implementation Elements

- SFMTA has expanded demand-based parking pricing (SFpark) to metered parking districts citywide. Creation of parking benefit district would require SFMTA approval.
- This strategy needs to be coordinated with the neighborhood permit parking program being implemented in Dogpatch.
- This strategy has limited application for off-street parking. The only two SFMTA-owned parking facilities in District 10 are Felton/San Bruno Lot and ZSFG Trauma Center Garage.
- Currently the only metered corridors in District 10 are San Bruno and Third Street, though these areas could be expanded based on parking occupancy data collected by the SFpark program.

CREATE SCHOOL CARPOOL PROGRAM

Mode(s): All modes

Trip Type(s): School transportation

Strategy Types: New Mobility, Partnership Tools

Recommendation

Create a customized school carpool ride-matching systems for parents of elementary-school-aged children in District 10 to expand the range of school transportation options available to parents.

Parents of schoolchildren in District 10 need assistance coordinating school transportation carpools. Some mobility providers may help parents find the transportation they need when

offline social networks like parent-teacher associations (PTAs) are unable to help. This need for school transportation is especially strong for families whose children participate in after-school activities that let out after school buses stop running. Some local schools also have limited bus transportation options regardless of the time of day.

Implementation Elements

- Some school transportation needs can be met through youth carpool apps, which use professional drivers to transport school carpools on-demand. These drivers should be certified/approved to work with children, with more background-checks required than for typical ride-hailing drivers. However, these services tend to be more expensive than ride-hail service; many residents found their pricing to be a significant barrier.
- Reach out to youth carpool apps such as Kango, HopSkipDrive, and Zum. Connect them with the community, and facilitate service to District 10.
- An alternative approach is to collaborate with SFUSD, SFMTA, and other public agencies about piloting a school trip ride-matching service to match families with similar origins/destinations. Ideally, these ride-matching services would be limited in scope to the school(s) where families' children are enrolled, increasing the odds of a viable match. A good model for this approach is King County Metro's "School Pools" program, a partnership between the transit agency and five suburban municipalities that each operate their own, private carpool ride-matching networks for local parents.[36] The platform is also used to facilitate walking and biking groups to schools to reduce traffic congestion near schools.
- Work with residential transportation coordinators and TMAs, as well as residential property managers and HOAs, to publicize and market these tools.

OPERATE SHUTTLE FOR SHOPPING AND DISCRETIONARY TRIPS

Mode(s): Microtransit, ride-hailing

Trip Type(s): General discretionary trips

Strategy Type: New Mobility

Recommendation

Operate an on-demand shuttle service to support shopping and other trips in District 10.

Infrequent service and limited hours on local Muni routes (e.g. 23, 54) make it difficult for District 10 residents to access retail and other community destinations without a personal car. According to public input received during previous neighborhood transportation plans, the need for additional service is strongest during evenings (6 - 10 PM), when many residents shop and run

[36] https://kingcounty.gov/depts/transportation/metro/travel-options/rideshare/programs/schoolpool.aspx#benefits

errands, especially buying groceries. Safety while traveling during nighttime hours is a particular concern for residents, so it is important for stops to be located in well-lit, busy areas.

A fixed-route shuttle would include stops at key grocery stores and other retail destinations (e.g. Foodsco, Grocery Outlet, Supersave, Smart & Final). The service could be free or have flexible fare options (e.g. Clipper Card, mobile payments, or cash). The service model could include microtransit or ride-hailing.

Implementation Elements

- Integrate this solution with Clipper Card to ease fare payment and enable free transfers.
- Integrate this solution with mobility kiosks, so riders can hail the service from the kiosks without a smartphone.
- Include specialized options for seniors and LEP users, via senior-oriented ride-hailing companies like Gogo Grandparent, Silver Ride or similar.
- Offer free or subsidized rides to address the price barrier emphasized by many workshop participants.
- Use microtransit and other emerging transportation services as case studies in local technology literacy courses (e.g. Community Youth Center).
- Reach out to senior-oriented rideshare program such as Gogo Grandparent and Silver Ride, connect them with the community, and facilitate service to District 10.
- Ensure developer-funded shuttles are open to the public, and do promotion/outreach to ensure this is publicly known. Examples include:
  - Chariot/UCSF shuttle, Warriors Arena (to 16th Street BART), India Basin developers (to Glen Park), Pier 70, Potrero Power Plant, Hunters Point
- Ensure local funding of D10 ride-hailing/microtransit projects gives consideration to the following conditions:
  - Microtransit routes should be publicly accessible.
  - Ride-hailing and microtransit drivers should undergo background checks and sensitivity training for working with people with limited English proficiency (LEP) and people with disabilities.
  - Mobility providers should participate in local job fairs and employment recruitment efforts.
  - Ride-hail/microtransit fleets should include wheelchair-accessible vehicles (WAVs), using access funds from SB 1376.
  - Mobility providers should operate call centers for dispatch (for non-smartphone-users) and accept cash payment.[37]

[37] This could be accommodated through additional partnerships with legacy taxis or ambulettes, for unbanked riders.

6 CONCLUSION

Residents of District 10 are supportive and open to non-infrastructure transportation solutions that are easily available, accessible, and efficient in getting them to where they need to go in terms of time and cost. The most common accessibility criteria are price, language, and non-smartphone access.

Long term affordability for District 10 residents depends on local housing stability; communities needs both stable housing and reliable transportation to thrive. This plan outlines solutions that can help support more equity – parking benefit districts and managed lanes are ways to increase funding to create an equitable environment as the district continues to undergo major development.

As this plan goes through implementation it is important that there is ongoing communication with the community. Conversations will support a feedback loop on what strategies are working to create a more livable neighborhood, and which are not. Visibility into the mobility, equity, and environmental justice challenges will further support community conversation and action.