



We Live Here

A Report on Monterey Boulevard

**WALK SAN FRANCISCO
FRIENDS OF MONTEREY BOULEVARD**

September 2010

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EXECUTIVE SUMMARY

THE STREET

Monterey Boulevard serves as a large east-west corridor in the Sunnyside neighborhood between western neighborhoods and Interstate 280. Monterey itself is also a residential area and close to three schools. This study focuses on the stretch of Monterey between Ridgewood Street (west) to the Interstate 280 on-ramp (east), especially the intersections with Foerster, Edna and Detroit Streets. Monterey has two travel lanes and one parking lane in each direction, separated by a median.

THE DANGER AND WHAT'S BEEN DONE SO FAR

Between 2004 and 2009, there were 13 reported injury collisions along Monterey Boulevard.¹ Residents and parents of school-aged children cite traffic dangers such as speeding, running stop signs, and failing to yield to pedestrians in crosswalks. In December 2009, the San Francisco Municipal Transportation Authority (SFMTA) Sunnyside Traffic Calming Project identified short and long-term improvements to make throughout the neighborhood. The Department of Public Health (SFDPH) conducted surveys and assessed the perception of safe routes to school by school-aged children in 2009-2010. Nearby residents who were concerned about the street's dangerous conditions for walking formed Friends of Monterey Boulevard to make their neighborhood safer.

THE CURRENT EFFORT

Now Friends of Monterey Boulevard and Walk San Francisco have completed surveys of parents and others who use Monterey, and have done observations of pedestrians and drivers along the street. These surveys and observations identify a number of dangerous pedestrian conditions.

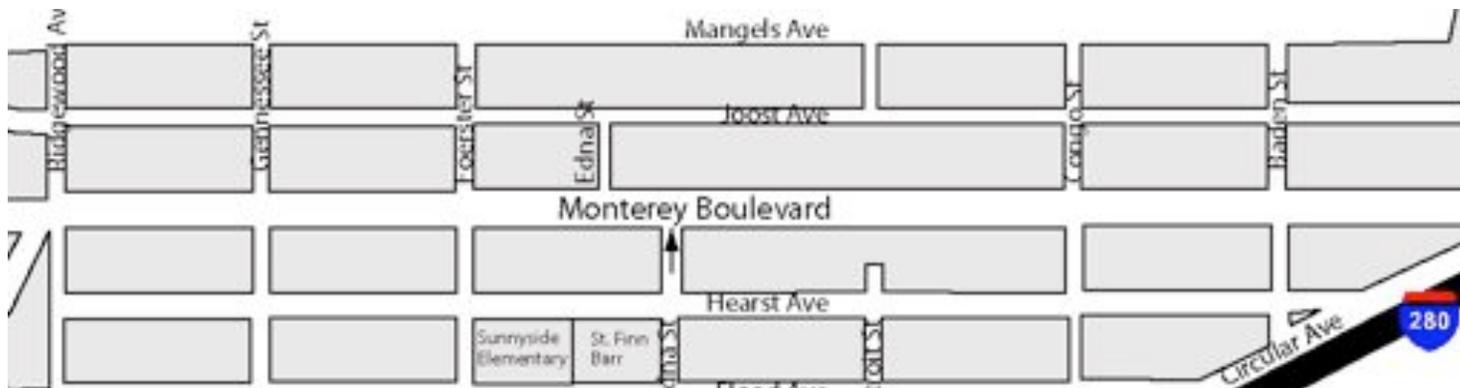
Recommendations

To make Monterey Boulevard safer and make the neighborhood more walkable:

1. Reduce speed limits to 25 mph on Monterey Boulevard.
2. Create school zones around local schools.
3. Install automated speed radar detectors and signs along Monterey Boulevard.
4. Complete the implementation of the Sunnyside Traffic Calming Project's traffic-calming recommendations.
5. Install pedestrian-actuated traffic signal in the crosswalk at Detroit Street.
6. Increase the signal time at Monterey Boulevard and Foerster Street to accommodate the walking pace of seniors and children.
7. Actively enforce existing traffic laws at intersections where drivers run stop signs and red lights (Baden, Congo, Edna and Foerster).
8. Replace worn and illegible crosswalk "Yield to Pedestrian" signs.
9. Coordinate designated school routes and pedestrian safety measures along Monterey Boulevard with the Safe Routes to School program and the Department of Public Health.
10. Use street improvements to reduce the chance of wrong-way traffic on Edna Street.
11. Consider a comprehensive urban design alternative for the intersection of Monterey Boulevard and Foerster Street, in coordination with SRTS, the new Safeway and the community.

¹ Traffic Collision History Report for Monterey Boulevard (SFMTA Sustainable Streets Division and the California Highway Patrol's Statewide Integrated Traffic Records System, 2010).

