

1455 Market Street, 22ND Floor, San Francisco, California 94103 415-522-4800 info@sfcta.org www.sfcta.org

Agenda

COMMUNITY ADVISORY COMMITTEE Meeting Notice

DATE: Wednesday, November 30, 2022, 6:00 p.m.

LOCATION: Watch https://bit.ly/3SGTAEb

PUBLIC COMMENT CALL-IN: 1-415-655-0001; Access Code: 2487 554 7428 # # To make public comment on an item, when the item is called, dial '*3' to be added to the queue to speak. Do not press *3 again or you will be removed from the queue. When the system says your line is unmuted, the live operator will advise that you will be allowed 2 minutes to speak. When your 2 minutes are up, we will move on to the next caller. Calls will be taken in the order in which they are received.

MEMBERS: Kevin Ortiz (Vice Chair), Sara Barz, Rosa Chen, Najuawanda

Daniels, Jerry Levine, Rachael Ortega, Eric Rozell, and Kat

Siegal

Remote Access to Information and Participation

This meeting will be held remotely and will allow for remote public comment pursuant to AB 361, which amended the Brown Act to include Government Code Section 54953(e) and empowers local legislative bodies to convene by teleconferencing technology during a proclaimed state of emergency under the State Emergency Services Act so long as certain conditions are met.

Written public comment may be submitted prior to the meeting by emailing the Clerk of the Transportation Authority at clerk@sfcta.org or sending written comments to Clerk of the Transportation Authority, 1455 Market Street, 22nd Floor, San Francisco, CA 94103. Written comments received by 5 p.m. the day before the meeting will be distributed to committee members before the meeting begins.

ITEM

1. Call to Order

2. [Final Approval on First Appearance] Approve the Resolution Making Findings to Allow Teleconferenced Meetings under California Code Section 54953(e) - ACTION*

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3. Election of Community Advisory Committee Chair - ACTION

Consistent with the CAC By-laws, the CAC needs to elect a Chair to complete the 2021 term. The November 30, 2022 meeting is the last meeting this calendar year. The CAC elections for Chair and Vice Chair for 2023 will be held at the January 25, 2023 CAC meeting.



Community Advisory Committee Meeting Notice – Agenda

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ITEM

- 4. Chair's Report INFORMATION
- Nominations for 2023 Community Advisory Committee Chair and Vice Chair – ACTION

At the November 30 Community Advisory Committee (CAC) meeting, nominations will be made for the CAC Chairperson and Vice-Chairperson for 2022. Per the CAC's By-Laws, nominations for the Chairperson and Vice-Chairperson shall be made at the last CAC meeting of the calendar year (i.e. November 30, 2022) to be eligible for election at the first CAC meeting of the following year (i.e. January 25, 2023). A nomination must be accepted by the candidate. Self-nominations are allowed. Candidates will be required to submit statements of qualifications and objectives to the Clerk of the Transportation Authority by January 18, 2023 for inclusion in the January meeting packet. The Chairperson and Vice-Chairperson shall be elected by a majority of the appointed members at the January CAC meeting. The term of office shall be for one year. There are no term limits.

Consent Agenda

ITEM

6.	Approve the Minutes of the October 26, 2022 Community Advisory Committee Meeting – ACTION*	9
7.	Approve the 2023 Community Advisory Committee Meeting Schedule - ACTION*	17
8.	Community Advisory Committee Vacancies - INFORMATION	
	The Community Advisory Committee (CAC) has three vacancies. The District 1, 4 and 11 offices are currently evaluating candidates to fill the vacancies created by the term expiration of David Klein, Nancy Buffum and Robert Gower, respectively, who did not seeking reappointment. Applications for the CAC can be submitted through the Transportation Authority's website at www.sfcta.org/cac.	
9.	Internal Accounting Report, Investment Report, and Debt Expenditure Report for the Three Months Ending September 30, 2022 – INFORMATION*	19
10.	Major Capital Project Update: Caltrain Modernization Program – INFORMATION*	47
End	d of Consent Agenda	
TEM		PAGE
11.	Adopt a Motion of Support to Allocate \$9,202,182 in Prop K Funds, with Conditions, and Allocate \$1,000,000 in Prop AA Funds, for Nine Requests – ACTION*	53



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ITEM PAGE

Projects: SFMTA: Replace 18 Paratransit Vehicles (\$2,273,920), Replace 27 Paratransit Vehicles - Additional Funds (\$370,353), Traffic Signal Upgrade Contract 36 (\$2,367,909), Bicycle Facility Maintenance (\$200,000), Sloat and Skyline Intersection Improvements (\$190,000), Howard Streetscape (\$500,000), Folsom Streetscape (\$3,200,000), and 29 Sunset Improvement Phase (\$1,000,000). SFPW: Jane Warner Plaza (NTIP Planning) \$100,000.

- 12. Adopt a Motion of Support to Amend San Francisco's One Bay Area Grant Cycle 3 (OBAG 3) Project Nominations to Shift \$4,899,000 from San Francisco Municipal Transportation Agency's (SFMTA's) Bayview Community Multimodal Corridor Project to San Francisco County Transportation Authority's (SFCTA's) West Side Bridges Seismic Retrofit Project (West Side Bridges); Approve a Fund Exchange, With Conditions, of \$14,899,000 in OBAG 3 Funds From SFCTA's West Side Bridges With an Equivalent Amount of Prop K Funds Allocated to SFMTA's Light Rail Vehicle Procurement Project; and, Appropriate, With Conditions, \$14,899,000 in Prop K Funds for the West Side Bridges ACTION*
- 13. Adopt a Motion of Support to Adopt the San Francisco Transit Plan 2050-ACTION*
- 14. Potrero Yard Modernization Update INFORMATION*
- 4F Main 7-12 Con Francisco Description and af Dublic Hardth/s 2022 Main 7-12
- 15. Vision Zero-San Francisco Department of Public Health's 2022 Vision Zero High Injury Network INFORMATION *
- 16. Vision Zero-San Francisco Municipal Transportation Agency's Safe Streets Evaluation Program 2022 Report – INFORMATION *
- 17. Vision Zero-Walk SF's Making San Francisco a 'Safe Speeds City': Solutions to Slow Our Streets and Save Lives Report – INFORMATION *

Other Items

18. Introduction of New Business - INFORMATION

During this segment of the meeting, CAC members may make comments on items not specifically listed above or introduce or request items for future consideration.

- 19. Public Comment
- **20.** Adjournment

Next Meeting: January 25, 2022

^{*}Additional Materials



Community Advisory Committee Meeting Notice - Agenda

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The Hearing Room at the Transportation Authority is wheelchair accessible. To request sign language interpreters, readers, large print agendas or other accommodations, please contact the Clerk of the Transportation Authority at (415) 522-4800 or via email at clerk@sfcta.org. Requests made at least 48 hours in advance of the meeting will help to ensure availability. Attendees at all public meetings are reminded that other attendees may be sensitive to various chemical-based products.

If any materials related to an item on this agenda have been distributed to the Community Advisory Committee after distribution of the meeting packet, those materials are available for public inspection at the Transportation Authority at 1455 Market Street, Floor 22, San Francisco, CA 94103, during normal office hours.

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code Sec. 2.100] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the San Francisco Ethics Commission at 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; (415) 252-3100; www.sfethics.org.

CAC113022

CAC RESOLUTION NO. 23-02

RESOLUTION MAKING FINDINGS TO ALLOW TELECONFERENCED MEETINGS OF THE SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY COMMUNITY ADVISORY COMMITTEE UNDER CALIFORNIA GOVERNMENT CODE SECTION 54953(e)

WHEREAS, California Government Code Section 54953(e) empowers local legislative bodies to convene by teleconferencing technology during a proclaimed state of emergency under the State Emergency Services Act so long as certain conditions are met; and

WHEREAS, In March, 2020, the Governor of the State of California proclaimed a state of emergency in California in connection with the Coronavirus Disease 2019 ("COVID-19") pandemic, and that state of emergency remains in effect; and

WHEREAS, In February 25, 2020, the Mayor of the City and County of San Francisco (the "City") declared a local emergency, and on March 6, 2020 the City's Health Officer declared a local health emergency, and both those declarations also remain in effect; and

WHEREAS, On September 16, 2021, the Governor signed AB 361, a bill that amends the Brown Act to allow local legislative bodies to continue to meet by teleconferencing during a state of emergency without complying with restrictions in State law that would otherwise apply, provided that the legislative bodies make certain findings at least once every 30 days; and

WHEREAS, Federal, State, and local health officials emphasize the critical importance of vaccination and consistent mask-wearing to prevent the spread of COVID-19, and the City Health Officer has issued at least one order (Health Officer Order No. C19-07y, available online at www.sfdph.org/healthorders) and one directive (Health Officer Directive No. 2020-33i, available online at www.sfdph.org/directives) that continue to recommend measures to promote physical distancing and other social distancing measures, such as masking, in certain contexts; and

WHEREAS, The California Department of Industrial Relations Division of Occupational Safety and Health ("Cal/OSHA") has promulgated Section 3205 of Title 8 of the California Code of Regulations, which requires most employers in California, including in the City, to train and instruct employees about measures that can decrease the spread of COVID-19, including physical distancing and other social

CAC113022

CAC RESOLUTION NO. 23-02

distancing measures; and

WHEREAS, Without limiting any requirements under applicable federal, state, or local pandemic-related rules, orders, or directives, the City's Department of Public Health, in coordination with the City's Health Officer, has advised that for group gatherings indoors, such as meetings of boards and commissions, people can increase safety and greatly reduce risks to the health and safety of attendees from COVID-19 by maximizing ventilation, wearing well-fitting masks (as required by Health Officer Order No. C19-07y), using physical distancing where the vaccination status of attendees is not known, and considering holding the meeting remotely if feasible, especially for long meetings, with any attendees with unknown vaccination status and where ventilation may not be optimal; and

WHEREAS, The San Francisco County Transportation Authority Board and its committees, including the Community Advisory Committee (CAC), have met remotely during the COVID-19 pandemic and can continue to do so in a manner that allows public participation and transparency while minimizing health risks to members, staff, and the public that would be present with in-person meetings while this emergency continues; and

WHEREAS, It is anticipated that the San Francisco County Transportation Authority Board will make findings to allow teleconferenced meetings under California Government Code Section 54953(e) that will cover its committees, including the CAC, but the San Francisco County Transportation Authority Board has not yet had the opportunity to make such findings; now, therefore, be it

RESOLVED, That the CAC finds as follows:

- 1. As described above, the State of California and the City remain in a state of emergency due to the COVID-19 pandemic. At this meeting, the CAC has considered the circumstances of the state of emergency.
- 2. As described above, State and City officials continue to recommend measures to promote physical distancing and other social distancing measures, in some settings.
- 3. As described above, because of the COVID-19 pandemic, conducting meetings of this body

CAC113022

CAC RESOLUTION NO. 23-02

and its committees in person would present imminent risks to the safety of attendees, and the state of emergency continues to directly impact the ability of members to meet safely in person; and, be it further

RESOLVED, That for at least the next 30 days meetings of the CAC will continue to occur exclusively by teleconferencing technology (and not by any in-person meetings or any other meetings with public access to the places where any legislative body member is present for the meeting). Such meetings of the CAC that occur by teleconferencing technology will provide an opportunity for members of the public to address this body in a manner that protects the statutory and constitutional rights of parties and the members of the public attending the meeting via teleconferencing.

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1455 Market Street, 22ND Floor, San Francisco, California 94103 415-522-4800 info@sfcta.org www.sfcta.org

DRAFT MINUTES

Community Advisory Committee

Wednesday, October 26, 2022

1. Call to Order

Vice Chair Ortiz called the meeting to order at 6:05 p.m.

CAC members present at Roll: Sara Barz, Rosa Chen, Jerry Levine, Rachael Ortega, Kevin Ortiz, Eric Rozell, and Kat Siegal (9)

CAC Members Absent at Roll: Najuawanda Daniels and David Klein (2)

2. Chair's Report - INFORMATION

Vice Chair Ortiz reported that together with Commissioner Dean Preston's office, the Transportation Authority submitted a US Department of Transportation Reconnecting Communities grant application for the Fillmore/Geary Underpass Community Planning Study, noting that the grant was intended to support a community based planning study to reimagine the Geary corridor and help mitigate past harms done to African American, Jewish and Japanese communities during past decades. Vice Chair Ortiz requested that if the grant were awarded, the Transportation Authority staff provide the CAC with a presentation on the study approach and community engagement strategy. Next, Vice-Chair Ortiz put out a call for folks to take the Ocean Avenue Mobility Action Plan survey which was open through October 28th. He explained that the Ocean Avenue Mobility Action Plan would prioritize and identify funding for traffic and pedestrian safety improvement along Ocean Avenue from Junipero Serra Boulevard to San Jose Avenue.

Vice Chair Ortiz then welcomed Rachael Ortega to the CAC. Rachael Ortega briefly introduced herself and outlined her priorities as a member of the CAC. Finally, Vice Chair Ortiz reminded members of the CAC that per the CAC by-laws, the November 30th CAC agenda would include an item to nominate CAC members to serve as Chair and Vice Chair for 2023, with the election to be held at the January CAC meeting.

There was no public comment.

Consent Agenda

- 3. Approve the Minutes of the September 28, 2022 Meeting ACTION
- 4. Community Advisory Committee Vacancies INFORMATION
- 5. State and Federal Legislation Update INFORMATION*
- 6. Transportation Authority's Project Priorities for the Senate Bill 1 Local Partnership Program Competitive Grant Program INFORMATION*

During public comment, Peter Tannen asked if there was a simple way to find the reasons that the bills listed in Item 5 were vetoed or if there is a summary somewhere.

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Maria Lombardo, Chief Deputy Director, responded that there was not always a reason provided. She offered to send Mr. Tannen an article from Streets Blog that covered a lot of the same bills that the Transportation Authority was tracking. She also related that there was a general theme with bills that were vetoed towards the end of session regarding concerns related to negative impacts on the state budget given the recent downward trend in state revenues.

Vice Chair Ortiz commented that he was glad that the Transportation Authority was able to seeking funds for new fare gates at the remaining BART stations.

Jerry Levine moved to approve the Consent Agenda, seconded by Eric Rozell.

The Consent Agenda was approved by the following vote:

Ayes: CAC Members Barz, Chen, Levine, Ortega, Ortiz, Rozell and Siegal (7)

Nays: (0)

Absent: CAC Members Daniels and Klein (2)

End of Consent Agenda

7. Allocate \$941,758 in Prop K Funds and Appropriate \$175,516, with Conditions, for Five Requests - ACTION*

Mike Pickford, Principal Transportation Planner, and David Long, Planner, presented the item per the staff memorandum.

Member Kat Siegal commented that the Brotherhood Way Safety and Circulation project includes a stretch located on the city's high injury corridor map. Since the Brotherhood Safety and Circulation plan would be completed in 2025, she wanted to know if short-term safety improvements on the corridor would be made while long term solutions were explored, and asked if there were any short-term plans for a quick build project as the Vision Zero goal was to make progress by 2024.

David Long explained that the plan would identify both near- and long-term solutions. He confirmed the report would be finished in 2025 as the project had a two-year planning process. He shared that the San Francisco Public Library was studying a new Ocean View Branch Library at the intersection of Brotherhood Way and Alemany Boulevard, which was part of the section on the High Injury network that Member Siegal mentioned. He said that the San Francisco Public Library was working with SFMTA on identifying near term safety improvements in the area. He added the project was still in the early stages and anticipated that the Transportation Authority would have more information in 3-4 months on safety improvements on the corridor.

Member Sara Barz asked about the Brotherhood Way Safety and Circulation Plan specifically inquiring why Park Merced was not identified in the list of community organizations and if the Transportation Authority could consider their engagement.

David Long explained how Park Merced was outside of the project area but acknowledged they are a nearby stakeholder and would be engaged early in the study.

Member Rachael Ortega asked about Bicycle Safety Education and Outreach and wanted additional information on the outreach plan and inquired whether there



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would be broader engagement across the city and not the usual biking audience. She asked for clarification of the purpose of outreach for 10,000 people with 1,000 people anticipated to attend the classes.

John Knox White, Project Manager at SFMTA, explained how SFMTA was at the end of a five-year contract with the Bicycle Coalition, competitively contracted through a request for proposals process. He said that this contract included a very large outreach component that hadn't historically been a part of the bike education. The 10,000 people that Member Ortega mentioned would be part of the community outreach efforts through the Bike Coalition. He explained how there was a calendar of outreach events that the SFMTA approved every quarter such as Sunday Streets and major street fairs. He continued by stating that SFMTA's outreach plan was to reach people who were not currently feeling confident on bikes and to provide education on how to bike, rules of the road, and how to navigate certain weather. He added the outreach events would occur in all 11 districts and that SFMTA was open to suggestions on these events and other ideas from CAC members.

Vice Chair Kevin Ortiz asked about the Brotherhood Way Safety and Circulation Plan and if there were any efforts to engage with SF State groups nearby and if so which groups.

David Long explained there wasn't yet a formal outreach plan yet but he anticipated reaching out to SF State and the student population. He also expressed being open to CAC member suggestions on who to reach out to.

Vice Chair Ortiz responded that he would reach out to Mr. Long to provide more information on SF State groups as he is familiar with the area as a previous resident.

Vice Chair Kevin Ortiz asked about the Bike to Wherever Day Sponsorship 2023 t and the engagement efforts that would occur. He recognized that this was an annual event and inquired how Latinx community organizations like Bicis Del Pueblo were included.

John Knox White, Project Manager at SFMTA, explained the funding request was just for a sponsorship and said that the Metropolitan Transportation Commission chooses the group that runs Bike to Wherever Day in each county. He said the group was the San Francisco Bicycle Coalition in San Francisco.

Chris Wade, Deputy Director at San Francisco Bicycle Coalition, said that there were a lot of different community groups in the build up to Bike to Wherever Day especially around planning efforts for the energizer stations located in all 11 districts. He said he would follow up to see if Bicis Del Pueblo were engaged for this event, and added that the Bicycle Coalition did engage with this organization on other different types of programming.

During public comment, Peter Tannen asked about the Hearing Loop at San Francisco Stations project and why SFMTA might perform their own analysis and design their own loops despite multiple meetings with BART to try and coordinate. He suggested that the CAC should investigate and find out why SFMTA was not coordinating with BART on loops in the stations that they both share.

Ahmad Rassai, Accessibility Program Manager at BART, explained that BART had worked with SFMTA's Annette Williams, Director of Accessibility Services. He that BART was sharing their specs with the SFMTA. Subsequent to the CAC meeting,

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SFMTA explained that they are exploring alternative design specifications that better meet their needs and that SFMTA was not ready to proceed with installation of the loops at their own booths at this time.]

Member Sara Barz asked about the Hearing Loop at San Francisco Stations and why would SFMTA need to install their own loop if it was in the same station and if one loop could serve both transit services.

Ahmad Rassai with BART explained how the loops were attached to the glass section of a Station Agent Booth, with each booth requiring its own loop.

Kat Siegal moved to approve the item, seconded by Sarah Barz.

The item was approved by the following vote:

Ayes: CAC Members Barz, Chen, Levine, Ortega, Ortiz, Rozell and Siegal (7)

Nays: (0)

Absent: CAC Member(s) Daniels and Klein (2)

8. Execute Contract Renewals and Options for Various Professional Services in an Amount Not to Exceed \$1,025,000 – ACTION*

Cynthia Fong, Deputy Director of Finance and Administration, presented the item per the staff memorandum.

There was no public comment.

Jerry Levine moved to approve the item, seconded by Kat Siegal.

The item was approved by the following vote:

Ayes: CAC Members Barz, Chen, Levine, Ortega, Ortiz, Rozell and Siegal (7)

Nays: (0)

Absent: CAC Members Daniels and Klein (2)

9. SF School Access Plan Update - INFORMATION*

David Long, Planner, presented the item staff memorandum.

Member Barz shared that she was interested in sustainable school access and that she was a parent of a young child. She asked whether the study team had looked at best practices from other cities across the world.

Mr. Long responded that the study team had performed a review of peer cities which focused on Seattle, Portland, and Chicago. Mr. Long said that the high-level takeaway from that effort was that there was relatively little innovative work being done to support medium and long-distance school trips in other US cities. Many cities had more robust yellow school bus systems than San Francisco and used those fleets as their key strategy to address medium and long-distance school commutes. Mr. Long said that the other common strategy employed by peers was to offer discounted fares for youth who took public transit. He said San Francisco's Free Muni for All Youth program was leading the effort on this strategy.

Member Barz shared that there had been a lot of advances outside of the US, including in Asian cities such Hong Kong. She said that San Francisco could learn from



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cities outside of the US as well. Member Barz then shared that she was surprised at the omission of programs like parent-organized bike buses.

Mr. Long clarified that the School Access Plan was focused on K-5 students who must make medium and long-distance trips, and that the bike bus strategy was not considered because it better fit under the umbrella of San Francisco's Safe Routes to School program which focuses on shorter trips.

Member Barz shared that some bike buses were two miles long, and said it would be much easier to follow the proposal if there were a clear definition of trip distance. She added that she would like to see some evaluation of existing policies and programs, specifically Safe Routes to Schools programs. For example, she wondered whether getting rid of yellow school buses and making kids use Muni was working well. She also shared that she saw assumptions built into some of the strategies that she would like to see fully vetted.

Member Siegel asked whether the personal safety concern was ranked.

Mr. Long responded that concerns were not ranked, but that personal safety was mentioned very often in focus groups.

Member Siegel asked whether the focus group findings about personal safety included both personal safety and physical safety accessing busses.

Mr. Long shared that most caregivers in focus groups shared concerns about being in unsafe situations, but that the study team did hear anecdotes about young students who were physically injured getting on and off of buses.

Member Siegal asked whether bus stops which were used by students could be prioritized for daylighting.

Mr. Long shared that he could follow us with the SFMTA to discuss this idea.

Vice Chair Ortiz asked for more explanation about the Muni Transit Assistance Program.

Mr. Long explained that the SFMTA hired transit ambassadors which ride the bus to de-escalate any unsafe situations which might arise. Mr. Long shared that the ambassadors were focused mostly on high school and middle school serving routes and offered to follow up with additional information.

Vice Chair Ortiz said that he would appreciate additional information and asked for clarification about whether this was for high school students or citywide. Mr. Long confirmed that the focus was on high school serving routes.

Vice Chair Ortiz then asked whether a cost estimate could be made for staffing every bus with a transit ambassador. Vice Chair Ortiz shared that it would be interesting to explore discounted or free Muni for families who took children to or from school on public transportation.

Member Rozell supported these comments.

Member Barz asked whether there was baseline mode-split information available for schools that the School Access Plan focused on. Mr. Long shared that the Transportation Authority's 2016 Child Transportation Survey found that 57% of caregivers drove their children to school and that number was higher for afterschool

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activities. Mr. Long shared that the Safe Routes to School program also conducted a yearly travel tally which asked children how they arrived at school. That information was available for individual school sites and Mr. Long offered to share that information.

Member Barz shard that she lived very close to two schools in District 7 which had very different mode shares. She said that while the averages are important, the reality could be very different at different school sites as could guidance from school administrators. She asked whether the School Access Plan intended to focus on any individual schools or do case studies of specific school sites. Mr. Long responded that the School Access Plan was a citywide plan and it did not anticipating identifying individualized strategies for specific school sites.

Member Ortega asked for clarification about the transportation coordinators strategy.

Mr. Long shared that the strategies were currently high level and that the study team would spend the coming months analyzing feedback and adding detail to the strategies. Mr. Long shared that to his knowledge, there was no current role in the city that was dedicated to sharing information about transportation programs specifically for caregivers and students of SFUSD schools. Mr. Long shared that this strategy could be designed several ways. For example the role could be in the SFUSD Transportation Department or it could be focused at individual school sites. Mr. Long shared another example would be to build a transportation communications role into the job description of Beacon School Coordinators.

Vice Chair Ortiz asked whether Beacon schools had been contacted as part of the School Access Plan outreach.

Mr. Long responded that every elementary school site had been contacted about the School Access Plan, including Beacon sites. Mr. Long also shared that the plan was promoted in SFUSD's Family News Bulletin which reached all SFUSD families.

Vice Chair Ortiz noted that there was a community meeting for Supervisor Mar's district and asked whether there were plans for meetings with every supervisorial district.

Mr. Long shared that the community meeting on October 27th was the only meeting on the upcoming calendar, but that the meeting was online and open to everyone.

Vice Chair Ortiz asked if the study team could plan additional town halls. Mr. Long responded that the team could explore the idea and follow up. Vice Chair Ortiz shared that it is important to reach out to all districts.

Member Barz agreed with Vice Chair Ortiz's comments and requested additional online events in other districts. Member Barz also strongly recommended prototyping ideas before concluding a plan. In particular, she said that this would be great for the Beacon schools.

There was no public comment.

10. Introduction of New Business - INFORMATION

Member Sara Barz requested an update on Member Kevin Ortiz's recent request for the list of previously requested new business items. Maria Lombardo answered that staff had created a list of pending requests and that they would email those requests



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next week. She provided an update on one request, noting that SFMTA was working on performance data in response to Member Jerry Levine's request on the Van Ness BRT that should be ready to be provided by next month's CAC meeting.

Member Eric Rozell requested an update on the Safer Taylor Street and the 6th Street Corridor Project, ideally at the next CAC meeting, but okay if later or via email.

Kat Seigel reiterated the CAC's interest in Vision Zero especially considering that there were a couple fatalities in the Sunset, making the total number this year equal to last year. Director Maria Lombardo responded that Vision Zero [information] items would go before the November 15th Transportation Authority Board and then be brought to the November 30th CAC.

Member Rachael Ortega requested a presentation from SFMTA or the Transportation Authority on the broader subject of the current transit network across the city. She has had personal issues with the reliability of public transit and would like to discuss how transit could increase connections throughout the city and not just in ways that currently existed.

Vice Chair Ortiz related that he would also like to see a master transportation plan on routes and how they integrate. He also requested a presentation from SFUSD about routes that directly go by and serve schools, as well as what buses were serving communities of interest or potentially failing to do so. He said he would like to see this presented through graphics, maps, and timetables.

Member Rozell supported the request for a network overview from the perspective of comparing pre-COVID to post-COVID to better understand where we stand and where we may be headed, including planned extensions or increases in service.

Chief Deputy Director Lombardo acknowledge that these were pretty substantial requests and said she would like to follow up with the requesters off line to get more information so staff could determine how to best bundle and address the requests.

Edward Mason commented on a previous statement from a CAC member concerning wait times and the ability to transfer between routes. He quoted some statistics from the Muni Policy and Governance Committee meeting on Tuesday that through APTA (American Public Transit Association) which revealed that about 70% of the transit agencies in the United Stated had to either cancel or rearrange routing in their districts due to labor shortages. Mr. Mason said that Muni did not provide this information and that he saw this as a demographic issue as younger people were less likely to want to work as transit operators and therefore this would be a long term problem.

11. Public Comment

There was no public comment.

12. Adjournment

The meeting was adjourned at 7:31 p.m.

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DRAFT 2023 Regular Transportation Authority Meeting Schedule

Subject to change. Please see our website (<u>www.sfcta.org/meetings</u>) for the most up to date information.

January			
Board	Tuesday	Jan. 10	10:00 a.m.
Board	Tuesday	Jan. 24	10:00 a.m.
Community Advisory Committee	Wednesday	Jan. 25	6:00 p.m.
February			
Board	Tuesday	Feb. 7	10:00 a.m.
Board	Tuesday	Feb. 14	10:00 a.m.
Community Advisory Committee	Wednesday	Feb. 22	6:00 p.m.
March	,		•
Board	Tuesday	Mar. 14	10:00 a.m.
Board	Tuesday Tuesday	Mar. 21	10:00 a.m.
Community Advisory Committee	Wednesday	Mar. 22	6:00 p.m.
Community Advisory Committee	Wednesday	IVIdi. ZZ	0.00 μ.π.
Board of Supervisors	Recess TBD DATE – TBD I	DATE — No Meetings	
April			
Board	Tuesday	Apr. 11	10:00 a.m.
Board	Tuesday	Apr. 25	10:00 a.m.
Community Advisory Committee	Wednesday	Apr. 26	6:00 p.m.
May			
Board	Tuesday	May 9	10:00 a.m.
Board	Tuesday	May 23	10:00 a.m.
Community Advisory Committee	Wednesday	May 24	6:00 p.m.
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June			
Board	Tuesday	Jun. 13	10:00 a.m.
Board	Tuesday	Jun. 27	10:00 a.m.
Community Advisory Committee	Wednesday	Jun. 28	6:00 p.m.
July			
Board	Tuesday	Jul. 11	10:00 a.m.
Board	Tuesday	Jul. 25	10:00 a.m.
Community Advisory Committee	Wednesday	Jul. 26	6:00 p.m.
August			
	rs Recess TBD DATE - TBD	DATE No Meetings	
September		-	
Community Advisory Committee	Wednesday	Sep. 6	6:00 p.m.
Board	Tuesday	Sep. 12	10:00 p.m.
Board	Tuesday	Sep. 26	10:00 a.m.
Community Advisory Committee	Wednesday	Sep. 27	6:00 p.m.
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DRAFT 2023 Regular Transportation Authority Meeting Schedule

Subject to change. Please see our website (www.sfcta.org/meetings) for the most up to date information.

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Board	Tuesday	Oct. 17	10:00 a.m.
Board	Tuesday	Oct. 24	10:00 a.m.
Community Advisory Committee	Wednesday	Oct. 25	6:00 p.m.
November			
Board	Tuesday	Nov. 14	10:00 a.m.
Board	Tuesday	Nov. 28	10:00 a.m.
Community Advisory Committee	Wednesday	Nov. 29	6:00 p.m.
December			
Board	Tuesday	Dec. 5	10:00 a.m.
Board	Tuesday	Dec. 12	10:00 a.m.

Board of Supervisors Recess DATE TBD - DATE TBD -- No Meetings

Transportation Authority General Schedule

Transportation Authority Board

Meets regularly every 2nd and 4th Tuesday at 10:00 am in Meets at the call of the Chair

City Hall Room 250

Personnel Committee

in City Hall

Community Advisory Committee

Meets regularly every 4th Wednesday at 6:00 pm in the Transportation Authority Hearing Room

Treasure Island Mobility Management Agency (TIMMA) General Schedule

TIMMA Board

Meets on a quarterly basis in City Hall

TIMMA Committee

Meets on a quarterly basis in City Hall

TIMMA CAC

Meets as needed based on the Board and Committee schedule on Treasure Island

1455 Market Street, 22ND Floor, San Francisco, California 94103 415-522-4800 info@sfcta.org www.sfcta.org

Memorandum

AGENDA ITEM 9

DATE: November 21, 2022

TO: Transportation Authority Board

FROM: Cynthia Fong - Deputy Director for Finance and Administration

SUBJECT: 12/6/2022 Board Meeting: Internal Accounting Report, Investment Report, and

Debt Expenditure Report for the Three Months Ending September 30, 2022

RECOMMENDATION ⊠ Information □ Action	☐ Fund Allocation
None. This is an information item.	☐ Fund Programming
CLINARA A DV	☐ Policy/Legislation
SUMMARY	☐ Plan/Study
The purpose of this memorandum is to provide the quarterly internal accounting report, investment report, and debt	☐ Capital Project Oversight/Delivery
expenditure report for the Fiscal Year (FY) 2022/23 period ending September 30, 2022.	⊠ Budget/Finance
	☐ Contract/Agreement
	□ Other:

BACKGROUND

Our Fiscal Policy (Resolution 21-57) establishes an annual audit requirement and directs staff to report to the Board the agency's actual expenditures in comparison to the approved budget, on at least a quarterly basis. The Investment Policy (Resolution 21-57) directs a review of portfolio compliance with the Investment Policy in conjunction with, and in the context of, the quarterly expenditure and budgetary report.

Internal Accounting Report. Using the format of our annual financial statements for governmental funds, the Internal Accounting Report includes a "Balance Sheet" (Attachment 1) and a "Statement of Revenues, Expenditures, and Changes in Fund Balances, with Budget Comparison" (Attachment 2). In Attachment 2, the last two columns show the prorated adopted budget values and the variance of revenues and expenditures as compared to the prorated adopted budget. For the three months ending September 30, 2022, the numbers in the prorated adopted budget column are one-fourth of the total adopted budget for FY 2022/23, including the Treasure Island Mobility Management Agency. Although the sales tax



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revenue bond revenue accrual for sales tax, vehicle registration fee, and Traffic Congestion Mitigation Tax Program are included, the Internal Accounting Report does not include: the Governmental Accounting Standards Board Statement Number 34 adjustments, and the other accruals that are done at fiscal year-end. The Balance Sheet values, as of September 30, 2022, are used as the basis for the Investment Policy compliance review.

Investment Report. Our investment policies and practices are subject to, and limited by, applicable provisions of state law and prudent money management principles. All investable funds are invested in accordance with the Investment Policy and applicable provisions of California Government Code, Section 53600 et seq. Any investment of bond proceeds will be further restricted by the provisions of relevant bond documents. We observe the "Prudent Investor" standard, as stated in California Government Code, Section 53600.3, applied in the context of managing an overall portfolio. Investments are to be made with care, skill, prudence, and diligence, taking into account the prevailing circumstances, including, but not limited to, general economic conditions, our anticipated needs, and other relevant factors that a prudent person of a like character and purpose, acting in a fiduciary capacity and familiar with those matters, would use in the stewardship of funds. The primary objectives for the investment activities, in order of priority, are:

- 1) **Safety.** Safety of the principal is the foremost objective of the investment program. Investments will be undertaken in a manner that seeks to ensure preservation of the principal of the funds under its control.
- 2) **Liquidity.** The investment portfolio will remain sufficiently liquid to enable us to meet its reasonably anticipated cash flow requirements.
- 3) **Return on Investment.** The investment portfolio will be managed with the objective of attaining a market rate of return throughout budgetary and economic cycles, commensurate with the investment risk parameters and the cash flow characteristics of the portfolio.

Permitted investment instruments are specifically listed in the Investment Policy and include the San Francisco City and County Treasury Pool (Treasury Pool), certificates of deposit, and money market funds.

Balance Sheet Analysis. Attachment 1 presents assets, liabilities, and fund balances, as of September 30, 2022. Cash, deposits, and investments, total to \$106.9 million. Other assets total to \$58.9 million, which mainly includes, \$20.5 million sales tax receivable, and \$27.0 million of the program receivables. Liabilities total \$294.7 million, as of September 30, 2022, and mainly includes \$66.6 million in accounts payable, and \$224.1 million in sales tax revenue bond and premium amounts (Series 2017). There is \$158.1 million in total fund deficit, which is largely the result of how multi-year programming commitments are accounted for. Future sales tax revenues and grant reimbursements collected will fully fund this difference. This amount is obtained as follows: \$37.2 million is restricted for capital projects and \$195.4



Agenda Item 9 Page 3 of 4

million is an unassigned fund deficit. The unassigned fund deficit reflects grant-funded capital projects that are scheduled to be implemented over the course of several fiscal years. The commitments are multi-year commitments and funded with non-current (i.e., future) revenues. In addition, we do not hold nor retain title for the projects constructed or for the vehicles and system improvements purchased with sales tax funds, which can result in a negative position.

Statement of Revenues, Expenditures, and Changes in Fund Balances Analysis.

Attachment 2 compares the prorated budget to actual levels for revenues and expenditures for the first three months (one quarter) of the fiscal year. We earned \$34.1 million in revenues, including \$28.4 million in sales tax revenues, \$1.2 million in vehicle registration fee, \$2.0 million in traffic congestion mitigation tax, and \$2.2 million in total program revenues for the three months ending September 30, 2022. Total revenue was \$942,211 over budget due to Sales Tax revenue coming in at higher amount than projected. Program revenue variance of \$2.2 million is mainly related to the delay in approval of toll policies, thus pushing toll system delivery back in the Treasure Island Management Mobility Agency (TIMMA) program and offset by the increase in Federal, State and Regional revenues for the Yerba Buena Island (YBI) Southgate Road Realignment project and increase in the YBI Westside Bridges project, which required additional design work that we had not anticipated in the adopted budget in the Congestion Management Agency (CMA) program.

As of September 30, 2022, we incurred \$29.1 million of expenditures, including \$5.5 million in debt principal payment and service cost for the sales tax revenue bond; \$3.0 million for personnel and non- personnel expenditures; and \$20.6 million of capital project costs. Total expenditures were lower than the prorated budgetary estimates by \$22.0 million. This amount mainly includes a net favorable variance of \$620.1 thousand for debt services costs, and a favorable variance of \$21.3 million in capital project costs. The net favorable variance of \$620.1 thousand in debt service costs is due to timing of bond principal and interest payments and earlier start of withholding the necessary amounts for the bi-annual interest payments made in August and February. The favorable variance of \$21.1 million in capital project costs are mainly due to costs (reimbursement requests) from project sponsors that have not yet been received in the first quarter. We anticipate a higher amount of reimbursement requests and expenditures in the next quarter which is the typical pattern for this time of year.

Investment Compliance. As of September 30, 2022, approximately 46.6% of our investable assets were invested in the Treasury Pool. These investments are in compliance with both the California Government Code and the adopted Investment Policy, and provide sufficient liquidity to meet expenditure requirements for the next six months with the drawdown from the Revolving Credit (loan) Agreement later in the fiscal year. Attachment 3 is the most recent investment report furnished by the City's Office of the Treasurer.

Debt Expenditure Compliance. In October 2021, we entered into a 3-year Revolving Credit (loan) Agreement with U.S. Bank for a total amount of \$125 million, to ensure we have



Agenda Item 9 Page 4 of 4

available funds when needed to support the delivery of the projects and programs in the Prop K Sales Tax Expenditure Plan. As of September 30, 2022, we do not have an outstanding balance in the loan.

As of September 30, 2022, total outstanding bond principal and premium balance is \$224.1 million. We made cumulative payments of \$78.1 million, including principal payment of \$39.9 million and interest payment of \$38.2 million.

FINANCIAL IMPACT

None. This is an information item.

CAC POSITION

None. This is an information item.

SUPPLEMENTAL MATERIALS

- Attachment 1 - Balance Sheet (unaudited)
- Attachment 2 Statement of Revenue, Expenditures, and Changes in Fund Balance with Budget Comparison (unaudited)
- Attachment 3 Investment Report



Attachment 1 Governmental Funds Balance Sheet (unaudited) September 30, 2022

ACCETTO	Sale	es Tax Program	Mana	Congestion gement Agency Programs	ortation Fund for n Air Program	Fee fo	cle Registration or Transportation rements Program	e Island Mobility ement Agency	fic Congestion tion Tax Program	Tota	l Governmental Funds
ASSETS Cash in bank Deposits and investments with City Treasurer Sales tax receivable Vehicle registration fee receivable Interest receivable from City and County of San Francisco Program receivables Receivable from the City and County of San Francisco Other receivables Due from other funds Prepaid costs and deposits	\$	39,714,206 34,397,797 20,520,746 - 169,341 - 9,850 2,214,720 81,580	\$	26,193,618 3,269,332 - 1,397,117	\$ 1,895,200 - - - - 419,252 - - -	\$	19,724,806 - - 1,242,435 - - - -	\$ 385,788 1,044,562 - -	\$ - 11,139,676 - - - - - - -	\$	61,334,212 45,537,473 20,520,746 1,242,435 169,341 26,998,658 4,313,894 9,850 3,611,837 81,580
Total Assets	\$	97,108,240	\$	30,860,067	\$ 2,314,452	\$	20,967,241	\$ 1,430,350	\$ 13,101,608	\$	165,781,958
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES											
LIABILITIES Accounts payable Accounts payable to the City and County of San Francisco Accrued salaries and taxes Sales tax revenue bond (series 2017) Due to other funds	\$	2,947,152 56,239,429 376,437 224,114,390	\$	3,381,586 - - - -	\$ 27,779 238,724 - - 556,177	\$	554,090 456,611 - - - 1,721,378	\$ 34,167 - - - 159,914	\$ 145,511 2,600,157 - - - 1,174,368	\$	7,090,285 59,534,921 376,437 224,114,390 3,611,837
Total Liabilities	\$	283,677,408	\$	3,381,586	\$ 822,680	\$	2,732,079	\$ 194,081	\$ 3,920,036	\$	294,727,870
Deferred Inflows of Resources Unavailable revenues Total deferred inflows of resources	\$	<u>.</u>	\$	27,478,481	\$ 419,252	\$	<u> </u>	\$ 1,236,269	\$ 	\$	29,134,002
Fund Balances Nonspendable Restricted Unassigned	\$	81,580 8,751,731 (195,402,479)	\$		\$ 1,072,520	\$	- 18,235,162 -	\$ 	\$ 9,181,572 -	\$	81,580 37,240,985 (195,402,479)
Total Fund Balances (Deficit)	\$	(186,569,168)	\$	-	\$ 1,072,520	\$	18,235,162	\$ -	\$ 9,181,572	\$	(158,079,914)
Total Liabilities, Deferred Inflows of Resources, and Fund Balances	\$	97,108,240	\$	30,860,067	\$ 2,314,452	\$	20,967,241	\$ 1,430,350	\$ 13,101,608	\$	165,781,958



Attachment 2

Governmental Funds

Statement of Revenues, Expenditures, and Changes in Fund Balances with Budget Comparison (unaudited)

For the Three Months Ending September 30, 2022

	_Sales Tax	« Program	Ma	ongestion anagement Agency Programs	Fur	nsportation ad for Clean r Program	Tra	Vehicle gistration Fee for ansportation provements Program	Ma	asure Island Mobility nagement Agency	Mi	Traffic iongestion tigation Tax Program	Go	Total overnmental Funds	Prorated Adopted Budget Fiscal Year 2022/23	Pror Bu	ariance With rated Adopted dget Positive (Negative)
REVENUES Sales tax Vehicle registration fee Traffic congestion mitigation tax Investment income	\$ 28	3,439,168 - - 180,232	\$	- - - -	\$	- - - 244	\$	1,242,435 - 245	\$	- - - -	\$	- - 1,961,932 -	\$	28,439,168 1,242,435 1,961,932 180,721	\$ 25,425,250 1,208,512 1,953,875 93,643	\$	3,013,918 33,923 8,057 87,078
Program revenues Other revenues		<u>-</u>		2,114,845		<u>-</u>	_			194,082 		-		2,308,927	4,509,692		(2,200,765)
Total Revenues	\$ 28	3,619,400	_\$	2,114,845	\$	244	\$	1,242,680	\$	194,082	\$	1,961,932	_\$_	34,133,183	\$ 33,190,972	\$	942,211
EXPENDITURES																	
Current - transportation improvement Personnel expenditures Non-personnel expenditures Capital project costs Debt service Principal	16	1,339,109 652,371 5,294,451 3,531,206	\$	691,932 17,889 1,996,513	\$	5,186 - - -	\$	56,662 218 -	\$	163,289 1,406 41,113	\$	54,053 - 2,222,497 -	\$	2,310,231 671,884 20,554,574 3,531,206	\$ 2,337,084 808,226 41,693,662 3,531,250	\$	26,853 136,342 21,139,088 44
Interest and fiscal charges		2,006,022												2,006,022	2,626,126		620,104
Total Expenditures	\$ 23	3,823,159	_\$	2,706,334	_\$	5,186	_\$_	56,880	\$	205,808	_\$_	2,276,550		29,073,917	\$ 50,996,348		21,922,431
Excess (Deficiency) of Revenues Over (Under) Expenditures	\$ 4	1,796,241	_\$_	(591,489)	_\$	(4,942)	\$	1,185,800	\$	(11,726)	_\$_	(314,618)	_\$_	5,059,266	\$ (17,805,376)	_\$	22,864,642
OTHER FINANCING SOURCES (USES) Transfer in Transfer out Draw on revolving credit agreement Total Other Financing Sources (Uses)		(603,215) - (603,215)	\$	591,489 - - - 591,489	\$	- - -	\$	- - -	\$	11,726 - - - 11,726	\$	- - -	\$	603,215 (603,215)	\$ 2,899,922 (2,899,922) 12,500,000 \$ 12,500,000	\$	(2,296,707) 2,296,707 (12,500,000) (12,500,000)
NET CHANGE IN FUND BALANCES Fund Balances - Beginning Sales tax revenue bond (series 2017)	\$ 4	1,193,026 3,352,196 1,114,390)	\$	-	\$	(4,942) 1,077,462	\$	1,185,800 17,049,362	\$	-	\$	9,496,190	\$	5,059,266 60,975,210 (224,114,390)	\$ (5,305,376)	\$	10,364,642
Fund Balances (Deficit) - End	\$ (186	5,569,168)	\$	-	\$	1,072,520	\$	18,235,162	\$		\$	9,181,572	\$	(158,079,914)			

Office of the Treasurer & Tax Collector City and County of San Francisco

Tajel Shah, Chief Assistant Treasurer Hubert R White, III CFA, CTP, Chief Investment Officer



José Cisneros, Treasurer

Investment Report for the month of September 2022

October 15, 2022

The Honorable London N. Breed Mayor of San Francisco City Hall, Room 200 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4638 The Honorable Board of Supervisors City and County of San Franicsco City Hall, Room 244 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4638

Colleagues,

In accordance with the provisions of California State Government Code, Section 53646, we forward this report detailing the City's pooled fund portfolio as of September 30, 2022. These investments provide sufficient liquidity to meet expenditure requirements for the next six months and are in compliance with our statement of investment policy and California Code.

This correspondence and its attachments show the investment activity for the month of September 2022 for the portfolios under the Treasurer's management. All pricing and valuation data is obtained from Interactive Data Corporation.

CCSF Pooled Fund Investment Earnings Statistics *

	Current Month	Prior Month
(in \$ million)	Fiscal YTD September 2022 Fiscal YTD	August 2022
Average Daily Balance	\$ 13,948	\$ 13,963
Net Earnings	44.88 15.58 29.30	15.38
Earned Income Yield	1.28% 1.39% 1.22%	1.30%

CCSF Pooled Fund Statistics *

(in \$ million)	% of	Book	Market	Wtd. Avg.	Wtd. Avg.	
Investment Type	Portfolio	Value	Value	Coupon	YTM	WAM
U.S. Treasuries	30.46%	\$ 4,230.8	\$ 3,917.0	0.84%	0.79%	832
Federal Agencies	37.76%	5,132.7	4,855.1	1.31%	1.29%	750
Public Time Deposits	0.23%	30.0	30.0	2.53%	2.53%	106
Negotiable CDs	14.77%	1,910.0	1,898.8	2.58%	2.58%	182
Commercial Paper	3.10%	397.0	399.0	0.00%	2.55%	26
Money Market Funds	8.69%	1,118.0	1,118.0	2.89%	2.88%	1
Supranationals	4.98%	676.1	640.6	0.90%	1.10%	586
Totals	100.0%	\$ 13,494.7	\$ 12,858.5	1.47%	1.50%	594

In the remainder of this report, we provide additional information and analytics at the security-level and portfolio-level, as recommended by the California Debt and Investment Advisory Commission.

Respectfully,



José Cisneros Treasurer

cc: Treasury Oversight Committee: Aimee Brown, Kevin Kone, Brenda Kwee McNulty, Meghan Wallace

Ben Rosenfield - Controller, Office of the Controller

Mark de la Rosa - Director of Audits, Office of the Controller

Mayor's Office of Public Policy and Finance

San Francisco County Transportation Authority

San Francisco Public Library

San Francisco Health Service System

Portfolio Summary Pooled Fund

As of September 30, 2022

(in \$ million)		Book	Market	Market/Book	Current %	Max. Policy	
Security Type	Par Value	Value	Value	Price	Allocation	Allocation	Compliant?
U.S. Treasuries	\$ 4,225.0	\$ 4,230.8	\$ 3,917.0	92.58	30.46%	100%	Yes
Federal Agencies	5,130.6	5,132.7	4,855.1	94.59	37.76%	100%	Yes
State & Local Government							
Agency Obligations	-	-	-	-	0.00%	20%	Yes
Public Time Deposits	30.0	30.0	30.0	100.00	0.23%	100%	Yes
Negotiable CDs	1,910.0	1,910.0	1,898.8	99.41	14.77%	30%	Yes
Bankers Acceptances	-	-	-	-	0.00%	40%	Yes
Commercial Paper	400.0	397.0	399.0	100.50	3.10%	25%	Yes
Medium Term Notes	-	-	-	-	0.00%	30%	Yes
Repurchase Agreements	-	-	-	-	0.00%	10%	Yes
Reverse Repurchase/							
Securities Lending Agreements	-	-	-	-	0.00%	\$75mm	Yes
Money Market Funds - Government	1,118.0	1,118.0	1,118.0	100.00	8.69%	20%	Yes
LAIF	-	-	-	-	0.00%	\$50mm	Yes
Supranationals	668.5	676.1	640.6	94.74	4.98%	30%	Yes
TOTAL	\$ 13,482.1	\$ 13,494.7	\$ 12,858.5	95.29	100.00%	-	Yes

The City and County of San Francisco uses the following methodology to determine compliance: Compliance is pre-trade and calculated on a par value basis of the overall portfolio value. Cash balances are included in the City's compliance calculations.

Please note the information in this report does not include cash balances. Due to fluctuations in the market value of the securities held in the Pooled Fund and changes in the City's cash position, the allocation limits may be exceeded on a post-trade compliance basis. In these instances, no compliance violation has occurred, as the policy limits were not exceeded prior to trade execution.

The full Investment Policy can be found at https://sftreasurer.org/banking-investments/investments

Totals may not add due to rounding.

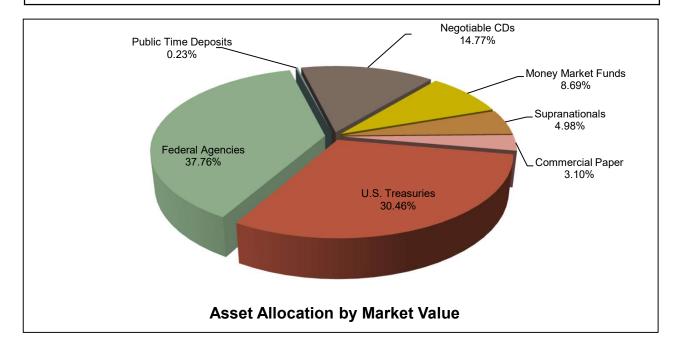
City and County of San Francisco

Pooled Fund Portfolio Statistics

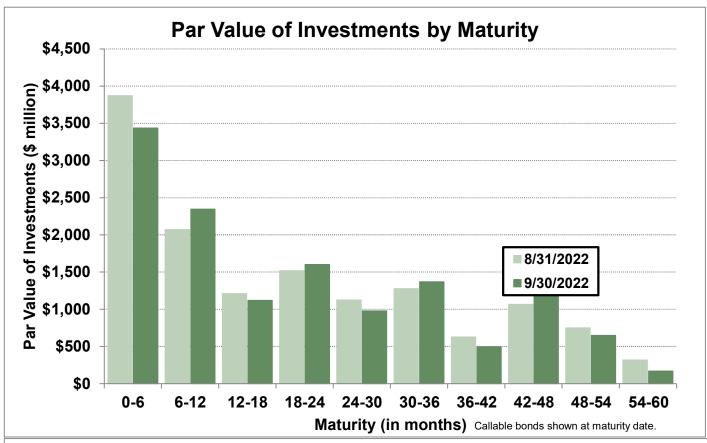
For the month ended September 30, 2022

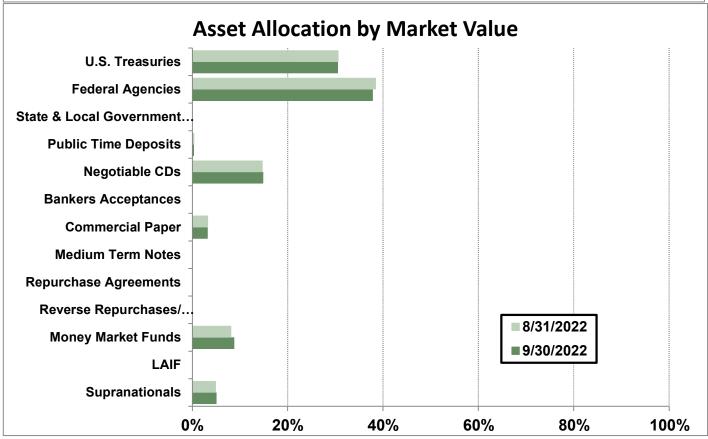
Average Daily Balance	\$13,663,838,029
Net Earnings	\$15,578,262
Earned Income Yield	1.39%
Weighted Average Maturity	594 days

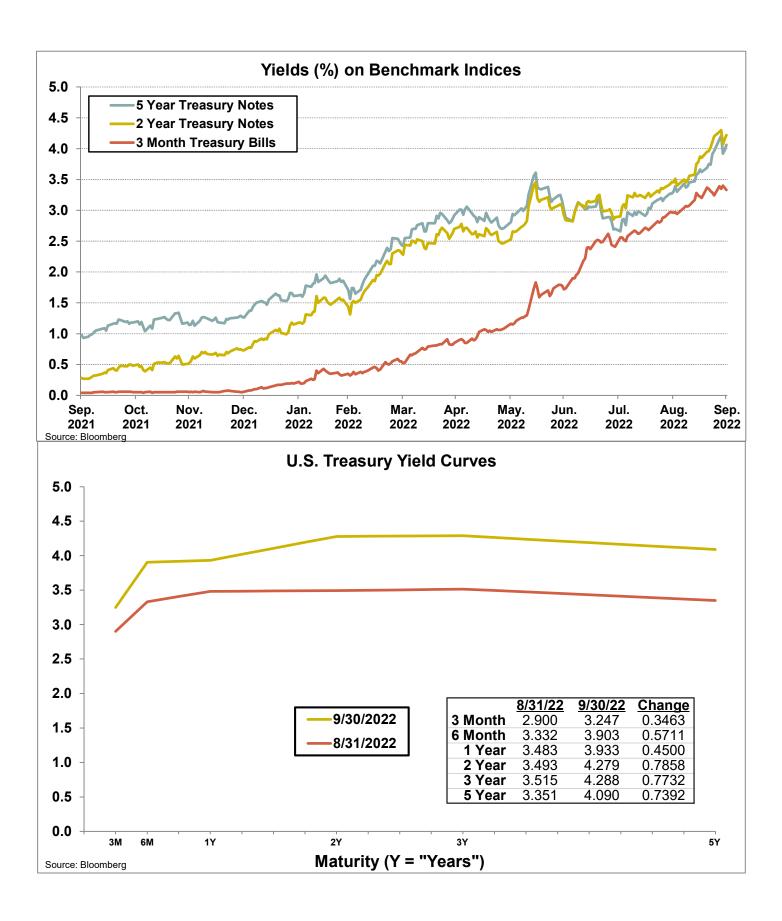
Investment Type	(\$ million)		Par Value	Book Value	Market Value
U.S. Treasuries	\$;	4,225.0	\$ 4,230.8	\$ 3,917.0
Federal Agencies			5,130.6	5,132.7	4,855.1
Public Time Deposits			30.0	30.0	30.0
Negotiable CDs			1,910.0	1,910.0	1,898.8
Commercial Paper			400.0	397.0	399.0
Money Market Funds			1,118.0	1,118.0	1,118.0
Supranationals			668.5	676.1	640.6
Total	\$	1	3,482.1	\$ 13,494.7	\$ 12,858.5



Portfolio Analysis Pooled Fund







As of September 30, 2022

As of September 30,	2022							
			<u>Maturity</u>				<u>Amortized</u>	
Type of Investment	CUSIP	Issuer Name	<u>Date</u>	Coupon	<u>Par Value</u>	Book Value	Book Value	Market Value
U.S. Treasuries	912796M89	UNITED STATES TREASURY	10/6/2022	0.00 \$	50,000,000 \$	49,719,417 \$	49,992,292 \$	49,989,250
U.S. Treasuries	912796V63	UNITED STATES TREASURY	10/20/2022	0.00	50,000,000	49,684,028	49,967,014	49,938,139
U.S. Treasuries	912828TY6	UNITED STATES TREASURY	11/15/2022	1.63	50,000,000	51,201,172	50,092,240	49,898,438
U.S. Treasuries	912796P94	UNITED STATES TREASURY	12/1/2022	0.00	50,000,000	49,878,019	49,978,921	49,760,313
U.S. Treasuries	912828Z86	UNITED STATES TREASURY	2/15/2023	1.38	50,000,000	50,923,828	50,231,379	49,546,875
U.S. Treasuries	912828Z86	UNITED STATES TREASURY	2/15/2023	1.38	50,000,000	50,166,016	50,065,169	49,546,875
U.S. Treasuries	912828ZD5	UNITED STATES TREASURY	3/15/2023	0.50	50,000,000	50,335,938	50,076,244	49,234,375
U.S. Treasuries	91282CBU4	UNITED STATES TREASURY	3/31/2023	0.13	50,000,000	49,972,656	49,992,889	49,078,125
U.S. Treasuries	912828ZU7	UNITED STATES TREASURY	6/15/2023	0.25	50,000,000	50,066,406	50,020,687	48,656,250
U.S. Treasuries	912828ZU7	UNITED STATES TREASURY	6/15/2023	0.25	50,000,000	50,072,266	50,023,274	48,656,250
U.S. Treasuries	912828ZU7	UNITED STATES TREASURY	6/15/2023	0.25	50,000,000	49,998,047	49,999,304	48,656,250
U.S. Treasuries	912828S35	UNITED STATES TREASURY	6/30/2023	1.38	50,000,000	49,605,469	49,915,369	48,992,188
U.S. Treasuries	912828S35	UNITED STATES TREASURY	6/30/2023	1.38	50,000,000	51,138,672	50,420,814	48,992,188
U.S. Treasuries	91282CCK5	UNITED STATES TREASURY	6/30/2023	0.13	50,000,000	49,865,234	49,949,786	48,539,063
U.S. Treasuries	912828S92	UNITED STATES TREASURY	7/31/2023	1.25	50,000,000	51,220,703	50,434,633	48,789,063
U.S. Treasuries	912828S92	UNITED STATES TREASURY	7/31/2023	1.25	50,000,000	51,218,750	50,433,938	48,789,063
U.S. Treasuries	91282CAK7	UNITED STATES TREASURY	9/15/2023	0.13	50,000,000	49,886,719	49,948,388	48,093,750
U.S. Treasuries	912828WE6	UNITED STATES TREASURY	11/15/2023	2.75	50,000,000	51,960,938	50,562,620	49,140,625
U.S. Treasuries	91282CBA8	UNITED STATES TREASURY	12/15/2023	0.13	50,000,000	49,767,578	49,897,837	47,570,313
U.S. Treasuries	91282CBA8	UNITED STATES TREASURY	12/15/2023	0.13	50,000,000	49,402,344	49,642,706	47,570,313
U.S. Treasuries	91282CBA8	UNITED STATES TREASURY	12/15/2023	0.13	50,000,000	49,443,359	49,664,491	47,570,313
U.S. Treasuries	9128285Z9	UNITED STATES TREASURY	1/31/2024	2.50	50,000,000	52,511,719	51,440,762	48,812,500
U.S. Treasuries	91282CDV0	UNITED STATES TREASURY	1/31/2024	0.88	50,000,000	49,390,625	49,580,247	47,757,813
U.S. Treasuries	91282CDV0	UNITED STATES TREASURY	1/31/2024	0.88	50,000,000	48,605,469	48,971,005	47,757,813
U.S. Treasuries	912828B66	UNITED STATES TREASURY	2/15/2024	2.75	50,000,000	50,250,000	50,185,926	48,929,688
U.S. Treasuries	91282CBR1	UNITED STATES TREASURY	3/15/2024	0.25	50,000,000	48,708,984	49,071,099	47,148,438
U.S. Treasuries	91282CCC3	UNITED STATES TREASURY	5/15/2024	0.25	50,000,000	49,718,750	49,841,126	46,843,750
U.S. Treasuries	912828XT2	UNITED STATES TREASURY	5/31/2024	2.00	50,000,000	52,263,672	51,298,408	48,164,063
U.S. Treasuries	91282CCL3	UNITED STATES TREASURY	7/15/2024	0.38	50,000,000	49,998,047	49,998,812	46,687,500
U.S. Treasuries	91282CCL3	UNITED STATES TREASURY	7/15/2024	0.38	50,000,000	49,960,938	49,976,183	46,687,500
U.S. Treasuries	91282CCL3	UNITED STATES TREASURY	7/15/2024	0.38	50,000,000	47,572,266	48,078,411	46,687,500
U.S. Treasuries	912828Y87	UNITED STATES TREASURY	7/31/2024	1.75	50,000,000	52,210,938	51,213,386	47,789,063
U.S. Treasuries	91282CCT6	UNITED STATES TREASURY	8/15/2024	0.38	50,000,000	49,898,438	49,936,032	46,515,625
U.S. Treasuries	912828YM6	UNITED STATES TREASURY	10/31/2024	1.50	50,000,000	51,746,094	51,026,083	47,281,250
U.S. Treasuries	912828G38	UNITED STATES TREASURY	11/15/2024	2.25	50,000,000	53,160,156	51,820,550	47,968,750
U.S. Treasuries	912828G38	UNITED STATES TREASURY	11/15/2024	2.25	50,000,000	53,228,516	51,864,083	47,968,750
U.S. Treasuries	912828YY0	UNITED STATES TREASURY	12/31/2024	1.75	50,000,000	52,226,563	51,319,563	47,375,000
U.S. Treasuries	912828Z52	UNITED STATES TREASURY	1/31/2025	1.38	50,000,000	51,515,625	50,921,474	46,828,125
U.S. Treasuries	912828Z52	UNITED STATES TREASURY	1/31/2025	1.38	50,000,000	51,507,813	50,927,299	46,828,125
U.S. Treasuries	912828ZC7	UNITED STATES TREASURY	2/28/2025	1.13	50,000,000	51,011,719	50,616,407	46,437,500
U.S. Treasuries	912828ZC7	UNITED STATES TREASURY	2/28/2025	1.13	50,000,000	50,998,047	50,614,881	46,437,500
U.S. Treasuries	912828ZF0	UNITED STATES TREASURY	3/31/2025	0.50	50,000,000	49,779,297	49,860,801	45,609,375
U.S. Treasuries	912828ZF0	UNITED STATES TREASURY	3/31/2025	0.50	50,000,000	49,839,844	49,898,708	45,609,375
U.S. Treasuries	912828ZL7	UNITED STATES TREASURY	4/30/2025	0.38	50,000,000	49,615,234	49,748,822	45,281,250
U.S. Treasuries	912828XB1	UNITED STATES TREASURY	5/15/2025	2.13	50,000,000	52,849,609	52,018,561	47,375,000
U.S. Treasuries	912828ZW3	UNITED STATES TREASURY	6/30/2025	0.25	50,000,000	49,140,625	49,452,728	44,875,000
U.S. Treasuries	912828ZW3	UNITED STATES TREASURY	6/30/2025	0.25	50,000,000	49,042,969	49,390,151	44,875,000
U.S. Treasuries	912828ZW3	UNITED STATES TREASURY	6/30/2025	0.25	50,000,000	49,281,250	49,522,579	44,875,000
U.S. Treasuries	912828ZW3	UNITED STATES TREASURY	6/30/2025	0.25	50,000,000	49,183,594	49,457,352	44,875,000

