2016-2017 Visitor Survey Report

City of Boulder Open Space and Mountain Parks

2016-2017 Visitor Survey Report

Monitoring Report

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Cover photograph: Chautauqua Trail administration table. Photo by: Anna Kellogg

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EXECUTIVE SUMMARY

The City of Boulder's Open Space and Mountain Parks (OSMP) Department manages over 45,000 acres of open space with 155 miles of designated trails available for passive recreation activities. Tracking visitor use trends and visitor experience preferences on these lands helps managers better understand and serve visitors to city-managed open space and maintain opportunities for high quality visitor experiences now and into the future. Visitor use data provide important context for planning and operations, helping staff to design services that align with visitor needs. This information is also important to visitors, empowering them to express their opinions while also helping them to understand the perspectives of other visitors. Survey results, along with results from the visitation estimate, can also support visitors in making informed decisions about when and where to visit to achieve their desired experience on city-managed open space.

GOAL

The overall goal of the 2016-2017 Visitor Survey was to develop a quantitative understanding of visitors to city-managed open space to support the department and public in making informed decisions. Specific objectives include gaining an understanding of visitor characteristics (e.g., demographics), trip characteristics (e.g., activities participated in, time spent visiting), and visitor perceptions (e.g., ratings of OSMP facilities and services, encounters with other activity groups). When possible, staff also desired to assess trends in visitor attributes measured during previous survey efforts and to evaluate potential seasonal effects on visitation.

APPROACH

Staff conducted an on-site, self-administered survey to visitors age 16 or older at access locations estimated to receive a minimum of 1,000 annual visits. Visitors were intercepted at the end of their trip to gather feedback regarding their experiences during that specific visit. A total of 2,143 visitors completed the survey from June 2016 through May 2017 with a 65% response rate. Results presented in this report were derived from these reported responses. Results calculated from the entire sample can be interpreted with a 95% level of confidence ± 2% and are considered generalizable to the target population. This survey effort was part of a larger Visitation Study in which the estimated visitation levels and patterns across the city-managed land system was also assessed.

RESULTS

This study is the third in a series of system-wide intercept surveys (previously conducted in 2004-2005 and 2010-2011). Where applicable, trend information has been summarized over time. Findings include an overview of visitor demographics, visitation frequency, visitor activities, trip lengths, transportation and arrival information, group size and composition, motivations for visiting, service ratings, and areas no longer visited.

Overall trends (2004-2005, 2010-2011, 2016-2017)

- Most visitors live in the City of Boulder or Boulder County
- The average trip lasts about an hour
- Most visitors have been coming for at least five years and a quarter have been visiting >10–20 years
- The visitor demographic is gradually getting older
- Hiking, walking dog(s), running and biking are the top primary activities
- Most visitors come at least once a week and one fifth visit >20 times per month

- More than half of visitors arrive by car, about one third arrive on foot (i.e., walking or running), and 9% arrive by bike.
- About one third of visitor parties have one or more dogs with them
- Most visitors rate the overall quality of OSMP services as "Very good" or "Excellent"
- Daily conflict rates have ranged between 5-7% and most visitors have positive experiences with others

Visitor characteristics

- Most visitors live in the City of Boulder (55%) or in Boulder County but outside city limits (27%). These proportions have remained fairly steady since the 2004-2005 survey.
- By 10-year age group, the greatest proportions of adult visitors are between 40-49 and 50-59 years old, with a median age of 48. This is an increase from previous surveys with median ages of 39 and 42 in 2004-2005 and 2010-2011, respectively. Proportions in the 50-59, 60-69 and 70+ age groups have increased since the 2004-2005 survey, indicating the visitor population is trending toward older adults. Respondents in the 20-29 age group is trending down, despite remaining constant in Boulder County as a whole.
- Survey respondents' race was nearly entirely white (94%), with around 5% of Hispanic, Latino, or Spanish origin (of any race). Males and females responded in roughly equal proportions at 52% and 48% respectively.
- Around half (51%) of respondents reported an annual household income of $100,000 or more, and the majority had college degrees (88%).
- Sixty-seven percent of respondents indicated they visit more than four times per month (i.e., more than once per week), and 12% visit 30 or more times per month (i.e., roughly daily or more than once a day). These proportions have remained fairly steady since 2005.
- Just under half (47%) of respondents have been visiting for over 10 years, and just under a quarter (24%) visiting for over 20 years. The proportion in the >20 years category along with the median number of years visiting have increased since the 2004-2005 survey.

Trip characteristics

- Hiking is the number one primary activity (42%), followed by walking dog(s) (22%), running (16%), and biking (10%). All other activities were reported at 2% or less.
- Since the 2004-2005 survey, a smaller proportion of people reported "Viewing scenery" (from 52% to 37% in 2016-2017) and "Viewing wildlife" (from 24% to 16% in 2016-2017) during their visit.
- Most visitors (60%) spend between a half hour to 89 minutes visiting, with a median trip length of 60 minutes. This is 10 minutes longer than the 2004-2005 survey and the same as the 2010-2011 survey.
- When rating all potential motivations, "Enjoying nature" (65%), "Physical fitness (exercise)" (57%), and "Having fun" (52%) were top rated as extremely important motivations for visiting. When asked to identify the one primary motivation for visiting, "Physical fitness (exercise)" (34%), "Enjoying nature" (18%), and "Being with my dog(s)" (14%) were the top three respectively.
- Over half of respondents (56%) indicated they arrived by car, a third (34%) arrived on foot (i.e., walking or running), and 9% arrived by bike. Collectively, less than 2% arrived by bus, horse or ride share. These proportions have remained steady since the 2004-2005 survey. Most parked in an OSMP parking lot (57%) or on a neighborhood street (23%).

- *Of those who arrived by car,* the majority (95%) were able to visit their first-choice destination. However, less than half of respondents answered this question, so results should be interpreted conservatively.
- *Of those who arrived by car*, roughly half (51%) of respondents indicated that it was “Very easy” and one-third (30%) indicated that it was “Easy” to find a parking spot.
- Close to half of visitors (49%) visited by themselves, and of the groups that came, 78% had one other person, 17% had three to four people, and 6% had five or more people. Of the groups that came, 68% were with family, 30% with friends, and 2% were part of an organized group. Seven percent of groups had one or more children (under 18 years old) with them.
- Around 37% of groups had at least one dog with them, and of these, close to three-quarters (74%) had one dog and 26% had two or more dogs.

Service ratings

- *Of the services and facilities used*, trails, dog stations, parking, trash and recycling bins, and restrooms were all rated as "Very important" services and facilities to provide by 60% or more of respondents and dog stations, trails, trash and recycling bins, and vehicle parking received the highest marks for perceived quality (60% or more "Very good").
- More than 90% of respondents gave OSMP overall quality ratings of "Very good" or "Excellent," and no respondents said the quality was "Poor."

Experience ratings

- While most respondents provided pleasant ratings with other groups encountered on the day of their visit, 6% reported having a conflict with someone else. This is very similar to the average daily conflict rate of the 2010-2011 survey (7%).
- *Of the 6% that reported conflict*, over half (53%) indicated that the conflict was with dog walkers/dogs, a third (33%) experienced conflict with bikers, and a quarter (25%) experienced conflict with runners.

Areas no longer visited

- Fourteen percent of respondents indicated there is an area they no longer visit, and the most avoided areas are Chautauqua and Sanitas. These two were also the top two reported areas no longer visited, or visited less frequently, during the 2010-2011 survey. However, *for those that reported no longer visiting an area*, the proportion avoiding Chautauqua has increased from 5% to 23%.
- *Of the 14% that indicated there is an area they no longer visit*, crowding (32%), parking problems (12%), dog presence (12%) and dog restrictions (12%) were the top reported reasons for avoiding an area.

1 INTRODUCTION

The City of Boulder's Open Space and Mountain Parks (OSMP) Department manages over 45,000 acres[1] of open space land in and around the City of Boulder. The city charter's open space purposes, as outlined in the Boulder Revised Code (Article XII Section 176), guide the management and use of this land. These charter purposes are reflected in OSMP's mission "to preserve and protect the natural environment and land resources that characterize Boulder," and "foster appreciation and use that sustain the natural values of the land for current and future generations." Two of these charter purposes are especially tied to this study:

- (c) "Preservation of land for passive recreational use, such as hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing."
- (h) "Preservation of land for its aesthetic or passive recreational value and its contribution to the quality of life of the community."

In support of its mission and charter purposes, OSMP offers over 155 miles of designated trails for passive recreation activities. Visitation studies over the past three decades confirm visitation to city-managed open space is growing (Zeller et al., 1994; City of Boulder, 1997; Vaske et al., 2009; Leslie, 2018). From June 2016 through May 2017, the latest year for which visitation data is available, city-managed open space supported an estimated 6.25 million visits (Leslie, 2018).

Visitor surveys were identified in the Visitor Master Plan (City of Boulder, 2005) to monitor public perceptions regarding OSMP management and to measure community satisfaction with various OSMP facilities and services. To better understand visitors, including their recreation motivations and experiences, and to evaluate the OSMP's service delivery to visitors, OSMP (or its predecessors, the Open Space/Real Estate Department and the Mountain Parks Division of the Parks and Recreation Department) conducted periodic surveys of visitors to land managed by OSMP (Zeller et al., 1994; City of Boulder, 1996 and 2001; Vaske & Donnelly, 2008; Giolitto, 2012). These surveys provide an understanding of changes in visitor characteristics, preferences, and experiences on city-managed open space, despite changes in survey design and methodology over time[2]. The three most recent study periods (Table 1) had the most similar geographic scope and study design and can provide the most accurate understanding of changes or trends in visitor characteristics, preferences, and experiences. All trend data tables include only information from the 2004-2005, 2010-2011, and 2016-2017 surveys as these are the most directly comparable.

Table 1. Attributes of three system-wide visitor intercept surveys conducted over the last 13 years.

Study Period	Number of Surveys Received	Response Rate
2004-2005	2,806	78%
2010-2011	2,552	73%
2016-2017	2,143	65%

[1] https://bouldercolorado.gov/osmp/department-information-and-osmp-history

[2] These surveys have varied in geographic scope, duration, populations surveyed, survey design and methodology, and focus of the survey questions.

1.1 GOAL AND OBJECTIVES

The overall goal of the 2016-2017 OSMP Visitor Survey (the Survey) was to quantify various dimensions of visitors to city-managed open space to support the department and public in making informed decisions. Specific objectives include gaining an understanding of:

- visitor characteristics (e.g., demographics),
- trip characteristics (e.g., activities participated in, time spent visiting) and
- visitor perceptions (e.g., ratings of OSMP facilities and services, encounters with other activity groups).

When possible, staff also desired to assess trends in visitor attributes measured during previous survey efforts and to evaluate potential seasonal effects on visitation.

This document provides an overview of the methods used and the results of the Survey. This survey effort was part of a larger Visitation Study in which the estimated visitation levels and patterns across the city-managed land system was also assessed. This data is detailed in a separate Visitation Estimate report (Leslie, 2018), and there are plans to conduct paired analyses of these two components.

2 METHODS

Staff conducted an on-site, self-administered survey (Appendix A: Survey Instrument and Question Development) of visitors leaving city-managed open space from June 1, 2016 through May 31, 2017. The survey period consisted of four seasons: summer (June 1 through August 31, 2016), fall (September 1 through November 30, 2016), winter (December 1, 2016 through February 28, 2017), and spring (March 1 through May 31, 2017).

Staff administered the survey instrument to visitors age 16 or older at randomly selected exit locations estimated to receive a minimum of 1,000 annual visits. Visitors were intercepted at the end of their trip to gather feedback regarding their experiences during that specific visit. For each visitor that agreed to participate, the administrator provided a hard copy questionnaire secured to a clipboard along with a pencil and asked the visitor to complete both the front and back sides. A total of 2,143 visitors completed the survey from June 2016 through May 2017, with a 65% response rate. Results presented in this report were derived from these reported responses. Results calculated from the entire sample can be interpreted with a 95% level of confidence ± 2% and are considered generalizable to the target population. By season, the margin of error generally ranges from ± 4% in summer and fall to ± 5% in winter and spring. This error increases question-by-question as sample size decreases, and sample sizes of below 30 should be interpreted especially cautiously. For a more detailed explanation of project methodology, see VanderWoude (2018), *in progress*.

2.1 2016-2017 SURVEY INSTRUMENT

The 2016-2017 survey instrument was developed through a review of the 2004-2005 and 2010-2011 surveys, discussion with staff to determine current data needs, and a thorough review of published literature (e.g., Dillman, Smyth, & Christian, 2014; Fowler, 2014) and census data. Some of the questions were repeated from the previous survey instruments, some were repeated but modified, and others were created to inquire into current topics of interest, such as parking difficulty and income level.

Although group composition data (e.g., group size, number of dogs with group) were previously collected, comparisons with current data are excluded from this report due to differences in data collection methods. For example, previous survey iterations calculated group size by including *all* group size responses (i.e., if a group of four people filled out a questionnaire and each wrote that they were part of a group of four, it appeared that there were four groups of four instead of one). Large groups were overrepresented as a result. The 2016-2017 survey accounted for this by assigning one "group leader" questionnaire to one member of the party and giving the rest of the party "visitor party" versions. Only responses from group leader versions were considered for group composition analyses.

Four different questionnaire variations (A-D) were also created (for both group leader and visitor party versions) to minimize any bias for questions with serially listed responses or sub-questions. The different variations were distributed randomly. For these four variations, the responses or sub questions were randomly ordered. Future iterations of the survey instrument will be developed in a similar manner.

The final question on the questionnaire asked if the respondent entered from this access/trailhead. If they did not, they were asked to indicate on a map where they entered from. The responses could be used to estimate the proportion of inbound/outbound visitors for the visitor estimate portion of this visitation study. The results of this question are not included in this document.

A copy of the 2016-2017 survey instrument, along with a general description of question modification over time, can be found in Appendix A: Survey Instrument and Question Development.

2.2 SAMPLING

Staff used a multi-stage sampling design to randomly sample exiting visitors at sample locations meeting selection criteria.

2.2.1 Site selection

For the purposes of this study, sample locations were defined as all established locations (e.g., trails and gates) at which visitors enter and/or exit city-managed open space *and* met the following criteria:

1. The annual visitation level was estimated by staff in 2015 to be at least 1,000 annual visits (i.e., at least three visits per day on average);
2. Traveling to the location did not require crossing private property and/or the location was not on private property or other property not managed by OSMP (unless OSMP has explicit permission to cross or be on the private property);
3. The location was open to visitor access for most of the study period; and
4. If an undesignated trail, it was established and estimated to receive at least three visits per day.

A list of all sample locations can be found in Appendix B: Sample Locations. This includes each location's volume classification, designation status, whether the location was selected during sample creation, the number of surveys received, and the percent of the total number of surveys received during the entire sample.

2.2.2 Site visitation classification

Staff categorized each sample location in the sampling frame (197 valid locations in total) according to the estimated level of visitation in 2015 (Table 2, Figure 1, Appendix B: Sample Locations). These classes were informed by the 2004-2005 system-wide visitation results, interim site-specific visitation studies conducted between 2006 and 2014, and best staff judgement. "Very very low" locations (<1,000 annual visits) are excluded from the study because they do not meet the criteria to have a minimum of three visits per day. Although not used as a sampling stratum, site classifications could be used in the future to analyze the data and results by each volume class.

Table 2. 2015 visitation classes and their representation in the 2016-2017 survey sample.

2015 Visitation class/range of visits	Number of survey sample sites in 2016-2017 (all potential valid sites)	Number of survey sessions conducted
High: >75,000	14 (7%)	16 (6%)
Medium: 25,000 – 74,999	38 (19%)	64 (22%)
Low: 10,000 – 24,999	72 (37%)	111 (39%)
Very low: 1,000 – 9,999	73 (37%)*	97 (34%)
Total	**197**	**288**

**Includes one location that was removed part way through the study.*

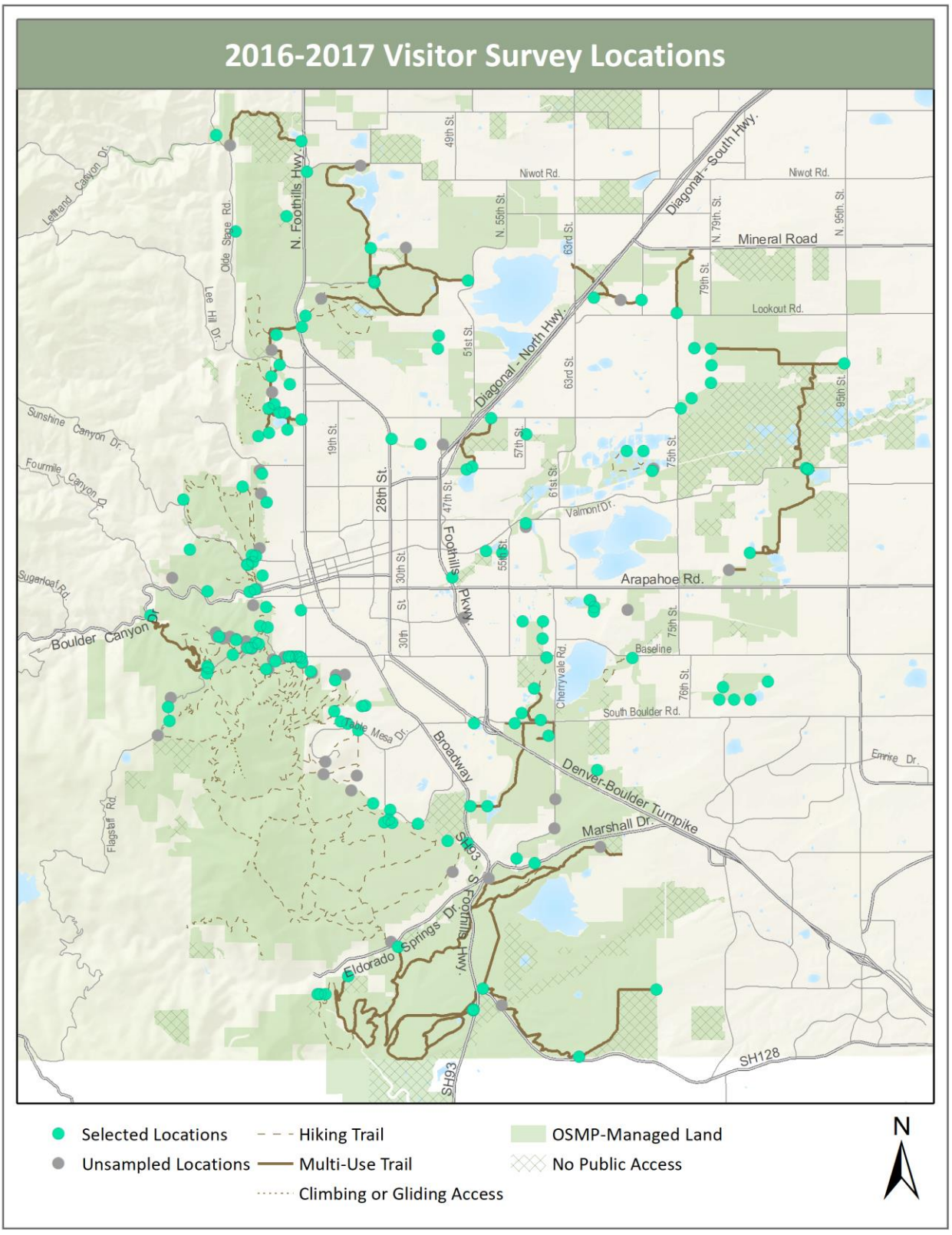

Figure 1. Selected survey site locations and the sample they were drawn from. Maps divided by quadrants can be found in Appendix B: Sample Locations.

2.2.3 Sample design

Photograph 1. Example of a survey table at Upper Crown Rock.

Staff incorporated three stages into the sampling strategy. For stage one, staff created a sampling frame of all available dates per season and then used a simple random sample to select 72 survey administration dates for each season. For stage two, staff used a simple random sample to select locations from the sampling frame for each survey administration period, resulting in 141 distinct sample locations selected across all four seasons. For stage three, staff used a simple random sample to select a time period for each day selected (a.m., mid-day or p.m.). If more than three hours were available in a time period, based upon available daylight, staff further randomly sampled a start hour for each respective period. During all stages, staff intentionally created a randomized over-sample to be used for replacement dates, locations, and times.

2.3 QUALITY ASSURANCE/CONTROL PROCEDURES

Staff implemented various quality assurance/quality control procedures. All training and pre-test sessions were supervised by a project manager experienced with administration procedures. Future monitoring will repeat any existing procedures and add any additional procedures that staff deem necessary to ensure consistent data quality.

2.3.1 Survey pre-test

A staff member experienced in survey administration pre-tested the survey instrument for clarity, understandability, and other visitor responses during an on-site survey session. The survey pre-test lasted three hours, which is the session length as determined in the project protocol (VanderWoude, 2018 *in progress*). Following the pre-test, the staff member modified the survey instrument based upon encountered problems such as visitor confusion when completing the questionnaire, or unclear directions for particular questions.

2.3.2 Survey administrator training

Staff administering the survey instrument received training on visitor contact procedures, survey administration, and how to provide unbiased responses to visitor inquiries. Staff was also trained on recording session information and observed repeats, refusals and passes on the non-response/session information documentation sheet (Appendix C: Survey Session Cover Data Sheet).

2.3.3 Adherence to monitoring protocols

Staff made efforts to adhere to all monitoring protocols. Training was provided to assure understanding of the protocols and definitions. All variances to methods were noted and considered, such as shortened sessions due to weather, unanticipated trail closures at selected sites, and verbally administering the questionnaire to persons having difficulty reading the questions.

2.3.4 Data entry

Staff entered data from completed questionnaires into a Microsoft Access database for storage and sorting. Complete questionnaires were those in which the respondent provided responses to at least 75% of the questions. A staff member other than the person entering the data conducted quality control by checking the data entry in the database to ensure the data entry was accurate.

2.4 FIELD OPERATIONS

Most of the survey sessions were conducted by one staff member per session. In the few instances when the level of visitation at the selected site was too difficult for one person to manage, two staff members conducted the survey session.

In the field, staff attempted to ask each exiting visitor that appeared to be 16 or more years old to participate in the survey. For each exiting visitor that agreed, the administrator provided the visitor with a hard copy questionnaire secured to a clipboard along with a pencil and asked the visitor to complete both the front and back sides.

Staff occasionally could not ask each visitor to participate in the survey. This generally occurred at either high volume locations or when fast moving visitors passed the survey location. At high volume areas, staff members administering the survey might be engaged in conversation with one visitor when another exited the area. Fast moving visitors (runners and/or cyclists) sometimes passed the survey location before the survey administrator could contact them.

The survey administrator recorded the number, perceived activity, and presence/absence of an accompanying dog of those visitors who refused to participate and those who passed the survey station without being asked to participate (Appendix C: Survey Session Cover Data Sheet). Staff used this information to calculate a response rate (number of visitors participating in the survey/number of visitors asked to participate in the survey) and evaluate possible under- or oversampling of specific groups of visitors, such as runners or cyclists.

2.5 DATA MANAGEMENT AND ANALYSIS

Staff stored the survey data in a Microsoft Access database and analyzed the data using Microsoft Excel, Microsoft Access, and Statistical Package for the Social Sciences (SPSS) 24.0. Because all survey administration locations, dates and time periods were randomly selected, staff did not have a need to weight any of the results.

For all analyses, non-responses[3] and invalid responses[4] were not included. For example, suppose 2,500 respondents completed the survey, and responses to the question “How did you get to the trailhead?” included 2,200 valid responses, 250 respondents who did not answer, and 50 who responded in an indecipherable way (invalid). Only the 2,200 valid responses would be used to calculate the percentage of respondents who indicated

[3] This includes instances where the respondent did not respond to a question and when a question was not applicable (e.g., a question regarding parking if the respondent did not drive to the survey location).

[4] For example, respondent chooses two responses for a question that requires one and only one response.

they got to the trailhead by a particular mode of transportation. The number of surveys included in the analyses will be denoted with an "n" and provided in the table title or figure caption (n=2,200 in this example).

The analyses presented in this report include:

1. Univariate analysis (primarily frequency analysis) of responses for each survey question
2. Bivariate analysis of the relationship between responses for most survey questions and season to evaluate differences among seasons
3. Bivariate analysis of the relationship between responses and selected visitor and trip characteristics to elucidate differences in responses among specific segments of the visitor population (e.g., Boulder residents, long-time visitors, hikers, etc.)
4. A comparison of the results of the univariate analysis of responses to the results obtained for the same question in the 2004-2005 (Vaske & Donnelly, 2008) and 2010-2011 (Giolitto, 2012) OSMP visitor surveys
5. Pearson Chi-square tests and ANOVAs as appropriate to determine whether the responses to survey questions depended upon inclusion in the visitor sub-group
6. Cramer's *V* and *eta* measures of effect size to evaluate the strength of any statistically significant relationship following guidance of Vaske et al. (2002) and Vaske (2008)[5]
7. Post-hoc analyses of the adjusted residuals and Bonferroni pairwise comparisons to determine statistically significant relationships between variables; these were considered in the presentation of results but are not shown in the report.

Statistical analysis of trend data was outside the scope of this report. However, generally speaking, a 4% change from year to year for results calculated from the overall sample would be indicative of a significant difference. Comparisons to the 2016 Resident Survey (City of Boulder, 2017) are included when deemed appropriate, but are limited due to differences in survey methodology and target populations.

2.6 LIMITATIONS

2.6.1 Interpreting open-ended responses

Respondents may or may not adequately describe their experiences when answering any of the open-ended questions. Subjective terms (e.g., "rude" or "bad attitude") and incomplete responses necessitated staff interpretation of some verbatim responses. When coding verbatim responses, staff reviewed past guidance (when available) to replicate past coding procedures. For new questions, staff coded each response into themes, then conferred with other staff for confirmation of assigned categories. Coding guidance from the 2016-2017 survey will be kept on file to inform future coding procedures.

