Shared Streets 2.0 Pilot Evaluation

University of California, San Diego

Urban Studies & Planning Department

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EXECUTIVE SUMMARY

Key Findings from Manual Counts

Pacific Beach

- Compared to before the Shared Street project, there was a:
  - **59% decrease** in vehicle volumes on the Shared Street (57% before to 23% after), with only a 36% increase in vehicle volumes on the adjacent control street (57% before to 78% after).
  - **41% increase** in people walking on the Shared Street (33% before to 46% after).
  - **231% increase** in people biking on the Shared Street (6% before to 20% after)
  - **297% increase** in people using other modes (skateboard, child strollers) on the Shared Street (1% before to 5% after)

- The percentage of children was twice as high on the Shared Street compared to the control (10% vs 5% of users).

- On the Shared Street, the majority of users were walking (47%) and biking (18%) versus 23% walking and 6% biking on control streets.

- 4% of bike users were observed on the sidewalk on the Shared Street, compared to 10% on control streets.

- Men had a higher percentage of trips on bikes (29%) compared to women (19%).

- Older adults had the highest proportion of biking (32%) of all age groups.

- Black and Asian racial groups had the highest proportion of walking and lowest biking mode across racial and ethnic groups.

El Cajon

- There was a greater proportion of walking and biking and less vehicle volume on the Shared Street compared to the control street.

- Men had a higher percentage of biking (18%) compared to women (4%).

- As in Pacific beach, older adults had the highest proportion of biking (19%) of all age groups.

- White and black racial groups had roughly double the biking volume, compared to Hispanic and Latinos.

- The change in travel volumes post project implementation compared to prior conditions were opposite the expected direction. There was a decrease in walking, biking and other modes,

while vehicle volumes increased slightly on the Shared Street. In contrast, pedestrian, scooter, and other mode volumes increased on the control street, with no change in vehicle volumes and a decrease in biking.

Key Findings from Interviews

Pacific Beach

- Interestingly, more users on the Shared Street indicated they have concerns for their personal safety when walking in the area (40% vs 30% on control streets). However, only 17% indicated that there were improvements that could be added to the location to improve walking, biking or scootering on the Shared Street, compared to 84% of users on the control street.

- Respondents in both locations overwhelmingly agreed having sidewalks, crosswalks and bike lanes in their community provided opportunities to improve their health and connect with their community, and allowed them to move around while maintaining social distance during COVID-19.

- Respondents indicated that they would feel most comfortable riding in bikeways that are physically separated from traffic, compared to any other bike facility type.

- Secure bike parking was a concern in all locations.

- The majority of bicyclists reported that drivers travelled at a safe speed on the Shared Streets, but 100% of users disagreed on control streets.

- A majority of users agreed or strongly agreed that they would be more likely to ride a bike in that location if vehicles and bikes were always physical separated by a barrier.

- Strong support existed for separated bike paths, even if it meant parking loss, in both locations (range of 66% to 100%).

El Cajon

- The proportion of respondents who indicated that they would like to bike more than they currently do grew from 35% before to 54% after the project. This may suggest that the fully separated bikeway was attractive to those walking on the street. During the same time, the proportion of pedestrians on the control street who wished to bike more declined.

- There was an increase in the proportion of Shared Street users who agreed that the location was safe for all people of all ages after the project, while this perception decreased in the control location.

- Prior to the project, more pedestrians at the control location supported separated bike paths, even if it meant parking loss, than at the Shared Street. After the project, however, support increased from 41% to 57% on the Shared Street, while it declined from 58% to 33% on the

control street. This suggests that temporary projects like these may provide a useful strategy to build support for cycling infrastructure designed to increase comfort for all users.

Recommendations

- Cyclists on Shared Streets agreed that walking, biking and scootering was safe for all ages and abilities, while control street respondents did not. This lends support to implementing traffic calming measures more broadly across city streets to increase cycling levels.

- Less users in El Cajon endorsed making the project permanent, compared to more than 80% on in Pacific Beach. This is likely due to the smaller scale of the El Cajon Shared Street project which mainly improved the street design for cyclists, and only for a very small section. More expansive projects may garner more use and community support.

- Shared Streets projects need regular maintenance to ensure signage and barriers are still in place.

- The installation should be adapted after installation based on community feedback and data analysis.

- Black and Asian/Asian American users made up less than 4% of users in all locations. Without conscious decision making on where facilities are placed, projects may further widen disparities in physical and mental health outcomes, especially during public health emergencies requiring social distancing.

OVERVIEW

The COVID-19 pandemic led to dramatic changes in every aspect of how we live our lives, including where and how we work, learn, and play. Many cities throughout the U.S. and the world implemented novel programs to support mental and physical wellbeing while adhering to public health guidelines. SANDAG's Shared Streets Pilot program was first implemented in May of 2020 as an alternative program to support Bike Month while statewide stay-at-home orders were in effect. In a continuation of this program, SANDAG implemented Shared Streets 2.0 to incentivize cities to create safe and healthy places for biking and other micromobility options, with a goal of reducing vehicle trips during Bike Month. The program was intended to encourage people of all ages and abilities by incorporating bikeways, street closures, or traffic calming measures into existing streets. The 18 incorporated cities and the County of San Diego were eligible to apply for $5,000 in program funding to support a pilot project to be implemented for a minimum of 4 weeks between May 1, 2021 and June 27, 2021. Two jurisdictions, San Diego and El Cajon, were selected for projects designed to increase biking, walking, scootering and other micromobility options.

STUDY PURPOSE

The aim of this study was to assess the impact of SANDAG Shared Streets 2.0 Pilot projects on key performance metrics before, during and after project implementation.

STUDY OBJECTIVES

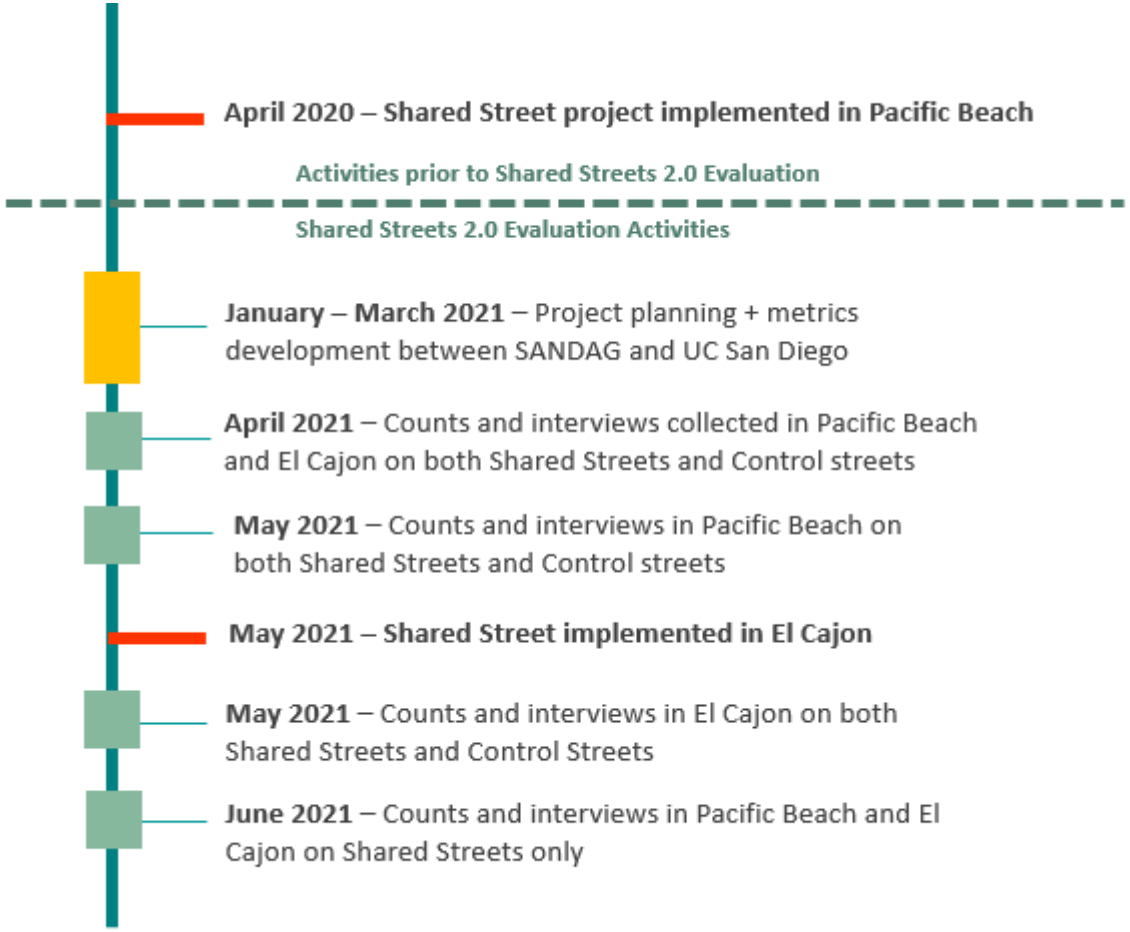
Manual counts and intercept interviews were collected before, during and after projects on both Shared Streets and comparable locations where no change occurred to the roadway, i.e. "control" streets. The goal of the study was to understand the impact of Shared Street treatments on:

- usage by sociodemographic groups and travel mode (i.e. biking, walking, scooter, etc.),
- safety perceptions,
- physical activity and mental health,
- perceived barriers and motivators to using non-vehicle travel modes,
- and insight into main benefits, improvements and support for Shared Streets projects.

STUDY TIMELINE

Prior to the Shared Streets evaluation, the City of San Diego implemented a street project in the Pacific Beach neighborhood in April of 2020 during COVID-19 physical distancing mandates. This project was extended under the Shared Streets 2.0 program.

Figure 1. Study Timeline

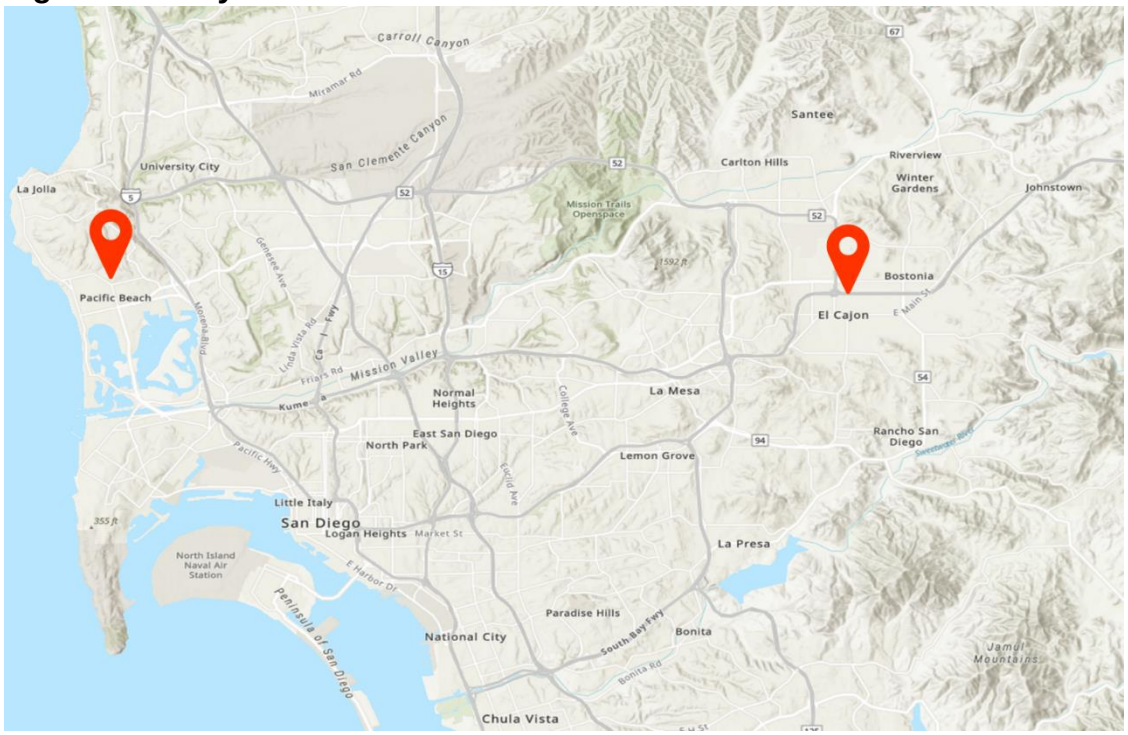


The Shared Streets 2.0 evaluation partnership began in January of 2021. From January through March, UC San Diego and SANDAG collaborated on defining study metrics, methodology and data collection instruments. Data was collected in April before the new project was installed in El Cajon. Follow up data was collected in both locations in May and June of 2021.

STUDY AREAS

Two jurisdictions were studied: the Pacific Beach neighborhood in the City of San Diego and the City of El Cajon. Census data from these regions are provided to understand the context in which the projects were implemented.

Figure 2. Study areas

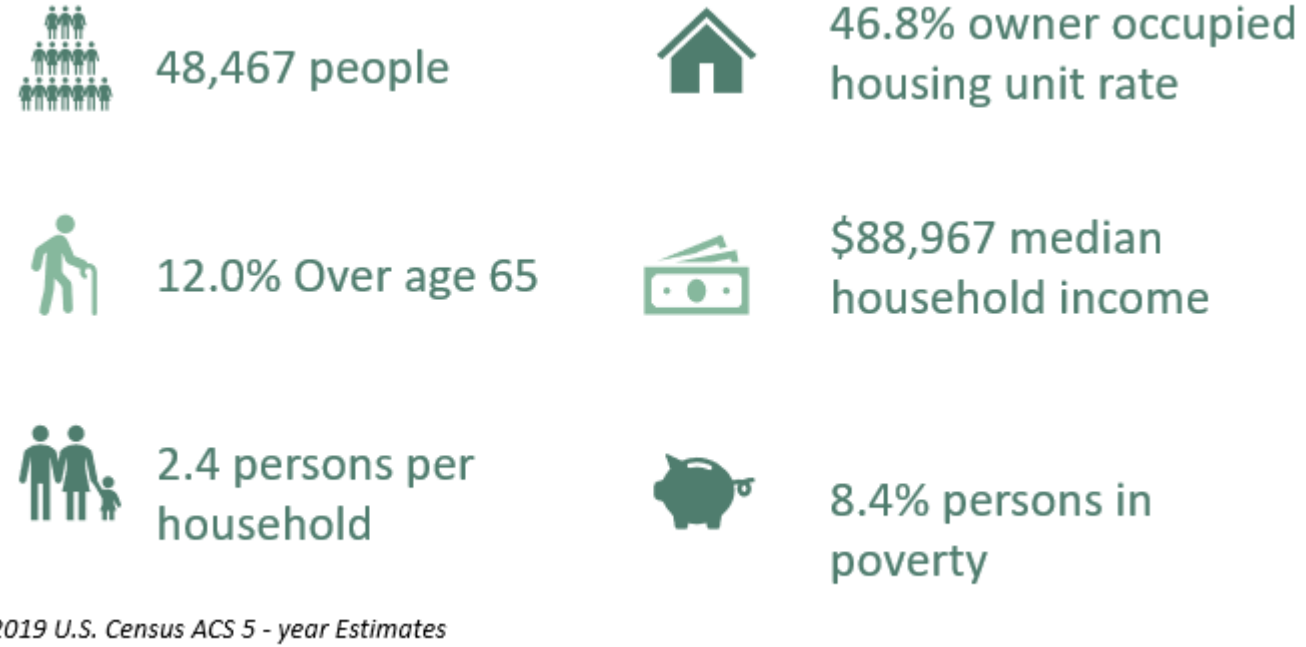


PACIFIC BEACH

Figure 3. Pacific Beach characteristics

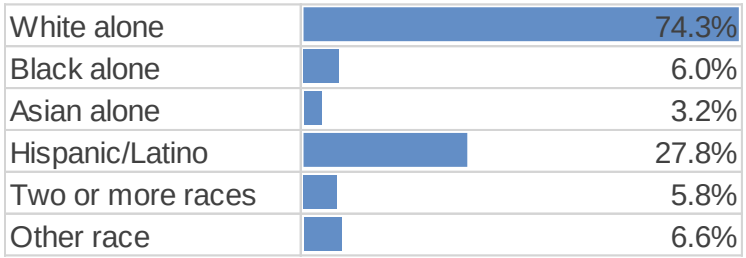
White alone	65.4%
Black alone	4.0%
Asian alone	4.9%
Hispanic/Latino	17.7%
Two or more races	3.9%
Other race	1.1%

Pacific Beach is a coastal neighborhood roughly 10 miles north of downtown San Diego and home to a 3-mile beach and boardwalk, with multiple shops, restaurants, bars and hotels in close proximity to residential homes and apartments. It has a developed recreation and nightlife scene. The population is predominantly White, with 18% of Hispanic or Latino ethnicity. It is an affluent neighborhood with a median household income of $88,967 and fewer than 10% of residents living in poverty. Nearly half of houses are owner occupied with an average of 2.4 persons per household.