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Maturity Services CUSID Income Name Park Value Park Val	
Type of Investment CUSIP Issuer Name Date Coupon Par Value Book Va	
U.S. Treasuries 912828ZW3 UNITED STATES TREASURY 6/30/2025 0.25 50,000,000 49,253,906 49,502	
U.S. Treasuries 912828ZW3 UNITED STATES TREASURY 6/30/2025 0.25 50,000,000 49,310,547 49,522	
U.S. Treasuries 912828ZW3 UNITED STATES TREASURY 6/30/2025 0.25 50,000,000 49,500,000 49,648	
U.S. Treasuries 912828ZW3 UNITED STATES TREASURY 6/30/2025 0.25 50,000,000 49,406,250 49,581	
U.S. Treasuries 912828ZW3 UNITED STATES TREASURY 6/30/2025 0.25 50,000,000 48,628,906 48,942	
U.S. Treasuries 91282CAB7 UNITED STATES TREASURY 7/31/2025 0.25 50,000,000 49,458,984 49,615	
U.S. Treasuries 91282CAB7 UNITED STATES TREASURY 7/31/2025 0.25 50,000,000 49,363,281 49,547 U.S. Treasuries 91282CAM3 UNITED STATES TREASURY 9/30/2025 0.25 50,000,000 49,109,375 49,391	
U.S. Treasuries 91282CAM3 UNITED STATES TREASURY 9/30/2025 0.25 50,000,000 49,281,250 49,484	
U.S. Treasuries 91282CAT8 UNITED STATES TREASURY 10/31/2025 0.25 50,000,000 49,298,828 49,538	
U.S. Treasuries 91282CAT8 UNITED STATES TREASURY 10/31/2025 0.25 50,000,000 49,078,125 49,390	
U.S. Treasuries 91282CAT8 UNITED STATES TREASURY 10/31/2025 0.25 50,000,000 49,048,828 49,370	
U.S. Treasuries 91282CBC4 UNITED STATES TREASURY 12/31/2025 0.38 50,000,000 49,455,078 49,634	
U.S. Treasuries 91282CBC4 UNITED STATES TREASURY 12/31/2025 0.38 50,000,000 49,271,484 49,511	
U.S. Treasuries 91282CBW0 UNITED STATES TREASURY 4/30/2026 0.75 50,000,000 49,662,109 49,750	
U.S. Treasuries 91282CBW0 UNITED STATES TREASURY 4/30/2026 0.75 50,000,000 49,730,469 49,800	
U.S. Treasuries 912828R36 UNITED STATES TREASURY 5/15/2026 1.63 50,000,000 52,203,125 51,657	
U.S. Treasuries 912828R36 UNITED STATES TREASURY 5/15/2026 1.63 50,000,000 51,890,625 51,451	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 49,931,641 49,948	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 50,070,313 50,053	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 50,328,125 50,248	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 50,345,703 50,262	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 50,406,250 50,310	,648 44,281,250
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 50,240,234 50,184	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 49,937,500 49,950	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 49,593,750 49,676	
U.S. Treasuries 91282CCJ8 UNITED STATES TREASURY 6/30/2026 0.88 50,000,000 49,027,344 49,187	,672 44,281,250
U.S. Treasuries 91282CCW9 UNITED STATES TREASURY 8/31/2026 0.75 50,000,000 49,449,219 49,561	,948 43,867,188
U.S. Treasuries 91282CCZ2 UNITED STATES TREASURY 9/30/2026 0.88 50,000,000 49,671,875 49,736	
U.S. Treasuries 91282CCZ2 UNITED STATES TREASURY 9/30/2026 0.88 50,000,000 49,689,453 49,750	,606 44,015,625
U.S. Treasuries 91282CCZ2 UNITED STATES TREASURY 9/30/2026 0.88 50,000,000 49,318,359 49,449	,256 44,015,625
U.S. Treasuries 91282CDK4 UNITED STATES TREASURY 11/30/2026 1.25 50,000,000 50,072,266 50,060	,294 44,507,813
U.S. Treasuries 91282CDK4 UNITED STATES TREASURY 11/30/2026 1.25 50,000,000 50,117,188 50,097	,989 44,507,813
U.S. Treasuries 91282CDK4 UNITED STATES TREASURY 11/30/2026 1.25 50,000,000 47,078,125 47,396	,502 44,507,813
U.S. Treasuries 91282CDQ1 UNITED STATES TREASURY 12/31/2026 1.25 50,000,000 47,107,422 47,416	
U.S. Treasuries 91282CEF4 UNITED STATES TREASURY 3/31/2027 2.50 25,000,000 24,757,813 24,781	,499 23,363,281
Subtotals 0.84 \$ 4,225,000,000 \$ 4,230,838,104 \$ 4,222,777	
	,978 \$ 39,996,840
Federal Agencies 3133EMS45 FEDERAL FARM CREDIT BANKS FU 12/14/2022 0.11 50,000,000 49,992,900 49,998	,986 49,650,900
Federal Agencies 3133EMWK4 FEDERAL FARM CREDIT BANKS FU 1/19/2023 0.14 60,000,000 59,987,400 59,997	
Federal Agencies 3133ELJH8 FEDERAL FARM CREDIT BANKS FU 1/23/2023 1.60 10,140,000 10,384,141 10,166	,917 10,074,029
Federal Agencies 3133EMPH9 FEDERAL FARM CREDIT BANKS FU 2/3/2023 0.13 45,500,000 45,096,315 45,350	
Federal Agencies 3133827H0 FEDERAL HOME LOAN BANKS 2/6/2023 2.14 44,400,000 44,826,684 44,562	,546 44,156,644
Federal Agencies 3133ENDQ0 FEDERAL FARM CREDIT BANKS FU 2/10/2023 0.16 50,000,000 49,899,789 49,970	
Federal Agencies 3133EMUH3 FEDERAL FARM CREDIT BANKS FU 3/23/2023 0.13 65,000,000 64,955,150 64,989	
Federal Agencies 3133EMVP4 FEDERAL FARM CREDIT BANKS FU 4/13/2023 0.13 20,000,000 19,973,600 19,992	
Federal Agencies 3133EMVP4 FEDERAL FARM CREDIT BANKS FU 4/13/2023 0.13 25,000,000 24,967,000 24,991	
Federal Agencies 3133EMVP4 FEDERAL FARM CREDIT BANKS FU 4/13/2023 0.13 50,000,000 49,934,000 49,982	
Federal Agencies 3133EMXM9 FEDERAL FARM CREDIT BANKS FU 4/27/2023 0.13 44,500,000 44,462,233 44,489	

			Maturity				Amortized	
Type of Investment	CUSIP	Issuer Name	Date	Coupon	Par Value	Book Value	Book Value	Market Value
Federal Agencies	3133EMYX4	FEDERAL FARM CREDIT BANKS FU	5/10/2023	Coupon 0.13	12,500,000	12,484,000	12,495,156	Market Value 12,214,275
Federal Agencies	3133EMYX4	FEDERAL FARM CREDIT BANKS FU	5/10/2023	0.13	25,000,000	24,968,000	24,990,312	24,428,550
Federal Agencies	3133EMYX4	FEDERAL FARM CREDIT BANKS FU	5/10/2023	0.13	75,000,000	74,904,000	74,990,937	73,285,650
Federal Agencies	3130AMRY0	FEDERAL HOME LOAN BANKS	6/2/2023	0.13	15,000,000	14,986,200	14,995,375	14,614,260
Federal Agencies	3133EMF31	FEDERAL FARM CREDIT BANKS FU	6/2/2023	0.13	100,000,000	99,938,000	99,979,277	97,428,400
Federal Agencies	3133EMH96	FEDERAL FARM CREDIT BANKS FU	6/14/2023	0.13	50,000,000	49,864,850	49,951,678	48,640,600
Federal Agencies	3133EM3S9	FEDERAL FARM CREDIT BANKS FU	6/26/2023	0.13	48,067,000	47,826,184	47,951,546	46,714,202
Federal Agencies	3133EM3S9	FEDERAL FARM CREDIT BANKS FU	6/26/2023	0.20	50,000,000	49,979,892	49,991,945	48,592,800
Federal Agencies	3133EMS37	FEDERAL FARM CREDIT BANKS FU	7/14/2023	0.13	50,000,000	49,927,791	49,971,710	48,473,300
Federal Agencies	3133EMS37	FEDERAL FARM CREDIT BANKS FU	7/14/2023	0.13	50,000,000	49,907,253	49,963,664	48,473,300
Federal Agencies	3133ENEY2	FEDERAL FARM CREDIT BANKS FU	7/24/2023	0.45	50,000,000	49,996,500	49,998,293	48,547,550
Federal Agencies	3133EM2E1	FEDERAL FARM CREDIT BANKS FU	8/10/2023	0.16	50,000,000	49,970,000	49,987,137	48,336,900
Federal Agencies	3137EAEV7	FEDERAL HOME LOAN MORTGAGE	8/24/2023	0.10	40,776,000	40,542,761	40,654,164	39,380,441
Federal Agencies	3130AJXD6	FEDERAL HOME LOAN BANKS	9/8/2023	0.13	20,975,000	20,806,361	20,883,887	20,195,401
Federal Agencies	313383YJ4	FEDERAL HOME LOAN BANKS	9/8/2023	3.38	25,000,000	25,070,000	25,058,676	24,804,050
Federal Agencies	313383YJ4	FEDERAL HOME LOAN BANKS	9/8/2023	3.38	25,000,000	25,071,750	25,060,143	24,804,050
Federal Agencies	313383YJ4	FEDERAL HOME LOAN BANKS	9/8/2023	3.38	40,000,000	40,102,000	40,085,710	39,686,480
Federal Agencies	3135G0U43	FEDERAL NATIONAL MORTGAGE A	9/12/2023	2.88	29,648,000	30,793,302	30,265,250	29,277,637
Federal Agencies	3133EM6N7	FEDERAL FARM CREDIT BANKS FU	9/27/2023	0.17	50,000,000	49,950,000	49,975,274	48,055,200
Federal Agencies	3133ENGF1	FEDERAL FARM CREDIT BANKS FU	12/1/2023	0.50	25,000,000	24,963,750	24,978,788	23,924,550
Federal Agencies	3133ENGF1	FEDERAL FARM CREDIT BANKS FU	12/1/2023	0.50	25,000,000	24,963,750	24,978,788	23,924,550
Federal Agencies	3133ENGF1	FEDERAL FARM CREDIT BANKS FU	12/1/2023	0.50	75,000,000	74,891,250	74,936,363	71,773,650
Federal Agencies	3130A3VC5	FEDERAL HOME LOAN BANKS	12/8/2023	2.25	10,000,000	10,301,000	10,179,029	9,761,870
Federal Agencies	3130A3VC5	FEDERAL HOME LOAN BANKS	12/8/2023	2.25	30,000,000	30,903,000	30,537,087	29,285,610
Federal Agencies	3133ENHR4	FEDERAL FARM CREDIT BANKS FU		0.68	25,000,000	24,987,600	24,992,441	23,929,525
Federal Agencies	3133ENHR4	FEDERAL FARM CREDIT BANKS FU		0.68	25,000,000	24,988,000	24,992,685	23,929,525
Federal Agencies	3133ENHR4	FEDERAL FARM CREDIT BANKS FU		0.68	62,000,000	61,970,488	61,982,010	59,345,222
Federal Agencies	3133ENLF5	FEDERAL FARM CREDIT BANKS FU	1/18/2024	0.90	11,856,000	11,738,815	11,775,030	11,349,097
Federal Agencies	3133ENLF5	FEDERAL FARM CREDIT BANKS FU	1/18/2024	0.90	50,000,000	49,701,000	49,802,059	47,862,250
Federal Agencies	3130AFW94	FEDERAL HOME LOAN BANKS	2/13/2024	2.50	39,010,000	40,648,810	40,005,632	38,065,841
Federal Agencies	3133ELNE0	FEDERAL FARM CREDIT BANKS FU	2/14/2024	1.43	20,495,000	20,950,604	20,654,844	19,710,841
Federal Agencies	3133EMRZ7	FEDERAL FARM CREDIT BANKS FU	2/26/2024	0.25	5,000,000	4,998,200	4,999,157	4,725,075
Federal Agencies	3133EMRZ7	FEDERAL FARM CREDIT BANKS FU	2/26/2024	0.25	5,000,000	4,998,200	4,999,157	4,725,075
Federal Agencies	3133EMRZ7	FEDERAL FARM CREDIT BANKS FU	2/26/2024	0.25	100,000,000	99,964,000	99,983,134	94,501,500
Federal Agencies	3130ARHG9	FEDERAL HOME LOAN BANKS	2/28/2024	2.13	11,000,000	10,987,460	10,990,840	10,670,418
Federal Agencies	3130ARHG9	FEDERAL HOME LOAN BANKS	2/28/2024	2.13	25,000,000	24,971,500	24,979,181	24,250,950
Federal Agencies	3133EMTW2	FEDERAL FARM CREDIT BANKS FU	3/18/2024	0.30	50,000,000	49,939,500	49,970,523	47,169,250
Federal Agencies	3133EMTW2	FEDERAL FARM CREDIT BANKS FU	3/18/2024	0.30	50,000,000	49,939,450	49,970,498	47,169,250
Federal Agencies	3133EMWV0	FEDERAL FARM CREDIT BANKS FU	4/22/2024	0.35	16,545,000	16,549,633	16,547,432	15,564,295
Federal Agencies	3133EMWV0	FEDERAL FARM CREDIT BANKS FU	4/22/2024	0.35	29,424,000	29,432,239	29,428,325	27,679,892
Federal Agencies	3133EMWV0	FEDERAL FARM CREDIT BANKS FU	4/22/2024	0.35	39,000,000	39,010,920	39,005,732	36,688,275
Federal Agencies	3133ENWP1	FEDERAL FARM CREDIT BANKS FU	5/16/2024	2.63	45,000,000	44,939,250	44,950,719	43,805,430
Federal Agencies	3133ENWP1	FEDERAL FARM CREDIT BANKS FU	5/16/2024	2.63	50,000,000	49,932,500	49,945,243	48,672,700
Federal Agencies	3133ENYH7	FEDERAL FARM CREDIT BANKS FU	6/10/2024	2.63	50,000,000	49,935,500	49,945,471	48,619,700
Federal Agencies	3133ENYH7	FEDERAL FARM CREDIT BANKS FU	6/10/2024	2.63	50,000,000	49,935,500	49,945,471	48,619,700
Federal Agencies	3130A1XJ2	FEDERAL HOME LOAN BANKS	6/14/2024	2.88	15,955,000	16,008,449	15,998,859	15,576,276
Federal Agencies	3130A1XJ2	FEDERAL HOME LOAN BANKS	6/14/2024	2.88	17,980,000	18,043,829	18,032,377	17,553,209
Federal Agencies	3130A1XJ2	FEDERAL HOME LOAN BANKS	6/14/2024	2.88	25,500,000	25,552,530	25,542,767	24,894,707
Federal Agencies	3130A1XJ2	FEDERAL HOME LOAN BANKS	6/14/2024	2.88	50,000,000	50,204,000	50,166,958	48,813,150
Federal Agencies	3130ASHK8	FEDERAL HOME LOAN BANKS	6/14/2024	3.13	28,000,000	27,979,867	27,914,302	27,448,792
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			Maturity				Amortized	
Type of Investment	CUSIP	Issuer Name		Coupon	Par Value	Book Value	Book Value	Market Value
Federal Agencies	3130ASHK8	FEDERAL HOME LOAN BANKS	<u>Date</u> 6/14/2024	3.13	28,210,000	28,190,845	28,124,672	27,654,658
Federal Agencies	3133ENYX2	FEDERAL FARM CREDIT BANKS FU	6/17/2024	3.15	25,000,000	24,970,500	24,974,778	24,556,175
Federal Agencies	3133ENYX2	FEDERAL FARM CREDIT BANKS FU	6/17/2024	3.25	25,000,000	24,970,750	24,974,991	24,556,175
Federal Agencies	3133ENYX2	FEDERAL FARM CREDIT BANKS FU	6/17/2024	3.25	50,000,000	49,970,000	49,974,350	49,112,350
Federal Agencies	3133ENZS2	FEDERAL FARM CREDIT BANKS FU	6/28/2024	3.10	25,000,000	24,986,500	24,988,254	24,486,500
Federal Agencies	3133ENZS2	FEDERAL FARM CREDIT BANKS FU	6/28/2024	3.10	25,000,000	24,987,500	24,989,124	24,486,500
Federal Agencies	3133ENZS2	FEDERAL FARM CREDIT BANKS FU	6/28/2024	3.10	50,000,000	49,973,000	49,976,509	48,973,000
Federal Agencies	3130ASME6	FEDERAL HOME LOAN BANKS	7/8/2024	3.00	10,000,000	9,980,600	9,982,856	9,769,580
Federal Agencies	3130ASME6	FEDERAL HOME LOAN BANKS	7/8/2024	3.00	15.000,000	14,970,900	14,974,284	14,654,370
Federal Agencies	3130ASME6	FEDERAL HOME LOAN BANKS	7/8/2024	3.00	17,500,000	17,466,050	17,469,998	17,096,765
Federal Agencies	3133EMV25		7/23/2024	0.45	50,000,000	, ,	50,056,203	, ,
		FEDERAL FARM CREDIT BANKS FU				50,092,000		46,632,800
Federal Agencies	3133ENJ84 3133EM5X6	FEDERAL FARM CREDIT BANKS FU	8/26/2024 9/23/2024	3.38 0.43	50,000,000	49,916,500	49,920,612	49,111,800
Federal Agencies		FEDERAL FARM CREDIT BANKS FU			25,000,000	24,974,750	24,983,343	23,162,750
Federal Agencies	3133EM5X6	FEDERAL FARM CREDIT BANKS FU	9/23/2024	0.43	50,000,000	49,949,500	49,966,687	46,325,500
Federal Agencies	3133EM5X6	FEDERAL FARM CREDIT BANKS FU	9/23/2024	0.43	50,000,000	49,949,500	49,966,687	46,325,500
Federal Agencies	3133ENP79	FEDERAL FARM CREDIT BANKS FU	9/26/2024	4.25	50,000,000	49,996,000	49,996,027	49,897,100
Federal Agencies	3133ENEJ5	FEDERAL FARM CREDIT BANKS FU		0.88	10,000,000	9,988,500	9,991,826	9,301,970
Federal Agencies	3133ENEJ5	FEDERAL FARM CREDIT BANKS FU		0.88	10,000,000	9,988,500	9,991,826	9,301,970
Federal Agencies	3133ENEJ5	FEDERAL FARM CREDIT BANKS FU		0.88	50,000,000	49,942,500	49,959,131	46,509,850
Federal Agencies	3133ELCP7	FEDERAL FARM CREDIT BANKS FU	12/3/2024	1.63	25,000,000	24,960,000	24,982,616	23,605,750
Federal Agencies	3133ENGQ7		12/9/2024	0.92	50,000,000	49,963,000	49,972,993	46,464,700
Federal Agencies	3133ENGQ7		12/9/2024	0.92	50,000,000	49,985,000	49,989,051	46,464,700
Federal Agencies	3133ENKS8	FEDERAL FARM CREDIT BANKS FU	1/6/2025	1.13	20,000,000	19,955,000	19,965,848	18,626,860
Federal Agencies	3133ENKS8	FEDERAL FARM CREDIT BANKS FU	1/6/2025	1.13	25,000,000	24,943,750	24,957,310	23,283,575
Federal Agencies	3133ENKS8	FEDERAL FARM CREDIT BANKS FU	1/6/2025	1.13	25,000,000	24,943,750	24,957,310	23,283,575
Federal Agencies	3135G0X24	FEDERAL NATIONAL MORTGAGE A	1/7/2025	1.63	39,060,000	40,632,556	40,020,684	36,791,122
Federal Agencies	3137EAEP0	FEDERAL HOME LOAN MORTGAGE	2/12/2025	1.50	5,000,000	4,996,150	4,998,175	4,683,865
Federal Agencies	3137EAEP0	FEDERAL HOME LOAN MORTGAGE	2/12/2025	1.50	5,000,000	4,996,150	4,998,175	4,683,865
Federal Agencies	3137EAEP0	FEDERAL HOME LOAN MORTGAGE	2/12/2025	1.50	5,000,000	4,996,150	4,998,175	4,683,865
Federal Agencies	3137EAEP0	FEDERAL HOME LOAN MORTGAGE	2/12/2025	1.50	15,000,000	14,988,450	14,994,526	14,051,595
Federal Agencies	3137EAEP0	FEDERAL HOME LOAN MORTGAGE	2/12/2025	1.50	50,000,000	49,961,500	49,981,752	46,838,650
Federal Agencies	3137EAEP0	FEDERAL HOME LOAN MORTGAGE	2/12/2025	1.50	53,532,000	55,450,052	54,723,037	50,147,332
Federal Agencies	3133ELQY3	FEDERAL FARM CREDIT BANKS FU	3/3/2025	1.21	16,000,000	15,990,720	15,995,458	14,859,392
Federal Agencies	3133ELQY3	FEDERAL FARM CREDIT BANKS FU	3/3/2025	1.21	24,000,000	23,964,240	23,982,496	22,289,088
Federal Agencies	3133EMWT5		4/21/2025	0.60	50,000,000	49,973,500	49,983,077	45,521,150
Federal Agencies	3135G03U5	FEDERAL NATIONAL MORTGAGE A	4/22/2025	0.63	37,938,000	37,367,792	37,505,364	34,558,786
Federal Agencies	3135G03U5	FEDERAL NATIONAL MORTGAGE A	4/22/2025	0.63	50,000,000	50,108,000	50,073,096	45,546,400
Federal Agencies	3135G03U5	FEDERAL NATIONAL MORTGAGE A	4/22/2025	0.63	50,000,000	49,243,950	49,426,360	45,546,400
Federal Agencies	3133ENXE5	FEDERAL FARM CREDIT BANKS FU	5/23/2025	2.85	6,000,000	5,991,600	5,992,604	5,777,838
Federal Agencies	3133ENXE5	FEDERAL FARM CREDIT BANKS FU	5/23/2025	2.85	20,000,000	19,972,000	19,975,347	19,259,460
Federal Agencies	3130ASG86	FEDERAL HOME LOAN BANKS	6/13/2025	3.38	11,940,000	12,055,027	11,996,834	11,646,766
Federal Agencies	3130ASG86	FEDERAL HOME LOAN BANKS	6/13/2025	3.38	12,700,000	12,863,195	12,800,058	12,388,101
Federal Agencies	3133ENYQ7	FEDERAL FARM CREDIT BANKS FU	6/13/2025	2.95	50,000,000	49,975,500	49,977,959	48,237,450
Federal Agencies	3135G04Z3	FEDERAL NATIONAL MORTGAGE A	6/17/2025	0.50	4,655,000	4,556,640	4,579,338	4,202,255
Federal Agencies	3135G04Z3	FEDERAL NATIONAL MORTGAGE A	6/17/2025	0.50	10,000,000	9,789,600	9,838,154	9,027,400
Federal Agencies	3130AN4A5	FEDERAL HOME LOAN BANKS	6/30/2025	0.70	17,680,000	17,734,631	17,717,816	16,029,236
Federal Agencies	3135G05X7	FEDERAL NATIONAL MORTGAGE A	8/25/2025	0.38	25,000,000	24,684,250	24,795,487	22,331,325
Federal Agencies	3135G05X7	FEDERAL NATIONAL MORTGAGE A	8/25/2025	0.38	72,500,000	71,862,000	72,088,525	64,760,843
Federal Agencies	3130A8ZQ9	FEDERAL HOME LOAN BANKS	9/12/2025	1.75	10,295,000	10,575,333	10,509,127	9,568,863
Federal Agencies	3137EAEX3	FEDERAL HOME LOAN MORTGAGE	9/23/2025	0.38	22,600,000	22,295,352	22,400,807	20,132,622

			Maturity				Amortized	
Type of Investment	CUSIP	Issuer Name	Date	Coupon	Par Value	Book Value	Book Value	Market Value
Federal Agencies	3133ENEG1	FEDERAL FARM CREDIT BANKS FU		1.05	39,675,000	39,622,232	39,633,718	35,932,418
Federal Agencies	3133ENEG1	FEDERAL FARM CREDIT BANKS FU		1.05	55,000,000	54,923,000	54,939,760	49,811,795
Federal Agencies	3133ENHM5	FEDERAL FARM CREDIT BANKS FU		1.17	45,000,000	44,954,100	44,963,179	40,812,615
Federal Agencies	3133ENHM5	FEDERAL FARM CREDIT BANKS FU		1.17	50,000,000	49,949,000	49,959,088	45,347,350
Federal Agencies	3133ENJ35	FEDERAL FARM CREDIT BANKS FU		3.32	35,000,000	34,957,650	34,958,874	33,925,010
Federal Agencies	3133EMZ21	FEDERAL FARM CREDIT BANKS FU	4/6/2026	0.69	15,500,000	15,458,150	15,468,434	13,704,449
Federal Agencies	3133ENUD0	FEDERAL FARM CREDIT BANKS FU	4/8/2026	2.64	20,000,000	19,961,200	19,965,874	18,939,560
Federal Agencies	3133ENUD0	FEDERAL FARM CREDIT BANKS FU	4/8/2026	2.64	30,000,000	29,941,800	29,948,811	28,409,340
Federal Agencies	3130ANNM8	FEDERAL HOME LOAN BANKS	7/13/2026	1.05	25,000,000	25,000,000	25,000,000	22,212,800
Federal Agencies	3130ANNM8	FEDERAL HOME LOAN BANKS	7/13/2026	1.05	25,000,000	25,000,000	25,000,000	22,212,800
Federal Agencies	3130ANNM8	FEDERAL HOME LOAN BANKS	7/13/2026	1.05	25,000,000	25,000,000	25,000,000	22,212,800
Federal Agencies	3130ANNM8	FEDERAL HOME LOAN BANKS	7/13/2026	1.05	25,000,000	25,000,000	25,000,000	22,212,800
Federal Agencies	3130ANMP2	FEDERAL HOME LOAN BANKS	7/27/2026	1.07	25,000,000	25,000,000	25,000,000	22,206,700
Federal Agencies	3130ANMP2	FEDERAL HOME LOAN BANKS	7/27/2026	1.07	25,000,000	25,000,000	25,000,000	22,206,700
Federal Agencies	3130ANMP2	FEDERAL HOME LOAN BANKS	7/27/2026	1.07	25,000,000	25,000,000	25,000,000	22,206,700
Federal Agencies	3130ANMP2	FEDERAL HOME LOAN BANKS	7/27/2026	1.07	25,000,000	25,000,000	25,000,000	22,206,700
Federal Agencies	3130ANTG5	FEDERAL HOME LOAN BANKS	8/10/2026	1.05	25,000,000	25,000,000	25,000,000	22,166,650
Federal Agencies	3130ANTG5	FEDERAL HOME LOAN BANKS	8/10/2026	1.05	25,000,000	25,000,000	25,000,000	22,166,650
Federal Agencies	3130ANTG5	FEDERAL HOME LOAN BANKS	8/10/2026	1.05	25,000,000	25,000,000	25,000,000	22,166,650
Federal Agencies	3130ANTG5	FEDERAL HOME LOAN BANKS	8/10/2026	1.05	25,000,000	25,000,000	25,000,000	22,166,650
Federal Agencies	3130AP6T7	FEDERAL HOME LOAN BANKS	9/3/2026	1.08	25,000,000	25,000,000	25,000,000	22,149,425
Federal Agencies	3130AP6T7	FEDERAL HOME LOAN BANKS	9/3/2026	1.08	25,000,000	25,000,000	25,000,000	22,149,425
Federal Agencies	3130AP6T7	FEDERAL HOME LOAN BANKS	9/3/2026	1.08	25,000,000	25,000,000	25,000,000	22,149,425
Federal Agencies	3130AP6T7	FEDERAL HOME LOAN BANKS	9/3/2026	1.08	25,000,000	25,000,000	25,000,000	22,149,425
Federal Agencies	3130APPR0	FEDERAL HOME LOAN BANKS	10/19/2026	1.43	25,000,000	25,000,000	25,000,000	22,379,675
Federal Agencies	3130APPR0	FEDERAL HOME LOAN BANKS	10/19/2026	1.43	25,000,000	25,000,000	25,000,000	22,379,675
Federal Agencies	3130APPR0	FEDERAL HOME LOAN BANKS	10/19/2026	1.43	25,000,000	25,000,000	25,000,000	22,379,675
Federal Agencies	3130APPR0	FEDERAL HOME LOAN BANKS	10/19/2026	1.43	25,000,000	25,000,000	25,000,000	22,379,675
Federal Agencies	3130AQ7L1	FEDERAL HOME LOAN BANKS	11/16/2026	1.61	25,000,000	25,000,000	25,000,000	22,478,000
Federal Agencies	3130AQ7L1	FEDERAL HOME LOAN BANKS	11/16/2026	1.61	25,000,000	25,000,000	25,000,000	22,478,000
Federal Agencies	3130AQ7L1	FEDERAL HOME LOAN BANKS	11/16/2026	1.61	25,000,000	25,000,000	25,000,000	22,478,000
Federal Agencies	3130AQ7L1	FEDERAL HOME LOAN BANKS	11/16/2026	1.61	25,000,000	25,000,000	25,000,000	22,478,000
Federal Agencies	3130AQJ95	FEDERAL HOME LOAN BANKS	12/14/2026	1.65	25,000,000	25,000,000	25,000,000	22,463,275
Federal Agencies	3130AQJ95	FEDERAL HOME LOAN BANKS	12/14/2026	1.65	25.000.000	25.000.000	25.000.000	22,463,275
Federal Agencies	3130AQJ95	FEDERAL HOME LOAN BANKS	12/14/2026	1.65	25,000,000	25,000,000	25,000,000	22,463,275
Federal Agencies	3130AQJ95	FEDERAL HOME LOAN BANKS	12/14/2026	1.65	25,000,000	25,000,000	25,000,000	22,463,275
Federal Agencies	3130ARB59	FEDERAL HOME LOAN BANKS	3/8/2027	2.35	25,000,000	25,000,000	25,000,000	23,043,875
Federal Agencies	3130ARB59	FEDERAL HOME LOAN BANKS	3/8/2027	2.35	25,000,000	25,000,000	25,000,000	23,043,875
Federal Agencies	3130ARB59	FEDERAL HOME LOAN BANKS	3/8/2027	2.35	25,000,000	25,000,000	25,000,000	23,043,875
Federal Agencies	3130ARB59	FEDERAL HOME LOAN BANKS	3/8/2027	2.35	25,000,000	25,000,000	25,000,000	23,043,875
Federal Agencies	3133ENRD4	FEDERAL FARM CREDIT BANKS FU		1.68	48,573,000	47,432,020	47,556,776	43,662,901
Federal Agencies	3133ENTS9	FEDERAL FARM CREDIT BANKS FU	4/5/2027	2.60	22,500,000	22,393,963	22,402,838	21,035,048
Federal Agencies	3133ENTS9	FEDERAL FARM CREDIT BANKS FU	4/5/2027	2.60	24,500,000	24,378,779	24,389,006	22,904,830
Federal Agencies	3133ENTS9	FEDERAL FARM CREDIT BANKS FU		2.60	25,000,000	24,805,806	24,823,117	23,372,275
Federal Agencies	3130ASGU7	FEDERAL HOME LOAN BANKS	6/11/2027	3.50	10,000,000	10,173,583	10,135,644	9,708,120
Federal Agencies	3130ASGU7	FEDERAL HOME LOAN BANKS	6/11/2027	3.50	12,375,000	12,592,532	12,545,469	12,013,799
Federal Agencies	3130ASGU7	FEDERAL HOME LOAN BANKS	6/11/2027	3.50	21,725,000	22,088,363	22,004,640	21,090,891
Federal Agencies	3133ENZK9	FEDERAL FARM CREDIT BANKS FU	6/28/2027	3.24	27,865,000	28,121,637	28,087,987	26,735,882
Subtotals	O TOOLINZING	I EDELOCE I AKWI OKEDIT DANKOTO	5/20/2021	1.31		\$ 5,132,681,696 \$		4,855,106,126
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			Maturity				Amortized	
Type of Investment	CUSIP	Issuer Name	Date	Coupon	Par Value	Book Value	Book Value	Market Value
Public Time Deposits	PPFT6Q6D2	Bank of San Francisco	12/5/2022	1.64 \$	10,000,000		10,000,000 \$	10,000,000
Public Time Deposits	PPFR6ZB99		12/19/2022	2.39	10,000,000	10,000,000	10,000,000	10,000,000
Public Time Deposits	PPFQECA11		3/20/2023	3.57	10,000,000	10,000,000	10,000,000	10,000,000
Subtotals	020/111	Dirago Daim	0,20,2020	2.53 \$		\$ 30,000,000 \$	30,000,000 \$	30,000,000
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Negotiable CDs	65602YF47	Norinchukin Bank - New York Branch	10/20/2022	2.50 \$	50,000,000	\$ 50,000,000 \$	50,000,000 \$	49,982,950
Negotiable CDs	78012UW68	Royal Bank of Canada New York Bran	10/24/2022	0.30	50,000,000	50,000,000	50,000,000	49,905,800
Negotiable CDs	89114WU52	Toronto-Dominion Bank - New York Br	10/24/2022	1.50	50,000,000	50,000,000	50,000,000	49,945,250
Negotiable CDs	96130ALC0	Westpac Banking Corporation - New Y	10/24/2022	0.30	50,000,000	50,000,000	50,000,000	49,905,800
Negotiable CDs	78012U2E4	Royal Bank of Canada New York Bran	12/2/2022	0.48	50,000,000	50,000,000	50,000,000	49,737,500
Negotiable CDs	89114WM36	Toronto-Dominion Bank - New York Br	12/2/2022	0.48	50,000,000	50,000,000	50,000,000	49,737,500
Negotiable CDs	06367CPS0	Bank of Montreal - Chicago Branch	12/7/2022	0.52	50,000,000	50,000,000	50,000,000	49,719,850
Negotiable CDs	89114WP58	Toronto-Dominion Bank - New York Br		0.57	10,000,000	10,000,000	10,000,000	9,921,270
Negotiable CDs	89114WP58	Toronto-Dominion Bank - New York Br		0.57	50,000,000	50,000,000	50,000,000	49,606,350
Negotiable CDs	89114WWV3		1/4/2023	2.26	50,000,000	50,000,000	50,000,000	49,799,750
Negotiable CDs	06367CTW7	Bank of Montreal - Chicago Branch	1/13/2023	1.92	50,000,000	50,000,000	50,000,000	49,720,050
Negotiable CDs	89114WU94	Toronto-Dominion Bank - New York Br		1.92	50,000,000	50,000,000	50,000,000	49,720,050
Negotiable CDs	06367CUZ8	Bank of Montreal - Chicago Branch	1/18/2023	2.28	50,000,000	50,000,000	50,000,000	49,754,700
Negotiable CDs	89114WWX9		1/24/2023	2.36	50,000,000	50,000,000	50,000,000	49,745,250
Negotiable CDs	78012U5C5	Royal Bank of Canada New York Bran	1/27/2023	2.00	50,000,000	50,000,000	50,000,000	49,675,650
Negotiable CDs	06367CSR9	Bank of Montreal - Chicago Branch	1/30/2023	1.18	50,000,000	50,000,000	50,000,000	49,528,200
Negotiable CDs	89114WQL2	Toronto-Dominion Bank - New York Br	1/30/2023	0.95	50,000,000	50,000,000	50,000,000	49,490,200
Negotiable CDs	06367CSM0	Bank of Montreal - Chicago Branch	2/13/2023	1.35	50,000,000	50,000,000	50,000,000	49,488,300
Negotiable CDs	89114WRW7		2/13/2023	1.35	50,000,000	50,000,000	50,000,000	49,488,300
Negotiable CDs	89114WUU7	Toronto-Dominion Bank - New York Br	2/27/2023	2.16	50,000,000	50,000,000	50,000,000	49,581,100
Negotiable CDs	89114WUU7	Toronto-Dominion Bank - New York Br	2/27/2023	2.16	50,000,000	50,000,000	50,000,000	49,581,100
Negotiable CDs	06367CV46	Bank of Montreal - Chicago Branch	3/27/2023	2.60	50,000,000	50,000,000	50,000,000	49,563,000
Negotiable CDs	78012U5Z4	Royal Bank of Canada New York Bran	3/27/2023	2.58	50,000,000	50,000,000	50,000,000	49,558,750
Negotiable CDs	78012U6W0	Royal Bank of Canada New York Bran	6/15/2023	3.71	50,000,000	50,000,000	50,000,000	49,651,000
Negotiable CDs	78012U7H2	Royal Bank of Canada New York Bran	6/15/2023	3.68	50,000,000	50,000,000	50,000,000	49,641,850
Negotiable CDs	89115B3A6	Toronto-Dominion Bank - New York Br	6/15/2023	3.60	50,000,000	50,000,000	50,000,000	49,615,600
Negotiable CDs	89115B3A6	Toronto-Dominion Bank - New York Br	6/15/2023	3.60	50,000,000	50,000,000	50,000,000	49,615,600
Negotiable CDs	06367CX51	Bank of Montreal - Chicago Branch	6/30/2023	3.92	50,000,000	50,000,000	50,000,000	49,695,250
Negotiable CDs	89115BAW0	Toronto-Dominion Bank - New York Br	6/30/2023	3.90	50,000,000	50,000,000	50,000,000	49,687,650
Negotiable CDs	06367CWT0	Bank of Montreal - Chicago Branch	7/3/2023	3.75	50,000,000	50,000,000	50,000,000	49,624,750
Negotiable CDs	06367CXA0	Bank of Montreal - Chicago Branch	7/3/2023	3.84	50,000,000	50,000,000	50,000,000	49,660,500
Negotiable CDs	06417MB87	Bank of Nova Scotia - Houston Branch	7/3/2023	3.73	50,000,000	50,000,000	50,000,000	49,621,050
Negotiable CDs	78015J3N5	Royal Bank of Canada New York Bran	7/3/2023	3.73	50,000,000	50,000,000	50,000,000	49,617,450
Negotiable CDs	78015JAJ6	Royal Bank of Canada New York Brand	7/3/2023	4.02	50,000,000	50,000,000	50,000,000	49,728,850
Negotiable CDs	06367CXR3	Bank of Montreal - Chicago Branch	8/28/2023	4.23	50,000,000	50,000,000	50,000,000	49,710,250
Negotiable CDs	78015JFJ1	Royal Bank of Canada New York Bran	9/20/2023	4.75	50,000,000	50,000,000	50,000,000	49,887,900
Negotiable CDs	78015JHJ9	Royal Bank of Canada New York Brand	9/22/2023	4.81	50,000,000	50,000,000	50,000,000	49,975,400
Negotiable CDs	06367CXX0	Bank of Montreal - Chicago Branch	9/25/2023	4.82	50,000,000	50,000,000	50,000,000	49,952,650
Negotiable CDs	78015JH67	Royal Bank of Canada New York Bran	9/25/2023	4.76	50,000,000	50,000,000	50,000,000	49,924,100
Subtotals				2.58 \$	1,910,000,000	\$ 1,910,000,000 \$	1,910,000,000 \$	1,898,766,520

			<u>Maturity</u>						Amortized		
Type of Investment	CUSIP	Issuer Name	Date	Coupon	Par Value		Book Value		Book Value		Market Value
Commercial Paper	62479MKC6	MUFG Bank - New York Branch	10/12/2022	0.00			49,639,111	\$	49,964,556		49.944.700
Commercial Paper	89233HKL7	Toyota Motor Credit Corporation	10/20/2022	0.00	50.000.000	*	49.611.597	•	49.937.986	*	49.905.350
Commercial Paper	62479MKM4	MUFG Bank - New York Branch	10/21/2022	0.00	50.000.000		49.629.500		49,931,389		49.901.850
Commercial Paper	89233HKM5	Toyota Motor Credit Corporation	10/21/2022	0.00	50.000.000		49,610,111		49,932,778		49.900.500
Commercial Paper	62479MKS1	MUFG Bank - New York Branch	10/26/2022	0.00	50,000,000		49,588,264		49,914,931		49,877,550
Commercial Paper	89233HL28	Toyota Motor Credit Corporation	11/2/2022	0.00	50.000.000		49.586.667		49.889.778		49.841.100
Commercial Paper	62479ML76	MUFG Bank - New York Branch	11/7/2022	0.00	50,000,000		49,790,458		49,835,042		49,817,800
Commercial Paper	89233HL77	Toyota Motor Credit Corporation	11/7/2022	0.00	50,000,000		49,571,167		49,872,042		49,815,850
Subtotals			,	0.00		\$	397,026,875	\$	399,278,500	\$	399,004,700
Money Market Funds	262006208	DREYFUS GVT CSH MGT INST	10/1/2022	2.74	\$ 20,060,259	¢	20,060,259	Ф	20,060,259	¢	20,060,259
Money Market Funds	608919718	FEDERATED HRMS GV O PRMR	10/1/2022	2.74	660,861,266	Φ	660,861,266	Φ	660,861,266	φ	660,861,266
Money Market Funds	09248U718	BLKRK LQ:T-FUND INSTL	10/1/2022	2.00 2.81	11,675,098		11,675,098		11,675,098		11,675,098
Money Market Funds	31607A703	FIDELITY IMM:GOVT INSTL	10/1/2022	2.81	11,473,118		11,473,118		11,473,118		11,473,118
Money Market Funds	61747C707	MORG STAN I LQ:GV I	10/1/2022	2.82	11,473,116		11,473,116		11,257,091		, ,
Money Market Funds	85749T517	SS INST INV:US GV MM OPP	10/1/2022	2.02	402,700,416		402,700,416		402,700,416		11,257,091 402,700,416
Subtotals	65/49151/	33 INST INV.03 GV WIN OPP	10/1/2022	2.89		\$	1,118,027,249	\$	1,118,027,249	\$	1,118,027,249
Subtotals				2.09	p 1,110,02 <i>1</i> ,245	Ψ	1,110,027,249	φ	1,110,021,249	Ą.	1,110,021,249
Supranationals	459058ES8	INTERNATIONAL BANK FOR RECON	10/7/2022	1.88	64.387.000	\$	65.187.330	\$	64.403.278	\$	64.379.853
Supranationals	459058JV6	INTERNATIONAL BANK FOR RECON	4/20/2023	0.13	100,000,000	•	99,793,000	•	99,943,004	•	97,908,100
Supranationals	4581X0CC0	INTER-AMERICAN DEVELOPMENT E	10/4/2023	3.00	25.756.000		26,837,752		26,360,992		25,412,286
Supranationals	45906M3B5	INTERNATIONAL BANK FOR RECON	6/14/2024	1.98	100,000,000		100,000,000		100,000,000		96,190,000
Supranationals	4581X0EE4	INTER-AMERICAN DEVELOPMENT E	7/1/2024	3.25	30,000,000		29,997,000		29,997,378		29,466,390
Supranationals	4581X0EE4	INTER-AMERICAN DEVELOPMENT E	7/1/2024	3.25	50.000.000		49,995,000		49,995,629		49.110.650
Supranationals	459056HV2	INTERNATIONAL BANK FOR RECON	8/28/2024	1.50	50.000.000		50,984,250		50,666,041		47,524,900
Supranationals	4581X0DZ8	INTER-AMERICAN DEVELOPMENT E	9/23/2024	0.50	50,000,000		49,595,500		49.722.530		46,432,000
Supranationals	45950VQG4	INTERNATIONAL FINANCE CORP	9/23/2024	0.44	10.000.000		9.918.700		9.944.911		9.206.010
Supranationals	4581X0CM8	INTER-AMERICAN DEVELOPMENT E	1/15/2025	2.13	100.000.000		105,676,000		103,493,244		95,176,000
Supranationals	459058JB0	INTERNATIONAL BANK FOR RECON	4/22/2025	0.63	40,000,000		40,086,000		40,058,673		36,513,160
Supranationals	4581X0DN5	INTER-AMERICAN DEVELOPMENT E	7/15/2025	0.63	28,900,000		28,519,098		28,613,197		26,081,267
Supranationals	45818WDG8	INTER-AMERICAN DEVELOPMENT E	2/27/2026	0.82	19,500,000		19,556,907		19,543,017		17,205,201
Subtotals			-	1.58	668,543,000	\$	676,146,538	\$	672,741,894	\$	640,605,818
Grand Totals											
				1 17 (13,482,164,249	@ 4	3,494,720,462	œ.	12 402 004 025	œ.	12,858,491,083

For month ended September 30, 2022

For month ended Se	ptember 30, 20)22									
							<u>Maturity</u>		<u>Amort.</u>	<u>Realized</u>	Earned Income
Type of Investment	<u>CUSIP</u>	Issuer Name	Par Value Co	<u>oupon</u>	YTM ¹	Settle Date	<u>Date</u>	Earned Interest	<u>Expense</u>	Gain/(Loss)	/Net Earnings
U.S. Treasuries	912828WE6	United States Department of The Treasury	50000000	2.75	1.7265	12/17/19	11/15/23	112,092	-41,167	0	70,925
U.S. Treasuries	912828S35	United States Department of The Treasury	50000000	1.375	1.6052	1/9/20	6/30/23	56,046	9,334	0.00	65,381
U.S. Treasuries	91282CAT8	United States Department of The Treasury	50000000	0.25	0.5534	2/25/21	10/31/25	10,190	12,308	0	22,499
U.S. Treasuries	91282CBC4	United States Department of The Treasury	50000000	0.375	0.603	2/25/21	12/31/25	15,285	9,236	0	24,521
U.S. Treasuries	91282CBC4	United States Department of The Treasury	50000000	0.375	0.6805	2/26/21	12/31/25	15,285	12,355	0.00	27,640
U.S. Treasuries	91282CAT8	United States Department of The Treasury	50000000	0.25	0.6509	3/2/21	10/31/25	10,190	16,230	0.00	26,420
U.S. Treasuries	91282CAT8	United States Department of The Treasury	50000000	0.25	0.6643	3/4/21	10/31/25	10,190	16,766	0	26,956
U.S. Treasuries	912828ZW3	United States Department of The Treasury	50000000	0.25	0.6534	3/8/21	6/30/25	10,190	16,369	0	26,559
U.S. Treasuries	912828G38	United States Department of The Treasury	50000000	2.25	0.5199	3/9/21	11/15/24	91,712	-70,382	0	21,330
U.S. Treasuries	912828ZW3	United States Department of The Treasury	50000000	0.25	0.6999	3/9/21	6/30/25	10,190	18,241	0	28,431
U.S. Treasuries	912828G38	United States Department of The Treasury	50000000	2.25	0.4798	3/12/21	11/15/24	91,712	-72,065	0	19,647
U.S. Treasuries	912828ZU7	United States Department of The Treasury	50000000	0.25	0.1912	3/12/21	6/15/23	10,246	-2,415	0	7,831
U.S. Treasuries	912828YY0	United States Department of The Treasury	50000000	1.75	0.5654	3/15/21	12/31/24	71,332	-48,159	0.00	23,172
U.S. Treasuries	912828ZC7	United States Department of The Treasury	50000000	1.125	0.6083	3/15/21	2/28/25	46,616	-20,990	0	25,626
U.S. Treasuries	912828ZD5	United States Department of The Treasury	50000000	0.5	0.1627	3/18/21	3/15/23	20,561	-13,863	0.00	6,698
U.S. Treasuries	91282CBA8	United States Department of The Treasury	50000000	0.125	0.2951	3/19/21	12/15/23	5,123	6,966	0.00	12,089
U.S. Treasuries	912828Y87	United States Department of The Treasury	50000000	1.75	0.4178	3/30/21	7/31/24	71,332	-54,412	0	16,920
U.S. Treasuries	912828Z52	United States Department of The Treasury	50000000	1.375	0.5773	3/30/21	1/31/25	56,046	-32,408	0.00	23,638
U.S. Treasuries	912828ZC7	United States Department of The Treasury	50000000	1.125	0.6095	3/31/21	2/28/25	46,616	-20,938	0.00	25,678
U.S. Treasuries	912828S92	United States Department of The Treasury	50000000	1.25	0.2029	4/1/21	7/31/23	50,951	-43,033	0.00	7,918
U.S. Treasuries	912828S92	United States Department of The Treasury	50000000	1.25	0.2046	4/1/21	7/31/23	50,951	-42,964	0	7,987
U.S. Treasuries	912828TY6	United States Department of The Treasury	50000000	1.625	0.1255	4/8/21	11/15/22	66,236	-61,493	0.00	4,743
U.S. Treasuries	912828ZU7	United States Department of The Treasury	50000000	0.25	0.1838	4/8/21	6/15/23	10,246	-2,717	0.00	7,529
U.S. Treasuries	912828YM6	United States Department of The Treasury	50000000	1.5	0.5059	4/15/21	10/31/24	61,141	-40,450	0	20,691
U.S. Treasuries	912828Z52	United States Department of The Treasury	50000000	1.375	0.5723	4/15/21	1/31/25	56,046	-32,613	0	23,433
U.S. Treasuries	912828ZF0	United States Department of The Treasury	50000000	0.5	0.6127	4/15/21	3/31/25	20,496	4,579	0.00	25,074
U.S. Treasuries	912828ZF0	United States Department of The Treasury	50000000	0.5	0.582	4/19/21	3/31/25	20,496	3,332	0	23,828
U.S. Treasuries	91282CBU4	United States Department of The Treasury	50000000	0.125	0.1537	5/4/21	3/31/23	5,124	1,179	0	6,303
U.S. Treasuries	912828ZW3	United States Department of The Treasury	50000000	0.25	0.6015	5/12/21	6/30/25	10,190	14,280	0	24,470
U.S. Treasuries	91282CAM3	United States Department of The Treasury	50000000	0.25	0.6619	5/12/21	9/30/25	10,248	16,678	0	26,926
U.S. Treasuries U.S. Treasuries	912828ZW3 912828ZL7	United States Department of The Treasury	50000000 50000000	0.25 0.375	0.6499 0.5719	5/13/21 5/18/21	6/30/25 4/30/25	10,190 15,285	16,231	0.00	26,421 23,285
U.S. Treasuries	912828ZW3	United States Department of The Treasury	5000000	0.375	0.6165	5/18/21	6/30/25	10,190	7,999 14,882	0.00	25,265 25,072
U.S. Treasuries	912828S35	United States Department of The Treasury United States Department of The Treasury	5000000	1.375	0.0103	6/24/21	6/30/23	56.046	-46,413	0	9.633
U.S. Treasuries	912828ZU7	United States Department of The Treasury United States Department of The Treasury	5000000	0.25	0.2459	6/24/21	6/15/23	10,246	-40,413 81	0.00	10,327
U.S. Treasuries	91282CBW0	United States Department of The Treasury United States Department of The Treasury	5000000	0.25	0.252	6/28/21	4/30/26	30,571	5,737	0.00	36,307
U.S. Treasuries	91282CCK5	United States Department of The Treasury	5000000	0.75	0.0920	6/30/21	6/30/23	5,095	5,737	0.00	10.633
U.S. Treasuries	91282CBW0	United States Department of The Treasury United States Department of The Treasury	5000000	0.125	0.8639	7/2/21	4/30/26	30,571	4,586	0.00	35,157
U.S. Treasuries	91282CCC3	United States Department of The Treasury United States Department of The Treasury	50000000	0.75	0.6039	7/2/21	5/15/24	10,190	8,051	0.00	18,241
U.S. Treasuries	91282CCJ8	United States Department of The Treasury United States Department of The Treasury	50000000	0.25	0.903	7/2/21	6/30/26	35,666	1,124	0.00	36,790
U.S. Treasuries	912828XT2	United States Department of The Treasury	50000000	2	0.4302	7/6/21	5/31/24	81,967	-64,066	0.00	17,901
U.S. Treasuries	912828ZW3	United States Department of The Treasury United States Department of The Treasury	50000000	0.25	0.4302	7/12/21	6/30/25	10,190	14,274	0.00	24,465
U.S. Treasuries	91282CCJ8	United States Department of The Treasury	50000000	0.25	0.8461	7/12/21	6/30/26	35,666	-1,164	0.00	34,502
U.S. Treasuries	91282CCJ8	United States Department of The Treasury	50000000	0.875	0.7398	7/22/21	6/30/26	35,666	-5,457	0.00	30,209
U.S. Treasuries	91282CCJ8	United States Department of The Treasury United States Department of The Treasury	50000000	0.875	0.7326	7/22/21	6/30/26	35,666	-5,749	0.00	29,917
U.S. Treasuries	912828R36	United States Department of The Treasury	50000000	1.625	0.6941	7/23/21	5/15/26	66,236	-37,617	0.00	28,619
U.S. Treasuries	91282CAM3	United States Department of The Treasury	50000000	0.25	0.5983	7/26/21	9/30/25	10.248	14,121	0.00	24,369
U.S. Treasuries	912828ZW3	United States Department of The Treasury United States Department of The Treasury	50000000	0.25	0.5087	8/5/21	6/30/25	10,190	10,526	0.00	20,717
U.S. Treasuries	91282CAB7	United States Department of The Treasury	50000000	0.25	0.5241	8/5/21	7/31/25	10,190	11,147	0.00	21,338
U.S. Treasuries	912828ZW3	United States Department of The Treasury	50000000	0.25	0.5577	8/6/21	6/30/25	10,190	12,509	0.00	22,699
U.S. Treasuries	91282CAB7	United States Department of The Treasury	50000000	0.25	0.5731	8/6/21	7/31/25	10,190	13,128	0	23,318
U.S. Treasuries	91282CCJ8	United States Department of The Treasury	50000000	0.875	0.7063	8/6/21	6/30/26	35,666	-6,812	0	28,853
U.S. Treasuries	91282CCL3	United States Department of The Treasury	50000000	0.375	0.3763	8/6/21	7/15/24	15,285	55	Ő	15,340
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							<u>Maturity</u>		<u>Amort.</u>	<u>Realized</u>	Earned Income
Type of Investment	<u>CUSIP</u>	Issuer Name	<u>Par Value</u>		YTM ¹	Settle Date		arned Interest	<u>Expense</u>	Gain/(Loss)	/Net Earnings
U.S. Treasuries	91282CCL3	United States Department of The Treasury	50000000	0.375	0.4018	8/9/21	7/15/24	15,285	1,094	0.00	16,380
U.S. Treasuries	91282CAK7	United States Department of The Treasury	50000000	0.125	0.2334	8/10/21	9/15/23	5,140	4,437	0.00	9,577
U.S. Treasuries	91282CCJ8	United States Department of The Treasury	50000000	0.875	0.7749	8/10/21	6/30/26	35,666	-4,038	0.00	31,628
U.S. Treasuries	912828Z86	United States Department of The Treasury	50000000	1.375	0.1396	8/17/21	2/15/23	56,046	-50,667	0.00	5,379
U.S. Treasuries	91282CCT6	United States Department of The Treasury	50000000	0.375	0.4437	8/25/21	8/15/24	15,285	2,806	0	18,091
U.S. Treasuries	912828R36	United States Department of The Treasury	50000000	1.625	0.8077	8/27/21	5/15/26	66,236	-32,938	0	33,299
U.S. Treasuries	912828XB1	United States Department of The Treasury	50000000	2.125	0.5683	9/2/21	5/15/25	86,617	-63,278	0.00	23,339
U.S. Treasuries	91282CCJ8	United States Department of The Treasury	50000000	0.875	0.9018	9/24/21	6/30/26	35,666	1,078	0 0	36,743
U.S. Treasuries U.S. Treasuries	91282CCW9 9128285Z9	United States Department of The Treasury	50000000	0.75 2.5	0.9795	9/28/21	8/31/26 1/31/24	31,077	9,190	0	40,267 13.149
U.S. Treasuries	91282CCZ2	United States Department of The Treasury	50000000	0.875	0.3304 1.0103	10/4/21 10/8/21	9/30/26	101,902	-88,753	0.00	41.282
U.S. Treasuries	91282CCZ2	United States Department of The Treasury United States Department of The Treasury	50000000 50000000	0.875	1.0103	10/8/21	9/30/26	35,867 35,867	5,415 5,125	0.00	40,992
U.S. Treasuries	91282CC22 91282CCJ8	United States Department of The Treasury	50000000	0.875	1.0519	10/5/21	6/30/26	35,666	7,086	0.00	42,752
U.S. Treasuries	91282CCZ2	United States Department of The Treasury	50000000	0.875	1.159	10/14/21	9/30/26	35,867	11,317	0.00	47.184
U.S. Treasuries	91282CDK4	United States Department of The Treasury	50000000	1.25	1.133	12/3/21	11/30/26	51,230	-1,189	0.00	50,040
U.S. Treasuries	912828ZW3	United States Department of The Treasury	50000000	0.25	1.035	12/7/21	6/30/25	10,190	31,616	0.00	41,807
U.S. Treasuries	91282CDK4	United States Department of The Treasury	50000000	1.25	1.2013	12/7/21	11/30/26	51,230	-1,933	0.00	49,297
U.S. Treasuries	91282CBA8	United States Department of The Treasury	50000000	0.125	0.7231	12/9/21	12/15/23	5,123	24,361	0	29.484
U.S. Treasuries	912796P94	United States Department of The Treasury	50000000	0.120	0.2527	12/13/21	12/1/22	0,120	10,367	0.00	10,367
U.S. Treasuries	91282CBA8	United States Department of The Treasury	50000000	0.125	0.6864	12/15/21	12/15/23	5,123	22,876	0.00	27,999
U.S. Treasuries	91282CCJ8	United States Department of The Treasury	50000000	0.875	1.3228	1/4/22	6/30/26	35,666	17,814	0.00	53,480
U.S. Treasuries	91282CDV0	United States Department of The Treasury	50000000	0.875	1.5159	2/23/22	1/31/24	35,666	25,858	0.00	61,523
U.S. Treasuries	912828Z86	United States Department of The Treasury	50000000	1.375	1.0249	3/3/22	2/15/23	56,046	-14,271	0.00	41,776
U.S. Treasuries	91282CBR1	United States Department of The Treasury	50000000	0.25	1.5538	3/8/22	3/15/24	10,280	52,480	0.00	62,761
U.S. Treasuries	912796U56	United States Department of The Treasury	0	0	0	3/29/22	9/22/22	0	28,496	0.00	28,496
U.S. Treasuries	91282CDK4	United States Department of The Treasury	50000000	1.25	2.5854	3/29/22	11/30/26	51,230	51,351	0.00	102,581
U.S. Treasuries	91282CDQ1	United States Department of The Treasury	50000000	1.25	2.5489	3/29/22	12/31/26	50,951	49,929	0.00	100,881
U.S. Treasuries	912796U64	United States Department of The Treasury	0	0	0	3/31/22	9/29/22	0	40,833	0.00	40,833
U.S. Treasuries	91282CEF4	United States Department of The Treasury	25000000	2.5	2.7091	4/6/22	3/31/27	51,239	3,992	0.00	55,231
U.S. Treasuries	912796M89	United States Department of The Treasury	50000000	0	1.1318	4/7/22	10/6/22	0	46,250	0.00	46,250
U.S. Treasuries	912828B66	United States Department of The Treasury	50000000	2.75	2.4706	4/11/22	2/15/24	112,092	-11,111	0.00	100,981
U.S. Treasuries	91282CDV0	United States Department of The Treasury	50000000	0.875	2.4625	4/11/22	1/31/24	35,666	63,388	0.00	99,054
U.S. Treasuries	91282CCL3	United States Department of The Treasury	50000000	0.375	2.6013	4/12/22	7/15/24	15,285	88,281	0.00	103,567
U.S. Treasuries	912796V63	United States Department of The Treasury	50000000	0	1.2754	4/21/22	10/20/22	0	52,083	0	52,083
Subtotals		\$	4,225,000,000				\$	2,873,686 \$	(80,162)	\$ - \$	2,793,524
Federal Agencies	3133ELCP7	Federal Farm Credit Banks Funding Corpor: \$	25,000,000	1.63	1.66	12/3/19	12/3/24 \$	33.854 \$	657	\$ - \$	34.511
Federal Agencies	3137EAEP0	Federal Home Loan Mortgage Corporation	5,000,000	1.50	1.52	2/14/20	2/12/25	6,250	63	φ - ψ	6,313
Federal Agencies	3137EAEP0	Federal Home Loan Mortgage Corporation	5,000,000	1.50	1.52	2/14/20	2/12/25	6,250	63		6,313
Federal Agencies	3137EAEP0	Federal Home Loan Mortgage Corporation	5,000,000	1.50	1.52	2/14/20	2/12/25	6,250	63		6,313
Federal Agencies	3137EAEP0	Federal Home Loan Mortgage Corporation	15,000,000	1.50	1.52	2/14/20	2/12/25	18,750	190	_	18,940
Federal Agencies	3137EAEP0	Federal Home Loan Mortgage Corporation	50,000,000	1.50	1.52	2/14/20	2/12/25	62,500	633	_	63.133
Federal Agencies	3133EHZP1	Federal Farm Credit Banks Funding Corpora	-	1.85	1.85	3/18/20	9/20/22	24,410	(14,909)	_	9,501
Federal Agencies	3133ELNE0	Federal Farm Credit Banks Funding Corpora	20,495,000	1.43	0.85	3/18/20	2/14/24	24,423	(9,572)	_	14,852
Federal Agencies	3133ELQY3	Federal Farm Credit Banks Funding Corpora	16,000,000	1.21	1.22	3/23/20	3/3/25	16,133	154	_	16,287
Federal Agencies	3133ELQY3	Federal Farm Credit Banks Funding Corpora	24,000,000	1.21	1.24	3/23/20	3/3/25	24,200	594	_	24,794
Federal Agencies	3133ELJH8	Federal Farm Credit Banks Funding Corpora	10,140,000	1.60	0.75	3/25/20	1/23/23	13,520	(7,083)	_	6,437
Federal Agencies	3133ELVL5	Federal Farm Credit Banks Funding Corpora	40,000,000	0.70	0.71	4/3/20	10/3/22	23,333	329	-	23,662
Federal Agencies	3135G05X7	Federal National Mortgage Association	72,500,000	0.38	0.57	2/25/21	8/25/25	22,656	11,657	-	34,313
Federal Agencies	3133EMRZ7	Federal Farm Credit Banks Funding Corpora	5,000,000	0.25	0.26	2/26/21	2/26/24	1,042	49	-	1,091
Federal Agencies	3133EMRZ7	Federal Farm Credit Banks Funding Corpora	5,000,000	0.25	0.26	2/26/21	2/26/24	1,042	49	-	1,091
Federal Agencies	3133EMRZ7	Federal Farm Credit Banks Funding Corpora	100,000,000	0.25	0.26	2/26/21	2/26/24	20,833	986	=	21,820
Federal Agencies	3135G05X7	Federal National Mortgage Association	25,000,000	0.38	0.66	3/4/21	8/25/25	7,813	5,794	=	13,606
Federal Agencies	3137EAEX3	Federal Home Loan Mortgage Corporation	22,600,000	0.38	0.67	3/4/21	9/23/25	7,063	5,492	-	12,555