Figure 1: Map of the Study Area



INTRODUCTION

WALK SAN FRANCISCO

Walk San Francisco is a pedestrian advocacy group that promotes walking as a safe and sustainable form of transportation. Walk SF seeks to improve San Francisco's walking environment through activism and policy advocacy. Walk SF's goals are: 1) to reduce pedestrian deaths and injuries; 2) to ensure the design of a human-scaled, pedestrian-oriented city; 3) to promote community attitudes and government policies that favor walking; and 4) to increase funding for pedestrian-friendly transportation planning and projects.

FRIENDS OF MONTEREY BOULEVARD

Friends of Monterey is dedicated to the betterment of Monterey Boulevard and the Sunnyside community. The community organization has advocated for safety improvements, distributed "slow down" window signs, hung utility-pole banners featuring the message, "We live here, Please Slow Down," and encouraged a speed limit reduction along Monterey.

THIS REPORT

Walk SF teamed with Friends of Monterey Boulevard to address pedestrian and bicycle safety along the Monterey Boulevard corridor. This report is part of a larger effort to increase pedestrian safety on Monterey Boulevard, in partnership with SFDPH, local residents and merchant groups. The effort has included the Friends of Monterey Boulevard advocacy work, surveys of local pedestrians and parents, traffic counts and observations of pedestrian conditions along Monterey Boulevard.



"Slow down" banners posted on Monterey in September 2010.

EXISTING CONDITIONS

Monterey Boulevard is a large east-west arterial road in San Francisco, providing the Twin Peaks/District 4 neighborhoods (e.g. St. Francis Wood, Sunnyside and Westwood Park) with direct access to Interstate 280. Monterey Boulevard itself is also a residential street. Monterey experiences heavy traffic from:

- **Automobiles:** commuter automobile traffic traveling to downtown San Francisco and the Peninsula via 280 (the majority of traffic travels east in the morning and west in the evening).
- **Public Transit:** Muni lines #23, 36 and 43 run along Monterey Boulevard, turning on and off of the Boulevard at Genessee and Foerster.

The following characteristics add to hazardous conditions along the corridor:

- **Hills:** The grade change along the street encourages speeding, as do the wide, straight lanes, as vehicles head east (downhill) toward Interstate 280.
- **Bike route problems:** Bike route #70 is an east-west connection for cyclists, who share the roadway along Monterey Boulevard west of Genessee. East of Genessee, there is a designated route on Hearst, but bicyclists often use Monterey because it is flatter.
- **Narrowed sidewalks:** While much of Monterey Boulevard has wide sidewalks, the clear zone on many stretches of sidewalk is less than three feet - pinched by property walls, tree wells and plantings, or bus shelters.

Existing pedestrian amenities include:

- **School routes:** Yellow crosswalks at Foerster and Edna indicate that these intersections are along school routes and within the vicinity of schools.
- **Signs:** "State Law: Yield to Pedestrians in Crosswalk" signs are present at unsignaled crossings, including Detroit.
- **Bulb-outs:** Sidewalk bulb-outs at Detroit have also been built, reducing the crossing distance for and increasing visibility of pedestrians.
- **Median plantings:** Recent landscaping by the greening committee of the Sunnyside Neighborhood Association and the Friends of the Conservatory has improved the Boulevard's appearance.

PREVIOUS STUDIES

Several Sunnyside pedestrian and traffic studies were conducted in recent years by the San Francisco Municipal Transportation Agency and the San Francisco Department of Public Health.

SUNNYSIDE TRAFFIC CALMING PROJECT

The SFMTA Traffic Calming Program completed the Sunnyside Traffic Calming Project in December 2009. The study area was bounded by Hazelwood (west), Mangels Avenue and Bosworth Street (north), and Judson Avenue and Circular Avenue (south and southeast). It included Monterey Boulevard between Hazelwood and Circular Avenue (overlapping with this report’s study area).

The study measured traffic volumes on Monterey Boulevard between Detroit and Congo streets as well. Per-day traffic totaled 8,700 vehicles westbound and 8,300 eastbound, similar to traffic at points along South Van Ness Ave. (at 20th street) or California Street (at 5th Ave).² Morning peak traffic volumes were 657 westbound and 786 eastbound. Evening peak traffic volumes totaled 822 westbound and 552 eastbound.

The study cited traffic collision data for the Sunnyside area between 2004 and 2008. Pedestrian collisions were noted at five locations along the Boulevard:³

- Foerster Street (just west of the intersection)
- Edna Street (in the eastern intersection)
- Detroit Street (in the intersection)
- Congo Street (in the intersection)
- Circular Avenue (in the intersection)

² Traffic Counts, <http://www.sfmta.com/cms/vhome/documents/ADTCOUNTSJuly2010.pdf> (SFMTA, July 2010)

³ Sunnyside Traffic Calming Project--Final Report, Appendix C. Traffic Collision Data. (SFMTA, December 2009).