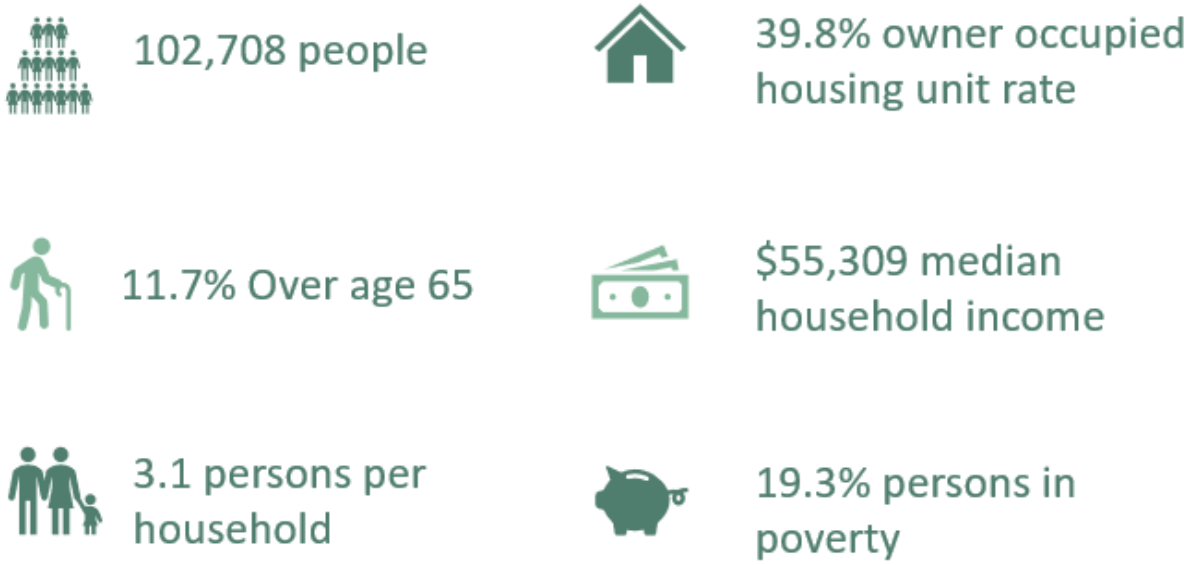


EL CAJON

Figure 4. El Cajon characteristics



El Cajon is an inland city located 17 miles east of downtown San Diego. It is home to multiple colleges and bounded to the east by unincorporated areas. It is more diverse with nearly a third of residents identifying as Hispanic or Latino, with a greater proportion of Black and multiracial residents. It is a larger community with a lower owner-occupied housing rate, median household income and more persons living in poverty. On average, there are 3.1 people per household.

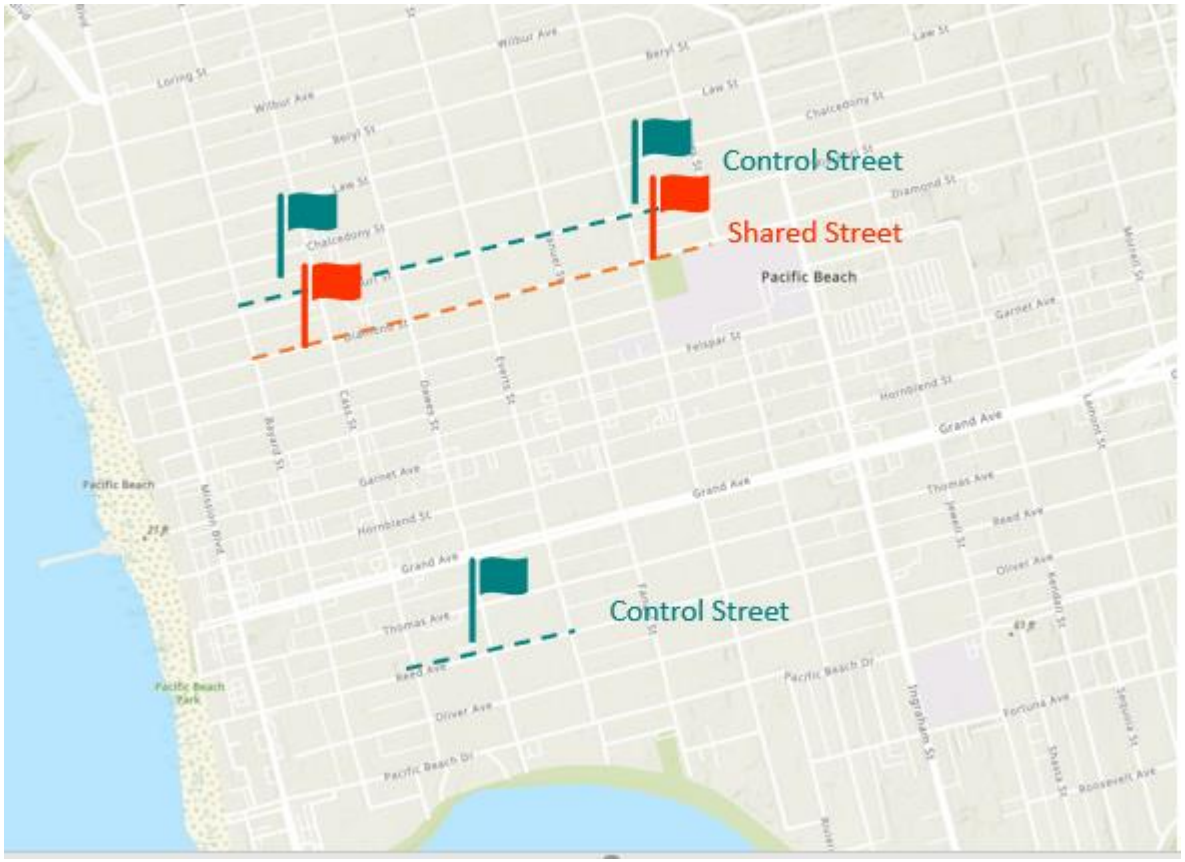


2019 U.S. Census ACS 5 - year Estimates

PROJECT DESCRIPTIONS

PACIFIC BEACH SHARED STREET

Figure 5. Pacific Beach study locations



The Shared Street project in Pacific Beach was located on Diamond Street, from Mission Boulevard to Haines Street. Diamond Street stretches east from a busy commercial street parallel to the beach through a residential area with properties on both sides of the street. The street originally had sidewalks on both sides but no designated bike lane. The Shared Street terminated to the east at the Pacific Beach Recreation Center, Community Park and middle school lot, which had multiple recreational facilities open to the public. Data were collected at 2 locations to capture traffic near both the park and the commercial district to the west.

The Shared Street project used temporary signage and barriers to close the street to through traffic so that users could utilize the full travel lane for biking, scootering, and walking. The signage indicated that pedestrians and cyclists might be actively using this street. Traffic cones and signs were placed at intersections to prevent vehicles from entering the street. The streets were not

completely closed as cars could navigate around the signs to enter or leave the street.

PACIFIC BEACH CONTROL STREETS

In addition to studying the Shared Street location, two control site locations were selected that did not undergo any change to their street design. The control sites provide a benchmark to measure the changes observed on Shared Streets and to understand what effect they had above and beyond any concurrent, natural trends in travel behaviors and attitudes.

Reed Avenue was a non-adjacent street comparable to Diamond St. as it runs through a residential area with properties on both sides. In addition, there was a public library and small playground open to the public. This street had more apartment complexes compared to Diamond Street, where most of the properties were single-family homes.

Missouri Street was directly adjacent to the Shared Street and thus highly comparable, minus direct access to the recreational facilities. This street was selected to assess any spillover effect from traffic diversion due to the closure of Diamond St. to through traffic.

As mentioned, this project was implemented in 2020 as part of the City of San Diego's "Slow Street" initiative. They applied for SANDAG funding to maintain the street during Bike Month in 2021 with no new changes, thus we were only able to collect data during the period after the project was installed. To supplement this evaluation, we obtained count data collected by the non-profit organization, beautifulPB, which collected annual counts on numerous Pacific Beach streets starting in 2016. We combined these data with new counts to provide a "pre/post" analysis of the project.

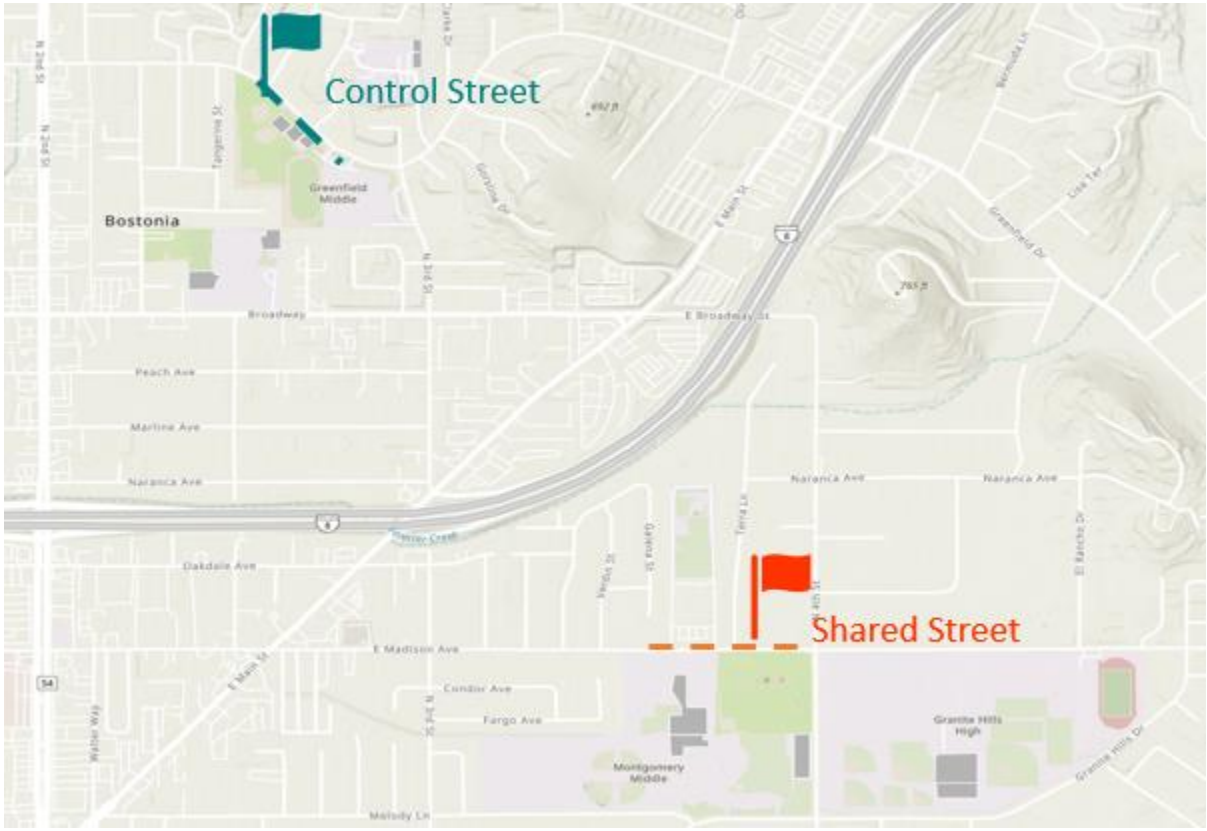
Figure 6 . Images of Pacific Beach Shared Street

EL CAJON SHARED STREET

The Shared Street project in El Cajon was located at 1675 East Madison Avenue. The project area extended from the parking lot of the John F. Kennedy Park and Recreation Center to the corner of North 4th Street. The 2-lane street accessed a large and well-utilized park with multiple recreational facilities and a high school further down the road. The existing street had sidewalks on both sides and a non-buffered bike lane alongside vehicle parking.

The Shared Street project widened the bike lane and eliminated parking by installing temporary barriers (K-rails) along with no parking signage and banners. The project was in place for 7 weeks, providing pedestrians and cyclists more space to bike or walk while accessing the park. The project was marketed though the city's social media platforms and presented at the City council meeting. There were shipping delays for materials which delayed the implementation and led to use of different physical barrier than originally proposed.

Figure 7. El Cajon study locations



EL CAJON CONTROL STREET

Greenfield Drive was selected as the control location in El Cajon as it was a comparable street with similar access to a large park and school. Greenfield Drive was also a 2-lane road with sidewalks in both directions. Next to the school, there was a park with a large amount of greenspace commonly used for exercise and dog walking, etc. The area was only open when school was closed making it less busy than the Shared Street location.

Figure 8. Before Shared Street project implementation in El Cajon

Figure 9. After Shared Street project implementation in El Cajon

METHODS

The study employed a repeated measures, cross-sectional, mixed methods design to assess the impact of the program on travel patterns and perceptions. The evaluation consisted of quantitative and qualitative components at three time points: April 2021 (before El Cajon installation), May 2021 (directly after El Cajon installation) and June 2021 (4 weeks post-installation). As mentioned previously, the Pacific Beach project was already installed, thus all data were post-implementation. To supplement this evaluation, data collected by beautifulPB were used to provide a pre/post project analysis in Pacific Beach. All data collection forms were available in English and Spanish and the research team included a Spanish speaking data collector. The date, day of week, street and cross street and rain events were recorded for each data collection period.

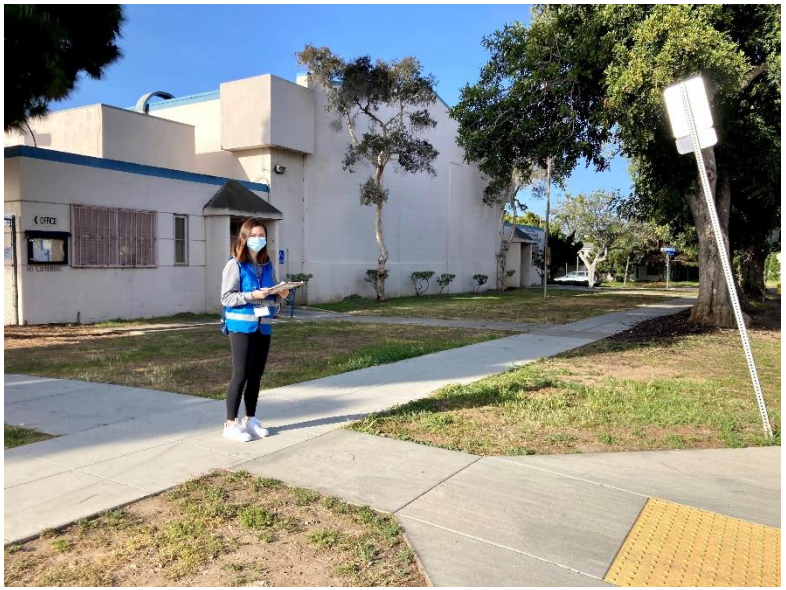
Two trainings sessions were held with student volunteers to practice with both counts and interviews prior to data collection. Performance was reviewed and counts were compared across collectors to certify them prior to entering the field. Data collectors were sent to the field in pairs. For each shift, one person conducted counts for 1 hour while the other did interviews. After 1 hour, they switched roles to prevent fatigue. A study protocol was submitted to the UC San Diego Institutional Review Board (IRB) and was certified as exempt from IRB review (Project #200089XX).

MANUAL COUNTS

On both Shared and control streets, counts were collected at 3 times of day (7-9am, 11-1pm and 4-6pm) on 2 different days within one week at each time point. Shared Street data was collected at 3 time points (April, May and June) to assess immediate and longer-term change, while control street data was collected in April and May only, as no changes were made to the street. At each time point, data were collected on 1 weekday (Wednesday or Thursday) and 1 weekend day (Saturday or Sunday).

Data collectors stood at locations outlined previously and counted all road users as they crossed an imaginary “screenline” extending across the street. For non-vehicle users, data collectors recorded, to the best of their ability:

- Mode of transportation: (walking, biking, mobility device (i.e. wheelchair, walker), scooter, e-bike, and other wheeled devices, which included skateboards and child strollers,
- Gender: male, female
- Age group: Adult, child, older adult
- Race/ethnicity: White, Black, Latino, Asian, Other
- Road position: Travel lane, bike lane, sidewalk, expanded sidewalk (if barriers were placed to extend sidewalk area).



While subjective, we aimed to understand usage of Shared Street projects across demographic subgroups and thus made an attempt to capture factors like gender, race and age. Children being carried were counted as pedestrians or if in a stroller, as “other wheeled device”. Users travelling on a tandem bike or with a bike trailer were counted as multiple individuals.

Additionally, the number of vehicles that passed the screenline were recorded. Demographic characteristics and number of passengers were not recorded for vehicle traffic. The high speed of travel precludes capturing this data reliably. (See Appendix 1 for data collection form).

