

CHAPTER 3

CURRENT BICYCLING CONDITIONS

3.1 BICYCLE REGISTRATION AND LICENSING

The State of Hawaii requires the registration and licensing of all bicycles with a wheel diameter of 20 inches or more (§249-14, HRS). Effective January 1, 1999, the registration program shifted from a biennial process (once every two years), to a \$15.00 one-time or permanent registration process (see Table 3-1). Registration is optional for bicycles with wheels less than 20 inches in diameter, though it is recommended as a means of facilitating the return of recovered stolen bicycles. Registration of new bicycles is handled by dealers at the point of sale. Transfer of ownership must be reported and costs \$5.00. All fees are deposited in a Bikeway Fund that is administered by the county in which the monies are collected (see Chapter 8).

Table 3-2 shows bicycle registration data for 2000 and 2001. Although data for prior years can be found in the *State of Hawaii Data Book*, they reflect different registration rules and apparent differences from county to county about what data to report (in some cases, the aggregate number of licensed bicycles, while, in other cases, the number of licenses issued in a given year). This variability renders the historic data unsuitable for trend analysis. However, since 2000, the data appear to be a consistent reflection of annual registration activity. In 2000, there were a total of 31,353 new registrations statewide. The number of new registrations in 2001 increased by 757 (2.4%) for a total of 32,110 statewide.

Theoretically, the current registration system will let planners know how many new bicycles are entering the pool of bicycles on each island. Over time, this will provide an increasingly accurate picture of the total number of bicycles in the state, with the following caveats:

- undercounting of bicycles with wheel diameters under 20 inches, primarily children's bikes
- undercounting of bicycles brought into the state with other household goods and unregistered because of unfamiliarity with the State's licensing requirement
- overcounting of bicycles that are destroyed or "junked"

Accuracy would be further improved if registration data on bicycles and mopeds were reported separately.

**Table 3-1
History of Bicycle Registration in Hawaii**

Prior to November 1, 1988	Annual registration	\$3 for bicycles with wheel diameter at least 16"
November 1, 1988– December 31, 1998	Biennial registration	\$8 for bicycles with wheel diameter at least 20"
Beginning January 1, 1999	Permanent (one-time) registration	\$15 for bicycles with wheel diameter at least 20"

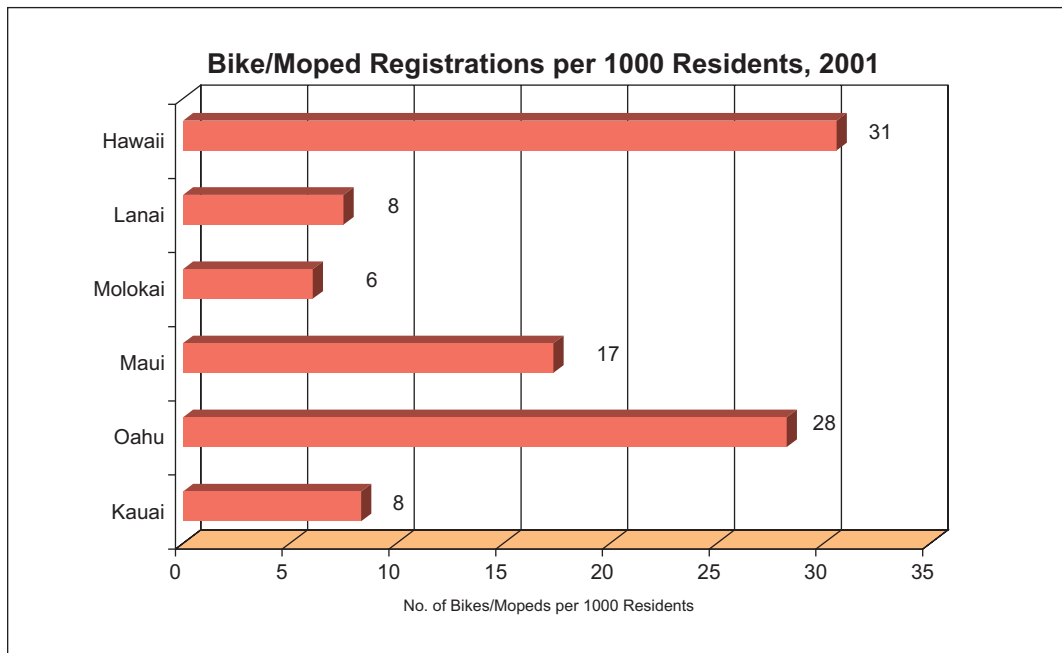
**Table 3-2
Bicycle and Moped Registrations by Island, 2000–2001**

	2000		2001	
	Registrations	Percent	Registrations	Percent
Kauai	1,095	3.5%	488	1.5%
Oahu	21,842	69.7%	24,777	77.2%
Maui	3,485	11.1%	2,225	6.9%
Molokai	183	0.6%	45	0.1%
Lanai	55	0.2%	24	0.1%
Hawaii	4,693	15.0%	4,551	14.2%
State Total	31,353	100.0%	32,110	100.0%

Source: 2001 State Data Book, Department of Business, Economic Development, and Tourism. Verification by correspondence from County of Kauai, City and County of Honolulu, and County of Hawaii.

Although the City and County of Honolulu registered the largest number of bicycles and mopeds, when the data are standardized, the highest proportion of new registrations occurred on the island of Hawaii. As shown in Figure 3-1, there were 31 new registrations per 1,000 residents on the Big Island, compared to 28 on Oahu. Registrations were also relatively high on Maui at 17 per 1,000 residents.

Figure 3-1



Source: 2001 State Data Book, Department of Business, Economic Development, and Tourism. Ratios calculated based on number of bicycle/moped registrations in 2001 and population counts as of the 2000 census.

3.2 INVENTORY OF BICYCLING FACILITIES

Statewide, there are approximately 208 miles of bicycle facilities. Of these, approximately half (101 miles) are signed shared roads (formerly called “bicycle routes”). In addition, there are approximately 59 miles of bike lanes and 48 miles of shared use paths. Oahu has the largest number of bicycle facilities (98 miles), while Molokai and Lanai have no bicycle facilities in the official inventory.