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							Maturity		Amort.	Realized	Earned Income
Type of Investment	CUSIP	Issuer Name	Par Value	Coupon	YTM ¹	Settle Date	Date	Earned Interest	Expense	Gain/(Loss)	/Net Earnings
Federal Agencies	3133EMTW2	Federal Farm Credit Banks Funding Corpora	50,000,000	0.30	0.34	3/18/21	3/18/24	12,500	1,656	-	14,156
Federal Agencies	3133EMTW2	Federal Farm Credit Banks Funding Corpora	50,000,000	0.30	0.34	3/18/21	3/18/24	12,500	1,657	-	14,157
Federal Agencies	3133EMUH3	Federal Farm Credit Banks Funding Corpora	65,000,000	0.13	0.16	3/31/21	3/23/23	6,771	1,864	-	8,634
Federal Agencies	3133EMVP4	Federal Farm Credit Banks Funding Corpora	20,000,000	0.13	0.19	4/13/21	4/13/23	2,083	1,085	-	3,168
Federal Agencies	3133EMVP4	Federal Farm Credit Banks Funding Corpora	25,000,000	0.13	0.19	4/13/21	4/13/23	2,604	1,356	-	3,960
Federal Agencies	3133EMVP4	Federal Farm Credit Banks Funding Corpora	50,000,000	0.13	0.19	4/13/21	4/13/23	5,208	2,712	-	7,921
Federal Agencies	3133EMWT5	Federal Farm Credit Banks Funding Corpora	50,000,000	0.60	0.61	4/21/21	4/21/25	25,000	544	-	25,544
Federal Agencies	3135G0X24	Federal National Mortgage Association	39,060,000	1.63	0.53	4/21/21	1/7/25	52,894	(34,765)	=	18,128
Federal Agencies	3137EAEP0	Federal Home Loan Mortgage Corporation	53,532,000	1.50	0.55	4/21/21	2/12/25	66,915	(41,308)	=	25,607
Federal Agencies	3133EMWV0	Federal Farm Credit Banks Funding Corpora	16,545,000	0.35	0.34	5/4/21	4/22/24	4,826	(128)	=	4,697
Federal Agencies	3133EMWV0	Federal Farm Credit Banks Funding Corpora	29,424,000	0.35	0.34	5/4/21	4/22/24	8,582	(228)	=	8,354
Federal Agencies	3133EMWV0	Federal Farm Credit Banks Funding Corpora	39,000,000	0.35	0.34	5/4/21	4/22/24	11,375	(302)	-	11,073
Federal Agencies	3133EMXM9	Federal Farm Credit Banks Funding Corpora	44,500,000	0.13	0.17	5/5/21	4/27/23	4,635	1,569	-	6,205
Federal Agencies	3133EMYX4	Federal Farm Credit Banks Funding Corpora	12,500,000	0.13	0.19	5/10/21	5/10/23	1,302	658	=	1,960
Federal Agencies	3133EMYX4	Federal Farm Credit Banks Funding Corpora	25,000,000	0.13	0.19	5/10/21	5/10/23	2,604	1,315	-	3,919
Federal Agencies	3133EMYX4	Federal Farm Credit Banks Funding Corpora	75,000,000	0.13	0.19	5/10/21	5/10/23	7,813	3,945	-	11,758
Federal Agencies	3133EMWK4	Federal Farm Credit Banks Funding Corpora	60,000,000	0.14	0.15	5/18/21	1/19/23	7,000	619	-	7,619
Federal Agencies	3133EMF31	Federal Farm Credit Banks Funding Corpora	100,000,000	0.13	0.16	6/2/21	6/2/23	10,417	2,548	-	12,965
Federal Agencies	3130AMRY0	Federal Home Loan Banks	15,000,000	0.13	0.17	6/4/21	6/2/23	1,563	569	-	2,131
Federal Agencies	3133EMH96	Federal Farm Credit Banks Funding Corpora	50,000,000	0.13	0.26	6/28/21	6/14/23	5,208	5,663	-	10,871
Federal Agencies	3130AN4A5	Federal Home Loan Banks	17,680,000	0.70	0.62	7/12/21	6/30/25	10,313	(1,131)	-	9,182
Federal Agencies	3135G03U5	Federal National Mortgage Association	50,000,000	0.63	0.57	7/12/21	4/22/25	26,042	(2,348)	-	23,694
Federal Agencies	3133EMS37	Federal Farm Credit Banks Funding Corpora	50,000,000	0.13	0.20	7/14/21	7/14/23	5,208	2,968	-	8,176
Federal Agencies	3133EMS37	Federal Farm Credit Banks Funding Corpora	50,000,000	0.13	0.22	7/14/21	7/14/23	5,208	3,812	-	9,020
Federal Agencies	3133EMS45	Federal Farm Credit Banks Funding Corpora	50,000,000	0.11	0.12	7/14/21	12/14/22	4,583	411	-	4,995
Federal Agencies	3133EMV25	Federal Farm Credit Banks Funding Corpora	50,000,000	0.45	0.39	8/6/21	7/23/24	18,750	(2,551)	=	16,199
Federal Agencies	3133EMZ21	Federal Farm Credit Banks Funding Corpora	15,500,000	0.69	0.75	8/9/21	4/6/26	8,913	738	-	9,651
Federal Agencies	3133EM2E1	Federal Farm Credit Banks Funding Corpora	50,000,000	0.16	0.19	8/10/21	8/10/23	6,667	1,233	-	7,900
Federal Agencies	3130ANNM8	Federal Home Loan Banks	25,000,000	1.05	1.05	8/19/21	7/13/26	21,875	-	-	21,875
Federal Agencies	3130ANNM8	Federal Home Loan Banks	25,000,000	1.05	1.05	8/19/21	7/13/26	21,875	=	=	21,875
Federal Agencies	3130ANNM8	Federal Home Loan Banks	25,000,000	1.05	1.05	8/19/21	7/13/26	21,875	=	=	21,875
Federal Agencies	3130ANNM8	Federal Home Loan Banks	25,000,000	1.05	1.05	8/19/21	7/13/26	21,875	=	=	21,875
Federal Agencies	3130ANMP2	Federal Home Loan Banks	25,000,000	1.07	1.07	8/20/21	7/27/26	22,292	-	-	22,292
Federal Agencies	3130ANMP2	Federal Home Loan Banks	25,000,000	1.07	1.07	8/20/21	7/27/26	22,292	-	-	22,292
Federal Agencies	3130ANMP2	Federal Home Loan Banks	25,000,000	1.07	1.07	8/20/21	7/27/26	22,292	=	=	22,292
Federal Agencies	3130ANMP2	Federal Home Loan Banks	25,000,000	1.07	1.07	8/20/21	7/27/26	22,292	.	=	22,292
Federal Agencies	3133EM3S9	Federal Farm Credit Banks Funding Corpora	50,000,000	0.20	0.22	8/26/21	6/26/23	8,333	902	-	9,235
Federal Agencies	3130ANTG5	Federal Home Loan Banks	25,000,000	1.05	1.05	9/13/21	8/10/26	21,875	-	-	21,875
Federal Agencies	3130ANTG5	Federal Home Loan Banks	25,000,000	1.05	1.05	9/13/21	8/10/26	21,875	-	-	21,875
Federal Agencies	3130ANTG5	Federal Home Loan Banks	25,000,000	1.05	1.05	9/13/21	8/10/26	21,875	-	-	21,875
Federal Agencies	3130ANTG5	Federal Home Loan Banks	25,000,000	1.05	1.05	9/13/21	8/10/26	21,875	-	-	21,875
Federal Agencies	3133EM5X6	Federal Farm Credit Banks Funding Corpora	25,000,000	0.43	0.46	9/23/21	9/23/24	8,958	691	-	9,649
Federal Agencies	3133EM5X6	Federal Farm Credit Banks Funding Corpora	50,000,000	0.43	0.46	9/23/21	9/23/24	17,917	1,382	-	19,299
Federal Agencies	3133EM5X6	Federal Farm Credit Banks Funding Corpora	50,000,000	0.43	0.46	9/23/21	9/23/24	17,917	1,382	-	19,299
Federal Agencies	3133EM6N7	Federal Farm Credit Banks Funding Corpora	50,000,000	0.17	0.22	9/27/21	9/27/23	7,083	2,055	-	9,138
Federal Agencies	3130AP6T7	Federal Home Loan Banks	25,000,000	1.08	1.07	10/1/21	9/3/26	22,396	-	-	22,396
Federal Agencies	3130AP6T7	Federal Home Loan Banks	25,000,000	1.08	1.07	10/1/21	9/3/26	22,396	-	-	22,396
Federal Agencies	3130AP6T7	Federal Home Loan Banks	25,000,000	1.08	1.07	10/1/21	9/3/26	22,396	-	-	22,396
Federal Agencies	3130AP6T7	Federal Home Loan Banks	25,000,000	1.08	1.07	10/1/21	9/3/26	22,396	-	-	22,396
Federal Agencies	3130A8ZQ9	Federal Home Loan Banks	10,295,000	1.75	1.03	11/2/21	9/12/25	15,014	(5,965)	-	9,049
Federal Agencies	3130AFW94	Federal Home Loan Banks	39,010,000	2.50	0.62	11/12/21	2/13/24	81,271	(59,738)	-	21,533
Federal Agencies	3133ENDQ0	Federal Farm Credit Banks Funding Corpora	50,000,000	0.16	0.32	11/12/21	2/10/23	6,667	6,607	-	13,274
Federal Agencies	3133ENEG1	Federal Farm Credit Banks Funding Corpora	39,675,000	1.05	1.08	11/17/21	11/17/25	34,716	1,084	-	35,799
Federal Agencies	3133ENEG1	Federal Farm Credit Banks Funding Corpora	55,000,000	1.05	1.09	11/17/21	11/17/25	48,125	1,581	-	49,706

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Type of Investment	CUSIP	Issuer Name Federal Home Loan Banks	Par Value 25,000,000		YTM ¹	Settle Date		Earned Interest 29,792	<u>Expense</u>	<u>Gain/(Loss)</u>	/Net Earnings 29,792
Federal Agencies Federal Agencies	3130APPR0 3130APPR0	Federal Home Loan Banks	25,000,000	1.43 1.43	1.43 1.43	11/18/21 11/18/21	10/19/26 10/19/26	29,792	-	-	29,792 29,792
Federal Agencies	3130APPR0	Federal Home Loan Banks	25,000,000	1.43	1.43	11/18/21	10/19/26	29,792	-	-	29,792
Federal Agencies	3130APPR0	Federal Home Loan Banks	25,000,000	1.43	1.43	11/18/21	10/19/26	29,792	=	-	29,792
Federal Agencies	3133ENEJ5	Federal Farm Credit Banks Funding Corpora	10,000,000	0.88	0.91	11/18/21	11/18/24	7,292	315	_	7,606
Federal Agencies	3133ENEJ5	Federal Farm Credit Banks Funding Corpora	10,000,000	0.88	0.91	11/18/21	11/18/24	7,292	315		7,606
Federal Agencies	3133ENEJ5	Federal Farm Credit Banks Funding Corpora	50,000,000	0.88	0.91	11/18/21	11/18/24	36,458	1,574	_	38,032
Federal Agencies	3133ENEY2	Federal Farm Credit Banks Funding Corpora	50,000,000	0.45	0.45	11/24/21	7/24/23	18,750	173	_	18,923
Federal Agencies	3133ENGF1	Federal Farm Credit Banks Funding Corpora	25,000,000	0.50	0.57	12/3/21	12/1/23	10,417	1,494	_	11,910
Federal Agencies	3133ENGF1	Federal Farm Credit Banks Funding Corpora	25,000,000	0.50	0.57	12/3/21	12/1/23	10,417	1,494	_	11,910
Federal Agencies	3133ENGF1	Federal Farm Credit Banks Funding Corpora	75.000.000	0.50	0.57	12/3/21	12/1/23	31,250	4,481	-	35.731
Federal Agencies	3137EAEV7	Federal Home Loan Mortgage Corporation	40,776,000	0.25	0.58	12/6/21	8/24/23	8,495	11,178	-	19,673
Federal Agencies	3135G03U5	Federal National Mortgage Association	37,938,000	0.63	1.08	12/8/21	4/22/25	19,759	13,896	-	33,656
Federal Agencies	3135G03U5	Federal National Mortgage Association	50,000,000	0.63	1.08	12/8/21	4/22/25	26,042	18,425	-	44,467
Federal Agencies	3135G04Z3	Federal National Mortgage Association	4,655,000	0.50	1.11	12/8/21	6/17/25	1,940	2,293	-	4,232
Federal Agencies	3135G04Z3	Federal National Mortgage Association	10,000,000	0.50	1.11	12/8/21	6/17/25	4,167	4,904	-	9,071
Federal Agencies	3133ENGQ7	Federal Farm Credit Banks Funding Corpora	50,000,000	0.92	0.95	12/9/21	12/9/24	38,333	1,013	-	39,346
Federal Agencies	3133ENGQ7	Federal Farm Credit Banks Funding Corpora	50,000,000	0.92	0.93	12/9/21	12/9/24	38,333	411	-	38,744
Federal Agencies	3135G0U43	Federal National Mortgage Association	29,648,000	2.88	0.66	12/9/21	9/12/23	71,032	(53,519)	-	17,513
Federal Agencies	3130A3VC5	Federal Home Loan Banks	10,000,000	2.25	0.73	12/10/21	12/8/23	18,750	(12,404)	-	6,346
Federal Agencies	3130A3VC5	Federal Home Loan Banks	30,000,000	2.25	0.73	12/10/21	12/8/23	56,250	(37,212)	-	19,038
Federal Agencies	3130AJXD6	Federal Home Loan Banks	20,975,000	0.13	0.59	12/14/21	9/8/23	2,185	7,992	-	10,177
Federal Agencies	3133EM3S9	Federal Farm Credit Banks Funding Corpora	48,067,000	0.20	0.53	12/14/21	6/26/23	8,011	12,924	=	20,935
Federal Agencies	3130AQ7L1	Federal Home Loan Banks	25,000,000	1.61	1.61	12/16/21	11/16/26	33,438	-	=	33,438
Federal Agencies	3130AQ7L1	Federal Home Loan Banks	25,000,000	1.61	1.61	12/16/21	11/16/26	33,438	-	-	33,438
Federal Agencies	3130AQ7L1	Federal Home Loan Banks	25,000,000	1.61	1.61	12/16/21	11/16/26	33,438	-	-	33,438
Federal Agencies	3130AQ7L1	Federal Home Loan Banks	25,000,000	1.61	1.61	12/16/21	11/16/26	33,438	-	-	33,438
Federal Agencies	3133ENHM5	Federal Farm Credit Banks Funding Corpora	45,000,000	1.17	1.20	12/16/21	12/16/25	43,875	943	-	44,818
Federal Agencies	3133ENHM5	Federal Farm Credit Banks Funding Corpora	50,000,000	1.17	1.20	12/16/21	12/16/25	48,750	1,047	-	49,797
Federal Agencies	3133ENHR4	Federal Farm Credit Banks Funding Corpora	25,000,000	0.68	0.70	12/20/21	12/20/23	14,167	510	=	14,676
Federal Agencies	3133ENHR4	Federal Farm Credit Banks Funding Corpora	25,000,000	0.68	0.70	12/20/21	12/20/23	14,167	493	-	14,660
Federal Agencies	3133ENHR4	Federal Farm Credit Banks Funding Corpora	62,000,000	0.68	0.70	12/20/21	12/20/23	35,133	1,213	-	36,346
Federal Agencies	3133ENKS8	Federal Farm Credit Banks Funding Corpora	20,000,000	1.13	1.20	1/11/22	1/6/25	18,750	1,237	-	19,987
Federal Agencies	3133ENKS8	Federal Farm Credit Banks Funding Corpora	25,000,000	1.13	1.20	1/11/22	1/6/25	23,438	1,547	-	24,984
Federal Agencies	3133ENKS8	Federal Farm Credit Banks Funding Corpora	25,000,000	1.13	1.20	1/11/22	1/6/25	23,438	1,547	=	24,984
Federal Agencies	3130AQJ95	Federal Home Loan Banks	25,000,000	1.65	1.65	1/14/22	12/14/26	34,271	-	=	34,271
Federal Agencies	3130AQJ95	Federal Home Loan Banks	25,000,000	1.65	1.65	1/14/22	12/14/26	34,271	-	=	34,271
Federal Agencies	3130AQJ95	Federal Home Loan Banks	25,000,000	1.65	1.65	1/14/22	12/14/26	34,271	-	=	34,271
Federal Agencies	3130AQJ95	Federal Home Loan Banks	25,000,000	1.65 0.90	1.65 1.21	1/14/22	12/14/26	34,271	10 500	-	34,271
Federal Agencies	3133ENLF5	Federal Farm Credit Banks Funding Corpora	50,000,000	0.90	1.21	2/1/22 3/3/22	1/18/24	37,500	12,528 35,936	-	50,028
Federal Agencies	3133EMPH9 3133ENLF5	Federal Farm Credit Banks Funding Corpora	45,500,000	0.13	1.10	3/3/22	2/3/23 1/18/24	4,740 8,892	5,125	-	40,676
Federal Agencies	3133827H0	Federal Farm Credit Banks Funding Corpora	11,856,000			3/7/22		,	(38,097)	-	14,017
Federal Agencies	3133627H0 3133ENRD4	Federal Home Loan Banks Federal Farm Credit Banks Funding Corpora	44,400,000 48,573,000	2.14 1.68	1.08 2.18	3/16/22	2/6/23 3/10/27	79,180 68,002	18,807	-	41,083 86,810
Federal Agencies Federal Agencies	3130ARB59	Federal Home Loan Banks	25,000,000	2.35	2.16	3/22/22	3/8/27	48,958	10,007	-	48,958
Federal Agencies	3130ARB59	Federal Home Loan Banks	25,000,000	2.35	2.35	3/22/22	3/8/27	48,958	-	-	48,958
Federal Agencies	3130ARB59	Federal Home Loan Banks	25,000,000	2.35	2.35	3/22/22	3/8/27	48,958	-	-	48,958
Federal Agencies	3130ARB59	Federal Home Loan Banks	25,000,000	2.35	2.35	3/22/22	3/8/27	48,958	_	-	48,958
Federal Agencies	3130ARHG9	Federal Home Loan Banks	11,000,000	2.13	2.18	3/25/22	2/28/24	19.479	534	-	20,013
Federal Agencies	3130ARHG9	Federal Home Loan Banks	25,000,000	2.13	2.18	3/25/22	2/28/24	44,271	1,213	-	45,484
Federal Agencies	3133ENTS9	Federal Farm Credit Banks Funding Corpora	22,500,000	2.60	2.70	4/6/22	4/5/27	48,750	1,770	-	50,520
Federal Agencies	3133ENTS9	Federal Farm Credit Banks Funding Corpora	24,500,000	2.60	2.71	4/6/22	4/5/27	53,083	2,022	_	55,105
Federal Agencies	3133ENTS9	Federal Farm Credit Banks Funding Corpora	25,000,000	2.60	2.77	4/6/22	4/5/27	54.167	3,222	_	57,389
Federal Agencies	3133ENUD0	Federal Farm Credit Banks Funding Corpora	20,000,000	2.64	2.69	4/8/22	4/8/26	44,000	797	_	44,797
	cccb		_0,000,000			., 5,	., 5, 20	,550			,. 51

Type of Investment CUSIP Issuer Name Par Value Coupon YTM Settle Date Date Earned Interest Expense Gain/(Loss) Met Earnin Federal Agencies 31338FNUDD Federal Farm Credit Banks Funding Corpor: 30,000,000 2.64 2.69 4/8/22 4/8/26 66,000 1,195 - 67,116 67,000 67,10/22 9/16/22 - 11,667 -
Federal Agencies 3133ENUD0 Federal Farm Credit Banks Funding Corpor: 30,000,000 2.64 2.69 4/8/22 4/8/26 66,000 1,195 - 67,15
Federal Agencies 313385F92 Federal Home Loan Banks - 0.00 0.00 5/10/22 9/16/22 - 11,667 - 11,667 - 11,667 Federal Agencies 3130A1XJ2 Federal Home Loan Banks 25,500,000 2.88 2.77 5/12/22 6/14/24 61,094 (2,063) - 59,000 - 59,000,000 2.88 2.67 5/16/22 6/14/24 119,792 (8,053) - 111,77 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor: 45,000,000 2.63 2.69 5/16/22 5/16/24 98,438 2.493 - 100,97 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 5/16/22 5/16/24 109,375 2,770 - 112,14 Federal Agencies 3130A1XJ2 Federal Home Loan Banks 15,955,000 2.88 2.71 5/18/22 6/14/24 38,226 (2,115) - 36,14 7.980,000 2.88 2.70 5/18/22 6/14/24 43,077 (2,526) - 40,55 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 6,000,000 2.85 2.90 5/23/22 5/23/25 14,250 230 - 14,46 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,07 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,07 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,07 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,07 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,07 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,07 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor: 50,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,211 - 68
Federal Agencies 3130A1XJ2 Federal Home Loan Banks 50,000,000 2.88 2.67 5/16/22 6/14/24 119,792 (8,053) - 111,73 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpori 45,000,000 2.63 2.69 5/16/22 5/16/24 98,438 2,493 - 100,93 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpori 50,000,000 2.63 2.69 5/16/22 5/16/24 19,375 2,770 - 112,14 Federal Agencies 3130A1XJ2 Federal Home Loan Banks 15,955,000 2.88 2.71 5/18/22 6/14/24 38,226 (2,115) - 36,1 Federal Agencies 3133ENXL25 Federal Home Loan Banks 17,980,000 2.88 2.70 5/18/22 6/14/24 43,077 (2,526) - 40,53 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpori 6,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26
Federal Agencies 3130A1XJ2 Federal Home Loan Banks 50,000,000 2.88 2.67 5/16/22 6/14/24 119,792 (8,053) - 111,775 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor: 45,000,000 2.63 2.69 5/16/22 5/16/24 98,438 2,493 - 100,93 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 5/16/22 5/16/24 198,438 2,493 - 100,93 Federal Agencies 3133ENWP1 Federal Home Loan Banks 15,955,000 2.88 2.71 5/18/22 6/14/24 38,226 (2,115) - 36,17 Federal Agencies 3133ENXE5 Federal Home Loan Banks 17,980,000 2.88 2.70 5/18/22 6/14/24 43,077 (2,526) - 40,55 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 6,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26
Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor. 45,000,000 2.63 2.69 5/16/22 5/16/24 98,438 2,493 - 100,935 Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 5/16/22 5/16/24 109,375 2,770 - 112,14 Federal Agencies 3130A1XJZ Federal Home Loan Banks 15,955,000 2.88 2.71 5/18/22 6/14/24 38,226 (2,115) - 36,15 Federal Agencies 3133ENXE5 Federal Home Loan Banks 17,980,000 2.88 2.70 5/18/22 6/14/24 38,226 (2,115) - 36,15 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor. 6,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 -
Federal Agencies 3133ENWP1 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 5/16/22 5/16/24 109,375 2,770 - 112,14 Federal Agencies 3130A1XJ2 Federal Home Loan Banks 15,955,000 2.88 2.71 5/18/22 6/14/24 38,226 (2,115) - 36,1* Federal Agencies 3130A1XJ2 Federal Home Loan Banks 17,980,000 2.88 2.70 5/18/22 6/14/24 43,077 (2,526) - 40,55 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor. 6,000,000 2.85 2.90 5/23/22 5/23/25 14,250 230 - 14,46 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor. 20,000,000 2.85 2.90 5/23/22 5/23/25 14,250 230 - 14,46 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - <td< td=""></td<>
Federal Agencies 3130A1XJ2 Federal Home Loan Banks 15,955,000 2.88 2.71 5/18/22 6/14/24 38,226 (2,115) - 36,1 Federal Agencies 3130A1XJ2 Federal Home Loan Banks 17,980,000 2.88 2.70 5/18/22 6/14/24 43,077 (2,526) - 40,55 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 6,000,000 2.85 2.90 5/23/22 5/23/25 14,250 230 - 14,48 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 20,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENY47 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.95 2.97 6/13/22 6/10/24 109,375 2,647 -
Federal Agencies 3130A1XJ2 Federal Home Loan Banks 17,980,000 2.88 2.70 5/18/22 6/14/24 43,077 (2,526) - 40,55 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 6,000,000 2.85 2.90 5/23/22 5/23/25 14,250 230 - 14,48 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 20,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENY47 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.95 2.97 6/13/22 6/13/25 122,917 671 -<
Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 6,000,000 2.85 2.90 5/23/22 5/23/25 14,250 230 - 14,48 Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor: 20,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor: 50,000,000 2.95 2.97 6/13/22 6/13/25 12,917 671 - 123,52 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor: 25,000,000 3.25 3.31 6/17/24 67,708 1,201 -
Federal Agencies 3133ENXE5 Federal Farm Credit Banks Funding Corpor. 20,000,000 2.85 2.90 5/23/22 5/23/25 47,500 766 - 48,26 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.95 2.97 6/13/25 122,917 671 - 123,56 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor. 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,201 - 68,9 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor. 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 -
Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.63 2.69 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor. 50,000,000 2.95 2.97 6/13/25 122,917 671 - 123,58 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor. 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,211 - 68,99 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor. 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 - 68,99 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor. 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 - 68,99
Federal Agencies 3133ENYH7 Federal Farm Credit Banks Funding Corpor 50,000,000 2.63 2.69 6/10/22 6/10/24 109,375 2,647 - 112,02 Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor 50,000,000 2.95 2.97 6/13/22 6/13/25 122,917 671 - 123,58 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,211 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 50,000,000 3.25 3.28 6/17/22 6/17/24 67,708 1,200 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 50,000,000 3.25 3.28 6/17/24 6/17/24 135,417 1,231
Federal Agencies 3133ENYQ7 Federal Farm Credit Banks Funding Corpor 50,000,000 2.95 2.97 6/13/22 6/13/25 122,917 671 - 123,58 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,211 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 50,000,000 3.25 3.28 6/17/22 6/17/24 135,417 1,231 - 136,64
Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,211 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 50,000,000 3.25 3.28 6/17/22 6/17/24 135,417 1,231 - 136,64
Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 25,000,000 3.25 3.31 6/17/22 6/17/24 67,708 1,200 - 68,90 Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 50,000,000 3.25 3.28 6/17/22 6/17/24 135,417 1,231 - 136,64
Federal Agencies 3133ENYX2 Federal Farm Credit Banks Funding Corpor 50,000,000 3.25 3.28 6/17/22 6/17/24 135,417 1,231 - 136,64
Federal Agencies 3133ENZS2 Federal Farm Credit Banks Funding Corpora 25,000,000 3.10 3.13 6/28/22 6/28/24 64,583 554 - 65,13
Federal Agencies 3133ENZS2 Federal Farm Credit Banks Funding Corpora 25,000,000 3.10 3.13 6/28/22 6/28/24 64,583 513 - 65,09
Federal Agencies 3133ENZS2 Federal Farm Credit Banks Funding Corpora 50,000,000 3.10 3.13 6/28/22 6/28/24 129,167 1,108 - 130,27
Federal Agencies 3133ENZK9 Federal Farm Credit Banks Funding Corpora 27,865,000 3.14 3.06 7/7/22 6/28/27 75,236 (3,865) - 71,33
Federal Agencies 3130ASME6 Federal Home Loan Banks 10,000,000 3.00 3.10 7/8/22 7/8/24 25,000 796 - 25,79
Federal Agencies 3130ASGU7 Federal Home Loan Banks 10,000,000 3.50 3.19 7/19/22 6/11/27 29,167 (2,374) - 26,79
Federal Agencies 3130ASGU7 Federal Home Loan Banks 12,375,000 3.50 3.18 7/19/22 6/11/27 36,094 (2,984) - 33,17
Federal Agencies 3130ASGU7 Federal Home Loan Banks 21,725,000 3.50 3.20 7/20/22 6/11/27 63,365 (4,895) - 58,47
Federal Agencies 3130ASHK8 Federal Home Loan Banks 28,000,000 3.13 3.31 7/22/22 6/14/24 72,917 4,133 - 77,05
Federal Agencies 3130ASHK8 Federal Home Loan Banks 28,210,000 3.13 3.31 7/22/22 6/14/24 73,464 4,115 - 77,57
Federal Agencies 313383YJ4 Federal Home Loan Banks 25,000,000 3.38 3.12 7/27/22 9/8/23 70,313 (5,147) - 65,16
Federal Agencies 313383YJ4 Federal Home Loan Banks 25,000,000 3.38 3.11 7/27/22 9/8/23 70,313 (5,276) - 65,000
Federal Agencies 313383YJ4 Federal Home Loan Banks 40,000,000 3.38 3.14 7/28/22 9/8/23 112,500 (7,518) - 104,98
Federal Agencies 3130ASG86 Federal Home Loan Banks 12,700,000 3.38 3.07 8/3/22 6/13/25 35,719 (3,044) - 32,67
Federal Agencies 3130ASG86 Federal Home Loan Banks 11,940,000 3.38 3.19 8/4/22 6/13/25 33,581 (1,729) - 31,85
Federal Agencies 3133ENJ35 Federal Farm Credit Banks Funding Corpor 35,000,000 3.32 3.36 8/25/22 2/25/26 96,833 993 - 97,82
Federal Agencies 3133ENJ84 Federal Farm Credit Banks Funding Corpor 50,000,000 3.38 3.46 8/26/22 8/26/24 140,625 3,427 - 144,05
Federal Agencies 313385E33 Federal Home Loan Banks - 0.00 0.00 8/31/22 9/1/22
Federal Agencies 313385E33 Federal Home Loan Banks - 0.00 0.00 8/31/22 9/1/22
Federal Agencies 313385E33 Federal Home Loan Banks - 0.00 0.00 8/31/22 9/1/22
Federal Agencies 313385E33 Federal Home Loan Banks - 0.00 0.00 8/31/22 9/1/22
Federal Agencies 313385E41 Federal Home Loan Banks - 0.00 0.00 9/1/22 9/2/22 - 3,014 - 3,014 - 3,014
Federal Agencies 313385E41 Federal Home Loan Banks - 0.00 0.00 9/1/22 9/2/22 - 3,014 - 3,014 - 3,014
Federal Agencies 313385E82 Federal Home Loan Banks - 0.00 0.00 9/2/22 9/6/22 - 12,111 - 12,11
Federal Agencies 313385G83 Federal Home Loan Banks - 0.00 0.00 9/22/22 9/23/22 - 4,028 - 4,02
Federal Agencies 313385G83 Federal Home Loan Banks - 0.00 0.00 9/22/22 9/23/22 - 4,028 - 4,02
Federal Agencies 313385H33 Federal Home Loan Banks - 0.00 0.00 9/23/22 9/26/22 - 12,083 - 12,08
Federal Agencies 313385H33 Federal Home Loan Banks - 0.00 0.00 9/23/22 9/26/22 - 12,085 - 12,085
Federal Agencies 313385H41 Federal Home Loan Banks - 0.00 0.00 9/26/22 9/27/22 - 4,028 - 4,02
Federal Agencies 313385H41 Federal Home Loan Banks - 0.00 0.00 9/26/22 9/27/22 - 4,028 - 4,02
Federal Agencies 3133ENP79 Federal Farm Credit Banks Funding Corpor 50,000,000 4.25 4.25 9/26/22 9/26/24 29,514 27 - 29,54
Subtotals \$ 5,130,594,000 \$ 5,456,813 \$ (14,696) \$ - \$ 5,442,1′

							Maturity		Amort.	Realized	Earned Income
Type of Investment	CUSIP	Issuer Name	Par Vali	ue Coupon	YTM ¹	Settle Date		arned Interest	Expense	Gain/(Loss)	/Net Earnings
Public Time Deposits			\$	- 0.81	0.81	3/21/22	9/19/22 \$			\$ -	\$ 4,050
Public Time Deposits	PPEEE5T97	Bridge Bank	Ψ	- 0.81	0.81	3/21/22	9/19/22	3,617	_	Ψ -	3.617
Public Time Deposits	PPFT6Q6D2	Bank of San Francisco	10,000,00		1.64	6/6/22	12/5/22	13,667	_	_	13,667
Public Time Deposits	PPFR6ZB99	Bridge Bank	10.000.00		2.39	6/20/22	12/19/22	19.644	_	_	19.644
Public Time Deposits	PPFQECA11		10,000,00		3.57	9/19/22	3/20/23	11,737	_	_	11,737
Subtotals	111 Q207111		\$ 30,000,00		0.01	0/10/22	\$	52,715 \$	_	\$ -	
			, ,,,,,,,,				-	<u> </u>		T	7 22,210
Negotiable CDs	78012UW68	Royal Bank of Canada New York Branch	\$ 50,000,00	0.30	0.30	10/25/21	10/24/22 \$	12,500 \$	_	\$ -	\$ 12,500
Negotiable CDs	78012UW84	Royal Bank of Canada New York Branch		- 0.28	0.28	10/26/21	9/26/22	9,722	=.	-	9,722
Negotiable CDs	96130ALC0	Westpac Banking Corporation - New York B	50,000,00	0.30	0.30	10/27/21	10/24/22	12,500	-	_	12,500
Negotiable CDs	78012U2E4	Royal Bank of Canada New York Branch	50,000,00	0 0.48	0.48	12/2/21	12/2/22	20,000	-	_	20,000
Negotiable CDs	89114WM36	Toronto-Dominion Bank - New York Branch	50,000,00	0 0.48	0.48	12/2/21	12/2/22	20,000	=.	-	20,000
Negotiable CDs	06367CPS0	Bank of Montreal - Chicago Branch	50,000,00	0 0.52	0.52	12/8/21	12/7/22	21,667	-	_	21,667
Negotiable CDs	89114WP58	Toronto-Dominion Bank - New York Branch	10,000,00	0 0.57	0.57	1/6/22	12/30/22	4,750	-	-	4,750
Negotiable CDs	89114WP58	Toronto-Dominion Bank - New York Branch	50,000,00	0 0.57	0.57	1/6/22	12/30/22	23,750	-	-	23,750
Negotiable CDs	89114WQL2	Toronto-Dominion Bank - New York Branch	50,000,00	0 0.95	0.95	2/3/22	1/30/23	39,583	-	-	39,583
Negotiable CDs	06367CSM0	Bank of Montreal - Chicago Branch	50,000,00	0 1.35	1.35	2/28/22	2/13/23	56,250	-	-	56,250
Negotiable CDs	06367CSP3	Bank of Montreal - Chicago Branch		- 0.82	0.82	2/28/22	9/12/22	12,528	-	_	12,528
Negotiable CDs	89114WRW7	Toronto-Dominion Bank - New York Branch	50,000,00	0 1.35	1.35	2/28/22	2/13/23	56,250	-	-	56,250
Negotiable CDs	06367CSR9	Bank of Montreal - Chicago Branch	50,000,00	0 1.18	1.18	3/1/22	1/30/23	49,167	-	_	49,167
Negotiable CDs	78012U3V5	Royal Bank of Canada New York Branch		- 0.85	0.85	3/1/22	9/12/22	12,986	-	_	12,986
Negotiable CDs	78012U4G7	Royal Bank of Canada New York Branch		- 1.42	1.42	3/15/22	9/22/22	41,417	_	_	41,417
Negotiable CDs	78012U4H5	Royal Bank of Canada New York Branch		- 1.44	1.44	3/15/22	9/26/22	50,000	-	-	50,000
Negotiable CDs	06367CTT4	Bank of Montreal - Chicago Branch		- 1.42	1.42	4/4/22	9/28/22	53,250	_	_	53,250
Negotiable CDs	89114WU52	Toronto-Dominion Bank - New York Branch	50,000,00		1.50	4/4/22	10/24/22	62,500	-	_	62,500
Negotiable CDs	06367CTW7	Bank of Montreal - Chicago Branch	50,000,00		1.92	4/6/22	1/13/23	80,000	-	-	80,000
Negotiable CDs	89114WU94	Toronto-Dominion Bank - New York Branch	50,000,00		1.92	4/6/22	1/13/23	80,000	-	_	80,000
Negotiable CDs	89114WUU7	Toronto-Dominion Bank - New York Branch	50,000,00		2.16	4/12/22	2/27/23	90,000	-	_	90,000
Negotiable CDs	89114WUU7	Toronto-Dominion Bank - New York Branch	50,000,00		2.16	4/12/22	2/27/23	90,000	_	_	90,000
Negotiable CDs	78012U5C5	Royal Bank of Canada New York Branch	50,000,00		2.00	4/14/22	1/27/23	83,333	-	_	83,333
Negotiable CDs		Toronto-Dominion Bank - New York Branch	50,000,00		2.26	5/9/22	1/4/23	94,167	_	_	94,167
Negotiable CDs		Toronto-Dominion Bank - New York Branch	50,000,00		2.36	5/9/22	1/24/23	98,333	_	_	98,333
Negotiable CDs	06367CUZ8	Bank of Montreal - Chicago Branch	50.000.00		2.28	5/12/22	1/18/23	95.000	_	_	95,000
Negotiable CDs	06367CV46	Bank of Montreal - Chicago Branch	50,000,00		2.60	5/17/22	3/27/23	108,333	_	_	108,333
Negotiable CDs	78012U5Z4	Royal Bank of Canada New York Branch	50,000,00		2.58	5/24/22	3/27/23	107,500	_	_	107,500
Negotiable CDs	78012U6W0	Royal Bank of Canada New York Branch	50,000,00		3.71	6/21/22	6/15/23	154,583	_	_	154,583
Negotiable CDs	78012U7H2	Royal Bank of Canada New York Branch	50,000,00		3.68	6/28/22	6/15/23	153,333	_	_	153,333
Negotiable CDs	89115B3A6	Toronto-Dominion Bank - New York Branch	50,000,00		3.60	7/5/22	6/15/23	150,000	_	_	150,000
Negotiable CDs	89115B3A6	Toronto-Dominion Bank - New York Branch	50,000,00		3.60	7/5/22	6/15/23	150,000	_	_	150,000
Negotiable CDs	65602YF47	Norinchukin Bank - New York Branch	50,000,00		2.50	7/11/22	10/20/22	104.167	_	_	104,167
Negotiable CDs	06367CWT0	Bank of Montreal - Chicago Branch	50,000,00		3.75	7/12/22	7/3/23	156,250	_	_	156,250
Negotiable CDs	78015J3N5	Royal Bank of Canada New York Branch	50,000,00		3.73	7/12/22	7/3/23	155,417	_	_	155,417
Negotiable CDs	89115BAW0	Toronto-Dominion Bank - New York Branch	50,000,00		3.90	7/19/22	6/30/23	162,500	_	_	162,500
Negotiable CDs	06367CX51	Bank of Montreal - Chicago Branch	50,000,00		3.92	7/21/22	6/30/23	163,333	_	_	163,333
Negotiable CDs	06367CXA0	Bank of Montreal - Chicago Branch	50,000,00		3.84	7/27/22	7/3/23	160,000	_	_	160,000
Negotiable CDs	06417MB87	Bank of Nova Scotia - Houston Branch	50,000,00		3.73	8/1/22	7/3/23	155,417	-	=	155,417
Negotiable CDs	78015JAJ6	Royal Bank of Canada New York Branch	50,000,00		4.02	8/8/22	7/3/23	167,500	=	_	167,500
Negotiable CDs	06367CXR3	Bank of Montreal - Chicago Branch	50,000,00		4.02	9/1/22	8/28/23	176,250	<u>-</u>	<u>-</u>	176,250
Negotiable CDs	78015JFJ1	Royal Bank of Canada New York Branch	50,000,00		4.75	9/20/22	9/20/23	72,569	_	_	72,569
Negotiable CDs	06367CXX0	Bank of Montreal - Chicago Branch	50,000,00		4.73	9/28/22	9/25/23	20,083	_	_	20,083
Negotiable CDs	78015JH67	Royal Bank of Canada New York Branch	50,000,00		4.76	9/28/22	9/25/23	19,833	<u>-</u>	<u>-</u>	19,833
Negotiable CDs	78015JHJ9	Royal Bank of Canada New York Branch	50,000,00		4.81	9/30/22	9/22/23	6.681	-	_	6.681
Subtotals	, 00 1001 108	<u> </u>	\$ 1,910,000,00		7.01	3/30/22	9/22/23		-	<u>-</u>	\$ 3,613,403
วนมเบเสเจ			Ψ 1,310,000,00	v			ð	J,013,403 \$	-	Ψ -	Ψ 3,013,403

							<u>Maturity</u>			Amort.		Realized	Ear	rned Income
Type of Investment	CUSIP	Issuer Name	Par Value	Coupon	YTM ¹	Settle Date	<u>Date</u>	Earned Interest		Expense	G	ain/(Loss)	/N	Net Earnings
Commercial Paper	03785EJ62	Apple Inc. \$	-	0.00	0.00	5/10/22	9/6/22	\$ -	\$	6,667	\$	-	\$	6,667
Commercial Paper	62479MJE4	MUFG Bank - New York Branch	=	0.00	0.00	5/10/22	9/14/22	_		23,111		_		23,111
Commercial Paper	62479MKC6	MUFG Bank - New York Branch	50.000.000	0.00	2.34	6/22/22	10/12/22	-		96.667		=		96.667
Commercial Paper	89233HKL7	Toyota Motor Credit Corporation	50,000,000	0.00	2.37	6/23/22	10/20/22	-		97,917		=		97,917
Commercial Paper	62479MKS1	MUFG Bank - New York Branch	50,000,000	0.00	2.48	6/27/22	10/26/22	-		102,083		=		102,083
Commercial Paper	89233HKM5	Toyota Motor Credit Corporation	50.000.000	0.00	2.44	6/27/22	10/21/22	_		100.833		_		100.833
Commercial Paper	62479MKM4	MUFG Bank - New York Branch	50,000,000	0.00	2.49	7/5/22	10/21/22	_		102,917		_		102,917
Commercial Paper	89233HL28	Toyota Motor Credit Corporation	50,000,000	0.00	2.51	7/5/22	11/2/22	_		103,333		_		103,333
Commercial Paper	89233HL77	Toyota Motor Credit Corporation	50,000,000	0.00	2.52	7/6/22	11/7/22	_		103,750		_		103,750
Commercial Paper	62479ML76	MUFG Bank - New York Branch	50.000.000	0.00	3.24	9/21/22	11/7/22	_		44.583		_		44,583
Subtotals	02 02. 0	\$	400,000,000	0.00	0.2.	0,2.,22		\$ -	\$	781,861	\$	-	\$	781,861
		<u>*</u>	100,000,000					*	-	,	т		т	,
Money Market Funds	262006208	Dreyfus Government Cash Management Fu \$	20,060,259	2.74	2.74	9/30/22	10/1/22	\$ 343,353	\$	-	\$	-	\$	343,353
Money Market Funds	608919718	Money Market Obligations Trust - Federated	660,861,266	2.88	2.87	9/30/22	10/1/22	1,022,769		-		-		1,022,769
Money Market Funds	09248U718	BlackRock Liquidity Funds - T-Fund	11,675,098	2.81	2.81	9/30/22	10/1/22	21,880		-		-		21,880
Money Market Funds	31607A703	Fidelity Colchester Street Trust - Governmen	11,473,118	2.81	2.77	9/30/22	10/1/22	65,183		_		-		65,183
Money Market Funds	61747C707	Morgan Stanley Institutional Liquidity Funds	11,257,091	2.82	2.81	9/30/22	10/1/22	21,529		-		-		21,529
Money Market Funds	85749T517	State Street Institutional U.S. Government N	402,700,416	2.91	2.91	9/30/22	10/1/22	805,803		-		-		805,803
Subtotals		\$	1,118,027,249					\$ 2,280,518	\$	-	\$	-	\$	2,280,518
													_	
Supranationals	459058JV6	International Bank for Reconstruction and D \$	100,000,000	0.13	0.23	4/20/21	4/20/23		\$	8,507	\$	=	\$	19,007
Supranationals	4581X0CM8	Inter-American Development Bank	100,000,000	2.13	0.58	4/26/21	1/15/25	177,083		(125,206)		-		51,877
Supranationals	459058JB0	International Bank for Reconstruction and D	40,000,000	0.63	0.57 0.75	7/23/21	4/22/25 2/27/26	20,867		(1,885)		-		18,982
Supranationals Supranationals	45818WDG8 45950VQG4	Inter-American Development Bank International Finance Corporation	19,500,000 10,000,000	0.82 0.44	0.75	8/25/21 10/22/21	9/23/24	13,325 3,667		(1,037) 2,286		-		12,288 5,953
Supranationals	4581X0DN5	Inter-American Development Bank	28.900.000	0.44	0.72	11/1/21	7/15/25	15.052		2,200 8.452		-		23.504
Supranationals	459056HV2	International Bank for Reconstruction and D	50.000.000	1.50	0.33	11/2/21	8/28/24	62,500		(28,667)		_		33.833
Supranationals	4581X0DZ8	Inter-American Development Bank	50,000,000	0.50	0.78	11/4/21	9/23/24	20,833		11,513		_		32,347
Supranationals	4581X0CC0	Inter-American Development Bank	25,756,000	3.00	0.76	12/15/21	10/4/23	64,390		(49,320)		_		15.070
Supranationals	459058ES8	International Bank for Reconstruction and D	64.387.000	1.88	0.34	12/16/21	10/7/22	100.658		(81,390)		_		19.269
Supranationals	45906M3B5	International Bank for Reconstruction and D	100,000,000	1.98	1.98	3/23/22	6/14/24	165,000		(= 1,000)		-		165,000
Supranationals	4581X0EE4	Inter-American Development Bank	30,000,000	3.25	3.26	7/1/22	7/1/24	81,250		123		_		81,373
Supranationals	4581X0EE4	Inter-American Development Bank	50,000,000	3.25	3.26	7/1/22	7/1/24	135,417		205		-		135,622
Subtotals		\$	668,543,000					\$ 870,542	\$	(256,418)	\$	-	\$	614,124
			3.482.164.249					\$ 15.147.676		430.586		-		15.578.262

Yield to maturity is calculated at purchase

Investment Transactions

Pooled Fund

Fan	ad Camtamaha	- 20 2022									
For month end		Maturity	Type of Investment	Issuer Name CUSIP		Par Value	Coupon	YTM	Price	Interest Tr	ansaction Amount
Purchase	9/1/22	10/1/22	Money Market Funds	Morgan Stanley Institutional Liquidity 61747C707	\$	47,670	2.82	2.12 \$		\$ - \$	(47,670)
Purchase	9/1/22	9/2/22	Federal Agencies	Federal Home Loan Banks 313385E36	*	50,000,000	0.00	2.15	99.99	-	(49,996,986)
Purchase	9/1/22	9/2/22	Federal Agencies	Federal Home Loan Banks 313385E36		50,000,000	0.00	2.15	99.99	-	(49,996,986)
Purchase	9/1/22	8/28/23	Negotiable CDs	Bank of Montreal - Chicago Branch 06367CXR3		50,000,000	4.23	4.07	100.00	-	(50,000,000)
Purchase	9/1/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 262006208		721,195	2.74	2.13	1.00	-	(721,195)
Purchase	9/1/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		500,446	2.88	2.17	1.00	-	(500,446)
Purchase	9/1/22	10/1/22	Money Market Funds	BlackRock Liquidity Funds - T-Fund 09248U718		19,863	2.81	2.05	1.00	-	(19,863)
Purchase	9/2/22	9/6/22	Federal Agencies	Federal Home Loan Banks 313385E77		50,000,000	0.00	0.55	99.98	-	(49,987,889)
Purchase	9/6/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		45,000,000	2.88	2.16	1.00	-	(45,000,000)
Purchase	9/7/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		30,000,000	2.88	2.16	1.00	=	(30,000,000)
Purchase	9/9/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		77,000,000	2.88	2.18	1.00	=	(77,000,000)
Purchase	9/15/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		15,000,000	2.88	2.19	1.00	-	(15,000,000)
Purchase	9/19/22	3/20/23	Public Time Deposits	Bridge Bank PPFQECA11		10,000,000	3.57	3.57	100.00	-	(10,000,000)
Purchase	9/19/22	10/1/22	Money Market Funds	Fidelity Colchester Street Trust - Gov 31607A703		57,000,000	2.81	2.21	1.00	-	(57,000,000)
Purchase	9/20/22	9/20/23	Negotiable CDs	Royal Bank of Canada New York Bra 78015JFJ1		50,000,000	4.75	4.71	100.00	-	(50,000,000)
Purchase	9/21/22	11/7/22	Commercial Paper	MUFG Bank - New York Branch 62479ML76		50,000,000	0.00	3.11	99.58	-	(49,790,458)
Purchase	9/22/22	9/23/22	Federal Agencies	Federal Home Loan Banks 313385G83		50,000,000	0.00	2.96	99.99	-	(49,995,972)
Purchase	9/22/22	9/23/22	Federal Agencies	Federal Home Loan Banks 313385G83		50,000,000	0.00	2.96	99.99	-	(49,995,972)
Purchase Purchase	9/23/22 9/23/22	9/26/22 9/26/22	Federal Agencies Federal Agencies	Federal Home Loan Banks 313385H33 Federal Home Loan Banks 313385H33		50,000,000 50.000.000	0.00 0.00	0.99 0.99	99.98 99.98	-	(49,987,917) (49,987,915)
Purchase	9/23/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		59,000,000	2.88	2.77	1.00	-	(59,000,000)
Purchase	9/26/22	9/26/24	Federal Agencies	Federal Farm Credit Banks Funding 3133ENP79		50,000,000	4.25	4.25	99.99	-	(49,996,000)
Purchase	9/26/22	9/27/22	Federal Agencies	Federal Home Loan Banks 313385H41		50,000,000	0.00	2.96	99.99	-	(49,995,972)
Purchase	9/26/22	9/27/22	Federal Agencies	Federal Home Loan Banks 313385H41		50,000,000	0.00	2.96	99.99	_ _	(49,995,972)
Purchase	9/27/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		105,000,000	2.88	2.86	1.00	- -	(105,000,000)
Purchase	9/28/22	9/25/23	Negotiable CDs	Royal Bank of Canada New York Bra 78015JH67		50,000,000	4.76	4.92	100.00	_	(50,000,000)
Purchase	9/28/22	9/25/23	Negotiable CDs	Bank of Montreal - Chicago Branch 06367CXX0		50,000,000	4.82	4.92	100.00	_	(50,000,000)
Purchase	9/30/22	10/1/22	Money Market Funds	Morgan Stanley Institutional Liquidity 61747C707		21,529	2.82	2.81	1.00	-	(21,529)
Purchase	9/30/22	9/22/23	Negotiable CDs	Royal Bank of Canada New York Bra 78015JHJ9		50,000,000	4.81	4.86	100.00	-	(50,000,000)
Purchase	9/30/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 262006208		343,353	2.74	2.74	1.00	-	(343,353)
Purchase	9/30/22	10/1/22	Money Market Funds	Fidelity Colchester Street Trust - Gov 31607A703		65,183	2.81	2.77	1.00	-	(65,183)
Purchase	9/30/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		1,022,769	2.88	2.87	1.00	-	(1,022,769)
Purchase	9/30/22	10/1/22	Money Market Funds	State Street Institutional U.S. Goverr 85749T517		805,803	2.91	2.91	1.00	-	(805,803)
Subtotals					\$	1,201,547,811	2.11	2.89 \$	67.72	\$ - \$	(1,201,275,851)
Cala	0/0/00	40/4/00	Manay Markat Funda	Describes Conversed Cook Manager 202000200	Φ.	(7,000,000)	0.74	0.44 0	4.00	ф ф	7 000 000
Sale Sale	9/8/22 9/14/22	10/1/22	Money Market Funds	Dreyfus Government Cash Manager 262006208	\$	(7,000,000)	2.74 2.74	2.14 \$ 2.13	1.00 1.00	\$ - \$	7,000,000
Sale	9/14/22	10/1/22 10/1/22	Money Market Funds Money Market Funds	Dreyfus Government Cash Managen 262006208 Dreyfus Government Cash Managen 262006208		(20,000,000) (10,000,000)	2.74	2.13	1.00	-	20,000,000 10,000,000
Sale	9/10/22	10/1/22	Money Market Funds	Dreyfus Government Cash Manager 262006208		(11,000,000)	2.74	2.11	1.00	-	11,000,000
Sale	9/20/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 262006208		(23,000,000)	2.74	2.13	1.00	-	23,000,000
Sale	9/21/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 262006208		(23,000,000)	2.74	2.15	1.00	-	23,000,000
Sale	9/22/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 262006208		(100,000,000)	2.74	2.17	1.00	- -	100,000,000
Sale	9/22/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 608919718		(43,000,000)	2.88	2.21	1.00	_	43,000,000
Sale	9/26/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 262006208		(5,000,000)	2.74	2.74	1.00	_	5,000,000
Sale	9/28/22	10/1/22	Money Market Funds	Dreyfus Government Cash Manager 262006208		(50,000,000)	2.74	2.74	1.00	_	50,000,000
Sale	9/28/22	10/1/22	Money Market Funds	Fidelity Colchester Street Trust - Gov 31607A703		(12,000,000)	2.81	2.78	1.00	_	12,000,000
Sale	9/30/22	10/1/22	Money Market Funds	Fidelity Colchester Street Trust - Gov 31607A703		(45,000,000)	2.81	2.77	1.00	_	45.000.000
Subtotals				, , , , , , , , , , , , , , , , , , , ,	\$	(349,000,000)	2.77	2.35 \$	1.00	\$ - \$	349,000,000
		_,									
Maturity	9/1/22	9/1/22	Federal Agencies	Federal Home Loan Banks 313385E28	\$	(200,000,000)	0.00	•	100.00	\$ - \$	200,000,000
Maturity	9/2/22	9/2/22	Federal Agencies	Federal Home Loan Banks 313385E36		(100,000,000)	0.00	2.15	100.00	-	100,000,000
Maturity	9/6/22	9/6/22	Federal Agencies	Federal Home Loan Banks 313385E77		(50,000,000)	0.00	2.19	100.00	=	50,000,000
Maturity	9/6/22	9/6/22	Commercial Paper	Apple Inc. 03785EJ62		(40,000,000)	0.00	2.34	100.00	-	40,000,000
Maturity	9/12/22	9/12/22	Negotiable CDs	Bank of Montreal - Chicago Branch 06367CSP3		(50,000,000)	0.82	2.33	100.00	-	50,000,000
Maturity	9/12/22	9/12/22	Negotiable CDs	Royal Bank of Canada New York Bra 78012U3V5		(50,000,000)	0.85	2.34	100.00	-	50,000,000

Investment Transactions

Pooled Fund

Transaction	Settle Date	Maturity	Type of Investment	Issuer Name C	USIP		Par Value	Coupon	YTM	Price	Interest	Transaction Amount
Maturity	9/14/22	9/14/22	Commercial Paper		2479MJE4		(40,000,000)	0.00	2.66	100.00	-	40,000,000
Maturity	9/16/22	9/16/22	Federal Agencies		13385F92		(25,000,000)	0.00	2.23	100.00	-	25,000,000
Maturity	9/19/22	9/19/22	Public Time Deposits	Bridge Bank P	PEEE5T97		(10,000,000)	0.81	0.00	100.00	_	10,000,000
Maturity	9/19/22	9/19/22	Public Time Deposits	Bank of San Francisco P	PE4E8VT6		(10,000,000)	0.81	0.00	100.00	-	10,000,000
Maturity	9/20/22	9/20/22	Federal Agencies	Federal Farm Credit Banks Funding 3	133EHZP1		(25,000,000)	1.85	3.15	100.00	_	25,000,000
Maturity	9/22/22	9/22/22	Negotiable CDs	Royal Bank of Canada New York Bra 78	8012U4G7		(50,000,000)	1.42	2.45	100.00	_	50,000,000
Maturity	9/22/22		U.S. Treasuries	United States Department of The Tre 9			(50,000,000)	0.00	1.80	100.00	-	50,000,000
Maturity	9/23/22	9/23/22	Federal Agencies	•	13385G83		(100,000,000)	0.00	2.96	100.00	_	100,000,000
Maturity	9/26/22	9/26/22	Federal Agencies	Federal Home Loan Banks 3	13385H33		(100,000,000)	0.00	2.96	100.00	_	100,000,000
Maturity	9/26/22	9/26/22	Negotiable CDs	Royal Bank of Canada New York Bra 78	8012UW84		(50,000,000)	0.28	8.65	100.00	-	50,000,000
Maturity	9/26/22	9/26/22	Negotiable CDs	Royal Bank of Canada New York Bra 78			(50,000,000)	1.44	6.32	100.00	_	50,000,000
Maturity	9/27/22	9/27/22	Federal Agencies	Federal Home Loan Banks 3	13385H41		(100,000,000)	0.00	2.96	100.00	-	100,000,000
Maturity	9/28/22	9/28/22	Negotiable CDs	Bank of Montreal - Chicago Branch 00			(50,000,000)	1.42	3.05	100.00	-	50,000,000
Maturity	9/29/22	9/29/22	U.S. Treasuries	United States Department of The Tre 9			(50,000,000)	0.00	2.39	100.00	_	50,000,000
Subtotals				•		\$	(1,200,000,000)	0.31	2.86	100.00	\$ - \$	
						•						
Interest	9/1/22	10/1/22	Money Market Funds	Morgan Stanley Institutional Liquidity 6				2.82	2.12		- \$	
Interest	9/1/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 26				2.74	2.13		-	721,195
Interest	9/1/22	10/1/22	Money Market Funds	Money Market Obligations Trust - Fe 60	08919718			2.88	2.17		-	500,446
Interest	9/1/22	10/1/22	Money Market Funds	BlackRock Liquidity Funds - T-Fund 09				2.81	2.05		-	19,863
Interest	9/6/22	3/3/25	Federal Agencies	Federal Farm Credit Banks Funding 3				1.21	3.61		-	242,000
Interest	9/6/22	9/3/26	Federal Agencies		130AP6T7			1.08	3.58		-	537,500
Interest	9/8/22	9/8/23	Federal Agencies	Federal Home Loan Banks 3	130AJXD6			0.13	3.39		-	13,109
Interest	9/8/22	3/8/27	Federal Agencies	Federal Home Loan Banks 3	130ARB59			2.35	3.77		-	1,083,611
Interest	9/8/22	9/8/23	Federal Agencies	Federal Home Loan Banks 3	13383YJ4			3.38	3.40		-	1,518,750
Interest	9/12/22	3/10/27	Federal Agencies	Federal Farm Credit Banks Funding 3	133ENRD4			1.68	3.58		-	408,013
Interest	9/12/22	9/12/22	Negotiable CDs	Bank of Montreal - Chicago Branch 00	6367CSP3			0.82	2.33		-	223,222
Interest	9/12/22	9/12/22	Negotiable CDs	Royal Bank of Canada New York Bra 78	8012U3V5			0.85	2.34		-	230,208
Interest	9/12/22	9/12/25	Federal Agencies	Federal Home Loan Banks 3	130A8ZQ9			1.75	3.74		-	90,081
Interest	9/12/22	9/12/23	Federal Agencies	Federal National Mortgage Associati 3	135G0U43			2.88	3.48		-	426,190
Interest	9/13/22	8/10/26	Federal Agencies	Federal Home Loan Banks 3	130ANTG5			1.05	3.81		-	525,000
Interest	9/15/22	9/15/23	U.S. Treasuries	United States Department of The Tre 9	1282CAK7			0.13	4.04		-	31,250
Interest	9/15/22	3/15/24	U.S. Treasuries	United States Department of The Tre 9	1282CBR1			0.25	3.98		-	62,500
Interest	9/15/22	3/15/23	U.S. Treasuries	United States Department of The Tre 9	12828ZD5			0.50	3.71		-	125,000
Interest	9/19/22	3/18/24	Federal Agencies	Federal Farm Credit Banks Funding 3	133EMTW2			0.30	4.00		-	150,000
Interest	9/19/22	9/19/22	Public Time Deposits	Bridge Bank P	PEEE5T97			0.81	0.00		-	40,012
Interest	9/19/22	9/19/22	Public Time Deposits	Bank of San Francisco P	PE4E8VT6			0.81	0.00		-	40,950
Interest	9/20/22	9/20/22	Federal Agencies	Federal Farm Credit Banks Funding 3	133EHZP1			1.85	3.15		-	231,250
Interest	9/22/22	9/22/22	Negotiable CDs	Royal Bank of Canada New York Bra 78	8012U4G7			1.42	2.45		-	376,694
Interest	9/23/22	3/23/23	Federal Agencies	Federal Farm Credit Banks Funding 3	133EMUH3			0.13	3.74		-	40,625
Interest	9/23/22	9/23/24	Supranationals	Inter-American Development Bank 4	581X0DZ8			0.50	4.28		-	125,000
Interest	9/23/22	9/23/25	Federal Agencies	Federal Home Loan Mortgage Corpo 3	137EAEX3			0.38	4.31		-	42,375
Interest	9/23/22	9/23/24	Supranationals	International Finance Corporation 49				0.44	4.68		-	22,000
Interest	9/23/22	9/23/24	Federal Agencies	Federal Farm Credit Banks Funding 3	133EM5X6			0.43	4.31		-	268,750
Interest	9/26/22	9/26/22	Negotiable CDs	Royal Bank of Canada New York Bra 78	8012UW84			0.28	8.65		=	130,278
Interest	9/26/22	9/26/22	Negotiable CDs	Royal Bank of Canada New York Bra 78	8012U4H5			1.44	6.32		-	390,000
Interest	9/27/22	9/27/23	Federal Agencies	Federal Farm Credit Banks Funding 3	133EM6N7			0.17	4.31		=	42,500
Interest	9/28/22	9/28/22	Negotiable CDs	Bank of Montreal - Chicago Branch 00				1.42	3.05		-	349,083
Interest	9/30/22	10/1/22	Money Market Funds	Morgan Stanley Institutional Liquidity 6				2.82	2.81		-	21,529
Interest	9/30/22	9/30/26	U.S. Treasuries	United States Department of The Tre 9				0.88	4.15		-	656,250
Interest	9/30/22	3/31/23	U.S. Treasuries	United States Department of The Tre 9				0.13	3.88		-	31,250
Interest	9/30/22	3/31/27	U.S. Treasuries	United States Department of The Tre 9				2.50	4.11		-	312,500
Interest	9/30/22	3/31/25	U.S. Treasuries	United States Department of The Tre 9				0.50	4.24		-	250,000
Interest	9/30/22	9/30/25	U.S. Treasuries	United States Department of The Tre 9				0.25	4.24		-	125,000
Interest	9/30/22	10/1/22	Money Market Funds	Dreyfus Government Cash Managen 20				2.74	2.74		-	343,353
Interest	9/30/22	10/1/22	Money Market Funds	Fidelity Colchester Street Trust - Gov 3				2.81	2.77		-	65,183
			•	· ·								

Investment Transactions

Pooled Fund

Transaction	Settle Date	Maturity	Type of Investment	Issuer Name	CUSIP	<u>Pa</u>	ır Value	Coupon	YTM	Price	Interest	Transaction Amoun
Interest	9/30/22	10/1/22	Money Market Funds	Money Market Obliga	tions Trust - Fe 608919718			2.88	2.87		-	1,022,769
Interest	9/30/22	10/1/22	Money Market Funds	State Street Institution	nal U.S. Goverr 85749T517			2.91	2.91		-	805,803
Subtotals						\$	-	1.29	2.26 \$	-	\$ -	\$ 12,688,764

Grand Totals 33	Purchases
(12) Sales
(20) Maturities / Calls
1	Change in number of positions



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Memorandum

AGENDA ITEM 10

DATE: November 21, 2022

TO: Transportation Authority Board

FROM: Carl Holmes - Deputy Director for Capital Projects

SUBJECT: 12/13/22 Board: Major Capital Project Update: Caltrain Modernization Program

RECOMMENDATION ⊠ Information □ Action	☐ Fund Allocation
None. This is an information item.	☐ Fund Programming
SUMMARY	☐ Policy/Legislation
The Caltrain Modernization (CalMod) program is a \$2.72	☐ Plan/Study
billion suite of projects, which includes Positive Train Control (PTC) and the Peninsula Corridor Electrification Project (PCEP).	⊠ Capital Project Oversight/Delivery
PTC was completed in December 2020. PCEP is comprised of electrification of the Caltrain line between San Jose and San	☐ Budget/Finance
Francisco, upgrade of the signal system, and the procurement of electric multiple-unit vehicles (EMUs). As of September 30,	☐ Contract/Agreement
2022, PCEP has expended 77.5% of its current budget. Work	□ Other:
is continuing on the installation of the Overhead Contact System (OCS) poles, cantilever arms, and contact wire, and the traction power facilities are nearing completion. The first four EMU trainsets have been delivered and are undergoing static testing. The current PCEP Baseline Budget is \$2.44 billion. As detailed in Attachment 1, Caltrain is pursuing multiple funding sources to address the \$462 million increase resulting from the December 2021 change to the Baseline Budget. Caltrain has secured \$52 million in additional federal funds, leaving a \$410 million gap. In October 2022, the Metropolitan Transportation Commission (MTC) adopted the Bay Area Major Project Advancement Policy, which identifies completion of PCEP as a regional priority and prioritizes it for certain state and federal grant funds. If needed, up to \$140 million in bond proceeds, backed by Caltrain Measure RR funds, may be called upon to close the funding gap. A final fallback measure is the Four-Party Agreement, under which the Transportation Authority, San Mateo County	
Transportation Authority, VTA, and MTC committed to helping to seek and secure up to an additional \$50 million each, for a collective \$200 million backstop for PCEP in the event of cost	
collective \$200 million backstop for PCEP in the event of cost	



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over-runs or shortfalls in revenues. The planned revenue	
service date is September 2024.	

BACKGROUND

CalMod is a \$2.72 billion suite of sustainable projects that will electrify and upgrade the performance, operating efficiency, capacity, safety, and reliability of Caltrain commuter rail service, while improving air quality and reducing greenhouse gas emissions. CalMod includes the PTC Project, which was completed on December 17, 2020, and the PCEP, which has two components: electrification of the Caltrain line between San Jose and San Francisco; and the purchase of EMUs to operate on the electrified railroad. Revenue service is scheduled for September 2024.

The CalMod Program will improve system performance with faster, more reliable service while minimizing equipment and operating costs. The Program is critical to the long-term financial sustainability of Caltrain. The improvements will extend for 52 miles from San Francisco to San Jose and will also prepare the alignment for the future High-Speed Rail blended system. The project received the Full Funding Grant Agreement by the Federal Transit Administration (FTA) in 2017.

