

Agenda Item 10

Reporting the Results 2022 Year-End Report

Safe Streets Evaluation Program

November 15, 2022

Thalia Leng and Brian Liang, Safe Streets Evaluation Program Team



- 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
- Masonic
 Streetscape
 Project

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

INVENTORY

7TH STREET 8TH STREET FOLSOM STREETSCAPE **GOLDEN GATE AVENUE** LEAVENWORTH STREET TURK STREET **CENTRAL EMBARCADERO** VALENCIA STREET **6TH STREET** SAFER TAYLOR STREET **INDIANA STREET CALIFORNIA STREET** PAGE STREET FELL STREET POLK STREET SECOND STREET MASONIC AVENUE LEFT-TURN SAFETY

M

SFMTA



Results

Collisions decreased by 18% 85th percentile speeds decreased by 3% Bicycle volumes increased up to 75% Vehicle-bike interactions at bike signals decreased by 93% Vehicles blocking the bike lane decreased by 90% Pedestrian-vehicle close calls decreased by 38%

Vehicle travel time increased an average of **50 seconds** for 7.3 miles of road lane reductions

Left turn vehicle speeds decreased by 17%

*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	△ Annual Collision Rate	-18%	-19%	-17%
	△ Annual Bike Related Collision Rate	-33%	-5%	-42%
	△ 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	△ Vehicle Travel Time Seconds	50.00	221.00	21.50
Bike Volume	∆ AM Bike Volume	75%	187%	41%
	△ PM Bike Volume	72%	107%	62%
Bike Signal Interactions and Close Calls	△ 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	∆ Rate of Incidents	-90%	-19%	-90%
Vehicle-Pedestrian Close Calls	∆ Close Calls (near misses)	-38%	0%	-34%

М SFMTA







 Golden Gate Ave Quick-Build

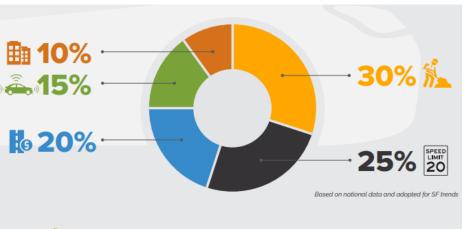




VZ Action Strategy

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.





Major Street Redesign: Car free zones, Quick-Build projects, protected bike lane network, and transit only lanes

Measure	Metric	Overall Findings
Collisions	Δ Total Collisions	-18%
	∆ 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

