SUMMARY REPORT
Examining Outdoor Recreation Barriers, Amenity Preferences, and Communication and Outreach Needs of the Latino/Hispanic Community in and around the Denver Metro Region, Colorado

A research study conducted as an inter-agency research project for
Boulder County Parks and Open Space
Denver Parks and Recreation

by

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Following is the citation for entire research report.

Executive Summary

Demographic shifts in the U.S. and the state of Colorado indicate a rapidly growing Latino/Hispanic population. Local open space agencies need to be cognizant of this change and work towards increasing Latino/Hispanic use in their parks to ensure long term support of their programs and land base. To better cater to the growing Latino/Hispanic population, open space agencies require an improved understanding of potential barriers that are limiting park and open space use; preferred amenity needs; and how to best communicate and reach out to this section of the community.

The aim of this study was to evaluate the identified barriers, amenity preferences, and communication and outreach needs of the Latino/Hispanic community within the six county region of Jefferson, Boulder, Adams, Arapahoe, Broomfield, and Denver counties.

Study objectives

The following objectives for this research focused on the Latino/Hispanic community within this region were as follows:

**Objective 1.** To identify and evaluate any barriers to outdoor recreation.

**Objective 2.** To compare barriers to outdoor recreation among different family generational groups (e.g. 1st generation residing in the USA) and generation cohorts (e.g. Baby Boomers, Millennials, etc.) within the Latino/Hispanic community.

**Objective 3.** To provide specific recommendations on how county open spaces can overcome identified barriers recreation.

**Objective 4.** To identify and evaluate park amenity preferences.

**Objective 5.** To compare differences in park amenity preferences among different family generational groups and generation cohorts within the Latino/Hispanic community.

**Objective 6.** To identify and evaluate the communication and outreach preferences and needs of different family generational groups and generation cohorts within the Latino/Hispanic community.

**Objective 7.** To provide recommendations on best practices for outreach and communication to different family generational groups and generation cohorts within the Latino/Hispanic community.

Proposed methodology

A two-stage, mixed-methods research project centered around the Denver metro region was undertaken that identifies and evaluates possible barriers to outdoor recreation, park amenity preferences,
and the communication and outreach preferences and needs of the Latino/Hispanic community within the context of county open space. The initial geographic focus of the study was concentrated on the six-county region of Jefferson, Boulder, Adams, Arapahoe, Broomfield, and Denver counties. However, the scope of the study was opened to the broader Denver metro region, due to difficulties accessing the Latino/Hispanic community for both stages one and two.

**Stage 1. Methodology**

For stage one of this research project, a focus group including “community leaders” from the Latino/Hispanic community was initially proposed to help identify relevant barriers, amenity preferences, and communication and outreach needs of the Latino/Hispanic community. Thirty-three people and organizations were contacted, with only two responses provided, requiring a modification to the proposed project. Two in-depth qualitative interviews with the two respondents were conducted (one who identifies as Latino/Hispanic, another who does not), in place of the proposed focus group, to address the abovementioned aims of stage one of the research project. This data, alongside a comprehensive literature review, helped inform stage two of the research project.

**Stage 2. Methodology**

Given that this research was partly focused on examining the barriers to visiting parks/open space, researchers sought to focus data collection at sites away from county parks and open space. This was to avoid the common problem of “displacement”, whereby respondents are limited to those at a park, and does not consider those who do not visit the park for a variety of reasons. Rather, it seemed more pertinent to find Latinos/Hispanics who were not visiting county parks and open space and find out why.

Stage two of this project was originally proposed to be intercept surveys conducted at a range of locations throughout Boulder, Denver, and Jefferson County, with particular emphasis placed on collecting data at locations which the Latino/Hispanic community commonly frequent (e.g. supermarkets, churches, etc.). This was in addition to distributing these surveys via email through the identified “community leaders” from stage 1. However, due to the difficulties faced in contacting prominent leaders of the Latino/Hispanic community, the possibility of distributing the stage two email surveys through Latino/Hispanic community leaders was removed. Furthermore, the initial idea to collect most of the data from popular spaces where members of the Latino/Hispanic community commonly frequent, was met with significant concern from both stage one interviewee participants due to the current political climate regarding immigration status. Thus, alternative methods for collecting data from Latino/Hispanics away from county parks and open space, were both required and encouraged.
As an alternative, a self-administered survey was delivered via the Qualtrics Web-survey platform to Latino/Hispanic residents predominantly residing in and around the Denver metro region. Geographic parameters of the original six country region of Jefferson, Boulder, Adams, Arapahoe, Broomfield, and Denver were used, with surveys only sent to Internet Protocol (IP) addresses associated with a physical address in the six-county region. A total of n=292 respondents was received. However, to obtain a large sample size to allow more rigorous analyses to be performed, the six-county geographic region had to be expanded to include additional counties within the broader Denver region. A total of 8,752 email invitations to complete the survey via the Web link were sent. Of those, a total of 485 participants completed the survey, a 5.5% response rate. All 485 surveys were included in the survey with unanswered questions coded as missing values.