Bicycle facilities have almost doubled since 1994. The largest mileage increase occurred on Oahu where 38 miles of bike facilities were added since the last plan was published. The largest percentage gains were experienced on Kauai (up 484%, from 3.8 miles in 1994 to 22.2 miles in 2002) and the Big Island (up 281%, from 7.2 miles in 1994 to 27.4 miles in 2003). On Maui, bicycle facility mileage increased from 33.8 miles to 60.4 miles, an increase of 79%. All islands also saw significant improvements in highway shoulders, but these changes are not reflected in the official inventory.

**Table 3-3
Inventory of Bicycle Facilities in the State of Hawaii, 2003**

Island	Signed Shared Road Length (mi.)	Bike Lane Length (mi.)	Shared Use Path Length (mi.)	All Facilities Length (mi.)
Kauai	14.5	1.2	6.5	22.2
Oahu*	30.1	33.6	34.3	98.0
Maui	37.8	21.6	1.0	60.4
Hawaii	18.3	2.8	6.3	27.4
Statewide	100.7	59.2	48.1	208.0

* Includes the Honolulu Primary Urban Center (PUC)

Source: State Department of Transportation; Field verification and update by Kimura International, Inc.

**Table 3-4
Bicycle Facility Miles Added Since the 1994 Plan**

Island	Signed Shared Road Length (mi.)	Bike Lane Length (mi.)	Shared Use Path Length (mi.)	All Facilities Length (mi.)
Kauai	11.7	1.2	5.5	18.4
Oahu*	12.5	13.0	13.0	38.5
Maui	5.8	19.8	1.0	26.6
Hawaii	11.1	2.8	6.3	20.2
Statewide	41.1	36.8	25.8	103.7

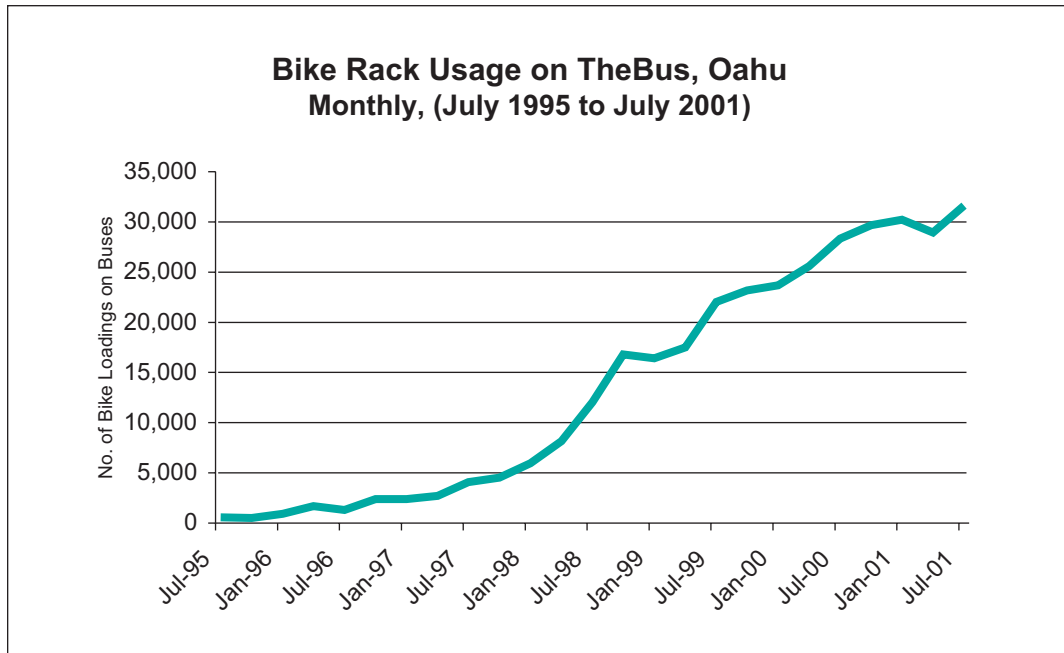
* Includes the Honolulu Primary Urban Center (PUC)

Source: Kimura International, Inc.

3.3 BICYCLES ON BUSES

One of the most significant gains accomplished since 1995 has been the modal integration of bicycle and bus transportation on Oahu. Figure 3-2 shows a sharp climb in the number of bicycle loadings onto buses between July 1995 and July 2001. Although the labels on the horizontal axis of the chart are shown in six-month intervals, the line represents monthly data. During the six-year period examined, bike rack usage increased from virtually zero to more than 30,000 per month. According to bus officials, the explanation is simple: as more buses were outfitted with bike racks, more bicyclists started using them.

Figure 3-2



Source: Department of Transportation Services, City and County of Honolulu, 2001

3.4 BICYCLE ACCIDENTS

The following charts contain data for major traffic accidents involving bicycles. A major traffic accident is an accident that results in death, injury, or property damage of \$3,000 or more. The threshold for property damage only (PDO) accidents increased from \$1,000 to \$3,000 in 1995.

