

Kodiak Island road-accessible trails: A survey of residents and trail enthusiasts



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Executive Summary

This report provides results from a survey of Kodiak Island residents and trail enthusiasts about Kodiaks' road-accessible trails. Study objectives for both the "general public" and "trail enthusiast" surveys included:

- Socio-demographic characteristics of trail users and non-users
- Trail activity participation and relative amount of use.
- Annual economic expenditures related to trail activity
- General trail improvement priorities & locations

Additional study objectives for the "trail enthusiast" survey included:

- Favorite trails for key activities
- Use of specific trails
- Priority actions for specific trails

The general public sample came from Kodiak Island Borough tax rolls and a proportional-to-population sample from USCG base residents. The enthusiast sample came from self-selected volunteers recruited by networking and public service announcements in the community. The general public sample (n=508) had a 48% response rate with a three reminder mail survey protocol. The enthusiast sample (n=163) had a 55% response rate with no reminders; there was an overlap of 20 people in both samples (self-selected enthusiasts who were randomly chosen in the general sample).

Socio-demographic profiles of the general public and enthusiasts show few differences, although enthusiasts were slightly younger and more likely to be males. Compared to Census data, the general public sample had higher education and income levels, but were otherwise similar to the Island's population. About 13% of our sample (n=66) reported that they never use Kodiak Island road-accessible trails, and they tended to be slightly older than trail users. Differences between USCG and non-base residents, motorized and non-motorized users, and people with different lengths of residency were also explored; motorized/non-motorized differences were generally more pronounced.

In general, Kodiak has higher trail participation rates than comparable populations in Anchorage, the state of Alaska, or nationwide. Enthusiasts showed higher participation rates than the general public; however, the rank-order of activities was roughly similar for both samples. Trails used for fishing and hunting have higher participation rates in Kodiak than in Alaska, and much higher rates than the nation as a whole. However, Kodiak's winter activity participation is generally lower than in Anchorage and Alaska statewide (although higher than national rates). The most popular activities are hiking-based and occur in summer. ORV/motor bike use is the other relatively popular activity, with about a third of ORV users reporting they ride several times a week.

Both trail users and non-trail users provided information about barriers to trail use. Enthusiasts reported several reasons beyond the control of management, although better information about trail opportunities might encourage more trail use among some. Enthusiasts provided additional information about their favorite activities and trails.

Respondents were asked to estimate trails-related expenditures to broadly estimate the magnitude of economic activity associated with trail recreation on Kodiak Island (this information, however, does *not* provide economic impact information nor address several other types of economic value of the Kodiak trail system). Taking all the categories of expenditures together suggests there may be over 6 million dollars spent on trail-related activities over the course of a year (4.9 million on food and basic expenditures, 0.9 million on road vehicle mileage and maintenance, and 0.6 million on purchases of ORVs, snowmachines, or horses). Using Census figures for median incomes and number of households, 6 million spent on trail recreation is about 3% of what people earn. It is beyond the scope of this study to estimate the precision of this type of calculation, but it seems reasonable from an intuitive perspective.

A major goal of the study was to assess residents' priorities for trail system improvements. All respondents were asked about the overall emphasis of improvements (local vs. tourism-development) and to prioritize 26 different potential trail improvement actions. Results show much greater interest in improvements for local users than for tourism-development, which is not surprising given that the sample was entirely made up of local residents. However, about a third of respondents were interested in a "balanced" approach that considered both local and tourism needs.

There was general support for all 14 improvement actions, and no action was opposed ("do not do this") by a majority in either the general public or enthusiast samples. Five actions were a medium or high priority for a majority of respondents: major trail re-routes, garbage cans at trailheads, trailhead information kiosks, new bridges at stream crossings, and improved trailhead parking areas. The same actions and rank order were evident in both public and enthusiast samples. Developing campsites and public use cabins was a lower priority than some large scale improvements on the trails themselves (major re-routes, bridges), but they had a similar priority to other "on-the-trails" improvements (trail surfacing, improved access for people with disabilities, improved signs and markers, rest areas with benches). Three of the five highest ranked actions were associated with trailhead improvements. This is significant because trailhead/pull-out enhancements may be developable during road construction projects, offering an alternative trails system funding source for these types of actions.

There was also general support for all 12 of the programmatic actions, with only one action opposed ("do not do this") by more than a quarter of either sample (trail patrols for law enforcement). Two program actions were rated a high or medium priority by over three-quarters of the general public (with higher support among enthusiasts): development of a map and guidebook and the "adopt-a-trail" program featuring volunteer clean-up efforts. These are obvious candidates for priority actions in any eventual plan. Eight other programmatic actions were rated a medium or high priority by a majority of the general public, including a volunteer program, a trail crew program, creation of a trail fund-raising program, trail etiquette and safety programs, and creation of some separate motorized and non-motorized trails. In general, more programmatic actions received majority support (10 of 12) than trail development/improvement actions (5 of 14).

There were some priority differences between motorized and non-motorized users in the general public sample. Data show that while these differences are statistically significant, they are generally not substantial (the two groups still have similar ranked-ordered priorities). The exceptions are priorities for creating separate trails for motorized and non-motorized users. For these actions, a majority of non-motorized users reported a medium or high priority, while just under a majority reported the same among motorized users. Results also show greater polarization on these issues in the enthusiast sample than in the general public sample.

Respondents were also asked to prioritize locations for trail system improvements. Three areas consistently received more “votes” for many actions: the Kodiak urban trails, the Monashka area, and the Middle Bay / Saltery / Miam Lake area. The first two make sense because they are closer to town where most people live and work, and the third is the highest use area for ORV advocates (who make up about half of the enthusiast sample). Trails in these areas probably deserve closer attention in trail planning, although this should not be the only input into choosing projects. Trail users appear to recognize that developing camps or public use cabins makes more sense in more remote areas (Anton Larsen Bay, Chiniak, Pasagshak) compared to closer-in areas.

Enthusiasts were asked to report candidate trails for specific trail improvement actions, including building new bridges, addressing erosion, grade, wetlands, trail surfacing, or trail marking issues, as well as locations for public use cabins and campsite development. Results show that in most cases, “close-in trails” (those nearer to downtown) receive majority support from non-motorized users, while more remote trails receive primary support from motorized users. The exceptions are for campsite and public use cabin development, where both groups were more likely to report more remote trails.

Nearly 40 comments were made by the general public about motorized/non-motorized use issues, which is many more than for any other issue. A similar number were provided by enthusiasts. A final section of the document reviews previous conflict research findings and discusses issues suggested by the comments. Ultimately, long-lasting, successful solutions to these conflicts will probably require extended discussions with stakeholder groups, and may need to offer a diversity of improved ORV trails or riding areas in trade for some designated non-motorized trails or areas. Stakeholder groups are clearly more polarized on these issues than the general trail-using public, but open discussions may help lead negotiated solutions acceptable to all.

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Introduction

Trails in Kodiak provide a variety of benefits to area residents and visitors, but a high quality trail system can be challenging to plan, develop, and maintain. The Kodiak Island Borough, Parks and Recreation Committee, and several other agencies and trail groups are cooperatively developing a plan for road-accessible trails on Kodiak Island. The goal is to maintain natural resource conditions and opportunities for high quality trail experiences for a diversity of trail users; the plan is not focused on land ownership issues.

In order to do this job well, planners were interested in information about residents' use of Kodiak's trails and their priorities for improving the system. Surveys of a random sample of residents and a self-selected sample of trail enthusiasts were designed to provide that information; they are summarized in this report.

Study objectives

Specific study objectives were developed for the two surveys, as given below. Surveys also solicited comments on other improvements or issues related to road-accessible trails on Kodiak Island.

Study objectives for both the "general public" and "trail enthusiast" surveys:

- Socio-demographic characteristics of trail users and non-users
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- Annual economic expenditures related to trail activity
- General trail improvement priorities & locations

Additional study objectives for the "trail enthusiast" survey:

- Favorite trails for key activities
- Use of specific trails
- Priority actions for specific trails

Report organization

The report begins with a summary of research methods, including discussions of sample development, survey administration, and potential sources of error. Findings then comprise the majority of the report, organized by study objectives.

Findings include profiles of the general public and trail enthusiasts, descriptions of trail use and barriers to that use, favorite trails by activity, expenditures on trail activities, prioritizing trail system improvements and locations, and some additional discussion on motorized/non-motorized use issues. Appendices include the survey instruments (including maps of the key trails) and verbatim comments written by respondents.

Methods

The survey included two components: 1) a survey of randomly selected residents or the “general public” and 2) a survey of self-selected “trail enthusiasts” who were asked more specific questions about trail use, conditions, or candidate trails for specific improvements. Sample development, administration, and sources of error for each are described below.

Sample development

General public sample

This sample was developed with two strata: one from residents represented on Kodiak Island Borough (KIB) tax rolls and one from a list of US Coast Guard (USCG) base residents. The proportions of the sample in each stratum were based upon estimated proportions of road-area Kodiak residents vs. USCG base residents. The overall sample size goal for the general public sample was 400 responses. This would provide a statistical margin of error (MOE) of $\pm 5\%$ at a 95% confidence level for dichotomous (yes/no) variables, which is typical for this type of study.

Tax roll component of the general public sample

The primary database for developing the general public sample was the KIB property tax roll. It has the names and addresses of property owners only, so it was less than ideal for a sample of all Kodiak Island residents who live on the road system. However, use of “filters,” targeted sampling by geographic location, and a randomizing protocol for choosing a survey respondent within households reduced the impact from these weaknesses. The following describes the filters or sampling protocols that were used, how they worked, and what they were designed to accomplish.

Off the road system filter. No properties owned away from the road accessible areas on Kodiak were sampled, eliminating “bush” and road-inaccessible village residents, who were not in the target population.

Targeted geographic sampling. Property owners were sampled from across known residential areas throughout the Kodiak road system area. This helped filter out business properties (although some businesses still exist within residential areas), and ensured proportional geographic representation from smaller but important communities outside the core Kodiak city boundary. The tax rolls are organized in a Geographic Information System (GIS) database that allows this kind of geographically-stratified sampling; KIB officials used extensive experience with the tax roll database, geographic knowledge of the island, and professional judgment to define the residential areas from which samples were drawn in proportion to the population sizes of those sub-regions.

Residency filter. No out-of-Kodiak addresses were sampled from the tax rolls. This eliminated seasonal residents and non-residents, who were not in the target population.

Duplicate names filter. People who own more than one property were more likely to be sampled with this database, so we tried not to compound this source of error by sending only one survey to any name.

Randomizing filter. After the residency and duplicate names filters had been applied to the sample, we randomly chose 946 records to develop the final “tax roll sample.” Together with the USCG sample, the total was designed to be 1,125 names; with an pre-study estimated response rate of 40 to 60%, we expected this initial sample frame would produce a final general population n of 400 or more (which it did; see below).

Random adult in household protocol. Surveys were mailed to the name of the property owner, but the cover letter asked that it be completed by a random adult (16+) member of the household (the person with the earliest birthday in the year). The goal of this protocol was to better represent random adults in the community (we thought that property owners would potentially over-represent males and heads of households). Respondents were asked to complete the survey for themselves (not to try and represent all the opinions of the household in which they live). The gender mix among responses (55% male, which is similar to the 53% males in the 2000 Census) offers some evidence that this was successful.

USCG Base Component

Because USCG base residents generally do not own land in Kodiak, the tax roll database would not reach any of this substantial population (about 12% of the road-system population). This component of the general population sample addressed the problem by sampling from this stratum in rough proportion to its population size. The base commander provided a random sample of 179 names and addresses from base residents and these were included in the sample frame.

Trail enthusiast sample

This sample was developed through networking and limited advertising in the local paper. The goal was to ensure that we can quantify opinions from users with intense interest in the trail system who might not be sampled through the general survey, especially from groups with specialized trail interests (e.g., horse riders, snowmachiners, cross country skiers, mountain bikers, etc.). No sample size goal was set for this part of the survey.

The network sample was initiated at a Parks and Recreation Committee trail meeting and from existing lists of interested trail users. Public Service Announcements about the enthusiast survey were placed in the local newspaper and aired on radio over several weeks during the survey period.

People who were randomly-chosen in the general public survey and who requested to be in the trail enthusiast survey were sent both surveys. Their responses were included with the general public (because they were part of the sample), but their supplement responses

were also included in the enthusiast responses. In comparisons between general public and enthusiasts, this “overlap” group was included in the general public sample only.

Instrument Development

The survey instruments were developed in a collaborative fashion with KIB staff, members of the Parks and Recreation Committee, interested trail users, and Doug Whittaker from Confluence Research and Consulting (CRC). Instrument development was also guided by a variety of methods established in previous research (particularly similar efforts conducted in Juneau and Ketchikan in the 1990s). Specific theoretical and methodological traditions from recreation research suggested formatting and response options for several questions; when relevant, these are discussed as results are presented. Maps for the survey were produced by KIB (see appendices).

Survey administration

General public survey

A total of 1,125 names and addresses were in the initial general public sample frame; 57 of the surveys were undeliverable or sent back by respondents uninterested in the effort, resulting in a final sample frame size of 1,068 (see Table 1). A postcard reminder, letter reminder, and final reminder with an additional survey were sent to non-respondents over an eight week period to encourage them to participate. When the survey return period was closed (April 20, 2004), 508 had been returned (a response rate of 48%). Table 2 summarizes final sample sizes used in analyses. It shows numbers and percent by the types of respondents.

An additional 72 surveys were returned after the deadline but were not included in analysis because preliminary results had already been presented in public and we wanted to avoid potential strategic biases from respondents reacting to those findings. If the 72 were included, the response rate would have risen to 54%. This is typical for a general public survey on recreation issues.

Table 1. Summary of general public and trail enthusiast sample frame and response rate information.

	Sample frame			Final	Before 3/20 deadline		After 3/20 deadline	
	Sent	Bad addresses	Un-interested		Returned	Response rate	Returned	Response rate
Public from tax rolls	946	34	8	904	442	49%	65	56%
Public from USCG	179	13	2	164	66	40%	7	45%
Total general public	1,125	47	10	1,068	508	48%	72	54%
Trail enthusiasts	298	3	--	295	163*	55%	3	57%

*Includes 20 respondents who were randomly chosen as part of general public sample.

Table 2. Sample sizes by group.

	Number	Percent of sample
General public from USCG base list	66	13
General public from tax rolls	422	83
Enthusiasts in general public sample	20	4
Total general public (includes overlap)	508	100%
Enthusiasts in general public sample	20	12%
Enthusiasts not in general public sample	143	82%
Total enthusiasts sample (includes overlap)	163	100%

Trail enthusiast survey

A total of 298 names and addresses were in the initial enthusiast sample frame; 3 were undeliverable, resulting in a final sample frame of 295 (Table 1). No reminders were sent to this sample, as they were presumed to be sufficiently motivated to return surveys (they had requested to be part of the effort). When the survey return period was closed, 163 had been returned (a response rate of 55%). Only three were returned after the survey deadline.

A total of 12 enthusiasts requested to be in the enthusiast sample but only completed the general survey. Some of these may have felt the general survey sufficiently addressed their concerns (making the more detailed questions in the supplement less important for them to complete), while others may have been discouraged by the response burden. Several other people in the initial enthusiast sample frame appeared to have asked to be part of the effort because they were concerned the survey might lead to access restrictions; although this is speculation, many may have decided not to complete the survey after reviewing the questions (few of which were even related to access issues).

Survey coding and analysis

Responses to quantitative questions were coded in Excel by KIB using protocols developed by CRC. Quantitative analysis was conducted by CRC in SPSS, a statistical software package commonly used for analyzing social data. Written comments were simply typed into a Word database and organized by question. They are provided in Appendix B.

Statistical tests were made between several sub-groups (e.g., motorized and non-motorized users, USCG base residents vs. non-base residents). The sub-groups are defined below. Tests were generally made using t-test comparisons of averages for the variable in question, however, differences between sub-groups based on years of residency were conducted via analysis of variance with post-hoc Scheffé contrasts. Statistically significant differences were defined by the $p > .05$ level.

Sub-group definitions

The following definitions were used to create and analyze sub-groups:

Motorized users: 145 in the general public sample (29%) defined as those who reported ORV / motor bike riding or snowmachine riding “about once a month” or more. Of these, 90% also reported owning ORVs and 25% reported owning a snowmachine. We did not use ORV/snowmachine ownership to define this group because we wanted people who report using their vehicles rather than just those who own them. It is possible to own one for chores around a house/ranch or for use at locations off the trail system.

Non-motorized users: 363 in the general public sample (71%) defined as those who reported ORV /motorbike riding and snowmachine riding less than “about once a month” on Kodiak’s road accessible trails.

The USCG base residents sample (n=66; 13%) was defined by those on the list provided by the base commander. We did not ask a question to determine if other respondents to the general survey were USCG staff or base residents, but we assumed that those sampled from the tax roles lived off-base.

The **three length of residency sub-groups** were defined by responses to the question about years in Kodiak. The three groups were “recent residents” (0 to 5 years; n=90; 18%); “mid-length residents” (6 to 20 years; n=165; 33%), and “longer-term residents” (over 20 years; n=235; 46%).

Sources of error

All surveys have several potential sources of error that critical readers should consider when considering results. While a full discussion of error sources is beyond the scope of this report, there is value in briefly describing the major types and how they were addressed in this study.

Sample size error

This source of error is the most commonly cited type in social research and is usually described as the “margin of error” in public opinion polls. It is typically phrased in terms of “plus or minus X percentage points” (usually 3 to 5 for large national polls with sample sizes around 1,000).

This characterization is a simplified definition of the actual margin of error. Strictly speaking, a margin of error refers to a 95% chance that the survey results will be within X percentage points, with the size of X inversely related to the square root of the sample size (large samples = smaller margins of error). However, the margin is also affected by the size of the sample relative to the size of the population, as well as the proportions of responses (which assumes questions have only two response choices). Because most social questions use Likert-type scales or other formats that have multiple responses,

margin of error percentages are more difficult to assess and other statistical tests are more meaningful.

Based on sample size alone, the general public sample in this study has a 5% margin of error, while the enthusiast sample has an 8% margin of error. However, one could argue that both are likely to be lower (particularly the enthusiast sample) because we have surveyed a substantial proportion of each population.

Sampling frame error

In most cases, sample size error is a far smaller problem than “sampling frame” error. This is error associated with less than representative (non-random) samples, and it is rarely discussed with national polls in part because the sampling frame margin of error cannot be calculated. For example, random-digit dialing telephone surveys in many national polls assume that households with phones are randomly distributed and thus can represent the population at large. However, if phone numbers are not randomly distributed (higher income homes arguably have more of them, although “busier” people are more likely to have answering machines and screen calls), error is introduced.

As discussed earlier, the general public component of the trail survey has at least one identifiable source of sampling frame error: we did not sample households that rent their homes (non-property owners). Based on census data, we expect that these households tend to have people who are younger, have lower income and education levels, and have lived in the area a shorter period of time. US census information from 2000 suggests that 45% of households in Kodiak rent, so this is a substantial potential source of sampling error. However, awareness of this potential sample defect allowed us to test for differences in responses based on these variables and consider if those not in the sample are likely to be substantially different from those who were.

The trail enthusiast sample was self-selected by definition and also has a potentially large sampling frame error. We do not know the extent to which we sampled a random selection of trail enthusiasts or whether certain sub-groups of trail enthusiasts “stuffed the ballot box” by encouraging higher proportions of its group to participate. However, we went into this portion of the survey aware of the issue. Analysis was designed to represent responses of identifiable sub-groups when they differ precisely to highlight differences rather than represent “averages” in a mixed sample that may not characterize any specific group.

Non-response error

A third major source of error is non-response error. It is a problem if those who do not respond to the survey are somehow different from those who do. While some studies attempt to measure this error through non-response checks (a separate phone survey of non-respondents on some variables to see if they are systematically different from the sample), there were insufficient resources for this in the present study.

In general, non-response checks conducted in natural resource or recreation studies tend to show small socio-demographic differences between respondents and non-respondents, although responses to other variables suggest some under-represented sub-groups: 1) those uninterested in the topic of the survey, and 2) those that hold general “anti-government” attitudes. One could argue that responses from people uninterested in trails are probably less important to consider when developing a trail plan, so this error is less worrisome. However, one should be more cautious about making similar statements about people with anti-government attitudes, who may use the trails and have strong opinions about how they should be managed (or not managed). Unfortunately, we simply do not know as much about this group, nor their proportions in the population.

Content and individual-related error

A final source of error relates to ways that respondents read, understand, and respond to questions. Use of pre-tested survey wording and response formats minimizes most of this error, but few surveys in the natural resource arena benefit from extensive psychometric testing and analysis (surveys that are given to several samples and adjusted after testing for reliability as commonly done with IQ and educational testing). Time constraints prevented a full pre-test of the Kodiak trail survey, but informal pre-testing occurred during survey development.

“Strategic bias” is one particular form of error worth noting in this category. Strategic bias occurs when respondents purposefully answer a question with a response that exaggerates their actual opinion or otherwise modifies a “real” answer because they feel it will help with their advocacy position when pooled with other responses. For example, a person who supports development of a boat launch may overestimate the times they say they go boating. While evidence for strategic bias is difficult to assess, one way to partially address it is to analyze sub-groups separately; if there is systematic bias within a sub-group, it will then only accentuate responses of that group and not modify responses of the larger sample.