The study identified the traffic problems that qualify for a traffic-calming recommendation as:

- speeding,
- high traffic volumes,
- cut-through traffic,
- reported collisions, or
- a major pedestrian generator

Based on the analysis, the study identified four locations in need of traffic-calming improvements along Monterey Boulevard, and made the recommendations in Figure 2.⁴

The SFMTA study identified the Safe Routes to School (SRTS) grant programs as a potential funding source for identifying traffic-calming improvements. The SFDPH conducted a survey (summarized below) in 2009-2010 and added Sunnyside Elementary School to the group of schools in the 2010 SRTS program.

⁴ Sunnyside Traffic Calming Project--Final Report (SFMTA, December 2009)



Edna Street Intersection, looking South

Figure 2. Sunnyside Traffic Calming Project Recommendations for Monterey Intersections

Intersection	Problem	Traffic Calming Solution
Joost Ave.	Long pedestrian crossing	None noted
Circular Ave.	Small pedestrian refuge islands and poor yield compliance	Expanded median island
Acadia St.	Poor visibility	Red zone
Edna St. (south)	Vehicles driving the wrong way down the one-way portion of Edna	Place STOP pavement marking in center of Edna Street, south of Monterey

SUNNYSIDE PARENT SURVEY SUMMARY REPORT

In fall 2009 and spring 2010, the SFDPH and the National Center for Safe Routes to School surveyed parents of school-age children at Sunnyside Elementary School to learn how they felt about allowing their children to walk or bike to school. A total of 139 responses were received in response to 335 surveys; these were included in the fall report. The spring survey again distributed 335 questionnaires and received 80.

The surveys found that 19% to 29% of students walked to school, the second-most-common travel mode (the most common mode was being driven).

The fall survey found that less than half (28%) of the children had asked their parents if they could walk to school. In the spring, more than half of the children (57%) responding had asked permission to walk to school.

Aside from distance, the top reasons in the fall survey for parents determining why their children would not walk to school were traffic speed along the route (49%) and the safety of intersections and crossings (47%).⁵ In the spring 2010 survey, parents cited the same reasons to a greater degree: traffic speed along route to school (67%) and the safety of intersections and crossings (67%), as well as the amount of traffic (69%).⁶

CITYWIDE TRAFFIC COLLISION AND PEDESTRIAN FATALITIES DATA

Upon request for this study, the SFMTA Sustainable Streets Division and the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS) issued a traffic-collision history report for Monterey Boulevard between Hazelwood Street and Circular Avenue between November 1, 2004 and October 31, 2009. The SWITRS data reported three crashes with pedestrians and one with a bicyclist. Two of those accidents were on Monterey Boulevard east of Edna Street.

⁵ Sunnyside Parent Survey Summary Report, page 8 (SFDPH, Fall 2009)

⁶ Sunnyside Parent Survey Summary Report, page 9 (SFDPH, Spring 2010)

CURRENT STUDY

PEDESTRIAN AND TRAFFIC OBSERVATIONS

On four weekdays in September, after the start of the school year, vehicles and pedestrians were counted and observed on Monterey Boulevard at Detroit, Edna and Foerster. The observations were made from 8:20 to 9:20 a.m. during the morning school trip time and from 2:20 to 3:20 p.m., after students get out of school.

Methodology

Since each intersection is unique, slightly different observation methods were used for each.

At Monterey and Foerster, the following were counted:

- Pedestrians crossing Monterey; Pedestrians continuing along Monterey
- Pedestrian interactions with cars (failure to yield, by turn direction and red light running)
- Pedestrian interactions with buses (failure to yield and unsafe crossings to/from bus)
- Jaywalking (crossing mid-block or against light)

Monterey and Edna:

1. Pedestrians crossing Monterey, Pedestrians continuing along Monterey
2. Vehicle failure to yield (left, right, straight through)
3. Vehicle complete stop
4. Bicycles on Edna (right way, wrong way), counted last 2 days

Monterey and Detroit:

1. Pedestrians crossing; Pedestrians continuing along Monterey
2. Pedestrian false/delayed start
3. Pedestrian stuck in median
4. Crossing to/from bus stop
5. Vehicle failure to yield
6. Number of cars
7. Number of bicycles

Major Findings

1. The vast majority of pedestrians cross at Foerster.

Often, more than three times the number of pedestrians cross at Foerster than at Edna. And often nearly 10 times as many pedestrians cross at Foerster than at Detroit (Figure 3).