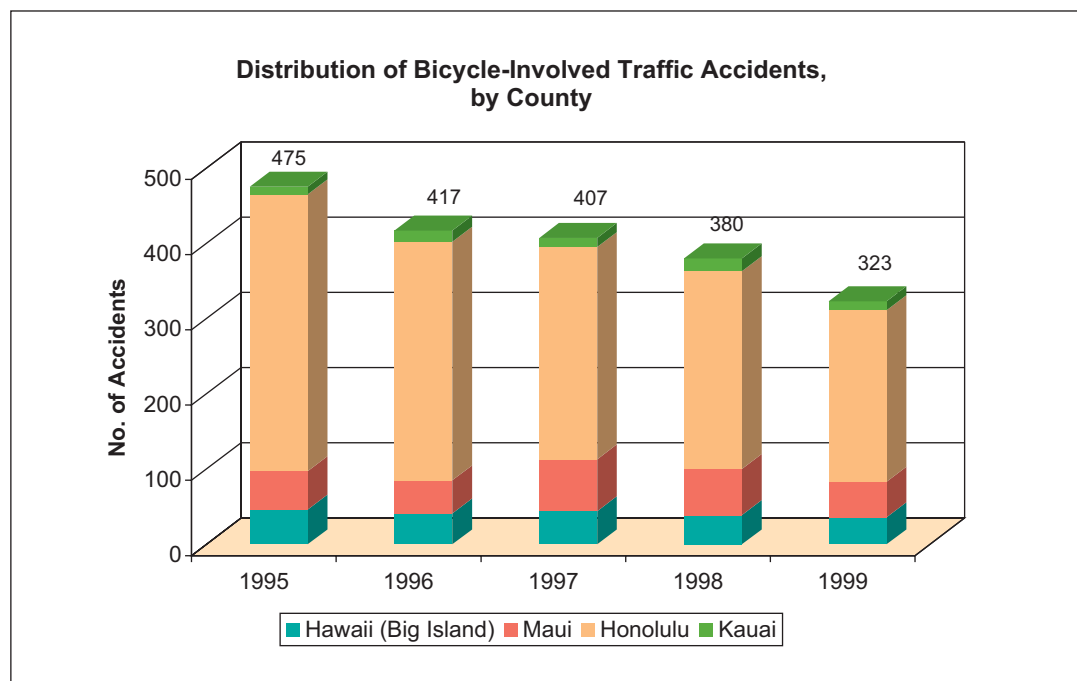
For the state as a whole, the number of major traffic accidents involving bicycles declined steadily from 1995 to 1999. There were 475 accidents in 1995 compared to 323 in 1999 (see Table 3-5, Figure 3-3). The decline was most noticeable on Oahu. Although the most populous island experiences the largest number of accidents (228 in 1999), the number of accidents dropped each year over the 5-year period. Accident numbers fluctuated in the other counties. Maui experienced the largest fluctuation, ranging from a low of 44 major accidents in 1996 to 69 the following year. Accident data are disaggregated by type in Table 3-6.

Table 3-5
Major Traffic Accidents Involving Bicycles, by County, 1995-1999

County	1995	1996	1997	1998	1999
Kauai	10	15	12	17	12
Honolulu	368	317	282	263	228
Maui	51	44	69	61	47
Hawaii	46	41	44	39	36
Statewide	475	417	407	380	323

Source: State of Hawaii, Department of Transportation

Figure 3-3



Source: State of Hawaii, Department of Transportation

Table 3-6
Detailed Accident Breakdown by County, 1995-1999

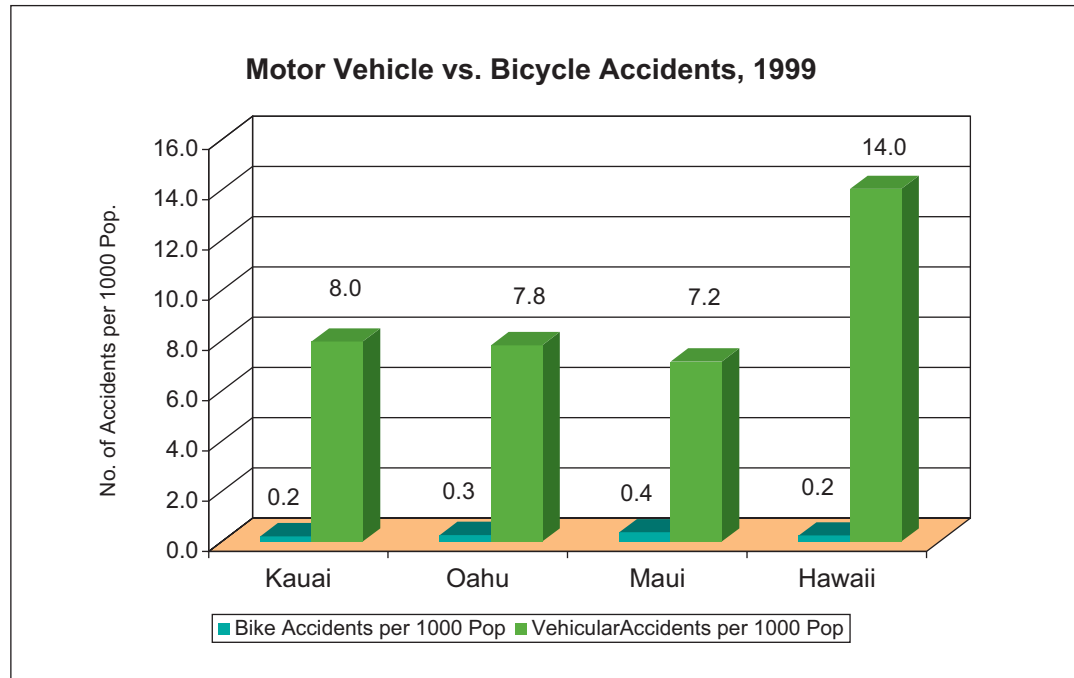
	Year	Fatal	Injury	PDO*	Total
Kauai	1995	1	9	0	10
	1996	0	15	0	15
	1997	1	10	1	12
	1998	0	17	0	17
	1999	0	11	1	12
Honolulu	1995	4	354	10	368
	1996	3	311	3	317
	1997	0	277	5	282
	1998	0	258	5	263
	1999	0	223	5	228
Maui	1995	0	51	0	51
	1996	2	42	0	44
	1997	0	69	0	69
	1998	1	60	0	61
	1999	1	46	0	47
Hawaii	1995	0	46	0	46
	1996	0	39	2	41
	1997	0	43	1	44
	1998	0	39	0	39
	1999	0	34	2	36

* PDO = Property Damage Only

Source: State of Hawaii, Department of Transportation

Figure 3-4 shows that bicycling in Hawaii is a relatively safe activity. Accident rates range from 0.2 to 0.4 per 1,000 residents. "Per capita" rates of bicycle accidents are not ideal measures—much preferred would be an indication of bicycle accidents relative to bicycle miles ridden or some other measure of exposure. Because bicycle use is less common than automobile use, it is not surprising that the likelihood of being in a motor vehicle accident is higher. However, a key comparison in Figure 3-4 is the ratio for Oahu compared to the other islands. By observation, bicycles are ridden more frequently on Oahu (i.e., exposure is higher), yet accidents occur at about the same rate as the other islands.

