

Cruz511 In Your Neighborhood



Providing relevant and customized travel information to support informed travel choices

Pilot Program Report

December 2017

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Executive Summary

The *Cruz511 In Your Neighborhood* program was a pilot program of the Santa Cruz County Regional Transportation Commission (RTC), in partnership with the Santa Cruz Metropolitan Transit District (METRO). The program was designed to see if providing relevant and customized information through targeted outreach changed the number of trips made by driving alone, riding the bus, bicycling, walking, and carpooling¹. The pilot program's focus was to provide information about travel options to support more informed travel choices and encourage riding the bus, bicycling, walking, and carpooling at the neighborhood level.

Households in the Central Watsonville and Eastside Santa Cruz neighborhoods were selected as the target audience, after a review of similar programs and neighborhoods countywide. The program was branded the *Cruz511 In Your Neighborhood* program to expand the reach of the RTC's existing *Cruz511 Travel Information* program. Like many transportation demand management programs, this pilot program encouraged efficient use of infrastructure across all transportation modes by helping individuals use existing bus, bicycling, walking and carpooling facilities.

The program was successful in enrolling 1,202 individuals, including participation from two groups that have been historically underrepresented in local transportation planning efforts: residents living in and near the City of Watsonville, and individuals whose preferred language is Spanish. In general, program participation was fairly evenly split between the neighborhoods, with 41% of the participants associated with the Central Watsonville neighborhood, and 57% associated with the Eastside Santa Cruz neighborhood².



The program introduced a non-traditional approach to transportation demand management programs by soliciting participation through the use of travel advisors. Travel advisors are trained individuals who canvassed neighborhoods and contacted people at their doorstep. Travel advisors enrolled the highest number of participants of the four outreach methods (i.e. direct mail, online communication, neighborhood events, travel advisors). Travel advisors were also the most effective

¹ Providing relevant and customized materials are strategies used to test the impact of applying individualized marketing techniques to travel behavior.

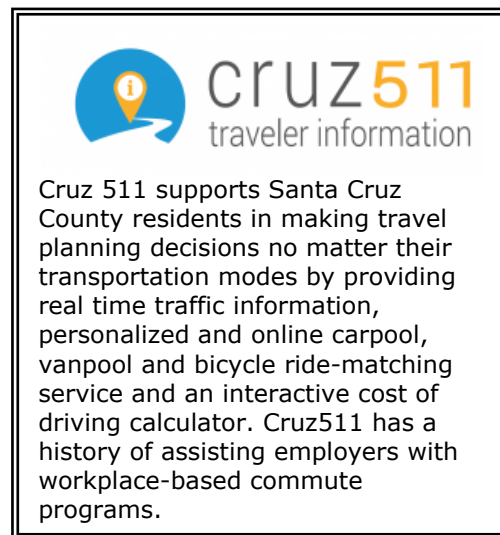
² Two percent (2%) of participants could not be associated with a neighborhood because no address was provided.

communication channel for enrolling individuals whose preferred language is Spanish, enrolling 50% of participants whose preferred language is Spanish; followed by neighborhood events (41%).

Information about relevant neighborhood transportation resources were provided to Cruz511 In Your Neighborhood program participants. The visually appealing and content rich neighborhood-scaled maps created for the program were well received by participants and made useful information easy to understand. The option to order neighborhood- and mode-specific travel resources was designed to encourage program participation and maximize the program's effectiveness. The *Cruz511 In Your Neighborhood* program was well received by participants and partner agencies, as demonstrated by positive comments from participants, inquiries about how to reproduce materials, and requests for similar information in other neighborhoods.

Providing information about travel options shifted some participant's travel choices³. Overall, participants reduced one drive alone trip per week (-.98 per week) as a result of the *Cruz511 In Your Neighborhood* program. This led to a reduction of an estimated -1,175 weekly drive alone trips and 266,321 annual vehicle miles traveled removed from Santa Cruz County roadways. A comparable increase of 1,055 new trips were made by riding the bus, bicycling, walking and carpooling as a result of a .96 net increase in weekly trips by these modes. The change in travel choices led to 241,314 lbs of greenhouse gas emission not being emitted annually. Positive health benefits associated with the change in travel choices included burning on average 188 more calories per week per participant, which can cause a loss of 2 lbs in one year^{4 5}. The reduction in drive alone trips translated into an annual savings of \$40 on fuel per participant. In total, an estimated \$48,456 was not spent on fuel as a result of the program and could be spent instead in the local economy.

The *Cruz511 In Your Neighborhood* program was funded in part by a Caltrans Transit Planning for Sustainable Communities Grant awarded to the Santa Cruz County Regional Transportation Commission, in partnership with the Santa Cruz Metropolitan Transit District.



³ Based on a comparison of responses to the program pre- and post-survey.

⁴ "Free Walking Calorie Calculator Tool," Everyday Health Media, LLC, accessed January 2014, <http://www.everydayhealth.com/Calories-Burned-Walking.htm>. 34 Mayo Clinic Staff,

⁵ "Counting calories: Get back to weight-loss basics," Mayo Clinic (June 2012), accessed January 2014, <http://www.mayoclinic.com/health/calories/WT00011>.

Introduction

The Santa Cruz County Regional Transportation Commission (RTC), in partnership with the Santa Cruz Metropolitan Transit District (METRO), secured a Caltrans Transit Planning for Sustainable Communities Grant to conduct a pilot program to apply individualized marketing techniques to transportation demand management programs. This involved targeted outreach to provide information and assistance about travel options and encourage riding the bus, bicycling, walking, and carpooling in Santa Cruz County. The RTC, in coordination with the METRO, developed the *Cruz511 In Your Neighborhood* program, previously the “User Oriented Transit Planning Project”, to apply these outreach techniques as a strategy for addressing regional, state, and federal transportation goals. The program was carried out in Santa Cruz County between March 2017 and September 2017.

In order to maximize the efficiency and safety of the transportation system and advance sustainable transportation goals, Santa Cruz County’s long range transportation plan (2014 Regional Transportation Plan) included investments in all travel modes. Projects were analyzed to identify those projects that simultaneously provided environmental, economic and social equity benefits. In addition, development of the 2014 RTP considered the limitations for increasing capacity on the transportation system due to geographic and financial constraints. Informed by this analysis, the adopted 2014 Regional Transportation Plan project list included both infrastructure and non- infrastructure investments as strategies for achieving regional transportation goals. It was recognized that while new infrastructure may lead to more trips by sustainable modes, usage of existing and new facilities could be maximized when infrastructure investments were combined with a comprehensive set of outreach tools to provide individuals with information about their travel choices. As a result, the application of individualized marketing techniques to transportation demand management programs was one of the non-infrastructure projects in the 2014 Regional Transportation Plan and was

implemented as the *Cruz511 In Your Neighborhood* program.



The RTC’s *Cruz 511 In Your Neighborhood* program was designed after researching transportation demand management programs that tested one or more aspects of applying individualized marketing techniques to travel behavior (Appendix A: Program Review).

Consistent with other similar programs, a key component of the RTC’s pilot program was to provide

individuals who express interested in riding the bus, bicycling, walking and carpooling with a comprehensive set of customized travel resources based on their community segment. Households within a neighborhood near bus service were considered a community segment due to common access to travel options, popular nearby destinations, and the potential for shared household characteristics. The program was branded *Cruz 511 In Your Neighborhood* to expand the reach of the existing *Cruz511 Traveler Information* program sponsored by the RTC. Households in the neighborhoods defined as Central Watsonville and Eastside Santa Cruz were the target audience.

Individuals living in Central Watsonville and Eastside Santa Cruz neighborhoods were invited to participate in the program using four different contact methods: direct mail, contact with travel advisors who canvassed neighborhoods and spoke with individuals at their doorstep, neighborhood events, and online communications. Each participant completed a pre-program survey that provided information about their weekly travel choices, their attitudes and awareness towards travel modes, and their request for customized travel resources. Travel resources available for order included bus, bicycling and walking map guides specific to each neighborhood, information about connections to county and region-wide transportation services, and how to conveniently and safely travel. Almost all materials were available in both English and Spanish.

The effectiveness of the *Cruz511 In Your Neighborhood* program was primarily measured by comparing the number of weekly drive alone, bus, bicycling, walking and carpooling trips before and after the program, and awareness and attitudes towards travel modes. Calculations about the total change in the number of drive alone trips, and vehicle miles traveled reduced as a result of the program were done to further evaluate the program's effectiveness and impacts on greenhouse gases, health and transportation costs. The program's effectiveness also considered the number of program participants enrolled, materials distributed, and the participant's level of satisfaction with the *Cruz511 In Your Neighborhood* program. Information to measure program effectiveness was collected using the pre- and post-program surveys. Completion of the pre-program survey was required to participate.

In addition to this report documenting the program background, development, implementation, results and lessons learned, a toolkit for conducting an individualized travel marketing program in Santa Cruz County and in similar communities in California has also been developed. This toolkit provides instructions about how to develop an effective program, describes items to be considered during program development, and tasks that should be completed when conducting a program to accomplish similar results. The toolkit also provides information about potential challenges and lessons learned from the *Cruz511 In Your Neighborhood* program.

RTC worked with Steer Davies Gleave, a firm specializing in the field of travel behavior change through community based programs and individualized marketing to develop the *Cruz511 In Your Neighborhood* program. Steer Davies Gleave

advised RTC staff during the development of the program, oversaw the travel advisor outreach portion of the program, conducted the initial analysis of project effectiveness, and provided information about similar programs.

Program Approach

The *Cruz511 In Your Neighborhood* program reflected best practices for applying individualized marketing techniques to travel behavior change, and took into consideration Santa Cruz County's community characteristics, and transportation systems and services. Development of the pilot program involved obtaining input from stakeholders involved in transportation demand management programs, working with consultants experienced in individualized marketing of travel behavior change, researching the effectiveness of similar programs completed in the United States and the United Kingdom (Appendix A: Program Review), and consistency with grant requirements. The program design also considered how the techniques implemented in the *Cruz511 In Your Neighborhood* program could be applied to different community segments within Santa Cruz County and scaled based on available resources.

Neighborhood Selection

While the program study area encompassed all of Santa Cruz County, one of the program objectives was to attract new bus riders who lived or worked near bus routes. Neighborhoods near bus routes were selected as the focus of the RTC's program based on the effectiveness of similar neighborhood programs. Households within a neighborhood were considered a unique community segment due to common access to travel options, popular nearby destinations, and the potential for shared household characteristics. Selecting households in neighborhoods as the program focus also took into consideration that about 30% of trips are for shopping and errands, 30% for recreation, 30% are made for work and school⁶. Many of these trips start from home and may end within a neighborhood where services are accessible. Other community segments considered included employers, new movers, and students.

All neighborhoods in Santa Cruz County within walking distance of bus service available every 30 minutes or less were considered potential neighborhoods. When selecting neighborhoods, the following characteristics were considered:

- number of households within ¼ mile of bus routes and stops;
- number of bus routes serving neighborhood bus stops;
- presence of reasonably level terrain;
- overall street connectivity;
- number of drive alone, bus, bicycling, walking and carpooling trips;
- presence of single and multi-family housing; and,
- proximity to services and commercial centers.

⁶ 2009 California Household Travel Survey

After an initial review of 15 neighborhoods countywide, 2 neighborhoods were selected as the target audience: Central Watsonville and Eastside Santa Cruz (Figure 1: Central Watsonville Neighborhood and Figure 2: Eastside Santa Cruz Neighborhood).

The Central Watsonville and Eastside Santa Cruz neighborhoods were determined to be good candidates for the pilot program because they:

- had bus stops within ½ mile with service at least every 30 minutes;
- exhibited a lower percentage of people riding the bus, bicycling, walking and carpooling than their respective cities as a whole (Table 2: Transportation Mode to Work);
- were not affected by neighborhood transportation demand management programs (ex. parking permit or shared parking programs) that may influence travel choices;
- were made-up of a combination of single-family and multi-family housing;
- had a relatively level terrain with one section of each neighborhood at a lower or higher elevation by a moderate slope;
- included between 3,000-3,500 households; and,
- offered neighborhoods in different geographical areas of Santa Cruz County.

Central Watsonville Neighborhood

The Central Watsonville Neighborhood is within the City of Watsonville, located in the southern portion of Santa Cruz County. The City of Watsonville is the second largest city in Santa Cruz County with 52,915 residents⁷. For the purpose of the *Cruz511 In Your Neighborhood* program, the Central Watsonville Neighborhood was defined as households within

approximately ¼ mile of Freedom Boulevard and Main Street bounded by Crestview Drive and Sonoma Street in the north and 2nd Street and Maple Avenue to the south (Figure 1: Central Watsonville Neighborhood). The neighborhood consists of both residential and commercial areas including downtown Watsonville. There are commercial centers along the bus routes on Freedom Boulevard and Main Street that bisect the Central Watsonville Neighborhood. The Central Watsonville Neighborhood is adjacent to the Wetlands of Watsonville system of trails and has several parks, a library, the Watsonville Plaza and the Watsonville Transit Center. The City of Watsonville, including the Central Watsonville Neighborhood, has a higher than average number of individuals that speak Spanish at home when compared to other cities in Santa Cruz County (Table 1: Neighborhood Demographics). The lower than average bus ridership and bicycling trips made in the Central Watsonville neighborhood when compared to the City of Watsonville overall also indicated a potential for increasing trips made by riding the bus and bicycling (Table 2: Transportation Mode Trips to Work).

"Loved all the handy maps outlining bike routes! And the snap bracelet reflector is way cool and keeps me visible on the road."

⁷ American Communities Survey estimate, 2016

Eastside Santa Cruz Neighborhood

The Eastside Santa Cruz Neighborhood is within the City of Santa Cruz located in the northwestern portion of Santa Cruz County. The City of Santa Cruz is the largest city in Santa Cruz County with 62,310 residents⁸. For the purpose of the *Cruz511 In Your Neighborhood* program, the Eastside Santa Cruz Neighborhood was defined as households within approximately ¼ mile of Soquel Avenue bounded by Dakota Ave and Riverside Avenue in the west and San Juan Ave and Frederick Street to the east (Figure 2: Eastside Santa Cruz Neighborhood). The Eastside Santa Cruz Neighborhood is made up of a mix of residential neighborhoods and commercial areas, is adjacent to the Arana Gulch Open Space, and has several parks and a library. The western edge of the Eastside of Santa Cruz Neighborhood is the boundary of downtown Santa Cruz, where the Santa Cruz Metro Transit Center is located. There is also a multi-use path along the San Lorenzo River providing a connection between downtown Santa Cruz and the Eastside Santa Cruz Neighborhood. Commercial services in this neighborhood are concentrated on the bus routes on Soquel Avenue and Water Street.

Table 1: Neighborhood Demographics

	Population Census				Square Miles	Mean Median Income	Limited English Proficiency
	< 14	15 - 24	25 - 59	> 60			
Central Watsonville	27%	17%	45%	11%	1.1	\$41,746	29.0%
Eastside Santa Cruz	13%	18%	53%	16%	.91	\$52,528	6.6%

Source: Data was analyzed at the Block Group level from the 2014 American Communities Survey, except for age distribution of households and number of households, which was analyzed at the block level from the 2010 Census.