Figure 3. Pedestrian Crossings

	Day 1		Day 2		Day 3		Day 4		Average	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Detroit	15	25	12	8	22	10	7	14	14	14
Edna	55	39	38	32	54	51	52	46	50	42
Foerster	159	171	123	170	193	147	160	169	159	164

2. Many pedestrians do not cross at Detroit and Edna

A related finding is that a high proportion of pedestrians choose not to cross at Detroit and Edna. Data (collected on two days of observations) show that on average, 81% of pedestrians in the morning at the Detroit intersection do not cross it and continue to walk along Monterey. That number is 50% for Edna and 14% for Foerster. If walking is to be encouraged in the neighborhood, then permeability of pedestrian routes and choices for safe crossings must be improved. The discrepancy in crossings between the three intersections indicates that improvements are needed at Detroit and Edna (Figure 4).

Figure 4. Pedestrians Not Crossing

	Day 3		Day 4		Average	
	AM	PM	AM	PM	AM	PM
Detroit	81%	74%	81%	77%	81%	76%
Edna	48%	42%	52%	54%	50%	48%
Foerster	23%	41%	5%	30%	14%	36%

3. Drivers fail to yield to pedestrians in crosswalks.

Drivers frequently fail to yield to pedestrians: mostly at the Detroit crosswalk, but often while turning at Foerster as well. At Detroit, several drivers often pass up pedestrians without yielding; 40 cars failed to yield to 15 pedestrians on the morning of Day 1. Despite crosswalks, crossing guards and a traffic signal, there were 25 failures to yield at Foerster during the morning hour on Day 3 (Figure 5).

Figure 5. Driver Failures to Yield

	Day 1		Day 2		Day 3		Day 4		Average	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Detroit	40	41	20	4	57	0	9	5	32	13
Edna	6	5	11	0	6	1	5	7	7	3
Foerster	24	7	5	8	25	1	5	0	15	4

4. Drivers fail to stop at Edna.

The vast majority – 75% – of drivers fail to come to a complete stop at the Edna intersection (Figure 6). The behavior seemed to change when children were present: in the afternoon on Day 3, 38% of drivers failed to stop, when students were on the corner of Edna in front of a store.

Figure 6. Complete Stops at Edna

	Day 1		Day 2		Day 3		Day 4		Average	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Total Vehicles	1284	1232	1565	1188	1429	1230	1493	1214	1443	1216
Complete Stops	551	197	395	141	349	760	136	222	358	330
% Complete Stops	43%	16%	25%	12%	24%	62%	9%	18%	25%	27%

SURVEY

A survey was designed and distributed by the Friends of Monterey Boulevard to identify the areas and intersections considered most dangerous to pedestrians (See Appendix).

Methodology

A 19-question online survey was made available via surveymonkey.com, advertised on the Friends of Monterey Boulevard website (friendsofmontereyblvd.wordpress.com) and Facebook page (facebook.com/monterey.blvd.sf). The survey was available online for 2 months (July 20 through September 22, 2010) and received 43 responses.

In addition to the online survey, the Friends of Monterey Boulevard distributed a similar hard-copy survey to 300 parents via their children attending Sunnyside Elementary School. 27 were returned by the time this report was written.

Major Findings

Respondents' Familiarity with the Area

Most of the online respondents walk and drive daily in San Francisco, in roughly equal numbers (walking: 46%, driving: 48%). The vast majority of the online respondents live in the neighborhood (78%) and walk along Monterey Boulevard in the Sunnyside area between Hazelwood and Congo Street (93%).

The five intersections which online respondents cross most frequently are:

- Foerster (40%)
- Edna (33%)
- Congo (29%)
- Circular (29%)
- Detroit (27%)