Due to some delays in contract approval, and subsequently obtaining approval from the Institutional Review Board (IRB) to conduct a study with human participants, stage 2 data collection did not begin until late summer/early fall, 2017. These surveys were also handed out to visitors onsite at four county open space areas (Bald Mountain Scenic Area, Corwina Park, Lagerman Preserve, Lair o’ the Bear Park) in Denver, Jefferson, and Boulder counties (n=25). Only two respondents from the on-site intercept surveys self-identified as being Latino/Hispanic. Therefore, in total, 487 surveys were completed by those who self-identified as being Latino/Hispanic.

**Results and discussion**

The objectives of the research informed the items developed for the self-administered survey that was designed to explore barriers, how to overcome those barriers, preferences for and evaluation of park amenities, as well as preferences for methods and topics for communication and outreach for the Latino/Hispanic community. In addition to these basic topics, this study identified groups within the study population based on family generational group (1st generation of family residing in the USA, 2nd generation of the family residing in the USA, and 3rd or more generation of the family residing in the USA), and generation cohort (Millennials, Generation X, and Baby Boomers). Responses specific to park visitation, preferences and communication were also compared across both groups.

Findings indicate that the large majority of Latino/Hispanic respondents do visit parks/open space on an occasional or frequent basis. Motivations vary, but the importance of spending time with friends and family are widely shared. So too are the use of picnic tables and other built facilities. A range of barriers to visiting parks/open space were explored. While many were identified as being potential barriers by respondents, few were rated as strong barriers by a high number of respondents and a relatively low proportion of respondents indicated an inability to overcome them. Communication needs at parks/open space include information on maps, trails, opening hours, and rules and regulations, with interest also
expressed in educational signage. The preference for bilingual signage at parks/open space was also noted. Finally, the role, importance, and preference of friends and family, followed by the Internet, was also identified. Statistically significant differences were noted between family generational groups and generation cohorts within the sample.

To further examine the results of this study, the following discussion is provided that frames the research findings in light of the hypotheses used to inform this study.

**Hypothesis 1. There are barriers limiting Latinos/Hispanics from visiting county open space**

Hypothesis 1 is supported by the results of this research. Each barrier of the survey was identified by a portion of some of the respondents. The barriers identified by the highest proportion of respondents were concern about safety and not having enough time (approximately one fourth of respondents agreed these as a barrier). These were followed by lack of facilities, poorly maintained facilities, and no one to go with, where approximately one-fifth of respondents identified as potential barriers. However, most of those respondents who agreed with these as potential barriers were able to overcome them. There are respondents who identified potential barriers who were unable to overcome them, although in all, a minority of respondents.

**Hypothesis 2. Barriers differ among different family generational groups and generation cohorts within the Latino/Hispanic community**

Hypothesis 2 was supported with reservation for family generational groups. There was a significant family generational group effect for only one of the 17 barriers. Those respondents who were the 2nd generation of their family in the USA felt slightly more strongly that not knowing the rules was a potential barrier than those who were the 1st generation of the family residing in the USA. However, none of the groups held this belief with strength. As mentioned, there was no difference across family generational group for any of the other 17 potential barriers.

Hypothesis 2 was supported for three of the 17 potential barriers with respect to membership in a generation cohort. Baby Boomers agreed more strongly that they did not feel comfortable at parks/open space than did Generation Xers and Millennials. On the other hand, Baby Boomers disagreed more strongly than the other two groups that there were not enough people at parks/open space who “looked like me.” Baby Boomers were more concerned about safety at parks than Generation Xers and Millennials. There were no significant differences among generation cohorts for the other 14 potential barriers.
Hypothesis 3. Preferences for amenities and activities differ among family generational groups and generation cohorts within the Latino/Hispanic community

Hypothesis 3 was generally supported regarding preferences for amenities and activities across family generational group. Respondents in the 1st generation of their family in the USA were much less likely to use covered seating areas and educational signage than were those in the 2nd and 3rd+ generation residing in the USA. There was no relationship among these three groups on use of other facilities and amenities. The 3rd+ generation residing in the USA was more likely to be interested in camping, fishing, spending time with family and friends than either of the other two groups.