Figure 3-4



Source: State of Hawaii, Department of Transportation, 2001

3.5 USER SURVEYS

3.5.1 SURVEY OF WORKSHOP PARTICIPANTS

During the first round of community workshops, held in November 2001, participants were asked to complete a one-page questionnaire (see Appendix A). 118 completed questionnaires were collected after nine of the workshops and two more were mailed back for a total of 120 usable questionnaires and a response rate of 82%.¹ The findings of this survey represent the views and opinions of those who filled out the questionnaire and cannot be generalized to the larger community. Nevertheless, the results help to understand the concerns and preferences of one segment of the bicycle-riding public.

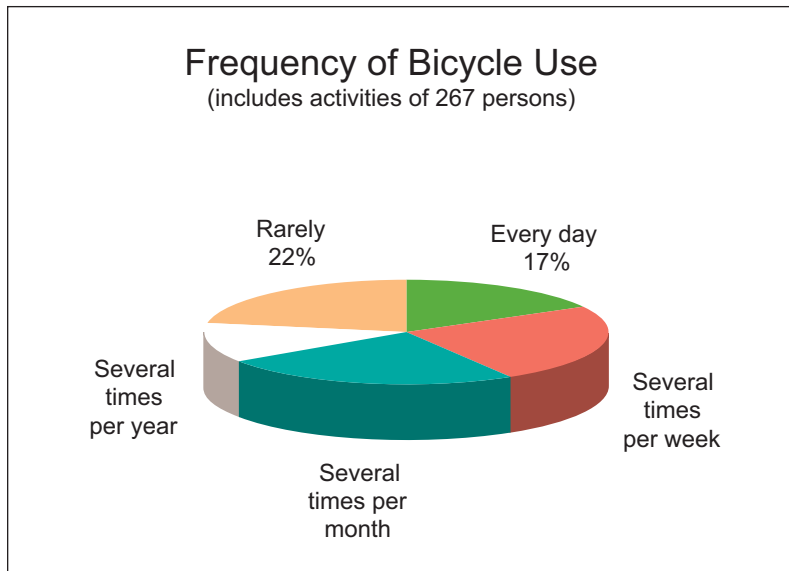
The 120 respondents who completed questionnaires reported ownership of 368 bicycles. The pool of respondents included 6 households with zero bicycles. The remaining 114 households average 3.2 bicycles per household.

¹ Participants were asked to complete one questionnaire per household. To the extent that more than one household member was present at the workshop, the response rate will inevitably be less than 100%. Because the Puna workshop was cancelled due to no-shows, no questionnaires are available from this venue.

Frequency of Bicycle Use

Respondents were asked to describe how frequently members of their household ride their bicycles—including themselves and three other members. Using this querying technique, the survey obtained information on 267 household members. Of these, 107 persons or 40% ride their bicycles several times a week, if not every day (Figure 3-5). Another 62 persons (24%) use their bicycles several times a month. Overall, more than 3 out of 5 household members are out bicycling at least once a month. At the same time, 1 out of 5 rarely rides a bike.

Figure 3-5



Source: Data collected during Round 1 series of public workshops.

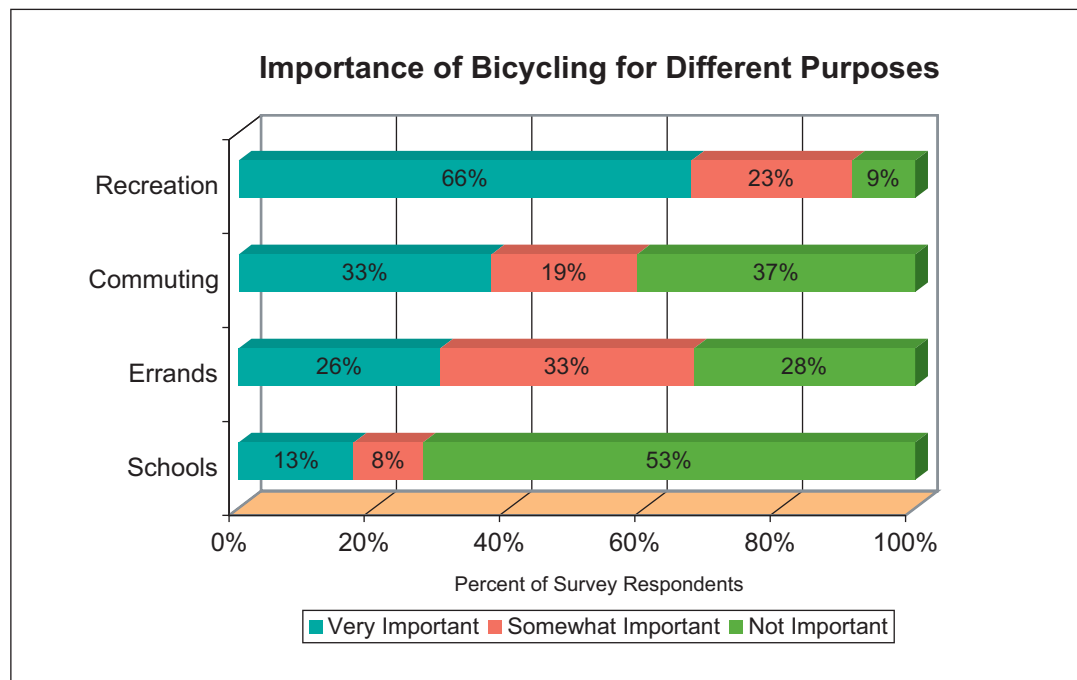
Purpose of Bike Use

Why are people on their bikes? By far, recreation was cited most frequently as the reason why people use their bicycles (Figure 3-6). Fully 90% of respondents said that bicycling is an important recreational activity within their household. A third of all respondents reported that bicycling is *very important* for purposes of commuting to work. Another 19% of respondents said that bicycling is *somewhat important* for commuting purposes. Adding these two categories, more than half of the respondents indicated that household members use bicycles for commuting to some extent.

Although only one-quarter of the respondents reported that bicycling is *very important* for shopping and other errands, when combined with respondents who said that bicycling is *somewhat important* for this purpose, almost 60% of the represented households use bicycles for errands at least occasionally.

