

2016-2017 Visitation Study Initial Findings

Visitor survey and visitation estimate summaries

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ABSTRACT

The preliminary results of the 2016-2017 Visitation Study indicate that visitors to Open Space and Mountain Parks managed lands are trending toward older adults, most reside in the City of Boulder (55%) or in Boulder County but outside city limits (27%) and more than half arrive to the trailhead by vehicle. Hiking, walking dog(s), running and biking are the top reported primary activities and “Physical fitness” is the leading primary motivation for visiting. Most visitors rated the overall quality of OSMP services as “Very good” or “Excellent.” System-wide visitation has increased from approximately 4.68 million visits in 2005 to 6.25 million visits in 2017, roughly a 34% increase over the last 12 years¹. OSMP-managed lands receive an estimated 1.79 million annual dog visits.

Findings presented in this report are initial results. A full visitation study, including final data and analysis along with final reports for the visitor survey and visitation estimate will be completed by July 2018.

INTRODUCTION

In 2016, Open Space and Mountain Parks (OSMP) began a multi-year study of visitor characteristics and visitation metrics for the OSMP land system. Two primary objectives of this study were to: 1) update estimates of visitor characteristics, which were assessed in both 2004-2005 and 2010-2011 and 2) update the estimate of system-wide visitation, which was last assessed empirically in 2004-2005.

Several key results were prepared for this summary based on data collected between 2016 and 2017. Visitor characteristics include: visitor demographics, activity participation, mode of transportation to the trailhead, trip length, experience and service ratings, and parking perceptions. Visitation metrics include: system-wide annual visitation, percent of nighttime use (11pm – 6am), and system-wide annual dog visitation. Note that all visitation metrics are reported in terms of “visits,” which is distinct from “visitors.” Visits refers to unique times that a visitor accesses OSMP owned or managed lands. For example, if the same visitor goes for a hike one day and then goes for another hike the following day, the occurrences are counted as two distinct visits.

METHODS

This section is an overview of how the visitor survey and visitation estimate were conducted. A detailed explanation of methods, including specific examples of sampling and analysis steps, will be included in the forthcoming visitation study reports.

Visitor Survey Approach

To estimate system-wide visitor characteristics, OSMP conducted a self-administered two-page written visitor survey. Visitors age 16 and older were contacted as they exited OSMP. Data obtained from 2,143 respondents were analyzed to estimate current visitor characteristics.

¹ As of 2017, there are approximately 150 miles of designated trails (and 180 miles of undesignated trails) on OSMP lands, up from 130 miles of designated trails in 2005. Previous undesignated trail inventories of up to 300 miles of trail as reported in the 2005 Visitor Master Plan are not directly comparable with current data.

Visitation Estimate Approach

To measure system-wide visitation levels, OSMP used automated trail counter devices to detect the number of people that passed by a given point on a trail or road. Trail counters were generally placed as close as possible to access points. OSMP defines access points as any point where a person can enter OSMP owned or managed land, typically on a road or trail, and may either be at the beginning of a trail (trailhead) or where a trail transitions onto OSMP land from an adjoining management agency. Counts of the number of people that passed-through access points on the OSMP system were then used to estimate total system-wide visitation. Forty-six of 187 access points were selected for 12-month installations (the entire study period) and 141 access points received two-week installations to confirm each location's visitation class.

RESULTS

Who Visited OSMP-Managed Lands?

Males and females responded in roughly equal proportions at 52% and 48% respectively. Approximately half (51%) of respondents reported an annual household income of \$100,000 or more, and the majority had college degrees (88%). Survey respondents identified themselves mostly as white (93%), with around 5% identifying as Hispanic, Latino, or Spanish origin (of any race) (VanderWoude & Kellogg, 2018 *in progress*).

The majority (82%) of respondents indicated they live within Boulder County, and a little over half (55%) live within city limits. Approximately 7% of respondents were from Metro Denver, and another 7% were from outside Colorado. These proportions have remained constant since the 2004-2005 survey.

Nearly a quarter (24%) of respondents were 60 years old or older. The median age of respondents 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. This aging trend is underlain by both increased visitation by 60-69-year-old people, reflecting their increase in the Boulder County population (State of Colorado, 2018), and declining visitation among 20-29-year-old people. The decline in 20-29-year-old people is perhaps surprising, as this group is slightly increasing in the Boulder County population.

Most respondents (67%) indicated that 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., approximately daily or more than once a day). These proportions have remained steady since 2005.

Just under half (47%) of respondents have been visiting OSMP-managed lands for over 10 years, and just under a quarter (24%) have been 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.

What Did Visitors Do on OSMP-Managed Lands?

Hiking was the primary activity (42%), followed by walking dog(s) (22%), running (16%) and biking (10%). All other activities were reported at 2% or less. Approximately 37% of groups had at least one dog with them, and of these, close to three-quarters (72%) had one dog and 28% had two or more dogs. At the annual level, OSMP-managed lands received an estimated 1.79 million dog visits.

Most visitors (60%) spent between a half hour to 89 minutes on OSMP, with a median trip length of 60 minutes. This was 10 minutes longer than the 2004-2005 survey and the same as the 2010-2011 survey.

Most respondents indicated they arrived to OSMP property by car (56%) or by human power (i.e., walk, bike, run; 43%). Collectively, less than two percent 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%).

How Many Visits Did OSMP-Managed Lands Support, Where Did Visitors Go and When Did They Visit?

