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## Introduction

In the summer of 2010, the Denver Museum of Nature \& Science (DMNS) spearheaded an effort to bring together a group of Denver Metro Area cultural institutions as part of an informal network of professionals interested in visitor evaluation (hereafter referred to as "the Network"). The founding purpose of the Network was to utilize the existing resources of DMNS ${ }^{1}$ to build evaluation capacity in other institutions, share instruments and data between cultural institutions, and to embark on citywide evaluation projects that would be of benefit to all institutions involved in the group.

The first Network-wide project was a psychographic study using John Falk's Visitor Identity-Related Motivation Typology to identify and categorize visitors' motivations for attending a cultural institution on a given day. The Network prototyped Falk's latest instrument (a card select), collected and analyzed the data, and addressed potential applications of the results to Network institutions.

The Network decided it would also be beneficial to collect visitor demographics across sites using a selfadministered survey. In order to ensure maximum comparability across the varied institutions, the Network agreed to conduct a pilot study at eleven institutions over the course of one weekend, providing a snap shot in time of who visits Denver cultural institutions on any given weekend. The participating cultural institutions were: Butterfly Pavilion, Buffalo Bill Museum \& Grave, Children's Museum of Denver, Colorado Railroad Museum, Denver Art Museum, Denver Botanic Gardens, Denver Museum of Nature \& Science, Denver Zoo, Littleton Historical Museum, Molly Brown House Museum, and Wildlife Experience².

[^0]The weekend of October 23-24, 2010 was chosen for several reasons: no holidays fall over this weekend; only one institution had a special event happening; and based on the time of year there was a chance that the weather would not be too cold or inclement, which could have negatively affected outdoor venues.

DMNS drafted a one-page survey instrument (see Appendix A), based on their Visitor Baseline Survey ${ }^{3}$. The Network was encouraged to comment on the survey and suggest changes. The instrument was then finalized. The survey asked about age, sex, ethnic background/heritage, language(s) spoken at home, membership, repeat visitation, education level, zip code, income level, and group composition.

## Methodology

Fourteen research assistants collected data as part of this study. They worked from 11:00 am to 3:00 pm on both Saturday, October $23^{\text {rd }}$ and Sunday, October24 ${ }^{\text {th }}, 2010$. There were two exceptions, which should be kept in mind when interpreting the data and reported results:

1) Due to a special event the weekend of October $23^{\text {rd }}$ and $24^{\text {th }}$ at the Butterfly Pavilion, data collection occurred the following weekend (October $30^{\text {th }}$ and $31^{\text {st }}$ ).
2) The research assistant assigned to the Denver Art Museum on Sunday, October $24^{\text {th }}$ was unable to make the shift. Data was collected the following Sunday, October $31^{\text {st }}$.

Researchers approached visitors and distributed the self-administered surveys just beyond the admission desk/check-in counter/entrance to each institution. Researchers utilized a randomized sample protocol, approaching the third adult ${ }^{4}$ visitor observed and surveyed only one visitor per family/social group.

Researchers asked individuals if they would be willing to take a few minutes to help the museum learn more about its visitors. The top of the survey read: "This questionnaire is voluntary, private, and confidential. It will be used only to learn more about our visitors. We collect this information to help make sure we are an inclusive cultural institution-- welcoming, reflective and responsive to our community and visitors. Additionally, many of our funders and supporters request demographic information. We thank you very much for your help."

[^1]A total of eight hundred and seventy ( $n=870$ ) surveys were collected from visiting adults during this study ${ }^{5}$.

Table 1 and Figure 1 provide a breakdown of the number of surveys were collected at each institution ${ }^{6}$.

Table 1: Number of Surveys per Institution

| Institution | Number of Surveys |
| :--- | :---: |
| Buffalo Bill Museum \& Grave | 53 |
| Butterfly Pavilion | 81 |
| Children's Museum of Denver | 70 |
| Colorado Railroad Museum | 58 |
| Denver Art Museum | 96 |
| Denver Botanic Gardens | 115 |
|  <br> Science | 159 |
| Denver Zoo | 73 |
| Littleton Historical Museum | 29 |
| Molly Brown House Museum | 39 |
| Wildlife Experience |  |

Figure 1: Number of Surveys per Institution


Researchers also noted how many visitors refused to complete the survey, and the reason (if known, i.e. not a native English speaker, in a hurry, etc.). Five hundred and forty ( $n=540$ ) refusals were recorded, a $62.1 \%$ refusal rate. The most common refusal response was "No, thank you."