This issue leads to a final comment about survey results in general: results should not be considered votes or referenda on various trail issues. The purpose of these types of surveys is to provide information and identify sub-group positions in search of “elegant” solutions that would address potential problems, conflicts, or priority disagreements. In addition to surveys, good planning integrates information from several sources, including stakeholder input, public testimony at workshops and meetings, laws and legal mandates, and agency missions and regulations.

Findings

Profiles of the general public and trail enthusiasts

Age, gender, and household size

Respondents were asked to provide age, gender, and information about the number of adults and children living in their household. Statistics for the general public and enthusiast samples are given in Table 3.

Table 3. Age, gender, and household size statistics for general public and trail enthusiasts.

	General public	Trail enthusiasts
Median age	48	43
Average age	48	42
Range of ages	16 to 89	16 to 78
Percent under 30	12%	17%
Percent over 60	17%	4%
Percent male	55%	60%
Average children in household	1.6	1.6
Average adults in household	2.0	2.0
Average people in household	3.6	3.6

Comparing gender information to 2000 U.S. Census data suggests that our general public sample was similar to the actual proportion of males in the Kodiak Island population (53%), although the census proportion refers to the entire island (while our sample was for road-accessible areas only). The similarities suggest that the tax roll sampling frame and “randomization within households” protocol did help create a sample similar to the general population in terms of gender.

Census data suggests that average household size on Kodiak Island is 3.1 people, while our sample averaged slightly higher (3.6). This is probably due to the sampling frame that did not reach renters (who are more likely to be single or without families). Using the KIB estimate of 11,500 people living on the road system and applying the Census household size factor, there are about 3,700 households on the road system. Of these, the Census estimates that 55% or 2,035 are occupied by property owners and should have been on the tax rolls. Our sampling frame included about 950 of these households, or about 47% (suggesting we have a smaller sample size margin of error than 5%).

Differences between the general public and trail enthusiasts were generally small on socio-demographic variables. However, enthusiasts were slightly younger and more likely to be males than the general public.

Education and income

Respondents were asked to provide education and household income information; frequencies of responses for the general public and enthusiast samples are given in Table 4.

Table 4. Percent of responses in education (highest level achieved) and household income categories.

	General public	Trail enthusiasts
Some high school	4	5
Completed high school	13	8
Some college or vocational school	33	28
Completed college or vocational degree	27	32
Some graduate school	6	6
Completed graduate degree	17	21
Under \$20,000	5	3
\$20,000 to \$39,999	15	11
\$40,000 to \$59,999	22	23
\$60,000 to \$79,999	24	20
\$80,000 to \$99,999	14	23
Over \$100,000	22	20

Compared to Census data, our sample has higher education levels. Census data suggest about 14% of the population have not completed high school (compared to 4% in our public sample) and only 19% have a college degree (compared to 50% in our sample). Some of this difference is due to Census proportions representing the entire population while our sample is adults 16 and older. Nonetheless, the study sample probably does under represent those with lower education levels, who may be less likely to use trails or complete surveys about them.

On income, differences between the study sample and Census data are smaller but notable. Census data suggest 34% of households have incomes under \$40,000 (ours only has 20% in this category), so the study probably under represents lower income populations too. However, proportions in the highest category (\$100,000 income or greater) are similar in the Census (20%) and our sample (22%). Differences between general public and enthusiasts were generally small on both education and income, although enthusiasts are slightly higher on both.

Residency in Kodiak and Alaska

Respondents were asked to report the number of years they had lived on Kodiak Island and in Alaska; averages and medians are given for the general public and enthusiast samples are given in Table 5. As measures of the “central tendency” of the sample, medians are less likely to be influenced by high outliers.

Results suggest that the many in the samples have lived in Kodiak or Alaska for a long time. This finding may also reflect the probable longer residencies of property owners compared to renters (who were not in our sample frame).

Table 5. Average and median years of residency in Kodiak and Alaska.

	General public	Trail enthusiasts
Average years in Kodiak	22	16
Median years in Kodiak	20	14
Average years in Alaska	25	18
Median years in Alaska	24	18

Profile differences between trail users and non-trail users

About 13% of our sample (n=66) reported that they never use Kodiak Island road-accessible trails, and so they were only asked to answer questions about potential barriers to trail use and general socio-demographics. The 13% is likely to underestimate the proportion of non-trail users in the population because these people are less likely to return a survey.

There were statistical differences between non-trail and trail users for several socio-demographic variables as illustrated in Table 6. In general, most of these appear to derive from the older age of non-trail users. There were no statistical differences in terms of gender, or the number of adults and children in the household.

Table 6. Illustrative socio-demographic differences between non-trail and trail users (all variables were statistically different).

	Non-trail users	Trail users (general public)
Average age	58	45
Average years in Kodiak	29	15
Average years in Alaska	34	22
Percent high school degree or less	38%	17%
Percent income under \$40,000	13%	3%

Profile differences between USCG and non-USCG public

About 13% (n=66) of the public sample were residents from the USCG base, and we also compared socio-demographic information from them to the general public (see Table 7). . As one might expect, USCG base residents were younger, had lived in Kodiak and Alaska for a shorter time, and had lower incomes than the rest of the general public. There were no statistical differences in terms of gender, or the number of adults and children in the household (USCG residents actually averaged slightly more children (2.1) than the general public (1.6).

Table 7. Illustrative socio-demographic differences between USCG base residents and non-USCG base residents in the general sample (all variables shown were statistically different).

	USCG base residents	Non-USCG residents in general public sample
Average age	32	50
Typical age range (25-75% responses)	25 to 40	42 to 57
Average years in Kodiak	3	24
Average years in Alaska	5	28
Percent income under \$40,000	33%	17%
Percent income over \$100,000	8%	24%

Profile differences between newer and longer-term residents

Differences between newer and longer-term residents were explored by dividing the sample into three roughly equal-sized categories based on years of residency in Kodiak (0 to 5 years, 6 to 20 years, and over 20 years). Table 8 shows illustrative differences in socio-demographics for the three groups (only those that were statistically different as tested by analysis of variances are shown).

Table 8. Illustrative socio-demographic differences between newer and longer-term residents (all variables shown were statistically different).

	Short residency (0 to 5 years)	Medium residency (6 to 20 years)	Long residency (over 20 years)
Average age	35	43	54
Average number of children in household	1.5	1.5	1.8
Average years in Kodiak	3	13	34
Average years in Alaska	7	18	37
Percent with high school degree or less	12%	12%	21%
Percent with college degree	63%	56%	43%
Percent income over \$100,000	14%	25%	23%

In general, longer-term residents are older, have slightly more children, have been in Alaska longer, have slightly more people with high school degrees or better (but slightly fewer with college degrees), and have slightly higher proportions earning high incomes. There were no significant differences in terms of gender or the number of adults in households.

Profile differences between motorized and non-motorized users

About 29% (n=145) of the public sample were motorized users (reported ORV or snowmachine use more than once per month in season) and 71% (n=363) were non-motorized users. The two groups were compared in socio-demographic information (see Table 9). Motorized users were younger, more likely to be males, had lived in Kodiak

and Alaska a slightly shorter period of time, and had slightly lower education and income levels. There were no statistical differences in terms of the number of adults and children in the household.

Table 9. Illustrative socio-demographic differences between motorized and non-motorized users (all variables shown were statistically different).

	Motorized users	Non-motorized users
Average age	41	50
Typical age range (25-75% responses)	33 to 49	41 to 58
Percent male	76	45
Average years in Kodiak	18	23
Average years in Alaska	20	27
Percent with high school degree or less	20	16
Percent with college degree	39	50
Percent income under \$40,000	22	11
Percent income over \$100,000	18	23

Trail use

Trail activity participation among trail users

Respondents were asked how often they engage in various activities on Kodiak Island’s road-accessible trails in their respective seasons. The percent who reported any use for an activity (hereafter referred to as participation among trail users) are given in Figure 1 for the general public and trail enthusiasts. (Note: this does not include the 13% of Kodiak users who reported they never used any Kodiak Island road-accessible trails).

Results show higher participation for short and long hikes, trail use for exercise, and fishing access than other activities (about two-thirds of the general public or higher). Wildlife viewing and hunting access were at the next level (with majorities of users reporting participation), while other activities were reported by less than a third (with snowmachining, backcountry skiing, snowboarding, and horse riding reported by under 10%).

As expected, the enthusiast sample showed higher participation rates than the general public. However, the rank order of participation is roughly similar, with notable exceptions of trail use for hunting, ORV use, and cross country skiing (with even higher rates among trail enthusiasts).

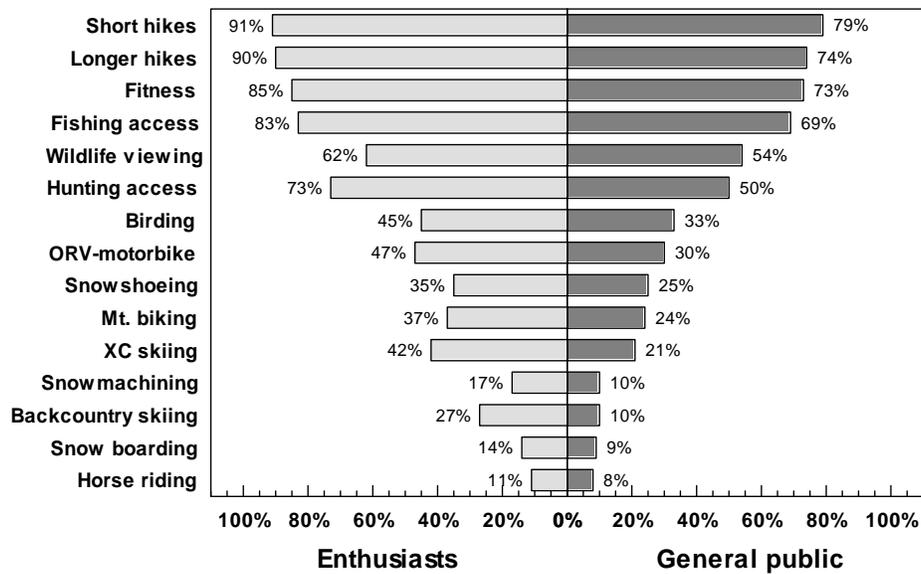


Figure 1. Percent of trail users reporting participation in specific trail activities.

Comparing Kodiak, Anchorage, state, and national trail activity participation

A comparison of participation rates for various trail-related activities are given for this study (first two columns) and other studies in Anchorage, Alaska, or the nation in Table 9. Question items from the various studies were not identical, but they still provide some context for assessing Kodiak participation patterns. In general, participation rates from other studies were based on reported activities at least once in a 12 month period, while Kodiak rates were discerned from a question about the frequency of participation. To match other studies, the Kodiak percentages are for the entire general public sample (including non-trail users); these rates are thus different from participation rates for activities among trail users as given in Figure 1.

In general, results suggest that Kodiak has an active trail community, with higher participation rates than comparable populations in Anchorage, the state of Alaska, or nationwide. It is beyond the scope of the study to examine these comparisons in depth (with methodological explanations likely to account for at least some discrepancies), but a few highlights are useful for understanding the Kodiak samples and trail use.

- Trail use for exercise and hiking occur at similar rates in Kodiak, Anchorage, and Alaska overall.
- Trails used for fishing and hunting have higher participation rates in Kodiak than in Alaska, and much higher rates than the nation as a whole.
- Kodiak’s winter activity participation is generally lower than in Anchorage and Alaska statewide, but higher than national rates. This makes sense given general climate considerations: Kodiak has a less reliable close-by snow pack than southcentral and interior Alaska, but it is probably better than many parts of the national overall.

- Birding and wildlife viewing participation appears lower than statewide estimates, but these may be related to methods issues (the USFWS survey items are more broadly-based than trail-related activities and includes residential bird watching and bird feeding).
- Methods note: All of the Kodiak participation rates in general are likely to be over-estimates of the true population because participation among non-respondents (who were not part of our sample) is probably lower.

Table 10. General comparisons of participation rates in activities from various studies for illustrative purposes (Note: question wording differed in various studies).

	Kodiak general public	Kodiak trail enthusiast	Anchorage trails survey ¹	Alaska SCORP survey ²	Alaska from USFWS survey ³	National survey (NSRE) ⁴	National survey (OIA) ⁵
Fitness (walking, jogging, skating)	64	85	49	73	--	--	--
Short hikes or walks	69	91	68	69	--	84	--
Longer hikes (over a mile)	64	90	--	--	--	33	35
Access to fishing areas	60	83	--	75	41	26	--
Access to hunting areas	44	73	--	36	16	11	--
Mountain biking	21	37	64	67	--	21	20
Horse riding	7	11	--	6	--	--	--
ORV-ATV-motorbike riding	26	47	--	33	--	19	--
Cross country skiing	18	42	52	27	--	5	6
Snow machining	9	17	--	36	--	6	--
Snow boarding	8	14	--	--	--	4	--
Backcountry skiing	9	27	--	11	--	--	2
Birding	29	45	81	74	53	--	--
Wildlife viewing	47	62	--	--	--	--	--
Snowshoeing	22	35	--	--	--	--	3

1. Conducted by Craclun Research Group, 1999 for the Municipality of Anchorage.

2. Conducted by Ivan Moore Associates for Alaska State Parks' 1997-2002 Statewide Comprehensive Outdoor Recreation Plan.

3. Alaska statewide data from US Fish and Wildlife Service National Survey on Fishing, Hunting, and Wildlife-related Recreation.

4. National Survey on Recreation and the Environment, 1999-2000.

5. National survey on 21 human powered activities by Outdoor Institute of America, 2001.

Amount of use by activity (among trail users)

Among trail users, respondents were asked to report the frequency of their trail use (in season) by activity on a six point scale from “rarely” to “nearly every day.” Results for the general public and enthusiasts are given in Tables 11 and 12, respectively (Note: results show responses for those who reported at least some use for the activity). Figure 2 shows the rank order of activities based on average scores on the scale.

Table 11. Frequency of general public participation among those who report any use (percent giving each response).

	Rarely: once a year	About once a month	About once per two weeks	About once a week	A few times a week	Nearly every day
Fitness (walking, jogging, inline)	12	16	9	15	27	20
Short hikes or walks	10	19	11	21	27	12
Longer hikes (over a mile)	16	26	18	15	16	9
Access to fishing areas	21	27	17	13	17	5
Access to hunting areas	28	25	15	15	13	3
Mountain biking	39	32	11	10	5	3
Horse riding	54	12	10	15	5	5
ORV-ATV-motorbike riding	16	20	15	16	18	15
Cross country skiing	58	23	7	8	2	3
Snow machining	31	29	4	25	6	4
Snow boarding	30	38	13	4	11	4
Backcountry skiing	53	27	6	8	4	2
Birding	28	29	17	11	7	8
Wildlife viewing	21	29	16	15	11	9
Snowshoeing	49	22	12	10	6	1
Other:	10	29	15	16	15	15

Table 12. Frequency of trail enthusiast participation among those who report any use (percent giving each response).

	Rarely: once a year	About once a month	About once per two weeks	About once a week	A few times a week	Nearly every day
Fitness (walking, jogging, inline)	12	17	7	13	28	23
Short hikes or walks	7	20	9	16	27	22
Longer hikes (over a mile)	12	18	19	18	23	10
Access to fishing areas	20	20	13	16	21	10
Access to hunting areas	24	20	13	18	15	10
Mountain biking	39	34	10	7	8	2
Horse riding	78	6	6	6	0	6
ORV-ATV-motorbike riding	3	12	9	21	34	22
Cross country skiing	38	19	22	13	9	0
Snow machining	39	11	7	18	25	0
Snow boarding	43	13	26	13	0	4
Backcountry skiing	45	20	14	16	2	2
Birding	26	29	14	11	10	11
Wildlife viewing	15	29	22	12	11	12
Snowshoeing	47	25	12	14	2	0
Other:	0	41	18	18	6	18

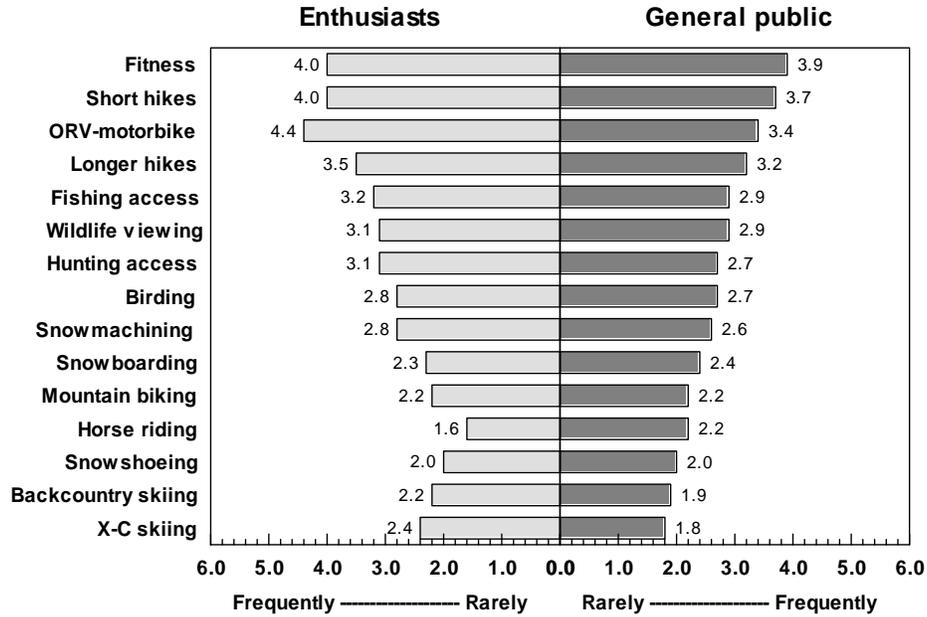


Figure 2. Ranked activities by frequency of reported use among trail users (based on mean scores on a 6-point scale with 1=rarely and 6=nearly daily).

Results suggest several general findings about trail use in Kodiak, as listed below:

- The most popular activities are hiking-based and are likely to occur in summer. About a third to one-half may hike or use the trails for fitness several times per week or more.
- ORV/motor bike use is the other relatively popular activity, with about a third of ORV users reporting they ride several times a week or more.
- Winter activity participation is less frequent than summer participation. Among various winter activities, cross country skiing is apparently done less frequently than backcountry skiing, snowboarding, and snowshoeing.
- Enthusiasts engage in several activities slightly more frequently than the general public. Of particular note is the reported high frequency of use by ORV enthusiasts compared to ORV riders in the general public sample; this is consistent with an over-representation of highly involved ORV riders in the enthusiast sample.

Backcountry use

Respondents were asked to report the number of nights they spend camping in conjunction with their road-accessible trail use; results are summarized in Table 13. In general, about half of the general public reported camping at least one night along Kodiak’s road-accessible trails, with nearly three-quarters of the enthusiasts reporting the same. Of those who camp, about half in the general public sample camp more than 5 nights (median) and almost a third camp more than 10 nights. Enthusiasts camp slightly more frequently (a median of 6 nights with 37% reporting camping more than 10 nights).

Table 13. Information about backcountry camping in conjunction with trail use.

	General public	Trail enthusiasts
Percent spending at least one night in backcountry	48%	71%
Of those who camp...		
Average number of nights	8.5	11.5
Median number of nights	5.0	6.0
Percent spending more than 10 nights per year	31%	37%

Highest use trails (from enthusiasts)

Trail enthusiasts were asked to report how often they used 42 individual trails (as well as the Kodiak urban trail system) on the use frequency scale. The trails were shown on a pair of maps and listed in the survey; they are provided in Appendix A. The general public was not asked this question because of concern about response burden (or the ability of the public to identify trails from the enclosed map). Results are given in Table 14 for all users as well as motorized and non-motorized users. Motorized users defined by those who reported ORV-motor bike or snowmachine use more often than once a month; this characteristic was highly correlated with ORV and snowmachine ownership.

Because the enthusiast sample was self-selected and they have slightly higher use levels than the general public, readers should be cautious in applying enthusiasts' frequencies of use to the larger public. However, the *relative* popularity of these trails is likely to be similar, and the "high/medium/low" categorization of use based on average scores (as given in the table) may be useful. Some trails are clearly well-known and used frequently, while others see moderate use, and the remainder are infrequently used and may offer important lower density opportunities or access to more remote areas.

It is beyond the scope of this report to fully explain these patterns of use; proximity to residential areas, distance from the city, attractions, type of terrain, types of uses, trail difficulty, and trail conditions are the most likely factors. Linking these findings with inventory information may be a useful future planning exercise.

The relative use levels and categorizations for motorized and non-motorized users may also prove useful in future planning. Trails that see medium or higher use from both groups are probably the most likely to have conflict problems. Based on that hypothesis, the following trails may deserve closer attention for conflict issues (recognizing that "motorized users" may often do non-motorized activities too):

Urban trails	Termination Point
Pillar Mountain	Buskin Lake
Bruma Road	Old Womens Mountain
Cope / Sargent	Russian Creek
Bells Flat	Kashevarof
Cliff Point	Salonie Creek
Pasagshak Point	

Table 14. Average “frequency of use” score (0=never & 6=daily) and percent reporting some use on individual trails (from enthusiasts).