2.6.2 Social desirability bias and the exaggeration factor

It may be hard for participants to recall information or to tell the truth about a controversial question (Dillman, Smyth, & Christian, 2014). Respondents may provide answers that represent their perspective of societal norms or that they think coincide with the survey administrator's viewpoints (i.e., answering what they think "should be"

[5] Vaske et al. (2002) suggest a Cramer's *V* of 0.1 denotes a "minimal" relationship while a Cramer's *V* of 0.3 a "typical" relationship and a Cramer's *V* of 0.5 a "substantial" relationship. Likewise, an *eta* of 0.10 denotes a "minimal" relationship, 0.243 a "typical" relationship, and 0.371 a "substantial" relationship (Vaske, 2008).

or “telling the administrator what they want to hear”) (Vaske, 2008). Respondents may also exaggerate their response because they internally have a desire to do so or are unaware of their exaggerations (e.g., they wish to visit more than they actually do).

2.6.3 Detectability and visitor displacement

The survey will only detect the beliefs and opinions reported by those who visit city-managed open space. Individuals who choose not to visit will not be represented in the survey. Some of the individuals who choose not to visit may do so because they expect or have experienced something unpleasant on the trail or no longer desire the recreational settings offered by staff. These “displaced” visitors will not be represented in the results.

To better understand the viewpoints of people who choose to no longer visit city-managed open space, a separate hard copy questionnaire, known as the Resident Survey, is mailed to the broader city and county of Boulder population about every five years. Those who have been displaced would be captured via this survey effort.

2.6.4 Non-responses

In addition to displaced visitors, the survey results presented here are the perceptions of those willing and able to take the survey. As a result, it excludes the perceptions of those not eligible to complete the survey (e.g., visitors under 16 years old), those who visit at night, and those who refused to complete the survey. For example, bikers and runners were less likely to fill out the questionnaire, so their perceptions are somewhat underrepresented in the results.

2.6.5 Difficulty in interpreting change between survey years

Over time, the wording for some repeated questions has been modified to reflect best practices and/or current departmental need(s). This makes direct comparison across survey years more complex and can make interpreting change more difficult.

As time passes, the OSMP-managed land base changes through new acquisitions, trail construction and trail closures, modified designated visitor access points, and development of new undesignated trail access points. Collectively, this alters the population of locations to be sampled and makes comparison of repeat survey results less direct.

Changes in the frequency distribution for repeated questions could be due to a variety of reasons such as demographic shifts, a shift in sampled locations or an actual change in visitor characteristics, beliefs or opinions. For example, the frequency of “biking” as the reported primary activity of visitors may change due to an increase in the number of survey sessions randomly selected for locations serving shared-use trails rather than an actual growth in the number of visitors biking on city-managed open space. Staff addressed this potential problem, and other potential influences of sampling location(s) by intentionally creating a random sample of survey administration sites, including those with access to multi-use trails.

For examples of question changes over time, see Appendix A: Survey Instrument and Question Development.

3 RESULTS

3.1 RESPONSE RATE

A total of 2,143 surveys were completed over 288 survey sessions, with 72 three-hour sessions conducted per season. Although there were an equal number of survey sessions per season, visitors completed more surveys during the summer and fall seasons (1,265) than during the winter and spring seasons (878).

Photograph 2. Example of a survey table at Greenbriar Connector Trail.

While the survey protocol called for the administrator to ask every exiting visitor 16 or more years old to complete a survey, this is not always possible. Of the visitors who were asked to complete the survey, 65% agreed to do so (Table 3). The response rate was further assessed by comparing the observed activity of the refuser with the primary activity distribution from survey responses. For purposes of response rate, dog walkers and hikers/walkers were combined. Similarly, refusals that represented <1% of the refusal sample and/or the survey did not contain a corresponding primary activity for comparison were grouped into an "other" category. In addition to tracking the number of refusals, the survey administrator attempted to estimate the number of visitors from various visitor groups that passed by the survey administration station before the staff member could ask the visitor to participate. Bikers and runners were more likely to pass by at 34% and 14% of their respective activity group, compared to 3% of hikers, and are therefore somewhat underrepresented in the survey. Despite this underrepresentation, statistical tests revealed they did not provide significantly different responses on a select sample of questions of concern (e.g., reporting conflict, overall quality ratings). Around 5% of each activity group was a repeat visitor and did not complete the survey. Across all four seasons and activity types, there were a total of 1,146 refusals, 190 passes, and 97 repeats (passes and repeats are not included in the response rate).

Table 3. Response rates by activity type with the percentage of primary activity responses it represents.

Activity Group	Refusals	Response Rate (Based on Primary Activity Survey Response)
Hiking/Walking	670 (34%)	1,280 (66%)
Running	281 (46%)	326 (54%)
Biking	165 (46%)	195 (54%)
Other*	30 (14%)	191 (86%)
Blank or invalid survey response	n/a	151 (n/a)
Total	**1,146 (35%)**	**2,143 (65%)**

**"Other" refusals represented <1% of the refusal sample and/or the survey did not contain a corresponding primary activity for comparison. These include climbers, equestrians, birders, etc.*

A total of 141 sites were randomly selected from a sample of 197 sample locations. Of these, 119 received at least one survey. There were 22 sites in which no surveys were received either because visitors declined, or no one visited the site during the survey period. A list of all sample locations at which OSMP conducted the 2016-2017 survey along with the number of surveys completed at each of these locations in provided in Appendix B: Sample Locations. Select results are presented below – for more detail on seasonal and trend results, see Appendix D: Bi-variate Contingency Tables.

3.2 VISITOR CHARACTERISTICS

3.2.1 Demographics

Males and females responded in roughly equal proportions at 52% and 48% respectively (Table D-1). Roughly half (51%; Table D-2) of respondents reported an annual household income of $100,000 or more, and the majority had college degrees (88%; Table D-3). Survey respondents identified themselves most strongly as white (94%; Table D-4), with around 5% of Hispanic, Latino, or Spanish origin (of any race; Table D-5). A majority (82%) of visitors live within Boulder County, and a little over half (55%) live within city limits (Table D-6). About 7% of respondents were from Metro Denver, and another 7% were from outside Colorado. These residence proportions have remained fairly constant since the 2004-2005 survey iteration (Table D-7).

Nearly a quarter (24%) of respondents were 60 years old or older (Figure 2, Table D-8). The median age was 48 years old, which is an increase from previous survey iterations with median ages of 39 and 42 in 2004-2005 and 2010-2011, respectively. While these age trends are roughly reflective of Boulder County residents, respondents in the 20-29 age group appear to be less well represented in more recent surveys (Figure 2 and Figure 3).

Visitor demographics were roughly reflective of Boulder County census data with a few exceptions. According to 2016 U.S. census data, the estimate for people of Hispanic or Latino origin in Boulder County is 14% (U.S. Census Bureau, 2016), and they represented just 5% of survey respondents. The median income of Boulder County residents was $72,000 (from 2012 to 2016), compared to $100,000 for survey respondents. Level of education also differed, with 59% of county residents obtaining a bachelor's degree or higher, compared to 89% of survey respondents (age 25 or older in both categories).

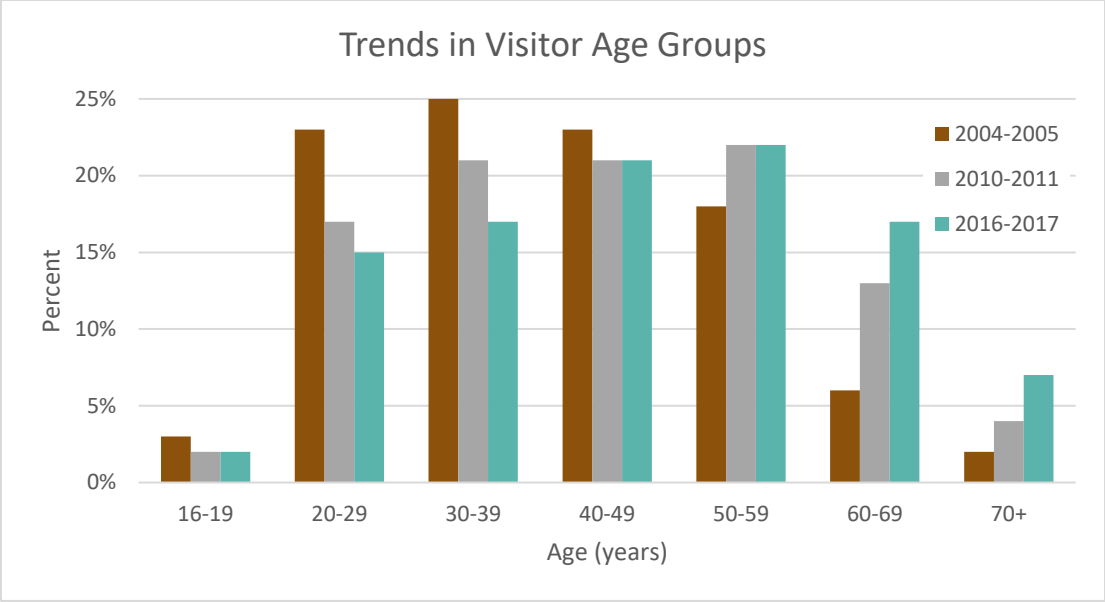

Figure 2. Respondents' stated age compared to previous surveys (n=2,686 for 2004-2005, n=2,448 for 2010-2011, n=2,109 for 2016-2017).

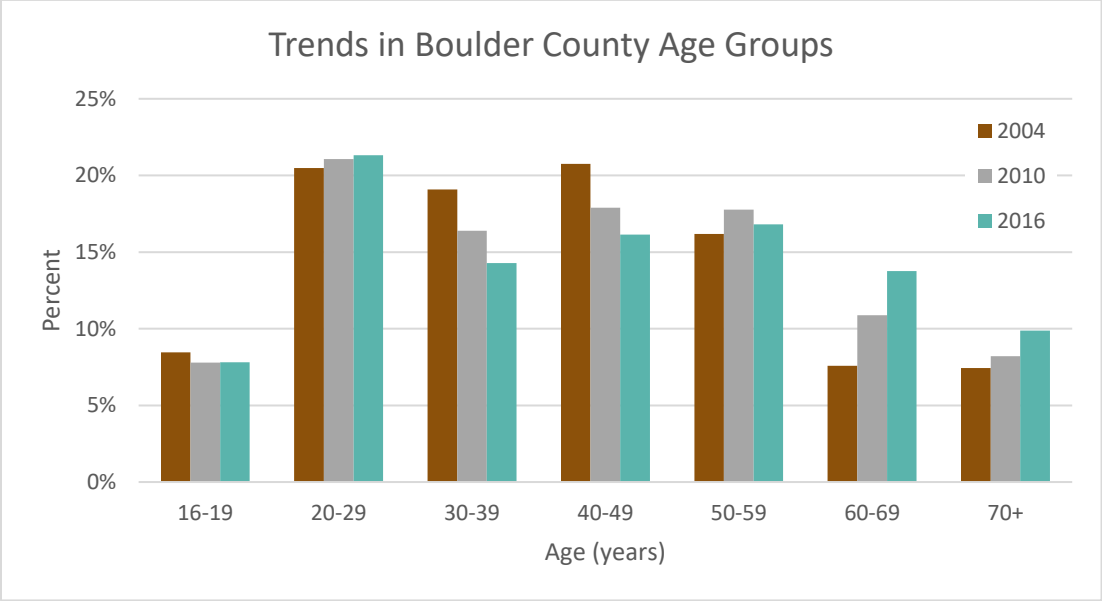

Figure 3. Boulder County age trends (data from State of Colorado, 2018).

3.2.2 Visitation frequency and years visiting

Sixty-seven percent of respondents indicated they visit more than four times per month (i.e., more than once per week), and 12% visit 30 or more times per month (i.e., roughly daily or more than once a day; Figure 4, Table D-9, and Table D-10). Dog walkers visit the most frequently compared to other groups, with nearly a quarter (23%) visiting at least once a day on average (χ^2 = 223.69, p < 0.001, Cramer's V = 0.17; Table D-11). Hikers reported visiting less frequently, with 41% visiting less than once a week or visiting for the first time.

Just under half (47%) of respondents have been visiting for over 10 years, and just under a quarter (24%) have been visiting for over 20 years (Figure 5, Table D-12, and Table D-13). Six percent of respondents said they were visiting for the first time. Nearly all (99%) respondents from Boulder County had previously visited city-managed open space, followed by 89% of respondents from Metro Denver and 85% from other areas of Colorado (χ^2 = 673.72, p < 0.001, Cramer's V = 0.57; Table D-14). Closer to half of respondents from other states and countries have previously visited (47% and 54%, respectively). First time visitors were slightly less likely to visit in the winter months compared to summer months, but the effect size was minimal (χ^2 = 9.65, p = 0.022, Cramer's V = 0.07; Table D-15).

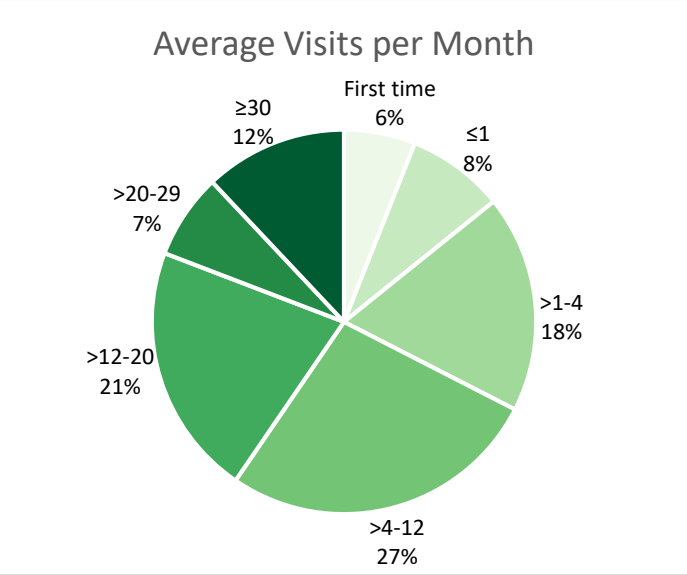

Figure 4. Average visits per month (n=2,096).

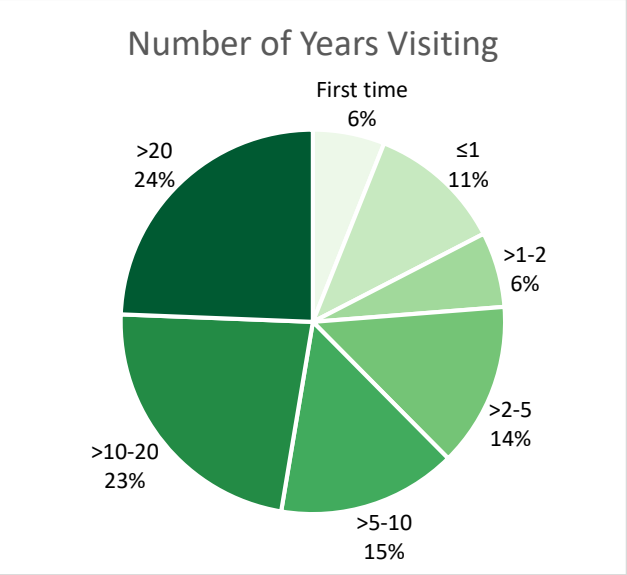

Figure 5. Number of years visiting (n=2,084).

3.3 TRIP CHARACTERISTICS

3.3.1 Activities

The majority (60%) of respondents indicated that they hiked during their visit (Table D-16). Although viewing scenery and viewing wildlife were top activities (37% and 16%, respectively), this is a decrease from previous surveys (Table D-17 and Figure 6). One percent or less of respondents indicated that they fished, picnicked, or went horseback riding during their visit. Write-in responses for "Other" activities can be found in Table E-1.

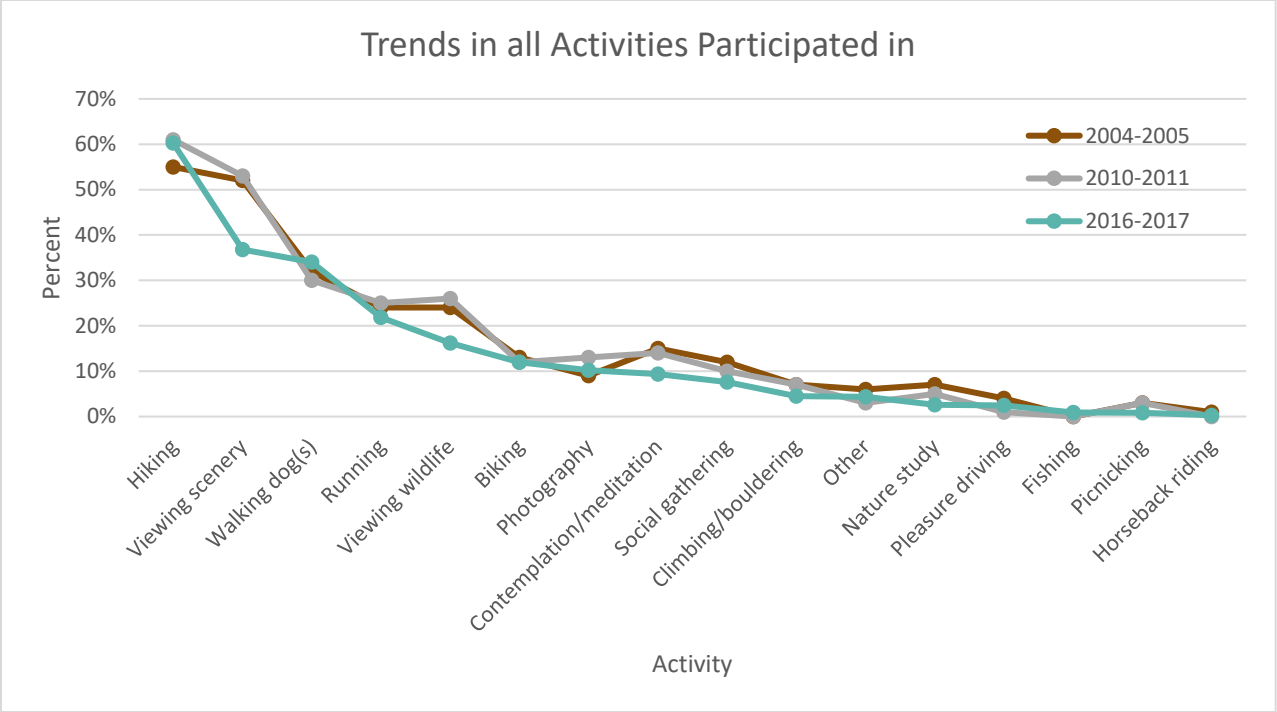

Figure 6. Activities participated in during visit (respondent could select more than one activity; n=2,806 for 2004-2005, n=2,552 for 2010-2011, n=2,141 for 2016-2017).

In addition to marking all activities, the participant was asked to circle the one activity that they considered to be their primary activity during their visit. Most respondents either hiked (42%) or walked dog(s) (22%; Table D-18 and Table D-19). These percentages, along with running, biking, viewing scenery and climbing/bouldering percentages are remarkably similar between the 2010-2011 and 2016-2017 survey periods (Table 4). This similarity is likely due to low turn-over in visitors (same people visiting now as in 2010-2011) and/or new visitors arriving with very similar activity desires.

Table 4. Primary activities compared to previous surveys (primary activities that represented less than 2% of the sample are excluded, see Table D-19 in Appendix for full table).

Primary Activity	2016-2017 (n=1,992)	2010-2011 (n=2,272)	2004-2005 (n=2,517)
Hiking	42%	41%	34%
Walking dog(s)	22%	19%	19%
Running	16%	18%	19%
Biking	10%	11%	9%
Viewing scenery	2%	3%	5%
Climbing/bouldering	2%	2%	3%

Fifty-five percent of visitors from outside Boulder County indicated hiking was their primary activity, which is significantly different from county residents at 39% (χ^2 = 108.43, p < 0.001, Cramer's V = 0.23; Table D-20). Residents of Boulder County were more likely to mark running (19% of county residents compared to 7% non-county) and walking dog(s) (25% compared to 11%) as primary activities. No significant difference was observed

for bikers by residence. Female respondents were more likely to be hiking or walking dog(s), while males were more likely to be running or biking ($\chi^2 = 92.84$, $p < 0.001$, Cramer's $V = 0.22$; Table D-21).

3.3.2 Trip lengths

Visitors generally spend about an hour visiting city-managed open space (Table D-22 and Table D-23). Visitors from outside Boulder County spend a half hour on average longer on the system than county residents, and a quarter (26%) visited for over two hours (average of 88 minutes; $F = 105.83$, $p < 0.001$, e*ta* = 0.22; Table D-24). Hikers tended to have longer trip times compared to the other primary activity groups (average of 75 minutes; $F = 37.36$, $p < 0.001$, e*ta* = 0.27; Table D-25).

3.3.3 Transportation

Over half of respondents (56%) indicated they arrived to city-managed open space by car (Table D-26). Primary mode of transport changed slightly by season ($\chi^2 = 49.42$, $p < 0.001$, Cramer's $V = 0.09$), with respondents less likely to arrive by car in spring (from an average of 58% in other seasons to 46%) and less likely to bike in winter (from an average of 11% in other seasons to 4%). Respondents were more likely to walk to the sample location in spring (34%) as compared to summer (24%). Primary mode of transport has remained largely the same over time (Table D-27). Write-in responses for "Other" modes of transport can be found in Table E-2.

Sixty-four percent of hikers arrived by car, while just 16% of bikers arrived by car[6] ($\chi^2 = 1{,}884.62$, $p < 0.001$, Cramer's $V = 0.49$; Table D-28). Arrival by car also varied by residence, with 52% of Boulder County residents and 75% of residents from outside Boulder County arriving by car ($\chi^2 = 77.06$, $p < 0.001$, Cramer's $V = 0.19$; Table D-29). Of the respondents who drove, over half (57%) parked in an OSMP parking lot, and just under a quarter (23%) parked in a neighborhood street (Table D-30).

All respondents who indicated they arrived by car were asked how easy or difficult it was to find a parking spot. About half (51%) of respondents indicated that it was "Very easy" and one third (30%) indicated that it was "Easy" to find a parking spot (Table D-31). Six percent of respondents said it was "Difficult" or "Very difficult" to find a parking spot.

Respondents who arrived by car were also asked where they would have gone if they were unable to park where they did on the day of their visit. Around 46% indicated they would have found a different place to hike (write-in responses provide in Table E-3). Over a third (37%) indicated that they would have found a way to still hike the trail they were surveyed at (e.g., by parking further away, waiting, or driving home and walking). Six percent indicated that they would not have hiked if they did not find a spot.

The clear majority (95%) of respondents who arrived by car indicated that the trailhead they were surveyed at was their first-choice destination that day (Table D-32). While visitors who indicated that it was *not* their first choice were asked follow-up questions, each question had fewer than 30 valid responses. This sample size was deemed to be too low to conduct further analyses on. Write-in responses for this question can be found in Table E-4.

[6] For comparison, 52% of respondents reporting biking as their primary activity during the most recent five-year visitor survey for Boulder County Parks and Open Space (Marotti, 2018) arrived at the trailhead by car.

3.3.4 Group size and composition

About half (49%) of respondents visited by themselves. Of the groups that visited, the majority (78%) had one other person, 17% had three to four people, and 6% had five or more people (Table D-33). Additionally, of these groups, 68% were with family, 30% with friends, and 2% were part of an organized group (Table D-34).

Just 7% of groups reported having children under 18 years old with them. Of these, the majority (68%) had just one child (Table D-35). Respondents were equally likely to have children with their group across seasons. Children were more likely to be in a group with at least one other child in the fall as compared with spring, but there was no significant difference between the other seasons ($\chi^2 = 9.19$, $p = 0.027$, Cramer's $V = 0.28$). The majority (74%) of groups with children were from Boulder County ($\chi^2 = 15.61$, $p < 0.001$, Cramer's $V = 0.10$; Table D-36).

Approximately 37% of groups had at least one dog with them (Table D-37). Of the groups that had at least one dog, the majority (74%) just had one (Table D-38). The majority (91%) of groups with dogs were from Boulder County ($\chi^2 = 20.32$, $p < 0.001$, Cramer's $V = 0.11$; see Table D-39 for a breakout of locations within Boulder County).

3.3.5 Motivations

Visitors were asked to rate how important a set of 12 potential reasons were for visiting city-managed open space *on the day of the survey* from one ("Not at all important") to seven ("Extremely important"). Respondents provided the most "Extremely important" ratings for "Enjoying nature" (65%), "Physical fitness" (57%), and "Having fun" (52%; Figure 7). At the other extreme, respondents provided the most "Not at all important" ratings for "Being with my dog(s)" (47%), "Visiting a particular place" (23%), and "Learning" (22%). However, because visitors were asked to rate every reason listed, responses could be considered non-applicable for "Being with my dog(s)" if the respondents did not have a dog, and "Spending time with family/friends" if the respondents visited by themselves. Further analyses revealed that *of respondents who had a dog with them,* 73% rated "Being with my dog(s)" as "Extremely important," and *of respondents who were visiting with at least one other person*, 60% rated "Spending time with family/friends" as "Extremely important." In other words, being with a dog was very important for people who had dogs with them, and spending time with family/friends was very important for people visiting in groups.