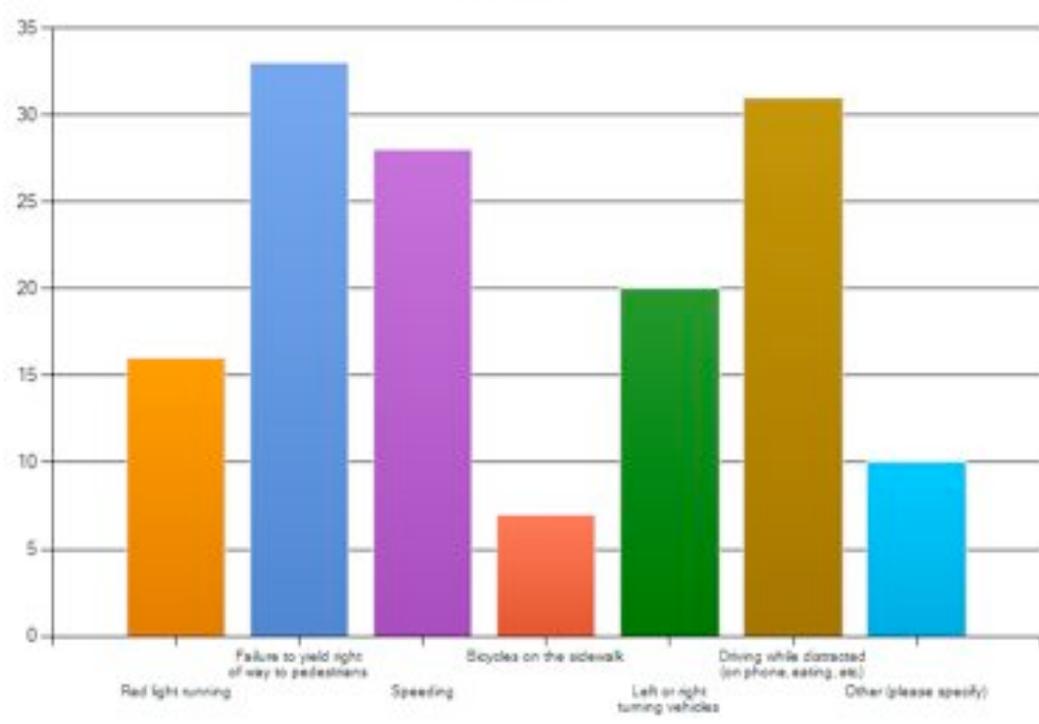
Problems Residents Experience

Respondents were asked to write in the neighborhood intersections they consider the most dangerous. The online respondents identified nine that were on Monterey Boulevard, in the study area. In descending order, the most dangerous were:

8. Foerster (19%; 8 responses)
 - Edna and Detroit (16%; 7 each)
 - Circular (14%; 6)
 - Congo (12%; 5)
 - Acadia (9%; 4)

The top reasons that online respondents wrote in to describe why they called these intersections the most dangerous included: failing to yield for pedestrians in crosswalks, speeding, left turns onto Monterey, drivers running stop signs and lack of stop signs (Figure 7).

Figure 7: What types of driver behaviors that may endanger pedestrians do you observe frequently?



We Live Here: A Report on Monterey Boulevard

Respondents of the hard-copy survey were more focused on the three intersections closest to school property. They identified the same three most-dangerous intersections along Monterey Boulevard as the online respondents, where they noticed similar common driver behavior:

- Foerster (75%): failure to yield to pedestrians in the crosswalk
- Edna (15%): the low rate of cars coming to a complete stop and failing to yield to pedestrians
- Detroit (10%): the lack of traffic control, speeding, and failure to yield to pedestrians

The slight majority of online respondents (60%) feel “somewhat safe, but have to look out” when crossing the street at intersections along Monterey. A combined 25% percent felt “not very safe” or “not at all safe.” (Figure 8).

When asked to identify their overall safety concerns in the neighborhood, most online respondents were “very concerned” or “somewhat concerned” with “unsafe driver behavior” and “dangerous intersections” (Figure 9). Twelve online respondents said they had observed a collision on Monterey.



Above: Crossing at Detroit Street has signage but does not have traffic control. Below: Runners in Edna Street crosswalk.



Figure 8: How safe do you feel when crossing the street at intersections along Monterey?