		All enthusiasts		Motorized	Non-motorized
		Average	% some use	Average	Average
K.	Urban trails	3.6	89	2.3	4.6
1.	Termination Point	1.6	88	1.4	1.8
2.	Monashka Mt.	0.9	65	0.8	0.9
3.	North Sister	0.7	50	0.6	0.8
4.	Pillar Valley	1.2	66	1.2	1.3
5.	Pillar Mt.	2.1	90	1.8	2.3
6.	Cascade Lake	0.7	53	0.8	0.6
7.	Three Pillar Pt.	0.6	38	0.6	0.4
8.	Sharatin Mt.	0.9	57	1.0	0.7
9.	A. Larsen Loop	1.1	64	1.6	0.7
10.	Pyramid Mt.	1.3	77	1.2	1.3
11.	Buskin Lake etc.	1.4	75	1.7	1.2
12.	Swampy Acres	1.3	68	1.2	1.3
13.	Boy Scout Lake	1.2	67	1.1	1.2
14.	Barometer Mt.	1.0	73	1.1	1.0
15.	Burma Rd.	1.6	85	1.8	1.5
16.	Old Womens Mt.	1.7	85	1.8	1.7
17.	Cope/Sargent	1.3	67	1.6	1.0
18.	Russian Ck.	1.4	71	1.7	1.2
19.	Bells Flats	1.5	68	1.6	1.3
20.	Kashevarof Mt.	1.4	78	1.5	1.2
21.	Cliff Pt.	1.7	89	2.2	1.2
22.	Heitman Lk./Mt.	1.0	70	0.9	1.2
23.	Salonie Ck.	1.3	71	1.7	1.0
24.	Center Mt.	0.7	46	1.0	0.4
25.	Saltery Cove Rd.	2.2	69	3.7	0.8
26.	Kalsin Ridge	0.7	39	0.9	0.4
27.	Powerline	0.4	28	0.5	0.3
28.	West Fork	0.4	22	0.6	0.2
29.	Chiniak Lk./Cape	1.3	72	1.9	0.8
30.	Hidden Lakes	0.8	43	1.3	0.3
31.	Cape Greville/Sac.	0.8	44	1.2	0.3
32.	Shaft Peak/Lake	0.2	14	0.4	0.1
33.	Burton/Barry etc.	0.9	52	1.0	0.6
34.	Narrow Cape Lp.	1.0	64	0.9	1.0
35.	Pasagshak Pt.	1.3	77	1.5	1.1
36.	Marin Ridge	0.3	18	0.5	0.1
37.	Zentner Creek	0.4	21	0.4	0.3
38.	Pasagshak/Portage	1.0	54	1.5	0.6
39.	Lk. Miam/Summit	1.5	58	2.5	0.6
40.	Lefly Lake	0.6	28	1.0	0.1
41.	Saltery Cove	2.2	68	3.6	0.8
42.	Wild Creek	0.9	38	1.6	0.2

Higher use trails are darkly shaded: mean score > 1.5.

Medium use trails are lightly shaded: mean score between 1.0 & 1.5.

Low use trails are not shaded: mean score < 1.0.

Barriers to trail use

Respondents were asked to rate reasons that may prevent them from using local trails as often as they'd like (or not at all). The four-point response scale ranged from “not a problem” to “slightly,” “moderately,” and “strongly discourages my use.” Ranked “barriers” to trail use are given for general public trail users (n=442) and non-trail users (n=66) in Figures 3 and 4; the frequency of responses (percentages) used to construct the graphs are given in Tables 15 and 16 for readers interested in more detail.

Among trail users, four of the top six reasons that discouraged their trail use are affected by management (access/trespass issues, crowding, litter, and trail conditions). These are appropriate issues to address in any trail planning effort, and could be integrated with inventory information. There is no specific information from the general public about where these issues are particular problems, although enthusiasts identified specific trails with various condition problems (see section on specific trail improvements below). Written comments from some respondents may also help in this regard (see Appendix B)

Among non-trail users, several of the top rated reasons for not using trails tend *not* to be trail management issues: poor weather, lack of free time, fear of bears, preferences for non-trail activities, and poor health. However, there appear to be some who don't use trails because they fear becoming lost, are unsure of access options, or don't know where to go – all of which could be addressed by management actions (publication of a map/guidebook, marking trails, etc.).

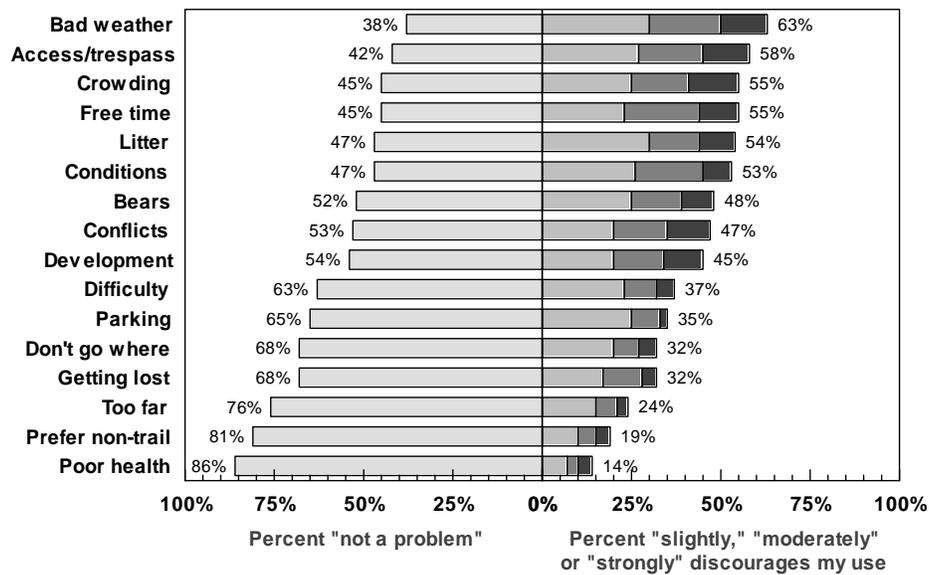


Figure 3. Top ranked reasons for using trails less often among trail users.

Table 15. Percent reporting reasons for using trails less often among trail users.

	Not a problem	Slightly discourages my use	Moderately discourages my use	Strongly discourages my use
Litter	47	30	14	10
Crowding	45	25	16	14
Too much nearby development	54	20	14	11
Poor trail conditions	47	26	19	8
Difficulty of trails	63	23	9	5
Concern about bear encounters	52	25	14	9
Concern about getting lost	68	17	11	4
Lack of good parking	65	25	8	2
Access / trespass issues	42	27	18	13
Conflicts with other users	53	20	15	12
Trails don't go where I want	68	20	7	5
Trails are too far from house / work	76	15	6	3
I prefer non-trail activities	81	10	5	4
Poor health	86	7	3	4
Not enough free time	45	23	21	11
Bad weather	38	30	20	13

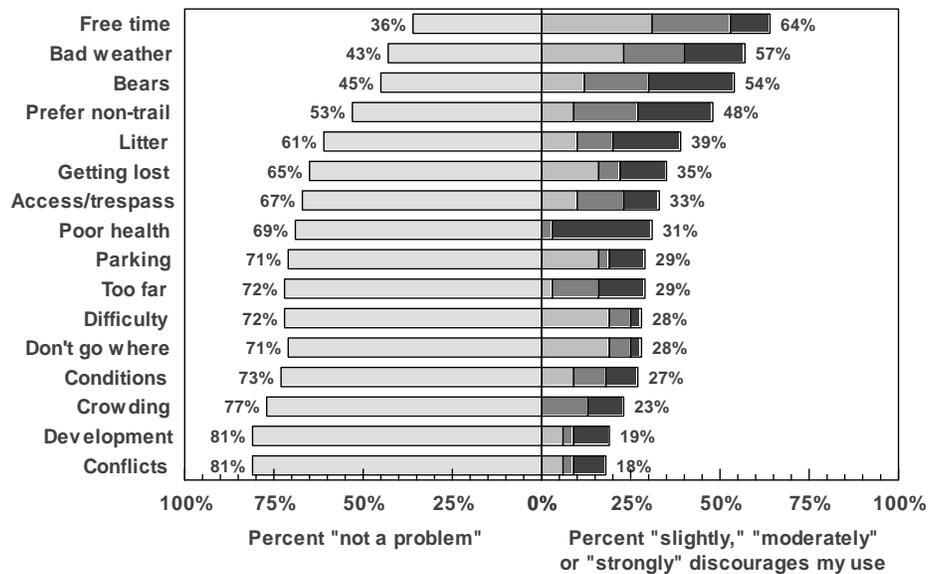


Figure 4. Top ranked reasons for not using trails among non-trail users.

Table 16. Percent reporting reasons for not using trails among non-trail users.

	Not a problem	Slightly discourages my use	Moderately discourages my use	Strongly discourages my use
Litter	61	10	10	19
Crowding	77	0	13	10
Too much nearby development	81	6	3	10
Poor trail conditions	73	9	9	9
Difficulty of trails	72	19	6	3
Concern about bear encounters	45	12	18	24
Concern about getting lost	65	16	6	13
Lack of good parking	71	16	3	10
Access / trespass issues	67	10	13	10
Conflicts with other users	81	6	3	9
Trails don't go where I want	71	19	6	3
Trails are too far from house / work	72	3	13	13
I prefer non-trail activities	53	9	18	21
Poor health	69	0	3	28
Not enough free time	36	31	22	11
Bad weather	43	23	17	17

Sub-group differences on trail use

Motorized vs. non-motorized users

Motorized and non-motorized users in the *general public* sample were statistically compared regarding their reported activity participation rates (t-test comparisons of mean scores). Non-motorized users reported more frequent use of trails for five activities: exercise, short hikes, longer hikes, horse riding, and birding. Motorized users, in contrast, reported more frequent use for eight activities: access for fishing, access for hunting, ORV-motor bike use, snowmachining, snowboarding, backcountry skiing, wildlife viewing, and snowshoeing. There was no statistical difference between these groups for cross country skiing. Results highlight the “hiking/exercise” focus of non-motorized users, while motorized users were more focused on gaining access for fishing, hunting, or winter activities.

There were also differences between non-motorized and motorized *enthusiasts* regarding the frequency of use on specific trails (comparisons were made using t-tests of mean use scores). Non-motorized users showed much higher use frequencies on the Kodiak urban trail system and on Termination Point. Motorized users showed much higher use on seven trails (Cliff Point, Saltery Cove Road, Chiniak Lakes, Hidden Lakes, Cape Greville, Lake Miam, and Saltery Cove) while they showed slightly higher use frequencies on 13 others (Anton Larson Pass Loop, Cope Mountain, Russian Creek, Salorie Creek, Center Mountain, Kalsin Ridge, West Fork, Burton Ranch/Barry Lagoon, Pasagshak Point, Marin Rdige, Pasagshak/Portage Bay, Lefly Lake, and Wild Creek). There were no statistical differences for the rest of the trails.

Readers should use caution interpreting comparisons of specific trail use information, which refers to reported rather than actual use. It also comes from the self-selected enthusiast sample, which included higher proportions of motorized users than evident in the general population. Other studies commonly show that motorized users are concerned about loss of access for their activity, so it would not be surprising if some motorized respondents inflated their use of specific trails – particularly for their favorite trails. However, even if these results are part of a “strategic bias,” they are useful for documenting which trails are considered important to motorized enthusiasts.

USCG vs. other residents

We compared USCG base residents to the general public on trail use, and results were similar to those for motorized and non-motorized users. USCG residents reported more frequent use of trails for fishing access, hunting access, ORV-motor bike use, and snowshoeing, while non-USCG residents reported higher use for exercise, short hikes, long hikes, horse riding, and birding. There were no statistical differences for other activities. Results are not surprising given the higher proportion of motorized users in the USCG sample (58%) compared to the non-USCG residents (24%). Comparisons between specific trail use of USCG and non-USCG residents could not be made since none of the former were part of the self-selected enthusiast sample.

Long-time residents vs. newer residents

Trail use comparisons were made between three residency categories (0 to 5 years, 6 to 20 years, and over 20 years), and a few differences were statistically significant (and even those were small). For fishing access, hunting access, and ORV use, newcomers reported more use than medium term residents, who in turn reported more use than longer-term residents. For snowmachine use, newcomers and long-time residents had slightly higher use than medium term residents. For snowshoeing, newcomers had slightly higher use levels than both longer residency groups. Results suggest that people explore the trail system more actively (particularly for fishing and hunting) when they first arrive, but there may be a “participation life cycle” that leads to diminishing use over time. Age may play a substantial role in this process as well; longer-term residents are often older and may be less interested in these active pursuits.

Favorite Trails

Enthusiasts were asked to identify their two favorite activities as well as their three favorite trails for those activities (Table 17 and subsequent lists by activity). Results show that there are two clear favorite activities (hiking and ORV/motor-biking); others are considerably less popular (most were reported as “favorites” by only 5 to 8% of the enthusiast sample). In addition, snowboarding was only listed by three respondents and horse riding was only named by one. Appendix B includes a list of other “write-in” activities listed as favorites, including access for hunting and fishing, beachcombing, and dog walking.

There are certainly constituencies for all of the “second level” activities, but the overwhelming majority of Kodiak trail enthusiasts are focused on hiking or ORV use. Although this question was not asked of the general public, we would expect to find a similar pattern (although the proportion of those listing ORVs is likely to drop to about 30%, the proportion of the general public that reported ORV use).

Results also help identify potential high priority trails for different types of activities. Readers are cautioned about assuming that enthusiasts’ favorite trails will be identical to the general public’s favorite trails, but the general patterns are likely to be similar.

While a review of favorite trails and the potential reasons underlying those choices is beyond the scope of this study, it is interesting to note that favorite hiking and ORV trails generally do not overlap. This suggests some “natural” separation of these potential conflicting uses (see discussion on this issue below). However, there is also some overlap on favorite trails for cross country skiers and snowmachiners (Burma Road and Cliff Point).

Table 17. Percent of enthusiasts reporting “favorite activities” and individual trails (within activities).

	Hiking	ORV	Back skiing	Wildlife viewing	XC skiing	Biking	Birding	Snow- machine	Exercise
<i>Number and percent of sample reporting favorite activities (could name up to two)...</i>									
Number	99	75	13	13	10	9	9	8	7
Percent	61%	46%	8%	8%	6%	6%	6%	5%	5%
<i>Percent within category reporting individual trails as their favorites (could name up to three)...</i>									
Urban trails	8	0	0	10	0	13	17	0	17
Termination Point	18	0	0	13	0	4	13	0	28
Monashka Mt.	3	0	3	3	0	0	0	0	6
North Sister	2	0	7	6	0	0	0	0	6
Pillar Valley	3	0	7	6	0	0	0	0	6
Pillar Mt.	5	0	3	0	0	22	8	5	11
Cascade Lake	2	0	0	0	0	0	4	0	0
Three Pillar Pt.	1	1	0	0	0	0	0	0	0
Sharatin Mt.	3	1	3	3	0	0	0	5	0
A. Larsen Loop	1	2	0	3	0	4	0	24	0
Pyramid Mt.	3	0	28	3	4	0	0	5	0
Buskin Lake etc.	1	0	0	3	12	0	4	0	6
Swampy Acres	1	0	0	0	19	4	4	0	0
Boy Scout Lake	3	0	0	3	4	13	0	0	0
Barometer Mt.	2	0	0	0	0	0	0	0	0
Burma Rd.	2	3	0	0	27	9	0	14	0
Old Womens Mt.	9	1	0	3	0	0	0	0	11
Cope/Sargent	2	0	10	0	4	0	0	19	0
Russian Ck.	3	0	3	0	12	0	0	0	0
Bells Flats	1	0	0	0	0	0	8	0	6
Kashevarof Mt.	7	2	14	3	0	0	0	0	0
Cliff Pt.	2	5	0	0	8	9	0	5	0
Heitman Lk./Mt.	6	0	0	0	4	0	0	0	0
Salonie Ck.	0	0	3	3	4	4	0	0	0
Center Mt.	2	1	0	0	0	0	0	0	6
Saltery Cove Rd.	1	25	3	0	4	4	0	5	0
Kalsin Ridge	1	0	0	6	0	0	0	0	0
Powerline	0	0	0	0	0	0	0	5	0
West Fork	0	0	0	0	0	0	0	0	0
Chiniak Lk./Cape	1	4	3	0	0	0	17	5	0
Hidden Lakes	1	0	0	0	0	0	0	0	0
Cape Greville/Sac.	0	3	0	3	0	0	0	0	0
Shaft Peak/Lake	0	0	0	0	0	0	0	0	0
Burton/Barry etc.	0	2	0	3	0	0	0	0	0
Narrow Cape Lp.	1	0	3	10	0	0	17	0	0
Pasagshak Pt.	2	0	0	0	0	4	8	0	0
Marin Ridge	0	0	0	0	0	0	0	0	0
Zentner Creek	0	0	0	0	0	0	0	0	0
Pasagshak/Portage	0	3	0	0	0	0	0	0	0
Lk. Miam/Summit	0	21	0	6	0	4	0	10	0
Lefly Lake	0	3	0	0	0	4	0	0	0
Saltery Cove	0	14	3	6	0	0	0	0	0
Wild Creek	0	2	3	0	0	0	0	0	0

Note: More “popular” trails are shaded (5% or higher).

Hiking Trails (n=99)

Most popular trails (ranked):

Termination Point
Old Womens Mountain
Urban trail system
Kashevarof Mountain
Heitman Lake/Mountain

Other popular trails (>1 person reporting):

Monashka Mtn
North Sister
Pillar Valley
Cascade Lake
Pillar Valley
Pillar Mtn
Sharatin Mtn
Pyramid Mtn.
Boy Scout Lake
Barometer Mountain
Burma Road
Cope/Sargent
Russian Creek
Cliff Point
Center Mountain
Pasagshak Point

ORV trails (n=75)

Most popular trails (ranked):

Saltery Cove Road
Lake Miam/Summit Lake
Saltery Cove
Cliff Point

Other popular trails (>1 person reporting):

Anton Larsen Pass Loop
Burma Road
Kashevarof Mountain
Cape Greville/Sacramento River
Burton/Barry Lagoon
Pasagshak/Portage Bay
Lefly Lake
Wild Creek

Backcountry skiing (n=13)

Most popular trails (ranked):

Pyramid Mountain
Kashevarof Mountain
Cope/Sargent
North Sister
Pillar Valley

Wildlife viewing trails (n=13)

Most popular trails (ranked):

Termination Point
Narrow Cape Loop
Kodiak urban trails
Lake Miam/Summit Lake
Kalsin Ridge
North Sister
Pillar Valley

Cross country skiing trails (n=10)

Most popular trails (ranked):

Burma Road
Swampy Acres
Buskin Lake
Russian Creek
Cliff Point

Mountain biking trails (n=9)

Most popular trails (ranked):

Pillar Mountain
Kodiak urban trails
Boy Scout Lake
Burma Road

Birding trails (n=9)

Most popular trails (ranked):

Kodiak urban trails
Chiniak Lake Loop
Narrow Cape Loop
Termination Point
Pasagshak Point

Snowmachining trails (n=8)

Most popular trails (ranked):

Anton Larsen Pass Loop
Cope/Sargent
Burma Road
Lake Miam/Summit Lake

Exercise trails (n=7)

Most popular trails (ranked):

Termination Point
Kodiak urban trails
Old Womens Mountain
Pillar Mountain

Snowboarding areas (n=3)

Reported trails (no ranking implied):

Anton Larsen Pass
Pyramid Mountain,
West Fork
Sharatin Mt.
Hidden Lakes
Kashevarof Mountain
Shaft Peak/Shaft Lake.

Horse riding trails (n=1)

Reported trails:

Cope Mountain
Russian Creek
Bells Flats

Expenditures on trail activities

Background, concepts, and a disclaimer

Economists study the costs and benefits of individual, collective, and institutional decisions, and examine how those decisions affect the well-being of individuals or society. In general, economists define “benefit” as “anything contributing to an improvement in condition” while “cost” is a “loss, sacrifice, or detriment” (Loomis & Walsh, 1997). Because the range of benefits and costs can be enormous, much of the work in economics focuses on assessing that range using a single metric (dollars).

In recreation management contexts, recurring economic research issues focus on 1) the cost to build and maintain recreation facilities, 2) the estimation of recreation demand, 3) the willingness of recreation users to pay fees for use of facilities or access to recreation areas, 4) the value of recreation opportunities in a broader welfare economics model, and 5) the economic impact of recreationists’ expenditures on local and regional economies (Loomis & Walsh, 1997).

This study only asked questions related to this last issue – and only partially – because the study was *not* designed to use responses in a larger economic impact modeling effort. Expenditure information was simply collected to *broadly estimate the magnitude of economic activity associated with trail recreation on Kodiak Island*. Considerably more precise questions and secondary data collection about the regional economy would be necessary to assess the actual impact of these expenditures on the Island’s economy or compare it to other industries. In addition, we have no information about whether people spend the money they reported in the Kodiak economy or whether they made their purchases in Anchorage, the Lower 48, or via the internet, catalogs, etc., which would dramatically alter the impact of this activity on the local economy.