Like any large capital project, the CalMod funding plan relies on contributions from multiple funding partners including the three Peninsula Corridor Joint Powers Board (PCJPB) member counties (San Francisco, San Mateo, and Santa Clara), the Transportation Authority, MTC, and the California High-Speed Rail Authority (CHSRA), in addition to the FTA. Funding contributions were codified in a series of memorandums of agreement, of which the latest included an oversight protocol. The three PCJPB counties have provided a local contribution of \$80 million each to the CalMod program. The Transportation Authority provided about \$41 million, primarily from the Prop K sales tax and One Bay Area Grant programs. The San Francisco Municipal Transportation Agency provided the remaining \$39 million of San Francisco's local contribution from the Prop AA General Obligation Bond.

The Funding Partners oversight protocol for CalMod requires the Executive Director of Caltrain to attend a Board of Supervisors meeting twice a year to provide an update on the CalMod Program. With the concurrence of the President of the Board of Supervisors, the updates since 2019 have taken place at Transportation Authority Board meetings.

DISCUSSION

The paragraphs below provide a brief status update on the CalMod program.

Positive Train Control (PTC) [COMPLETED]. This \$329.3 million project is complete. PTC is an advanced signal system that equipped the corridor with federally-mandated safety technology. Caltrain received conditional approval of the PTC Safety Plan from the Federal Railroad Administration (FRA) in December 2020. PTC is currently in Revenue Service and is fully interoperable with all tenants. Caltrain's Interoperable Electronic Train Management



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System is now certified by the FRA as a mixed PTC system. Caltrain has established a follow-on maintenance agreement with Wabtec Corporation, the project's contractor.

Peninsula Corridor Electrification Project (PCEP). As of September 30, 2022, expenditures on the PCEP reached \$1.89 billion, 77.5% of the \$2.44 billion current budget. Work is progressing on both the Electrification and the Vehicles components of the project.

Electrification design-build contract. In August 2016, Caltrain awarded the Design-Build Electrification contract to Balfour Beatty Infrastructure in the amount of \$697 million. The contract was issued with a \$108 million Limited Notice to Proceed, which was followed by full Notice to Proceed on June 19, 2017.

Overhead Contact System poles, cantilever arm, and wire installation continues. OCS foundations are complete and pole installation, of which 144 remain, is expected to be completed by year end. Contact wire installation has been completed in Segments 3 and 4 at the south end of the alignment, and completion in Segments 1 and 2 in the north is anticipated for October 31, 2023.

Work continues on the Traction Power Facilities. Power substations in San Jose and South San Francisco are 100% complete. Traction Power substations 1 and 2 interconnections are also complete. All the other facilities are 90% complete. The power facilities were energized on August 27, 2022, a major milestone. Live-running tests with the EMUs will begin on the weekend of January 13, 2023.

Signals and Communication Systems construction also continues. Integrated testing continues on Segment 4. Segment 2 is anticipated for completion in December 2022 and Segments 1 and 2 are expected to be completed by October 2023.

Tunnels. [COMPLETED] Work on modifications to the 100-year-old San Francisco tunnels reached Substantial Completion on September 17, 2020, and Final Acceptance was reached in December 2020.

Vehicles. On September 6, 2016, Caltrain gave a limited Notice to Proceed to Stadler Rail for the \$551 million EMU contract to design and fabricate 96 electric vehicles. After receipt of the Full Funding Grant Agreement, Caltrain issued the full Notice to Proceed on June 1, 2017. Subsequently, Caltrain executed an option for an additional 37 cars, bringing the total to 133 cars. In accordance with the Buy America provisions of the FTA funding, the vehicles are being manufactured by Stadler US at its new facility in Salt Lake City, Utah.

The first four trainsets have been delivered to Caltrain and are undergoing static testing prior to dynamic testing on Segment 4 (Santa Clara to San Jose). Delivery of the next two trainsets is anticipated for April 2023. Operator training started on the week of August 22, 2022 and will continue until all operators are trained. PTC brake testing of Trainset 1 was successfully completed at the Pueblo, Colorado rail testing facility.

Carshells for trains 1 through 16 are completed. The 14th trainset is anticipated to arrive at CEMOF by January 2024 and the 19th and final trainset's anticipated arrival is for summer 2024. Trains 15 through 19 represent additional trainsets purchased with funding outside of



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the PCEP budget.

Supply chain issues and labor turnover/shortages continue to be the primary issues for final assembly in Salt Lake City.

Central Equipment and Maintenance Facility. Located in San Jose since 2007, this facility accommodates inspections, maintenance, repair, train washing, and storage for the rail fleet. As part of the PCEP, the facility just went through an overhaul to accommodate the new electric vehicles. All work at the facility was completed in July 2022. Contract is now in closeout.

Cost and Schedule. The current Baseline Budget for the PCEP, adopted by the PCJPB in December 2021, is \$2.44 billion. The December 2021 change to the Baseline Budget represented an increase of \$462 million over the original Baseline Budget. This increased budget reflects the completion of negotiations with the electrification design-build contractor, which resulted in a global settlement of \$346.68 million to resolve outstanding issues. The budget also reflected a "budget scrub", which resulted in a \$115.76 million cost increase.

The current budget includes a total of \$90 million in contingency: \$50 million in a shared risk pool and \$40 million in allocated and unallocated contingency. As of September 30, 2022, \$85.78 million in contingency remains. The Revenue Service date remains unchanged for September 2024, which includes a six-month contingency.

Funding Gap. The December 2021 Baseline Budget adjustment resulted in a \$462 million funding gap. Caltrain already has received \$52.4 million from the federal American Rescue Plan Act for the PCEP cost increase, leaving a remaining gap of \$410 million.

On October 26, 2022, the MTC adopted the Regional Major Project Advancement Policy (MAP), to guide regional major project investment priorities for various state and federal funding sources. The MAP identifies PCEP as a regional priority for up to \$300 million in state Transit and Intercity Rail Capital Program (TIRCP) funds. Caltrain staff is actively pursuing multiple options for addressing the funding gap as detailed in Attachment 1.

We are concurrently working with Caltrain and the funding partners on expanding and implementing the risk mitigation measures contained in the Risk Management Plan for the remainder of the project, seeking to reduce the amount of additional funding ultimately required to complete the project. We are also continuing to work with all the funding partners to seek additional federal and state funding and supporting Caltrain advocacy to secure those funds. Cash flow projections indicate that the additional funding will be needed by June 2023.

Progress Reports. Detailed CalMod monthly reports are provided to the Caltrain Board and are publicly available. Peninsula Corridor Electrification Project reports are located at:

http://www.caltrain.com/projectsplans/CaltrainModernization/CalMod Document Librar y.html - electric

Challenges and Opportunities. In addition to needing to secure funds to cover the increased project cost and contingency, there are some challenges that may impact Caltrain's



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ability to complete CalMod, even within a new schedule and budget. An updated Monte Carlo quantitative risk analysis was conducted in October 2022. Results indicate that the forecasted direct cost of risks is now \$24.4 million, a 52% reduction from the July 2022 figure of \$54.3 million. With respect to schedule, the analysis found that four risks remain with the potential to impact the project for three or more months, a reduction from 20 such risks in July 2022. Broadly, this analysis indicates that the program is headed in the right direction. The primary risk items that we are monitoring include the risks that:

- The contractor may not be able to complete design, installation, and testing for the "Two-Speed Check" signal/communication modifications within budget and schedule.
- Caltrain's operations contractor may not have sufficient field support resources (railroad worker in-charge, watchmen, flaggers, signal maintainers) for testing.
- Caltrain may not be able to provide sufficient personnel for implementation of the Rail Activation Plan on the planned schedule.
- The contractor Quality Manager may be missing issues that are not caught until PCEP Quality Manager finds them.
- Caltrain and Union Pacific are unable to resolve clearance issues between Main Track
 1 and Union Pacific duct bank infrastructure
- Funding shortfall of \$410 million is not met consistent with expenditures required to complete the PCEP project. Current cashflow is sufficient through June 2023

FINANCIAL IMPACT

None. This is an information item.

CAC POSITION

The Community Advisory Committee will consider this item at its November 30, 2022, meeting.

SUPPLEMENTAL MATERIALS

• Attachment 1 - Funding Strategy to Close \$410 Million Funding Shortfall



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Attachment 1

Funding Strategy to Close \$410 Million Funding Shortfall

- Supplemental FTA Capital Investment Grants Full Funding Grant Agreement (FFGA) funding: An estimated \$51million of the House THUD Appropriations Bill could go towards project.
- FRA Federal State Partnership for Intercity Rail grant program: In partnership with CHSRA and other corridor stakeholders, Caltrain is developing a multi-project approach for this upcoming federal funding opportunity.
- "Community Project" funding: Possible \$10 million in Senate THUD Appropriations Bill from Senators Feinstein and Padilla.

State

• FY 23 State Budget signed into law: The \$10.8 billion transportation package has \$1.5 billion available in Northern California for an augmentation cycle of the Transit and Intercity Rail Capital Program or TIRCP. At least \$900 million within that program is reserved for projects that have already received TIRCP funds, like the Caltrain Electrification project, that can demonstrate additional funding is needed. California State Transportation Agency released a call for projects for these funds earlier in November.

Regional/Local

- **Tax-exempt bonds**: On February 3, 2022, having received authorization from the three member agencies, the Peninsular Corridor Joint Powers Board approved the issuance of bonds secured by Caltrain's Measure RR, a 1/8 -cent sales tax approved in 2020. The bonds are structured to be payable from the sale of Low Carbon Fuel Standards credits upon electrified revenue service. On March 2, 2022, Caltrain issued \$150 million in bonds which yielded \$140 million in funds that could be used for the project should other options not materialize. The bond proceeds are currently planned for state of good repair.
- **Four-Party Agreement:** As part of the Full Funding Grant Agreement process, the Transportation Authority, San Mateo County Transportation Authority, VTA, and MTC each committed to helping to seek and secure up to an additional \$50 million, for a collective \$200 million backstop for PCEP in the event of cost overruns or shortfalls in revenues.



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Memorandum

AGENDA ITEM 11

DATE: November 22, 2022

TO: Transportation Authority Board

FROM: Anna LaForte - Deputy Director for Policy and Programming

SUBJECT: 12/6/2022 Board Meeting: Allocate \$9,202,182 in Prop K Funds, with Conditions,

and Allocate \$1,000,000 in Prop AA Funds, for Nine Requests

RECOMMENDATION □ Information ⊠ Action	☑ Fund Allocation		
Allocate \$9,102,182 in Prop K funds to San Francisco Municipal	⊠ Fund Programming		
Transportation Agency (SFMTA) for:	\square Policy/Legislation		
 Replace 18 Paratransit Vehicles (\$2,273,920) Replace 27 Paratransit Vehicles - Additional Funds (\$370,353) 	☐ Plan/Study		
 Sloat and Skyline Intersection Improvements (\$190,000) Traffic Signal Upgrade Contract 36 (\$2,367,909) Bicycle Facility Maintenance (\$200,000) 	□ Capital Project Oversight/Delivery		
6. Howard Streetscape (\$500,000)	☐ Budget/Finance		
7. Folsom Streetscape (\$3,200,000)	☐ Contract/Agreement		
Allocate \$100,000 in Prop K funds to San Francisco Public Works	□ Other:		
(SFPW) for: 8. Jane Warner Plaza [NTIP Planning]			
Allocate \$1,000,000 in Prop AA funds to SFMTA for: 9. 29 Sunset Improvement Phase 1			
SUMMARY			
Attachment 1 lists the requests, including phase(s) of work and supervisorial district(s). Attachment 2 provides brief descriptions of the projects. Attachment 3 contains the staff recommendations. Project sponsors will attend the meeting to answer any questions the Board may have regarding these requests.			

DISCUSSION

Attachment 1 summarizes the subject requests, including information on proposed leveraging (e.g. stretching Prop K sales tax dollars further by matching them with other fund sources) compared with the leveraging assumptions in the Prop K Expenditure Plan or the Prop AA Expenditure Plan category referenced in the 2022 Prop AA Strategic Plan. Attachment 2 includes brief project descriptions. Attachment 3 summarizes the staff recommendations for each request, highlighting special conditions and other items of



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interest. An Allocation Request Form for each project is enclosed, with more detailed information on scope, schedule, budget, funding, deliverables and special conditions.

FINANCIAL IMPACT

The recommended action would allocate \$9,202,182 in Prop K funds with conditions and allocate \$1,000,000 in Prop AA funds. The allocations would be subject to the Fiscal Year Cash Flow Distribution Schedules contained in the enclosed Allocation Request Forms.

Attachment 4 shows the Prop K and Prop AA Fiscal Year 2022/23 allocations and appropriations approved to date, with associated annual cash flow commitments as well as the recommended allocation and cash flow amounts that are the subject of this memorandum.

Sufficient funds are included in the Fiscal Year 2022/23 annual budget. Furthermore, sufficient funds will be included in future budgets to cover the recommended cash flow distributions in those fiscal years.

CAC POSITION

The Community Advisory Committee will consider this item at its November 30, 2022 meeting.

SUPPLEMENTAL MATERIALS

- Attachment 1 Summary of Requests
- Attachment 2 Project Descriptions
- Attachment 3 Staff Recommendations
- Attachment 4 Prop K and Prop AA Allocation Summary FY 2022/23
- Enclosure Allocation Request Forms (9)

							Lev	eraging		
Source	EP Line No./ Category 1	Project Sponsor ²	Project Name	Current Prop K Request	Current Prop AA Request	Total Cost for Requested Phase(s)	Expected Leveraging by EP Line ³	Actual Leveraging by Project Phase(s) ⁴	Phase(s) Requested	District(s)
Prop K	17M	SFMTA	Replace 18 Paratransit Vehicles	\$ 2,273,920		\$ 3,781,120	84%	40%	Construction	Citywide
Prop K	17M	SFMTA	Replace 27 Paratransit Vehicles - Additional Funds	\$ 370,353		\$ 4,730,139	84%	61%	Construction	Citywide
Prop K	33	SFMTA	Traffic Signal Upgrade Contract 36	\$ 2,367,909		\$ 5,893,431	41%	60%	Construction	1, 2, 3, 6, 7, 8, 9, 10
Prop K	37	SFMTA	Bicycle Facility Maintenance	\$ 200,000		\$ 200,000	48%	0%	Construction	Citywide
Prop K	31	SFMTA	Sloat and Skyline Intersection Improvements	\$ 190,000		\$ 190,000	26%	0%	Design	4, 7
Prop K	39, 40	SFMTA	Howard Streetscape	\$ 500,000		\$ 4,500,000	25%	89%	Design	6
Prop K	39, 40	SFMTA	Folsom Streetscape	\$ 3,200,000		\$ 38,965,238	28%	92%	Construction	6
Prop K	44	SFPW	Jane Warner Plaza [NTIP Planning]	\$ 100,000		\$ 100,000	40%	0%	Planning	8
Prop AA	Transit	SFMTA	29 Sunset Improvement Phase 1	\$ -	\$ 1,000,000	\$ 1,276,240	NA	22%	Design	1, 2, 4, 7
			TOTAL	\$ 9,202,182	\$ 1,000,000	\$ 59,636,168	36%	80%		

Footnotes

[&]quot;EP Line No./Category" is either the Prop K Expenditure Plan line number referenced in the 2021 Prop K Strategic Plan or the Prop AA Expenditure Plan category referenced in the 2022 Prop AA Strategic Plan, including: Street Repair and Reconstruction (Street), Pedestrian Safety (Ped), and Transit Reliability and Mobility Improvements (Transit) or the Traffic Congestion Mitigation Tax (TNC Tax) category referenced in the Program Guidelines.

Acronyms: SFMTA (San Francisco Municipal Transportation Agency); SFPW (San Francisco Public Works)

"Expected Leveraging By EP Line" is calculated by dividing the total non-Prop K funds expected to be available for a given Prop K Expenditure Plan line item (e.g. Pedestrian Circulation and Safety) by the total expected funding for that Prop K Expenditure Plan line item over the 30-year Expenditure Plan period. For example, expected leveraging of 90% indicates that on average non-Prop K funds should cover 90% of the total costs for all projects in that category, and Prop K should cover only 10%.

⁴ "Actual Leveraging by Project Phase" is calculated by dividing the total non-Prop K, non-Prop AA, or non-TNC Tax funds in the funding plan by the total cost for the requested phase or phases. If the percentage in the "Actual Leveraging" column is lower than in the "Expected Leveraging" column, the request (indicated by yellow highlighting) is leveraging fewer non-Prop K dollars than assumed in the Expenditure Plan. A project that is well leveraged overall may have lower-than-expected leveraging for an individual or partial phase.

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Prop AA Funds Requested	Project Description
17M	SFMTA	Replace 18 Paratransit Vehicles	\$ 2,273,920		Funds would be used to procure 18 paratransit vehicles to replace vehicles that have reached the end of their useful life. This project will procure 17 gasoline paratransit vehicles and 1 electric paratransit vehicle. The electric paratransit vehicle is part of a pilot program to test its performance in San Francisco. This project will follow the Replace 27 Paratransit Vehicles procurement and includes additional contingencies to account for any potential cost increases between now and procurement. SFMTA expects the vehicles to be in service by December 2024.
17M	SFMTA	Replace 27 Paratransit Vehicles - Additional Funds	\$ 370,353		The requested additional funds are needed to supplement \$1,503,640 in previously allocated Prop K funds to replace 27 paratransit vehicles that have reached the end of their useful life. SFMTA attributes the 27% overall cost increase to the recent material shortage and inflation. Two types of vehicles will be procured: 26 vans accommodating up to 14 passengers and one smaller van with better maneuverability for use on narrow streets. Procuring different models of vehicles will provide operational flexibility. New vehicles will reduce maintenance costs and increase reliability. SFMTA will finalize specifications by December 2022 and approve vehicles for service by June 2024.
33	SFMTA	Traffic Signal Upgrade Contract 36	\$ 2,367,909		This request will fund constrution of traffic-signal related upgrades at 14 locations across the city to improve safety and accessibility for all road users. Upgrades include new pedestrian signals, new accessible pedestrian signals, new higher-visibility 12-inch traffic signals on mast arms, new left turn signals, curb ramps, and replacement of old/damaged signal infrastructure. Twelve of the intersections are located on the Vision Zero High Injury Network. The list of locations is shown on page 35 of the enclosed allocation request form. SFPW will issue and manage the contract on SFMTA's behalf. The schedule shows contract award by end of 2023 and the project open for use by Winter 2026.

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Prop AA Funds Requested	Project Description
37	SFMTA	Bicycle Facility Maintenance	\$ 200,000		Requested funds will be used to maintain bicycle facilities to preserve their safety features. SFMTA will repaint bicycle lanes using green epoxy and repaint bike box/ mixed zone markings using green thermoplastic treatment. Additionally, the SFMTA will focus on replacing traffic delineators with more permanent bike separation including concrete and rubber islands and curbs particularly at locations where protected bikeways are between motor vehicle travel lanes and the curb. The SFMTA will also work with SFPW on paving bikeways where potholes present an uncomfortable riding experience. SFMTA will identify locations by field review and through input received by calling 311, through sf311.org or through the SF311 app available on smartphones. The project is expected to be open for use by Winter 2025.
31	SFMTA	Sloat and Skyline Intersection Improvements	\$ 190,000		This request will fund the design phase of new traffic signals at Skyline Boulevard/Sloat Boulevard/39th Avenue to improve traffic, pedestrian, bicycle safety, and right of way allocations at the intersection. The scope of work includes new traffic signals (mast arms, signal heads, controllers, conduit, wiring, and poles), pedestrian countdown signals, accessible (audible) pedestrian signals, and curb ramps. Final design will be begin in early 2023 and last 5 months. SFMTA plans to fund construction with a \$1.2 million state earmark secured for the project by Assemblyman Ting. The project is expected to be open for use by December 2023.
39, 40	SFMTA	Howard Streetscape	\$ 500,000		This request will fund the design phase of the Howard Streetscape project between 4th and 11th streets to improve traffic safety for pedestrians, bicyclists, and motorists. The project will implement a series of treatments on the High Injury Network corridor including a traffic lane reduction, concrete median protected two-way bikeway, separate bicycle and vehicle signal phases, raised crosswalks at alleys, curb ramps and pedestrian-level lighting, and other streetscape and safety features. The conceptual design is shown on pages 69-73 of the enclosed allocation request form. Design will be done by end of 2024. Assuming funding availability, the project would be open for use by December 2027.

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Prop AA Funds Requested	Project Description
39, 40	SFMTA	Folsom Streetscape	\$ 3,200,000		This request will fund construction of the Folsom Streetscape complete streets project between 2nd and 11th streets to improve traffic safety for pedestrians, bicyclists, and motorists. The project will implement a series of treatments on the High Injury Network corridor including a traffic lane reduction, concrete median protected two-way bikeway, separate bicycle and vehicle signal phases, raised crosswalks at alleys, curb ramps and pedestrian-level lighting, a Muni transit only lane and boarding islands, and other streetscape and safety features. The subject Prop K request leverages over \$20 million in state and federal funding. The list of improvements by location and the map of improvements are on pages 91-95 and pages 101-106 of the enclosed allocation request form. The project is expected to be open for use by March 2026.
44	SFPW	Jane Warner Plaza [NTIP Planning]	\$ 100,000	\$ -	Requested funds will be used to plan the Jane Warner Plaza Renovation Project. This effort seeks to make permanent some temporary features that serve pedestrian safety, to further safety of the intersection at Castro and Market streets while considering adjustments to adjacent SFMTA infrastructure that will allow the plaza and space to better serve the community for transit and pedestrian uses. SFPW and SFMTA staff will coordinate with community stakeholders and other agencies, and analyze, propose, and develop schematics. Upon completion, expected by late May 2023, SFPW will present the final plan to the Board for approval.
Transit	SFMTA	29 Sunset Improvement Phase 1	\$ -	\$ 1,000,000	This project would improve the travel time, reliability, and passenger experience on the Muni 29 Sunset bus route, which extends from the Bayview District to the Presidio. This request is for design of Phase 1, which includes the western segment of the route, from Bowley Street and Lincoln Boulevard in the Presidio (District 2) to Junipero Serra Boulevard and Holloway Avenue (District 7) near San Francisco State University. The project is part of the SFMTA's Muni Forward program and includes stop improvements, optimization of stop locations, and transit signal priority. It also includes scope elements to provide safe pedestrian access to the bus stops with higher-visibility crosswalks, transit stops at signalized intersections, corner bulb-outs, and larger boarding areas. Part of the construction would be done through a SFPW paving project on Sunset Boulevard between Lincoln Way and Lake Merced Boulevard, which is anticipated to start construction in summer 2023. The full scope of Phase 1 is expected to be open for use by December 2026.
		TOTAL	\$9,202,182	\$1,000,000	

¹ See Attachment 1 for footnotes.

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EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Recommended	Prop AA Funds Recommended	Recommendations
	•	,			
17M	SFMTA	Replace 18 Paratransit Vehicles	\$ 2,273,920		5YPP Amendment: Funding this request requires a concurrent amendment to the Vehicles-Muni 5YPP to reprogram \$2,273,920 from the Mid-Life Overhauls Placeholder to the subject project. This amendment, combined with the requested 5YPP amendment for the Replace 27 Paratransit Vehicles - Additional Funds project (see below) would leave \$11,700,910 in Prop K funds available for Mid-Life Overhauls. The SFMTA is currently delivering the New Flyer Mid-Life Overhauls - Phase I project using previously allocated Prop K funds and does not require additional funds for Phase II at this time. See enclosed 5YPP amendment for details.
17M	SFMTA	Replace 27 Paratransit Vehicles - Additional Funds	\$ 370,353		5YPP Amendment: Funding this request requires a concurrent amendment to the Vehicles-Muni 5YPP to reprogram \$370,353 from the Mid-Life Overhauls Placeholder to the subject project. See above and enclosed 5YPP amendment for details.
33	SFMTA	Traffic Signal Upgrade Contract 36	\$ 2,367,909		
37	SFMTA	Bicycle Facility Maintenance	\$ 200,000		

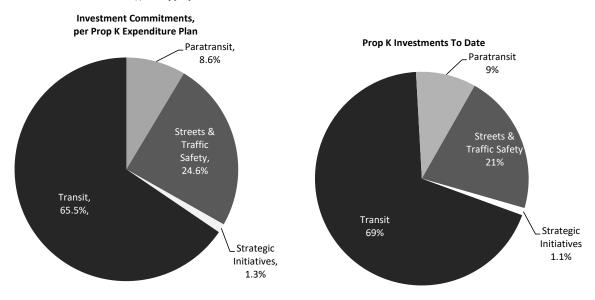
EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Recommended	Prop AA Funds Recommended	Recommendations
31	SFMTA	Sloat and Skyline Intersection Improvements	\$ 190,000		5YPP Amendment: Funding this request requires a concurrent amendment to the New Signals and Signs 5YPP to reprogram \$190,000 from New Signal Contract 66 to the subject project. The SFMTA is planning to request construction funds for Contract 66 once design is complete, which is anticipated later this fiscal year. SFMTA would need to seek additional funds to fully fund the Contract 66 scope. See enclosed 5YPP amendment for details.
39, 40	SFMTA	Howard Streetscape	\$ 500,000		5YPP Amendment: Funding this request requires a concurrent amendment to the Bicycle Circulation and Safety 5YPP to reprogram \$20,820 from the Page Street Neighborway (Webster to Stanyan) to the subject project. This request also requires a concurrent amendment to the Pedestrian Circulation and Safety 5YPP to reprogram \$479,180 from Folsom-Howard Streetscape construction to Howard Streetscape design. See enclosed 5YPP amendment for details.
39, 40	SFMTA	Folsom Streetscape	\$ 3,200,000		5YPP Amendment: Funding this request requires a concurrent amendment to the Bicycle Circulation and Safety 5YPP to reprogram a total of \$2,778,217 to the subject project, specifically \$2,290,000 from Citywide Neighborways which will be funded by Prop B General Funds, and \$488,217 from Short-term Bike Parking which has funding from a Transportation for Clean Air grant. This request also requires a concurrent amendment to the Pedestrian Circulation and Safety 5YPP to reprogram \$421,783 from Folsom-Howard Streetscape construction to Folsom Streetscape construction. See enclosed 5YPP amendment for details.
44	SFPW	Jane Warner Plaza [NTIP Planning]	\$ 100,000		5YPP Amendment: Funding this request requires a concurrent amendment to the Transportation/Land Use Coordination 5YPP to add the subject project with \$16,000 from the NTIP Planning Placeholder and \$84,000 from the NTIP Capital Placeholder. See enclosed 5YPP amendment for details. Special Condition: SFPW staff shall present a final plan to the Board for approval.

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Recommended	Prop AA Funds Recommended	Recommendations
Transit	SFMTA	29 Sunset Improvement Phase 1		\$ 1,000,000	
		TOTAL	\$ 9,202,182	\$ 1,000,000	

¹ See Attachment 1 for footnotes.

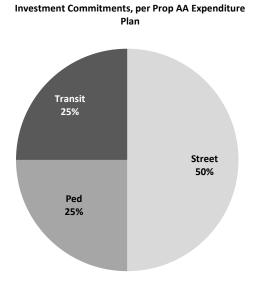
PROP K SALES TAX									
FY2022/23	Total	F	Y 2022/23	F	Y 2023/24	F	Y 2024/25	F	Y 2025/26
Prior Allocations	\$ 33,918,052	\$	17,774,023	\$	13,225,067	\$	2,618,962	\$	300,000
Current Request(s)	\$ 9,202,182	\$	100,000	\$	2,453,822	\$	5,131,640	\$	1,516,721

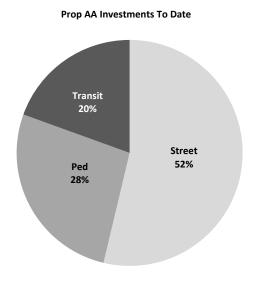
The above table shows maximum annual cash flow for all FY 2022/23 allocations and appropriations approved to date, along with the current recommended allocation(s) and appropriation.



PROP AA VEHICLE REGISTRATION FEE FY2022/23 Total FY 2022/23 FY 2023/24 FY 2024/25 FY 2025/26 Prior Allocations \$ 6,351,186 1,427,428 1,012,714 \$ 2,060,829 1,850,215 Current Request(s) \$ 1,000,000 500,000 \$ 500,000 New Total Allocations \$ 7,351,186 \$ 1,427,428 \$ 1,512,714 \$ 2,560,829 \$ 1,850,215

The above table shows total cash flow for all FY 2022/23 allocations approved to date, along with the current recommended allocation(s).





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1455 Market Street, 22ND Floor, San Francisco, California 94103 415-522-4800 info@sfcta.org www.sfcta.org

Memorandum

AGENDA ITEM 12

DATE: November 21, 2022

TO: Transportation Authority Board

FROM: Carl Holmes - Deputy Director for Capital Projects

for West Side Bridges, increasing the total OBAG amount to \$14,899,000 (Attachment 1). The Bayview project is now fully

Anna LaForte - Deputy Director for Policy and Programming

SUBJECT: 12/6/2022 Board Meeting: Amend San Francisco's One Bay Area Grant Cycle 3

(OBAG 3) Project Nominations to Shift \$4,899,000 from San Francisco Municipal Transportation Agency's (SFMTA's) Bayview Community Multimodal Corridor Project to San Francisco County Transportation Authority's (SFCTA's) West Side Bridges Seismic Retrofit Project (West Side Bridges); Approve a Fund Exchange, With Conditions, of \$14,899,000 in OBAG 3 Funds From SFCTA's West Side Bridges With an Equivalent Amount of Prop K Funds Allocated to SFMTA's Light

Rail Vehicle Procurement Project; and, Appropriate, With Conditions,

\$14,899,000 in Prop K Funds for the West Side Bridges

RECOMMENDATION - In	nformation	⊠ Action	☑ Fund Allocation
Amend San Francisco's OBAG 3	Project Nom	inations to shift	☑ Fund Programming
\$4,899,000 from SFMTA's Bayvi	☐ Policy/Legislation		
Corridor Project to SFCTA's Wes	st Side Bridge	es	☐ Plan/Study
 Approve a fund exchange of \$16 from SFCTA's West Side Bridges 	s with an equi	ivalent amount of	□ Capital Project Oversight/Delivery
Prop K funds from SFMTA's Ligh Procurement Project, with condi		(LRV)	☐ Budget/Finance
 Appropriate \$14,899,000 in Prop 	p K funds to S	SFCTA's West	☐ Contract/Agreement
Side Bridges, with conditions			☐ Other:
SUMMARY The Transportation Authority is delive project on behalf of the Treasure Isla (TIDA). The project is shovel ready be enable March 2023 contract award a escalation. The project construction We are recommending that the Boarnominations to shift \$4,899,000 from Corridor project to complete the construction.	and Developrout for final fu and to avoid f phase cost is ard amend ou n the Bayview	ment Authority nding actions to further cost \$113.7 million. r OBAG 3 project Multimodal	



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funded with a recently awarded state Active Transportation Program (ATP) grant and no longer needs OBAG funds. We are also recommending that the Board approve a fund exchange of \$14,899,000 in OBAG 3 funds from West Side Bridges for an equivalent amount of Prop K funds allocated to the SFMTA's LRV project to allow the West Side Bridges contract to be awarded in March, faster than the OBAG funds would be available. Given the conditions recommended to ensure there is no impact from the fund exchange on the LRV project, staff from the SFMTA and Metropolitan Transportation Commission (MTC) are supportive of the proposal. Lastly, we are requesting appropriation of \$14,899,000 in Prop K funds for the West Side Bridges as part of this item. The fund exchange and appropriation are conditioned upon MTC approval of \$14,899,000 in OBAG funds for the West Side Bridges project as part of the MTC's OBAG 3 actions anticipated on January 25, 2023. The West Side Bridges construction phase funding plan is shown in Attachment 2.

BACKGROUND

West Side Bridge Seismic Retrofit Project (West Side Bridges). The Transportation Authority is leading the West Side Bridges on behalf of the Treasure Island Development Authority (TIDA). This project will replace seven seismically deficient bridges and retrofit one bridge with a realigned roadway and retaining walls, a Class II bicycle facility, and a transit-only access on-ramp. It is one of a series of transportation infrastructure projects on Yerba Buena Island that are being constructed to support development on Treasure Island, which includes 8,000 units of housing at full build out, with 26% affordable. The West Side Bridges has been shovel-ready, except for the need to close the final funding gap. With new housing units being sold on Treasure Island and with increasing construction costs due to supply shortages and inflation, it is critical that we close the funding gap and enable the project to begin construction this spring.

OBAG Cycle 3 (OBAG 3) Nominations. The Board approved San Francisco's OBAG 3 project nominations in September 2022. The nominated projects include \$10 million for the West Side Bridges and \$5 million in federal OBAG funds for the construction phase of SFMTA's Bayview Community Multimodal Corridor Project. When the Board approved the OBAG 3 project nominations, we flagged the need for the Board to approve a fund exchange for West Side Bridges to ensure that the project could award the construction contract by March 2023. We also made the Board aware that the Bayview Community Multimodal Corridor Project had a pending \$12.3 million grant application for the California Transportation Commission's (CTC) Active Transportation Program (ATP) and if it was successful in getting the grant, then the Board could redirect up to \$5 million in OBAG funds to another OBAG project.

On October 20, 2022, the CTC released the 2023 ATP staff recommendations, which included a recommendation for \$12.3 million in funding for the Bayview Community Multimodal



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Corridor Project. The full scope of work identified in the Bayview Community Multimodal Corridor Project's OBAG 3 application is fully funded with the ATP grant and no longer requires OBAG 3 funds.

DISCUSSION

The West Side Bridges project has been shovel-ready, except for the need to close the final funding gap. We are pleased to report that the original nomination of \$10 million in OBAG 3 funds provided the momentum for the remaining pieces of the funding plan to come together to close the funding gap for the \$113.7 million construction phase cost. In November 2022, the Bay Area Toll Authority (BATA) approved \$5 million in Local Partnership Program (LPP) formula funds and Caltrans committed an additional \$4.3 million in Federal Highway Bridge Program funds. With upcoming funding actions by the Transportation Authority, MTC/BATA, Caltrans, and TIDA, the project's funding plan will be complete by January 2023. The Construction Manager/General Contractor is on board and, assuming we have all project approvals and funding in place by February, we can award the construction contract in March and start construction in April 2023.

The three recommended Transportation Authority funding actions needed to fully fund West Side Bridges are described below.

Proposed Amendment to OBAG 3 Project Nominations. As detailed in Attachment 1, we recommend that the Board amend San Francisco's OBAG 3 project nominations to redirect \$5 million in OBAG 3 funds from the Bayview Multimodal Corridor Project, which is now fully funded and does not need the OBAG funds, to the West Side Bridges. This funding will close the project's construction funding gap. The remaining projects on the OBAG 3 list are not as good candidates for the \$5 million at this time. We are not recommending SFCTA's Yerba Buena Island Multi-use Pathway which is fully funded through the design phase, but has a \$70 million construction phase with no funding yet secured. BART's Next Generation Fare Gates in San Francisco is already nominated for funding for five of eight stations and the Transportation Authority is submitting a grant application this month to the state for LPP competitive funds for the remaining three stations. SF Port's Embarcadero Resilience Master Plan would not be fully funded with \$5 million (\$8 million requested), and the Port has indicated that it is not able to be phased.

Proposed OBAG 3/Prop K Fund Exchange. The proposed fund exchange is for \$14,899,000 in OBAG 3 funds from the West Side Bridges with an equivalent amount of Prop K funds from the SFMTA's LRV Procurement Project, with conditions. The fund exchange will resolve a timing issue for West Side Bridges to allow the construction contract to be awarded by March 2023. The fund exchange does not impact the SFMTA LRV project. The SFMTA and MTC support the proposed fund exchange, which is conditioned upon the following actions:

• Transportation Authority Board approval of the amended San Francisco's OBAG 3 project nominations to shift \$4,899,000 from the Bayview Multimodal Corridor project to West Side Bridges, increasing West Side Bridges OBAG funds from \$10,000,000 to \$14,899,000.



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- TIDA Board approval of a Memorandum of Agreement for \$3.5 million for West Side Bridges, expected on December 15, 2022.
- MTC Commission approval of \$14,899,000 in OBAG 3 funds for the West Side Bridges, expected January 25, 2023.

The fund exchange would be reflected in a Prop K 5-Year Prioritization Program amendment to the Vehicles - Undesignated category, which is where the exchanged sales tax funds from the LRV project would come from.

Prop K Appropriation Request. We are requesting \$14,899,000 in Prop K (exchange) funds for the West Side Bridges project as described in the attached allocation request form (Attachment 7). The appropriation is conditioned upon MTC Commission approval of \$14,899,000 in OBAG 3 funds for the West Side Bridges and upon the Transportation Authority Board approval of the proposed fund exchange.

Next Steps. After the Board adopts the revised San Francisco OBAG 3 project nominations, we will submit the resolution and supporting materials to MTC. MTC staff is currently conducting a regional evaluation and anticipates final OBAG 3 project selection and Commission approval on January 25, 2023. We are also actively tracking and supporting upcoming December actions by Caltrans, CTC, and TIDA that together with the recommended Transportation Authority actions will fully fund the West Side Bridges.

FINANCIAL IMPACT

The recommended action would approve a fund exchange of \$14,899,000 in OBAG 3 funds from West Side Bridges for an equivalent amount of Prop K funds allocated to the SFMTA's LRV project, and appropriate \$14,899,000 in Prop K funds deobligated from the LRV project, with conditions. The appropriation would be subject to the Fiscal Year Cash Flow Distribution Schedules contained in the attached West Side Bridges Seismic Retrofit Project Allocation Request Form (Attachment 7).

Attachment 6 shows the Prop K Fiscal Year 2022/23 allocations and appropriations approved to date, with associated annual cash flow commitments as well as the recommended allocation and cash flow amounts that are the subject of this memorandum.

Sufficient funds are included in the Fiscal Year 2022/23 annual budget. Furthermore, sufficient funds will be included in future budgets to cover the recommended cash flow distributions in those fiscal years.

CAC POSITION

The Community Advisory Committee will consider this item at its November 30, 2022, meeting.

SUPPLEMENTAL MATERIALS

- Attachment 1 OBAG 3 Detailed Staff Recommendation Revised
- Attachment 2 West Side Bridges Funding Plan
- Attachment 3 Summary of Prop K Request



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- Attachment 4 Project Description
- Attachment 5 Staff Recommendations
- Attachment 6 Prop K Allocation Summary FY 2022/23
- Attachment 7 West Side Bridges Seismic Retrofit Project Allocation Request Form

Attachment 1 San Francisco One Bay Area Grant Cycle 3 (OBAG 3) Call for Projects Detailed Staff Recommendation - Revised 11.21.22¹

Total Score	Sponsor Agency ²	Project Name	Recommended Phase(s)	OBAG 3 Requested	Recommended OBAG 3 Programming	Notes
85	SFMTA	Bayview Community Mulitmodal Corridor	Construction	\$5,000,000	\$0	On October 20, 2022 the California Transportation Commission released the 2023 Active Transportation Program staff recommendations, which included a recommendation for \$12.3 million in funding for the Bayview Community Multimodal Corridor Project. The CTC Commission is expected to approve the staff recommendation on December 7-8, 2022. With the \$12.3 million in funding, the full scope of work identified in the Bayview Community Multimodal Corridor Project's OBAG 3 application is fully funded and no longer requires OBAG 3 funds.
83	SFMTA	Central Embarcadero Safety	Construction	\$6,320,000	\$6,320,000	This application is based on a robust outreach process that identified this project as the top priority for the Embarcadero Enhancement Program. Requested funds would complete the project's funding plan. Environmental review and design are underway.

Attachment 1 San Francisco One Bay Area Grant Cycle 3 (OBAG 3) Call for Projects Detailed Staff Recommendation - Revised 11.21.22¹

Total Score	Sponsor Agency ²	Project Name	Recommended Phase(s)	OBAG 3 Requested	Recommended OBAG 3 Programming	Notes
83	SFCTA	West Side Bridges Seismic Retrofit	Construction	\$10,000,000	\$14,899,900	The Transportation Authority is leading the West Side Briges project on behalf of TIDA. This is a shovel-ready project that is a critical piece of infrastructure for the Equity Priority Community on Treasure Island and Yerba Buena Island. Requested funds would complete the funding plan, with MTC/BATA, Caltrans, and TIDA also contributing.
81	SFMTA	29 Sunset Improvement Project Phase 1	Construction	\$5,976,000	\$5,976,000	This project would improve transit reliability, pedestrian safety and access to many schools and parks including Golden Gate Park and McLaren Park, as well as the Presidio. It supports geographic equity spanning Districts 1, 2, 4 and 7. Requested funds would complete the project's funding plan.

Attachment 1 San Francisco One Bay Area Grant Cycle 3 (OBAG 3) Call for Projects Detailed Staff Recommendation - Revised 11.21.22¹

Total Score	Sponsor Agency ²	Project Name	Recommended Phase(s)	OBAG 3 Requested	Recommended OBAG 3 Programming	Notes
75	BART	Elevator Modernization Phase 1.3 (Embarcadero, Montgomery St, Powell St, Civic Center/UN Plaza, Glen Park)	Construction	\$13,300,000	\$13,300,000	This project has documented support from the disability community and improves accessibility to BART and Muni. BART and Muni equally share the cost for improving joint use elevators at downtown stations, per the BART/ SFMTA Joint Maintenance Agreement (JMA) for shared station facilities. The recommended OBAG programming would complete BART's 50% share of the project cost. SFMTA is responsible for its 50% share of the cost (\$17,048,115) per the JMA. SFMTA has requested that 50% of the recommended OBAG fund be credited towards SFMTA's share. We note that our proposed OBAG recommendations would fully fund all 3 applications that SFMTA submitted in response to the call for projects.
74	BART	Elevator Modernization Design for 16th Street Mission, 24th Street Mission, and Balboa Park Stations	Design	\$4,945,000	\$4,945,000	[Added to recommended nomination list 09.22.22] This project has documented support from the disability community and improves accessibility to BART and Muni. If the requested funds are secured, BART anticipates starting the design phase in January 2025.

Attachment 1 San Francisco One Bay Area Grant Cycle 3 (OBAG 3) Call for Projects Detailed Staff Recommendation - Revised 11.21.22¹

	Detailed Staff Recommendation - Revised 11.21.22							
Total Score	Sponsor Agency ²	Project Name	Recommended Phase(s)	OBAG 3 Requested	Recommended OBAG 3 Programming	Notes		
66	SFCTA	Yerba Buena Island Multi-Use Pathway	Design	\$5,000,000	\$3,000,000	We are recommending \$3,000,000 in OBAG funds to fully fund the design phase of the project. OBAG funds would leverage an Active Transportation Program grant and position the project to be highly competitive for an SB 1 Solutions for Congested Corridors grant application that the Metropolitan Transportation Commission intends to submit and on which we are partnering for the construction phase. Environmental review has started.		
60	BART	Next Generation Fare Gates in San Francisco and San Francisco International Airport	Construction	\$12,500,000	\$4,314,600	[Funding Decreased to Accommodate Elevator Design Project - 09.22.22] BART staff have proposed that, with the recommended amount of OBAG funds, BART would install Next Generation Fare Gates at five stations: Powell St, Civic Center/UN Plaza, 16th Street Mission, 24th Street Mission, and Balboa Park. BART staff will sequence installation of fare gates at the five stations in a manner that is efficient and avoids potential cost and technical impacts. SFCTA staff with work with BART to identify funding for the remaining San Francisco stations: Embarcadero, Montgomery St, and Glen Park.		

Attachment 1 San Francisco One Bay Area Grant Cycle 3 (OBAG 3) Call for Projects Detailed Staff Recommendation - Revised 11.21.22¹

Total Score	Sponsor Agency ²	Project Name	Recommended Phase(s)	OBAG 3 Requested	Recommended OBAG 3 Programming	Notes		
53	SF Port	Embarcadero Resilience Master Plan	Planning	\$8,000,000	\$0	OBAG is focused on prioritizing specific transit, bike and pedestrian (or sustainable) transportation projects and not a multi-hazard, multi-sector resilience plan that results in concepts. In addition, the scope can't be phased. SFCTA strongly supports this project and will work with SF Port to identify other potential funding sources including new state and regional climate adaptation and resiliency fund programs.		
			TOTAL	\$71,041,000	\$52,755,500			
					\$50.755.500	- -		
			REVISED TOTAL		\$52,755,500			

San Francisco's OBAG 3 Project Nomination Target ³ \$52,855,600

¹ Projects are sorted by evaluation score from highest ranked to lowest.

² Sponsor abbreviations include: Bay Area Rapid Transit (BART), Port of San Francisco (SF Port), San Francisco County Transportation Authority (SFCTA), San Francisco Municipal Transportation Agency (SFMTA).

³ The Metropolitan Transportation Commission requested that counties submit project nominations for 120% of the available funding capacity for the County Program.

Attachment 2.
West Side Bridges Construction Phase Funding Plan

Source	Total (in \$ x 1M)
Project Construction Cost Project Construction Funding	\$ 113.70 Amount
Federal Highway Bridge Program	54.84
State Prop 1B Local Bridge Seismic	7.105
Federal RAISE grant	18.00
Bay Area Toll Authority	2.00
San Francisco share SB 1 Local Partnership Program Formula funds	4.056
Bay Area Toll Authority share SB 1 Local Partnership Program Formula funds	5.00
Treasure Island Development Authority	3.505
Prop K (via OBAG fund exchange)	14.89
Caltrans Highway Bridge Program	4.30
Total funding	\$ 113.70
Federal Amount	\$ 77.14
Non Federal Amount	\$ 36.56
Non Federal Percent	32.2%

							Lev	eraging		
	EP Line No./	Project			C	Total Cost for	Expected	Actual	D 1 (a)	
Source	Category 1	Sponsor ²	Project Name]	Current Prop K Request	Requested Phase(s)	Leveraging by EP Line ³	Leveraging by Project Phase(s) ⁴	Phase(s) Requested	District(s)
Prop K	17U	SFCTA	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)	\$	14,899,000	\$ 113,700,000	NA	87%	Construction	6
			TOTAL	\$	14,899,000	\$ 113,700,000	0%	87%		

Footnotes

¹ "EP Line No./Category" is either the Prop K Expenditure Plan line number referenced in the 2021 Prop K Strategic Plan or the Prop AA Expenditure Plan category referenced in the 2022 Prop AA Strategic Plan, including: Street Repair and Reconstruction (Street), Pedestrian Safety (Ped), and Transit Reliability and Mobility Improvements (Transit) or the Traffic Congestion Mitigation Tax (TNC Tax) category referenced in the Program Guidelines.

Acronyms: SFCTA (San Francisco County Transportation Authority)

³ "Expected Leveraging By EP Line" is calculated by dividing the total non-Prop K funds expected to be available for a given Prop K Expenditure Plan line item (e.g. Pedestrian Circulation and Safety) by the total expected funding for that Prop K Expenditure Plan line item over the 30-year Expenditure Plan period. For example, expected leveraging of 90% indicates that on average non-Prop K funds should cover 90% of the total costs for all projects in that category, and Prop K should cover only 10%.

⁴ "Actual Leveraging by Project Phase" is calculated by dividing the total non-Prop K, non-Prop AA, or non-TNC Tax funds in the funding plan by the total cost for the requested phase or phases. If the percentage in the "Actual Leveraging" column is lower than in the "Expected Leveraging" column, the request (indicated by yellow highlighting) is leveraging fewer non-Prop K dollars than assumed in the Expenditure Plan. A project that is well leveraged overall may have lower-than-expected leveraging for an individual or partial phase.

EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Requested	Prop AA Funds Requested	Project Description
17U	SFCTA	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)	\$ 14,899,000		Funds would be used for construction phase for the retrofit/replacement of eight seismically deficient bridge structures along Treasure Island Road to meet current seismic standards. The project is a component of the transportation system that SFCTA is implementing on behalf of the Treasure Island Development Authority to facilitate Treasure Island and Yerba Buena Island redevelopment. These bridges are critical connections between the islands and the Bay Bridge. The project includes a transit-only westbound onramp to the Bay Bridge to accommodate expanded service for the Muni 25 bus route, and a new Class II bicycle lane along Treasure Island Road. The project is expected to be open for use by December 2026.
		TOTAL	\$14,899,000	\$0	

¹ See Attachment 3 for footnotes.

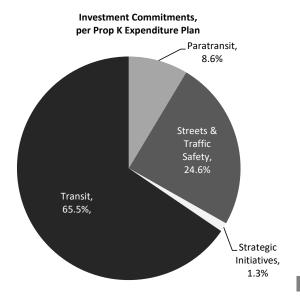
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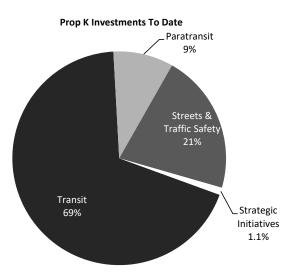
					VIII
EP Line No./ Category	Project Sponsor	Project Name	Prop K Funds Recommended	Prop AA Funds Recommended	Recommendations
17U	SFCTA	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)	\$ 14,899,000		Special Conditions: This recommendation is conditioned upon MTC Board approval of \$14.899M in OBAG 3 funds for the subject project (anticipated January 25, 2023), and SFCTA Board approval of a fund exchange of \$14.899M in OBAG fund from the subject project with an equivalent amunt of Prop K funds from SFMTA's Light Rail Vehicle Procurement Project, with condition (anticipated December 13, 2022). See memo for additional details. 5-Year Prioritization Program (5YPP) Amendment: Funding this request requires concurrent amendment to the Vehicles - Undesignated 5YPP to add the subject project and program \$14.899 M in Prop K funds deobligated from the SFMTA's Light Rail Vehicle Procurement project to the subject project. See attached 5YPP amendment for details.
	-	TOTAL	\$ 14,899,000	\$ -	

¹ See Attachment 3 for footnotes.

PROP K SALES TAX									
FY2022/23	Total	I	FY 2022/23	F	Y 2023/24	F	Y 2024/25	FY	2025/26
Prior Allocations	\$ 33,918,052	\$	17,774,023	\$	13,225,067	\$	2,618,962	\$	300,000
Current Request(s)	\$ 14,899,900	\$	=	\$	-	\$	14,899,900	\$	-
New Total Allocations	\$ 48,817,952	\$	17,774,023	\$	13,225,067	\$	17,518,862	\$	300,000

The above table shows maximum annual cash flow for all FY 2022/23 allocations and appropriations approved to date, along with the current recommended allocation(s) and appropriation.





San Francisco County Transportation Authority Allocation Request Form

FY of Allocation Action:	FY2022/23
Project Name:	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)
Grant Recipient:	San Francisco County Transportation Authority

EXPENDITURE PLAN INFORMATION

PROP K Expenditure Plans Vehicles - Undesignated		
Current PROP K Request:	\$14,899,000	
Supervisorial District	District 06	

REQUEST

Brief Project Description

The project will replace seven seismically deficient bridges, retrofit one bridge, with a realigned roadway and retaining walls and improve the horizontal clearance for the I-80 Eastbound off-ramp. Additionally, this project includes a Class II bicycle facility, and a transit-only access on-ramp. This project is designed to improve multi-modal access between Yerba Buena and Treasure Islands and the greater San Francisco/Oakland area.

Detailed Scope, Project Benefits and Community Outreach

The project consists of the following elements:

- Demolish seven (7) existing roadway bridge structures;
- · Realign the roadway into the Yerba Buena Island hillside;
- Construct six (6) retaining walls to support the new roadway;
- Construct one (1) undercrossing structure (to accommodate the road and Bay Bridge ramps);
- Seismically retrofit/reconfigure one (1) bridge structure that carries Westbound I-80 on-ramp traffic to the Bay Bridge. This ramp becomes a dedicated bus lane.
- Bridge improvements include the relocation of two columns at the Eastbound I-80 Bay Bridge offramp to Yerba Buena Island to increase the off-ramp horizontal clearances and increase the ability for trucks to navigate the sharp off-ramp exit. The increased clearance will greatly reduce the issue of truck blockages on the Eastbound I-80 off-ramp, which result in bottlenecks and vehicular queuing on the Bay Bridge.
- Pave/stripe for new Class II bicycle facility on Treasure Island Road;
- Install water pollution, erosion control measures, and drainage system.

This project also includes a Class II bicycle facility, and a transit-only access on-ramp in addition to the replacement of seven bridges and retrofitting of one bridge.

There are also 8,000 units planned for construction by 2040 of which 26% will be affordable. Initial units are for sale now and 3 more builds are breaking ground this year. The Construction Manager/General Contractor (CMGC) is currently being worked on with the contractor through the design phase and are ready to finalize the construction contract.

Project Phase(s)

Construction (CON)

5YPP/STRATEGIC PLAN INFORMATION

Type of Project in the Prop K 5YPP/Prop AA Strategic Plan?	
Is requested amount greater than the amount programmed in the relevant 5YPP or Strategic Plan?	
Prop K 5YPP Amount:	\$0

Justification for Necessary Amendment

Request includes an amendment to the Vehicles - Undesignated 5YPP to add the subject project and program \$14,899,900 in Prop K funds deobligated from the SFMTA's Light Rail Vehicle Procurement project to the subject project.

San Francisco County Transportation Authority Allocation Request Form

FY of Allocation Action:	FY2022/23
Project Name:	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)
Grant Recipient:	San Francisco County Transportation Authority

ENVIRONMENTAL CLEARANCE

Environmental Type:	Categorically Exempt
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PROJECT DELIVERY MILESTONES

Phase	S	tart	End		
	Quarter	Calendar Year	Quarter	Calendar Year	
Planning/Conceptual Engineering (PLAN)					
Environmental Studies (PA&ED)	Jan-Feb-Mar	2011	Oct-Nov-Dec	2020	
Right of Way	Jan-Feb-Mar	2017	Oct-Nov-Dec	2020	
Design Engineering (PS&E)	Oct-Nov-Dec	2018	Oct-Nov-Dec	2023	
Advertise Construction					
Start Construction (e.g. Award Contract)	Jan-Feb-Mar	2023			
Operations (OP)					
Open for Use			Oct-Nov-Dec	2026	
Project Completion (means last eligible expenditure)			Oct-Nov-Dec	2027	

SCHEDULE DETAILS

The West Side Bridges Project Team is in constant communication and coordination with Treasure Island Development Authority (TIDA) who has right of way of the project limit. When construction starts in 2023, the project team will work with TIDA to provide regular updates to the community. Construction updates can be found at: https://sf.gov/information/treasure-island-community-development-community-construction-meetings

The team is also in coordination with FHWA, Caltrans and Bay Area Toll Authority. SFCTA is also coordinating with the Southgate Road Project which is finishing construction and the new Hillcrest Road Widening Project next to the West Side Bridges Project.

SFCTA will submit the Request for Authorization to Proceed with Construction to Caltrans in December 2022. The RAISE grant has the following timely-use-of-funds deadlines: construction must start by April 2023 and be completed by December 2026.

San Francisco County Transportation Authority Allocation Request Form

FY of Allocation Action:	FY2022/23
Project Name:	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)
Grant Recipient:	San Francisco County Transportation Authority

FUNDING PLAN - FOR CURRENT REQUEST

Fund Source	Planned	Programmed	Allocated	Project Total
EP-117M: Vehicles - MUNI	\$14,899,000	\$0	\$0	\$14,899,000
Bay Area Toll Authority	\$0	\$0	\$2,000,000	\$2,000,000
Bay Area Toll Authority share SB 1 Local Partnership Program Formula funds	\$0	\$5,000,000	\$0	\$5,000,000
Caltrans Highway Bridge Program	\$0	\$0	\$4,300,000	\$4,300,000
Federal Highway Bridge Program	\$0	\$0	\$54,840,000	\$54,840,000
Federal RAISE Grant	\$0	\$0	\$18,000,000	\$18,000,000
San Francisco share SB 1 Local Partnership Program Formula funds	\$0	\$4,056,000	\$0	\$4,056,000
State Proposition 1B Local Bridge Seismic Retrofit Account	\$0	\$0	\$7,105,000	\$7,105,000
Treasure Island Development Authority	\$0	\$0	\$3,500,000	\$3,500,000
Phases In Current Request Total:	\$14,899,000	\$9,056,000	\$89,745,000	\$113,700,000

FUNDING PLAN - ENTIRE PROJECT (ALL PHASES)

Fund Source	Planned	Programmed	Allocated	Project Total
PROP K	\$14,899,000	\$0	\$0	\$14,899,000
Bay Area Toll Authority	\$0	\$0	\$2,000,000	\$2,000,000
Bay Area Toll Authority share SB 1 Local Partnership Program Formula funds	\$0	\$5,000,000	\$0	\$5,000,000
Caltrans Highway Bridge Program	\$0	\$0	\$4,300,000	\$4,300,000
Federal Highway Bridge Program	\$0	\$0	\$7,427,185	\$7,427,185
Federal Highway Bridge Program	\$0	\$0	\$54,840,000	\$54,840,000
Federal RAISE Grant	\$0	\$0	\$18,000,000	\$18,000,000
San Francisco share SB 1 Local Partnership Program Formula funds	\$0	\$4,056,000	\$0	\$4,056,000
State Prop 1B	\$0	\$0	\$43,815	\$43,815

State Proposition 1B Local Bridge Seismic Retrofit Account	\$0	\$0	\$7,105,000	\$7,105,000
Treasure Island Development Authority	\$0	\$0	\$4,418,000	\$4,418,000
Funding Plan for Entire Project Total:	\$14,899,000	\$9,056,000	\$98,134,000	\$122,089,000

COST SUMMARY

Phase	Total Cost	PROP K - Current Request	Source of Cost Estimate
Planning/Conceptual Engineering	\$0		
Environmental Studies	\$0		
Right of Way	\$382,000		Actual costs
Design Engineering	\$8,007,000		Actual costs
Construction	\$113,700,000	\$14,899,000	CMGC construction estimate
Operations	\$0		
Total:	\$122,089,000	\$14,899,000	

% Complete of Design:	100.0%
As of Date:	02/28/2022
Expected Useful Life:	50 Years

San Francisco County Transportation Authority Prop K/Prop AA Allocation Request Form

MAJOR LINE ITEM BUDGET

SUMMARY BY MAJOR LINE ITEM (BY AGENCY LABOR BY TASK)										
Budget Line Item		Totals	% of contract	SFCTA		Contractor				
Construction Contract										
Contract Items	\$	83,014,801				\$	83,014,801			
Supplemental Work	\$	2,324,070				\$	2,324,070			
2. Contingencies	\$	8,543,157	10%			\$	8,543,157			
3. Agency Furnished Materials	\$	2,416,765		\$	2,416,765					
4. Construction Engineering	\$	12,814,735	15%	\$	12,814,735					
5. Finance Costs*	\$	4,586,473								
TOTAL CONSTRUCTION PHASE	\$	113,700,000		\$	15,231,500	\$	93,882,027			

^{*} Finance costs are budgeted due to the anticipated delay in federal reimbursements to the Transportation Authority.

