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Memorandum

AGENDA ITEM 7

DATE: May 25, 2023

TO: Transportation Authority Board

FROM: Rachel Hiatt - Deputy Director for Planning

SUBJECT: 06/13/23 Board Meeting: Adopt the Octavia Improvements Study Final Report

[NTIP Planning]

RECOMMENDATION □ Information ⊠ Action	☐ Fund Allocation
Adopt the Octavia Improvements Study Final Report [NTIP	☐ Fund Programming
Planning].	\square Policy/Legislation
	⊠ Plan/Study
Requested by former District 5 Supervisor Vallie Brown, the Octavia Improvements Study recommends near-term local safety and connectivity improvements, as well as longer-term regional congestion management strategies, to support the safety and efficiency of Octavia Boulevard and surrounding streets. Informed by technical analysis and community outreach, the Study identifies a set of local safety and connectivity improvements to be funded by revenues in the Market and Octavia Special Revenue Fund. The Study also recommends potential funding sources to advance the regional congestion management strategies to the next stage of planning and technical analysis. We led this study in partnership with the San Francisco Municipal Transportation Agency and undertook two major rounds of community outreach, including special collaboration with the Market and Octavia Community Advisory Committee. We have reviewed the Study findings and recommendations with District 5 Board member Dean Preston's office and they have expressed their support.	□ Capital Project Oversight/Delivery □ Budget/Finance □ Contract/Agreement □ Other:



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BACKGROUND

In 2012, through Resolution 13-10, the Transportation Authority adopted the Central Freeway and Octavia Boulevard Circulation Study. This 2012 Study evaluated the performance of the transportation system in the Market-Octavia area and recommended changes for improving travel options and traffic management. This Study identified a decade's worth of improvements to be funded by the Market and Octavia Special Revenue funds pursuant to the Planning Department's 2008 Market/Octavia Plan.

Since that time, the City has implemented all of the recommendations of the 2012 Study. In 2019, former District 5 Commissioner Vallie Brown requested an Octavia Boulevard Circulation and Accessibility Study Update, known as the Octavia Improvements Study (Study).

DISCUSSION

In partnership with SFMTA, the Octavia Improvements Study evaluates the accessibility, safety, and circulation of Octavia Boulevard leading to the Central Freeway. During peak hours, there is significant traffic congestion on Octavia and streets leading to/from the Boulevard that causes queuing and conflicts in the area. The Study's analyses include an evaluation of the overall travel demand pattern on Octavia Boulevard with a view to identifying short (local area), medium (crosstown), and long-distance (regional) trip markets.

Based on these trip markets, the Study makes recommendations in two categories - Local Safety and Connectivity concepts and Regional Congestion Management strategies - based on outreach and technical analyses.

Outreach: Study outreach included two major rounds and involved special collaboration with the Market and Octavia Community Advisory Committee (CAC). The first round sought input to confirm Study goals and both local and regional traffic management and safety needs. The second round of outreach included an online survey publicized to local and regional travelers of all modes, asking respondents to prioritize the potential local safety and connectivity improvements, and to indicate level of interest in the potential regional congestion management strategies. Both outreach rounds involved presentations to area community groups, including the Market and Octavia CAC.

Local Safety and Connectivity Improvements: The Local Safety & Connectivity concept recommendations include:



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- Bulbouts on Oak and Fell streets at Buchanan and Webster streets;
- Red light camera enforcement (or a similar strategy to reduce red light running and associated conflicts) on Market Street at Gough Street; and
- Traffic calming on Octavia Street, such as raised crosswalks, signal timing adjustments, and/or speed humps.

Some of the recommended concepts can be designed or delivered as part of related projects led by SFMTA, such as the SFMTA's Better Market Street 2023 Hub Quickbuild project or Upper Market Safety Improvements.

Regional Congestion Management Strategies: The Study recommends the following regional Congestion Management Strategies to advance to the next stage of planning and technical analysis:

- Transit and High Occupancy Vehicle Lane on Oak Street: Study and conduct stakeholder outreach to develop High Occupancy Vehicle (HOV) and transit lanes on Oak Street. This HOV / transit lane would connect the existing and planned managed lane and freeway network on US 101. This recommended next phase of planning work should include further technical analysis and outreach regarding retiming the Oak Street signals to meter traffic along Oak, upstream of the Oak and Octavia intersection. This upstream traffic metering is a prerequisite to allow for a lane of mixed traffic on Oak Street to be converted into the HOV and transit lane. As part of this concept development, integrate regional wayfinding signage for circulation and access to guide vehicles towards the most time-competitive freeway access routes, such as potential new HOV lanes on 9th and 10th streets.
- Regional Express Transit Hub: Plan for regional and local express transit service to connect San Francisco with Peninsula cities, and study establishing a regional transit hub in the Civic Center area to enable closer connections from western neighborhoods to regional transit service.

Each of these strategies requires further planning, concept development, and stakeholder outreach.

Funding and Implementation: The funding source for the Local Safety and Connectivity Improvement recommendations is the Market and Octavia Special Revenue fund. The Regional Congestion Management Strategies all require further planning and community engagement funding sources as a next step. In addition to the Special Revenue fund, these could include Caltrans Sustainable Planning Grants,



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regional Priority Development Area planning grants, regional Mobility Hub planning grants, and more as described in the attached final report.

FINANCIAL IMPACT

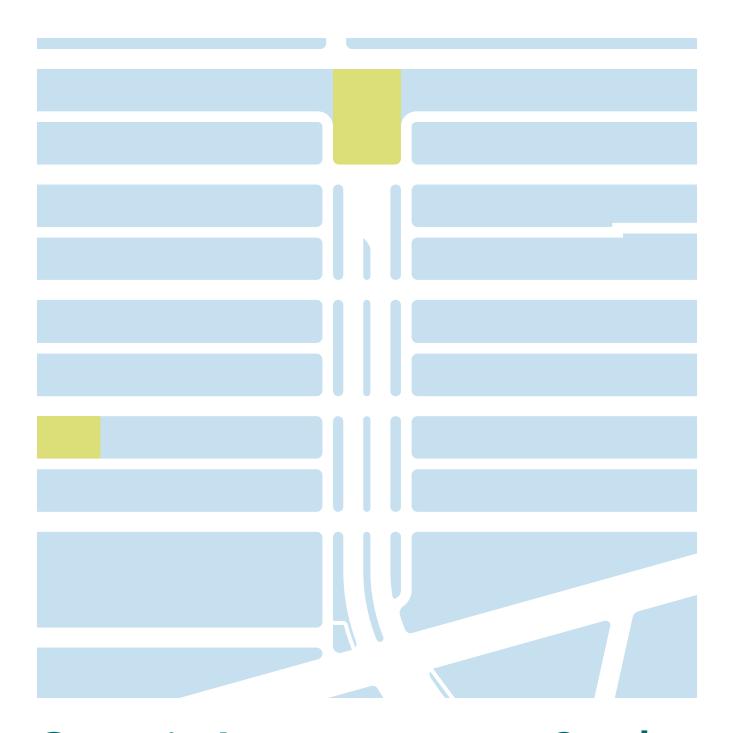
The recommended action would not have an impact on the adopted Fiscal Year 2022/23 budget or proposed Fiscal Year 2023/24 budget.

CAC POSITION

The CAC considered this item at its May 21, 2023 meeting and unanimously adopted a motion of support for the staff recommendation.

SUPPLEMENTAL MATERIALS

- Attachment 1 Octavia Improvements Study Final Report
- Attachment 2 Resolution



Octavia Improvements Study



Draft Report: May 2023

Acknowledgments

Prepared by the San Francisco County Transportation Authority

Funded by the San Francisco County Transportation Authority through the Neighborhood Transportation Improvement Program (NTIP). The Neighborhood Program was developed to build community awareness of, and capacity to provide input to, the transportation planning process and to advance delivery of community supported neighborhood-scale projects.

PROJECT TEAM

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1. Background

The Octavia Improvement Study was completed at the request of the District 5 Commissioner Vallie Brown and Dean Preston and made possible through the San Francisco County Transportation Authority's (SFCTA) Neighborhood Transportation Improvement Program (NTIP), funded by Prop K sales tax revenue. The NTIP was established to fund community-based efforts in San Francisco neighborhoods, particularly underserved neighborhoods and areas with vulnerable populations such as seniors, children, or people with disabilities.

The Octavia Improvements Study team analyzed travel patterns, traffic-related collisions, vehicular congestion and transit, bike, and pedestrian usage in the study area. The team also solicited feedback from the community about their travel experiences and potential improvement areas. Project initiation and outreach began in Spring 2020 and was completed in Summer 2022. Staff reviewed past studies and projects that have addressed the Octavia area's transportation needs and goals, particularly the 2012 Central Freeway and Octavia Blvd. Circulation Study. Most of the streets in the study area are the focus of a current or past city initiatives, including the Octavia Blvd. Enhancement Program, Better Market St., the Market/Octavia Living Alleys Project, and more.