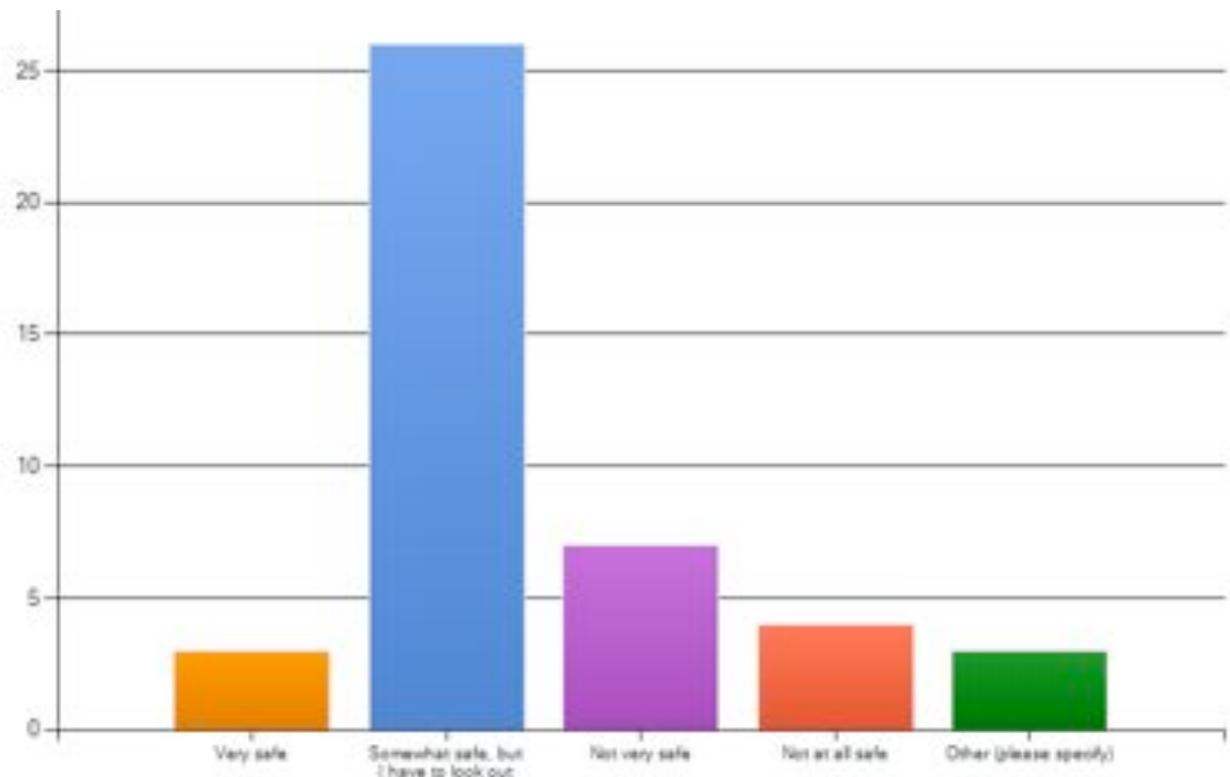
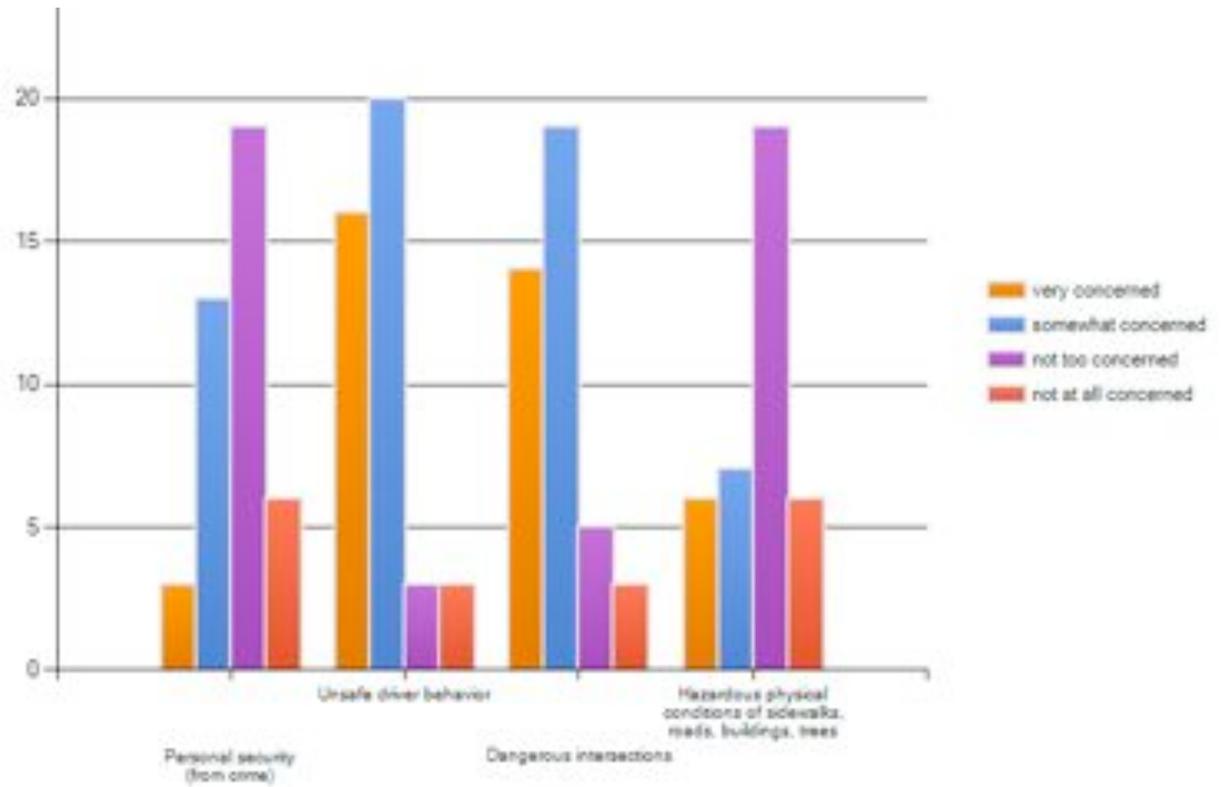


Figure 9: What are your main safety concerns in the neighborhood and how concerned are you about each one?



Left- and right-turning vehicles on Monterey at Foerster make crossing difficult even with a crossing guard.