Item No	Item Code	Final Pay	Item Description	Units	Quantity	Estimated Unit Cost	Estimated Total Item
1	070030		LEAD COMPLIANCE PLAN	LS	1	\$ 16,478.00	\$ 16,478.00
2	080050		PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	1	\$ 5,350.00	\$ 5,350.00
3	100100		DEVELOP WATER SUPPLY	LS	1	\$ 117,700.00	\$ 117,700.00
4	120090		CONSTRUCTION AREA SIGNS	LS	1	\$ 37,450.00	\$ 37,450.00
5	120100		TRAFFIC CONTROL SYSTEM	LS	1	\$ 807,850.00	\$ 807,850.00
6	120120		TYPE III BARRICADE	EA	12	\$ 133.75	\$ 1,605.00
7	120159		NOT USED	N/A			\$
8	120198		NOT USED	N/A			\$
9	120300		NOT USED	N/A			\$
10	128651		PORTABLE CHANGEABLE MESSAGE SIGN (EA)	EA	2	\$ 14,445.00	\$ 28,890.00
11	129000		TEMPORARY RAILING (TYPE K)	LF	500	\$ 58.85	\$ 29,425.00
12	129140		TEMPORARY ALTERNATIVE CRASH CUSHION	EA	2	\$ 5,457.00	\$ 10,914.00
13	130100		JOB SITE MANAGEMENT	LS	1	\$ 668,750.00	\$ 668,750.00
14	130200		PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1	\$ 8,025.00	\$ 8,025.00
15	130505		MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	4	\$ 588.50	\$ 2,354.00
16	130530		TEMPORARY HYDRULIC MULCH (BONDED FIBER MATRIX)	SQYD	80,400	\$ 1.93	\$ 155,172.00
17	130620		TEMPORARY DRAINAGE INLET PROTECTION	EA	17	\$ 278.20	\$ 4,729.40
18	130640		TEMPORARY FIBER ROLL	LF	5,350	\$ 5.89	\$ 31,511.50
19	130670		TEMPORARY REINFORCED SILT FENCE	LF	1,810	\$ 13.91	\$ 25,177.10
20	130710		TEMPORARY CONSTRUCTION ENTRANCE	EA	4	\$ 8,453.00	\$ 33,812.00
21	130730		STREET SWEEPING	LS	1	\$ 727,600.00	\$ 727,600.00
22	130900		TEMPORARY CONCRETE WASHOUT	LS	1	\$ 88,039.60	\$ 727,000.00
23	141103		REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	2,218	\$ 6.42	
24	141120		TREATED WOOD WASTE	LB	75,000	\$ 0.32	\$ 14,239.56
25	146002		CONTRACTOR-SUPPLIED BIOLOGIST	LS	1	\$ 217,210.00	\$ 24,000.00
26	148006		VIBRATION MONITORING	LS	1	\$ 169,381.00	\$ 217,210.00
27	170103		CLEARING AND GRUBBING (LS)	LS	1	\$ 48,150.00	\$ 169,381.00
28	190101	F	ROADWAY EXCAVATION	CY	15,158	\$ 94.16	\$ 48,150.00
29	190105		ROADWAY EXCAVATION (TYPE Z-2) (AERIALLY DEPOSITED LEAD)	CY	2,190	\$ 310.30	\$ 1,427,277.28
30	192003	F	STRUCTURE EXCAVATION (BRIDGE)	CY	5,684	\$ 48.15	\$ 679,557.00
31	192037	F	STRUCTURE EXCAVATION (RETAINING WALL)	CY	9,948	\$ 374.50	\$ 273,684.60
32	193003	F	STRUCTURE BACKFILL (BRIDGE)	CY	910	\$ 535.00	\$ 3,725,526.00
33	193013	F	STRUCTURE BACKFILL (RETAINING WALL)	CY	8,921	\$ 267.50	\$ 486,850.00
34	193007	F	NOT USED	θ			\$ 2,386,367.50 \$
35	198212		SUBGRADE ENHANCEMENT GEOTEXTILE	SY	50	\$ 17.66	
36	193116	F	CONCRETE BACKFILL (SOLDIER PILE WALL)	CY	672	\$ 1,005.80	\$ 883.00
37	193119	F	LEAN CONCRETE BACKFILL	CY	130		\$ 675,897.60
38	210010		MOVE-IN/MOVE-OUT (EROSION CONTROL)	EA	2	\$ 545.70	\$ 130,754.00
			(1	2	0.0.70	\$ 1,091.40

39 210270 ROLLED FROSION CONTROL PRODUCT (NETTING) 40 210281A LROSION CONTROL (WIRL MESH BLANKET) 41 210300 HYDROMULCH 42 210150 FIBER ROLLS 43 210120 STRAW 44 210430 HYDROSFED 45 210610 COMPOST (CY) 46 211111 PERMANENT EROSION CONTROL ESTABLISHMENT WORK 47 280001 CONCRETE BASE 48 397364 NOTUSEFD 49 390132 HOT MIX ASPHALT (TYPE A) 50 398200 COLD PLANE ASPHALT (CONCRETE PAVEMENT 51 460210 GROUND ANCHOR (SUBHORIZONTAL) 52 360211 GROUND ANCHOR (SUBHORIZONTAL) 53 460300 SOIL NAIL 54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 280321 STEEL SOLDIER PILE (W 14 x 182) 56 390323 STEEL SOLDIER PILE (W 14 x 182) 57 490324 STEEL SOLDIER PILE (W 14 x 182) 58 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 34") 62 490587 PERMANENT STEEL CASING (36" X 34") 63 490601 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490605 16" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510061 F STRUCTURAL CONCRETE RITIONING WALL WALER 70 510060 F STRUCTURAL CONCRETE RITIONING WALL WALER			Estimated Unit Cost	Estimated Total Item
11 210300	SQFT	60,300	\$ 0.86	\$ 51,858.00
42 210350 FIBER ROLLS 43 210420 STRAW 44 210430 HYDROSLED 45 210610 COMPOST (CY) 46 211111 PERMANENT EROSION CONTROL ESTABLISHMENT WORK 47 280001 CONCRETE BASE 48 377501 NOT USED 49 390132 HOT MIX ASPHALT (TYPE A) 50 398200 COLD PLANE ASPHALT CONCRETE PAVEMENT 51 460210 GROUND ANCHOR (TIEBACK) 52 460211 GROUND ANCHOR (SUBHORIZONTAL) 53 460300 SOIL NAIL 54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 490321 STEEL SOLDIER PILE (W 14 x 90) 56 490323 STEFL SOLDIER PILE (W 14 x 159) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (W 14 x 159) 59 490400 24" DRILLED HOLE 60 490403 30" CAST IN DRILLED HOLE 61 490585 PERMANENT STEEL CANING (36" X 394") 63 490604 30" CAST IN DRILLED HOLE CONCRETE PILING 64 490605 36" CAST IN DRILLED HOLE CONCRETE PILING 65 490681 S0" CAST IN DRILLED HOLE CONCRETE PILING 66 490682 SC" CAST IN DRILLED HOLE CONCRETE PILING 67 510081 F STRUCTURAL CONCRETE (BRIDGE) 68 510060 F STRUCTURAL CONCRETE (BRIDGE)	SQFT	36,900	\$ 18.73	\$ 691,137.00
44 210430	SQFT	60,300	\$ 0.16	\$ 9,648.00
144 210430	LF	6,275	\$ 5.56	\$ 34,889.00
45 210610 COMPOST (CY) 46 211111 PERMANENT EROSION CONTROL ESTABLISHMENT WORK 47 280001 CONCRETE BASE 48 377501 NOT USED 49 390132 HOT MIX ASPHALT (TYPE A) 50 398200 COLD PLANE ASPHALT CONCRETE PAVEMENT 51 460210 GROUND ANCHOR (SUBHORIZONTAL) 52 460211 GROUND ANCHOR (SUBHORIZONTAL) 53 460300 SOIL NAIL 54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 490321 STEEL SOLDIER PILE (W 14 x 90) 56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (W 14 x 159) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 34") 62 490597 PERMANENT STEEL CASING (36" X 11") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE (RETAINING WALL)	SQFT	60,300	\$ 0.16	\$ 9,648.00
46 211111	SQFT	60,300	\$ 0.21	\$ 12,663.00
47 280001 CONCRETE BASE 48 377591 NOT USED 49 390132 HOT MIX ASPHALT (TYPE A) 50 398200 COLD PLANE ASPHALT CONCRETE PAVEMENT 51 460210 GROUND ANCHOR (TIEBACK) 52 460211 GROUND ANCHOR (SUBHORIZONTAL) 53 460300 SOIL NAIL 54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 490321 STEEL SOLDIER PILE (W 14 x 132) 56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (W 14 x 159) 58 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 34") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (BRIDGE)	СҮ	70	\$ 178.69	\$ 12,508.30
48 377591 NOTUSED	LS	1	\$ 81,320.00	\$ 81,320.00
HOT MIX ASPHALT (TYPE A) 398200	СҮ	2,021	\$ 593.85	\$ 1,200,170.85
SO 398200 COLD PLANE ASPHALT CONCRETE PAVEMENT	N/A			\$
51 460210 GROUND ANCHOR (TIEBACK) 52 460211 GROUND ANCHOR (SUBHORIZONTAL) 53 460300 SOIL NAIL 54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 490321 STEEL SOLDIER PILE (W 14 x 90) 56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE	TON	2,597	\$ 184.04	\$ 477,951.88
52 460211 GROUND ANCHOR (SUBHORIZONTAL) 53 460300 SOIL NAIL 54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 490321 STEEL SOLDIER PILE (W 14 x 90) 56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 1" STRUCTURAL CONCRETE (RETAINING WALL)	SQYD	304	\$ 109.14	\$ 33,178.56
SOIL NAIL	EA	251	\$ 19,795.00	\$ 4,968,545.00
54 490317 STEEL SOLDIER PILE (W 14 x 68) 55 490321 STEEL SOLDIER PILE (W 14 x 90) 56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	EA	117	\$ 19,795.00	\$ 2,316,015.00
55 490321 STEEL SOLDIER PILE (W 14 x 90) 56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	11,616	\$ 117.70	\$ 1,367,203.20
56 490323 STEEL SOLDIER PILE (W 14 x 132) 57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	655	\$ 144.45	\$ 94,614.75
57 490324 STEEL SOLDIER PILE (W 14 x 159) 58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	1,510	\$ 176.55	\$ 266,590.50
58 490320 STEEL SOLDIER PILE (HP 14 x 89) 59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	1,045	\$ 224.70	\$ 234,811.50
59 490400 24" DRILLED HOLE 60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	140	\$ 288.90	\$ 40,446.00
60 490403 30" DRILLED HOLE 61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	3,145	\$ 288.90	\$ 908,590.50
61 490585 PERMANENT STEEL CASING (36" X 3/4") 62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	555	\$ 144.45	\$ 80,169.75
62 490587 PERMANENT STEEL CASING (36" X 1") 63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	4,289	\$ 149.80	\$ 642,492.20
63 490604 30" CAST-IN-DRILLED-HOLE CONCRETE PILING 64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	1,178	\$ 540.35	\$ 636,532.30
64 490605 36" CAST-IN-DRILLED-HOLE CONCRETE PILING 65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	2,480	\$ 758.63	\$ 1,881,402.40
65 490681 30" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	451	\$ 347.75	\$ 156,835.25
66 490682 36" CAST-IN-DRILLED-HOLE CONCRETE PILING (ROCK SOCKET) 67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	6,374	\$ 353.10	\$ 2,250,659.40
67 510051 F STRUCTURAL CONCRETE, BRIDGE FOOTING 68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	352	\$ 355.24	\$ 125,044.48
68 510053 F STRUCTURAL CONCRETE (BRIDGE) 69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	LF	2,421	\$ 352.03	\$ 852,264.63
69 510060 F STRUCTURAL CONCRETE (RETAINING WALL)	CY	77	\$ 1,177.00	\$ 90,629.00
	CY	2,385	\$ 2,675.00	\$ 6,379,875.00
70 510064 E STRICTIRAL CONCRETE DETAINING WALL WALER	CY	3,093	\$ 2,717.80	\$ 8,406,155.40
70 510064 F STRUCTURAL CONCRETE, RETAINING WALL-WALER	CY	195	\$ 8,132.00	\$ 1,585,740.00
71 510072 F STRUCTURAL CONCRETE (BARRIER SLAB)	CY	385	\$ 3,210.00	\$ 1,235,850.00
72 51 0086 F STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N (30))	CY	80	\$ 1,605.00	\$ 128,400.00
73 510094 F STRUCTURAL CONCRETE, DRAINAGE INLET	CY	31	\$ 4,424.45	\$ 137,157.95
74 510502 MINOR CONCRETE (DRAINAGE CHANNEL)	CY	63	\$ 2,931.80	\$ 184,703.40
75 511035 F ARCHITECTURAL TREATMENT	SQFT	19,740	\$ 47.22	\$ 932,122.80
76 511106 DRILL & BOND DOWEL	LF	487	\$ 53.50	\$ 26,054.50

Item No	Item Code	Final Pay	Item Description	Units	Quantity	Estimated Unit Cost	Estimated Total Item
77	511111		DRILL AND BOND (CHEMICAL ADHESIVE)	LF	134	\$ 60.99	\$ 8,172.66
78	519100		JOINT SEAL (MR 2")	LF	51	\$ 249.31	\$ 12,714.81
79	520101	F	BAR REINFORCING STEEL (BARRIER SLAB)	LB	49,141	\$ 1.98	\$ 97,299.18
80	520102	F	BAR REINFORCING STEEL (BRIDGE)	LB	617,801	\$ 1.77	\$ 1,093,507.77
81	520103	F	BAR REINFORCING STEEL (RETAINING WALL)	LB	660,429	\$ 1.77	\$ 1,168,959.33
82	520104	F	BAR REINFORCING STEEL (RETAINING WALL)-WHALER	LB	94,500	\$ 1.50	\$ 141,750.00
83	520108	F	BAR REINFORCING STEEL (CIDH CONCRETE PILING)	LB	828,917	\$ 1.77	\$ 1,467,183.09
84	520116	F	BAR REINFORCING STEEL (RETAINING WALL)-SHOTCRETE	LBS	45,500	\$ 1.93	\$ 87,815.00
85	530200	F	STRUCTURAL SHOTCRETE	CY	1,988	\$ 1,562.20	\$ 3,105,653.60
86	550102	F	STRUCTURAL STEEL (BRIDGE)	LB	5,003	\$ 29.96	\$ 149,889.88
87	560218		FURNISH SIGN STRUCTURE (TRUSS)	n/a			\$
88	560219		INSTALL SIGN STRUCTURE (TRUSS)	n/a			\$
89	575004	F	TIMBER LAGGING	MFBM	87	\$ 7,746.80	\$ 673,971.60
90	590115		CLEAN AND PAINT STRUCTURAL STEEL	LS	1	\$ 35,310.00	\$ 35,310.00
91	590116		CLEAN AND PAINT STRUCTURAL STEEL (EXISTING BRIDGE)	LS	1	\$ 35,310.00	\$ 35,310.00
92	590125		SPOT BLAST CLEAN	LS	1	\$ 67,410.00	\$ 67,410.00
93	600114		BRIDGE REMOVAL (PORTION)	LS	1	\$ 532,860.00	\$ 532,860.00
94	600117		REMOVE RETAINING WALL (LF)	LF	1,179	\$ 406.60	\$ 479,381.40
95	600017A		REMOVE RETAINING WALL (ABUTMENT) (LF)	LF	95	\$ 428.00	\$ 40,660.00
96	600018A		REMOVE CAP BEAM	LF	80	\$ 1,669.20	\$ 133,536.00
97	600019		REMOVE CRIB WALL	LF	145	\$ 342.40	\$ 49,648.00
98	600025		REMOVE RETAINING WALL (PORTION) (LF)	LF	60	\$ 203.30	\$ 12,198.00
99	600093		REMOVE TREE	EA			\$
100	600097		REMOVE STRUCTURE (BRIDGE No. 2)	LS	1	\$ 1,926,000.00	\$ 1,926,000.00
101	600098		REMOVE STRUCTURE (BRIDGE No. 3)	LS	1	\$ 805,710.00	\$ 805,710.00
102	600099		REMOVE STRUCTURE (BRIDGE No. 4)	LS	1	\$ 652,700.00	\$ 652,700.00
103	600100		REMOVE STRUCTURE (BRIDGE No. 5)	LS	1	\$ 204,370.00	\$ 204,370.00
104	600101		REMOVE STRUCTURE (BRIDGE No. 6)	LS	1	\$ 184,040.00	\$ 184,040.00
105	600102		REMOVE STRUCTURE (BRIDGE No. 7A)	LS	1	\$ 110,210.00	\$ 110,210.00
106	600103		REMOVE STRUCTURE (BRIDGE No. 7B)	LS	1	\$ 211,860.00	\$ 211,860.00
107	600104		REMOVE STRUCTURE (BRIDGE No. 8)	LS	1	\$ 354,170.00	\$ 354,170.00
108	600155	F	COMPOSITE COLUMN CASINGS	SQFT	448	\$ 214.00	\$ 95,872.00
109	610101		8" PLASTIC PIPE	LF	101	\$ 214.00	\$ 21,614.00
110	627110A		NOT USED	00			\$
111	641101		12" PLASTIC PIPE	LF	326	\$ 231.12	\$ 75,345.12
112	641107		18" PLASTIC PIPE	LF	2,213	\$ 272.85	\$ 603,817.05
113	680902		NOT USED	n/a			
114	682049	F	NOT USED	n/a			\$
_		<u> </u>		•	-		

Item No	Item Code	Final Pay	Item Description	Units	Quantity	Estimated Unit Cost	Estimated Total Item
115	698601		NOT USED	n/a			\$
116	700617		DRAINAGE INLET MARKER	EA	20	\$ 49.22	\$ 984.40
117	703233		GRATED LINE DRAIN	LF	49	\$ 792.87	\$ 38,850.63
118	705307		NOT USED	n/a			\$
119	705311		NOT USED	n/a			\$
120	705471A		NOT USED	n/a			\$
121	709522		INLET DEPRESSION	EA	17	\$ 3,959.00	\$ 67,303.00
122	710100		ABANDON CULVERT (EA)	EA	11	\$ 6,955.00	\$ 76,505.00
123	710110		ABANDON INLET	EA	3	\$ 1,391.00	\$ 4,173.00
124	710132		REMOVE CULVERT (LF)	LF	1,275	\$ 40.66	\$ 51,841.50
125	710150		REMOVE INLET	EA	13	\$ 1,391.00	\$ 18,083.00
126	710154		REMOVE MANHOLE	EA	1	\$ 12,727.65	\$ 12,727.65
127	710194A		CLEANOUT	n/a			\$ -
128	723080		ROCK SLOPE PROTECTION (60 lb, Class II, METHOD B) (CY)	n/a			\$ -
129	729011		ROCK SLOPE PROTECTION FABRIC (CLASS 8)	n/a			\$ -
130	730010		MINOR CONCRETE (6" CITY CURB) (LF)	LF	854	\$ 49.22	\$ 42,033.88
131	731502		MINOR CONCRETE (CONTRETE PAD) (MISCELLANEOUS CONSTRUCTION)	CY	0.6	\$ 9,426.70	\$ 5,656.02
132	731710		REMOVE CONCRETE CURB (LF)	LF	1,753	\$ 13.91	\$ 3,030.02
133	731780A		REMOVE CONCRETE (SLOPE PAVING)	SQFT	41,671	\$ 5.35	\$ 222,939.85
134	731840		REMOVE CONCRETE (CURB AND GUTTER) (LF)	LF	465	\$ 17.23	\$ 222,939.83
135	731840A		REMOVE CONCRETE (GUTTER)	LF	1,033	\$ 14.12	\$ 8,011.93
136	731841A		REMOVE CONCRETE (STAIRCASE)	CY	5	\$ 3,638.00	
137	731842A		REMOVE CONCRETE (SIDEWALK)	CY	8	\$ 722.25	\$ 18,190.00
138	750001	F	MISCELLANEOUS IRON AND STEEL	LB	10,017	\$ 6.53	\$ 5,778.00
139	750010A		CITY MANHOLE	EA	17	\$ 12,947.00	\$ 65,411.01 \$ 220,099.00
140	750501		MISCELLANEOUS METAL (BRIDGE)	LB	21,315	\$ 6.90	·
141	750502		MISCELLANEOUS METAL (RETAINING WALL)	LB	990	\$ 6.90	\$ 147,073.50 \$ 6,831.00
142	750505	F	BRIDGE DECK DRAINAGE SYSTEM	LB	950	\$ 13.91	,
143	770080		JOINT UTILITY TRENCH	LF	1,335	\$ 428.00	,
144	770090		LIGHTING (CITY STREET)	LS	1	\$ 664,470.00	\$ 571,380.00
145	770091A		TUNNEL LIGHTING (CITY STREET)	LS	1	\$ 636,650.00	\$ 664,470.00
146	770092A		ELECTRONIC TOLL SYSTEMS	LS	1	\$ 369,150.00	\$ 636,650.00
147	780230		SURVEY MONUMENT (TYPE D)	EA	6	\$ 3,745.00	\$ 369,150.00
148	780280		RELOCATE CALTRANS CONTROLLER BOX (LIGHTING)	LS	1	\$ 7,511.40	\$ 22,470.00
149	780285		REMOVE CONDUIT AND CABLE	LF	220	\$ 110.21	\$ 7,511.40
149A	780286A		12" PLASTIC PIPE (AT&T CONDUIT)	LF	200	\$ 649.49	\$ 24,246.20
150	780290		UTILITY BOX (AT&T)	EA	2	\$ 28,569.00	\$ 129,898.00
151	800321		CHAIN LINK FENCE (TYPE CL-4, VINYL CLAD)	LF	862	\$ 64.20	\$ 57,138.00
							\$ 55,340.40

Item No	Item Code	Final Pay	Item Description	Units	Quantity	Estimated Unit Cost	Estimated Total Item
152	800360A		CHAIN LINK FENCE (TYPE CL-6 Mod)	LF	680	\$ 577.80	\$ 392,904.00
153	810120		REMOVE PAVEMENT MARKER	EA	158	\$ 5.62	\$ 887.96
154	810170		DELINEATOR (CLASS 1)	EA	12	\$ 49.22	\$ 590.64
155	810190		GUARD RAILING DELINEATOR	EA	15	\$ 27.82	\$ 417.30
156	810230		PAVEMENT MARKER (RETROREFLECTIVE)	EA	245	\$ 6.53	\$ 1,599.85
157	820130		OBJECT MARKER	EA	12	\$ 71.69	\$ 860.28
158	820250		REMOVE ROADSIDE SIGN	EA	13	\$ 112.35	\$ 1,460.55
159	820890		INSTALL SIGN PANEL ON EXISTING FRAME	n/a	-		\$ -
160	820300		REMOVE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	5	\$ 82.39	\$ 411.95
161	820360		REMOVE SIGN PANEL	EA	4	\$ 545.70	\$ 2,182.80
162	820710		FURNISH LAMINATED SIGN PANEL (1" - TYPE A)	SQFT	344	\$ 53.50	\$ 2,182.80
163	820750		FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	180	\$ 24.08	\$ 4,334.40
164	820820		METAL (BARRIER MOUNTED SIGN)	LB	510	\$ 15.52	\$ 4,334.40
165	820840		ROADSIDE SIGN - ONE POST	EA	11	\$ 331.70	
166	820860		INSTALL SIGN (STRAP AND SADDLEBRACKET METHOD)	EA	28	\$ 112.35	,
167	820890		INSTALL SIGN PANEL ON EXISTING FRAME	SQFT	344	\$ 27.82	\$ 3,145.80
168	832015		MIDWEST GUARDRAIL SYSTEM (7' WOOD POST)	LF	253	\$ 192.60	\$ 9,570.08
169	832070		VEGETATION CONTROL (MINOR CONCRETE)	SQYD	114	\$ 98.98	\$ 48,727.80
170	833025	F	TUBULAR BICYCLE RAILING	LF	1,204	\$ 165.85	\$ 11,283.72
171	839521	F	CABLE RAILING	LF	124	\$ 85.60	\$ 199,683.40
172	839543		TRANSITIONAL RAILING (TYPE WB-31)	EA	2	\$ 13,375.00	\$ 10,614.40
173	839584		ALTERNATIVE INLINE TERMINAL SYSTEM	EA	1	\$ 10,058.00	\$ 26,750.00
174	839600A		CRASH CUSHION (SCI-70GM)	EA	3	\$ 41,730.00	\$ 10,058.00
175	839640A		CONCRETE BARRIER (TYPE 60)	LF	355	\$ 365.94	\$ 125,190.00
176	839642A		CONCRETE BARRIER (TYPE 60C Mod)	LF	110	\$ 543.56	\$ 129,908.70
177	839643A		CONCRETE BARRIER (TYPE 60D)	LF	2,039	\$ 117.70	\$ 59,791.60
178	839644A		CONCRETE BARRIER (TYPE 60F Mod)	LF			\$ 239,990.30
179	839645A		CONCRETE BARRIER (TYPE 60D Mod)	LF	361	\$ 197.95	
180	839716	F	REMOVE AND RECONSTRUCT BARRIER (TYPE 60)	LF	26	\$ 738.30	\$ 71,459.95
181	839720	F	CONCRETE BARRIER (TYPE 836B (MOD)	LF	147	\$ 230.05	\$ 19,195.80
182	839725	F	CONCRETE BARRIER (TYPE 836A) (MOD)	LF	60	\$ 251.45	\$ 33,817.35
183	839742	F	CONCRETE BARRIER (TYPE 836A)	LF	977	\$ 428.00	\$ 15,087.00
184	839744	F	CONCRETE BARRIER TYPE 836 (MOD)	LF	563	\$ 258.94	\$ 418,156.00
185	839752		REMOVE GUARDRAIL	LF	1,010		\$ 145,783.22
186	839774		REMOVE CONCRETE BARRIER	LF	190		\$ 34,582.40
187	839775		REMOVE CONCRETE BARRIER (TYPE K)	LF	380		\$ 17,890.40
188	839780	F	REMOVE AND RECONSTRUCT BARRIER AND RAILING (TYPE 1.5)	LF	33	\$ 1,284.00	\$ 18,703.60
			6" THERMOPLASTIC TRAFFIC STRIPE				\$ 42,372.00
189	846007		(ENHANCED WET NIGHT VISIBILITY)	LF	18,058	\$ 1.66	\$ 29,976.28

Item No	Item Code	Final Pay	Item Description	Units	Quantity	Estimated Unit Cost	Estimated Total Item
190	846009		8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY)	LF	320	\$ 2.19	\$ 700.80
191	846012		THERMOPLASTIC CROSSWALK AND PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)	SQFT	4,154	\$ 11.93	\$ 49,557.22
192	846030		REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	3,033	\$ 1.12	\$ 3,396.96
193	846035		REMOVE THERMOPLASTIC PAVEMENT MARKING	SQFT	151	\$ 4.60	\$ 694.60
194	847196		CONTRAST STRIPE PAINT (2-COAT)	LF	2,326	\$ 1.07	\$ 2,488.82
195	872001		TEMPORARY LIGHTING SYSTEMS	LS			\$
196	872140A		REMOVE ELECTROLIER	EA	16	\$ 2,514.50	\$ 40,232.00
197	872141		REMOVING LIGHTING SYSTEMS (CITY)	LS	1	\$ 38,520.00	\$ 38,520.00
198	999999		MOBILIZATION	LS	1	\$ 9,185,139.20	\$ 9,185,139.20
199	770001		12" WATERLINE	LF	537	\$ 2,247.00	\$ 1,206,639.00
200	770002		GATE VALVE	EA	1	\$ 5,457.00	\$ 5,457.00
201	770003		AIR RELEASE VALVE / BLOW OFFS	EA	4	\$ 4,761.50	\$ 19,046.00
202	770004		REMOVE WATERLINE	LF	300	\$ 85.60	\$ 25,680.00
203	770005		ABANDON WATERLINE	EA	2	\$ 6,206.00	\$ 12,412.00
204	204035		PLANT (GROUP A)	LS	1	\$ 22,630.50	\$ 22,630.50
205	475001		RETAINING WALL (WATERLINE RETAINING WALL A)	LS	1	\$ 237,540.00	\$ 237,540.00
206	100200		RESIDENT ENGINEERS OFFICE	n/a			\$
207	050100		LAYDOWN YARD AREA	n/a			\$
208	130001		STORM WATER ANNUAL REPORT	EA	2	\$ 802.50	\$ 1,605.00
209	999999A		MOBILIZATION (WATERLINE RETAINING WALL A)	LS	1	\$ -	\$ -
210	832100		BOLLARD (K4)	EA	8	\$ 3,263.50	\$ 26,108.00
211	260203		CLASS 2 AGGREGATE BASE (CY)	CY	623	\$ 117.70	\$ 73,327.10
212	390100		PRIME COAT	TON	3	\$ 1,563.53	\$ 4,690.59
213	610300	F	CONCRETE BACKFILL (PIPE TRENCH)	CY	1	\$ 1,070.00	\$ 1,070.00
214	68200A		CITY CULVERT TRENCH	LF	2,520	\$ 16.05	\$ 40,446.00
215	705500A		INLINE CONTINUOUS DEFLECTIVE SEPARATION UNIT	EA	1	\$ 1,774.02	\$ 1,774.02
216	800322A		CHAIN LINK FENCE (TYPE CL-4, VINYL CLAD, SURFACE MOUNT)	LF	165	\$ 64.20	\$ 10,593.00
217	120149		TEMPORARY PAVEMENT MARKING (PAINT)	SQFT	37	\$ 6.72	
21/	120149		IEMPURAKI PAVEMENI MAKKINU (PAINI)	SQF1		t Item Estimate	\$ 2 \$ 83,014,8

San Francisco County Transportation Authority Allocation Request Form

FY of Allocation Action:	FY2022/23
Project Name:	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)
Grant Recipient:	San Francisco County Transportation Authority

SFCTA RECOMMENDATION

Resolution Number:		Resolution Date:	
Total PROP K Requested:	\$14,899,000	Total PROP K Recommended	\$14,899,000

SGA Project Number:		Name:	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)
Sponsor:	San Francisco County Transportation Authority	Expiration Date:	12/30/2027
Phase:	Construction	Fundshare:	13.0%

Cash Flow Distribution Schedule by Fiscal Year

Fund Source	FY2024/25	Total
PROP K EP-117U	\$14,899,000	\$14,899,000

Deliverables

- 1. Quarterly progress reports (QPRs) shall include % complete to date, photos of work being performed, upcoming project milestones, and delivery updates including work performed in the prior quarter, work anticipated to be performed in the upcoming quarter, and any issues that may impact delivery, in addition to all other requirements described in the Standard Grant Agreement.
- 2. Provide 2-3 photos of project with quarterly progress reports and upon project completion.

Special Conditions

- 1. Recommendation is conditioned upon MTC approval of \$14,899,000 in OBAG 3 funds for the West Side Bridges project, anticipated January 25, 2023, and SFCTA Board approval of a fund exchange of \$14,899,000 in OBAG 3 funds from SFCTA's West Side Bridges with an equivalent amount of Prop K funds from SFMTA's Light Rail Vehicle Procurement Project, with conditions (anticipated December 13, 2022).
- 2. Recommendation is conditioned upon concurrent amendment to the Prop K Vehicles Undesignated 5YPP to add the subject project with \$14.899 million in FY 22/23 funds for the construction phase. These funds will be deobligated from the SFMTA's Light Rail Vehicle Procurement project and appropriated for the subject project as part of a Prop K/OBAG 3 fund exchange. See accompanying staff memo for fund exchange details, including conditions.

Metric	PROP K	TNC TAX	PROP AA
Actual Leveraging - Current Request	86.9%	No TNC TAX	No PROP AA
Actual Leveraging - This Project	87.8%	No TNC TAX	No PROP AA

San Francisco County Transportation Authority Allocation Request Form

FY of Allocation Action:	FY2022/23
Project Name:	West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange)
Grant Recipient:	San Francisco County Transportation Authority

EXPENDITURE PLAN SUMMARY

Current PROP K Request: \$14,899,000

1) The requested sales tax and/or vehicle registration fee revenues will be used to supplement and under no circumstance replace existing local revenues used for transportation purposes.

Initials of sponsor staff member verifying the above statement:

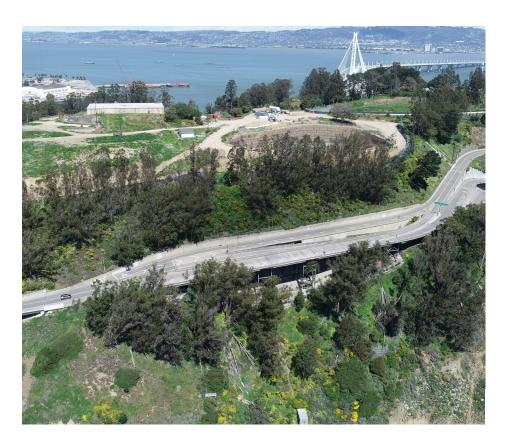
LV

CONTACT INFORMATION

	Project Manager	Grants Manager
Name:	Yana Waldman	Mike Pickford
Title:	Assistant Deputy Director	Senior Transportation Planner
Phone:	(415) 522-4813	(415) 522-4822
Email:	yana.waldman@sfcta.org	mike.pickford@sfcta.org

Existing Structures







2019 Prop K 5-Year Project List (FY 2019/20 - FY 2023/24) Vehicles - Undesignated Category (EP 17U)

Programming and Allocations to Date

Pending December 13, 2022 Board

Total
\$10,545,950
\$14,899,000
225 111 050
\$25,444,950
\$25,444,950
\$0
\$10,545,950
\$0
(\$14,899,000)
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Pending Allocation/Appropriation

Board Approved Allocation/Appropriation

FOOTNOTES:

- ¹ Strategic Plan and 5YPP amendments to accommodate allocation of \$10,545,950 for Light Rail Vehicle Procurement (Resolution 20-040, 4/14/2020). Light Rail Vehicle Procurement: Advance \$3,965,843 in cash flow from FY2022/23 to FY2020/21;
- ² 5YPP amendment to accomodate allocation of \$14.899M to West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange) (Resolution 23-xx, 12/13/2022)
 West Side Bridges Seismic Retrofit Project (OBAG Fund Exchange): Added project with \$14.899M in construction funds in FY 2022/2023. [Funds to be deobligated from the SFMTA's Light Rail Vehicle Procurement project (SGA 117-910055) pending SFCTA approval of OBAG3/Prop K fund exchange and MTC approval of the OBAG 3 Project List.]

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Memorandum

AGENDA ITEM 13

DATE: November 22, 2022

TO: Transportation Authority Board

FROM: Rachel Hiatt - Deputy Director for Planning

SUBJECT: 12/06/22 Board Meeting: Adopt the San Francisco Transportation Plan 2050

RECOMMENDATION □ Information ⊠ Action	☐ Fund Allocation
Adopt the San Francisco Transportation Plan (SFTP) 2050.	☐ Fund Programming
	\square Policy/Legislation
SUMMARY	⊠ Plan/Study
The San Francisco Transportation Plan (SFTP) is the countywide long-range investment and policy blueprint	□ Capital Project Oversight/Delivery
encompassing every transportation mode, every transit	☐ Budget/Finance
operator, and all streets and freeways. The SFTP 2050 outlines	☐ Contract/Agreement
how expected and potential new transportation funding in the city will be prioritized through 2050 to advance the city's goal	□ Other:
to build an effective, equitable, and sustainable transportation system. The SFTP considers local and regional goals and	
priorities. The SFTP is updated every four years along and	
consistent with the Metropolitan Transportation	
Commission's (MTC's)/Association of Bay Area Government's	
(ABAG's) Plan Bay Area (PBA), the long-range transportation	
plan and sustainable communities strategy for the nine-county	
Bay Area. MTC/ABAG adopted PBA 2050 in October 2021.	

BACKGROUND

As San Francisco's Congestion Management Agency (CMA), the Transportation Authority develops a long-range transportation plan to establish the City's investment priorities and guide policy initiatives in the sector. The San Francisco Transportation Plan (SFTP) prioritizes and recommends transportation projects and programs for anticipated local, regional, state, and federal funding, and is a tool for San Francisco's advocacy for discretionary (e.g. competitive) transportation funds, as well for new transportation revenues. In addition to investment strategies, the SFTP examines policy and programmatic needs to help reach the



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City's long-range goals. The present update of the SFTP provide the basis for San Francisco's input to the region's development of the Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), together known as Plan Bay Area 2050 (PBA 2050), adopted by MTC in October 2021. In turn, PBA 2050 has informed development of SFTP 2050.

The last major update to the SFTP was in 2013 (SFTP 2040). In October 2017 the Board adopted a minor update to the SFTP. The SFTP 2050 is part of the third phase of the ConnectSF long-range transportation planning program, a multi-agency collaborative process to build an effective, equitable, and sustainable transportation system for San Francisco's future. The Board has been briefed on prior phases of ConnectSF including: the ConnectSF vision, approved by the Board on April 24, 2018; the Statement of Needs, presented on May 21, 2019; the Transit Strategy, presented on April 27, 2021, and the Streets and Freeways Strategy, presented on June 28, 2022. The SFTP uses the ConnectSF Phases 1 and 2 vision, goals, and modal studies to guide prioritization, as well as ongoing outreach, neighborhood plans, local and regional transit operating plans, the City's Climate Action Plan, and known local and regional goals and priorities.

Through this detailed analysis, interagency collaboration, and continuous public engagement, staff evaluated how to prioritize expected and potential new revenues to advance transportation goals—equity, economic vitality, environmental sustainability, safety and livability, and accountability and engagement. We presented the SFTP's draft Investment and Vision Plans, including a summary of outreach findings, to the Transportation Authority Board at the September 13, 2022 meeting.

DISCUSSION

Meaningful progress towards San Francisco's transportation goals - equity, economic vitality, environmental sustainability, safety and livability, and accountability and engagement - requires a diverse investment plan paired with policy actions. Consistent with PBA 2050 revenue assumptions, the SFTP 2050 Investment Plan estimates that San Francisco will see \$78.9 billion in transportation funding (in constant 2020 dollars) over the thirty years of the plan. Most of this revenue (about 85%) is already committed to specific projects and purposes like local streets operations and maintenance and transit operations. About 15% of the expected revenues are discretionary, meaning that there is flexibility in how they can be invested to improve the transportation system. The SFTP captures these commitments and, through the Investment Plan, proposes how to invest the discretionary revenues most effectively to make progress toward our goals.

Discretionary revenues in the Investment Plan include the reauthorization of the half-cent transportation sales tax to fund the 2022 Expenditure Plan, which was approved by voters on November 8, 2022.



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The SFTP also includes a Vision Plan because the transportation needs are greater than the expected revenues for transportation. The Vision Plan imagines how to get closer towards city goals with significant new revenue sources. The Vision Plan totals about \$95 billion dollars in revenues, which includes all the Investment Plan revenues plus an additional \$15 billion in potential new revenues. In total, the Vision plan has \$28 billion in discretionary revenues. Though the plan does not identify specific sources for this new revenue, sources may include, but are not limited to, local and regional measures, as well as increased federal and state funds. The investment categories in the SFTP are consistent with the 2022 Expenditure Plan, with one additional category for transit operations.

Investment Plan. The Investment Plan advances all of the transportation goals. With anticipated revenues, the plan funds:

- Major Transit Projects Category includes systemwide improvements to ease crowding, improve reliability, and increase rider capacity on Muni and BART through transit priority for Muni buses and rail, improvements to train control systems, and new vehicles.
- Transit Maintenance and Enhancements Category maintains our transit infrastructure
 to prevent breakdowns and delays, improves safety, reliability and accessibility with
 new Muni vehicles and other maintenance and rehabilitation projects for Muni, and
 San Francisco's share of BART, Caltrain, ferry; improvements to stations and bus
 stops like new elevators to improve accessibility; and new stations. This category also
 includes planning for the next generation of transportation investments.
- Paratransit Category continues funding for paratransit operations for seniors and persons with disabilities.
- Street and Freeways Category maintains smooth streets through regular and timely maintenance to keep the recent achievement of meeting a 10-year pavement quality goal and upgrade signs, signals, and pavement markings; improves street safety through upgrades to the pedestrian and bicycle network; maintains the Safe Routes to School Program; and improves safety and operations on freeways.
- Transportation System Development and Management Category includes congestion management and cost effective projects to shift trips to more sustainable modes, and it expands the neighborhood planning program with a focus on equity planning and planning to address changes in land use.
- Transit Operations Category includes operations for Muni, BART, and Caltrain and continues Free Muni for Youth through 2050.

In the Investment Plan we begin to address many needs to address equity gaps and advance citywide transportation improvements. There are still gaps. The most notable is the gap in transit operations, which means that we cannot increase investment levels for Transit



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Operations beyond what we have in 2022. We also have additional needs for street safety and transit and street maintenance.

Vision Plan. The Vision Plan increases the investments to close funding gaps for San Francisco's share of BART operations and exceed pre-pandemic investment levels for Muni operations; reduce the capital maintenance backlog for all operators to improve transit reliability and safety; improve street safety; and expand the Safe Routes to School program. About \$2 billion of potential new revenues from the Vision Plan is set aside as a placeholder that remains flexible for Muni operations, maintenance, and capital investments. This allows flexibility for this future new revenue to increase transit service levels, reduce the transit maintenance backlog to improve reliability, and/or to capital projects to further expand bus or rail in San Francisco.

Policy Initiatives. Policy initiatives address transportation trends and larger needs that warrant further exploration and advancement to strengthen investment priorities and their impacts on transportation goals. Policy initiatives cover transit funding for operations and maintenance, regional transit coordination, street safety, personal security, neighborhood planning and equity, planning for mode shift, equity-focused pricing and incentives, capital project delivery, BART and Muni shared station facility maintenance, new mobility and autonomous vehicles, and climate and resilience.

Outreach. The SFTP built on outreach findings throughout the ConnectSF process and included community engagement initiatives throughout 2022. We also considered outreach findings from the 2022 Transportation Expenditure Plan development process, which were consistent with what we heard in the SFTP outreach process. The findings of our technical analysis and recommendations in the SFTP are consistent with the feedback we have heard from the public. Investment priorities heard through outreach include restore transit service, improve transit reliability, improve street safety, and plan for the next generation of transportation investments. Policy themes heard through public outreach included improve project delivery and accountability, improve transportation equity and affordability, improve personal security on transit and on streets, and improve regional transit coordination. WE presented the SFTP outreach process and findings were presented to the Transportation Authority Board at the September 13, 2022 meeting.

FINANCIAL IMPACT

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

CAC POSITION

The CAC considered this item at its November 30, 2022 meeting.



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SUPPLEMENTAL MATERIALS

- Attachment Draft SFTP 2050 Report (without appendices)
- Enclosure Draft SFTP 2050 Appendices

San Francisco Transportation Plan 2050 Draft Report: November 2022

Draft Report: November 2022



ConnectSF

Acknowledgments

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White Papers

Transportation Demand Management (TDM) and Long Range Planning Road User Charge (RUC)

Revenues

AV

Executive Summary

The San Francisco Transportation Plan (SFTP) is the blueprint for San Francisco's transportation system development and investment over the next 30 years. The SFTP covers all transportation modes, networks, and operators that serve the city and establishes long term investment priorities. The plan is updated every four years in coordination with PBA 2050, the regional long-range plan. Through detailed analysis, the ConnectSF long-range planning effort, interagency collaboration, and listening to the public, the San Francisco County Transportation Authority (SFCTA) evaluated ways to improve the transportation system with existing and potential new revenues.

The SFTP recommends a balanced Investment Plan that makes meaningful progress towards the ConnectSF vision and goals – equity, safety and livability, sustainability, economic vitality, and accountability and engagement. The SFTP also recommends a set of policy initiatives to support these goals and make the most of our investments.

SFTP AT A GLANCE

The SFTP includes:

- An Investment Plan to guide the allocation of \$80 billion in existing and anticipated transportation revenues through 2050
- A Vision Plan to guide the allocation of an additional \$15 billion potential new transportation revenues through 2050
- Policy initiatives to complement the Investment Plan and Vision Plan
- Guidance for implementation and monitoring

SFTP REVENUES

Through 2050, San Francisco can expect to have about \$80 billion in funding available to support the transportation system; this funding makes up the Investment Plan. Most of these funds are already committed to specific projects or purposes. About \$13 billion of the expected revenues are discretionary, meaning there is more flexibility in how they can be allocated.

WHY DOES THE SFTP MATTER?

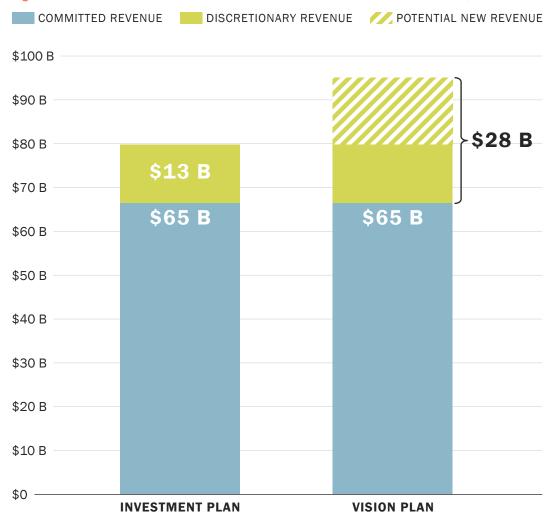
Like many counties in California,
San Francisco is a "self-help" county
where local revenues make up the
majority of transportation funding
(Figure 5). Local "matching" funding
is often necessary to access federal,
state, and regional funds to deliver the
projects and services that are essential
to meeting our goals.

The SFTP will make the city more competitive for transportation funding at the regional, state, and federal level, including for opportunities made possible by the Bipartisan, Federal Infrastructure Law that was enacted in 2021. Transportation projects seeking this funding must be consistent with the SFTP and the region's long-range transportation plan, PBA 2050.

The SFTP also provides a roadmap to ensure that transportation funds are invested wisely and support advocacy for new revenues to help the city get closer to San Francisco's transportation goals.

The 2022 Transportation Expenditure Plan¹ revenues – resulting from a proposed 30-year continuation of San Francisco's existing half-cent transportation sales tax to 2053 – are included in the Investment Plan's discretionary revenues. The Vision Plan assumes additional revenues to help move the city closer to the long-term goals for San Francisco's transportation system. The Vision Plan totals about \$95 billion dollars in revenues, which includes all the Investment Plan revenues plus an additional \$15 billion in potential new revenues. In total, the Vision Plan has \$28 billion in discretionary revenues. Though the plan does not identify specific sources for this new revenue, sources may include, but are not limited to, local and regional measures, as well as increased federal and state funds. Figure 1 shows the SFTP revenue forecasts in the Investment Plan and Vision Plan.

Figure 1: SFTP 2050 Investment Plan and Vision Plan Revenues, in Billions of Dollars, 2020



¹ https://www.sfcta.org/ExpenditurePlan

SFTP INVESTMENT AND VISION PLAN SUMMARY

The Investment Plan and Vision Plan are organized into six primary categories, consistent with the 2022 Transportation Expenditure Plan plus the addition of a Transit Operations category. Table 1 shows categories of major investments and funding levels recommended by both the Investment Plan and Vision Plan.

Table 1: Investment Levels by Category, in Billions of Dollars, 2020

CATEGORY	INVESTMENT PLAN	VISION PLAN
Major Transit Projects Includes transit reliability, speed, and capacity capital improvements to support local and regional operators providing more frequent bus and rail service, running longer trains, and extending Caltrain in San Francisco.	\$10.37	\$11.37
Transit Maintenance and Enhancements Includes transit maintenance, rehabilitation, and replacement of local and regional transit infrastructure serving San Francisco, and enhancements such as stop/station access improvements, new stations, and planning for the next generation of transit projects.	\$10.88	\$16.86
Paratransit Includes door-to-door van, taxi, and other transportation services for seniors and people with disabilities who are unable to use fixed route transit service.	\$1.27	\$1.27
Streets and Freeways Includes pedestrian and bicycle safety and traffic calming, maintenance, rehabilitation, and replacement of road infrastructure, streetscape improvements and freeway safety and operational improvements.	\$5.36	\$7.22
Transportation System Development and Management Includes neighborhood and equity planning to create a pipeline of projects across the city, and Transportation Demand Management strategies — costeffective projects that support shifting when, how, and where people travel.	\$4.00	\$4.00
Transit Operations Includes transit operations for Muni and San Francisco's share of regional transit services, except for Muni paratransit operations which is shown in a separate category.	\$46.47	\$52.93
Existing Obligations Remaining balances on Prop K grants and debt service.	\$0.6	\$0.6
TOTAL	\$78.95	\$94.25

ACCOMPLISHMENTS SINCE SFTP 2040

The 2013 SFTP (SFTP 2040) outlined specific recommendations and priorities to improve the transportation system¹. San Francisco accomplished and advanced many of the recommendations in the past decade, though many remain relevant as we plan for the next 30 years. SFTP 2040 policy recommendations and an overview of accomplishments and current progress are listed in Table 2.

Table 2: Summary of SFTP 2040 Accomplishments

SFTP 2040 POLICY RECOMMENDATIONS	ACCOMPLISHMENTS AND PROGRESS
Prioritize revenues to fully fund timely transit vehicle replacement and rehabilitation	The city made a major investment in transit to buy and fully replace Muni buses, light rail, and paratransit vehicles, help rehabilitate existing Caltrain diesel vehicles, and purchase the new Caltrain electric fleet.
Expand transit service while supporting steps to stabilize costs	Prior to the COVID-19 pandemic (pandemic), there was a Muni service expansion of at least 12%. Unfortunately, those gains were eroded by the pandemic. SFTP 2050 is the first time the Investment Plan will not be able to meet transit operating needs. Decreased ridership and the associated loss of fare revenue (caused by the pandemic and persistent today), along with increases in operating costs that exceed the growth in revenues, have created unprecedented financial deficits for all transit operators in the region. See 36 for a discussion of the fiscal cliff transit operators are facing.
Achieve city goals for average pavement condition	In 2020, the city achieved pavement quality goals (Pavement Condition Index 75/100)² through coordinated investment from San Francisco's General Fund, the Prop K half-cent transportation sales tax, Prop AA Vehicle Registration Fee³, the 2011 Road Repaving and Street Safety Bond, and Senate Bill 1.4
Build the pedestrian and bicycle strategies to establish safer neighborhood networks citywide	The separated bikeway network increased by 34 miles and there was rapid growth in the active transportation network during the pandemic.
Create more complete streets (at lower cost) through coordination with repaving	The city adopted Vision Zero in 2014. The SFCTA established the Vision Zero Committee which met quarterly from 2014 to 2020, after which point quarterly Vision Zero updates have been presented to the full SFCTA board. The city has implemented quick-build projects on the on the High Injury Network ⁵ that allowed for quick and innovative improvements to our streets. About 31 miles (19%) of improvement are complete, 22 miles (13%) under construction, and 29 miles (17%) are in design.

- ${\tt 1} \quad https://www.sfcta.org/projects/san-francisco-transportation-plan\#panel-reports-documents$
- 2 https://www.sfcta.org/blogs/milestone-smoother-streets-san-francisco
- 3 https://www.sfcta.org/funding/prop-aa-vehicle-registration-fee
- 4 https://dot.ca.gov/programs/sb1
- 5 https://www.visionzerosf.org/maps-data/

SFTP 2040 POLICY RECOMMENDATIONS	ACCOMPLISHMENTS AND PROGRESS		
Increase investment in employer, school, and community trip reduction programs	The San Francisco Department of Environment, San Francisco Planning Department, SFCTA, and San Francisco Municipal Transportation Agency (SFMTA) jointly developed the 2017 – 2020 Citywide Transportation Demand Management (TDM) strategy ¹ , but many recommendations still need to be implemented. New development efforts include robust TDM programs to reduce new driving trips associated with new developments. To encourage transit ridership, BART piloted the BART Perks ² program and BART, the SFMTA, and Samtrans launched the Gator Pass ³ to provide free or reduced fares to San Francisco State University students. The Metropolitan Transportation Commission, in partnership with Bay Area transit agencies, launched the Bay Pass ⁴ pilot program, which will provide free transit access to about 50,000 Bay Area residents.		
Increase transparency and promote public involvement by sharing agency prioritization and development processes	The ConnectSF process brought together the SFCTA, the SFMTA, San Francisco Planning Department, and the Office of Workforce Development to jointly form a long-range transportation planning effort, rooted in community engagement. The SFCTA also developed the Neighborhood Program ⁵ for community transportation planning in response to mobility and equity findings from the SFTP 2040, which found that walking, biking, and transit reliability initiatives are important ways to address socio-economic and geographic disparities. The SFCTA continued to invest in Community Based Transportation Plans and implement their recommendations in Equity Priority Communities. MyStreetSF, an online tool, was created for community members to track transportation projects funded by the SFCTA. ⁶		
Continue to develop pricing approaches to congestion management	The city developed and implemented SFPark to improve parking availability, began developing an equity-first congestion pricing strategy ⁷ , and established developer TDM programs ⁸ to reduce new driving trips associated with new development. The Treasure Island Mobility Management Agency (TIMMA) is implementing the comprehensive multimodal TDM program to support growth on Treasure Island. ⁹		
Continue rapid transit network development, including bus rapid transit	The city installed nearly 80 miles of transit upgrades since 2014 through the Muni Forward program, implementing a range of elements from the Transit Preferential Streets toolkit. The city now has approximately 70 miles of dedicated transit lanes, along with many other elements to improve reliability such as signal priority, stop rebalancing, and more. Recently, the city completed the Van Ness Bus Rapid Transit and Geary Rapid Projects and installed transit signal priority on the entire Muni bus rapid network. The Muni Service Equity Strategy ¹⁰ focuses on improving transit performance in San Francisco neighborhoods with high percentages of households with low incomes and people of color. This strategy is an ongoing effort to improve service performance in eight Equity Strategy neighborhoods, with annual monitoring.		

- ${\tt 1} \quad https://sfplanning.org/transportation-demand-management-program$
- 2 https://www.BART.gov/guide/perks
- 3 https://bursar.sfsu.edu/students/campus-fees/gator-pass
- ${\tt 4~https://mtc.ca.gov/news/clipperr-baypass-sets-sail-unlimited-transit-access}$
- 5 https://www.sfcta.org/policies/neighborhood-program
- 6 https://mystreetsf.sfcta.org
- 7 https://www.sfcta.org/downtown
- 8 https://sfplanning.org/transportation-demand-management-program
- 9 https://www.sfcta.org/projects/treasure-island-transportation-program
- 10 https://www.sfmta.com/projects/muni-service-equity-strategy

SFTP 2040 POLICY RECOMMENDATIONS	ACCOMPLISHMENTS AND PROGRESS			
Continue to coordinate transit investment with land use development plans	The city adopted the Transportation Sustainability Program¹ to ensure new growth contributes to improving and expanding the transportation system. The regional One Bay Area Grant (OBAG) program, administered in San Francisco by the SFCTA, directs transportation funding to the city's adopted Priority Development Areas.² The SFCTA continues to support the Caltrain Downtown Extension (DTX) and the redevelopment of Treasure Island.³			
Set a vision for managing the city's freeway network	SFCTA completed the Freeway Corridor Management Study in 2017 and began follow- on work to analyze managed lanes and express bus on US-101/I-280 and coordinate regional express lane strategic planning ⁴ , ⁵ . The SFCTA also completed the SoMa Vision Zero Freeway Ramp Safety Study. The ConnectSF Streets and Freeway Strategy identified priorities for addressing key challenges within the freeway network and is an input to SFTP 2050. ⁶			
Identify the next generation transit network priorities for BART, Caltrain, and Muni	Through ConnectSF, the Transit Strategy provides a vision for regional and local bus, rail, and ferry and is an input into SFTP 2050.7 Caltrain developed the Caltrain Business Plan to define how the Caltrain service and corridor should grow and change in the future.8			
Consider all options for delivering projects	Caltrans, in partnership with the SFCTA, successfully delivered Presidio Parkway as a Public Private Partnership. The TJPA, in collaboration with funding partners, is exploring delivery options for the DTX by modeling best practices for governance. The SFMTA is pursuing a joint development method for Potrero Yard and the SFCTA is delivering the Westside Bridges using the Construction Manager/General Contractor process to adapt early construction related learnings. There have also been challenges with project delivery (e.g., Van Ness Improvement Project and Central Subway), resulting in significant delays and cost increases. The SFCTA is leading an effort to recommend project delivery best practices for major capital projects, in coordination with other city agencies.			

- 2 https://www.sfcta.org/funding/one-bay-area-grant-program
- ${\tt 3} \quad https://www.sfcta.org/projects/treasure-island-transportation-program$
- $4 \quad https://www.sfcta.org/sites/default/files/2019-03/FMCS_PH2_Report_FINAL_1.pdf$
- 5 https://www.sfcta.org/projects/101280-express-lanes-and-bus-project
- 6 https://connectsf.org/wp-content/uploads/FINAL_SFS_Report.pdf
- 7 https://connectsf.org/transit-strategy/
- 8 https://caltrain2040.org/

In addition to making progress in the policy recommendations, new needs arose in the areas of emerging mobility and climate since the last major SFTP update in 2013. The city was able to fund additional efforts to advance:

- Emerging mobility and technology: San Francisco worked to understand the impacts of Transportation Network Companies (TNCs) such as Uber and Lyft, which provide ridehail service, on the transportation system through a series of analysis and reports including TNCs Today,¹ TNCs & Congestion,² TNCs & Land Use,³ and TNCs & Disabled Access.⁴ Proposition D,⁵ a voter approved ordinance that collects a tax on fares charged to rides provided by TNCs, autonomous vehicles (AVs), and private transit services passed in 2019. The city also adopted 10 guiding principles⁶ for new mobility in San Francisco and is actively advocating at the state and federal level to ensure autonomous vehicles support long term transportation goals.
- Climate: The city adopted the 2021 Climate Action Plan, which is a roadmap for meeting the City's emissions reduction goal to have net-zero emissions by 2040.7 The Climate Action Plan lays out a path to meet this goal with interventions in five sectors: energy supply, building operations, transportation, housing, responsible production and consumption, and healthy ecosystems. The Department of Environment, the SFCTA, the SFMTA, and the San Francisco Planning Department collaborated to develop the transportation strategies and actions. The SFCTA provided analytical support to forecast the effectiveness of the transportation strategies.

- 1 https://www.sfcta.org/projects/tncs-today
- ${\tt 2} \quad https://www.sfcta.org/projects/tncs-and-congestion$
- ${\tt 3~https://sfplanning.org/sites/default/files/documents/citywide/TNCs-land-use/TNC_Land_Use_Study_2022.pdf}$
- $4 \quad https://www.sfmta.com/sites/default/files/reports-and-documents/2019/05/tnc_and_disable_access_whit_paper-rev11_2.pdf$
- 5 https://www.sfcta.org/funding/tnc-tax
- 6 https://www.sfcta.org/policies/emerging-mobility#panel-guiding-principles
- 7 https://sfenvironment.org/climateplan#The%20Plan

SFTP 2050 Plan Development

REGIONAL TRANSPORTATION PLAN ALIGNMENT

Plan Bay Area (PBA 2050) is the long-range transportation plan for the San Francisco Bay Area – the regional equivalent of the SFTP.¹ PBA 2050 demonstrates how the transportation network and land use development can work together to reduce greenhouse gas emissions and create more complete, livable, and sustainable communities with sufficient affordable housing, more transportation choices, and easier access to vital services and amenities. The SFCTA coordinates San Francisco's input to PBA 2050, including the list of specific transportation projects and programs to be included in the PBA 2050's transportation investment strategy. Inclusion of projects and programs in PBA 2050 is a prerequisite for receiving state and federal transportation grants, as well as a requirement for securing a project's federal environmental document approval.

The SFCTA works closely with the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), which lead the regional process, to ensure consistency between PBA 2050 and the SFTP. Because SFTP 2050 follows regional guidelines, the draft Investment Plan and its project priorities served as San Francisco's primary input into the PBA 2050 update, adopted in October 2021.

Through PBA 2050, the SFCTA and partners advocated for inclusion of critical regional and local priorities such as the Muni and BART Core Capacity projects, local safety and transit reliability improvements, the Downtown Extension of Caltrain, and the Pennsylvania Avenue Extension.

EMERGING FROM CONNECTSF

ConnectSF is San Francisco's multi-agency long range planning effort to build an effective, equitable, and sustainable city. There are three phases in ConnectSF to establish a long-term transportation vision, understand needs, identify recommendations, and plan to support future implementation. The three phases of ConnectSF are shown in Figure 2 below. SFTP 2050 is part of Phase 3:

1 https://www.planbayarea.org

Figure 2: ConnectSF Phases of Work

Vision

ConnectSF Vision

PHASE 2

Needs

Transit Strategy

Streets and Freeways Strategy

PHASE 3

Plans & Priorities

San Francisco Transportation Plan

Transportation Element of San Francisco General Plan

- Phase 1 began by asking, as a city, where have we been, where are we now, and where do we want to go. A vision for San Francisco emerged through extensive community engagement that was guided by five goals: equity; economic vitality; environmental sustainability; safety and livability; and accountability and engagement. The ConnectSF Vision has been used to guide the subsequent phases.
- Phase 2 developed a Statement of Needs, which described
 San Francisco's pre-pandemic conditions and future needs that
 would arise without transportation investments. Phase 2 also included
 the Transit Strategy and Streets and Freeways Strategy, which offer
 strategic direction for the future transit system and major streets and
 freeways within San Francisco.
- Phase 3 includes plans that support future implementation of transportation investments – the SFTP defines investment priorities, and the Transportation Element of the General plan codifies transportation policies.

CONNECTSF VISION

The vision that emerged from Phase 1 of ConnectSF was one of a growing, diverse, and equitable city. Participants in the outreach process envisioned a transportation system with many reliable ways to get around that are available and affordable to all. This multifaceted transportation system would be planned and built in a timely manner – a result of strong civic and government engagement.

As part of ConnectSF, the SFTP and builds on previous efforts and uses the ConnectSF goals, shown in Figure 3 below.

Figure 3: ConnectSF and SFTP Goals



EOUITY

San Francisco is an inclusive, diverse, and equitable city that offers high-quality, affordable access to desired goods, services, activities, and destinations.



ECONOMIC VITALITY

To support a thriving economy, people and businesses easily access key destinations for jobs and commerce in established and growing neighborhoods both within San Francisco and the region.



ENVIRONMENTAL SUSTAINABILITY

The transportation and land use system support a healthy, resilient environment and sustainable choices for future generations.



SAFETY AND LIVABILITY

People have attractive and safe travel options that improve public health, support livable neighborhoods, and address the needs of all users.



ACCOUNTABILITY AND ENGAGEMENT

San Francisco agencies, the broader community, and elected officials work together to understand the City's transportation needs and deliver projects, programs, and services in a clear, concise, and timely fashion.

SFTP OUTREACH

ConnectSF was informed by a robust, continuous outreach process that included focus groups, online surveys, and targeted outreach to community-based organizations. The SFTP brought together the community outreach findings and feedback collected throughout ConnectSF and sought additional community priorities through a multilingual online survey, meetings with community based organizations, and townhall events. The SFTP survey and events were promoted through partnerships with community based organizations. The project team spoke with groups across the city, prioritizing community groups in Equity Priority Communities. In total, there were over 500 survey responses and 15 community meetings. See Appendix E for additional information. The 2022 Transportation Expenditure Plan Outreach Process also supported the development of the SFTP 2050.¹ This process particularly focused on low-income communities, communities of color, and monolingual communities across the city, to help advance the SFCTA's equity framework.

¹ https://www.sfcta.org/sites/default/files/2022-02/Enclosure%201_Reauthorization_Outreach_Summary.pdf

Through the public outreach process, the project team heard investment themes that were used to guide the prioritization of discretionary revenues and policy themes to guide policy initiatives.

Investment Themes include:

- Transit investments are important to expand service to pre-pandemic levels and improve reliability
- Street safety is important across the city to reduce conflicts and collisions that harm the most vulnerable road users
- There is a need to start considering the next generation of transportation projects, including new major rail and freeway transformations, to plan for and accommodate future growth in San Francisco

Policy Themes include:

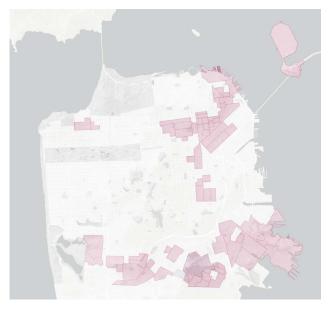
- The need to improve personal security by addressing actual and perceived safety risks on city streets and on transit to promote a greater sense of safety and encourage non-vehicular travel
- Equity and affordability are important across all modes to reduce barriers for low-income residents
- The need to improve project delivery and accountability and to create a more transparent planning process
- The need to create a more integrated regional transit system to make trips easier and more reliable

TRANSPORTATION CHALLENGES

The ConnectSF Streets and Freeways Strategy and the Transit Strategy documented San Francisco's needs and identified solutions to overcome challenges and advance ConnectSF goals. The SFTP brings together these two strategies and prioritizes funding for projects and programs which address San Francisco's most pressing challenges, outlined below.

The SFTP also recognizes that transportation needs can vary between neighborhoods.¹ San Francisco uses a designation called Equity Priority Communities for neighborhoods with high levels of households that could be considered disadvantaged or vulnerable (Figure 4). The SFTP considers outcomes for these neighborhoods alongside citywide outcomes.

Figure 4: San Francisco Equity Priority Communities



EQUITY PRIORITY COMMUNITIES

The Metropolitan Transportation Commission (MTC), the Bay Area's regional transportation planning agency, has designated a set of census tracts as Equity Priority Communities (EPCs). EPCs include census tracts that either have both a concentration of people of color and low-income households or have a concentration of low-income households and three of the remaining six factors - people of color, low incomes, limited English proficiency, zero-vehicle households, seniors 75 years and older, people with disabilities, single parent families, or cost burdened renters.

In San Francisco, vulnerable communities are often located in the same census tracts with more affluent neighborhoods. Because of this proximity, the SFCTA conducts an analysis similar to the MTC's at a more fine-grained level to capture San Francisco's EPCs more accurately, shown in Figure 4.

¹ https://www.sfcta.org/sites/default/files/2021-09/SFCTA_Equity-Assessment-for-New-Sales-Tax-Expenditure-Plan_2021-09-17_FINAL.pdf

Infrastructure Maintenance and Rehabilitation

Keeping the existing transportation system in a state of good repair is essential to providing safe and reliable transportation options for residents, workers, and visitors in San Francisco and the region. The SFMTA has a state of good repair backlog that requires replacing obsolete equipment and strengthening our critical infrastructure and facilities to handle the increased demands of San Francisco's continued growth. The SFMTA's 2020 State of Good Repair Report' highlights the critical need to address a backlog in vehicle, facilities, and guideways maintenance. Keeping the transit system in a state of good repair is essential to support safe and reliable transit service. Deferred maintenance not only decreases service reliability but increases maintenance costs to keep old assets functional. Regional transit operators serving San Francisco such as BART and Caltrain also lack the budget to replace, repair, and rehabilitate assets in a timely fashion. This has led to a significant backlog in necessary repairs and manifests itself as an increased frequency of breakdowns, including elevators, faregates, and tracks, resulting in less reliable transit service.

San Francisco recently achieved a city goal by raising the average pavement condition of city roads. Newly repaired and resurfaced pavement benefits all road users from bicyclists to motorists to bus riders. In addition, maintaining roads in a timely fashion, before they fall into poor condition, is less costly. Ongoing investment is needed to maintain this good pavement status and to ensure other roadway infrastructure such as signs, signals, sidewalks, and bicycle facilities are maintained.

Transit Service and Reliability

Transit service levels and ridership demand declined dramatically at the beginning of the pandemic. The ridership demand that remained was overwhelmingly travelers reliant on transit for basic mobility, not the traditional downtown-centric commute, underscoring the lifeline role that transit plays for these populations. Although regional rail service has been restored to near pre-pandemic level and some Muni bus routes have fully recovered or exceeded their pre-pandemic ridership, especially during weekend/off-peak periods, overall ridership demand remains significantly below 2019 levels despite substantial restoration of service hours. The pandemic also caused a steep drop in revenue associated with reduced ridership. BART, Caltrain, and the SFMTA all suffered significant losses in fare revenues and parking fees. In addition, for the SFMTA, the steep drop in daily commuters and visitors, as well as tourists, also led to significant declines in other revenue sources from parking garage revenues to General Fund support. During fiscal years 2021 and 2022, this drop in revenues was mitigated by federal covid relief funds. When federal relief funds are exhausted in 2025, the SFMTA risks entering a continuous cycle of service cuts, reduced ridership, and further reductions in revenues that lead to more cuts, unless additional

¹ https://www.sfmta.com/sites/default/files/reports-and-documents/2021/07/7-20-21_mtab_item_17_state_of_good_repair_-_report.pdf

funding sources are secured. Regional transit systems such as BART and Caltrain are faced with similar dynamics. The situation is such that the MTC, the nine-county Bay Area's federally designated metropolitan planning organization, has identified finding solutions to avert the transit fiscal cliff a top priority for its state and federal legislative advocacy in the upcoming legislative session.

Even prior to the pandemic, the SFMTA had a growing structural budget deficit. Transit fares and parking revenues declined as a share of the overall budget, from 58% in 2013 to 47% in 2018. During this period, deficits were filled by one-time sources as escalating costs outpaced revenues. Solving this structural problem and expanding transit service will be critical to sustaining essential transportation services, reducing transit crowding, and serving communities reliant on transit.

Safety

In 2014, San Francisco adopted a Vision Zero policy and set the goal of eliminating traffic deaths by 2024. Currently, Vision Zero includes education programs, street improvements, focused enforcement of the most significant causes of traffic fatalities, and ongoing evaluation. While the framework is robust, more progress is needed to meet this goal: In 2021, there were 27 traffic-related deaths in San Francisco.