[^2]
## Results

## Age

The majority ( $53.7 \%$, $n=467 / 870$ ) of visitors to the Denver Metro Area institutions were between the ages of 2645. The next largest segment of visitors ( $30.1 \%, n=262 / 870$ ) were between 46 and 65 . Table 2 and Figure 2 provide information about the number of people from each of the age segments represented in the survey.

Table 2: All adult age segments

| Age Segment | Percent | $\mathbf{N}=870$ |
| :--- | :--- | :--- |
| $18-25$ | 10.8 | 94 |
| $26-35$ | 27.8 | 242 |
| $36-45$ | 25.9 | 225 |
| $46-55$ | 15.7 | 137 |
| $56-65$ | 14.4 | 125 |
| $66-75$ | 4 | 35 |
| 75 or more | 1.4 | 12 |

Figure 2: All adult age segments


## Sex and Sexual Orientation

More females than males attended the Denver Metro Area cultural institutions that participated in this study: $56.2 \%, n=489 / 870$ versus $40.7 \%, n=354 / 870$, respectively.

A very small percentage of respondents self-identified as GLBTIQ $^{7}(1.1 \%, n=10 / 870)$.

## Ethnic Background or Heritage

The majority of visitors self-identified as "White, Caucasian or European American" (84.4\%, $\mathrm{n}=734 / 870$ ). According to U.S. Census data $50.9 \%$ of Denver County residents identified themselves as "White person, not Hispanic." Therefore, it can be inferred that the Metro Area's cultural institutions see a disproportionately high percentage of White visitors; White visitorship exceeded Denver's estimated Anglo population by thirty-three percent.
"Latino[s], Hispanic[s], Chicano[s] or Latin American[s]" represented the next largest group of respondents at ten percent (10.1\%, $\mathrm{n}=88 / 870$ ). However, $34.3 \%$ of Denver County residents and $20.2 \%$ of Coloradans self-

[^3]identified as "Persons of Hispanic or Latino origin" according to the 2008 U.S. Census estimates. The Metro Area's Latino visitorship was therefore approximately one-third of what might be expected based on local population statistics.

The percentage of "African, African-American or Black" visitors was also disproportionately low. According to the 2008 U.S. Census, 10\% of Denver County residents identify as "Black persons." However, just over two percent $(2.2 \%, n=19 / 870)$ of respondents at the participating cultural institutions self-identified with this ethnic background.

Data for other ethnic backgrounds include one and a half percent (1.5\%, $n=13 / 870$ ) "American Indian, Native American or Alaskan Native;" three percent (3.1\%, $n=27 / 870$ ) "Asian or Asian American;" and a half percent (.5\%, $\mathrm{n}=4 / 870$ ) "Native Hawaiian, Filipino or Pacific Islander." These data are consistent with City and County of Denver ethnicity statistics.

Just under one percent (.7\%, $n=6 / 870$ ) of visitors self-identified as "Middle Eastern, Arab or Arab-American." The City and County of Denver does not record statistics in this category, so no comparison can be made between the findings and the larger Denver population.

The number of visitors self-reporting two or more races $(3.2 \%, n=28 / 870)$ exceeded the percentage of Denver Metro Area residents who self-reported (2\%) in that category according to 2008 U.S. Census estimates.

Table 3 and Figure 3 provide information about the number of people from each of the ethnic background/heritage segments represented in the survey ${ }^{8}$.