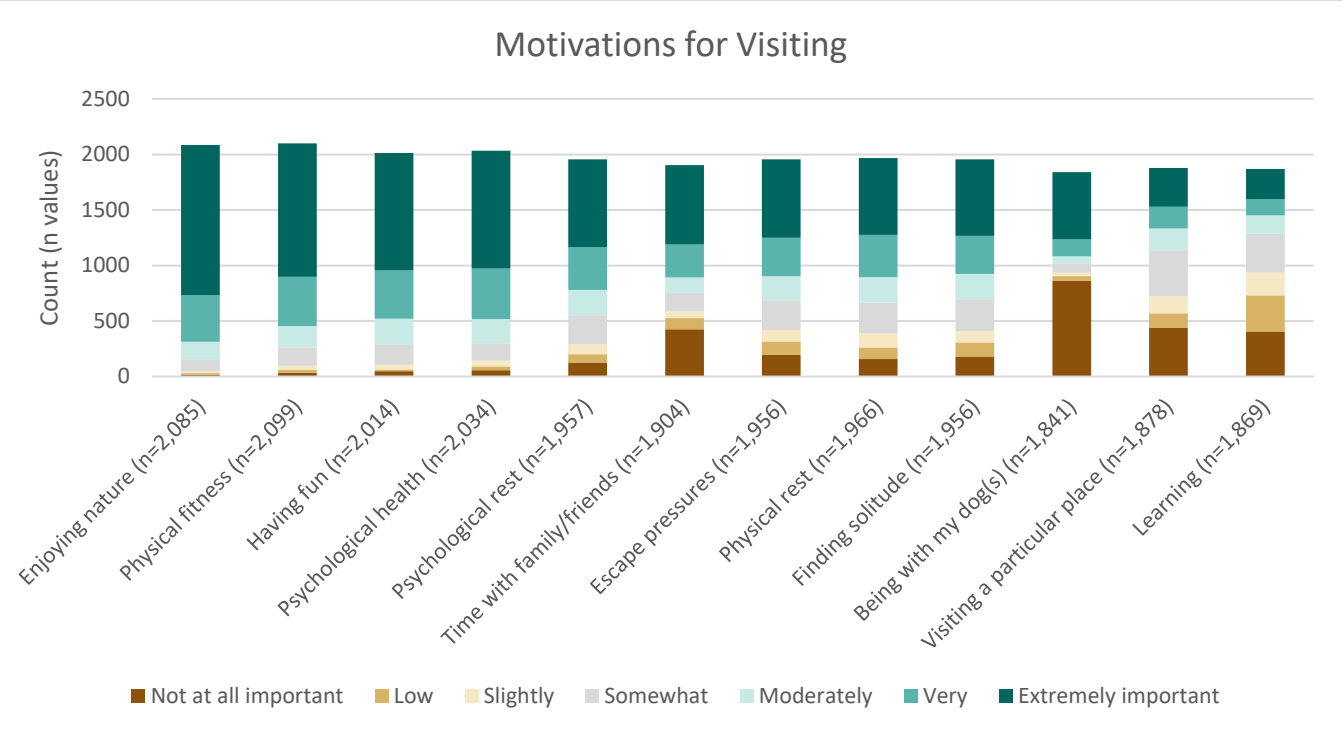

Figure 7. Visitor motivations in order of percentage of "Extremely important" ratings. Figure includes ratings for "Time with family/friends," even if the respondents were visiting by themselves, and ratings for "Being with my dog(s)," even if the respondents did not have a dog with them.

In addition to ranking each item, participants were asked to circle their *"Most important"* reason for visiting from the 12 potential reasons provided. Roughly one-third (34%) indicated that "Physical fitness" was the most important reason, followed by "Enjoying nature" (18%), and "Being with my dog(s)" (14%; Figure 8; Table D-40). For respondents with dogs, 40% marked "Being with my dog(s)" as the most important. For those visiting in a group, 26% marked "Physical fitness" as the most important reason followed by "Spending time with family/friends" (21%).

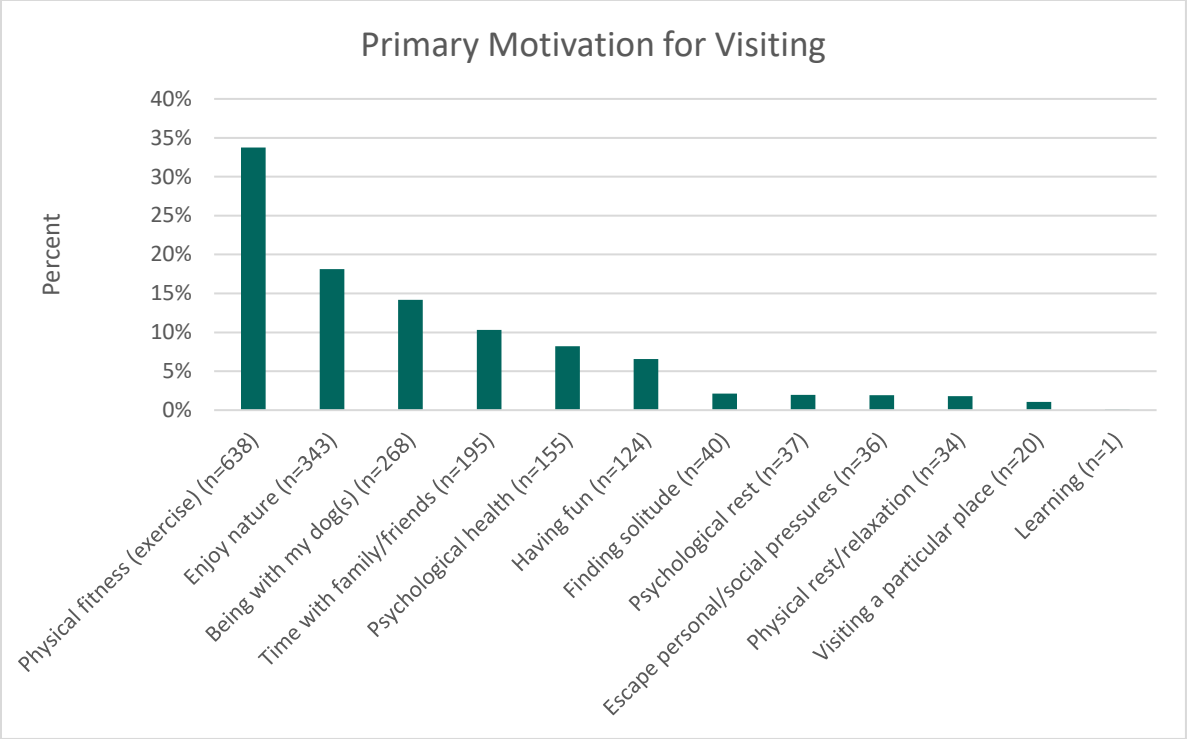

Figure 8. Most important reason for visit (n=1,891).

Primary motivations also varied by activity group (χ^2 = 721.26, p < 0.001, Cramer's V = 0.39; Table D-41). Hikers were statistically more likely to mark "Enjoy nature" and "Spending time with family/friends" (21% and 15% of hikers, respectively), and bikers were more likely to mark "Having fun" as a primary motivation compared to other activity groups (15%). Boulder County residents were statistically more likely to mark "Physical fitness" (36% compared to 22% from outside Boulder County) and "Being with my dog(s)" (16% compared to 5%). County residents were less likely to mark "Enjoy nature" (16% compared to 27%), "Spending time with family/friends" (9% compared to 19%), and "Having fun" (6% compared to 10%; χ^2 = 96.66, p < 0.001, Cramer's V = 0.23; Table D-42).

Although the 2004-2005 and 2010-2011 surveys also included a question about trip motivations, there were only three choices to select from (Table 5). Previous results reflect participation in activities (e.g., exercise) as most important, although not as prominently as the current results.

Table 5. Most important reason for visit.

Most important reason for visit	2010-2011 (n=2,226)	2004-2005 (n=2,471)
To do the activities I enjoy	49%	48%
To enjoy the place itself	42%	44%
To spend time with family or friends	9%	8%

3.4 SERVICE RATINGS

Visitors were asked to rate the importance and quality of the listed facilities or services they used on the day of their visit on a five-point scale (importance ratings from "Not at all," "Low," "Somewhat," "Moderately," to "Very," and quality ratings from "Very poor," "Poor," "Average," "Good," to "Very good"). Ratings were positive overall, with trails receiving the highest ratings in both categories: 98% of respondents rated as "Very" or "Moderately" important, and 93% as "Very good" or "Good" quality. The next highest ratings were provided for dog stations: 92% rated as "Very" or "Moderately" important, and 90% rated as "Very good" or "Good" quality (Figure 9). Fewer than 30 respondents indicated that they used picnic tables/grills, shelters, American Disabilities Act access, and horse trailer parking, and were therefore excluded from the figure below since the sample sizes were deemed to be too low to draw conclusions from. Figure 10 illustrates the number of respondents who used each facility or service and the range of importance and quality ratings from one to five. A full table of responses can be found in Table D-43, and write-in responses for "Other" facilities and services can be found in Table E-5.

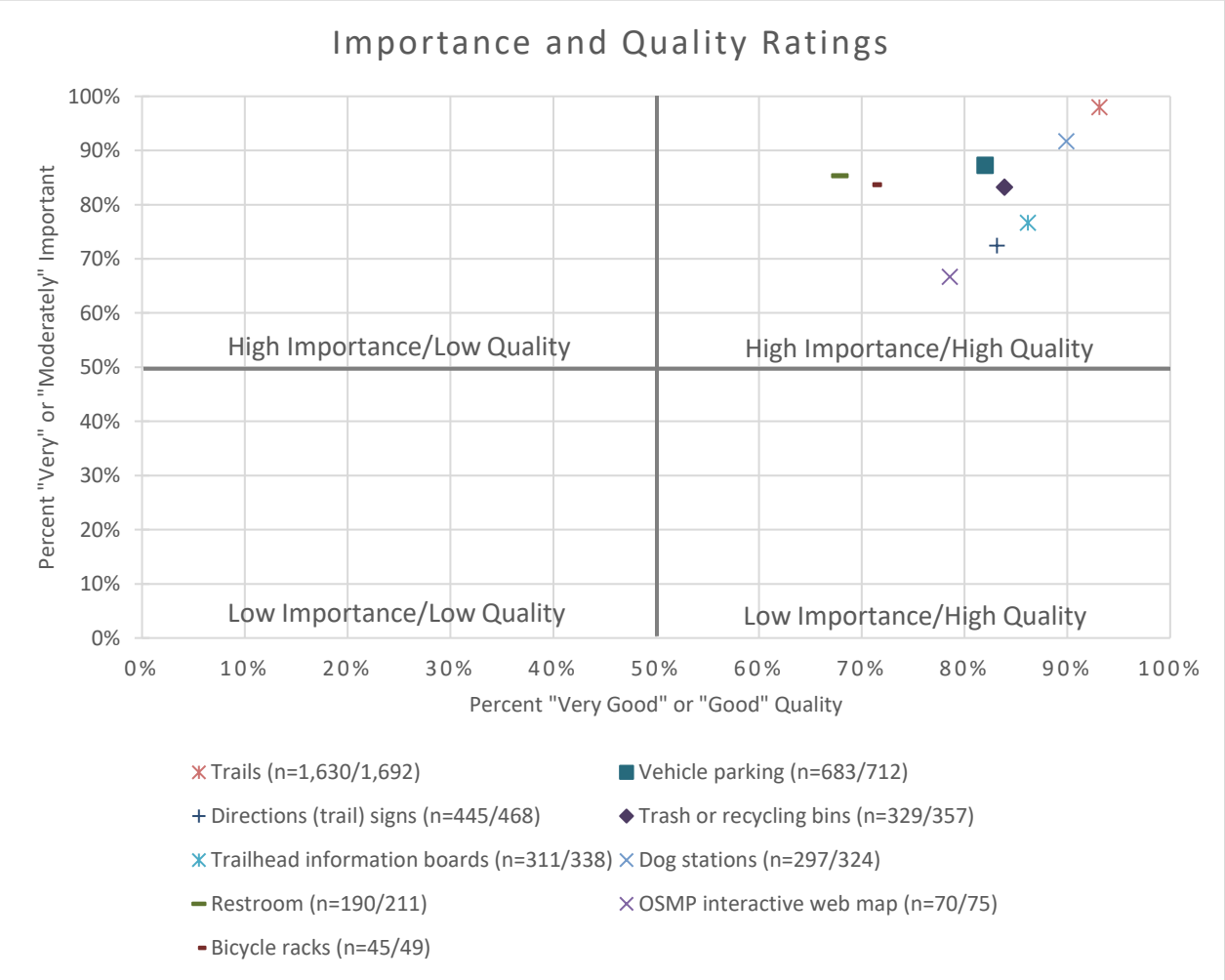

Figure 9. Percent of high (ratings of four or five out of five) importance and quality ratings. The n values are represented as "(Quality/Importance)" in the legend. Ratings for picnic tables/grills, shelters, American Disabilities Act access, and horse trailer parking were excluded because fewer than 30 respondents reported using them.

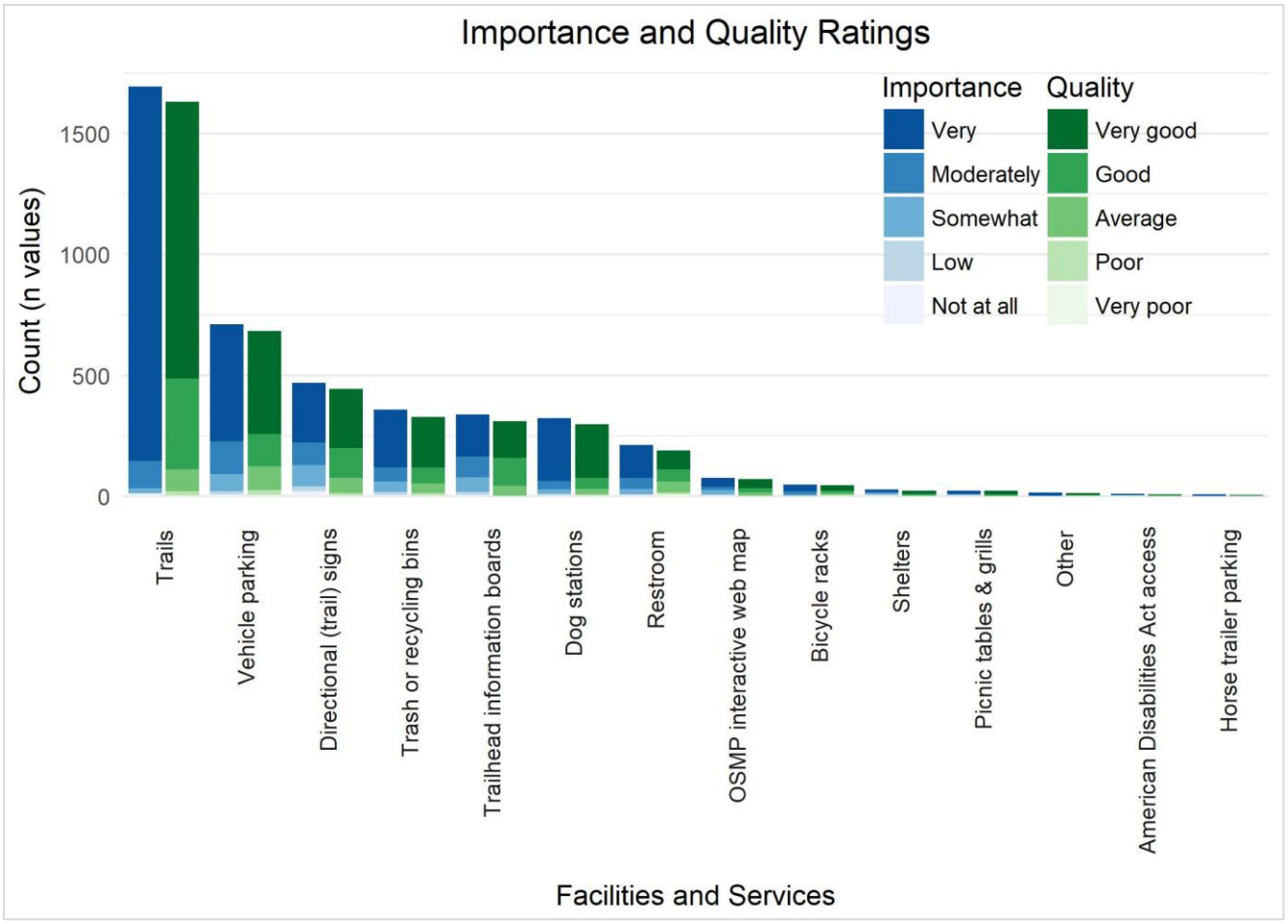

Figure 10. Importance and quality ratings for facilities and services, sorted by the number of times it was used (n=1,692).

Respondents were also asked to rate the overall quality of OSMP services, for which they provided high ratings: 63% rated as "Excellent," 32% as "Very good," and 5% as "Good" (Table D-44). Less than one percent rated them as "Fair," and no one rated them as "Poor."

3.5 Experience Ratings

Visitors were asked to mark all the visitor groups (by activity) that they encountered during their visit and to rate their experience ranging from "Conflict" to "Neutral" to "Pleasant." Figure 11 shows the ratings provided to each activity group. Write-in responses for "Other" groups/activities encountered can be found in Table E-6.

Most encounters with other user groups were rated as "Neutral" or "Pleasant" (Figure 11). *Relative to the number of times they were encountered*, OSMP staff received the most positive ratings at 86%, followed by hikers (81%), dog walkers/dogs (76%), and runners (75%; Table D-45). Bikers received positive ratings from 69% of respondents, and horseback riders received positive ratings from 65% of respondents.

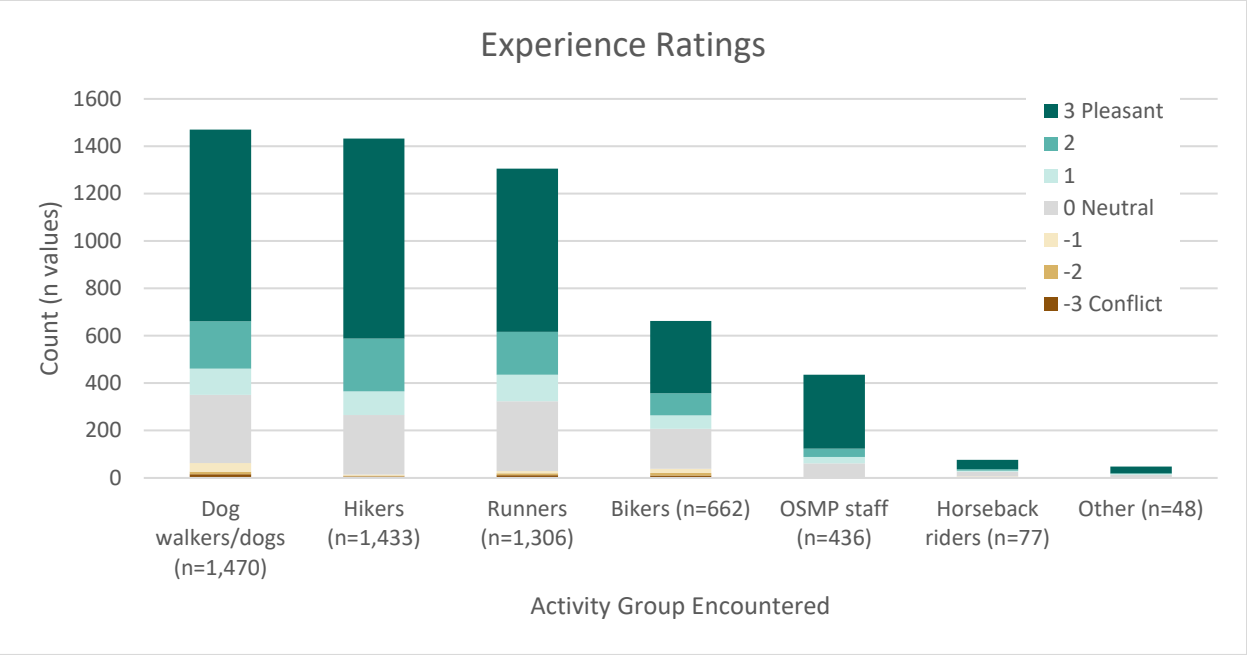

Figure 11. Ratings provided for each activity group encountered (n=1,846; respondents were asked to provide a rating for every activity group they encountered).

Six percent of respondents (118 people) indicated that they experienced conflict on the day of their visit (Table D-46). *Of the 6% that reported conflict with others*, roughly half (53%) (3% of total sample) indicated that the conflict was with dog walkers/dogs, a third (33%) (2% of total sample) experienced conflict with bikers, and a quarter (25%) (1.5% of total sample) experienced conflict with runners. A Chi-square test revealed no statistical difference between activity groups in reporting conflict on the day of their visit (Table D-47).

3.6 AREAS NO LONGER VISITED

Fourteen percent of respondents indicated that there is an OSMP area they no longer visit (Table D-48), similar to the 13% in the 2016 Resident Survey, and an increase from the 9% in 2010-2011 who indicated they visited *less often* or stopped visiting entirely[7]. In 2016-2017 Chautauqua and Sanitas were mentioned most frequently and in roughly equal proportions (23% and 22% of responses, respectively); Marshall Mesa was also mentioned frequently, but to a lesser extent than the other two at 6%. Roughly the same proportion of respondents mentioned Sanitas and Marshall Mesa as with the 2010-2011 survey (21% and 7%, respectively), but Chautauqua rose from 5% of responses to 23% over the years. For Chautauqua, this represents a seven-fold increase between 2010-2011 and 2016-2017 in the percentage of the total sample avoiding this one location (i.e., from <1% to 3%). Doudy Draw decreased from 9% to 3%; however, this may be partially due to question wording and respondents visiting "less often" in 2010-2011. Comparisons of this trend data should be made cautiously as the question was worded differently and the sample sizes for individual locations were relatively small. Write-in responses from this survey can be found in Table E-7.

[7] In 2010-2011, the survey question was worded "Are you using a particular Open Space and Mountain Parks area less often or have you even stopped using it entirely?" as opposed to "Is there a particular Open Space and Mountain Parks area you no longer visit?" in 2016-2017.

Of the 14% of respondents who indicated there is a place they no longer visit, a third (32%) of the responses mentioned crowding (representing 4% of total respondents). This was followed by parking, dog restrictions (e.g., dogs not allowed, dogs not allowed off-leash), and dog presence (e.g., too many dogs, too much dog waste), each representing 12% of responses (1.5% of total respondents each). Responses varied by location, with crowding and parking the primary reasons for Chautauqua (67% and 20% of responses, respectively), and crowding and dog presence the primary reasons for Sanitas (46% and 30% of responses, respectively). Dog walkers were the most likely to indicate there is an area they no longer visit (17%), followed by hikers (16%), bikers (13%), and runners (10%; Table D-49).

3.7 OVERALL RESULTS (2004-2005, 2010-2011, 2016-2017)

- Most visitors to city-managed open space live in the City of Boulder or Boulder County
- The average trip lasts about an hour
- Most respondents have been visiting for at least five years and a quarter have been visiting >10–20 years
- The visitor demographic is gradually getting older
- Hiking, walking dog(s), running and biking are the top primary activities
- Most visitors come at least once a week and one fifth visit >20 times per month
- More than half of visitors arrive by car, about one third arrive on foot (i.e., walking or running), and 9% arrive by bike.
- About one third of visitor parties have one or more dogs with them
- Most visitors rate the overall quality of OSMP services as “Very good” or “Excellent”
- Daily conflict rates have ranged between 5-7% and most visitors have positive experiences with others

4 DISCUSSION

The overall goal of this study was to develop a quantitative understanding of visitors to city-managed open space including visitor characteristics, experiences, perceptions, and how these attributes have changed over time. Staff were able to fully meet the objectives outlined for this study. Descriptive visitor data such as these inform managers about the diversity of visitors, their arrival experiences, preferred activities, and other characteristics. These survey findings provide important context for planning and operations, helping staff to design services that align with visitor needs. This information is also important to visitors, empowering them to express their opinions while also helping them to understand the perspectives of other visitors. Survey results, along with results from the visitation estimate, can also support visitors in making informed decisions about when and where to visit to achieve their desired experience on city-managed open space.

4.1 VISITOR CHARACTERISTICS

The primary residence of visitors has remained largely the same on a percentage basis, although the number of visits has increased over the years (Leslie, 2018). This suggests the visitation increase is due to population growth in these areas, as opposed to an increase in the proportion of people traveling from outside Boulder. Further analyses comparing survey results with visitation rates can be found in a supplemental paired-analysis report (forthcoming).

Many of the visitor characteristics have remained largely stable over time, although there are a few notable exceptions. Survey trends indicate the visitor demographic has been getting increasingly older. While the age distribution of visitors has roughly followed Boulder County age trends, the largest disparity was with those in the 20-29 age range. This age group has proportionally remained stable over time in Boulder County but has reduced over time as visitors to city-managed open space. Assuming this group is largely composed of students (or recent graduates) at the University of Colorado Boulder, it could suggest college students are increasingly less likely to visit open space.

Visitors of Hispanic, Latino, or Spanish origin were also underrepresented compared to Boulder County census data and could be an area for increased outreach.

4.2 FACILITIES AND SERVICES

Respondents provided high ratings for specific facilities and services, with the highest given to trails and dog stations, respectively. The high service ratings reported suggest the work OSMP is doing is consistent with visitor preferences and visitors are generally satisfied with their experience.

System-wide, parking did not emerge as a major issue, with 6% of respondents indicating it was “Difficult” or “Very difficult” to find a parking spot, and 82% rating vehicle parking as “Very good” or “Good” quality. Of respondents who drove, 95% said the location they were surveyed at was their first-choice destination, suggesting they were not displaced during that trip due to lack of parking at another site. Furthermore, if respondents hypothetically could not find parking, 37% were confident that they would have found a spot at that location, and 46% still planned to hike in general. However, this does exclude approximately 19% of respondents who would not have hiked or were unsure what they would have done. There are still many unanswered questions regarding the impact parking has on the quality of the visitor experience and this topic is worth further exploration, especially on a site-by-site basis.