INTRODUCTION AND PURPOSE

Octavia Boulevard (Octavia) connects the US-101 Central Freeway terminus at Market St. to Fell St. at Hayes Valley. Octavia is the only street that can be used to access US-101 South and has persistent congestion. Octavia serves as a major connection point for the surrounding neighborhoods of Upper Market, Western Addition, Hayes Valley, and the Lower Haight area to Downtown San Francisco and the East Bay. Octavia Street is an adjacent frontage road that provides local access to houses and retail along Octavia and is a designated bike route, separated from Octavia Boulevard by landscaped medians. The prevalence of collisions on Octavia have classified the boulevard as a high injury street in San Francisco's Vision Zero program. The Octavia and Haight St. intersection is identified as a Pedestrian High Injury Intersection.¹

The Octavia Improvements Study ("The Study") objectives are to improve road safety for vulnerable users, strengthen the integration of transportation alternatives and land uses, enhance circulation and accessibility on Octavia for all modes, increase transportation options to reduce driving trips, and help achieve the city's climate action goals.² In 2012, the SFCTA completed the Central Freeway and Octavia Boulevard Circulation Study

¹ The SF Vision Zero High Injury Network is the network of streets on which of the majority of severe and fatal traffic injuries occurring in San Francisco. Vision Zero High Injury Network Map: https://www.visionzerosf.org/maps-data/

 $^{{\}tt 2-SF\ Climate\ Action\ Plan\ 2021:\ https://sfenvironment.org/sites/default/files/events/cap_fulldocument_wappendix_web_220124.pdf}$

to identify ways to improve the corridors accessibility and functionality. The study recommended a list of projects that include additional crosswalks, curb bulb-outs, lane reconfiguration, signal timing changes, and other short- to medium-term improvements. These recommendations made up the first generation of projects to be financed by the Special Fund revenues; this current study is the second generation of improvements, following the Central Freeway and Octavia Circulation Study recommendations, which have mostly been implemented by the San Francisco Municipal Transportation Authority (SFMTA).

Since the 2012 study, new mixed-use housing and retail developments have been completed. Between 2015 to 2019, 1,900 housing units were built in the Market Octavia Plan Area,² which is more than twice the amount of housing units added in the previous five years combined. New developments included ground-floor commercial space for local retail and commercial square footage doubled. Commercial employment increased by over 20% during this time. To address this new growth, new near- to long-term strategies are needed to further improve the safety and accessibility of the area.

Transportation Authority Board Members Vallie Brown and Dean Preston requested that the SFCTA conduct the Octavia Improvements Study to explore ways to reduce congestion and improve circulation, accessibility, and pedestrian and bike safety in the Market and Octavia area. This study identifies the next generation of near- and long-term improvements, determined through technical analysis and community engagement, to address transportation needs and prioritize and recommend projects to be financed by Market and Octavia Special Revenue funds.³ The SFCTA collaborated with SFMTA and Parisi Transportation Consulting to complete the study.

STUDY AREA

The Study included a Core and secondary study area because of the importance of Octavia as a key arterial in the city (see Figure 1). The core study area is situated in the Western Market area near the Lower Haight and Hayes Valley neighborhoods. The area encompasses Octavia and adjacent blocks from Fell St. to the north, Market St. to the south, Laguna St. to the west, and Gough St. to the east. The secondary study area was included to analyze impacts and travel patterns from key corridors that connect to Octavia Blvd. and are used to access downtown and the Central Freeway. The secondary study area includes Haight St., Page St., Oak St., and Fell St. between Stanyan St. and Laguna St. Areas north of Fell Street were not included in the secondary study area because of a lack of connectivity with Octavia Boulevard

¹ Central Freeway & Octavia Circulation Study: https://www.sfcta.org/sites/default/files/2019-03/Final%20Report%20 ENCLOSURE.pdf

 $^{2\}quad 2015-2019\ Market\ Octavia\ Monitoring\ Report-Key\ Trends\ \&\ Takeaways:\ https://sfplanning.org/sites/default/files/documents/cac/MOCAC_Presentation02-20200817.pdf$

³ SF Controller's Office Summary of Special Revenue Funds: https://sfcontroller.org/ftp/uploadedfiles/controller/cafr/00/cafr00-29.pdf

and the recent completion of the Western Addition Community-Based Transportation Plan (led by SFMTA).

The study area was split to capture the local and regional accessibility of Octavia Blvd. The core study area was analyzed to determine local or neighborhood specific issues such as pedestrian and bicycle safety, traffic congestion, and transit crowding. The secondary study area was analyzed to determine the number of trips generated from other districts that use Octavia to get to the Central Freeway or other destinations in the city. The study team also analyzed regional travel demand. The travel patterns and trends for the Core and secondary study areas were used to develop recommendations to achieve the project objectives.

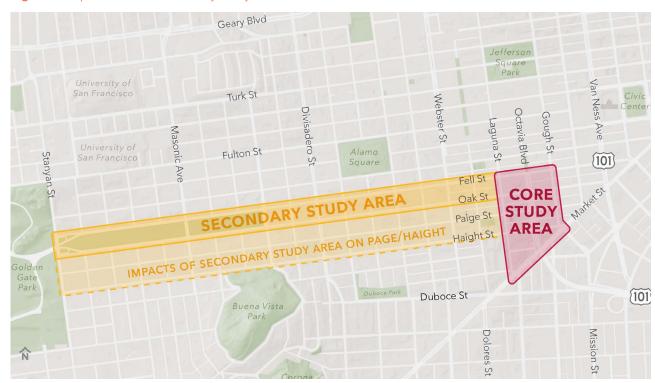


Figure 1. Map of Core and Secondary Study Area

CURRENT PROJECTS IN STUDY AREA

The SFMTA has many recently completed and ongoing projects that are anticipated to be completed in the coming years. This study builds on past planning efforts and incorporates ongoing projects into the baseline conditions to ensure recommendations are consistent with, and not duplicative of, ongoing or planned improvements. The goals of these projects are to improve safety and accessibility for vulnerable road users, enhance integration of transportation mode alternatives such as walking, biking, and

riding public transit to achieve the city's climate goals, and manage vehicle circulation in and around Octavia.

Previous studies and related projects are outlined below and shown in Figure 2:

- The Octavia Blvd. Enhancement Program¹ is a series of capital projects to improve safety, support active transportation, and better balance competing demands along and around the boulevard. Recently completed projects include Octavia Open Street at Patricia's Green and sidewalk/streetscape improvements along Oak St. and Fell St. A potential streetscape and traffic calming project along the Octavia northbound local lane was put on hold due to lack of funding / parcel development.
- Page Slow Street² includes traffic circulation changes and streetscape upgrades from Stanyan to Octavia streets. Formerly known as a 'neighborway,' the city is currently completing construction of sidewalk extensions, rain gardens, and a raised intersection along Page St. between Buchanan St. and Gough St. This project will be completed in spring 2023.
- Upper Market Safety Project³ is a multi-phased effort to improve the safety and comfort of Market St. between Octavia Blvd. and Castro St. for all road users. The project recommendations include engineering recommendations for the corridor's complex six-legged intersections, dedicated bike lane upgrades, and public realm improvements to enhance safety and comfort for people walking, driving, and bicycling. The project's final construction phase should be substantially completed in March 2023.
- Western Addition Community Safe Streets Project is a robust community-focused planning effort, completed in 2018, led to identify near-term traffic safety fixes and longer-term safety needs, including traffic signal upgrades. In 2022, the city was awarded a major federal grant (Safe Streets and Roads for All) to complete signal upgrades at 16 locations within the Western Addition community.

- 1 Octavia Boulevard Enhancement Program: https://www.sfmta.com/projects/octavia-boulevard-enhancement-program
- 2 Page Slow Street: https://www.sfmta.com/projects/page-slow-street
- 3 Upper Market Street Safety Project: https://www.sfmta.com/projects/upper-market-street-safety-project

Better Market Street Project¹ is a project to revitalize Market St. from Octavia Blvd. to Steuart Street. As part of this project, sections of Market St. from 10th St. to Main St. eastbound and Steuart St. to Van Ness Ave. westbound were designated car-free in January 2020. Phase One improvements, located between 5th St. and 8th St., is starting construction in early 2023. As part of a related quick-build project, additional car-free designated areas are expected along Market from 10th St. to 12th St.

Market Octavia Living Alleys Project² identified three alleys in the study area – Rose St., Lily St., and Hickory St – for conversion to living alleys. The project transforms underutilized alleys to create a secondary pedestrian network in the study area that is separate from heavily trafficked streets. A Living Alley is a narrow, low-volume traffic street that is designed to focus on livability, instead of parking and traffic. A living alley on lvy, between Laguna and Octavia is slated to begin construction in early 2024.

Upper Haight Transit Improvement & Pedestrian Project³ spans half a mile on Haight St. from Stanyan to Central Ave. in the secondary study area. The project includes Muni Forward transit and pedestrian safety improvements, streetscape enhancements, pedestrian scale lighting, tree planting, curb ramps and bulb-outs, bus bulbs, traffic signal installation/replacement, and street repaving. This effort was completed in 2021.

Buchanan St. Mall Renovation Project⁴ began in 2015 as a partnership between The Trust for Public Land, Green Streets, The Exploratorium, Citizen Film, San Francisco Public Works, and the San Francisco Department of Recreation and Parks to redesign Buchanan St. from Eddy St. to Fulton St. Among the project's goals are to improve safety, lighting, and street beautification, create an engaging public space for multigeneration recreation and social interaction, create skills training and job opportunities, and tell the story of the neighborhood. Key features of the redesign include a Memory Walk, picnic tables, gardens, a playground, a stage, a senior fitness area, and a micro-enterprise kiosk. Phase 1 is expected to begin construction in April 2023 and open to the public by June 2024.

Fell St. Panhandle Social Distancing & Safety Project⁵ was an emergency response planning initiative during the COVID-19 Pandemic that implemented a parking-protected bikeway on the south side of Fell St. between Baker St. and Shrader St. to provide relief to crowding and support social distancing on the Panhandle Path. The project was completed in 2020.