INTERCEPT INTERVIEWS

Adult users only (per IRB approval) on Shared and control streets that passed data collectors’ screenline were approached to participate in an interview. Data collectors introduced the study in general terms without disclosing the study aims. Users were asked if they were 18 years of age or older, told that their participation was voluntary and asked to verbally consent to participating prior to collecting any data. Data collectors were instructed not to lead participants to answers and general prompts were provided to elicit more information on open-ended questions. Data collectors were asked to be systematic in how they approached users (for example, asking every other person to participate). This was designed to avoid any unconscious bias in who was approached.

The interview consisted of both closed-ended questions, with predetermined response scales, and open-ended questions with no restriction on responses. Open ended questions were recorded as closely as possible to what was said. Quotes were only added when the data collector captured a respondent comment verbatim. The interviews asked questions about general use of the area, physical activity and health, safety concerns, social distancing, bike safety perceptions, suggested improvements and attitudes toward Shared Streets. We also collected respondents’ neighborhood, age, gender, race/ethnicity, number of vehicles, adults and children in the household, bicycle access, and annual household income (above or below 2019 median income for San Diego region). At the 2 follow

up time points (May and June), respondents on the Shared Streets only were asked their attitudes about making the Shared Street project permanent. (See Appendix 2 for an example).

Figure 10. Intercept interview with bicyclist

DATA ENTRY AND ANALYSIS

Data were entered as closely as possible to the end of each shift into google forms. A 10% check of the data was conducted, matching paper forms to electronic data entry forms. If errors were detected, a larger review of the data was completed. Quantitative data were summarized as percentages across study sites and time points, as appropriate. All response to open-ended questions were coded into themes by 2 independent reviewers and key quotes that supported the themes were identified.

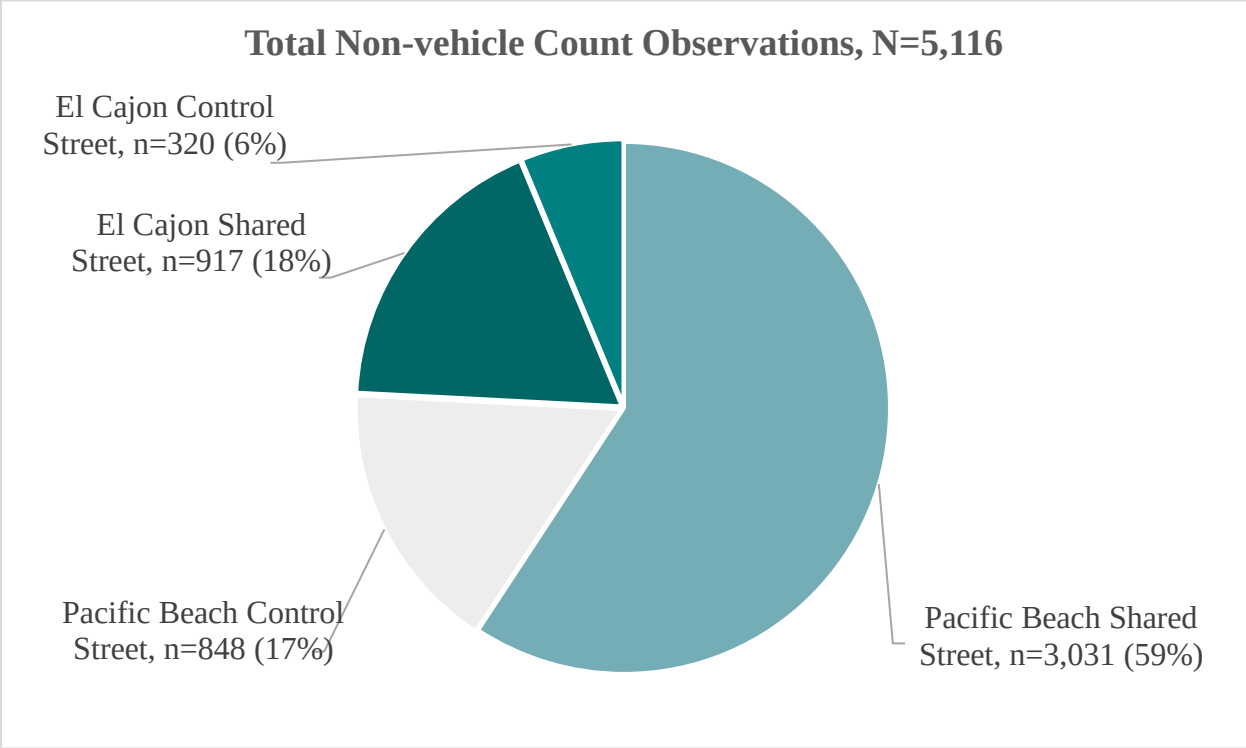
A formal pre-post statistical analysis was not possible given that the Pacific Beach location was already implemented prior to data collection. Further, the interview data sample sizes were small and not evenly distributed across study sites (Pacific Beach vs. El Cajon, Shared Street vs. Control, Pre vs Post). Thus a descriptive analysis was conducted to account for these limitations.

RESULTS

MANUAL FIELD COUNTS

There was a total of 5,116 non-vehicle count observations with demographic indicators across all time points and all study sites. The Shared Street in Pacific Beach had the greatest usage, accounting for 59% of all observed non-vehicle users. The Pacific Beach control locations had a similar number of users as the El Cajon Shared Street, though across a fewer number of days (4 on control streets versus 6 on Shared Streets). The control street in El Cajon was the least utilized.

Figure 11. Non-vehicle Counts



CHARACTERISTICS OF NON-VEHICLE USERS

Table 1 shows the demographic characteristics of non-vehicle users across study sites. Males comprised more than 50% of users in all locations. There were fewer women observed at the El Cajon control location compared to the Shared Street (47% vs 33%). Adults made up the majority of users in both cities, followed by children and then older adults, however children represented a much larger share (roughly 1/3rd) of users in both El Cajon locations. In Pacific Beach, the percentage of children was twice as high on the Shared Street compared to the control (10% vs 5% of users). The sample of users in Pacific Beach was mainly white (86%), whereas the El Cajon locations had a greater proportion of Hispanic or Latino users, in alignment with the overall city demographics. Black and Asian/Asian American users made up less than 4% of users in all locations.

Table 1. Demographic characteristics from non-vehicle counts

	Pacific Beach				El Cajon			
	Shared Street		Control Streets		Shared Street		Control Street	
	N	%	N	%	N	%	N	%
TOTAL	**3031**	**78%**	**848**	**12%**	**917**	**74%**	**320**	**26%**
Gender								
Women	1364	45%	376	44%	427	47%	107	33%
Men	1617	53%	468	55%	487	53%	207	65%
Not recorded	50	2%	4	0%	3	0%	6	2%
Age								
Adult	2538	84%	746	88%	490	53%	181	57%
Child	308	10%	41	5%	315	34%	115	36%
Older adult	165	5%	56	7%	112	12%	24	8%
Not recorded	20	1%	5	1%	0	0%	0	0%
Race/Ethnicity								
White	2553	84%	744	88%	489	53%	166	52%
Asian	95	3%	25	3%	34	4%	14	4%
Black	72	2%	23	3%	41	4%	13	4%
Latino	184	6%	39	5%	274	30%	105	33%
Other	34	1%	11	1%	53	6%	22	7%
Not recorded	93	3%	6	1%	26	3%	0	0%

PACIFIC BEACH MANUAL COUNT RESULTS

Table 2 provides an overview of the manual count results for the Pacific Beach locations. In addition to non-vehicle modes, data collectors recorded the number of vehicles. No information on the number of passengers or demographic characteristics of vehicle occupants were recorded as it was infeasible to reliably observe at speed. Vehicle counts were summed for each time point.

Pedestrians comprised the largest percentage of users in April and June. The proportion of vehicles increased during the May measurement period along with a decrease in walking, biking and all other modes. This is not explained by weather as temperatures were normal and no rain days were recorded during data collection.

Vehicles comprised 23% of users on Shared Streets versus 67% of users on control streets, which is not surprising given that Diamond Street was closed to through traffic. However, there were notable differences in active travel modes between the locations. On the Shared Street, the majority of users were walking (47%) and biking (18%), with roughly 8% using other modes like skateboards, scooters or child strollers. By comparison in control locations, the proportion of pedestrians was 23%, 6% biking and 3% other modes. There were more pedestrians observed on weekdays, while more cyclists and scooters were observed on weekends.

We collected information on the road position across travel modes as bicyclist and pedestrian conflict is a common safety concern on sidewalks. In Pacific Beach, the Shared Street was closed to through traffic, so the entire travel lane was open to all modes and the street additionally had sidewalks in both directions. The control street had sidewalks, but no other bike facility. We observed a difference between locations in Pacific Beach, where 4% of bike users were observed on the sidewalk on the Shared Street, compared to 10% on the control streets.

Among women in our sample, 73% of those observed were walking, followed by 19% biking and just over 3% on scooters or other modes. Walking was the greatest proportion of trips for men as well, though men had a much higher percentage of trips on bikes (29%) and other modes (7%), likely skateboards.

Walking was the most common mode across all age groups, though children were more split across biking, and other modes, which would include being in a stroller. Interestingly, older adults had the highest proportion of biking (32%) of all age groups.

For all groups, walking was the most common mode observed. Black and Asian racial groups had the highest proportion of walking and lowest biking mode across racial and ethnic groups. Black users had a greater percentage of scooter and e-bike modes than other groups.

Table 2. Pacific Beach manual count results

Pacific Beach Locations															
	Walk	%	Bike	%	Mobility	%	Scooter	%	e-bike	%	Other	%	Vehicle	%	Total
TOTAL	2458	37.6%	932	14.3%	2	0.0%	179	2.7%	61	0.9%	246	3.8%	2654	40.6%	6539
April_2021	1128	40.1%	427	15.2%	2	0.1%	88	3.1%	20	0.7%	115	4.1%	1028	36.5%	2814
May_2021	753	31.7%	251	10.6%	0	0.0%	49	2.1%	17	0.7%	65	2.7%	1237	52.0%	2378
June_2021	577	42.6%	254	18.7%	0	0.0%	42	3.1%	24	1.8%	66	4.9%	387	28.5%	1356
Shared Street	1867	47.2%	771	19.5%	0	0.0%	134	3.4%	49	1.2%	210	5.3%	921	23.3%	3958
Control Street	591	22.9%	161	6.2%	2	0.1%	45	1.7%	12	0.5%	36	1.4%	1732	67.2%	2579
Weekday	1076	53.1%	369	18.2%	0	0.0%	69	3.4%	21	1.0%	126	6.2%	358	17.7%	2025
Weekend	1382	47.8%	563	19.5%	2	0.1%	110	3.8%	40	1.4%	120	4.1%	669	23.1%	2893
Travel lane	493	27.8%	889	50.2%	0	0.0%	157	8.9%	57	3.2%	175	9.9%	N/A	N/A	1771
Bicycle Lane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sidewalk	1956	93.4%	42	2.0%	2	0.1%	22	1.1%	3	0.1%	70	3.3%	N/A	N/A	2095
Expanded Sidewalk	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Women	1276	73.4%	327	18.8%	0	0.0%	60	3.5%	17	1.0%	58	3.3%	N/A	N/A	1738
Men	1176	56.4%	600	28.8%	2	0.1%	117	5.6%	44	2.1%	146	7.0%	N/A	N/A	2085
Child	158	45.3%	84	24.1%	0	0.0%	22	6.3%	3	0.9%	82	23.5%	N/A	N/A	349
Adult	2150	65.5%	767	23.4%	1	0.0%	157	4.8%	53	1.6%	155	4.7%	N/A	N/A	3283
Older adult	144	65.8%	70	32.0%	1	0.5%	0	0.0%	3	1.4%	1	0.5%	N/A	N/A	219
White	2079	63.1%	823	25.0%	2	0.1%	155	4.7%	51	1.5%	187	5.7%	N/A	N/A	3297
Black	69	72.6%	12	12.6%	0	0.0%	5	5.3%	3	3.2%	6	6.3%	N/A	N/A	95
Latino	142	63.7%	49	22.0%	0	0.0%	9	4.0%	4	1.8%	19	8.5%	N/A	N/A	223
Asian	92	76.7%	17	14.2%	0	0.0%	4	3.3%	2	1.7%	5	4.2%	N/A	N/A	120
Other	23	51.1%	13	28.9%	0	0.0%	1	2.2%	1	2.2%	7	15.6%	N/A	N/A	45

**Demographic characteristics recorded for non-vehicle modes only*
**Does not include missing value*

PACIFIC BEACH BEFORE AND AFTER DATA

We used data from beautifulPB to compare current conditions to those before the Shared Street was implemented. BeautifulPB collected data for a 2-hour window on a single day in each location versus our data collection for 6 hours on 2 different days at each time point. To make the data as comparable as possible, we compared percentages, rather than counts, across modes (Table 3).

On average, compared to conditions before the Shared Street was implemented, there was a:

- **59% decrease** in vehicle volumes on the Shared Street (57% before to 23% after).
- 36% increase in vehicle volumes on the adjacent control street (57% before to 78% after)
- 16% decrease in vehicle volumes on the non-adjacent control street (69% before to 58% after)

- **41% increase** in people walking on the Shared Street (33% before to 46% after).
- 47% decrease in people walking on the adjacent control street (32% before to 17% after)
- 21% increase in people walking on the non-adjacent control street (23% before to 28% after)

- **231% increase** in people biking on the Shared Street (6% before to 20% after)
- 53% decrease in people walking on the adjacent control street (8% before to 4% after)
- 18% increase in people biking on the non-adjacent control street (8% before to 10% after)

- **42% decrease** in people on scooters on the Shared Street (6% before to 4% after)
- 71% decrease in people on scooters on the adjacent control street (4% before to 1% after)
- 31% decrease in people on scooters on the non-adjacent control street (4% before to 2% after)

- **297% increase** in people using other modes (skateboard, child strollers) on the Shared Street (1% before to 5% after)
- 25% decrease in people using other modes on the adjacent control street (1% before to .7% after)
- 111% increase in people using other modes on the non-adjacent control street (1% before to 2% after)

There were dramatic changes in usage across all travel modes from before to after the Shared Street project was implemented in Pacific Beach. We collected data on two different control streets; one directly adjacent to the Shared Street to understand traffic diversion and a second location on a comparable street less than 1 mile away to understand general trends in the area over time. In general, we observed changes in the same direction on the **non-adjacent** control street (Reed Ave.), indicating that shifts in travel mode were likely occurring regardless of the Shared Street project. ***However, the changes were of far smaller magnitude that those observed on the Shared Street, suggesting that the street design encouraged non-vehicle travel in volumes that exceeded what would have occurred without the project. The decrease in people walking, biking and taking other non-vehicle modes on the adjacent control street indicates that users preferred the Shared Street for these modes. The barricades and restrictions to through traffic succeeded in decreasing vehicle volumes by nearly 60% on the Shared Street, while vehicle volumes decreased on the non-adjacent control street by 16%. There was an increase in vehicle volumes on the adjacent control street but the increase was not proportionate to the decrease observed on the Shared Street (36% increase vs 59% decrease).***

Table 3. Comparison of counts before and after Shared Street project implementation in Pacific Beach

	Before Shared Street					After Shared Street					
	August_2016	August_2017	August_2018	August_2019	Average % (Before)	April_2021	May_2021	June_2021	Average % (After)	% Difference (Pre to Post)	Direction of change
	Percent of all trips by street										
WALKING											
Diamond Street	41.0%	35.0%	28.0%	28.0%	33.0%	51.6%	47.4%	40.3%	46.4%	41%	↑
Missouri Street	32.4%	28.6%	35.4%	31.7%	32.0%	--	16.9%	--	16.9%	-47%	↓
Reed Street	21.4%	25.0%	23.2%	23.9%	23.4%	28.2%	--	--	28.2%	21%	↑
BIKING											
Diamond Street	4.0%	7.0%	6.0%	7.0%	6.0%	22.1%	18.1%	19.4%	19.8%	231%	↑
Missouri Street	10.0%	7.0%	8.0%	5.0%	7.5%	--	3.5%	--	3.5%	-53%	↓
Reed Street	11%	10%	6%	6%	8.0%	9.5%	--	--	9.5%	18%	↑
SCOOTERS (electric + non-electric)											
Diamond Street	--	--	6.0%	6.0%	6.0%	3.8%	3.6%	2.9%	3.5%	-42%	↓
Missouri Street	--	--	3.0%	4.0%	3.5%	--	1.0%	--	1.0%	-71%	↓
Reed Street	--	--	3.0%	4.0%	3.5%	2.4%	--	--	2.4%	-31%	↓
OTHER											
Diamond Street	1.0%	1.0%	1.0%	2.0%	1.3%	6.1%	4.2%	4.6%	5.0%	297%	↑
Missouri Street	1.0%	1.0%	0.0%	2.0%	1.0%	--	0.7%	--	0.7%	-25%	↓
Reed Street	1.0%	2.0%	1.0%	0.0%	1.0%	2.1%	--	--	2.1%	111%	↑
VEHICLES											
Diamond Street	54.0%	57.0%	59.0%	57.0%	56.8%	16.3%	26.7%	27.1%	23.4%	-59%	↓
Missouri Street	56.0%	64.0%	53.0%	56.0%	57.3%	--	77.9%	--	77.9%	36%	↑
Reed Street	72%	68%	69%	68%	69.2%	57.8%	--	--	57.8%	-16%	↓

EL CAJON MANUAL COUNT RESULTS

Table 4 provides an overview of the manual count results for the El Cajon locations. Vehicle traffic was by far the most common mode, comprising roughly 90% of all users at all time points. Pedestrians accounted for between 6% and 8.5% of users, while all other modes made up around 1% or less. There was a greater proportion of walking and biking and less vehicle volume on the Shared Street compared to the control street. Similar to Pacific Beach, there was more walking on weekdays and more biking on weekend days.