4.3 VISITOR EXPERIENCES

Recreation conflict is a major concern for many land management agencies. Despite the relatively high levels of use some OSMP-managed trails receive, most encounters with other visitor groups received positive or neutral ratings. Furthermore, over 50% of the ratings for each activity group were given the highest rating of "+3" with the exception of bikers, for which 46% of respondents provided a "+3" rating.

While overall conflict with other activity groups was low, it will be important to monitor over time as population growth continues along the Front Range of Colorado. Additional research with more focused survey questions can help illuminate the specific causes of the conflict, and results could be used to inform conflict management strategies. For example, previous research found the primary cause of conflict with dog walkers was dog waste left behind (Giolitto, 2012), and further information on behaviors and perceptions regarding dog waste disposal was uncovered in an OSMP funded research study (Blenderman et al., 2018). Collectively, this information could be used to modify dog waste management strategies.

Crowding was the primary reason provided for no longer visiting an area, with Chautauqua and Sanitas mentioned most frequently. At the same time, respondents did not indicate finding solitude was an important motivation for visiting open space. Crowding can be a complicated issue, with social, ecological, and managerial considerations, and it will be important to monitor perceptions of crowding as visitation continues to grow in certain areas of the system. Gaining an understanding of how visitor expectations of crowding vary and developing specific and measurable desired conditions could be considered to ensure the quality of visitor experiences are not diminished.

Parking followed crowding as a reason visitors avoided Chautauqua and is being addressed in the Chautauqua Area Management Plan[8]. After crowding, dog presence emerged as a top reason to avoid Sanitas in both this study and the 2010-2011 iteration, with responses related to the number of dogs, presence of dog waste, and dog/dog guardian behavior. However, these Sanitas results are based on relatively few responses (20 responses for 2016-2017) to a single open-ended question, so a more targeted study of this topic could be warranted.

System-wide, an equal proportion of people reported they avoided an area due to dog *presence* (e.g., too many dogs, too much dog waste) as dog *restrictions* (e.g., dogs not allowed, dogs not allowed off-leash). These diverse perspectives regarding dogs reinforce the value of having a range of regulations for visitors who prefer a dog-free, dog on-leash, or Voice and Sight experience, and the importance of continued monitoring to ensure an appropriate balance is in place.

4.4 NEXT STEPS AND OPPORTUNITIES

4.4.1 Additional analysis

Staff plan to conduct further analysis on the survey data to better understand site variability, sub-group characteristics and potential applications for specific OSMP work groups. Additionally, staff plan to pair the survey data results with the results of the visitation estimate to gain a more holistic understanding of visitation levels and visitor characteristics.

[8] https://bouldercolorado.gov/pages/chautauqua-access-management-plan

4.4.2 Sampling interval

Methodologically, modifying the sampling interval is something to consider. Conducting a survey annually, at a reduced sampling rate, would provide current information on a more frequent basis (existing methods include a five-year interval between data collection periods). This inter-year data could be used to inform in-house and external discussions, on-going operations and planning efforts requiring information on visitor characteristics.

4.4.3 Management applications

A key goal of the Visitor Master Plan (2005) is to "maintain or enhance the quality of the visitor experience." Tracking visitor use trends and visitor experience preferences helps managers better understand and serve visitors and maintain opportunities for high quality visitor experiences now and into the future. Results from this survey can be used to support staff planning efforts, on-going operations and discussions with stakeholders and advisory boards. Specific examples of how this information could be used include, but are not limited to:

Table 6. Management application themes and examples.

Management Application	Example(s)
Understand the visitor experience over time and periodically assess service ratings, as committed to in the Visitor Master Plan (City of Boulder, 2005)	Detect change in activity distribution or perceptions of trails, information boards and parking lots
Support amenity provision review/inquiry	Consider topical inquiry into services with greater reported use and the highest number of "Poor" and "Very poor" quality responses (e.g., trash/recycling bins, vehicle parking, directional signs, restrooms)
Inform staff allocation	Schedule ranger patrol or trailhead educators to coincide with high conflict areas
Support adaptive management and visitor management decisions	Consider activity separation in high conflict areas; consider parking lot modifications or alternative transportation opportunities in areas of inadequate parking
Inform current plans, implementation of past plans and creation of new plans	Inform the Master Plan, Integrated Site Plans, and the Visitor Experience: Community Engagement Framework
Understand recreation (paired with visitation and respective "other" resource data) in relation to other managed resources such as wildlife, trails or vegetation	Conduct interdisciplinary research to establish relationship between recreation and ground nesting bird success or the spread of non-native plants
Frame conversations related to recreation management with stakeholders and advisory boards	Inform "Responsible Recreation and Enjoyment" focus area in fall study session with Open Space Board of Trustees

4.5 SUMMARY

This five-year study provides managers with information to inform planning and on-going operations related to the provision of passive recreation opportunities and visitor management strategies. This report summarized visitors in terms of their: (a) demographic characteristics (e.g., gender, age, place of residence) and prior visitation rates, (b) trip characteristics (e.g., trip duration, activity participation) on the day that they were surveyed, and (c) evaluations of their experience (e.g., perceived conflict, satisfaction with OSMP management). Results were presented for the entire sample as well as for different seasons and respondent sub-sets. Results indicate stable visitor characteristics over time, with an aging visitor population as one notable exception.

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5.1 Online Resources

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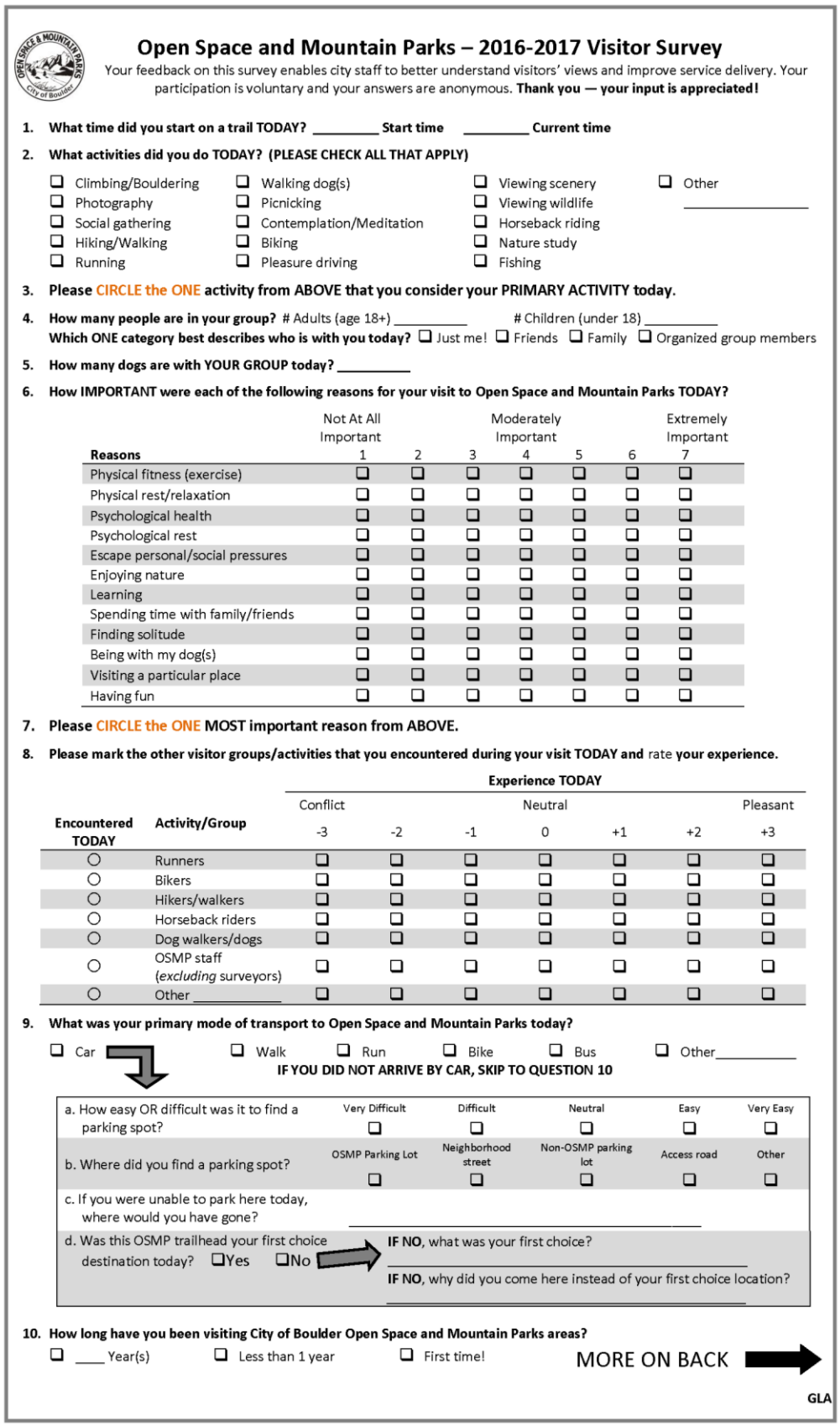
APPENDIX A: SURVEY INSTRUMENT AND QUESTION DEVELOPMENT

A1: SURVEY INSTRUMENT



Open Space and Mountain Parks – 2016-2017 Visitor Survey

Your feedback on this survey enables city staff to better understand visitors' views and improve service delivery. Your participation is voluntary and your answers are anonymous. **Thank you — your input is appreciated!**

1. **What time did you start on a trail TODAY?** _____ **Start time** _____ **Current time**

2. **What activities did you do TODAY? (PLEASE CHECK ALL THAT APPLY)**

❑ Climbing/Bouldering	❑ Walking dog(s)	❑ Viewing scenery	❑ Other
❑ Photography	❑ Picnicking	❑ Viewing wildlife	_____
❑ Social gathering	❑ Contemplation/Meditation	❑ Horseback riding	
❑ Hiking/Walking	❑ Biking	❑ Nature study	
❑ Running	❑ Pleasure driving	❑ Fishing	

3. **Please CIRCLE the ONE activity from ABOVE that you consider your PRIMARY ACTIVITY today.**

4. **How many people are in your group?** # Adults (age 18+) _____ # Children (under 18) _____
Which ONE category best describes who is with you today? ❑ Just me! ❑ Friends ❑ Family ❑ Organized group members

5. **How many dogs are with YOUR GROUP today?** _____

6. **How IMPORTANT were each of the following reasons for your visit to Open Space and Mountain Parks TODAY?**

	Not At All Important			Moderately Important			Extremely Important
Reasons	1	2	3	4	5	6	7
Physical fitness (exercise)	❑	❑	❑	❑	❑	❑	❑
Physical rest/relaxation	❑	❑	❑	❑	❑	❑	❑
Psychological health	❑	❑	❑	❑	❑	❑	❑
Psychological rest	❑	❑	❑	❑	❑	❑	❑
Escape personal/social pressures	❑	❑	❑	❑	❑	❑	❑
Enjoying nature	❑	❑	❑	❑	❑	❑	❑
Learning	❑	❑	❑	❑	❑	❑	❑
Spending time with family/friends	❑	❑	❑	❑	❑	❑	❑
Finding solitude	❑	❑	❑	❑	❑	❑	❑
Being with my dog(s)	❑	❑	❑	❑	❑	❑	❑
Visiting a particular place	❑	❑	❑	❑	❑	❑	❑
Having fun	❑	❑	❑	❑	❑	❑	❑

7. **Please CIRCLE the ONE MOST important reason from ABOVE.**

8. **Please mark the other visitor groups/activities that you encountered during your visit TODAY and** rate **your experience.**

		Experience TODAY						
		Conflict			Neutral			Pleasant
Encountered TODAY	**Activity/Group**	-3	-2	-1	0	+1	+2	+3
○	Runners	❑	❑	❑	❑	❑	❑	❑
○	Bikers	❑	❑	❑	❑	❑	❑	❑
○	Hikers/walkers	❑	❑	❑	❑	❑	❑	❑
○	Horseback riders	❑	❑	❑	❑	❑	❑	❑
○	Dog walkers/dogs	❑	❑	❑	❑	❑	❑	❑
○	OSMP staff (*excluding* surveyors)	❑	❑	❑	❑	❑	❑	❑
○	Other _____	❑	❑	❑	❑	❑	❑	❑

9. **What was your primary mode of transport to Open Space and Mountain Parks today?**

❑ Car ❑ Walk ❑ Run ❑ Bike ❑ Bus ❑ Other_____

IF YOU DID NOT ARRIVE BY CAR, SKIP TO QUESTION 10

a. How easy OR difficult was it to find a parking spot?	Very Difficult ❑	Difficult ❑	Neutral ❑	Easy ❑	Very Easy ❑
b. Where did you find a parking spot?	OSMP Parking Lot ❑	Neighborhood street ❑	Non-OSMP parking lot ❑	Access road ❑	Other ❑
c. If you were unable to park here today, where would you have gone?	_____				
d. Was this OSMP trailhead your first choice destination today? ❑Yes ❑No	**IF NO**, what was your first choice? _____ **IF NO**, why did you come here instead of your first choice location? _____				

10. **How long have you been visiting City of Boulder Open Space and Mountain Parks areas?**

❑ ____ Year(s) ❑ Less than 1 year ❑ First time!

MORE ON BACK

GLA

11. Please estimate how many times per month, on average, you have visited City of Boulder Open Space and Mountain Parks during the last 12 months.

_____ Times per month (write <1 if you visit less than once per month) ❑ This is my first visit

12. Is there a particular City of Boulder Open Space and Mountain Parks area you no longer visit?

❑No
❑Yes → **IF YES**, where?_____
IF YES, what caused you to avoid that area?_____

13. a. Please mark all visitor facilities and services that you or your group used during THIS visit ONLY.
b. For facilities and services that were used TODAY, please rate their IMPORTANCE *and* QUALITY from 1 – 5.

		1 = Not at all *2 = Low* *3 = Somewhat* *4 = Moderately* *5 = Very*	*1 = Very poor* *2 = Poor* *3 = Average* *4 = Good* *5 = Very Good*
Used TODAY	**Facility or Service**	**IMPORTANCE**	**QUALITY**
○	Restroom	_____	_____
○	Trails	_____	_____
○	Trash or recycling bins	_____	_____
○	Directional (trail) signs	_____	_____
○	Vehicle parking	_____	_____
○	Trailhead information boards	_____	_____
○	OSMP interactive web map	_____	_____
○	Bicycle racks	_____	_____
○	Picnic tables & grills	_____	_____
○	Shelters (covered picnic areas)	_____	_____
○	Horse trailer parking	_____	_____
○	Dog stations (compost bins, bag dispenser)	_____	_____
○	American Disabilities Act access	_____	_____
○	Other:_____	_____	_____

14. Please rate the overall quality of City of Boulder Open Space and Mountain Parks services.

❑ Excellent ❑ Very Good ❑ Good ❑ Fair ❑ Poor

15. Where is your PRIMARY residence?

❑ Boulder (within city limits)
❑ Louisville
❑ Lafayette
❑ Superior
❑ Longmont
❑ Unincorporated Boulder County
❑ Other city in Boulder County
❑ Metro Denver
❑ Other area in Colorado
❑ Other U.S. state
❑ Other Country

16. What YEAR were you born? _____

17. What is your current gender identity? (check all that apply)

❑ Male
❑ Female
❑ Trans male/trans man
❑ Trans female/trans woman
❑ Genderqueer/gender non-conforming
❑ Different identity (please state):_____

18. What range most closely represents your total annual household income?

❑ Less than $25,000
❑ $25,000 to $34,999
❑ $35,000 to $49,999
❑ $50,000 to $74,999
❑ $75,000 to $99,999
❑ $100,000 to $149,999
❑ $150,000 or more

19. Are you of Hispanic, Latino, or Spanish origin?

❑ Yes
❑ No

20. What is your race? For purposes of this question, persons of Spanish/Hispanic/Latino origin may be of any race.

❑ White
❑ Black or African American
❑ American Indian or Alaska Native
❑ Asian
❑ Native Hawaiian or Other Pacific Islander
❑ Other race

21. What is the highest degree or level of education you have completed?

❑ Some high school
❑ High school graduate (includes equivalency)
❑ Some college, no degree
❑ Associate's degree
❑ Bachelor's degree
❑ Graduate or professional degree
❑ Ph.D.

22. Did you enter from this access/trailhead?

❑ Yes
❑ No **If NO**, where did you enter from? Please write access number _____ **(REFER TO THE MAP)**

For STAFF use only:

Location _____, AM, MID, PM, **Date**_____ **Interview initials**_____ **#**_____ **GLA**

A2: Question Development Over Time

Key changes in 2016-2017 questionnaire (compared to past versions):

- Creation of a group leader and visitor party version, to reduce potential inflation with group size and number of dogs per party reporting
- Trip motivations section expanded (Q6)
- New visitor experience/interaction question matrix (Q8)
- New parking question matrix (Q9)
- Expanded facilities and services evaluation (Q13) (same item list and format as 2016 Resident Survey)
- Additional demographic questions (Q18 – Q21)

Specific examples across survey years

1. Staff expanded the list of motivations for visiting OSMP to reflect best practices and published motivation domain literature
    a. The 2004-2005 and 2010-2011 iterations had three choices including "Enjoy the place itself," "Good place to do the activities I enjoy" and "I wanted to spend more time with family or friends."
    b. The 2016-2017 iteration had 12 choices including "Physical fitness (exercise)," "Physical rest/relaxation," "Psychological health," "Psychological rest," "Escape personal/social pressures," "Enjoying nature," "Learning," "Spending time with family/friends," "Finding solitude," "Being with my dog(s)," "Visiting a particular place," and "Having fun."
2. Staff created a separate question in 2010-2011 to more directly ask visitors to rate their experiences with other visitors instead of asking them to rate OSMP based on their experiences with others as was done in 2004-2005.
    a. During 2004-2005 only "bikers" and "dogs and dog walkers" were included.
    b. The visitor activities listed for experience ratings in 2010-2011 included "bikers," "dogs and dog walkers," "runners," "hikers," and "horseback riders."

The series of conflict questions (2010-2011) were previously included as one summative "did you experience any conflicts" question and one "describe" question and two similar questions specifically inquiring about dogs/dog walkers and mountain bikers. The 2004-2005 survey did not ask about specific conflicts with any type of visitor and asked the respondent to report on/describe conflicts or unpleasant experiences for "today" only.

APPENDIX B: SAMPLE LOCATIONS

The 2016-2017 Visitor Survey sampling frame was composed of 197 sample locations. The maps below show the 140 selected survey site locations and the sample they were drawn from.

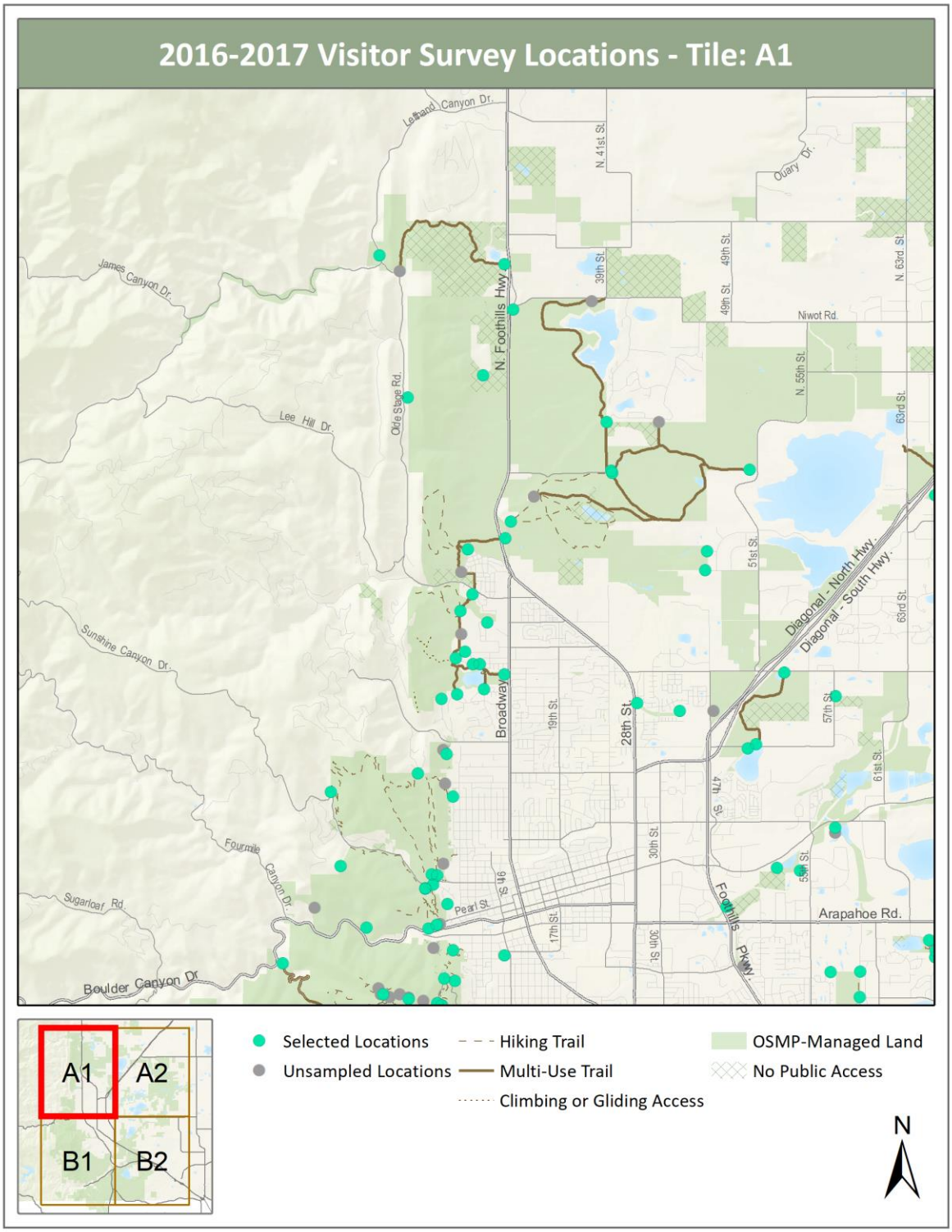


Figure B- 1. Selected survey site locations and the sample they were drawn from in northwest area of system.

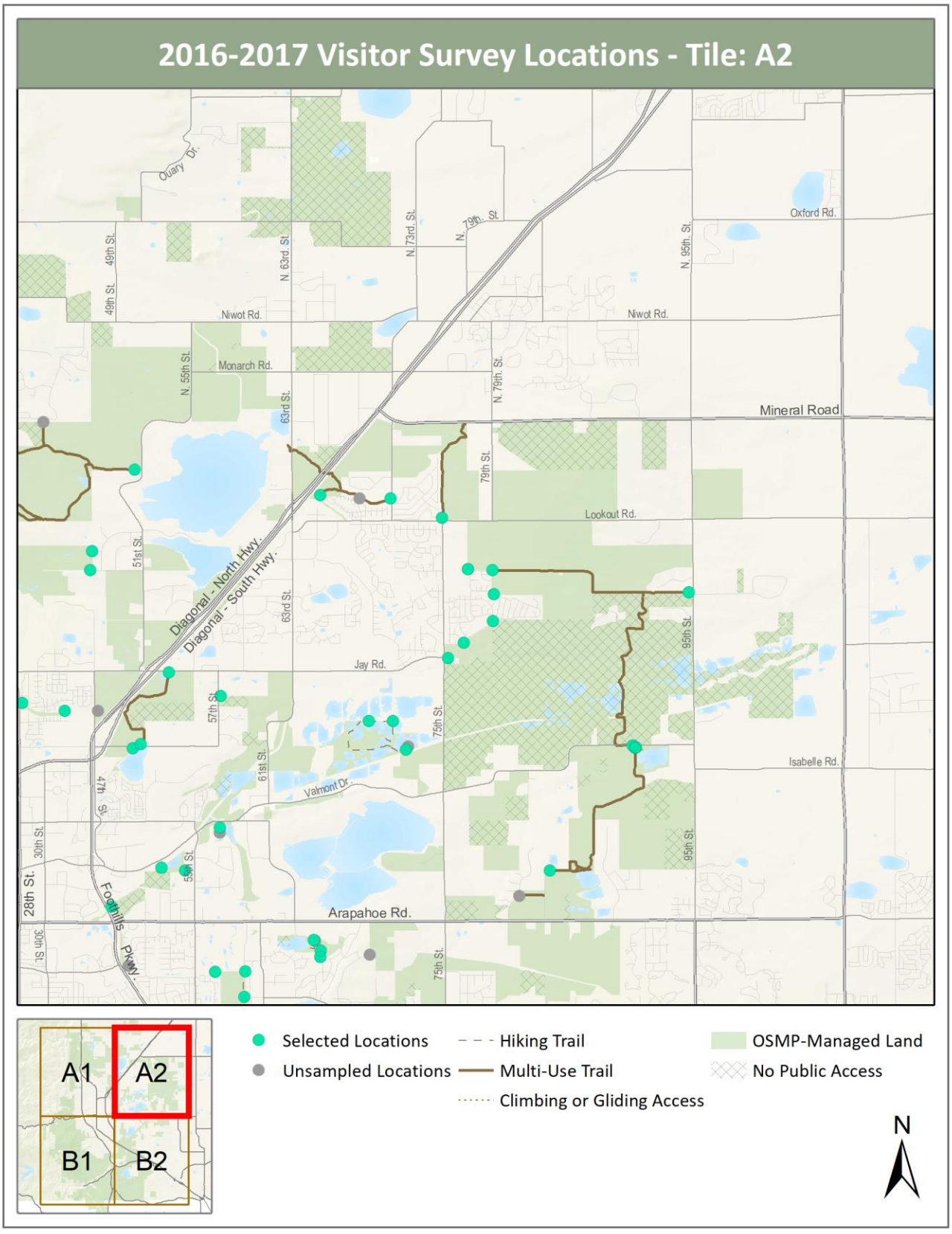


Figure B- 2. Selected survey site locations and the sample they were drawn from in northeast area of system.