- 1 Better Market Street: https://sfpublicworks.org/bettermarketstreet
- ${\tt 2~SF~Planning-Market~Octavia~Living~Alleys:~https://sfplanning.org/market-octavia-living-alleys}\\$
- 3 Upper Haight Transit & Pedestrian Improvement Project: https://www.sfmta.com/projects/upper-haight-transit-improvement-pedestrian-realm-project
- ${\tt 4}\quad {\tt Buchanan\,Street\,Mall\,Renovation\,Project:\,https://sfrecpark.org/1134/Buchanan-Street-Mall-Renovation-Project}\\$
- 5 Panhandle Social Distancing & Street Safety Project: https://www.sfmta.com/projects/panhandle-social-distancing-and-safety-project

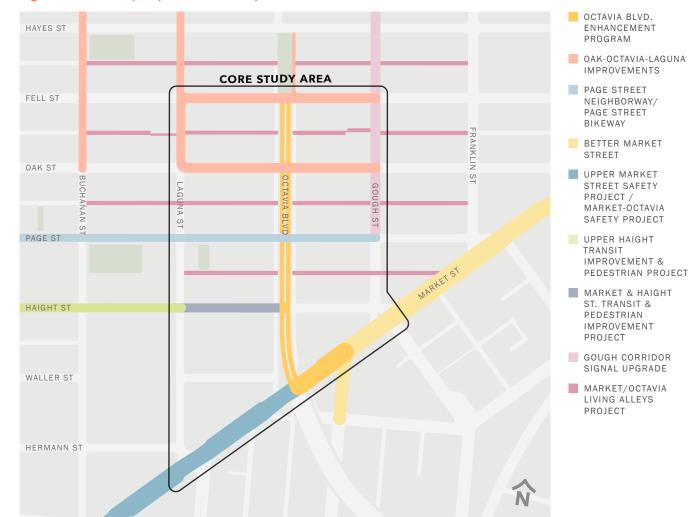


Figure 2. Current City Projects in Core Study Area

EXISTING TRANSPORTATION CONDITIONS

The project team used technical analysis to understand transportation patterns, travel markets, and existing needs in the Market and Octavia study area. This information was used in combination with outreach fundings to develop strategies to advance the study goals. Findings from this effort are discussed in the following sections. This analysis was conducted prior to the COVID-19 Pandemic and does not reflect the changes in citywide trip patterns, which became more focused on neighborhood trips compared to Downtown. Additionally, the Van Ness BRT project opened in April 2022, after the completion of the existing conditions analysis. Therefore, findings about transportation patters are not reflective of this transit service.

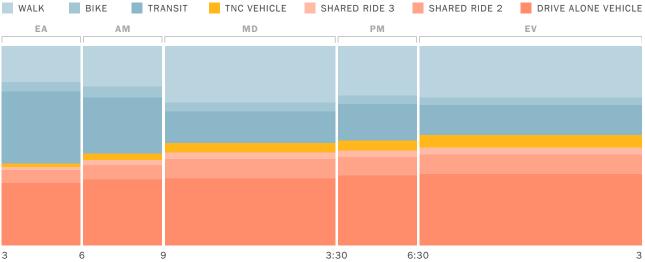
Travel Mode Share

Western Market Neighborhood Trip Patterns

The project team used the SFCTA's travel demand model known as the San Francisco Chained Activity Modeling Process (SF-CHAMP) to understand the mode share of all trips to, from, and within the Western Market neighborhood, congestion, and major trip markets. 1 For all trips to, from, and within the area throughout the day, about 50% of all trips are made by driving (including drive alone, carpool, and ride hail). In the PM peak and late-night periods, there are slightly more trips. Most of these are drive alone trips. The early morning and AM peak periods have the highest share of non-driving trips, with most trips made by transit and walking. Figure 3 illustrates Western Market's overall mode share throughout a typical weekday.



Figure 3. Western Market Mode Share



On a typical weekday there are about 300,000 trips that start within the Western Market neighborhood. The PM period has the highest number of trips (about 22,000), followed closely by the AM period (about 19,000), see Figure 4. Trips using transit and active transport modes (walking and biking) are highest during the AM and PM commute peaks. Drive alone trips make up the vast majority of driving trips originating in Western Market.

¹ CHAMP estimations were made using 2019 pre-COVID-19 Pandemic travel data.

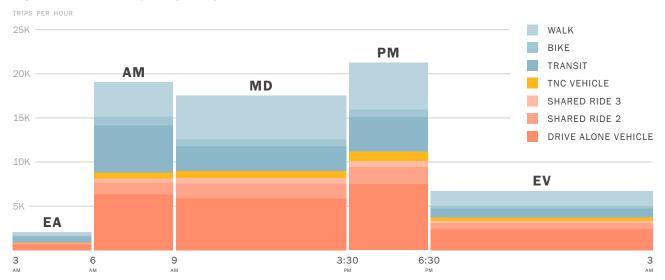


Figure 4. Number of Trips Originating in Western Market

Western Market Neighborhood Travel Markets

A travel market analysis was done at the neighborhood level to fully capture travel patterns and trends. Travel markets show that trips from the Western Market area to other parts of San Francisco vary by time of day and by travel mode. Figure 5 and Figure 6 demonstrate where trips originating in the Western Market area end and how people travel in the AM and PM peak periods. Not represented in the graphic are trips made within the neighborhood itself. Western Market has the highest number of walk trips compared to other destinations, but it also shows a high level of drive alone vehicle trips. About half of all walking trips originating in Western Market end within the neighborhood, and 23% of drive alone trips that start in the Western Market also end within the neighborhood.

The largest portion of trips in the AM period are to Downtown San Francisco, made by transit (53%), with a roughly equal portion of travelers driving alone as walking. The Mission/Potrero area and Marina are the next highest travel markets. There are more trips made to the Mission/Potrero area by driving than transit and walk and bike trips. Trips to the Marina have a more evenly distributed mix of modes. Though there are fewer trips made to other neighborhoods within San Francisco and the broader Bay Area, these trips are primarily made by car.

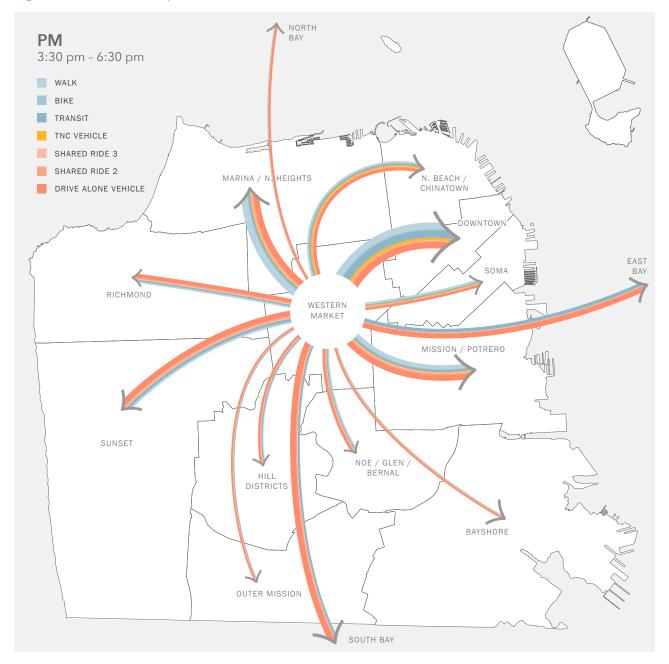
NORTH BAY **AM** 6:00 am - 9:00 am WALK BIKE TRANSIT TNC VEHICLE SHARED RIDE 3 SHARED RIDE 2 MARINA / N. HEIGHTS N. BEACH / DRIVE ALONE VEHICLE CHINATOWN SOMA RICHMOND WESTERN MARKET MISSION / POTRERO SUNSET NOE / GLEN BERNAL HILL DISTRICTS BAYSHORE OUTER MISSION SOUTH BAY

Figure 5. AM Peak Period Trip Markets

Similar to the AM peak period, in the PM period the most common trip destinations are to Downtown San Francisco, the Mission/Potrero, and the Marina. Trips downtown are made primarily by transit and active transportation, while trips to Mission/Potrero and the Marina have larger portions of trips made by driving and fewer transit trips. Bayshore and the Outer Mission areas have the highest number of drive alone trips.

As with the morning peak period, most of the trips headed to other neighborhoods and regions within the Bay Area are made by car, with 60% of trips to South Bay being made by driving alone.

Figure 6. PM Peak Period Trip Markets



Street-level Travel Mode Share

Travel in the Market and Octavia neighborhood is multimodal, with large numbers of drivers, pedestrians, and cyclists traveling in and through the study area. The study team collected information to understand how people travel on each street in the core study area in the morning and evening peak periods. Each street that crosses Octavia has a unique mix of modes and, for many streets, the mix is different on the east and west side of Octavia. The street level mode shares during the AM and PM peak periods are illustrated in Figure 7 and Figure 8.

In the AM peak periods most corridors have a vehicle mode share over 50% and many exceed 75%, with the exception of the eastern portion of Haight St. and Page St. There is a low share of pedestrian travel, with most streets under 10%. The eastern end of Page St. and Fell St. have the highest share of pedestrian use at 19% and 15%, respectively. Bike use is concentrated to a few streets in the study area, primarily Page St. (47%) and Market St. (16% to the west and 13% to the east), which are major bike connections. This is higher than the citywide bicycle mode share, at around 1%. Haight St. is the only street with transit use and the mode share is higher on the eastern side of Octavia.