Table 2: Transportation Mode to Work

	Central Watsonville Neighborhood	City of Watsonville (Average)	Eastside Santa Cruz Neighborhood	City of Santa Cruz (Average)
Drive Alone	67.6%	69.5%	64.5%	58.7%
Carpool	16.3%	15.5%	4.3%	7.0%
Transit	1.4%	2.2%	3.1%	6.0%
Bicycle	0.1%	1.1%	11.0%	9.7%
Walk	5.1%	3.1%	10.6%	9.9%

Source: 2014 American Community Survey

⁸ American Communities Survey estimate, 2016

Figure 1: Central Watsonville Neighborhood

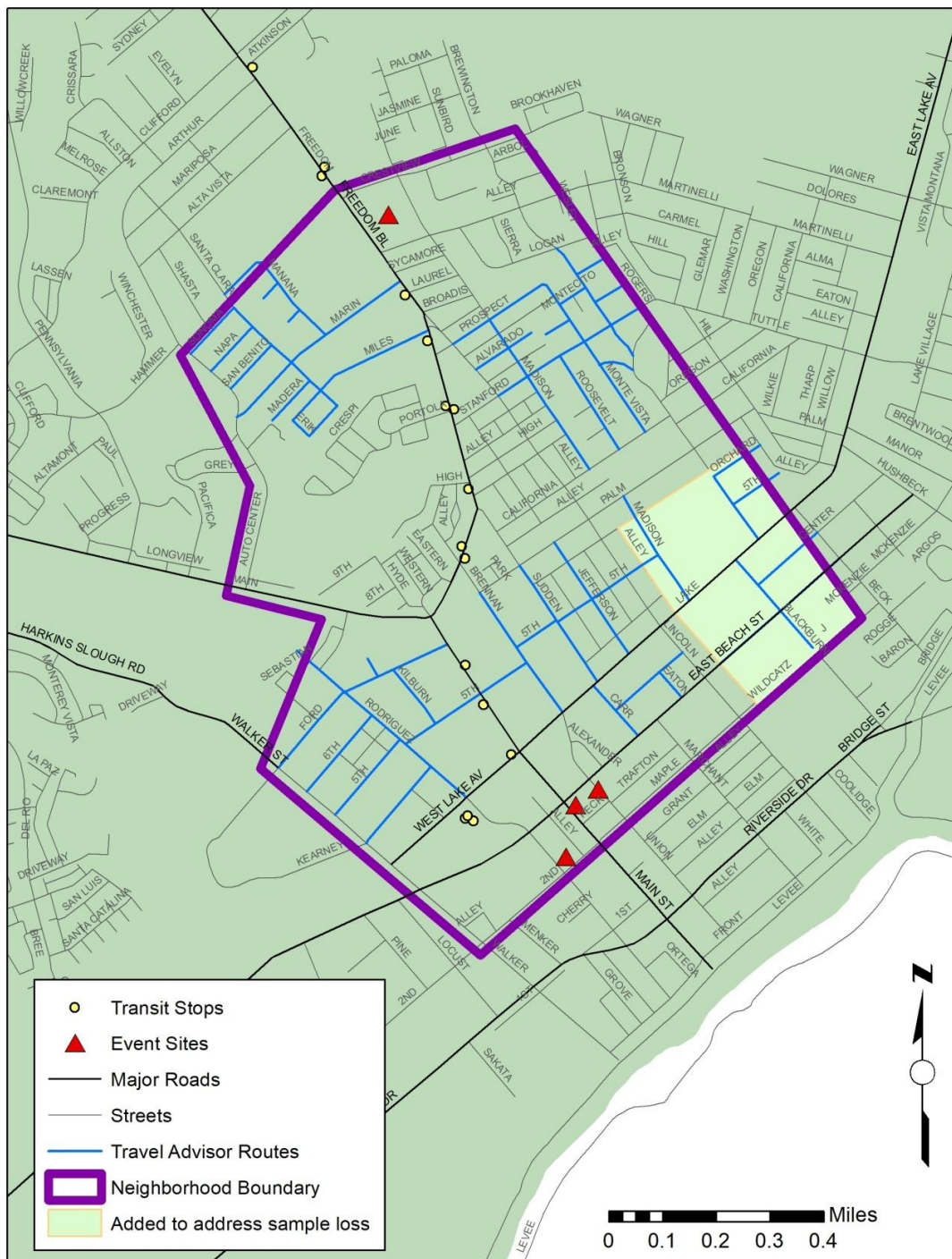
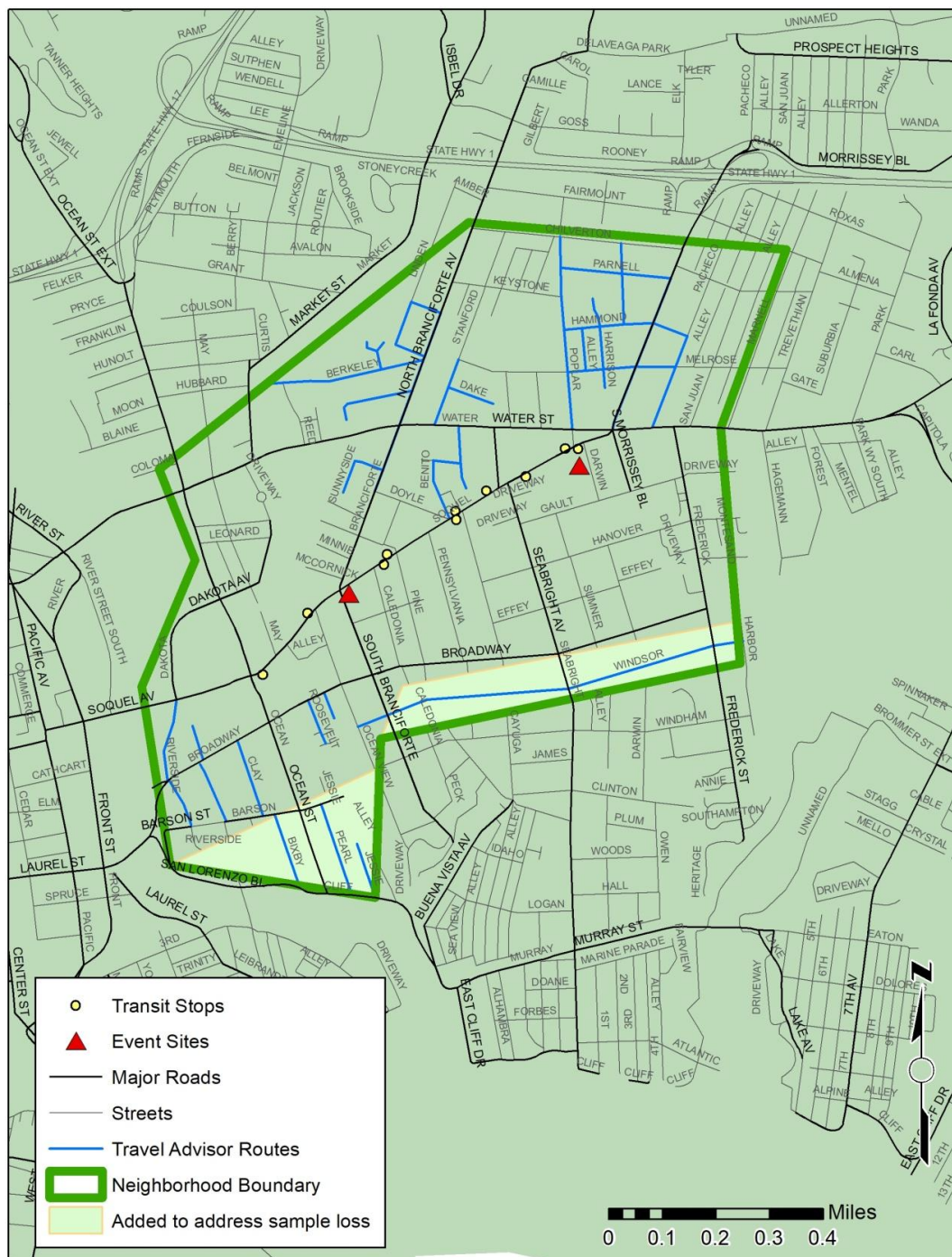


Figure 2: Eastside Santa Cruz Neighborhood



Communication Channels

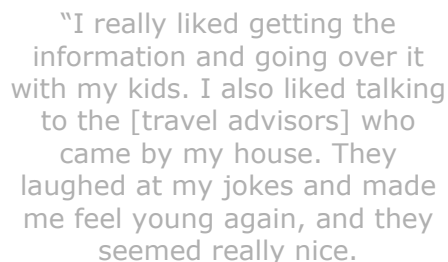
Information about the *Cruz511 In Your Neighborhood* program was distributed in a variety of ways in order to gain the most participation, test different communication channels, and appeal to different community groups within the neighborhoods. Communication channels used to invite program participation included: direct mail, travel advisors, neighborhood events, and online communications, including NextDoor, a neighborhood social media site.

Travel Advisors

Travel advisors are individuals who canvas neighborhoods, speak with individuals at their doorstep about their travel choices, and solicit information about their interest in riding the bus, bicycling, walking, and carpooling. The use of travel advisors is common in individualized marketing programs and typically results in a higher participation rate than direct mail techniques⁹. Travel advisors enrolled the most participation in the program out of the four communication channels tested.

Travel advisors participated in two-day classroom training and half-day field training before conducting door-to-door outreach on their own. The training included a background on the *Cruz511 In Your Neighborhood* program and information about the communities where they would be working. Travel advisors were trained to:

- conduct motivational interviewing¹⁰;
- engage participants about their travel choices;
- hold conversations in a relaxed manner;
- document the participants survey responses; and,
- ask participants to select free travel resources available for order.



"I really liked getting the information and going over it with my kids. I also liked talking to the [travel advisors] who came by my house. They laughed at my jokes and made me feel young again, and they seemed really nice."

All travel advisors wore a photo identification badge with the *Cruz511 In Your Neighborhood* program contact number and website, and a uniform shirt with the program logo when out in the field and door-knocking. Travel advisors were scheduled to work in pairs and visit each street together. Travel advisors canvassed four different zones in each of the neighborhoods. The zones were distributed geographically to account for potential demographic diversity and transportation facilities within the neighborhood. Streets canvassed by travel advisors are mapped on Figures 1 and 2: Central Watsonville and Eastside Santa Cruz Neighborhoods. As much as possible, one Spanish-speaking travel advisor would be paired with a non Spanish-speaking travel advisor.

⁹ . The Santa Cruz County Regional Transportation Commission contracted with the firm Steer Davies Gleave to conduct door-to-door outreach using travel advisors for the *Cruz511 In Your Neighborhood* program.

¹⁰ Motivational interviewing techniques involve engaging potential participants in a non-judgmental conversation incorporating open-ended questions about their travel behavior.

Travel advisors without Spanish proficiency were trained in the case of knocking on a door with a resident who preferred to speak Spanish. In this example, the travel advisors would politely excuse themselves, indicate that they would return with a colleague, and, if possible, give an indication of what the program purpose was in Spanish.

Travel advisors asked participants about their experiences with different travel options and presented examples of the customized travel resources created for the *Cruz511 In Your Neighborhood* program to generate interest in the program. Travel advisors engaged potential participants in a non-judgmental conversation incorporating open-ended questions about their travel behavior using motivation interviewing techniques. Travel advisors would actively listen for “change talk”, in which participants may bring up ideas about the behavior or lifestyle changes needed to try a new way of traveling. Travel advisors would document information provided by the participant using a version of the program invitation developed for use by travel advisors. Travel advisors attempted three times to contact households using one morning, one afternoon, and one weekend knock. A copy of the program invitation¹¹ was left at the home if there was no response at the third knock.

Travel advisors made attempts to contact 1,342 households in Eastside Santa Cruz and 1,324 in Central Watsonville. This includes the 323 households added to the travel advisor’s canvassing assignments mid-way through the program. Households were added due to high rates of sample loss from gated apartment complexes and otherwise inaccessible homes. The households added mid-way through the program received visits from travel advisors as described above, but received no introductory postcard (light green areas in Figure 1 and Figure 2) since they were added several weeks after the introductory postcard was mailed.



Cruz511 Travel Advisors Lessons Learned report provides additional information about administration and implementation of travel advisors in the *Cruz511 In Your Neighborhood* program.

Website

The *Cruz511 In Your Neighborhood* website was located within the main *Cruz511 Traveler Information* website hosted by the RTC, and was available in English and Spanish. The website contained all relevant information for participation in the

¹¹The program initiation distributed to households through direct mail was the same program invitation distributed by travel advisors after the third knock. This included a copy of the program invitation in both English and Spanish.



program. This included links to the pre-program survey, the travel resource order form, the post-program survey, and information about how to contact the *Cruz511 Team* by phone or email. The website also contained digital (PDF) versions or links to all print materials offered separated geographic and mode specific materials. The website also encouraged individuals interested in the program, but located outside of these neighborhoods, to contact the *Cruz511 Team* to receive personalized travel assistance.

Online Communications

When the program was initiated, a message inviting participation in the *Cruz511 In Your Neighborhood* program, noting the free travel resources available to participants, was posted on NextDoor, a neighborhood focused social media site, as well as RTC's Facebook and Twitter accounts. A second message posted on NextDoor provided a detailed explanation of how to participate (i.e. fill out the survey, select travel resources and provide contact information). A final post on NextDoor, Facebook, and Twitter just before the close of the program highlighted the availability of the book of coupons for local restaurants and businesses which could accompany the neighborhood bus, bicycling and walking map guides. In the two days following the final post, an additional 223 participants enrolled in the program.

Neighborhood Events

Events held in the Central Watsonville and Eastside Santa Cruz neighborhoods provided another method to invite participation in the program. Program tables were stationed at six neighborhood events including the Watsonville Open Streets (May 21, 2017) and Earth Day (April 22, 2017) events, both held at the plaza in Central Watsonville; the Staff of Life anniversary event in Eastside Santa Cruz (May 20, 2017); and at Bike to Work breakfast sites in both Central Watsonville and Eastside Santa Cruz (May 4, 2017). As a strategy to increase participation from



households in Central Watsonville, a program table was hosted at the La Princesa grocery store (July 8, 2016).

Neighborhood-specific bus, bicycling and walking tours were envisioned early in the program as a way to encourage participants to apply the travel resources they received through the *Cruz511 In Your Neighborhood* program to getting where they need to go. Due to difficulty in obtaining tour guides and an expected low turnout, program specific events were canceled and resources were focused on larger community events expected to draw a larger crowd of neighbors.

Program Elements

Introductory Postcard

The *Cruz511 In Your Neighborhood* introductory postcard alerted households that their neighborhood was selected to participate in the program, informed them that additional information about the program would be sent to their home soon, and that they could request information about riding the bus, bicycling, walking and carpooling in English and Spanish. The postcard was designed to be bright and appealing so it would stand out in the mail and the messaging was intended to motivate recipients to want to learn more about the program (Appendix B: Introductory Postcard). Six-thousand six-hundred and six (6,606) postcards were mailed to households in the Central Watsonville and Eastside Santa Cruz neighborhoods.

Program Invitation: Pre-Program Survey & Travel Resource Order Form

The *Cruz511 In Your Neighborhood* program invitation was mailed to households three weeks after the introductory postcard. An electronic version of the program invitation was also available on the *Cruz511 In Your Neighborhood* website and the program invitation was distributed at events ([Appendix C: Program Invitation](#)). The program invitation included the pre-program survey and the travel resource order form. The pre-program survey was designed to be simple, short, easy to complete, and collect information about:

- the number of trips individuals made driving alone, riding the bus, bicycling, walking, or carpooling in the last week;
- individual's awareness and attitudes towards riding the bus, bicycling, walking and carpooling; and,
- demographic information.

STEP 1: Fill out this survey

1. What best describes your access to the BUS?

	TRUE	FALSE	UNSURE
There is a bus stop near my house	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The bus takes me where I want to go	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The bus comes at the right time for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. What best describes your access to a BICYCLE?

☐ I have a working bicycle
☐ I have a bicycle that needs to be fixed
☐ I can borrow a bicycle
☐ I do not have access to a bicycle

3. What best describes your access to a CAR?

☐ I have my own car (or SUV, truck, van, etc.)
☐ I share a car with others in my household
☐ I can rent or borrow a car if I need to
☐ I do not have access to a car

4. Please write the number of ONE-WAY trips you took in the last week BY:

(Example: going to the store would be one trip. Coming home would be a second trip.)

Riding the bus _____
 Bicycling _____
 Walking _____
 Carpooling (sharing a car with others) _____
 Driving a car alone _____

5. Mark if you are interested in traveling more BY:

☐ Riding the bus
☐ Bicycling
☐ Walking
☐ Carpooling

6. Please mark which statements are TRUE for you.

☐ Helps me stay healthy
☐ Feels unsafe
☐ Is environmentally responsible
☐ Makes it hard to carry my things
☐ Frees up my time to think or do work
☐ Feels uncomfortable
☐ Is cheaper than driving
☐ Messes up my hair and clothes
☐ Is less stressful
☐ Too far or takes too long
☐ Other: _____

7. What is your age?

☐ Under 18* ☐ 18-29 ☐ 30-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ 70 or older
*You must be 18 to participate. We do not collect or report statistics to report a trend or pattern. Please do not select "Under 18" if you are 18 or older.