The lowest category of bicycle use is for commuting to school with 21% of respondents indicating that bicycling is either *very important* or *somewhat important* in traveling to schools. In part, the low percentages of use in this category may reflect the fact that, for the most part, adults completed the questionnaire. Alternatively, the low percentages may reflect the low density of development in many workshop regions (including the neighbor islands and suburban Oahu). Since low-density development does not have the same dampening effect on commuting and errands, the results suggest that children are not bicycling to the extent that adults are, or face different constraints than adults.

Figure 3-6



Source: Data collected during the Round I series of public workshops.

Inter-island Differences

Are there different patterns of bicycling use across the four major islands? There are slight variations, as seen in Table 3-7. Bicycling on Oahu is slightly less important across the board. Respondents on Kauai and Maui, on the other hand, expressed relatively strong bike usage—notably for running errands on Kauai and for going to school on Maui. For recreational purpose, the island breakdown shows consistently high responses for the importance of bicycling.

Table 3-7
Percentage of Respondents who Feel that Bicycling is “Very Important” or “Somewhat Important” for Various Purposes

	Kauai	Oahu (Rural/Suburban)	Maui	Hawaii
Commuting to School	17%	18%	31%	19%
Errands	75%	48%	69%	58%
Commuting to Work	67%	42%	69%	51%
Recreation	92%	82%	100%	90%
Total Number of Respondents	12	33	16	59

Source: Data collected during Round 1 series of public workshops.

What do People Like about Bicycling in their Community?

Respondents were asked to write in responses to this open-ended question. Responses were post-coded, grouped by similarity, then ranked by frequency as shown in Table 3-8. The largest number of respondents—25 or 21%—stated that bicycling is beneficial as an alternative form of transportation, with the related points that bicycles are cheaper to operate than cars, better for the environment, and sometimes a faster means of getting to desired destinations. Exercise and fitness were identified by 20 respondents (17%). Also prominent, were responses related to Hawaii’s favorable environment, including the opportunity to be outdoors, the scenic beauty found in many communities, and good weather. Several people mentioned that their neighborhoods are particularly conducive to bicycling because there is little conflict with cars and they enjoy plenty of road space.

Table 3-8
What Respondents Like about Bicycling

	Number of Respondents	Percent of Respondents
Alternative transportation	25	21%
Exercise	20	17%
Being outdoors	14	12%
Enjoying scenery	14	12%
Low conflict with cars	11	9%
Plenty of road space	9	8%
Good weather	8	7%

Note: Percentages based on 120 completed questionnaires. Question was open-ended. Respondents were allowed to write multiple responses that were subsequently post-coded. Therefore, the total may exceed 100%.

Source: Data collected during Round 1 public workshops.

What Problems do Bicyclists Face in their Community?

Another open-ended question asked respondents to identify problems or barriers for bicyclists. In general, this question elicited a greater number of comments than the previous question, and a higher number of repeats among the comments. Topping the list of problems (Table 3-9) is the lack of road space, including narrow roads and inadequate shoulders, mentioned by 45 persons (38%). Heavy traffic volumes and high speeds, leading to perceived danger, were expressed by 23 persons (19%). A related issue was lack of off-road facilities or bike paths, that respondents felt would provide a safer bicycling environment. 15 persons reported poor road maintenance as a hazard for bicyclists, and 12 persons each mentioned hostile or aggressive drivers and obstructions in the bikeway, such as signs and parked cars.

Table 3-9
Problems Respondents Face when Bicycling

	Number of Respondents	Percent of Respondents
Lack of road space	45	38%
High traffic volume/speed	23	19%
No off-road facilities (“paths”)	19	16%
Poor road maintenance	15	13%
Hostile drivers	12	10%
Obstructions	12	10%

Note: Percentages based on 120 completed questionnaires. Question was open-ended. Respondents were allowed to write multiple responses that were subsequently post-coded. Therefore, the total may exceed 100%.

Source: Data collected during Round 1 public workshops.

Other Concerns

Finally, respondents were asked to write down concerns that might be related to any of the 5 “E”s—engineering, education, enforcement, economics, and encouragement. The comments in this section tended to be more prescriptive in nature. Accordingly, the categories in Table 3-10 are written in the form of recommended changes. 25 people wanted better education of motorists and bicyclists about the rules of the road. 16 people would like to see design guidelines that provide adequate bike facilities (of sufficient width) and would like these guidelines attached to new urban development. 13 people raised the need for increased political commitment and funding to implement bike proposals. Ten people focused specifically on the desirability of more bike paths.

Table 3-10
Other Bicycling Concerns

	Number of Respondents	Percent of Respondents
Educate motorists and bicyclists about traffic laws	25	9%
Develop design guidelines for bike facilities	16	6%
Increase political commitment for bike improvements	13	5%
Build more bike paths	10	4%

Note: Percentages based on 120 completed questionnaires. Respondents could write multiple comments to this was an open-ended question; therefore, the total may exceed 100%.

Source: Data collected during Round 1 public workshops.

3.5.2 TELEPHONE SURVEY

To broaden the population base from which bicycle user data was obtained, a telephone survey was conducted in February 2002. The telephone survey reached a cross-section of 402 residents on the islands of Oahu, Kauai, Maui and the Big Island. On Oahu, the survey was limited to households in the Leeward, Central, Windward, and East Honolulu regions and excluded Urban Honolulu. The survey's geographic coverage corresponded to the scope for updating *Bike Plan Hawaii*.

The final results can be generalized *only* to the surveyed areas as a whole. For the total sample of 402, the maximum sampling error is +/- 4.9% at a 95% confidence level.