The impacts of trail recreation expenditures in a small region or local area can be significant if expenditures are high, use levels are high, the trail system attracts people from outside the region, and alternative recreation opportunities in the area are few (Loomis & Walsh, 1997). From a national, statewide, or even Island-wide perspective, however, trail users' expenditures are essentially negligible because people would simply spend similar amounts of money doing substitute recreation activities if the trail system were diminished or unavailable (Loomis & Walsh, 1997).

It is also important to recognize that local economic impact is not the only issue involved assessing the value of trail recreation or a trail system. Other types of economic value information that may also be important (but are beyond the scope of this report) include:

- **Use value** (also known as “consumer surplus”). Many outdoor recreation facilities or opportunities are essentially “non-market” goods, where people pay some out-of-pocket costs to take trips, but the value of those trips far exceeds their costs. That value is generally not captured by commercial entities (e.g., outfitters) or managing agencies (e.g., through user fees), but rather by the individual taking the trip. Most outdoor recreation pursuits on public land are close-to-free, but that does not mean they are without value.

In general, “use value” is estimated using one of two basic techniques. The first is called the “travel cost method” (TCM) and it is based on the premise that the number of trips to a recreation site will decrease with the distance traveled, all other things being equal, and uses actual behavior help estimate when costs prevent others from using a site (Loomis & Walsh, 1997). The second technique is called the “contingent valuation method” (CVM) but is also known as “willingness to pay” (WTP). In these studies, researchers attempt to create a hypothetical market for the non-market good by asking what participants would be willing to pay above and beyond expenses. There are several complex methodological issues involved in conducting either TCM or CVM studies well (Loomis & Walsh, 1997; Mitchell & Carson, 1989).

- **Option, bequest, and existence value.** These focus on the value of trail opportunities for people who are not currently using the resource, but who might 1) use it in the future (option value); 2) want future generations to be able to use it in the future (bequest value); or 3) appreciate the existence of those opportunities even if they will never use them (existence value). These types of values are more difficult to quantify than use value, and generally employ CVM techniques (Loomis & Walsh, 1997).
- **Place identity value.** A final value associated with trail systems focuses on community-building benefits attached to identification with local resources and recreation opportunities. In areas where tourism and quality of life resources are central to a community's identity, this value could be significant as well, and it is generally estimated through contingent valuation techniques with their attendant complexities.

Taken together, this background and conceptual information urges readers to be cautious about how they assess and apply expenditure information given below. To reiterate our disclaimer, this expenditure information is provided to generally assess local economic

activity associated with trail use on Kodiak, but it does *not* provide economic impact information nor address several other types of economic value of the Kodiak trail system.

Food, clothing, and equipment expenditures

Respondents were asked to estimate annual trail related expenditures in several food, clothing, and equipment categories; statistics are given in Table 18. The information is given only among respondents who provided it within any given category (i.e., people who left a category blank were not presumed to spend 0 dollars; they were simply removed from the analysis). In general, there was high non-response for these items, which further diminishes the utility of the estimates. Item response rates ranged from 49 to 71% for the general public and 59 to 77% for enthusiasts; in contrast, over 90% answered most other questions in the survey (the other exception was the trail priorities by location as discussed in another section of the report). The difficulty of estimating their annual trail-related expenditures probably accounts for the poor item response.

Table 18. Expenditures per year associated with trail-related food, clothing, and equipment (in dollars).

	General public (n=508)				Trail enthusiasts (n=163)			
	n	Avg	Med	Typical range ¹	n	Avg	Med	Typical range ¹
Food taken on trips (snacks, groceries)	361	219	100	50 to 250	127	320	200	100 to 400
Clothing primarily used with trail activities	356	252	150	100 to 300	123	295	200	100 to 300
Cameras, binoculars, spotting scopes, film, etc.	331	222	100	30 to 250	117	362	100	50 to 300
Trail recreation equipment (skis, snowshoes, backpacks, bikes, etc.)	307	204	100	0 to 200	115	411	100	50 to 200
Equestrian equipment related to trail riding	248	440	300	50 to 875	95	87	100	0 to 160
ORV / ATV / motor bike / snowmachine accessories	280	1,116	400	150 to 1,000	105	2,175	550	325 to 2,875
Total (for those who answered all)	220	3,175	1,300	620 to 4,360	89	3,660	2,400	790 to 6,100

1. The interquartile range: 25% reported amounts higher and lower than the range.

In general, medians are probably more accurate than averages because the latter were inflated by a few high outliers. The “typical range” is defined by the 25% and 75% responses or the “inter-quartile range;” it means that 25% of the sample provided numbers higher and lower than the ends of the range. This is a useful statistic because it ignores outliers and suggests the variance of responses (without requiring statistical expertise to interpret standard deviations, the standard error of the mean, or other variance estimators).

Results show that trail enthusiasts are likely to have higher expenditures than the general public, but the differences were not striking. The more important figures are for the

general public, which can be multiplied by population levels to estimate overall level of economic activity.

Taken together, information suggests that trail users in the general public spend several hundred dollars each year per person on trail related food or equipment. The “total” estimates in Table 18 are probably over-estimates because they only include people who provided responses to all the expenditure questions (and did not include non- trail users or non-respondents). However, summing medians across categories and adjusting for the estimated number of trail users in the population can provide some reasonable “ball park” estimates of total expenditures on trail-related food and basic equipment (Table 19). In these calculations, professional judgments were used to apply Kodiak participation rates similar to those given in Table 10 (the rates are for the entire Kodiak population, not just trail users). Once calculated, food and basic equipment expenditures can then be added to ORV, horse, and road vehicle costs (discussed separately below) to estimate total economic activity related to trails.

Table 19. General estimates for KIB road system annual trail expenditures on food and basic equipment.

	Median expenditures (\$)	Estimated proportion of population along the road system (11,500 total) that would spend this amount	Total expenditures (\$)
Sum of medians for food, clothing & cameras	450	70%	3.6 million
Median ORV accessory expenditures	400	25%	1.2 million
Median horse accessory expenditures	300	3%	0.1 million
Estimated total (food & basic equipment)			4.9 million

Vehicle mileage and gas/maintenance expenditures

Respondents were asked to estimate the miles they drove to access Kodiak’s road system trails over the course of a year. Among the general public, the average response was 651 miles, although the median was only 300 (the average is inflated due to a few very high outliers). The typical range (25% and 75% responses) was 100 to 800 miles. Among enthusiasts, as expected, mileage was higher: an average of 1,230; a median of 500; and a typical range of 300 to 1,000.

Applying the 300 mile median from the general public (assuming \$0.38 per mile for gas and vehicle maintenance, which is the current federal government standard), and assuming 70% of the road system population engages in trail activities, the total expenditures related to road vehicles used for trail activities is about \$900,000.

ORV, snowmachine, and horse expenditures

Respondents were asked to report the number of ORVs, snowmachines, or horses they owned by household, the year of their most recent purchase, and the average trail miles they spend on each per year. Results are summarized in Table 20.

Table 20. Information related to ORV, snowmachine, or horse ownership.

	General public			Trail enthusiasts		
Percent that own...	<u>n</u>	<u>%</u>		<u>n</u>	<u>%</u>	
ORV/motorbike	152	30		65	46	
Snow machine	28	6		16	11	
Horse	17	3		4	3	
Number per household (among those who own them)	<u>Average</u>			<u>Average</u>		
ORV/motorbike	2.1			2.5		
Snow machine	1.5			1.7		
Horse	1.8			2.3		
Year of latest purchase	<u>Average</u>	<u>Median</u>		<u>Average</u>	<u>Median</u>	
ORV/motorbike	2000	2002		2001	2003	
Snow machine	1999	2000		1998	2000	
Horse	1996	1999		2002	2003	
Miles per year	<u>Average</u>	<u>Median</u>	<u>Typical range</u>	<u>Average</u>	<u>Median</u>	<u>Typical range</u>
ORV/motorbike	771	400	100-875	957	800	300-1,200
Snow machine	619	500	100-1,000	696	600	30-1,050
Horse	165	100	65-200	50	50	0-100

In general, these results suggest large ORV ownership and expenditures, while snowmachine and horse ownership and expenditures are considerably smaller. Just under a third of residents' households have ORVs, while 6% have snowmachines and only 3% have horses.

For households with any ORVs, snowmachines, or horses, it is common to have more than one – which makes sense since these activities are often socially-oriented. In general, however, ORV households are more likely to have more than one compared to snowmachine or horse households.

Information about the year of the most recent purchases suggests the frequency with which owners of ORVs, snowmachines, or horses replace them. In general, ORV owners

appear to buy new vehicles more often (a new one every 2 to 4 years) than snowmachine (every 4 to 5 years) or horse owners (every 5 to 8 years).

Information in Table 19 can help roughly estimate the number of households with ORVs, snowmachines, and horses. Assuming about 3,700 households in the road accessible parts of Kodiak Island (11,500 people divided by 3.1 people per household; data come from KIB and the 2000 US Census), there are probably just over 1,000 “ORV households,” 200 “snowmachine households,” and 100 “horse households.”

If all ORV households replace their vehicles every 2 to 4 years, annual ORV purchases would range between 250 and 500. KIB discussions with a local dealer suggests that local ORV sales are much lower than this range (probably just over 100), but there is no way to know if Kodiak residents buy ORVs in Anchorage or from other non-local sources so the higher range remains a possibility. Perhaps more importantly, even 100 local ORV sales per year produces about \$500,000 dollars in economic activity (although much of this economic activity would be “leaked” to the places where ORVs are manufactured, not where they are sold).

Making similar calculations about the number of snowmachines or horses that are purchased each year is more difficult because of the small sample sizes we have to estimate them. These trail users also appear to buy new snowmachines or horses less frequently and own fewer of them than their ORV counterparts. Accordingly, their contribution to the economy is also smaller, probably under \$100,000 per year in total expenditures.

Summing expenditures and estimating total trail-related economic activity

Taking all the categories of expenditures together suggests there may be over 6 million dollars spent on trail-related activities over the course of a year (4.9 million on food and basic expenditures, 0.9 million on road vehicle mileage and maintenance, and 0.6 million on purchases of ORVs, snowmachines, or horses). This is a *very rough estimate*, and it is not the kind of calculation that is commonly reported in economic literature. Accordingly, readers should be cautious about what this figure means beyond giving a sense for the size of recreation expenditures.

To help provide more context, one might assume 3,700 households on the Kodiak road system and a median income of 54,000 per household (from 2000 Census figures). This suggests that collective annual income in Kodiak is roughly 200 million dollars per year. If households spend about 6 million of that income on trail-related recreation, those expenditures reflect about 3% of what people earn. It is beyond the scope of this study to estimate the precision of this type of calculation, but it seems intuitively reasonable.

Differences in expenditures by sub-groups

Motorized vs. non-motorized users

Motorized and non-motorized users in the general public sample were statistically compared regarding their reported expenditures for basic trail related equipment and vehicle miles (t-test comparisons of mean scores). In all categories, motorized users reported spending more on average, although differences between medians were not as large. Comparing medians suggests larger differences for clothing (\$250 for motorized vs. \$300 for non-motorized) and food (\$225 vs. \$100) compared to camera gear (\$150 vs. \$100), and other gear (\$100 for both). Motorized users also reported a median of 600 miles driven to access trails compared to 300 for non-motorized users.

Motorized users also spend more money purchasing, maintaining, and accessorizing their ORVs or snowmachines; these are categories in which most non-motorized users have no expenditures. Taken together, findings suggest that motorized users spend more money on trail activities than non-motorized users on a per capita basis.

USCG vs. other residents

We compared USCG base residents to the general public on trail-related expenditures (t-tests of means) and no differences were statistically significant. While base residents spent slightly more on food and clothing (median differences of \$80 and \$50 per year, respectively), non-base residents traveled slightly more miles (the median for the general public was 300 miles vs. 250 for base residents). Taken together, results suggest that Coast Guard base residents spend similar amounts of money on trail related activities as the general public.

Long-time residents vs. newer residents

Comparisons in trail-related expenditures and miles driven were made between three residency categories (0 to 5 years, 6 to 20 years, and over 20 years) through an analysis of variance (anova). No statistical differences were found between the three groups, indicating that length of residency has no substantial relationship with how much people spend on trail recreation.

Prioritizing trail system improvements

A major goal of the study was to assess residents' priorities for trail system improvements. All respondents were asked about the overall emphasis of improvements (local vs. tourism-development) and to prioritize 26 different potential trail improvement actions. Results are summarized below for the general public and enthusiasts, with an additional section on differences between key sub-groups.

Local vs. tourism emphasis

Respondents were asked if Kodiak's road-accessible trails should be developed for 1) local users; 2) visitors, commercial users, and the tourist economy; or 3) a combination of both. Response categories are given below; frequency distributions are given in Figure 5.

- Local users only
- For both groups, but with more emphasis on local users
- Balance improvements for local users and visitors, commercial users, and tourism
- For both groups, but with more emphasis on visitors, commercial users, and tourism
- Visitors, commercial users, and tourism only
- Neither; the trail system should not be improved or developed more.

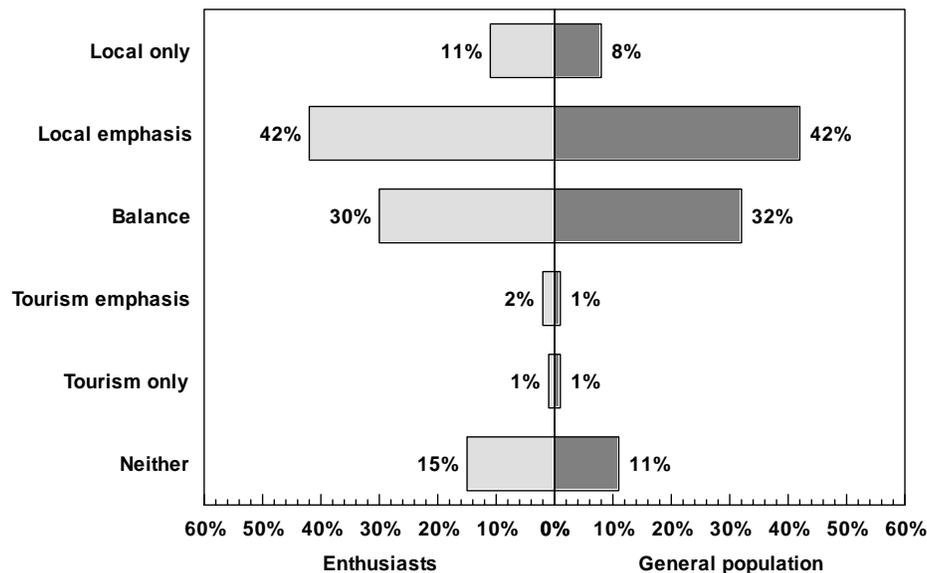


Figure 5. Percent indicating preferences for local vs. tourism emphasis in Kodiak trail improvements.

Results show greater interest in improvements for local users than for tourism-development, which is not surprising given that the sample was entirely made up of local residents. However, about a third of respondents were interested in a “balanced” approach that considered both local and tourism needs.

These results should not be interpreted as “anti-tourism” sentiment so much as a “pro-local use.” Only 8% of the general public wanted trail improvements only on “local trails,” while three-quarters recognized some need to consider tourism development too. In some ways, this question set up a false choice in that most trail system improvements

are not mutually exclusive. An improved trail to a scenic overlook or a wildlife viewing area, for example, provides high quality opportunities for both local users and tourists. Responses to this question, however, may reflect some concern that trail improvements might dramatically increase tourism use of particular trails, which some locals may oppose. However, improvements to already high-use trails (e.g., Kodiak’s urban trails, Termination Point) make more sense from a tourism perspective, because they access obvious attractions and offer easy one day options for cruise ship passengers. These are unlikely to change the nature of those trails.

Interestingly, about 11% of the general public and 15% of the enthusiasts were opposed to any improvements or development of the road accessible trails in Kodiak. Follow-up analysis suggests that this “anti-improvement” group is not particularly easy to characterize, and different respondents may have been attracted to the “no improvements” response for different reasons. While this group was slightly older, predominately male (79%), and had generally lived in Kodiak for a long time (55% for over 20 years), they were similar to other respondents for other socio-demographic variables. While 95% reported some ORV use, 80% also reported taking long hikes, and only 62% were classified as motorized users (used ORVs or snowmachines about once a month or more in season).

Analysis for this “anti-improvement” group suggested that while they were generally opposed to trail improvements, substantial numbers also supported certain specific improvements (see below). For example, majorities supported creation of an “adopt-a-trail” program, a map/guidebooks of trails, information kiosks at trailheads, trail etiquette efforts, bridges, trash cans at trailheads, trailhead parking, and education programs. However, strong majorities were opposed to actions such as creating separate motorized and non-motorized trails, law enforcement patrols, interpretive signs or kiosks, trail re-surfacing, new camps and public use cabins, and major re-routing of trails. These findings are consistent with a group concerned about regulatory approaches to trail management or increased development that might attract more use, as well as with people who generally distrust government or oppose use of tax revenues for these kinds of amenities.

Differences between the general public and enthusiasts for the “emphasis” question were not statistically significant. Similarly, there were no significant differences between motorized and non-motorized users, USCG residents and the general public, or people who had lived on Kodiak for different lengths of time.

Overall development/improvement priorities

Respondents were asked to prioritize 14 distinct trail development/improvement actions on a four point scale from “do not do this” to “low,” “medium,” and “high” priority. Frequencies of responses are given for the general public and enthusiasts in Table 21; graphic displays of the top priorities from the general public are given in Figure 6. Results suggest several general findings:

- There was general support for all 14 actions, with no actions were opposed (“do not do this”) by a majority in either the general public or enthusiast samples.

- Five actions were a medium or high priority for a majority of respondents: major trail re-routes, garbage cans at trailheads, trailhead information kiosks, new bridges at stream crossings, and improved trailhead parking areas. The same actions and rank order were evident in both public and enthusiast samples.

Table 21. Percent reporting various priorities for improvement/development actions in general public and enthusiast samples.

	General public				Enthusiasts			
	Do not do	Low priority	Medium priority	High priority	Do not do	Low priority	Medium priority	High priority
Major trail re-routing projects (to prevent erosion, avoid swampy areas, minimize impacts)	13	18	38	31	11	19	26	45
Add garbage cans at trailheads or along trails	14	19	28	39	14	22	28	35
Trailhead information kiosks (maps, trail information)	15	26	39	20	19	25	35	21
New bridges at stream crossings	13	33	36	18	12	22	40	26
Expand or improve existing trailhead parking areas	16	35	35	15	21	28	34	17
Improve trail surfaces (planking, gravel, paving)	22	35	29	14	28	25	28	20
More directional signs or markers along trails	20	37	27	15	24	35	29	13
Improve trail access for people with disabilities	21	39	30	10	24	36	25	15
Develop campsites on some backcountry trails	28	34	28	11	26	31	26	17
Develop public use cabins on some backcountry trails	30	32	25	13	37	19	27	16
Add pit toilets at trailheads or along trails	29	33	24	13	28	35	25	12
Trailhead interpretation kiosks (nature & history info.)	22	42	27	10	24	45	24	8
Rest areas with benches (non-backcountry trails only)	25	39	28	8	26	48	18	7
Interpretation signs along some trails	29	44	22	5	36	45	13	6

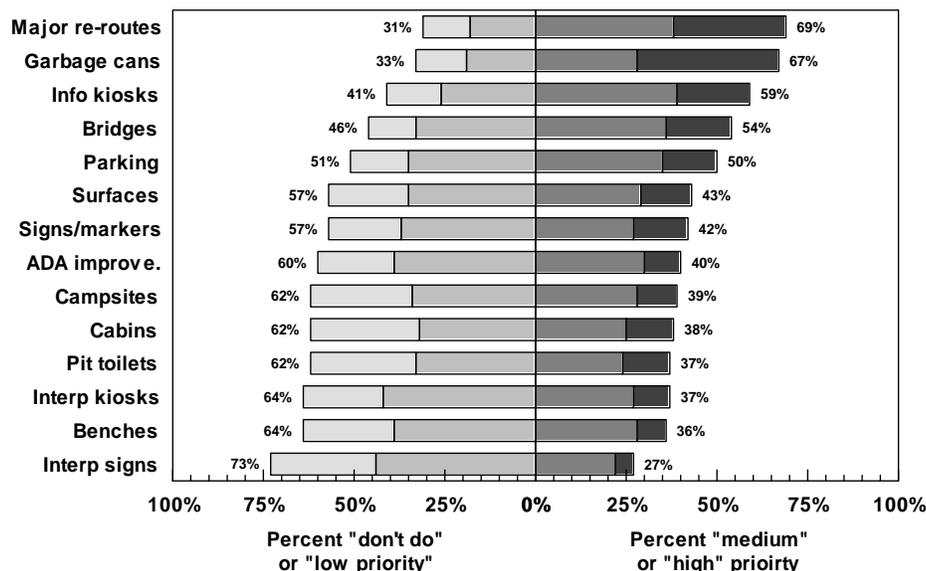


Figure 6. Ranked priorities for improvement/development actions (general public).