Inefficient Use of Limited Street Space

Street space in San Francisco is limited and, in the future, streets need to move more people and goods through the same space there is today. About 45% of all trips to, from, and within San Francisco are made by driving, and roughly half of these are drive alone trips. The city needs to manage this valuable public resource to make transportation options accessible and affordable to all.

Climate and Emissions

The world is in a climate crisis. San Francisco's climate goals include achieving net zero emissions by 2040. Private transportation makes up almost half of the city's greenhouse gas emissions, most coming from cars and trucks.¹ To meet these goals, transit, walking, biking, and carpooling need to be more convenient for more people. This is especially true for local trips. Currently, more than 40% of car trips in San Francisco are three miles or less. Improvements to transit reliability and street safety can help people chose transit, walking, and biking more often. While the SFMTA has one of the greenest transit fleets, doing its part to switch to zero emission buses involves significant costs with procurement of new vehicles and the retrofit and construction of maintenance facilities for the new fleet.

¹ https://sfenvironment.org/sites/default/files/cap_fulldocument_wappendix_web_220124.pdf

ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Transportation is San Francisco's biggest source of greenhouse gas emissions. San Francisco's Climate Action Plan sets a target to achieve net-zero emissions citywide by 2040 and highlights the need for significant investments throughout our transportation and land use efforts to reach the climate goals. It also sets a goal to have 25% of all registered vehicles be electric vehicles (EVs) by 2030 and 100% by 2040. At the state level, California's Advanced Clean Cars II rule sets a path for 100% of new cars and trucks sold in California to be electric vehicles by 2035.

The City needs to advance local policies and investments to make this possible, while at the same time working to shift as much travel as possible to transit, walking, and biking. To support the transition to EVs for those who need to drive, the city needs more infrastructure to ensure the widespread availability of electric charging and establish programs and policies to improve affordability of owning and maintaining these vehicles in place of internal combustion engine vehicles. In a dense urban environment where many residents live in multi-unit buildings, one challenge is that a significant share of drivers do not have off-street parking and will require charging opportunities elsewhere. The cost of this infrastructure is beyond the funding ability of local revenue sources. The city needs to encourage private investment while at the same time seeking regional, state, and federal funding opportunities to expand EV charging infrastructure.

Repairing Harms and Reconnecting Communities

Past investments in San Francisco's freeways and major roads have displaced communities and divided neighborhoods, many of which are historically low-income and communities of color. These freeways and roads are now significant paths of travel but remain transportation barriers in the neighborhoods where they are located, contribute to poor air quality, and create safety challenges, especially for people walking and biking. As efforts advance to redesign our streets, the city needs to work with communities to repair the harms created by past investments through concepts that combine transportation and land use opportunities. Repairing past harms will require extensive community engagement to identify and shape transformative projects across the city.

COVID-19 PANDEMIC CONTEXT

The SFTP 2050 was developed during unprecedented times when travel behaviors, San Francisco's transit network, and the transportation funding ecosystem all changed because of the pandemic. Congestion precipitously dropped early in the pandemic but has gradually returned and now rivals 2019 levels in some areas. The congestion patterns are different than before the pandemic began. For example, in the AM peak period, freeway speeds have declined since shelter-in-place orders but remain above pre-pandemic speeds. However, this is not true everywhere. The Bay Bridge, I-80, Central Freeway, and northbound US-101 are more congested than they were before the pandemic in both the AM and PM periods. In the PM peak period, freeway congestion has returned to pre-pandemic levels, and the Bay Bridge, I-80, and parts of northbound US-101 are more congested. Arterial speeds remain slightly higher than pre-pandemic levels.

In early 2020, transit ridership across the region dropped drastically because of the pandemic, and transit service was reduced. As San Francisco began to gradually reopen from shelter-in-place orders, the SFMTA Muni service was increased with a focus on serving communities most dependent on transit and essential workers and ridership began to gradually rise. Though federal COVID-relief funding helped avoid mass layoffs and worse service cuts, staffing shortages and structural budget deficits have kept transit service from being restored to pre-pandemic levels. By September 2022, Muni ridership reached about 57% of pre-pandemic ridership, with some lines exceeding 2019 levels.

During this same time, San Francisco was able to make quick progress on transit priority projects to improve speed and reliability along critical bus routes while expanding the active transportation network to create space for people to safely walk and bike.

Regional rail operators (BART and Caltrain) also reduced service early in the pandemic to match employee availability and passenger demand. These regional railways have high fixed costs. Reduced service led to somewhat reduced operational expenses, but not enough to offset the agencies' lost fare and parking revenues. Federal COVID-relief funds helped sustain regional transit service and avoid layoffs. As the region began to reopen, BART and Caltrain restored service on these systems close to pre-pandemic levels to attract back ridership. Ridership levels have increased, but remain far below prepandemic levels. By September 2022, BART weekend ridership ranged from 60 - 70% of pre-pandemic projections, while weekday ridership reached 38%. By July 2022, Caltrain monthly ridership reached about 25% of prepandemic ridership. Both agencies, like the SFMTA, are facing fiscal cliffs with respect to operations funding, when the federal relief funds run out as soon as 2025. The fiscal cliff means that all three operators will not have sufficient operating funds to continue providing current service levels, and will need to make service cuts unless new funding is identified after federal relief funds run out.

The SFTP recommendations were developed during this time of dramatic change. As the pandemic and transportation funding circumstances continue to evolve, the plans and recommendations developed in the SFTP 2050 will guide investments to support equitable recovery and advance the city's transportation goals. The SFTP is updated every four years, which provides the chance to make refinements and account for new and emerging issues and opportunities.

TRANSPORTATION FUNDING

The SFTP Investment Plan includes about \$80 billion in revenues for transportation in San Francisco through 2050, including about \$2.8 billion in anticipated new federal, state, and regional funds consistent with assumptions in the region's PBA 2050. Most of this revenue (about 85%) is already committed to specific projects and purposes like local streets operations and maintenance, the Mission Bay Ferry Landing, and programs like transit operations. About 15% of the expected revenues are discretionary, meaning that there is flexibility in how they can be invested to improve the transportation system. The SFTP captures these commitments and, through the Investment Plan, proposes how to invest the discretionary revenues most effectively to make progress toward our goals.

The SFTP also includes a Vision Plan because the transportation needs are greater than the expected revenues for transportation. The Vision Plan imagines how to get closer towards city goals with significant new revenue sources. The Vision Plan totals about \$95 billion. It assumes all of the Investment Plan revenues and layers on an additional \$15 billion in potential new revenue sources. The plan does not specify what these new revenue measures should be, but they could be a combination of local, regional, state, and federal revenues. The Investment Plan and Vision Plan allocate the discretionary revenues based on the priorities identified through public outreach, technical analysis, and known city and regional priorities.

Figure 5 compares transportation revenues assumed in the Investment Plan and Vision Plan. Figure 6 shows the revenue sources. Most of the revenues are local, which are increasingly important for leveraging regional, state, and federal funding opportunities.



Figure 5: Committed, discretionary, and vision revenues in the SFTP, in Billions of Dollars, 2020

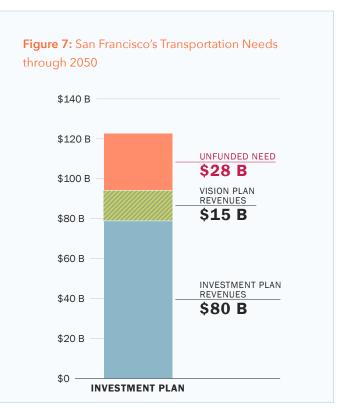


Appendix B includes the assumptions used to estimate expected revenues in more detail.¹ All revenues are shown in 2020 dollars.

The transportation needs exceed the revenues in the SFTP. For example, if all discretionary revenues were put towards transit maintenance, there would still not be enough revenues to eliminate the maintenance backlog. The SFTP includes more needs than just transit operations, which means that revenues need to be spread across all of the various needs to advance transportation goals.

UNDERSTANDING OUR NEED

The SFCTA issued a call for projects to all the transportation agencies and departments that serve San Francisco. This call asked for all capital and operating funding needs for the 2021 - 2050 period. Agencies were asked to draw on operating budgets, capital plans, PBA 2050 project lists, and other planning documents to provide this information. SFCTA staff compiled this information to inform the development of the Investment Plan and Vision Plan for the SFTP 2050, as well as the 2022 Transportation Expenditure Plan.



Recommendations

SFTP PROGRAMS AND PRIORITIES

Investments in complementary projects and programs will be needed to address San Francisco's transportation challenges and realize the ConnectSF vision. The key contribution of the SFTP is a description for how to prioritize expected, anticipated, and potential new revenues through 2050. The SFTP presents two funding plans: the Investment Plan and the Vision Plan. The Investment Plan matches expected and available revenues to future investments, and the Vision Plan demonstrates how additional potential new revenues could be used to further fund outstanding transportation needs.

The SFTP built on previous phases of ConnectSF, including the vision and goals, the Transit Strategy, and the Streets and Freeways Strategy. It also built on community engagement, known goals and priorities, including San Francisco's Climate Action Plan, Transit First Policy, community-based plans, regional transit capital and operating plans, and other agency transportation plans. Input from all these sources was used to define priorities for strategic investment.

Based on these inputs, the below guiding principles were used to develop the Investment Plan, each with a focus to address known transportation inequities:

- Invest to maintain transportation infrastructure in overall good condition and reduce the maintenance backlog to improve safety and reliability
- Invest to improve transit reliability and efficiency, particularly on the busiest lines
- Invest in core capacity and rail modernization to allow for more frequent and reliable Muni and BART train service and improve safety across the system
- Invest in street safety improvements across the city
- Invest in the walking and bike network to close gaps and improve connections to transit

The additional revenues in the Vision Plan will enable further progress toward the SFTP goals. Based on outreach findings and known transportation goals and priorities, the below guiding principles were used to guide investments for the additional Vision Plan revenues:

 Increase funding levels for Muni operations to meet or exceed prepandemic service levels

- Support Muni transit reliability and metro modernization by focusing on state of good repair
- Invest in street safety for all travelers
- Advance transformative transportation projects to add rail capacity and reconnect communities and repair past harms of past investments in our major roads and freeways

The 2022 Transportation Expenditure Plan – a proposed 30-year continuation of San Francisco's existing half-cent transportation sales tax to 2053 – would help implement the SFTP by making up a portion of the discretionary revenues that are used to leverage federal, state, and other revenues. To maintain consistency between these two efforts, the SFTP organizes the investment categories by the same categories used in the 2022 Transportation Expenditure Plan, plus one additional category for transit operations. These categories are summarized below.

- Major Transit Projects includes transit reliability, speed and capacity capital improvements to support local and regional operators providing more frequent bus and rail service, running longer trains, and extending Caltrain in San Francisco.
- 2. Transit Maintenance and Enhancements includes transit maintenance, rehabilitation, and replacement of local and regional transit infrastructure serving San Francisco, and enhancements such as stop/station access improvements, new stations, and planning for the next generation of transit projects.
- 3. Paratransit includes door-to-door van, taxi, and other transportation services for seniors and people with disabilities who are unable to use fixed route transit service.

NEXT GENERATION REGIONAL PROJECTS AND INITIATIVES

Partner transportation agencies are advancing projects and initiatives that the city supports but whose costs aren't accounted for in this plan's funding envelope. Most are in the early stage of development, with only preliminary cost, schedule, scope details, and significant funding gaps. This includes major projects such as Link21, which will include a new transbay passenger rail crossing between Oakland and San Francisco; the Bay Skyway project, which will construct a bicycle and pedestrian pathway on the west span of the San Francisco-Oakland Bay Bridge; the regional express lane network; the expansion of BART to Silicon Valley; and the California High Speed Rail project.

PBA 2050 also includes regional initiatives consistent with the SFTP's objectives, such as the implementation of all-lane tolling on Bay Area freeways; regionwide transit fare integration; and the expansion of commute trip reduction and clean vehicle initiatives. The SFCTA will continue to coordinate with sponsors of these projects and policy initiatives and evaluate San Francisco's future role in their implementation as additional details emerge.

- 4. Streets and Freeways includes pedestrian and bicycle safety and traffic calming, maintenance, rehabilitation and replacement of road infrastructure, streetscape improvements, freeway safety, and operational improvements. Expansion of the active transportation network is also included.
- 5. Transportation System Development and Management includes neighborhood and equity planning to create a pipeline of projects across the city and Transportation Demand Management strategies that include cost-effective projects that support shifting when, how, and where people travel.
- 6. Transit Operations includes transit operations for Muni and San Francisco's share of regional transit services, except for Muni paratransit operations, which is shown in a separate category.
- 7. Existing Obligations includes remaining balances on Prop K grants and debt services.

SFTP INVESTMENT AND VISION PLAN

Figure 8 and Table 3 present SFTP investment categories with the total need, Investment Plan funding, and Vision Plan funding. See Appendix A for more details of the needs and investment levels.

About \$2 billion of the new local/regional discretionary revenue in the Vision Plan is set aside as a placeholder for transit operations/transit capital investments. This allows flexibility for this future new revenue to be put towards transit operations to further increase service levels, transit capital maintenance and rehabilitation to improve reliability, and/or to capital projects to further expand bus or rail in San Francisco. The SFCTA will continue to work closely with local and the regional stakeholders to identify which new revenue sources to pursue and when and how to best allocate the resources.

Figure 8: Investment Categories, Total Needs, and Investment Levels, in Billions of Dollars, 2020



 Table 3: SFTP Investment Categories, Total Needs, and Investment Levels, in Billions of Dollars, 2020

NAME	DESCRIPTION	NEED (B)	INVESTMENT PLAN (B)	VISION PLAN (B)	
Major Transit Projects	Funding for Muni reliability and efficiency projects in addition to major system enhancements and capacity expansions such as BART and Muni Core Capacity and the Caltrain Downtown Extension	\$14.15	\$10.37	\$10.37*	
Transit Maintenance and Enhancements					
Transit Maintenance Rehabilitation and Replacement	Vehicles, guideways, and facilities maintenance for Muni, BART, and Caltrain	\$20.85	\$9.39	\$14.37*	
Transit Enhancements	Customer-facing improvements that promote system connectivity, accessibility, and improve transit service experience for riders	\$6.51	\$1.49	\$1.49*	
Paratransit	Door-to-door van, taxi, and other transportation for seniors and people with disabilities who are unable to use fixed-route transit service	\$1.27	\$1.27	\$1.27	
Streets and Freeways					
Maintenance, Rehabilitation and Replacement	Funding to prevent the deterioration of roadways and maintain pavement, sidewalks, signs, signals, and bike lanes	\$8.76	\$2.79	\$3.44	
Safe and Complete Streets	Programmatic improvements to the transportation system to make it safer for all road users, to help achieve Vision Zero, and to expand the active transportation network	\$7.43	\$2.10	\$3.05	
Freeway Safety and Operational Improvements	Improvements to the freeway network to improve transit speeds and promote carpooling, improve safety for all travelers at on- and off-ramps, and improve connectivity	\$1.26	\$0.49	\$0.74	
Transportation System Development and Management					
Transportation Demand Management	Cost-effective projects intended to shift trips to more sustainable modes like transit, walking, and biking, and to shift travel to less congested times	\$2.86	\$2.82	\$2.82	
Transportation, Land Use, and Community Coordination	Citywide and community-based planning to improve equity-focused planning and identify transportation improvements that support increased housing density in existing low-density neighborhoods.	\$1.18	\$1.18	\$1.18	
Transit Operations	Local and regional transit operations and fares, plus the extension of the SFMTA's Free Muni for Youth program through 2050	\$57.75	\$46.47	\$52.93*	
Existing Obligations	Existing Prop K sales tax debt obligations	\$0.55	\$0.55	\$0.55	
Total		\$124.63	\$78.9	\$92.2	

^{*} Programs where about \$2 billion of the new local/regional discretionary revenue in the Vision Plan is set aside as a placeholder for transit operations/transit capital investments could be allocated

The following pages show what specific achievements that San Francisco could see from the Investment Plan and Vision Plan. Achievements are organized by categories in the table above.

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Core Capacity and Transit Priority

From Major Transit Projects in Table 3

The Investment Plan funds the SFMTA's Muni Metro Modernization/ Subway Modernization Program and BART's Core Capacity Program – packages of strategic investments that will safely and reliably move more people along San Francisco's rail system. Upgrades to both the Muni and BART train control systems and facilities will allow both agencies to run more frequent trains; the SFMTA will be able to run longer trains. These upgrades will reduce transit crowding and increase frequency and reliability along San Francisco's rail network.

The SFTP also funds transit priority on streets with the busiest bus lines.¹ Improvements include transit-only lanes, signal improvements to reduce the time buses wait at red lights, and transit stop improvements like longer and accessible boarding islands.



Mission Bay Ferry Landing

From Transit Enhancements in Table 3

The Investment Plan fully funds a Mission Bay Ferry Landing, which will provide regional ferry service to and from the Mission Bay, Potrero Hill, and Dogpatch neighborhoods with an estimated capacity of 6,000 passengers per day. The landing will alleviate current regional transportation crowding, provide transportation resiliency in the event of an earthquake, BART or Bay Bridge failure, or other unplanned events, and will reduce San Francisco's carbon footprint.



Downtown Rail Extension

From Major Transit Projects in Table 3

The Investment Plan fully funds the Downtown Rail Extension, which will extend Caltrain and future California High-Speed Rail service from the existing 4th and King railyard to the newly constructed Salesforce Transit Center. The project will ultimately connect 11 Bay Area transit systems from San Francisco to the East and North Bays, and the Peninsula and South Bay, providing a one-seat ride from the Bay Area to Los Angeles through the California state rail system.

1 https://connectsf.org/transit-strategy

SAN FRANCISCO TRANSPORTATION PLAN 2050

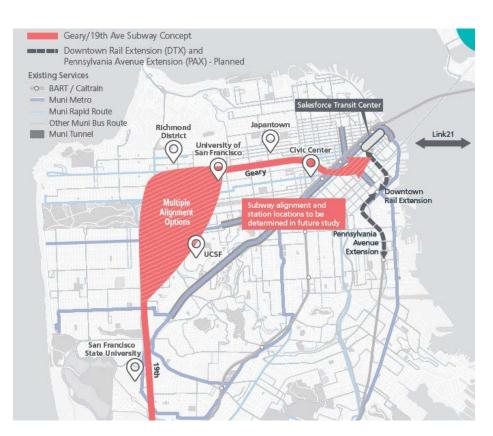
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Southeast Caltrain Station

From Transit Enhancements in Table 3

The Investment Plan fully funds a new Caltrain station in the Bayview neighborhood which will restore regional rail service that was lost when the Paul Avenue station closed in 2005. The new station will ensure Bayview residents have better access to the regional transit system and benefit from planned investments in high-speed rail and the Downtown Rail Extension.



Next Generation Transit

From Transit Enhancements in Table 3

The SFTP Investment Plan funds preliminary planning work and has room for implementation for San Francisco's next generation of transit investments envisioned in San Francisco's Transit Strategy, including a subway line on Geary and 19th Avenue, a new transbay rail crossing (Link 21), and an extension of the Central Subway to Fisherman's Wharf. Additional investments in preliminary planning and implementation could be made in the Vision Plan, depending on how the potential \$2 billion in local/regional discretionary revenue that is set aside a placeholder for transit operations/transit capital investments is allocated.



Repaving

From Street Maintenance in Table 3

The SFTP Investment Plan funds ongoing street maintenance, which will maintain San Francisco's recently attained 10-year pavement quality goal and improvements and upgrades to signs, signals, and pavement markings. Well-maintained streets are less expensive to repair. Road maintenance and repairs also support safe and efficient travel for all street users and reduce vehicle repair costs and transit vehicle maintenance costs.

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Safe Routes to Schools

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From Safe and Complete Streets in Table 3

The Investment Plan and Vision Plan maintain and expand the San Francisco Safe Routes to School program. This program aims to make walking and bicycling to school safer and more accessible for all children through educational programming and infrastructure improvements around school sites.



Vision Zero and Pedestrian Safety

From Safe and Complete Streets in Table 3

San Francisco adopted a Vision Zero policy in 2014, committing to build better and safer streets, educate the public on traffic safety, enforce traffic laws, and adopt policy changes that save lives. The Investment Plan and Vision Plan fund investments to make streets safe and address the leading causes of serious injuries and death on our roadways. Improvements include about 200 miles of improvements to the pedestrian and bike network, new crosswalks, curb ramps, traffic calming to slow speeds, and complete streets efforts to create dedicated space for transit, walking, and biking.



Vision Zero Ramps

From Freeway Safety and Operational Improvements in Table 3

The Investment Plan funds near-term safety improvements to freeway on- and off-ramps where they intersect with local streets. These investments will improve safety for all road users and can help close gaps in the walking and biking network. New and upgraded traffic signals, pavement markings, crosswalks, and sidewalk extensions are examples of Vision Zero ramp improvements.

1 Streets and Freeways Strategy and Active Transportation Study; https://connectsf.org/about/resources-and-media

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Managed Lanes on Freeways

From Freeway Safety and Operational Improvements in Table 3

Managed lanes (e.g., carpool lanes and express lanes) allow for more efficient use of the freeway network by moving more people in fewer vehicles along San Francisco's congested freeways. The Investment Plan includes funding for managed lanes along portions of I-280 and US-101, plus capital improvements for new express buses that can reduce driving trips, increase transit reliability, and enhance travel options for underserved communities.



Downtown Congestion Pricing

From Transportation Demand Management in Table 3

The Investment Plan funds a congestion pricing program with the goals of getting traffic moving, improving safety, improving air quality, and advancing equity by improving health and transportation for historically underinvested communities. The congestion pricing program uses a means-based system to charge drivers a fee to drive into congested areas of northeast San Francisco during the most congested times. Revenues from the program are reinvested into the transportation system to increase transit service to the downtown core with 170 new local and regional bus trips and 15 light rail trips daily, improve pedestrian and bicycle connectivity and safety, and repair streets within the pricing zone.



Treasure Island Transportation Program

From Transportation Demand Management in Table 3

By 2036, the Treasure Island neighborhood will grow by up to 8,000 homes, 27% of which are affordable, housing more than 20,000 new residents and bringing tens of thousands of new trips to and from the Island each day. The Investment Plan funds a comprehensive transportation program for the Island, creating a means-based toll for vehicle trips on the Island, an affordability program to ensure transportation options are affordable and accessible to all residents, and many sustainable transportation options for new and existing residents to meet the Island's transportation goal to have at least 50% of trips made by walking, biking, bus, and ferry.

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Neighborhood and Equity Priority Transportation Programs

From Transportation System Development and Land Use in Table 3

The Investment Plan funds the SFCTA's Neighborhood Transportation Program which supports neighborhood-scale transportation planning and provides local match to advance plan recommendations in each supervisorial district. Neighborhood transportation plans establish a pipeline of grant-ready projects throughout the city that reflect community priorities, such as street safety, mode shift, transit accessibility, and mobility. Similarly, the Investment Plan creates a new Equity Planning Program to fund community-based planning in Equity Priority Communities and equity studies citywide, with matching funds to implement recommendations.



Free Muni for Youth

From Transit Operations in Table 3

The SFMTA Free Muni for Youth is a pilot program that allows free trips on Muni to all youth 18 years or younger regardless of household income with no application required. The pilot will conclude in 2024 based on current funding. The Investment Plan funds this program through 2050.



Transit Operations

From Transit Operations in Table 3

The Investment Plan funds Muni light rail service in San Francisco to operate at 2019 investment levels. Muni bus service is funded to the equivalent of 2022 investment levels. The Vision Plan includes potential new revenues to help meet the regional transit operating needs and increase Muni transit operations investment levels beyond 2019 levels. Additional investments to further fund Muni transit operations could be made to in the Vision Plan, depending on how the potential \$2 billion in local/regional discretionary revenue that is set aside a placeholder for transit operations/transit capital investments is allocated.

INVESTMENT PLAN BENEFITS

To understand the benefits of our investments, the SFCTA evaluated the impacts of the SFTP 2050 investment scenario through a technical modeling process. Key metrics from the SFTP Investment Plan scenario compare a future year 2050 scenario, with and without the SFTP Investment Plan projects and programs.

MODEL SCENARIO DETAILS

The SFTP Investment Plan impacts on transportation goals are estimated and evaluated with The San Francisco Chained Activity Modeling Process (SF-CHAMP). The future year (2050) baseline allows for a comparison of the SFTP investments. The future year baseline includes future growth represented by the MTC's PBA 2050 land use projections; transit service represented by summer 2022 Muni transit service, 2019 BART frequencies, and Caltrain post-electrification service; and projects that will soon be open or are already fully committed. The Investment Plan scenario has identical land use assumptions to the baseline scenario, all projects in the baseline scenario, and additional projects which can be funded through the Investment Plan detailed

in Appendix A. The Vision Plan was not modeled because many of the vision investments are not projects that can be captured in the transportation model. The full modeling methodology and results can be found in Appendix C.

The SFTP also conducted an equity evaluation to measure the impacts of the Investment Plan on each Equity Priority Community area. This analysis, detailed in Appendix D, provides insight into equity impacts of the Investment Plan. It found that Investment Plan projects address many of the needs of equity priority communities.

Taken together, and despite the significant financial challenges triggered by the pandemic, the investments outlined in the SFTP will create positive impacts in San Francisco and advance ConnectSF goals. Planning for our next generation of transportation investments will require additional revenues to implement. Figure 9 shows how the SFTP investments, rooted in ConnectSF goals, support positive outcomes for San Francisco.

Figure 9: Investment Plan Impacts



The SFTP Investment and Vision Plans will:

• Fund safer streets with over 200 miles of pedestrian and bike improvements. Street safety investments will advance a range of Vision Zero priorities such as traffic calming, Safe Routes to School, and pedestrian improvements like sidewalk extensions and crosswalks. Investments in safer streets will advance equity by reducing the rates of traffic violence, which disproportionately affect seniors, people with disabilities, and people of color. Safety improvements are especially critical to advancing equity in San Francisco because a disproportionate number of the city's least safe roads are located in Equity Priority Communities.¹

 $^{1\} https://www.visionzerosf.org/wp-content/uploads/2021/11/VZSF_AS_111021_spreads-FINAL.pdf$

- Maintain smooth streets through regular and timely maintenance. Keeping streets smooth and in good condition benefits all travelers. Plan investments include the maintenance, replacement, and/ or upgrade of sidewalks, signs, signals, and pavement markings (including crosswalks and bike lanes) to support safety and accessibility. The Investment Plan funds street maintenance for San Francisco to maintain the current average pavement quality of 75, or "good", through 2050. Smooth streets are less expensive to repair and reduce the amount of maintenance required for both private and public transit vehicles, which can burden low-income households.
- Support reliable, accessible transit by funding both operations and capital improvements to make the transit system operate more reliably, safely, and efficiently. Transit capital maintenance is essential to a functional system. Capital improvements such as Muni Forward transit priority enhancements and Core Capacity improvements for BART and Muni will reduce crowding and improve transit reliability. The Investment Plan further advances equity by funding Paratransit operations and Free Muni for Youth.
- Reduce congestion and improve accessibility with investments to use street space more efficiently and prioritize transit. These investments would lead to an 8% increase in job access by transit. Residents of Equity Priority Communities in many parts of the city would see an even greater benefit than the city average. Transit priority on the busiest bus lines, where transit is currently mixed with general traffic, and Downtown Congestion Pricing would improve transit speeds by 15% citywide, dropping transit commute times and saving transit commuters about seven hours per year; commute times would also fall for people who drive. Transit commute times would improve most for San Francisco's low-income residents.
- Improve air quality by shifting some trips away from driving and to other modes. The Investment Plan would reduce the daily vehicle miles traveled of San Francisco residents by an average of 4%. Equity Priority Communities that currently have elevated health risks due to exhaust and pollution in their neighborhoods would benefit from fewer vehicles traveling through their neighborhoods. The reduction in vehicle miles traveled and investments to electrify the transit fleet and ferries will help reduce greenhouse gas emissions in the city.

Vision Plan

Though the Investment Plan is a robust funding strategy that will deliver tangible transportation improvements for San Franciscans, there are additional needs beyond what can be funded with the Investment Plan. The Vision Plan includes about \$15 billion in additional, new revenues. While the types of revenues are not specified, there would likely need to be some combination of new local, regional, state, and/or federal revenues, some of which would likely need voter approval. Appendix A includes a detailed list of the revenue allocation in the Investment Plan and Vision Plan.

The Vision Plan builds on the Investment Plan and describes the investment priorities for potential new revenues to close gaps and further advance transportation goals. Like the Investment Plan, the Vision Plan recommends how potential funds be allocated based on city, regional, and community priorities. See pages 27-31 for an overview of how revenues in the Vision Plan are prioritized and how San Francisco can benefit from the SFTP 2050 investments. The additional revenues would provide:

- Additional funding for transit operations to close funding gaps for San Francisco's share of BART and exceed pre-pandemic investment levels for Muni.
- Additional investment to reduce the capital maintenance backlog for all operators – BART, Caltrain, Muni – to improve transit reliability and safety.
- Additional investment in pedestrian safety improvements, including traffic calming, new street signs and signals, an expansion of the Safe Routes to School program, and additional investments to expand and close gaps in the pedestrian and bike network.
- Further advancement of transformative transportation projects to the transit system and to our major streets and freeways.

About \$2 billion of potential new revenues in the vision plan is set aside as a placeholder for Muni transit operations or maintenance, and capital investments that further advance the next generation of transit projects. This allows flexibility for this future new revenue to increase transit service levels, reduce the transit maintenance backlog to improve reliability, and/or to capital projects to further expand bus or rail in San Francisco. The SFCTA will continue to work closely with local and regional stakeholders to identify which new revenue sources to pursue and when and how to best allocate the resources.

Policy Initiatives

In addition to the projects and programs advanced in the Investment Plan and Vision Plan, the SFTP identifies policy initiatives for further study and advancement. These policy initiatives address transportation trends and larger needs that require further exploration and advancement to strengthen investment priorities and their impacts on transportation goals. Some of the policy initiatives identified are continued from SFTP 2040 and some are new for SFTP 2050.

Transit

Transit Funding for Operations and Maintenance

The available revenues in the SFTP cannot meet the long-term needs for transit operations and maintenance. It has been the case for previous SFTPs and previous versions of PBA 2050 that costs to maintain the transit system in a good condition (e.g., where assets are replaced at the end of their useful life and regularly maintained) outpaced available revenues. This forced prioritization of certain investments, typically urgent needs like bus and train replacement and track repair, while other preventative or lifecycle maintenance needs were partially addressed or deferred. Of note, this SFTP cycle is the first time the SFTP could not identify sufficient operations funding to maintain or grow transit service levels from the base year over the life of the plan. Significantly lower ridership demand and corresponding loss of fare revenue, declines in other key revenues like parking revenues, and increased operating costs have created unprecedented financial deficits for all transit operators in the region. BART, Caltrain, the SFMTA, and other operators are all facing an estimated \$2-billion five-year transit fiscal cliff for operations when federal relief funds that kept agencies afloat during the pandemic run out as soon as 2025.

Underfunding vehicle and infrastructure maintenance will lead to less reliable service. The Investment Plan provides funding for fleet replacement and guideway and facility improvements for all transit operators. Local funds prioritized for this purpose will leverage significant regional and federal monies. The Vision Plan provides additional revenues to further close the funding gap. However, it is not enough to fully fund all of the maintenance needs. The SFCTA will continue to collaborate with the SFMTA, regional transit operators, and MTC to seek additional funding to maintain transit infrastructure in a state of good repair.

With respect to transit operations, the SFTP Investment Plan can maintain 2022 funding levels to Muni and San Francisco's share of 2019 regional rail operations investments, leaving inadequate funds to meet anticipated increases in costs (such as operator pay raises or supply chain impacts) or to expand service hours beyond current levels, with the exception of existing commitments such as the Central Subway. New funding will be needed just to maintain current transit service levels in the long term. This creates

financial obstacles to improving service to underserved communities and addressing future transit crowding. Regional rail ridership demand is recovering slower than local bus and metro service. Compared to local bus service, regional rail service is less conducive to downscaling to meet lower demand and the available budget given the relatively high fixed costs of providing service. It is clear that additional local and regional funding, along with state and federal transit operating support, will be needed to sustain the level of transit services needed to meet the region's climate targets and other goals. MTC has made seeking transit operation funding a top legislative priority for the upcoming session.

Beyond the need to secure new funding to just maintain current operating budgets, additional new funding will be necessary to increase transit service hours to meet or exceed pre-pandemic levels, reduce crowding, and support future growth. The SFTP Equity Analysis (Appendix D) can be used to understand how new transit funding can help meet the needs of Equity Priority Communities and parts of the city where there is more limited transit frequency, access, or service (like the west side). Additionally, if new stable sources of revenues for transit operations can be secured, they may have the potential to reduce the dependency on fare revenues for transit operations and could support expanded transit affordability programs in the future.

Given the unprecedented changes brought about by the pandemic and the still-evolving travel patterns and financial conditions, it will be critical for local and regional transit agencies to continue to closely monitor conditions, track system performance, and update cost and ridership projections. That data can be used to revise service operating plans to best serve the public and to help prioritize capital maintenance and enhancements. The SFCTA can support these efforts through travel demand forecasting, data collection, and analysis.

Regional Transit Coordination

As the city and region grow and seek to meet climate goals, the Bay Area needs to continue efforts to improve coordination among its 27 regional transit operators to create a more connected and customer-focused system with easier transfers and integrated fares. This has been the focus of a number of recent regional efforts that the SFCTA, the SFMTA, and other regional transit agencies have been engaged in, stemming from MTC's convening of the Blue Ribbon Transit Recovery Task Force in 2020, and the approval of the region's Transit Transformation Action Plan in 2021. The Action Plan outlines several areas for the region to improve transit connectivity in the near term: integrated transit fare and transfer policies; universal mapping and wayfinding; and bus transit priority on roadways. The region is also studying whether to designate an entity to serve as a network manager, tasked with performing centralized planning, implementation, and oversight of regionwide transit system coordination. Work is currently underway to advance these initiatives, as is a two-year pilot of BayPass. This single pass will provide about 50,000 Bay Area residents free access to

all bus, rail, and ferry services in the nine-county region, with the exception of special event services.¹ Some of these areas, in particular fare integration and transfer policies, warrant pilots to evaluate effectiveness and cost impacts. Expanding these policies will likely require a significant, ongoing new revenue source. Looking forward, the city supports these important efforts but also wants to ensure that the tradeoffs are well understood, that there are not negative budget impacts for San Francisco transit operators, and that the SFMTA sees its fair share of new revenue in light of the city's historic high level of investment in transit subsidies (e.g., discounts and keeping fares low) and large share of low-income and transit-dependent riders, which contrasts with many other Bay Area transit systems with relatively little local operating subsidies. In the meantime, since the beginning of the pandemic, the region's transit operator chief executives and staff have been meeting weekly to coordinate and improve the rider experience by providing unified and transparent communication to build confidence in the transit network, making riding transit easier and more affordable, improving connections to make riding between operators easy and convenient, providing real time information for riders, improving the paratransit experience, and planning for a more connected network to improve mobility.

The Transit Transformation Action Plan also calls for the development and adoption of a Bay Area Connected Network Plan to include transit service and hub categories, core service networks, funding requirements, and next steps. MTC plans to kick off the next update to the regional transportation plan, PBA 2050, in 2023 and proposes to integrate the Connected Network Plan into that work. The city will engage with this planning work, ensuring that the needs of San Franciscans are represented in this network planning and that future investments in the city's transit system are fully funded in the plan.

Safety

Street Safety

Vision Zero was adopted in 2014 with a goal to eliminate traffic fatalities by 2024. At the end of 2021, there were 27 traffic fatalities on San Francisco's streets. A comprehensive street safety strategy will help to mitigate high speeds and near misses across the city and reduce the likelihood of crashes, while an update to the High Injury Network will identify specific corridors with a history of collisions. The Streets and Freeways Strategy outreach process revealed that preferences for specific traffic safety improvements vary throughout the city (see Appendix F). Community engagement will be an important aspect to identify immediate and long-lasting street safety mitigations that reflect community transportation needs.

1 https://mtc.ca.gov/news/clipperr-baypass-sets-sail-unlimited-transit-access

To further support safety efforts, the city should continue to advocate for the authority to use speed cameras¹ for enforcement, which requires state legislation, in particular on streets with a higher share of vulnerable users, such as near schools, commercial areas, and locations that serve seniors and disabled persons. Implementation of speed cameras should be paired with community engagement to ensure that the use of cameras is designed to address equity, affordability, and privacy concerns.

Personal Security

During public outreach, community members often raised concerns about personal safety while taking transit. Though reported crime on Muni² is below historic levels,³ perceptions of safety risks are heightened, particularly for women and the Asian American and Pacific Islander community. BART and Muni are expanding ambassador programs and surveillance and planning new equity and safety initiatives to reduce harassment on transit. Improving personal security will require upgrading transit facilities and the public realm to create active spaces with more eyes on the street. The SFTP includes investments in safety elements like lighting, security cameras, and elevator attendants. In addition, investments in Muni bus shelters across the city would not only help create consistency in transit facilities across the city, but also would help address personal security concerns for all travelers and improve equitable transit access.

Neighborhood Planning and Equity

The 2022 Transportation Expenditure Plan includes a subcategory of Transportation, Land Use, and Community Coordination to begin this work. This includes dedicated funding for equity planning within San Francisco. Programs in this category fund community-based planning for each supervisorial district, underserved neighborhoods and areas with vulnerable populations (e.g., low income communities, seniors, children, and/or people with disabilities), citywide equity evaluations and planning efforts, and transportation efforts to support increasing housing density in existing, primarily low-density neighborhoods.

These investments create a pipeline of grant-ready projects across the city that reflect community priorities. Improved coordination between transportation and land use planning will bring new opportunities to provide more reliable and efficient transportation options for all people regardless of how they travel, paired with new land use opportunities for community priorities to address past displacement, prevent future displacement, and address negative impacts of major streets and freeways like poor air quality and safety.

- 1 https://www.sfmta.com/projects/speed-safety-cameras
- 2 https://www.sfmta.com/reports/sfpd-reported-muni-related-crimes-100000-miles
- 3 https://sfgov.org/scorecards/transportation/crimes-muni

Transportation Demand Management

Planning for Mode Shift

As a result of the pandemic, travel patterns are changing in San Francisco and the region. Congestion on city streets dropped in early 2020 but has increased steadily as people return to work and the tourism industry recovers.¹ By June 2022, the number of vehicles crossing the Bay Bridge was within 5% of pre-pandemic levels, despite workfrom-home rates remaining high. As the region continues to recover and employees return to San Francisco, vehicle trips will reach pre-pandemic levels. Transit ridership, however, has not recovered as quickly, with ridership at about 50% of pre-pandemic levels (see the pandemic discussion on 20).

Though congestion is returning, travel patterns have shifted away from the downtown core, though it remains a major activity hub, with more employees working from home. Even before the pandemic, an increasing number of jobs and services were located outside the downtown financial district, yet much of San Francisco's transit system reflects a historic focus on bringing people to daytime jobs downtown. San Francisco's transportation systems need to adapt to changing travel patterns.

Transportation Demand Management (TDM) is a systematic approach to shift how, when, and where people travel through programs and policies. TDM is an effective tool that San Francisco and other cities use to address the rise in congestion associated with population and job growth. TDM was included as a policy initiative in the SFTP 2040 and is included in long-range plans for cities across the country because it is a proven tool to decrease the dependence on driving and maximize the efficiency and effectiveness of the transportation system.

The Climate Action Plan sets a goal to have 80% of trips in San Francisco be made by non-driving modes by 2030.² The SFTP Investment Plan will help shift modes across the city through capital investments and policy initiatives such as TDM. Of trips to, from, and within San Francisco on a typical pre-pandemic weekday, 45% are taken by driving modes, and roughly half of those are drive-alone trips. Of trips entirely within the city, about 40% are taken by driving modes. More than half of those driving trips are under two miles in length. For trips less than one mile, there are more than 10 times as many driving trips as there are bike trips. These short driving trips present an opportunity for TDM strategies to shift neighborhood-based driving trips to more environmentally friendly options.

To support more strategic investments in TDM, the SFTP recommends that San Francisco establish a vision and measurable goals for the future TDM strategy

- 1 https://covid-congestion.sfcta.org
- 2 https://sfenvironment.org/sites/default/files/cap_fulldocument_wappendix_web_220124.pdf

to guide development, implementation, and monitoring; identify priority geographic areas, trip types, travel markets, traveler types, and success metrics to guide program selection and implementation details; and provide guidance for how to incorporate ongoing evaluation to track impacts on modeshift and cost effectiveness and guide future TDM investments.¹

Equity-Focused Pricing and Incentives

Equity-focused pricing and incentives charge a fee to drivers who can afford it, provide discounts and exemptions for those who can't, and include incentives for choosing non-driving options that can help reduce the overall cost of transit. Pricing efforts are being considered at the state, regional, and local level because of the proven effectiveness in reducing congestion, addressing climate risks, and generating sustainable revenue sources to fund transportation programs. San Francisco will continue to actively participate in these broader discussions to provide city input. Within the city, San Francisco is evaluating pricing efforts with a deliberate focus on equity to ensure the benefits of these programs bring transportation benefits to the low-income households and equity priority communities and not burden these populations.

BAY AREA REGIONAL PRICING EFFORTS

At the regional level, a strategy calling for the implementation of per-mile, all lane tolling on congested freeways with transit alternatives was adopted by MTC as part of PBA 2050, with the primary objective of reducing greenhouse gas emissions in the region to state-mandated targets. MTC is currently engaged in pre-implementation work, including its Next-Generation Bay Area Freeways Study, a multi-pronged effort to explore freeway pricing mechanisms and complementary strategies through a robust technical and public engagement process. This study is expected to conclude in 2023 and recommend potential pathways for implementation.

Pricing strategies reduce vehicle trips by more directly linking the cost or impact of driving to the decision to make a trip. The Investment Plan and Vision Plan advance various pricing programs including on Treasure Island, downtown congestion pricing, and transportation demand management programs like parking management and transportation incentives like rewards for using non-driving options.

Equitable road pricing programs can reduce private vehicle trips and traffic congestion to allow the limited road and freeway space to be used more efficiently. The implementation of a successful program would allow transit vehicles to move more quickly and reliably and reduce travel times for people who must or choose to continue to drive and would otherwise be traveling on congested roadways. Pricing programs can also help to reduce emissions, traffic fatalities, and serious injuries, and wear and tear on the roadways.

1 See Appendix G – TDM White Paper

While rising housing costs in the Bay Area have forced some low-income households to relocate out of well-connected urban neighborhoods to suburbs that are farther from employment opportunities, equitable pricing programs can mitigate the economic impacts by charging different rates for low-income households. In addition, pricing programs can integrate incentives such as credits for transit, walking, biking, and carpooling and can use generated revenues to fund investments that improve travel choices such as expanded and more frequent transit.

Pricing programs can also serve as a more sustainable revenue source to replace or supplement the existing gas tax model for funding transportation. Historically, gas taxes were meant to capture revenues to pay for maintenance and repair of roads and highways that gas-powered vehicles were driving on. They are easy to administer, and the cost of the tax is "hidden" in the consumer's overall cost of purchasing gas at the pump. However, over time, road maintenance costs increased at a far greater rate than the state and federal gas taxes. Further, the gas tax has become a declining revenue source as the fuel efficiency (e.g., miles per gallon) of vehicles improved and more electric and other clean fuel vehicles hit the roads. California's Advanced Clean Cars II rule, approved in 2022 by the California Air Resource Board, sets a path for 100% of new cars and trucks sold in California to be electric vehicles by 2035, further emphasizing the decline of the existing gas tax.1

For these reasons, governments across the country (e.g., Washington, Oregon, and New York) and in Europe have become increasingly interested in the potential for a road user charge (RUC) as a more sustainable revenue source to replace or supplement the existing gas tax model. RUCs are designed to have drivers pay to maintain the roads based on how much they drive rather than how much gas they purchase.² With new technologies allowing more accurate tracking of driving behavior and offering easier options for administration, road pricing programs can more directly identify where roadway usage is taking place (e.g., in a congested area/time of day), charge drivers accordingly, and direct revenues to impacted locations. While the State of California is specifically studying how an RUC could replace the existing gas tax model as a major source of road funding, gas taxes may still have a role to play as a disincentive for fossil fuel consumption and to fight climate change.

Project Delivery

Capital Project Delivery

To support effective delivery of transportation improvements described in the SFTP, the SFCTA led an effort in collaboration with city agencies to uncover barriers to efficient project delivery for major capital projects, identify opportunities for improvement,

- 1 https://ww2.arb.ca.gov/news/california-moves-accelerate-100-new-zero-emission-vehicle-sales-2035
- 2 See Appendix G Road User Charge White Paper

increase collaboration across stakeholders, and improve accountability.¹ Case studies, workshops, and surveys of key project staff have culminated in the Transportation Capital Projects Delivery Study and a series of recommendations that San Francisco can use to effectively deliver projects over the life of this plan.

Preliminary recommendations include establishing a Capital Projects Management office, strengthening the processes used for cost estimation, investing in right-of-way certification and utility investigation programs, expanding interdepartmental risk reviews, and facilitating structured collaborative partnering.²

The city also recognizes that construction projects can pose challenges for businesses that are located adjacent to work sites. In 2017, the Board of Supervisors established the Construction Mitigation Program to help businesses overcome negative impacts caused by nearby construction projects led by public agencies. In addition to mitigation funding, the program recommends that projects include outreach to businesses and provide on-site staff during construction to resolve concerns that arise. It is important that the city continue to proactively plan projects and their construction to minimize their negative effects and support surrounding businesses. More sustainable and continued funding is needed for this program.³

BART/Muni Shared Station Facility Maintenance

There are six rail stations in San Francisco that are shared between BART and Muni. Certain aspects of station capital maintenance and customer-facing enhancements are the shared financial responsibility of both operators, while others are independent. Maintaining these stations in good condition, improving safety and security, increasing accessibility, and making enhancements to wayfinding and other station features are part of ensuring that transit is safe, convenient, and reliable. To this end, because the SFCTA funds station improvements at shared stations, the SFCTA will work with BART and the SFMTA to develop a mid- to long-range set of capital project priorities for the shared San Francisco stations and an accompanying funding strategy. Closer, more proactive coordination and shared station improvement plans can make it easier to secure funding for projects in a timely fashion and can lead to lower costs, fewer customer facing impacts of construction and implementation, enhanced connectivity, and a more pleasant customer experience.

New Mobility and Autonomous Vehicles

New transportation technologies can fundamentally change the way residents and visitors get around San Francisco. The SFCTA and the SFMTA adopted guiding principles for new mobility in 2018 to serve as a framework for evaluating these services

- 1 https://www.sfcta.org/blogs/lessons-learned-approach-improve-delivery-large-scale-transportation-projects
- 2 https://www.sfcta.org/blogs/lessons-learned-approach-improve-delivery-large-scale-transportation-projects
- 3 See Appendix G Construction Mitigation White Paper

and technologies, identifying ways to meet city goals, and shaping future areas of studies, policies, and programs.¹

Recently, autonomous vehicle (AV) development and testing has picked up momentum. AVs are vehicles that can operate without a human driver, to varying degrees. As of 2022, there are 49 AV companies with permits from the California Department of Motor Vehicles (DMV) to test on public roads in California. Between November 2020 through November 2021, there were over 4 million miles driven by AVs in California, 78% of which was by only two companies.² However, the future of AV technologies and business models is deeply uncertain. How AVs are used in San Francisco and their potential effects depends on further development of the technology, federal and state regulatory actions, consumer adoption, costs of ownership, safety, accessibility, and impacts of the transportation system.

Automated vehicle safety is regulated at the federal level, but operational regulations are primarily set at the state level. In California, regulations are set by the California DMV and the California Public Utilities Commission who have permitting authority over automated driving and its use for passenger services. San Francisco has little regulatory control over where, when, and how AVs may operate. However, through pilot programs and other efforts, San Francisco may be able to gain insights into how AV deployment may be shaped by local plans and policies (e.g., San Francisco's curb and parking management plans). These insights may help shape the near-term and long-term work program, policy development, and investment priorities of the SFCTA, as well as other city agencies.

The availability of AVs could have a range of potential effects on San Francisco's transportation system, built environment, and residents, workers, and visitors. If AVs become more widely adopted, they may change individual travel behaviors and choices, street safety, environmental performance, land use decisions, local workforce, and the availability of travel options to underserved communities.³ It is important that if AVs become more widely used, they support San Francisco's transportation goals and policies (e.g., Climate Action Plan and Transit First Policy). Based on the potential risks that AVs could have on the local transportation system and the lack of authority to regulate these vehicles at a local level, the following efforts are suggested for further study as potential ways to mitigate negative impacts: continue to participate in AV regulatory proceedings at the state and federal level; continue to engage with AV developers, AV service providers, other stakeholders, and the public; assemble and analyze data to understand how the AV market evolves and to assess impacts on congestion, transit, environment,

- 1 https://www.sfcta.org/policies/emerging-mobility#panel-guiding-principles
- 2 2021 Autonomous Mileage Reports and 2020-21 Autonomous Mileage Reports (driverless). DMV. https://www.dmv.ca.gov/portal/vehicle-industry-services/autonomous-vehicles/disengagement-reports/
- 3 See Appendix G AV WHITE PAPER

equity, etc.; provide insights to decision-makers on the AV impacts at a local level to encourage collaboration between the city and AV industry at the highest level; and identify and implement policies and investments that can mitigate the potential increases in vehicle travel, such as pricing-based strategies such as congestion pricing, VMT fees that are being discussed at the state level, on-street priority for walking, biking, and public transit, and curb management strategies.

Climate and Resilience

Resilience efforts in San Francisco center sea level rise, earthquakes, natural disasters, and other climate-related risks. The SFCTA completed a review of current climate resiliency planning efforts in San Francisco to explore ways it can support climate change adaptation, mitigation, and resilience of the transportation network through the SFTP. This research focused on identifying needs and opportunities related to transportation infrastructures' resilience to sea level rise and other natural hazards such as flooding and seismic events.

Staff documented many resiliency efforts in the city that include the development of transportation projects. The transportation-related projects typically fall under one of two types: 1) projects that protect transportation infrastructure or 2) larger resilience projects that also provide opportunities to rethink our built environment to provide more transportation benefits. While most of these resiliency efforts are still in initial stages, three efforts for Ocean Beach,¹ Islais Creek,² and The Embarcadero Waterfront Resilience Program³ are the farthest along and identify specific projects that will need funding in the next several years. Beyond these major efforts, other resilience needs can be addressed through state of good repair efforts like repaving and subway improvements.

In understanding funding opportunities, research found that oftentimes resilience projects are funded by a variety of funding sources beyond those considered in the SFTP or PBA 2050. More recently, though, there has been more momentum to fund transportation-specific resilience projects. One such funding source is the Infrastructure Investment and Jobs Act's Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) program through which California is expected to receive \$630 million over the next five years. The California Transportation Agency is currently deciding how these funds will be distributed. The 2022 state budget also included \$400 million for climate adaptation projects that support climate resiliency and reduce infrastructure risk.

As part of the continued resilience planning happening in the city, the Office of Resilience and Capital Planning is leading an effort to update the City's Capital Plan for San Francisco

- 1 https://sfplanning.org/ocean-beach
- 2 https://sfplanning.org/project/islais
- 3 https://sfport.com/wrp

to include climate resilience. The Capital Plan update, which will be complete by early 2023, will better identify the transportation-related resiliency projects that are most needed in the years to come, and San Francisco can position itself to take advantage of the new transportation resilience funding opportunities as they become available. Until then, priority efforts for San Francisco include continued planning, needs assessment, program development, and identification of funding for resiliency projects related to Ocean Beach, Islais Creek, and The Embarcadero Waterfront Resilience Program efforts.

Monitoring and Reporting

Performance measurement is one of the SFCTA's statutory functions in its capacity as Congestion Management Agency, and as administrator of the Prop K half-cent transportation sales tax. The SFCTA will focus on performance tracking and evaluation in the following areas, spanning the monitoring of system needs and trends, project delivery, and project effectiveness. This work can also inform many of the previously mentioned strategic initiatives.

SYSTEM PERFORMANCE

Through biennial monitoring at the Congestion Management Agency (CMA), the SFCTA will track and provide information to the public on changes in congestion on San Francisco's major streets and freeways; transit ridership, speeds and reliability; bicycle and pedestrian counts; collision data; etc. Regular monitoring will help keep the city on track to meet long-term transportation goals and understand whether progress is being made. The SFCTA will also develop performance indicators that allow targets to be set for future SFTP updates.

DEMOGRAPHICS AND TRIP-MAKING TRENDS

During the pandemic, the SFCTA created the COVID-Era Congestion Tracker to understand how travel patterns associated with recovery impact the transportation network. The SFCTA will continue to monitor post-pandemic travel patterns and how recovery impacts the transportation system. As the CMA, the SFCTA will also continue to monitor demographic and travel behavior trends including remote work trends, and the effect of new growth on the transportation system.

DOCUMENTING THE COST EFFECTIVENESS OF TRANSPORTATION INVESTMENTS

The SFCTA will work with implementing agencies to evaluate the effectiveness of new projects and programs to inform future project prioritization and scoping, especially in the areas of transit speed and reliability, travel demand management, pedestrian and bicycle safety, and traffic calming. The 2022 Transportation Expenditure Plan increases the available revenues to conduct this work.

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150 BUILDING PROGRESS Program Overview

5-Years in the **Building Progress Program** continues to lead in innovative project delivery, resilient planning and community outreach.

The SFMTA launched the Building Progress Program in Fall 2017.

Modernize aging SFMTA facilities in order to meet the needs of everyone who travels in San Francisco

Improve the transportation system's resiliency to seismic events, climate change, technology changes Make the SFMTA a better neighbor in the parts of the city that currently host our facilities

State of Good Repair

Resiliency

Community

BUILDING PROGRESS Program Overview

Core programs and initiatives currently include the following.

Modernization Program

Muni Metro East Expansion Potrero Yard Modernization Presidio Yard Modernization Kirkland Yard Modernization

Electrification Program

Woods Chargers Pilot Project
Battery Electric Bus (BEB)
Facility Master Plan

Cable Car Barn Program

Cable Car Barn Improvements
Cable Car Barn Master Plan

Joint-Development Program

4th and Folsom
Parking Garages
Surface Parking Lots
Yard Modernization

Capital Program

Burke Rehabilitation
Presidio Lifts & Scott Lifts
1200 15th Street PCO HQ
Station Escalators
Operator Restrooms

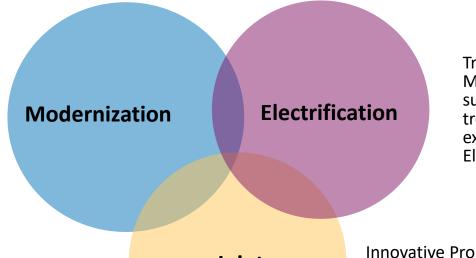
Facility Condition Assessment (FCA) Program

Implementation of \$200+ million in deferred maintenance and repairs

152 BUILDING PROGRESS Modernization Program

The **Building Progress Modernization Program** is a \$2 billion+ capital program designed to meet the current and future facility needs of the SFMTA.

Modernization of Muni operational workspaces and maintenance equipment for growth and resiliency.



Transformation of Muni Yards to support both the trolley fleets and expansion to Battery Electric Busses.

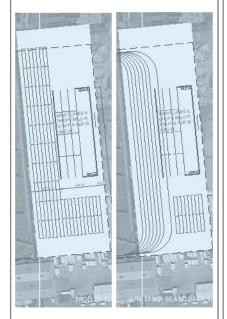
Joint Development

Innovative Project delivery to finance Muni capital, maintenance and operations into the future.

BUILDING PROGRESS Modernization Program

MME

Rebuild as multi-level trolley and motor coach facility with private development above



Project at 100% design

Potrero

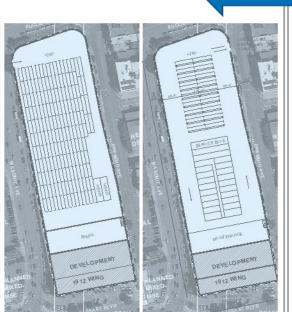
Rebuild as multi-level trolley and motor coach facility with private development above



Predevelopment Agreement Phase

Presidio

Rebuild as multi-level trolley and motor coach facility with private development adjacent



Planning/Site Programming

Kirkland

Modernize as a new Zero Emission Bus Facility



Planning

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BUILDING PROGRESS

Potrero Yard Modernization Project



A LOOK AT POTRERO YARD



102,000

Muni riders rely on buses from Potrero Yard every day. (~14% of Muni riders)

Existing Facility

2 levels of transit	138 buses	16 bus bays	391 employees (245 operators)
			٠,

Future Facility

3 213 buses bu	17 829 employees (383 operators)
----------------	----------------------------------



Potrero Yard was built to serve 100 street cars. Today it serves 136 trolley buses for eight routes. In many of the maintenance bays the ceiling is too low to do roof repairs indoors or lift buses to repair them from below.

Potrero Yard Modernization Project

Core Transportation Objectives

Rebuild and modernize Potrero Yard **by 2026**Provide infrastructure for **battery electric buses**Improve **safety and working conditions** for the SFMTA workforce

Consolidate functions for **efficiencies** (Training + Street Operations)

Site/Housing Objectives

Enhance architecture and urban design
Enhance streetscape to ensure public safety and reduce conflicts
Maximize housing, including at least 50% affordable and up to 100% affordable

Commitment to:

A responsible public investment
Inclusive and transparent stakeholder engagement
Leadership in sustainability

156 BUILDING PROGRESS

Potrero Yard Modernization Project

On Nov 1, 2022, the SFMTA Board of Directors approved awarding the final Potrero Yard Modernization Project Pre-Development Agreement (PDA) to the selected developer team and partners:

- Lead Developer: The Potrero Neighborhood Collective, LLC
- Plenary Americas US Holdings Inc. is the sole equity member



- Affordable Housing Developer: Mission Economic Development Agency, Young Community Developers, Inc., and Tabernacle Community Development Corp.
- Housing Developer: Presidio Development Partners, LLC and Tabernacle Community Development Corp.
- Design Consultant: IBI Group, Y.A. studio
- Construction Management Consultant: Plant Construction Company, L.P., The Allen Group LLC
- Infrastructure Facility Management Consultant: WT Partnership

BUILDING PROGRESS Potrero Yard Modernization Project

The project is being developed and constructed as a **Design-Build-Finance-Maintain (DBFM) project**.

- PDA phase will entail development and negotiation of the final project agreement with developer team to construct, operate, and maintain the facility
- Long term payments begin after substantial completion as "availability payments" in the SFMTA operating budget. These will be for 30-years, after an initial payment set in the final project agreement.
- During the PDA Phase, the Lead Developer is required to include a "fixed budget limit"

The **Fixed Budget Limit** is the maximum anticipated sum for the design and construction costs for the Bus Yard and the SFMTA's prorata share of:

- the design and construction costs for the Common Infrastructure,
- the SFMTA's pro rata share of the Infrastructure Maintenance Costs
- The pro rata share predevelopment costs

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BUILDING PROGRESS

Potrero Yard Modernization Project

The **Fixed Budget Limit can be modified during the PDA phase** – terms are included in the final PDA Agreement.

- The current fixed budget limit is \$391.6 million – this is not the final complete project cost.
- Changes may occur if:
 - The SFMTA changes the technical requirements (scope)
 - There are unknown conditions
 - Changes to applicable laws
 - Adjustments to budget allowances
 - Adjustments to construction escalation and insurance.

Budget Allowance guidelines were included and will be priced during the PDA Phase. These include:

- Construction Escalation
- Insurance Costs
- Items requiring additional design or development
- Emerging technology
- Iterative designs

BUILDING PROGRESS

Potrero Yard Modernization Project – Technical Proposal

BUS YARD

Three levels plus mezzanine above ground floor, partial basement, approx. ~600,000 gsf, satisfying operations and maintenance requirements

HOUSING

The proposed housing development consists of a total of 575 units, approx. ~500,000 gsf, 100% of which meet the definition of affordable housing in the project's technical requirements.

The proposed housing consists of **four (4) separate housing elements:**

- Low income (3): Three of these housing elements are designated as low-income housing (for households at 80% of AMI or below) and divided as follows: a senior housing element containing approximately 96 units which face Bryant Street, and two family housing elements that each contain approximately 90 to 100 units and are situated above the bus yard along the western portion of the project.
- Moderate income (1): The fourth element is moderate income housing (for households at 81% to 120% of AMI), containing approximately 280 units which are situated above the bus yard along the eastern portion of the project. This proposed housing is subject to any modifications made pursuant to the change provisions in the PDA.

COMMERCIAL

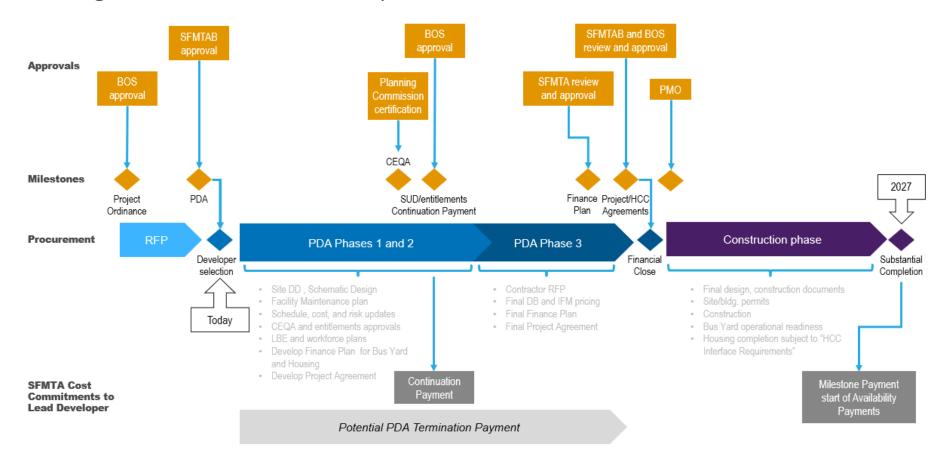
Community uses intended for small businesses and community uses, approx. ~10,000 gsf

160

BUILDING PROGRESS

Potrero Yard Modernization Project -- Program Overview

The critical path after approval of the PDA, is to advance toward certification of the Environmental Impact Report (EIR) and entitlements. First, we will spend a few weeks building the team with our selected partner.