8. With what gender do you identify?

☐ Female ☐ Gender non-binary ☐ Male ☐ Prefer not to say

STEP 2: Choose your FREE Home

Please choose all of the FREE resources you'd like to help you leave your car at home.

RIDING THE BUS:

☐ Customized map & tips for riding the bus in your neighborhood
☐ Santa Cruz Metro bus schedule and guide
☐ Greater Bay Area transit connection information
☐ Santa Cruz Metro all day bus pass *(limited supply!)*

BICYCLING:

☐ Customized map & tips for bicycling in your neighborhood
☐ Santa Cruz County regional bicycle map
☐ Biking bicycle reflector light *(limited supply!)*

WALKING:

☐ Customized map & tips for walking in your neighborhood
☐ Watsonville Wetlands slough trail map
☐ Santa Cruz historical walking tour
☐ Pedometer *(limited supply!)*

CARPPOOLING:

☐ Resources & tips for beginning to carpool
☐ Personalized ride matching information
☐ Electric and Hybrid vehicle information

OTHER RESOURCES:

☐ Local business discount coupon book *(limited supply!)*
☐ Biking reflective stop band *(limited supply!)*
☐ Info on local transportation events

STEP 3: Fill out your contact info

We'll deliver the materials you asked for and provide personalized assistance by phone or email.

FIRST NAME: _____
 LAST NAME: _____
 ADDRESS: _____
 TELEPHONE: _____
 BEST TIME TO CALL? ☐ AM ☐ PM
 EMAIL: _____
 DO YOU PREFER WE CONTACT YOU VIA EMAIL? ☐ YES ☐ NO

QUESTIONS? **MEET ANOTHER SURVEY?**

CONTACT US: 831-429-7665 | info@cruz511.org
 Monday-Friday, 9am-5pm
 info@cruz511.org yourneighborhood

Project funded by Caltrans and the Santa Cruz County Regional Transportation Commission (RTC)

CRUZ511
 In Your Neighborhood

The program invitation asked individuals to complete three steps. Step 1 was the pre-program survey and included eight questions. Three questions were related to an individual's access to the bus, bicycle, or car; one question asked individuals to report the number of drive alone, bus, bike and walk trips in the last week; another question, with several components, asked about the individual's attitudes towards riding the bus, bicycling, walking and carpooling; and two demographic questions



requested information about the individual's age and gender. Step 2 of the program invitation instructed individuals to choose free resources to help them leave their car at home. Resources included: neighborhood specific bus, bicycling

and walking map guides; information about region-wide travel services; and informational resources about how to easily, conveniently and safely travel. Respondents could also order tools to support travel by bus, bicycling and walking; and a book of coupons for local restaurants and business to be used when taking the bus, walking or bicycling. Step 3 asked individuals to provide their contact information. Contact information was required to distribute travel resources to their home by mail, to offer additional personalized assistance and provide notification about the post-program survey. Step 4 provided instructions about how to return the completed program invitation to the RTC. The program invitation was designed to be a self-administered form and returned by mail to the RTC with postage pre-paid. Step 5 instructed participants to have fun with their new travel resources after they arrived

Program invitations in English and Spanish were mailed to 2,221 households in the Central Watsonville neighborhood and 2,042 households in the Eastside Santa Cruz neighborhood, for a total of 4,263 households. Sixty-four percent (64%) of the 6,606 initially targeted households received program invitations after receiving the introductory postcard. The remaining households were contacted by travel advisors.

Travel Resources

Travel resource distribution was a central component of the *Cruz511 In Your Neighborhood* program. Customized travel resources were designed to appeal to each neighborhood- and mode-preference as a way to encourage participants to make a trip using the travel option that attracted

"I had been bike riding to dinner at night using my phone as a light. I love the leg band and flashing reflector, I feel so much safer...I love the coupon book. My friends and I are trying new restaurants and it is getting us out in our community. I loved the whole package."

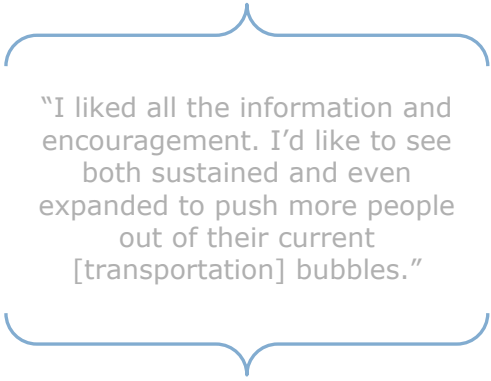
- map guides and tips for riding the bus, bicycling, and walking in each neighborhood;
- a guide to regional transit connections from Santa Cruz County to the greater San Francisco and Monterey Bay areas;
- tips for shopping by bicycle or foot; and,
- instructions to become a successful carpooler.

information about hybrid and electric vehicle options; and, the *Santa Cruz Historical Walking Tour*. Travel resource packets also included the Bicyclists *Quick Guide*¹², and the *What Pedestrians and Motorists Want Each Other to Know* and *What Pedestrians and Bicyclists Want Each Other to Know* brochures to support safe bicycling and walking trips¹³.



¹³ Produced by the Pedestrian Safety Workgroup, a subcommittee of the RTC's Elderly and Disabled Transportation Advisory Committee.

Consistent with individualized marketing techniques, travel resources were customized to appeal to the community segments¹⁴ and individual's interests. Mode-specific transportation map guides were developed for each neighborhood to provide participants with relevant information about the travel option that attracted their interest. The map guides identified transportation facilities specific to each mode and recommended routes, where appropriate. Developing the map guides involved an examination of nearby bus stops, bicycle routes, and walking routes. Bus frequencies, bicycle and pedestrian facilities, and automobile speeds were considered when providing information about travel options. Recommended bicycle travel routes also considered the location of multi-use paths, bike lanes, and alternative routes presented in: the Santa Cruz County Regional Bike Map, and the RTC's 2015 Bicycle Signage Implementation Plan. Recommended walking routes considered the location of sidewalks and gaps in the sidewalk networks on both arterial and residential streets. The bus stops identified were based on bus schedule information from the METRO, and the bus stop amenities including seating benches and shelters.



"I liked all the information and encouragement. I'd like to see both sustained and even expanded to push more people out of their current [transportation] bubbles."

Customized maps for riding the bus emphasized METRO's new Schedule By Stop tool, which provides a schedule update and more precise arrival times for a selected bus stop. Information is provided to the bus rider via text or the Metro website. Using the Schedule By Stop tool, riders can see which buses are coming next to that stop in a quick, easy format, instead of estimating when the bus might arrive based on scheduled arrival times at major stops. Bus stops, bicycle routes, and walking routes for each neighborhood were reviewed by transit planners at METRO as well as staff from the cities of Santa Cruz and Watsonville. Finally, the *Cruz511 Team* conducted on-the-ground verification of transportation facilities.

Neighborhood specific "Places to Go", and instructions about how to get there by riding the bus, bicycling or walking were included in the map guides to provide information about nearby destinations. "Places to Go" for the walking and bicycling map guides included routes to intersections near or within the neighborhood where there were a concentration of restaurants, shopping, and other services. For the walking map guide, "Places to Go" locations were within approximately ¼ - ½ mile. For the bicycling map guide "Place to Go" identified locations ranging ½ to 1 mile. For the bus map guides, the "Places to Go" section showed destinations such as nearby libraries, farmer's markets, and medical facilities. "Places to Go" by bus also included locations outside the neighborhood boundaries, including recreational destinations (beaches and parks) and large recreational destinations such as the

¹⁴ Households within each neighborhood were considered a unique community segment due to common access to travel options, popular nearby destinations, and potential for shared household characteristics in neighborhoods.

Boardwalk, Roaring Camp, and the Seymour Marine Discovery Center) and higher education facilities.

Post-Program Survey

A post-program survey collected information about the effects of the Cruz511 In Your Neighborhood program ([Appendix F: Post-Program Survey](#)). To measure program effectiveness, the post-program survey asked about the program's impact on travel choices, and awareness and attitudes. The post-program survey also solicited information about the participant's level of satisfaction with the *Cruz511 In Your Neighborhood* program. Post-program surveys were sent to all individuals who participated in the program and provided an email or phone number. Post-program surveys were distributed between three and twelve weeks following the distribution of materials, depending on when participants enrolled in the program. A small group of participants who signed up online very late in the program only saw one week between receiving materials and the post-program survey.

The majority of participants received a request to complete the post-program survey via email. The 18% of participants that did not provide an email address in their survey response, but provided a phone number when they returned the program invitation, were contacted by travel advisors, first via phone, and then at their home. The follow-up assistance by phone or home visit also provided additional assistance in obtaining information about travel choices, if needed.

CHOOSE YOUR BICYCLE ROUTE



Program Design and Review

The *Cruz511 In Your Neighborhood* program design was based on the application of individualized marketing techniques to travel behavior within the context of Santa Cruz County's community characteristics and transportation services. Input from individuals with experience in transportation demand management programs in Santa Cruz County was considered when designing the program.

Individualized Marketing

Individualized marketing is notable for customizing the user experience by the way of materials or contact with participants, identifying community segments most likely to make changes, and interested individuals. This approach allows for program resources to be directed towards the specific activities most likely get the attention of interested individuals and support informed travel choices. This is different from a traditional outreach approach which provides the same information to the entire population regardless of whether or not they have expressed interest in the program.

The *Cruz511 In Your Neighborhood* program applied individualized marketing techniques by:

- soliciting participation from the community segment defined as neighborhoods;
- developing a comprehensive set of mode-specific travel resources including maps, instructional materials and safety information to support individuals in taking a trip by bus, bicycling, walking and carpooling;
- identifying individuals who expressed interest in learning more about their travel options using the pre-program survey;
- fulfilling orders for travel resources and tools that provided participants with information about the travel option that attracted their interest; and,
- following-up with participants to offer additional assistance.

Once customized travel resources had been mailed to participants, the *Cruz511 Team* focused on providing additional support and answering questions to encourage participants interested in riding the bus, bicycling, walking and carpooling to give it a try. Participants who provided an email address when they returned the program invitation (62% of participants) were sent a friendly follow-up email with a personal tone, asking how their bus, bicycle, walk and carpool trips were going, and if they needed additional assistance. They were encouraged to contact the *Cruz511 Team* for more information or if they were interested in one-on-one assistance by phone or email.

Stakeholders & RTC Advisory Committee Input

A stakeholder group was established to provide input on the program design, and review the overall project effectiveness and project findings. Stakeholders included individual representatives from local advocacy groups interested in riding the bus, bicycling, walking, and staff from the METRO, the City of Santa Cruz, and the City of Watsonville. The City of Watsonville and City of Santa Cruz staff provided input on information about the neighborhood in their jurisdiction. Stakeholders provided input on the project design, outreach strategies, and development of the customized materials. The RTC's Interagency Technical Advisory Committee, Bicycle Committee and the Elderly and Disabled Transportation Advisory Committee also provided input on the *Cruz511 In Your Neighborhood* program design, and reviewed the overall program results and effectiveness.

Participant Contact & Activity Tracking

Contact and information management for the *Cruz511 In Your Neighborhood* program was tracked using a Microsoft Access database. The database served the purpose of tracking each instance of contact with participants and collecting participant responses required to evaluate the program's effectiveness. The database assigned a unique identification number to each participant to track participation by communication channel and neighborhood. The database also included fields to track travel resource order requests and fulfillment, and survey

responses. Hard copies of all program invitations returned¹⁵ were filed using the unique identification number. All data was also entered manually into the database. The database was stored on a secure server to ensure personal information was protected.

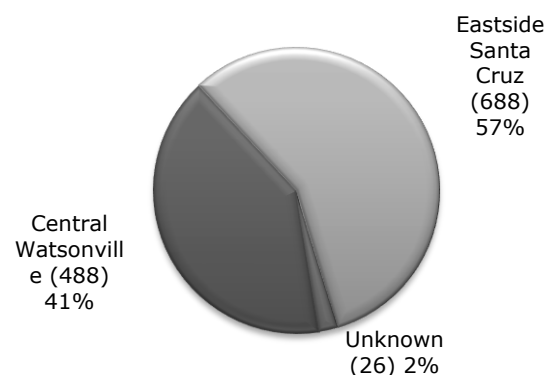
Project Schedule

- Program Initiation & Design: February-June 2016
- Program Development: June 2016-February 2017
- Program Implementation: March–September 2017
 - March: Postcards mailed to households in Central Watsonville and Eastside Santa Cruz neighborhoods
 - April: Program invitation distributed through direct mail, travel advisors, and social media
 - April, May, July: Neighborhood event tables hosted in Central Watsonville and Eastside Santa Cruz neighborhoods
 - May-July: Fulfilled orders and mailed travel resources to participants
 - May-July: Recorded participation, and tracked travel resource orders, survey responses and customer contacts
 - July: Contacted participants and offered additional assistance
 - August: Requested participation in the post-program survey
 - September: Sent a reminder to complete post-program survey and offered a book of coupons for local venues to participants who completed the post-program survey
- Program Analysis: September–October 2017
- Program Report: November-December 2017

Program Effectiveness

The effectiveness of the *Cruz511 In Your Neighborhood* program was measured by the number of program participants, the number of materials distributed, a comparison of the number of drive alone, bus, bicycle, walk and carpool trips before and after the program, and awareness and attitudes towards transportation options. The public's perception of the *Cruz511 In Your Neighborhood* program was also considered when evaluating the program's effectiveness.

Figure 3: Participation by Neighborhood



¹⁵ This includes hard copies of program invitations returned by direct mail, collected by travel advisors, submitted at events and through the online survey.

Program Participation

A total of 1,202 individuals participated¹⁶ in the program. Participating in the program required individuals to return a completed pre-program survey by either speaking with a travel advisor at their doorstep, returning the program invitation delivered to their home by mail, speaking with *Cruz511 Team* members at an event, or by filling out the pre-program survey online. Four-hundred and eighty-eight (488) participants, or 41%, had addresses within the Central Watsonville Neighborhood boundaries or received information for the Central Watsonville Neighborhood. Six hundred and eighty-eight (688) participants, or 57%, had addresses within the Eastside Santa Cruz Neighborhood boundaries or received information for the Eastside Santa Cruz Neighborhood (Figure 3: Participation by Neighborhood).

Participants were distributed geographically within each of the neighborhoods (Figure 6 & 7: Location of Participants). Although the majority of participants (59%) lived within the Central Watsonville or Eastside Santa Cruz neighborhood boundaries, some participants lived outside the neighborhood boundaries. Most participants (73%) lived either within or just outside of the neighborhood boundary, such that they would have been able to view the location of their home on the neighborhood specific bus, bicycling, and walking map guides, and use the guides to determine travel options from their home to points of interest. Two-hundred and eleven (211) participants, or 17.5%, had an address outside of the City of Santa Cruz or the City of Watsonville. If participants provided an address outside of either the City of Watsonville or City of Santa Cruz boundaries, customized resources for

Figure 4: Age Distribution of Participants

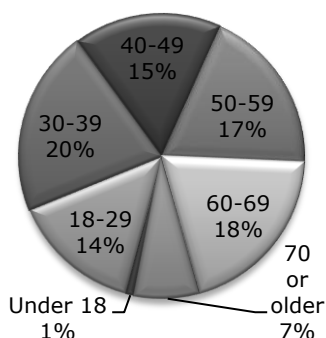
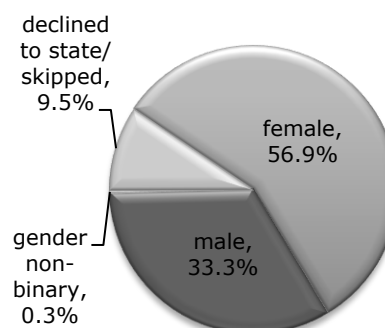


Figure 5: Gender Distribution of Participants



¹⁶ Program participants were defined as individuals who returned a completed pre-program survey. Not all participants requested travel resources.