Sampling was proportionate to each area's representation in the identified population, as follows:

	% Target Population	Final Number of Interviews
Kauai	6%	25
Oahu (selected areas)	59%	237
Maui	15%	59
Hawaii (Big Island)	20%	81

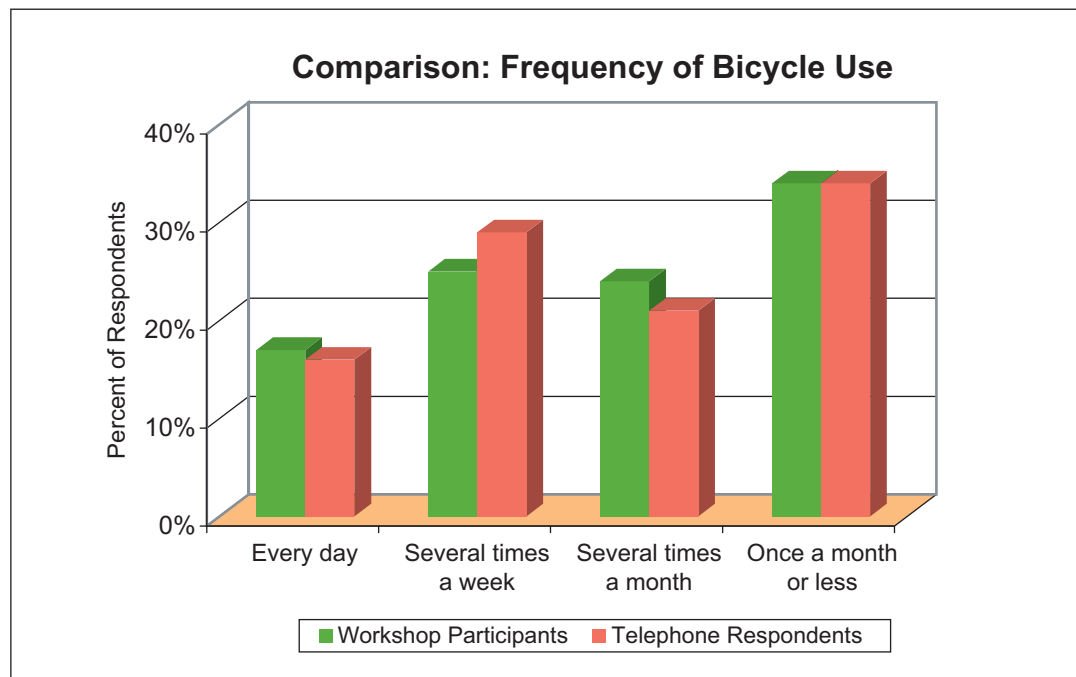
Field dates for the telephone survey were February 10 to 13, 2002. Interviews were based on a questionnaire with interviews averaging 10 minutes. (The questionnaire is reproduced in Appendix A.) The sampling frame was generated at random by the survey research firm using a random digit dialing program. This random-digit dialing method includes unlisted, as well as listed telephone numbers, helping to promote an unbiased sample. All interviewing was conducted from the Ward Research Calling Center. Interviews were conducted between the hours of 5:00 p.m. and 9:00 p.m. on week nights and 9:00 a.m. to 9:00 p.m. on weekends.

The questionnaire used in the telephone survey contained several questions that were identical to the survey administered to workshop participants. This enables a comparison between workshop participants (presumably those with a higher intrinsic interest in bicycling) to a broader sample of the state's population. Thus several charts below show responses from the two surveys side by side.

Frequency of Bicycle Use

There is a high degree of similarity in the frequency of bicycle use between workshop participants and telephone survey respondents (Figure 3-7). In both groups, the same percentage of people (66%) reported that they ride their bicycles regularly—at least several times a month. Telephone respondents were slightly less likely to ride every day; however, they were slightly more likely to ride several times a week.

Figure 3-7

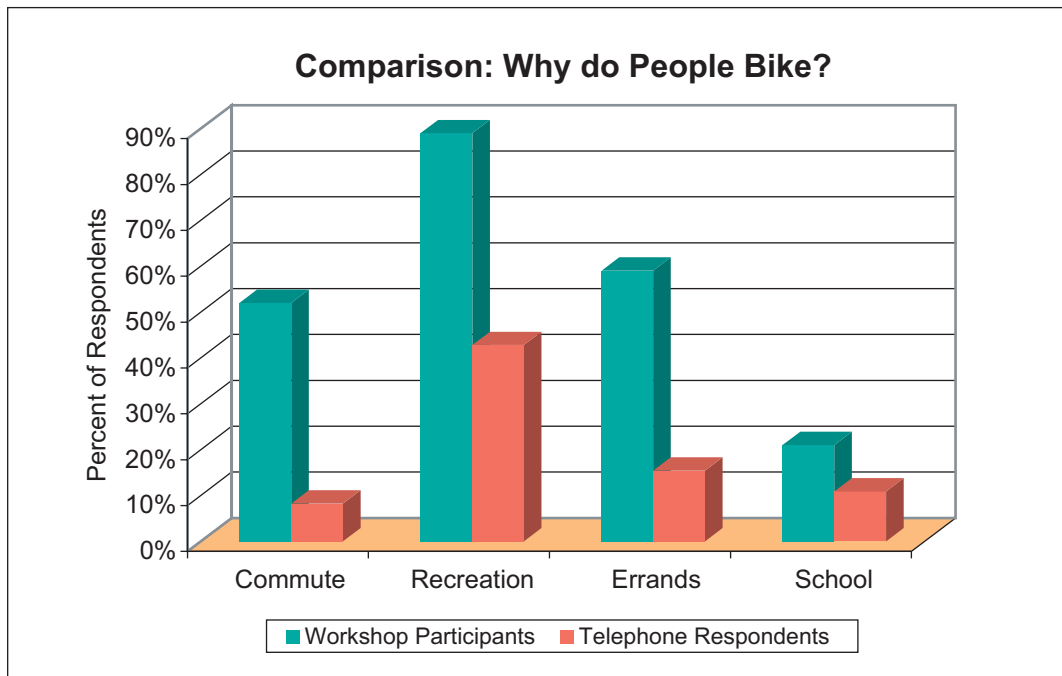


Source: Kimura International, Inc., 2002

Purpose of Bicycle Use

The survey asked respondents to indicate the importance of bicycling for four different purposes: commuting to work, recreation, running errands, and commuting to school. Telephone respondents were most likely to say that bicycling is *important* or *somewhat important* for recreational purposes, and least likely to say that bicycling is *important* or *somewhat important* for commuting to work, as seen in Figure 3-8. Across all four categories, bicycling is less important for telephone respondents than for workshop participants. For example, in the recreation category, approximately 43% of telephone respondents said that bicycling is *very important* or *somewhat important*, compared to 89% of workshop participants.