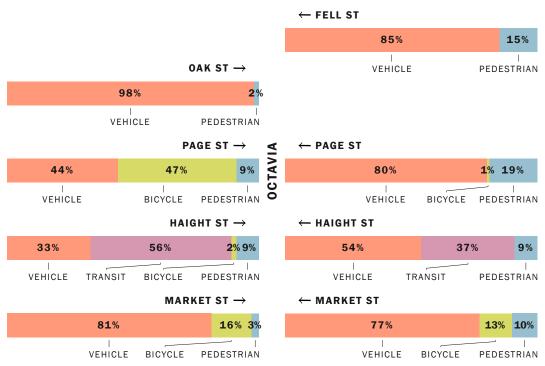


Figure 7. AM Peak Period Mode Share by Street Approaching Octavia

Note: Market Street mode share data does not include Muni Metro and F-Line ridership data

In the PM peak period, most corridors also have a vehicle mode share of over 50%. Haight St. sees a higher share of transit trips in both directions (about 55%), meanwhile about one third of travelers on Haight St. are in personal vehicles. Page St. becomes more car-dominated, and pedestrian and bicycle shifts from primarily east bound travel to westbound travel. Bicycle use on Page St. declines in the PM peak period down to 17% mode share, but Market St. sees a higher share of cyclists eastbound (41%). Fell St. and Oak St. are characterized predominantly by vehicle traffic during both the AM and PM peak period. Overall, personal vehicles make up the largest share of travel modes.

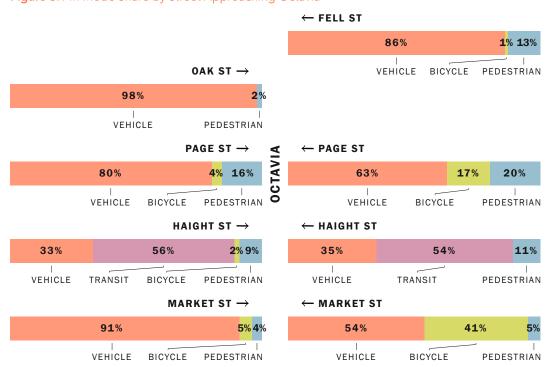


Figure 8. PM Mode Share by Street Approaching Octavia

Note: Market Street mode share data does not include Muni Metro and F-Line ridership data

Vehicle Travel Patterns

Octavia Boulevard Travel Analysis

Given the importance of Octavia for access to the freeway network and citywide connectivity, the project team conducted an analysis of where trips that specifically

use Octavia end. The number of weekday trips starting and ending or passing through Octavia in the surrounding area was analyzed by time of day (see Table 1).

Table 1. Select Link Analysis – Weekday Trips Starting, Ending, & % Pass-Through Octavia

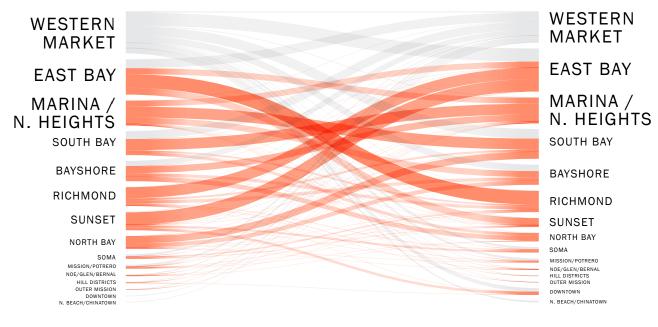
NUMBER OF TRIPS	ALL TRIPS	STARTING & ENDING IN THE HAYES VALLEY SURROUNDING AREA	% OF TRIPS THAT ARE PASSING THROUGH
Daily	81,285	30,210	63%
AM Peak	15,365	5,140	67%
Midday	29,080	12,035	59%
PM Peak	14,935	4,890	67%
Early Morning & Evening	21,915	8,145	63%

While the morning and afternoon peak periods are made up predominantly by commute trips, midday trips have a more balanced mix of commute to non-commute trips. Octavia has particularly high volumes of both local and regional traffic due to its connection to the Central Freeway. The top origin within San Francisco and regional destination pairs using Octavia include:

- East Bay and Richmond District
- Western Market and East Bay
- Sunset and East Bay
- Marina / N. Heights and South Bay
- Western Market and South Bay

Approximately 80% of drive alone trips that use Octavia are pass-through trips (see Figure 9 below).

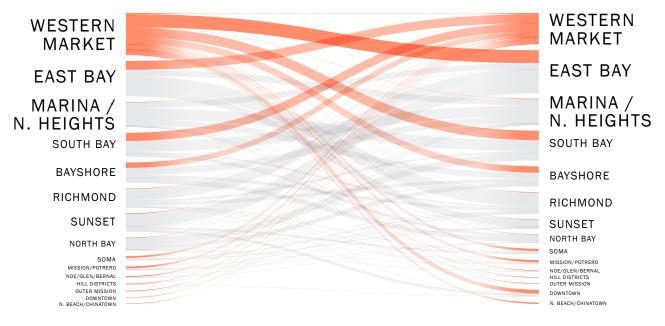
Figure 9. Daily Drive Alone Trips Passing Through Octavia Blvd.



The remaining 20% of daily drive alone trips on Octavia Blvd. begin or end in the Western Market region (see Figure 10 below). Top daily drive alone destinations and origins for this portion of trips include:

- East Bay
- South Bay
- Bayshore
- Downtown

Figure 10. Daily Drive Alone Trips Starting or Ending in Study Area Using Octavia Blvd.



Octavia Boulevard Traffic Counts

This section presents traffic counts at intersections in the core study area and documents community feedback on traffic congestion and circulation in the overall study area.

Drivers use Octavia to access the local and regional freeway system. Octavia connects the Central Freeway exit ramp from U.S. 101 North to the entrance ramp for the U.S. 101 South, I-80 West, and I-280 North/South. The local and arterial streets surrounding Octavia are organized in a grid used for both local and regional traffic. Octavia has a posted speed limit of 25 mph and the local Octavia St. on either side of Octavia has a speed limit of 15 mph.

The study team reviewed traffic count data provided by SFMTA to analyze traffic levels in the morning peak hour (7:30 a.m. to 8:30 a.m.) and evening peak hour (4:30 p.m. to 5:30 p.m.). The counts reflect data collected on May 8, 2019. This data showed roughly equal volumes on Octavia in the evenings (3,400) and the mornings (3,300).

Figure 11 shows traffic volumes in the AM peak hour along Octavia and connecting streets. Traffic volumes are higher in the southbound direction, towards the Central Freeway, than in the northbound direction.

Figure 11. Octavia Blvd AM Peak Hour Vehicle Levels



Figure 12 shows traffic volumes in the PM peak hour along Octavia and connecting streets. As in the morning, traffic on Octavia has higher volumes in the southbound direction.

Figure 12. Octavia Blvd PM Peak Hour Vehicle Levels



Congestion Speed Distribution

Using INRIX data from October 2019, the study team mapped congestion in the study area (see Figure 13 and Figure 14). INRIX data uses congestion percent as its metric, which is the percent of the free-flow speed that vehicles are moving on a given segment. It does not represent traffic counts.

In the AM peak period (8 a.m. - 9 a.m.), congestion is heaviest on eastbound Oak St. to Webster St. and on southbound Octavia between Oak St. and Page St. (see Figure 13). Congestion increases on Page St. and Haight St. at the approach to Octavia – this may partly be due to some drivers diverting off Oak St. to avoid congestion on Octavia. On southbound Octavia, congestion alleviates at the approach to the Central Freeway. Northbound Octavia between Haight St. and Page St. also experiences relatively high congestion levels, as vehicles exit the Central Freeway onto surface streets.

The green segment along the Market/Octavia intersection shows lower congestion in terms of speeds but observed traffic count data shows the segment has the highest volume of traffic in the corridor.

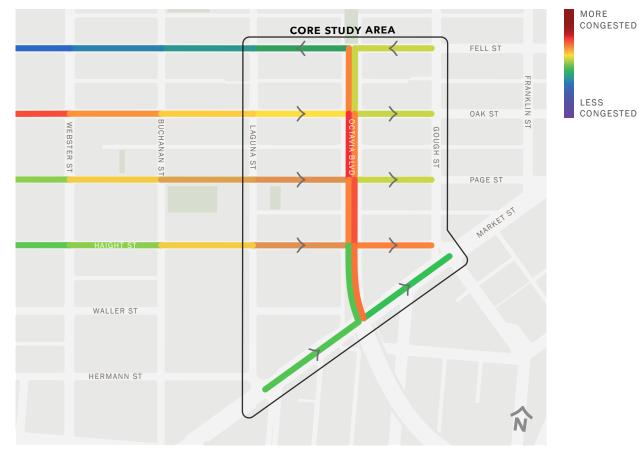


Figure 13. Congestion Distribution – Weekday AM Peak

Source: INRIX, October 2019

Congestion patterns in the PM peak period (5 p.m. - 6 p.m.) are similar to the morning period (See Figure 14). On eastbound Oak St. congestion is heavy between Buchanan St. to Octavia, continuing southbound along Octavia to Page St. Congestion along westbound Fell St. is generally moderate in comparison. Large numbers of vehicles turning onto southbound Octavia from Fell St. and vehicles from Oak St. exacerbate congestion on Octavia at Page St. and Haight St.

CORE STUDY AREA

FELL ST

FRANKLIN ST

LESS
CONGESTED

WEBSSITER
WALLER ST

HAIGHE ST

HARMANN ST

Figure 14. Congestion – Weekday PM Peak

Source: INRIX, October 2019

Transit Conditions

Two Muni routes pass through the study area: 6 Haight/Parnassus and 7 Haight/Noriega. The 6 Haight/Parnassus route connects downtown, and the Inner Sunset and the 7 Haight/Noriega route connects downtown and Ocean Beach. Both bus lines have three stops within the study area located at:

- Haight St. / Buchanan St.
- Haight St. / Gough St.
- Market St. / South Van Ness St.

The 6 Haight/Parnassus has a frequency of 10 to 20 minutes and runs between the hours of 5 a.m. and 10 p.m. daily.

The 7 Haight/Noriega has a frequency of 10 minutes or less and runs between the hours of 5 a.m. and 10 p.m. daily.