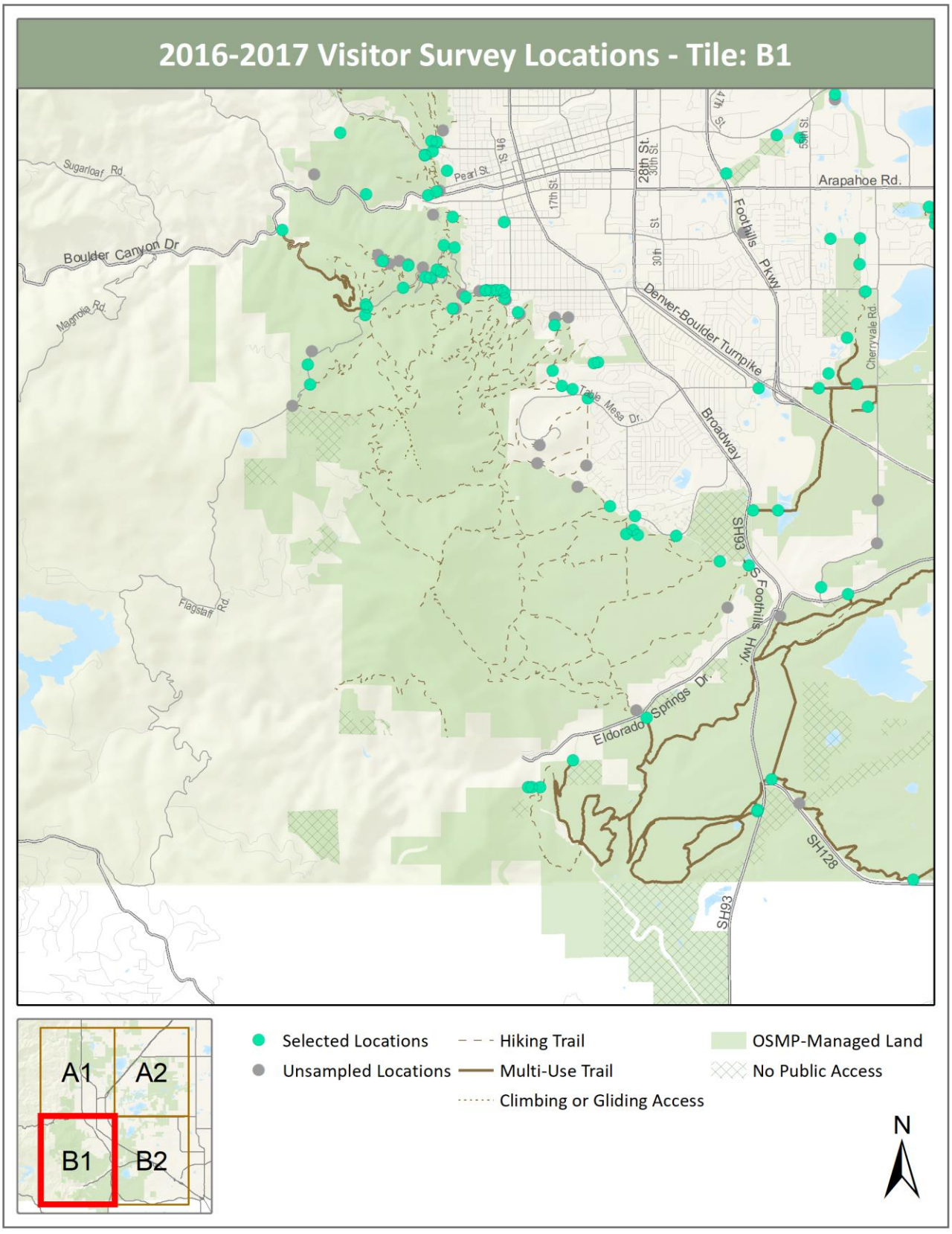


Figure B- 3. Selected survey site locations and the sample they were drawn from in southwest area of system.

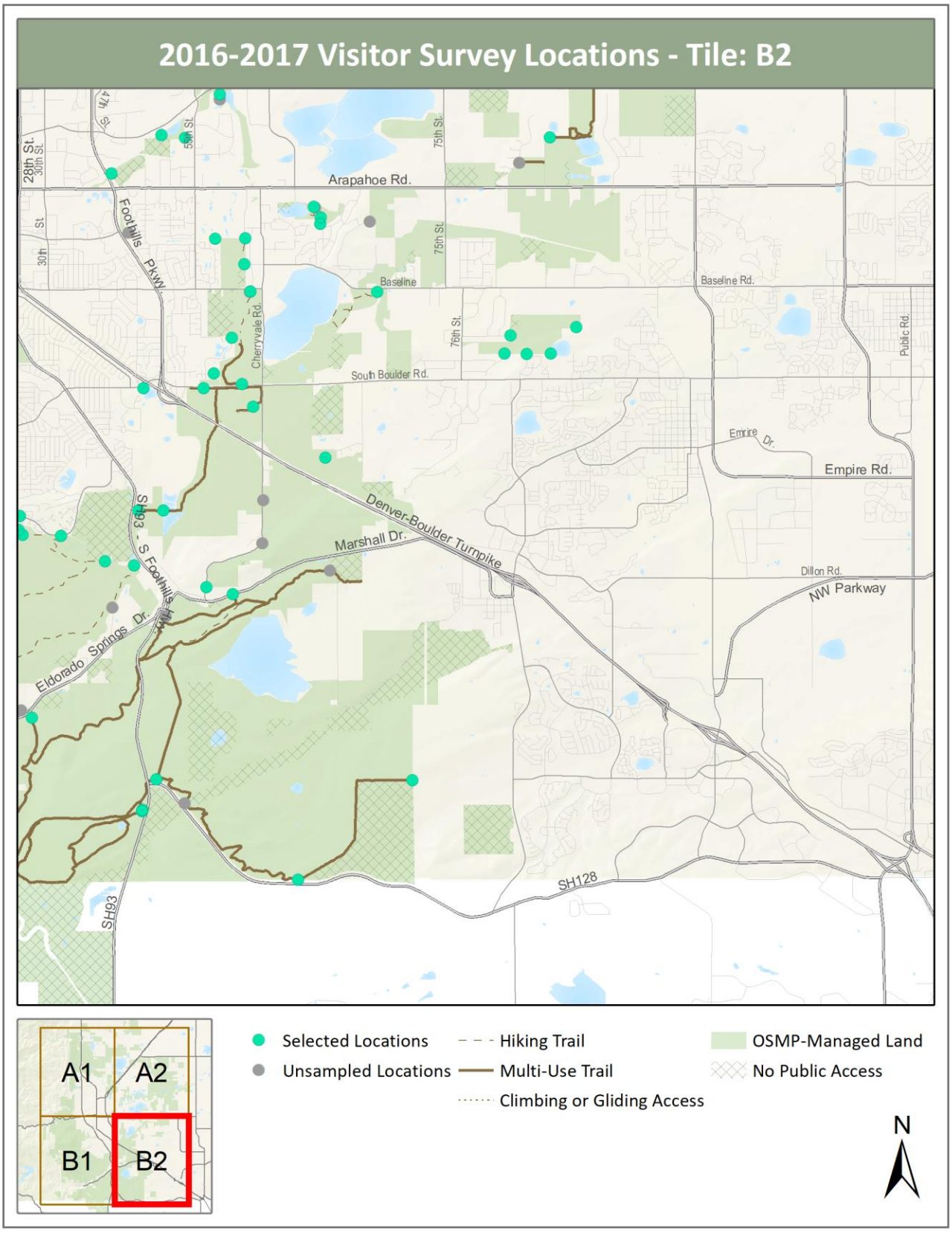


Figure B- 4. Selected survey site locations and the sample they were drawn from in southeast area of system.

Table B- 1. Survey sample visitation volume class (from 2005), the number of surveys completed, and the percent of total surveys the site represented.

Site ID	Site Name	Visitation Volume Class	Number of Surveys	Percent of Surveys
54	Settlers Trailhead West	High	21	1%
55	Settlers Trailhead East	Low	Not selected	n/a
60	Mount Sanitas Trail	High	63	3%
61	Sanitas Valley Trail	High	164	8%
63	Sanitas Valley View	Medium	Not selected	n/a
65	Sanitas Pinebrook Connector	Low	18	1%
66	Wonderland Trail Poplar Ave	High	20	1%
67	Wonderland Spring Valley Rd	Very low	7	<1%
68	Foothills Trail Locust Pl	Low	14	1%
69	Wonderland Trail Utica West	Medium	6	<1%
70	Wonderland Utica East	High	9	<1%
71	Wonderland Lake Trailhead	Medium	86	4%
72	Foothills Trail Locust Av	Medium	30	1%
73	Foothills Trail NoBo Park	Medium	Not selected	n/a
74	Fourmile Trailhead	High	5	<1%
76	Foothills Rosewood Av - undesignated	Low	0	0%
77	Foothills Trail Dog Park	Medium	8	<1%
78	Foothills Trail Near Hogback Trail	Medium	Not selected	n/a
79	Foothills Trail Near US 36	Low	13	1%
80	Degge Trail	Medium	18	1%
81	Eagle Trail West	Medium	Not selected	n/a
82	BVR Trailhead South	Medium	38	2%
83	BVR Trailhead North	Low	10	<1%
84	Lefthand Trailhead	Low	Not selected	n/a
85	North Rim Trail	Low	Not selected	n/a
86	Eagle Trailhead	Medium	10	<1%
87	Cottontail East Subdivision	Low	Not selected	n/a
88	Cottontail Trail South	Low	28	1%
89	Cottonwood Trail Independence Rd South	Medium	3	<1%
90	Cottonwood Trail Independence Rd North	Low	17	1%
91	Cottonwood Trail Jay Rd	Low	24	1%
92	Beech Pavilion	Very low	0	0%
95	Boulder Creek Path Cottonwood Grove West - undesignated	Low	0	0%

Site ID	Site Name	Visitation Volume Class	Number of Surveys	Percent of Surveys
96	Cottonwood Grove Humane Society - undesignated	Low	1	<1%
98	Boulder Creek Path Valmont Industrial Park North	Very low	0	0%
99	Boulder Creek Path Valmont Industrial Park South	Very Low	Not selected	n/a
100	East Boulder - Gunbarrel	Medium	26	1%
101	East Boulder Trail at White Rocks TH	Very low	2	<1%
103	East Boulder Trail White Rocks	Medium	7	<1%
104	East Boulder Trail Valmont	Medium	77	4%
105	East Boulder Trail Teller No 5 Pond Access	Low	1	<1%
106	Teller Farm South Trailhead	Medium	40	2%
107	Sawhill Entrance West	Low	32	1%
108	Sawhill Entrance North	Low	Not selected	n/a
109	Sawhill Walden East	Low	23	1%
110	Sawhill Walden West	Very low	2	<1%
111	Sombrero South	Low	Not selected	n/a
112	Sombrero West	Very low	0	0%
113	Dry Creek Trailhead	High	49	2%
114	Centennial Northwest	Low	26	1%
115	Centennial South	Low	6	<1%
116	Centennial Northeast	Very low	36	2%
117	Bobolink Multi-Use Trail	High	27	1%
118	South Boulder Creek Community Center	High	39	2%
120	South Boulder Creek SBR Underpass South	Low	0	0%
121	South Boulder Creek Van Vleet	Low	26	1%
122	South Boulder Creek Foothills Campus	Very low	0	0%
123	South Boulder Creek Marshall	Medium	27	1%
124	Church	Low	Not selected	n/a
126	Hogan Brothers North	Very Low	Not selected	n/a
127	Richardson - undesignated	Very low	1	<1%
129	Coalton Trail East	Low	22	1%
130	High Plains East	Very low	0	0%
131	Marshall Mesa Trailhead	Medium	2	<1%
136	Greenbelt Plateau Trailhead	Medium	4	<1%
137	Flatirons Vista Trailhead	Medium	21	1%

Site ID	Site Name	Visitation Volume Class	Number of Surveys	Percent of Surveys
138	Doudy Draw Trailhead	Medium	12	1%
139	South Mesa Trailhead	High	Not selected	n/a
140	Fowler East	Low	14	1%
141	Fowler Trail West	Very low	39	2%
146	Big Bluestem Trail	Low	4	<1%
147	South Boulder Creek Trail Broadway	Medium	55	3%
153	Shanahan Greenbriar Galena	Low	15	1%
154	Greenbriar - undesignated	Very low	2	<1%
155	North Fork Shanahan	Medium	38	2%
156	Lower Bear Canyon Trail	Medium	Not selected	n/a
158	NCAR Trail	Medium	Not selected	n/a
159	Skunk Canyon Trail Table Mesa	Medium	19	1%
162	Skunk Canyon Trail	Low	16	1%
164	Kohler Mesa Trail	Low	3	<1%
165	Four Pines Entrance	Low	Not selected	n/a
166	Four Pines Upper	Low	Not selected	n/a
167	Enchanted Mesa Trail	Medium	49	2%
168	McClintock Trail	Low	Not selected	n/a
169	Bluebell Road	High	Not selected	n/a
170	Chautauqua Trail	High	19	1%
171	Baseline Trail	Medium	9	<1%
172	6th Street Access	Low	7	<1%
173	Amphitheater Trail	Medium	Not selected	n/a
174	Gregory Canyon	Medium	27	1%
175	Flagstaff Trail East	Low	Not selected	n/a
176	View Point Trail South	Low	3	<1%
177	View Point Trail North	Low	12	1%
178	Halfway House	Low	7	<1%
179	Capstan Rock	Very Low	Not selected	n/a
182	Lower Crown Rock	Medium	Not selected	n/a
183	Upper Crown Rock Road Pull-off	Low	5	<1%
184	Upper Crown Rock	Medium	6	<1%
188	Contact Corner	Low	Not selected	n/a
189	Baseline Picnic Area	Low	0	0%
191	Gregory Canyon Spur	Low	3	<1%
193	Range View Trail South	Low	7	<1%
194	Ute Trail	Very low	13	1%
197	Flagstaff Amphitheater	Low	Not selected	n/a

Site ID	Site Name	Visitation Volume Class	Number of Surveys	Percent of Surveys
198	Flagstaff Amphitheater South	Low	27	1%
200	Range View Trail North	Low	0	0%
201	Boy Scout Trail	Very Low	Not selected	n/a
202	Artist's Point	Low	Not selected	n/a
205	Lost Gulch	Medium	Not selected	n/a
206	Cathedral Trailhead	Very low	3	<1%
207	Long Canyon Trail	Very low	4	<1%
208	Green Mountain West Ridge Trail	Medium	Not selected	n/a
210	Elephant Buttress	Low	7	<1%
213	Buckingham North Privy	Medium	9	<1%
224	Mattie Dean - undesignated	Low	1	<1%
225	Steinbach Continental View - undesignated	Low	19	1%
226	Steinbach Niland - undesignated	Low	6	<1%
227	Steinbach Fairview - undesignated	Very low	2	<1%
228	Steinbach Ponderosa - undesignated	Low	1	<1%
229	Hatch	Low	Not selected	n/a
230	Boulder Creek Path Foothills - undesignated	Low	38	2%
236	Heatherwood Wood Brothers East - undesignated	Low	0	0%
237	Heatherwood Wood Brothers West - undesignated	Low	3	<1%
239	Heatherwood Kaufman - undesignated	Very low	0	0%
240	Heatherwood Cambridge St - undesignated	Low	18	1%
243	Fourth Street Undesignated Access Near View Point Trail	Very Low	Not selected	n/a
244	Lion’s Lair Spur	Very low	0	0%
245	Eldo Post Office Trail East	Very low	0	0%
246	Eldo Post Office Trail West	Very low	0	0%
250	Joder interim West	Very Low	Not selected	n/a
251	West Beech Old Stage Rd *(Note: site removed part way through study)*	Very Low	0	0%
252	Joder Interim East	Very low	3	<1%
254	East Beech / Lake Valley Pebble Beach Ln - undesignated	Very low	4	<1%
258	BVR / Boulder Warehouse	Very low	3	<1%

Site ID	Site Name	Visitation Volume Class	Number of Surveys	Percent of Surveys
259	Lefthand Creek at Cottonwood Trail	Very Low	Not selected	n/a
260	Sanitas / Dakota Ridge Trail lower area - undesignated	Very low	16	1%
262	Teller - Willow Glenn	Very Low	Not selected	n/a
263	Sombrero SE - undesignated	Very low	12	1%
264	Sombrero SW - undesignated	Very low	4	<1%
265	West Beech / Business Park - undesignated	Low	0	0%
266	Lookout Road subdivision	Very low	22	1%
267	Andrus Mesa - undesignated	Very low	0	0%
270	S Wittemyer / North	Very low	6	<1%
271	S Wittemyer / Middle - undesignated	Very low	0	0%
274	Boulder/4 Mile Canyon N	Very Low	Not selected	n/a
276	Sanitas - Dakota Ridge Hawthorn	Very Low	Not selected	n/a
279	Aweida - Merle-Smith	Very Low	Not selected	n/a
280	S Boulder Creek Trail / Greenbelt Meadows - undesignated	Very low	12	1%
281	Chautauqua / W Baseline Trail	Very low	6	<1%
282	Chautauqua - 7th St	Very Low	Not selected	n/a
283	Chautauqua - 7 1/2 St	Very Low	Not selected	n/a
284	Chautauqua - 8th St	Very Low	Not selected	n/a
285	Chautauqua / 8 ½ St - undesignated	Very low	6	<1%
286	Settler's / 1st - undesignated	Very low	0	0%
290	Chautauqua - 5 1/2 St	Very Low	Not selected	n/a
291	Steinbach Reservoir - undesignated	Very Low	19	1%
293	68th Whaley Dr - undesignated	Very Low	1	<1%
295	S Boulder Creek Trail - Senda Ricosa	Very Low	Not selected	n/a
306	Holly Berry	Very Low	15	1%
307	NOAA W Dartmouth	Very Low	1	<1%
308	NOAA spur off Dartmouth	Very Low	19	1%
310	Devils Thumb - Stony Hill Rd - riparian	Very Low	Not selected	n/a
356	Marshall Mesa	High	Not selected	n/a
400	Climbing access near Crown Rock - undesignated	Very Low	7	<1%
401	6th St / Baseline - undesignated	Very Low	4	<1%
402	6 ½ St / Baseline - undesignated	Very Low	12	1%
403	7 ½ St / Baseline - undesignated	Very Low	19	1%
404	8th St / Baseline - undesignated	Very Low	Not selected	n/a

Site ID	Site Name	Visitation Volume Class	Number of Surveys	Percent of Surveys
405	8 ½ St / Baseline - undesignated	Very Low	Not selected	n/a
406	Climbing access below Crown Rock - undesignated	Very Low	11	1%
406	Boulderado drive	Low	Not selected	n/a
407	Chapman Trailhead	Low	6	<1%
408	Sensory Trail	Very Low	Not selected	n/a
409	Boy Scout East	Very Low	Not selected	n/a
410	Flagstaff Summit/Ute Connector - undesignated	Very Low	Not selected	n/a
412	Connector to South Boulder Creek Trail off S. Boulder Rd	Very Low	0	0%
475	Red Rocks / Sunshine Canyon junction	Low	11	1%
481	Red Rocks Spur	Low	10	<1%
482	Red Rocks access / Knollwood Dr East - undesignated	Very Low	0	0%
492	Linden Dr/Sanitas Connector - undesignated	Very Low	Not selected	n/a
496	Goat Trail	Low	7	<1%
498	Foothill North / Dakota Ridge neighborhood	Low	48	2%
500	Wonderland lake / Wonderland Hill Ave	Medium	13	1%
513	Palo Park Trail West	Low	19	1%
520	Palo Park Trail East	Low	6	<1%
526	Papini / Loki Ave - undesignated	Very Low	1	<1%
600	Cottontail	Low	20	1%
602	High Plains West	Low	Not selected	n/a
604	Shanahan Undesignated	Very Low	9	<1%
605	Lehigh Connector North	Low	80	4%
606	Hardscrabble Connector	Medium	28	1%
607	Prairie Vista Trail	Medium	13	1%
608	South Boulder Creek – Bobolink Trailhead	High	Not selected	n/a
609	Cowdry Draw West	Low	Not selected	n/a
610	Devils Thumb Access	Low	Not selected	n/a
611	NCAR - Table Mesa	Low	24	1%
613	US 36 South Connector	Very Low	15	1%

APPENDIX C: SURVEY SESSION COVER DATA SHEET

Survey administrators filled out this document for each survey session. The weather data was filled out at the beginning of the shift, and the non-response data (passes, refuses, and repeats) were recorded throughout the session.

Date:		Start time:		End time:	Recorder:
Sky		Temp F	Wind	Precipitation	Location
Sunny Overcast Partly Sunny			≤20 mph >20 mph	Rain Hail Snow None	
Survey #s:					
		By Individual Visitor			
Activity type		Passes		Refuses	Repeats
Hiker	w/out dog				
	With dog				
Runner	w/out dog				
	With dog				
Biker	w/out dog				
	With dog				
Equestrian	w/out dog				
	With dog				
Other (describe)	w/out dog				
	With Dog				
Busy Periods (partial sampling)					
Period #		Start time		End time	Sampling rate (every 3rd party)
1					
2					
3					
4					
5					
NOTES:					

APPENDIX D: BI-VARIATE CONTINGENCY TABLES

Bi-variate contingency tables showing the responses to survey questions by selected categories and the number of valid response represented as an "n" value. These tables are typically presented in the order they appear in the body of the report, with the 2016-2017 seasonal results first, followed by available trend results not represented in the body of the report by question/theme.

VISITOR CHARACTERISTICS

Demographics

Table D-1. Current gender identity (n=2,130). Respondents could select more than one category.

Gender	Total (n=2,130)	Summer (n=624)	Fall (n=636)	Winter (n=465)	Spring (n=405)
Female	52%	49%	50%	58%	50%
Male	48%	50%	49%	42%	49%
Genderqueer/gender non-conforming	<1%	<1%	<1%	<1%	<1%
Trans female/trans woman	<1%	0%	0%	0%	<1%
Trans male/trans man	0%	0%	0%	0%	0%
Different identity	<1%	<1%	<1%	0%	0%

Table D-2. Total annual household income (n=1,972).

Income	Total (n=1,972)	Summer (n=577)	Fall (n=591)	Winter (n=423)	Spring (n=381)
$150,000 or more	30%	29%	30%	26%	34%
$100,000 - $149,999	21%	24%	18%	23%	20%
$75,000 - $99,999	14%	15%	13%	16%	11%
$50,000 - $74,999	13%	13%	13%	13%	14%
$35,000 - $49,999	8%	5%	9%	9%	9%
$25,000 - $34,999	6%	6%	7%	5%	4%
Less than $25,000	9%	8%	10%	8%	8%
Median*	$100,000	$100,000	$100,000	$100,000	$100,000

**Roughly speaking, half the responses represent ranges above $100,000, and half represent ranges below $100,000 (exact break point is unknown due to capturing responses in pre-determined income ranges)*

Table D-3. Highest degree or level of education completed (n=2,120).

Education	Total (n=2,120)	Summer (n=619)	Fall (n=632)	Winter (n=463)	Spring (n=406)
Some high school	1%	3%	1%	1%	1%
High school graduate (includes equivalency)	3%	4%	2%	2%	2%
Some college, no degree	8%	9%	9%	7%	8%

Education	Total (n=2,120)	Summer (n=619)	Fall (n=632)	Winter (n=463)	Spring (n=406)
Associate degree	3%	4%	2%	3%	4%
Bachelor's degree	37%	33%	38%	38%	37%
Graduate or professional degree	39%	36%	40%	41%	40%
Ph.D.	9%	11%	8%	8%	9%

Table D-4. Race (n=2,087). Respondents could select more than one race.

Race	Total (n=2,087)	Summer (n=617)	Fall (n=621)	Winter (n=455)	Spring (n=394)
White	94%	93%	94%	95%	94%
Asian	3%	4%	4%	2%	3%
Other race*	2%	2%	2%	3%	3%
Black or African American	1%	1%	1%	<1%	1%
Native Hawaiian or Other Pacific Islander	<1%	1%	<1%	<1%	1%
American Indian or Alaskan Native	<1%	<1%	1%	<1%	0%

**"Other" responses included Latina, Asian American, Irish-American, and Hispanic.*

Table D-5. Hispanic, Latino, or Spanish origin (of any race) (n=2,059).

Hispanic, Latino, Spanish origin	Total (n=2,059)	Summer (n=607)	Fall (n=609)	Winter (n=450)	Spring (n=393)
No	95%	95%	95%	95%	95%
Yes	5%	5%	5%	5%	5%

Table D-6. Primary residence (n=2,135).

Primary Residence	Total (n=2,135)	Summer (n=622)	Fall (n=637)	Winter (n=467)	Spring (n=409)
Boulder (within city limits)	55%	50%	58%	57%	56%
Unincorporated Boulder County	10%	6%	8%	12%	18%
Other U.S. State	7%	7%	8%	4%	6%
Metro Denver	7%	9%	6%	7%	5%
Lafayette	5%	6%	6%	4%	3%
Louisville	5%	7%	2%	7%	3%
Other area in Colorado	3%	4%	4%	3%	3%
Longmont	3%	4%	3%	3%	4%
Other city in Boulder County	2%	2%	2%	2%	1%
Superior	2%	4%	1%	1%	2%
Other Country	1%	2%	1%	1%	<1%

Table D-7. Primary residence compared to previous surveys.