In general, sidewalk bike riding was much higher in El Cajon compared to Pacific Beach. Out of all cyclists observed on the Shared Street in El Cajon, 45% were using the sidewalk prior to the project installation versus 37% after the project. We observed a similar trend, however, on the control street where the percentage of cyclists on the sidewalk decreased from 54% in April to 35% at the follow up time points. Given this, it's difficult to attribute the change from pre to post assessment to the protected bikeway project since a decrease was observed in both locations.

In the El Cajon sample, 92% of women observed were walking, followed by 4% biking. Walking was the greatest proportion of trips for men as well, though men had a much higher percentage of biking (18%), and using scooters (4%) and other modes (4%).

Walking was the most common mode across all age groups. Nine percent of observations among children were other modes (strollers, skateboards), 9% on bikes, and 6% on scooters. Twelve percent of adults were observed on bikes, with roughly 1% or less on other modes. As in Pacific beach, older adults had the highest proportion of biking (19%) of all age groups.

For all groups, walking was the most common mode observed. White and black racial groups had roughly double the biking volume, compared to Latino and "other" racial groups. Black and Latino users had greater use of scooters and mobility devices (i.e. walkers, wheelchairs) than other groups.

Table 4. El Cajon manual count results

El Cajon Locations															
	Walk	%	Bike	%	Mobility	%	Scooter	%	e-bike	%	Other	%	Vehicle	%	Total
TOTAL	894	6.7%	127	0.9%	2	0.0%	29	0.2%	5	0.0%	41	0.3%	12,329	91.8%	13427
April (Pre)	230	6.5%	38	1.1%	0	0.0%	10	0.3%	3	0.1%	13	0.4%	3245	91.7%	3539
May (Post 1)	432	6.0%	57	0.8%	1	0.0%	18	0.3%	2	0.0%	18	0.3%	6613	92.6%	7141
June (Post 2)	232	8.5%	32	1.2%	1	0.0%	1	0.0%	0	0.0%	10	0.4%	2460	89.9%	2736
Shared Street	660	9.6%	90	1.3%	2	0.0%	13	0.2%	1	0.0%	26	0.4%	6093	88.5%	6885
Control Street	234	3.6%	37	0.6%	0	0.0%	16	0.2%	4	0.1%	15	0.2%	6225	95.3%	6531
Weekday	559	6.9%	61	0.7%	1	0.0%	15	0.2%	3	0.0%	19	0.2%	7486	91.9%	8144
Weekend	335	6.4%	66	1.3%	1	0.0%	14	0.3%	2	0.0%	22	0.4%	4832	91.7%	5272
Travel lane	12	19.7%	44	72.1%	0	0.0%	3	4.9%	0	0.0%	2	3.3%	N/A	N/A	61
Bicycle Lane	6	15.8%	30	78.9%	0	0.0%	0	0.0%	2	5.3%	0	0.0%	N/A	N/A	38
Sidewalk	863	87.9%	49	5.0%	2	0.2%	26	2.6%	3	0.3%	39	4.0%	N/A	N/A	982
Expanded Sidewalk	11	73.3%	4	26.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	N/A	N/A	15
Women	441	92.1%	20	4.2%	0	0.0%	5	1.0%	1	0.2%	12	2.5%	N/A	N/A	479
Men	451	73.9%	107	17.5%	2	0.3%	24	3.9%	4	0.7%	22	3.6%	N/A	N/A	610
Child	291	76.0%	34	8.9%	1	0.3%	22	5.7%	0	0.0%	35	9.1%	N/A	N/A	383
Adult	504	85.1%	70	11.8%	1	0.2%	8	1.4%	3	0.5%	6	1.0%	N/A	N/A	592
Older adult	99	79.8%	23	18.5%	0	0.0%	0	0.0%	2	1.6%	0	0.0%	N/A	N/A	124
White	461	80.5%	80	14.0%	0	0.0%	10	1.7%	4	0.7%	18	3.1%	N/A	N/A	573
Black	36	76.6%	7	14.9%	1	2.1%	2	4.3%	0	0.0%	1	2.1%	N/A	N/A	47
Latino	279	81.6%	27	7.9%	1	0.3%	16	4.7%	1	0.3%	18	5.3%	N/A	N/A	342
Asian	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	N/A	N/A	0
Other	60	87.0%	5	7.2%	0	0.0%	1	1.4%	0	0.0%	3	4.3%	N/A	N/A	69

EL CAJON BEFORE AND AFTER DATA

Table 5 compares counts and percentages for all modes both before (April) and after (May and June) project implementation.

On average, compared to conditions before the Shared Street was implemented, there was a:

- **3% increase** in vehicle volumes on the Shared Street (87% before to 90% after).
- No change in vehicle volumes on the non-adjacent control street (96% before and after)

- **17% decrease** in people walking on the Shared Street (11% before to 9% after).
- 6% increase in people walking on the non-adjacent control street (3.1% before to 3.2% after)

- **16% decrease** in people biking on the Shared Street (1.4% before to 1.2% after)
- 30% decrease in people biking on the non-adjacent control street (0.7% before to 0.5% after)

- **83% decrease** in people on scooters on the Shared Street (** This represents a very small proportion of observations. Less than 1% of those observed were on scooters.)*
- 1200% increase in people on scooters on the non-adjacent control street (** This represents a very small proportion of observations. Less than 1% of those observed were on scooters.)*

- **5% increase** in people using other modes (skateboard, child strollers) on the Shared Street (** This represents a very small proportion of observations. Less than 1% of those observed were on other modes.)*
- 30% increase in people using other modes on the non-adjacent control street (** This represents a very small proportion of observations. Less than 1% of those observed were on other modes.)*

The change in travel volumes post project implementation compared to prior conditions were opposite the expected direction. There was a decrease in walking, biking and other modes, while vehicle volumes increased slightly on the Shared Street. In contrast, pedestrian, scooter and other mode volumes increased on the control street, with no change in vehicle volumes and a decrease in biking. It should be noted that the large percentage change in Table 5 is somewhat misleading as scooter and other modes represented a very small proportion of total observations, thus small changes appear very large. Still, overall, it does not appear that the Shared Street project increased use among active travel modes.

Table 5. Comparison of counts before and after Shared Street project implementation in El Cajon

	April_2021 (Before)		May_2021 (After)		June_2021 (After)		Average % (After)	% Difference (Pre to Post)	Direction of change
	N	%	N	%	N	%			
SHARED STREET									
Walking	238	10.7%	306	10.1%	185	7.7%	8.9%	-17%	↓
Biking	31	1.4%	37	1.2%	27	1.1%	1.2%	-16%	↓
Scooters	9	0.4%	3	0.1%	1	0.0%	0.1%	-83%	↓
Other	7	0.3%	10	0.3%	8	0.3%	0.3%	5%	↑
Vehicles	1938	87.2%	2674	88.3%	2186	90.8%	89.5%	3%	↑
Total	**2223**		**3030**		**2407**				
CONTROL STREET									
Walking	109	3.1%	133	3.2%	--	--	--	6%	↑
Biking	26	0.7%	21	0.5%	--	--	--	-30%	↓
Scooters	1	0.0%	15	0.4%	--	--	--	1200%	↑
Other	6	0.2%	9	0.2%	--	--		30%	↑
Vehicles	3410	96.0%	3919	95.7%	--	--	--	0%	↔
Total	**3552**		**4097**						

INTERCEPT INTERVIEWS

We collected a total 193 intercept interviews across 3 time points at the Shared Street locations and 2 time points at the control street locations. All street users were asked about the purpose and frequency of use, safety perceptions, and perceptions of pedestrian and bike infrastructure. Questions about biking behavior and comfort on different types of facilities were asked of all users to gain insight from both those who currently ride bikes and those who do not to provide insight on cycling barriers from a sample representative of the broader population. Users were asked open-ended questions to gather feedback in participants' own words, without question prompts. Demographic characteristics are presented in the following tables across all time points, though no clear demographic trends emerged over time. In Pacific Beach, the project had been in place for one year, so no change in users was expected. Bicyclist interview responses are presented by Shared Street or control street for both cities as, 1) the Pacific Beach project was already in place making "pre" data collection infeasible, and 2) there were only 4 total bicyclist interviews in El Cajon (1 pre-project and 3 post-project). Pedestrian interviews in El Cajon are presented by pre- and post-project implementation to assess change in outcomes associated with the protected bikeway.

DEMOGRAPHIC CHARACTERISTICS – PEDESTRIAN INTERVIEWS, PACIFIC BEACH

We conducted 102 pedestrian intercept interviews in Pacific Beach across the Shared Street and control street locations (Table 6). Roughly 1/3rd of the interviews were conducted on control streets, ensuring feedback was balanced across users and non-users, and there was good representation of men and women. All interviews were conducted in English and more than 90% of respondents lived in Pacific Beach. Aligning with demographic indicators for the surrounding census block groups, the majority of those interviewed were white (more than 70% at all time points). Black respondents were least represented among other racial and ethnic groups. Approximately 2/3rds of pedestrians interviewed had access to a bicycle and a majority had incomes greater than $82,000 per year (2019 median income for the region). Very few respondents (less than 3.5%) did not have access to a car. Pedestrians were 45 years of age on average.

Table 6. Demographic characteristics Pacific Beach Pedestrian Interviews

Pacific Beach Pedestrian Interview Demographic Summary						
	April (N)	April (%)	May (N)	May (%)	June (N)	June (%)
Total Interviews (N=102)	**48**	**47%**	**31**	**30%**	**23**	**23%**
Location type						
Shared Street	20	41.7%	23	74.2%	**23**	100.0%
Control Street	28	58.3%	8	25.8%	**0**	0.0%
Day of Week						
Weekday	25	52.1%	23	74.2%	**12**	52.2%
Weekend	23	47.9%	8	25.8%	**11**	47.8%
Gender						
Female	25	52.1%	17	54.8%	9	39.1%
Male	22	45.8%	13	41.9%	13	56.5%
Missing/Refused	1	2.1%	1	3.2%	1	4.3%
Language						

English	48	100.0%	31	100.0%	23	100.0%
Spanish	0	0.0%	0	0.0%	0	0.0%
Missing/Refused	0	0.0%	0	0.0%		0.0%
Race/Ethnicity*						
Hispanic/Latino	3	6.3%	2	6.5%	1	4.3%
White, non-Hispanic	35	72.9%	22	71.0%	20	87.0%
Black/African American	1	2.1%	1	3.2%	0	0.0%
Asian/Asian American	4	8.3%	2	6.5%	1	4.3%
Other	3	6.3%	2	6.5%	1	4.3%
Missing/Refused	2	4.2%	2	6.5%	1	4.3%
Access to Bicycle						
Yes	31	64.6%	21	67.7%	21	91.3%
No	18	37.5%	9	29.0%	1	4.3%
Missing/Refused	2	4.2%	1	3.2%	1	4.3%
Household Annual Income > $82K/year						
Yes	28	58.3%	19	61.3%	17	73.9%
No	1	2.1%	8	25.8%	4	17.4%
Missing/Refused	2	4.2%	4	12.9%	2	8.7%
Access to Vehicle						
No	1	2.1%	1	3.2%	0	0.0%
Neighborhood						
Pacific Beach	45	93.8%	28	90.3%	21	91.3%
Other	2	4.2%	1	3.2%	1	4.3%
Missing/Refused	1	2.1%	2	6.5%	1	4.3%
Mean						
Age (years)	50	--	41.0	--	43	--
Number of Vehicles	1.5	--	1.5	--	1.4	--
Adults in Household	1.9	--	1.8	--	2.1	--
Children in Household	0.8	--	0.6	--	0.4	--

DEMOGRAPHIC CHARACTERISTICS – BICYCLIST INTERVIEWS, PACIFIC BEACH

We conducted 24 bicyclist intercept interviews in Pacific Beach, the majority of which were on the Shared Street (Table 7). Interviews were split across weekday and weekend days, which likely captured biking for different purposes. The majority of interviews were male, though 26% of respondents were women. There was less racial and ethnic diversity in respondents compared to pedestrian interviews. Eighty percent of interviewees identified as white, 5% as Hispanic or Latino and 3% a race not listed. Most respondents had incomes greater than the 2019 median income, though roughly 1/3rd of participants either did not complete the question or refused to answer. Less than 17% did not have access to a vehicle. There were a greater proportion of respondents that lived

outside of Pacific Beach, which makes sense given the greater distances that can be reached on a bike. Participants were 47 years old on average and had fewer adults and children living in their household.

Table 7. Demographic characteristics Pacific Beach Bicyclist Interviews

Pacific Beach Bicyclist Interview Demographic Summary						
	April (N)	April (%)	May (N)	May (%)	June (N)	June (%)
Total Interviews (N=24)	**7**	**29%**	**6**	**25%**	**11**	**46%**
Location type						
Shared Street	5	71.4%	5	83.3%	**11**	100.0%
Control Street	2	28.6%	1	16.7%	**0**	0.0%
Day of Week						
Weekday	4	57.1%	2	33.3%	**3**	27.3%
Weekend	3	42.9%	4	66.7%	**8**	72.7%
Gender						
Female	0	0.0%	2	33.3%	5	45.5%
Male	6	85.7%	3	50.0%	4	36.4%
Missing/Refused	1	14.3%	1	16.7%	1	9.1%
Language						
English	7	100.0%	6	100.0%	11	100.0%
Spanish	0	0.0%	0	0.0%	0	0.0%
Missing/Refused	0	0.0%	0	0.0%	0	0.0%
Race/Ethnicity*						
Hispanic/Latino	1	14.3%	0	0.0%		0.0%
White, non-Hispanic	5	71.4%	5	83.3%	9	81.8%
Black/African American	0	0.0%	0	0.0%		0.0%
Asian/Asian American	0	0.0%	0	0.0%		0.0%
Other	0	0.0%	0	0.0%	1	9.1%
Missing/Refused	1	14.3%	1	16.7%	1	9.1%
Household Annual Income > $82K/year						
Yes	4	57.1%	3	50.0%	10	90.9%
No	1	14.3%	1	16.7%	0	0.0%
Missing/Refused	2	28.6%	2	33.3%	1	9.1%
Access to Vehicle						
No	1	14.3%	1	16.7%	0	0.0%
Neighborhood						
Pacific Beach	6	85.7%	4	66.7%	9	81.8%
Other	0	0.0%	1	16.7%	1	9.1%
Missing/Refused	1	14.3%	1	16.7%	1	9.1%

Mean						
Age (years)	45	--	51.2	--	46	--
Number of Vehicles	1.8	--	1.2	--	1.8	--
Adults in Household	1.6	--	1.8	--	1.8	--
Children in Household	0.6	--	0.2	--	0.3	--

DEMOGRAPHIC CHARACTERISTICS – PEDESTRIAN INTERVIEWS, EL CAJON

We conducted 63 pedestrian intercept interviews in El Cajon across the Shared Street and control street locations, with three-quarters of the interviews on the Shared Street (Table 8). The majority of interviews were done on weekdays and 56% of respondents were female. There was greater ethnic diversity compared to Pacific Beach. Roughly ¼ of respondents identified as Hispanic of Latino, 53% white, and 2% Black and Asian. One interview was conducted in Spanish. Almost 1/3rd of respondents did not have access to a vehicle and less than 2% did not have access to a car. On average, roughly 40% of respondents lived outside of El Cajon. Participants were slightly older than in Pacific Beach, with an average age of 52 years. There were also more vehicles and adults reported in the household, which aligns with city-wide averages.