Transit Ridership

Transit ridership data was summarized using the SF-CHAMP model data, using pre-covid-19 Pandemic data. This data was validated with pre-covid observed data provided by SFMTA. Table 2 shows transit ridership for the 6 Haight/Parnassus and 7 Haight/Noriega in the morning and evening peak periods. Both bus routes take riders into downtown to connect with BART and Muni Metro stops along Market St., so crowdedness during the peak commute times is not abnormal.

Table 2. Transit Ridership Summary

TRANSIT ROUTES	PEAK PERIOD	RIDERSHIP
Muni route 6	AM Peak	1,750
	PM Peak	2,210
	Daily	9,650
Muni route 7	AM Peak	2,080
	PM Peak	2,690
	Daily	12,890

Figure 15 and Figure 16 show crowding on both bus lines. The symbols of the legend are defined as:

Uncrowded: the bus is not full.

Crowded: the bus is almost at capacity and can add a few new passengers.

Packed: the bus is completely full and is unable to board new passengers.

Figure 15 shows how many passengers are traveling during the AM and PM peak period inbound (to downtown) and outbound (to the Inner Sunset). In the AM peak periods, the 6 Haight/Parnassus is packed with passengers before approaching the core study area; residents are unable to get on the bus in the inbound direction. In the outbound direction, the bus is not crowded, reflecting the strong directionality of travel on this route. In the PM peak period, outbound ridership is packed to Octavia and then reduced to crowded conditions.

AM PEAK PERIOD S CORE STUDY AREA STEINER BUCHANAN FILLMORE ST WEBSTER ST OCTAVIA BLVD S ST ← OUTBOUND $\mathsf{INBOUND} \rightarrow$ UNCROWDED CROWDED PACKED 1000 PASSENGERS 100 PASSENGERS PM PEAK PERIOD STEINER FILLMORE ST BUCHANAN OCTAVIA BLVD GOUGH ST ST ← OUTBOUND $INBOUND \rightarrow$ UNCROWDED CROWDED PACKED 100 PASSENGERS 1000 PASSENGERS

Figure 15. Muni 6 Haight/Parnassus Crowding – AM Peak Period (top) and PM Peak Period (bottom)

Figure 16 shows the 7 Haight/Noriega ridership in the AM and PM peak period. The 7 Haight/Noriega follows a similar route to the 6 Haight/Parnassus but continues to Ocean Beach. In the AM peak period, the Inbound 7 Haight/Noriega packed until the Haight / Fillmore St. stop; east of this point the bus conditions are crowded. During the PM peak period travel in both directions is crowded. In the outbound direction, the bus is packed through the core study area until it reaches the Haight St. / Fillmore St. stop. In the inbound direction, the bus is crowded for most of its route headed to downtown.

AM PEAK PERIOD S **CORE STUDY AREA** STEINER BUCHANAN FILLMORE WEBSTER ST OCTAVIA BLVD S ST ← OUTBOUND $INBOUND \rightarrow$ UNCROWDED CROWDED PACKED 1000 PASSENGERS 100 PASSENGERS PM PEAK PERIOD

Figure 16. Muni 7 Haight/Noriega Crowding – AM Peak Period (top) and PM Peak Period (bottom)



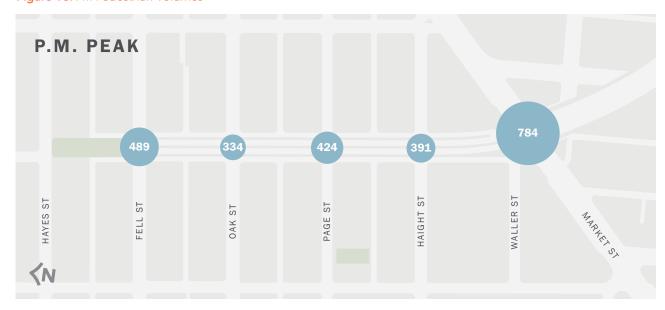
Active Transportation Conditions and Pedestrian Circulation

Figure 17 and Figure 18 highlight pedestrian travel on or crossing Octavia in the AM and PM peak periods. This information reflects data collected on May 8, 2019 during the peak hours of 7:30 a.m. to 8:30 a.m. and evening peak hour of 4:30 p.m. to 5:30 p.m. Overall, the Octavia / Fell St. and Octavia / Central Freeway / Market St. / Waller St. intersections see higher pedestrian activity than the other three intersections with 615 pedestrians crossing in the morning and 784 pedestrians crossing in the evening, respectively.

Figure 17. AM Pedestrian Volumes



Figure 18. PM Pedestrian Volumes



Bicycle Circulation

Figure 19 and Figure 20 summarize the AM and PM peak hour travel patterns of bicyclists in the core study area, respectively. The bicycle counts reflect data collected by SFMTA on May 8, 2019, between the morning peak hour of 7:30 a.m. to 8:30 a.m. and evening peak hour of 4:30 p.m. to 5:30 p.m. In the AM period, there are higher levels of bicyclists traveling eastbound on Page St. and Market St. compared to other intersections. In the PM peak hour, westbound bicycle travel primarily uses Market St.

Figure 19. AM Bicycle Volumes



Figure 20. PM Bicycle Volumes



Safety analysis

Octavia is on San Francisco's High Injury Network.¹ The study team assessed the total number and distribution of collisions and the number of bicycle and pedestrian collisions with vehicles within the study area using Statewide Integrated Traffic Records System (SWITRS) data, from 2014 to 2018. Figure 21 illustrates the most common primary causes of collisions along the core study area. Based on this data, most of these collisions along Page St., Market St. and Octavia St. resulted from red light signal violations.

The biggest crash clusters in the area are at the intersections of Octavia and Market St., Gough at Market, and Octavia at Oak St.; other notable clusters of crashes are at the intersections of Market / Laguna St. and Page St. / Gough St.



Figure 21. Crashes with Injuries

Source: SWITRS 2014 - 2018

1 https://www.visionzerosf.org/maps-data/

The highest overall density of crashes resulting in injury are at Octavia / Market St., with many of them attributable to unsafe turns or prohibited lane changes, turn prohibition sign violations, and red-light violations. A large portion of these crashes at the intersection of Market St. and Octavia involve injuries of cyclists specifically.

Locations with a high number of crashes involving cyclists include Haight St. / Gough St. at Market, Octavia at Page St., and Market St. at Guerrero St. / Laguna St. Almost half of these crashes were caused by driver failure to yield at crosswalks. Octavia has the highest number of crashes involving pedestrians.

Meanwhile, the highest density of vehicle-only crashes is at Octavia / Oak St. The collision factors of crashes at that intersection are primarily red-light violations, unsafe speeds, and following too closely. The intersection of Gough St. / Haight St. and Market St. also has a disproportionately large cluster of red signal violations, mainly involving personal vehicles.

2. Strategy Development

Using the existing conditions analysis and feedback from the first round of public outreach, (see Chapter 3), the study team developed potential strategies to advance the study goals. Strategies were then qualitatively assessed by their ability to address project goals for improving safety, accessibility, and circulation. Strategy benefits were ranked from Low to High based on the performance of similar projects implemented in the past. These project concept rankings are illustrated in Figure 22, organized by each strategy's ability to meet citywide objectives and by the estimated amount of time the strategy would take to implement. Once defined, concepts were categorized as either Local Safety and Connectivity Concepts or Regional Congestion Management Strategies based on their purpose, geographic scope, and level of agency coordination required. The study team presented the final list of seven local and six regional strategies in the second-round outreach survey to ascertain residents' interests and priorities for each proposed strategy.

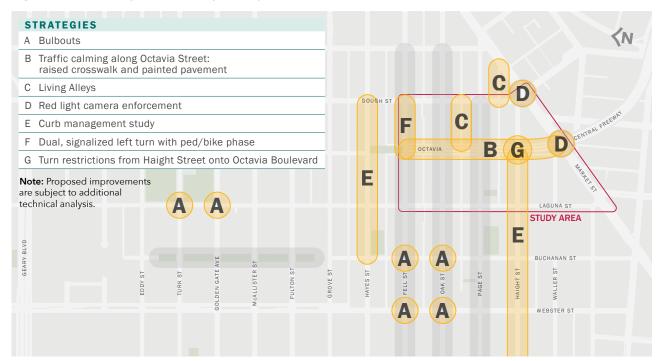
Figure 22. Project Concept Ranking by Objectives and Time Frame

	Time Frame			
	Short-Term	Mid-Term	Long-Term	
High	Turn Restrictions from EB Haight to SB Octavia for vehicles			
	Repurpose fourth travel lane on Oak	Increase transit capacity		
	Explore other potential signal improvements for safer crossings across Octavia	Living Alley program Transit lane on Haight Street	Woonerf concept	
	Page Street Bikeway Pilot Project implementation	Permanent Fell Street Panhandle Bikeway		
	Page Street slow street			
Meets Project Objectives Medium	Bicycle signal installation Red light camera installation Curb management study Ensure that crossing time reflects new SFMTA standards	 Bulb-outs Broad wayfinding/signage program New local shuttle service to Civic Center BART and/or Caltrain Coordinate with SFMTA to BART transfer 	Explore traffic metering concept Permanent Fell Street Panhandle bikeway	
Low	 Reverse direction of alleys to restrict driver access to Octavia Blvd. Signage describing Octavia turn restrictions 		 Coordinate with GG for transfer to Caltrain Coordinate with AC Transit for Express transbay connection Coordinate or organize carpool or carshare program Congestion pricing impacts 	

LOCAL SAFETY & CONNECTIVITY CONCEPTS

The local safety and connectivity concepts aim to reduce conflicts between vehicles and people walking and biking, improve visibility of people at intersections, and close gaps in the pedestrian network to support neighborhood travel. Each of the concepts are outlined below and mapped in Figure 23.