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2022 High Injury Network Update

November 2022







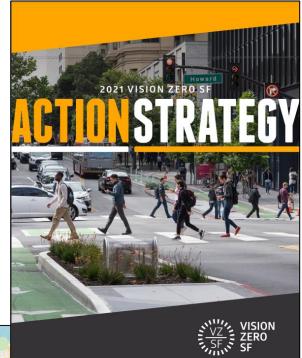
High Injury Network: 2011-Present

- **2011:** Original *Pedestrian High Injury Corridors* using Statewide Integrated Traffic Records System (SWITRS), 2005-2012
- 2015: Pedestrian, Cyclist and Vehicle High Injury Corridors combined to create the Vision Zero High Injury Network
- 2017 present: Vision Zero High Injury Network updated using DPH's Transportation Injury Surveillance System (TISS) using 2013-2015 severe and fatal crashes
- Planned update for 2020 using 2016-2019 severe and fatal crashes from TISS was delayed due to COVID-19 pandemic

High Injury Network: Uses to Date





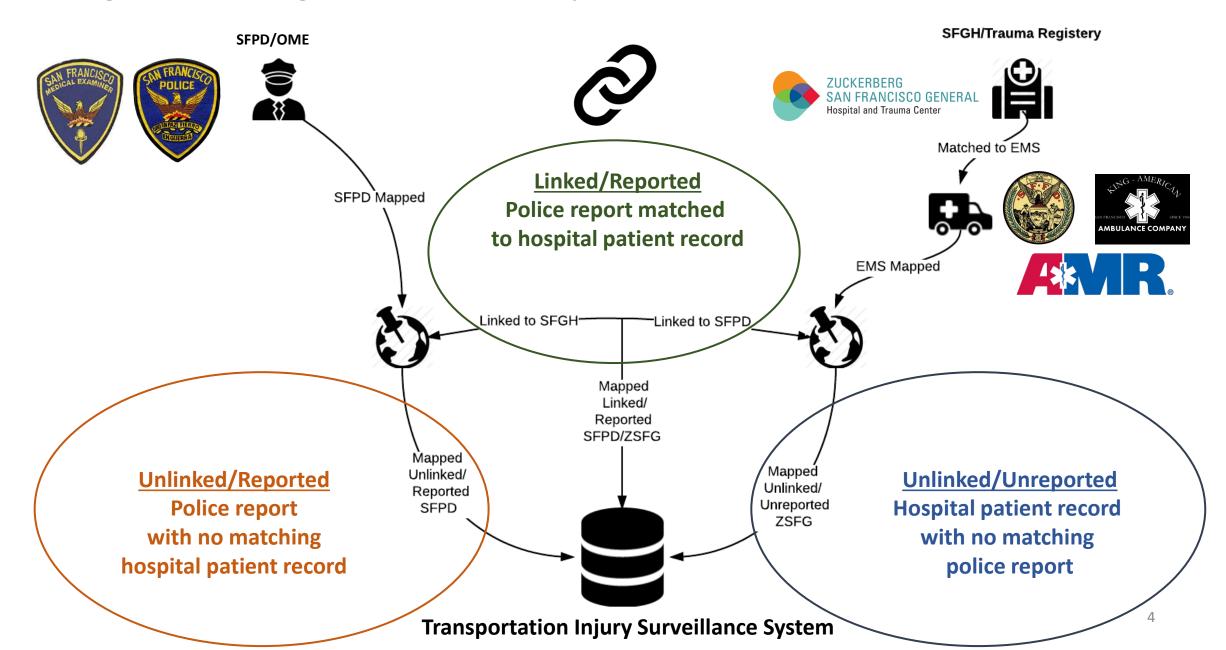








Linking Zuckerberg SF General Hospital and Police Data



What is Counted Counts: Findings from 2013-2015 TISS Linkage

"Transportation-injured ZSFG-treated patients lacking police reports were more often cyclists, male, Hispanic or Black, and less often occupants of motor vehicles compared to those with injuries captured only in police reports."

"Police reports were **significantly less likely to record individuals as Hispanic** (16%, p<0.0001) compared to medical records (20%)."

"Police officers were **significantly more likely to classify injuries as severe** or fatal than hospital staff (p=0.0005)."

"However, more than three in 10 non-fatal injuries with a critical ISS were missed (i.e. reported as non-severe) in police crash reports."

"Disproportionate concentration of severe and fatal injuries in Communities of Concern (47%); just 31% of San Francisco streets are located in these areas where more vulnerable populations are concentrated."

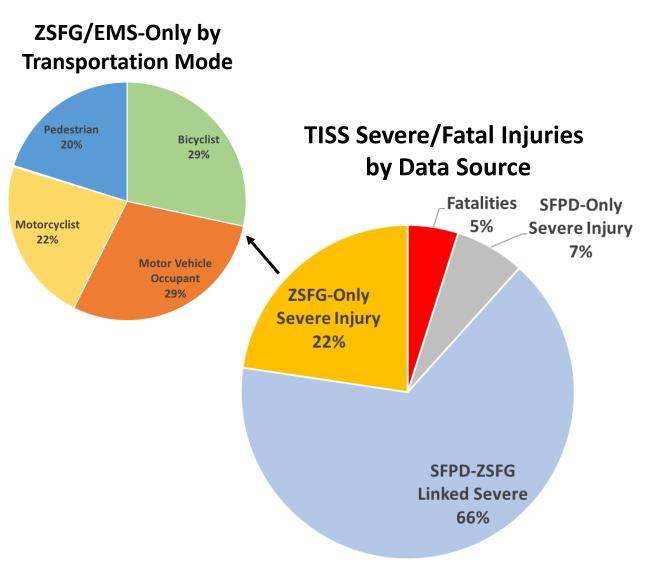
Shamsi Soltani, Leilani Schwarcz, Devan Morris, Rebecca Plevin, Rochelle Dicker, Catherine Juillard, Adaobi Nwabuo, Megan Wier What is counted counts: An innovative linkage of police, hospital, and spatial data for transportation injury prevention, *Journal of Safety Research*, 2022, ISSN 0022-4375, https://doi.org/10.1016/j.jsr.2022.08.002

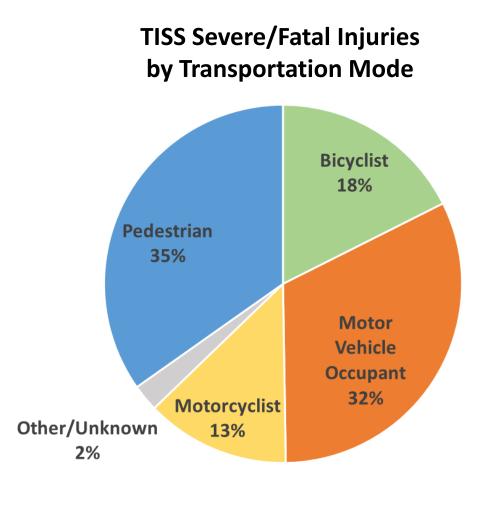
Réelassifying Injury Severity for Injuries with Linked SFPD-ZSFG Data 2017-2021 TISS Update

Linked/Reported Linked/Reported Linked/Reported **Complaint of Pain Visible Injuries Severe Injuries 65%** 21% **12% Remain Severe Reclassified to Severe per hospital Reclassified to Severe per hospital** (also hospital severe) **79%** 35% 88% **Remain Visible Injury** Reclassified **Remain Complaint of Pain** (not severe per hospital) (not severe per hospital) (not severe per hospital)

Net increase in severe injuries in SFPD records based on hospital data.

TISS Breakdown of Severe and Fatal Injuries by Data Source (2017-2021) N= 2,631*





^{*}Excludes the Presidio, intentional assaults, homicides, and suicides.

The Vision Zero High Injury Network Focuses on Severe and Fatal Injuries

NETWORK GOALS

- **Focus on severe injury and death**: More strongly aligned with Vision Zero goals by targeting corridors with the <u>highest concentrations of severe and fatal injuries</u>, regardless of mode.
 - Vulnerable road users (pedestrians, cyclists, e-mobility devices) make up over half of inputs into the network.
- Only one network and map: Each mode can still be analyzed and prioritized with underlying data to inform specific programs and projects to best match that mode's problems.
- Establishes a clear, absolute threshold for future network updates: X severe/fatal injuries per mile to qualify.

3 Alternatives based on 2017-2021 TISS (ZSFG/SFPD) data:

"Pre-Pandemic" Network (identical methodology to 2017 update)

2017-2019 (3 years of data) with 7 killed or severely injured per mile

"Mostly Pandemic" Network (identical methodology to 2017 update)

2019-2021 (3 years of data) with 7 killed or severely injured per mile

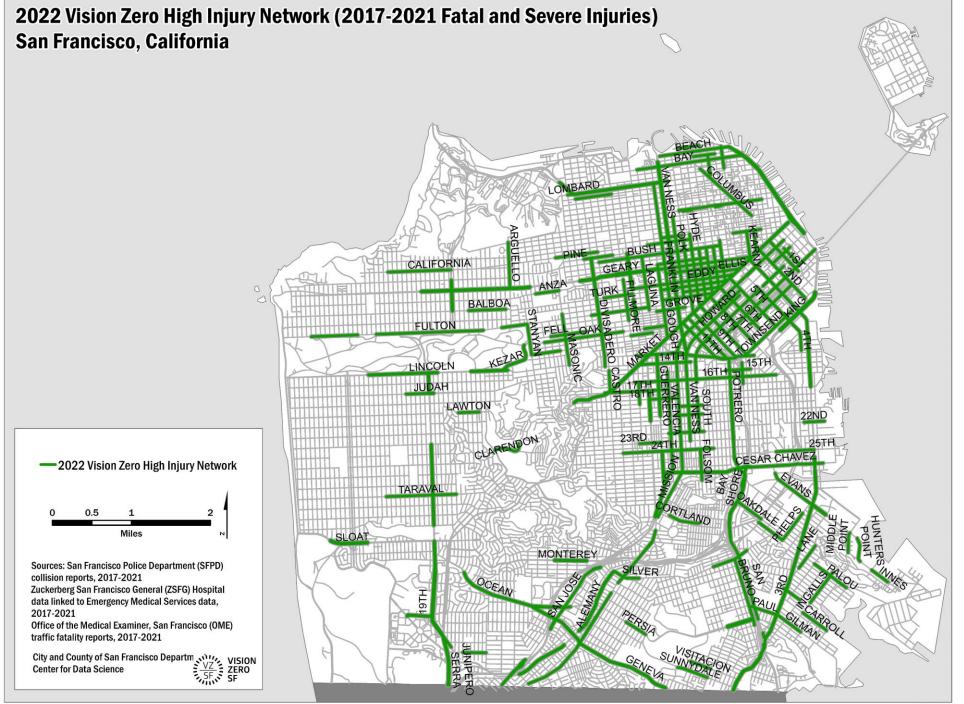
"5 Year" Network (modified methodology to account for 5 years of data)

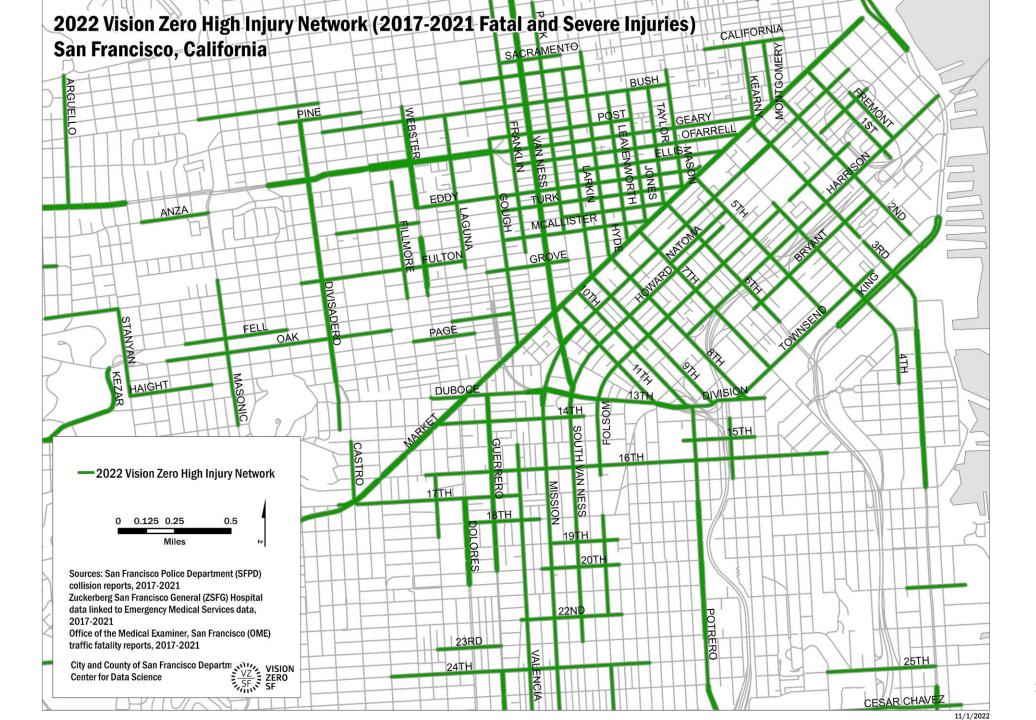
2017-2021 (5 years of data) with 10 killed or severely injured per mile

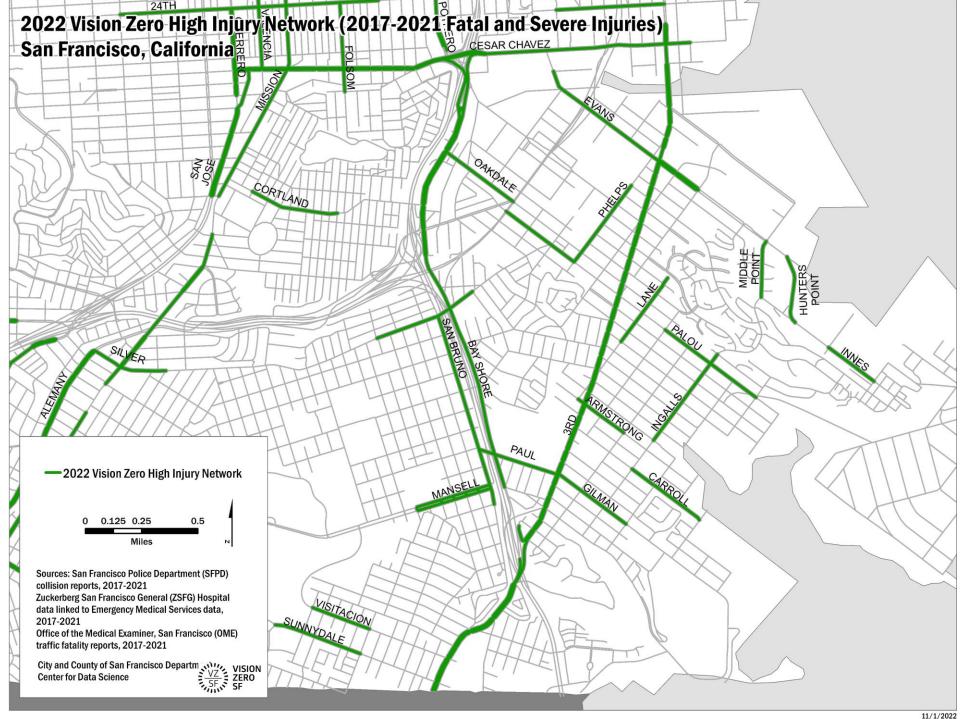
A minimum of least 3 people killed or severely injured within approximately 3 city blocks of one another along the same street from 2017-2021.

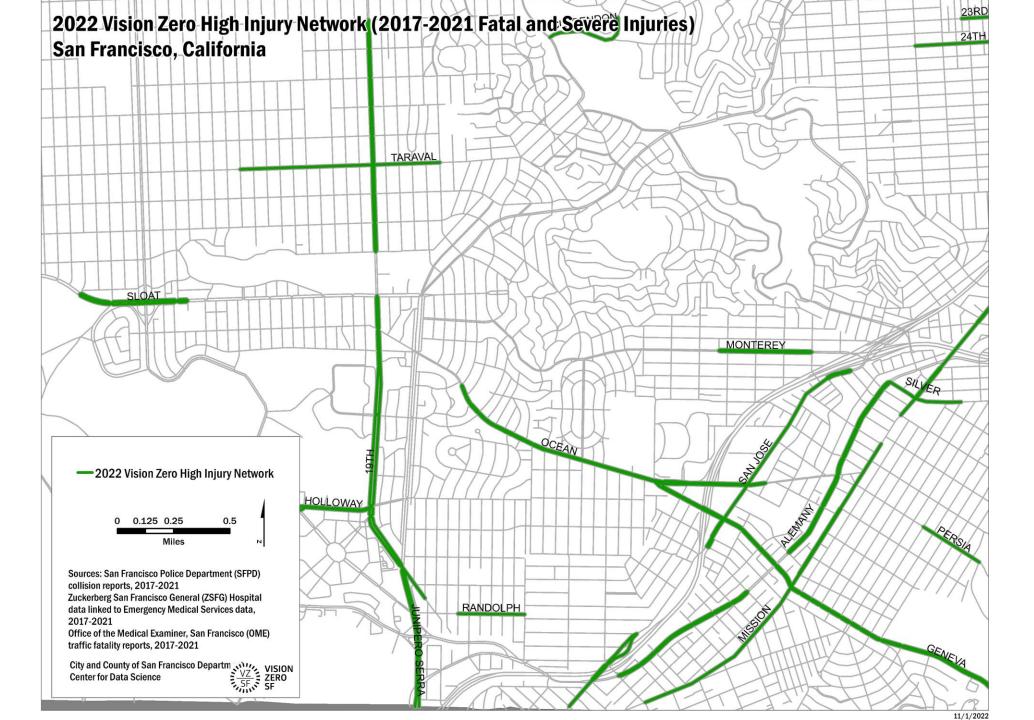
Vision Zero High Injury Network Limitations

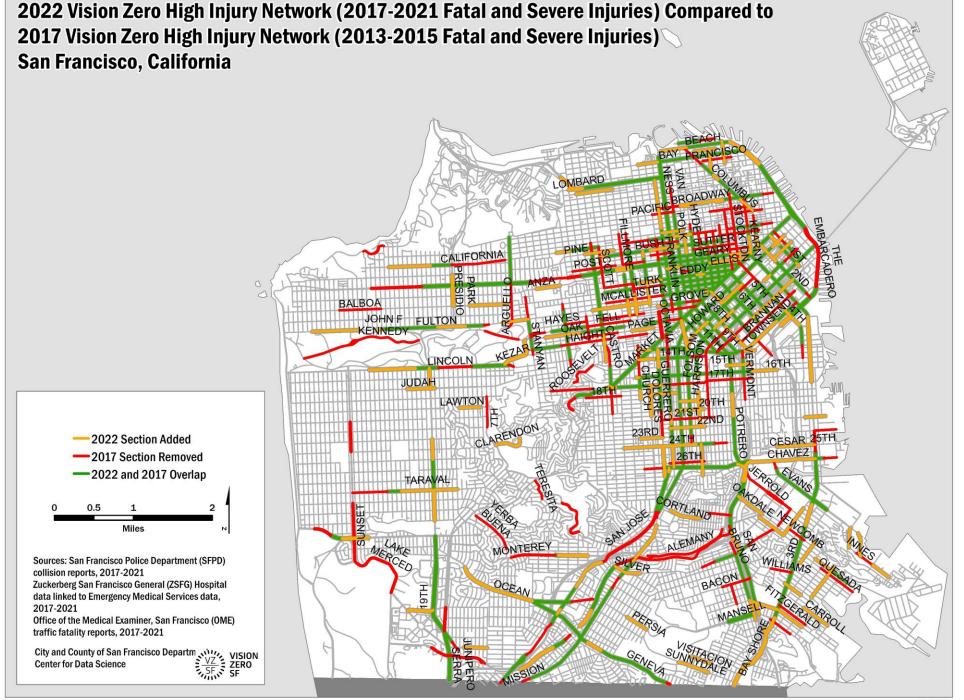
- Current network represents snapshot in time and may not reflect current conditions
- Although prior incidents are often indicative of future incidents, the Vision Zero High Injury Network is **not a prediction (probability) of future risk**
- The network is built on **only the worst injury outcomes** (fatalities and severe injuries) and may not cover locations with high numbers of less severe injury collisions
- Small changes in the number of severe and/or fatal injuries can qualify streets
- Limited amount of information available about collision factors from only ZSFG/EMS records
- Limitations on what can be shared from ZSFG/EMS-only crashes due to HIPAA











Why Might a Corridor Have Been Removed or Added?

METHODOLOGY

- Focus of network is on smaller sample of crashes with worst injury outcomes
 - Streets near threshold for inclusion in 2017 map can drop due to small change in number of severe fatal crashes
 - Streets with any fatality in last 4 years no longer automatically included in network
- 5 years of TISS severe injury/fatality data used with different threshold for inclusion.

CITYWIDE FACTORS

- Vision Zero prevention initiatives:
 - engineering
 - enforcement
 - education
- Changing population growth and transportation patterns
 - COVID-19 pandemic/work from home

Overlap with TISS Killed/Severely Injured and all SFPD Crash Victims 179

62% of updated 2022 network overlaps 2017 network

2022 network is **12% of city street** miles and captures **68% of severe** and fatal injuries (TISS, 2017-2021)

2022 network captures **61% of all traffic crashes** resulting in an injury (SFPD, 2017-2021) of any severity

2022 network has **captured 74% of fatalities this year** (end of September 2022)

Overlap with Equity Priority Communities

Equity Priority Communities are census tracts that have a significant concentration of underserved populations, such as households with low incomes and people of color.

29% of city street miles

38% of ZSFG/SFPD (2017-2021) severe injuries and fatalities

44% of 2022 Vision Zero High Injury Network miles

Compared to 40% of 2017 VZ HIN



Thank You TAC Members

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Reporting the Results 2022 Year-End Report

Safe Streets Evaluation Program

November 15, 2022

Thalia Leng and Brian Liang, Safe Streets Evaluation Program Team

Agenda

- 1. The Inventory
- 2. The Toolbox
- 3. The Results
- 4. Quick-Build and Capital Projects
- 5. Spotlight
- 6. What's Next?

Safe Streets Evaluation Program Annual Report:

SFMTA.com/SafeStreetsReport2022

The Inventory

Quick-Build Projects

- 7th Street
- 8th Street
- Folsom Streetscape
- Golden Gate Avenue
- Leavenworth Street
- Turk Street Safety
- Central Embarcadero
- Valencia Bikeway
- 6th Street Pedestrian Safety
- Safer Taylor Street
- Indiana Street Bikeway
- California Street Safety
- Page Street
- Fell Street

Capital Projects

- Polk Streetscape
- Second Street Improvement Project
- MasonicStreetscapeProject

City-Wide Program

Left-Turn Safety





The Inventory



7.3 miles in road lane reductions



7 miles of created or upgrading existing bikeways to separated bikeways



10 intersections with new separated bike signals



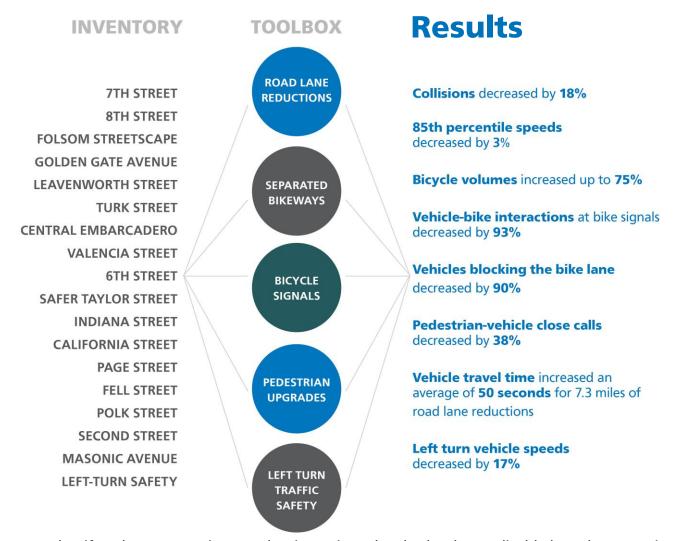
Various pedestrian safety improvements at intersections in all projects

Methodology

Purpose: Evaluate the design measures installed by SFMTA street safety projects to determine their effectiveness in improving bicycle and pedestrian safety

- The aggregated analysis used data and analysis from past project evaluations (the inventory)
- Evaluation timeframe the project evaluations used in the aggregate analysis were completed between 2017 2022
- Projects were selected based on sufficient data available and generally represent the wide range of treatments installed by the SFMTA on bike and pedestrian traffic safety projects
- The data from past project evaluations were collected using the city's transbase collision database, pneumatic tubes, intersection counts, and observations by objective third parties
- Data collection methodology follows the instructions and templates from the program's handbook of standard operating procedures, which ensures consistency across projects

Key Findings



^{*}Metrics were not used uniformly across projects evaluations, since they had to be applicable based on a project's scope. Therefore, these aggregated findings from the past evaluations used the information available from the inventory of projects.

Quick-Build vs. Capital Projects





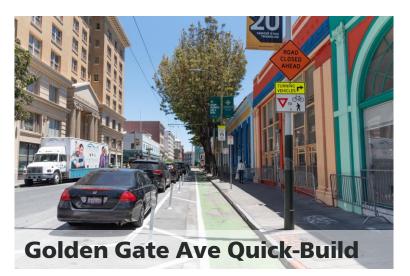
Quick-Build vs. Capital Projects

Measure	Metric	Overall Findings	Capital Findings	Quick-Build Findings
Collisions	Δ Annual Collision Rate	-18%	-19%	-17%
	Δ Annual Bike Related Collision Rate	-33%	-5%	-42%
	Δ Annual Pedestrian Related Collision Rate	-32%	-50%	-26%
Vehicle Speed	Δ 85th Percentile Speed	-3%	-5%	-3%
	Max Speed Change Observed	-20%	N/A	N/A
Vehicle Travel Time	Δ Vehicle Travel Time Seconds	50.00	221.00	21.50
Bike Volume	Δ AM Bike Volume	75%	187%	41%
	Δ PM Bike Volume	72%	107%	62%
Bike Signal Interactions and Close Calls	Δ Bike-Vehicle Interactions	-93%	N/A	-93%
	Δ Close Calls (near misses)	-62%	N/A	-62%
	Avg Daily Interactions Post-Implementation	2.2	0.3	3.1
	Bike Compliance w/ Bike Signal	87%	86%	88%
	Vehicle Compliance w/ No Turn On Red	90%	86%	92%
Blocking the Bikeway	Δ Rate of Incidents	-90%	-19%	-90%
Vehicle-Pedestrian Close Calls	Δ Close Calls (near misses)	-38%	0%	-34%

Spotlight





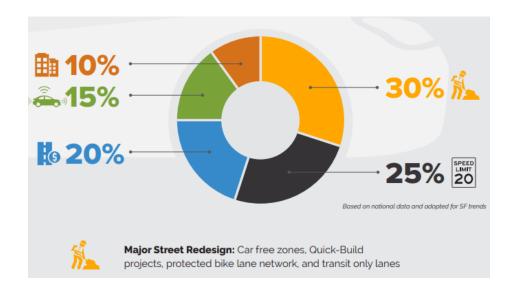




VZ Action Strategy

Our findings show that street design changes are decreasing bike and pedestrian-related collision rates by 33 and 32% respectively.

These findings are in line with the collision decrease estimate from the Vision Zero Action Strategy.



Measure	Metric	Overall Findings
Collisions	Δ Total Collisions	-18%
	Δ Bike Related Collisions	-33%
	Δ Pedestrian Related Collisions	-32%

Lessons Learned

- Our safety projects are proving effective at improving safety for people walking and bicycling.
- Some of our earlier capital projects did not include fully protected bicycle infrastructure-but new capital projects include robust concrete protection for bikes and public realm improvements
- Evaluation has helped us identify projects that need additional improvements, especially projects in underserved neighborhoods





Next Steps

- Continue evaluating street safety projects and programs to track trends and performance and applying lessons learned
- Develop and launch a database for the program and update data collection Standard Operating Procedures



Safe Streets Evaluation Program

Annual Report:

SFMTA.com/SafeStreetsReport2022

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2022 Safe Streets Evaluation Summary



Project Performance (2017-2022)

SFMTA Livable Streets

San Francisco adopted Vision Zero in 2014, a citywide and inter-departmental commitment to prioritize street safety and eliminate traffic deaths in San Francisco.

Data-driven analysis is at the core of San Francisco's Vision Zero program, allowing the city to cost-effectively prioritize limited resources. As part of that data-driven approach, SFMTA maintains a robust Safe Streets Evaluation Program to measure the outcomes of safety investments. This evaluation summary provides an overview of the impacts of recent SFMTA street projects on safety and other metrics.

The Inventory

The SFMTA tracks and reports on the transformation of city streets in several ways The San Francisco Vision Zero program maintains a **quarterly dashboard** that details the number of safety measures installed across the city measured against commitments made in the San Francisco Vision Zero Action Strategy.

Additionally, the **Safe Street Evaluation Program** individually evaluates before and after conditions on many of our pedestrian, bicycle, and traffic safety projects, to ensure that we are not only delivering a certain quantity of improvements, but that those improvements are having the intended impact on improving safety. Since 2018, the Evaluation Program has published annual reports summarizing evaluation results for individual projects. Past annual reports can be found on the Program's webpage.

Instead of focusing on specific projects, this annual report reviews changes in key performance metrics across many of SFMTA projects completed in the past five years to identify the types of treatments and investments with the largest benefits. As the SFMTA continues to increase the pace of transportation safety investments, this analysis will help to ensure that those investments are well-spent and lead to measurably improved safety on San Francisco streets.

Evaluated Projects

The projects that were analyzed for 2022 Safe Streets
Evaluation Summary include both quick-build projects, or
reversible, adjustable traffic safety improvements that can be
installed relatively quickly, and capital projects, or largescale construction projects that typically involve
concrete/utility work and have long timelines and large
budgets. The evaluated projects are listed below.

- 7th Street Safety Project Phase 1 (Quick-Build)
- 8th Street Safety Project (Quick-Build)
- Folsom Streetscape Project (Quick-Build)
- Golden Gate Avenue (Quick-Build)
- Leavenworth Street (Quick-Build)
- Turk Street Safety Project (Quick-Build)
- Central Embarcadero (Quick-Build)
- Valencia Bikeway Project (Northern Section Pilot/Quick-Build)

- 6th Street Pedestrian Safety Project (Quick-Build)
- Safer Taylor Street (Quick-Build)
- Indiana Street Bikeway Project (Quick-Build)
- California Street Safety Project (Quick-Build)
- Page Street Neighborway (Quick-Build)
- Fell Street Protected Bike Lane (Quick-Build)
- Polk Streetscape (Capital Project)
- Second Street Improvement Project (Capital Project)
- Masonic Streetscape Project (Capital Project)
- Left-Turn Traffic Safety at Seven Intersections (City-Wide Program)

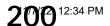
Take a tour of each of these projects below!



1 Folsom Street, 2nd Street to 5th Street



Quick-build improvements installed on Folsom Street in SoMa in **2018 and supplemented in 2021** will serve as near-term treatments to address traffic



safety in the area in advance of major construction for the Folsom-Howard Streetscape Project—a long-term design and implementation effort to bring substantial safety and livability improvements to SoMa.

Improvements installed as part of the Folsom Street Quick—Build Project include an eastbound parking-protected bikeway to create safer conditions for bicyclists and pedestrians by adding daylighting (red zones) and other transportation safety features at intersections, removing a travel lane to calm traffic speeds and vehicle volumes, and improving vehicle loading conditions for nearby businesses.

(2)

7th & 8th Street Safety Projects





Comprehensive traffic safety improvements were installed throughout 8th Street and parts of 7th Street **between May 2017 and July 2019**. Further improvements on 7th Street from Folsom to Townsend Streets were installed as the 7th Street Quick-Build Safety Project in 2020 and 2021, connecting previous traffic safety installations to create one continuous protected biking corridor.



Golden Gate Avenue, Polk Street to Market Street



In response to community requests for increased investment in traffic safety solutions in the Tenderloin, the SFMTA committed to implementing quick-build improvements in the neighborhood. The <u>Golden Gate Avenue Quick-Build Project</u>, **completed in 2021**, focuses on improving comfort and safety of people walking and biking along the corridor.

Improvements to the corridor include a protected bikeway, active flex space for local businesses and organizations to use, and reallocated curb space for residents' and businesses' parking and loading needs.

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4

Leavenworth Street, McAllister Sreet to Post Street



In tandem with efforts along Golden Gate Avenue, the Leavenworth Street Quick-Build Project also aims to improve traffic safety and comfort for those traveling in the Tenderloin.

Following completion of the quick-build in **2021**, Leavenworth Street now has one less travel lane (three lanes to two) with painted buffers to deter speeding. Additionally, curb space has been adjusted to improve parking and loading for businesses and residents, and a suite of pedestrian safety improvements—

including advanced limit lines, new crosswalks, and painted safety zones—have been added at intersections.



Turk Street Safety Project



In **Spring 2018**, the SFMTA installed a series of improvements on Turk Street between Market Street and Gough Street as part of the <u>Turk Street Safety</u>

<u>Project</u>. Turk Street is a vibrant corridor with a diverse range of people including families, seniors, youth, and shoppers, and tourists. The diverse range of people that includes families, seniors, youth, and shoppers on Turk

reflects the wide variety of transportation use such as private automobiles, transit, paratransit, pedestrians, bicyclists, and both passenger and commercial vehicle loading.



Central Embarcadero Quick-Build



The SFMTA substantially completed the Embarcadero 2020 Quick-Build

Project at Pier 35, Ferry Terminal, and in the Rincon Restaurant Zone in early

2021 to expedite safety and mobility improvements along the

waterfront. These changes included the corridor's first segment of a two-way

protected bikeway adjacent to the promenade (between Folsom and Mission streets), offering a preview of the changes proposed with the <u>Embarcadero</u> Enhancement Program (EEP).

7

Valencia Bikeway Improvements



In **2018** and under Mayor London Breed's leadership, the SFMTA Board of Directors approved a project to pilot and evaluate a parking-protected bikeway from Valencia Street from Market to 15th streets. Additional project

elements included better intersection visibility, school loading islands and parking and loading changes.



6th Street Pedestrian Safety Project



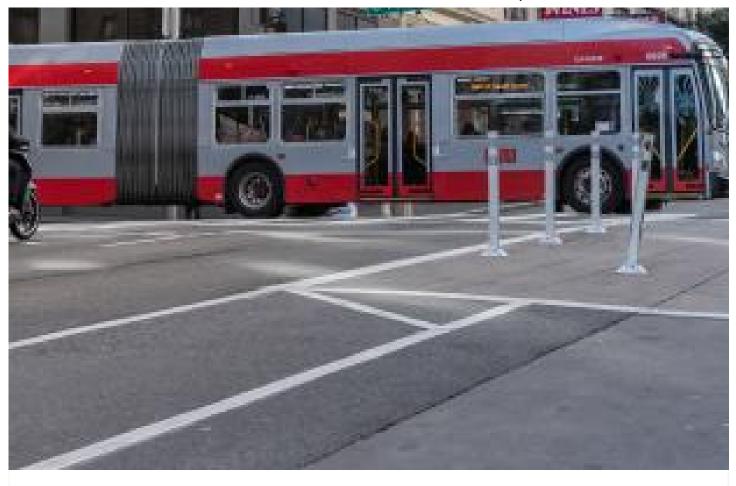
The 6th Street corridor has one of the highest concentrations of pedestrian collisions, injuries, and fatalities in San Francisco. In support of San Francisco's Vision Zero initiative, the 6th Street Pedestrian Safety Project aims to create a safe and inviting place for people to walk by transforming 6th

Street with wider sidewalks, new traffic signals, and streetscape improvements.

The 6th Street Pedestrian Safety Project was approved by the SFMTA Board of Directors on October 16, 2018. The <u>Quick-Build portion</u> of the 6th Street Pedestrian Safety Project was completed in **September 2019** to bring near-term safety improvements to the corridor. Construction on the longer-term improvements is expected to wrap up in 2024.

9 Safer Taylor Street

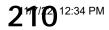




The <u>Safer Taylor Street Project</u> included a quick-build component completed in **summer 2019.** The purpose of these changes were to rapidly bring traffic safety improvements to protect vulnerable road users on one of the Tenderloin's most important streets. On average, each month one person walking or biking is injured in a traffic collision within the Taylor Street project area.

10

Indiana Street Quick-Build Bikeway Project







The goal of the <u>Indiana Street Quick-Build Bikeway Project</u> is to create a safe and comfortable north-south bike route connection in the Dogpatch Neighborhood. Indiana Street had no bike lanes between 23rd Street to Cesar Chavez, due to the one-way vehicle traffic heading north on Indiana Street that vehicles use to access the I-280 on-ramp, near 25th Street. People riding bikes have historically used Minnesota Street, as an alternative route to avoid the one-way northbound traffic on Indiana Street from Cesar Chavez to 25th Street.

The SFMTA implemented changes in **October 2019** to improve bike safety on Indiana Street from Cesar Chavez to 23rd Street. These improvements provide a better, connected bike facility, not only for those in the Dogpatch neighborhood, but also for those who travel from the Bayview and Mission Bay neigborhoods.



California Street Safety Project



The <u>California Street Safety Project</u> implemented a Quick-Build road diet on California Street between Arguello and Park Presidio boulevards in **Summer 2020** to improve safety. The street is on the city's high-injury network and also had frequent collisions involving Muni buses due to its narrow travel lanes. The street was converted from four travel lanes to three, with a center lane for left turns. Other improvements included intersection daylighting,

continental crosswalks and more time for people walking to cross the street at traffic signals.



Page Street Neighborway



The Page Neighborway project completed in **Spring 2020** includes existing freeway-access restrictions and bikeway upgrades approaching Octavia

Boulevard, existing restrictions on non-local traffic (entire corridor), new eastbound and westbound traffic diversion at signalized intersections, and framework for ongoing community art and placemaking along the corridor.



Fell Street Protected Bike Lane



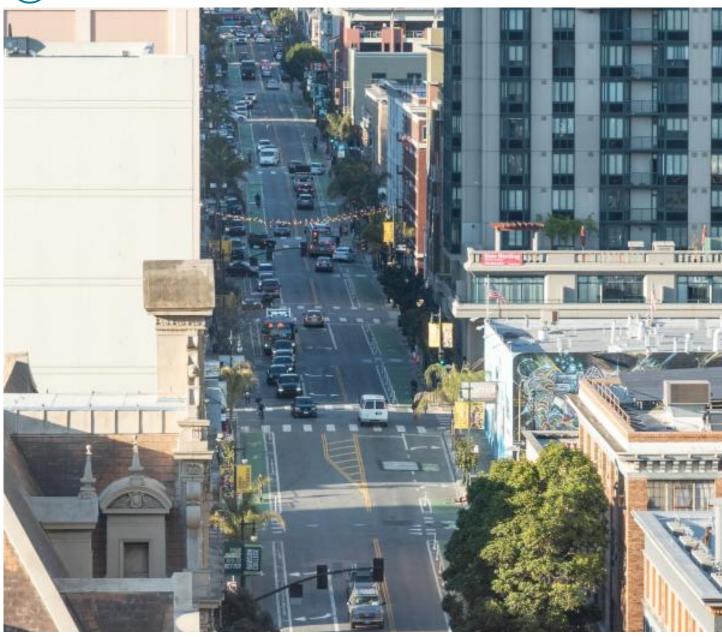
In response to congestion on the northern
Panhandle Path and the Public Health Order to socially distance during the
COVID-19 pandemic, the SFMTA installed a parking-protected bikeway on Fell
Street adjacent to the Panhandle between Baker Street and Shrader Street in

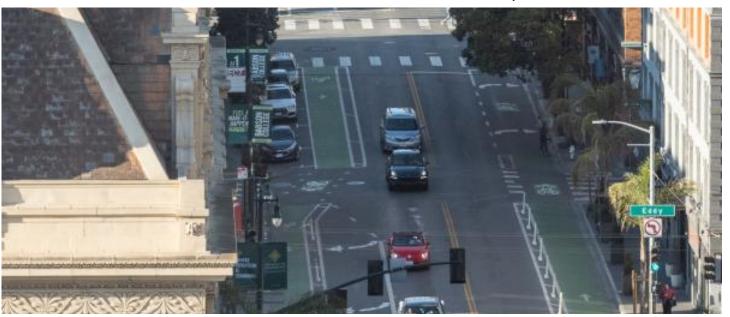
215

early **2020**. The project reduced the number of travel lanes on Fell Street from four to three lanes to accommodate the new protected bike lane.



Polk Streetscape Project





Polk Street is a thriving commercial corridor and serves an important transportation function for San Francisco. The corridor is on the 19 Polk Muni bus route and also a preferred north-south bicycle route due to its flatter terrain. Furthermore, Polk Street is a popular destination for people walking, biking, driving and riding transit.

Completed in **Spring 2019**, the <u>Polk Streetscape Project</u> was designed to enable safe access for all road users of all ages and abilities. Implemented in design includes corridor-wide safety improvements include protected bike lanes, pedestrian safety improvements, and additional streetscape amenities at key locations.



Second Street Improvement Project



Completed in **Fall 2019**, the <u>Second Street Improvement Project</u> extends from Market to King Streets, stretching from downtown San Francisco to the SOMA district.

This project implemented that vision by transforming 2nd Street into a pleasant multi-modal corridor that improves safety and access for pedestrians, bicyclists and transit as well as drivers.



Masonic Streetscape Project



Completed in Fall 2018, the Masonic Avenue Streetscape Project is an effort to improve safety for people walking, biking, taking transit and driving on Masonic Avenue between Geary Boulevard and Fell Street. The project has implemented a variety of improvements to the corridor including, wider sidewalks, a new median, new paving, landscaping, raised bikeways, better lighting and upgraded sewer infrastructure.

17

Left-Turn Traffic Safety



In 2021, SFMTA piloted left turn safety treatments at seven high-crash intersections and paired the designs with comprehensive Safety—It's Your
Turn education campaign. Left-turn pilot locations included:

- 10th Street and Folsom
- Broadway and Montgomery

- -Gough and Sacramento
- -Ellis and Leavenworth
- Leavenworth and Sutter
- -Lincoln and 17th Avenue
- Lincoln and 18th Avenue

The Toolbox

Each of these evaluated projects included significant safety changes such as vehicle travel lane removals (road diets), separated bikeways, separated bike signals, left-turn safety devices, and general improvements for pedestrians at intersections including pedestrian signal improvements, daylighting (red zones at intersections) and upgraded crosswalks.

Click through the photos below to find out more about these safety tools!



Vehicle Travel Lane Reductions

The evaluated projects included a total of 7. 3 miles in road lane reductions. Vehicle travel lane reductions help improve safety and comfort for pedestrian as well as bicyclists. Reducing the number of lanes on a multilane roadway can help improve sight distances for left-turning vehicles and create space for bicycle, transit, and/or parking lanes.

Many of SFMTA's traffic safety projects have utilized road lane reductions to both make room for multi-modal complete streets, and as a mechanism for lowering vehicle speeds.



Separated Bikeways

Evaluated projects included creating or upgrading 7 miles of separated bikeways. These bikeways (Class IV), also commonly referred to as cycle tracks or protected bikeways,

are bicycle facilities that are separated from traffic by parked cars, safe-hit posts, transit islands or other physical barriers. with the goal ofmaximizing the safety of bicyclists on city streets and reducing traffic related severe injuries.

Learn more about our bike facilities toolkit here!



Separated Bike Signals

Evaluated projects included 10 intersections with new separated bike signals. Separated bike signals provide an exclusive signal phase for bicyclists to cross an intersection separate from vehicles turning right at an intersection.



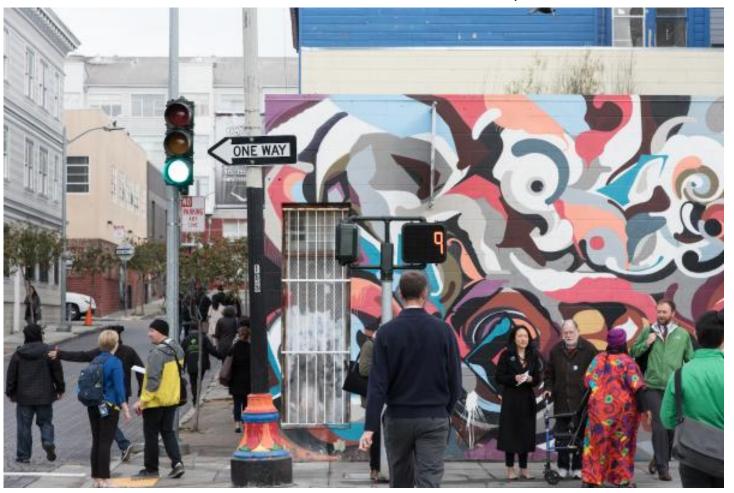
Pedestrian Striping Improvements

The SFMTA has implemented a range of pedestrian striping improvements on most of the intersections found

in the evaluated projects.

Specifically, most projects include <u>upgrading crosswalks</u> to full continental striping, adding red zones (<u>daylighting</u>) to corners at intersections both increase visibility of pedestrians in the roadway, and <u>painted safety zones</u>, or painted road areas that wrap around sidewalk corners to make pedestrian crossing intersections more visible to people driving.

Learn more about the full pedestrian toolkit here.



Pedestrian Signal Improvements

The SFMTA has implemented a range of improvements to pedestrian signals at intersections, including: **pedestrian countdown signals**, **leading pedestrian intervals**, and **increased crossing times**.

Pedestrian countdown signals add a lighted timer following the "walk" signal at intersections so people can see how long

they have to cross the street.

Leading pedestrian intervals (LPIs) are a change to traffic signal configurations that give people the "walk" signal at least three seconds before the drivers get a green light.

Increased crossing time adjusts the signal timing at intersections to give pedestrians more time to cross the street.



Left-Turn Traffic Safety

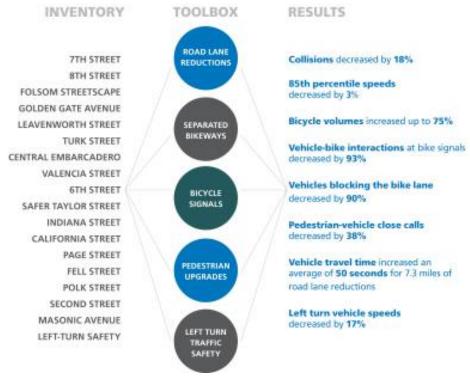
Left-turn traffic safety upgrades consist of installing waisthigh vertical delineator posts, small rubber speed bumps, and paint to create enhanced center lane lines and painted safety zones to encourage slower, wider left turns and increase drivers' awareness of other road users.

The Results

To understand if and how well these safety tools are working, the following key **performance metrics** were aggregated across the evaluated projects:

- Vehicle, Bicycle, and Pedestrian Collisions
- Vehicle Speeds
- Bicycle Volumes
- Bicycle Signal Compliance/Yielding
- Blockage of Bikeways
- Vehicle-Pedestrian Interactions
- Vehicle Travel Time
- Vehicle Turning Speeds

As part of reviewing the aggregated data over the past five years, we overwhelmingly found **the SFMTA's safety tools are working.**



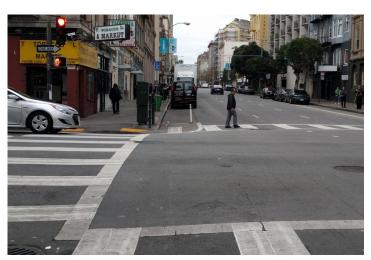
Collisions

Among the evaluated projects with at least three years of police report data, collisions **decreased by 18%**. Bicycle - related collisions experienced a more **significant decrease of 33%** and pedestrian-related collisions **decreased by 32%**. Looking specifically at our capital projects- **pedestrian collisions have decreased on average by 50%**.

Vehicle Speeds

The 85th percentile speed, or the speed at or below which 85 percent of the drivers travel on a road segment, **decreased**

across projects by 3%, The greatest decrease in 85th percentile speed occurred on 6th Street, where speeds decreased by 20%. Even small decreases in speed are valuable safety improvements as vehicles speeds directly affect the severity of injuries.





move the slider to see Turk Street changes (left-before/right-after)

Bicycle Volumes

Bicycle volumes grew sizably across the board, with **increases up to** 75% in the morning peak commute times, with similar growth in the afternoon peak commute times.

On the two streets that had no bike facilities at all before the project (2nd Street and Masonic Avenue), bicycle volumes are up significantly.

Bicycle Signals

Separated bicycle signals installed across the evaluated projects are providing major safety benefits by lowering vehicle-bike interactions at the location of the signal/turn by 93% on average, with a 62% decrease in near-misses or close calls. Moreover, both vehicles and bicycles are complying with the bicycle signals (87% compliance by bicycles, 90% compliance by vehicles). Interactions are defined as instances when turning vehicles and bicycles are near each other and one party must yield to the other.





move the slider to see Taylor Street changes (left-before/right-after)

Blocking the Bike Lane

Data from the evaluated projects demonstrates with certainty that providing protected bikeways provides significant decreases in vehicle blockage of the bike lane. The rate of incidents of vehicles blocking the bike lane **decreased by** 90%.

Vehicle-Pedestrian Close Calls

The many pedestrian safety tools implemented at intersections including countdown signals, more walking time, daylighting and crosswalk upgrades are helping to not only decrease pedestrian-related collisions, but also close calls at crosswalks. While the number of interactions between pedestrians and vehicles generally increased at intersections (expected when implementing measures such as turn restrictions where more vehicles are turning during the green light), close calls or near misses **decreased across projects by 38%.**





move the slider to see Central Embarcadero changes (left-before/right-after)

Vehicle Travel Time

While vehicle travels times are not indicative of improvements to safety, they can be important in understand the cost-benefit to safety projects as it relates to overall traffic congestion and emergency response time. Even with the 7.3 miles of road lane reductions implemented across the evaluated projects, the average vehicle travel time during peak periods increased on average by **approximately 50 seconds**.

Vehicle Turning Speeds

Overall, the seven intersections piloted in early 2021 for left-turn traffic safety treatments resulted in an approximately 17% reduction in average speed (1.7mph slower) and a 71% reduction in the likelihood of a car turning left at speeds over 15 mph.

Due to these encouraging results, left turn safety treatments will become a key tool in SFMTA's future street improvement projects.





move the slider to see Masonic Avenue changes (left-before/right-after)

Methodology

To get these results, the SFMTA utilized data collected from 17 projects and one pilot program for left turn safety treatments - all completed over the last five years. We reviewed hundreds of police-recorded collision reports, speed data collected through pneumatic tubes, and hours of anonymized observations by objective third parties. Projects were selected based on sufficient data available and generally represent the wide range of treatments installed by the SFMTA, and several include both success stories and less successful safety components such as partially protected bike lanes. Annual collision rates were derived from three years of pre-implementation data to determine baselines, and from at least one year of post-implementation data.

Performance metrics were selected based on national best practices, and commonly collected data such as speeds and volumes. For many of the metrics, specific templates and standard operating procedures (SOPs) have been developed to ensure consistent data collection even when observing qualitative metrics such as yielding and near misses or "close calls". To find out more about our evaluation process please see our Safe Streets Evaluation Handbook.

Quick-Builds vs. Capital Projects

The <u>Vision Zero Quick-Build</u> initiative is an SFMTA effort to quickly implement pedestrian and bicycle safety improvements on the Vision Zero High Injury Network. Quick-Build projects are reversible, adjustable traffic safety improvements that can be installed relatively quickly. Unlike major capital projects that may take years to plan, design, bid and construct, quick-build projects are constructed within weeks or months and are intended to be evaluated and reviewed within the initial 24 months of construction.

Typical quick-build type improvements include:

- Paint, traffic delineators, and street signs
- Parking and loading adjustments
- Traffic signal timing
- Transit boarding islands

With the body of projects evaluated for the 2021 Safe Streets Evaluation Summary, **14 of the projects are near-term or quick-build projects** and **three are major capital projects** that were implemented within a much longer timeline.

Below is a matrix comparting aggregate metrics between the capital projects versus the evaluated Quick-Build projects.

Aggregate Project Findings Across Evaluated Projects

Measure	Metric	Overall Findings	Capital Findings	Quick-Build Findings
Collisions	Δ Annual Collision Rate	-18%	-19%	-17%
	Δ Annual Bike Related Collision Rate	-33%	-5%	-42%
	Δ Annual Pedestrian Related Collision Rate	-32%	-50%	-26%
Vehicle Speed	∆ 85th Percentile Speed	-3%	-5%	-3%
	Max Speed Change Observed	-20%	N/A	N/A
Vehicle Travel Time	Δ Vehicle Travel Time Seconds	50.00	221.00	21.50
Bike Volume	Δ AM Bike Volume	75%	187%	41%
	Δ PM Bike Volume	72%	107%	62%
Bike Signal Interactions and Close Calls	Δ Bike-Vehicle Interactions	-93%	N/A	-93%
	△ Close Calls (near misses)	-62%	N/A	-62%
	Avg Daily Interactions Post-Implementation	2.2	0.3	3.1
	Bike Compliance w/ Bike Signal	87%	86%	88%
	Vehicle Compliance w/ No Turn On Red	90%	86%	92%
Blocking the Bikeway	Δ Rate of incidents	-90%	-19%	-90%
Vehicle-Pedestrian Close Calls	Δ Close Calls (near misses)	-38%	0%	-34%

Because the overall collision rates do not take into account increased bicycle ridership, it is also helpful to look specifically at the **three capital projects** (2nd Street, Masonic

Avenue, and Polk Street) to understand the collision rates side by side with bicycle volumes.

2nd Street		
Measure	Metric	Overall Findings
Collisions	△ Annual Collision Rate	-25%
	Δ Annual Bike Related Collision Rate	-33%
	Δ Annual Pedestrian Related Collision Rate	-50%
Bike Volume	Δ Average Bike Volume	46%

Measure Metric Overall Findings Collisions Δ Annual Collision Rate -30% Δ Annual Bike Related Collision Rate 37% Δ Annual Pedestrian Related Collision Rate -55% Bike Volume Δ Average Bike Volume 393%

Measure	Metric	Overall Findings
Collisions	Δ Annual Collision Rate	-3%
	Δ Annual Bike Related Collision Rate	-18%
	Δ Annual Pedestrian Related Collision Rate.	-46%
Bike Volume	Δ Average Bike Volume	2%

Capital Project Collision and Bike Count Data

What do these results mean?

Capital projects show strong results with a 50% decrease in pedestrian collisions. The greater pedestrian safety for the capital projects (50%) versus quick-builds (26%) is likely due to building more concrete features such as widened sidewalks and bulb-outs. While bike related collisions for the capital projects did not decrease on average (-5%) as much as quickbuild projects (-42%), the collision rate does not take into account large increases in the number of bicyclists on the **capital projects.** In fact, on two streets that had no bike facilities in the pre-condition (2nd Street and Masonic Avenue), bicycle volumes are up significantly. The three capital projects observed also included minimally protected bike lanes and trials in design such as partially raised cycle tracks. The SFMTA has learned from these older projects and has since invested in capital projects such as Folsom and Howard Streets which include not only concrete upgrades for pedestrians, but fully protected bike infrastructure as well as public realm upgrades.

But quick-builds still provide and enormous amount of benefit. Quick-builds are implemented swiftly and cost a fraction of the cost of large capital project, yet are leading to significantly less collisions, slower speeds, and less close calls.

The major takeaway is that **both capital and Quick-Build projects have resulted in major safety benefits.** Given the timeline and costs of large capital projects, installing Quick-

Build projects before making improvements permanent through a full capital improvement is a very effective strategy for addressing immediate safety needs on city streets.

Spotlight: Reaching Underserved Communities

The SFMTA recognizes our involvement in the long history of past racist policies that have led to disinvestment in some communities within San Francisco. Rectifying these injustices will take time, but begin with near-term efforts in underserved areas such as the recently completed Bayview Quick-Build in Hunters Point/Bayview, the Leavenworth and Golden Gate Quick-Build projects in the Tenderloin, and the neighborhood-wide No Turn on Red turn restriction effort in the Tenderloin. The goal of this work by SFMTA staff is to begin the process of building trust with community members, uplifting their voices, and ultimately decreasing traffic violence in previously underserved communities.

Bayview Quick-Build

A major goal of the <u>Bayview Quick-Build Project</u> is to improve pedestrian visibility and comfort at crossings and reducing vehicle speeds. To date, improvements identified by the community through the <u>Bayview Community Based</u>

<u>Transportation Plan</u> have been installed on Evans Avenue,

Hunters Point Boulevard, and Innes Avenue. Changes to the

roadways included a lane removal from four lanes to two lanes on a section of these roadways to include one bike lane and walkways on both sides of the street protected by concrete barriers, new turn pockets on Innes Avenue, and new crosswalks, and protected corners at Jennings and Hawes Streets.

Data collected after this project shows **verified improvements in driver yields at the Innes/Griffith (westbound) and Innes/Hunters Point (southbound) crosswalks**, but there was no significant change to vehicle speeds. While the project entailed a detailed, community driven design and implementation process, the SFMTA needs to continue
working with neighbors to make additional changes that build trust and further traffic safety goals.



Bayview Quick-Build Concrete Barriers- Painted by Bayview Community

Leavenworth and Golden Gate Quick-Build Projects

Stemming from the community's demand for increased investment and broader solutions for traffic safety in the Tenderloin neighborhood, the SFMTA recently installed two quick-build projects in the neighborhood on Leavenworth Street and Golden Gate Avenue and will continue to further community discussion on future potential quick-builds on additional Tenderloin streets.





move the slider to see Golden Gate Avenue changes (left-before/right-after)

The Leavenworth Street Quick-Build included:

- Vehicle travel lane removal (three lanes to two) with narrow buffers to deter speeding and overtaking of vehicles
- Pedestrian safety improvements such as advanced limit lines, crosswalks, and painted safety zones at key intersections
- Reallocating curb space for residents' and businesses' parking and loading needs

Key findings from the project evaluation include:

• On average, there was a 12% decrease in double parking instances on Leavenworth at observed locations

- There was a slight increase in drivers yielding to pedestrians at observed intersections.
- North and southbound weekday bike volumes have increased by 9% after project implementation (from 257 to 279 in peak periods)

The Golden Gate Avenue Quick-Build included:

- Installation of a protected bikeway from Polk to Market street
- Installing an active flex space for local businesses and organizations to utilize
- Reallocating curb space for residents' and businesses' parking and loading needs

When comparing pre- and post-data, we found that:

- Travel times **decreased on average by 58 seconds**, with the greatest decrease taking place in the AM peak period, where travel times decreased by over 50%.
- Instances of bike lane blockages on the weekdays reduced by over 90 percent. However, with the parking protected bikeway design, double parking in the travel lane became more prevalent.
- Bike counts **increased by 29 percent** (from 188 to 243 bikes) following the installation of the project.

Tenderloin No Turn on Red Restrictions

Given the high volume of high injury corridors and intersections in the Tenderloin, there is a clear need for not only street-specific interventions but also neighborhood wide countermeasures to help make these streets safer for all users. In Fall 2021, the SFMTA posted No Turn On Red signs at over 50 intersections in the Tenderloin to study how they can make streets safer to cross.



No Turn on Red Sign in Tenderloin Neighborhood

Findings from a before/after study reveal that No Turn on Red (NTOR) restrictions can keep crosswalks clear and reduce close calls on major intersections:

- Motorists are demonstrating a high compliance with NTOR restrictions. On average, 92% of vehicles are complying with the turn restriction.
- While pedestrian-vehicle interactions increased (expected given NTOR restriction), close calls for vehiclepedestrians decreased from 5 close calls before NTOR signs were posted to 1 close call after restrictions were in place at observed intersections.
- Vehicles blocking or encroaching onto crosswalks on a red signal was reduced by more than 70% after the restriction was implemented.

Future Projects in Underserved Communities

The SFMTA has started to invest more in previously neglected neighborhoods, and we recognize there is more work to be done to continue to increase traffic safety and build trust. Towards this effort, the SFMTA has initiated several projects that are currently in planning and design. These include additional changes/amplified efforts in the Bayview, projects on Evans Avenue and Bayshore Boulevard, and a future quickbuild on Hyde Street in the Tenderloin.

What's Next?

We plan to continue this work, while making new efforts to use new technology to improve accessibility to the evaluation data. Improvements include building a publicly accessible database of all data collected through the program, reviewing opportunities to better engage community stakeholders in our evaluation efforts, and distributing updates on our evaluation progress.

This story was made by SFMTA Livable Streets.

Learn more about the SFMTA Safe Streets Evaluation Program, visit www.sfmta.com\safestreetsevaluation

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Agenda Item 17

Making San Francisco a "Safe Speeds" City

Solutions to Slow our Streets and Save Lives

November 15, 2022





We Need to Slow Our Streets









Source: Walk SF



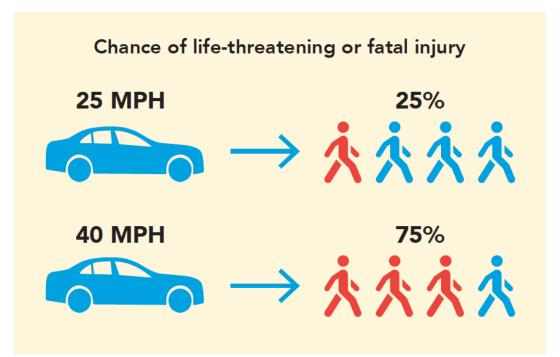
Why Speed Matters

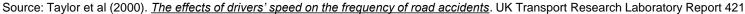
90% of people will survive if hit by a vehicle traveling 20 MPH.

On urban roads, reducing average speed by 1 MPH reduces injury collisions by 2-7%.



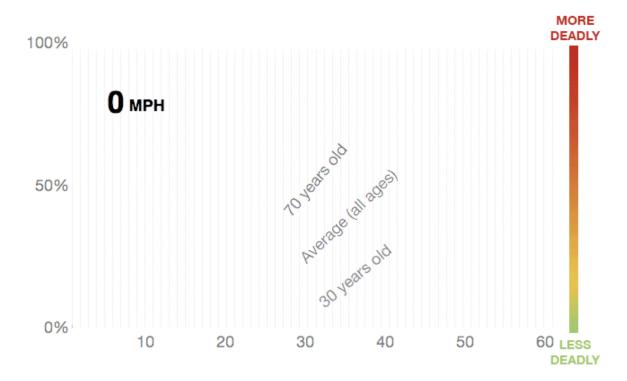
Why Speed Matters







Why Speed Matters



Source: ProPublica



Credit: Brian Haagsman



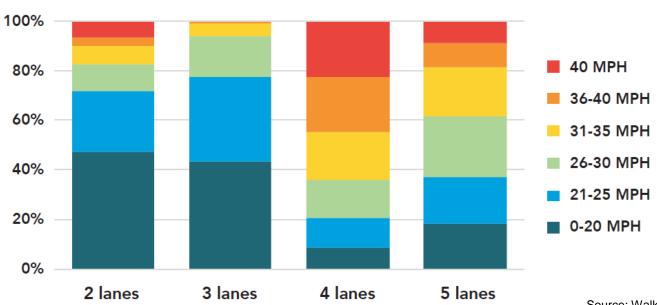


Credit: Jim Watkins



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Vehicle speed by number of travel lanes



Source: Walk SF Data Collection 2022

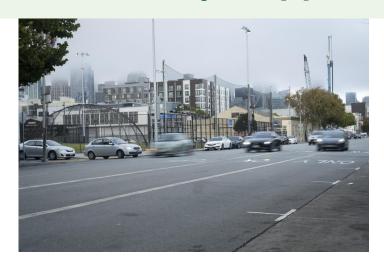
Harrison Street vs. Folsom Street





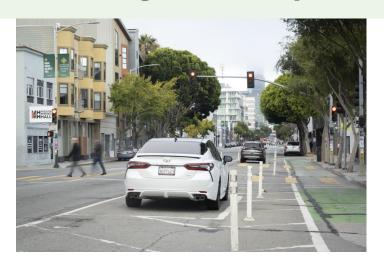
Credit: William McLeod







- Median Speed 29 MPH
- 85th Percentile Speed 47 MPH



Folsom Street

- Median Speed 18 MPH
- 85th Percentile Speed 24 MPH



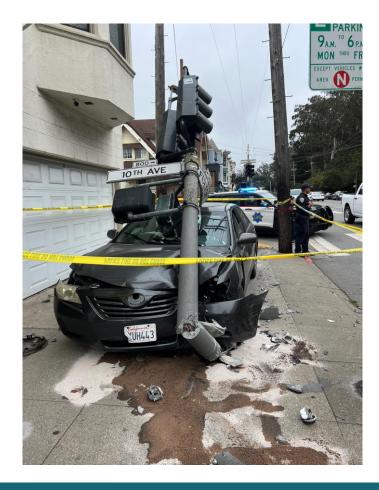
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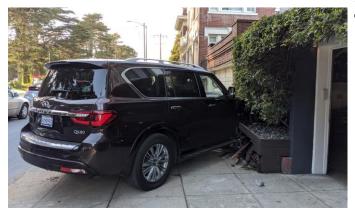
What's Really Happening with Dangerous Speeds?



Credit: Emily Huston









The Tenderloin

We surveyed:

Hyde

Leavenworth

Jones

Turk

Median speeds:

17.8 MPH on average

85th percentile speeds:

22 MPH on average









Credit: Jim Watkins

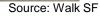




Source: Walk SF









264 Speed Solutions: Tools to Slow Our Streets



Source: SFMTA Photo Archive

Source: SFMTA Photo Archive

Speed Solutions: Tools to Slow Our Streets 265

- 1. Setting lower speed limits
- 2. Reducing, reconfiguring & narrowing lanes
- 3. Timing traffic signals
- 4. Reducing speed at intersections and midblock
- 5. Vertical speed reducers (speed humps, cushions, and more)
- 6. Speed radar signs
- 7. Midblock solutions (chinanes, pinch points, crosswalks and islands)
- 8. Roundabouts and traffic circles

Lower speed limits to **20 MPH** on every possible street with an aggressive timeline





Lower speed limits to 20 MPH on every possible street with an aggressive timeline

90% of people will survive if hit by a vehicle traveling 20 MPH.