Figure 6: Location of Participants -Central Watsonville Neighborhood

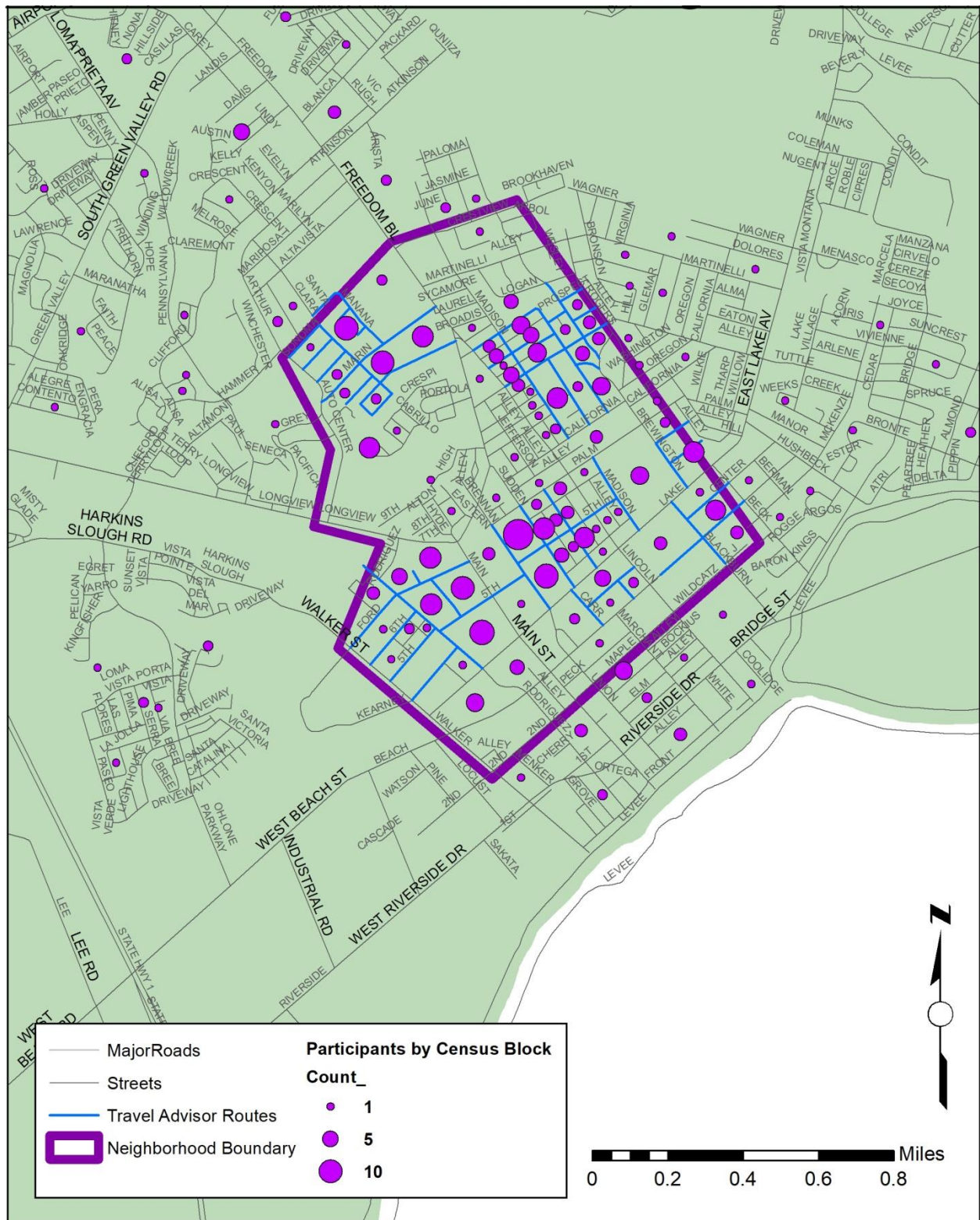


Figure 7: Location of Participants-Eastside Santa Cruz Neighborhood

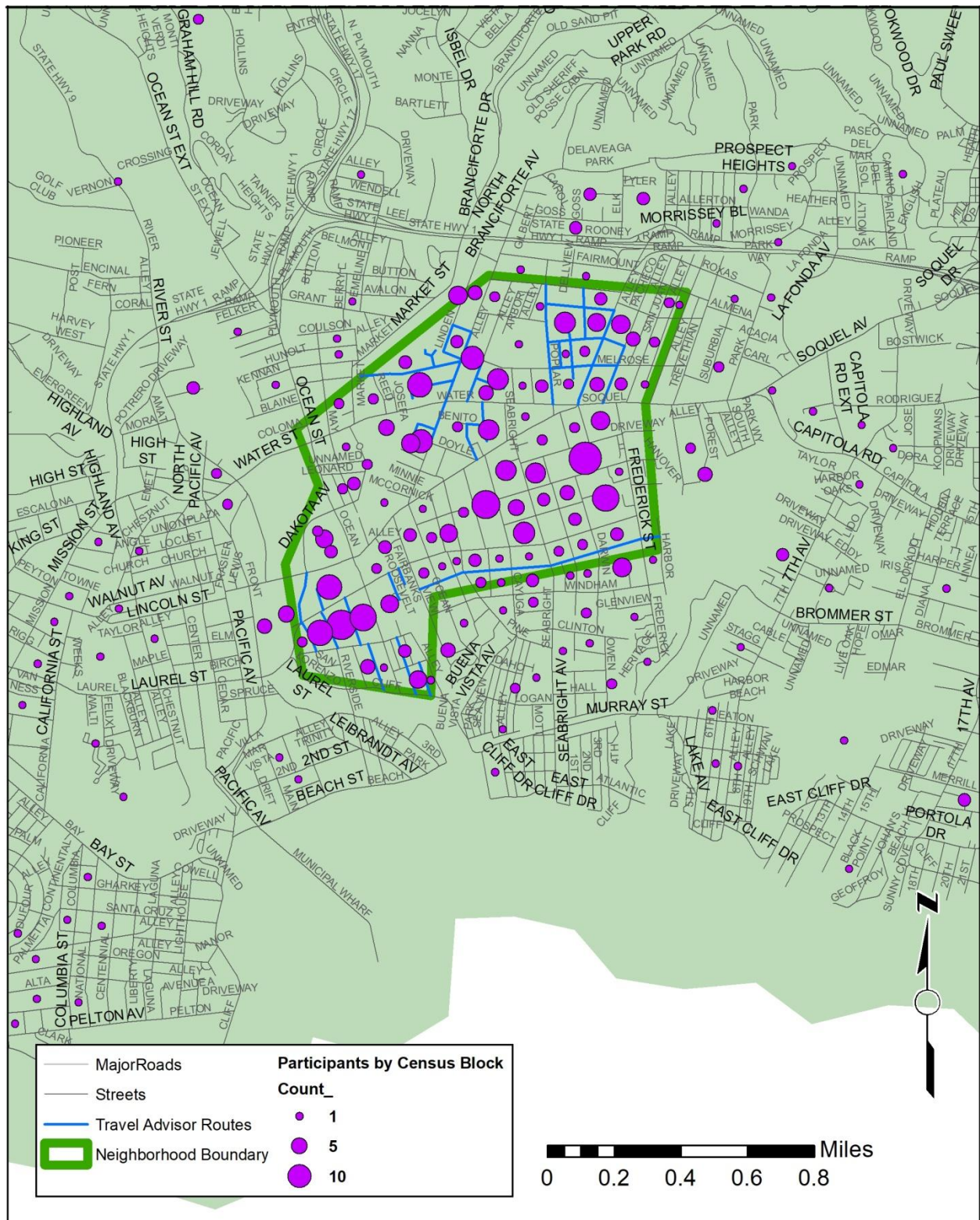
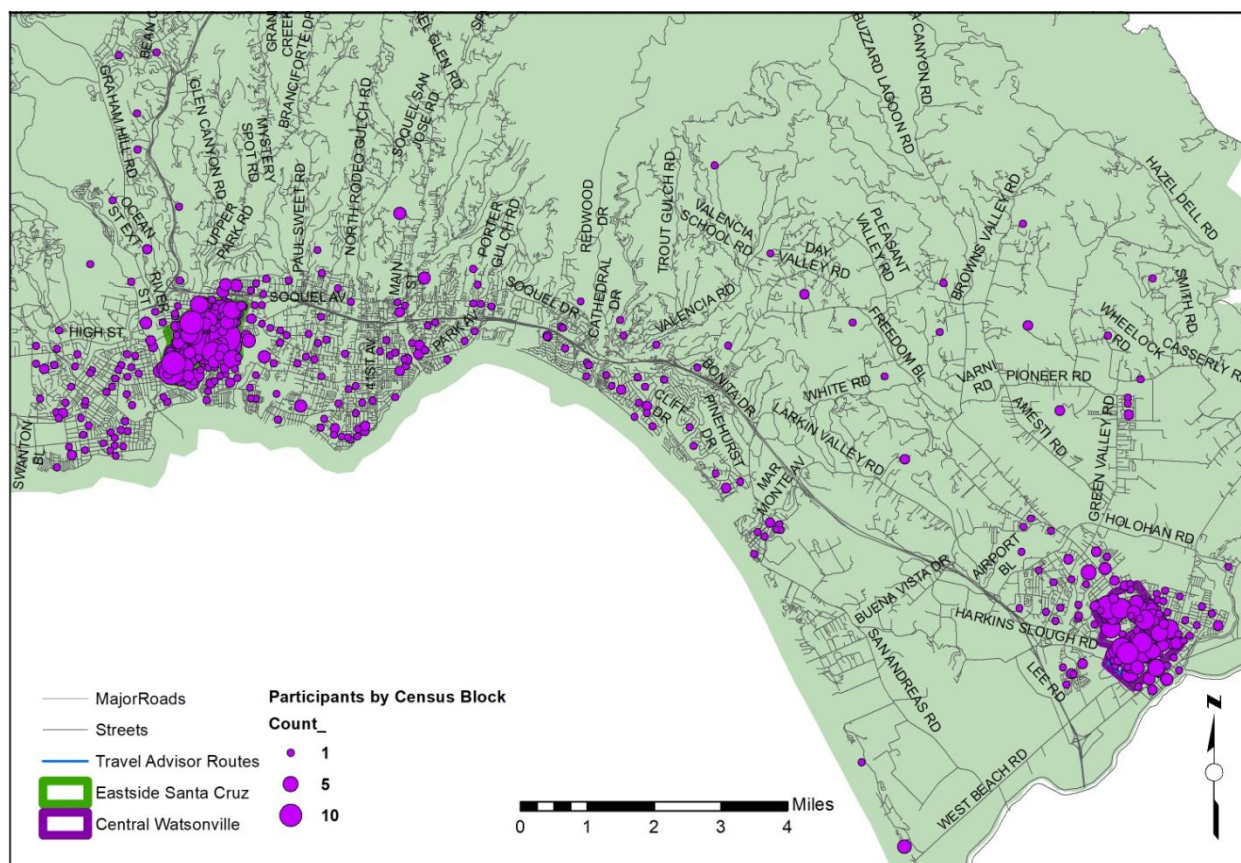


Figure 8: Location of Participants- County of Santa Cruz



the nearest of the two neighborhoods were mailed to them¹⁷. Figure 6 and 7 are maps of concentrations of participating households for each neighborhood and Figure 8 shows participation countywide. Participants that lived outside of the neighborhood boundaries may have received information about the program through online communications or at events they attended in the Central Watsonville or Eastside Santa Cruz neighborhoods.¹⁸

Program participants were relatively evenly distributed by age (Figure 4: Age Distribution of Participants). There was a noticeably higher number of female participants in the program than male (Figure 5: Gender Distribution of Participants).

Of the 6,606 households targeted¹⁹ in Central Watsonville and Eastside Santa Cruz neighborhoods that received an introductory postcard informing them that their

¹⁷ Households with addresses east or southeast of State Park Drive in Aptos requesting travel resources received customized materials for the Central Watsonville neighborhood. Households with address west or northwest of State Park Drive requesting travel resources received customized materials for the Eastside Santa Cruz neighborhood. Exceptions were made when a participant requested materials for a specific neighborhood or received materials at a neighborhood event.

¹⁸ Two percent (2%) of participants could not be associated with a neighborhood because no address was provided.

¹⁹ "Households targeted" indicates the number of households who were identified as recipients of either mailer or in-person visit.

neighborhood was selected to participate in the program, 4,263 received the program invitation (including the pre-program survey and travel resource order form) by mail and the remaining 2,343 households were targeted²⁰ by travel advisors. An additional 323 households were added mid-way in the program and visited by travel advisors to address sample loss from gated apartment complexes and otherwise inaccessible homes, for a total of 2,666 households targeted by travel advisors. Contact with individuals at events and through online communications enrolled participants that may not have been included in the 6,606 households originally targeted.

Door-to-door contact with travel advisors resulted in the greatest number of participants when compared to other communication channels. Five hundred and fourteen (514) participants, or 43%, resulted from contact with travel advisors, (Figure 9: Participation by Communication Channel). Participant's enrollment in the program by different communication channels varied between Central Watsonville and Eastside Santa Cruz neighborhoods. Central Watsonville neighborhood participants were more likely to enroll in the program through door-to-door contact with travel advisors or by speaking with the *Cruz511 Team* at events. Participant's enrolling online was higher in the Eastside Santa Cruz neighborhood (Figure 10: Neighborhood Participation by Communication Channel).

Participation rates were tracked for direct mail and travel advisors to further evaluate their effectiveness. For door-to-door contact by travel advisors, the participation rate overall was 23%, with approximately the same participation rate in Central Watsonville and Eastside Santa Cruz. The participation rate for contact by direct mail was 4%, with 6% participation rate for Eastside Santa Cruz and 2% for Central Watsonville (Table 3: Direct Mail Participation Rate and Table 4: Travel Advisor Participation Rate). Participation rates for online communications and events was not tracked since the total number of recipients of online communications and total number of individuals at community events was unknown.

Figure 9: Participation by Communication Channel

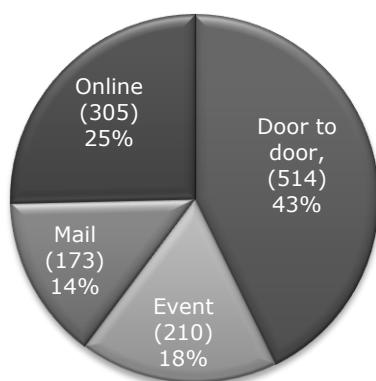
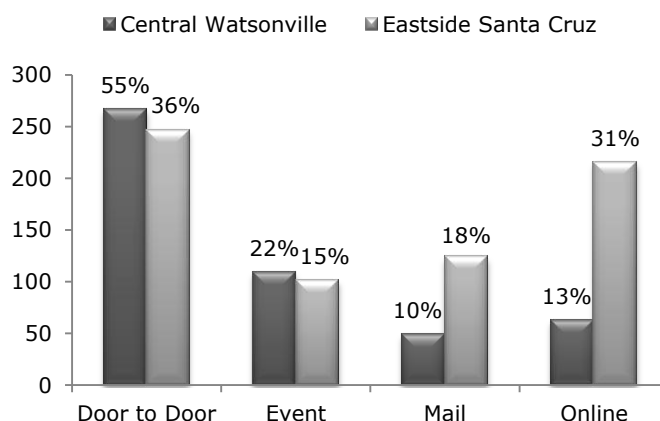


Figure 10: Neighborhood Participation by Communication Channel



in-person visit.

Table 3: Direct Mail Participation Rate

Neighborhood	Contact Attempt	Participating	Participation Rate
Eastside Santa Cruz	2,042	124	6.07%
Central Watsonville	2,221	49	2.21%
Overall	4,263	174	4.05%

Source: RTC and Steer Davies Gleave

Table 4: Travel Advisor Participation Rate

Neighborhood	Households Targeted	Sample Loss	Households Reached	Households Not Reached ²¹	Non-Participants	Participants	Participation Rate
Eastside Santa Cruz	1,342	247	553	555	300	247	22.37%
Central Watsonville	1,324	209	591	634	332	267	23.86%
Overall	2,666*	456	1,144	1,189	632	514	23.12%

Source: RTC and Steer Davies Gleave

* Households targeted totals include 323 households that were added after the postcard mailing, see Communication Channels: Travel Advisors

Travel Resource Requests

Materials distribution was a central component of the *Cruz511 In Your Neighborhood* program. Participants were able to order one of each travel resource, and could request all resources offered. Travel resources available for order included map guides and information about connections with regional transportation services and relevant travel information to support convenient and safe trips. Travel tools to use when making a trip could also be ordered. A book of coupons for local restaurants and businesses to be used when taking a trip by bus, bicycling and walking was also offered to motivate participants to go to nearby businesses by bus, bicycling or walking.