Figure 23. Local Safety & Connectivity Concept Sites

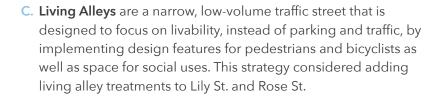


A. Bulbouts or Curb Extensions are raised curbs that narrow the travel lane at intersections or midblock locations to effectively shorten the crossing distance and slow speeds for vehicles making right turns. This concept identified 6 potential locations in the secondary study area, including the intersections of Fell / Buchanan St., Fell / Webster St., Laguna / Turk St., Laguna / Golden Gate Ave., Oak / Buchanan St. and Oak / Webster St.



Curb Bulbout with newly painted crosswalks

B. Traffic Calming along Octavia St (local lanes) in the north and south directions could including sidewalk/median widening, raised crosswalks, speed humps, and signal adjustments for cross east-west cross traffic. Shorter pedestrian crossings through median and sidewalk widening would help address persistent community concerns about too little time to cross the multi-way boulevard. Raised crosswalks increase pedestrian visibility by elevating the crosswalk to sidewalk level.





Raised Crosswalk



Living Alley

D. Red light camera enforcement uses automated cameras to enforce illegal red-light running and illegal right turns. This strategy considers using this technology at the Market / Gough St. intersection. This intersection was selected based on feedback collected via a map-based activity during the first round of outreach; the Market/Octavia intersection was also identified by the community as an area for improved signal compliance. Improving signal compliance could be further supported through additional street design improvements that prevent vehicles blocking the intersection.





Red light Camera



White curb space for passenger loading

F. Fell and Octavia Intersection signal improvements to prioritize pedestrian safety:

The intersection of Fell St. at Octavia Blvd. was identified as a concern through outreach and the existing conditions analysis. This location carries high volumes of vehicles seeking to turn left from Fell onto freeway-bound Octavia Blvd. and left from Octavia Blvd. onto Fell St., creating high exposure risks for pedestrians and cyclists. Improvements to reduce congestion and improve pedestrian safety could include reducing the number of northbound Octavia turn lanes at Fell St., further restricting vehicle access on the northbound Octavia local lane to reduce cut through traffic, and adding an additional turn lane on Fell St. to connect to Octavia Blvd.

This improvement concept would have to be coordinated with other recommended traffic calming changes for Octavia Street local lane(s).

G. Turn restrictions from Haight St. onto Octavia Blvd to restrict eastbound right turns from Haight St. onto Octavia would reduce the number of potential collision points between vehicle traffic and pedestrians and help people cross and walk along Octavia safely. The SFMTA Board adopted the addition of Page St. (parallel to the north of Haight St.) into the ongoing Slow Streets Program in January 2023, which included a formal adoption of left turn restrictions on Page at Divisadero St., so this concept would be in line with ongoing efforts to enhance pedestrian safety and access in the study area.



Turn Restrictions

REGIONAL CONGESTION MANAGEMENT STRATEGIES

The Existing Conditions analysis showed that a great deal of the vehicle traffic on Oak St., Fell St., and Octavia is regional through-traffic coming to or going from the South and East Bay and the Richmond or Inner Sunset districts of San Francisco's west side. While the Local Safety and Connectivity Strategies presented in the prior section will help reduce exposure and conflicts between pedestrians, cyclists, and vehicles in the core study area, they will not necessarily reduce the overall volume of vehicles.

For this reason, the study team also developed strategies intended to reduce the overall volumes of through-traffic and congestion. These Regional Congestion Management Strategies are more complex and have a longer-term implementation timeframe relative to the Local Safety and Connectivity projects in the previous section. Further concept development and technical analysis is needed for each of the regional congestion management strategies. These strategies seek to shift single-occupant

vehicle traffic to high-occupancy modes by making transit more reliable and travel times more competitive with driving and giving street priority to high-occupancy vehicles such as transit buses and carpool vehicles.

Through Round 2 outreach, the study team sought out people's interest level in these regional strategies for further development.

Regional Transit Hub at Civic Center would create a centralized location for connections to regional transit for people coming from western San Francisco, including facilities to support local transit, walking, and bike trips, would address gaps in regional transit service in San Francisco's west side neighborhoods. Currently, there are no regional transit services on the westside and travelers to the East Bay and South Bay have to go to downtown to connect to BART or Caltrain. The purpose of this strategy is to create access to regional express transit that is more time-competitive for west side travelers. This hub could also host future SamTrans routes (see



Bus stop at a Transit Hub

following strategy), AC Transit Transbay routes, Golden Gate Transit, and connect to the proposed surface high occupancy vehicle (HOV) lane network for transit priority access to the freeway network.

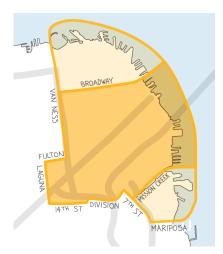
Designated Transit and Carpool Lanes would install red painted lanes for buses, taxis, and carpooling vehicles to enhance transit speed and improve connections to US 101 and I-80. Possible connections to the freeway network are 9th St. and 10th St., though other east west connections in SOMA could be explored to maximize connections and travel time savings. These lanes could connect upstream to the Oak St. HOV / transit lane (described below), and downstream to a future potential managed lane network on the I-280 and US 101 as described in the Streets and Freeways Strategy. The purposes of this strategy are varied. One role would be to provide transit priority treatment for regional



Transit & Carpool Priority Lanes

transit services such as SamTrans and AC Transit that could use the proposed Civic Center Transit Hub to access the freeway. Additionally, this strategy would deliver a second, more time-competitive freeway access route for HOVs and carpools that could help shift HOVs away from Octavia, thereby reducing queues. The 6 and 7 Muni bus routes had express service prior to the COVID-19 Pandemic. If these are restored an extension of HOV lanes into the west side may also be considered to extend benefits on these lines.

Congestion Pricing Study would charge drivers a fee to drive into congested areas of northeast San Francisco during rush hours, a strategy called congestion pricing, would reduce vehicle demand for Octavia Boulevard and the Central Freeway. The best practice is to combine the congestion fee with discounts and incentives to make the system fair and encourage the use of public transit, walking, and biking. Congestion Pricing program revenue would be used to improve transit service and street maintenance. The Downtown Congestion Pricing Study will use public feedback and technical analysis to shape a fair and effective congestion pricing recommendation for San Francisco. The Transportation Authority has paused the Downtown Congestion Pricing Study in light of the changing and fluid conditions surrounding traffic conditions and transit use. Since the study's timeline was extended, congestion pricing policy recommendations will be completed following the resumption of public outreach activities at a future date. Following completion of the study, if the Transportation Authority Board wishes to proceed, it would take at least 5 years to implement a congestion pricing system.



Congestion Pricing Zone Concept Map

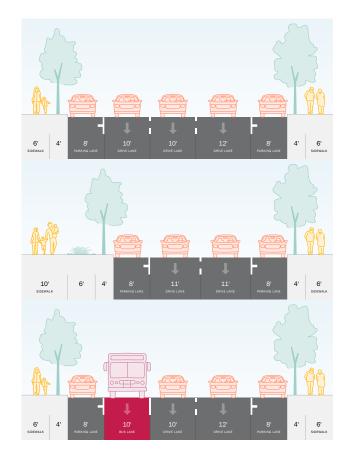
Regional Express Bus Study would develop, in coordination with neighboring transportation authorities, a regional express bus network linking job centers and residential along the San Francisco Peninsula. These services would crease north-south connections to the westside and connection to downtown could be accessed at the proposed Civic Center Regional Hub and take advantage of the proposed HOV priority. Further study is needed to identify specific express bus routes, but the conceptual map was developed as part of the Reimagine SamTrans process and serves to illustrate promising express bus routes that could serve western San Francisco and connect to hubs in South Bay. These routes showed promise but are not in line for implementation at this time due to the transit operations funding impacts of the COVID-19 Pandemic.



Concept Regional SamTrans Express Bus Routes

Oak St. Signal Retiming and Lane Conversion concept aims to reduce the concentration of

concept aims to reduce the concentration of vehicles at the intersection of Oak St. and Octavia. A capacity reduction analysis was conducted for Oak St. by re-allocating 10%, 20%, and 30% of green light time from Oak to side streets, vis either Masonic or Divisadero. Estimates of congestion per block along Oak St. were sourced from INRIX using an average of data from the entire 2019 calendar. Adjustments to the signal timing along Oak St. would redistribute the queuing to be more evenly spread out along the corridor and some vehicles would move to streets or blocks that currently have more available capacity. This adjustment would ultimately allow for the conversion or removal of a travel lane. Ultimately, reduced capacity on the western section of Oak St. would meter the amount of traffic on Oak at Octavia and reduce queuing at this intersection and along Octavia. The removed travel lane would free up street space to be repurposed to a dedicated high occupancy vehicle lane, transit only lane, protected bike lane, or additional sidewalk space.



Conceptual Roadway Reconfiguration Alternatives for Oak St.

Wayfinding Signage would install dynamic wayfinding signage to assist drivers and pedestrians navigate through the area. Dynamic messaging would support drivers on the corridor by providing real-time wayfinding, estimated times to destinations, and information related to traffic safety. For instance, this strategy would help guide HOVs from the west side to alternative, more time-competitive freeway access routes such as future HOV / transit-only lanes.

3. Outreach

Outreach for the Octavia Improvements Study was conducted in two rounds. Round one focused on understanding transportation needs and round two focused on understanding preferences and priorities for concepts.

- Round 1 was conducted in Winter 2020-21. This round focused on collecting site-specific feedback and understanding transportation challenges and preferences for the area. Engagement methods included a virtual town hall, a digital map-based survey, social media outreach and community presentations.
- Round 2 was conducted from Spring Summer 2022. The final
 outreach round goals were to further refine proposed improvements
 and determine preferred interventions, building on feedback from
 Round 1. Engagement methods involved a second virtual townhall and
 digital survey, social media outreach and community presentations.