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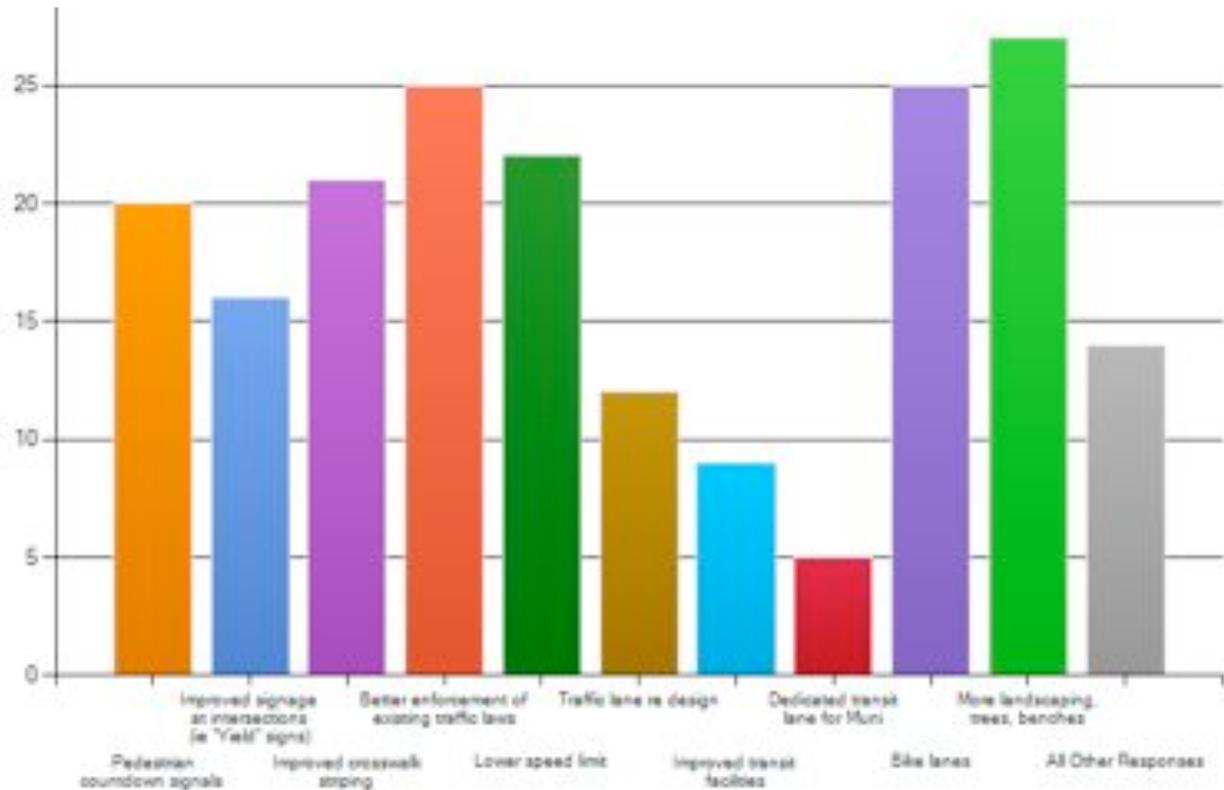
Figure 10: Which best describes your opinion of Monterey Boulevard?



Above: Worn and illegible pedestrian crossing sign. Below: U-turns can present conflicts at Edna Street, where schoolchildren often cross.



Figure 11: What changes would you like to see to improve Monterey Boulevard?



Solutions Recommended

The vast majority of online respondents believe Monterey Boulevard needs improvement; but responses varied in the amount of improvement needed (Figure 10).

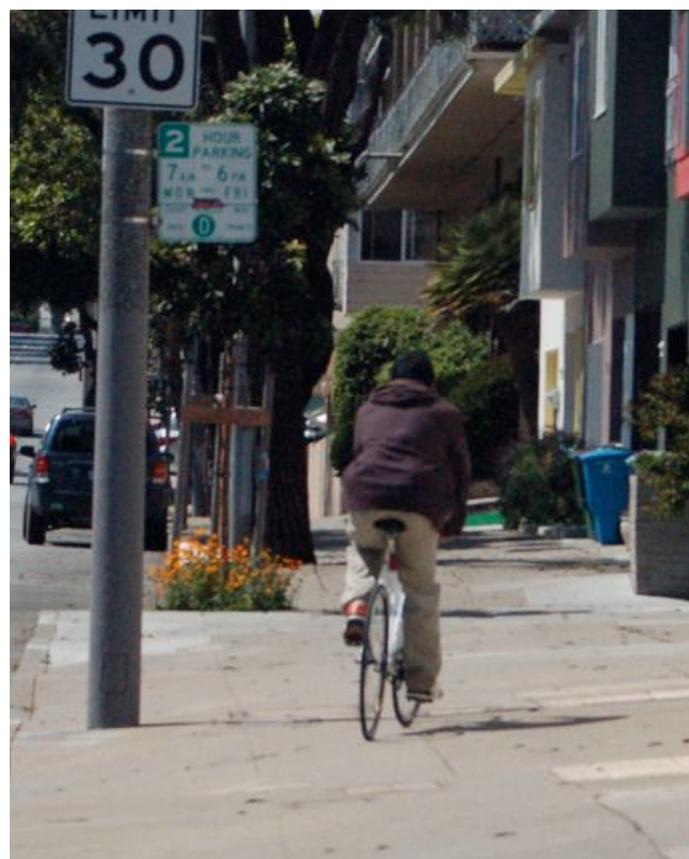
Similarly, 89% of those who responded to the hard-copy survey reported that Monterey Boulevard needs improvement. Only 11% reported that nothing needed to be changed—but they suggested improvements nonetheless.