- Developing campsites and public use cabins was a lower priority than some large scale improvements on the trails themselves (major re-routes, bridges), but they had a similar priority to other “on-the-trails” improvements (trail surfacing, improved access for people with disabilities, improved signs and markers, rest areas with benches).
- Three of the five highest ranked actions were associated with trailhead improvements. This is significant because trailhead/pull-out enhancements may be developable during road construction projects, offering an alternative funding source for these types of actions.
- Information kiosks and directional signs were a higher priority than interpretation kiosks and interpretation signs. Most Kodiak trail users are more interested in learning about trails to use compared to learning about their natural or cultural history.
- Differences between the general public and enthusiasts were small (see further discussion below).

Programmatic priorities

Respondents were asked to prioritize 12 distinct programmatic improvement actions on a four point scale from “do not do this” to “low,” “medium,” and “high” priority. Frequencies of responses are given for the general public and enthusiasts in Table 22; graphic displays of the top priorities from the general public are given in Figure 7. Results suggest several general findings:

- There was general support for all 12 of these actions, with only one action opposed (“do not do this”) by more than a quarter of either sample (trail patrols for law enforcement, with just over one-third opposing).
- Two program actions were rated a high or medium priority by over three-quarters of the general public (with higher support among enthusiasts): development of a map and guidebook and the “adopt-a-trail” program featuring volunteer clean-up efforts. These are obvious candidates for priority actions in any eventual plan.
- Eight other programmatic actions were rated a medium or high priority by a majority of the general public, including a volunteer program, a trail crew program, creation of a trail fund-raising program, trail etiquette and safety programs, and creation of some separate motorized and non-motorized trails. In general, more programmatic actions received majority support (10 of 12) than trail development/improvement actions (5 of 14).
- Differences between the general public and enthusiasts were small (see further discussion below).

Table 22. Percent reporting various priorities for programmatic actions in general public and enthusiast samples.

	General public				Enthusiasts			
	Do not do	Low priority	Medium priority	High priority	Do not do	Low priority	Medium priority	High priority
Create a Kodiak trail map or guidebook	8	16	31	45	18	11	27	45
Adopt-a-trail program (volunteer clean-up, etc.)	8	17	41	34	11	9	40	40
Develop volunteer trail program	12	25	37	26	17	18	33	33
Trail crew program (litter pick-up, light maintenance)	11	27	36	25	14	34	27	26
Create fund raising programs (e.g., voluntary pins sold to support Kodiak trails)	13	27	37	23	18	20	34	28
Create some separate summer trails (or areas) for motor and non-motorized trail users	22	20	24	34	22	16	20	42
Create some separate winter trails (or areas) for motor and non-motorized trail users	23	22	24	30	25	18	20	38
Trail etiquette program (out-reach, brochures)	18	29	29	24	18	23	22	37
Trail safety program (out-reach, brochures)	18	31	31	20	21	28	28	23
Create a trail non-profit organization	19	35	26	20	25	18	30	27
Trail education program	18	37	28	17	14	28	27	31
Trail patrol (law enforcement) program	36	36	18	11	39	29	14	18

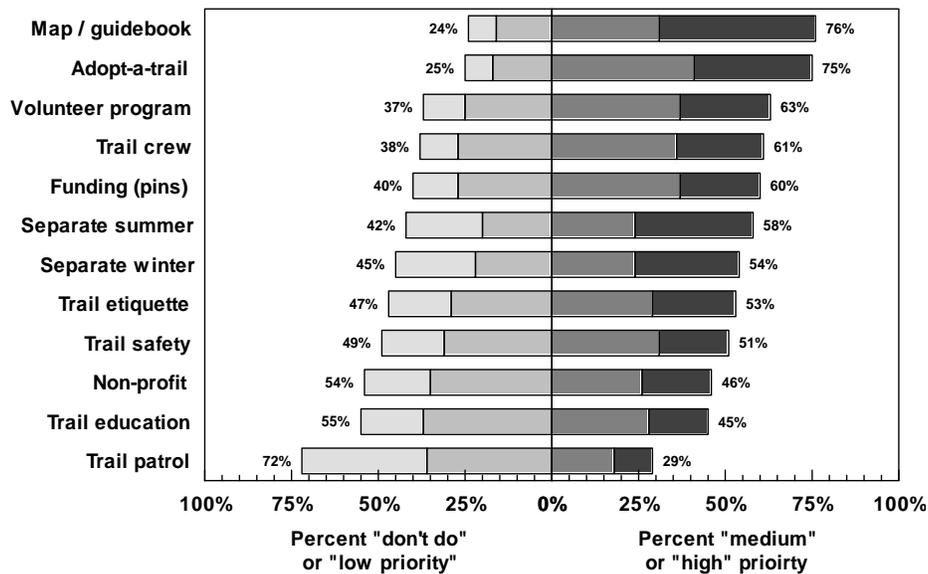


Figure 7. Ranked priorities for programmatic actions (general public).

Priorities: general public vs. enthusiasts

Trail action priorities (both development/improvements and programmatic actions) were compared between the general public and enthusiasts via t-tests of mean scores. Priorities were only statistically different for two actions (new bridges and development of a trail education program), with enthusiasts rating each of higher importance. However, these differences are not practically important as they don't change conclusions about support for both actions in both samples, and the rank-order of actions is similar in both samples.

Priorities: motorized vs. non-motorized users

Trail action priorities (both development/improvements and programmatic actions) were also compared between motorized and non-motorized users in the general public sample via t-tests of mean scores. Comparisons showed that there were differences for 10 of the 26 potential actions, and in every case except one (new bridges), non-motorized users rated actions as higher priorities than motorized users. Comparisons of non-motorized and motorized trail enthusiasts shows a similar but accentuated pattern, with 23 of the 27 being significantly different (always with non-motorized users reporting actions were higher priorities than their motorized counterparts).

Figure 8 shows differences for the five development/improvement actions with priority differences between motorized and non-motorized users in the general public sample, while Figure 9 shows the same for the five programmatic actions with priority differences. Data show that while these differences are statistically significant, they are generally not substantial (the two groups still have similar ranked-ordered priorities). For example, both show majority support for information kiosks, but slightly more non-motorized users rate kiosks a higher priority than motorized users. Similarly, they both show opposition or low priority ratings for interpretation signs, but slightly more motorized users are opposed.

The exceptions are priorities for creating separate trails for motorized and non-motorized users. For these actions, a large majority of non-motorized users reported a medium or high priority, while just under a majority reported the same among motorized users. This is evidence of the desire among most non-motorized user to have at least some trails without motorized use, which is consistent with a developing use conflict.

Figure 10 shows differences between motorized and non-motorized users on these two key "conflict solution" variables for both the general and enthusiast samples, and suggests how the general public within motorized and no-motorized groups are less extreme than enthusiasts for each group. This finding is consistent with the general notion that stakeholders on either side of a conflict are likely to be more polarized. Additional discussion of these actions and motorized/non-motorized conflict is discussed at the end of the report.

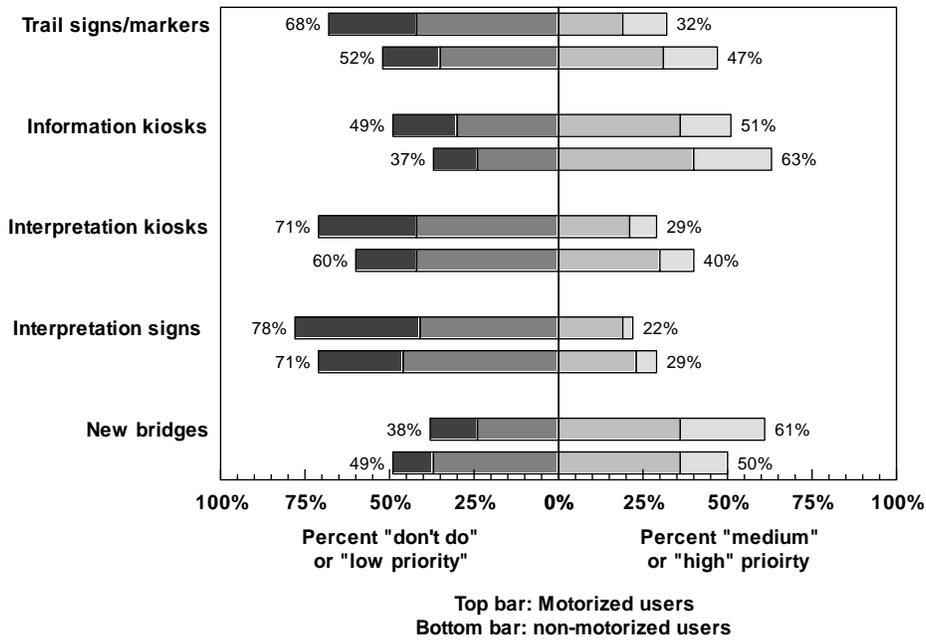


Figure 8. Differences between motorized and non-motorized users (in the general sample) for development/improvement actions (other actions were not statistically different).

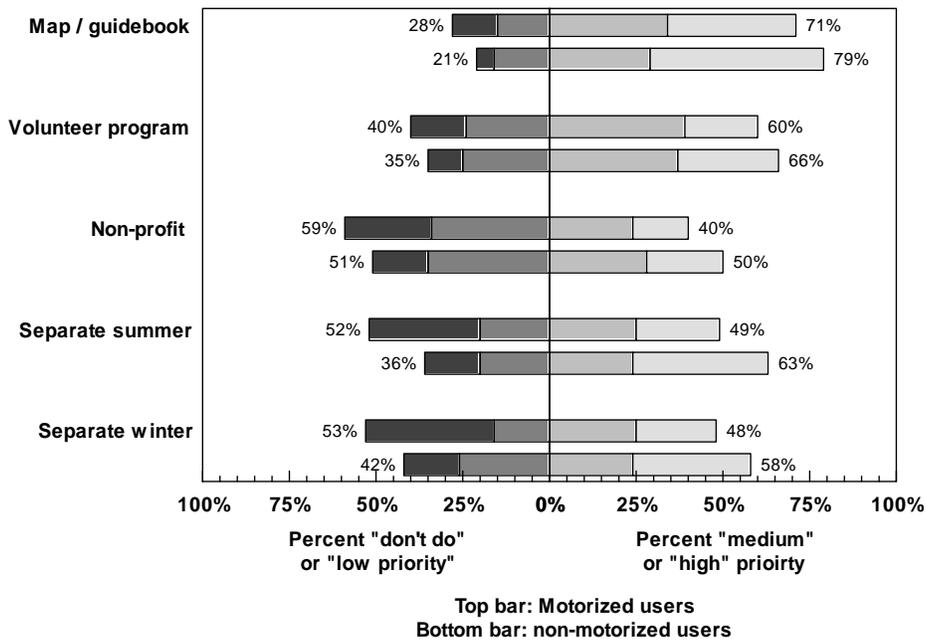


Figure 9. Differences between motorized and non-motorized users (in the general sample) for programmatic actions (other actions were not statistically different).

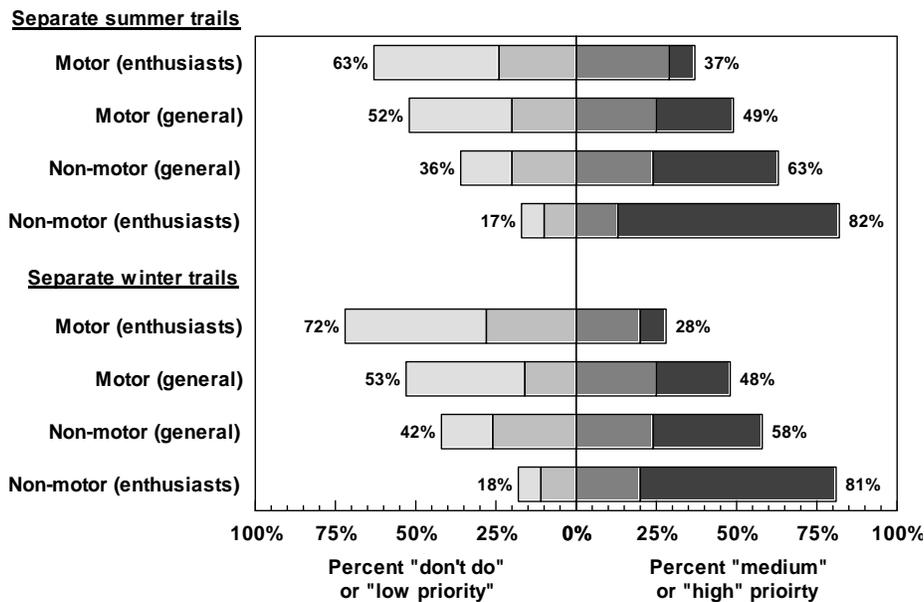


Figure 10. Differences between motorized and non-motorized users for separate trails in both the general public and enthusiast samples.

Priorities: differences between other sub-groups

USCG vs. other residents

We compared USCG base residents to the general public on trail action priorities (t-tests of means) and only 6 of the 26 were statistically different. In all six cases, the USCG base residents rated the actions as a higher priority than the general public. Three of these actions related to providing more information about where the trails are (maps/guidebook, directional and marking signs along trails, and information kiosks at trailheads), which makes sense given the shorter time that USCG residents have been in Kodiak. USCG base residents were also more supportive of developed camps and public use cabins, indicating an interest in exploring backcountry areas. Finally, they were more supportive of law enforcement patrols; this is consistent with the likely occupations of many base residents (patrolling coastal waters, enforcing laws, conducting search and rescues).

Long-time residents vs. newer residents

Comparisons in trail action priorities were made between three residency categories (0 to 5 years, 6 to 20 years, and over 20 years) through an analysis of variance (anova). Of these, 8 of the 26 were statistically different, but most were smaller differences than those observed for motorized and non-motorized users. For seven of the eight actions with differences (directional signs and marking, information kiosks, trail improvements for people with disabilities, develop backcountry camps, public use cabins, map/guidebook, and law enforcement patrols), the newer residents (0 to 5 years) rated actions as slightly higher priorities than longer-term residents (6 to 20 and over 20 years).

These findings are generally explained by newcomers' younger age, more active trail use profile, and need for more knowledge of where trails are located, although the higher support for disability improvements is slightly curious given that longer-term residents

are more likely to be older (with potentially more people with disabilities). The other action with differences by year of residence was separate summer trails for motorized and non-motorized users; people who had lived in Kodiak 6 to 20 years rated the action higher than newcomers and very long-term residents.

Locations for trail system improvements

Trail area priorities for improvements

Respondents were asked to prioritize general locations for 19 potential “on the ground” trail improvements from the overall list of 26 actions (other programmatic actions do not apply to specific geographic areas). For each action, respondents were asked to check up to three areas from a list of eight areas:

- Kodiak urban area
- Anton Larsen Bay
- Monashka
- USCG / Buskin area
- Womens Bay area
- Middle Bay / Saltery / Miam area
- Chiniak
- Pasagshak

As this question was developed, there was concern about “response burden” because it required respondents to consider specific geographic knowledge and the item format was complicated. We considered using a Likert-type low to high priority scale for each action and location, but this would have made the question eight times as long. In retrospect (and unfortunately), these concerns were valid, and item non-response was substantial (many people did not answer them). Even for the most highly supported trail actions (re-routing trails and add garbage cans), less than half (usually less than 40%) reported even one priority location, while the least supported actions (interpretive signs and rest areas with benches) had less than 10% reporting three priority locations. ***Given this high item non-response, findings should be considered cautiously.*** Nonetheless, results probably indicate some general priorities for action locations.

Table 23 summarizes the percent of “votes” for each location and action. The percentage is the number of people who selected an area for an action divided by the total number of times people selected any location for that action. The total percent of “votes” across all eight areas sums to 100 for each action. Table 24 summarizes the same type of information for motorized and non-motorized users for key actions (those supported strongly by one group or the other). Results suggest several general conclusions about locations for improvement actions, as listed below.

Table 23. Percent of general public reporting areas as one of three priority locations for trail actions.

	Kodiak urban area	Anton Larsen Bay	Monashka	USCG / Buskin area	Women's Bay area	Middle Bay / Saltery / Miam	Chiniak	Pasagshak
More directional signs or markers along trails	18	11	19	9	8	12	11	11
Trailhead information kiosks (maps, trail information)	22	12	18	8	9	12	10	9
Trailhead interpretation kiosks (nature & history info.)	26	11	15	12	6	8	13	8
Interpretation signs along some trails	30	10	20	9	8	8	7	8
Expand or improve existing trailhead parking areas	13	16	14	8	13	16	10	9
Add garbage cans at trailheads or along trails	25	10	16	9	8	16	9	8
Add pit toilets at trailheads or along trails	18	15	11	8	7	16	15	10
Improve trail access for people with disabilities	42	3	13	14	8	6	6	9
Improve trail surfaces (planking, gravel, paving)	27	8	19	7	8	16	8	7
Major trail re-routing projects (to prevent erosion, avoid swampy areas, minimize impacts)	14	10	20	6	9	25	7	9
Trail crew program (litter pick-up, light maintenance)	30	7	21	9	9	13	5	5
Trail education program	22	7	16	9	9	16	11	10
Trail patrol (law enforcement) program	21	8	20	9	9	19	5	8
Rest areas with benches (non-backcountry trails only)	41	5	18	12	7	4	5	7
New bridges at stream crossings	16	12	20	5	10	21	7	8
Develop campsites on some backcountry trails	4	16	14	2	6	21	19	19
Develop public use cabins on some backcountry trails	3	15	12	2	4	23	20	21
Create some separate summer trails (or areas) for motor and non-motorized trail users	9	11	17	10	12	20	11	9
Create some separate winter trails (or areas) for motor and non-motorized trail users	9	15	15	12	13	18	11	7

Note: Locations with higher support (>15%) are shaded.

Table 24. Percent of motorized and non-motorized respondents reporting areas as one of three priority locations for selected trail actions.

	Kodiak urban area	Anton Larsen Bay	Monashka	USCG / Buskin area	Women's Bay area	Middle Bay / Saltery / Miam	Chiniak	Pasagshak
More directional signs or markers along trails								
Motorized	16	11	13	10	7	17	14	13
Non-motorized	19	11	22	9	9	10	10	10
Expand or improve trailhead parking areas								
Motorized	9	14	6	7	12	24	12	16
Non-motorized	16	18	19	9	15	11	8	6
Add garbage cans at trailheads or along trails								
Motorized	17	14	9	7	17	21	5	9
Non-motorized	30	10	19	9	8	9	7	7
Improve trail surfaces (planking, gravel, paving)								
Motorized	21	7	12	8	7	25	11	10
Non-motorized	31	9	23	6	9	11	6	6
Major trail re-routing projects (to prevent erosion, avoid swampy areas, minimize impacts)								
Motorized	12	9	11	6	6	33	11	13
Non-motorized	15	10	24	6	10	22	6	7
New bridges at stream crossings								
Motorized	13	12	15	5	7	27	9	11
Non-motorized	18	10	18	10	8	20	7	9
Develop public use cabins on some backcountry trails								
Motorized	0	19	7	3	2	26	21	23
Non-motorized	5	13	15	2	5	21	19	20
Create some separate summer trails (or areas) for motor and non-motorized trail users								
Motorized	10	14	18	6	10	20	11	10
Non-motorized	9	11	17	11	13	20	11	9
Create some separate winter trails (or areas) for motor and non-motorized trail users								
Motorized	10	11	14	11	10	21	12	9
Non-motorized	9	16	15	12	14	17	11	6

Note: Locations with higher support (>15%) are shaded.

- Three areas consistently received more “votes” for many actions: the Kodiak urban trails, the Monashka area, and the Middle Bay / Saltery / Miam Lake area. The first two make sense because they are closer to town where most people live and work, and the third is the highest use area for ORV advocates (who make up about half of the enthusiast sample). Trails in these areas probably deserve closer attention in trail planning, although this should not be the only input into choosing projects.

- With a few exceptions, there was some support for each action in each area – this probably reflects the geographic distribution of our sample and the fact that the Kodiak road system is relatively small and accessible to most of the population. Readers should not assume that improvements made in one area will only be used by people living close-by.
- Trail users appear to recognize that developing camps or public use cabins makes more sense in more remote areas (Anton Larsen Bay, Chiniak, and Pasagshak) compared to closer-in areas. Conversely, they are more likely to support trailhead development, garbage cans, pit toilets, and similar projects on closer trails.
- There are some significant differences between location priorities for motorized and non-motorized users. For many actions, motorized users show strong interest in Middle Bay / Saltery / Lake Miam areas, while the non-motorized users tend to show interest in the Kodiak urban trails, Monashka, and (to a lesser degree) Womens Bay.
- For the specific actions to address potential motorized/non-motorized conflicts (separate trails in summer or winter), there is little difference in the two groups' locational priorities – as long as one remembers that motorized users in general are far less supportive of this option.

Candidate trails for specific improvements

Enthusiasts were asked to report candidate trails for specific trail improvement actions, including building new bridges, addressing erosion, grade, wetlands, trail surfacing, or trail marking issues, as well as locations for public use cabins and campsite development. For each type of improvement, they were asked to provide up to five candidate trails; Table 25 summarizes the number of candidate trails reported in each category (a indicator of interest in those types of projects), and the percentage of “votes” for specific trails within each category.

Note: Many enthusiasts did not answer these questions. While 39% (grade issues) to 61% (bridges) provided at least one candidate trail for each action, many fewer provided all five allowed. In general, developing a list of trail projects is a difficult task, even for enthusiasts, which explains the item non-response. However, this fact urges caution when considering results – they are from a sub-set of trail enthusiasts, who are in turn a self-selected subset of the general public.