Due to the COVID-19 Pandemic, the study team was limited to virtual engagement methods to solicit community input. The outreach process included two virtual town halls, a map-based questionnaire, and a digital survey of residents. Both surveys were promoted in social media and conducted in English, Spanish, and Chinese. The District 5 Supervisor's Office helped promote the surveys in their newsletters and through social media. The project team also gave presentations to community-based organizations to get additional input on needs, priorities, and proposed study recommendations; these organizations helped to promote the survey efforts. Community based organizations that participated in the outreach efforts include:

- North of Panhandle Neighborhood Association
- SF Bicycle Coalition
- WalkSF
- SF Transit Riders
- Hayes Valley Neighborhood Association
- Market and Octavia CAC
- Lower Haight Neighborhood and Merchant Association

ROUND 1 OUTREACH

The first round of outreach included a virtual town hall and online survey. The town hall meeting was held in November 2020 and was an opportunity for the project team to hear transportation needs and challenges from participants.

The round 1 survey conducted in Fall 2020 collected 749 responses through a mapbased questionnaire that asked respondents to identify needs and challenges of particular locations within the core study area on a map. The purpose of the survey was to understand priorities for the area and identify areas of concern to guide interventions and recommendations. Feedback from the outreach process was consolidated to location-specific feedback and street-wide themes, shown in Figure 24. Some themes include high speeds and safety issues on Oak St.; congestion blocking pedestrian crosswalks; cut-through vehicles traffic on streets parallel to Oak St.; and turn restrictions and red-light cameras suggested as mitigation measures.

HAYES ST Crosswalks are challenging for pedestrians **CORE STUDY AREA** Too many vehicles going to/ from the freeway FELL ST FELL ST Add more signal time for pedestrians to cross Intersections are challenging to vulnerable road users Encourage traffic calming Challenging to drive because to slow vehicles too many drivers merge into the left turn lane GOUGH Red light running is an issue, S S particularly with motorcycles PAGE ST Turning left onto Octavia from Page is challenging for cyclists Concerns about future impacts if traffic diversion is implemented on Page St. Confusing intersection with too much street space Discourage through traffic Provide separation between northbound cyclists and vehicles Used as a bypass to avoid Vehicles speed as they travel the queue of traffic onto Market St. Support for bicycle and pedestrian safety Speed up the 6/7 buses Bicycle improvements HERMANN ST to make transit a more requested on uphill westbound attractive option Buses move too slowly Extend the center-running due to congestion bicycle lane

Figure 24. Round 1 Outreach Feedback Map

STREETWIDE COMMENT

LOCATION-SPECIFIC COMMENT Of the 749 survey responses, 132 responses were from the study area ZIP code 94102. Respondents were asked to identify issues for their respective primary travel mode and their preferred improvements to address them. Survey findings were divided into an Issue Analysis and an Improvement Analysis, summarized below.

Issue Analysis:

Respondents were asked to express their agreement on various transportation issues. These issues were categorized by four travel modes – transit, driving, walking, and biking. An accessibility category was included to document transportation accessibility issues.

Transit Issues:

While only 3% of all respondents cited transit as their main mode of travel through the study area, many survey respondents did identify the need for improving this mode. The top issues for transit riders highlighted a need for more transit services in the study area (31 responses) and problems with vehicles blocking bus lanes (24 responses).

Driving Issues:

Drivers made up 34% of respondents, and only 2.5% of respondents used rideshare apps or taxis to travel through the study area. A majority of all respondents (including non-drivers), about 61%, cited traffic delays and congestion as an issue for the area. Almost 16% of respondents also cited unsafe traffic speeds as a driving issue.

Active Transportation Issues:

About 19% of respondents use a bike or scooter as their main mode of travel through the study area, and about 36.5% walk – meaning 55.5% of respondents use active transport as the primary mode of travel. For walking and biking issues, the distribution of responses was generally the same across income categories. The largest pedestrian safety issue cited was unsafe traffic speeds, with over 42% of respondents (316 out of 749 total respondents), followed closely by vehicles running red lights at nearly 37% of respondents. For top cycling issues, 30% of respondents cited lack of protective bike infrastructure, followed by unsafe traffic speeds at 25%.

Accessibility Issues:

The most highly cited accessibility issues were unsafe speeds, vehicles running red lights, and long crossing wait times.

Improvements Analysis:

Survey respondents were asked to provide feedback on potential improvements to address issues, categorized by four travel mode improvements, accessibility improvements, and pickup & delivery improvements.

Transit Improvements:

Roughly equal numbers of respondents cited improving travel times (34 responses), reliability (31 responses), and adding more service (28 responses) as their suggested improvements, with a further 22 respondents suggesting adding more amenities.

Drive Improvements:

The most popular suggested improvement for driving was to reduce traffic congestion, at nearly 35%, followed by improving signal timing at about 26% and improving lane configurations at almost 22%.

Walk Improvements:

Better pedestrian signal timing was the most popular improvement concept for pedestrians, with almost 29% of respondents in favor, followed closely by adding and improving crosswalks and improving pedestrian visibility at about 22% each.

Bike Improvements:

Over 26% of respondents suggested adding or improving bike lanes, with another 18% in favor of adding or improving bike signals.

Accessibility Improvements:

About the same number of respondents suggested improving pedestrian timing, clearing walkways, and enhancing crosswalks and curb ramps.

Pickup/delivery improvements:

There were 23 respondents suggested improvements for pickup and delivery services – 16 approved of adding curb space for pickup and deliveries, and 7 approved of adding curb space signage.

Respondent Demographics:

Race/Ethnicity:

Of the 407 respondents who provided their racial identity, 36% of them were White (255), compared to the citywide 51%.

Gender:

There were 460 out of the total 749 respondents that preferred not to specify their gender identity, but among the 289 who did, 200 were men, 82 were women, and 7 identified as non-binary.

Individual Income:

of the 382 respondents who provided their income, nearly 39% (148) make less than \$100,000 a year – including 7% (28) who make under \$20,000 annually. Among the 61% (234) who earn more than \$100,000, about 14% (55) earn more than \$250,000 a year.

ROUND 2 OUTREACH

The second round of outreach presented local and regional strategies to improve transportation, based on feedback heard in the first round of public outreach. The second round of outreach included a virtual townhall and online survey. The town hall was held in May 2022.

The online survey asked respondents to rank a list of seven local improvement strategies and rate their interest in six long-term regional transportation improvement concepts. The survey received a total of 1,091 responses; 967 respondents provided a home ZIP code. Responses were categorized into two groups – near and far – to understand how preferences varied by the proximity of respondents' home zip code to the study area. Figure 25 shows the zip codes that were included in the "near" category (94117, 94102, 94103). The "near" category includes 595 survey responses (61.5%); the "Far" category includes 372 survey responses (38.5%).

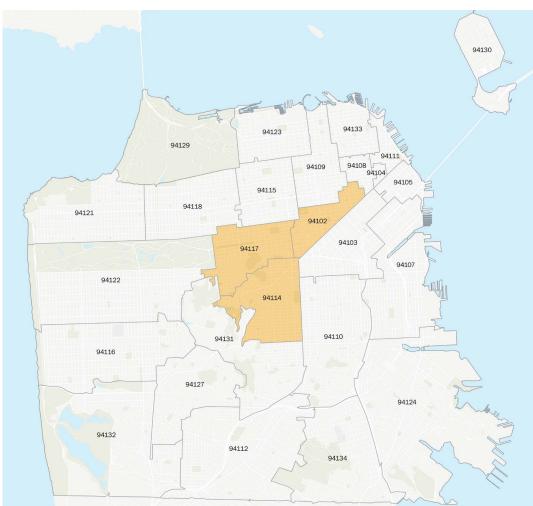


Figure 25. Round 2 Outreach Survey Areas

Transportation Priorities

Respondents were asked to rank the following three transportation priorities on a low to high scale: Pedestrian and Bike Safety, Livability and Quality of Life, and Parking and Vehicle Access. Overall, survey respondents from both Near and Far considered Pedestrian and Bike Safety (74%) as well as Livability and Quality of Life (77%) to be high priorities for the area. Parking and Vehicles access were generally assigned a low priority, at 55% for all respondents (see Table 3). Respondents Near the study area ranked livability and quality of life as the most important, with pedestrian and bike safety ranked a close second. The reverse is true for respondents Far from the study area, with pedestrian and bike safety ranked the highest priority and livability and quality of life a close second.

Table 3. Transportation Priorities

PRIORITY		LOW	MEDIUM	HIGH
	Overall	11%	16%	74%
Pedestrian and Bike Safety	Near	8%	16%	76%
	Far	14%	16%	70%
	Overall	5%	18%	77%
Livability and Quality of Life	Near	3%	14%	84%
	Far	8%	25%	68%
	Overall	55%	21%	24%
Parking and Vehicle Access	Near	56%	24%	21%
	Far	55%	18%	28%

Priorities for Local Safety and Connectivity Projects

Respondents were asked to rank the seven proposed local street design interventions from lowest to highest priority in order to address safety and connectivity issues along Octavia. Results from the survey showed strongest support for traffic calming through raised crosswalks and painted pavement along Octavia St., at over 68% support from respondents both Near and Far from the study area, while turn restrictions from Haight St. onto Octavia and curb management studies along Hayes St. and Haight St. were generally considered lowest priority (see Table 4). Red light camera enforcement at two Market St. intersections had an even split in prioritization for both groups. There appears to be a strong consistency between how projects were ranked for each group, with not much difference in prioritization between respondents Near and Far from the study area.