Develop a systematic approach to bring solutions to different types of streets with the biggest speed issues.



Credit: William McLeod



Bring every possible speed solution to high-injury streets.



Source: SFMTA Photo Archive



Focus on Equity Priority Communities.



Bring more transparency, evaluation, and metrics to speed-related work.



Photo by Richard Drdul via Flickr Creative Commons



Get City agencies better coordinated and refocused on Vision Zero





Enhance the role of enforcement and education in setting a safer tone on our streets.



SFPDTrafficSafety @ @SFTrafficSafety · Sep 27

Unfortunately, it didn't take long to start clocking drivers doing about 60mph.

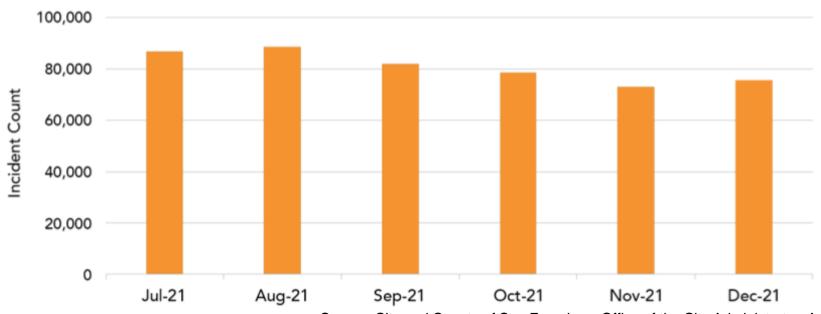
With LIDAR, if you can see us, it's already too late.

Please slow down, and drive safe.





Speeding Incidents 10 mph+ Over Posted Limit in SF, Excluding Highways (Geotab Only)



Source: City and County of San Francisco; Office of the City Administrator. April 29, 2022

Source: Tweet by Vision Zero Minneapolis @visionzerompls September 23, 2020; Jodie Medeiros; KPIX







Let's Slow Our Streets and save lives. Let's be a 'safe speeds city'!







MAKING SAN FRANCISCO A 'SAFE SPEEDS CITY'

Solutions to Slow Our Streets and Save Lives







Volunteers made it possible for us to do speed surveys on 47 blocks in every District. This is from our survey in the Bayview, which community partners made a big success.

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WE NEED TO SLOW OUR STREETS

Dangerous speeds kill. Again and again on San Francisco's streets.

When drivers go dangerous speeds, the risk for you and me and our loved ones skyrockets, and speed is the #1 contributor to severe and fatal crashes in our city.

Walk San Francisco launched the Slow Our Streets campaign in 2020 to take on dangerous speeds because there is simply no faster way to save lives from traffic crashes.

In 2021, together with our members, 35+ groups in the Vision Zero Coalition, and Families for Safe Streets, we successfully pushed the City to commit to creating a comprehensive speed management plan. But this win will only be meaningful if the plan itself has meaningful commitments along with the funds and accountability needed to make it happen. So in 2022 with the help of volunteers and neighborhood groups, Walk SF conducted speed surveys around the city to see what's really happening. We researched everything San Francisco is — and isn't — doing related to speed, plus what's really working here and elsewhere.

This report is the culmination of that work and a blueprint for San Francisco to become what we call 'a safe speeds city.'

If San Francisco were a 'safe speeds city' we would all feel it every day, on every street. We would immediately see significantly fewer tragedies. Our neighborhoods — especially the Tenderloin, the Bayview, and South of Market — would *feel* more like neighborhoods, and communities would be stronger.

And San Francisco would take a huge leap in progress toward Vision Zero. In 2024, it will be a decade since San Francisco's leaders and agencies committed to Vision Zero: a data-driven, preventative, and intersectional approach to ending severe and fatal traffic crashes. There's no better time and way for the City to live out this promise than addressing speed in every way possible now. **So read on and join the movement to Slow Our Streets to save lives.**

A speeding driver almost killed Julie Nicholson

Julie Nicholson was jogging in the Panhandle when a speeding driver ran a red light and crashed into another vehicle. The vehicles ricocheted and one struck her, sending her flying 20 feet. She broke her neck and back. Julie is lucky to be alive, and has shared her story with City leaders many times urging action to Slow Our Streets.

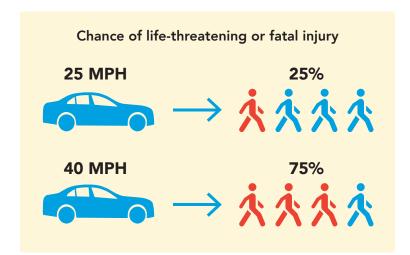


WHY SPEED MATTERS SO MUCH

Safe streets depend on safe speeds.

The faster a driver is going, the more likely a crash is to occur. That's because the driver has a smaller scope of vision, less time to react, and can't stop the vehicle as quickly. And the faster a vehicle is traveling at the moment of impact, the more serious the injuries and the higher the chance of death.

Pedestrians are highly vulnerable as speed rises above 25 MPH. The most frequently cited study on speed and risk of fatality¹ shows that at 25 MPH and under, a person has a less than 1 in 4 chance of being severely injured or killed if they are hit. But by 40 MPH, this flips, with 75% of pedestrians suffering life-threatening injuries or dying. Most drivers don't realize how deadly going even 5 or 10 miles over a 25 MPH speed limit is — and many wouldn't think twice about doing it.



90% of people will survive if hit by a vehicle traveling 20 MPH.¹⁴

On urban roads, reducing average speed by 1 MPH reduces injury collisions by 2-7%.²

Fatality rates for seniors are significantly worse. For example, a 70-year-old person hit by a driver of a vehicle going 35 MPH will experience fatality rates as though the vehicle were going 45 MPH in a crash with a 30-year-old, and be very unlikely to survive.³

And this likely underestimates risk for pedestrians. With the recent popularity of SUVs — now surpassing sedans as the best-selling vehicles in the US^4 — the average midsize vehicle now weighs around 5,000 pounds.⁵ Many reports have cited SUVs as a major factor in the national rise of pedestrian traffic deaths, which is logical given the sheer impact of vehicles this large and where these vehicles hit a person.

So in a city like San Francisco, where millions of people walk each year, keeping speeds down is critical to keeping us all safe.

What are dangerous speeds?

When we say 'dangerous speeds', we mean 30 MPH or higher. This is 5 MPH higher than the majority of San Francisco's speed limits, and the speed at which the likelihood of life-threatening injuries or death for a pedestrian starts to quickly rise. A person is about 70% more likely to be killed if they're struck by a vehicle traveling at 30 MPH versus 25 MPH. By 40 MPH, about 75% of pedestrians will suffer a life-threatening injury or die.⁶

What is median speed vs. 85th percentile speed?

In our speed surveys, we looked at both the median speeds and 85th percentile speeds for each street we surveyed.

Median speed is taking a range of driver speeds and determining how fast the middle driver was going (different from the average). The 85th percentile speed is the speed that 85% of drivers are going at or below—and represents the most likely speed of any one driver—but also shows how fast the remaining 15% of drivers are going. This helps us see the extremes that pedestrians face.

The 85th percentile is how transportation engineering has approached setting speed limits for over fifty years,⁷ much to the detriment of our safety.⁸ Assembly Bill 43 (discussed more in "Future Speed Solutions") was passed to help address its shortcomings and is why San Francisco can now lower the speed limit on some types of streets.

What are arterial roads?

An arterial road is a high-capacity urban road — think of big multi-lane thoroughfares in San Francisco like Geary Boulevard. Many arterial roads are on the 'high-injury network': the 13% of streets where 75% of crashes occur in San Francisco.

SURVEYING SPEED IN SAN FRANCISCO

WHAT'S REALLY HAPPENING WITH DANGEROUS SPEEDS?

For many years, speed has been the #1 cause of severe and fatal crashes on San Francisco streets. This statistic comes from police reports and investigations, and mirrors statewide trends. It also lines up with how our streets often feel as a pedestrian.

Walk SF wanted to understand dangerous speed in greater detail. Where is it the worst? How extreme is it? Where are people most at risk? And as the City embarks on creating a comprehensive speed management plan, we felt that additional data could help to strengthen their approach.

So over eight months in 2022, Walk SF surveyed speeds on 47 blocks across the city in every Supervisorial District. We assessed multiple streets at each survey, and included many street types: quiet, two-lane residential streets; three-lane streets with protected bike lanes; four-lane streets with frequent Muni service; and five-lane arterials designed to move tens of thousands of vehicles daily. We also included streets with varying levels of safe streets improvements, including some that haven't had any yet.

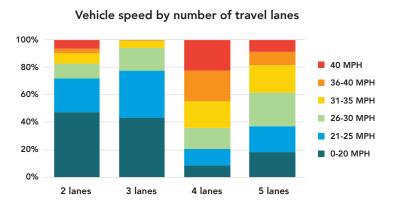
Walk SF members, neighbors, and community groups made it possible for us to gather data. And thanks to these trained volunteers and a handful of radar guns, we know a lot more about what's going on with dangerous speeds.

OUR SPEED SURVEY FINDINGS

Our surveys showed that all neighborhoods face frequent dangerous speeds for people walking. The threat is real citywide, but varies widely depending on the type of street and level of safety improvements.

It is important to note that our speed survey data likely underestimates speeds — possibly significantly. For safety reasons, volunteers were reflective vests, and depending on the location, stood in spots where they were visible to drivers. Also, to get a clear line of sight with the radar guns, volunteers collected data from the outer lane, which is generally slower traffic. Surveys were timed to be during a time of day with free-flowing traffic.

What we saw in our surveys is that dangerous speeds are happening everywhere, but arterial roads with four and five travel lanes are by far the worst in terms of frequency and how extreme dangerous speeds are. We found that four-lane streets had 85th percentile speeds of 31.0 MPH, on average. That means 15% of drivers, or almost 1 of 6 drivers, are going faster than 31.0 MPH. The top speeds we recorded on four-lane streets averaged 41.9 MPH. Five-lane roads were even faster with 85th percentile speeds of 31.5 MPH, on average. The top speeds we recorded on five-lane roads averaged 46 MPH.



Not only do arterial roads see higher speeds, but because of the greater number of lanes, pedestrians must contend with vehicles going by at dangerous speeds as often as 4-5 times/minute on streets like Harrison Street, Lincoln Way, and Oak Street, or as many as 30 times/minute on Lake Merced Boulevard. It's no surprise that many of the city's widest streets are on the high-injury network: the 13% of streets where 75% of crashes occur.

Dangerous speeds are less frequent and extreme on two- and three-lane streets, but are nevertheless a problem. Two- and three-lane streets averaged 85th percentile speeds of 24.7 MPH. The top speeds on two- and three-lane streets averaged 34.2 MPH. That means if a person walks just a few blocks on one of these streets, they are almost guaranteed to encounter a driver going at a dangerous speed.

People are especially at risk of dangerous speeds near parks. In our speed surveys, we observed some of the most dangerous speeds occurring directly adjacent to Lake Merced Park, McLaren Park, Golden Gate Park,

and the Panhandle. Lake Merced Boulevard is the worst offender, with its close proximity to schools and speed limits of 35 MPH and 40 MPH on different sections. During our survey, we witnessed numerous drivers going over 50 MPH.

On Geneva Avenue, near the Purple Playground and soccer fields at McLaren Park, drivers regularly went over 40 MPH on this 25 MPH road. This means pedestrians face dangerous speeds three times every minute, on average. And to get to Golden Gate Park, we saw top speeds regularly above 40 MPH on Fulton and Lincoln.



Walk SF members, neighbors, and community groups made it possible to survey speeds on 47 blocks across the city.

STREET SAFETY IMPROVEMENTS AND LOWERED SPEED LIMITS ARE WORKING TO BRING DOWN SPEED

Our surveys led to a remarkable comparison in the South of Market neighborhood that shows the difference a lane reduction can make. Folsom and Harrison sit one block away from each other, have similar curb-to-curb widths (between 60 and 65 feet), and serve one-way travel in the east- or west-bound directions.

But Folsom had a suite of 'Quick Build' safety improvements installed in late 2017 and early 2018 using paint, posts, signs, and signals to calm the street, plus added a protected bike lane and concrete bus islands. Folsom now has three vehicle travel lanes compared with Harrison's five.

The difference we found in speeds was remarkable. On Folsom, median speeds were 18 MPH and the 85th percentile speed was 24 MPH. Speeds were fully 10 MPH faster on Harrison; its median speed was 29 MPH and 85th percentile speed was 34 MPH. Folsom's top observed speed was 34 MPH vs. Harrison's 47 MPH. A person walking will contend with dangerous speeds over 20 times as often on Harrison as on Folsom — over eight times per minute versus once every two and a half minutes.





The difference in speeds between Harrison (left) and Folsom (right) is remarkable, but not when you see how they're designed. Our surveys saw lower average speeds on streets with completed safety projects.

Dangerous speed hits home for Paul and Susan

On the day Paul and Susan moved into their home on Fulton Street, they witnessed a crash right outside. This would turn out to be the first of many—and they have the pictures to prove it. The photo below shows the aftermath of when a speeding SUV changed lanes and struck a car that was pulling out of a parking space, which then jumped the curb and hit Paul and Susan's neighbor's house. There are frequently families walking on the sidewalk there. Thankfully there weren't any when this happened.

This is just the tip of the iceberg. On Father's Day, Paul and his baby were almost hit by a speeding driver while crossing Fulton.







Focus on the Tenderloin: Where 20 is Plenty

In April 2021, speed limits on every street in the Tenderloin neighborhood were reduced from 25 MPH to 20MPH — a first in San Francisco for neighborhood-wide speed limit reductions.

This was a welcome change for the neighborhood, where every single street is designated as "high-injury" in terms of the number of severe and fatal traffic crashes.

We did a speed survey in the Tenderloin with residents and members of the Tenderloin Traffic Safety Task Force, organizations like Central City SRO Collaborative, and the Tenderloin Community Benefit District.

And great news: the new speed limits are making a meaningful difference — and lighting the path toward becoming a 'safe speeds city.' We surveyed Hyde, Leavenworth, Jones, and Turk, and found median speeds were 17.8 MPH and 85th percentile speeds were 22.5 MPH on average. These rates were lower than every other neighborhood we surveyed. Still, dangerous speeds did occur about every 10 minutes on average, which means more street design changes and signal upgrades are needed.



Focus on the Bayview: A Neighborhood Asking for Change

"49 miles an hour," Hicks said as a driver raced by on Third Street.

'Wait, what's the speed limit?" asked Dario as he jotted down the number on the tracking sheet. Like most San Francisco streets, it was 25 MPH, but there wasn't a speed limit sign anywhere to be seen.

We partnered with the San Francisco African American Arts and Cultural District (SFAAACD) to do a speed survey in the Bayview, but also to start a bigger conversation about unmet needs of the neighborhood when it comes to traffic safety. SFAAACD, plus United in Love, Rafiki Coalition, and other groups helped connect with people deeply rooted in the Bayview to participate.

Many participants shared how dangerous speeds can be, and they were right. In less than an hour of the speed survey on Third, Oakdale, Mendell, Newcomb, McKinnon, and Phelps, drivers were captured going as fast as 53 MPH. It's clear that more work needs to be done to bring down dangerous speeding on Bayview streets and respond to residents on what safety changes they want to see.

SPEED SOLUTIONS: TOOLS TO SLOW OUR STREETS

Our speed surveys confirmed the real threat of dangerous speeds, as well as how solutions like lower speed limits and redesigning streets can make a real difference in reducing speeds.

There are many speed solutions out there, varying in cost and effectiveness. All can play important roles, and are most effective in a layered approach.

Which solutions is San Francisco already using and how? What could the City be doing more of, or doing more strategically? We researched all solutions currently being used, and identified opportunities to strengthen how these are being applied.



Speed humps are a cost-effective, proven way to bring down speeds to around 15-20 MPH.



Mission Street recently got 20 MPH speed limits.

SOLUTION 1

SETTING SPEED LIMITS FOR SAFETY

Speed limits are one of the most visible cues on how fast a driver should go. While we know drivers don't always heed these, appropriate speed limits are a crucial starting point. Research shows they are particularly effective in bringing down the most dangerous, outlier speeds.

After Portland brought 20 MPH to all residential streets, a study⁹ found the number of drivers traveling more than 35 MPH was nearly halved (49.6%), and incidents of speeding more than 30 MPH went down by 33.6%.

After Boston lowered speed limits from 30 MPH to 25 MPH in 2017, a study¹⁰ found the number of drivers exceeding 35 MPH dropped by 29.3%.

Those are life-saving speed reductions. A person hit by a car traveling at 35 MPH is about five times more likely to die than a person hit by a car traveling at $20 \text{ MPH}.^{11}$

► What's San Francisco Doing Now?

The majority of San Francisco's streets have 25 MPH speed limits, though some are higher, like Lake Merced Boulevard discussed above.

Percentage of S.F. street segments
15 MPH 10.3%
20 MPH 1.3%
25 MPH 82.5%
30 MPH 3.0%
35 MPH 2.5%
40 MPH 0.3%
45 MPH 0.2%

Source: City of San Francisco¹²

Note: A street segment is defined as any portion of a street located between two intersections.

In 2012, as part of a Walk San Francisco campaign, 15 MPH zones were established around almost all public and private schools. As mentioned above, a 20 MPH speed limit was implemented across the entire Tenderloin neighborhood in 2021 - and speed surveys show this is working.

With the passage of Assembly Bill 43¹³ in 2021, San Francisco now has a greater ability to set speed limits based on safety with certain types of streets. Commercial corridors have been eligible for lower speed limits since the bill's passage, but streets with high crash rates and/or numbers of vulnerable road users are now also eligible for a 5 MPH reduction as of November 2022. The need to bring speed limits below 25 MPH everywhere possible comes down to this: **90% of people will survive if hit by a vehicle traveling 20 MPH**. ¹⁴

The City used its new authority to lower speed limits on sections of seven commercial streets in spring 2022: 24th Street, Haight, Fillmore, Ocean, Polk, San Bruno, and Valencia. The City is in the process of lowering speed limits on an additional 35 street sections, with completion estimated by fall 2023. The sign crews that produce and install speed limits signs are currently experiencing a backlog. This slow roll-out is frustrating when implementing lower speed limits is one of the fastest, most cost-effective solutions out there. After the initial 35 street sections are complete, the San Francisco Municipal Transportation Agency (SFMTA, the City's transportation department and lead agency on Vision Zero), plans to look at a more neighborhoodwide approach for the South of Market, Financial District, Chinatown, and North Beach and high-injury corridors citywide.

▶ Opportunities

San Francisco's ability to now lower speed limits to 20 MPH on many more streets is one of the cheapest, fastest solutions available — and the City needs to max out this tool to support a serious shift in speeds across San Francisco.

- The signage backlog problem needs to be solved, or it will take more than 5 years for 20 MPH to be established on all high-injury and business district streets. Additional capacity in the SFMTA sign shop is absolutely necessary.
- Speed limit signs must be installed at more frequent intervals, too. Over two-thirds of blocks where we surveyed speeds had no speed limit sign present. A study in Seattle¹⁵ showed how installing signs every ¹/₄ mile with no other street design changes notably reduced speeds. The new 20 MPH corridors have speed limit signs spaced at every ¹/₈ mile, which should be standard for all speed MPH signs on high-injury corridors.
- SFMTA needs a plan for and a firm commitment to complete all allowable speed limit reductions by December 2024, the ten-year anniversary of the City's adoption of Vision Zero.
- Major and ongoing education campaigns focused on becoming a "safe speeds city" will be essential to successfully shifting norms. This is especially important given the number of drivers who don't live in San Francisco.



Every possible speed solution is needed on high-injury streets with schools, parks, and senior facilities on them

Last year, educator Andrew Zieman was hit and killed crossing at Franklin and Union Streets. He was on his way to Sherman Elementary School on the corner of Franklin and Union. Franklin is a wide, three-lane, one-way street with rampant speed problems. Until November 2022, Franklin did not qualify for lower speed limits due to the number of travel lanes. Every possible speed solution is needed here—and on all streets like this.

SOLUTION 2

REDUCING, RECONFIGURING, AND NARROWING LANES

What a street looks and feels like to a driver makes a huge difference in how they drive, particularly with speed. The wider and straighter a street is, the faster drivers feel comfortable going — especially when there are multiple travel lanes. If you flip the script, drivers naturally go slower.

The most common type of street reconfiguration or 'road diet' converts four travel lanes — with two lanes in each direction — to three travel lanes, with a through-lane in each direction and a middle turn lane. This change can bring down speeds 3-5 MPH. And because a middle turn lane reduces delays at intersections for

turning vehicles, travel time is often unaffected.

Changing the layout of lanes also creates an opportunity for narrowing dangerously wide lanes. Lane width is correlated directly with vehicle speed; a study 17 showed that if lane width is increased by 3.3 feet, vehicle speeds are 9.4 MPH faster. Additionally, narrowing lanes creates space for wider sidewalks, bus lanes, bike and micromobility lanes, or parklets — all of which provide additional traffic calming benefits.



After the 'Quick Build' project on 6th Street reduced travel lanes from four to three, 85th percentile speeds went down by 21%.

▶ What San Francisco is Doing

San Francisco has used road diets over the past few decades with big safety and transportation projects on Cesar Chavez Street, Masonic Avenue, Second Street, San Jose Avenue, and other streets.

Since 2019, SFMTA has been doing road diets through the 'Quick Build' program — using only paint and posts to reconfigure the street — and it's working. In the South of Market neighborhood, a 'Quick Build' project on Sixth Street took the street from four travel lanes to three and brought 85th percentile speeds down by 21%. Nearby in the Tenderloin, a road diet on Taylor took the street from three travel lanes to two, resulting in a 94% reduction in speeds over 40 MPH. And as mentioned previously, our speed surveys on Folsom Street, which went from four travel lanes to three, echo the power of this solution.

▶ Opportunities

As our speed surveys demonstrated, speeds are much deadlier on four- and five- lane arterial roads — and road diets work. The City must use lane reconfigurations and reductions at every opportunity.

- Every safety project on a high-injury corridor should first evaluate the possibility of reallocating travel lanes to better uses, like transit lanes, protected bike lanes, or safer walking spaces.
- Road diets have often occurred on streets that need extra space to add a bike or transit lane. But road diets should be used even when extra road space is not needed for another purpose. SFMTA should add features to discourage drivers from entering these spaces by installing mid-block pinch points, small lateral rumble strips, or traffic dots.

SOLUTION 3

TIMING TRAFFIC SIGNALS TO SUPPORT SAFE SPEEDS

There's a surprising speed solution that's almost invisible: setting the timing on traffic signals to encourage safe speeds. Timing traffic signals makes it so that traffic moving at a certain speed will get continuous green lights — a "green wave." As drivers figure this out, they stick to the speed limit, knowing that they'll move smoothly along as their reward. Timing the flow of traffic is an especially effective tool on wide, one-way streets.

▶ What San Francisco is Doing

The SFMTA is using this tool on some streets, and even has a 'green wave' for people biking on Folsom and Valencia in the Mission set at 13 MPH. Fell, Oak, Franklin, and Gough have long had timed traffic lights set at the speed limit of 25 MPH.

But SFMTA has increasingly updated the speed for these green waves to lower, safer speeds. In the fall of 2019, for example, the SFMTA retimed signals for Bush and Pine in the area north of Market and east of Van Ness. By retiming the speed for the green wave to 25 MPH rather than 30 MPH, the 85th percentile speed went from 33 MPH to 30 MPH on Bush and Pine.



'Green wave' signage exists for bicyclists, but could also be used on streets with 'green waves' for drivers.

This then made it legal for the City to lower speed limits on Bush and Pine Streets from 30 MPH to 25 MPH the following year (based on state law prior to the passable of Assembly Bill 43 around limit-setting and 85th percentile speeds). A later evaluation showed that drive times were not impacted.

The SFMTA implemented timed signals on Franklin this year (set for traffic to go 25 MPH during the day and 15 MPH at night), and our speed survey showed this change was positively shifting behavior on this well-known hotspot for dangerous speeds.

▶ Opportunities

San Francisco is already leading the way in harnessing traffic signals for safer speeds; like speed limits, this is a lower-cost solution. Now the City must go even further, making this the norm especially on all arterial one-way streets.

- Setting the 'green wave' at lower speeds should be de facto with all 'Quick Build' safety improvement projects, as well as larger capital safety projects.
- Every high-injury corridor that has not had signals retimed for safe speeds should receive slower progression timing by December 2024. Start with one-way streets that have not had full safety projects, like 9th Street, 10th Street, and Franklin Street, as well as Gough Street south of Broadway.
- Messaging, signage, and education for drivers (like what exists for bicyclists) about signal timing could help people understand how they work more quickly, and then stick to the speed limit.

SOLUTION 4

BRINGING DOWN SPEED AT INTERSECTIONS

While vehicle speeds matter along every part of a block, they matter most where there is the greatest opportunity for a crash: at the intersection. Turning vehicles are the biggest threat to pedestrians. A driver may not have a signal controlling their behavior, putting them in direct conflict with someone crossing. Turning drivers often make what's known as 'visual scanning failures.'

Left turns are especially dangerous. When a driver makes a left turn, they're more likely to make it at a higher speed and cut corners because they have a wider radius than with a right turn. Visibility is reduced for drivers, too, because the car's frame blocks a driver's view when they're making a left turn. In 2019, 40% of pedestrians killed in San Francisco were hit in the crosswalk by a driver making a left turn. In 2019, 40% of pedestrians

But there are solutions: bulb-outs, painted safety zones, protected intersections, and left turn calming all reduce the speed a driver makes a turn, thereby reducing the chances and severity of a crash.

Installed at corners, **concrete bulb-outs (also called curb extensions) and painted safety zones** force drivers to make a more precise turn to avoid hitting the curb or posts without veering into oncoming traffic. Concrete bulb-outs slow down turn speeds by 2.6 MPH on average¹⁹ and also somewhat slow through-traffic (a 1.1 MPH decrease was observed in one study).²⁰ Concrete bulb-outs are more expensive, but more durable. Painted safety zones use paint and posts, and are less inexpensive and faster to install; SFMTA has shown these to reduce turning speeds by up to 55 percent on average.²¹ **Protected intersections**, which put concrete islands or painted safety zones on the outside of a bike lane, are like bulb-outs, but reach even farther into the intersection.

Strategically placing **left turn calming**, vertical posts, rubber speed bumps, and/or slow turn wedges in an intersection forces a driver to take a slower, 90-degree turn — this is known as centerline hardening (when vertical posts and rubber bumps are added to the median). In New York, where left turn calming was pioneered, this tool has slowed average turning speeds by 52%. New York City has left turn calming at 589 intersections.²² A study in Washington D.C. showed that left turn calming decreased the odds of a driver turning faster than 15 MPH by 67%;²³ D.C. has calming installed at 85 locations.²⁴



A concrete bulb-out (also known as a curb extension) on Geary Boulevard.



A painted safety zone on Second Street.

▶ What San Francisco is Doing

For many years, the City has generally added concrete bulb-outs when doing a major capital street improvement project as funding has allowed. Now with 'Quick Build' projects, painted safety zones are always included, though not necessarily at every corner. There is only one protected intersection so far, at 9th and Division. In a post-project evaluation of the protected intersection, 25 this resulted in drivers yielding to pedestrians 100% of the time and 98% of drivers turning at or below the speed limit. More protected intersections are being planned as part of the Folsom/Howard project.



Left turn calming on Leavenworth Street forces drivers to navigate rubber bumpers and posts.

Left turn calming is a much newer tool for SFMTA, with limited use despite its incredible potential. The SFMTA launched a small left turn calming pilot at seven intersections in 2020, with evaluations showing a 17% reduction in average speed (1.7 MPH slower) and a 71% reduction in the likelihood of a car turning left at higher speeds over 15 MPH.²⁶ As part of the City's newest Vision Zero Action Strategy,²⁷ the SFMTA committed to adding left turn calming at a modest 35 additional intersections by the end of 2024. We believe this inexpensive speed reduction treatment should be brought to many more intersections.

▶ Opportunities

- Painted safety zones should be the default design for *every* corner of *every* intersection in a 'Quick Build' project and made strong enough to withstand wear-and-tear from traffic. Some 'Quick Build' projects have not maxed out where painted safety zones are added because SFMTA anticipates posts will be frequently run over and require frequent maintenance. But we see this as a demonstrated need for stronger 'Quick Build' materials, plus the use of thicker bollards like K71s, rubber bumpers, tire stops, dots, and other tools to ensure drivers respect safety zones.
- Protected intersections should be the default design for any intersecting routes on the bike network when these are improved as part of larger safety projects.
- Left turn calming should be required for all eligible intersections in future capital street safety and 'Quick Build' projects, with centerline hardening used at at two-way to two-way intersections. The SFMTA should also add slow turn wedges to all one-way to one-way intersections on the high-injury network.



Oakland uses substantially larger posts in its pedestrian safety zones.

SOLUTION 5

VERTICAL SPEED REDUCERS: SPEED HUMPS, CUSHIONS, AND MORE

The original speed solution — the speed bump — is still one of the most powerful tools available to reinforce safe speeds. Today, there are four main variations on this same idea. 28 Vertical speed reducers are cost-effective and durable.

Speed bump: The most pronounced raised, rounded area. Designed for keeping speeds to ~5-10 MPH.

Speed humps: A raised, gently rounded area that goes across the entire driving lane. Used to bring speeds down to ~15-20 MPH.

Speed cushions: A raised area (rounded or flat) that has wheel cutouts designed to allow large vehicles, such as fire trucks and buses, to pass with minimal slowing or rocking. Sometimes there are two wheel cutouts for each lane, or just two wheel cutouts spaced toward the middle of the street.

Raised crosswalks and speed tables: A wide, raised area with a flat top, often used for a mid-block crossing. Entire intersections can be raised, too.

How tall and wide the element is, what material it's made of (rubber slows drivers more than asphalt), and how frequently these are spaced determine how much speeds are slowed.

► What's San Francisco Doing Now?

Over the past 20 years, the SFMTA has worked with the Department of Public Works to install about 900 speed humps and about 300 speed cushions²⁹ at a cost of around \$15,000 each.

Many of these have been installed as part of the Residential Traffic Calming Program (see below). Others have been installed as part of proactive neighborhood traffic calming projects in areas with high numbers of seniors or in school zones.

More recently, there has been criticism that humps are installed with too gentle of slopes to make much difference, and that the cut-outs in speed cushions fit most vehicles' wheel width³⁰ so as to have little real effect.

▶ Opportunities

- If SFMTA doesn't yet have a database of streets with vertical speed reducers including type, date of installation, and reason installed (Residential Traffic Calming program, school zone, etc.) they should create one. This is an important first step for smarter speed planning.
- SFMTA also needs updated evaluations of the efficacy of speed humps vs. speed cushions, including an analysis of the widths of wheel cut-outs. Agency design standards should be set to ensure speed reduction goals are met, with past projects revisited and enhanced as necessary.
- A more systematic approach is needed. Vertical speed reducers should be targeted at two-lane roads near large high-injury network arterial streets that drivers use to avoid traffic. Portland, for example, is focusing speed humps on cut-through streets.
- Raised crosswalks should be used in many more "transition zones" where speed limits change drastically.
 Their presence sends a visual message to drivers where traffic transitions from a freeway into a
 neighborhood. This includes streets like Monterey Boulevard, Vermont Street, San Jose Avenue, and other
 locations where Highway 101 and 280 touch down in South of Market, Excelsior, Dogpatch, Visitacion
 Valley, and the Bayview neighborhoods.

SOLUTION 6

SPEED RADAR SIGNS

Speed radar signs, which show a driver's speed in real time next to the posted speed limit, can help tamp down speeds. Numerous studies on speed radar signs have shown decreases of between 3-9 MPH in driver speeds. Signs can be permanently installed, or a mobile sign can be placed for a period of time.



Speed radar signs reduce speeds by 3-9 MPH, and could be used to help educate drivers about new, lower speed limits.

Speed radar signs are especially effective at locations where streets move from a higher speed limit to a lower speed limit, like the transition between a highway and a city street or when entering a school zone.

Speed radar signs are also useful at locations where drivers tend to speed up (e.g. going down a hill) or may underestimate the need to slow their speed (e.g. on a curved road or when approaching an area with an unsignaled crossing or a school zone).

Permanent installation costs around \$50,000 per sign, a relatively low-cost solution.

► What's San Francisco Doing Now?

San Francisco has only about 30 permanent speed radar signs, with plans to add about four more per year. Most speed radar signs are not on high-injury streets, and many have been placed based on neighbor requests or in response to a crash. What's worse, these signs currently aren't enabled to collect speed data.

▶ Opportunities

Speed radar signs hold a lot of promise for keeping drivers aware of speed limits and their own behavior. San Francisco must invest significantly more funding and commit to a more focused approach toward this solution. An internal program is needed — one that maps out strategic sign placement and implements what's really needed to support speed management goals. This should include:

- Prioritizing permanent speed radar signs for high-injury streets with the biggest speed issues, especially near highway off-ramps in the South of Market neighborhood and southeast San Francisco.
- Expanding speed radar signs in 15 MPH school zones in close proximity to high-injury streets and in Equity Priority Communities.
- Enabling speed data collection so it can be used in evaluating the new radar sign program (and assessing the City's comprehensive speed plan).
- Determining how signs can be added more quickly (and potentially be solar-powered) in partnership between SFMTA, Department of Public Works, and the Public Utilities Commission.
- Using mobile speed radar signs as a way to educate drivers about new 20 MPH streets as these are rolled out.

SOLUTION 7

SLOWING SPEEDS MIDBLOCK: CHICANES, PINCH POINTS, CROSSWALKS, AND CONCRETE ISLANDS

Longer blocks or hills will often lead drivers to build up more speed than they should, even on two-lane streets. By adding **chicanes** — concrete bulb-outs that alternate from one side of the street to the other — drivers have to navigate S-curves and slow down. This can yield 16-29% reductions in the 85th percentile speed (or 4-7 MPH if the 85th percentile is 25 MPH).³²

Pinch points are a concrete bulb-out on both sides of the street at a mid-block location. This tool works best on narrower streets and when the curb is extended significantly into the street. These can support unsignalized **midblock crosswalks**, though a raised crosswalk may be a safer option (see above in "Vertical



This midblock crosswalk on Fulton Street uses concrete islands that force drivers to slow down to navigate.

Speed Reducers"). Small **concrete islands** can also force drivers to slow down in order to navigate the islands. Like with pedestrian safety zones, versions of chicanes, pinch points, and islands can be made using low-cost paint and posts along with other materials like tire stops and rubber bumpers instead of concrete.

Streets with parking can replace a parking space on each side to narrow a mid-block crossing, or they can allow parking on alternating parts of the street for a chicane treatment.

► What San Francisco is Doing

San Francisco has applied these tools to a limited number of low-traffic streets. For example, on Beacon Street above Noe Valley, curved curb extensions and a median island create a narrow curve that drivers must navigate more slowly at a crosswalk between two parks.

▶ Opportunities

- As the City develops a comprehensive approach to speed, it must bring these tools to more places and more systematically. Streets where it is critical to keep speed down, like in 15 MPH school zones and on Slow Streets, are perfect for chicanes and pinch points. These tools could be brought to more two-lane streets, especially those with current lane widths over 11 feet and/or where speeding is a known issue.
- Neighborhood park entrances and senior centers are great candidates for midblock crossings and median islands.

SOLUTION 8

TRAFFIC CIRCLES/ROUNDABOUTS

Another option for managing speeds at the intersection is **traffic circles**, also known as **roundabouts**. These consistently reduce speeds by 11% or 2.75 MPH on a 25 MPH street.³³ Crashes are also dramatically reduced because of greatly limiting the possible conflict points between different vehicle maneuvers.³⁴

▶ What San Francisco is Doing



This traffic circle next to Lauren Hill Playground does not have four-way stops.

In San Francisco, traffic circles have a controversial history. While they have brought down speeds, neighbors have sometimes objected to them. Part of this issue is related to the local practice of adding four-way stop signs at some traffic circles, which reduces the traffic flow benefits of traffic circles and also likely makes them less popular with neighbors.

Given how effective traffic circles (without a four-way stop) are in other cities, we felt this solution should be part of the discussion. There are currently 31 built traffic circles in San Francisco³⁵ and 24 of these have four-way stops.

Opportunities

- Revive the use of traffic circles without four-way stop control as a solution for long, straight residential streets with dangerous speeds. Include additional traffic calming tools, like pedestrian safety zones to narrow crossings or raised crosswalks, to ensure pedestrians who move slower can still cross safely at these uncontrolled crossings.
- Use inexpensive temporary materials and plantings to test out mini-traffic circles in neighborhoods that feature wide streets and ample space in the intersection, like the Sunset.

"It's those high-end speeds that are disproportionately the cause of so many crashes on our streets... There are schools on these streets."

> -SFMTA Streets Director Tom Maguire at a January 2020 public hearing about the need to lower the speed limit on Bush and Pine Streets

SPEED SOLUTIONS: ADDITIONAL APPROACHES IN SAN FRANCISCO

SAFE SPEEDS AROUND SCHOOLS & SENIOR FACILITIES

There's no more important place for drivers to go slow than around schools and senior facilities. In 2012, Walk SF successfully pushed the City to create 15 MPH zones around almost all public and private schools.



Five streets now have 'Senior Zones' with lower limits, but these are only a few blocks long.

In 2020, we supported the City in establishing 'Senior Zones' near some senior living facilities and centers. 'Senior Zones' have been added to sections of Bush Street, Sunnydale Avenue, Geary Boulevard, 19th Avenue, and Brotherhood Way in close proximity to senior housing and services. Unfortunately, the Senior Zones are only a few blocks long — practically a blip with the high-traffic, fast-moving streets they're on.

SFMTA has a program to bring street safety solutions to San Francisco Unified elementary and middle schools, including some of the tools in the previous section. But only five schools are audited each year, improvements often take years to implement, and priority isn't given to

schools in Equity Priority Zones. With over 100 public schools, it will take more than 20 years to bring better infrastructure to all of them. SFMTA needs more transparency around the schools they've assessed, should empower Safe Routes to School partners to help speed up audits, and increase staffing for street engineering around schools.

When it comes to Senior Zones, this needs to be evaluated so this approach can be strategically enhanced and expanded as part of the City's comprehensive speed plan. Streets near senior housing and facilities need extra speed solutions applied consistently.

SLOW STREETS

Cities around the world are rethinking their street space to support safety, health, air quality, climate, equity, and economic goals. London now has 'Low Traffic Neighborhoods.' Seattle has 'Stay Healthy Streets.' Barcelona has 'Superblocks.' All of these are essentially 'slow speed zones.' If there are enough of these — and they're connected — they can help shift norms around speed and shift more people to sustainable modes.

In response to the pandemic, San Francisco created 47 miles of 'Slow Streets.' This allowed many people to experience low-traffic, low-speed streets — and the City to experiment with the concept. An evaluation by SFMTA shows a 14% decrease in traffic speed and a 35% decrease in traffic volumes on Slow Streets. The data shows an increase in pedestrian and bicycle usage (up 65% and 27% respectively) on Slow Streets, and a 36% decrease in collisions. 36



Evaluation of the City's Slow Streets show notable decreases in traffic speeds.

While a handful of Slow Streets have been made permanent and some phased out, the City will determine its overall post-pandemic approach by year end. Mayor London Breed recently shared her vision³⁷ for "a connected network that will support people walking and biking within and between neighborhoods across the city" including expanding into Equity Priority Communities.

Neighborhood groups and citywide organizations (including Walk San Francisco) are working together to shape the details of the City's long-term approach for Slow Streets to realize the Mayor's vision. It's critical that Slow Streets are made 15 MPH zones with safety

infrastructure to support those speeds and metrics for success. A network must connect schools, parks, and services in ways that are intuitive and meet people's needs. It must also invest in making community-led pilot projects happen in Equity Priority Communities without Slow Streets.

RESIDENTIAL TRAFFIC CALMING

Imagine you live on a two-lane street where drivers regularly drive at unsafe speeds. And you're not alone in feeling unsafe: neighbors have shared their worries with you, too.

"Someone's going to get hurt or worse," your neighbor says. There are no plans for street safety improvements on your street, so what do you do? The SFMTA's 'Residential Traffic Calming Program' is designed to help. But we believe this program isn't contributing as much as it could to bringing down speeds.

Currently, San Francisco residents can apply for mid-block traffic calming on two-lane streets. There are limitations: the street can't be frequently used by fire trucks or have a fire station on it, and can't be classified as an "arterial" or "collector" street in the San Francisco General Plan. Finally, at least 20 residents from separate households on the block need to have signed onto the application. If approved, only one block will get improved. A speed hump or humps are typically installed if the SFMTA evaluation process confirms a speed problem.

Each year, SFMTA gets around 100 applications and about half are approved, though in FY 2021/2022 they received over 300 and approved 150. The sheer number of applications reflects how pervasive dangerous speeds are, as well as the public support for addressing speed.

SFMTA ranks applications based on traffic speed, volumes, collision history and proximity to schools, parks, transit stops, and healthcare. The timeline for installing speed humps can be long - up to 18 months or even more depending on the availability of the Department of Public Works.

The Residential Traffic Calming Program is a valuable tool for resident-initiated change, but could make bigger contributions within a larger speed strategy. It should be connected to an overall plan for vertical speed reducers (see above in "Vertical Speed Reducers"), ensure that a minimum number of Residential Traffic Calming projects happen in Equity Priority Communities annually, and increase funding to meet the growing demand.

SPEED SOLUTIONS: THE ROLE OF ENFORCEMENT & EDUCATION

The speed solutions and approaches we just explored are all part of creating "self-enforcing" streets that get drivers to slow down in a variety of ways. These solutions work 24 hours a day, and especially when layered, reduce dangerous speeds in a meaningful way.

But these solutions won't eliminate dangerous speeds entirely. There is a role for more direct enforcement, especially given the high stakes of speed. Some drivers will go as fast as they can get away with, despite the risks and despite well-designed streets. There's also a need for ongoing education for drivers so that the idea of a "safe speeds city" permeates and influences driving norms in San Francisco. Most people agree that the tone on the streets right now is too fast and aggressive. Education and enforcement are needed to change this — and save lives.

THE STATE OF ENFORCEMENT & CHANGING THE TONE ON OUR STREETS

Much has been discussed in recent months about the dramatic drop in traffic enforcement by the San Francisco Police Department,³⁸ especially how few "Focus on the Five" citations are being given. (This term refers to the five most dangerous driving behaviors, including speeding.)

We know that SFPD's Traffic Enforcement officers conduct periodic speed enforcement operations. In 2016-2017, a larger 'high visibility speed campaign'³⁹ was conducted as part of the City's Vision Zero strategy, but it showed no lasting effects on driver behavior once enforcement ended.



Speed enforcement operations happen, but are infrequent. The number of speed citations has plummeted over the past few years.

SFPD needs to enforce dangerous speeds with enough frequency and visibility — and in the most impactful locations — so drivers know there can be consequences. And that's not happening right now. In September 2022, for example — the most recent month that stats are available from SFPD — there were a total of 130 speeding tickets given citywide. That's less than five per day.

In a related effort, <u>Walk SF is involved in the Coalition to End Pretext Stops</u>⁴⁰ in part to keep limited resources where they belong: on the most dangerous driving behaviors like speeding, not low-level offenses like broken tail lights and tinted windows.

There's also a gaping hole in accountability for dangerous speeding by City employees. In 2016, former Supervisor and crash survivor Norman Yee passed legislation requiring that telematics be installed in all motor vehicles owned or leased by the City of San Francisco, with the exception of law enforcement vehicles. An August 2020 report on telematics data by the Budget and Legislative Analyst⁴¹ showed alarming trends with dangerous speeds by City employees.⁴²

Then in November 2020, Supervisor Yee issued an ordinance to require annual reporting on the data collected by the telematics in City vehicles. The annual report on telematics for calendar year 2021 shows that trends have continued,⁴³ and there are thousands of egregious speeding violations by City employees happening *every day* (see graphic below).

Safe speeds on our streets should start first and foremost with City employees. Because of additional legislation Supervisor Yee passed, departments are required to develop correction plans to reduce speeding and collisions, and report after six months on the efficacy of these plans. But to date, no plans or reporting have been submitted.

There is also certainly a role for **speed safety cameras**, which have proven highly effective around the country, but they are not yet legal in California (more in "Future Tools" below).

100,000 80,000 60,000 20,000 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21

Speeding Incidents 10 mph+ Over Posted Limit in SF, Excluding Highways (Geotab Only)

There are thousands of egregious speeding violations happening every day by City employees.⁴⁴

HOW EDUCATION CAN SUPPORT BECOMING A 'SAFE SPEEDS CITY'

There's an inherent challenge in addressing dangerous speeds: while most drivers know that speeding is dangerous, they still underestimate the specific risks involved with speeding.

Drivers often have a false sense of control. If a driver has personally never experienced the consequences that come with speeding, their perceived risk may be lower. Without the visceral feedback of a crash or near miss, a driver may habitually speed and routinely underestimate the risks involved.

A 2015 survey by the AAA Foundation for Traffic Safety evinced the prevailing notion that speeding is acceptable "but only when I do it." 89% of survey respondents considered it unacceptable to drive 10 MPH over

the speed limit on a residential street, yet 45% reported having done so in the past 30 days. Speeding is also a decision made moment to moment throughout a drive, and isn't always conscious when people drive by habit on "autopilot." Distraction or intoxication reduce a driver's awareness of their speed, too. Drivers also feel empowered to speed if they do not fear enforcement. Research shows that "motorists who believe they won't get a ticket until they go 10 MPH above the speed limit are 27 percent more likely to drive up to 20 MPH above the speed limit."

An additional challenge is that traffic safety education campaigns are rarely shown to be effective. ⁴⁸ Many convey familiar messages, fail to target specific audiences, or lack the backing resources and social marketing savvy necessary for success.

San Francisco has extra challenges. As a major city, we have a constant influx of drivers who don't live here, or are new to driving here, so any education effort has to figure out how to reach them as well — or be so visible that it's unmissable for most drivers.

We can't underestimate the power of norms. Drivers are more likely to speed if they believe that others are speeding. In the most recent National Survey of Speeding Attitudes and Behaviors, 82% of survey respondents indicated that "people should keep up with the flow of traffic."

This is the City's big opportunity as it moves toward becoming a 'safe speeds city': fundamentally shifting norms around speed. Once 20 MPH limits are on many streets, plus many other speed solutions including more speed enforcement, driver behavior will start to shift — and this can be affirmed and cultivated through savvy education campaigns. These campaigns can explicitly talk about being a 'safe speeds city' and speak to the benefits that a broad behavior shift will bring to San Francisco in keeping our kids, seniors, and communities safe. Campaigns can connect to values beyond a generic idea of speed, and also bring drivers into the movement for change.

In Australia, drivers pledge to drive safely and place an orange magnet on their vehicle for other drivers to see. In Minnesota, a blend of community engagement, high-visibility enforcement, and feedback signs shifted driver norms. ⁵⁰ In Portland, residents show their support for 20 MPH with lawn signs. As San Francisco truly tackles speed, it must revamp and innovate the approach to street safety education to support — and continually reinforce — behavioral shifts.







Cities like Portland, Seattle, and Minneapolis/St. Paul have used yard signs to show community support for safe speeds. Hayward, California took an edgier approach in its speed campaign.

FUTURE SPEED SOLUTIONS

This report focuses on the solutions that San Francisco can use right now to address dangerous speeds. We believe existing solutions — especially when layered and applied strategically — can go a long way. However, we want to touch briefly on solutions that aren't yet available, but would be welcome additions.

SPEED SAFETY CAMERAS

Other cities in the United States have already embraced speed safety cameras, including Portland, Washington D.C., New York City, and Seattle. Speed detection systems dramatically shift behavior and can reduce the number of severe and fatal crashes by as much as 51%. California cities do not yet have the legal authority to use speed safety cameras. Legislation to change this has been introduced four times since 2017, but has not yet made it to the Governor's desk.

A new analysis on racial profiling in traffic stops from the Public Policy Institute of California points to speed safety cameras as an effective tool in reducing speed-related crashes and also reducing discretion in enforcement decisions.⁵²

ADDRESSING THE ROLE OF RIDESHARE

Rideshare companies like Uber and Lyft have led to an explosion of vehicles on our streets, and account for around 15% of intra-city trips.⁵³ Some rideshare drivers regularly speed. Some rideshare drivers speed to pick up passengers in order to earn bonuses so they can make enough on their shift. Some rideshare drivers speed because they are exhausted from driving long shifts, or think their customers want them to drive fast.

Whatever the reason, having such a large portion of vehicles on our roads regularly speeding is counterproductive to being a 'safe speeds city.' While the City currently is limited in what safety data it can access, it must continue advocating for more transparency from the Transportation Network Companies, which now are required to at least share some safety data with the California Public Utilities Commission. ⁵⁴ As autonomous vehicles and other rideshare options emerge, pathways for accountability are sorely needed.

INTELLIGENT SPEED ASSISTANCE

Intelligent Speed Assistance (ISA) is now required for all vehicles sold in the E.U. after July 2024. More commonly known as speed governors or limiters, ISA uses a speed sign-recognition video camera as well as GPS-linked speed limit data to discourage speeding. The ISA system alerts drivers of the current speed limit and deploys mechanical controls (that can be overridden by the driver) to limit the vehicle speed as needed. ⁵⁵ By switching off engine power that would allow acceleration past the current speed limit, ISA actively nudges drivers towards slower and safer driving behavior.

While it will be a longer road for this technology to be required and standard in American vehicles, there is potential for City vehicles to have this installed in the less-distant future. For instance, as part of its Vision Zero strategy, New York City in August began to implement ISA technology on 50 of its city fleet vehicles.⁵⁶

CONCLUSION

Walk SF's surveys confirmed that dangerous speeds are a problem in every part of San Francisco. On some four- and five-lane streets, the average top speeds were pushing 15 MPH above the speed limit — or higher.

But our surveys, evaluations of SFMTA projects, and additional research show that speed solutions — particularly when layered — really work. Reduced speed limits across the Tenderloin neighborhood are working. Lane reductions, like on Folsom Street, are working. SFMTA's evaluations have shown how effective timing traffic signals, left turn calming, bulb-outs, speed humps, and Slow Streets are. And there are additional untapped or underutilized solutions, from speed radar signs to shifting norms through savvy education.

What this means is that there is hope for slowing our streets — and making San Francisco a 'safe speeds city.' It will require new levels of focus, funding, commitment, and coordination. But it is how San Francisco can realize its Vision Zero commitment, and lead the nation on speed.

So as the City creates a comprehensive speed management plan, we urge it to:

- Lower speed limits to 20 MPH on every possible street and with an aggressive timeline. This must start with completing the 35 street segments in motion, and then a plan and commitment to complete all allowable speed limit reductions by December 2024.
- Develop a systematic approach to bring solutions to different types of streets with the biggest speed issues. Lane reductions are needed on four- and five-lane arterial streets, especially one-way streets. Streets near arterials, freeways, schools, parks, and senior centers need extra speed solutions, as do Slow Streets. The City must map out how, when, and where these streets will get the appropriate suite of solutions to bring down speeds.
- Bring every possible speed solution to high-injury streets. All capital and 'Quick Build' street safety projects should max out available solutions, plus solutions like timing signals for safe speeds and left turn calming should be implemented across the high-injury network by December 2024.
- Focus on Equity Priority Communities. While notable progress has been made in the Tenderloin, other neighborhoods especially the South of Market and Bayview need many more speed solutions. As discussed above, safety improvements around schools should happen in Equity Priority Communities first, with a clear path for Slow Streets in these areas as well.
- Bring more transparency, evaluation, and metrics to speed-related work. There are many gaps in public data around speed in San Francisco. In addition, projects must be evaluated consistently and within six months of implementation to see if speed reduction goals are being met (and if not, the project should be strengthened). We also need citywide metrics to track broader progress toward becoming a 'safe speeds city.'
- **Get City agencies better coordinated and refocused on Vision Zero.** While SFMTA is the lead agency on traffic safety, all City agencies have a part to play. The Department of Public Works and the San Francisco Police Department have especially key roles with speed-related efforts.
- Enhance the role of enforcement and education in setting a safer tone on our streets. SFPD traffic enforcement should focus limited resources on dangerous speeds. City employees must be held accountable for speeding. And ongoing and more innovative education campaigns are needed to nurture broader shifts.

LET'S SLOW OUR STREETS AND SAVE LIVES.

REFERENCES

- ¹ Tefft, Brian C. *Impact Speed and a Pedestrian's Risk of Severe Injury or Death.* Washington, D.C.: AAA Foundation for Traffic Safety, 2011. Accessed October 22, 2022.
- ² Taylor, M.C.; Lynam, D.A.; and Baruya, A. *The Effects of Drivers' Speed on the Frequency of Road Accidents.* Berkshire, England: Transport Research Foundation, 2000. Accessed October 22, 2022.
- ³ Tefft, Brian, <u>Pedestrian's Risk of Severe Injury or Death</u>.
- ⁴ Lawrence, Eric D.; Bomey, Nathan; and Tanner, Kristi. "<u>Death on Foot: America's Love of SUVs is Killing Pedestrians.</u>" Detroit Free Press. June 28, 2018. Accessed October 22, 2022.
- ⁵ Hawley, Dustin. "How Much Does an SUV Weigh?" J.D. Power. February 9, 2021. Accessed October 22, 2022.
- ⁶ Tefft, Brian, <u>Pedestrian's Risk of Severe Injury or Death</u>.
- ⁷ Marohn, Charles. "<u>Understanding the 85th Percentile Speed.</u>" Strong Towns. July 27, 2020. Accessed October 22, 2022.
- ⁸ Curry, Melanie. "Zero Fatalities Task Force Report: Change the Way Speed Limits Are Set." StreetsBlog Cal. February 6, 2020. Accessed October 22, 2022.
- ⁹ Wilson, Kea. "<u>Study: 20 Is Plenty But Signs Alone Don't Always Get Drivers to Slow Down.</u>" StreetsBlog USA. February 2, 2022. Accessed October 22, 2022.
- ¹⁰ Insurance Institute for Highway Safety and Highway Loss Data Institute. "<u>City Drivers Slow Down for Lower Speed Limit in Boston.</u>" IIHS and HLDI. August 28, 2018. Accessed October 22, 2022.
- ¹¹ Tefft, Brian, <u>Pedestrian's Risk of Severe Injury or Death</u>.
- ¹² Cano, Ricardo. "<u>These are the Seven San Francisco Streets Poised to Have Reduced Speed Limits in January.</u>" San Francisco Chronicle. October 30, 2021. Accessed October 22, 2022.
- ¹³ AB 43, California State Assembly (2021-2022 Legislative Session).
- ¹⁴ Tefft, Brian, *Pedestrian's Risk of Severe Injury or Death.*
- ¹⁵ Seattle Department of Transportation. *Speed Limit Case Studies*. Seattle: Seattle DOT, 2020. Accessed October 22, 2022.
- ¹⁶ Knapp, Keith K..; Welch, Thomas M.; and Witmer, John A. <u>Converting Four-Lane Undivided Roadways to a Three-Lane Cross Section: Factors to Consider</u>. Iowa: Iowa State University Institute of Transportation, 2001. Accessed October 22, 2022.
- ¹⁷ National Association of City Transportation Officials. "Lane Width." NACTO. Accessed October 22, 2022.
- ¹⁸ SF Municipal Transit Agency. "<u>SFMTA Releases Report on Success of Safer Intersections Project.</u>" SFMTA. November 18, 2021. Accessed October 22, 2022
- ¹⁹ Institute of Transportation Engineers and Federal Highway Administration. <u>Traffic Calming: State of the Practice.</u> ITE and FHA, 1999. Accessed October 22, 2022.
- ²⁰Johnson, Randal S. <u>Pedestrian Safety Impacts of Curb Extensions: A Case Study</u>. Salem, Oregon: Oregon Department of Transportation and Federal Highway Administration, 2005. Accessed October 22, 2022.
- ²¹ SF Municipal Transit Agency. "<u>Painted Safety Zones: Three Ways Painted Safety Zones Make People Safer.</u>" SFMTA Safe Streets Evaluation Program. 2021. Accessed October 22, 2022.
- ²²NYC Department of Transportation. "<u>Turn Calming Program.</u>" NYC DOT. 2022. Accessed October 22, 2022.
- ²³Hu, Wen and Cicchino, Jessica B. *The Effects of Left-Turn Traffic-Calming Treatments on Conflicts and Speeds in Washington*, D.C. Arlington, VA: Insurance Institute for Highway Safety, 2020. Accessed October 22, 2022
- ²⁴ Pascale, Jordan. "D.C. Hopes These Pylons Will Reduce Crashes During Left-Hand Turns." DCist. January 17, 2019.
- ²⁵SF Municipal Transportation Agency. "9th and Division Street Protected Intersection: San Francisco's First Protected Intersection." SFMTA. 2018. Accessed October 22, 2022.
- ²⁶Vision Zero SF. <u>A Turn Toward Safety: The Safer Intersections Project.</u> San Francisco: Vision Zero SF, 2021. Accessed October 22, 2022.
- ²⁷ Vision Zero SF. <u>2021 Vision Zero SF Action Strategy.</u> San Francisco: SFMTA, 2021. Accessed October 22, 2022.
- ²⁸ National Association of City Transportation Officials. "<u>Vertical Speed Control Elements.</u>" NACTO. Accessed October 22, 2022.
- ²⁹Mead, Natalie. "<u>They're Worthless': A Feud is Erupting in San Francisco Over the City's Traffic Calming Efforts.</u>" SFGATE. March 15, 2022. Accessed October 22, 2022.

- 30 Ibid.
- ³¹ Veneziano, David; Hayden, Larry; and Ye, Jared. <u>Effective Deployment of Radar Speed Signs.</u> Bozeman, MT: Western Transportation Insitute, 2010. Accessed October 22, 2022.
- ³²Xu, Guan. <u>Speed Management Toolkit</u>. Washington, D.C.: FHWA Safety Program, 2015. Accessed October 22, 2022. ³³Ibid.
- ³⁴Marek, John. "Neighborhood Mini Traffic Circles." FHWA, Office of Safety. September 2014. Accessed October 22, 2022.
- ³⁵"Map of Traffic Circles." DataSF. December 3, 2020. Accessed October 22, 2022.
- ³⁶Hake, Shannon; Liang, Brian; and Hoy, Jordan. *Slow Streets Evaluation Report.* San Francisco: SFMTA and SFCTA, 2021. Accessed October 22, 2022.
- ³⁷ Breed, London. "What's Next for San Francisco's Slow Streets Program." Medium. July 29, 2022. Accessed October 22, 2022.
- ³⁸"Traffic Violation Reports: San Francisco Police Department Traffic Statistics." San Francisco Police Department. 2022. Accessed October 22, 2022.
- ³⁹Vision Zero SF. <u>Executive Summary: Safe Speeds SF High Visibility Enforcement Campaign Findings.</u> San Francisco: SFMTA, 2020. Accessed October 22, 2022.
- ⁴⁰Medeiros, Jodie. "<u>Focusing Enforcement on the Most Dangerous Driving Behaviors.</u>" Walk San Francisco. August 18, 2022. Accessed October 22, 2022.
- ⁴¹ SF Budget and Legislative Analyst, <u>Policy Analysis: Vehicle Telematics Update</u>, Metcalf, Julian and Brousseau, Fred. City and County of San Francisco: Board of Supervisors, 2020. Accessed October 22, 2022.
- ⁴²Lindsey, Marta. "New Report Shows Dangerous Speeding by City Employees, but No Accountability." Walk San Francisco. September 17, 2020. Accessed October 22, 2022.
- ⁴³ <u>Annual Report on Telematics for Calendar Year 2021.</u> City and County of San Francisco; Office of the City Administrator. April 29, 2022.
- 44 Ibid.
- ⁴⁵ National Transportation Safety Board. <u>Reducing Speeding-Related Crashes Involving Passenger Vehicles.</u> Washington, D.C.: NTSB, 2017. Accessed October 22, 2022.
- ⁴⁶ Pappas, Stephanie. "<u>Curbing the Need to Speed: Psychologists' Innovative Interventions are Slowing Down Drivers and Potentially Saving Lives.</u>" American Psychological Association. April 2018. Accessed October 22, 2022.
- ⁴⁷ Parker-Pope, Tara. "<u>No Respect for Speed Limits.</u>" The New York Times. November 10, 2008. Accessed October 22, 2022.
- ⁴⁸ Zipper, David. "<u>Traffic Safety Ads Are Better at Making Puns Than Saving Lives.</u>" Slate. June 14, 2022. Accessed October 22, 2022.
- ⁴⁹ Schroeder, Paul; Kostyniuk, Lidia; and Mack, Mary. <u>2011 National Survey of Speeding Attitudes and Behaviors.</u> Washington, D.C.: National Highway Traffic Safety Administration, 2013. Accessed October 22, 2022.
- ⁵⁰Schmitt, Angie. "<u>To Get Drivers to Yield, St. Paul Uses Psych Trick.</u>" StreetsBlog USA. October 18, 2018. Accessed October 22, 2022.
- ⁵¹"Reducing Speeding-Related Crashes Involving Passenger Vehicles." National Transportation Safety Board. July 2017. Accessed November 6, 2022.
- ⁵²Public Policy Institute of California. *Racial Disparities in Traffic Stops.* October 2022. Accessed October 22, 2022.
- 53 San Francisco County Transportation Authority. <u>TNCs & Congestion.</u> San Francisco: SFCTA, 2018. Accessed October 22, 2022.
- ⁵⁴Rosenfeld, Seth. "<u>Uber, Lyft Lose Shield on Safety Reports as California Regulator Rescinds Secrecy Rule.</u>" San Francisco Public Press. March 12, 2020. Accessed October 22, 2022.
- ⁵⁵European Transport Safety Council. "Intelligent Speed Assistance." ETSC. Accessed October 22, 2022.
- ⁵⁶City of New York. "Mayor Adams, DCAS Commissioner Pinnock Implement new Technology on City Fleet Cars to Reduce Speeds and Save Lives." NYC. August 11, 2022. Accessed October 22, 2022.

ABOUT SLOW OUR STREETS

Walk San Francisco launched the Slow Our Streets campaign with the support of our members in 2020. Some of what we've done since includes:

- Working on state legislation to allow lower speed limits and speed safety cameras
- Successfully pushing the City to commit to creating a comprehensive speed safety plan
- Advocating for City projects to include the strongest possible speed-reducing solutions
- Lifting up stories about the true toll of dangerous speeds in the media and with elected officials

Learn more and get involved at walksf.org/slowourstreets.





Lawrence Holman was hit and killed crossing at Geary Boulevard and 38th Avenue on December 1, 2020. While the speed limit is 30 MPH at this part of Geary, because the road is very wide, people often drive much faster.

OUR THANKS

This report took a village! We're so grateful to:

- **▼ The 50+ volunteers** who did the speed surveys.
- **▼ All the neighborhood groups** that promoted speed surveys or partnered with us in doing them, including:

Black Men Enhanced
Lower Haight Merchants and Neighbors Association
North Beach Neighbors
North of the Panhandle Neighborhood Association
Rafiki Coalition
San Francisco Bay Area Families for Safe Streets
San Francisco African American Arts & Cultural District
Sherman Elementary School community
Tenderloin Community Benefit District



- ▼ The generous **Walk SF members** for supporting the Slow Our Streets campaign.
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Page 6: Folsom and Harrison photos by William McLeod; Photo of Paul and Susan by Emily Huston; Photo of crash by Paul Rivera.

Page 7: Photo from the Tenderloin by Marta Lindsey; Photo of speed survey in the Bayview by Jim Watkins. Page 8: Speed hump photo by SFMTA Photo Archive; 20 MPH photo by Marta Lindsey. Page 10: Photo of Andrew Zieman memorial by Jana Asenbrennerova/
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@SFTrafficSafety. September 27, 2022. Page 23: Jodie Medeiros (left); Tweet by Vision Zero Minneapolis @visionzerompls
September 23, 2020 (center); KPIX (right). Page 28: Marta Lindsey. Page 29: Marta Lindsey. Back cover: Brian Haagsman.

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