The number of “votes” from motorized and non-motorized users for specific trails and improvements were examined for the highest rated improvement trails in each category (determined from Table 25). These are presented in Table 26. The goal was to determine if an action /trail combination was supported by primarily by one or the other (although a few were supported by both). This information could be helpful to planners as they try to develop projects for these different and important constituencies.

Table 25. Percent of enthusiasts reporting candidate trails for specific improvement actions.

	Bridges	Erosion	Grade	Wetlands	Surface	Marking	Cabins	Camps
Number of total "votes" for trails within each category...	343	317	187	319	273	280	208	207
Percent reporting specific trails within each category...								
Urban trails	6	7	3	6	11	7	0	0
Termination Point	12	12	7	12	15	14	8	8
Monashka Mt.	1	2	4	3	3	7	2	1
North Sister	1	1	4	1	1	2	0	0
Pillar Valley	1	1	2	1	1	1	0	1
Pillar Mt.	1	3	2	2	1	2	0	0
Cascade Lake	2	0	2	2	1	2	1	4
Three Pillar Pt.	2	1	1	5	2	1	2	3
Sharatin Mt.	0	0	3	2	1	3	2	0
A. Larsen Loop	2	1	1	1	2	2	3	2
Pyramid Mt.	1	2	8	0	0	3	2	1
Buskin Lake etc.	3	1	0	2	1	2	1	1
Swampy Acres	0	0	0	1	0	1	0	0
Boy Scout Lake	0	1	0	1	0	1	0	0
Barometer Mt.	1	3	11	0	2	3	0	0
Burma Rd.	5	3	1	1	2	1	1	2
Old Womens Mt.	0	5	2	0	3	2	0	1
Cope/Sargent	3	2	3	2	1	2	2	1
Russian Ck.	3	3	3	4	3	1	0	0
Bells Flats	1	2	1	3	3	1	0	0
Kashevarof Mt.	3	6	4	2	4	3	3	2
Cliff Pt.	2	4	1	1	2	1	1	4
Heitman Lk./Mt.	3	3	5	4	3	5	1	2
Salonie Ck.	2	3	2	1	1	2	1	1
Center Mt.	0	0	2	1	0	1	9	1
Saltery Cove Rd.	13	10	6	9	7	3	8	10
Kalsin Ridge	0	1	0	1	1	1	0	0
Powerline	0	0	0	0	0	1	0	0
West Fork	0	0	0	0	0	1	0	0
Chiniak Lk./Cape	1	1	3	1	3	3	5	5
Hidden Lakes	0	0	1	0	1	2	2	2
Cape Greville/Sac.	1	1	2	1	1	1	4	1
Shaft Peak/Lake	0	0	1	0	0	0	0	0
Burton/Barry etc.	2	1	2	2	2	4	4	4
Narrow Cape Lp.	0	0	2	0	1	0	1	1
Pasagshak Pt.	1	0	1	1	2	1	3	3
Marin Ridge	0	0	0	0	0	0	1	1
Zentner Creek	1	0	1	0	0	0	0	0
Pasagshak/Portage	4	3	4	3	2	3	8	4
Lk. Miam/Summit	9	8	3	16	9	6	9	11
Lefly Lake	1	0	0	1	0	1	3	3
Saltery Cove	10	7	3	7	7	3	5	12
Wild Creek	3	2	2	2	1	1	4	4

Table 26. Number of “votes” from non-motorized and motorized enthusiasts for each of the highest rated specific improvements (majority is shaded).

Category/trail	NM #	M #	Category / trail	NM #	M #
New bridges			Erosion control		
Urban trails	18	3	Urban trails	16	5
Termination Point	30	8	Termination Point	29	5
Burma Road	6	9	Old Womens Mountain	12	3
Saltery Cove Road	17	24	Kashevarof Mountain	14	4
Pasagshak / Portage Bay	4	14	Cliff Point	5	7
Lake Miam / Summit Lake	12	18	Saltery Cove Road	11	21
Saltery Cove	10	22	Lake Miam / Summit Lake	8	17
			Saltery Cove	4	17
Grade issues			Wetlands issues		
Termination Point	12	2	Urban trails	17	3
Monashka Mountain	6	1	Termination Point	33	5
North Sister	8	0	Three Pillar Point	8	7
Pyramid Mountain	11	3	Russian Creek	11	2
Barometer Mountain	16	3	Heitman Lake / Mountain	8	5
Kashevarof Mountain	3	4	Saltery Cove Road	16	12
Heitman Lake / Mountain	4	5	Lake Miam / Summit Lake	18	30
Saltery Cove Road	3	8	Saltery Cove	9	13
Pasagshak/Portage	1	6			
Surface improvements			Trail marking and signs		
Urban trails	26	4	Urban trails	15	4
Termination Point	28	11	Termination Point	27	13
Kashevarof Mountain	9	3	Monashka Mountain	15	5
Saltery Cove Road	7	11	Heitman Lake / Mountain	10	3
Lake Miam / Summit Lake	9	14	Burton / Barry Lagoon	2	10
Saltery Cove	7	11	Lake Miam / Summit Lake	1	15
Public use cabins			New backcountry camps		
Termination Point	11	5	Termination Point	9	5
Center Mountain	15	3	Cascade Lake	4	3
Saltery Cove Road	6	10	Cliff Point	3	5
Chiniak Lake / Loop	5	5	Saltery Cove Road	10	10
Cape Greville / Sac.	7	2	Chiniak Lake / Loop	3	8
Burton / Barry Lagoon	5	4	Burton / Barry Lagoon	4	5
Pasagshak / Portage Bay	9	8	Pasagshak / Portage Bay	5	3
Lake Miam / Summit Lake	8	10	Lake Miam / Summit Lake	10	13
Saltery Cove	7	4	Saltery Cove	13	10
Wild Creek	4	4	Wild Creek	3	6

Results show that in most cases, “close-in trails” (those nearer to downtown) receive more support from non-motorized users, while more remote trails receive more support from motorized users. The exceptions are for campsite and public use cabin development, where groups were more likely to report more remote trails.

It is beyond the scope of this report to examine specific trails and actions and explain their potential support (or lack of support), but the information in these tables should prove helpful to planners as they search for specific trail projects to improve the system. Readers should be cautious, however, of blindly presuming that these results indicate broad support for specific projects instead of a “first cut” at potential projects. In many cases, these results may reflect existing use patterns and trail preferences rather than the locations and actions that would bring the greatest benefits for the least cost. Planners will probably want to use this in conjunction with information about trail inventories,

land ownership, stakeholder preferences, available funding options, available volunteer support, environmental compliance, and agency mandates before deciding which projects make sense.

Motorized and non-motorized use issues

Several findings from this survey indicate differences between motorized and non-motorized users, and suggest that there may be developing conflicts between these groups on some trails. Although only the questions about creating separate trails directly address this conflict, several written comments (see Appendix B) suggest it is a major issue for at least some users. Given this finding, some additional information about motorized/non-motorized conflicts is provided below, along with some analysis of conflict comments.

Conflicts between motorized and non-motorized use are well-documented in the recreation literature (Lucas, 1964; Jacob & Schreyer, 1980; Shelby, 1980; Adelman et al., 1982; Jackson & Wong, 1982; Kuss et al., 1990; Watson et al., 1991; Watson et al., 1994). Research shows antipathy from non-motorized users toward motorized use in many settings, particularly wilderness-like settings. This antipathy is often one-sided, and it may have a value-based component that is independent of actual encounters with motorized users or the severity of biophysical impacts (i.e., “social values conflict;” see Vaske et al., 1995).

Research on conflicts between motorized and non-motorized transportation has looked at backgrounds and attitudes of users, economic impacts, safety, enforcement problems, and ecological effects on wildlife, plants, and water quality (Kuss et al., 1990). While these issues are interesting and important, they sometimes obscure the more central issue, which is the nature of contrasting experiences and which type of use is appropriate for a given setting (Shelby, 1980; Watson et al., 1991).

Most efforts to reduce conflicts in recreation settings focus on 1) separating uses by space or time; 2) employing technical fixes to reduce objectionable impacts; 3) educating users about the impact issues to minimize behavior-based problems (if possible); and 4) developing new “norms” that support shared use (or separate use that is viewed as “fair”).

Data from Kodiak trail users are consistent with several previous conflict findings. For example, there is evidence that the conflict is “asymmetrical,” in that non-motorized users complain about motorized use but the converse is rare. There is also evidence suggesting there are different norms about the appropriateness of motorized use on segments of the Kodiak trail system. As discussed with the “separate trails” results for summer and winter trails, non-motorized users are supportive of creating at least some separate trails.

Nearly 40 comments were made by the general public about motorized/non-motorized use issues (see Appendix B), which is many more than for any other issue (the next closest issue focused on conflicts between dog walkers and other users, with just under ten comments). Among enthusiasts, there were just over 40 comments on motorized/non-motorized issues. Note: The number of comments is greater than the number of people who made them, because some provided multiple comments. Even if 40 public and 40

enthusiasts provided comments, this represents less than 8% of the general sample and less than 20% of the enthusiast sample.

Of conflict comments from the public, three-quarters suggested the need for separate trails or motorized prohibitions in some areas. All but two comments were focused on summer rather than winter motorized use, suggesting that summer conflicts receive greater attention. Among enthusiasts, about 60% were supportive of some non-motorized trails or areas. Of comments that were “pro-motorized use,” a handful requested no reductions in motorized access, although a couple also acknowledged potential motorized impacts that may need to be addressed.

Based on written comments, non-motorized users voiced three potential reasons for separate trails or other conflict-reduction actions: 1) biophysical impacts (especially trail erosion through wet areas); 2) safety concerns; and 3) experiential impacts (e.g., noise, rude behavior). Of these, the biophysical impacts are mentioned more often and more prominently.

If motor/non-motor conflicts in Kodiak are primarily based on biophysical impacts, directed efforts to reduce those impacts by trail re-design, trail hardening (gravel, surfacing, geo-block, wetlands boardwalks, etc.) or short-term closures during particularly wet periods (e.g. shortly after break-up) may be effective. However, at least some comments suggest that ORV impacts may extend beyond specific trail corridors to open tundra or alpine areas, which would be much more expensive and difficult to address.

In addition, it is clear that some users see the conflict through the prism of experiential or safety concerns, which may relate to a deeper social values conflict. This survey did not offer data on these issues, which have been controversial in the community (and we feared that controversy might detract from other goals of the effort).

It is beyond the scope of this report to assess whether ORV use or impacts are increasing on Kodiak trails, although this appears to be a statewide trend (taken over a twenty year time horizon). Similarly, it does not offer data that will support a “magic solution” for reducing those impacts or conflict, even as they may help planners understand underlying issues and the proportions of people with different attitudes toward motorized use. Ultimately, successful solutions to these conflicts will probably require extended discussions with stakeholder groups, and may need to offer a diversity of improved ORV trails or riding areas in trade for some designated non-motorized trails or areas. While stakeholder groups are clearly more polarized on these issues than the general trail-using public, open discussions about these findings and issues may help lead proponents from both sides into negotiated solutions that are acceptable to all.

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Appendix A:
Cover letter and survey instruments



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Phone (907) 486-9363 Fax (907) 486-9396

February 20, 2004

Dear Kodiak Resident:

Trails in Kodiak provide a variety of benefits to area residents and visitors, but a high quality trail system can be challenging to plan, develop, and maintain. The Kodiak Island Borough and several other agencies and trail groups are cooperatively developing a plan for the road system trails on Kodiak Island. The goal is to maintain natural resource conditions and opportunities for high quality trail experiences for a diversity of trail users.

In order to do this job well, planners need to know about you – how you use Kodiak’s trails and what you would like to see happen on them. This survey is designed to provide that information. **The surveys are NOT focused on land ownership issues at this time – that will come later as the trails plan develops.** Questions ask about your general trail use, your annual expenditures on trails, and how you would prioritize potential improvements to the Kodiak Island road system trails.

While participation in the survey is voluntary, we would appreciate your help. The survey is only being sent to a limited number of households, and we need responses from a random sample of Kodiak residents to get an accurate understanding of public attitudes – even if you don’t use trails very much. Your household was randomly selected among those in Kodiak.

We would like to have ***one adult from your household complete the survey.*** In order to make the survey random, please choose the ***adult (16 or older) whose birthday comes first in the year*** (not necessarily the person addressed on this mailing).

There are no right or wrong answers; the best responses reflect your personal feelings and beliefs. The survey only takes about fifteen minutes to complete if you are a trail user. ***If you don’t use Kodiak trails, you only need to answer the first question and the last page of the survey*** (this will only take couple of minutes).

When you are finished, place the survey in the stamped, self-addressed envelope and mail it back to us. We hope to have everyone’s responses within a month so we can analyze data and present results later this spring. **Please keep the map as a token of our appreciation.**

For more information about the survey, please call Erin Whipple, Secretary, with the Department of Community Development at the Kodiak Island Borough at 486-9363. She can assist you or, if necessary, provide you with the name of someone who can.

All your answers will be kept strictly confidential, and will never be associated with your name. The identification number on the survey only helps us know who returned the survey so we don't send you reminder letters. Once you have returned the survey, we remove you from our mailing list.

Thanks very much for your help,

Sincerely,

Michelle R. Stearns, AICP, Director
Department of Community Development
Kodiak Island Borough

Kodiak Island Road System Trails Survey

A: Your use of Kodiak Island road system trails

1. In general, about how often do you do the following activities on Kodiak Island's road system trails in their respective seasons? (Circle one number for each row, or check the box for "I don't use Kodiak Island trails")

	Never	Rarely: once a year	About once a month	About once per two weeks	About once a week	A few times a week	Nearly every day
Fitness (walking, jogging, inline skating, biking, etc.)	0	1	2	3	4	5	6
Short hikes or walks	0	1	2	3	4	5	6
Longer hikes (over a mile)	0	1	2	3	4	5	6
Access to fishing areas	0	1	2	3	4	5	6
Access to hunting areas	0	1	2	3	4	5	6
Mountain biking	0	1	2	3	4	5	6
Horse riding	0	1	2	3	4	5	6
ORV-ATV-motorbike riding	0	1	2	3	4	5	6
Cross country skiing	0	1	2	3	4	5	6
Snow machining	0	1	2	3	4	5	6
Snow boarding	0	1	2	3	4	5	6
Backcountry skiing	0	1	2	3	4	5	6
Birding	0	1	2	3	4	5	6
Wildlife viewing	0	1	2	3	4	5	6
Snowshoeing	0	1	2	3	4	5	6
Other:	0	1	2	3	4	5	6

I don't use Kodiak Island road system trails → PLEASE SKIP TO LAST PAGE OF THE SURVEY

2. How many nights do you camp in backcountry reached from Kodiak's road system trails per year?

_____ nights camping

3. Please estimate how much you spend *each year* on the *trail-related activities* in the following categories.

Food taken on trips (snacks, groceries) \$ _____
 Clothing primarily used with trail activities \$ _____
 Cameras, binoculars, spotting scopes, film, etc. \$ _____
 Trail recreation equipment (skis, snowshoes, backpacks, bikes, etc.) \$ _____
 Equestrian equipment related to trail riding \$ _____
 ORV / ATV / motor bike / snowmachine accessories \$ _____
 Other _____ \$ _____

4. Please estimate the number of miles you drive each year to access Kodiak road system trails?

I drive about _____ miles to access road-accessible trails in my car / truck each year

5. Please tell us 1) the number of snow machines, ORVs, or horses you own; 2) the year that the newest one was purchased; and 3) estimate the number of miles you drive/ride it per year on trails. *(If you don't own these, please write "0" in the first column and skip the rest of the question).*

	Number owned by your household	Year most recent one was purchased	Average trail miles per year
ORVs			
Snowmachines			
Horses			

B. Prioritizing trail improvements

People have suggested several ways to improve Kodiak's trail system. Please help prioritize these potential improvements. *(Circle one number for each).*

	Do not do this	Low priority	Medium priority	High priority
A. More directional signs or markers along trails	0	1	2	3
B. Trailhead information kiosks (maps, trail information)	0	1	2	3
C. Trailhead interpretation kiosks (nature & history info.)	0	1	2	3
D. Interpretation signs along some trails	0	1	2	3
E. Expand or improve existing trailhead parking areas	0	1	2	3
F. Add garbage cans at trailheads or along trails	0	1	2	3
G. Add pit toilets at trailheads or along trails	0	1	2	3
H. Improve trail access for people with disabilities	0	1	2	3
I. Improve trail surfaces (planking, gravel, paving)	0	1	2	3
J. Major trail re-routing projects (to prevent erosion, avoid swampy areas, minimize impacts)	0	1	2	3
K. Trail crew program (litter pick-up, light maintenance)	0	1	2	3
L. Trail education program	0	1	2	3
M. Trail patrol (law enforcement) program	0	1	2	3
N. Rest areas with benches (non-backcountry trails only)	0	1	2	3
O. New bridges at stream crossings	0	1	2	3
P. Develop campsites on some backcountry trails	0	1	2	3
Q. Develop public use cabins on some backcountry trails	0	1	2	3
R. Create some separate summer trails (or areas) for motorized and non-motorized trail users	0	1	2	3
S. Create some separate winter trails (or areas) for motorized and non-motorized trail users	0	1	2	3
T. Create a Kodiak trail map or guidebook	0	1	2	3
U. Trail etiquette program (out-reach, brochures)	0	1	2	3
V. Trail safety program (out-reach, brochures)	0	1	2	3
W. Adopt-a-trail program (volunteer clean-up, etc.)	0	1	2	3
X. Create fund raising programs (e.g., voluntary pins sold to support Kodiak trails)	0	1	2	3
Y. Develop volunteer trail program	0	1	2	3
Z. Create a trail non-profit organization	0	1	2	3
Other (specify):	0	1	2	3

C. Prioritizing locations for trail improvements

For each potential trail improvement, please *check locations where the improvement is needed the most*. Use the map provided to find the locations. Please *check no more than three (3) boxes for each row*. If you don't think the improvement is a good idea in any location, please leave that row blank.

	Kodiak urban area	Anton Larsen Bay	Monashka	USCG / Buskin area	Women's Bay area	Middle Bay / Sallery / Miam	Chiniak	Pasagshak
A. More directional signs or markers along trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
B. Trailhead information kiosks (maps, trail information)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
C. Trailhead interpretation kiosks (nature & history info.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
D. Interpretation signs along some trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
E. Expand or improve existing trailhead parking areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
F. Add garbage cans at trailheads or along trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
G. Add pit toilets at trailheads or along trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
H. Improve trail access for people with disabilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
I. Improve trail surfaces (planking, gravel, paving)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
J. Major trail re-routing projects (to prevent erosion, avoid swampy areas, minimize impacts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
K. Trail crew program (litter pick-up, light maintenance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
L. Trail education program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
M. Trail patrol (law enforcement) program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
N. Rest areas with benches (non-backcountry trails only)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
O. New bridges at stream crossings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
P. Develop campsites on some backcountry trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Q. Develop public use cabins on some backcountry trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
R. Create some separate summer trails (or areas) for motorized and non-motorized trail users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
S. Create some separate winter trails (or areas) for motorized and non-motorized trail users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

D. Overall priorities for developing Kodiak's road system trails

Do you think Kodiak's road system trails should be developed or improved for 1) local trail users; 2) visitors, commercial users, and the tourist economy; or 3) a combination of both? (Please circle **only one** response).

1. *Local users only*
2. For both groups, but with *more emphasis on local users*
3. Balance improvements for local users *and* visitors, commercial users, and tourism
4. For both groups, but with *more emphasis on visitors, commercial users, and tourism*
5. *Visitors, commercial users, and tourism only*
6. *Neither*; the road system trails *should not be improved or developed* more.

E. Potential reasons for not using Kodiak Island road system trails

Several reasons may prevent people from using local trails as often as they'd like (or not at all). Please tell us if the following discourage you from using Kodiak Island road system trails. (*Circle one number for each*).

	Not a problem	Slightly discourages my use	Moderately discourages my use	Strongly discourages my use
A. Litter	0	1	2	3
B. Crowding	0	1	2	3
C. Too much nearby development	0	1	2	3
D. Poor trail conditions	0	1	2	3
E. Difficulty of trails	0	1	2	3
F. Concern about bear encounters	0	1	2	3
G. Concern about getting lost	0	1	2	3
H. Lack of good parking	0	1	2	3
I. Access / trespass issues	0	1	2	3
J. Conflicts with other users	0	1	2	3
K. Trails don't go where I want	0	1	2	3
L. Trails are too far from house / work	0	1	2	3
M. I prefer non-trail activities	0	1	2	3
N. Poor health	0	1	2	3
O. Not enough free time	0	1	2	3
P. Bad weather	0	1	2	3

F. Questions about you

These final questions ask about you so we can compare responses for different groups. All responses are confidential and will never be associated with your name. If you feel uncomfortable with any questions, leave those blank.

- How old are you? _____ years
- Please indicate your gender (*circle one*). 1. male 2. female
- How many people live in your household? _____ adults
_____ children
- How many years have you lived ...on Kodiak? _____ years
...in Alaska? _____ years
- What is the highest education level you have attained? (*Circle one*).