Hypothesis 3 was also supported regarding preferences for amenities and activities for generation cohorts. As might be expected, Millennials and Generation Xers were more likely to use hiking trails and athletic fields than Baby Boomers. Millennials were less likely to use restroom facilities than were Baby Boomers and Generation Xers, respectively. Finally, although sites for guided exercise were used by few respondents overall, they were more likely to be used by Millennials than Generation Xers and Baby Boomers. Generation Xers were more likely to be interested in hiking than both Millennials and Baby Boomers, respectively. On the other hand, Millennials were more likely to be interested in jogging/running than Generation Xers, and especially Baby Boomers. Millennials were more likely to be interested in active sports than were Generation Xers and Baby Boomers. However, Generation Xers were more interested in league sports than Millennials and Generation Xers.

Hypothesis 4. Preferred communication and outreach efforts differ among family generational groups and generation cohorts within the Latino/Hispanic community

Hypothesis 4 was supported regarding differences across family generational group for preferred methods of communication and outreach about parks/open space. For example, both educational information on animals and plants as well as what activities are allowed were desired by 3rd+ generation of the family residing in the USA more than the 2nd generation, and especially the 1st generation. Regarding the best ways to communicate information while at a parks/open space, bilingual signage was preferred by those who were part of the 2nd generation of the family to reside in the USA than did the 1st generation and the 3rd+ generation respectively. The 3rd+ generation preferred supported an increased presence of park rangers than both the 2nd generation and 1st generation. Finally, those in the 1st generation of the family to reside in the USA preferred bilingual park rangers than did the 2nd generation and the 3rd+ generation respectively. Finally, respondents in the 1st generation of the family to reside in the USA showed higher preference for the church, a child’s school, Spanish-language television, Spanish-language radio, Spanish-
language newspapers, and English-language newspapers than did the 2nd generation, with 3rd+ generation in the middle. Those in the 3rd+ generation preferred obtaining information by driving past parks than did the 2nd generation.

Hypothesis 4 was also supported regarding differences across generation cohort for preferred methods of communication and outreach about parks/open space. While there were no differences across generation cohort for the type of information respondents would like to see, there were differences on the best way to communicate information while at a park/open space. A higher proportion of Millennials preferred bilingual signage and bilingual park rangers than did Generation Xers and Baby Boomers. Outside of a park/open space, Millennials and Generation Xers preferred family, Facebook, a child’s school, and Spanish-language television as sources of information about parks/open space than did Baby Boomers.

In summary, each of the hypotheses were generally supported. The first hypotheses supported previous literature that has found that certain barriers to visiting parks/open space are identified by the Latino/Hispanic community. However, these were not identified by a majority of respondents in this study, and ability of respondents to overcome these barriers was generally quite strong. Testing the second hypothesis supported the notion that identification of the barriers differed across family generational group (a potential indicator of integration into US society) and generation cohort (based on age). However, as with hypothesis 1, identification of these barriers were not by a majority of respondents in each group. There was also general support for differences in amenity and activity preferences across both family generational group and generation cohort (hypothesis 3) and communication and outreach (hypothesis 4).
Recommendations

Based on the above findings, the following recommendations can be made.

Recommendation 1. Undertake efforts to increase the overall percentage of Latino/Hispanics visiting county open space

As identified in the findings, 25% of Latino/Hispanic respondents in this study stated that they are not interested in visiting parks/open space. While visitation findings indicate that more than 80% of respondents visit parks/open space occasionally or frequently, it is important to address this apparent disinterest among a quarter of the respondents. This is because when examining potential barriers to visitation, not knowing other Latino/Hispanics that visit parks/open space or not having anyone to go with were identified barriers for close to 20% of respondents (with more than 25% of those who indicated this stating they are unable to overcome this barrier). Thus, efforts to attract additional Latino/Hispanics to visit parks/open space, can have a broader flow-on effect, given the importance of friends and families as preferred sources of communication about parks/open space, and the importance placed on spending time with friends and family at parks/open space.

The question for county agencies then is how to attract a greater number of Latino/Hispanics to visit and recreate at county open space? Findings from this study indicate that communication through schools, the church, and non-profit organizations may not be highly effective. Rather, improved signage at the parks, and the provision of more information about county open space on the Internet, may also be beneficial. Targeted advertising through social media platforms, such as Facebook, may also be useful to educate and inform Latino/Hispanics about the recreational opportunities that are available at county open space. What is important to note here is the need to communicate information and messages that the Latino/Hispanic community deem worthy of passing on to friends and family through their internal network (e.g. community events/activities/educational programs). These will be discussed further below.

Recommendation 2. Ensure that county open space facilities adequately meet the needs of Latino/Hispanics and are well maintained.