Primary Residence	2016-2017 (n=2,135)	2010-2011 (n=2,523)	2004-2005 (n=2,788)
Boulder (within city limits)	55%	59%	57%
Unincorporated Boulder County	10%	8%	10%
Other U.S. State	7%	8%	7%
Metro Denver	7%	9%	8%
Lafayette	5%	2%	4%
Louisville	5%	3%	4%
Other area in Colorado	3%	4%	3%
Longmont	3%	3%	4%
Other city in Boulder County	2%	1%	1%
Superior	2%	2%	1%
Other Country	1%	1%	2%

Table D-8. Age (n=2,109).

Age	Total (n=2,109)	Summer (n=614)	Fall (n=629)	Winter (n=462)	Spring (n=404)
16-19	2%	3%	2%	1%	0%
20-29	15%	15%	15%	13%	14%
30-39	17%	19%	15%	17%	17%
40-49	21%	20%	21%	19%	22%
50-59	22%	21%	23%	21%	21%
60-69	17%	16%	16%	21%	18%
70+	7%	6%	8%	8%	6%
Median age (years)	48	47	48	50	48
Mean age (years)*	47.2 ± 0.7	45.7 ± 1.2	47.3 ± 1.2	48.8 ± 1.4	47.6 ± 1.5

**Margin of error calculated at a 95% confidence level*

Visitation frequency and years visiting

Table D-9. Average visits per month (n=2,096)*.

Average visits per month	Total (n=2,096)	Summer (n=611)	Fall (n=626)	Winter (n=460)	Spring (n=399)
First time	6%	7%	7%	4%	6%
≤1 time/mo	8%	9%	9%	7%	7%
>1-4 times/mo	18%	20%	20%	17%	15%
>4-12 times/mo	27%	27%	26%	28%	27%
>12-20 times/mo	21%	19%	20%	23%	25%
>20-29 times/mo	7%	6%	6%	8%	9%
≥30 times/mo	12%	12%	12%	14%	12%
Median (times/mo)	10	9	8	12	12

**Mean is not reported because visit frequency is unknown for respondents who visit less than once per month.*

Table D-10. Average visits per month compared to previous surveys*.

Average visits per month	2016-2017 (n=2,096)	2010-2011 (n=2,518)	2004-2005 (n=2,685)
≤1 time/mo	14%	17%	10%
>1-4 times/mo	18%	18%	17%
>4-12 times/mo	27%	27%	31%
>12-20 times/mo	21%	21%	23%
>20 times/mo	19%	17%	19%
Median (times/mo)	10	8	10

**Mean is not reported because visit frequency is unknown for respondents who visit less than once per month.*

Table D-11. Average visits per month by primary activity (n=1,951).

Average visits per month	Hiking (n=821)	Running (n=318)	Walking dog(s) (n=433)	Biking (n=193)	Other* (n=186)
First time	8%	2%	3%	3%	13%
≤1 time/mo	12%	3%	4%	5%	17%
>1-4 times/mo	21%	15%	14%	15%	25%
>4-12 times/mo	27%	33%	22%	33%	26%
>12-20 times/mo	18%	28%	25%	24%	12%
>20-29 times/mo	6%	9%	10%	8%	1%
30+ times/mo	8%	10%	23%	12%	5%

**Activities that represented 2% or less of the sample were combined into "Other" (e.g., climbing/bouldering, horseback riding, fishing).*

Table D-12. How long visiting OSMP areas (n=2,084)*.

Years Visiting	Total (n=2,084)	Summer (n=601)	Fall (n=625)	Winter (n=460)	Spring (n=398)
First time	6%	8%	6%	3%	6%
≤1 year	11%	13%	10%	11%	13%
>1 - 2 years	6%	7%	5%	8%	6%
>2 - 5 years	14%	16%	13%	13%	13%
>5 - 10 years	15%	15%	16%	12%	17%
>10 - 20 years	23%	21%	24%	26%	21%
>20 years	24%	20%	26%	27%	26%
Median (years)	10	9	10	13	10

**Mean is not reported because time period is unknown for respondents who have been visiting for less than one year.*

Table D-13. Years visiting. "First time" visitors and those visiting for one year or less combined in 2016-2017 for comparison.*

Years Visiting	2016-2017 (n=2,084)	2010-2011 (n=2,515)	2004-2005 (n=2,653)
≤1 year	17%	15%	21%
>1 - 2 years	6%	6%	
>2 - 5 years	14%	14%	20%
>5 - 10 years	15%	16%	22%
>10 - 20 years	23%	25%	24%
>20 years	24%	24%	13%
Median (years)	10	10	8

**Mean is not reported because time period is unknown for respondents who have been visiting for less than one year.*

Table D-14. First time visitors by primary residence (n=2,077).

How long visiting	Boulder County (n=1,704)	Metro Denver (n=142)	Other area in Colorado (n=72)	Other U.S. State (n=135)	Other country (n=24)
First time	1%	11%	15%	53%	46%
Not first time	99%	89%	85%	47%	54%

Table D-15. First time visitors (n=2,084).

How long visiting	Total (n=2,084)	Summer (n=601)	Fall (n=625)	Winter (n=460)	Spring (n=398)
First time	6%	8%	6%	4%	6%
Not first time	94%	92%	94%	97%	95%

TRIP CHARACTERISTICS

Activities

Table D-16. Activities participated in on day of visit (n=2,141). Respondents were asked to mark all that applied.

Activity (can select multiple)	Total (n=2,141)	Summer (n=625)	Fall (n=639)	Winter (n=468)	Spring (n=409)
Hiking	60%	58%	57%	67%	62%
Viewing scenery	37%	34%	41%	35%	36%
Walking dog(s)	34%	28%	31%	47%	33%
Running	22%	24%	25%	15%	22%
Viewing wildlife	16%	16%	16%	14%	21%
Biking	12%	15%	11%	6%	15%
Photography	10%	8%	14%	9%	9%
Contemplation/Meditation	9%	7%	12%	10%	8%
Social Gathering	8%	7%	10%	8%	5%
Climbing/Bouldering	4%	4%	7%	1%	5%
Other*	4%	3%	5%	3%	2%
Nature Study	3%	2%	3%	2%	3%
Pleasure driving	2%	1%	4%	1%	3%
Picnicking	1%	1%	1%	<1%	<1%
Fishing	1%	1%	<1%	0%	2%
Horseback riding	<1%	1%	<1%	<1%	0%

**Other activities included other types of exercise (e.g., aerobics, yoga), relaxing (e.g., lunch break), and commuting.*

Table D-17. Activities participated in on day of visit compared to previous surveys. Respondents were asked to mark all that applied.

Activity (can select multiple)	2016-2017 (n=2,141)	2010-2011 (n=2,552)	2004-2005 (n=2,806)
Hiking	60%	61%	55%
Viewing scenery	37%	53%	52%
Walking dog(s)	34%	30%	32%
Running	22%	25%	24%
Viewing wildlife	16%	26%	24%
Biking	12%	12%	13%
Photography	10%	13%	9%
Contemplation/Meditation	9%	14%	15%
Social Gathering	8%	10%	12%
Climbing/Bouldering	4%	7%	7%
Other*	4%	3%	6%
Nature Study	3%	5%	7%

Activity (can select multiple)	2016-2017 (n=2,141)	2010-2011 (n=2,552)	2004-2005 (n=2,806)
Pleasure driving	2%	1%	4%
Fishing	1%	<1%**	<1%**
Picnicking	1%	3%	3%
Horseback riding	<1%	<1%	1%

**Other activities included other types of exercise (e.g., aerobics, yoga), relaxing (e.g., lunch break), and commuting.*

**Fishing was not listed as an option in previous surveys. These percentages are based on write-in responses.*

Table D-18. Primary activity on day of visit (n=1,992).

Primary Activity	Total (n=1,992)	Summer (n=594)	Fall (n=609)	Winter (n=419)	Spring (n=370)
Hiking	42%	44%	40%	43%	40%
Walking dog(s)	22%	17%	21%	36%	18%
Running	16%	19%	18%	10%	17%
Biking	10%	13%	9%	5%	13%
Viewing scenery	2%	2%	3%	<1%	1%
Climbing/Bouldering	2%	1%	3%	0%	3%
Photography	1%	<1%	1%	1%	2%
Contemplation/Meditation	1%	1%	1%	1%	<1%
Social Gathering	1%	1%	1%	1%	1%
Fishing	1%	1%	0%	0%	2%
Viewing wildlife	1%	1%	<1%	1%	3%
Horseback riding	<1%	1%	0%	<1%	0%
Pleasure driving	<1%	0%	<1%	0%	0%
Nature Study	<1%	0%	0%	<1%	0%
Picnicking	0%	0%	0%	0%	0%
Other*	2%	2%	3%	2%	1%

**Other activities included other types of exercise (e.g., aerobics, yoga), relaxing (e.g., lunch break), and commuting..*

Table D-19. Primary activity on day of visit compared to previous surveys.

Primary Activity	2016-2017 (n=1,992)	2010-2011 (n=2,272)	2004-2005 (n=2,517)
Hiking	42%	41%	34%
Walking dog(s)	22%	19%	19%
Running	16%	18%	19%
Biking	10%	11%	9%
Viewing scenery	2%	3%	5%
Climbing/Bouldering	2%	2%	3%
Photography	1%	1%	1%

Primary Activity	2016-2017 (n=1,992)	2010-2011 (n=2,272)	2004-2005 (n=2,517)
Contemplation/Meditation	1%	1%	2%
Social Gathering	1%	1%	2%
Fishing	1%	<1%**	<1%**
Viewing wildlife	1%	1%	1%
Horseback riding	<1%	<1%	1%
Pleasure driving	<1%	<1%	<1%
Nature Study	<1%	<1%	1%
Picnicking	0%	<1%	<1%
Other*	2%	1%	4%

**Other activities included other types of exercise (e.g., aerobics, yoga), relaxing (e.g., lunch break), and commuting.*

***Fishing was not listed as an option in previous surveys. These percentages are based on write-in responses.*

Table D-20. Primary activity by residence (n=1,984).

Primary Activity	Boulder County (n=1,625)	Outside Boulder County (n=359)
Hiking	39%	55%
Walking dog(s)	25%	11%
Running	19%	7%
Biking	10%	8%
Other*	8%	19%

**Other activities included other types of exercise (e.g., aerobics, yoga), relaxing (e.g., lunch break), and commuting.*

Table D-21. Primary activity by primary gender identity (n=1,971).

Primary Activity	Male (n=951)	Female (n=1,021)
Hiking	37%	47%
Walking dog(s)	18%	26%
Running	20%	13%
Biking	15%	5%
Other*	11%	8%

**Other activities included other types of exercise (e.g., aerobics, yoga), relaxing (e.g., lunch break), and commuting.*

Trip lengths

Table D-22. Trip duration (n=2,070).

Trip Duration in Minutes	Total (n=2,070)	Summer (n=603)	Fall (n=619)	Winter (n=452)	Spring (n=396)
<30	16%	17%	15%	15%	19%
30-59	33%	27%	34%	37%	37%
60-89	27%	25%	25%	33%	25%
90-119	12%	14%	14%	9%	6%
120+	12%	17%	12%	6%	13%
Median (minutes)	**60**	**60**	**60**	**55**	**50**
Mean (minutes)*	**65.9 ± 2.0**	**71.0 ± 3.9**	**67.1 ± 3.9**	**58.0 ± 3.1**	**65.2 ± 5.3**

**Margin of error calculated at a 95% confidence level*

Table D-23. Trip duration compared to previous surveys.

Trip Duration in Minutes	2016-2017 (n=2,070)	2010-2011 (n=2,511)	2004-2005 (n=2,715)
<30	16%	16%	22%
30-59	33%	35%	35%
60-89	27%	20%	23%
90-119	12%	13%	10%
120+	12%	16%	10%
Median (minutes)	**60**	**60**	**50**
Mean (minutes)*	**65.9 ± 2.0**	**73.0 ± 2.1**	**59.3 ± 1.9**

**Margin of error calculated at a 95% confidence level*

Table D-24. Trip duration by residence (n=2,062).

Trip Duration in Minutes	Boulder County (n=1,690)	Outside Boulder County (n=316)
<30	18%	9%
30-59	36%	20%
60-89	27%	25%
90-119	10%	21%
120+	9%	26%
Median (minutes)	**51**	**85**
Mean (minutes)*	**60.9 ± 2.1**	**88.0 ± 5.4**

**Margin of error calculated at a 95% confidence level*

Table D-25. Trip duration by primary activity (n=1,927).

Trip Duration in Minutes	Hiking (n=811)	Running (n=316)	Walking dog(s) (n=426)	Biking (n=190)	Other (n=183)
<30	10%	16%	22%	32%	18%
30-59	27%	45%	44%	23%	26%
60-89	28%	27%	27%	23%	20%
90-119	17%	8%	5%	12%	9%
120+	17%	4%	3%	11%	27%
Median (minutes)	**65**	**49**	**45**	**45**	**63**
Mean (minutes)*	**75.2 ± 3.0**	**54.6 ± 3.7**	**48.9 ± 2.7**	**62.7 ± 9.4**	**85.2 ± 10.0**

**Margin of error calculated at a 95% confidence level*

Transportation

Table D-26. Primary mode of transport (n=2,122).

Transport	Total (n=2,122)	Summer (n=619)	Fall (n=633)	Winter (n=465)	Spring (n=405)
Car	56%	57%	55%	63%	46%
Walk	28%	24%	29%	28%	34%
Bike	9%	11%	9%	4%	13%
Run	6%	6%	7%	4%	7%
Bus	1%	1%	<1%	<1%	0%
Other*	<1%	<1%	0%	<1%	<1%

**Other modes of transport included by horse and Uber.*

Table D-27. Primary mode of transport compared to previous surveys.

Transport	2016-2017 (n=2,122)	2010-2011 (n=2,517)	2004-2005 (n=2,788)
Car	56%	57%	58%
Walk/Run	34%	34%	32%
Bike	9%	9%	9%
Bus	1%	<1%	1%
Other*	<1%	<1%	n/a

**Other modes of transport included by horse and Uber.*

Table D-28. Primary mode of transport by primary activity (n=1,976).

Primary Mode of Transport	Hiking (n=832)	Walking dog(s) (n=442)	Running (n=322)	Biking (n=195)	Other (n=185)
Car	64%	56%	48%	16%	71%
Walk	33%	43%	13%	4%	18%
Run	<1%	1%	37%	0%	2%
Bike	1%	<1%	3%	79%	7%
Other*	1%	0%	<1%	1%	3%

**Other modes of transport included by horse and Uber.*

Table D-29. Primary mode of transport by primary residence (n=1,976).

Primary Mode of Transport	Boulder County (n=1,734)	Outside Boulder County (n=380)
Car	52%	75%
Walk	30%	18%
Run	7%	1%
Bike	10%	5%
Other*	1%	1%

**Other modes of transport included by horse and Uber.*

Table D-30. Where found a parking spot (n=1,162). This question was only asked of visitors who arrived by car.

Parking Location	Total (n=1,162)	Summer (n=346)	Fall (n=345)	Winter (n=288)	Spring (n=183)
OSMP Parking Lot	57%	45%	62%	66%	52%
Neighborhood Street	23%	35%	18%	18%	22%
Access Road	10%	8%	9%	9%	15%
Non-OSMP Parking Lot	7%	6%	7%	5%	9%
Other	4%	5%	4%	2%	2%

Table D-31. Parking difficulty (n=1,176). This question was only asked of visitors who arrived by car.

Difficulty	Total (n=1,176)	Summer (n=351)	Fall (n=348)	Winter (n=291)	Spring (n=186)
Very Easy	51%	46%	54%	55%	46%
Easy	30%	31%	31%	29%	29%
Neutral	12%	14%	10%	9%	17%
Difficult	5%	7%	4%	5%	7%
Very Difficult	1%	3%	1%	1%	1%

Table D-32. Whether the trailhead was the first-choice destination (n=1,019).

Trailhead was first-choice	Total (n=1,019)	Summer (n=296)	Fall (n=286)	Winter (n=267)	Spring (n=170)
Yes	95%	96%	94%	97%	93%
No	5%	4%	6%	3%	7%

Group size and composition

Table D-33. Number of people in group* (n=599).

Number of people	Total (n=599)	Summer (n=183)	Fall (n=184)	Winter (n=132)	Spring (n=100)
2	78%	77%	75%	82%	79%
3-4	17%	15%	20%	15%	18%
5+	6%	9%	5%	3%	3%

**49% of visitors wrote that there was "1" person in the group and are excluded from this table.*

Table D-34. Group composition* (n=719).

Group Composition	Total (n=719)	Summer (n=180)	Fall (n=230)	Winter (n=177)	Spring (n=132)
Family	68%	58%	66%	80%	67%
Friends	30%	38%	34%	19%	29%
Organized group members	2%	4%	<1%	1%	4%

**50% of respondents marked "Just me" and are excluded from this table.*

Table D-35. Number of children listed in group, for groups with at least one child (n=115).

Number of Children	Total (n=115)	Summer (n=41)	Fall (n=33)	Winter (n=21)	Spring (n=20)
1	68%	71%	48%	76%	85%
2	23%	12%	45%	14%	15%
3-4	4%	5%	3%	10%	0%
5+	5%	12%	3%	0%	0%

Table D-36. Primary residence of groups with and without children (n=1,642).

Primary Residence	Child with visitor party (n=115)	No child with visitor party (n=1,527)
Boulder County	87%	74%
Outside Boulder County	13%	26%

Table D-37. Whether dogs were a part of the group (n=1,629).

Dogs	Total (n=1,629)	Summer (n=460)	Fall (n=489)	Winter (n=361)	Spring (n=319)
No dogs in group	63%	70%	67%	50%	65%
At least one dog in group	37%	30%	34%	50%	35%

Table D-38. Number of dogs in group, for groups with at least one dog (n=598).

Number of Dogs	Total (n=598)	Summer (n=139)	Fall (n=164)	Winter (n=182)	Spring (n=113)
1	74%	77%	78%	67%	77%
2	23%	21%	20%	30%	20%
3	2%	2%	1%	1%	2%
4	1%	0%	0%	1%	1%
5	1%	0%	1%	1%	0%

Table D-39. Primary residence of respondents with a dog, including people visiting by themselves or in a group (n=1,623).

Primary Residence	Dog with visitor party (n=596)	No dog with visitor party (n=1,027)
Boulder (within city limits)	60%	57%
Unincorporated Boulder County	13%	10%
Louisville	7%	4%
Lafayette	6%	4%
Superior	2%	2%
Longmont	2%	4%
Other city in Boulder County	1%	2%
Outside Boulder County	9%	17%

Motivations

Table D-40. Primary motivations (n=1,891).

Primary Motivation	Total (n=1,891)	Summer (n=584)	Fall (n=578)	Winter (n=391)	Spring (n=338)
Physical fitness (exercise)	34%	38%	35%	27%	32%
Enjoy nature	18%	18%	17%	17%	21%
Being with my dog(s)	14%	12%	10%	25%	12%
Spending time with family/friends	10%	10%	12%	9%	9%
Psychological health	8%	6%	10%	8%	9%
Having fun	7%	6%	8%	6%	7%
Finding solitude	2%	3%	2%	3%	2%
Psychological rest	2%	1%	2%	1%	4%
Escape personal/social pressures	2%	2%	1%	3%	2%
Physical rest/relaxation	2%	2%	2%	1%	2%
Visiting a particular place	1%	2%	1%	1%	1%
Learning	<1%	0%	<1%	0%	0%

Table D-41. Primary motivations by primary activity (n=1,807).

Primary Motivation	Hiking (n=752)	Running (n=311)	Walking dog(s) (n=390)	Biking (n=180)	Other (n=174)
Physical fitness (exercise)	36%	61%	13%	51%	12%
Enjoy nature	21%	12%	13%	9%	33%
Spending time with family/friends	15%	3%	9%	4%	16%
Psychological health	9%	10%	3%	9%	11%
Having fun	6%	5%	3%	15%	13%
Being with my dog(s)	4%	3%	54%	2%	1%
Physical rest/relaxation	3%	1%	1%	2%	2%
Finding solitude	2%	2%	2%	2%	2%
Psychological rest	2%	2%	2%	1%	3%
Escape personal/social pressures	2%	2%	1%	2%	3%
Visiting a particular place	1%	0%	0%	2%	4%
Learning	0%	<1%	0%	0%	0%

Table D-42. Primary motivations by residence (n=1,885).

Primary Motivation	Boulder County (n=1,551)	Outside Boulder County (n=334)
Physical fitness (exercise)	36%	22%
Enjoy nature	16%	27%
Being with my dog(s)	16%	5%
Spending time with family/friends	9%	19%
Psychological health	8%	7%
Having fun	6%	10%
Finding solitude	2%	2%
Psychological rest	2%	2%
Escape personal/social pressures	2%	3%
Physical rest/relaxation	2%	2%
Visiting a particular place	<1%	2%
Learning	<1%	0%

SERVICE RATINGS

Table D-43. Importance and quality ratings. Percentages indicate the proportion of respondents rating a “4” or “5” out of a five-point scale. n values for the number of respondents who provided the rating are given in parentheses due to low counts for some of the services. Counts of 30 or lower should be interpreted cautiously.

Facility/Service	Percent "Very good" or "Good" Quality	Percent "Very" or "Moderately" Important
Trails	93% (1,631)	98% (1,693)
Dog stations	90% (297)	92% (324)
Trailhead information boards	86% (311)	77% (338)
Picnic tables & grills	86% (22)	65% (23)

Facility/Service	Percent "Very good" or "Good" Quality	Percent "Very" or "Moderately" Important
Trash or recycling bins	84% (329)	83% (357)
Directions (trail) signs	83% (445)	72% (468)
Shelters (covered picnic areas)	83% (24)	52% (27)
Vehicle parking	82% (683)	87% (712)
OSMP interactive web map	79% (70)	67% (75)
Bicycle racks	71% (45)	84% (49)
Restroom	68% (190)	85% (211)
Horse trailer parking	50% (6)	88% (8)
American Disabilities Act access	43% (7)	60% (10)
Other*	77% (13)	81% (16)

**"Other" facilities/services included benches and bird blinds*

Table D-44. Rating of overall quality of OSMP services (n=2,123).

Overall Quality of Services	Total (n=2,123)	Summer (n=621)	Fall (n=634)	Winter (n=465)	Spring (n=403)
Excellent	63%	60%	68%	59%	63%
Very Good	32%	33%	29%	33%	32%
Good	5%	6%	3%	8%	4%
Fair	<1%	<1%	<1%	<1%	0%
Poor	0%	0%	0%	0%	0%

EXPERIENCE RATINGS

Table D-45. Ratings by activity group (n=1,846). Respondents were asked to provide a rating for every activity group they encountered).

Rating	OSMP staff (n=436)	Hikers (n=1,433)	Dog walkers/dogs (n=1,470)	Runners (n=1,306)	Bikers (n=662)	Horseback riders (n=77)	Other (n=48)
Pleasant	86%	81%	76%	75%	69%	65%	68%
Neutral	13%	18%	20%	23%	26%	27%	24%
Conflict	1%	1%	4%	2%	6%	8%	8%

Table D-46. Negative (conflict) ratings for any group (n=1,846).

Conflict with any group	Total (n=1,846)	Summer (n=544)	Fall (n=573)	Winter (n=396)	Spring (n=333)
Yes	6%	5%	8%	5%	7%
No	94%	95%	92%	95%	93%

Table D-47. Negative (conflict) ratings for any group by primary activity (n=1,744).

Conflict with any group	Hiking (n=743)	Running (n=289)	Walking dog(s) (n=391)	Biking (n=165)	Other (n=156)
Yes	7%	5%	5%	9%	8%
No	94%	95%	95%	92%	92%

AREAS NO LONGER VISITED

Table D-48. Whether there is a particular OSMP area no longer visited (n=1,964).

OSMP area no longer visit	Total (n=1,964)	Summer (n=575)	Fall (n=599)	Winter (n=431)	Spring (n=359)
Yes	14%	13%	14%	15%	14%
No	86%	87%	86%	85%	86%

Table D-49. OSMP area no longer visited by primary activity type (n=1,840).

OSMP area no longer visit	Hiking (n=762)	Running (n=316)	Walking dog(s) (n=412)	Biking (n=177)	Other (n=173)
Yes	16%	10%	17%	13%	12%
No	85%	91%	83%	87%	88%

APPENDIX E: VERBATIM RESPONSES

Verbatim responses from survey respondents who provided their own response to the prompt and how OSMP staff classified the response during the data analysis.

Table E-1. "Other" coded write-in responses for activities participated in (n=74). Responses in bold were also selected as the primary activity.

Other Activity	Code
commuting	Commuting
alternative commute	Commuting
Commute to school	Commuting
commuting	Commuting
Commuting	Commuting
Commuting	Commuting
Commuting	Commuting
commute	Commuting
commuting	Commuting
Tennis	Other exercise
pushups	Other exercise
swimming	Other exercise
sweating and spitting	Other exercise
exercise	Other exercise
Swimming	Other exercise
tennis	Other exercise
cardio exercise	Other exercise
Tai Chi	Other exercise
masters swimming	Other exercise
skiing	Other exercise
aerobics	Other exercise
tennis	Other exercise
yoga & relaxation	Other exercise
yoga	Other exercise
Frisbee golfing	Other exercise
cc skiing	Other exercise
x country skiing	Other exercise
yoga	Other exercise
swim	Other exercise
Golf	Other exercise
Work!	Work
working	Work
working	Work
work	Work
Work	Work

Other Activity	Code
worked	Work
Silver Lake Ditch Inspection	Work
showing venue to friends	Venue searching
wedding site survey	Venue searching
viewing for a wedding site	Venue searching
wedding planning	Venue searching
checking out wedding venue	Venue searching
viewing wedding venue	Venue searching
Kicking back at twin lakes	Relaxing (mental or physical)
hammocking	Relaxing (mental or physical)
hammocking	Relaxing (mental or physical)
sungazing	Relaxing (mental or physical)
hammocking	Relaxing (mental or physical)
healing time from mental break	Relaxing (mental or physical)
work break	Relaxing (mental or physical)
Serenity	Relaxing (mental or physical)
Praying	Relaxing (mental or physical)
to combat my anxiety	Relaxing (mental or physical)
chilling	Relaxing (mental or physical)
Praying	Relaxing (mental or physical)
Reminiscing	Relaxing (mental or physical)
went to lunch	Relaxing (mental or physical)
pokemon	Pokemon
pokemon	Pokemon
Pokemon	Pokemon
self-designated poop and trash pickup	Picking up trash
pick up trash	Picking up trash
memorial	Other
With Thorne Nature Summer Camp	Other
Kids' scootering	Other
rock study	Other
listened to audio lectures	Other
Experiencing scenery and wildlife	Other
try a new trail	Other
sculpture/design	Other
Chatting	Other

Other Activity	Code
Motorcycles	Other
Flying	Other
park	Other
listen to birds	Coded as “Viewing wildlife”
Bird watching	Coded as “Viewing wildlife”
Birding	Coded as “Viewing wildlife”
Birding	Coded as “Viewing wildlife”
Birding	Coded as “Viewing wildlife”
Birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birding	Coded as “Viewing wildlife”
birdwatching	Coded as “Viewing wildlife”
birds	Coded as “Viewing wildlife”

Table E-2. “Other” coded write-in responses for primary mode of transport (n=7).