1. Some high school	4. Completed college or vocational degree
2. Completed high school	5. Some graduate school
3. Some college or vocational school	6. Completed graduate degree
- Please indicate the category that is closest to your total family annual income before taxes. (*Circle one*).

1. Under \$20,000	4. \$60,000 to \$79,999
2. \$20,000 to \$39,999	5. \$80,000 to \$99,999
3. \$40,000 to \$59,999	6. Over \$100,000

Thanks for completing the survey!

Please put it in the self-addressed and stamped envelope and mail it back to us.

Please keep the map as a token of our appreciation.

Kodiak Island Road System Trails Survey

Trail Enthusiast Supplement

Dear Trail Enthusiast:

Trails in Kodiak provide a variety of benefits to area residents and visitors, but a high quality trail system can be challenging to plan, develop, and maintain. The Kodiak Island Borough and several other agencies and trail groups are cooperatively developing a plan for the road system trails on Kodiak Island. The goal of the effort is to maintain natural resource conditions and opportunities for high quality trail experiences for a diversity of trail users.

In order to do this job well, planners need to know how the public and trail enthusiasts like you use Kodiak's trails -- and what you would like to see happen on them. This survey has two parts designed to provide that information. **The surveys are NOT focused on land ownership issues at this time – that will come later as the trails plan develops.**

The first part is the **“general public survey”** that we have sent out to a random sample of residents (and is included with this package). Questions ask about general trail use and help prioritize general improvements to the Kodiak Island road system trails.

The second part of the survey is this **“trail enthusiast supplement.”** These questions ask for you to recommend specific trail improvement projects and provide more detailed information about your trail use.

While participation in the survey is voluntary, we would appreciate your help. The general survey is being sent to a random sample of households, but we also wanted to survey people who use the trails more often. You were sent the survey and the supplement because you have identified yourself as a trail enthusiast who wanted to help. The enthusiast supplement is only being sent to a limited number of people so your responses really matter.

There are no right or wrong answers; the best responses reflect your personal feelings and beliefs. The survey only takes about twenty minutes to complete. When you are finished, place the survey in the stamped, self-addressed envelope and mail it back to us. We hope to have everyone's responses within a month so we can analyze data and present results later this spring.

For more information about the survey, please call Erin Whipple, Secretary, with the Department of Community Development at the Kodiak Island Borough at 486-9363. She can assist you or, if necessary, provide you with the name of someone who can.

All your answers will be kept strictly confidential, and will never be associated with your name. The identification number on the survey only helps us know who returned the survey so we don't send you reminder letters.

Thanks very much for your help,

Sincerely,

Michelle R. Stearns AICP, Director
Department of Community Development

Prioritizing trails for trail improvement projects

The questions below and on the following page ask you identify specific trails that need various types of trail improvement projects. Using the numbers from the list below (which are also on the map provided), please identify *as many as five (5) trails for each of the following types of improvements.*

If you have additional comments about these types of improvements, please write them in the space provided.

- | | |
|--|--|
| K. Kodiak Urban Trails (see back of map) | |
| 1. Termination Point | 22. Heitman Lake/Mountain |
| 2. Monashka Mountain | 23. Salonie Creek |
| 3. North Sister | 24. Center Mountain |
| 4. Pillar Valley Ridge | 25. Saltery Cove Road Area |
| 5. Pillar Mountain | 26. Kalsin Ridge |
| 6. Cascade Lake | 27. Powerline |
| 7. Three Pillar Point | 28. West Fork |
| 8. Sharatin Mountain | 29. Chiniak Lake/Cape Chiniak |
| 9. Anton Larson Pass Loop | 30. Hidden Lakes |
| 10. Pyramid Mountain | 31. Cape Greville/Sacramento River |
| 11. Buskin Lake/Buskin Hills/Cross Fox Lakes | 32. Shaft Peak/Lake |
| 12. Swampy Acres | 33. Burton Ranch/Barry Lagoon/Sacramento |
| 13. Boy Scout Lake | 34. Narrow Cape Loop |
| 14. Barometer Mountain | 35. Pasagshak Point |
| 15. Burma Road | 36. Marin Ridge |
| 16. Old Womens Mountain | 37. Zentner Creek Valley |
| 17. Cope Mountain/Sargent Creek Area | 38. Pasagshak/Portage Bay |
| 18. Russian Creek/Jack Lee Lakes | 39. Lake Miam/Summit Lake |
| 19. Bells Flats | 40. Lefty Lake |
| 20. Kashevarof Mountain | 41. Saltery Cove |
| 21. Cliff Point | 42. Wild Creek |

1. New bridges at stream crossings

2. Erosion control projects (small retaining walls, water bars on trails, etc.).

3. Grade issues. Re-routing trails to make them less steep (create switchbacks, etc.).

4. Wetlands issues. Re-routing trails, adding boardwalks, planking, or "geo-block" surfacing to avoid swampy areas and minimize impacts.

5. Trail surfacing issues. Add gravel, boardwalks, planking, or otherwise modify the trail tread for easier use and minimize impacts.

6. Trail marking issues. Add directional signs, mark trails or routes, or improve tread to make trails easier to follow.

7. Public use cabins. Develop a "for-fee" cabin or series of cabins on the following trails.

8. Campsites. Develop "hardened" campsites on the following trails to minimize impacts.

9. Other improvement projects. Please specify a trail name and describe your idea.

Detailed information about your use of Kodiak Island road system trails

1. Please indicate your **two favorite trail activities** and use the map to list your **favorite three trails for that activity**. (Circle one activity and list up to three (3) trails using the numbers on the map).

First trail activity	Favorite 3 trails for that activity (use numbers from the map)	Second trail activity	Favorite 3 trails for that activity (use numbers from the map)
1. Hiking 2. Jogging/ running 3. Biking 4. Horse riding 5. Cross country skiing 6. ATV / ORV riding 7. Snowmachining 8. Backcountry skiing 9. Snowboarding 10. Birding 11. Wildlife viewing 12. Other: _____	_____ _____ _____	1. Hiking 2. Jogging/ running 3. Biking 4. Horse riding 5. Cross country skiing 6. ATV / ORV riding 7. Snowmachining 8. Backcountry skiing 9. Snowboarding 10. Birding 11. Wildlife viewing 12. Other: _____	_____ _____ _____

2. In general, about how often do you use the following trails in season? (Circle one number for each trail)

	Never	Rarely: once a year	About once a month	About once per two weeks	About once a week	A few times a week	Nearly every day
K. Kodiak Urban Trails (see map)	0	1	2	3	4	5	6
1. Termination Point	0	1	2	3	4	5	6
2. Monashka Mountain	0	1	2	3	4	5	6
3. North Sister	0	1	2	3	4	5	6
4. Pillar Valley Ridge	0	1	2	3	4	5	6
5. Pillar Mountain	0	1	2	3	4	5	6
6. Cascade Lake	0	1	2	3	4	5	6
7. Three Pillar Point	0	1	2	3	4	5	6
8. Sharatin Mountain	0	1	2	3	4	5	6
9. Anton Larson Pass Loop	0	1	2	3	4	5	6
10. Pyramid Mountain	0	1	2	3	4	5	6
11. Buskin Lake/Buskin Hills/Cross	0	1	2	3	4	5	6
12. Swampy Acres	0	1	2	3	4	5	6
13. Boy Scout Lake	0	1	2	3	4	5	6
14. Barometer Mountain	0	1	2	3	4	5	6
15. Burma Road	0	1	2	3	4	5	6
16. Old Womens Mountain	0	1	2	3	4	5	6
17. Cope Mountain/Sargent Creek	0	1	2	3	4	5	6
18. Russian Creek/Jack Lee Lakes	0	1	2	3	4	5	6
19. Bells Flats	0	1	2	3	4	5	6
20. Kashevarof Mountain	0	1	2	3	4	5	6
21. Cliff Point	0	1	2	3	4	5	6
22. Heitman Lake/Mountain	0	1	2	3	4	5	6
23. Salonie Creek	0	1	2	3	4	5	6
24. Center Mountain	0	1	2	3	4	5	6
25. Saltery Cove Road Area	0	1	2	3	4	5	6
26. Kalsin Ridge	0	1	2	3	4	5	6
27. Powerline	0	1	2	3	4	5	6
28. West Fork	0	1	2	3	4	5	6
29. Chiniak Lake/Cape Chiniak	0	1	2	3	4	5	6
30. Hidden Lakes	0	1	2	3	4	5	6
31. Cape Greville/Sacramento River	0	1	2	3	4	5	6
32. Shaft Peak/Lake	0	1	2	3	4	5	6
33. Burton Ranch/Barry Lagoon	0	1	2	3	4	5	6
34. Narrow Cape Loop	0	1	2	3	4	5	6
35. Pasagshak Point	0	1	2	3	4	5	6
36. Marin Ridge	0	1	2	3	4	5	6
37. Zentner Creek Valley	0	1	2	3	4	5	6
38. Pasagshak/Portage Bay	0	1	2	3	4	5	6
39. Lake Miam/Summit Lake	0	1	2	3	4	5	6
40. Lefly Lake	0	1	2	3	4	5	6
41. Saltery Cove	0	1	2	3	4	5	6
42. Wild Creek	0	1	2	3	4	5	6

***Thanks for completing the survey and the trail enthusiasts' supplement!
Please put both in the self-addressed and stamped envelope and mail them back to us.
Please keep the maps as a token of our appreciation.***

**Map of trail areas
(included in general public survey)**

**Map of specific trails
(included with trail enthusiast supplement)**

**Map of Kodiak urban trails
(included in trail enthusiast supplement)**

Appendix B: Verbatim survey comments

General Public

Section A. Your use of Kodiak Island trails

Estimating use by activities

- *This is what stopped me the first time I started to fill out this questionnaire. From once a year to once a month leaves a gap of activity.*
- *Badly needs a intermediate category.*
- *I don't currently use the trail system, but we are all getting older may need a place to go that is not as rugged or inaccessible.*
- *Other activities listed:*
 - Boating/Pasagshak.*
 - Access to camping.*
 - Berry picking and beaches.*
 - Beach combing!*
 - Running dogs.*
 - Photography*
 - Enjoying free access.*
 - Beach access.*
 - Trapping.*
 - Off road truck*
 - Access to beach.*
 - Trapping*
 - To enjoy beauty and atmosphere of Kodiak.*
 - Dog walks w/friends.*

Expenditure estimates

- *Who knows? I guess between 350-1000 depending on the weather and on what else we have going on.*
- *This question doesn't make sense, we have these things not specifically for trail related activities, but rather because of the life style we choose to live and out jobs!*
- *Use same stuff each year, have 3500 in horse and camping equipment.*
- *All multi use, not exclusive to trails.*
- *You don't buy cameras, binoculars, spotting scopes every year!*

Mileage estimates

- *No real estimate trail use is incidental to other activity.*
- *Can't guessimate, daily, weekly trip's out the road. All summer.*

Section B. Prioritizing trail improvements

General/non-specific comments

- *Keep Borough from selling more Bell Flats green belt and losing more good recreation/trail lands for Kodiak residents in Bell Flat!*
- *A lot of these answers depend upon how much money and manpower you have.*

Trailheads and signs

- *Trailhead marker & occasional trail marker so you know you are on the right trail.*
- *Where needed.*
- *I don't want people to find the trails that I use.*

Interpretation kiosks and signs

- *If history related.*

Information kiosks

- *They will get vandalized.*

- *Vandalism?*
- *These invite vandalism.*

Trash cans

- *Bear problem!*
- *Bear proof only.*
- *Bear feeders.*
- *Only if emptied once in a while.*
- *Too much trash around.*

Access for people with disabilities

- *Some trails, state park.*
- *Abercrombie.*
- *Depends on how many disabled are in Kodiak. I have seen very few if any, but there should be some trails for older or disabled use.*
- *Non-backcountry only.*

Improve surfaces

- *In some areas.*
- *Existing trails.*
- *Planking muddy areas.*
- *Wash out area on stairs on north end trail (on Fish Tech side).*
- *Where needed.*

Major re-routes

- *Most important.*

Trail education

- *Volunteer/Borough*
- *Riders should do that, I do.*
- *Not bad idea for community service.*
- *I do myself.*

Trail patrols

- *Enforce what?*
- *Waste of \$\$\$ w/volunteers can be self-policing.*
- *Enforce leash law!*
- *During summer when transients set up camps (tents) ie Rotary Park trail area in the dense forest and North End park walk areas off the trail (follow a well used out of the way trail and find the stone pit, camp fire areas that transients must tell each other about).*

Rest areas with benches

- *Where's the money?*

New bridges

- *Island Lake*
- *If needed.*

Campsites

- *Fort Abercrombie takes care of this, I hope.*

Public use cabins

- *Only if they are looked after.*

Create separate summer trails for motorized and non-motorized.

- *ATV park for the yahoos.*
- *Restrict motorized.*

Kodiak trail map

- *Yes! Number 1 priority for me.*

Trail etiquette program

- *I ride ATV's and enjoy the trails and try to be mindful of other users; however, some groups of people who use the trails don't actually want ATV riders to use proper etiquette, they want us gone all together, i.e. the CG property that was put off limits, local Audubon, etc. We should try to work together w/realistic expectations of everyone's needs.*

Trail volunteer program

- *Monitoring! Observation? Maintenance? Meaning what?*
- *Use the people who need to community service as a punishment for wrongdoing.*

Action suggestions pertaining to dogs

- *Enforce leash law and individuals cleaning up after their dogs!*
- *Stop the dog poop on Near Island trails!! A person spends more time trying not to step on dog poop than enjoying the walk!! Pop cans and beer bottles.*
- *Free dog (leash free) zone, south end of Near Island.*

Other action suggestions

- *Trails for mountain bikes.*
- *Suggestion: Borough Community Development Department should secure use of Holiday Beach for the public. That is the jewel of the road system that is only open to a few privileged USCG personnel.*
- *I would like to see an additional trail on Near Island starting at the parking lot at north end park, extending out to Trident Basin where it connects with an existing trail to the SW send of Near Island.*
- *Force people to clean after themselves and pets.*
- *Tread lightly program.*
- *Cut some brush.*
- *First aid kit on trail.*
- *Trail construction/bridge building*
- *Open old well rounded roads to ORV, bicycles, etc.*
- *Trail condition updates.*
- *Remove debris from salmon streams so they can travel upstream this should be part of the state park system+, maintenance program or the ADF&G staff. Get them out of the office instead of crunching numbers.*
- *Remove the junk cars at the end of Sergeant Creek and Jack Lakes trails. Block off the trail so cars (only) can't drift in and dump trash or party there.*
- *Get KIB to: 1) Enforce laws already on the books and to clean up existing "town" parks (Mill Bay, Otmeloi, or example). 2) Put monies into dumpster staging areas so that appliance/car dumping is at least passively discouraged. Who wants to use/pay taxes for park upkeep if junk items are at the entrance to park?*

Other general suggestions related to prioritizing actions

- *Expand existing trails.*
- *Keep wild trails wild, minimal interference to protect them from being loved to death or civilized out of all recognition.*
- *Please don't publicize trails.*
- *Anything that will help to increase funding.*
- *Get fed hwy # - other grants, etc.*

- Utilize existing (and past) public access laws. Check with and empower those who have used the trails the longest and the most.

Section C. Prioritizing by location

General comments

- I use only urban and Monashka trails, and Barometer, because they are the only ones I know. I would like to know more. Mark trailheads.
- Coast Guard should fund these (in Buskin area).
- Cliff Point, Heitman, Holiday Beach, Kalsin
- These are leading questions and are contradictory to answers in part “B”, therefore are invalid.
- Take the trailhead signs down.
- Leave alone.
- Expand the bike trail.
- All would be nice, but \$ is of course a must....
- Every trail should be made better by your passing.

Signs and markers

- Especially Termination Point.
- Trailhead markers.

Trash cans

- All!

Pit toilets

- Only if attended too.

Access for disabled people

- Where feasible.

Trail surfacing

- Already good.
- Where needed.
- Stairs at Island Lake trail.

Trail re-routing

- Where feasible.
- Cliff Point.
- ATV's are tearing swampy areas up.

Trail patrol

- Don't do this.

Benches

- Perhaps “in memory of”

New bridges

- Where needed most.
- Where feasible.

Separate summer/winter motorized and non-motorized trails

- Needed areas for motorized users that are ok (approved) for use. Not sure best areas.
- If this means separate trails for motorized vehicles and a different trail for non-motorized.
- There should be places you only access by walking. ORV's are ruining many trails!

Section D. Overall priorities

- *Improve only a few short popular trails for both groups. Leave the mountain trails rustic. It adds to the “Kodiak Experience”.*
- *No government (tax payers) money should be used. All people equally, by those using it.*

Section E. Barriers to use

General comments

- *Don’t know about trails.*

Litter

- *Dog poop.*
- *Dog poop at Near Island.*
- *Just makes me angry to see litter in such a beautiful place.*

Crowding

- *By machines.*

Poor trail conditions

- *Due to ATV use.*
- *Cut the trees up that have fallen down on Island Lake trail.*
- *Due to ATV use.*
- *The most discouraging situation is having trails destroyed by 4 wheelers.*
- *Russian Ridge is a continuous mud pit.*

Access / trespass issues

- *Need better maps of useable areas.*

Getting lost

- *Also, we just recently moved here and I don’t know where many are yet and which ones are kid friendly.*
- *Don’t know where they are?*

Conflicts with others: ATVs, other motorized use

- *ATV users.*
- *ATV users who are not respectful of hikers and the land. Many experiences with this type of ATV user.*
- *ATV’s, ORV’s*
- *Motorized users.*
- *4 wheelers/snow machines will run over pedestrians and “buzz” pets and picnic places were people are already using the area until they are driven off.*
- *Motorized users and hunters.*
- *Due to ATV use.*
- *4 wheelers*
- *ORV’s, hunters, trappers discourage my trail use.*
- *ATV uses on Pillar Mountain –Hiking over pillar or picking berries – ATV people drive over all vegetated terrain with no regard for the berry/vegetation and have torn the area up. ATV’s run freely and at will and don’t hesitate to tear up the land.*
- *Motorized use.*
- *ATV’s and snow machines.*

Conflicts with others:

- *Dog walking.*
- *Drunks and rude teenagers.*
- *Commercial users*
- *I would not take a child on a trail where you have loose dogs and an unenforced leash law.*
- *Vagrants' camping across bridge in some areas is scary for women walking alone.*
- *Dog unleashed – a huge problem!*

Other anti-motorized use comments

- *ATV use is driving wildlife off our trails.*
- *They simply should not be used by off road vehicles of any kind.*
- *ATV damage should be mitigated; reclamation!*
- *Ban motorized use.*
- *Submit a ballot initiative for registered voters only to sign demanding borough to adopt a borough wide ban on use of ATV's outside of private property.*
- *Note: ATV's are loud, rude and tearing up trails and habitat.*
- *Note: The reason I marked items I. & J. is because ATV's are ruining swampy areas – when the mud gets too deep for them, they reroute the trail, continuing to widen the torn up areas. With a wood decked travel surface in these areas, it would protect the wetlands and make it easier for the ATV's to travel.*
- *Get rid of four wheelers scaring the hills and trails.*
- *I do not care for any motorized vehicle on any trail, they ruin the trails. I enjoy walking mostly on the urban area, Chiniak and Monashka.*

Other pro-motorized or motorized access comments

- *Do not close down trails for motorized vehicles.*
- *Leave trails alone and accessible!*
- *I'm very thankful for the four-wheeler trails that go up above the brush line. With these trails it saves me a lot of time in the summer, not having to fight the tall grass and tag alders. I get to enjoy the alpine country.*

Other comments (multiple ideas; longer comments)

- *There are three types of trails on this island: 1) High maintenance w/trail markers, bridges and gravel paths, interp sings, garbage cans and access for all people, these need volunteer support. 2) Low maintenance w/maybe a trailhead marked map w/parking area. 3) Game trails where the adventurers find their own way.*
- *Guys: You failed to leave room for comments. I exclusively use the south end of Near Island for dog walking; it is ideal in that there is no bear problem. The litter is minimal and most of the people out there are dog walkers as well. Pillar is the pits trash wise. One of the dogs stepped on a broken beer can and severed an artery nearly dying before we could get back to the car and to a vet. Abercrombie has a leash free area but it is adjacent to a leash zone causing problems. It would be phenomenal if you would designate the south end leash free officially. Those of us who are out there daily would gladly do the trail maintenance (we do now anyway) for that privilege, but to be able to do it openly. Why don't you get people to "adopt" a park area in town?*
- *The only trail I use is Mill Bay trail. Since answering this I'd like to use more trails. Any chance of providing a brochure that indicates where the other trails are located?*
- *Thank you for the map and efforts to better trails. Pillar mountain road is in desperate need of fixing washed out areas. Such a waste of such a grand place to take the tourists/local people too.*

- *When we came back to Kodiak in 1958 I was only 38 years old so age has caused me not to get out as much as I'd like to now. Most of the old packhorse trails have grown over and have not been used since the 40's when navy and army started building roads. Also, with a boat I get away from the road system and use trails in Shuyak and Afognak where natives haven't posted the land. Also the elk that were great trail makers have changed their territory and their trails are now closed up in areas like Muskomee Bay, etc. The state improved trails in Muskomee Bay (Raspberry Straits) in mid 60's but never maintained it and it was impossible in 7 years. It ran from salt water up to Afognak Lake and forked up mountain to Molina Lake.*
- *I've walked Kodiak for over 50 years while young. I walked up the face of Pillar. The trails closed due to development. I miss that trail. I've walked the back side of Pillar crossed around reservoir walked the back road to the end of the road. The lake was closed off. Sad. Use to walk Swampy Acres; alert to bears my husband would drive along side. That area closed to road traffic. The walk along the Buskin. Again bear concern; husband drove his car while I ran. Closed off. On and on, the beauty of this island is in ruin. The natural trails I walked on and my parents walked on are closed. Dogs not allowed. My heart is really saddened to see what is happening to my home. New trails are so engineered the wild life isn't there to enjoy. I like natural. Walking renews one with God. Where are we going with all the regulations on something as simple as a walk?*
- *Personally I would not spend a dime of precious resources, (tax monies, OPM) on signs, garbage cans, toilets, etc. The orangutan, slobs, the punks, the delinquents, tear down signs, burn outhouses, shoot and turn garbage cans upside down, steal picnic tables or vandalizes them. Seems to me this questioner is better fitted for use in more civilized places like the Pacific NW. If I must pay taxes let's not spend it on frivolous things! You can build a whole new bureaucracy over something like this. People need less taxes, less government, not more... I have done hunted and fished plenty during my 40 years in Kodiak and did not miss trails and public toilets.*

Trail experience...