[^4]Table 3: All ethnic background/heritage segments

| Ethnic background/heritage | Percent | $\mathrm{N}=870$ |
| :---: | :---: | :---: |
| African, African American or Black | 2.2 | 19 |
| American Indian, Native American or Alaskan Native | 1.5 | 13 |
| Asian or Asian American | 3.1 | 27 |
| Latino, Hispanic, Chicano or Latin American | 10.1 | 88 |
| Middle Eastern, Arab, or ArabAmerican | . 7 | 6 |
| Native Hawaiian, Filipino or Pacific Islander | . 5 | 4 |
| White, Caucasian or European American | 84.5 | 734 |

Chart 3: All ethnic background/heritage segments


## Language Spoken in the Home

Respondents primarily spoke English only at home ( $82 \%$, $n=713 / 870$ ). Over $10 \%$ households were multilingual ( $10.8 \%, \mathrm{n}=94 / 870$ ). Of these, $39.4 \%(\mathrm{n}=37 / 94)$ spoke English and Spanish. Monolingual Spanish households represented $2 \%$ of respondents ( $n=17 / 870$ ) ${ }^{9}$.

The U.S. Census indicates that $27 \%$ of the City and County of Denver's population speak a language other than English at home and the same is true for $15.1 \%$ of Coloradans. Denver Metro Area institutions appear to be visited by a higher proportion of English-only visitors in relation to the larger population.

## Membership and Repeat Visitation ${ }^{10}$

Two-thirds of respondents ( $64.8 \%, \mathrm{n}=529 / 817$ ) were not members and never had been members of the institution they were visiting that day. Just under one-third were members ( $32.8 \%, n=268 / 817$ ). A very small percentage $(2.4 \%, \mathrm{n}=20 / 817)$ of visitors were not members but had a member in their group.

Though membership was not predominant, close to two-thirds ( $63.5 \%, \mathrm{n}=547 / 863$ ) of all visitors had been to the institution where they were surveyed at least once before.

[^5]
## Education

Visitors to the institutions achieved a higher level of education than would be predicted from City and County of Denver census data. Just over forty percent of respondents reported a "college degree" ( $42.8 \%, n=371 / 866$ ). Combining those who identified as holding a "college degree" and those with a "post-graduate degree" increases that number to just under three-quarters of all visitors $(73.1 \%, \mathrm{n}=633 / 866)$. This is more than double the number of Denver County residents (34.5\%) who have a bachelor's degree or higher. Table 4 and Figure 4 provide information about the number of people from each of the education segments represented in the survey.

Table 4: All education segments

| Highest level of education | Percent | $\mathrm{N}=867$ |
| :--- | :---: | :---: |
| Less than high school | 1 | 9 |
| Completed high school | 8.4 | 73 |
| Completed some college | 17.4 | 151 |
| or technical school | 42.8 | 371 |
| College degree | 30.3 | 262 |
| Post-graduate degree |  |  |

Figure 4: All education segments


## Zip Code

Visitors came from throughout the Denver Metro Area, the greater Colorado region, and nationwide. Of the zip codes listed most often by visitors, Denver ( $n=56$ ), Highlands Ranch ( $n=29$ ), Littleton ( $n=26$ ), Broomfield ( $n=12$ ), Parker ( $n=10$ ), and Aurora ( $n=10$ ) were most frequent.

One hundred and twenty-seven visitors listed out-of-state zip codes: this is $17.4 \%$ of all respondents.

Table 5 represents the zip codes most listed by visitors. Map 1, below, shows the location of those most-listed zip codes, as well as the locations of institutions where surveys were adminstered.

Table 5: Zip Codes with Greatest Number of Visitors

| Zip Code | Number | Location |
| :--- | :---: | :--- |
| 80123 | 18 | Littleton |
| 80129 | 17 | Highlands Ranch |
| 80220 | 13 | Denver |
| 80020 | 12 | Littleton |
| 80120 | 11 | Highlands Ranch |
| 80130 | 11 | Denver |
| 80206 | 11 | Denver |
| 80211 | 10 | Denver |
| 80227 | 10 | Parker |
| 80013 | 10 | Denver |
| 80134 | 12 |  |
| 80210 | 12 |  |

## Map 1: Denver metro area zip codes with the greatest number of visitors. ${ }^{11}$



[^6]
## Joint Househod Income

The "under $\$ 50,000$ " and the " $\$ 50,000$ to $\$ 74,999$ " both represented approximately one quarter of the sample each: $23.8 \%(n=192 / 806)$ and $23.3 \%(n=188 / 806)$ respectively. The U.S. median household income is $\$ 50,233$ and Denver's medial income is $\$ 46,305$; the median of our sample falls in the " $\$ 75,000$ to $\$ 99,999$ " category and the mode is in the "under $\$ 50,000$ " category. Seven percent $(7.4 \%, n=64 / 870)$ did not answer this question.

