

Ecology Action
SANTA CRUZ COUNTY ELECTRIC BIKE PROGRAM
Evaluation-- FY 2003/04

Program Goal (1)

Tasks to maintain the program were implemented throughout the fiscal year, as follows:

- (a) **PROMOTION:** The program was promoted through the Ecology Action website and appropriate community web links, which included:
- Santa Cruz Area Transportation Management Association
 - Bike To Work
 - Community Traffic Safety Coalition
 - Santa Cruz County Regional Transportation Commission—Commute Solutions
 - Monterey Bay Unified Air Pollution Control District
 - Electric bike vendors—Subaru, Cycle Works, Electric Sierra Cycles

Program promotion materials were provided to the same community based organizations, local government agencies and business partners for distribution to the public during their own outreach events. Information cards printed as business cards were provided to all new program participants, giving them a convenient way to promote the program with other residents when asked about their electric bike.

- (b) **RECRUITMENT:** Program participants were continually recruited with the goal of engaging 38 new County residents per month on average. The average thus far in FY 2003/04 has been 16 residents per month. We anticipate the average will increase to 24 per month by the end of the fiscal year as most program activities occur between the months of April and October.
- (c) **Administrative systems** were maintained throughout the year, including:
- applications and follow-up surveys from participants;
 - vendor contracts and relationships;
 - the “buyer incentive” subsidy portion of the program; and
 - compliance with contract regulations from all funding sources.

Program Goal (2)

Tasks beyond those necessary to maintain the program were identified and implemented , as follows:

- (a) The local work force was targeted for program recruitment through two alternative transportation workshops coordinated by the Santa Cruz Area Transportation Management Association (SCATMA), which drew 27 department and HR managers representing 16 local employers and over 7,000 employees. A third workshop is planned for May 11th.
- (b) In cooperation with the SCATMA, interest-free bike loan funds were reserved for program participants with physical challenges and those on fixed income assistance programs.
- (c) One permanent fleet of 35 bikes was established within the City of Santa Cruz for residents of a high density housing complex located on the West Side, Schaeffer Apartments. The fleet was purchased by the complex owner, Pacific Shores Development.

Program Goal (3)

The program was analyzed through process and outcome evaluative procedures as follows:

(a) Process evaluation was conducted on a monthly basis and reported to the SCCRTC and the Monterey Bay Unified Air Pollution Control District in the form of a brief narrative report. The evaluation determined whether all tasks as outlined on the work scope had been completed within a timeframe conducive to the continued success of the program. Year to date progress on the forecasted budget was also monitored and reported monthly.

(b) Outcome evaluation was conducted on a monthly basis and reported to the funding sources in the form of an excel spreadsheet showing the following data, the most recent of which is *Attachment 1* of this report:

- (1) Quantity of program participants;
- (2) Number and dates of safety trainings; and
- (3) Status of vendor sales of all subsidized bikes and scooters.

(c) Data Analyzed—Data was analyzed from baseline and follow-up surveys received from 9/1/03 through 3/31/04. The data gathered prior to that timeframe already was reported to the SCCRTC, (refer to the *Executive Summary* of the final report from Phase 1 and 2, *Attachment 2* of this report.) The recent data is summarized here below under (d), *Benchmarks of Success*.

(d) Benchmarks of Success— We anticipated that the outcomes for Phase Three of the program would be similar or improved from the outcomes documented in the *Final Evaluative Report* for Phases One and Two in the categories listed below. The outcome data from 9/1/03 through 3/31/04 is as follows:

(1) The number and demographic profile of program participants:

- 96 new program participants who attended 9 safety training workshops
- 88 workshop attendees purchased subsidized electric bikes (92% of total)
- 14% of the new program participants were seniors, disabled, agricultural workers, or receive government assistance. Note that 41.2% of the program participants from Phase 1 and 2 of the project fit into these categories.
- 46% of the new program participants used a single occupied auto exclusively prior to purchasing an electric bike. Note that 62% of the program participants from Phase 1 and 2 of the project fit into this category.

(2) The commute corridors receiving the benefit of congestion mitigation:

- The Soquel Avenue/Drive corridor continued to be the most heavily used among new electric bike purchasers.

- 2nd corridor most used -- East Cliff/Eaton/Portola
- Tied for 3rd place—
Water St., Capitola Rd., 41st Ave. and Hwy 1/Mission/Parallels
- Downtown Santa Cruz continued to be the most frequent destination, with UCSC/Bay Avenue , 41st Avenue and Cabrillo as the second, third and fourth most frequent destinations respectively.
- Scotts Valley and Watsonville continued to be the areas with the most potential for program expansion.

(3) The number of average miles ridden per week per rider:

On average, new program participants used their electric bikes 4 days per week, riding an average of 27 miles per week.