Table 8. Demographic characteristics El Cajon Pedestrian Interviews

El Cajon Pedestrian Interview Demographic Summary						
	April (N)	April (%)	May (N)	May (%)	June (N)	June (%)
Total Interviews (N=63)	**29**	**46%**	**20**	**32%**	**14**	**22%**
Location type						
Shared Street	17	58.6%	14	70.0%	**14**	100.0%
Control Street	12	41.4%	6	30.0%	**0**	0.0%
Day of Week						
Weekday	15	51.7%	16	80.0%	**7**	50.0%
Weekend	14	48.3%	4	20.0%	**7**	50.0%
Gender						
Female	18	62.1%	7	35.0%	10	71.4%
Male	10	34.5%	12	60.0%	3	21.4%
Missing/Refused	1	3.4%	1	5.0%	1	7.1%
Language						
English	28	96.6%	20	100.0%	14	100.0%
Spanish	1	3.4%	0	0.0%	0	0.0%
Missing/Refused	0	0.0%	0	0.0%	0	0.0%
Race/Ethnicity*						
Hispanic/Latino	7	24.1%	4	20.0%	4	28.6%
White, non-Hispanic	15	51.7%	14	70.0%	5	35.7%
Black/African American	2	6.9%	0	0.0%	0	0.0%
Asian/Asian American	0	0.0%	0	0.0%	1	7.1%
Other	3	10.3%	1	5.0%	2	14.3%

Missing/Refused	2	6.9%	1	5.0%	2	14.3%
Access to Bicycle						
Yes	16	55.2%	15	75.0%	10	71.4%
No	12	41.4%	4	20.0%	3	21.4%
Missing/Refused	1	3.4%	1	5.0%	1	7.1%
Household Annual Income > $82K/year						
Yes	14	48.3%	8	40.0%	17	121.4%
No	12	41.4%	10	50.0%	4	28.6%
Missing/Refused	3	10.3%	2	10.0%	2	14.3%
Access to Vehicle						
No	0	0.0%	1	5.0%	0	0.0%
Neighborhood						
El Cajon	20	69.0%	11	55.0%	7	50.0%
Other	8	27.6%	8	40.0%	6	42.9%
Missing/Refused	1	3.4%	1	5.0%	1	7.1%
Mean						
Age (years)	52	--	49.0	--	54	--
Number of Vehicles	2.3	--	2.5	--	2.5	--
Adults in Household	2.1	--	2.8	--	2.9	--
Children in Household	0.9	--	0.9	--	1.4	--

DEMOGRAPHIC CHARACTERISTICS – BICYCLIST INTERVIEWS, EL CAJON

There were only 4 bicyclist interviews conducted in El Cajon; 2 on the Shared Street after the project was implemented and 2 on the control street (Table 9). The Shared Street interviews were both on weekdays and may reflect perceptions of transportation cyclists. Three respondents were male, 2 were White, 1 was Hispanic and 1 identified as race that was not listed. The majority were from El Cajon and the sample was split across income categories. The average age was 48 years and there were a greater number of adults and children living in the household compared to other interview samples.

Table 9. Demographic characteristics El Cajon Bicyclist Interviews

El Cajon Bicyclist Interview Demographic Summary						
	April (N)	**April (%)**	**May (N)**	**May (%)**	**June (N)**	**June (%)**
Total Interviews (N=4)	**1**		**1**		**2**	
Location type						
Shared Street	0	0.0%	0	0.0%	**2**	**100.0%**

Control Street	1	100.0%	1	100.0%	**0**	**0.0%**
Day of Week						
Weekday	0	0.0%	0	0.0%	**2**	**100.0%**
Weekend	1	100.0%	1	100.0%	**0**	**0.0%**
Gender						
Female	0	0.0%	0	0.0%	1	**50.0%**
Male	1	100.0%	1	100.0%	1	**50.0%**
Missing/Refused	0	0.0%	0	0.0%	0	**0.0%**
Language						
English	1	100.0%	1	100.0%	2	**100.0%**
Spanish	0	0.0%	0	0.0%	0	**0.0%**
Missing/Refused	0	0.0%	0	0.0%		**0.0%**
Race/Ethnicity*						
Hispanic/Latino	0	0.0%	1	100.0%	0	**0.0%**
White, non-Hispanic	0	0.0%	0	0.0%	2	**100.0%**
Black/African American	0	0.0%	0	0.0%	0	**0.0%**
Asian/Asian American	0	0.0%	0	0.0%		**0.0%**
Other	1	100.0%	0	0.0%	0	**0.0%**
Missing/Refused	0	0.0%	0	0.0%	0	**0.0%**
Household Annual Income > $82K/year						
Yes	0	0.0%	0	0.0%	1	**50.0%**
No	1	100.0%	0	0.0%	1	**50.0%**
Missing/Refused	0	0.0%	1	100.0%	0	**0.0%**
Access to Vehicle						
Neighborhood						
El Cajon	1	100.0%	1	100.0%	1	**50.0%**
Other	0	0.0%	0	0.0%	1	**50.0%**
Missing/Refused	0	0.0%	0	0.0%	0	**0.0%**
Mean						
Age (years)	68	--	20.0	--	55	--
Number of Vehicles	0	--	2.0	--	1	--
Adults in Household	9	--	4.0	--	1.5	--
Children in Household	0	--	1.0	--	1	--

PEDESTRIAN INTERVIEW RESPONSES – PACIFIC BEACH

We collected a total of 102 interviews across all time points and locations in Pacific Beach (Table 10). Responses are presented by Shared Street or control streets as all of the data was collected after the project was implemented.

General Use

Pedestrians were asked their main reason for walking at that location. The majority of Shared Street users (37%) reported that they lived there, 26% stated exercise and physical health, 9% just passing through 5-6% listing personal errands, access to the park and walking their dog. Six percent of survey respondents indicated that they came to the Shared Street expressly to give their input to the data collectors and were generally opposed to the Shared Street project. Responses were largely the same on the control streets, though there was a higher proportion of people doing personal errands. A very small proportion of pedestrians had taken a car to get to their walking location. Most had walked (80% on Shared Street and 89% on control streets), while 6% of Shared Street pedestrians arrived there on a scooter and 2% by transit. Reasons for driving included long distances, time constraints and needing to run errands in different locations. Thirty-two percent of Shared Street users stated they planned to visit a business while in the area, compared to 46% of control street users. When asked what users enjoyed most about walking in that location, most users stated it was a safe place to walk, followed by access to recreation, connections to where they want to go, and lastly, 3% stated access to businesses.

Physical Activity

Respondents reported walking in their respective locations more than 5 days per week, with only a very small percentage visiting the area for the first time. Shared Street users reported transportation as the main reason they walk (37%), followed by exercise (30%), recreation (18%) and then mental health/quality of life (15%). In contrast, on the control streets, exercise was the main reason for walking (47%), transportation (22%), recreation (16%) and mental health (14%). The majority of users agreed or strongly agreed they would like to travel by bike more than they do currently, though a higher proportion strongly disagreed with that statement on control streets.

Safety

Perceptions of safety between the Shared Street and control streets were different than expected. More users on the Shared Street indicated they have concerns for their personal safety when walking in the area (40% vs 30% on control streets). On Shared Streets, respondents listed traffic and cars, whereas users in both locations stated the homeless population and walking at night. Shared Street users added a lack of lighting and crowds as safety concerns. Most users in both locations indicated that, with the current street configuration, they feel safe from traffic when walking. Surprisingly, agreement was higher on the control streets than the Shared Street that was closed to through traffic (92% vs 86%). Seventy-eight percent of users in both locations indicated they are likely to choose to walk in that location as opposed to other streets. There was no difference between locations in the believe that walking in the area was safe for all ages. Just over 50% thought drivers traveled at a safe speed in the area.

Health

Users were asked if having sidewalks, crosswalks and bike lanes in their community provided opportunities to improve their health and connect with their community. Respondents in both locations overwhelmingly agreed with both statements. More than 90% of users in both locations also agreed that having those facilities helped them move around while maintaining social distancing during COVID-19.

Biking perceptions and concerns

Users were asked to state how comfortable they would be riding a bicycle in different types of locations, whether or not they currently ride a bike. This was to capture feedback from those who are not already biking. Users were shown pictures describing each of the 4 scenarios. Less than 1/3rd of users indicated they were comfortable or very comfortable riding on a commercial street, with speeds of 35 mph, on street parking, and no bike facilities (roughly 30% in both locations). On a similar street with a painted bike lane, more than 70% were comfortable. This number jumped to greater than 90% in all users if a separated bikeway was added. Roughly 90% of users were comfortable on a completely separated path or trail, though the percentage was less than for a separated bikeway.

We asked questions to understand what may encourage more people to ride bicycles. Secure bike parking was a concern in both locations as nearly 50% of users disagreed with the statement “There are convenient and secure places to park bikes here”. Approximately 2/3rds of users agreed or strongly agreed that they would be more likely to ride a bike in that location if vehicles and bikes were always physical separated by a barrier. However, we then asked whether they agreed with the statement “I am in support of bike paths, separated from traffic, along some city streets even if it means eliminating some parking spaces or a lane of traffic”. While a majority in both locations agreed, there was a greater proportion of users who disagreed or strongly disagreed on the control streets (40% vs 31%).

Improvements

Users were asked to rate the area as a place for walking on a scale of 1 (worst) to 5 (best). Average ratings did not differ between Shared Street and Control locations (4.1 vs 4.2). However, only 17% indicated that there were improvements that could be added to the location to improve walking, biking or scootering on the Shared Street, compared to 84% of users on the control street. Those responses are listed in the qualitative data section.

Support of Shared Streets

On the Shared Street only, we asked a series of questions about perceptions and behaviors if the project were to become permanent. There was strong support for the project to remain. Eighty-two percent of users stated they agreed or strongly agreed they would feel safer sharing the street with people travelling by different modes if projects like Shared Streets became permanent. More than 80% agreed they would feel more connected to the community, would spend more time walking, biking or scootering if Shared Streets were permanent. The majority of respondents (>80%) felt permanent Shared Streets would improve the health of the community and the ability to maintain physical distance while walking and 84% stated they would like to see the Diamond St. or similar projects become permanent.

Table 10. Pedestrian survey responses – Pacific Beach

	Shared Street Total = 65		Control Street Total= 37	
	N	%	N	%
General Use				
What is the reason(s) for your trip to THIS LOCATION today?				
Exercise/physical health	17	26%	10	27%
Mental health/enjoyment	1	2%	0	0%
Safe way to socialize	1	2%	0	0%
I live here	24	37%	11	30%
I work here	1	2%	0	0%
Just passing through	6	9%	1	3%
Personal errand/appointment	3	5%	6	16%
Shopping	0	0%	1	3%
Restaurant/Bar/Café	1	2%	1	3%
Access park or beach	3	5%	3	8%
Walk dog	4	6%	4	11%
To provide feedback to survey	4	6%	0	0%
How did you get to this location today?				
Car	8	12%	4	11%
Walk	52	80%	33	89%
Bike	0	0%	0	0%
Public Transit	0	0%	0	0%
RideShare/Taxi	0	0%	0	0%
Scooter	4	6%	0	0%
Transit	1	2%	0	0%
[ONLY IF ANSWERED CAR in previous question], what is the main reason they drove?				
	Distance, time		Errands, different locations	
What do you enjoy most about walking in this location?				
Safe places to walk	20	31%	9	24%

Access to recreation (parks, greenspace, beaches)	15	23%	6	16%
Access to businesses/restaurants	2	3%	1	3%
Connects me to where I want to go	6	9%	3	8%
Other	Closed street, Being otuside, Extra Space, Peaceful, Quiet		Quiet, calm, close to beach, fresh air	
Do you plan to visit a business (for shopping, eating, etc.) while you're in this area?				
Yes	21	32%	17	46%
Today was first time walking in this location?				
Yes	1	2%	1	3%
Physical Activity				
How many days per week do you walk in this location?				
Days per week	5.2		5.8	
What are the most common reasons why you walk in general.	*more than one response possible so may sum to more than total interviews			
Transportation	26	37%	11	22%
Recreation/fun	13	18%	8	16%
Exercise	21	30%	23	47%
Mental health/quality of life	11	15%	7	14%
State whether you agree with the statement: "I would like to travel by bike more than I do now."				
Strongly disagree	7	11%	7	19%
Somewhat disagree	14	22%	9	24%
Somewhat agree	16	25%	16	43%
Strongly agree	26	40%	5	14%
Refused	2	3%	0	0%
Safety				

Do you have concerns for your personal safety when walking in this area?				
Yes	26	40%	11	30%
With the current street configuration, I feel safe from traffic when walking here.				
Strongly disagree	3	5%	1	3%
Disagree	4	6%	2	5%
Agree	19	29%	13	35%
Strongly agree	37	57%	21	57%
N/A or Don't know	2	3%	0	0%
I am likely to choose to walk here as opposed to other streets.				
Strongly disagree	5	8%	3	8%
Disagree	8	12%	3	8%
Agree	9	14%	16	43%
Strongly agree	42	65%	13	35%
N/A or Don't know	1	2%	2	5%
Drivers travel at a safe speed here.				
Strongly disagree	9	14%	4	11%
Disagree	20	31%	13	35%
Agree	30	46%	16	43%
Strongly agree	5	8%	4	11%
N/A or Don't know	1	2%	0	0%
Walking here is safe for all people and all ages (all ages, races, abilities).				
Strongly disagree	4	6%	0	0%
Disagree	9	14%	10	27%
Agree	30	46%	18	49%
Strongly agree	18	28%	9	24%
N/A or Don't know	4	6%	0	0%
Biking Perceptions				
Whether or not you currently bike in all of the following situations, please consider how comfortable you would be riding a bicycle in each place: On a commercial street with two lanes of traffic in each direction with traffic speeds of 35 miles per hour, on-street car parking and no bike lane.				

Very uncomfortable	19	29%	14	38%
Uncomfortable	26	40%	12	32%
Comfortable	15	23%	8	22%
Very comfortable	4	6%	3	8%
Refused	1	2%	0	0%
On a similar street to (2) but with a striped (painted) bike lane added?				
Very uncomfortable	3	5%	0	0%
Uncomfortable	11	17%	11	30%
Comfortable	30	46%	15	41%
Very comfortable	20	31%	11	30%
Refused	1	2%	0	0%
On a similar street to (2) but with a physically separated bike lane?				
Very uncomfortable	1	2%	0	0%
Uncomfortable	0	0%	2	5%
Comfortable	24	37%	17	46%
Very comfortable	38	58%	17	46%
Refused	2	3%	1	3%
Comfort riding a bike on a path or trail separate from the street?				
Very uncomfortable	0	0%	0	0%
Uncomfortable	1	2%	5	14%
Comfortable	17	26%	7	19%
Very comfortable	46	71%	25	68%
Refused	1	2%	0	0%
There are convenient and secure places to park bikes here.				
Strongly disagree	11	17%	8	22%
Disagree	18	28%	7	19%
Agree	18	28%	9	24%
Strongly agree	3	5%	3	8%
N/A or Don't know	15	23%	10	27%
I would be more likely to ride a bike here if motor vehicles and bicycles were always physically				

separated by a barrier. *(any kind of barrier)*				
Strongly disagree	7	11%	7	19%
Disagree	14	22%	5	14%
Agree	26	40%	16	43%
Strongly agree	16	25%	9	24%
N/A or Don't know	2	3%	0	0%
I am in support of bike paths, separated from traffic, along some city streets even if it means eliminating some parking spaces or a lane of traffic.				
Strongly disagree	6	9%	6	16%
Disagree	14	22%	9	24%
Agree	20	31%	15	41%
Strongly agree	21	32%	5	14%
N/A or Don't know	4	6%	2	5%
Health				
Having sidewalks, crosswalks, and bike lanes in this community gives me the opportunity to improve my health.				
Strongly disagree	0	0%	0	0%
Disagree	2	3%	0	0%
Agree	22	34%	18	49%
Strongly agree	39	60%	19	51%
N/A or Don't know	2	3%	0	0%
Having sidewalks, crosswalks, and bike lanes nearby allows me to connect with my community.				
Strongly disagree	0	0%	0	0%
Disagree	2	3%	1	3%
Agree	28	43%	21	57%
Strongly agree	32	49%	14	38%
N/A or Don't know	3	5%	1	3%

Having sidewalks, crosswalks, and bike lanes nearby allows me to move around while keeping socially distanced during COVID.				
Strongly disagree	0	0%	1	3%
Disagree	2	3%	1	3%
Agree	25	38%	22	59%
Strongly agree	35	54%	13	35%
N/A or Don't know	3	5%	0	0%
Imrpovements				
How would you rate this area as a place for walking (1=worst, 5=best)				
	4.1		4.2	
Are there any street improvements that could be added here to improve walking, biking or scootering here?				
Yes	11	17%	31	84%
Permanent Shared Street **does not include missing, may not sum to 100%*				
	N=45			
I would feel safer sharing the street with people traveling by different modes if projects like Shared Streets became permanent.				
Strongly disagree	5	11%	--	--
Disagree	3	7%	--	--
Agree	15	33%	--	--
Strongly agree	22	49%	--	--
I would feel more connected to the community if projects like Shared Streets became permanent.				
Strongly disagree	6	13%	--	--
Disagree	3	7%	--	--
Agree	18	40%	--	--
Strongly agree	18	40%	--	--

I would spend more time walking, biking, scootering in my neighborhood if projects like Shared Streets became permanent.				
Strongly disagree	5	11%	--	--
Disagree	2	4%	--	--
Agree	18	40%	--	--
Strongly agree	19	42%	--	--
The health of the community would improve if projects like Shared Streets became permanent.				
Strongly disagree	5	11%	--	--
Disagree	2	4%	--	--
Agree	18	40%	--	--
Strongly agree	19	42%	--	--
The Shared Street improved my ability to maintain physical distance while walking on this street.				
Strongly disagree	5	11%	--	--
Disagree	3	7%	--	--
Agree	15	33%	--	--
Strongly agree	22	49%	--	--
I would like to see this or similar projects become permanent in this neighborhood.				
Strongly disagree	5	11%	--	--
Disagree	2	4%	--	--
Agree	15	33%	--	--
Strongly agree	23	51%	--	--

PEDESTRIAN INTERVIEW RESPONSES – EL CAJON

We collected a total of 63 pedestrian interviews across all time points in the El Cajon locations. Responses are presented by Shared Street or control street and pre- or post-project installation in Table 11.