Table 6 and Figure 6 provide information about the number of people from each of the income segments represented in the survey.

Table 6: All income segments

| Income range | Percent | $\mathbf{N}=\mathbf{8 0 6}$ |
| :--- | :--- | :--- |
| Under $\$ 50,000$ | 23.8 | 192 |
| $\$ 50,000$ to $\$ 74,999$ | 23.3 | 188 |
| $\$ 75,000$ to $\$ 99,999$ | 16.7 | 135 |
| $\$ 100,000$ to $\$ 124,999$ | 15.4 | 124 |
| $\$ 125,000$ to $\$ 149,999$ | 7.7 | 62 |
| $\$ 150,000$ to $\$ 174,999$ | 4 | 32 |
| $\$ 175,000$ or more | 9.1 | 73 |

Figure 6: All income segments


## Group Composition

Over three-quarters ( $78.8 \%, \mathrm{n}=681 / 864$ ) of all visitors came with a family member. Additionally $14 \%$ ( $13.7 \%$, $n=118 / 864$ ) came with a friend. Only a small percentage of respondents $(3.2 \%, n=28 / 864)$ indicated that they were visiting the institution alone or with a "school/community group" ( $1.7 \%, \mathrm{n}=15 / 864$ ). It appears that visiting a cultural institution is primarily a social activity for those who participated in the study.

Over one-third of visitors were accompanied by a child under the age of ten ( $36.1 \%, \mathrm{n}=740 / 2052$ ). This may indicate that at least one-third of visitors to Denver Metro Area cultural institutions are parents or caregivers of young children. The next largest segment in the "age of other" category was $26-45$ ( $28.4 \%, \mathrm{n}=583 / 2052$ ). This was also the largest age segment of those who responded to this survey, indicative of visitors being accompanied by someone in their peer-age group.

## Institution-Specific Findings within the City Wide Demographic Study

Age

- Highest percentage 18 and 25 year olds: Butterfly Pavilion ( $17.3 \%, \mathrm{n}=14 / 81$ ).
- The Molly Brown House Museum had no visitors between the ages of 18 and 25.
- Highest percentage of 26-35 year olds: Children's Museum of Denver (44.3\%, n=31/70).
- Highest percentage of $36-45$ year olds: Wildlife Experience ( $43.6 \%, \mathrm{n}=17 / 39$ ).
- Highest percentage of $46-55$ year olds: Molly Brown House Museum ( $34.5 \%, n=10 / 29$ ).
- Highest percentage of 56-75 year olds: Denver Botanic Gardens ( $39.1 \%, \mathrm{n}=38 / 97$ )
- Highest percentage of 76 or over year olds: Littleton Historical Museum (4.1\%, $\mathrm{n}=3 / 73$ )
- The Children's Museum of Denver did not have any visitors over the age of 65 .
- The Colorado Railroad Museum and the Wildlife Experience did not have any visitors 76 or above.


## Sex and Sexual Orientation

- Highest percentage of males: Denver Museum of Nature \& Science ( $52.3 \%, \mathrm{n}=58 / 111$ ).
- Highest percentage of females: Butterfly Pavilion ( $72.5 \%, \mathrm{n}=58 / 80$ ).
- Most even distribution males and females: Denver Zoo (51.9\%, $\mathrm{n}=74 / 154$ and $48.1 \%, \mathrm{n}=80 / 154$ respectively).
- Highest percentage identifying as GLBTIQ: Denver Museum of Nature \& Science ( $2.6 \%, \mathrm{n}=3 / 115$ ).