Other mode of transport	Code
Uber	Uber/Lyft
Uber	Uber/Lyft
Uber	Uber/Lyft
horse	Horse
Horse	Horse
Motorcycle	Coded as “car”
Motorcycle	Coded as “car”

Table E-3. Coded responses for where respondent would have gone if was unable to park (n=698 surveys, n=741 valid responses). Respondents could list more than one location.

Where would have gone if unable to park	Code
nearby off road	Same trail
other neighborhood st	Same trail
Across the st.	Same trail
on up the road/or waited	Same trail
Neighborhood parking/street	Same trail
neighborhood nearby	Same trail
never had a problem here	Same trail
across the street to the other osmp parking lot	Same trail
across the street/ Chautauqua	(1) Same trail (2) Chautauqua

Where would have gone if unable to park	Code
parked further down	Same trail
Find somewhere else to park	Same trail
I would have waited for parking	Same trail
access road	Same trail
would have found a spot	Same trail
come back later	Same trail
I would wait and come back	Same trail
parked further and walked	Same trail
from home (near Chautauqua)	Same trail
Find a place to park	Same trail
run to same	Same trail
park further away	Same trail
waited till find a parking spot	Same trail
never been a problem	Same trail
further into neighborhood for spot	Same trail
further away to find a parking spot	Same trail
parked further down	Same trail
driven to nearest parking	Same trail
further away	Same trail
further down/up trail	Same trail
park further away	Same trail
wherever google maps said to park	Same trail
neighborhood street	Same trail
further away	Same trail
walked from house (1 mile extra)	Same trail
parked further away	Same trail
other streets	Same trail
other side of Arapahoe	Same trail
Ridden bike from house	Same trail
Arapahoe side or Resevoir	(1) Same trail (2) Different trail (specified)
been very angry and went Arapahoe lot	Same trail
Arapahoe side	Same trail
Arapahoe side	Same trail
parked further away	Same trail
parked on some street	Same trail
street parking	Same trail
streets	Same trail
access road	Same trail
parked along road	Same trail

Where would have gone if unable to park	Code
further away	Same trail
further away	Same trail
further away	Same trail
parked further away	Same trail
neighborhood	Same trail
neighborhood parking	Same trail
on the street/ neighborhood	Same trail
further down the road	Same trail
further down	Same trail
find off street	Same trail
find off street parking	Same trail
parked farther away	Same trail
neighborhood street	Same trail
neighborhood street	Same trail
further down	Same trail
park further away	Same trail
further down the road	Same trail
further down street	Same trail
parked further down	Same trail
street somewhere	Same trail
side street	Same trail
side street	Same trail
Down street	Same trail
another lot	Same trail
road	Same trail
Went home, parked and walked over	Same trail
Neighborhood	Same trail
further down or other park	(1) Same trail (2) Different trail (unspecified)
Parked farther away	Same trail
Down street	Same trail
Neigborhood St.	Same trail
Parking lot	Same trail
Park further away	Same trail
Here	Same trail
Street	Same trail
Street Parking	Same trail
Street	Same trail
Mapleton St homes	Same trail
N. St	Same trail

Where would have gone if unable to park	Code
Another Street	Same trail
Side Street	Same trail
Street	Same trail
Neighborhood street	Same trail
Neighborhood Street	Same trail
Neighborhood street	Same trail
Neighborhood	Same trail
neighborhood	Same trail
Neighborhood	Same trail
Baseline or 9th or S. Boulder creek	(1) Same trail (2) Different trail (specified)
Settler's Parking Lot	Same trail
Walked around bike route on 4th.	Same trail
along road	Same trail
neighborhood	Same trail
neighborhood nearby	Same trail
road	Same trail
neighborhood	Same trail
neighborhood	Same trail
neighborhood close by	Same trail
neighborhood	Same trail
soccer fields- Foothills trail	Same trail
Down street	Same trail
neighborhood	Same trail
walked from home	Same trail
where there was an open space	Same trail
road	Same trail
waited or gone to another spot nearby they are abundant	Same trail
street	Same trail
Mapleton	Same trail
continued on road and parked further up on left	Same trail
road	Same trail
next lot	Same trail
street	Same trail
Here still somehow	Same trail
try another lot	Same trail
would have waited for 5-10 minutes	Same trail
neighborhood or other Wonderland Lake trail access (North side of lake)	(1) Same trail (2) Different trail (specified)

Where would have gone if unable to park	Code
neighborhood or other Wonderland Lake Trail Access (North Side of lake)	(1) Same trail (2) Different trail (specified)
to neighborh	Same trail
neighborhood	Same trail
further up the street	Same trail
further away	Same trail
side street	Same trail
side street	Same trail
Down the street	Same trail
Go here several times a week	Same trail
on street parking	Same trail
up the road	Same trail
a different pull off or lot	Same trail
Street east of Broadway	Same trail
street	Same trail
Parked further up from trailhead	Same trail
Neighborhood	Same trail
6th Street to park or So. Mesa Trailhead	(1) Same trail (2) South Mesa
up more	Same trail
on the street	Same trail
Neighborhood streets	Same trail
further away	Same trail
Always find spot. Always	Same trail
nearby side street	Same trail
Neighborhood	Same trail
7th St	Same trail
Access road	Same trail
Across street	Same trail
Home-can walk	Same trail
further down street	Same trail
Side of road (residential street)	Same trail
neighborhood side street	Same trail
street parking	Same trail
neighborhood street	Same trail
would have found another spot	Same trail
Trailhead	Same trail
Neighborhood	Same trail
Left and wait stayed	Same trail
Further down street	Same trail
across street @ Centennail	Same trail

Where would have gone if unable to park	Code
street	Same trail
Neighborhood	Same trail
parking lot	Same trail
Parked further away & walked to trail	Same trail
always find parking here	Same trail
Bottom of trailhead	Same trail
left from home	Same trail
across st.	Same trail
South entrance or Dry Creek	Same trail
other side (Teller Farm South)	Same trail
Went home & hiked in	Same trail
Along road in front	Same trail
Frontage road	Same trail
neighborhood	Same trail
neighborhood	Same trail
different parking lot, street, or side street	Same trail
different parking lot, street, side street	Same trail
street or gone somewhere else like Coot Lake	(1) Same trail (2) Different trail (specified)
Parked on road or Sawhill parking lot	Same trail
Sawhill Parking lot or road	Same trail
I would have walked	Same trail
Found somewhere off street	Same trail
I always find a place to park	Same trail
Down road	Same trail
street	Same trail
Centennial	Same trail
neighborhood parking	Same trail
neighborhood parking	Same trail
neighborhood	Same trail
Centennial parking lot	Same trail
Centennial parking lot	Same trail
Settlers/E.G. Fine & run here	Same trail
Neighborhood St.	Same trail
down street	Same trail
Parking isn't the issue - signage is confusing	Same trail
Street	Same trail
Parked along road	Same trail
neighborhood street	Same trail
Parked on street	Same trail

Where would have gone if unable to park	Code
Parked on street	Same trail
Never had problem here	Same trail
Neighborhood, Walden	(1) Same trail (2) Walden Ponds
Lot on other side of st.	Same trail
Access road	Same trail
Access Road	Same trail
Parked on access road	Same trail
neighborhood	Same trail
on street	Same trail
would have waited	Same trail
access road	Same trail
Neighborhood street	Same trail
parked on access road	Same trail
side of access road to park/parking lot expand	Same trail
further down the road	Same trail
Up the road	Same trail
up the road	Same trail
access road	Same trail
neighborhood	Same trail
road	Same trail
Street	Same trail
Down a neighborhood street	Same trail
Quence	Same trail
Neighborhood street	Same trail
neighborhood st	Same trail
street parking	Same trail
across street	Same trail
Across street	Same trail
street curb	Same trail
Street	Same trail
parked down the road	Same trail
Road	Same trail
Access road	Same trail
side road	Same trail
Street	Same trail
Baseline	Same trail
Street parking	Same trail
access road	Same trail
street	Same trail
store parking lot	Same trail

Where would have gone if unable to park	Code
I would have found a spot somewhere	Same trail
Neighborhood	Same trail
street	Same trail
No choice - soccer practice	Same trail
At soccer	Same trail
further down the street	Same trail
neighborhood	Same trail
streets	Same trail
same place	Same trail
Trailhead	Same trail
further	Same trail
Other side of Wonderland Lake OR Trailhead on Lee Hill Rd	Same trail
Chautauqua	Chautauqua
Chautauqua	Chautauqua
Chautauqua	Chautauqua
Chautauqua	Chautauqua
Chautauqua	Chautauqua
Chautauqua	Chautauqua
we would have just done the drive and hiked back to Chautauqua	Chautauqua
Chautauqua or another nearby bouldering spot	Chautauqua
Chautauqua Park	Chautauqua
Chautauqua	Chautauqua
Chautauqua	Chautauqua
Chautauqua or South Mesa	(1) Chautauqua (2) South Mesa
Chautauqua neighborhood	Chautauqua
Chautauqua	Chautauqua
Mt Sanitas	Sanitas
Sanitas Valley Trail	Sanitas
Sanitas, Eldo	(1) Sanitas (2) Different trail (specified)
Sanitas	Sanitas
Sanitas?	Sanitas
sanitas	Sanitas
Sanitas	Sanitas
Bobolink Trailhead	Bobolink
Bobolink	Bobolink
Bobolink Trailhead	Bobolink
Bobolink TH	Bobolink
Bobolink	Bobolink

Where would have gone if unable to park	Code
Bobolink or S. Boulder Creek West	(1) Bobolink (2) Different trail (specified)
Bobolink or Teller	(1) Bobolink (2) Teller Farm
Bobolink?	Bobolink
Bobolink	Bobolink
S. Mesa Trailhead	South Mesa
south mesa	South Mesa
South Mesa	South Mesa
South Mesa	South Mesa
South Mesa trailhead	South Mesa
South Mesa TH or Marshall across 93	(1) South Mesa (2) Marshall Mesa
S. Mesa TH	South Mesa
S. Mesa	South Mesa
S. Mesa TH	South Mesa
S. Mesa TH	South Mesa
Valmont Access	Valmont
Valmont TH	Valmont
Valmont trailhead	Valmont
other access on Valmont	Valmont
Valmont trailhead or Coot Lake	(1) Valmont (2) Different trail (specified)
Valmont	Valmont
Valmont trailhead	Valmont
Valmont trailhead	Valmont
NCAR	NCAR
NCAR	NCAR
ncar	NCAR
NCAR	NCAR
NCAR	NCAR
NCAR	NCAR
NCAR	NCAR
NCAR	NCAR
NCAR	NCAR
Marshall Mesa	Marshall Mesa
marshall mesa	Marshall Mesa
Marshall Mesa	Marshall Mesa
Marshall	Marshall Mesa
Marshall Mesa	Marshall Mesa
Marshal or South Bldr Creek	(1) Marshall Mesa (2) Different trail (specified)

Where would have gone if unable to park	Code
Marshall Mesa or Doudy Draw S. Mesa	(1) Marshall Mesa (2) Doudy Draw (3) South Mesa
Marshall Mesa	Marshall Mesa
Marshall Mesa	Marshall Mesa
Marshall Mesa	Marshall Mesa
Marshall Mesa	Marshall Mesa
Walden Ponds Trailhead	Walden Ponds
Walden Ponds	Walden Ponds
Walden Ponds	Walden Ponds
walden ponds	Walden Ponds
Walden Ponds	Walden Ponds
Walden	Walden Ponds
Teller Farm	Teller Farm
Teller	Teller Farm
South Teller Trailhead	Teller Farm
Teller or Coot	(1) Teller Farm (2) Different trail (specified)
Teller Farm	Teller Farm
Teller Ranch	Teller Farm
Eagle TH or 36 TH	(1) Eagle (2) Different trail (specified)
Eagle 36 to foothills	Eagle
Eagle	Eagle
Eagle Trail	Eagle
Eagle	Eagle
Eagle or Taylor Ranch	(1) Eagle (2) Different trail (specified)
Eagle	Eagle
Dowdy Draw	Doudy Draw
Doudy Draw/South Mesa TH	(1) Doudy Draw (2) South Mesa
Another trailhead Doudy Draw	Doudy Draw
Doudy Draw TH	Doudy Draw
Dowdy Draw	Doudy Draw
Would have went up Flagstaff to the lake	Flagstaff
Up Flagstaff	Flagstaff
Up Flagstaff	Flagstaff
spot along flagstaff rd.	Flagstaff
Flagstaff	Flagstaff
Up Flagstaff Road	Flagstaff
Flagstaff	Flagstaff

Where would have gone if unable to park	Code
home/other Teller lot	(1) Would not have hiked (2) Teller Farm
by the pool	Would not have hiked
home	Would not have hiked
wouldn't have gone hiking	Would not have hiked
home	Would not have hiked
Back home	Would not have hiked
home	Would not have hiked
home	Would not have hiked
Home	Would not have hiked
Home	Would not have hiked
no where	Would not have hiked
Home	Would not have hiked
Pearl St or Eldorado Canyon	(1) Would not have hiked (2) Different trail (specified)
Pearl St	Would not have hiked
Home	Would not have hiked
Town	Would not have hiked
Town	Would not have hiked
home	Would not have hiked
Give up	Would not have hiked
home	Would not have hiked
home	Would not have hiked
Home	Would not have hiked
back to bed?	Would not have hiked
home	Would not have hiked
home	Would not have hiked
back to work	Would not have hiked
Home	Would not have hiked
Dog park Valmont	Would not have hiked
home	Would not have hiked
Nowhere else today	Would not have hiked
Back home	Would not have hiked
home	Would not have hiked
Pearl	Would not have hiked
Cheese Importers	Would not have hiked
Home	Would not have hiked
No where	Would not have hiked
Dog Park	Would not have hiked
Home	Would not have hiked
home	Would not have hiked

Where would have gone if unable to park	Code
home	Would not have hiked
different trail access	Different trail (unspecified)
found another park	Different trail (unspecified)
to another trail	Different trail (unspecified)
any of many OS…Teller Farm, Dry Creek, Cottonwood	(1) Different trail (unspecified) (2) Teller Farm (3) Different trail (specified)
inside park have sticker	Different trail (unspecified)
try a different trail	Different trail (unspecified)
In my neighborhood	Different trail (unspecified)
Another trailhead	Different trail (unspecified)
Another neighborhood street	Different trail (unspecified)
different trailhead	Different trail (unspecified)
home and walked neighborhood nearby (trail is softer than concrete)	Different trail (unspecified)
other trail	Different trail (unspecified)
Louisville trail by my house	Different trail (unspecified)
different trail	Different trail (unspecified)
Another pond	Different trail (unspecified)
Another Park	Different trail (unspecified)
Keep going up in the mountain	Different trail (unspecified)
up sunshine canyon	Different trail (unspecified)
Another neighboorhood trailhead.	Different trail (unspecified)
other side of ? (ilegible)	Different trail (unspecified)
other trail	Different trail (unspecified)
other local trail	Different trail (unspecified)
another trail head up the road	Different trail (unspecified)
Different trailhead	Different trail (unspecified)
To a different trail	Different trail (unspecified)
other trail	Different trail (unspecified)
some other trailhead	Different trail (unspecified)
another trailhead	Different trail (unspecified)
another trail	Different trail (unspecified)
another trailhead	Different trail (unspecified)
County trailhead	Different trail (unspecified)
climbing somewhere else	Different trail (unspecified)
Different trailhead	Different trail (unspecified)
another trail	Different trail (unspecified)
Boulder OS	Different trail (unspecified)
somewhere nearby	Different trail (unspecified)
Another trail	Different trail (unspecified)

Where would have gone if unable to park	Code
USFS Land	Different trail (unspecified)
Another Open Space	Different trail (unspecified)
another open space	Different trail (unspecified)
to another trail	Different trail (unspecified)
different trail	Different trail (unspecified)
Tried another place	Different trail (unspecified)
Another Trailhead	Different trail (unspecified)
Another trail	Different trail (unspecified)
Another trail	Different trail (unspecified)
somewhere else	Different trail (unspecified)
somewhere else!	Different trail (unspecified)
another trail (Hall or Heil probably)	(1) Different trail (unspecified) (2) Different trail (specified)
another trail	Different trail (unspecified)
Other OSMP access	Different trail (unspecified)
somewhere else	Different trail (unspecified)
different open space	Different trail (unspecified)
Different park	Different trail (unspecified)
Another trail	Different trail (unspecified)
To another place to walk	Different trail (unspecified)
another trail	Different trail (unspecified)
Another trailhead	Different trail (unspecified)
different trail	Different trail (unspecified)
Another trail	Different trail (unspecified)
somewhere else	Different trail (unspecified)
a different park/open space	Different trail (unspecified)
other trail	Different trail (unspecified)
Other OSMP/BOCO Open Space area	Different trail (unspecified)
different trail	Different trail (unspecified)
another park	Different trail (unspecified)
another OSMP trail - Teller?	(1) Different trail (unspecified) (2) Teller Farm
Another trail	Different trail (unspecified)
next trail	Different trail (unspecified)
N. Boulder	Different trail (unspecified)
somewhere else	Different trail (unspecified)
Another hike	Different trail (unspecified)
different hike	Different trail (unspecified)
Next trailhead	Different trail (unspecified)
bike trail/Chautauqua	(1) Different trail (unspecified) (2) Chautauqua

Where would have gone if unable to park	Code
Next trail	Different trail (unspecified)
another spot	Different trail (unspecified)
Another OSMP park	Different trail (unspecified)
Another trail	Different trail (unspecified)
another trail	Different trail (unspecified)
from my house in N. Boulder to OS trails Wonderland Lake	(1) Different trail (unspecified) (2) Different trail (specified)
Other trailhead	Different trail (unspecified)
another street	Different trail (unspecified)
Up Canyon	Different trail (unspecified)
Up the canyon further	Different trail (unspecified)
up the canyon	Different trail (unspecified)
Canyon	Different trail (unspecified)
north bouler ranch	Different trail (specified)
Boulder Res.	Different trail (specified)
S. Boulder Creek Trail/Blue Stem	Different trail (specified)
SB Creek Trail	Different trail (specified)
possibly up to the Bear Peak trail	Different trail (specified)
Centennial	Different trail (specified)
Towards Eldorado Springs	Different trail (specified)
Coot Lake	Different trail (specified)
trail along m/m	Different trail (specified)
mesa	Different trail (specified)
to mesa trailhead	Different trail (specified)
farther down- Lehigh/ Shanahan Ridge	Different trail (specified)
Sawhill Ponds	Different trail (specified)
Fairview	Different trail (specified)
Table Mesa	Different trail (specified)
Eldorado State Park	Different trail (specified)
Gregory Canyon	Different trail (specified)
Bear Canyon	Different trail (specified)
Bear Creek	Different trail (specified)
Homestead/North of here	(1) Different trail (specified) (2) Different trail (unspecified)
cragmoor	Different trail (specified)
mesa trailhead, south boulder	(1) Different trail (specified) (2) Different trail (specified)
mesa trail	Different trail (specified)
Coot Lake	Different trail (specified)
Coot Lake	Different trail (specified)
Lion's Lair	Different trail (specified)

Where would have gone if unable to park	Code
South Boulder Creek trail	Different trail (specified)
gregory trail	Different trail (specified)
Shanahan Ridge	Different trail (specified)
Green Mountain	Different trail (specified)
36 TH to foothills trail connector (different TH)	Different trail (specified)
White Rocks	Different trail (specified)
Mesa Trail or Chaut.	(1) Different trail (specified) (2) Chautauqua
Prob Wonderland Lake	Different trail (specified)
Boulder Valley Ranch	Different trail (specified)
Boulder Valley Ranch	Different trail (specified)
Wanneka Lake	Different trail (specified)
Walker Ranch	Different trail (specified)
Lee Hill entrance	Different trail (specified)
Heil Ranch	Different trail (specified)
otherside of wonderland lake or trailhead on Lee Hill Road	(1) Different trail (specified) (2) Different trail (specified)
Leehill Trailhead,if no parking, get a chai and pumpkin bread and home	(1) Different trail (specified) (2) Would not have hiked
to Poplar	Different trail (specified)
North Foothills TH	Different trail (specified)
93rd South Boulder Creek	Different trail (specified)
Boyfriends house- Dakota Ridge	Different trail (specified)
Cherryvale or East Bldr Rec	(1) Different trail (specified) (2) Unknown
arapahoe trailhead	Different trail (specified)
Dry Creek OSMP	Different trail (specified)
another trail-Dry Creek	Different trail (specified)
Reservoir entrance	Different trail (specified)
Reservoir	Different trail (specified)
Reservoir entrance	Different trail (specified)
Reservoir	Different trail (specified)
Twin Lakes	Different trail (specified)
Crown Rock parking	Different trail (specified)
Hogback	Different trail (specified)
Hogback	Different trail (specified)
BVR	Different trail (specified)
Gregory Canyon	Different trail (specified)
Eldo	Different trail (specified)
Mesa trail	Different trail (specified)
S. Boulder Trailhead	Different trail (specified)

Where would have gone if unable to park	Code
Joder Ranch	Different trail (specified)
another trail along Boulder Creek	Different trail (specified)
other lot at East Rec Center or Marshall	(1) Different trail (specified) (2) Marshall Mesa
greenbelt	Different trail (specified)
South Foothill HGHWY (93)	Different trail (specified)
Centennial Trailhead	Different trail (specified)
Centennial T/H	Different trail (specified)
Flatirons	Different trail (specified)
South Shannahan	Different trail (specified)
Open Valley Ranch	Different trail (specified)
Dry Creek	Different trail (specified)
Shannahan Ridge	Different trail (specified)
South Boulder - Mesa TH	Different trail (specified)
Boulder Valley Ranch	Different trail (specified)
Settlers Park	Different trail (specified)
Davidson Mesa	Different trail (specified)
Dry Creek	Different trail (specified)
Bear Canyon	Different trail (specified)
Alpine	Different trail (specified)
Mesa Trailhead	Different trail (specified)
Heil Valley	Different trail (specified)
Heil Valley	Different trail (specified)
BV Ranch	Different trail (specified)
Cottonwood Trail	Different trail (specified)
BVR	Different trail (specified)
Sombrero Marsh or Mesa Trail	Different trail (specified)
Sawhill	Different trail (specified)
Twin lakes	Different trail (specified)
Hog's Back	Different trail (specified)
Coal Creek	Different trail (specified)
Flatirons Vista	Different trail (specified)
Sterns Lake	Different trail (specified)
Lee Hill	Different trail (specified)
Shanahan Ridge	Different trail (specified)
S. Boulder Creek	Different trail (specified)
Boulder Creek	Different trail (specified)
Eldorado Canyon	Different trail (specified)
Dream Canyon	Different trail (specified)
? (x23)	Don't know (x23)

Where would have gone if unable to park	Code
Unsure (x27)	Don't know (x27)
Don’t know (x16)	Don’t know (x16)
no clue!	Don't know
Not sure, not from here	Don't know
no idea	Don't know
no idea- visiting	Don't know
No clue	Don't know
IDK	Don't know
no idea	Don't know
not sure- probably neighborhood street	(1) Don't know (2) Same trail
Beats me. Don't know the area	Don't know
no idea	Don't know
unknown	Don't know
New to the area, I'm not sure where I would have gone	Don't know
no clue	Don't know
no idea	Don't know
no idea	Don't know
no idea	Don't know
not sure (Chautauqua)	(1) Don't know (2) Chautauqua
unsure, generally difficult on weekends	Don't know
No idea	Don't know
? Never not found a place	(1) Don't know (2) Same trail
unknown	Don't know
Not familiar with area - unsure	Don't know
IDK the Next Open Spot	(1) Don't know (2) Same trail
Gone somewhere else	Unknown
wouldn't have gone here	Unknown
Millenum Hotel	Unknown
Millenum Hotel	Unknown
CU south	Unknown
East Boulder Rec	Unknown
Platt Middle	Unknown
Rec Center	Unknown
Fairview High School Track	Unknown
Rec Ctr.	Unknown
home (neighborhood)	Unknown
City Park in Denver	Unknown
unmarked trail	Unknown
S.B	Unknown

Where would have gone if unable to park	Code
preschool	Unknown
To Doudy Draw Parking Lot	Unknown
other place	Unknown
to another place	Unknown
CU South	Unknown
Dirt road or Gunbarrel	Unknown
CU South	Unknown
Further towards Boulder	Unknown
West	Unknown
A nearby business	Unknown
Boulder	Unknown
CU East	Unknown
East Boulder Rec Center	Unknown
20 miles	Unknown
Yes (x10)	Invalid (x10)
N/A (x14)	Invalid (x14)
It was easy today but often difficult to find parking	Invalid
No - diff trail	(1) Invalid (2) Different trail (unspecified)
yes!	Invalid
no	Invalid
N/A, street	(1) Invalid (2) Same trail
gone	Invalid
No	Invalid

Table E-4. If the trailhead was not the first-choice destination, what the first choice was and why came to the survey location instead (n=27 valid responses). Respondents could list more than one location and reason.