General Use

Pedestrians were asked their main reason for walking at that location. Prior to installation, the majority of both Shared Street and control street users stated exercise/physical health as the reason. Shared Street users cited access to the park and dog walking as significant reasons, while 17% of control street users indicated they lived in the area. Post-installation, more walkers who lived in the area were observed on the Shared Street as well as users who were running a personal errand. On the control street at the post-assessments, 50% of users stated park access as the reason for walking in that location. There was a slight decrease in the percentage of users who drove to the location, though this difference was greater at the control site. Reasons for driving included long distances, time constraints, easy parking, and convenience. The number of Shared Street users who planned to visit a business while in the area decreased from 41% before to 21% after the project. There were no respondents who were visiting the area for the first time after the project was installed. When asked what users enjoyed most about walking in that location, Shared Street users reported that it was a safe place to walk, followed by access to the park, and connecting them where they want to go. After the project was installed, there was an increase in the proportion of responses for safe places to walk and access to recreation, while the percentage of respondents who listed the connection to where they want to go decreased. Responses on the control street followed the same pattern.

Physical Activity

There was a slight decrease in the average number of days Shared Street users walked in that location from pre- to post-installation (4.5 to 4.3 days). However, there was an increase in the frequency of walking on the control street (3.7 to 5.3 days). Over 50% of Shared Street users indicated exercise was the main reason they walked, followed by mental health/quality of life, recreation and lastly for transportation. This pattern did not change from pre- to post-assessment. Control street users walked mainly for exercise. The proportion of respondents who indicated that they would like to bike more than they currently do grew from 35% before to 54% after the project. This may suggest that the fully separated bikeway was attractive to those walking on the street. During the same time, the proportion of pedestrians on the control street who wished to bike more than they do declined.

Safety

There was a significant decrease in the percentage of Shared Street users that had concerns for their safety when walking in the area after the project was installed (59% before to 18% after), with no change observed at the control location. Agreement with the statement that users felt safe when walking in that location with the current street configuration was high in both locations before and after the project. Similarly, there was no change in people choosing to walk in that location as opposed to other streets. However, there was an increase in the proportion of Shared Street users who agreed that the location was safe for all people of all ages after the project, while the control location had a decrease. More Shared Street pedestrians disagreed that drivers travel at a safe speed after the project was implemented, indicating that the bikeway barriers may not have succeeded in slowing traffic.

Health

Users were asked if having sidewalks, crosswalks and bike lanes in their community provided opportunities to improve their health, connect with their community and aid in their ability to maintain physical distance during COVID-19. Respondents from the Shared

Street location overwhelmingly agreed with all statements, before and after the project was installed. There was less agreement on the control street with almost 20% of users strongly disagreeing with all statements.

Biking perceptions and concerns

Users were asked to state how comfortable they would be riding a bicycle in different types of locations, whether or not they currently rode a bike. The proportion of Shared Street users who stated they were comfortable or very comfortable with riding on a commercial street with no bike facilities decreased from 24% to 21%. However, stated comfort riding on a painted bike lane or physically separated bikeway increased from pre- to post-project on the Shared Street, with less change on the control street. The majority of pedestrians agreed they would be comfortable riding on a completely separated path or trail in both locations at both time points.

The proportion of users in both locations who disagreed with the statement "There are convenient and secure places to park bikes here" increased from the before to after assessment. In the control location, 100% of users disagreed at the second time point. There was a notable increase in the percentage of Shared Street pedestrians who indicated they would be more likely to ride a bike in that location if vehicles and bikes were always physical separated by a barrier. Before the project, 65% agreed versus 75% after the project. Being able to see a separated bikeway may have changed perception among pedestrians. Interestingly, in the control location, agreement with that statement dropped from 83% to 33%. Prior to the project, more pedestrians at the control location supported separated bike paths, even if it meant parking loss, than at the Shared Street. After the project, however, support increased from 41% to 57% on the Shared Street, while it declined from 58% to 33% on the control street. This suggests that temporary projects like these may provide a useful strategy to build support for cycling infrastructure designed to increase comfort for all users.

Improvements

Users were asked to rate the area as a place for walking on a scale of 1 (worst) to 5 (best). The average rating increased from 4.2 before to 4.4 after the project on the Shared Street and 3.6 to 3.7 on the control street. However, there was a large decrease in the number of pedestrians who felt there were improvements that could be made to the Shared Street to improve walking or biking, from 47% before to 4% after. A decrease was also observed on the control street, though not as large.

Support of Shared Streets

We asked Shared Street users a series of questions about perceptions and behaviors if the project were to become permanent. While most pedestrians agreed with the statements about the benefits of making Shared Street projects permanent, support was lower than what was observed in Pacific Beach. Generally, 64% to 75% of users endorsed making the projects permanent, compared to more than 80% on Diamond Street. This is likely due to the smaller scale of the El Cajon Shared Street project which didn't change how the street was used by pedestrians.

Table 11. Pedestrian survey responses – El Cajon

	Pre-installation = 29				Post -installation =34			
	Shared Street		Control Street		Shared Street		Control Street	
	Total= 17		Total= 12		Total= 28		Total= 6	
	N	%	N	%	N	%	N	%
General Use								
What is the reason(s) for your trip to THIS LOCATION today?								
Exercise/physical health	9	53%	9	75%	12	43%	1	17%
Mental health/enjoyment	0	0%	0	0%	1	4%	0	0%
Safe way to socialize	0	0%	0	0%		0%	0	0%
I live here	1	6%	2	17%	6	21%	1	17%
I work here	0	0%	0	0%		0%	0	0%
Just passing through	1	6%	1	8%		0%	0	0%
Personal errand/appointment	1	6%	0	0%	4	14%	0	0%
Shopping	0	0%	0	0%		0%	0	0%
Restaurant/Bar/Café	0	0%	0	0%		0%	0	0%
Access park or beach	3	18%	0	0%	2	7%	3	50%
Walk dog	2	12%	0	0%	3	11%	1	17%
To provide feedback to survey	0	0%	0	0%		0%	0	0%
How did you get to this location today?								
Car	10	59%	6	50%	16	57%	2	33%
Walk	7	41%	6	50%	12	43%	4	67%
Bike	0	0%	0	0%		0%	0	0%
Public Transit	0	0%	0	0%		0%	0	0%
RideShare/Taxi	0	0%	0	0%		0%	0	0%
Scooter	0	0%	0	0%		0%	0	0%
Transit	0	0%	0	0%		0%	0	0%
[ONLY IF ANSWERED CAR in previous question], what is the main reason they drove?								
	Distance, time, dog, convenience		Easy parking, Distance Time, Convenience		Distance, convenience, time, easy parking, dog		Not safe to walk, distance	
Do you plan to visit a business (for shopping, eating, etc.) while you're in this area?								
Yes	7	41%	3	25%	6	21%	0	0%

What do you enjoy most about walking in this location?								
Safe places to walk	5	29%	1	8%	9	32%	1	17%
Access to recreation (parks, greenspace, beaches)	4	24%	4	33%	8	29%	3	50%
Access to businesses/restaurants	0	0%	0	0%	1	4%	0	0%
Connects me to where I want to go	2	12%	2	17%	2	7%	0	0%
Other	Quiet, peaceful, nature, close to home		Close to home		Quiet, peaceful, nature		Close to home, quiet	
Today was first time walking in this location?								
Yes	2	12%	1	8%	0	0%	0	0%
Physical Activity								
How many days per week do you walk in this location?								
Days per week	4.5		3.7		4.3		5.3	
What are the most common reasons why you walk in general.	*more than one response possible so may sum to more than total interviews							
Transportation	1	4%	3	23%	3	9%	0	0%
Recreation/fun	4	14%	2	15%	4	11%	0	0%
Exercise	15	54%	8	62%	21	60%	6	86%
Mental health/quality of life	8	29%	0	0%	7	20%	1	14%
State whether you agree with the statement: "I would like to travel by bike more than I do now."								
Strongly disagree	5	29%	5	42%	6	21%	2	33%
Somewhat disagree	5	29%	2	17%	7	25%	2	33%
Somewhat agree	5	29%	4	33%	7	25%	2	33%
Strongly agree	1	6%	1	8%	8	29%	0	0%
Refused	1	6%	0	0%	0	0%	0	0%
Safety								
Do you have concerns for your personal safety when walking in this area?								
Yes	10	59%	4	33%	5	18%	2	33%
With the current street configuration, I feel safe from traffic when walking here.								
Strongly disagree	0	0%	0	0%	1	4%	0	0%
Disagree	1	6%	1	8%	1	4%	0	0%

Agree	9	53%	6	50%	11	39%	3	50%
Strongly agree	7	41%	5	42%	14	50%	3	50%
N/A or Don't know	0	0%	0	0%	1	4%	0	0%
I am likely to choose to walk here as opposed to other streets.								
Strongly disagree	0	0%	0	0%	0	0%	0	0%
Disagree	1	6%	1	8%	2	7%	0	0%
Agree	11	65%	4	33%	13	46%	3	50%
Strongly agree	4	24%	5	42%	12	43%	3	50%
N/A or Don't know	1	6%	2	17%	1	4%	0	0%
Drivers travel at a safe speed here.								
Strongly disagree	3	18%	2	17%	6	21%	0	0%
Disagree	3	18%	5	42%	7	25%	3	50%
Agree	8	47%	2	17%	10	36%	1	17%
Strongly agree	2	12%	2	17%	3	11%	2	33%
N/A or Don't know	1	6%	1	8%	2	7%	0	0%
Walking here is safe for all people and all ages (all ages, races, abilities).								
Strongly disagree	1	6%	0	0%	0	0%	0	0%
Disagree	1	6%	4	33%	0	0%	3	50%
Agree	10	59%	5	42%	20	71%	1	17%
Strongly agree	5	29%	2	17%	7	25%	2	33%
N/A or Don't know	0	0%	1	8%	1	4%	0	0%
Biking Perceptions								
Whether or not you currently bike in all of the following situations, please consider how comfortable you would be riding a bicycle in each place: On a commercial street with two lanes of traffic in each direction with traffic speeds of 35 miles per hour, on-street car parking and no bike lane.								
Very uncomfortable	10	59%	6	50%	13	46%	1	17%
Uncomfortable	3	18%	5	42%	9	32%	4	67%
Comfortable	3	18%	0	0%	4	14%	0	0%
Very comfortable	1	6%	1	8%	2	7%	1	17%
Refused	0	0%	0	0%	0	0%	0	0%
On a similar street to (2) but with a striped (painted) bike lane added?								
Very uncomfortable	1	6%	3	25%	1	4%	1	17%
Uncomfortable	6	35%	4	33%	4	14%	2	33%
Comfortable	7	41%	4	33%	15	54%	2	33%
Very comfortable	3	18%	1	8%	8	29%	1	17%

Refused	0	0%	0	0%	0	0%	0	0%
On a similar street to (2) but with a physically separated bike lane?								
Very uncomfortable	1	6%	2	17%	1	4%	1	17%
Uncomfortable	3	18%	2	17%	3	11%	1	17%
Comfortable	8	47%	3	25%	14	50%	2	33%
Very comfortable	5	29%	5	42%	10	36%	2	33%
Refused	0	0%	0	0%	0	0%	0	0%
Comfort riding a bike on a path or trail separate from the street?								
Very uncomfortable	0	0%	1	8%	2	7%	0	0%
Uncomfortable	2	12%	3	25%	3	11%	0	0%
Comfortable	8	47%	3	25%	12	43%	4	67%
Very comfortable	7	41%	5	42%	11	39%	2	33%
Refused	0	0%	0	0%	0	0%	0	0%
There are convenient and secure places to park bikes here.								
Strongly disagree	0	0%	2	17%	4	14%	1	17%
Disagree	5	29%	4	33%	8	29%	5	83%
Agree	5	29%	1	8%	5	18%	0	0%
Strongly agree	1	6%	0	0%	3	11%	0	0%
N/A or Don't know	6	35%	5	42%	8	29%	0	0%
I would be more likely to ride a bike here if motor vehicles and bicycles were always physically separated by a barrier. *(any kind of barrier)*								
Strongly disagree	0	0%	0	0%	2	7%	1	17%
Disagree	4	24%	0	0%	3	11%	3	50%
Agree	9	53%	7	58%	12	43%	1	17%
Strongly agree	2	12%	3	25%	9	32%	1	17%
N/A or Don't know	2	12%	2	17%	2	7%	0	0%
I am in support of bike paths, separated from traffic, along some city streets even if it means eliminating some parking spaces or a lane of traffic.								
Strongly disagree	2	12%	1	8%	2	7%	1	17%
Disagree	7	41%	4	33%	7	25%	3	50%
Agree	6	35%	6	50%	10	36%	2	33%
Strongly agree	1	6%	1	8%	6	21%	0	0%

N/A or Don't know	1	6%	1	8%	3	11%	0	0%
Health								
Having sidewalks, crosswalks, and bike lanes in this community gives me the opportunity to improve my health.								
Strongly disagree	0	0%	1	8%	0	0%	1	17%
Disagree	1	6%	0	0%	1	4%	0	0%
Agree	7	41%	5	42%	12	43%	3	50%
Strongly agree	9	53%	4	33%	14	50%	2	33%
N/A or Don't know	0	0%	3	25%	1	4%	0	0%
Having sidewalks, crosswalks, and bike lanes nearby allows me to connect with my community.								
Strongly disagree	0	0%	0	0%	0	0%	1	17%
Disagree	1	6%	0	0%	2	7%	1	17%
Agree	8	47%	8	67%	11	39%	2	33%
Strongly agree	8	47%	1	8%	13	46%	2	33%
N/A or Don't know	0	0%	3	25%	2	7%	0	0%
Having sidewalks, crosswalks, and bike lanes nearby allows me to move around while keeping socially distanced during COVID.								
Strongly disagree	0	0%	0	0%	0	0%	1	17%
Disagree	0	0%	1	8%	0	0%	0	0%
Agree	9	53%	6	50%	15	54%	3	50%
Strongly agree	8	47%	3	25%	12	43%	2	33%
N/A or Don't know	0	0%	2	17%	1	4%	0	0%
Improvements								
How would you rate this area as a place for walking (1=worst, 5=best)								
	4.2		3.6		4.4		3.7	
Are there any street improvements that could be added here to improve walking, biking or scootering here?								
Yes	8	47%	6	50%	1	4%	2	33%
Permanent Shared Street ***does not include missing, may not sum to 100%***								
I would feel safer sharing the street with people traveling by different modes if projects like Shared Streets became permanent.								

Strongly disagree	--	--	--	--	2	7%	--	--
Disagree	--	--	--	--	4	14%	--	--
Agree	--	--	--	--	9	32%	--	--
Strongly agree	--	--	--	--	10	36%	--	--
I would feel more connected to the community if projects like Shared Streets became permanent.								
Strongly disagree	--	--	--	--	2	7%	--	--
Disagree	--	--	--	--	5	18%	--	--
Agree	--	--	--	--	11	39%	--	--
Strongly agree	--	--	--	--	8	29%	--	--
I would spend more time walking, biking, scootering in my neighborhood if projects like Shared Streets became permanent.								
Strongly disagree	--	--	--	--	3	11%	--	--
Disagree	--	--	--	--	5	18%	--	--
Agree	--	--	--	--	12	43%	--	--
Strongly agree	--	--	--	--	6	21%	--	--
The health of the community would improve if projects like Shared Streets became permanent.								
Strongly disagree	--	--	--	--	2	7%	--	--
Disagree	--	--	--	--	4	14%	--	--
Agree	--	--	--	--	12	43%	--	--
Strongly agree	--	--	--	--	7	25%	--	--
The Shared Street improved my ability to maintain physical distance while walking on this street.								
Strongly disagree	--	--	--	--	2	7%	--	--
Disagree	--	--	--	--	3	11%	--	--
Agree	--	--	--	--	12	43%	--	--
Strongly agree	--	--	--	--	9	32%	--	--
I would like to see this or similar projects become permanent in this neighborhood.								
Strongly disagree	--	--	--	--	2	7%	--	--
Disagree	--	--	--	--	4	14%	--	--
Agree	--	--	--	--	13	46%	--	--
Strongly agree	--	--	--	--	6	21%	--	--

BICYCLE INTERVIEW RESPONSES

We collected a total of 28 bicyclist interviews across all time points in the Pacific Beach and El Cajon locations (Table 12). The majority (n=21) were from the Shared Street in Pacific Beach, which was implemented prior to data collection for this study. Given that, and that only 1 interview captured responses prior to the project installation in El Cajon, results are presented for each city by Shared Street or control street, rather than before or after the project.