Figure 3-8

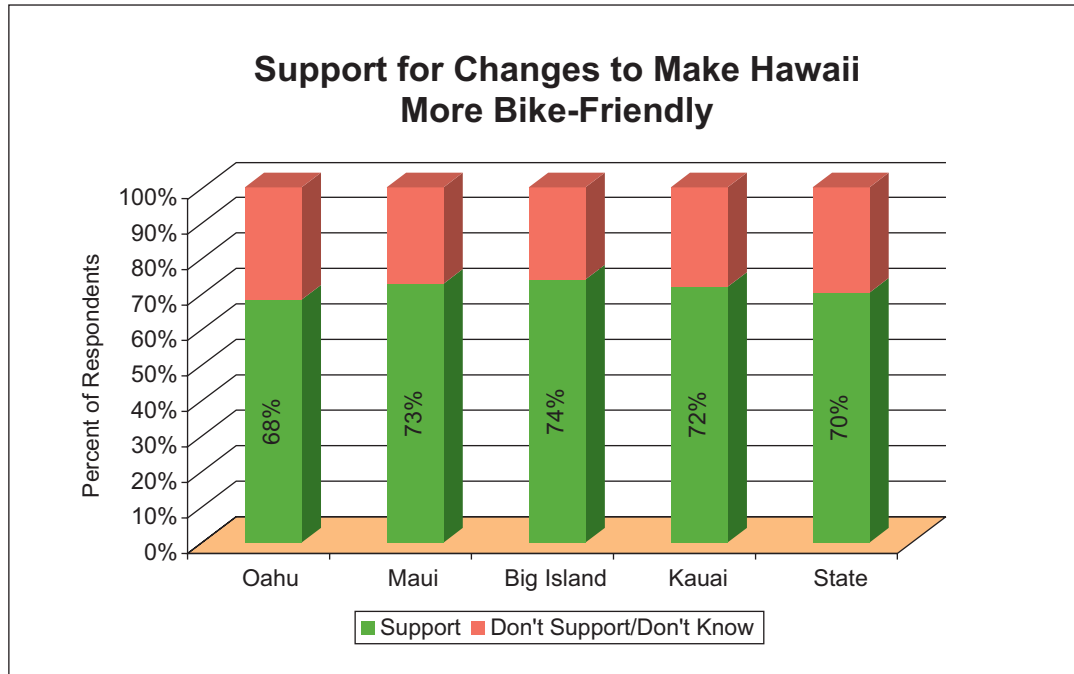


Source: Kimura International, Inc., 2002

Support for Improvements to the Bicycling Environment

Telephone respondents were asked whether they would support changes to make Hawaii more “bicycle friendly.” Seventy percent of all respondents replied affirmatively. In Figure 3-9, only the bar farthest to the right (representing the total sample) is statistically significant—in other words, there is a 95% probability that the result is non-random and the finding can be generalized to the study area as a whole. The same claim cannot be made for the island-specific results, nevertheless it is interesting to note that the island-by-island breakdown shows a consistently high degree of support for bicycle improvements among the survey respondents. A follow-up question asked if the respondent would support the *use of government funds* to improve the bicycling environment. Overall, 73% of respondents supported public funding.

Figure 3-9



Source: Kimura International, Inc., 2002

When asked what type of changes are desired, and presented with a list of 10 possible ideas, the top 5 ideas that generated the strong support among telephone respondents were:

- Maintenance
- Bike education
- Bike paths
- Bike parking
- Enforcement

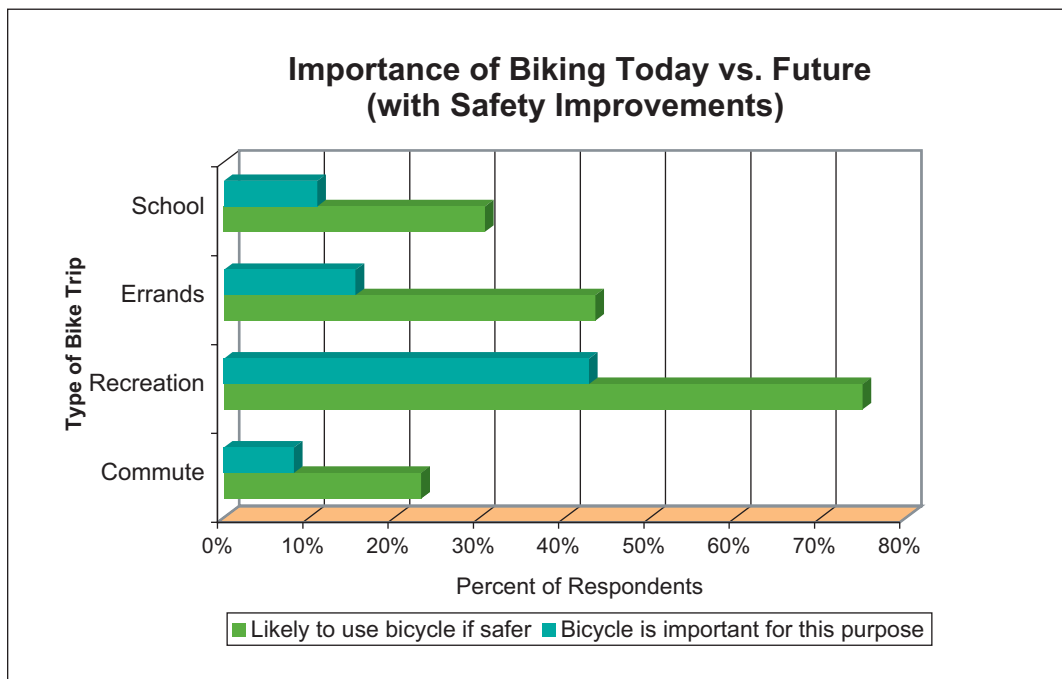
The island-specific tallies are not statistically significant and, therefore, the results only represent the views of the respondents. Nevertheless, they show interesting patterns with maintenance, bike paths, and bike parking mentioned regularly. On the other hand, there were differences in the priorities expressed. Kauai respondents tended to favor stronger enforcement of traffic laws and improved signage, while Maui and Big Island respondents tended to rank bicycle education more highly.