²¹ "Households not reached" are households who received three contact attempts by travel advisors, but did not speak with a travel advisor. Households targeted by a travel advisor, but not reached were left with a program invitation.

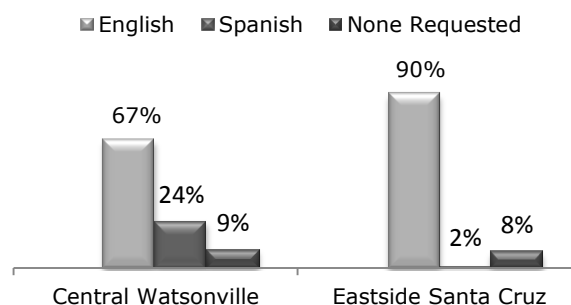
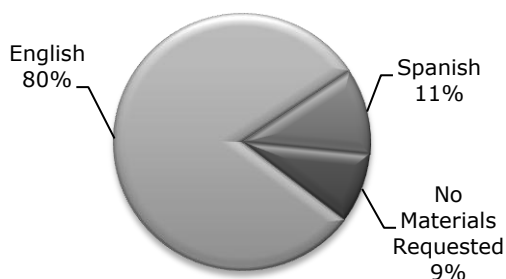
Figure 12: Requests by Language Preference by Neighborhood

Figure 11: Travel Resources Requested by Language Preference

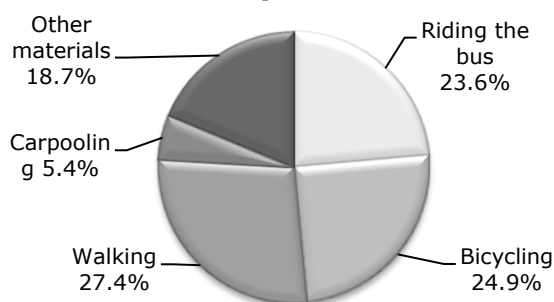


Of the total participants, 1,086 requested travel resources and 116 submitted the program invitation without a request for resources²². The majority of travel resources were requested in English with 959 participants, or (80%), of requests, made for materials in English. One hundred and twenty-seven (127), or 11%, of request were made for materials in Spanish, and 116 participants (9%) did not request materials (Figure 11: Travel Resources Requested by Language Preference and

Figure 12: Requests by Language Preference by Neighborhood). One-hundred and twelve (88%) of requests for materials in Spanish were for Central Watsonville neighborhood travel resources. In total, 6,716 travel resources and tools were ordered. This includes 2,936 of the materials developed by the RTC specifically for the *Cruz511 In Your Neighborhood* program, 1,570 of the materials supplied by external organizations, and 2,210 of the travel tools distributed.

Travel resource requests were generally evenly distributed across travel modes, with the exception of carpooling resources, which were requested less often (Figure 13: Resources Requests by Mode). Several participants requested information for all modes, while some grouped requests for bus and walking information or bicycling and walking information. The total number of travel resources requested for each resource is shown in Figure 14: Travel Resources Requested²³. In general, the customized map guides and travel tools were the most popular items requested. Sufficient resources were available to complete all of the orders.

Figure 13: Resources Requested by Mode



Three hundred and eighty-six (386) of the 400 free bus day-passes made available by METRO to the *Cruz511 In Your Neighborhood* program were distributed²⁴. Two-hundred and eighty-six (286) or 62% bus day-passes had been used at the time of this report and 605 trips had been made for an average of 2.4

²² Twenty-three (23) of the individuals who submitted the program invitation and did not request resources also did not provide an address.

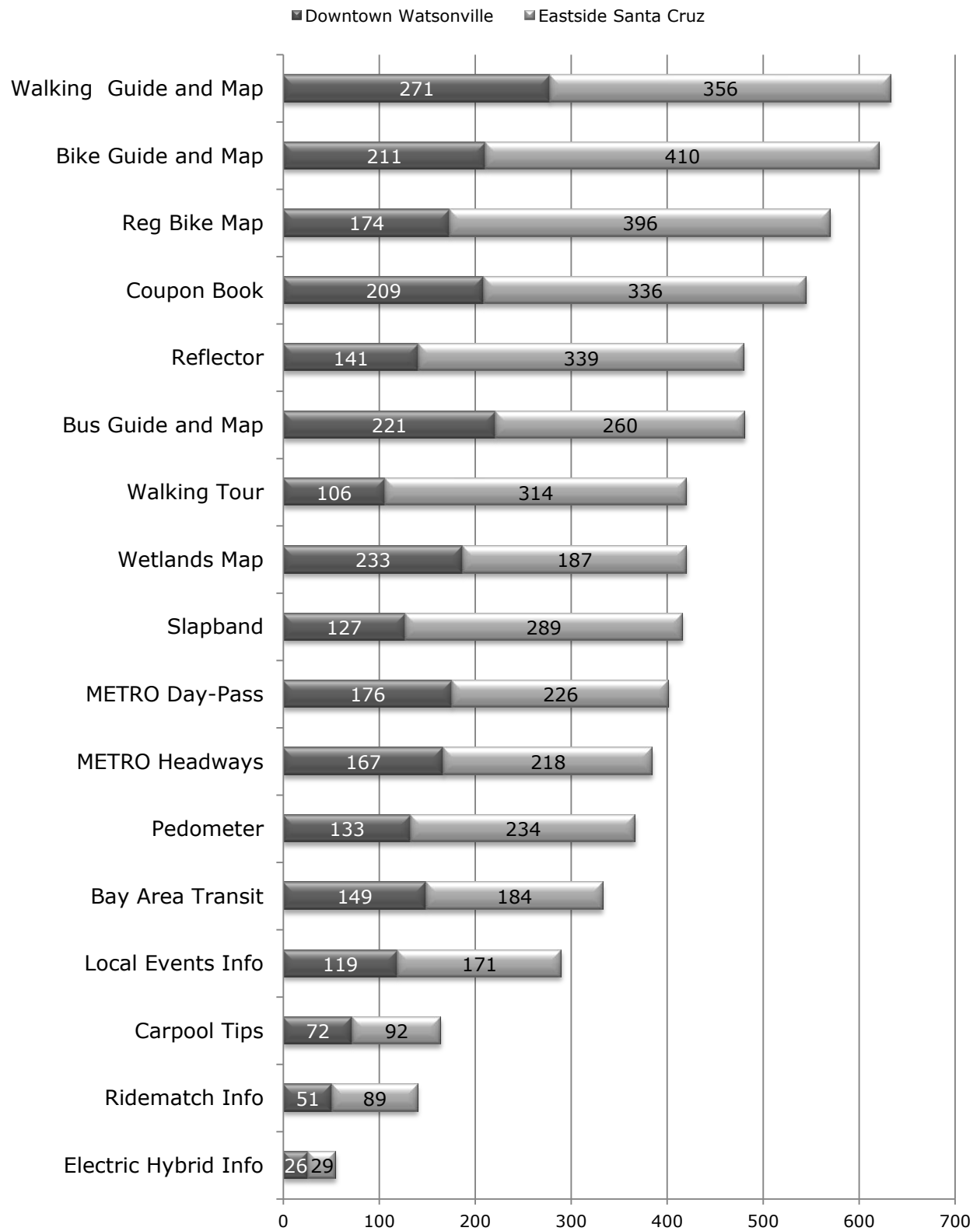
²³ Resources listed here reflect the menu of resources provided to participants. For some resources, more than one item was provided. For example "Shop by Bike and Walk" was an item distributed when a participant requested a "Walk Guide and Map" or a "Bike Guide and Map".

²⁴ An additional 16 Metro bus day-passes were requested by participants, but were not successfully distributed because a correct address was not available.

trips per pass. Of the trips made using the bus day-pass, a majority (60%) provided service to and from either the Central Watsonville or the Eastside Santa Cruz neighborhood as follows:

- 27% were used on routes between the City of Watsonville and the City of Santa Cruz;
- 28% were used on routes between the City of Watsonville, Cabrillo College and Capitola;
- 12% were used on routes connecting Eastside Santa Cruz and Live Oak; and,
- 3% were used on local Watsonville routes.

Figure 14: Travel Resources Requested



Travel resources ordered were delivered by direct mail to participants who were contacted by mail, travel advisors, and online. Orders placed by participants at an event were filled at the event. In some cases, travel resources available at events were exhausted before all orders were completed and the remaining items were filled by direct mail. Of the 1,086 participants who ordered resources, 1,041, or 96%, were delivered and 45, or 4%, were not delivered. Travel resources could not be delivered when an address was not correct, missing, or illegible on a mailed program invitation or a travel advisor form, and an email or phone was not provided to contact the participant to obtain the correct address. In other cases, an email or phone was provided but the participant did not respond to follow up emails/calls to obtain an address. For each participant with an incorrect, missing, or illegible address, but who provided other contact information, contact was attempted at least three times to obtain a correct address.

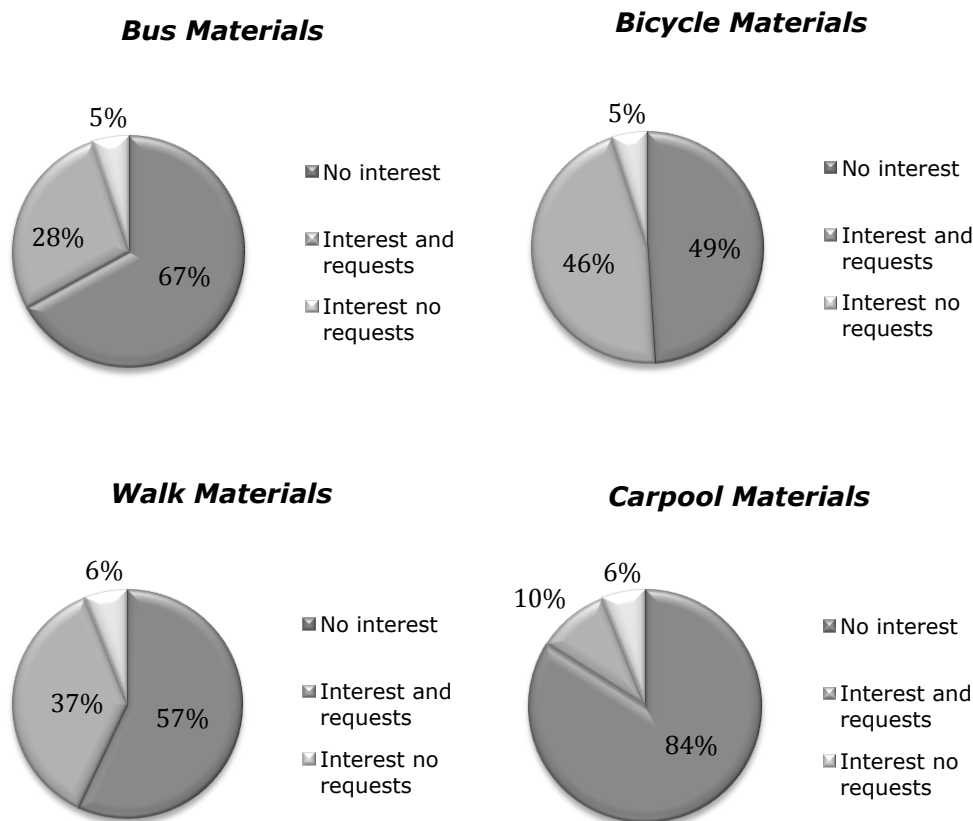
Resources Requested by Mode of Interest

A key strategy for applying individualized marketing to travel behavior change is providing interested individuals with customized and relevant travel information. In addition to creating materials specific to a participant's neighborhood, *Cruz511 In Your Neighborhood* program allowed participants to order resources and tools specific to the mode they were interest in learning more about. Individuals were also asked in the pre-program survey to indicate by which mode of travel they were interested in traveling more.

Participants in the *Cruz511 In Your Neighborhood* program who expressed interest in traveling by a particular mode in the pre-program survey, generally ordered travel resources related to that mode (Figure 15: Comparing Interest and Requests by Mode). Participants interested in riding the bus and carpooling were more likely to request related materials than participants that expressed interest in traveling by bicycle or walking. This may indicate that participants who wanted to bicycle and walk more felt familiar with these modes and participants who are interested in traveling by riding the bus and carpooling may have needed more support.



Figure 15: Comparing Interest and Requests by Mode



Post- Program Survey Participation

A total of 150 participants, or 12%, completed the post-program survey. Due to the lower than expected response to the initial request to complete the post-program survey, the book of coupons for local venues not distributed as part of travel resource requests were offered to encourage participants to complete the post-program survey. Thirty-nine (39) participants (26%) took the post-program survey in the four days between when the book of coupons was offered and the post-program survey closed.

Post-program surveys were distributed by email to the 62% of participants who provided an email address on the returned program invitation. In order to obtain the most participation in the post-program survey, the 18% of participants that provided a phone number, but not an email address, were contacted by travel advisors, first via phone, offering them the opportunity to complete the post-program survey, and then visited at their home by travel advisors, if a home address was provided. Follow-up calls and visits from travel advisors to homes were focused on increasing the post-program survey response rate from Central Watsonville neighborhood participants. Before travel advisors contacted participants

by phone or at their home, 86% of post-program surveys were completed by Eastside Santa Cruz neighborhood participants and 14% of post-program surveys were from the Central Watsonville neighborhood. After travel advisors contacted participants by phone or at their home, 63% of the total 150 post-program surveys completed were from Eastside Santa Cruz neighborhood and 37% from the Central Watsonville neighborhood.

The post-program survey was not distributed by direct mail and contact by travel advisors was only made to those participants that also provided phone numbers. Therefore, the 16% of participants that only provided a household address and not a phone number or email address did not receive the offer to complete the post-program survey.

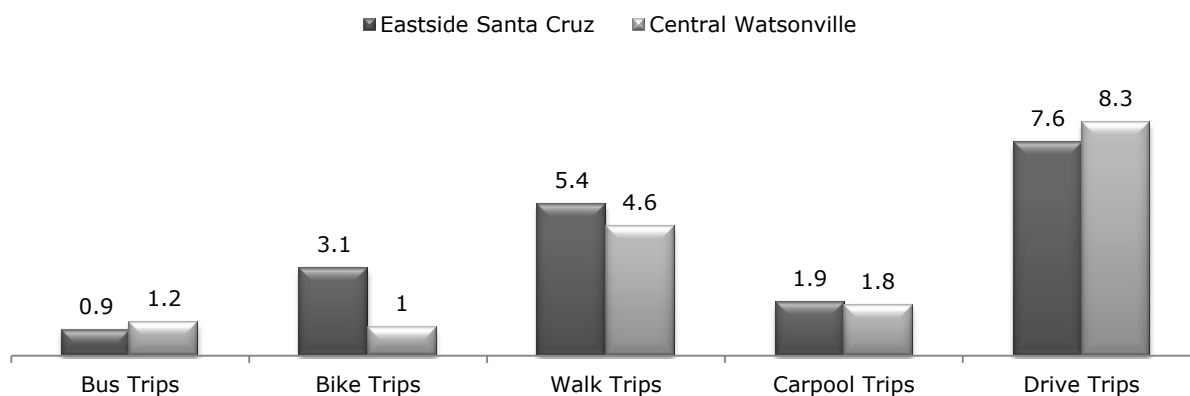
Travel Choice Changes

Evaluating the impacts of the *Cruz511 In Your Neighborhood* program on the number of trips made by riding the bus, biking, walking and carpooling involved a comparison of information collected in the pre- and post-program surveys. In both the pre- and post-program survey, participants were asked to report the number of one-way trips taken in the past week by riding the bus, bicycling, walking, carpooling, and driving alone. The example of going to the store as one trip and coming home as a second trip was provided.