General Use

Bicyclists were asked their main reason for biking at that location. In Pacific Beach, users indicated exercise and physical health was the most important reason, followed by living in the area and to a lesser extent running errands or visiting an eating or drinking establishment. In El Cajon, 50% of users biked at the Shared Street and control street locations for exercise and 50% to access a park. Two-thirds of the Shared Street sample planned to visit a business in the area, compared to 1/3rd of the control street bicyclists. Half of the bicyclists on the El Cajon Shared Street planned to visit a business versus none on the control street. The control street location was not close to a business district, so this result is not surprising. Responses differed across location about what users enjoyed most about biking in that location. On the Pacific Beach Shared Street, 38% of bicyclists stated it was a safe place to ride, 17% cited access to recreation, with 4% reporting access to businesses or connecting them to where they want to go. All Pacific Beach control street cyclists stated that access to recreation was what they enjoyed the most. This indicates that many bicyclists in the area use a bike to get around town and access the parks and beach. In El Cajon, responses on the Shared Street were split between access to the park and access to businesses. In the control location, one respondent replied that the area connected them with where they wanted to go. Other responses in both locations included being outside and having extra space.

Physical Activity

Respondents in Pacific Beach reported biking in their respective locations approximately 5 days per week. Users in El Cajon indicated they biked on the Shared Street location every day of the week while use was less frequent (average 3 days) at the control location. In Pacific Beach, transportation was the biggest reason users biked in general. El Cajon users were relatively evenly split between transportation, exercise, mental health, and recreation as reasons they rode a bike. In Pacific Beach, there was nearly 100% support for the statement that users would like to bike more than they do currently. This was also true at the El Cajon Shared Street site but not the control street.

Safety

Users expressed concern for their safety when biking in the area., including 50% of Shared Street bicyclists in both locations. This is surprising given that, in Pacific Beach, the road was closed to through traffic. One participant was quoted as saying "There's still traffic here, and drivers drive fast. It would be safer if the street is completely shut off..." By comparison, 100% of respondents on Pacific Beach control streets indicated concern. Open-ended questions revealed that traffic, driving speed, driver inattention and people on

scooters were cause for concern. With the exception of the control streets in Pacific Beach, respondents indicated that they felt safe biking given the current street configuration. However, 100% of Pacific Beach control street cyclists disagreed. Neither control street in Pacific Beach had bike specific infrastructure. In Pacific Beach, all bicyclists agreed or strongly agreed that they would choose to bike in that location over other streets. Interestingly, this was true of one cyclist that was biking on the street adjacent to the Shared Street. However, in El Cajon, users were split and only 50% agreed they would choose that location over other routes. The majority of bicyclists reported that drivers travelled at a safe speed on the Shared Streets, but 100% of users disagreed on control streets. This lends support to implementing traffic calming measures more broadly across city streets to increase cyclist comfort levels. A similar pattern was observed for the question "Biking here is safe for all people and all ages, races and abilities." Users on Shared Streets generally agreed, while control street cyclists did not.

Biking perceptions and concerns

Bicyclists were asked to state how comfortable they would be riding a bicycle in different types of locations. Users were shown pictures describing each of the 4 scenarios. In Pacific Beach, only 1/3rd of users indicated they were comfortable or very comfortable riding on a commercial street, with speeds of 35 mph, on street parking, and no bike facilities, compared to 50% who were comfortable in this scenario in El Cajon. Most bicyclists were comfortable on a similar street with a painted bike lane, with the exception of control street users in Pacific Beach. Almost all users indicated they were comfortable or very comfortable riding on bikeway separated from traffic (>90% in all locations). Similarly, almost all users were comfortable or very comfortable riding on a completely separated path or trail. The majority of users in both cities disagreed that secure and convenient places existed to park a bike. Nearly all users agreed or strongly agreed that they would be more likely to ride a bike in that location if vehicles and bikes were always physical separated by a barrier. Strong support existed for separated bike paths, even if it meant parking loss in both locations. This differs somewhat from pedestrian results in El Cajon, indicating less support for bike specific infrastructure from non-cyclists.

Health

Users were asked if having sidewalks, crosswalks and bike lanes in their community provided opportunities to improve their health and connect with their community. Respondents in both locations overwhelmingly agreed with both statements. All users in both locations also agreed that having those facilities helped them be active while maintaining social distancing during COVID-19.

Improvements

Users were asked to rate the area as a place for walking on a scale of 1 (worst) to 5 (best). Average ratings were higher on Shared Streets compared to control locations in both cities (4.1 to 3.0 in Pacific Beach and 4.0 to 3.5 in El Cajon). On Shared Streets, only 19% of bicyclists in Pacific Beach and 0% in El Cajon indicated that there were improvements that could be added to the location to improve walking, biking or scootering on the Shared Street, compared to 67% and 50% on control streets, respectively.

Support of Shared Streets

On Shared Streets, we asked a series of questions about perceptions and behaviors if the project were to become permanent. There was strong support for both projects to remain. Support for the El Cajon project, among bicyclists, was universal. This makes sense given it was a bike specific intervention. In Pacific Beach, a small proportion of respondents disagreed that they would feel safer sharing the street with different modes, would feel more connected to community, would spend more time being active, that the health of the community would be improved, or that they would better maintain physical distance while biking if the projects were to remain permanent (6% to 19% of respondents). However, in general, 94% of Pacific Beach and 100% of El Cajon bicyclists agreed with the statement "I would like to see this or similar projects become permanent in this neighborhood."

Table 12. Bicyclist survey responses – El Cajon

	Pacific Beach				El Cajon			
	Shared Street Total = 21		Control Street Total=3		Shared Street Total=2		Control Street Total=2	
	N	%	N	%	N	%	N	%
General Use								
What is the reason(s) for your trip to THIS LOCATION today?								
Exercise/physical health	8	38%	1	33%	1	50%	1	50%
Mental health/enjoyment	0	0%		0%	0	0%	0	0%
Safe way to socialize	0	0%		0%	0	0%	0	0%
I live here	7	33%	1	33%	0	0%	0	0%
I work here	0	0%		0%	0	0%	0	0%
Just passing through	0	0%	1	33%	0	0%	0	0%
Personal errand/appointment	2	10%		0%	0	0%	0	0%
Shopping	0	0%		0%	0	0%	0	0%
Restaurant/Bar/Café	3	14%		0%	0	0%	0	0%
Accessing park	1	5%		0%	1	50%	1	50%
Do you plan to visit a business (for shopping, eating, etc.) while you're in this area?								
Yes	14	67%	1	33%	1	50%	0	0%
What do you enjoy most about biking in this location?								
Safe places to ride	9	38%	0	0%	0	0%	0	0%

Access to recreation (parks, greenspace, beaches, etc)	4	17%	3	100%	1	50%	0	0%
Access to businesses/restaurants	1	4%	0	0%	1	50%	0	0%
Connects me to where I want to go	1	4%	0	0%	0	0%	1	50%
Other	Being otuside, Extra Space, Community				Open area with lots of room			
Today was first time riding in this location?								
Yes	0	0%	0	0%	1	50%	0	0%
Physical Activity								
How many days per week do you bike in this location?								
Days per week	4.7		5.3		7.0		3.0	
What are the most common reasons why you BIKE in general.	*more than one response possible so may sum to more than total interviews							
Transportation	14	48%	2	67%	1	25%	1	33%
Recreation/fun	4	14%	1	33%	1	25%	0	0%
Exercise	6	21%	0	0%	2	50%	1	33%
Mental health/quality of life	5	17%	0	0%	1	25%	1	33%
State whether you agree with the statement: "I would like to travel by bike more than I do now."								
Strongly disagree	0	0%	0	0%	0	0%	0	0%
Somewhat disagree	1	5%	0	0%	0	0%	2	100%
Somewhat agree	7	33%	2	67%	1	50%	0	0%
Strongly agree	13	62%	1	33%	1	50%	0	0%
Safety								
Do you have concerns for your personal safety when biking in this area?								
Yes	10	48%	3	100%	1	50%	1	50%
If yes, please state concerns								
	Getting hit by car, Traffic, Driving too fast, Drivers not paying attention to bicyclists				Won't bike in evening, traffic			
With the current street configuration, I feel safe from traffic when biking here.								

Strongly disagree	0	0%	0	0%	0	0%	0	0%
Disagree	2	10%	3	100%	0	0%	0	0%
Agree	7	33%	0	0%	1	50%	1	50%
Strongly agree	12	57%	0	0%	1	50%	1	50%
N/A or Don't know	0	0%	0	0%	0	0%	0	0%
I am likely to choose to bike here as opposed to other streets.								
Strongly disagree	0	0%	0	0%	0	0%	0	0%
Disagree	0	0%	0	0%	1	50%	1	50%
Agree	4	19%	3	100%	1	50%	1	50%
Strongly agree	17	81%	0	0%	0	0%	0	0%
N/A or Don't know	0	0%	0	0%	0	0%	0	0%
Drivers travel at a safe speed here.								
Strongly disagree	1	5%	2	67%	0	0%	0	0%
Disagree	7	33%	1	33%	0	0%	2	100%
Agree	8	38%	0	0%	2	100%	0	0%
Strongly agree	5	24%	0	0%	0	0%	0	0%
N/A or Don't know	0	0%	0	0%	0	0%	0	0%
Biking here is safe for all people and all ages (all ages, races, abilities).								
Strongly disagree	1	5%	1	33%	0	0%	0	0%
Disagree	2	10%	1	33%	0	0%	2	100%
Agree	12	57%	1	33%	0	0%	0	0%
Strongly agree	5	24%	0	0%	2	100%	0	0%
N/A or Don't know	1	5%	0	0%	0	0%	0	0%
Biking Perceptions								
Whether or not you currently bike in all of the following situations, please consider how comfortable you would be riding a bicycle in each place: On a commercial street with two lanes of traffic in each direction with traffic speeds of 35 miles per hour, on-street car parking and no bike lane.								
Very uncomfortable	6	29%	1	33%	0	0%	0	0%
Uncomfortable	7	33%	1	33%	1	50%	1	50%
Comfortable	6	29%	1	33%	1	50%	1	50%

Very comfortable	1	5%	0	0%	0	0%	0	0%
Refused	1	5%	0	0%	0	0%	0	0%
On a similar street to (2) but with a striped (painted) bike lane added?								
Very uncomfortable	1	5%	0	0%	0	0%	0	0%
Uncomfortable	2	10%	2	67%	0	0%	0	0%
Comfortable	10	48%	0	0%	1	50%	2	100%
Very comfortable	7	33%	1	33%	1	50%	0	0%
Refused	1	5%	0	0%	0	0%	0	0%
On a similar street to (2) but with a physically separated bike lane?								
Very uncomfortable	0	0%	0	0%	0	0%	0	0%
Uncomfortable	1	5%	0	0%	0	0%	0	0%
Comfortable	4	19%	1	33%	1	50%	1	50%
Very comfortable	15	71%	2	67%	1	50%	1	50%
Refused	1	5%	0	0%	0	0%	0	0%
Comfort riding a bike on a path or trail separate from the street?								
Very uncomfortable	0	0%	0	0%	0	0%	0	0%
Uncomfortable	0	0%	0	0%	0	0%	1	50%
Comfortable	3	14%	1	33%	0	0%	1	50%
Very comfortable	17	81%	2	67%	2	100%	0	0%
Refused	1	5%	0	0%	0	0%	0	0%
There are convenient and secure places to park bikes here.								
Strongly disagree	4	19%	0	0%	1	50%	0	0%
Disagree	10	48%	2	67%	1	50%	1	50%
Agree	4	19%	1	33%	0	0%	1	50%
Strongly agree	2	10%	0	0%	0	0%	0	0%
N/A or Don't know	1	5%	0	0%	0	0%	0	0%
I would be more likely to ride a bike here if motor vehicles and bicycles were always physically separated by a barrier. *(any kind of barrier)*								
Strongly disagree	0	0%	0	0%	0	0%	0	0%

Disagree	2	10%	1	33%	0	0%	0	0%
Agree	9	43%	0	0%	1	50%	1	50%
Strongly agree	10	48%	2	67%	1	50%	1	50%
N/A or Don't know	0	0%	0	0%	0	0%	0	0%
I am in support of bike paths, separated from traffic, along some city streets even if it means eliminating some parking spaces or a lane of traffic.								
Strongly disagree	2	10%	0	0%	0	0%	0	0%
Disagree	2	10%	1	33%	0	0%	0	0%
Agree	9	43%	1	33%	0	0%	1	50%
Strongly agree	8	38%	1	33%	2	100%	1	50%
N/A or Don't know	0	0%	0	0%	0	0%	0	0%
Health								
Having sidewalks, crosswalks, and bike lanes in this community gives me the opportunity to improve my health.								
Strongly disagree	0	0%	0	0%	0	0%	0	0%
Disagree	0	0%	0	0%	0	0%	0	0%
Agree	7	33%	1	33%	0	0%	1	50%
Strongly agree	13	62%	2	67%	2	100%	1	50%
N/A or Don't know	1	5%	0	0%	0	0%	0	0%
Having sidewalks, crosswalks, and bike lanes nearby allows me to connect with my community.								
Strongly disagree	0	0%	1	33%	0	0%	0	0%
Disagree	0	0%	1	33%	0	0%	0	0%
Agree	11	52%	1	33%	1	50%	1	50%
Strongly agree	9	43%	0	0%	1	50%	1	50%
N/A or Don't know	1	5%	0	0%	0	0%	0	0%
Having sidewalks, crosswalks, and bike lanes nearby allows me to move around while keeping socially distanced during COVID.								
Strongly disagree	0	0%	0	0%	0	0%	0	0%

Disagree	0	0%	0	0%	0	0%	0	0%
Agree	6	29%	2	67%	0	0%	1	50%
Strongly agree	13	62%	0	0%	2	100%	1	50%
N/A or Don't know	2	10%	1	33%	0	0%	0	0%
Improvements								
How would you rate this area as a place for biking (1=worst, 5=best)								
	4.1		3.0		4.0		3.5	
Are there any street improvements that could be added here to improve walking, biking or scootering here?								
Yes	4	19%	2	67%	0	0%	1	50%
Permanent Shared Street ***does not include missing, may not sum to 100%***								
	N=16				**N=2**			
I would feel safer sharing the street with people traveling by different modes if projects like Shared Streets became permanent.								
Strongly disagree	1	6%	--	--	0	0%	--	--
Disagree	0	0%	--	--	0	0%	--	--
Agree	6	38%	--	--	1	50%	--	--
Strongly agree	9	56%	--	--	1	50%	--	--
I would feel more connected to the community if projects like Shared Streets became permanent.								
Strongly disagree	1	6%	--	--	0	0%	--	--
Disagree	0	0%	--	--	0	0%	--	--
Agree	7	44%	--	--	0	0%	--	--
Strongly agree	8	50%	--	--	2	100%	--	--
I would spend more time walking, biking, scootering in my neighborhood if projects like Shared Streets became permanent.								
Strongly disagree	1	6%	--	--	0	0%	--	--
Disagree	1	6%	--	--	0	0%	--	--

Agree	7	44%	--	--	0	0%	--	--
Strongly agree	7	44%	--	--	2	100%	--	--
The health of the community would improve if projects like Shared Streets became permanent.								
Strongly disagree	1	6%	--	--	0	0%	--	--
Disagree	2	13%	--	--	0	0%	--	--
Agree	5	31%	--	--	1	50%	--	--
Strongly agree	8	50%	--	--	1	50%	--	--
The Shared Street improved my ability to maintain physical distance while biking on this street.								
Strongly disagree	1	6%	--	--	0	0%	--	--
Disagree	1	6%	--	--	0	0%	--	--
Agree	6	38%	--	--	1	50%	--	--
Strongly agree	7	44%	--	--	1	50%	--	--
I would like to see this or similar projects become permanent in this neighborhood.								
Strongly disagree	1	6%	--	--	0	0%	--	--
Disagree	0	0%	--	--	0	0%	--	--
Agree	4	25%	--	--	1	50%	--	--
Strongly agree	11	69%	--	--	1	50%	--	--

QUALITATIVE DATA

This section provides an overview of responses to open-ended questions from the 193 intercept interviews. Tables 13 and 14 includes the question prompts, the qualitative themes extracted from the data and sample quotes reflective of the feedback. The qualitative data is organized by city, pedestrian or bicyclist user, and Shared or control street.

As can be seen in the data below, concerns about the Shared Street projects were identified. In Pacific Beach, residents from neighboring streets felt that it added additional traffic volume to their street. We saw in the count data that vehicle counts did increase on the adjacent street after the Shared Street was implemented. However, the increase in traffic was less than the decrease in vehicle travel observed on the Shared Street. In El Cajon, some respondents didn't view the project as a meaningful change and did not find added benefit. The qualitative feedback we received in El Cajon was roughly equal in either in support or opposition to the project. Respondents in both locations noted that issues with signage, which was often knocked over or falling off the barriers. The images below show cyclists riding on the sidewalk, alongside the newly expanded bike lane, and signage in disrepair.