(4) The satisfaction level of participants with the program, the equipment and vendor service:

- Application and safety training process— 94% high satisfaction
- Satisfaction with equipment— 84% “delighted” or “satisfied”
- Satisfaction with vendor service-- 84% “delighted” or “satisfied”

Attachment 1: • Program to date transactions by vendor and safety training participation
• Same information—activities from 9/1/03 through 3/31/04

Attachment 2: • Executive Summary, Phases 1 and 2

Attachment 1

PROGRAM TO DATE VENDOR & SAFETY TRAINING ACTIVITIES--			
(VEHICLES SOLD & SAFETY TRAINING FROM SEPTEMBER 2000 TO MARCH 2004)			
		UNITS	REBATES
CYCLE WORKS	BICYCLES	49	\$ 21,175.00
ELECTRIC SIERRA	BICYCLES	581	14
	KITS	34	
	RECUMBENT	1	
	TRYKES	8	
	TANDEM	2	
	TOTAL UNITS	626	\$ 276,625.00
SUBARU	BICYCLES	274	
	SCOOTERS	2	
	TOTAL UNITS	276	\$ 106,290.00
The Bicycle Trip	BICYCLES	1	\$ 375.00
Scotts Valley Cyclesport	BICYCLES	5	\$ 2,500.00
Armadillo	BICYCLES	1	\$ 250.00
	TOTAL REBATES		\$ 407,215.00
SUMMARY			
	BICYCLES	911	
	KITS	34	
	RECUMBENT	1	
	TRYKES	8	
	TANDEM	2	
	SCOOTERS	2	
	TOTAL SOLD	958	
TOTAL PERSONS TRAINED TO DATE		1307	

VENDOR & SAFETY TRAINING ACTIVITIES-- 9/2/03 THROUGH 3/31/04:			
Number of residents attending safety training	96		
Number of safety training workshops	9	9/4/03	12/9/03
		9/18/03	1/27/04
		9/27/03	2/21/04
		10/23/03	3/11/04
		11/12/03	
Total Bikes Sold	88		
Electric Sierra Cycles		64	
Subaru of Santa Cruz		15	
Pacific Alternative Energy		7	
Bicycle Trip		1	
Cycle Works		1	

Attachment 2:
Santa Cruz County Electric Bike Commuter Incentive Program
Final Evaluative Report—Phases 1 & 2
All program activities from March 2000 through August 2003

Executive Summary

The purpose of the Santa Cruz Electric Bike Program has been to encourage the regular use of cost effective, appropriate electric transportation technology to reduce single occupancy auto trips, traffic congestion, neighborhood traffic volumes and speeds, parking demand and air pollution. The program has combined an attractive financial incentive, infrastructure support and safety education to encourage regular electric bike commuting among residents of the county. In May 1999, the Santa Cruz County Regional Transportation Commission gave its approval for Ecology Action, a local non-profit, to design the program, secure the funding and implement three phases of program activities. The purpose of this report is to document and analyze the goals, tasks and outcomes accomplished during program Phases 1 and 2 from March 2000 through August 2003 under funding from the Santa Cruz County Regional Transportation Commission and the Monterey Bay Unified Air Pollution Control District. The program will continue with Phase 3 supported through funding from the Santa Cruz County Regional Transportation Commission effective 7/1/03. Highlights of the program's accomplishments thus far:

- During Phases 1 and 2, 879 Santa Cruz County residents purchased subsidized electric bikes and 1,211 residents received free safety training under the program. In addition, the program vendors sold over 1,100 electric bikes and scooters not subsidized by the program.

- Based on the follow-up survey data, the 879 program participants have been riding on average 3+ days per week, averaging 24 to 28 miles per week. (In the baseline survey, participants predicted they would ride between 30 and 40 miles per week. We are citing the follow-up survey data as a more accurate estimate. Note that this data is the mean, or arithmetic average, number of miles and days ridden per week.)

- 62% percent of program participants switched from driving exclusively in a single-occupied auto to improving their health and helping their community by riding an electric bike. Over 80% indicated that they would drive solo at least part of the time if they did not have an electric bike.
- 96% of participating Santa Cruz residents have deemed the safety training and application process to be accessible and easy.
- 41.2% of program participants served thus far have been agricultural workers, seniors, retired, disabled or receive government assistance.
- 39.5% of participants heard about the program through family or friends, and 22% learned of the program through one of the vendors.
- 97% of participants would recommend riding an electric bike to a friend, 84% of participants think the bikes are easy to use, and 77% of participants are "very satisfied" with vendor customer service.
- The Soquel Avenue/Soquel Drive corridor is the most heavily traveled by electric bike riders.
- Downtown Santa Cruz is the most frequent destination of electric bike riders
- UCSC/Bay Avenue and 41st Avenue are the 2nd and 3rd most frequent ebike destinations.
- The greatest potential for program expansion exists in Scotts Valley and Watsonville.
- The overall cost per "ebike" mile from PUBLIC FUNDS for Phase 1 and 2 ranges from 7.9 cents to 9.2 cents, with an anticipated REDUCED cost per mile from public funds for Phase 3 to be 5.3 cents to 6.2 cents.

- The overall administrative cost of the program during Phase 1 and 2 has been 9.4% of the total public funds, with 17% going to direct program staff implementation and 73.6% going to program material costs, including bike subsidies. For Phase 3, we anticipate these costs will be 2% of the total public funding going toward administration, 12% for program staff implementation time, and 86% for program material expenses, including bike subsidies.
- For Phases 1 and 2, in-kind non-public support for this program has matched 15% of the public funds, with this trend continuing for Phase 3.

This is an alternative transportation program that residents have embraced and referred to repeatedly as “cutting edge”. The program has given participants the flexibility of car travel without the cost and congestion, and the range of a bus without being tied to a timetable. It has worked well while complementing the existing Metro system and has assisted residents who still use their cars 50% or more of the time.