"I went from recreational rider back to commuting on my bike."

The average number of total weekly trips (all modes) before the program for all participants was fairly consistent across the two neighborhoods, with participants in the Central Watsonville neighborhood reporting an average of 17 trips per week, and participants in the Eastside Santa Cruz neighborhood reporting an average of 19 trips per week. Average weekly trips by mode were also similar for each neighborhood, with the exception of participants in Central Watsonville neighborhood making noticeably fewer bicycling trips than in Eastside Santa Cruz neighborhood (Figure 16: Pre-Program Average Weekly Trips by Neighborhood).

Figure 16: Pre-Program Average Weekly Trips by Neighborhood



Overall, the *Cruz511 In Your Neighborhood* program reduced one drive alone trip per week (-.98 trips per week) per participant. This was determined by comparing the average weekly drive alone trips reported by the participants who completed both the pre- and post-program survey. Drive alone trips between the matched pairs were reduced from an average of 6.93 trips per week reported before the program to 5.95 trips per week after the program (Table 5: Average Change in Trips and Mode Share). An estimated -1,175 in weekly drive alone trips were reduced as a result of the *Cruz511 In Your Neighborhood* program, when this reduction in weekly drive alone trips was applied across all participants (Figure 17: Total Weekly Change in Trips by Mode). Additional information about the average weekly trips by mode by neighborhood when comparing the average weekly trips reported by all participants to only those participants who completed the post-program survey is available in Appendix G: Average Weekly Trips by Mode Comparison.

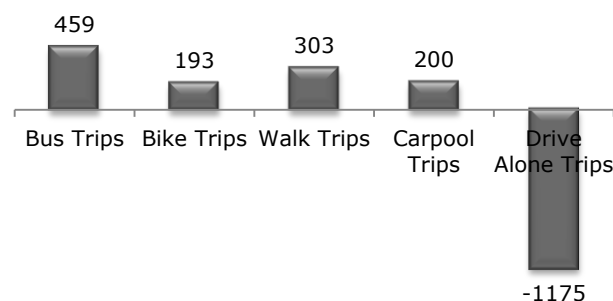
Table 5: Average Change in Weekly Trips and Mode Share

	Drive alone	Bus	Bicycle	Walk	Carpool
Trips before	6.93	1.04	2.23	5.28	2.27
Trips after	5.95	1.42	2.39	5.53	2.44
Change in Trips	-0.98	0.38	0.16	0.25	0.17
<i>Mode shares</i>					
Before	39%	6%	13%	30%	13%
After	34%	8%	13%	31%	14%
Change	-5	2	1	1	1

The number of weekly trips by bus, bicycling, walking and carpooling followed the reverse trend with a .96 net increase in weekly trips by bus, bicycling, walking and carpooling. This equates to average weekly increase in bus, bicycle, walk and carpool trips of .38, .16, .25, and .17, respectively (Table 5: Average Change in Trips and Mode Share). An estimated 1,055 new trips were made by bus, bicycling, walking and carpooling when the averages are applied across all participants. This equates to 459 new bus trips, 193 new bicycle trips, 303 new walk trips, and 200 new carpool trips (Figure 17: Weekly Change in Trips by Mode).

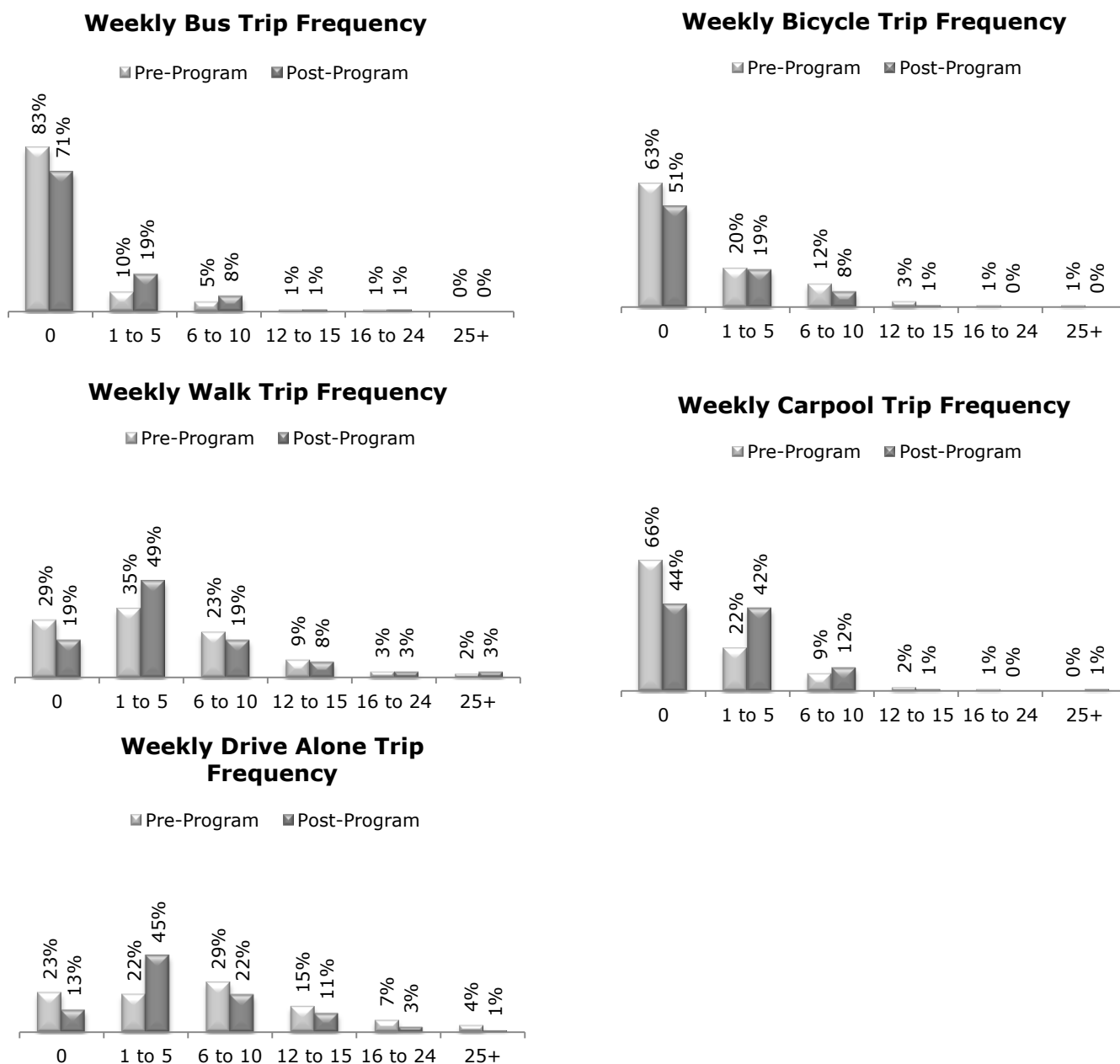
Examining how often participants took a trip by each travel mode can also provide information about the change in travel choices before and after the *Cruz511 In Your Neighborhood* program (Figure 18: Weekly Trip Frequency by Mode).

Figure 17: Weekly Change in Trips by Mode



Seventeen percent (17%) of participants had taken one or more bus trips in the past week before the program, while 29% of participants that completed the post-program survey reported taking the bus in the past week. At first contact, 71% of participants had taken walk trips in the past week compared to 81% of participants who completed the post-program survey. Before participating in *Cruz511 In Your Neighborhood*, 49.3% of participants indicated they drove alone for 6 or more one-way trips per week; after participating in the program this percentage fell to 38.9%. In contrast, the percentage of participants who drove alone fewer than 6 one-way trips per week rose from 50.7% to 61.1%.

Figure 18: Weekly Trip Frequency by Mode



Self-Reported Reduction in Drive Alone Trips

Another way to evaluate the *Cruz511 In Your Neighborhood* participant's changes in travel choices was to ask participants to self-report their impressions of how much they reduced their driving alone as a result of the *Cruz511 In Your Neighborhood* program²⁵: "How much did you reduce your driving alone as a result of the Cruz511 In Your Neighborhood Program?" Fifty-nine percent (59%) of the participants who completed the post-program survey said that they reduced their driving alone trips, and 40% reported that they reduced their driving alone trips by more than one trip per week (Figure 19: Drive Alone Trips Reduced per Week). This information is consistent other measures indicating that the *Cruz511 In Your Neighborhood* program reduced the number of drive alone trips by one trip per week per participant.

The age range of participants who reduced their drive alone trips was relatively evenly distributed across age groups, with participants aged 18-29 reducing their trip alone trips (75%), followed by participants aged 60-69 (70%). Fewer participants 70 and older and 30-39 reduced their drive alone trips (50% and 56% respectively). Of those participants who did reduce their driving, the majority (76%) were female.

Participants who completed the post-program survey were also asked how likely they were to continue their new travel patterns. Participant's responses provided information about the extent to which the program could lead to longer-term changes in travel patterns (Figure 20: Maintain Travel Choices). Eighty-three percent (83%) of participants said they were very or somewhat likely to maintain

Figure 19: Drive Alone Trips Reduced per Week

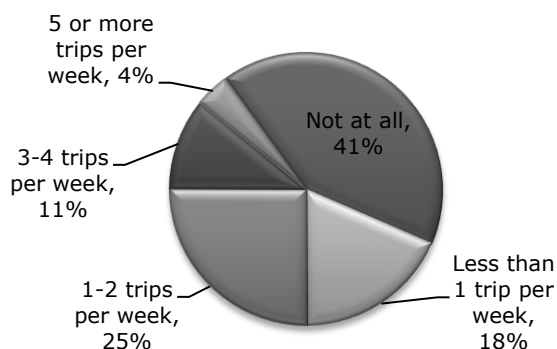
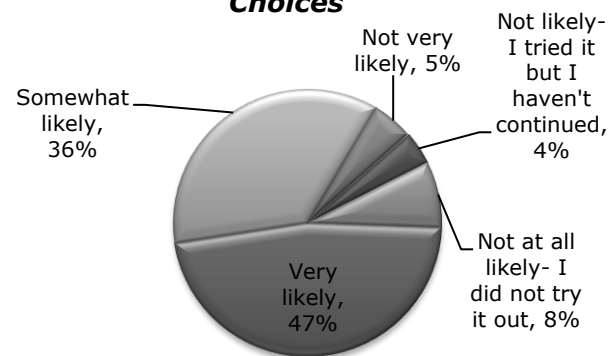


Figure 20: Maintain Travel Choices

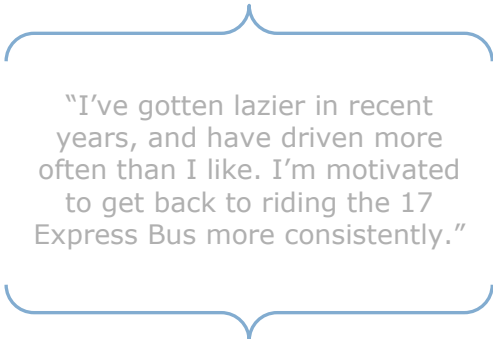


²⁵ All information collected from program participants and used to examine the *Cruz511 In Your Neighborhood* program's impacts on travel choices was self-reported. Self-reporting was selected as the method for collecting information from participants because it is an efficient way of collecting relevant data and is common method for evaluating the effectiveness of transportation demand management programs. Although self-reporting provides a significant amount of useful information, it should be noted that self-reporting can introduce some challenges since it relies on the participant's recollection of their number of weekly trips by mode, their perception of travel behavior changes, and their understanding of the survey question. To reduce some of the impacts with self-reporting the same question was asked in the pre- and post-surveys without allowing the participant to compare their post-program answer with their pre-program answer.

their new travel pattern and 9% of participants who tried a new travel mode indicated they were not likely at all to continue.

Vehicle Miles Travel Reduction

Vehicle Miles Traveled (VMT)²⁶ provides information about changes in travel based on the number of vehicle trips and the length of vehicle trips and was used as one of the measures to evaluate the *Cruz511 In Your Neighborhood* program's effectiveness. VMT can also be used to calculate other program benefits including health related impacts, greenhouse gas emissions, and household transportation costs.



"I've gotten lazier in recent years, and have driven more often than I like. I'm motivated to get back to riding the 17 Express Bus more consistently."

The calculated VMT reduction by participants in the Eastside Santa Cruz neighborhood was 4,036 miles per week and in the Central Watsonville neighborhood was 3,530 miles per week for an estimated annual VMT reduction of 266,321 miles as a result of the *Cruz511 In Your Neighborhood* program (Table 6: Vehicle Miles Traveled Reductions)²⁷. The annual VMT reduction of 266,321 miles assumes that the reduction in weekly VMT was sustained for two months. Two months was the average time period between the reporting of pre-program trip choices and post-program trip choices,²⁸ and then sustained by 68% for the remaining 10 months in the year²⁹.

Sustainable Transportation Benefit

There is a strong relationship between a reduction in vehicle miles traveled (VMT), greenhouse gas emissions, lowering household transportation costs and improving health. For example, a reduction in drive alone trips reduces automobile emissions and fuel costs, and when drive alone trips are replaced with trips by bus, bicycle and walking, there can be an increase in physical activity.

The *Cruz511 In Your Neighborhood* program resulted in an estimated 241,483 lbs of greenhouse gas emissions reduced annually when comparing the number of drive alone trips before and after the program³⁰. The program also reduced the amount participants spent on transportation each year by an average of \$40 dollars per year. In total, there was an annual savings of \$48,456 not spent on fuel and could be re-spent in the local economy. Physical activity increased after the program, as a result of more use of active transportation modes. Participants

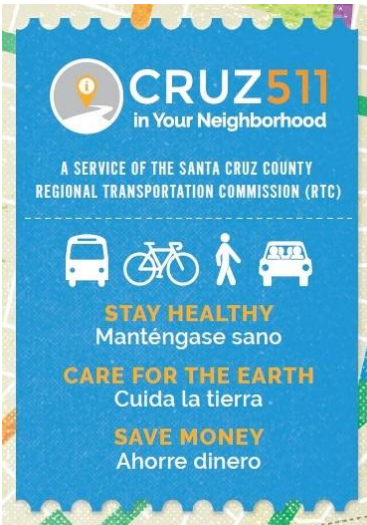
²⁶ Vehicle Miles Traveled (VMT) is a performance measure commonly used in transportation planning, including transportation demand management programs.

²⁷ Assumes average trip lengths for the City of Santa Cruz (6.0 miles) and the City of Watsonville (7.4 miles) as reported in the 2012 California Household Transportation Survey.

²⁸ The post-program survey collected information from participants between 3 and 12 weeks after receipt of the program information, for an average of 7.5 weeks between completion of the pre- and post-program survey.

²⁹ TAG UNIT M5.2 Modeling Smarter Choices, DfT, January 2014. Case study of two similar programs showed that participants either give up in the first few weeks or sustain the new travel modes, with 68% sustaining the change after three years and nearly all of the drop-off happening within the first three months.

³⁰ CO2 emissions is used as a measure of GHG emissions since CO2 accounts for such a large percentage of GHG emissions.



burned approximately 367 additional calories per week as a result of new trips made by active transportation, which could cause a reduction in weight of approximately over 4 pounds per year.

Awareness of Travel Choices

An individual may have access to transportation services, but may not be aware of the services available, such as if there is a bus stop nearby, the availability of bicycle repair services, car sharing opportunities, or trainings to practice using different modes. Although the *Cruz511 Your Neighborhood* program could not change an individual's access to the bus, bicycle, or car facilities or services, responses to questions in the pre- and post-program survey helped to provide information about whether or not the

Cruz511 In Your Neighborhood program supported participants in learning more about the availability of bus, bicycle, and car sharing services.

Participants were asked about their awareness of nearby bus services before and after the program (Figure 21: Change in Bus Access). While 76% of participants answered that there was a bus stop in good proximity to their home, fewer people (39%) felt that it went where they wanted to go, and even fewer (27%) felt that it came at the right time. There were some changes in the awareness of bus services after the program. This may indicate that the participants were more informed about the availability of buses services after the program and that the new Schedule By Stop tool provided more timely information about when the bus arrived. The same proportion of people reported having access to a working bicycle (62%) before and after the program and fewer reported that they could borrow a bicycle (Figure 22: Change in Bicycle Access). This may indicate that the *Cruz511 In Your Neighborhood* program could have provided more information about resources for fixing a bicycle or bike share programs. Seven percent fewer participants reported having access to a car after the program than before the program, while the same percentage of participants reported that they shared a car with others in their household. This may indicate that participants took advantage of car sharing opportunities (Figure 23: Change in Car Access).