Table 4. Priorities for Local Safety & Connectivity Projects

LOCAL SAFETY AND CONNECTIVITY PRIORITIES		HIGH		LOW	
LOCAL SAFEIT AND CONNECTIVITY PRIORITIES	NEAR	FAR	NEAR	FAR	
Traffic Calming along Octavia St; raised crosswalk & painted pavement	69%	68%	31%	32%	
Bulb Outs at 6 Locations	54%	58%	47%	42%	
Red light camera enforcement at 2 Market St. intersections (Gough St. & Octavia Blvd.)	50%	51%	50%	49%	
Living Alleys: Lily St. & Rose St.	41%	35%	59%	65%	
Dual left turn w/ ped & bike phase on Fell at Octavia Blvd.	38%	40%	62%	60%	
Curb management study along Hayes & Haight St.	27%	22%	73%	78%	
Turn restrictions from Haight St. onto Octavia Blvd.	23%	29%	77%	71%	

Interest in Regional Congestion Management Concepts:

The survey also gauged respondents' interest in six regional congestion management strategies. While a majority of respondents indicated interest in all six proposals, installing wayfinding signage had the greatest interest at 68% of those Near and 64% of those Far from the study area (see Table 7). The Congestion Pricing Study elicited the smallest share of interest at 51% of Near respondents and 53% of Far respondents. Nearby respondents expressed greater interest in Oak St. signal retiming and lane conversions than respondents further away, at 68% and 53%, respectively. Designated lanes for transit and carpooling received slightly higher support from Far respondents (58%) than Near respondents (53%). Besides these small differences, interest in these concepts didn't differ very strongly between each survey group.

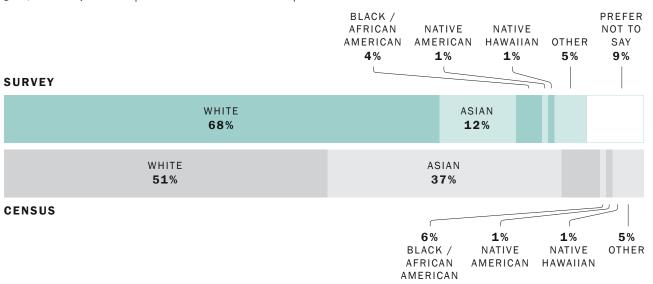
 Table 5. Interest in Regional Congestion Management Concepts

REGIONAL CONGESTION	INTERESTED		NEU'	NEUTRAL		NOT INTERESTED	
MANAGEMENT CONCEPTS	NEAR	FAR	NEAR	FAR	NEAR	FAR	
Wayfinding Signage	68%	64%	16%	17%	16%	19%	
Oak St. signal retiming & lane conversion	68%	53%	31%	29%	15%	27%	
Regional Transit Hub at Civic Center	58%	56%	29%	30%	13%	14%	
Regional Express Bus Study	54%	53%	31%	29%	15%	17%	
Designated lanes for transit & carpool	53%	58%	28%	20%	19%	22%	
Congestion Pricing Study	51%	53%	21%	19%	28%	30%	

Respondent Demographics:

Race/Ethnicity:

more respondents identified as White compared to the citywide population (68% vs. 51%). About 9% of respondents identified as Hispanic/Latinx.



Gender:

277 respondents identified as women (36%) and 488 identified as men (64%).

Household Income:

48% of all respondents earned below \$150,000 a year, 52% earned above.

NEARBY SURVEY RESPONDENTS



4. Findings and Recommendations

The study team prioritized the Local Safety and Connectivity concepts and Regional Congestion Management strategies based on outreach survey findings and technical work.

We recommend the Local Safety & Connectivity concepts ranked as a high priority by at least 50% of survey respondents. The Local Safety and Connectivity concepts that did not reach this threshold may still be implemented - the Study outreach revealed an interest in these recommendations - but would be advanced as a lower priority and pending funding availability.

A majority – 50% or more – of survey respondents indicated interest in further developing all of the Regional Congestion Management strategies.

The following sections provide a summary of each recommendation, its costs, implementation and funding strategy, and lead agency.

LOCAL SAFETY & CONNECTIVITY CONCEPT RECOMMENDATIONS

The Local safety & Connectivity concept recommendations are shown in Table 6 below and include bulbouts on Oak and Fell Streets at Buchanan and Webster; red light camera enforcement (or a similar strategy to reduce red light running and associated conflicts) on Market Street at Gough Street; and traffic calming on Octavia Street. Some of the recommended concepts can be designed or delivered as part of related projects led by SFMTA; these are noted under the "Implementation Strategy" column. Planning level cost estimates are provided for each recommendation and additional expected costs (e.g. contingency) are shown at a package level in Table 6. The funding source for these recommendations are the Market and Octavia Special Revenue funds.

Table 6. Overview of Local Safety & Connectivity Concept Recommendations and Planning Level Cost Estimates

RECOMMENDATION	DESCRIPTION	IMPLEMENTATION Strategy	TOTAL COST
Bulbouts (page 30)	Six bulbouts spread across four intersections of Oak and Fell at Buchanan and Webster	Design in coordination with SFMTA's signal retiming for Oak Street	\$1,850,000
Red Light Cameras (or similar strategies) (page 31)	Install at Gough St. / Market St.	Better Market Street 2023 Hub Quick Build	\$600,000
Octavia St. Traffic Calming (page 31)	Sidewalk/median changes, raised crosswalks, signal improvements, speed humps	New Project	\$3,575,000
Contingency	30% of construction items		\$1,807,000
Total Cost			\$7,832,500

REGIONAL CONGESTION MANAGEMENT STRATEGY RECOMMENDATIONS

We recommend all but one¹ of the strategies for regional Congestion Managements to advance to the next stage of planning and technical analysis. Some of these strategies are best studied together, as described below:

- Transit and High Occupancy Vehicle Lane on Oak Street: Study and advance High Occupancy Vehicle (HOV) and transit lanes on Oak St. to connect the existing and planned managed lane and freeway network, including signal retiming and a lane conversion (page 35). This study would include further analysis and outreach to retime Oak St. signals to meter traffic to allow for street reconfigurations. As part of this concept design, integrate regional wayfinding signage for circulation and access to guide vehicles towards the most time-competitive freeway access routes, such as potential new HOV lanes on 9th and 10th.
- Regional Express Transit Hub: Plan for regional and local express transit service to connect San Francisco with Peninsula cities, and study a regional transit hub at the Civic Center to enable closer connections from western neighborhoods to regional transit service.

COST, FUNDING, & IMPLEMENTATION

The Local Safety and Connectivity recommendations can be implemented with the \$7 million available in Market and Octavia Special funds.

The Regional Congestion Management strategies require funding for the next phase of conceptual design, technical analysis, and community engagement. In addition to the Special Fund, potential funding sources for these activities include:

- Caltrans Sustainable Transportation Planning Grants:
 - » Sustainable Communities Grants: encourage local planning that supports state goals, implements Regional Transportation Plans and Sustainable Communities Strategies, and ultimately achieve California's greenhouse gas emissions reduction target of 40 and 80 percent below 1990 levels by 2030 and 2050, respectively.

¹ Downtown Congestion Pricing: The SFCTA's Downtown Congestion Pricing Study is currently paused. The SFCTA will continue monitoring commute patterns, transit provision/usage, and economic recovery data to evaluate status of the paused Downtown Congestion Pricing Study.

- » Strategic Partnerships Grants: identify and address statewide, interregional, or regional transportation deficiencies on the State highway system in partnership with Caltrans. A sub-category funds transit-focused planning projects that address multimodal transportation deficiencies.
- MTC Mobility Hub Grants could provide funding to plan, design, and implement mobility hubs.
- MTC Priority Development Area Regional Planning Grants provide funding for land use and transportation plans that support Priority Development Areas such as the Market-Octavia Plan area.
- **Prop L:** local sales tax revenues to be used as a local match for larger planning grant programs and to fund local planning and implementation.
- Federal SS4A: A federal grant program that began in 2022 to fund planning and implementation of street safety projects.

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BD061323

RESOLUTION NO. 23-55

RESOLUTION ADOPTING THE OCTAVIA IMPROVEMENTS STUDY FINAL REPORT [NTIP]

WHEREAS, The Transportation Authority appropriated \$100,000 in Prop K half-cent sales tax funds from the Neighborhood Program (NTIP) for the Octavia Boulevard Circulation and Accessibility Study (Study) Update at the requestion of former Commissioner Vallie Brown; and

WHEREAS, The City and County of San Francisco allocated \$200,000 in Market and Octavia Special Revenue Funds, also known as Central Freeway Parcel Revenues, to the Study, for a total project budget of \$300,000; and

WHEREAS, The Study objective was to identify near-term local safety and connectivity improvements, as well as longer-term regional congestion management strategies, to support the safety and efficiency of Octavia Boulevard and surrounding streets; and

WHEREAS, The Study conducted public outreach including frequent consultation of the Market and Octavia Community Advisory Committee (CAC); and

WHEREAS, The Study recommends top priority concepts for local safety and connectivity to be implemented using Market and Octavia Special Revenue Funds; and

WHEREAS, The Study recommends several regional Congestion Management Strategies to advance to the next stage of planning and technical analysis; and

WHEREAS, All proposed solutions described in the attached Final Report support the Study goals and outreach findings; and

WHEREAS, The Market and Octavia CAC was briefed on the recommendations and expressed support for their advancement; and

WHEREAS, The Transportation Authority Community Advisory Committee was briefed on the final report at its May 24, 2023 meeting and unanimously adopted a motion of support for its adoption; now, therefore, be it

RESOLVED, That the Transportation Authority hereby adopts the attached Octavia Improvements Study Final Report; and be it further

RESOLVED, That the Executive Director is hereby authorized to prepare the Octavia Improvements Study Final Report document for final publication and distribute the document to all relevant agencies and interested parties.

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RESOLUTION NO. 23-55

Attachment:

1. Octavia Improvements Study Final Report