The importance of picnic tables, covered seating areas, restrooms, grills, walking/hiking trails and open grassy areas has been identified in this study. In addition, the importance of spending time with family and friends has been highlighted, much of which can be assumed to occur around the use of these different facilities. With this study and the academic literature emphasizing the central role that socialization plays...
for the Latino/Hispanic community in their use of parks and recreational areas, it is important that county open space facilities are well maintained and are of sufficient capacity so as not to become a barrier to visitation for the Latino/Hispanic community.

Efforts should be made by county open space to regularly clean and maintain restrooms, picnic tables, grills, and covered areas, so that they are suitable for use. Ensuring that covered areas and the number of picnic tables are large enough to cater for large extended family and friends’ gatherings is also important. Associated with this is a recommendation by Dunn et al. (2002) and Gobster (2002) to make sure that trashcans are large enough, and regularly emptied so as not to deter use of these built areas. Gobster (2002) also suggests that not only should there be sufficient numbers of picnic tables, but their arrangement should be as such where it does accommodate large groups. Having larger, and not just more grills may also further assist large group gatherings within the Latino/Hispanic community (Gobster, 2002).

**Recommendation 3. Improving county open space signage and directional information**

Given the large number of respondents who appear to find out about parks/open space simply from driving past, the need for having clear and easily visible signage at county open spaces seems to be very important. Although findings from this study did not identify a large percentage of respondents as not knowing where to go as a barrier, given the importance placed in the literature on this barrier to visitation (Burns et al., 2006; Hickcox, 2008), combined with the importance and preference placed on drive-by communication by respondents, the provision of directional information from nearby major roads could also be useful. This way, people are made aware that there is a county open space nearby, and can easily find it. Open space agencies should therefore consider updating signage and look into increasing signage on nearby major highways and roads to better alert people driving by of the existence of county open space.

**Recommendation 4. Provide bilingual signage at county open space**

An interesting finding from this report is the preference for bilingual signage for on-site communication among Latino/Hispanic respondents, over the existence of bilingual rangers or the increased presence of park rangers. What is so interesting here is that only 13 of the total 487 respondents chose to complete the Spanish version of this survey, indicating that the large majority are comfortable reading and writing in English. Furthermore, it was not just 1st generation respondents who were interested in bilingual signage, but all generational groups, as well as generation cohorts, with Millennials in particular, interested in bilingual signage. This could be in recognition that while the respondents themselves are fluent in
English, they recognize that the broader Latino/Hispanic community may not be, and as such, bilingual signage could be beneficial to increasing visitation among this population.

As such, it is recommended that county agencies invest in bilingual signage at county open space for a range of information provided. This should include maps, opening hours, rules and regulations, as well as educational and interpretive information on the area and points of interest. Efforts should be made for rules and regulations to be communicated bilingually in short positive statements that avoid negatives where possible. For example, ‘Do this’, as opposed to ‘Don’t do this’, with a brief explanation as to why this is important. This is because most often, rules are not being followed due to a lack of understanding (Dunn, et al., 2002). In doing so, this will allow Latino/Hispanics to more deeply engage with their surroundings through learning about flora and fauna and points of interest. It may also help to reduce any discomfort that is felt by Latino/Hispanics regarding not knowing what to do, and ensuring that they are aware of rules and regulations.

**Recommendation 5. Provide more information on county open space websites and social media platforms, and make it available in both English and Spanish.**

Findings from this study indicate the importance of the Internet, whether parks/open space websites, search engines, or social media platforms. As such, it is important that information on the location of county open space, maps and directions on how to get there are provided on the Internet. Both Boulder County Open Space and Denver Parks and Recreation provide interactive maps and direct links from their website to Google maps, making it easy for people to find the quickest route to county open space form their home or current location. This kind of linkage and functionality can further help encourage Latino/Hispanics to more frequently utilize these websites as a trusted and convenient source of information. Information on rules and regulations and other useful information may also be beneficial to have in a clearly marked section, for example a ‘frequently asked questions’ or a ‘things you should know before you go’ section. What is also suggested is that further research be undertaken to determine whether this information on county open space websites should also be offered in Spanish. As with bilingual signage, the importance of the Internet as a source of information for the Latino/Hispanic community emphasizes the need for this.

Facebook and other social media platforms can also be useful here for providing up to date information trail and road closures, weather conditions, etc. Targeted advertising through social media platforms may also be useful to send specific messages to the Latino/Hispanic community about county open space, whether to advertise particular events, or provide them with information about recreational offerings to help increase their familiarity with county open space. For example, a social media campaign
to inform Latino/Hispanics about a local event at a county open space may help increase awareness among this population, and encourage them to explore the county open space website.