First choice location	Why came here instead
Lions Lair	Dogs not allowed
Lions Lair	Dogs not allowed
Dry Creek	Dogs off leash/crowded
Dry Creek	(no response)
Sanitas	windy weather
dog park	(no response)
dog park	(no response)
South Mesa Trailhead -end	pass through
Betaso	here closer to work
Rocky Mountain National Park	In transit stop
Table Mesa Trail	It was closer
Walker Ranch	Time restraints

First choice location	Why came here instead
Flatirons Vista	too crowded on weekends at the south dog off leash trails
Royal Arch	less people, forgot everyone had off school
Chautauqua or Sanitas	Too crowded
Gregory Canyon	needs parking lot!!
Longhorn Road	Triathalon Road Closure
up high	snow
Catch a plane @ 8:25pm to Austin	(no response)
just went anywhere	(no response)
Access road	(no response)
Coors Brewery	(no response)
Rabbit Mountain	(no response)
Cottonwood	(no response)
climbing location	(no response)
No- 121 and 612 S. Boulder Creek South	no dogs at other?
Snow	seemed like we could rest here by water
Not from here	first
n/a	n/a
Equally here or Walden Ponds	(no response)
Not from here	(no response)
(no response)	just driving by
(no response)	convenience
(no response)	too crowded
(no response)	no parking
(no response)	Brother's house
(no response)	avoiding someone
(no response)	BAM Swim
(no response)	The sun was down at Chautauqua
(no response)	Hills

Table E-5. “Other” coded write-in responses for facilities or services used (n=22).

Other Facility/Service	Code
Benches	Bench
single bench	Bench
bench	Bench
bench	Bench
Blind	Bird blind
Bird Blind	Bird blind
bird blind	Bird blind
bird blind	Bird blind

Other Facility/Service	Code
water	Water
water	Water
Bridge still out too slow to repair	Other
trees for shade	Other
None desired	Other
interpretive signs	Other
so clean!	Other
Bicycle gate alternates	Other
Peak	Other
Off-leash trail	Other
Dirt road to trail (Longhorn)	Other
Horse s/!!! Cleanup/Flies	Other
park	Other
climbing	Other
(illegible)	Invalid

Table E-6. "Other" coded write-in responses for activity/groups encountered and their ratings (n=48).

Other group/activity encountered	Code	Rating
climbers	Climbers	3
climbers	Climbers	3
Climbers	Climbers	3
climbers	Climbers	3
climbers	Climbers	3
Climber	Climbers	3
Climbers	Climbers	0
climbers	Climbers	0
climbers	Climbers	3
climbers	Climbers	3
Climbers	Climbers	(none)
birders	Birders	3
Birding	Birders	0
birders	Birders	3
birders	Birders	3
Birders	Birders	3
birders	Birders	1
birder	Birders	0
birders	Birders	3
fishing	Fishermen/women	3
fisherman	Fishermen/women	3
fishermen/women	Fishermen/women	3

Other group/activity encountered	Code	Rating
Fishing	Fishermen/women	3
Fishing People	Fishermen/women	0
fisherman	Fishermen/women	-3
fisher	Fishermen/women	3
Fishing	Fishermen/women	0
Fishing	Fishermen/women	3
fisherman	Fishermen/women	1
fisher	Fishermen/women	(none)
paragliders	Hang glider/paraglider	3
Hangglider	Hang glider/paraglider	0
Hang Gliders	Hang glider/paraglider	3
neighbor	Neighbor	2
neighbor	Neighbor	3
Commuters	Other	1
People playing music on their phones	Other	-1
school	Other	3
group	Other	2
Rancher	Other	3
studier	Other	2
"Trippers"	Other	0
family photos	Other	3
families	Other	3
ski	Other	0
Playing baseball	Other	3
picnic	Other	0
chanting spinner	Other	0
Tourists	Other	1
2 people walking cats on leash	Other	3
campers/homeless	Other	(none)
cows	Animal/wildlife	2
coyote	Animal/wildlife	0
Fox	Animal/wildlife	3
Cars	Other-non-human	-3
strollers	Other-non-human	0
strollers	Other-non-human	2
parking lot	Other-non-human	3
Tractor	Other-non-human	0

Other group/activity encountered	Code	Rating
quadcopter	Other-non-human	2
construction	Other-non-human	0
planes	Other-non-human	-3
hoses	Invalid (unknown)	-1
no one	Invalid	3
none on trail	Invalid	(none)

Table E-7. Coded responses for where the respondent no longer visits (n=276 valid responses) and why (n=271 valid responses). Respondents could list more than one location and reason.

Where no longer visit	Where-Code	Why no longer visit	Why-Code
chautauqua	Chautauqua	too crowded	Crowded
Chautauqua (main road)	Chautauqua	too crowded, no parking	(1) Crowded (2) Parking
Chautauqua	Chautauqua	Too Many People	Crowded
Chautauqua	Chautauqua	parking	Parking
Chautauqua	Chautauqua	Nearly no parking	Parking
Chautauqua	Chautauqua	Too many people	Crowded
Chautauqua	Chautauqua	congested and stressful	(1) Crowded (2) Other
Chautauqua	Chautauqua	too many people and dogs	(1) Crowded (2) Dog presence
Chautauqua	Chautauqua	too crowded, no parking	(1) Crowded (2) Parking
Chautauqua	Chautauqua	too crowded, bad parking	(1) Crowded (2) Parking
Chautauqua	Chautauqua	Crowded	Crowded
Chautauqua	Chautauqua	too busy	Crowded
Chautauqua	Chautauqua	Too crowded	Crowded
Chautauqua	Chautauqua	Too crowded	Crowded
Chautauqua	Chautauqua	Too crowded	Crowded
Chautauqua	Chautauqua	999	(no response)
Chautauqua	Chautauqua	Too Crowded!	Crowded
Chautauqua	Chautauqua	Too crowded!	Crowded
Chautauqua	Chautauqua	Lived in Boulder for 30 years, Looking for new places	Invalid
Chautauqua	Chautauqua	999	(no response)
Chautauqua	Chautauqua	parking	Parking
Chautauqua	Chautauqua	no longer live close; it is crowded	(1) Invalid (2) Crowded
Chautauqua	Chautauqua	too busy	Crowded
Chautauqua	Chautauqua	too many people	Crowded
Chautauqua Park	Chautauqua	too busy on weekends	Crowded

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Chautauqua and Sanitas	(1) Chautauqua (2) Sanitas	Too crowded and not as friendly	Crowded
Chautauqua	Chautauqua	Damaged trails from flood & crowds	(1) Trail quality (2) Crowded
Chautauqua	Chautauqua	too busy	Crowded
Chautauqua	Chautauqua	Too crowded	Crowded
Chautauqua	Chautauqua	no longer on bus route	Other
Chautauqua	Chautauqua	crowds	Crowded
Chautauqua Trailhead	Chautauqua	main trail is damaged from 2013; overcrowding	(1) Trail quality (2) Crowded
Chautauqua	Chautauqua	too many people on trails overcrowded	Crowded
Chautauqua THs <1/yr	Chautauqua	too crowded; too many stupid people	(1) Crowded (2) Other
Chautauqua	Chautauqua	traffic, crowds	Crowded
Chautauqua	Chautauqua	generally try to avoid Chautauqua due to crowding	Crowded
Chautauqua	Chautauqua	crowds	Crowded
Chautauqua	Chautauqua	crowds/parking	(1) Crowded (2) Parking
Chautauqua park	Chautauqua	The Trail is wide enough to drive a truck down. People are very rude.	(1) Trail quality (2) Other
Chautauqua	Chautauqua	parking	Parking
Chautauqua	Chautauqua	parking	Parking
Chautauqua	Chautauqua	People & dogs	(1) Crowded (2) Dog presence
Chautauqua	Chautauqua	too popular - in Boulder	Crowded
Chautauqua	Chautauqua	too crowded	Crowded
Chautauqua/Sanitas	(1) Chautauqua (2) Sanitas	999	(no response)
Chautauqua Park	Chautauqua	crowd	Crowded
Chautauqua	Chautauqua	crowds	Crowded
Chautauqua	Chautauqua	too crowded	Crowded
Chautauqua	Chautauqua	too many people	Crowded
Chautauqua	Chautauqua	crowds/parking	(1) Crowded (2) Parking
Chautauqua	Chautauqua	0 parking	Parking
Chautauqua	Chautauqua	too much traffic, too populated	Crowded
Chautauqua	Chautauqua	Traffic	Crowded
Chautauqua	Chautauqua	too crowded	Crowded
Chautauqua, Sanitas, etc	(1) Chautauqua (2) Sanitas	too many people/cars	(1) Crowded (2) Parking

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Chautauqua	Chautauqua	way to many people!!	Crowded
Chautauqua	Chautauqua	999	(no response)
Chautauqau	Chautauqua	crowded, no parking	(1) Crowded (2) Parking
Chautauqua	Chautauqua	Parking	Parking
Chautauqua	Chautauqua	too many people	Crowded
Chautauqua	Chautauqua	Too crowded	Crowded
Mt. Sanitas	Sanitas	trail erosion and dogs	(1) Trail quality (2) Dog presence
Sanitas	Sanitas	Parking	Parking
Sanitas	Sanitas	too busy and not convenient	(1) Crowded (2) Other
mt sanitas	Sanitas	too busy-not relaxing	Crowded
sanitas/Bear Creek/ Shanahan Ranch	(1) Sanitas (2) Other (3) Other	999	(no response)
sanitas	Sanitas	dogs	Dog presence
Sanitas	Sanitas	Too Crowded	Crowded
Sanitas	Sanitas	Too crowded. Too many dogs!	(1) Crowded (2) Dog presence
sanitas	Sanitas	999	(no response)
Sanitas	Sanitas	crowded	Crowded
Sanitas	Sanitas	smells like dog poop; crowded	(1) Dog presence (2) Crowded
Mt. Sanitas	Sanitas	dogs + poop + crowds	(1) Dog presence (2) Crowded
Sanitas	Sanitas	Dog guardians	Dog presence
Sanitas	Sanitas	no parking	Parking
Sanitas	Sanitas	Crowded, no parking	(1) Crowded (2) Parking
Sanitas	Sanitas	Too many people and dogs	(1) Crowded (2) Dog presence
Sanitas	Sanitas	999	(no response)
Sanitas	Sanitas	Chautauqua is better	Other
Mt Sanitas	Sanitas	Dogs!	Dog presence
Mt Sanitas	Sanitas	too much dog poo & busy	(1) Dog presence (2) Crowded
Sanitas	Sanitas	Too crowded/and hard to park	(1) Crowded (2) Parking
Sanitas	Sanitas	Dogs	Dog presence
Sanitas	Sanitas	999	(no response)
Mt. Sanitas	Sanitas	Too many people	Crowded
Sanitas	Sanitas	Parking - too difficult	Parking
(1) Sanitas (2) Dry Creek	(1) Sanitas (2) Dry Creek	(1)Too many peeps (sic) (2) too many dog tickets	(1) Crowded (2) Dog restrictions

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Sanitas	Sanitas	crowded and dogs	(1) Crowded (2) Dog presence
Mt Sanitas	Sanitas	Dogs & owners out of voice control - off leash, poop on trail	Dog presence
Sanitas	Sanitas	too crowded certain days/times	Crowded
Sanitas	Sanitas	Too many dogs and smells like dog poop :(	Dog presence
Sanitas	Sanitas	too many people	Crowded
Sanitas	Sanitas	too busy	Crowded
Mt. Sanitas	Sanitas	999	(no response)
Mt. Sanitas (not backside or Lions Lair trails)	Sanitas	people	Crowded
Mt. Sanitas	Sanitas	Too many dogs/poop	Dog presence
I try not to go to Sanitas	Sanitas	too many people	Crowded
Mt Sanitas	Sanitas	Too many people	Crowded
Sanitas	Sanitas	dogs	Dog presence
Sanitas	Sanitas	parking	Parking
Sanitas	Sanitas	Congested	Crowded
Mt Sanitas	Sanitas	crowded	Crowded
Mt Sanitas	Sanitas	too crowded	Crowded
Sanitas	Sanitas	too many dogs	Dog presence
Sanitas	Sanitas	parking issues, too many people & dogs	(1) Parking (2) Crowded (3) Dog presence
Sanitas	Sanitas	999	(no response)
Sanitas	Sanitas	999	(no response)
Valley Trail at Sanitas & Goat Trail going up to it	Sanitas	Quality of goat trail; # of dogs at valley trail	(1) Trail quality (2) Dog presence
Sanitas	Sanitas	too many people	Crowded
Sanitas	Sanitas	crowded	Crowded
Sanitas	Sanitas	too crowded	Crowded
Sanitas	Sanitas	too many dogs	Dog presence
Mt Sanitas	Sanitas	Too many un-controlled dogs	Dog presence
Mount Sanitas	Sanitas	No parking	Parking
Mt Sanitas	Sanitas	999	(no response)
Sanitas	Sanitas	Too crowded	Crowded
Sanitas	Sanitas	Too many people, no parking	(1) Crowded (2) Parking

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Mt Sanitas	Sanitas	Too many liberals	Other
Marshal Mesa/Vista Ridge	(1) Marshall Mesa (2) Other	Bikes	Bikers/bikes
marshall mesa	Marshall Mesa	Mountain Bikes	Bikers/bikes
Marshall Mesa	Marshall Mesa	too many bikes	Bikers/bikes
Marshall road area	Marshall Mesa	999	(no response)
Marshall Mesa	Marshall Mesa	Bikes	Bikers/bikes
MARSHALL MESA	Marshall Mesa	Too many different users - bikes, hikers, horses. Don't like how the trail was rerouted years ago.	(1) Other conflicting activity types (2) Other
Marshall Mesa	Marshall Mesa	can't figure out how to get there anymore	Invalid
Marshall Mesa	Marshall Mesa	graze cattle	Animals/wildlife
Marshall Mesa	Marshall Mesa	Too many mountain bikes	Bikers/bikes
Marshal Mesa	Marshall Mesa	too busy, conflicts on trail	(1) Crowded (2) Other
Marshall Mesa	Marshall Mesa	security issues, creepy people	Other
Marshall Mesa	Marshall Mesa	Bikers	Bikers/bikes
Marshall Mesa	Marshall Mesa	Bicyclists	Bikers/bikes
Marshall	Marshall Mesa	Bikers	Bikers/bikes
Marshal	Marshall Mesa	lots of bikers	Bikers/bikes
Marshall Mesa	Marshall Mesa	Bikes + dogs don't mix	Bikers/bikes
Bobolink	Bobolink	crowded and people don't pay attention to the rules	(1) Crowded (2) Other
Bobolink Trail	Bobolink	no parking	Parking
Bobolink	Bobolink	bikes	Bikers/bikes
Bobolink Trail	Bobolink	Too many runners for too narrow trail. That said, I think runners should have that space. No complaint	Other conflicting activity types
Bobolink	Bobolink	999	(no response)
Bobolink; Terrler Farms; Cement Factory	(1) Bobolink (2) Teller Farms (3) Other	coyotes/prairie dogs	Animals/wildlife
Bobolink	Bobolink	999	(no response)
Doudy	Doudy Draw	bikers	Bikers/bikes
Doudy Draw	Doudy Draw	Because closed of mud	Trail closure
Doudy Draw	Doudy Draw	Bikers	Bikers/bikes
Doudy Draw	Doudy Draw	Too many hair pin, bike	(1) Trail quality (2) Bikers/bikes
Doudy Draw	Doudy Draw	Dogs	Dog presence
Doudy Draw	Doudy Draw	bikes	Bikers/bikes

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Lion's Lair	Lion's Lair	No dog areas	Dog restrictions
Lion's Lair	Lion's Lair	no dogs allowed currently	Dog restrictions
West Sanitas/Wittemeyer	Lion's Lair	Dog no longer allowed	Dog restrictions
Lions Lair	Lion's Lair	cannot walk my dog	Dog restrictions
Lion's Lair	Lion's Lair	dog ban	Dog restrictions
Lions Lair	Lion's Lair	no dogs	Dog restrictions
Wonderland Lake	Wonderland Lake	999	(no response)
Wonderland	Wonderland Lake	kids grew up	Invalid
Wonderland Lake area	Wonderland Lake	999	(no response)
Wonderland Lake	Wonderland Lake	999	(no response)
Wonderland Lake/Chautauqua	(1) Wonderland Lake (2) Chautauqua	Main Loop	Invalid
Flagstaff area	Flagstaff	crowds, weekends	Crowded
Flagstaff Summit	Flagstaff	Too crowded	Crowded
Flagstaff Summit	Flagstaff	Stupid winter dog ban	Dog restrictions
Flagstaff	Flagstaff	Parking	Parking
Flatirons Vista	Flatirons Vista	too many bikes	Bikers/bikes
Flatirons Vista	Flatirons Vista	too much bike traffic	Bikers/bikes
Flatirons Vista	Flatirons Vista	Prairie dogs	Animals/wildlife
White Rocks	White Rocks	bridge	Trail closure
East Boulder White Rocks	White Rocks	Because Bridge is out	Trail closure
White Rocks (fix bridge!)	White Rocks	can't use it (note: White Rocks because of bridge)	Trail closure
Teller Farms	Teller Farm	Trail to White Rocks still out	Trail closure
Teller Farms	Teller Farm	999	(no response)
Teller Farm	Teller Farm	Trail bridge being closed due to flood	Trail closure
Teller Farm	Teller Farm	Farther from my home	Invalid
Dry Creek	Dry Creek	Dog and trail regulations, crowding	(1) Dog restrictions (2) Crowded
Dry Creek	Dry Creek	Overgrown, less water	Trail quality
Mesa out of Eldorado	Mesa Trail	too busy no parking too many dogs	(1) Crowded (2) Parking (3) Dog presence
Mesa Trailhead	Mesa Trail	Parking area- have to pay to park	Parking

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Mesa Trail	Mesa Trail	cause I've moved from Boulder	Invalid
Mesa Trail	Mesa Trail	999	(no response)
sometimes here (South Boulder Creek Marshall) if prairie dogs not here	Boulder Creek Trail	prairie dogs not here	Animals/wildlife
Boulder Creek and Settler's Park	(1) Boulder Creek Trail (2) Other	transients	People experiencing homelessness
south side of South Boulder Creek Trail	Boulder Creek Trail	bikers	Bikers/bikes
SB Crk Trail	Boulder Creek Trail	Aggressive dogs	Dog presence
South Boulder Creek	Boulder Creek Trail	too crowded	Crowded
Boulder Creek near Broadway	Boulder Creek Trail	Too many homeless	People experiencing homelessness
Rarely go to South Boulder Creek	Boulder Creek Trail	Parking (lack of)	Parking
Boulder Creek Trail downtown	Boulder Creek Trail	Homeless population explosion	People experiencing homelessness
Boulder Valley Ranch	Boulder Valley Ranch	coyotes	Animals/wildlife
Boulder Valley Ranch	Boulder Valley Ranch	999	(no response)
North Boulder Valley Ranch	Boulder Valley Ranch	too much horse poop	Other conflicting activity types
Lower Gregory Canyon & related trails	Gregory Canyon	I now have a dog that doesn't like other dogs - there are more of them there	Dog presence
Amphitheater/Gregory	Gregory Canyon	no parking	Parking
Some of the trails closed to off-leash dogs and dogs	Any trail with dog restrictions	trail closed to off-leash dogs and dogs	Dog restrictions
all trails that don't allow off leash dogs	Any trail with dog restrictions	trail doesn't allow off leash dogs	Dog restrictions
Anywhere where dogs have to be leashed ie: Lion's Lair	(1) Any trail with dog restrictions (2) Lion's Lair	dogs have to be on leash	Dog restrictions
Areas closed/leash only to dogs	Any trail with dog restrictions	Can't bring my dog	Dog restrictions

Where no longer visit	Where-Code	Why no longer visit	Why-Code
any areas with no dogs	Any trail with dog restrictions	no dog areas, because no dogs are allowed	Dog restrictions
leashed areas in general	Any trail with dog restrictions	dogs must be on leash	Dog restrictions
All leashed dog areas	Any trail with dog restrictions	want dog off leash to run	Dog restrictions
Areas with no dogs or must be leashed	Any trail with dog restrictions	No dogs or must be leashed	Dog restrictions
any not - dog friendly (voice/tag)	Any trail with dog restrictions	not dog friendly (voice/tag)	Dog restrictions
Places that don't allow dogs off leash	Any trail with dog restrictions	don't allow dogs off leash	Dog restrictions
places that don't allow dogs OFF LEASH	Any trail with dog restrictions	don't allow dogs OFF LEASH	Dog restrictions
Places where no dogs allowed	Any trail with dog restrictions	No dogs allowed + now have a dog	Dog restrictions
Places where dogs must be on leash	Any trail with dog restrictions	Because dogs must be on leash	Dog restrictions
any area where dogs not allowed off leash	Any trail with dog restrictions	dogs not allowed off leash	Dog restrictions
leashed areas	Any trail with dog restrictions	dogs must be on leash	Dog restrictions
Tend to stay off trails with leash regulations	Any trail with dog restrictions	leash regulations	Dog restrictions
Trails w/out voice/sight access	Any trail with dog restrictions	want to have voice/sight access	Dog restrictions
Hardscrabble Trail	Other	Too crowded since 2013 flood	Crowded
Shanahan Ridge	Other	999	(no response)
Hog's back	Other	Dog ban	Dog restrictions
Cottonwood Trail	Other	999	(no response)
75th and Baseline behind Reservior	Other	Snails - dog can't get drink	(1) Animals/wildlife (2) Other
Toehe trail eldorado	Other	No more steep trail	Trail quality
3rd & Canyon Creek	Other	homeless vagrants always want cigs	People experiencing homelessness
upper blue stem	Other	horse crap	Other conflicting activity types
trails closed from path through woods/road that crossed ravine to trail just north of water tank	Other	trails closed	Trail closure

Where no longer visit	Where-Code	Why no longer visit	Why-Code
Anywhere with prarie dogs	Other	prarie dogs	Animals/wildlife
NCAR Mesa	Other	999	(no response)
Eldora 4th of July Trail	Other	Too packed	Crowded
Skyline Trail	Other	Narrow, Rattlesnakes	(1) Trail quality (2) Animals/wildlife
Eldo Springs.	Other	Cars illegally park in horse trailer spots!	Parking
Shadow Canyon	Other	Bears	Animals/wildlife
Up near newlands/mapelton	Other	too much dog poop	Dog presence
Gunbarrel	Other	888	Invalid
South Boulder Trails	Other	No leash-less areas for dogs	Dog restrictions
Anemone	Other	999	(no response)
Greenbelt Plateau	Other	Bikers are not courteous	Bikers/bikes
Chapman	Other	999	(no response)
Foothills Tr.	Other	Moved away	Invalid
Boulder Falls	Other	Closed	Trail closure
this one (AK note: AP513-unnamed)	Other	999	(no response)
The trail N. off of foothills near hogback	Other	overgrowth of bushes/grass	Trail quality
Mts.	Other	moved	Invalid
anywhere there are offleash dogs	Other	because of my dog's issues	Other
Chapman Drive	Other	closed for "rebuild"	Trail closure
Left Hand	Other	Closed	Trail closure
Hogback trail	Other	dogs	Dog presence
just avoid certain ones on certain days/ times	Other	999	(no response)
White Cliffs	Other	Bridge out	Trail closure
Valmont TH and Bobolink and South Boulder Creek East	(1) Other (2) Bobolink (3) Boulder Creek Trail	not dog friendly and no bathrooms	(1) Dog restrictions (2) Other
sight/sound "dog" trails	Other	But I try to avoid the sight/sound "dog" trails	Dog presence
Parts of Bear Peak	Other	no dogs "off leash" anymore	Dog restrictions
Highly popular areas	Other	Dogs off leash not controlled by sight or sound/voice	Dog presence

Where no longer visit	Where-Code	Why no longer visit	Why-Code
UT trail 'Skyline trail' (from Foothills North toward McGuckins Warehouse)	Other	rattlesnakes	Animals/wildlife
S. Mesa Trailhead; Gregory Canyon (foot of Flagstaff)	(1) Other (2) Gregory Canyon	Full parking; nowhere to park	Parking
trails in southern areas (Doudy Draw etc)	(1) Other (2) Doudy Draw	trails trashed from bikers going off main tread	(1) Bikers/bikes (2) Trail quality
Cherryvalle/Bobolink	(1) Other (2) Bobolink	overcrowded	Crowded
Left hand	Other	prairie dogs	Animals/wildlife
mainly in and around Boulder	Other	no parking too many people	(1) Parking (2) Crowded
Areas open to mountain bikes	Other	unpleaseant to "share" trails	Other conflicting activity types
Beech	Other	cyclists on trail - rude. 2 trails for hikers & bikes.	Bikers/bikes
back Steinbach Louisville Resevoir	Other	more conflict, less dog people	Other
South side of East Boulder trail	Other	The bridge is out	Trail closure
North Foothills	Other	no dogs	Dog restrictions
Anemone trail	Other	closed	Trail closure
Bear Mtn	Other	Closed	Trail closure
?	Invalid	transportation	Other
888	Invalid	999	(no response)
closed	Invalid	999	(no response)
999	(no response)	homeless mitigation	People experiencing homelessness
999	(no response)	seasonal- when no water. I go elsewhere	Other
999	(no response)	Aggressive unleashed dogs (and owners)	Dog presence
999	(no response)	close to home	Other
999	(no response)	mountain biking	Bikers/bikes
999	(no response)	no dogs	Dog restrictions
999	(no response)	bikes	Bikers/bikes