Kauai	Oahu	Maui	Hawaii
● Maintenance	● Maintenance	● Maintenance	● Maintenance
● Enforcement	● Bike Paths	● Bike Education	● Bike Education
● Bike Paths/Signage	● Bike Parking	● Bike Paths/Parking	● Bike Paths/Parking

Potential Effects of Bicycling Improvements

Would improvements to the bicycling environment make any difference? Respondents were asked: If bicycling were a safer mode of transportation, how likely would you be to use a bicycle more frequently? In Figure 3-10, the responses to this question (an indicator of possible, future behavior) were juxtaposed against the responses shown previously in Figure 3-8 (an indicator of current behavior). With improved conditions for bicyclists, the likelihood of future bicycle use in each of the four categories is significantly higher than current use. Twice as many respondents expressed an inclination toward bicycling for commuting and running errands in the future, than they do today. In the area of recreational trips, 75% stated that they are *very likely* or *somewhat likely* to use the bicycle in the future compared to 43% today.

Figure 3-10



Source: Kimura International, Inc., 2002

3.6 CENSUS DATA ON BICYCLE COMMUTERS

The 2000 U.S. Census contains data about how workers 16 years and older travel to work. Statewide, 4,888 workers (less than 1% of all workers) use bicycles as their primary means of transportation. The data also show that there are concentrations of bicycling commuters in census tracts with lower median household incomes (see Table 3-11). In other words, residents in lower income neighborhoods tend to rely on bicycles for commuting purposes more heavily than residents in higher income neighborhoods. For example, in Maui County, 47% of the population lives in census tracts with median household incomes below the county median; however, these census tracts contain 70% of the county's bicycle commuters. Similarly, lower income census tracts in Hawaii County and in the suburban and rural areas of Honolulu County also contain higher shares of bicycle commuters; Kauai County is the only exception to this pattern.

Table 3-12 identifies the census tracts with ten or more bicycle commuters. The census tracts in this table are listed without regard for income level.

Table 3-11
Bicycle Commuters Categorized by Census Tract
Median Household Income Level, 2000

Median Household Income of Census Tracts	Bicycle Commuters		Population	
	Number	%	Number	%
Kauai County	93		58,463	
Census Tracts Below County Median	44	47%	31,008	53%
Census Tracts At or Above County Median	49	53%	27,455	47%
Honolulu County (Suburban and Rural Areas Only)	1,208		456,055	
Census Tracts Below County Median	795	66%	131,544	29%
Census Tracts At or Above County Median	413	34%	324,511	71%
Maui County	756		128,094	
Census Tracts Below County Median	527	70%	59,920	47%
Census Tracts At or Above County Median	229	30%	68,174	53%
Hawaii County	206		148,677	
Census Tracts Below County Median	120	58%	63,786	43%
Census Tracts At or Above County Median	86	42%	84,891	57%

Table 3-12
Census Tracts with 10 or More Bicycle Commuters

Kauai County		Honolulu County (Suburban/Rural)		Maui County		Hawaii County	
Census Tract	No.	Census Tract	No.	Census Tract	No.	Census Tract	No.
Hanalei	26	Laie	188	Lahaina Town	198	Keaau-Volcano	62
Koloa-Poipu	22	Mokapu-West	129	North Kihei	98	Kaunakakai	29
Puhi-Hanamaulu	22	Mokapu-East	109	South Kihei	92	Hilo: Puueo-Downtown	20
Kekaha-Waimea	15	Schofield: Kolekole Ave	75	Honokahua	88	Kahului-Kaunakakai	20
		Menohar Street	72	North Lahaina	41	Hilo: Villa Franca-Kaiko'o	12
		Kalaheo Avenue	65	Wailea	37	Kailua	11
		Ewa Beach	52	West Kahului	30	Hilo: Puainako	11
		Waimea-Kahuku	36	East Molokai	21	Hualalai	11
		Kailua Mall	25	South Lahaina	21	Papaikou-Wailea	10
		Enchanted Lakes	25	Haiku-Pauwela	20		
		Beaver Road	24	Northeast Kahului	17		
		Haleiwa-Kawailoa	22	Lanai	16		
		Iroquois Point	22	Southeast Kahului	15		
		Mokapu-East	22	East Central Wailuku	13		
		Schofield: Foote Ave	21	Paia	13		
		Waianae Kai	20	West Central Wailuku	13		
		Barbers Point	19				
		Oneawa-Kawainui	17				
		Ocean Pointe	15				
		Mililani Golf Course	14				
		Waialua-Mokuleia	13				
		Leilehua Avenue	13				
		Puu Papaa	13				
		Waikalua Road	13				
		Village Park	13				
		Kokokahi	13				
		Makakilo	12				
		Waipahu Park	11				
		Puu Papaa	11				
		Keolu Hills	11				

3.7 BICYCLING FOR OUTDOOR RECREATION

The Department of Land and Natural Resources prepares the *State Comprehensive Outdoor Recreation Plan* (SCORP) as part of a requirement to qualify for Federal grants of outdoor recreation projects under the Land and Water Conservation Fund (LWCF) Act, Public Law 88-758, as amended. SCORP provides technical guidance to various government agencies and private entities that plan, develop, and manage outdoor recreation resources in the state. The eighth update of SCORP was completed in March 2003.

Focus group meetings with representatives of different outdoor recreation user groups and a series of general public information meetings were held as part of the planning process for SCORP 2003. After combining the input obtained from the meetings and surveys, SCORP found that Hawaii residents were most concerned about the following recreational needs and issues (in order of importance):

- Park maintenance and cleanliness, particularly restrooms
- Need for more youth-oriented facilities
- Overcrowding at popular recreation sites
- Need for more facilities, such as beach parks, playgrounds, ball fields, paths for biking/jogging, skate parks, and expansion of mauka trail systems for multiple users
- Public access to *mauka* and *makai* recreation areas
- Safety issues

The perceived need for bicycling facilities continues to rank relatively high, and the level of demand has been sustained from earlier studies. For example, a survey conducted during the planning process for the 1997 edition of SCORP revealed that more than three-quarters of the respondents (76%) felt that Hawaii needed more paths for jogging and biking. Close to half of the respondents (47%) said the state needed a lot more of them, while 29% felt that a few more paths were needed. That study also found that bicycling was the third most popular outdoor activity, after fitness walking and hiking. Bicycling was categorized as a “high popularity, relatively high intensity” activity with 14% of Hawaii adults participating.