Figure 21: Change in Bus Access

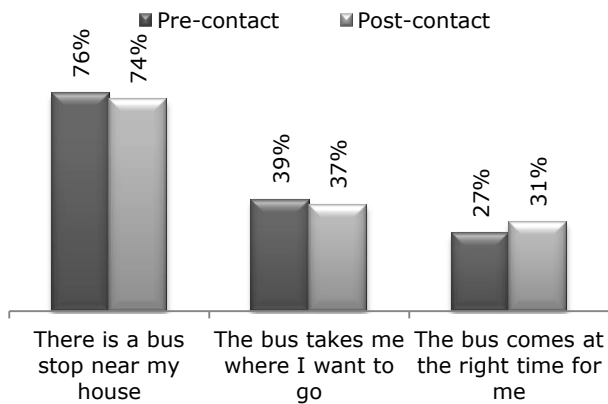


Figure 22: Change in Bicycle Access

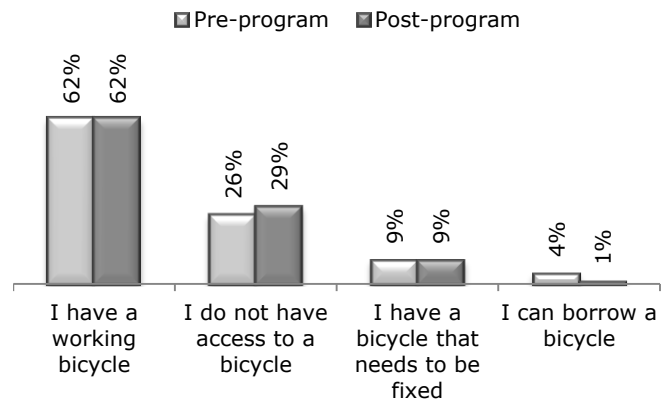
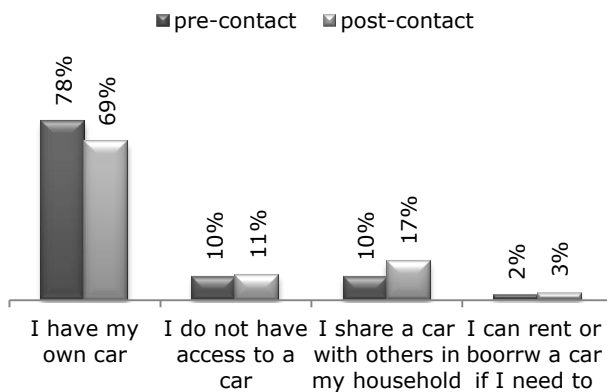


Figure 23: Change in Car Access



Attitudes about Travel Choices

Understanding attitudes towards transportation choices can be important for providing information and resources that appeal to the participants' interest and support participants in overcoming barriers. Understanding the perceived benefits and barriers to travel choices can also influence future program messaging to ensure relevancy to the target audience. Figure 24: Count of Perceived Benefits of Travel Choices by Mode, provides information about participants' perceptions about riding the bus, bicycling, walking and carpooling before the *Cruz511 In Your Neighborhood* program. Participants indicated that walking and bicycling provided the most environmental and health benefits and were the least expensive alternatives to driving alone. Benefits of riding the bus included freed up time to think or do work, was environmentally responsible and provided a cost savings. These responses indicated that *Cruz511 In Your Neighborhood* program messaging was successful in highlighting some of the benefits of riding the bus, bicycling, walking and carpooling experienced by participants, including "staying healthy", "caring for the earth", and "saving money". The participant's perception of the benefits also provided insight for consideration in future programs' messaging.

Figure 24: Count of Perceived Benefits of Travel Choices By Mode

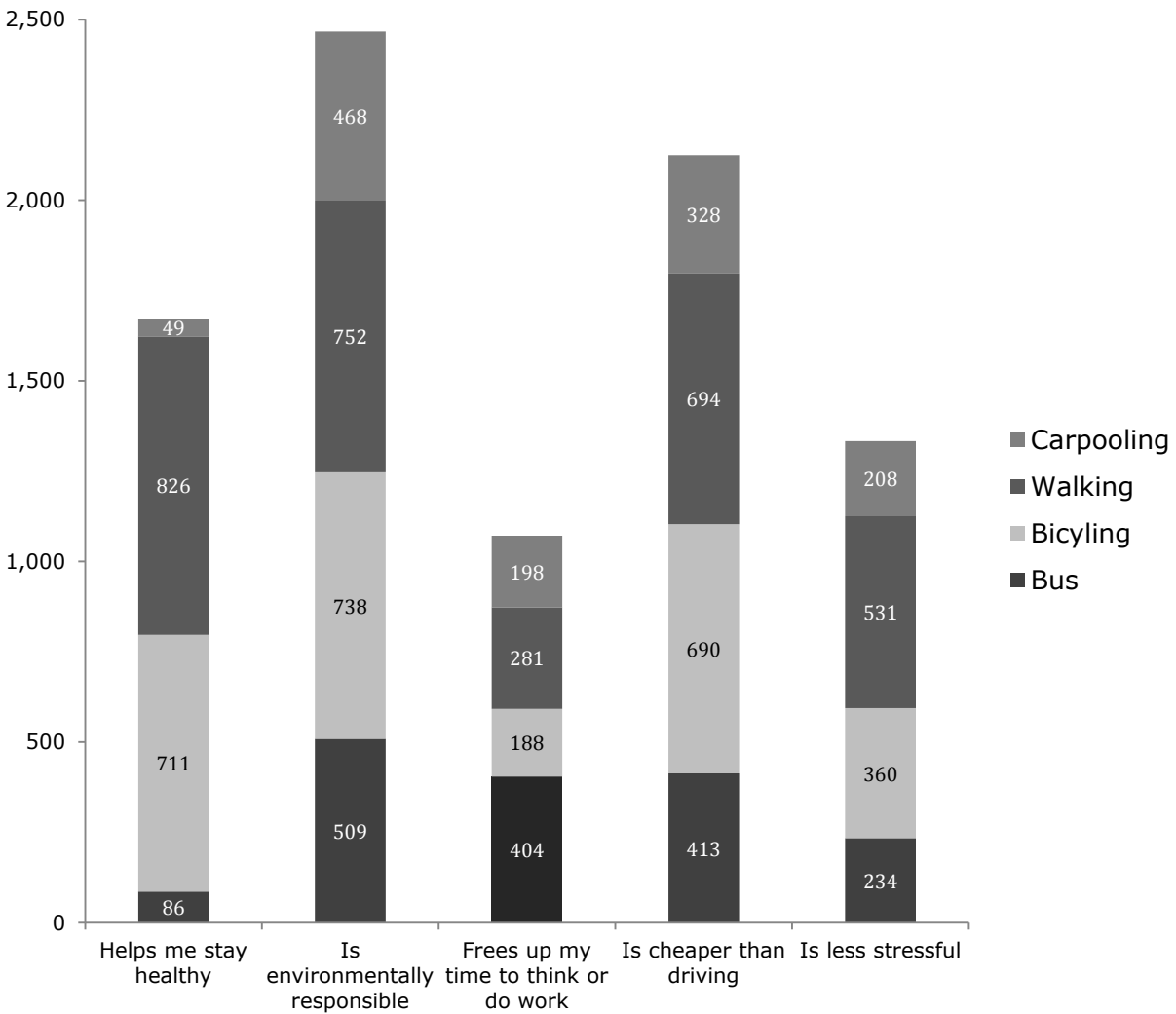
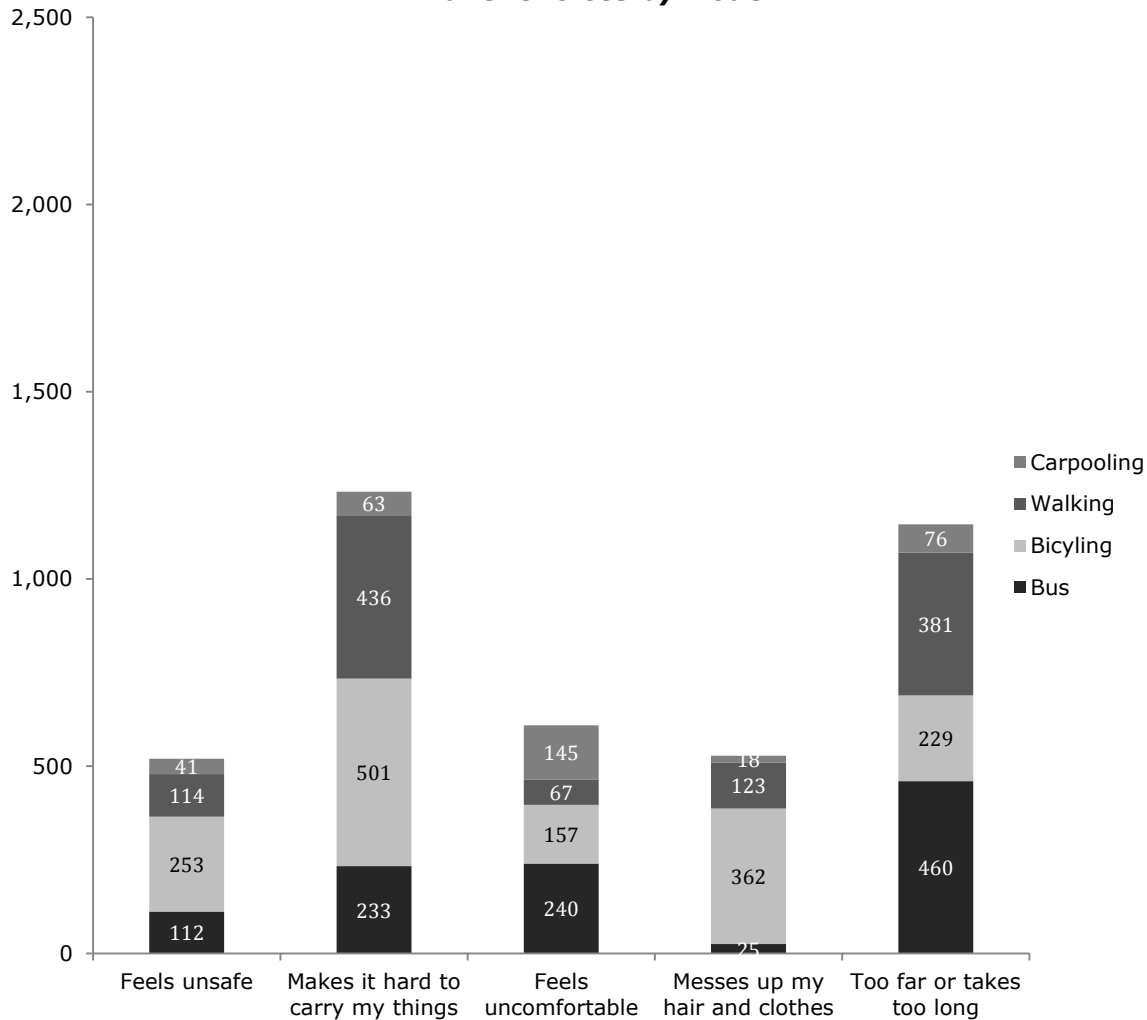


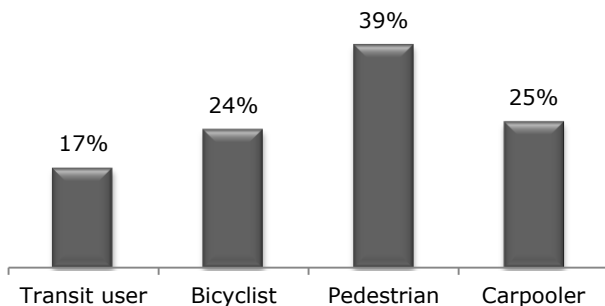
Figure 25: Count of Perceived Barriers to Travel Choices by Mode, provides information about participants' perceived barriers to riding the bus, bicycling, walking, and carpooling before the *Cruz511 In Your Neighborhood* program. Carrying items was the most frequently cited barrier to bicycling and walking. Taking too long was the most frequently cited barrier to riding the bus and feels uncomfortable was the most frequently cited barrier to carpooling. A comparison of attitudes towards barriers and benefits of travel choices was conducted to investigate if attitudes changed from the pre- to the post- program survey as a result of the information provided. The comparison showed that all benefits were selected on average 10% more frequently after the program and barriers were selected on average 2-3% more frequently after the program. While obtaining information about perceived benefits and barriers is helpful for understanding travel choices, the question was lengthily and not consistently answered by participants.

Figure 25: Count of Perceived Barriers to Travel Choices by Mode



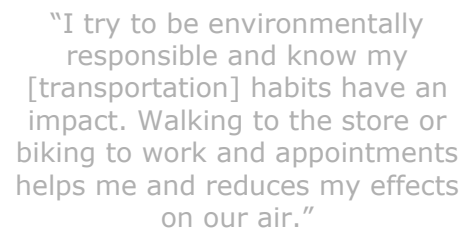
Participant's Perception of Travel Changes

Figure 26: I now consider myself a...



After the program intervention, participants were asked to mark the statement that describes them as another way to understand attitudes towards riding the bus, bicycling, walking, and carpooling after the program intervention (Figure 26: I now consider myself a...). Only 17% of participants considered themselves a transit user after the program even though 29% of participants indicated taking more than one transit trip after the program. Twenty-four

percent (24%) of participants considered themselves a bicycle rider, which is close to the 28% participants that indicated taking more than one bicycle trip after the program. Only 39% of participants considered themselves a pedestrian even though 81% of participants took more than one walking trip per week, and 25% considered themselves a carpooler even though 56% of people took more than one carpool trip per week after the program³¹.



"I try to be environmentally responsible and know my [transportation] habits have an impact. Walking to the store or biking to work and appointments helps me and reduces my effects on our air."

Participant Experience

The post-program survey included the question: How would you rate your overall experience participating in *Cruz511 In Your Neighborhood*? Participants were asked to consider the overall quality of the program, including usefulness of the materials, responsiveness of staff, etc. Of the 12% of participants that responded to the post-program survey, 60% of participants found the program to be good or excellent. Thirty-four percent (34%) of participants felt neutral about the program, and 6% indicated that their overall experience was below neutral or poor. The participants who rated the program poorly commented that they were not interested in driving less or they were frustrated because they lived in a rural area with lack of transportation options. One participant liked the idea of the program, but felt additional information would have been helpful.

The post-program survey asked participants to share any stories about their new travel habits and changes they made, and also what they did and didn't like about the program (Appendix H: Program Opinions and Change Stories). Overall, participants were very positive about the program focus and travel resources and tools. Participants praised the visual appeal and usefulness of the map guides, remarked they'd already used the book of coupons for local businesses to get out in their neighborhood with friends and family, and shared that the bike lights and reflective slap bands made them feel safer at night when walking and bicycling. Many also praised the effectiveness of receiving a free bus day pass to try out traveling by bus. Some shared that participation in the program was a wake-up call and made them realize they had been driving alone out of habit and they were now making an effort to make trips using the bus and active transportation. Some who had signed up for the program who resided outside of the neighborhood focus areas indicated they hoped customized maps would be available for their neighborhoods in the future³².

The small amount of criticism received focused almost exclusively on infrastructure or convenience barriers to traveling by bus, bicycling, walking, or carpooling. Some participants mentioned that bus stops were too far away from their home, employment or other frequent destinations; buses didn't come often enough to be

³¹Figure 18: Weekly Trip Frequency by Mode

³² Comments from the post-program survey are distributed throughout this report.

convenient or took too long. Barriers to bicycling and walking included lack of facilities or safety concerns. Some parents stated they found taking the bus, bicycling and walking too difficult to use when traveling with children or groceries. All participants who commented that they had not received materials or had further questions received follow-up communications from RTC staff.