Table 13. Pedestrian Interview – Qualitative Themes

Pacific Beach Shared Street - Pedestrian Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when walking in this area?	• Traffic, cars	"Some cars don't stop at stop sign. "
	• Homeless + party-going population at night	"There are cars going around the Shared Streets signs"
	• Lack of lighting	"Street lights are desperately lacking"
	• Crowded, not socially distanced	"Fear of unknowing criminals when walking. There are bikes being stolen." "I avoid walking at night to avoid being mugged. I keep distance from people who don't wear a mask." "Pedestrian is invisible in PB"
		"It's not bright enough at night, otherwise during the day it's good."
What are the reasons that keep you from biking as much as you would like to?	• Lack of bike infrastructure	"Biking in traffic sucks"
	• Fear of traffic	"Designated bike paths would be better"
	• No bike racks, theft	"I worry about my bike being stolen."
	• Lack of time	"I'm pregnant, and there's not a designated bike lane to bike on"
	• Child care	"I need to transport my baby, so I can't bike to places that are too far away. I currently still bike to go to the party though."

		"Bike when I need to, slow streets does not add any benefits to me"
Are there any street improvements that could be added here to improve walking, biking, scootering here?	• Enforce traffic laws • Street lighting • Road and sidewalk maintenance • Separate bike lanes • Bikeway maintenance	"Street lights, especially when it gets dark early" "It's inconvenient that walking and biking are in the same lane, it makes me uncomfortable as a walker." "Separated bike lanes needed to be maintained and cleaned, same with travel bike lanes", lots of trash causing flat tires." "total elimination of cars" "Opening up the car traffic on this street. We live on the next street and the traffic is nasty there becasue this street is closed."
What are the main benefits of this Shared Streets project?	• Safety for all modes • Seeing people out/meeting people • Able to socially distance • None, it's dangerou	"It encourages people who wouldn't have gone outside previously to feel safe and go outside." "People are more likely to walk on this street, and I met a lot of neighbors when walking on this street." "It creates more space to walk and to meet people" "Makes people feel safer" "Different modes of getting around (bike, rollerskates) etc." "Seeing everyone get outside and 'out and about" "none its dangerous to adjacent streets" "no benefits, adding additional travel to other streets"
How could the Shared Street project be improved?	• Better signage + barriers to limit traffic • Clear rules about street sweeping • Enforcement • More bike/scooter infrastructure + parking	"It needs more input from residents and people who are actually living here, not only people who come to the street. Residents are bothered by people coming by their houses and acting very rudely in their yards. The signs of the project are also not well maintained." "Not supervised enough and there are still cars entering the street" "Parking is somewhat of an issue, but with the implementation of this (SS), parking should be accessible too." "cancel it"; disrespectful users on slow street, unsafe traffic usage."

Pacific Beach Control Streets - Pedestrian Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when walking in this area?	• Walking at night • Homeless population at night	"It's dark at night."
What are the reasons that keep you from biking as much as you would like to?	• Don't own a bike • Time • Laziness • COVID + tourists not wearing masks	"Safety concerns, and being sweaty is not enjoyable" "I worry about my bike being stolen." can't bring a lot of stuff in grocery "I don't make the time" "I'm lazy"
Are there any street improvements that could be added here to improve walking, biking, scootering here?	• More stop signs • Separate bike lane • Streetlights • Better maintenance	"More stop signs on cross streets" "It's inconvenient that walking and biking are in the same lane, it makes me uncomfortable as a walker." "Drivers need to slow down and watch the stop signs, like what they do near the schools." "Cover the potholes, sidewalk uneven, people trip, scooters fly over" " There should be fewer "bird scooters on the street, which always obstruct the sidewalks when they are not used."

El Cajon Shared Street -Pedestrian Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when walking in this area?	• Time of day • Distance • Lack of bike racks	

What are the reasons that keep you from biking as much as you would like to?	No responses	
Are there any street improvements that could be added here to improve walking, biking, scootering here?	• Lighting + security • Traffic calming • Better sidewalks • More space for distancing	"Police do a good job keeping homeless people under control, but there are still homeless people, which is "uncomfortable." "Government" doesn't "provide enough social services." "There are two sides of E Madison Ave, the City is responsible for the side next to the Kennedy Skate Park, and the County is responsible for the opposite side. There's no sidewalk on the County part of the road, so I worry about my safety." "Esta muy chico el espacio, especialmente durante el COVID"
What are the main benefits of this Shared Streets project?	• Safety from cars • More space	"It enables more people to move around, and the street is much less crowded without all those cars parking on the side." "It's good for people who are walking and biking" "plenty of space for more than 1 person to walk" "More room to walk, and possibly bike" "Visibility of the orange blocks" "I don't know, I don't see a big change" "don't see it, none"
How could the Shared Street project be improved?	• Paint the bike lane • Don't block parking entirely • Reduce speed of cars • Extend further	"Implementing more of it. Extend it to other streets. Actually I thought this is a construction site at first. May need to deal with the parking when this project is further implemented." "Putting up signs to show what these blocks are actually for. People may think this is a construction site. So there can be signs showing that people walking this street, etc" "No, not sure how effective this can be" "Eliminate the project"

El Cajon Control Street - Pedestrian Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when walking in this area?	• Traffic speeds • Homeless • Dogs	"Too many cars speeding" "Other dogs unleashed"
What are the reasons that keep you from biking as much as you would like to?	• Distance • Lack of bike lanes • Crowded	"Location - where I need to go is too far by bike."
Are there any street improvements that could be added here to improve walking, biking, scootering here?	• Traffic calming • Crosswalks • Speed enforcement • Bike lanes	"Crosswalk in-between streets would be nice." "Speed enforcement...there's a school but people still be driving 50 in this street" "Add a bike lane. On the sidewalk, pedestrians always have to get out of the way for people who are biking."

Table 14. Bicyclist Interview – Qualitative Themes

Pacific Beach Shared Street - Bicyclist Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when biking in this area?	• Traffic • Driving speed • Cars not paying attention • People on scooters	"There's still traffic here, and drivers drive fast. It would be safer if the street is completely shut off. I won't let my baby walk here." "Fewer concerns now, due to closed off streets" "Cars and people who are on scooters are safety hazards to people who are walking, biking, and driving."

What are the reasons that keep you from biking as much as you would like to?	• Unsafe roadways / traffic • Lack of good bike pathways • Personal safety from homeless • Time • Convenience	"Not having bike routes that are safe to get to the place I want to go" "Not enough approproate routes" "Don't have the time, and roads are not friendly" "Need to take care of kids, too much stuff"
Are there any street improvements that could be added here to improve walking, biking, scootering here?	• Add more bike lanes • Roadway maintenance (i.e. fix potholes) • Add speed bumps, lighting	"Making this more permanent."
What are the main benefits of this Shared Streets project?	• Safer space to walk and bike • Safe space for kids • More space, physical distance • Encourages exercise	"Less chance for bikers and children to be hit by cars" "Safer space to walk and bike. Allows us to not be close to other people and maintain physical distance." "People need space, need less pollution, quiet/less noise, less stress, more safety. Only street kids feel safe on" "It provides kids with space to play outside and provides safe space for everyone. Some people are nervous to ride in the traffic." "Nice having dedicated road for no cars" "It encourages more people to bike and walk" "Pacific beach is so dangerous especially for bikers and even for cars, with all those 2-way stop signs. Me and my friends use this slow street all thetime because we feel so much safer on this street." "We use this street to get outside, roller skate, and do a lot of fun activities, instead of bored walking."

How could the Shared Street project be improved?	• Better signage + barriers to limit traffic • Make permanent • Expand length • Enforcement	"It needs to have better signage and make this street permanent." "It should have better barriers, there are too many cars right now." "...more inclusive of residents on Diamond St" "For Diamond Street, it's better to start at Gresham Street instead of Haines Street, because people need to drive to the park and the school."

Pacific Beach Control Streets - Bicyclist Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when biking in this area?	• Traffic speed • Drivers not paying attention to bicyclists	"Traffic too fast"
What are the reasons that keep you from biking as much as you would like to?	• Time	
Are there any street improvements that could be added here to improve walking, biking, scootering here?	• Signals	"I like Diamond St! But afternoon is too busy, so I have to pick other places."

El Cajon Shared Street - Bicyclist Interviews		
Prompt	**Themes**	**Key Quotes**
Do you have concerns for your personal safety when biking in this area?	• Time of day	"We won't bike in the evening. Other than that it's fine"

What are the reasons that keep you from biking as much as you would like to?	• Distance • Lack of bike racks	"Distance to where I want to go"
Are there any street improvements that could be added here to improve walking, biking, scootering here?	No responses	No responses
What are the main benefits of this Shared Streets project?	• Safe place to bike	"It's a safe place to bike. I don't want to bike on the sidewalk because I don't want to block the pedestrians. But I also don't want to have my son riding in the road, so this street is perfect for us."

El Cajon Control Street - Bicyclist Interviews

Prompt	Themes	Key Quotes
Do you have concerns for your personal safety when biking in this area?	• Traffic	"The traffic is wild."
What are the reasons that keep you from biking as much as you would like to?		
Are there any street improvements that could be added here to improve walking,	• Bike lanes	"To have more bike lanes."

biking, scootering here?

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Appendix 1. Count data collection form

Name:		**Street:**			**Cross street:**	
Day of week:		**Date:**	**Time: ____ to _____**		**Raining: Y/N**	**Pre / Post**
Shared Street / Control						
Observe all people passing by the location you are standing. Please circle their travel mode, road position, gender, age group, and racial category. Make your best guess! For vehicles, just make tick marks to count the number of cars, motorcycles, motorized scooters. No demographics needed. Babies being carried = pedestrian. Stroller = Other wheeled device. Don't need to complete demographics! Tandem bike/ bike trailer for child/child on bike= 2 cyclists Walking a bike = pedestrian						
	Mode	**Gender**	**Age group**	**Race/ethnicity**	**Road position**	**Vehicles**
	P= Pedestrian B= Bicyclist M= Mobility device/wheelchair S = Scooter E = e-Bike O = Other wheeled device (skateboard, stroller)	M=Male F=Female	A= Adult C = Child/teen E = Elderly	W=White B = Black L = Latino A = Asian O = Other	T= Travel lane B=Bicycle lane S=Sidewalk E=Expanded sidewalk	Vehicle counts ||||
1	P B M S E O	M F	A C E	W B L A O	T B S E	
2	P B M S E O	M F	A C E	W B L A O	T B S E	
3	P B M S E O	M F	A C E	W B L A O	T B S E	
4	P B M S E O	M F	A C E	W B L A O	T B S E	
5	P B M S E O	M F	A C E	W B L A O	T B S E	
6	P B M S E O	M F	A C E	W B L A O	T B S E	
7	P B M S E O	M F	A C E	W B L A O	T B S E	
8	P B M S E O	M F	A C E	W B L A O	T B S E	
9	P B M S E O	M F	A C E	W B L A O	T B S E	
10	P B M S E O	M F	A C E	W B L A O	T B S E	
11	P B M S E O	M F	A C E	W B L A O	T B S E	
12	P B M S E O	M F	A C E	W B L A O	T B S E	
13	P B M S E O	M F	A C E	W B L A O	T B S E	
14	P B M S E O	M F	A C E	W B L A O	T B S E	
15	P B M S E O	M F	A C E	W B L A O	T B S E	
16	P B M S E O	M F	A C E	W B L A O	T B S E	
17	P B M S E O	M F	A C E	W B L A O	T B S E	
18	P B M S E O	M F	A C E	W B L A O	T B S E	
19	P B M S E O	M F	A C E	W B L A O	T B S E	
20	P B M S E O	M F	A C E	W B L A O	T B S E	
21	P B M S E O	M F	A C E	W B L A O	T B S E	
22	P B M S E O	M F	A C E	W B L A O	T B S E	
23	P B M S E O	M F	A C E	W B L A O	T B S E	
24	P B M S E O	M F	A C E	W B L A O	T B S E	
25	P B M S E O	M F	A C E	W B L A O	T B S E	
26	P B M S E O	M F	A C E	W B L A O	T B S E	
27	P B M S E O	M F	A C E	W B L A O	T B S E	
28	P B M S E O	M F	A C E	W B L A O	T B S E	
29	P B M S E O	M F	A C E	W B L A O	T B S E	

Appendix 2. Example interview form

Name:	Date:	Time: am/pm	Day of week: M T W Th F Sa Su	
Street:		Nearest intersection:		Shared Street / Control
Pre / Post		Rain: Y / N	NOTES:	

☐ **Check box if person is on an e-bike.**

1. Are you 18 years or older? If yes, proceed. **If no, thank them for their time and do not complete the interview.**

2. What is the reason(s) for your trip to THIS LOCATION today? (Do not read – select best responses. Check all that apply)

1) Exercise/physical health 2) Mental health/enjoyment 3) Safe way to socialize 4) I live here
5) I work here 6) Just passing through 7) Personal errand or appointment
8) Shopping 9) Restaurant/Bar/Café 10) Other _____

3. How did you get to this location <u>today</u>? (Do not read– Select ONE)

1) Car **(Go to 3.a)** 2) Walk 3) Bike 4) Public transit 5) Ride share/taxi 6) Scooter or similar 7) Other_____

3.a [ONLY IF ANSWERED CAR in Q.3] What is the main reason you drove here? (Do not read– Select ONE) ___ N/A

1) Distance (I live far away) 2) Safety (Not safe to walk or bike here) 3) Time (I am in a hurry)
4) Parking (Easy, convenient) 5) No public transportation option 6) Physical limitations
7) Convenience (I always drive) 8) Other: _____ 9) Refused

4. Do you plan to visit a business (for shopping, eating, etc.) while you're in this area? 1) Yes 2) No

5. How many days <u>per week</u> do you <u>bike</u> in this location? ___ days per week (0-7) ___ Today is the first time

6. Do you have concerns for your personal safety when biking in this area? 1)Yes 2)No

6.1 If yes, please state concerns:

7. What are the most common reasons why you BIKE in general. (Read and check all that apply).

___1) Transportation (to get to/from places) ___2) Recreation/fun ___3) Exercise ___4) Mental health/Quality of life

8. State whether you agree with the statement: "I would like to travel by **bike** more than I do now."

1) Strongly disagree 2) Somewhat disagree 3) Somewhat agree 4) Strongly agree

9. If you agreed, what are the reasons that keep you from biking as much as you would like to?

9.a Reasons

10. Whether or not you currently <u>bike</u> in all of the following situations, please consider how comfortable you would be riding a bicycle in each place: (SHOW PICTURES ON BACK OF CLIPBOARD)

	Very uncomfortable	Uncomfortable	Comfortable	Very comfortable
1. On a path or trail separate from the street?				
2. On a commercial street with two lanes of traffic in each direction with traffic speeds of 35 miles per hour, on-street car parking and no bike lane.				
3. On a similar street to (2) but with a striped (painted) bike lane added?				

4. On a similar street to (2) but with a physically separated bike lane?				

11. Please rate your agreement with the following statements for THIS LOCATION ('NA' if doesn't apply or don't know):

	Strongly disagree	Disagree	Agree	Strongly agree	NA/ don't know
1. With the current street configuration, I feel safe from traffic when **biking** here.					
2. I am likely to choose to **bike** here as opposed to other streets.					
3. Drivers travel at a safe speed here.					
4. **Biking** here is safe for all people and all ages (all ages, races, abilities).					
5. Having sidewalks, crosswalks, and bike lanes in this community gives me the opportunity to improve my health.					
6. Having sidewalks, crosswalks, and bike lanes nearby allows me to connect with my community.					
7. Having sidewalks, crosswalks, and bike lanes nearby allows me to move around while keeping socially distanced during COVID.					
8. There are convenient and secure places to park bikes here.					
9. I would be more likely **to ride a bike** here if motor vehicles and bicycles were always **physically separated** by a barrier. *(any kind of barrier)*					
10. I am in support of **bike** paths, separated from traffic, along some city streets even if it means eliminating some parking spaces or a lane of traffic.					

12. What do you enjoy most about biking in this location?
1) Safe place to ride 2) Access to recreation (beaches, parks, greenspace) 3) Access to businesses/restaurants
4) Connects me to where I want to go 5) Other:_____

13. How would you rate this area as a place for biking? (worst) 1 2 3 4 5 (best)

14. Are there any street improvements that could be added here to improve walking, biking or scootering here?
1) Yes 2) No

14.1 If yes, please state:

15. What neighborhood do you live in?_____
16. What is your age? _____
17. **What is your gender?** 1) F 2) M 3) Not listed ***(you can fill this out without asking)***
18. Race/Ethnicity: 1) Hispanic/Latino 2) White, non-Hispanic 3) Black/African American 4) Asian/Asian American 5) Other
19. How many vehicles do you have access to? __ vehicles
20. Do you have access to a bicycle? 1) Yes 2) No
21. Is your household annual income more than $82,000 per year? 1) Yes 2) No
22. Including yourself, how many adults live in your household? ___adults
23. **How many children?** ___ children