## Ethnic Background/Heritage

- Highest percentage of visitors self-identifying as "African, African American or Black:"
- Butterfly Pavilion ( $4.9 \%, n=4 / 81$ )
- Highest percentage of visitors self-identifying as "American Indian, Native American or Alaskan Native:"
- Denver Botanic Gardens (3.1\%, n=3/97)
- Highest percentage of visitors self-identifying as "Asian or Asian American:"
- Wildlife Experience (5.1\%, $\mathrm{n}=2 / 39$ )
- Highest percentage of visitors self-identifying as "Latino, Hispanic, Chicano or Latin American:"
- Children's Museum of Denver (27.1\%, n=19/70)
- Highest percentage of visitors self-identifying as "Middle Eastern, Arab, or Arab-American:"
- Children's Museum of Denver (1.4\%, $n=1 / 70$ ) and the Littleton Historical Museum (1.4\%, $n=1 / 73$ )
- Highest percentage of visitors self-identifying as "Native Hawaiian, Filipino or Pacific Islander:"
- Wildlife Experience ( $2.6 \%, \mathrm{n}=1 / 39$ )
- Highest percentage of visitors self-identifying as "White, Caucasian or European American:"
- Denver Botanic Gardens ( $91.8 \%$, $\mathrm{n}=89 / 97$ )


## Language Spoken at Home

- Highest percentage English: Denver Art Museum (92.7\%, n=92/96).
- Highest percentage multilingual: Children's Museum of Denver ( $18 \%, \mathrm{n}=12 / 67$ ).
- Highest percentage of monolingual (non-English): Children's Museum of Denver (Spanish; 10.4\%, $n=7 / 67$ ).


## Members

- Highest percentage of members: Denver Zoo (47.8\%, n=76/159).
- Highest percentage of lapsed members: Wildlife Experience (20.5\%, n=8/39).
- Highest percentage of non-members: Molly Brown House Museum (89.7\%, n=26/29).
- Highest percentage of people visiting with a member: Wildlife Experience (5.1\%, $n=2 / 39$ ).


## Repeat Visitors

- Highest percentage of repeat visitors: Denver Museum of Nature \& Science (86.1\%, $\mathrm{n}=99 / 115$ )
- Highest percentage of first-time visitors: Molly Brown House Museum (89.7\%, n=26/29)


## Education

- The Butterfly Pavilion, Denver Art Museum, Denver Botanic Gardens, Molly Brown House Museum, Littleton Historical Museum, and the Wildlife Experience had no visitors with less than a high school education.
- Highest percentage of visitors who completed high school: Children's Museum of Denver (15.9\%, $\mathrm{n}=11 / 69$ ).
- Highest percentage of visitors who completed some college: Butterfly Pavilion ( $27.2 \%, \mathrm{n}=22 / 81$ ).
- Highest percentage of visitors with a college degree: Wildlife Experience ( $63.2 \%, \mathrm{n}=24 / 28$ ).
- Highest percentage of visitors with a post-graduate degree: Denver Botanic Gardens (54.6\%, n=53/97).


## Joint Annual Income

- Highest percentage under $\$ 50,000$ : Butterfly Pavilion ( $38 \%, n=30 / 79$ ).
- Highest percentage between $\$ 50,000$ and $\$ 74,999$ : Children's Museum of Denver ( $30.3 \%, \mathrm{n}=20 / 66$ ).
- Highest percentage between $\$ 75,000$ and $\$ 99,999$ : Children's Museum of Denver (27.3\%, n=18/66).
- Highest percentage over $\$ 175,000$ : Denver Botanic Gardens ( $17.1 \%, \mathrm{n}=14 / 82$ ).


## Key Findings in the City Wide Demographic Study

- The majority of respondents were female and between the ages of 26-45.
- One-third visited a cultural institution with at least one other person who was under the age of ten.
- Over three-quarters of visitors came with a family member and an additional fourteen percent visited with a friend.
- Respondents were primarily "White, Caucasian or European American" and spoke English at home.
- One-third were members of the institution they visited on the day they were surveyed, and two-thirds had been to that institution on at least one prior occasion.
- The majority of visitors had high levels of education; a college degree or above.
- Just under half of visitors indicated an income of under \$75,000.
- Many visitors reported zip codes in Denver, Littleton, Parker, Broomfield, and Aurora.