- *I'm not sure I even know where the trails are OK I see the map.*
- *I feel inadequate to answer most of these questions. The trails we use are very nice. They have been clean. I do like garbage cans and I have noticed the dog deposit cans. Thank you. I have enjoyed the wildlife signs and historical markers. The picnic tables on Near Island are a favorite spot for lunch! I appreciate the trail upkeep. I feel unqualified to speak or have an opinion of trail improvements or more access for disabled people, mainly because I am not sure of the use of these trails have or how it would help or improve Kodiak's economics. My family really does not use trails out of the town area.*
- *Have been on the island for 8 months and we do not know where trails are (with a few exceptions). Have had to ask around, but without ATV's, the trails that we have been told about are not appealing. Would be nice to have a book of trails so new comers could have adequate information for health and fitness. Length of trails, difficulty, etc. , so people with health conditions (i.e. pregnancy) can enjoy the trails of Kodiak without extensive research.*
- *Not aware of the Kodiak trails. It would help if there were better maps of the trail system. Difficult to read and determine exactly where the trails are.*

Enthusiasts' Comments

Section A. Your use of Kodiak Island trails

General comments about trail use

- *I have used some areas in the past more frequently than I do now as I'm older and stick to town locations and avoid mountains due to knee strain. Also, my grown "kids" use the trails and my spouse uses trails that I don't use.*
- *Just moved here, but anticipate 2-3 times a year.*
- *This is a big time interval "several times a year" or 4-6X/year would have helped me.*

Estimating use by activities

- *Other activities listed:
Swimming
Dog walking
Wild foods, foraging, ice-skating.
Hunting/trapping/fishing
Berry picking
Photography*

Expenditure estimates

- *How do you evaluate the equipment already purchased? Like ATV, cameras, don't buy these every year. Dumb, stupid questions.*
- *We are using mostly old clothes, equipment we already had.*
- *Most equipment, clothing, gear lasts over a year. Some years my expenses are much higher.*
- *I have feeling this is the driving force behind your survey. I'll spend less if you close any trail to ATV use!*
- *Have had gear for years and take food from home.*

Section B. Prioritizing trail improvements

General/non-specific comments

- *[Several development actions]...Creates vandalism issues.*

Trash cans

- *Should only be done at trailheads that are near town. Don't create a bear attraction.*

Pit toilets

- *Very high use trails only.*

Access for people with disabilities

- *City trails and beach access.*
- *Primarily city trails and beach access.*

Improve surfaces

- *[Don't do this]...Except when need for trails for people with disabilities.*

Major re-routes

- *On some trails, this is a higher priority.*
- *On damaged ATV trails.*
- *Has been done in a number of places on Miam Trail!*

Trail crew program

- *ATV club does it!*

Trail education

- *PSAs – positive testimonials.*
- *Very challenging to avoid preaching to the choir.*

Trail patrols

- *To keep motor vehicles off trails.*
- *Troopers do it!*

New bridges

- *Use area's materials.*

Public use cabins

- *Problem is possible disrespect /destruction by irresponsible users.*
- *Only if there is an agency and funding to maintain them.*
- *For non-motorized traffic only!*
- *For non-motorized access.*
- *Instead of "for fee" cabins provide some primitive weather shelters with bunks. Fees would be hard to collect. Reservations would be necessary in fee cabins, both types would be nice, depending on area. Shelters: e.g. back ridge of 2, beyond 20, towards 24, Heitman Mountain 8.*

Kodiak trail map

- *This would be excellent! It would guarantee trail awareness for residents and tourists.*
- *Top priority.*
- *Was done by Audubon.*

Trail etiquette program

- *Part of guidebook?*

Adopt-a-trail / Trail volunteer program

- *Way to teach etiquette.*
- *ATV club does it!*

Other action suggestions

- *Educating public about responsible use – no litter, pack it in pack it out signs and responsible motorized vehicle use.*
- *Promote non-motorized activities.*
- *Promote outdoor activity (preferably non-motorized).*
- *Change as little as possible!*
- *Vandalism is a big problem and is a "sport" for some people. A,B,C,D & Q would be great in the future, after these idiots are educated or areas are "patrolled". Trail improvements will be destroyed or shot up.*
- *Culverts to improve trail.*
- *Add culverts to certain specific areas.*
- *Create ORV road system owner permit program to fund natural resource repair costs.*
- *In winter I use snow machine to make ski trails on Burma Road – great for kids, walking and cross country skiing. 4-wheelers need to stay off Burma Road when there is snow. 4-wheelers make ruts, and it is shitty for all.*
- *Tread lightly program*

Other general suggestions related to prioritizing actions

- *There are so many trails that I am unfamiliar with (trailhead markers would be nice!). Someone with a broader knowledge could contribute better info than me on this section. Hopefully with the maps in this packet. I'll be able to locate some of those trails that I've always wanted to try.*
- *Need some sort of monitor/mediator group for conflicts, especially if separate trails for non-motorized/motorized to watch condition and maintenance of trails.*
- *Leave the trails alone. Don't spend a lot of money on them.*

Section E. Barriers to use

Litter

- *I carry bag to pick up trash and wish I didn't have to.*
- *Does not discourage use, but it is a problem in some areas.*
- *Encourages me to clean/remove it.*
- *Dog manure*

Development

- *I don't go where there is a lot of development.*

Trail difficulty

- *Poorly designed; poor layout; poor or non-existent construction (route v. trails).*

Conflicts with others: ATVs, other motorized use

- *ATV's*
- *Trail destruction by motorized vehicles and vandalism*
- *ATV's have their place, but it not everywhere!*
- *ATV's.*

Conflicts with others:

- *Dogs! I am tired of being jumped on.*
- *The dog walkers slow down my ATV.*
- *Target shooters at Jacks Lakes and Monashka.*
- *Watch out about shooting range-crossing trailhead @ Cope.*
- *People shooting guns*
- *The gun use at the Three Pillar parking lot and Cascade Lake is disturbing and dangerous. Most gun use seems to be Coast Guard or youth. Please address! We use this trail in the winter for access to our land on Anton Larsen Island is a necessity because of ice.*
- *Dog prints, snowshoe tracks, ATV/snowmobile tracks, should not be on cross-country ski trails. Motorized noise pollution/shooting.*

Comments about specific actions on specific trails

New bridges

- *Leave streams alone!*
- *Can't think of any – we just have to slosh.*
- *17 – Unfortunately a bridge here will just open the area up for more ATV destruction. There was a bridge here for snowmobiles.*
- *37- Need public access bridge across lower Rose Tead/Pasagshak River to enter Zentner trails.*
- *39 - At north end on small, deep channel after main river, near 1st bridge (installed in 2003).*
- *One the public can use since the "owners" tore down the old bridge after built their exclusive one.*

Erosion issues

- *Let nature take its course.*
- *Enforce ATV use rules here to reduce erosion problem! Russian Ridge.*

Grade issues

- *Additional trails 9, 10, 26*
- *Not an issue that requires taxpayers money.*
- *It's Kodiak! It's steep! It's Beautiful! Most trails are established in the best place already. Don't make new ones!*
- *Try switch back up Barometer & Pyramid.*

Wetlands issues

- *Additional trails 9, 20, 22, 39, 26*
- *Additional trails 9, 20, 22, 26, 39*
- *Not an issue that requires taxpayers money.*
- *K - New Island, south end area.*

- 41 - Stream bank areas, crossings, swamps.
- To me, these two issues only pertain to the urban trails.
- I am really concerned with growing evidence of trail creep that I see on urban and Monashka trails but I don't know what trails to prioritize for this.

Trail surfacing issues

- Unnecessary!
- K) Near Island, south end area. Pillar – Russian Ridge.

Trail marking

- It would be great if you looked at as many trails as possible.
- Vandalism issues. Create guidebook first: fund w/sale; educate public; volunteer program.
- Keep minimal.
- Information could be added to maps to decrease the costs and risk of vandalism.
- No. Leave as is. If you don't know where you are going stay home. No trail marking/signs.

Public use cabins

- Additional trails 29, 31
- Additional trails 31
- No!
- A big loop in Women's Bay would be possible but would be seriously vandalized.
- Borough does not need to spend tax dollars for vandals to nest "No Cabins"!!
- Great idea for long trails!
- These would be great for more remote trails, which I would hike to if I knew where the trails started, etc.!

Campsites

- Additional trails 22, 25, 29, 30
- Additional trails 25, 29, 30
- No!
- Campsite OK. Use good green moss.

Other improvement projects on specific trails:

- I don't think you should improve trails with (my) borough money, just keep 4-wheelers off them and they will be fine. Horses are fine they do little real damage.
- All trails: Volunteer litter crew, trail education, patrols to prevent motorized vehicles on strictly human powered access trails.
- 34) Fossil Beach access road badly needs maintenance and better parking. 4) This area is city watershed. This trail should be posted off-limits for ATV use. 20) Delicate sub-alpine meadows cannot sustain ATV use. These were world-class hiking trails that are being destroyed by uncontrolled ATV use. 20, 22, 9 should be designated hiking trails only!
- 42) Make trail for ATV use to Hidden Basin. 33) Make trail for ATV use to connect slop peak and twin peaks. 9) Extend trail to Elbow Creek for ATV use.
- K) Garbage cans for litter/dog poop especially Near Island/Spruce Cape.
- More protected lands.
- I rather see a bike trail from the Flats to town than a bunch of "improvements" on existing trails. Improvements are mostly for motorists to avoid destroying broader areas.
- I find it hard to recommend improvements like benches, campsites, etc. when so many of them are destroyed shortly after construction. I'd like to put my money toward education – trail etiquette and enforcement.
- 7) Prohibit gun use at trailhead. 7) Prohibit ATV use. 34) Maintain our access!
- General – Trail origination markers.
- 38) Make the trail wider near the washouts.
- Harden ATV trail to Azimuth Point.
- Trail head, Ski Chalet improvements.

- 25) Dumpsters @ the parking area and detailed parking area. 39) Have campfire wood available @ campsites.
- Create a bike trail from town to Flats.
- Most trails don't need any improvements for ATV's as they can go most anywhere.
- General comment: How about a complete, integrated, paved trail system around the town of Kodiak?
- I'm of the opinion that most trails should be left as they are currently. Status quo. General use!
- 25) Leave it alone! 39) Leave it alone, too! 17) Build a bridge across Sergeant Creek.
- Build boardwalk overlooks for handicapped and popular beaches (ex. Mill Bay). Cabin and center for access to remote areas of island.
- Develop platform/boardwalks for wheelchair access to beach. Maybe Mill Bay.
- I really would make use of many more trails if I knew exactly where to park and where the trail begins and ends. There are many well known trails and many more unknown/hidden trails that a nice booklet could encourage use of without trespassing over private property. Thanks for the survey. This survey will provide helpful information. Please keep in mind the use of certain trails could be enhanced with more information. Also, the survey numbers will show lower usage if others have similar usage patterns/problems.
- Pillar Mountain needs toilets. Also, more law patrol to keep 4-wheelers and speeding kids in pickups from scaring hikers. All Kodiak urban trails need something done about all the dog poop in the middle of the trails. Mission Road needs signs to beach and missions. Lost tourists have asked how to get out, and back to places in town from the road. Unleashed dogs that come after my little, leashed dog and scare my grandchildren are also a problem.
- 38) Close developing 4-wheeler trail from Pasagshak to Portage Bay. Restrict 4-wheeler use @ Pasagshak. 42) Stop expansion of this 4-wheeler route – use incompatible w/wildlife habitat values of shearwater Peninsula & Hidden Basin.
- Enforcement – No ATV's. 2) Enforcement – No ATV's. 18) Enforcement – No ATV's. 19) Enforcement – No ATV's.
- Saltery, Chiniak, Cliff Point, Monashka – Trail use etiquette, litter control/cleanup sponsorship.
- Keep ATV ban in place in Monashka. 41) Make improvements w/donations as needed to keep Saltery Cove Road ATV friendly.
- Most of our trails only need simple bridges over wet spots or creeks. The rest should be left as is!
- K) Abercrombie -- Put handrails along the trails on the steep hills.
- 25) Keep Saltery Cove Road open and maintained to increase tourism.
- 39, 40, 41, 42, 25, 38) Bridges, trail harding, trail re-routing, and litter pick up is already being done by the Kodiak ATV Club, KSWCD, USDA, NRCS, BLM, NPS.
- No new 4-wheeler trails!
- 25) Primitive campsites. 39) Primitive campsites.
- All) Keep primitive trails as is! Keep urban trails for Yuppies. Don't turn ATV trails over to others. Let them build their trails themselves?
- 38) Make easier trailhead access. 24) Create better parking – trailhead. 23) Create better parking – trailhead. 40) Geo block – steam crossings.
- I wish there would be a greenbelt trail going all the way from downtown up past the Mission, behind the college, Island Lake to Mill Bay to Fort Abercrombie – it would be great for our physically fit tourist and locals!
- Four wheelers should be banned from some where they have caused massive trail damage, ie. Some areas of Termination Point and off road on Pillar Mountain and Kashevarof Mountain.
- Sometimes Island, across from the fair grounds, is a heavily used area for dog walkers, is handicap accessible, people can set in their cars or on lawn chairs. Kids have big bonfires with pallets so there are a lot of nails. Big trucks, ATV's and trail bikers have destroyed one side of the island, it's a big mud hole. Duck hunters and people shooting the clay discs make this a dangerous area for walkers. I would like ATV's and dirt bikes banned. Trucks should not drive on the islands. Please, no dog leash laws here. Owners are responsible and there are few conflicts. "Socializing dogs is very popular. The racetrack at the fairgrounds is very popular but so noisy. Is there another area it could be relocated to? How did it get established there? It doesn't fit in with the rodeo grounds, boarding of animals and the agriculture intent.
- 25 & 39) Put culverts and bridges across Salmon Habitat.
- Extend bike path along Monashka Road to VFW. 1) Create a new trail access from town center to Monashka Bay/VFW beach/Pillar beach. Should be appropriate for hiking, biking, maybe tie in with

Pillar Mountain, Pillar Ridge, North Sister and Termination Point. 2) In the green belt just south of Marmote Drive and adjacent to Monashka Bay there has been 4-Wheeler trail development, which is causing damage and needs to be stopped.

- *39) Lake Miam 25) Saltery Cove 29) Cape Chiniak – If a small fenced campground could be set up at these locations for horseback riders, bikers and four wheelers to spend the night in a tent. Possibly with outhouse.*
- *20) Create “Destination” backpack trail that connects with Port Lions. 27) Designate the “Power line” ridge as ATV, snow machine trail. 24) Develop backcountry camping for backpackers.*
- *K) 1. Enforce ORV regulations and fund maintenance of trail projects with user fees. I see city or borough drainages filling with sediment dislodged by inappropriate ATV/ORV use (Example: ditch across from Eggmeyers). 25 & 41) ORV/ATV user fees for all road system riders – fees will pay for maintenance and trail improvements, which will protect fish, wildlife, water quality, veg. Noxious weed control, litter removal; or at least fees for all commercial and guide services using ORV’s on public land.*
- *25) Don’t want to see cabin for fee. 42) Don’t want to see marked trail. 39) Don’t want to see marked trail. 31) Don’t want to see marked trail.*
- *39) Limit access to Lake Miam we only need or possibly 2 routes to that area.*
- *Just in general, keep 4-wheelers and motorcycles out of wetlands to minimize erosion and protect sensitive areas. Keep motorized and non-motorized separate. Thank you for taking time to address this important issue.*
- *4-Wheelers - stay off Burma Road when there is snow. They make deep ruts, can’t ski, walk, and hunt. Allow snow machines in winter on Burma. They make good ski trail, sled for kids, hike, run. Snow machines tracks compacts trail 18” wide; good for access in winter. Perfect for cross-country ski. White Sand Beach allows 4-wheeler for kids in non-summer only, few people use in winter, and good for small kids.*
- *9 & 17) Backcountry hut-to-hut system. K) Expand urban bike trail system from landfill, Bells Flats. Improve urban trail links to all parks/green belts*
- *K) Naturalist signs/maps. Continue trail improvements at Ft. Abercrombie. Extend bike trails – connect – Termination Point. Across Kodiak trails – make contiguous with birding information. 1) Trail signs/natural history info. Bird guide for all trails together.*
- *9, 13, 16) Public use bathrooms.*
- *Public Restroom – Northside Park*
- *Island Lake Creek trail (Urban) needs new bridge (rotten). A good place for a new trail/path would be between Otmeloi and Marmot Drive – a bike path – even a dirt one. Those of us who live out there are very active – most have dogs, kids, or even horses, and the side of the road is not wide enough to safely walk on with the speed limit 45 and most cars driving faster than that, even a cheap dirt or gravel path along the road would be highly appreciated.*

Favorite activities and trails

List of other “favorite activities (when they had already given two):

- Wildlife viewing
- Hunting/fishing
- Hunting
- Fishing.
- Backpack hunting
- Hunting and fishing.
- Quiet
- Wildlife viewing.
- Hunting and fishing
- Wildlife viewing.
- Hunting
- Camping/picnicking
- Hunting/Fishing
- Jogging/running
- Snowboarding.
- Hunting
- Ice skating.
- Hunting
- Hunting/fishing
- Walk/run dogs.
- Hunting

Comments about specific trails

- *Bike trail along Rezanof my favorite, walk my dog on leash.*
- *Hikers did all the damage to Barometer! Not ATV's.*
- *Pasagshak trails: No foot access!! F@#*&% locked bridge and other bridge torn down! Pasagshak snobs.*
- *4-wheelers ruined Lake Miam area for all. Too many irresponsible assholes. I use to hike, hunt, bear watch, fish, they went to far too high.*

Other anti-motorized use comments

- *ATV's need to be cut-off from Russian Creek/Jack Lee Lakes*
- *Would love to see trail damage done by 4-wheelers paid for/cleaned up by 4-wheeler user groups!*
- *The ATV use at base of Pillar Creek Trail (at Anton) is horrible. This is private “Native Land” and this use should not be allowed. In the last year, the ATV use has become grossly noticeable in Sharatin Bay.*
- *However, I resent having scarce trail funds spent only on repairing damage caused by ATV users. A relatively small user group creates the most damage but also gets the most \$ spent on their priorities, all the while expanding their impacts into previously nice areas.*
- *I'm anti ATV because of the damage I've seen them do, but maybe that's being short sighted on my part!*
- *I go to a lot of rocky beaches to avoid ATV's, dirt bikes and the big trucks that try to get stuck.*

Other pro-motorized or motorized access comments

- *We need to plan for inevitable ATV use very carefully, so that ATV users have satisfying trails. On the other hand, these ATV trails should avoid ecologically sensitive areas, and be away from non-motorized trails, so hikers, walkers, joggers, skiers, etc. on these trails can have the pristine experience they are seeking.*

Other general comments

- *I think the trails are fine, don't think a lot of money should be put into them. USE the money for the schools!!!*
- *Would strongly prefer all the trails be left alone, to remain wild and natural.*
- *Lack of awareness of trails in Kodiak.*
- *Unfortunately I was not aware of many of these trails. I hope a booklet will be developed highlighting these trails.*
- *Please publish a trail book! Guarantee my family will try every trail.*
- *I don't have a car, so transportation is a problem. I haven't lived here long enough to be familiar with most of the trails, and some are too steep and difficult for me. I would walk every day on beaches, if I could get there.*
- *I want to help with trail improvements, If you need help my address is...*
- *I am a avid hunter! Many of the trails on you're map are used as a starting point for a hunt of one kind or other. Just FYI.*
- *I requested an enthusiast survey, but I feel that the format of this questionnaire is more user friendly, yet gets the job done. Thanks!*
- *Where is the comment section? Your Survey assumes there will be change, may be citizenship doesn't want change.*
- *You needed a place for people to comment. Most trail improvements would be a waste of money.*
- *I thought this was difficult to fill out completely.*
- *Too Long of a Survey!*