Online respondents favored many changes (Figure 11). Hard-copy survey responses were similar, but rated improved signage higher than pedestrian countdown signals.

These survey findings indicate that there is considerable concern with pedestrian safety in the Sunnyside neighborhood around Monterey Boulevard, and the traffic counts indicate the need for improving traffic safety for pedestrians. Both the surveys and the traffic counts make clear the steps needed to improve the safety of the street and the overall walkability of the neighborhood. The recommendations resulting from this analysis are listed on the following page.



Above: Monterey median garden project. Below: Safety conditions can lead to unsafe pedestrian and cycling environments.



RECOMMENDATIONS

RECOMMENDATION	RESPONSIBLE PARTY	TIME FRAME
<p>1. Reduce speed limits to 25 mph on Monterey Boulevard.</p> <p>Any measure taken to reduce speeds will increase the safety of walking. At 15 mph, most pedestrians will survive a crash, often sustaining only minor injuries. At 20 mph, though most result in serious injury, less than half are fatal. At 40 mph, fully 90% of crashes are fatal. Reducing speed limits, along with other traffic calming measures, will help alert drivers to pedestrians, crossings and children.</p>	MTA	Immediate
<p>2. Create school zones around local schools.</p> <p>State Assembly Bill 321, passed in 2007, allows cities and counties to establish school zones by resolution or ordinance. School zones create a 15-mph speed limit for a 500-foot radius surrounding a school and a 25-mph limit 1,000 feet around a school. Adopting school zones would allow for speed reductions and additional signage and traffic control devices throughout the area. MTA</p>	Board of Supervisors, MTA	Immediate
<p>3. Install automated speed radar detectors and signs along Monterey Boulevard.</p> <p>This will alert drivers of their own speeds between Detroit and Edna streets for eastbound traffic and between Congo and Detroit streets for westbound traffic.</p>	MTA, DPW	<1 year
<p>4. Complete the implementation of the Sunnyside Traffic Calming Project's traffic-calming recommendations</p>	MTA, DPW	<1 year
<p>5. Install pedestrian-actuated traffic signal in the crosswalk at Detroit Street.</p>	MTA, DPW	1 year
<p>6. Increase the signal time at Monterey Boulevard and Foerster Street to accommodate the walking pace of seniors and children.</p> <p>Currently, older people and children are not able to get across the street in time.</p>	MTA	Immediate
<p>7. Actively enforce existing traffic laws at intersections where drivers run stop signs and red lights (Baden, Congo, Edna and Foerster).</p>	SFPD, Friends of Monterey Boulevard	Ongoing
<p>8. Replace worn and illegible crosswalk "Yield to Pedestrian" signs.</p>	MTA	Immediate
<p>9. Coordinate designated school routes and pedestrian safety measures along Monterey Boulevard with the Safe Routes to School program and the Department of Public Health</p>	Sunnyside Elementary, St. Finn Barr, DPH, Friends of Monterey Blvd.	1 year
<p>10. Use street improvements to reduce the chance of wrong-way traffic on Edna Street.</p> <p>Explore the possibilities for installing temporary or permanent street improvements, such as tree wells or planters, to prevent southbound turns onto Edna Street from Monterey Boulevard.</p> <p>Further study of the Monterey Boulevard and Edna Street intersection may warrant a traffic signal with a countdown signal for pedestrians.</p>	MTA, DPW, Friends of Monterey Boulevard	1-2 years
<p>11. Consider a comprehensive urban design alternative for the intersection of Monterey Boulevard and Foerster Street, in coordination with SRTS, the new Safeway and the community.</p> <p>The intersection with Foerster is used by the vast majority of pedestrians in the area and is perceived as dangerous. While signal timing (Recommendation 6) will increase crossing safety, the design of the intersection is a primary reason for this feeling of insecurity. Design alternatives should consider street trees, bulbouts, bus stop relocation, driveways, pedestrian crossing time, signal phasing and the median design to the east and west of the intersection.</p>	DPH, Friends of Monterey Boulevard, Safeway, MTA, Sunnyside Neighborhood Association	1-3 years