OSMP's annual system-wide visitation is estimated at 6.25 million visits (Leslie, 2018). The previous estimate, conducted in 2004-2005, estimated an annual system-wide visitation of 4.68 million, a 34% increase in system-wide visitation from 2005 to 2017. This equates to an 2.4% average annual increase, if visitation is assumed to have increased similarly across the unmeasured years (2006-2015).

The specific level of growth varied by location. Some locations, including the Chautauqua Trail (+249%), South Mesa Trail (+110%) and Marshall Mesa (+65%) experienced greater growth than the average while other locations, including Sanitas Valley View (+19%), Flatirons Vista Trail (+17%) and Doudy Draw (-17%), experienced lower growth, or even slight decreases, in visitation. Other well-known trails including Sanitas Valley Trail (+34%), Mount Sanitas Trail (+36%) and Eagle Trail (+27%) were closer to the system-wide rate of increase in visitation.

June was the busiest month, accounting for approximately 10% of total annual visitation (~ 633,000 visits) and October was the second busiest month at 9.6% (~ 599,000 visits). The monthly visitation pattern to OSMP lands did not exhibit the strong seasonality observed at other public land management lands, such as those of the National Park Service (Ziesler & Singh, 2018), although visitation did dip in winter. Winter was the lowest visitation season on OSMP lands, with between 5% and 7% of total annual visitation (~ 314,000 – 444,000 visits). Spring, summer and fall months all received sustained visitation levels at between 8% and 10% of total annual visitation. There were more than 500,000 visits each month between March and November.

Sunday was the busiest day on average, receiving approximately 21% of total annual visits followed closely by Saturday (19%). Each weekday received around 12% of total annual visits. This pattern was very similar to the weekly visitation pattern observed in 2004-2005 (Vaske, Donnelly, & Shelby, 2009).

The busiest hour overall was 11am, accounting for 10% of total annual visitation. However, seasonality and the day of the week affected the hourly visitation pattern, including when the peak visitation time occurred and whether there were one or two spikes in daily visitation. Weekend use tended to have a single peak visitation hour, occurring at 10am and 11am during the spring, summer and fall, and around 1pm during the winter. Weekday use during the spring, summer and fall tended to peak twice: in the morning between 9am and 12pm and again between 5pm and 8pm. This pattern is likely related to work schedules where visitors were accessing OSMP-managed trails before and after work. Avoiding mid-day heat was also likely a significant factor during summer months. Winter weekday use however tended to

have a single peak between 12pm and 2pm, probably because there is less daylight at other times and early afternoon is typically the warmest part of the day.

Nighttime use (11pm – 6am) was estimated at 0.65% of total annual visits for the 2016-2017 study period. This represents a decrease from the previous 2004-2005 estimate of 1.40%. Expanding the time period considered “nighttime” to 9pm – 6am increased the percent of total use to 1.15% of total annual visits.

Why Did Visitors Come to OSMP-Managed Lands?

Top-rated motivations for visiting OSMP-managed lands were “Being with my dog(s)” (73%, *for those that had a dog(s) with them*), “Enjoying nature” (65%), and “Spending time with family/friends” (60%, *for those that arrived with two or more people*). When asked to identify the one primary motivation for visiting, “Physical fitness”, “Enjoying nature”, and “Being with my dog(s)” were the top three respectively.

How Did Visitors Experience and Perceive OSMP-Managed Lands?

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

Of those who arrived by car, approximately half of respondents indicated that it was “Very easy” and one third indicated that it was “Easy” to find a parking spot.

While most respondents provided pleasant or neutral ratings for their experience with other groups encountered on the day of their visit, 6% reported having a conflict with someone else. This was fairly similar to the OSMP average daily conflict rate of the 2010-2011 survey (7%) and the 2015 Boulder County Parks and Open Space daily conflict rate (5%) (Bowie, 2015). *Of the 6% that reported conflict*, over half (53%) indicated that the conflict was with dog walkers or dogs, approximately a third (33%) experienced conflict with bikers, and approximately a quarter (25%) experienced conflict with runners.

Fourteen percent of respondents indicated there was an OSMP location they no longer visit, and the most avoided areas were Sanitas and Chautauqua. *Of the 14% that reported displacement*, crowding (32%), parking problems (13%), dog presence (12%) and dog restrictions (12%) were the top-reported reasons for avoiding an area.

NEXT STEPS

Over the next few months, staff will complete the comprehensive analysis of visitation metrics from both the survey and use estimate components of the visitation study. The current timeline for completion of the reports is July 2018, when they will be posted to the OSMP and Master Plan websites. The reports will help inform conversations during future windows of public engagement for the Master Plan and other city projects.

REFERENCES

- Bowie, M. 2015. Five Year Visitor Study. County of Boulder, Parks and Open Space Department, Longmont, Colorado.
- City of Boulder. 2005. Visitor Master Plan. City of Boulder, Open Space and Mountain Parks Department, Boulder, Colorado.
- Leslie, C. 2018. DRAFT System-wide Visitation Estimates for the Master Plan System Overview. City of Boulder, Open Space and Mountain Parks Department, Boulder, Colorado.
- State of Colorado. 2018. Population by Single Year of Age – County. Colorado Department of Local Affairs. Retrieved on 4/16/2018 from <https://demography.dola.colorado.gov/population/data/sya-county/>.
- VanderWoude, D. and Kellogg, A. (2018). 2016-2017 Visitor Survey Report (*in progress*). The City of Boulder, Department of Open Space and Mountain Parks. Boulder, Colorado
- Ziesler, P. S., & Singh, P. (2018). *Statistical Abstract: 2017* (Statistical Abstract No. NPS/NRSS/EQD/NRDS—2018/1156) (p. 114). Fort Collins, Colorado: National Park Service.