## Appendix A: Visitor Information Sheet

(Please note: the original formatting of this survey was on one-side of one sheet)

## Visitor Information Sheet

This questionnaire is voluntary, private, and confidential. It will be used only to learn more about our visitors. We collect this information to help make sure we are an inclusive cultural institution-- welcoming, reflective and responsive to our community and visitors. Additionally, many of our funders and supporters request demographic information. We thank you very much for your help.

Your age:

| Under 18.......................... $\square$ | 36 to 45............................ $\square$ | 66 to 75 ............................ $\square$ |
| :---: | :---: | :---: |
| 18 to 25........................... $\square$ | 46 to 55............................ | 76 or more ........................ $\square$ |
| 26 to 35........................... $\square$ | 56 to 65............................ $\square$ |  |
| gender: Male ................. $\square$ | Female ............... $\square$ |  |

Please check if you self-identify as GLBTIQ. $\qquad$
What is your ethnic background or heritage? (Check as many as apply.)


If other, please specify: $\qquad$

What language(s) do you/your family speak at home? $\qquad$
a member here? (Please choose ONE.)
1 a member...................................
not a member and have never been
not a member but someone in my group is.

## Have you been here before? (Please choose ONE.)

Yes, I have been here before. $\qquad$If yes, when was the last time you were here? $\qquad$

No, this is my first visit here. $\qquad$ $\square$ (***Let us know the month/year, if you remember!)

What is the highest level of education you have completed? (Please choose ONE.) Less than high school. $\qquad$
$\square$ Completed some college or technical $\square$ Post-graduate degree education $\qquad$ College degree. $\qquad$
Completed high school.

## What is your home zip code?

$\qquad$
What is the joint annual income of your family? (Include you and those you live with; choose ONE.)

$\$ 75,000$ to $\$ 99,999$ $\qquad$ $\square$ $\$ 175,000$ or more $\qquad$
$\$ 100,000$ to $\$ 124,999$ $\qquad$

Who did you come with today? (Please choose ONE.)

| I came here alone.............. $\quad \square \quad$ I am here with family .......... $\quad \square$ |  |
| :--- | :--- |
| I am with a school/community | I am here with friends................ |
| group...... |  |

If other, please specify: $\qquad$

Please list the ages of all the other people who are with you here today:
$\qquad$
Thanks again for your time! Please return this to the person who gave it to you.


[^0]:    ${ }^{1}$ DMNS has a fully-funded 2-person internal evaluation department (Department of Visitor Research \& Program Evaluation) and a team of independently contracted, trained assistants (the DMNS Research Assistant team) who aid with data collection, data entry, transcriptions and other services.
    ${ }^{2}$ Research assistants intercepted visitors inside the Hamilton Building at the Denver Art Museum and both inside the museum and outside on the trail up to the grave at the Buffalo Bill Museum \& Grave.

[^1]:    ${ }^{3}$ The DMNS Visitor Baseline Survey is considered a valid and reliable measure, used with consistent results at DMNS since 2008.

    4 "Adult" visitors" refers to those who appeared to be $18+$ years old as determined by the researcher. It is a subjective determination. The survey question related to age also helped to determine if any youth/young people were accidentally surveyed. Surveys completed by visitors who self-identified as under-18 were removed from the data set and analyses, as they were under the age of consent.

[^2]:    ${ }^{5}$ Not all reported results are out of the full sample size. Since each question is independent and some participants chose to or accidentally skipped questions, each question has a unique sample size.
    ${ }^{6}$ The sample sizes vary greatly between institutions, from 29-159. This is important to acknowledge when analyzing the data and interpreting the results. All results are treated as raw frequency counts and associated percentages (not weighted) with the assumption that these are reflective samples.

[^3]:    ${ }^{7}$ Gay, lesbian, bisexual, transgender, intersex, queer.

[^4]:    ${ }^{8}$ Percentages do not equal 100, as participants could select more than one ethnic background/heritage category.

[^5]:    ${ }^{9}$ This result likely under represents monolingual households, as the survey was offered in English only.
    ${ }^{10}$ Buffalo Bill Museum \& Grave does not offer a membership option at their institution; they were removed from this analysis.

[^6]:    ${ }^{11}$ Buffalo Bill Museum \& Grave is located off the map; however, the location of the pin is correct in relation to the map.