Program Cost

The *Cruz511 In Your Neighborhood* program costs were associated with the cost of program development, program implementation, participant tracking and analysis, and program reporting and administration. Program development included: researching similar programs, designing the program approach to achieve program objectives, communications with stakeholders and RTC advisory committees, establishing performance measures, and creating program materials. Program implementation included: printing and mailing program materials, engaging participants through four communication channels, purchasing resources, tools, and books of coupons and fulfilling orders for travel resources including mailing materials to participants. Program tracking included: development of a participant tracking database, collecting participant information from pre- and post surveys, and recording orders for travel resources. Program analysis included: evaluating the program effectiveness based on performance measures and comparing program results to other programs. Program reporting and administration included: contract and grant administration, development of the program report and toolkit and presenting program findings to stakeholders, RTC advisory committees and the RTC. Table 7: Program Cost provides a breakdown of program expenditures by direct costs, contracted services, and RTC staff resources.

To support the *Cruz511 In Your Neighborhood* program development and analysis, RTC contracted with Steer Davies Gleave, a firm specializing in the field of travel behavior change through community based programs and individualized marketing. Steer Davies Gleave advised RTC staff on the program's approach and design, and conducted the analysis of program effectiveness based on best practices. RTC also contracted with the firm Steer Davies Gleave to conduct door-to-door outreach using travel advisors for the *Cruz511 In Your Neighborhood* program.

Table 6: Program Costs

Cruz511 In Your Neighborhood	
<i>Direct Costs</i>	
Material Design, Translation, Printing & Purchase	\$18,155
Travel Tools	\$9,022
Mailing	\$6,513
	\$33,690
<i>Contracted Services</i>	
Project Approach & Analysis	\$20,000
Travel Advisors Outreach	\$70,000
	\$90,000
<i>RTC Staff Resources*</i>	
Program Approach & Analysis	\$36,000
Communications & Outreach	\$81,000
Order Fulfillment & Tracking	\$36,000
Program Reporting & Administration	\$27,000
	\$180,000
TOTAL PROGRAM COST	\$303,690

Source: RTC

*Cost per task are based on estimates of the relative number of staff hours committed

Material design and distribution was a significant part of the program and accounted for 38% of the program costs, including direct costs (11%) and RTC staff resources committed to communications and outreach (27%). Order fulfillment and tracking generated 12% of the program costs, similar to the level of investment for material design and distribution. As the personnel leading the program development, implementation, and reporting, RTC staff was involved in every aspect of producing the pilot program and staff resources accounted for the majority of the program costs (60%). Travel advisors accounted for 23% of program costs and also enrolled the most participants in the program when compared to the other communication channels. Fifty percent (50%) of program expenditures were funded with the Caltrans Transit Planning for Sustainable Communities Grant funds (\$150,000). The remaining expenses were funded with the RTC's Cruz511 funds (\$153,690), including the required grant match of \$19,434.

Program Performance Comparison

The *Cruz511 In Your Neighborhood* program results were compared against other similar programs. Relevant program information, including a program's target audience, participation, impacts, messaging and materials were considered when selecting programs for comparison. A direct comparison of performance measures was challenging due to the potential for different assumptions in determining participation rates and program effectiveness amongst programs, and the level of documentation available. Based on available information, program comparisons focused on participation rates, travel choice changes, and program costs.

Participation Rates

The *Cruz511 In Your Neighborhood* program had twelve hundred and two (1,202) participants and 6,929 households targeted³³. This resulted in an overall participation rate of 17%, when considering all participants³⁴. This participation rate fell mid-way between the highest rate (23%) and lowest rate (16%) achieved in similar programs³⁵. Although the comparison of participation rates allowed for some evaluation of the *Cruz511 In Your Neighborhood* program's effectiveness in enrolling participants, it should be noted that the number of participants used to calculate the *Cruz511 In Your Neighborhood* participation rate included participants who were outside of the target audience and may have received information about the program through online communications or at an event.

A comparison of participation rates by communication channels to other programs also provided information about the program's effectiveness. The *Cruz511 In Your Neighborhood* participation rate for direct mail was 4% overall, 2% in Eastside Santa Cruz and 6% in Central Watsonville. A comparable program sponsored by King Country Metro in Washington resulted in a direct mail participation rate of 5.1%. The *Cruz511 In Your Neighborhood* participation rate by travel advisors of 23% is on the high end when compared to similar programs.

Travel Choice Changes

Overall, the *Cruz511 In Your Neighborhood* program resulted in a greater reduction in drive alone trips when compared to other similar programs and relevant research. This comparison included the following measures: the number of participants that reduced drive alone trips, the frequency with which participants reported reducing drive alone trips, and the average drive alone trips reduced by participant.

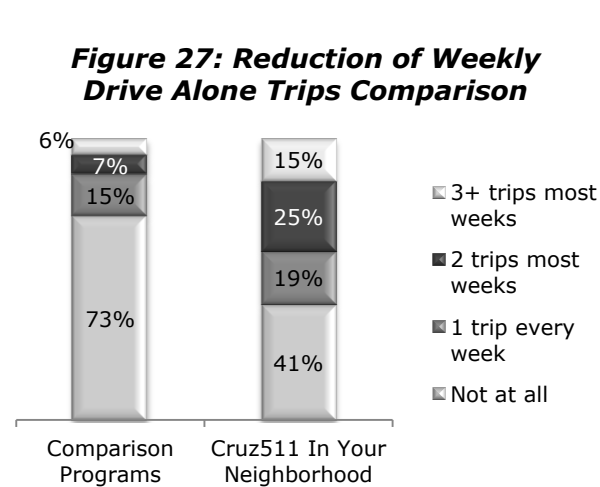
More participants in the *Cruz511 In Your Neighborhood* program reported in the post-program survey that they reduced their number of drive alone trips as a result

³³ 6,606 households were targeted initially and 323 added mid-way through the program.

³⁴ Participation rate is the ratio between the number of participants and the overall size of the target audience. The number of participants used to calculate the 17% participation rate for *Cruz511 In Your Neighborhood* program includes participants enrolled. Participants enrolled may not have been from the households targeted.

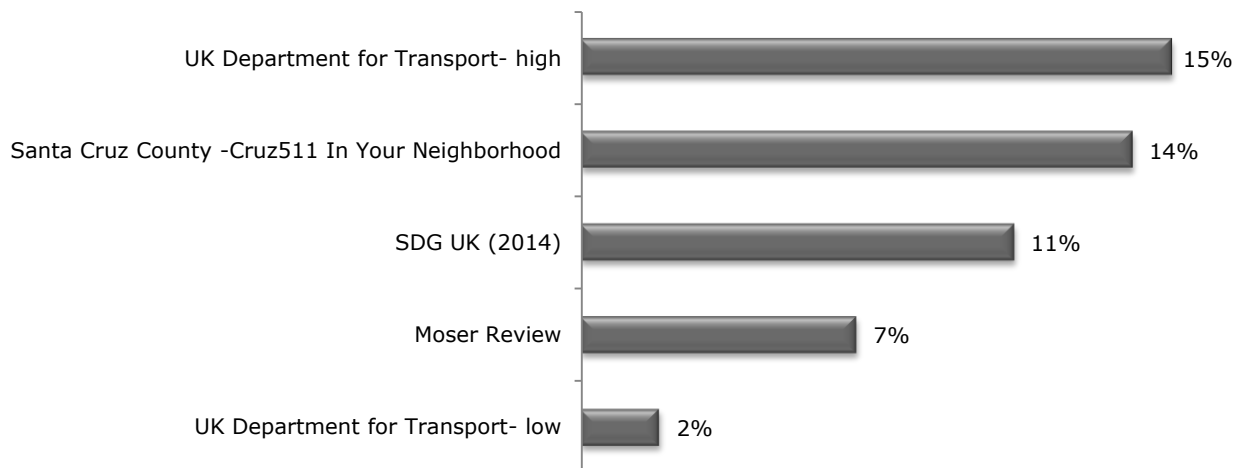
³⁵ The participation rate was compared to recent personalized travel planning projects undertaken by Steer Davies Gleave in Green Lake (Seattle), City of Issaquah and City of Puyallup, all in Washington State

of the *Cruz511 In Your Neighborhood* program³⁶ when compared to similar programs (Figure 27: Reduction of Weekly Drive Alone Trips Comparison). Only 41% of participants reported not changing the frequency of drive alone trips as a result of the *Cruz511 In Your Neighborhood* program when compared with 73% of comparison programs. Similarly, a greater number of participants reported decreasing the number of drive alone trips by one or more trips when compared with other programs.



The *Cruz511 In Your Neighborhood* program achieved an average reduction in drive alone trips of 14%, based on the change in average weekly drive alone trips from 6.93 to 5.95 (Table 5: Average Change in Trips and Mode Share). This is greater than the reduction in drive alone trips achieved by some similar personalized travel planning programs in the United Kingdom³⁷ and compared to an assessment of impacts of 'soft' transport policy measures, including personalized travel planning programs³⁸ (Figure 29: Comparison of Number of Drive Alone Trips Reduced).

Figure 28: Comparison of Number of Drive Alone Trips Reduced



³⁶ Figure 19: Drive Alone Trips Reduced per Week

³⁷ Programs undertaken by the United Kingdom Department of Transport and other United Kingdom Program reviewed by Steer Davies Gleave (2014). Lessons Learnt from Local Sustainable Transport Fund Projects.

³⁸ Moser, G. (2007). The effectiveness of soft transport policy measures: A critical assessment. *Journal of Environmental Psychology*.

Project Cost Comparison

The cost of the *Cruz511 In Your Neighborhood* program was analyzed by comparing the cost per participant to other programs and evaluating the cost of providing the *Cruz511 In Your Neighborhood* program outcomes and benefits. A cost comparison to similar programs was challenging due to the differences between programs, including the type of outreach conducted, if the program included new or repeated concepts and designs, and how different agencies reported program costs³⁹.

The *Cruz511 In Your Neighborhood* cost per participant was \$253 per participant including direct, contracted and staff expenditures associated with program development, implementation, analysis, and reporting (Table 7: Program Costs). Reported cost per participant of four similar programs, each which included either door-to-door outreach or other types of in-person contacts, ranged from \$50-\$264 per participant⁴⁰. Although the comparison of participation rates allowed for some evaluation of the *Cruz511 In Your Neighborhood* program's cost, it should be noted that the programs that reported a cost of less than \$100 per participant did not reflected the cost of staff resources required to support the program in their analysis. Implementation of similar programs in Santa Cruz County is expected to cost less overall because program research, concepts, and designs would be extended over more than one program.

The cost of the *Cruz511 In Your Neighborhood* program's impact on vehicle miles traveled and greenhouse gas emissions was also evaluated to allow for additional cost analysis. Information about the cost per vehicle mile traveled and greenhouse gas emissions reduced allows for a comparison of cost per unit to achieve the equivalent sustainable transportation benefits by other programs (Table 8: Cost Analysis).

Table 7: Cost Analysis

Cost Analysis	
Cost per participant	\$253
Cost per drive alone trips reduced over one year*	\$5
Cost per vehicle miles traveled reduced over one year*	\$1
Cost per pound of greenhouse gas emissions reduced*	\$1

*Assumes 100% sustainable travel choices for two months and 68% sustained travel choices for the additional ten months

³⁹ Many programs only reported consultant or other direct costs and did not report internal staff costs when documenting program costs.

⁴⁰ Comparison program included: Curb the Congestion-Evert Washington, North Coast Connected-Solano, Del Mar & Encinitas California, TravelSmart Program- South Australia, PerShoreTravel Choices Program in Birmingham, United Kingdom, Programs in Thurrock and Cheltenham, England. Only two of the programs for which participant cost information was available conducted in person outreach similar to the *Cruz511 In Your Neighborhood* program

Lessons Learned

Overall Reflections

- Implementing a variety of outreach methods (direct mail, travel advisors, events, and online communications) was effective in obtaining participation from households in different neighborhoods and participants who prefer the English or Spanish language resources.
- Visually appealing and content rich customized travel resources generated interest in the program and made useful information easy to understand.
- The focus on transportation services at the neighborhood level was effective in providing relevant information about transportation services and facilities. Partner agencies have expressed strong interest in utilizing the travel resources created specifically for *Cruz511 In Your Neighborhood* to support their program goals and/or expand the impact of the pilot program.
- Offering travel tools including a free bus day pass, blinking light, reflective slap band, and pedometer was one reason participants participated in the program and tried riding the bus, bicycling and walking. Asking program participants in the post-program survey how important these offerings were in influencing their participation could have provided additional information about the value of providing travel tools.

Major Successes

- The *Cruz511 In Your Neighborhood* approach reduced drive alone trips. This demonstrates that applying individualized marketing techniques to travel behavior can be an effective tool for reducing drive alone trips and increasing trips made by riding the bus, bicycling, walking, and carpooling in Santa Cruz County.
- Communicating with households through door-to-door communication using travel advisors was an effective strategy for enrolling participants and was an important outreach method for enrolling participation from households in the City of Watsonville and participants who prefer resources in Spanish, groups historically underrepresented in transportation planning efforts.
- Neighborhood scaled maps ensured information was relevant to the target audience. Neighborhood maps were an important strategy for generating interest in the program and supporting informed travel choices.
- The *Cruz511 In Your Neighborhood* program incorporated effective strategies for enrolling participation and providing information about travel choices when compared to similar programs. The pre- and post-program surveys provided a variety of indicators for measuring program effectiveness.

Challenges

- Response to the program invitation sent via direct mail did not enroll as many participants as projected. Sending a reminder by direct mail to households may have increased the direct mail response rate.
- Proposed program specific events were cancelled due to anticipated low participation, limited outreach, low response from community leaders, and staffing needs. Coordination with partner agencies for neighborhood events

could have resulted in generating stronger interest from community leaders and residents.

- Additional information about where people travel was needed to generate neighborhood specific carpooling information. The absence of neighborhood specific carpooling information may have resulted in overall less interest in carpooling when compared to riding the bus, bicycling, and walking.
- Post-program information from participants is helpful in evaluating the program effectiveness, but obtaining responses from all participants was challenging. Deploying travel advisors to obtain post-program information from all participating households may have increased the number of post-program surveys received.

Conclusion

The *Cruz511 In Your Neighborhood* program approach of providing customized materials designed for a neighborhood community segment and distributed using a variety of communication channels was successful in generating participation; resulted in changes in travel choices; and reduced vehicle miles

traveled, greenhouse gas emissions, and transportation costs, and increased calories burned. The program also provided a positive experience for *Cruz511 In Your Neighborhood* participants. Selecting neighborhoods as a community segment was beneficial for identifying common access to transportation services and popular nearby destinations. Developing visually appealing and content rich material attracted interest in the program and made useful information easy to understand.



A total participation of 1,202 individuals represented strong engagement. An overall balanced distribution of participants between the Central Watsonville and Eastside of Santa Cruz neighborhoods reflected the effectiveness of different communication channels to contact households. The 43% of participants that enrolled in the *Cruz511 In Your Neighborhood* program through travel advisors is an indicator that one-on-one communication at an individual's door-step is an effective way to enroll participants, especially in the Central Watsonville and amongst individuals whose preferred language is Spanish.

Providing customized travel resources and travel tools supported informed travel choices and motivated individuals to try a new mode. The *Cruz511 In Your*

Neighborhood program demonstrated that applying individualized marketing techniques to travel behavior change was effective in reducing drive alone trips. The program reduced one drive alone vehicle trip per week per participant resulting in -1,175 weekly drive alone trips reduced each week and 266,321 annual vehicle miles traveled each week removed from Santa Cruz County roadways.

The *Cruz511 In Your Neighborhood* Program was well received by participants and partner agencies as demonstrated by inquiries about how to reproduce materials to serve other neighborhoods and positive comments from participants. The program design provided a framework for applying similar techniques to different community segments within Santa Cruz County and scaled based on available resources.

Appendices

Appendix A: Program Review

Appendix B: Introductory Postcard

Appendix C: Program Invitation

Appendix D: Customized Travel Resources

Appendix E: Travel Resource List

Appendix F: Post-Program Survey

Appendix G: Average Weekly Trips by Mode Comparison

Appendix H: Program Opinions and Travel Change Stories